MEETING NOTICE

TUALATIN ARCHITECTURAL REVIEW BOARD
August 13, 2014, 6:30 PM
POLICE TRAINING ROOM
8650 SW TUALATIN RD
TUALATIN, OR 97062

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1. **CALL TO ORDER**

Members: Ed Truax, Skip Stanaway, John Howorth, Robert Perron, Chris Goodell, Terry Novak, and Michael Ward.

Alternates: John Medvac

Staff: Aquilla Hurd-Ravich, Planning Manager, Clare Fuchs, Senior Planner, Colin Cortes, Assistant Planner.

2. **APPROVAL OF MINUTES**

A. Approval of April 9, 2014 Minutes.

3. **COMMUNICATIONS FROM THE PUBLIC (NOT ON THE AGENDA)**

4. PUBLIC HEARINGS

A. Marquis Tualatin Cottages & Community Center Recommendation and Staff Report for AR-14-07

B. River Ridge Apartment Complex Recommendation and Staff Report for AR-14-10

5. COMMUNICATIONS FROM BOARD MEMBERS

6. **ADJOURNMENT**

MEMORANDUM
CITY OF TUALATIN

Architectural Review Board **2. A.**

Meeting Date: 08/13/2014
FROM: Lynette Sanford, Office Coordinator
Department: Community Development

Information

SUBJECT:
Approval of April 9, 2014 Minutes.

Attachments

ARB Minutes 4.9.14

City of Tualatin

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UNOFFICIAL

ARCHITECTURAL REVIEW BOARD - MINUTES OF April 9, 2014

MEMBERS PRESENT:
Ed Truax, Chair
John Howorth
Terry Novak
Skip Stanaway
Michael Ward
Chris Goodell
Robert Perron

STAFF PRESENT:
Aquilla Hurd-Ravich
Colin Cortes
Tony Doran
Lynette Sanford

MEMBER ABSENT: John Medvec

GUESTS: Steve Sieber, Ryan Schera, Tim McGuire, Steven Tuttle, Bob Thompson.

1. CALL TO ORDER AND ROLL CALL:

Councilor Truax called the meeting to order at 7:00 pm.

2. APPROVAL OF MINUTES:

Councilor Truax asked for review and approval of the December 3, 2013 and December 16, 2013 ARB Minutes. MOTION by Stanaway SECONDED by Goodell to approve the minutes. MOTION PASSED unanimously. (7-0).

3. COMMUNICATION FROM THE PUBLIC (NOT ON THE AGENDA):

None

4. PUBLIC HEARINGS:

A. Southwest Industrial Park Recommendation and Staff Report for AR-14-02.

Councilor Truax read the script for Quasi-Judicial Hearings.

Colin Cortes, Assistant Planner, presented the staff report for the Southwest Industrial Park project, which included a PowerPoint presentation. This project is to redevelop the Hanson Pipe & Products concrete pipe plant set on 17.23 acres at 19585 SW 118th Avenue into a multi-tenant industrial park of four buildings totaling 301,938 square feet with related site improvements.

These minutes are not verbatim. The meeting was recorded, and copies of the recording are retained for a period of one year from the date of the meeting and are available upon request.

Mr. Cortes explained that development over 150,000 square feet needs to be reviewed by the Architectural Review Board (ARB) per Tualatin Development Code (TDC) 73.030(2). The ARB is the final decision maker on architectural reviews, but the decision can be appealed to City Council.

Mr. Cortes noted that the site is 17 acres and the concrete plant has been in existence since 1977. The proposed project is an improvement from what is there currently. The conditions of approval topics include:

- Walkways and accessways
- Lighting
- Equipment screening, and fireproofing trash and recycling containers
- Landscaping
- Tree preservation
- Auto and bike parking

Mr. Cortes stated that the ARB has four options to discuss:

- Approve with staff recommended findings and conditions of approval
- Approve with amended findings and conditions of approval
- Continue the hearing of the issue to a date certain
- Deny the application

Councilor Truax welcomed the applicants: Ryan Schera from McKenzie; Steve Sieber, from Trammell Crow; and Bob Thompson, from McKenzie. Mr. Schera explained that they are in full agreement with the conditions of approval. The applicants have met with City staff and have made minor changes. A materials board was presented which detailed the use of colors and materials. This will be their 12-15th building project in Tualatin since 1990. The business plan for this project is to continue with light assembly, manufacturing, and warehouse distribution. Mr. Schera stated the next step is the subdivision, architectural review, and building permit approval. This will happen within the next few months.

Councilor Truax asked the audience if anyone wanted to speak for or against this project. Hearing no response, questions were put forth to the ARB members. Mr. Stanaway asked about the materials board and about the use of colors. He asked if the grey and indigo were accent colors. Mr. Thompson answered affirmatively and that the indigo color is at the base of the building, the darker grey will go around the back of the building and in the dock loading area. The truck traffic will be contained between the buildings. Mr. Stanaway inquired about the landscaping against the building. Steve Tuttle, the landscape architect for the project, explained that smaller trees will go against the building and away from the entrances. Mr. Stanaway asked about the dimensions to the curb line. Mr. Tuttle answered that there will be 7-8 feet of landscaping and a sidewalk. The total site consists of 17 percent landscaping.

Mr. Perron inquired about tree preservation. Mr. Tuttle explained that out of the 25 trees, 11 will be removed. Some of the trees are in poor condition. Some of the trees

being preserved are located in a 25 foot sewer easement. City staff met with engineers and determined that the roots should not have an issue with the sewer line. The proposed trees will have a root barrier system, which will not cause issues with the sewer line. Mr. Schera stated that there is a great deal of concrete and asphalt on the site and they will be mindful of the trees during the demolition process. Mr. Perron asked if a report was prepared on tree preservation. Mr. Schera responded that there was no formal arborist report. Mr. Perron added that Conifer trees are hard to preserve and it may be beneficial to engage an arborist during the imperious surface removal process.

Mr. Howorth inquired about the lighting standards and if this project is designed so the light doesn't spill outside the property. The applicant responded that they meet the dark sky regulation. Mr. Stanaway asked what the maximum height was for the building. The building is approximately 35 feet high. City street lights are also being added.

Hearing no further questions, Councilor Truax thanked the applicant and asked to close the hearing. MOTION by Ward, SECONDED by Perron to approve with staff recommended findings and conditions of approval. MOTION PASSED unanimously 7-0.

5. COMMUNICATION FROM BOARD MEMBERS:

None

6. FUTURE ACTION ITEMS

Ms. Hurd-Ravich stated that there will be another ARB meeting in June. She will discuss with them prospective dates for the meeting.

7. ADJOURNMENT

MOTION by Truax to adjourn the meeting at 7:44 pm.

_____ Lynette Sanford, Office Coordinator

MEMORANDUM
CITY OF TUALATIN

Architectural Review Board **4. A.**

Meeting Date: 08/13/2014

THROUGH: Aquilla Hurd-Ravich, Planning Manager

FROM: Colin Cortes, Assistant Planner

Department: Community Development

Information

SUBJECT:

Marquis Tualatin Cottages & Community Center Recommendation and Staff Report for AR-14-07

ISSUE BEFORE ARCHITECTURAL REVIEW BOARD:

Consideration of a request for Architectural Review AR-14-07 approval to develop a 9.34-acre site with a community building and 66 townhouses/duplexes. This is the second phase of Tualatin Marquis development of which the first phase is under construction.

EXECUTIVE SUMMARY:

Marquis Companies, represented by Scott Miller, Director of Property Development, proposes to develop a 9.34-acre site as Tualatin Marquis Phase 2 consisting of a community center and 66 single-story townhouses/duplexes, which the applicant refers to as cottages or “duettes". The developer might rent and/or sell this housing that is to be privately restricted to the persons 55 years or older. Because the proposal includes multi-family units adjacent to a Low Density Residential (RL) Planning District, which is along SW Sagert Street, the project necessitates Architectural Review Board (ARB) review and decision pursuant to Tualatin Development Code (TDC) 73.030(2).

The Community Center is to serve the residents of the skilled nursing and assisted living community and the multi-family dwellings. The Community Center elevations sheet includes a floor plan indicating an auditorium, café, gym, and indoor pool. It is sited at the northwest corner of SW Boones Ferry Road and SW Nasoma Lane, between Chelan Apartments and the Tualatin Marquis assisted living and skilled nursing facility. Regarding zoning, TDC 41.020 that lists Medium Low Density (RML) Planning District permitted uses does not explicitly include multi-family amenities such as clubhouses, gyms, or pools as ancillary uses. At the same time, TDC 41 makes no reference to such uses as either conditional or prohibited. Staff reads TDC 41, including 41.010 Purpose, such that the intent is to regard multi-family amenities such as clubhouses, gyms, or pools as ancillary uses. Based on this, staff regards the Community Center building as a multi-family amenity ancillary to the townhouses and therefore permitted.

To the south and east of the subject property is Tualatin Marquis Phase 1, the assisted living and skilled nursing facility, approved through a historic landmark demolition, plan map amendments, a property line adjustment, and an AR:

- HIST-08-01 on 12/19/2008 approved demolition of historic landmark Tualatin Grade School (1939), a.k.a. Old Tualatin Elementary a.k.a. Gerald Avery Building.
- PMA-09-01 on 6/08/2009 approved the rezoning of Tax Lot 500 from Low Density Residential (RL)

to RML via Ordinance No. 1284-09.

- PLA-10-01 on 3/05/2010 adjusted Tax Lot 500 (composed of two lots of record, Tualatin Garden 34 & 36) along north and west property lines to make it as it is present day.
- The City Council adopted on 8/23/2010 a non-statutory amended and restated development agreement among the City, Marquis, and the Tigard-Tualatin School District (TTSD).
- PMA-10-01 on 8/23/2010 rezoned Tax Lots 501 & 502 from RL to RML via Ordinance No. 1308-10.
- AR-10-04 on 9/10/2010 approved construction of the Tualatin Marquis assisted living and skilled nursing facility.

For the current proposal, the site plans (Attachment **107**) illustrate that the site development area that is Phase 2 itself is divided among Phases I through IV. The Community Center would be part of Phase I. The site is near the northwest corner of SW Boones Ferry Road and SW Sagert Street.

The applicant had a pre-application meeting on January 17, 2014. The neighborhood/developer meeting was on January 26, 2014. Staff visited the site on July 25, 2014. In response to either the notice of application or notice of public hearing, staff received no letters of comment from property owners within 1,000 feet (ft) of the subject property for inclusion in this staff report as of July 29, 2014.

For further information, refer to the attached Recommendation and Staff Report (Attachment **100**).

DISCUSSION:

Tualatin Development Code (TDC) 73.030(2) sets out that the Architectural Review Board (ARB) review and approve aspects of the proposed site redevelopment including architectural features, lighting, landscaping, off-street parking, pedestrian and cyclist circulation, trash and recycling enclosures, and tree preservation. The ARB decision can be appealed to the City Council. The Public Facilities Report (PFR) and its conditions of approval is a staff level decision and can be appealed to the City Council. A draft PFR is included as Attachment **101**. The PFR generally covers public utilities including roads and streets and potable water, sanitary sewer, and stormwater utilities.

Staff has prepared a recommendation to the Architectural Review Board attached to this memo as the Recommendation and Staff Report.

The Recommendation and Staff Report includes analysis and resulting detailed conditions of approval. Staff recommends approval of the proposal subject to conditions as summarized below. Conditions likely to be of most interest to the ARB are italicized below.

General

- Comply with the requirements of other agencies.

Accessways

- Add an accessway (8-ft paved path) between the SW Boones Ferry Road sidewalk and the main entrance.

Lighting

- Provide additional information about exterior pole and wall-mounted lighting regarding bulb visibility, glare, and light encroachment into public rights-of-way.

Architecture

- *Provide more architectural ornament, primarily windows, on certain townhouse elevations. (At least thirteen units would be sited such a side of each of these units would be farther away from other*

structures and visible from public streets or shared driveways and the occupants and visitors who travel them. These are the units on lots numbered 2, 12, 17, 18, 27, 36, 37, 44, 45, 46, 53, 58, and 65.)

- *Finalize the "unique design" units and their dispositions on Phase II Lot 26 and Phase IV Lots 49 and 50; design them with architectural colors and materials similar to the townhouses; and demonstrate the compliance of the units with the multi-family community design standards. (These three lots are constrained, and the applicant has deferred design of these units that will be different than the proposed standard townhouse plans.)*

Miscellaneous

- Adjust property lines via any of partition, property line adjustment, or subdivision application(s) pursuant to the direction of the Engineering Division.
- *Illustrate a separate outdoor area of not less than 80 square feet (sq ft) attached to each townhouse pursuant to TDC 73.130(1)(a).*
- Provide graphics and text about postal delivery and the screening of on and above grade electrical and mechanical equipment
- Indicate placement of address numerals that meet the needs of Tualatin Valley Fire & Rescue (TVF&R).
- Screen any and all on and above grade electrical and mechanical equipment.

Storage

- *Illustrate and note the locations, dimensions, and square footages of required areas for exterior enclosed storage and their means of access.*
- *Provide a letter from the waste hauler and graphic and textual information about townhouse mixed solid waste and source separated recyclables storage.*
- Note and provide covered or waterproof trash and recycling containers that meet TVF&R standards.
- Revise the trash enclosure details sheet to make consistent the proposed trash enclosure details and show a vertical clearance of at least 8 ft.

Landscaping

- Indicate calipers of proposed trees.
- Indicate gallon sizes of proposed shrubbery.
- Indicate an automatic underground or drip irrigation system.
- Replant natural vegetation if removed or damaged through grading in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements.
- Indicate the square footage of combined landscape island area.
- Extend the landscaping of 5 ft in width at least 25 ft deep beyond the Nasoma ROW line.

Tree Preservation

- Preserve a catalpa that is part of a Heritage Tree grove and update documents accordingly through the City Community Services Department.
- *Submit a tree preservation plan sheet or sheets that identifies all on-site trees, including all Heritage Trees; identifies species and caliper; distinguishes among those be removed and those to be preserved; preserves those trees within the northerly western boundary of the site development area for which their preservation would not conflict with Clean Water Services (CWS) Service Provider Letter (SPL) 10-001901 Amended August 8, 2012; and preserves any trees that do not meet the removal criteria of 34.230(1).*
- Protect trees to be preserved during construction.
- Design landscaping in a manner that protects preserved trees.

Bike Parking

- Shelter from the elements at least 35% of the proposed bike parking stalls and provide either (1)

both the number of auditorium seats to allow staff to have a basis for calculation of required bicycle parking and the number of required bike parking stalls resulting from such calculation, or (2) justification for the proposed four stalls.
- Indicate bike parking signage at the main entrance and at the location of the bicycle parking facilities.

Prior to Issuance of Certificate of Occupancy (CO)

- Build the project in accordance with conditions of approval and fire and life safety requirements.
- The site redevelopment and its conditions of approval are subject to field inspection.

Standard

- Submit separately from this AR sign permit applications for any proposed signage.
- The ARB decision becomes final two weeks after the date of decision unless an appellant appeals.
- Substantially construct the project before the two-year approval expiration date.
- Maintain landscaping.
- Maintain building improvements.

RECOMMENDATION:

Staff recommends approval subject to the recommended findings and conditions included in the staff report.

The Architectural Review Board has three options:

1. Approve with staff recommended findings and conditions of approval.
2. Approve with amended findings and conditions of approval.
3. Deny the application.

Attachments

100. Recommendation and Staff Report
101. Public Facilities Recommendation (PFR)
102. CWS Memorandum
103. Frontier Cable Franchise Comment
104. TVF&R Letter
105. Washington County Comment
106. City Community Services Dept. Comment
107. Site Plans and Other Application Materials
108. Fig. 11-1 Functional Classification and Traffic Signal Plan
109. Fig. 11-4 Bicycle and Pedestrian Plan
110. Fig. 11-5 Tualatin Transit Plan
111. Fig. 72-2 Greenway Development Plan
112. Fig. 73-3 Parking Maximum Map
113. Fig. 74-2A & F Street Design Standards: Major Arterial & Local
114. Guidelines for Good Exterior Lighting Plans

City of Tualatin

www.tualatinoregon.gov

August 13, 2014

STAFF REPORT

RECOMMENDATION TO THE ARCHITECTURAL REVIEW BOARD

Case #:	AR-14-07
Project:	Marquis Tualatin Cottages & Community Center
Location:	No Street Addresses Yet; Adjacent to, North, and West of Phase 1 at 19945 SW Boones Ferry Rd; (Tax Lots 2S1 23DD 00501 & 502)
Applicant:	Scott Miller, Director of Property Development, Marquis Companies (503-819-3610); Kirsten Van Loo, Emerio Design; and CB|Two Architects
Property Owners:	Tigard-Tualatin School District #23J (TTSD), Tualatin LTC Properties LLC, Contract Purchaser (Lot 501); TTSD (Lot 502)

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ARRANGEMENTS CAN BE MADE TO PROVIDE THESE MATERIALS IN ALTERNATIVE FORMATS, SUCH AS LARGE TYPE OR AUDIO RECORDING. PLEASE CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AND ALLOW AS MUCH LEAD TIME AS POSSIBLE.

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I. INTRODUCTION

Marquis Companies, represented by Scott Miller, Director of Property Development, proposes to develop a 9.34-acre site as Tualatin Marquis Phase 2 consisting of a community center and 66 single-story townhouses/duplexes, which the applicant refers to as cottages or "duettes". (There are 64 townhouses, and Unit 26 will have a "unique design" multi-family building type that can fit on its constrained area between two easements, such as a duplex or a two-story building with one unit below and one above.)

The developer might rent and/or sell this housing that is to be privately restricted to persons 55 years or older. Because the proposal includes multi-family units adjacent to a Low Density Residential (RL) Planning District, which is along SW Sagert Street, the project necessitates Architectural Review Board (ARB) review and decision pursuant to Tualatin Development Code (TDC) 73.030(2).

To the south and east of the subject property is Tualatin Marquis Phase 1, the assisted living and skilled nursing facility. The site plans illustrate that the site development area that is Phase 2 itself is divided among Phases I through IV. The Community Center would be part of Phase I. The site is bound by the Chelan Apartments and the Portland & Western Railroad (PNWR) to the north; SW Boones Ferry Road to the east; SW Nasoma Lane (under construction), Phase 1, and SW Sagert Street to the south; and Tualatin Heights Apartments and three houses to the west.

The applicant had a pre-application meeting on January 17, 2014. The neighborhood/developer meeting was on January 26, 2014. Staff visited the site on July 25, 2014. In response to the notice of public hearing, staff received no letters of comment from property owners within 1,000 feet (ft) of the subject property, including pursuant to Tualatin Development Code (TDC) 31.064(1) within any residential subdivisions platted through the City, for inclusion in this staff report as of July 29, 2014.

The applicant intends through a separate and later application to adjust property lines and/or subdivide Lots 501 and 502 to accommodate the community center, townhouses/duplexes, and water quality facility (WQF), with tax lot numbers that Washington County will then assign.

II. APPLICABLE STANDARDS

A. City of Tualatin Community Plan, which is Chapters 1-30 of the Tualatin Development Code (TDC)
B. City of Tualatin TDC Chapters 31-75
C. City of Tualatin Transportation System Plan (TSP) (Public Facilities Recommendation, Attachment **101**)
D. City of Tualatin Public Works Construction Code (PWCC) (Public Facilities Recommendation, Attachment **101**)
E. Clean Water Services (CWS) Design and Construction Standards, Resolution and Order 07-20. (Clean Water Services Memorandum, Attachment **102**)

III. ARCHITECTURAL REVIEW RECOMMENDED ANALYSIS & FINDINGS

A. Previous Land Use Actions

- ANN-39-01, ANN-72-02, and ANN-73-04 annexed the subject property.
- To the south and east of the subject property is Phase 1 of the Tualatin Marquis development – the assisted living and skilled nursing facility – approved through a historic landmark demolition, plan map amendments, a property line adjustment, and an AR:

Case File	*Approval Date*	*Summary*
HIST-08-01	12/19/2008	Approved demolition of historic landmark Tualatin Grade School (1939), a.k.a. Old Tualatin Elementary a.k.a. Gerald Avery Building
PMA-09-01	6/08/2009	Rezoned Tax Lot 500 from RL to RML via Ordinance No. 1284-09
PLA-10-01	3/05/2010	Adjusted Tax Lot 500 (composed of two lots of record, Tualatin Garden 34 & 36) along north and west property lines to make it as it is present day
Development Agreement	8/23/2010	Adoption of non-statutory amended and restated development agreement among the City, Marquis, and Tigard-Tualatin School District (TTSD)
PMA-10-01	8/23/2010	Rezoned Tax Lots 501 & 502 from RL to RML via Ordinance No. 1308-10*
AR-10-04	9/10/2010	Approved construction of the Tualatin Marquis assisted living and skilled nursing facility

*Per the ordinance and development agreement, the rezoning took effect only after Marquis satisfied Ordinance Conditions 2a and 2b and Development Agreement Conditions 4a and 4b, which in short were for Marquis to obtain within time certain AR approval and a foundation permit for the assisted living and skilled nursing facility.

B. Other Permit Actions

The Public Facilities Recommendation (PFR) (Attachment **101**) is part of the site development review and included for reference; however, as required by the TDC the Engineering Division issues it as a land use decision separate from an Architectural Review (AR) upon which the ARB decides.

C. Tualatin Community Plan

The Tualatin Community Plan is the City comprehensive plan and exists as Chapters 1-30 of the TDC. When built in conformance with the conditions of approval, the project will be in compliance with the Tualatin Community Plan.

D. Planning Districts and Adjacent Land Uses

The subject property is located in the Medium Low Density Residential (RML) Planning District where townhouses, multi-family dwellings including duplexes and triplexes, and condominiums are permitted pursuant to 41.020(1) and (2). Adjacent planning districts and land uses clockwise from north are:

N: ML Across the Portland & Western Railroad (PNWR): A.M.P. (Academic Musical Potential) / M.I.T.C.H. Charter School, Willamette Graystone Inc.;
RH Cypress Gardens Apts., Chelan Apts.
E: RML Tualatin Marquis assisted living and skilled nursing facility
RL Boones Ferry Plaza and Logan House Estates Subdivisions, other single-family house lots
S: RL Silvey's Subdivision, other single-family house lots
W: RML Rebecca Woods Condominiums, other multi-family units, Tualatin Heights Apts.

E. Lot Sizes

41.015 Permitted Density

Housing density shall not exceed 10 dwelling units per net acre, except as set forth below:

(1) Where provided by TDC 41.150.

(2) The maximum density for single-wide manufactured dwelling parks or parts of parks used for single-wide units shall not exceed 12 dwelling units per net acre.

(3) The maximum density for residential facilities, nursing facilities and retirement housing in accordance with TDC 34.170(2) shall not exceed 15 dwelling units per net acre.

31.060 Definitions

Housing Density. The number of dwelling units per acre of land, rounded to the nearest whole number. (For example, 12.5 is rounded to 13 and 12.49 is rounded to 12.)

Retirement Housing. Housing occupied by persons who are 58 years of age and older, including couples with one person 58 years of age or older, where a more supportive living environment than typically afforded to residents in conventional apartments or single-family residential housing is provided. Retirement housing includes "congregate care facility" and "retirement housing facility," or combinations thereof as defined by this code. Retirement housing does not include "nursing facility" as defined below by this code.

The proposal is for 66 dwelling units (DUs) across approximately 6.51 acres, yielding 10.1 DUs per acre rounded to 10, meeting the requirements.

41.040 Lot Size

(1) Except for lots for public utility facilities, natural gas pumping stations and wireless communication facilities which shall be established through the Subdivision, Partition or Lot Line Adjustment process and as otherwise provided, the lot size for a permitted use pursuant to TDC 41.020(1) is:

(a) Except for townhouses whose minimum lot size shall be 1,400 square feet, the minimum lot area shall be 10,000 square feet.

(i) When used for multiple-family residential purposes on less than an acre of land, the minimum lot area shall be according to the following table.

Number of Dwelling Units	Square Feet of Lot Required
2	10,000
3 and above	10,000 square feet, plus 4,195 square feet for each unit exceeding two.

(ii) For multiple-family residential purposes on one acre and larger, the minimum lot area shall be 4,356 square feet per dwelling unit.

(b) Except for townhouses whose minimum average lot width shall be 14 feet, the minimum average lot width shall be 75 feet.

(c) Except for townhouses whose minimum lot width shall be 14 feet on a cul-de-sac street, the minimum lot width shall be 40 feet on a cul-de-sac street.

(d) Except for townhouses which shall not occupy more than 90 percent of the lot area, buildings shall not occupy more than 40 percent of the lot area.

(e) For flag lots, the minimum lot width at the street shall be sufficient to comply with at least the minimum access requirements contained in TDC 73.400(7) to (12).

31.060 Definitions

"Lot Line, Rear." A lot line which is opposite and most distant from the front lot line and, in the case of an irregular, triangular, or other-shaped lot, a line ten feet in length within the lot, parallel to and at a maximum distance from the front lot line. On a corner lot, the shortest lot line abutting adjacent property that is not a street shall be considered a rear lot line.

"Lot Width." The horizontal distance between the side lot lines, ordinarily measured parallel to the front lot line, at the center of the lot, or, in the case of a corner lot, the horizontal distance between the front lot line and a side lot line.

"Lot Width, Average." The sum of the length of the front lot line and the rear lot line divided by 2.)

31.060 Definitions

Townhouse. A dwelling unit in the RML, RMH, RH and CO (in the Central Urban Renewal District's Block 1) Planning Districts that is either attached or detached where the owner of the dwelling unit also owns the land the dwelling is located on, the dwelling unit has its own front door and back door or side door access to the outside, no dwelling unit is located over another dwelling unit, and each dwelling unit is separated from another unit by one or more vertical fire-resistant walls.

The site plan (Sheet 1) illustrates a preliminary subdivision plan of townhouse lots ranging from 2,223 to 10,949 square feet (sq ft), exceeding the minimum requirement. (The average is 3,701 sq ft and the median is 3,195 sq ft.) The townhouse lot widths range from 30 to 40 ft wide, exceeding the minimum

requirement. The site plan (Sheet 2) illustrates townhouses that appear to occupy no more than 90% of lot areas, meeting the requirement.

F. Setback Requirements

41.060 Setback Requirements

Except as otherwise provided, the setbacks for permitted uses are:

(1) The front yard setback shall be a minimum of 20 feet for 1 story, 25 feet for 1 1/2-story, 30 feet for 2-story, and 35 feet for 2 1/2-story structures. The minimum front yard setback for townhouses shall be 0-20 feet as determined in the Architectural Review process. The minimum setback to a garage door shall be 20 feet.

(2) The side yard setback shall be a minimum of 5 feet for 1-story, 7 feet for 1 1/2-story, 10 feet for 2-story, and 12 feet for 2 1/2-story structures. Where living spaces face a side yard, the minimum setback shall be 10 feet. The side yard setback for townhouses shall be determined in the Architectural Review process.

(3) On corner lots, the setback is the same as the front yard setback on any side facing a street other than an alley.

(4) The rear yard setback is the same as the side yard setback.

(5) Where buildings are grouped as one project on one tract of land, the minimum distance between two buildings at any given point shall not be less than the sum of the required side yards computed separately for each building at that point. The minimum distance between two buildings for townhouses shall be determined in the Architectural Review process.

(6) Off-street parking and vehicular circulation areas shall be set back a minimum of 10 feet from any public right-of-way or property line. The setback for such areas for townhouses shall be determined in the Architectural Review process.

As allowed by the requirements for townhouses, staff determines through this Architectural Review (AR) process that the proposed setbacks are acceptable:

Attribute	*Yard*	*Minimum Required*	*Proposed Lineal Feet*
Typical Townhouse Disposition	Front	Zero to 20	14.0 to 17.0
	Rear	5	8.0 to 13.0
	Side 1	5	5.0
	Side 2	5	5.0
Community Center	Front	20	East 17.0
	Rear	5	West 129.0
	Side 1	5	South 17.5
	Side 2	5	North 30.0

G. Structure Height

41.090

(1) Except as otherwise provided, the maximum structure height is 35 feet.

The elevations illustrate the townhouses at 18 ft and the Community Center at 33 ft, meeting the requirement.

H. Site Planning

73.050 Criteria and Standards.

73.050(1)(a) The proposed site development, including the site plan, architecture, landscaping and graphic design, conforms to the standards of this and other applicable City ordinances, insofar as the location, height, appearance, etc. of the proposed development are involved.

This project has been reviewed based on TDC standards and other applicable general ordinances of the City of Tualatin. The proposed location, height, appearance, etc., of the development comply with the TDC and other applicable City ordinances as identified in this report and with applicable conditions of approval will be in compliance.

73.130 Standards.

The following standards are minimum requirements for multi-family and townhouse development:

73.130(1) Private Outdoor Areas.
(a) Except within the Central Design District, or within the Mixed Use Commercial Overlay District in which case the Architectural Review process shall determine the appropriate outdoor area, a separate outdoor area of not less than 80 square feet shall be attached to each ground level dwelling unit. These areas shall be separated from common outdoor areas in a manner which enables the resident to control access from separate to common areas with elements, such as walls, fences or shrubs.
(b) Except for townhouses, a separate outdoor area of not less than 48 square feet in the form of balconies, terraces, or loggias shall be provided for each unit located above the ground level, except that within the Central Design District or the Mixed Use Commercial Overlay District such outdoor areas may be less than 48 square feet.

Regarding (1)(a), the site development area is within neither the Central Design District nor the Mixed Use Commercial Overlay District. A separate outdoor area of not less than 80 sq ft is attached to each townhouse is not clearly present. The townhouse Plans 1, 2, and 3 propose covered decks, which can serve as aforementioned outdoor area. However, while the Plan 3 deck exceeds the minimum 80 sq ft, the Plan 1 deck is too small to count toward the requirement because it is 47½ sq ft, and Plan 2 has no deck dimensions or area noted. The applicant needs to act such that a separate outdoor area of not less than 80 square feet shall be attached to each ground level dwelling unit.

Staff recommends iteration of the requirement as a condition of approval (AR-2F).

Because the requirement of (1)(b) exempts townhouses, it is not applicable.

73.130(2) Entry Areas.
(a) Except as provided in TDC 73.130(2)(b), a private main entry area shall be provided in addition to required private outdoor areas and designed so that they are considered a private extension of each dwelling unit. Except for townhouses, each entrance area shall be a minimum of 24 square feet in area for each dwelling unit and may be combined to serve more than a single unit, subject to the following mini-mum area requirements:
(i) Two dwelling units for one-story buildings or two-story townhouses (48 square feet).
(ii) Four dwelling units for two-story buildings (96 square feet).
(iii) Six dwelling units for three-story buildings (144 square feet).
(iv) Unlimited for four-story and greater and for buildings with dwelling unit entries from interior corridors.
(b) Within the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, a private main entry area need not meet the minimum square footage requirements in TDC 73.130(2)(a).

(c) Entry areas shall be separated from on-site parking areas and public streets with landscaping, change of grade, low fences, walls or other means that enable the resident to supervise and control access and to retain privacy.

Because the requirements exempt townhouses, they are not applicable.

73.130(3) Shared Outdoor Areas and Children's Play Areas.
(a) Except for townhouses, projects with 12 or more dwelling units shall provide year round shared outdoor areas for both active and passive recreation (gazebos and other covered spaces are encouraged to satisfy part of this requirement) totaling not less than 450 square feet per dwelling unit. Except adult only projects, a minimum of 150 square feet of the 450 square feet shall be provided as a children's play area.
(b) The shared outdoor and children's play areas shall be located and designed in a manner which:
(i) Provides approximately the same accessibility to the maximum number of dwelling units possible;
(ii) Allows residents to watch over these areas from windows in at least two adjacent dwelling units. These windows must provide viewing from the kitchen, living room, dining room or other activity room (bedrooms or bathrooms are not included);
(iii) Provides a separation from all entryway and parking areas with a landscaped transition area measuring a minimum of 10 feet wide;
(iv) Controls access to shared outdoor areas from off-site as well as from on-site parking and entrance areas with features such as fencing, walls and landscaping;
(v) Provides both sunny and shady spots; and
(vi) Provides a usable floor surface (material such as lawn, decks, wood chips, sand and hard surface materials qualify).
(c) These standards shall not apply to townhouses or within the Central Design District or within the Mixed Use Commercial Overlay District. Within the Mixed Use Commercial Overlay District the amount of shared outdoor areas and children's play areas shall be consistent with the intent of the Mixed Use Commercial Overlay District and shall be appropriate for the design and scale of residential use proposed as determined through the Architectural Review process.

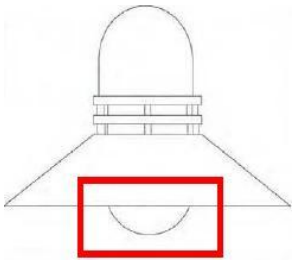
Because the requirements exempt townhouses, they are not applicable.

73.130(4) Safety and Security.
(a) Except for townhouses, private outdoor areas shall be separated from shared outdoor areas and children's play areas with elements such as walls, buildings, landscaping, and changes in grade in a manner which enables residents to utilize these areas as an extension of their units.
(b) Windows shall be located to encourage watching over entry areas, shared outdoor areas, walkways and parking areas.
(c) An outdoor lighting system shall be provided which facilitates police observation and resident observation through strategic location, orientation and brightness without shining into residential units, public rights-of-way, or fish and wildlife habitat areas.
(d) An identification system shall be established which clearly orients visitors and emergency services as to the location of residential units. Where possible, this system should be evident from the primary vehicle entryway.

Because the requirement of (4)(a) exempts townhouses, it is not applicable.

Regarding (4)(b), the proposed townhouse elevations and floor plans indicate windows encouraging watching over entry areas, shared outdoor areas, walkways and parking areas, meeting the requirement.

Regarding (4)(c), the elevations call out and note conceptual locations for a model of "decorative wall sconce". On the trash enclosure details sheet, inset 1 describes the wall-mounted fixture, which facilitates police observation and resident observation at unit entrances. As reproduced from the sheet and indicated in red below, the fixture bulb protrudes beyond the fixture housing.



Because it is not a full cut-off fixture and it is likely that it would shine into the units or public rights-of-way (ROWs), the applicant needs to revise the lighting proposal so that the proposed fixture model or models are full cut-off by submitting cut sheets showing no light would encroach into ROWs and, if needed to demonstrate compliance, a simple lighting plan.

Staff recommends iteration of the requirement as a condition of approval (AR-2B). The *Guidelines for Good Exterior Lighting Plans* (Attachment **114**) is available as an implementation aid.

Because the site plans make no mention of address numerals and the elevations illustrate none, staff is imposing a condition to meet the requirement of (4)(d). The applicant needs to revise the elevations to indicate placement of address numerals that meet the needs of Tualatin Valley Fire & Rescue (TVF&R).

Staff recommends iteration of the requirement as a condition of approval (AR-2H).

73.130(5) Service, Delivery and Screening.
(a) Provisions for postal delivery shall be conveniently located and efficiently designed for residents and mail delivery personnel.
(b) Safe pedestrian access from unit entries to postal delivery areas, shared activity areas, and parking areas shall be provided. Elements such as, but not limited to, concrete paths, raised walkways through vehicular areas or bark chip trails will meet this requirement.
(c) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.

Because the application materials lack information regarding the requirements of (5), the requirements are not met. The applicant needs to provide graphics and text, such as through revised site plans, about postal delivery and the screening of on and above grade electrical and mechanical equipment.

Staff recommends iteration of the requirement as a condition of approval (AR-2G).

73.130(6) Accessways.
(a) Accessways shall be constructed, owned and maintained by the property owner.
(b) Accessways shall be provided between the development's walkway and bikeway circulation system and all of the following locations that apply:
(i) adjoining publicly-owned land intended for public use, including schools, parks, or bike lanes. Where a bridge or culvert would be necessary to span a designated greenway or wetland to provide a connection, the City may limit the number and location of accessways to reduce the impact on the greenway or wetland;
(ii) adjoining arterial or collector streets upon which transit stops or bike lanes are provided or designated;
(iii) adjoining undeveloped residential or commercial property; and

(iv) adjoining developed sites where an accessway is planned or provided.
(c) Accessways to undeveloped parcels or undeveloped transit facilities need not be constructed at the time the subject property is developed. In such cases the applicant for development of a parcel adjacent to a vacant parcel shall enter into a written agreement with the City guaranteeing future performance by the applicant and any successors in interest of the property being developed to construct an accessway when the adjacent undeveloped parcel is developed. The agreement shall be subject to the City's review and approval.
(d) Accessways for multi-family development shall:
(i) be a minimum of 8 feet in width;
(ii) be constructed in accordance with the Public Works Construction Code if they are public accessways, and if they are private accessways they shall be constructed of asphalt, concrete or a pervious surface such as pervious asphalt or concrete, pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable;
(iii) not have fences or gates which prevent pedestrian and bike access at the entrance to or exit from any accessway; and
(iv) have curb ramps wherever the accessway crosses a curb.
(e) Outdoor Recreation Access Routes shall be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.

31.060 Definitions
Accessway. A non-vehicular, paved pathway designed for pedestrian and bicycle use and providing convenient linkages between a development and adjacent residential and commercial properties and areas intended for public use such as schools, parks, and adjacent collector and arterial streets where transit stops or bike lanes are provided or designated. An accessway is not a sidewalk.
Outdoor Recreational Access Route. A pedestrian path that provides access to a recreation trail. These trails are on City-owned property, exclusive rights-of-way or easements, but are not necessarily located in a designated greenway. They are typically 1/4 mile or less in length.

The development has no walkway and bikeway circulation system because it is not a garden apartment complex or a complex of condominiums or townhouses on a shared parcel with an internal driveway system. The proposal is for townhouses with direct access to public streets or via shared driveways along future flag lot stems. Additionally, the site development area is not adjacent to or near a greenway or recreation trail. For these reasons, the accessway and Outdoor Recreational Access Route requirements are not applicable to the townhouses.

73.130(7) Walkways [Multi-family].
(a) Except for townhouses, walkways for multi-family development shall be a minimum of 6 feet in width and be constructed of asphalt, concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable.
(b) Curb ramps shall be provided wherever a walkway crosses a curb.

31.060 Definitions
Walkway. A pedestrian facility which provides a paved surface for pedestrian circulation within a development. A walkway may be shared with bicycles and may cross vehicle areas.

Because the requirements exempt townhouses, they are not applicable.

73.160 The following standards are minimum requirements for commercial, industrial, public and semi-public development and it is expected that development proposals shall meet or exceed these minimum requirements.
73.160(1) Pedestrian and Bicycle Circulation.
(a) For commercial, public and semi-public uses:
(i) a walkway shall be provided between the main entrance to the building and any abutting public right-of-way of an arterial or collector street where a transit stop is designated or

provided. The walkway shall be a minimum of 6 feet wide and shall be constructed of concrete, asphalt, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable;
(ii) walkways shall be provided between the main building entrances and other on-site buildings and accessways. The walkways shall be a minimum of 6 feet wide and shall be constructed of concrete, asphalt, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable;
(iii) walkways through parking areas, drive aisles, and loading areas shall be visibly raised and of a different appearance than the adjacent paved vehicular areas;
(iv) accessways shall be provided as a connection from the development's internal bikeways and walkways to all of the following locations that apply: abutting arterial or collector streets upon which transit stops or bike lanes are provided or designated; abutting undeveloped residential or commercial areas; adjacent undeveloped sites where an agreement to provide an accessway connection exists; and to abutting publicly-owned land intended for general public use, including schools;
(v) fences or gates which prevent pedestrian and bike access shall not be allowed at the entrance to or exit from any accessway.
(vi) bikeways shall be provided which link building entrances and bike facilities on the site with the adjoining public right-of-way and accessways.
(vii) Outdoor Recreation Access Routes shall be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.
(c) Curb ramps shall be provided wherever a walkway or accessway crosses a curb.
(d) Accessways shall be a minimum of 8 feet wide and constructed in accordance with the Public Works Construction Code if they are public accessways, and if they are private accessways they shall be constructed of asphalt, concrete or a pervious surface such as pervious asphalt or concrete, pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable.
(e) Accessways to undeveloped parcels or undeveloped transit facilities need not be constructed at the time the subject property is developed. In such cases the applicant for development of a parcel adjacent to an undeveloped parcel shall enter into a written agreement with the City guaranteeing future performance by the applicant and any successors in interest of the property being developed to construct an accessway when the adjacent undeveloped parcel is developed. The agreement shall be subject to the City's review and approval.
(f) Where a bridge or culvert would be necessary to span a designated greenway or wetland to provide a connection to a bike or pedestrian path, the City may limit the number and location of accessways to reduce the impact on the greenway or wetland.
(g) Accessways shall be constructed, owned and maintained by the property owner.

31.060 Definitions
Accessway. A non-vehicular, paved pathway designed for pedestrian and bicycle use and providing convenient linkages between a development and adjacent residential and commercial properties and areas intended for public use such as schools, parks, and adjacent collector and arterial streets where transit stops or bike lanes are provided or designated. An accessway is not a sidewalk.

The narrative states under Project Summary in the third paragraph that the Community Center is to serve primarily the residents of the skilled nursing and assisted living community and the multi-family dwellings. Many requirements in TDC 73 apply to specified groups of land uses, among them commercial, industrial, institutional, multi-family, public, semi-public, and townhouse. On a number of occasions prior to application submittal and during a meeting with staff on August 4, 2014, the applicant had mentioned that some portions of the building or activities within would be open secondarily to the public. The Community Center elevations sheet includes a floor plan indicating an auditorium, café, gym, and indoor pool. An auditorium and a café are not found in conventional suburban multi-family

developments, such as garden apartment complexes. The building is sited with direct cyclist and pedestrian access from two public streets and direct vehicle access from one, unlike a community center within the interior of a garden apartment complex. For these reasons, it is reasonable to choose and apply the semi-public category as the best fit among the listed categories. Additionally, to classify the Community Center building as multi-family or townhouse would complicate and make non-sensical the applying standards written for actual such dwellings.

Regarding zoning, 41.020 that lists RML permitted uses does not explicitly include multi-family amenities such as clubhouses, gyms, leasing offices, or swimming pools as examples of accessory structure or use, which is defined in 31.060:

> Accessory Structure or Use. A structure or use incidental and subordinate to the main use of the property and which is located on the same lot with the main use, such as, but not limited to, garage, carports, tool sheds, private greenhouses, utility buildings, and home occupations.

At the same time, TDC 41 makes no reference to such uses as either conditional or prohibited and also makes no allowance for a zoning interpretation pursuant to 31.070 in which the Community Development Director would find use(s) of similar character to meet the purpose of RML. Applying the definition of accessory use or structure is the only remaining short-term option for code compliance.

In order to balance the apparent and appropriate nature of the Community Center as part of an overall multi-family proposal and assumed zoning intent on one hand with implementation of the TDC as written on the other, and to apply the definition, revision of site plans is necessary to clearly show that at present the subject property is composed of two Tax Lots 501 and 502 and that the Community Center and townhouse lot lines compose a preliminary subdivision plan and are contextual. This preliminary subdivision plan neither exists nor is approved. Therefore, the Community Center and a number of townhouses , including the 14 units composing Phase I, are proposed within the boundaries of Lot 501, i.e. on the same lot.

To retain application of the definition, following AR-14-07 approval and to allow construction of the approved site development, the applicant needs to adjust property lines via any of partition, property line adjustment, or subdivision application(s) pursuant to the direction of the Engineering Division to propose lot lines such that 31.060 Accessory Structure or Use can continue to apply to the Community Center.

Staff recommends a condition of approval to this effect (AR-2E).

The above cited pedestrian and bicycle circulation requirements apply to the semi-public Community Center.

Walkways

The site plans revised and submitted July 28, 2014 propose a walkway between the Community Center main entrance and SW Nasoma Lane and a second walkway between a secondary entrances and SW Boones Ferry Road. The Boones Ferry

walkway exceeds the minimum required width of 6 ft, and the Nasoma walkway is 6 ft wide. The requirements are met.

Accessways & Outdoor Recreational Access Routes

The Community Center fits two of the site development contexts listed in the accessway requirement of (1)(a)(iv). Pursuant to Figures 11-1 (Attachment **108**), the Transportation System Plan (TSP) classifies SW Boones Ferry Road as a Major Arterial. Figure 74-2A Street Design Standards: Major Arterial (Attachment **113**) illustrates bike lanes, and Figure 11-4 (Attachment **109**) indicates bike lanes. Figure 11-5 Transit Plan (Attachment **110**) indicates both existing fixed-route bus transit service and partial fixed route shuttle service along SW Boones Ferry Road. For these reasons, an accessway is required to and from the road. (Figure 72-2 [Attachment **111**] indicates no planned greenway path or trail on or along the site development area.)

The Community Center illustrates a partial accessway in the form of a paved path 8 ft wide from SW Boones Ferry Road; however, it does not connect to the Nasoma walkway that connects to the main entrance. The Boones Ferry accessway forks such that the south fork continues as a walkway along the south side of the building and dead-ends at a southwest building corner where there is no door as indicated by the elevations. This design is likely to attract pedestrians assuming the walkway leads to the main entrance only to walk approximately 100 ft, turn a corner, find a dead-end, and either double back 100 ft or trudge through shrubbery and lawn to get to the main entrance. The north fork continues as a walkway to emergency or side doors to the indoor pool. To meet the combined requirements of (1)(a)(ii) and (iv) that walkways and accessways connect to main entrances, the applicant needs to provide a Boones Ferry accessway 8 ft wide between the SW Boones Ferry Road sidewalk and the main building entrance.

Staff recommends iteration of the requirement as a condition of approval (AR-2A).

Because the Community Center is not adjacent to or near a greenway or recreation trail pursuant to Figure 72-2 (Attachment **111**), the Outdoor Recreational Access Route requirements are not applicable.

73.160(3)
(a) Locate windows and provide lighting in a manner which enables tenants, employees and police to watch over pedestrian, parking and loading areas.
(b) In commercial, public and semi-public development and where possible in industrial development, locate windows and provide lighting in a manner which enables surveillance of interior activity from the public right-of-way.
(c) Locate, orient and select on-site lighting to facilitate surveillance of on-site activities from the public right-of-way.
(d) Provide an identification system which clearly locates buildings and their entries for patrons and emergency services.
(e) Shrubs in parking areas must not exceed 30 inches in height. Tree canopies must not extend below 8 feet measured from grade.
These requirements apply to the semi-public Community Center.

Regarding (3)(a)-(c), the elevations show windows on all four sides of the building and that face the walkways and parking area, and the windows and parking area pole-mounted lighting allow surveillance of interior activity from the public right-of-way (ROW), meeting the requirements.

Because the site plans make no mention of address numerals and the elevations illustrate none, staff is imposing a condition to meet the requirement of (d). The applicant needs to revise the elevations to illustrate retention or replacement of address numerals that meet the needs of Tualatin Valley Fire & Rescue (TVF&R).

Staff recommends iteration of the requirement as a condition of approval (AR-2H).

With proper maintenance and pruning, the proposed landscape plan meets the requirement of (e).

73.160(4)(a) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.
This requirement applies to the semi-public Community Center.

Because the site plans, including the landscape plan, do not indicate on and above grade electrical and mechanical equipment, yet there is likely to be such equipment, the applicant needs to provide indication that if the applicant were to propose additional such equipment, that the applicant would comply with the requirement.

Staff recommends iteration of the requirement as a condition of approval (AR-2I).

I. Structure Design

Section 73.050(1)
(b) The proposed design of the development is compatible with the design of other developments in the same general vicinity.
(c) The location, design, size, color and material of the exterior of all structures are compatible with the proposed development and appropriate to the design character of other development in the same vicinity.
The vicinity around the site development area is one tax lot deep, an area that includes the businesses and land uses that Section D Planning Districts and Adjacent Land Uses identifies and is designated or zoned a combination of Light Manufacturing (ML), High Density Residential (RH), Medium Low Density Residential (RML), and Low Density Residential (RL) Planning District. It includes redevelopment of rural houses that began in the 1970s to the northeast, east, and south into Chelan Apartments and single-family housing subdivisions. In the early ‘80s came Tualatin Heights Apartments to the west and the industrial building at 19500 SW 90th Court to the northwest. Chelan has a beige and brown color scheme, the single-family houses vary with mostly neutral colors, Tualatin Heights has an orange beige color, and the industrial buildings have two-tone neutral color schemes. The vicinity also includes Marquis Phase 1, the assisted living and skilled nursing facility at 19945 SW Boones Ferry Road, a modernist building with fiber cement siding in cream and several dark hues of colors including blue, green, and maroon, and with many vertically proportioned windows akin to traditional architecture.

Townhouse Architecture

The proposal has three standard unit plans for townhouses, Plans 1, 2, and 3, two of each combined for a set of two townhouses. The includes townhouse elevations revised and submitted July 28, 2014 for the fronts and sides.

There is a need for side elevations with greater architectural ornament specific to certain sites within the site development area to meet the requirement and serve the following community and multi-family design objectives:

> *73.020(2)*
> *(b) Discourage monotonous, drab, unsightly, dreary and inharmonious development.*
> *(c) Promote the City's natural beauty and visual character and charm by ensuring that structures and other improvements are properly related to their sites … .*
> *73.120(14) Create opportunities for, or areas of, visual and aesthetic interest for occupants and visitors to the site.*

Most of the townhouses are sited such that their sides are 10 ft from the sides of other townhouses, meaning the sides would be little visible other than by residents of neighboring units. However, at least thirteen units would be sited such a side of each of these units would be farther away from other structures and visible from public streets or shared driveways and the occupants and visitors who travel them. These are the units numbered 2, 12, 17, 18, 27, 36, 37, 44, 45, 46, 53, 58, and 65, and the sides are indicated in the illustrated excerpt below by red rectangles.

The side elevations illustrate that Plan 1 and 3 sides would have one or two sets of windows each, and this appears too few for the aforementioned units because it indicates too much blank exterior wall resulting in monotony and drabness. Plan 2 sides each have two sets of windows and two small upper windows and no architectural ornament other than fiber cement side in one or two colors. By comparison, the front elevations in terms of the color and architectural ornament have siding in two or three colors and some canopies over windows. The side elevations are reproduced below:

1 LEFT ELEVATION
1/4" = 1'-0"

Unit 1-3: Left

2 RIGHT ELEVATION
1/4" = 1'-0"

Unit 1-3: Right

1 LEFT ELEVATION *(RIGHT ELEVATION SIM.)*
1/4" = 1'-0"

Unit 2-2: Left (Right is to be similar.)

For these reasons described starting in the bottom paragraph on p. 14 and continuing on p. 15, the applicant needs to redesign side elevations for the specific sides of the units on the aforementioned units by adding architectural ornament,

primarily windows.

Staff recommends a condition of approval to this effect (AR-2D1).

Because the proposed building type of townhouse is similar to a house, among other implementation aids the applicant and staff can look to is the Single-Family Architectural Review (ARSF) standards that the City Council established and that took effect June 11, 2008 as 73.190(1)(a). The purpose of this administrative permit type is for new houses and qualifying house additions to have a minimum window area on each elevation (with few exceptions) and a minimum number of "wall design elements", i.e. categories of architectural ornament. The ARSF application packet on pages 5-9 has a thumbnail menu of architectural ornament types that can serve as a basis for negotiation between the applicant and the City related to architecture.

Non-Standard Townhouses / Units 26, 49, & 50

The site plan legend refers to "unique design multifamily units" represented by the hatching of the locations of Units 26, 49, & 50 and that will have elevations other than the standard combinations of Plans 1, 2, and 3. Because the site plan includes Unit 26 within Phase II and Units 49 and 50 within Phase IV, when those phases approach development, prior to City issuance of permits, the applicant will need to provide elevations and other information to ensure that, like the proposed townhouses, the units will meet TDC multi-family design requirements.

Staff recommends a condition of approval to this effect (AR-2D2).

Community Center Architecture

The elevations and renderings show the Community Center as a one-story modernist building. It most resembles one of the closest of other developments in the same general vicinity – the Phase 1 the assisted living and skilled nursing facility – in terms of location relative to public streets, color, and material. The Center is set back from public streets, has little ornament, and has a combination of brick base with beige and dark hues of colors including blue and maroon above. The Center also relates to residential developments in the same general vicinity by having a pitched roof and being single-story, with three elevations having windows for a second story that is a false story but appears true and overall has the appearance of a portion of a large house. The Community Center meets the requirements of (1)(b) and (c).

73.100(2) All building exterior improvements approved through the Architectural Review Process shall be continually maintained including necessary painting and repair so as to remain substantially similar to original approval through the Architectural Review Process, unless subsequently altered with Community Development Director approval.

Because the applicant cannot demonstrate compliance until after approval of this AR, staff recommends iteration of the requirement as a condition of approval (AR-4E).

73.190(2) The following standards are minimum requirements for multi-family and townhouse development. (a) Storage.
(i) Except as provided in Subsection (a)(ii), enclosed storage areas are required and shall be attached to the exterior of each dwelling unit to accommodate garden equipment, patio furniture, barbecues, bicycles, etc. Garages are not intended to satisfy storage requirements. Each storage area shall be a minimum of 6 feet in height and have a minimum floor area of:
(A) 24 square feet for studio and one bedroom units;
(B) 36 square feet for two bed-room units; and
(C) 48 square feet for greater than two bedroom units.
(ii) For townhouses and residential and mixed use residential developments in the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, some provision shall be made for outdoor storage adjacent to private outdoor areas. Such provisions shall be reviewed for adequacy through Architectural Review and shall be designed to accommodate barbecues or other small deck equipment.
Townhouse Plan 1 pairs a one-bedroom and a two-bedroom unit. Plan 2 pairs two two-bedroom units. The two-bedroom unit of Plan 1 includes an oversized one-car garage with an area designated as "storage bay", which though within a garage is clearly meant for storage and would not preclude parking a vehicle. However, it lacks noted dimensions. Additionally, none of the plans or units include any other areas designated for exterior enclosed storage, such as an outdoor closet accessible from a deck, patio, or yard.

The applicant on July 28, 2014 submitted the following text:

> The largest garage is 13' 6", with a storage bay of 2 feet by 18 feet, 36 sq. ft. in area. The smallest garage is approx. 10' by 21', with a parking area of 10' by 18'. The intermediate garages are 11'6" by 20' with a parking area of 10' by 18'. The intermediate garages are wider than a typical single car garage and provide a wall of storage 1 foot wide by 18 feet long. Additionally they provide a small area at the head of the garage for additional storage approx. 2 feet by 4 feet. The intermediate garages provide storage of approx. 26 sq. ft.
>
> These units are proposed for a campus location that will be completely maintained by the owner/manager Marquis Companies, so the need for gardening or lawn maintenance equipment is minimal. Bicycles can be parked along the side of the garage walls or hung on the walls, a very typical storage method in residential units. Every rear patio is covered so patio furniture will most likely stay on the back patios year-round. Likewise, bbq's will sit on the back patio/deck.
>
> The ARB Review Board will need to understand and consider that this project is NOT a "general population" for rent complex. It is planned and designed for a specific population who – in their mature adult years – will decide to downsize their possessions and their lifestyle to live in close proximity to the main "assisted living and skilled nursing" building on the campus. While the various scenarios or reasons for moving onto this campus will be varied, the understanding of the size of the units and the expectations of the residents will be similar. They will make a very calculated decision to move into the unit AFTER carefully examining the amenities and the limitations, and weighing those facts against their needs and/or desires to be a part of the community. The floor plan has been carefully designed to accommodate aging in place, and sacrificing ADA bathrooms or other indoor spaces designed for the aging-in-place senior citizen MUST take precedence over the generic expectations of the Tualatin Development Code.

Because the requirement is not clearly met, staff is imposing a condition related to the requirement of (2)(a)(i). The applicant needs to revise the unit plans to illustrate

and note the locations, dimensions, and square footages of required areas for exterior enclosed storage and their means of access.

Staff recommends iteration of the requirement as a condition of approval (AR-2J).

Because staff reads the requirement of (2)(a)(ii) such that "For townhouses and residential and mixed use residential developments in the Central Design District …" means "In the Central Design District, townhouses and residential and mixed use residential developments …" rather than "Townhouses anywhere, or in the Central Design District residential and mixed use residential developments …", it is not applicable.

73.190(2)(b) Carports and Garages.
(i) If carports and garages are provided for multi-family development, except townhouses, the form, materials, color and construction shall be compatible with the complex they serve.
(ii) At least one garage space shall be provided for townhouses.
Because the requirement of (2)(b)(i) exempts townhouses, it is not applicable. Regarding (ii), the proposal includes a one-car garage for each townhouse, meeting the requirement.

J. Mixed Solid Waste and Source Separated Recyclables Storage Areas for New or Expanded Multi-Unit Residential, Including Townhouses, Commercial, Industrial, Public and Semi-Public Development

73.227
The following standards are minimum requirements for mixed solid waste and source separated recyclables storage areas. To provide for flexibility in designing functional storage areas, this section provides four different methods to meet the objectives of providing adequate storage for mixed solid waste and source separated recyclables and improving the efficiency of collection. An applicant shall choose and implement one of the following four methods to demonstrate compliance: 1) minimum standards; 2) waste assessment; 3) comprehensive recycling plan; or 4) franchised hauler review, as more fully described in subsections (2), (3), (4) and (5) of this section.
(1) The mixed solid waste and source separated recyclables storage standards shall apply to all new or expanded multi-family residential developments containing five or more units.
(2)(a) The size and location of the storage area(s) shall be indicated on the site plan. Compliance with the requirements set forth below are reviewed through the Architectural Review process.
(i) The storage area requirement is based on the area encompassed by predominant use(s) of the building (e.g., residential, office, retail, wholesale/warehouse/manufacturing, educational/institutional or other) as well as the area encompassed by other distinct uses. If a building has more than one use and that use occupies 20 percent or less of the gross leasable area (GLA) of the building, the GLA occupied by that use shall be counted toward the floor area of the predominant use(s). If a building has more than one use and that use occupies more than 20 percent of the GLA of the building, then the storage area requirement for the whole building shall be the sum of the area of each use.
The site plans included the size and location of such storage area for the Community Center, and the predominant uses of the townhouses fall under the category of residential and those of the Community Center under educational/institutional or other.

(ii) Storage areas for multiple uses on a single site may be combined and shared.
The applicant proposes to exercise this option for the Community Center.

(iv) Multi-family residential developments containing 5-10 units shall provide a minimum storage area of 50 square feet. Multi-family residential developments containing more than 10 units shall provide 50 square feet plus an additional 5 square feet per unit for each unit above 10.

The application materials include mixed solid waste and source separated recyclables storage area information in the narrative and a June 9, 2014 letter from waste hauler Republic Services, both of which relate to the Community Center only. Pursuant to 73.227 above, the applicant has among options 1) minimum standards or 4) franchised hauler review. Because of the lack of information regarding the townhouses that relates to either 1) or 4), no mixed solid waste and source separated recyclables storage area requirement is met, and staff is imposing a condition.

The applicant needs to act such that either 1) multi-family residential developments containing 5-10 units shall provide a minimum storage area of 50 square feet, and multi-family residential developments containing more than 10 units shall provide 50 square feet plus an additional 5 square feet per unit for each unit above 10; or, 4) franchised hauler review occurs and includes provision of a letter from the hauler regarding the townhouse mixed solid waste and source separated recyclables storage areas.

Staff recommends iteration of the requirements as a condition of approval (AR-2K).

73.227(6)(a)

(i) To encourage its use, the storage area for source separated recyclables may be co-located with the storage area for mixed solid waste.

The applicant has chosen to exercise this option for the Community Center.

(iii) Storage area space requirements can be satisfied with a single location or multiple locations, and can combine both interior and exterior locations.

The applicant has chosen to exercise this option for the Community Center.

(iv) Exterior storage areas shall not be located within a required front yard setback or in a yard adjacent to a public or private street.

The Community Center site plan proposes placement of the trash enclosure near the northwest corner of the site and parking area, away from SW Nasoma Lane, meeting the requirement.

(v) Exterior storage areas shall be located in central and visible locations on the site to enhance security for users.

The Community Center site plan proposes placement of the trash enclosure near the northwest corner of the site and parking area, visible from the Community Center and within the parking area, meeting the requirement.

(vi) Exterior storage areas can be located in a parking area, if the proposed use provides parking spaces required through the Architectural Review process.

The Community Center site plan proposes placement of the trash enclosure near the northwest corner of parking area, the proposal provides parking spaces as examined for the requirement of 73.370(2)(a) below, meeting the requirement.

(vii) Storage areas shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on site or on public streets adjacent to the site.

The Community Center site plan proposes placement of the trash enclosure near the northwest corner of the site and parking area. The application materials include from the waste hauler Republic Services a June 9, 2014 letter that supports the proposed placement, which would not obstruct pedestrian or vehicle traffic movement on site or to or from SW Nasoma Lane, meeting the requirement.

73.227(6)(b)

(i) The dimensions of the storage area shall accommodate containers consistent with current methods of local collection at the time of Architectural Review approval.

The application materials include from the waste hauler Republic Services a June 9, 2014 letter about the Community Center stating that, "[T]he enclosure is still on the narrow side and will need manual pull-outs for the containers however I do not see anything that will affect us servicing the waste and recycling needs; either safely, or as often as needed. This site looks very adequate, for service", meeting the requirement.

(ii) Storage containers shall meet Fire Code standards and be made and covered with waterproof materials or situated in a covered area.

Because the application materials lack information confirming the requirement, the requirement is not met. The applicant needs to revise the Community Center trash enclosure details sheet to note compliance.

Staff recommends iteration of the requirement as a condition of approval (AR-2L).

(iii) Exterior storage areas shall be enclosed by a sight obscuring fence or wall at least 6 feet in height. In multi-family, commercial, public and semi-public developments evergreen plants shall be placed around the enclosure walls, excluding the gate or entrance openings. Gate openings for haulers shall be a minimum of 10 feet wide and shall be capable of being secured in a closed and open position. A separate pedestrian access shall also be provided in multi-family, commercial, public and semi-public developments.

The trash enclosure details sheet revised and submitted July 28, 2014 illustrates Community Center trash enclosure walls at least 6 ft, 2 inches in height, a gate opening width of 12 ft, gates capable of being secured in a closed and open position, and a separate pedestrian access. The Community Center landscape plan shows evergreen shrubbery around the enclosure. The requirements are met.

(iv) Exterior storage areas shall have either a concrete or asphalt floor surface.

The trash enclosure details sheet illustrates paved floor surface, meeting the requirement.

(v) Storage areas and containers shall be clearly labeled to indicate the type of material accepted.

The proposed storage areas will have containers for different types of materials. Metro, the Portland metropolitan area regional government, provides that different materials are accepted in differently colored receptacles, and this is implemented by

regional waste haulers, meeting the requirement.

73.227(6)(c)
(i) Access to storage areas can be limited for security reasons. However, the storage areas shall be accessible to users at convenient times of the day, and to hauler personnel on the day and approximate time they are scheduled to provide hauler service.
The applicant has not proposed to limit access to storage areas for security reasons.

(ii) Storage areas shall be designed to be easily accessible to hauler trucks and equipment, considering paving, grade, gate clearance and vehicle access. A minimum of 10 feet horizontal clearance and 8 feet vertical clearance is required if the storage area is covered.
The application materials include from the waste hauler Republic Services a June 9, 2014 letter about the Community Center stating that, "[T]he enclosure is still on the narrow side and will need manual pull-outs for the containers however I do not see anything that will affect us servicing the waste and recycling needs; either safely, or as often as needed. This site looks very adequate, for service." The trash enclosure details sheet illustrates 12 ft horizontal clearance. Regarding vertical clearance, trash enclosure details sheet insets 3, 5, and 6 conflict in that 3 and 5 indicate no roof and unlimited vertical clearance, while inset 6 has notations referring to a roof with no indicate of vertical clearance. The applicant needs to revise the sheet to make consistent the proposed trash enclosure details and show a vertical clearance of at least 8 ft.

Staff recommends iteration of the requirement as a condition of approval (AR-2M).

(iii) Storage areas shall be accessible to collection vehicles without requiring backing out of a driveway onto a public street. If only a single access point is available to the storage area, adequate turning radius shall be provided to allow vehicles to safely exit the site in a forward motion.
The site plans illustrate that no garbage truck backing out of the Community Center driveway onto SW Nasoma Lane is necessary for hauler access to the enclosure, and the site plan layout with a single access point allows adequate turning radius for a garbage truck, meeting the requirement.

K. Landscaping

73.100(1) All landscaping approved through the Architectural Review Process shall be continually maintained, including necessary watering, weeding, pruning and replacement, in a manner substantially similar to that originally approved through the Architectural Review Process, unless subsequently altered with Community Development Director approval.
Because the applicant cannot demonstrate compliance until after approval of this AR, staff recommends iteration of the requirement as a condition of approval (AR-4D).

73.240(2) The minimum area requirement for landscaping for conditional uses for RL, RML, RMH, RH and RH/HR Planning Districts, listed in TDC 40.030, 41.030, 42.030, 43.030 and 44.030, excluding 40.030(3), 40.030 (4)(j), 40.030 (4)(m), 40.030 (4)(n) and 41.030(2) shall be twenty-five (25) percent of the total area to be developed. When a dedication is granted in accordance with the planning district provisions on the subject property for a fish and wildlife habitat area, the minimum area requirement for landscaping shall be twenty (20) percent of the total area to be developed as determined through the AR process.

Neither TDC 41 nor 73 contain a minimum landscaped area requirement specific to RML permitted uses. Because the proposal is for permitted uses, the requirement of (2) is not applicable. (The applicant proposes no dedication of greenway or natural area.)

73.240(9) Yards adjacent to public streets, except as described in 73.240(7), shall be planted to lawn or live groundcover and trees and shrubs and shall be perpetually maintained in a manner providing a park-like character to the property as approved through the Architectural Review process.

The landscape plans indicate that the townhouses and Community Center will have yards adjacent to SW Boones Ferry Road, SW Nasoma Lane, and SW 90th Avenue planted with a combination of lawn, live groundcover, shrubs, and trees, meeting the requirement.

73.240(10) Yards not adjacent to public streets or Low Density Residential (RL) or Manufacturing Park (MP) Planning Districts shall be planted with trees, shrubs, grass or other live groundcover, and maintained consistent with a landscape plan indicating areas of future expansion, as approved through the Architectural Review process.

The landscape plans indicate that the townhouses and Community Center will have yards not adjacent to public streets planted with a combination of lawn, live groundcover, shrubs, and trees, meeting the requirement.

73.240(11) Any required landscaped area shall be designed, constructed, installed, and maintained so that within three years the ground shall be covered by living grass or other plant materials. (The foliage crown of trees shall not be used to meet this requirement.) A maximum of 10% of the landscaped area may be covered with unvegetated areas of bark chips, rock or stone.

The landscape plans illustrate the townhouses and Community Center with landscaped areas designed so that within three years the ground shall be covered by living grass or other plant materials and that no more than 10% of the landscaped area is covered with unvegetated areas of bark chips, rock or stone, meeting the requirement.

73.260(1)(a) Deciduous shade and ornamental trees shall be a minimum one and one-half inch (1 1/2") caliper measured six inches (6") above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be characteristically shaped specimens.

Because the landscape plans for the townhouses and Community Center mention no tree caliper sizes, the requirement is not met. The applicant needs to revise the landscape plans. The applicant should place proposed trees such that they do not conflict with the placement of potable water, sanitary sewer, and stormwater lines and related lateral lines.

Staff recommends iteration of the requirement as a condition of approval (AR-2N).

73.260(1)(b) Coniferous trees shall be a minimum five feet (5') in height above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be well branched and characteristically shaped specimens.

Because the landscape plans for the townhouses and Community Center propose no coniferous trees, the requirement is not applicable.

73.260(1)(c) Evergreen and deciduous shrubs shall be at least 1 to 5 gallon size. Shrubs shall be characteristically branched. Side of shrub with best foliage shall be oriented to public view.
Because the landscape plans for the townhouses and Community Center mention no shrub gallon sizes, the requirement is not met. The applicant needs to revise the landscape plans.

Staff recommends iteration of the requirement as a condition of approval (AR-2O).

73.260(1)(d) Groundcovers shall be fully rooted and shall be well branched or leafed. English ivy (Hedera helix) is considered a high maintenance material, which is detrimental to other landscape materials and buildings and is therefore prohibited.
The landscape plans lists groundcover species other than English ivy, meeting the requirement.

73.260(1)(e) Lawns shall consist of grasses, including sod, or seeds of acceptable mix within the local landscape industry. Lawns shall be 100 percent coverage and weed free.
The landscape plans for the townhouses and Community Center propose lawns of grass, meeting the requirement.

73.280 Except for townhouse lots, landscaped areas shall be irrigated with an automatic underground or drip irrigation system.
The application narrative states, “Irrigation will be provided as required and will be detailed on the final landscape construction plans.” The applicant needs to ensure that the revised and final Community Center landscape plan or other site plan sheet(s) indicates an automatic underground or drip irrigation system.

Staff recommends iteration of the requirement as a condition of approval (AR-2P).

73.290(1) Where natural vegetation has been removed or damaged through grading in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements, such areas shall be replanted.
Because the applicant cannot demonstrate compliance until after approval of this AR, staff recommends iteration of the requirement as a condition of approval (AR-2Q).

73.310(1) A minimum 5-foot-wide landscaped area must be located along all building perimeters, which are viewable by the general public from parking lots or the public right-of-way, excluding loading areas, bicycle parking areas and pedestrian egress/ingress locations. Pedestrian amenities such as landscaped plazas and arcades may be substituted for this requirement. This requirement shall not apply where the distance along a wall between two vehicle or pedestrian access openings (such as entry doors, garage doors, carports and pedestrian corridors) is less than 8 feet.
This requirement applies to the semi-public Community Center.

The landscape plan illustrates that the Community Center has a combination of landscaping, walkways, and a walkway bulb-out as a plaza along the building perimeter, meeting the requirement.

73.310(2) Areas exclusively for pedestrian use that are developed with pavers, bricks, etc., and contain pedestrian amenities, such as benches, tables with umbrellas, children’s play areas, shade trees, canopies, etc., may be included as part of the site landscape area requirement.
This option applies to the semi-public Community Center.

73.310(3) All areas not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas or undisturbed natural areas shall be landscaped.
This requirement applies to the semi-public Community Center.

The landscape plan revised and submitted July 28, 2014 illustrates all areas not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas or undisturbed natural areas as landscaped, meeting the requirement.

73.340(1) A clear zone shall be provided for the driver at ends of on-site drive aisles and at driveway entrances, vertically between a maximum of 30 inches and a minimum of 8 feet as measured from the ground level, except for parking structures and under-ground parking, where this provision shall not apply.
This requirement applies to the semi-public Community Center.

The Community Center landscape plan illustrates no building or structure within the vision clearance area, meeting the requirement.

73.340(2) Perimeter site landscaping of at least 5 feet in width shall be provided in all off-street parking and vehicular circulation areas (including loading areas).
(a) The landscape area shall contain:
(i) Deciduous trees an average of not more than 30 feet on center. The trees shall meet the requirements of 73.360(7).
(ii) Plantings which reach a mature height of 30 inches in 3 years which provide screening of vehicular headlights year round.
(iii) Shrubs or ground cover, planted so as to achieve 90 percent coverage within three years.
This requirement applies to the semi-public Community Center.

The Community Center landscape plan illustrates deciduous trees an average of not more than 30 ft on center and groundcover and shrubbery which reach a mature height of 30 inches in 3 years which provide screening of vehicular headlights year round and can achieve 90 percent coverage within three years, meeting the requirement.

73.360
(1) A minimum of 25 square feet per parking stall shall be improved with landscape island areas, which are protected from vehicles by curbs. These landscape areas shall be dispersed throughout the parking area [see 73.380(3)].
(2) All landscaped island areas with trees shall be a minimum of 5 feet in width (60 inches from inside of curb to curb) and protected with curbing from surface runoff and damage by vehicles. Landscaped areas shall contain groundcover or shrubs and deciduous shade trees.
(3) Provide a minimum of one deciduous shade tree for every four (4) parking spaces to lessen the adverse impacts of glare from paved surfaces and to emphasize circulation patterns. Required shade trees shall be uniformly distributed throughout the parking lot. The trees shall meet the requirements of 73.360(7).
(4) Landscaped islands shall be utilized at aisle ends to protect parked vehicles from moving vehicles and emphasize vehicular circulation patterns.
This requirement applies to the semi-public Community Center.

Regarding (1) and (3), the Community Center landscape plan shows related information:

Attribute		*Future Community Center*
Parking Spaces Proposed		20
Landscape Island Area (sq ft)	*Required*	20 x 25 = 500 sq ft
	Proposed	unknown
Trees	*Required*	20 / 4 = 5
	Proposed	12

Regarding (1), because the site plans do not provide the square footage of combined landscape island area, the requirement is not clearly met. The applicant needs to revise the site plans to indicate the square footage of combined landscape island area.

Staff recommends iteration of the requirement as a condition of approval (AR-2R).

The proposal exceeds the minimum requirement (3). All landscaped island areas with trees shall be a minimum of 5 feet in width, meeting the requirement of (2), and cap aisle ends, meeting the requirement of (4).

73.360(5) Required landscaped areas shall be planted so as to achieve 90 percent coverage within three years.
The landscape plans illustrate landscaping that can achieve 90% coverage within three years, meeting the requirement.

73.360(6)(a) Site access from the public street shall be defined with a landscape area not less than 5 feet in width on each side and extend 25 feet back from the property line for commercial, public, and semi-public development with 12 or more parking spaces and extend 30 feet back from the property line for industrial development.
This requirement applies to the semi-public Community Center.

Because the east side of the driveway throat landscaping is 5 ft wide, but extends only a little over 12 ft deep beyond the ROW line, the applicant needs to revise the site plans to extend the landscaping of 5 ft in width at least 25 ft deep beyond the Nasoma ROW line.

Staff recommends iteration of the requirement as a condition of approval (AR-2S).

73.360(7) Deciduous shade trees shall meet the following criteria:
(a) Reach a mature height of 30 feet or more
(b) Cast moderate to dense shade in summer
(c) Long lived, i.e., over 60 years
(d) Do well in an urban environment
(i) Pollution tolerant
(ii) Tolerant of direct and reflected heat
(e) Require little maintenance
(i) Mechanically strong
(ii) Insect and disease resistant
(iii) Require little pruning

(f) Be resistant to drought conditions
(g) Be barren of fruit production.
This requirement applies to the semi-public Community Center.

The landscape plan proposes deciduous tree species with the above characteristics, meeting the requirement.

74.765 All trees, plants or shrubs planted in the right-of-way of the City shall conform in species and location and in accordance with the street tree plan in Schedule A. If the Operations Director determines that none of the species in Schedule A is appropriate or finds appropriate a species not listed, the Director may substitute an unlisted species.
The site development area is within Zone 1 pursuant to Map 74-1 Street Tree Plantings. The overall landscape plan illustrates a street tree species of October Glory Red Maple along SW Nasoma Lane and SW 90th Avenue, which is a cultivar akin to the several maples that Schedule A lists.

Pursuant to the option within 74.765, the Operations Director or designee, seeking to promote diversity within the City street tree stock in order to prevent wholesale loss due to unexpected epidemic arboreal disease, might wish to comment on the proposed species. To allow a determination of whether or not the proposed species is appropriate, the applicant needs to consult with him, obtain a written determination, and forward it to staff.

Staff recommends iteration of the requirement as a condition of approval (AR-2T).

L. Tree Preservation

73.050(4) As part of Architectural Review, the property owner may apply for approval to remove trees, in addition to those exemptions allowed in TDC 34.200(3), by submitting information concerning proposed tree removal, pursuant to TDC 34.210(1). The granting or denial of a tree removal permit shall be based on the criteria in TDC 34.230.

34.230 The Community Development Director shall consider the following criteria when approving, approving with conditions, or denying a request to cut trees.
(1) The Community Development Director may approve a request to cut a tree when the applicant can satisfactorily demonstrate that any of the following criteria are met:
(a) The tree is diseased, and
- **(i) The disease threatens the structural integrity of the tree; or**
- **(ii) The disease permanently and severely diminishes the aesthetic value of the tree; or**
- **(iii) The continued retention of the tree could result in other trees being infected with a disease that threatens either their structural integrity or aesthetic value.**

(b) The tree represents a hazard which may include but not be limited to:
- **(i) The tree is in danger of falling;**
- **(ii) Substantial portions of the tree are in danger of falling.**

(c) It is necessary to remove the tree to construct proposed improvements based on Architectural Review approval, building permit, or approval of a Subdivision or Partition Review.

At least three trees remain within the site development area as described below, and the applicant proposes to preserve two of them.

Heritage Trees

The site has three Heritage Trees designated by through Tualatin Municipal Code (TMC) Chapter 1-23 and reflected by the Community Services Department through the City Geographic Information System (GIS):

No. 2: Douglas-fir, planted 1918, straddling Tax Lots 501 & 502, and
No. 3: English chestnut, planted c. 1938, on Tax Lot 501.
No. 19: Catalpas (4), planted c. 1951, of which one is on Tax Lot 501 near SW Sagert Street.

The site plan proposes to preserve Trees 2 and 3, but not 19.

Heritage Tree No. 2 would remain in the north yard of the Community Center, and Heritage Tree No. 3 would remain in the east yard of Unit 53.

The catalpa, is part of No. 19, a grove of 4, and is west of the Sagert driveway of the assisted living and skilled nursing facility and outside SW Sagert Street ROW, meaning it is within the site development area. However, the application materials do not acknowledge or preserve it. Additionally, removal appears to be unnecessary because the catalpa would remain straddling the south yards of Units 48 and 49 of the preliminary subdivision plan and the site plans show no definitive displacement by site improvements. This means the applicant does not clearly show that the removal criterion of (1)(c) applies and is met. Because the application materials lack information showing the relevance of either or both of remaining criteria (a) and (b), neither applies.

Lastly, the Program Coordinator of the City Community Services Department, which includes the Parks and Recreation Division, e-mailed comment on July 30, 2014 (Attachment **106**) requesting that the tree be acknowledged and preserved and that if seeking to remove it, the applicant needs to consult with the Community Services Director (503-691-3060) to go through a process overseen by that department. The Department specifically requests a "condition in the final decision indicating that the applicant shall amend the recorded historic tree agreement to reflect that now 3, not 4, catalpa trees stand on that property, and rerecord the document."

Staff recommends a condition of approval to this effect (AR-2U1).

Other Trees

The application materials lack enough tree information per 34.210(1)(a) via the requirement of 73.050(4). A July 25, 2014 site visit by staff found trees other than the Heritage Trees and those indicated on the Community Center site plans also exist on site. There is an existing row of trees along the northerly western boundary of the site development area that do not appear to need removal based on the proposed disposition of Townhouses 26 through 36 that would allow them to be in backyards,

and of which a few appear to need removal because of proposed east-west public sanitary sewer and stormwater lines. At the same time, the Clean Water Services (CWS) Service Provider Letter (SPL) 10-001901 Amended August 8, 2012 conditioned enhancement of a stormwater ditch that exists along the northerly western boundary of the site development area. The applicant needs to submit a tree preservation plan sheet or sheets that uniquely identifies all on-site trees, including all Heritage Trees; identifies species and caliper; distinguishes among those be removed and those to be preserved; preserves those trees within the northerly western boundary of the site development area for which their preservation would not conflict with CWS SPL 10-001901 Amended August 8, 2012; and preserves any trees that do not meet the removal criteria of 34.230(1).

Staff recommends a condition of approval to this effect (AR-2U2).

73.250(1) Trees and other plant materials to be retained shall be identified on the landscape plan and grading plan.
Several site plan sheets (C1, 1, 2, and 3) illustrate or note the location or preservation of Heritage Trees, meeting the requirement.

73.250(2)
(a) During the construction process, the owner or the owner's agents shall provide above and below ground protection for existing trees and plant materials identified to remain.
(b) Trees and plant materials identified for preservation shall be protected by chain link or other sturdy fencing placed around the tree at the drip line.
(c) If it is necessary to fence within the drip line, such fencing shall be specified by a qualified arborist as defined in 31.060.
(d) Neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.
(e) Where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's drip line area, such grading, paving, trenching, boring, digging, or similar encroachment shall only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met.
(f) Tree root ends shall not remain exposed.
Because there are trees to preserve, particularly Heritage Trees, the applicant needs to revise landscape plans to provide notation showing compliance with the requirements.

Because the applicant cannot demonstrate compliance until after approval of this AR, staff recommends iteration of the requirement as a condition of approval (AR-2V).

73.250(3) Landscaping under preserved trees shall be compatible with the retention and health of said tree.
Because there are trees to preserve, particularly Heritage Trees, the applicant needs to revise landscape plans to provide notation showing compliance with the requirements.

Staff recommends iteration of the requirement as a condition of approval (AR-2W).

M. Grading

73.270(1) After completion of site grading, topsoil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.
The application narrative states that, "Topsoil will be retained and restored for landscaping", meeting the requirement.

73.270(4) Impervious surface drainage shall be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.
The application narrative states that, "Grading and drainage will meet all City standards", meeting the requirement.

N. Bicycle Parking, Off-Street Parking and Loading

73.370(1)(l) Parking facilities may be shared by users on adjacent parcels if the following standards are met:
(i) One of the parcels has excess parking spaces, considering the present use of the property; the other parcel lacks sufficient area for required parking spaces.
(ii) The total number of parking spaces meets the standards for the sum of the number of spaces which would be separately required for each use.
(iii) Legal documentation, to the satisfaction of the City Attorney, shall be submitted verifying permanent use of the excess parking area on one lot by patrons of the uses deficient in required parking area.
(iv) Physical access between adjoining lots shall be such that functional and reasonable access is actually provided to uses on the parcel deficient in parking spaces.
(v) Adequate directional signs shall be installed specifying the joint parking arrangement.
(vi) Areas in the Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor would be better protected.
The applicant might exercise this option regarding the Community Center parking area and the parking area of the existing Phase 1 development – the assisted living and skilled nursing facility, and the applicant intends both to remain under common ownership and property management by Marquis Companies. Because the criteria that come with the option are intended to apply to parking areas under different combinations of ownership and use, they are not applicable.

Bicycle Parking:
73.370(2)(a):

Use	Bicycle Parking Requirement	Percentage of Bicycle Parking to Be Covered
Residential Uses (i) Detached single-family dwelling, residential home, residential facilities (located in low density (RL) planning districts) Townhouse	**None Required**	**N/A**
Places of Public Assembly (iv) Other places of public assembly, including churches	**1.0 space per 40 seats or 80 feet of bench length**	**35**

Per the requirement, townhouses require no dedicated bicycle parking. Regarding

the Community Center and applying of the closest-match bike parking rate:

Building	*Sq Ft*	*No. of Auditorium Seats*	*Applied Rate*	*Bike Parking*	
				Required	*Proposed*
Community Center	8,635	unknown	unknown / 40 = unknown → unknown	unknown	4

The site plans revised and submitted July 28, 2014 illustrate two outdoor bike parking racks for four bikes total; however, none is covered or sheltered from the elements, failing to meet the minimum coverage of 35% per the above requirement. Also, while the number of stalls appears reasonable and sufficient, justification from the applicant for the number is needed.

The applicant needs to cover or shelter from the elements at least 35% of the proposed bike parking stalls and provide either (1) both the number of auditorium seats to allow staff to have a basis for calculation of required bicycle parking and the number of required bike parking stalls resulting from such calculation, or (2) justification for the proposed four stalls.

Staff recommends a condition of approval to this effect (AR-2X).

73.370(1)
(n) Bicycle parking facilities shall either be lockable enclosures in which the bicycle is stored, or secure stationary racks, which accommodate a bicyclist's lock securing the frame and both wheels.
(o) Each bicycle parking space shall be at least 6 feet long and 2 feet wide, and overhead clearance in covered areas shall be at least 7 feet, unless a lower height is approved through the Architectural Review process.
The site plans revised and submitted July 28, 2014 illustrate outdoor bike parking in the form of secure stationary racks with virtually unlimited clearance on all outer sides, meeting the requirements.

73.370(1)
(r) Required bicycle parking shall be located in convenient, secure, and well lighted locations approved through the Architectural Review process.
(s) Bicycle parking facilities may be provided inside a building in suitable secure and accessible locations.
(u) Bicycle parking areas and facilities shall be identified with appropriate signing as specified in the *Manual on Uniform Traffic Control Devices* (MUTCD) (latest edition). At a minimum, bicycle parking signs shall be located at the main entrance and at the location of the bicycle parking facilities.
The site plans revised and submitted July 28, 2014 illustrate outdoor bike parking secure racks in a convenient and well lit location, meeting the requirement of (r) and declining the option of (s).

Regarding (u), because the site plans revised and submitted July 28, 2014 and the narrative lack information about the requirement, staff cannot determine compliance.

The applicant needs to provide notation on the site plans or a revised site details sheet indicating bike parking signage at the main entrance and at the location of the bicycle parking facilities.

Note

Staff draws the applicant's attention to the requirement of (u) that means if bike parking is away from a building main entrance, two signs are needed: one at the main entrance directing cyclists to the bike parking and one at the bike parking itself.

Staff recommends iteration of the requirement as a condition of approval (AR-2Y).

Off-Street Vehicle Parking:

73.370
(1)(a) At the time of establishment of a new structure or use, or change in use, or change in use of an existing structure, within any planning district of the City, off-street parking spaces, off-street vanpool and carpool parking spaces for commercial, institutional and industrial uses, off-street bicycle parking, and off-street loading berths shall be as provided in this and following sections, unless greater requirements are otherwise established by the conditional use permit or the Architectural Review process, based upon clear findings that a greater number of spaces are necessary at that location for protection of public health, safety and welfare or that a lesser number of vehicle parking spaces will be sufficient to carry out the objectives of this section. In the Central Design District, the Design Guidelines of TDC 73.610 shall be considered. In case of conflicts between guidelines or objectives in TDC Chapter 73, the proposal shall provide a balance.
(g) Parking and loading requirements for structures not specifically listed herein shall be determined by the Community Development Director, based upon requirements of comparable uses listed.
(2)(a):

Use	Minimum Motor Vehicle Parking Requirement	Maximum
Residential Uses (i) Detached single-family dwelling, residential home, residential facilities (located in low density (RL) planning districts) Townhouse	**2.00 vehicle parking spaces per dwelling unit, residential home or residential facility (stalls or spaces within a residential garage not included, except as approved in Architectural Review).**	**None**
Places of Public Assembly (iv) Other places of public assembly, including churches	**1.00 space per 4 seats or 8 feet of bench length**	**Zone A: 0.6 spaces per seat** **Zone B: 0.5 spaces per seat**

The site development area is within Zone B per Figure 73-3 Parking Maximum Map (Attachment **112**).

The applicant proposes 2 parking spaces per townhouse, one in a garage and a tandem space in the driveway.

Because:

- 73.370(2)(a) Residential Uses (i) Townhouse cited above is the minimum motor vehicle parking requirement applicable to townhouses;
- The requirement allows an exception that stalls or spaces within a residential garage can be included as approved in Architectural Review (AR);
- The application of the requirement, sans exception, to the proposed townhouses would require that each unit have a driveway large enough to accommodate two vehicles, and the applicant proposes 2 parking spaces per townhouse, one in a garage and a tandem space in a driveway;
- 73.370(1)(a) allows AR to find that a lesser number of vehicle parking spaces will be sufficient to carry out the objectives of "this section", referring to 73.370, yet 73.370 contains no objectives;
- 73.370 contains no criteria or factors to guide analysis and findings about whether or not to approve as included stalls or spaces within a residential garage; and
- 73.370 contains no provision that compels denial, negotiation, or rebuttal of the applicant's proposed townhouse parking supply;

Therefore,

- Staff defaults to acceptance of the applicant's proposal, and
- The requirement is met.

Regarding the Community Center:

73.370(2)(a) includes no minimum parking rate specific to something like the Community Center, and the closest match is a "place of public assembly," written to apply primarily to churches and other houses of worship.

Building	*Sq Ft*	*No. of Auditorium Seats*	*Applied Rate*	*Vehicle Parking*	
				Required	*Proposed*
Community Center	8,635	unknown	unknown / 4 = unknown → unknown	unknown	20

The applicant on July 28, 2014 submitted the following text:

> The parking lot will be used by attendees at the Community Building, ... and will most probably be used for the least able-bodied attendees at large events. There is on-street parking, and considerable additional parking along the west side of the Main Marquis Building for high-attendance events in the Community Building Auditorium. Many of the envisioned events in the building will be targeted towards the residents of the ... independent living duette units who will walk to the community building facility. ... The "site" includes the entire campus, so there is adequate parking for all events. The Community building is located such that residents from nearby developments can walk to the facility, reducing the need for extensive additional parking.

The applicant's justification is valid and would obviate the need to apply to the Community Center a closest-match parking ratio that would not apply well to it. As

allowed by and pursuant to 73.370(1)(a), staff finds that a lesser number of vehicle parking spaces is sufficient to carry out the objectives of 73.370. The requirement is met.

Note

This analysis and finding does not exempt the applicant, succeeding owners, or tenants from 73.370(1)(a) that specifies the City may reexamine parking supply at the time of establishment of a new structure or use, or change in use, or change in use of an existing structure.

73.370(3) The minimum number of off-street Vanpool and Carpool parking for commercial, institutional, and industrial uses is as follows:

Number of Required Parking Spaces	Number of Vanpool or Carpool Spaces
0 to 10	1
10 to 25	2
26 and greater	1 for each 25 spaces

Other requirements reference the use category of semi-public, which the Community Center most closely matches. Because the Community Center is a semi-public use, and the requirement does not refer to the category of semi-public uses, the requirement is not applicable.

73.370(1)(x) Required vanpool and carpool parking shall meet the 9-foot parking stall standards in Figure 73-1 and be identified with appropriate signage.
Because the requirement of 73.370(3) is not applicable, the requirement is not applicable.

73.380
(1) Off-street parking lot design shall comply with the dimensional standards set forth in Figure 73-1 of this section.
(2) Parking stalls for sub-compact vehicles shall not exceed 35 percent of the total parking stalls required by Section 73.370(2).
(3) Off-street parking stalls shall not exceed eight continuous spaces in a row without a landscape separation.
The Community Center site plans propose 20 parking spaces that the narrative states “meet the dimensional standards” and of which none is compact, and no parking aisles exceed 8 continuous spaces in a row without a landscaped island, meeting the requirements.

73.380
(4) Areas used for standing or maneuvering of vehicles shall have paved asphalt or concrete surfaces maintained adequately for all-weather use and so drained as to avoid the flow of water across sidewalks.
(6) Artificial lighting, which may be provided, shall be so deflected as not to shine or create glare in any residential planning district or on any adjacent dwelling, or any street right-of-way in such a manner as to impair the use of such way.
(7) Groups of more than 4 parking spaces shall be so located and served by driveways that

their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.
(9) Parking bumpers or wheel stops or curbing shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.
(11) On-site drive aisles without parking spaces, which provide access to parking areas with regular spaces or with a mix of regular and sub-compact spaces, shall have a minimum width of 22 feet for two-way traffic and 12 feet for one-way traffic. On-site drive aisles without parking spaces, which provide access to parking areas with only sub-compact spaces, shall have a minimum width of 20 feet for two-way traffic and 12 feet for one-way traffic.
Regarding (4), the site plans illustrate that driveways, drive aisles, and parking are paved, meeting the requirement.

Regarding (6), for exterior pole-mounted lighting the application materials include pole locations on the Community Center landscape plan and, on the trash enclosure details sheet in inset 2, cut sheet information. Given the proposed fixture type and the placement of three poles in particular – at parking spaces numbered 7, 10, 14 – it appears the light from these poles might not be deflected as not to shine or create glare in any residential planning district, particularly onto the Chelan Apartments property approximately 8 ft north of Poles 7 and 10, or on any adjacent dwelling, particularly Townhouse Unit 2 approximately 8 ft west of Pole 14. Because it appears the requirement might not be met, the applicant needs to revise the lighting proposal to demonstrate that the proposed pole-mounted lights 7, 10, and 14 have deflection that permit no light to intrude beyond the north lot line or beyond the Community Center parking lot into Unit 2.

Staff recommends iteration of the requirement as a condition of approval (AR-2C). The *Guidelines for Good Exterior Lighting Plans* (Attachment **114**) is available as an implementation aid.

Regarding (7), the Community Center site plans illustrate that the group of more than 4 parking spaces is located and served by a driveway and drive aisle such that their use requires no backing movements or other maneuvering within SW Nasoma Lane, meeting the requirement.

Regarding (9), the Community Center site plans illustrate curbing that prevents parked cars from encroaching on ROW, or adjacent landscaped areas or pedestrian walkways, meeting the requirement.

Regarding (11), the Community Center site plans revised and submitted July 28, 2014 illustrate that the narrowest portion of the drive aisle is approximately 24 ft where there is two-way traffic, exceeding the minimum requirement.

73.390
(1) The minimum number of off-street loading berths for commercial, industrial, public and semi-public uses is as follows:

Square Feet of Floor Area	Number of Berths
Less than 5,000	**0**

5,000 - 25,000	**1**
25,000 - 60,000	**2**
60,000 and over	**3**

(2) Loading berths shall conform to the following minimum size specifications:
(a) Industrial uses - 12' x 60'
(c) Berths shall have an unobstructed height of 14'
(d) Loading berths shall not use the public right-of-way as part of the required off-street loading area.
(3) Required loading areas shall be screened from public view from public streets and adjacent properties by means of sight-obscuring landscaping, walls or other means, as approved through the Architectural Review process.

Because the semi-public Community Center is 8,637 sq ft, the corresponding number of required loading berths would be one. The proposal includes none.

The applicant on July 28, 2014 submitted the following text referring to the parking spaces near the building as numbered on the site plans:

> Parking spots 5 and 6 can be blocked off for a loading/unloading berth for special occasions when significant materials/supplies need to be moved into the facility. The community building does not have proposed uses that will require delivery of huge quantities of supplies, nor will it have 24 hour usage that will fill the parking lot to capacity. The addition of paved and landscaped areas far outweighs the need or desirability of more asphalt for a dedicated loading berth.

Staff accepts the justification as meeting the intent of the requirement. The requirement is met.

O. Access

73.400
(10)(a) Ingress and egress for single-family residential uses, including townhouses, shall be paved to a minimum width of 10 feet. Maximum driveway widths shall not exceed 26 feet for one and two car garages, and 37 feet for three or more car garages. For the purposes of this section, driveway widths shall be measured at the property line.

The site plans revised and submitted July 28, 2014 illustrate townhouse driveways, and Sheet B1 contains a note near inset 4 that all driveway widths are to be 10 ft. The requirement is met.

73.400
(11) Minimum Access Requirements for Commercial, Public and Semi-Public Uses.
Ingress and egress for commercial uses shall not be less than the following:
For required parking spaces of 1-99, a minimum number required of 1, and minimum pavement width of 32 feet for first 50 feet from ROW, 24 feet thereafter.

This requirement applies to the semi-public Community Center.

The site plans revised and submitted July 28, 2014 illustrate the Community Center driveway as 32 ft wide at the ROW line for first 50 feet from ROW, meeting the requirement.

Vision clearance requirements at the driveways and street intersection shall comply with the requirements of 73.400(16).

The site plans indicate for the townhouses and Community Center landscaping and improvements that respect these areas, meeting the requirement.

P. Signs

The applicant shall separately from this AR submit sign permit applications for any proposed signage.

Staff recommends a condition of approval to this effect (AR-4A).

Q. Public Comment Received

Staff received no public comment on the application.

R. Time Limit on Approval

73.056 Architectural Review approvals shall expire after two years unless:
(1) A building, or grading permit submitted in conjunction with a building permit application, has been issued and substantial construction pursuant thereto has taken place and an inspection performed by a member of the Building Division; or
(2) The Architectural Review (AR) applicant requests in writing an extension and the City approves it. If the Community Development Director and City Engineer or their designees approved the AR. then the Community Development Director and City Engineer shall decide upon the extension request. If the Architectural Review Board (ARB) approved the AR. then the ARB shall decide upon the extension request. The applicant shall provide notice of extension request to past recipients of the AR notice of application and post a sign pursuant to TDC 31.064. Before approving an extension, the deciding party shall find the request meets these criteria:
(a) The applicant submitted a written extension request prior to the original expiration date.
(b) There have been no significant changes in any conditions, ordinances, regulations or other standards of the City or applicable agencies that affect the previously approved project so as to warrant its resubmittal for AR.
(c) If the previously approved application included a special study, the applicant provided with the extension a status report that shows no significant changes on the site or within the vicinity of the site. A letter from a recognized professional also would satisfy this criterion if it states that conditions have not changed after the original approval and that no new study is warranted.
(d) If the AR applicant neglected site maintenance and allowed the site to become blighted, the deciding party shall factor this into its decision.
(e) The deciding party shall grant no more than a single one-year extension for an AR approval.
(f) If the Community Development Director and City Engineer or their designees are the deciding party, then they shall decide within thirty (30) days of receipt of the request. If the ARB is the deciding party. then the ARB shall decide within sixty (60) days of receipt of the request. If the deciding party fails to decide within the applicable time period, the decision shall default to approval.

Staff recommends iteration of the requirement as a condition of approval (AR-4C).

IV. ARCHITECTURAL REVIEW RECOMMENDED CONDITIONS OF APPROVAL

Based on the Findings and Conclusions presented in the staff report, staff recommends that AR-14-07 be approved, subject to the following Architectural Review Conditions of Approval:

Note: Conditions and findings in this staff report refer to the second submittal date stamped June 20, 2014 and the revised plans and accompanying outline submitted July 28, 2014.

AR-1 Prior to issuance of any grading permit(s) or on-site work, comply with Clean Water Services (CWS) requirements.

A. CWS: The applicant shall submit to the City Engineering Division copies of the Clean Water Services (CWS) Site Development Permit to show compliance with the attached July 18, 2014 CWS Memorandum (Attachment **102**).

AR-2 Prior to obtaining a building or grading permit, the applicant shall submit four revised plan sets – plan size, ledger (11 x 17 inches), letter, and electronically in Adobe PDF file format – for review and approval to the Planning Division that meet the conditions of approval below. (The analysis and findings above provides background and context for the conditions of approval.)

Accessways

A. 73.160(1)(a)(iv) accessways shall be provided as a connection from the development's internal bikeways and walkways to all of the following locations that apply: abutting arterial or collector streets upon which transit stops or bike lanes are provided or designated; abutting undeveloped residential or commercial areas; adjacent undeveloped sites where an agreement to provide an accessway connection exists; and to abutting publicly-owned land intended for general public use, including schools;

- The applicant shall provide a Boones Ferry accessway 8 ft wide between the SW Boones Ferry Road sidewalk and the main building entrance.

Lighting

B. 73.130(4)(c) An outdoor lighting system shall be provided which facilitates police observation and resident observation through strategic location, orientation and brightness without shining into residential units, public rights-of-way, or fish and wildlife habitat areas.

- The applicant shall revise the lighting proposal so that the proposed fixture model or models are full cut-off by submitting cut sheets showing no light would encroach into rights-of-way (ROWs) and, if needed to demonstrate compliance, a simple lighting plan. The *Guidelines for Good Exterior Lighting Plans* (Attachment **114**) is available as an

implementation aid.

C. 73.380(6) Artificial lighting, which may be provided, shall be so deflected as not to shine or create glare in any residential planning district or on any adjacent dwelling, or any street right-of-way in such a manner as to impair the use of such way.

- The applicant shall revise the lighting proposal to demonstrate that the proposed pole-mounted lights 7, 10, and 14 have deflection that permit no light to intrude beyond the north lot line or beyond the Community Center parking lot into Unit 2. The *Guidelines for Good Exterior Lighting Plans* (Attachment **114**) is available as an implementation aid.

Architecture

D. 73.050(1)
(b) The proposed design of the development is compatible with the design of other developments in the same general vicinity.
(c) The location, design, size, color and material of the exterior of all structures are compatible with the proposed development and appropriate to the design character of other development in the same vicinity.

1. The applicant shall provide more architectural ornament, primarily windows, on the following townhouse elevations as numbered on the site plans:

Phase	*Lot/Unit*	*Elevation*
I	2	East
	12	East
II	17	North
	18	South
	27	North
III	36	South
	37	North
	44	South
	45	South
	46	North
	53	South
	58	North
	65	South

2. The applicant shall finalize the unique design units and their dispositions on Phase II Lot 26 and Phase IV Lots 49 and 50; design them with architectural colors and materials similar to the townhouses; and demonstrate the compliance of the units with the multi-family community design standards.

Miscellaneous

E. **31.060** **Accessory Structure or Use**. A structure or use incidental and subordinate to the main use of the property and which is located on the same lot with the main use, such as, but not limited to, garage, carports, tool sheds, private greenhouses, utility buildings, and home occupations.
41.020 No building, structures or land shall be used, and no building or structures shall be erected, enlarged or altered, except for the following uses:
(1) Townhouses and multi-family dwellings, including duplexes and triplexes.
(2) Condominiums constructed in accordance with TDC 40.030(2).
(3) Manufactured dwelling parks, in the locations designated by the Tualatin Community Plan Map and constructed in accordance with TDC 34.190.
(4) Single family dwellings in a small lot subdivision.
(5) Greenways, and Natural Areas, including but not limited to bike and pedestrians paths and interpretive stations.
(6) Density transfer project approved by the City prior to April 25, 1994, subject to TDC 41.320.
(7) Residential homes.
(8) Residential facilities.
(9) Family day care provider, provided that all exterior walls and outdoor play areas shall be a minimum distance of 400 feet from the exterior walls and pump islands of any automobile service station, irrespective of any structures in between.
(10) Sewer and water pump stations and pressure reading stations.
(11) Wireless communication facility attached, provided it is not on a single-family dwelling or its accessory structures.
(12) Wireless communication facility located within 300 feet of the centerline of I-5.
(13) Accessory dwelling units in a small lot subdivision as provided in TDC 34.300 - 34.310.
(14) Transportation facilities and improvements.

- Following AR-14-07 approval and to allow construction of the approved site development, the applicant shall adjust property lines via any of partition, property line adjustment, or subdivision application(s) pursuant to the direction of the Engineering Division to propose lot lines such that 31.060 Accessory Structure or Use can continue to apply to the Community Center.

F. **73.130(1)(a)** Except within the Central Design District, or within the Mixed Use Commercial Overlay District in which case the Architectural Review process shall determine the appropriate outdoor area, a separate outdoor area of not less than 80 square feet shall be attached to each ground level dwelling unit. These areas shall be separated from common outdoor areas in a manner which enables the resident to control access from separate to common areas with elements, such as walls, fences or shrubs.

- The applicant shall act such that a separate outdoor area of not less than

80 square feet shall be attached to each ground level dwelling unit.

G. 73.130(5)
(a) Provisions for postal delivery shall be conveniently located and efficiently designed for residents and mail delivery personnel.
(b) Safe pedestrian access from unit entries to postal delivery areas, shared activity areas, and parking areas shall be provided. Elements such as, but not limited to, concrete paths, raised walkways through vehicular areas or bark chip trails will meet this requirement.
(c) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.

- The applicant shall provide graphics – such as a plan view diagram or plan sheet – and text about postal delivery and the screening of on and above grade electrical and mechanical equipment.

H. 73.160(3)(d) Provide an identification system which clearly locates buildings and their entries for patrons and emergency services.

- The applicant shall revise the elevations to indicate placement of address numerals that meet the needs of Tualatin Valley Fire & Rescue (TVF&R).

I. 73.160(4)(a) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.

- The applicant shall provide indication that if the applicant were to propose additional such equipment, that the applicant would comply with the requirement.

Storage

J. 73.190(2)(a)
(i) Except as provided in Subsection (a)(ii), enclosed storage areas are required and shall be attached to the exterior of each dwelling unit to accommodate garden equipment, patio furniture, barbecues, bicycles, etc. Garages are not intended to satisfy storage requirements. Each storage area shall be a minimum of 6 feet in height and have a minimum floor area of:
(A) 24 square feet for studio and one bedroom units;
(B) 36 square feet for two bed-room units; and
(C) 48 square feet for greater than two bedroom units.
(ii) For townhouses and residential and mixed use residential developments in the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, some provision shall be made for outdoor storage adjacent to private outdoor areas. Such provisions shall be reviewed for adequacy through Architectural Review and shall be designed to accommodate barbecues or other small deck equipment.

- The applicant shall revise the unit plans to illustrate and note the locations, dimensions, and square footages of required areas for exterior enclosed storage and their means of access.

K. 73.227
(1) The mixed solid waste and source separated recyclables storage standards shall apply to all new or expanded multi-family residential developments containing five or more units.
(2)(a)(iv) Multi-family residential developments containing 5-10 units shall provide a minimum storage area of 50 square feet. Multi-family residential developments containing more than 10 units shall provide 50 square feet plus an additional 5 square feet per unit for each unit above 10.

- The applicant shall act such that either 1) multi-family residential developments containing 5-10 units shall provide a minimum storage area of 50 square feet, and multi-family residential developments containing more than 10 units shall provide 50 square feet plus an additional 5 square feet per unit for each unit above 10; or, 4) franchised hauler review occurs and includes provision of a letter from the hauler regarding the townhouse mixed solid waste and source separated recyclables storage areas.

L. 73.227(6)(b)(ii) Storage containers shall meet Fire Code standards and be made and covered with waterproof materials or situated in a covered area.

- The applicant shall revise the Community Center trash enclosure details sheet to note compliance.

M. 73.227(6)(c)(ii) Storage areas shall be designed to be easily accessible to hauler trucks and equipment, considering paving, grade, gate clearance and vehicle access. A minimum of 10 feet horizontal clearance and 8 feet vertical clearance is required if the storage area is covered.

- The applicant shall revise the trash enclosure details sheet to make consistent the proposed trash enclosure details and show a vertical clearance of at least 8 ft.

Landscaping

N. 73.260(1)(a) Deciduous shade and ornamental trees shall be a minimum one and one-half inch (1 1/2") caliper measured six inches (6") above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be characteristically shaped specimens.

- The applicant shall revise the landscape plans.

O. 73.260(1)(c) Evergreen and deciduous shrubs shall be at least 1 to 5 gallon size. Shrubs shall be characteristically branched. Side of shrub with best foliage shall be oriented to public view.

- The applicant shall revise the landscape plans.

P. **73.260(1)(c)** Except for townhouse lots, landscaped areas shall be irrigated with an automatic underground or drip irrigation system.
- The applicant shall ensure that the revised and final Community Center landscape plan or other site plan sheet(s) indicates an automatic underground or drip irrigation system.

Q. **73.290(1)** Where natural vegetation has been removed or damaged through grading in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements, such areas shall be replanted.

R. **73.360(1)** A minimum of 25 square feet per parking stall shall be improved with landscape island areas, which are protected from vehicles by curbs. These landscape areas shall be dispersed throughout the parking area [see 73.380(3)].
- The applicant shall indicate the square footage of combined landscape island area.

S. **73.360(6)(a)** Site access from the public street shall be defined with a landscape area not less than 5 feet in width on each side and extend 25 feet back from the property line for commercial, public, and semi-public development with 12 or more parking spaces and extend 30 feet back from the property line for industrial development.
- The applicant shall revise the site plans to extend the landscaping of 5 ft in width at least 25 ft deep beyond the Nasoma right-of-way (ROW) line.

T. **74.765** All trees, plants or shrubs planted in the right-of-way of the City shall conform in species and location and in accordance with the street tree plan in Schedule A. If the Operations Director determines that none of the species in Schedule A is appropriate or finds appropriate a species not listed, the Director may substitute an unlisted species.
- To allow a determination of whether or not the proposed species is appropriate, the applicant needs to consult with the Operations Director, obtain a written determination, and forward it to staff.

Tree Preservation

U. **73.050(4)** As part of Architectural Review, the property owner may apply for approval to remove trees, in addition to those exemptions allowed in TDC 34.200(3), by submitting information concerning proposed tree removal, pursuant to TDC 34.210(1). The granting or denial of a tree removal permit shall be based on the criteria in TDC 34.230.
1. Heritage Trees: The applicant shall amend the recorded historic tree agreement to reflect that now 3, not 4, catalpa trees stand on the

property, and re-record the document.

2. The applicant shall submit a tree preservation plan sheet or sheets that uniquely identifies all on-site trees, including all Heritage Trees; identifies species and caliper; distinguishes among those be removed and those to be preserved; preserves those trees within the northerly western boundary of the site development area for which their preservation would not conflict with CWS SPL 10-001901 Amended August 8, 2012; and preserves any trees that do not meet the removal criteria of 34.230(1).

V. 73.250(2)

(a) During the construction process, the owner or the owner's agents shall provide above and below ground protection for existing trees and plant materials identified to remain.
(b) Trees and plant materials identified for preservation shall be protected by chain link or other sturdy fencing placed around the tree at the drip line.
(c) If it is necessary to fence within the drip line, such fencing shall be specified by a qualified arborist as defined in 31.060.
(d) Neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.
(e) Where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's drip line area, such grading, paving, trenching, boring, digging, or similar encroachment shall only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met.
(f) Tree root ends shall not remain exposed.

- The applicant shall revise landscape plans to provide notation showing compliance with the requirements.

W. 73.250(3) Landscaping under preserved trees shall be compatible with the retention and health of said tree.

- The applicant shall revise landscape plans to provide notation showing compliance with the requirements.

Bike Parking

X. 73.370(2)(a) <u>Places of Public Assembly</u> (iv) Required bicycle parking is 1.0 space per 40 seats or 80 feet of bench length, of which 35% shall be covered.

- The applicant needs to cover or shelter from the elements at least 35% of the proposed bike parking stalls and provide either (1) both the number of auditorium seats to allow staff to have a basis for calculation of required bicycle parking and the number of required bike parking stalls resulting from such calculation, or (2) justification for the proposed four stalls.

Y. 73.370(1)(u) Bicycle parking areas and facilities shall be identified with

appropriate signing as specified in the *Manual on Uniform Traffic Control Devices* (MUTCD) (latest edition). At a minimum, bicycle parking signs shall be located at the main entrance and at the location of the bicycle parking facilities.

- The applicant shall provide notation on the site plans or a revised site details sheet indicating bike parking signage at the main entrance and at the location of the bicycle parking facilities.

AR-3 Prior to Issuance of Certificate of Occupancy (CO):

A. 73.040(3) Construction, site development and landscaping shall be carried out in substantial accord with the approved architectural review plan or application.

B. 73.095
(1) Except as allowed by Subsection (2), all landscaping and exterior improvements required as part of the Community Development Director's, Architectural Review Board's or City Council's approval shall be completed in addition to Fire and Life Safety, and Engineering/Building Department requirements prior to the issuance of any certificate of occupancy.
(2) A temporary certificate of occupancy may be issued by the Building Official prior to the complete installation of all required on-site landscaping, landscaping in the public right-of-way and on-site exterior improvements if security equal to 110 percent of the cost of the landscaping and exterior improvements, as determined by the Community Development Director, is filed with the City, assuring such installation within a time specified by the Community Development Director, but not to exceed 6 months after granting of temporary occupancy. The applicant shall provide a list of uncompleted items along with specific cost estimates of on-site landscaping and on-site exterior improvements, including materials and installation to the satisfaction of the Community Development Director prior to approval of the security. "Security" may consist of a corporate surety bond issued by a surety company authorized to transact business in the State of Oregon, a cash deposit, an assignment of bank funds, an irrevocable letter of credit, cash in escrow or a certified check; and the form shall meet with the approval of the City Attorney. If installation of the on-site landscaping or other on-site exterior improvements is not completed within the period specified by the Community Development Director, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City shall be returned to the party posting the security. The final landscape and exterior improvement inspection shall be made by the Planning Department prior to the return of any securities. Any portion of the plan not installed, not installed properly, or not properly maintained shall cause the inspection to be postponed until the project is completed, or shall cause the security to be used by the City.

C. All conditions of approval, except where otherwise stated, shall be subject to field inspection prior to Certificate of Occupancy (CO).

AR-4 The applicant shall comply with these standard requirements:

A. The applicant shall separately from this AR submit sign permit applications for any proposed signage.

B. **31.075** Effective Date of Decision.
(1) The decisions of the Community Development Director and the City Engineer on the Architectural Features and Utility Facilities respectively or the Architectural Review Board, where the plan is initially reviewed by the Architectural Review Board shall each become final 14 calendar days after the date the notice of the decision is given unless written request for review of the Architectural Features or Utility Facilities decision is sought and submitted on a form provided by the City for that purpose.
(4) A request for review for an Architectural Review or Utility Facility decision may only be made by a party that has submitted written comments within 14 calendar days of the mailing date of the notice of application and may be adversely affected by the Architectural Review or Utility Facility decision. If the Architectural Review Board made the initial decision, a request for review may be made by a party that submitted written comments prior to the hearing or testified orally or in writing at the public hearing. A request for review shall be filed in accordance with this section, shall be complete and signed by the person making the request or the person's agent, and shall be accompanied by a fee as established by City Council resolution. Filing a request for review shall automatically stay the effective date only of the decision for which review is requested until either:
(a) review is conducted together with any appeals to the City Council or Architectural Review Board and a final decision is made; or
(b) a written withdrawal of the request for review is received from the person filing the request prior to the hearing and the 14 calendar day time frame for filing a request for review has otherwise passed.
(5) The written decision of the Architectural Review Board shall become final 14 calendar days after notice of the decision is given, unless within the 14 calendar days a written request for review to the City Council is received at the City offices by 5:00 p.m. on the 14th day. A request for review of Utility Facilities to the City Council shall be filed within 14 calendar days after notice of the decision is mailed. Requests shall be signed and submitted in writing by 5:00 p.m. on the 14th calendar day at the City offices.

C. **73.056** Architectural Review approvals shall expire after two years unless:
(1) A building, or grading permit submitted in conjunction with a building permit application, has been issued and substantial construction pursuant thereto has taken place and an inspection performed by a member of the Building Division; or

(2) The Architectural Review (AR) applicant requests in writing an extension and the City approves it. If the Community Development Director and City Engineer or their designees approved the AR. then the Community Development Director and City Engineer shall decide upon the extension request. If the Architectural Review Board (ARB) approved the AR. then the ARB shall decide upon the extension request. The applicant shall provide notice of extension request to past recipients of the AR notice of application and post a sign pursuant to TDC 31.064. Before approving an extension, the deciding party shall find the request meets these criteria:
(a) The applicant submitted a written extension request prior to the original expiration date.
(b) There have been no significant changes in any conditions, ordinances, regulations or other standards of the City or applicable agencies that affect the previously approved project so as to warrant its resubmittal for AR.
(c) If the previously approved application included a special study, the applicant provided with the extension a status report that shows no significant changes on the site or within the vicinity of the site. A letter from a recognized professional also would satisfy this criterion if it states that conditions have not changed after the original approval and that no new study is warranted.
(d) If the AR applicant neglected site maintenance and allowed the site to become blighted, the deciding party shall factor this into its decision.
(e) The deciding party shall grant no more than a single one-year extension for an AR approval.
(f) If the Community Development Director and City Engineer or their designees are the deciding party, then they shall decide within thirty (30) days of receipt of the request. If the ARB is the deciding party. then the ARB shall decide within sixty (60) days of receipt of the request. If the deciding party fails to decide within the applicable time period, the decision shall default to approval.

D. **73.100(1)** All landscaping approved through architectural review (AR) shall be continually maintained, including necessary watering, weeding, pruning and replacement, in a manner substantially similar to that originally approved by the AR decision, unless subsequently altered through AR.

E. **73.100(2)** All building exterior improvements approved through the Architectural Review Process shall be continually maintained including necessary painting and repair so as to remain substantially similar to original approval through the Architectural Review Process, unless subsequently altered with Community Development Director approval, as a condition of approval.

Submitted by:

Colin Cortes

Colin Cortes, AICP, CNU-A
Assistant Planner

Attachments:
101. Public Facilities Recommendation (PFR)
102. CWS Memorandum
103. Frontier Cable Franchise Comment
104. TVF&R Letter
105. Washington County Comment
106. City Community Services Dept. Comment
107. Site Plans and Other Application Materials
108. Fig. 11-1 Functional Classification and Traffic Signal Plan
109. Fig. 11-4 Bicycle and Pedestrian Plan
110. Fig. 11-5 Tualatin Transit Plan
111. Fig. 72-2 Greenway Development Plan
112. Fig. 73-3 Parking Maximum Map
113. Fig. 74-2A & F Street Design Standards: Major Arterial & Local
114. Guidelines for Good Exterior Lighting Plans

cc:
Scott Miller, Director of Property Development, Marquis Companies, 4560 SE International Way, Milwaukie, OR 97222-4628, applicant
Kirsten Van Loo, Land Use Planner, Emerio Design, 8285 SW Nimbus Ave, Suite 180, Beaverton, OR 97008-0004

file AR-14-07

CITY ENGINEER'S PUBLIC FACILITIES FINDINGS & RECOMMENDED DECISION

** APPROVAL WITH CONDITIONS **

DRAFT xx, 2014

Case #:	AR-14-07
Project:	Marquis Tualatin Cottages & Community Center
Location:	No Street Addresses Yet; Adjacent to, North, and West of Phase 1 at 19945 SW Boones Ferry Rd; (Tax Lots 2S1 23DD 00501 & 502)
Applicant:	Scott Miller, Director of Property Development, Marquis Companies (503-819-3610); Kirsten Van Loo, Emerio Design; and CB|Two Architects
Property Owners:	Tigard-Tualatin School District #23J (TTSD), Tualatin LTC Properties LLC, Contract Purchaser (Lot 501); TTSD (Lot 502)

INTRODUCTION

Marquis Companies, represented by Scott Miller, Director of Property Development, proposes to develop a 9.34-acre site as Tualatin Marquis Phase 2 consisting of a community center and 66 single-story townhouses/duplexes, which the applicant refers to as cottages or "duettes". (There are 64 townhouses, and Unit 26 will have a "unique design" multi-family building type that can fit on its constrained area between two easements, such as a duplex or a two-story building with one unit below and one above.)

The developer might rent and/or sell this housing that is to be privately restricted to persons 55 years or older. Because the proposal includes multi-family units adjacent to a Low Density Residential (RL) Planning District, which is along SW Sagert Street, the project necessitates Architectural Review Board (ARB) review and decision pursuant to Tualatin Development Code (TDC) 73.030(2).

To the south and east of the subject property is Tualatin Marquis Phase 1, the assisted living and skilled nursing facility. The site plans illustrate that the site development area that is Phase 2 itself is divided among Phases I through IV. The Community Center would be part of Phase I. The site is bound by the Chelan Apartments and the Portland & Western Railroad (PNWR) to the north; SW Boones Ferry Road to the east; SW Nasoma Lane (under construction), Phase 1, and SW Sagert Street to the south; and Tualatin Heights Apartments and three houses to the west.

The applicant had a pre-application meeting on January 17, 2014. The neighborhood/developer meeting was on January 26, 2014. Staff visited the site on July 25, 2014. In response to the notice of public hearing, staff received no letters of comment from property owners within 1,000 feet (ft) of the subject property, including pursuant to Tualatin Development Code (TDC) 31.064(1) within any residential subdivisions platted through the City, for inclusion in this staff report as of July 29, 2014.

ARRANGEMENTS CAN BE MADE TO PROVIDE THESE MATERIALS IN ALTERNATIVE FORMATS, SUCH AS LARGE TYPE OR AUDIO RECORDING. PLEASE CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT AND ALLOW AS MUCH LEAD TIME AS POSSIBLE

The applicant intends through a separate and later application to adjust property lines and/or subdivide Lots 501 and 502 to accommodate the community center, townhouses/duplexes, and water quality facility (WQF), with tax lot numbers that Washington County will then assign.

PUBLIC FACILITIES RECOMMENDATION

The following are the Public Facilities findings for AR 14-07, Tualatin Marquis Cottages. All references are to sections in the Tualatin Development Code (TDC) or Tualatin Municipal Code (TMC) unless otherwise noted.

TDC 74.120 ...No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit issued and the required fees paid.

TDC 74.140 (1) All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy.

TDC 74.330 Utility Easements

(1) Utility easements for water, sanitary sewer and storm drainage facilities, telephone, television cable, gas, electric lines and other public utilities shall be granted to the City.

(4) ...For both on-site and off-site easement areas, a utility easement shall be granted to the City; Building Permits shall not be issued for the development prior to acceptance of the easement by the City.

(5) The width of the public utility easement shall meet the requirements of the Public Works Construction Code.

TMC 4-1.010 This development is subject to all applicable building code requirements and all applicable building and development fees.

<u>FINDINGS</u>

These comments are a result of site investigation and review of the submitted plan sheets dated June 20, 2014.

1. <u>Fire and Life Safety</u>:

   TMC 4-2.010 (1) Every application for a building permit and accompanying plans shall be submitted to the Building Division for review of water used for fire protection, the approximate location and size of hydrants to be connected, and the provisions for access and egress for firefighting equipment. If upon such review it is determined that the fire protection facilities are not required or that they are adequately provided for in the plans, the Fire and Life Safety Reviewer shall recommend approval to the City Building Official.

   The submitted plans show two existing public fire hydrants adjacent to this development. Two public fire hydrants are proposed on SW 90th Place. This is acceptable. The applicant will need to submit final plans that show two public fire hydrants on SW 90th Place, for review and approval.

During the review of Building Permits the Building Official may determine that additional fire protection devices may be necessary upon recommendation of Tualatin Valley Fire & Rescue (TVF&R). The applicant will need to submit plans that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).

Prior to issuance of a Public Works Permit for the 2nd phase:

- *The applicant shall final plans that show two public fire hydrants on SW 90th Place, for review and approval.*

Prior to issuance of a Public Works Permit for the 3rd phase:

- *The applicant shall final plans that show two public fire hydrants on SW 90th Place, for review and approval.*

Prior to issuance of a Building Permit for the 1st phase:

- *The applicant shall submit plans for the 1st phase that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).*

Prior to issuance of a Building Permit for the 2nd phase:

- *The applicant shall submit plans for the 2nd phase that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).*

Prior to issuance of a Building Permit for the 3rd phase:

- *The applicant shall submit plans for the 3rd phase that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).*

Prior to issuance of a Building Permit for the 4th phase:

- *The applicant shall submit plans for the 4th phase that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).*

2. Transportation:

TDC 11.610 Transportation Goals and Objectives (2) (e) For development applications, including, but not limited to subdivisions and architectural reviews, a LOS of at least D and E are encouraged for signalized and unsignalized intersections, respectively.

TDC 73.400 (5)…a sidewalk shall be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to City standards,...

TDC 74.420 (6) All required street improvements shall include curbs, sidewalks, storm drainage, streetlights, street signs, street trees, and, where designated, bikeways and transit facilities.

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TDC 74.660 Underground.
(1) All utility lines including, but not limited to, those required for gas, electric, communication, lighting and cable television services and related facilities shall be placed underground. Surface-mounted transformers, surface-mounted connection boxes and meter cabinets may be placed above ground. Temporary utility service facilities, high capacity electric and communication feeder lines, and utility transmission lines operating at 50,000 volts or above may be placed above ground. The applicant shall make all necessary arrangements with all utility companies to provide the underground services. The City reserves the right to approve the location of all surface-mounted transformers.

TDC 75.060 Existing Driveways and Street Intersections (2) The City Engineer may restrict existing driveways and street intersections to right-in and right-out by construction of raised median barriers or other means.

TDC 74.120 ...No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit issued and the required fees paid.

TDC 74.140 (1) All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy.

<u>SW Boones Ferry Road</u>
SW Boones Ferry Road is designated by the City of Tualatin as a Major Arterial, which would ultimately have a right-of-way width of 74 feet (37 feet from centerline) that includes:

- two 12-foot travel lanes
- one 14-foot center turn lane
- 6-foot bike lanes
- 6–foot curbside planter strips with curbs, streetlights, and trees
- 6–foot sidewalks

The current width of SW Boones Ferry Road right-of-way along the property frontage is 49 feet west of centerline which is improved with the first phase of Marquis development of this site area with:

- 70 feet of pavement including:
    - one right-turn lane
    - two travel lanes
    - one center turn lane
    - 6-foot bike lanes
- 6–foot curbside planter strip on the west side
- 6–foot curbside sidewalk on the west side
- 6–foot curbside sidewalk on the east side

This is acceptable.

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<u>SW Sagert Street</u>
SW Sagert Street is a City of Tualatin facility and designated as a Minor Collector, which has a right-of-way width of 76 feet that includes:

- two 12-foot travel lanes
- two 8-foot parking lanes
- 6-foot bike lanes
- 6–foot curbside planter strips with curbs, streetlights, and trees
- 6–foot sidewalks

Currently there is 60 feet of right-of-way, with 30 feet from centerline on the north side, which is improved with:

- two 12-foot travel lanes
- 6-foot bike lanes
- 4-foot center painted median
- 6–foot sidewalk on the north side

Adjacent to this side is intersection which is improved with:

- two 12-foot travel lanes
- one 12-foot eastbound left turn lane
- 6–foot sidewalk on the north side

Tualatin's cross-sections were updated in 2013. All adjacent areas were developed with the previous cross-section which has a right-of-way width of 68 feet that includes:

- two 12-foot travel lanes
- one 8-foot parking lane on the south side
- 6-foot bike lanes
- 6–foot curbside planter strips with curbs, streetlights, and trees
- 6–foot sidewalks

To remain consistent with the neighborhood, this cross-section is acceptable for this development.

Dedication of right-of-way adjacent to the development is shown to be an additional 4 feet (for a total of 34 feet from centerline). This matches the first phase of Marquis development in on this site and is acceptable. The applicant will need to submit final plans that show dedication of a total of 34 feet of right-of-way from centerline of SW Sagert Street, for review and approval. The applicant will need to dedicate a total of 34-feet of right-of-way from the centerline of SW Sagert Street, for review and approval.

The applicant has expressed a desire to complete the SW Sagert Street half street to current standards. This is acceptable. The applicant will need to submit final plans that show the SW Sagert Street half-street improvements, from the centerline to the north right-of-way, of a full cross-section consisting of two 12-foot travel lanes, one 8-foot parking lane on the south side, 6-foot bike lanes, 6–foot curbside planter strips with curbs, streetlights, and trees, 6–foot sidewalks, for review and approval.

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SW Nasoma Lane

The applicant has submitted PTA 10-02 to add modify existing TDC chapter 75 to allow a public street intersection on the Major Arterial SW Boones Ferry Road approximately 500 feet to the north of Minor Collector SW Sagert Street. City Council approved PTA 10-02 during a public hearing on August 23, 2010.

The proposed intersection is consistent with the revised TDC chapter 75 as approved by City Council. This street is on the west side and will eventually connect to a future street extending from SW Sagert Street in the approximate alignment of SW 90th Avenue. The proposed SW Nasoma Lane is a City of Tualatin facility designated as a Local street, which has a right-of-way width of 50 feet and includes:

- 32 feet of pavement and gutters
- 4-foot curbside planter strips with curbs, streetlights, and trees
- 5-foot sidewalks

The plans show full construction of SW Nasoma Lane to current standards and dedication of 50-feet of right-of-way. This is acceptable. The applicant will need to submit final plans of SW Nasoma Lane, for review and approval. The applicant will need to dedicate a total of 50-feet of right-of-way for SW Nasoma Lane, for review and approval.

SW 90th Place

SW 90th Place extends north from SW Sagert Street in the approximate location of SW 90th Avenue, connecting to SW Nasoma Lane and ending in a cul-de-sac near the railroad tracks.

The proposed SW 90th Place is a City of Tualatin facility designated as a Local street, which has a right-of-way width of 50 feet and includes:

- 32 feet of pavement and gutters
- 4-foot curbside planter strips with curbs, streetlights, and trees
- 5-foot sidewalks

The plans show full construction of SW 90th Place to current standards and dedication of 50-feet of right-of-way. This is acceptable. The applicant will need to submit final plans of SW 90th Place, for review and approval. The applicant will need to dedicate a total of 50-feet of right-of-way for SW 90th Place, for review and approval.

While the dedication of right-of-way for SW Nasoma Lane and SW 90th Place is acceptable, this will bisect lot 501 creating two tax lots for a single lot. In order to associate a single tax lot with a single lot, property lines could be divided or adjusted through an appropriate land use process. The applicant has stated that they will perform a property line adjustment to accomplish this task. This is acceptable. Prior to dedication of SW Nasoma Lane or SW 90th Place right-of-way that would bisect a legal lot the applicant will need to appropriately adjust lot lines, for review and approval.

Note: Any street trees will need a 24-inch deep, 10-foot long root barrier centered on the tree trunk at the edge of public sidewalks and curbs.

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No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit and Water Quality Permit issued and the required fees paid. The applicant has not obtained a Public Works Permit or Water Quality Permit. The applicant will need to obtain a Public Works Permit and Water Quality Permit needed for this development.

All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy. The applicant has not completed all public improvements. The applicant will need to complete all the public improvements and have them accepted by the City.

Prior to issuance of a Public Works Permit for the 1st phase:

- *The applicant shall submit final plans of SW Nasoma Lane for the 1st phase, for review and approval.*

Prior to issuance of a Building Permit for the 1st phase:

- *Prior to dedication of SW Nasoma Lane or SW 90th Place right-of-way that would bisect lot 501 the applicant will need to appropriately adjust lot lines, for review and approval.*
- *The applicant shall obtain a Public Works Permit and Water Quality Permit needed for the 1st phase of this development.*

Prior to issuance of a Certificate of Occupancy for the 1st phase:

- *The applicant shall dedicate a total of 50-feet of right-of-way for SW Nasoma Lane and for the 1st phase, for review and approval.*
- *The applicant shall complete all the public improvements for the 1st phase and have them accepted by the City.*

Prior to issuance of a Public Works Permit for the 2nd phase:

- *The applicant shall submit final plans of SW Nasoma Lane and SW 90th Place for the 2nd phase, for review and approval.*

Prior to issuance of a Building Permit for the 2nd phase:

- *The applicant shall obtain a Public Works Permit needed for the 2nd phase of this development.*

Prior to issuance of a Certificate of Occupancy for the 2nd phase:

- *The applicant shall dedicate a total of 50-feet of right-of-way for SW Nasoma Lane and SW 90th Place for the 2nd phase, for review and approval.*
- *The applicant shall complete all the public improvements for the 2nd phase and have them accepted by the City.*

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Prior to issuance of a Public Works Permit for the 3rd phase:

- *The applicant shall submit final plans of SW 90th Place for the 3rd phase, for review and approval.*
- *The applicant shall submit final plans that show the SW Sagert Street half-street improvements, from the centerline to the north right-of-way, of a full cross-section consisting of two 12-foot travel lanes, one 8-foot parking lane on the south side, 6-foot bike lanes, 6–foot curbside planter strips with curbs, streetlights, and trees, 6–foot sidewalks for the 4th phase, for review and approval.*

Prior to issuance of a Building Permit for the 3rd phase:

- *The applicant shall obtain a Public Works Permit needed for the 3rd phase of this development.*

Prior to issuance of a Certificate of Occupancy for the 3rd phase:

- *The applicant shall dedicate a total of 50-feet of right-of-way for SW 90th Place for the 3rd phase, for review and approval.*
- *The applicant shall dedicate a total of 34-feet of right-of-way from the centerline of SW Sagert Street for the 3rd phase, for review and approval.*
- *The applicant shall complete all the public improvements for the 3rd phase and have them accepted by the City.*

Prior to issuance of a Public Works Permit for the 4th phase:

- *The applicant shall submit final plans that show the SW Sagert Street half-street improvements, from the centerline to the north right-of-way, of a full cross-section consisting of two 12-foot travel lanes, one 8-foot parking lane on the south side, 6-foot bike lanes, 6–foot curbside planter strips with curbs, streetlights, and trees, 6–foot sidewalks for the 5th phase, for review and approval.*

Prior to issuance of a Building Permit for the 4th phase:

- *The applicant shall obtain a Public Works Permit needed for the 4th phase of this development.*

Prior to Issuance of a Certificate of Occupancy for the 4th phase:

- *The applicant shall dedicate a total of 34-feet of right-of-way from the centerline of SW Sagert Street for the 4th phase, for review and approval.*
- *The applicant shall complete all the public improvements for the 4th phase and have them accepted by the City.*

3. <u>Access</u>:

73.400 Access

(2) Owners of two or more uses, structures or parcels of land may agree to utilize jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use.

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(10) Minimum access requirements for residential uses: (b) Ingress and egress for multi-family residential uses shall not be less than the following:…for 50-499 parking spaces a minimum of one 32-foot wide access or two 24-foot wide accesses are required.

(11) Minimum Access Requirements for Commercial, Public and Semi-Public Uses. If 1-99 parking spaces are required, only one access is required. If 100-249 parking spaces are required, two accesses are required. Ingress and egress shall not be less than 32 feet wide for the first 50 feet from the right-of-way and 24 feet thereafter.

(12) Minimum Access Requirements for Industrial Uses. If 1-250 parking spaces are required, only one access is required. Ingress and egress shall not be less than 36 feet wide for the first 50 feet from the right-of-way and 24 feet thereafter.

(14) (a) Unless otherwise herein provided, maximum driveway widths shall not exceed 40 feet.

(15) Distance between Driveways and Intersections. Distances listed shall be measured from the stop bar at the intersection. (a) At the intersection of collector or arterial streets, driveways shall be located a minimum of 150 feet from the intersection.

TDC 75.120 Existing Streets
(3) PACIFIC HIGHWAY 99W
Between 124th Avenue and the Tualatin River on the northwesterly side of Pacific Highway 99W existing accesses will remain except as noted below for development or redevelopment due to the median of Pacific Highway 99W these will be limited to right-turn in, right-turn out. Any redevelopment in this area will require that the driveway accesses be consolidated to a minimum number as determined by the City Engineer.

The plans show the community center to have an access 28 feet wide. There are 20 parking spaces which requires a single access between 32 and 40 feet wide. The applicant will need to submit revised plans that show an access to the community center of between 32 and 40 feet wide, for review and approval.

The submitted plans show residential lots accessing public streets to have driveways approximately 8 feet wide. The minimum residential driveway width is 10 feet. The applicant will need to submit revised plans that show residential driveways at least 10-feet wide, for review and approval.

Lots 47 to 52 and 59 to 64 are flag lots to SW 90th Place. The flag width is a total of 30 feet wide for each group. The applicant is proposing shared private easements over the flag. This is acceptable. The applicant will need to submit final plans that show shared private easements for flag lots 47 to 52 and 59 to 64, for review and approval. The applicant will need to submit copies of the recorded shared private easements for flag lots 47 to 52 and 59 to 64, for review and approval.

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Prior to issuance of a Public Works Permit for the 1st phase:

- *The applicant shall submit revised plans that show an access to the community center of between 32 and 40 feet wide, for review and approval.*
- *The applicant shall submit revised plans that show residential driveways at least 10-feet wide for the 1st phase, for review and approval.*

Prior to issuance of a Public Works Permit for the 2nd phase:

- *The applicant shall submit revised plans that show residential driveways at least 10-feet wide for the 2nd phase, for review and approval.*

Prior to issuance of a Public Works Permit for the 3rd phase:

- *The applicant shall submit revised plans that show residential driveways at least 10-feet wide for the 3rd phase, for review and approval.*

Prior to issuance of a Public Works Permit for the 4th phase:

- *The applicant shall submit revised plans that show residential driveways at least 10-feet wide for the 4th phase, for review and approval.*
- *The applicant shall submit final plans that show shared private easements for flag lots 47 to 52 and 59 to 64, for review and approval. The applicant will need to submit copies of the recorded shared private easements for flag lots 47 to 52 and 59 to 64, for review and approval.*

4. Water:

TDC 74.610 (1) Water lines shall be installed to serve each property in accordance with the Public Works Construction Code. Water line construction plans shall be submitted to the City Engineer for review and approval prior to construction.

TMC 3-3.040 (2) For nonresidential uses, separate meters shall be provided for each structure.

TMC 3-3.120 (2) The owner of property to which City water is furnished for human consumption shall install in accordance with City standards an appropriate backflow prevention device on the premises where any of the following circumstances exist: (b) Where there is a fire protection service, and irrigation service or a nonresidential service connection which is two inches or larger in size;

TMC 3-3.120 (4) requires all irrigation systems to be installed with a double check valve assembly.

TDC74.610 (3) As set forth in TDC Chapter 12, Water Service, the City has three water service levels. All development applicants shall be required to connect the proposed development site to the service level in which the development site is located.

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The plans show the public water line in SW Nasoma to be extended west to SW 90th Place, then connecting to a proposed public water line within SW 90th Place which connects to the existing public 12-inch water line in SW Sagert Street north to the cul-de-sac. This is acceptable. The applicant will need to submit final water system plans that show public water lines associated with each phase, for review and approval.

The plans do not show the size of the proposed public water lines. The minimum size of water line through residential streets is 8-inches. The applicant will need to submit revised plans that show 8-inch public water lines within SW Nasoma Lane and SW 90th Place, for review and approval.

Note: Water laterals for the 4th phase will need to be constructed during the 3rd phase to maintain the integrity SW 90th Place.

Water laterals are shown to each lot. Double check valve assemblies will be required to protect the domestic water system on irrigation systems. Landscape irrigation will need to include the planter strips of the adjacent right-of-way. The plans do not show that irrigation backflow devices will be installed. The applicant will need to install double check valve assemblies to meet the requirements of TMC 3-3.120(4), as necessary.

Note: Onsite trees are proposed. Private laterals should be located so that tree roots will not damage laterals.

Note: Any trees within 10 feet of a public water line will need a 24-inch deep, 10-foot long root barrier centered on the tree trunk at the edge of the public water easement.

Note: This site is located in service level 'B' and the proposed connection to the public system is within this service level.

All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy. The applicant has not completed all public improvements. The applicant will need to complete all the public improvements and have them accepted by the City.

Prior to issuance of a Public Works Permit for the 1st phase:

- *The applicant shall submit final water system plans that show 8-inch public water lines within SW Nasoma Lane with domestic service to each lot and double check valve assemblies to meet the requirements of TMC 3-3.120(4) for the 1st phase, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 1st phase:

- *The applicant shall complete all the public improvements for the 1st phase and have them accepted by the City.*

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Prior to issuance of a Public Works Permit for the 2nd phase:

- *The applicant shall submit final water system plans that show 8-inch public water lines within SW Nasoma Lane and SW 90th Place with domestic service to each lot and double check valve assemblies to meet the requirements of TMC 3-3.120(4) for the 2nd phase, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 2nd phase:

- *The applicant shall complete all the public improvements for the 2nd phase and have them accepted by the City.*

Prior to issuance of a Public Works Permit for the 3rd phase:

- *The applicant shall submit final water system plans that show 8-inch public water lines within SW Nasoma Lane with domestic service to each lot and double check valve assemblies to meet the requirements of TMC 3-3.120(4) for the 3rd phase, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 3rd phase:

- *The applicant shall complete all the public improvements for the 3rd phase and have them accepted by the City.*

5. Sanitary Sewer:

TDC 74.620 (1) Sanitary sewer lines shall be installed to serve each property in accordance with the Public Works Construction Code. Sanitary sewer construction plans and calculations shall be submitted to the City Engineer for review and approval prior to construction.

TDC 74.330 Utility Easements (1) Utility easements for water, sanitary sewer and storm drainage facilities, telephone, television cable, gas, electric lines and other public utilities shall be granted to the City.

Plan Map Amendment PMA 10-01 allowed the change of zone from Low Density Residential (RL) to Medium Low Density Residential. This increased the maximum dwelling unit density from 6.7 to 10 du/acre. The increase in maximum density increases the potential use of sanitary sewer. Downstream sanitary sewer conveyance calculations have been submitted to prove that adequate capacity existed with the AR 10-04, Marquis Phase 1. This is acceptable.

Public sanitary sewer lines exist adjacent to the west side of this development from SW Sagert Street to the north within public easements. The lines provide service to developments to the west. The submitted plans show relocation of the existing north/south public sanitary sewer line to within proposed SW 90th Place right-of-way. The relocated line would reconnect to the existing line within the future SW 90th Place. Public lines would extend west within public easements to continue service for the developments to the west. New public lines would extend east within SW Nasoma Lane right-of-way to serve all lots and the community center. Sanitary sewer laterals are proposed to each lot. This is acceptable. The applicant will need to submit final sanitary sewer plans that show private sanitary sewer laterals for each lot, for review and approval.

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For sanitary sewer lines within this development that are not within right-of-way, public sanitary sewer easements will be needed. For the 1st , 2nd, and 3rd phases, public sanitary sewer will be completely or have portions within dedicated right-of way. For the 3rd and 4th phases public sanitary sewer easements will be needed to serve flag lots 47 to 52 and 59 to 64 and over the lines extended to serve the developments to the west. The applicant will need to submit public sanitary sewer easements for sanitary sewer lines on private property, for review and approval.

The 3rd phase includes relocation public sanitary sewer lines from a public easement on the west side of the development to within SW 90th Place. To accommodate this change a segment of existing public sanitary sewer line in SW Sagert Street adjacent to the development from the west side to the proposed line in SW 90th Place will need to be upsized to a 12 inch line. The applicant will need to submit revised plans that show the public sanitary sewer line adjacent to the development from the west side to the proposed line in SW 90th Place upsized to 12 inches, for review and approval.

Note: Onsite trees are proposed. Private laterals should be located so that tree roots will not damage laterals.

Note: Any trees within 10 feet of a public sanitary sewer line will need a 24-inch deep, 10-foot long root barrier centered on the tree trunk at the edge of the public sanitary sewer easement.

All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy. The applicant has not completed all public improvements. The applicant will need to complete all the public improvements and have them accepted by the City.

Prior to issuance of a Public Works Permit for the 1st phase:

- *The applicant shall submit final sanitary sewer plans that show private sanitary sewer laterals for each lot for the 1st phase, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 1st phase:

- *The applicant shall complete all the public improvements for the 1st phase and have them accepted by the City.*

Prior to issuance of a Public Works Permit for the 2nd phase:

- *The applicant shall submit final sanitary sewer plans that show private sanitary sewer laterals for each lot for the 2nd phase, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 2nd phase:

- *The applicant shall complete all the public improvements for the 2nd phase and have them accepted by the City.*

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Prior to issuance of a Public Works Permit for the 3rd phase:

- *The applicant shall submit final sanitary sewer plans that show private sanitary sewer laterals for each lot for the 3rd phase, for review and approval.*
- *The applicant shall submit revised plans that show the public sanitary sewer line adjacent to the development from the west side to the proposed line in SW 90th Place upsized to 12 inches, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 3rd phase:

- *The applicant shall submit public sanitary sewer easements for sanitary sewer lines on private property, for review and approval.*
- *The applicant shall complete all the public improvements for the 3rd phase and have them accepted by the City.*

Prior to issuance of a Public Works Permit for the 4th phase:

- *The applicant shall submit final sanitary sewer plans that show private sanitary sewer laterals for each lot for the 4th phase, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 4th phase:

- *The applicant shall submit public sanitary sewer easements for sanitary sewer lines on private property, for review and approval.*
- *The applicant shall complete all the public improvements for the 4th phase and have them accepted by the City.*

6. <u>Storm Drainage & Water Quality:</u>

TDC 74.630 Storm Drainage System

(1) Storm drainage lines shall be installed to serve each property in accordance with City standards. Storm drainage construction plans and calculations shall be submitted to the City Engineer for review and approval prior to construction.

(2) The storm drainage calculations shall confirm that adequate capacity exists to serve the site. The discharge from the development shall be analyzed in accordance with the City's Storm and Surface Water Regulations (TMC 3-5).

TDC 74.650 Water Quality, Storm Water Detention and Erosion Control

(2) On all other development applications, prior to issuance of any building permit, the applicant shall arrange to construct a permanent on-site water quality facility and storm water detention facility and submit a design and calculations indicating that the requirements of the Surface Water Management Ordinance will be met and obtain a Stormwater Connection Permit from Clean Water Services.

(3) For on-site private and regional non-residential public facilities, the applicant shall submit a stormwater facility agreement, which will include an operation and maintenance plan provided by the City, for the water quality facility for the City's review and approval. The applicant shall submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site shall occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City.

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TMC 3-5-220 Criteria for Requiring On-Site Detention to be Constructed.
(1) There is an identified downstream deficiency, as defined in TMC 3-5.210, and detention rather than conveyance system enlargement is determined to be the more effective solution.
(2) There is an identified regional detention site within the boundary of the development.

TMC 3-5-330 Permit Required. Except as provided in TMC 3-5.310, no person shall cause any change to improved or unimproved real property that will, or is likely to, increase the rate or quantity of run-off or pollution from the site without first obtaining a permit from the City and following the conditions of the permit.

TMC 3-5-380 Criteria for Granting Exemptions to Construction of On-Site Water Quality Facilities. A regional public facility may be constructed to serve private non-residential development provided:
(1) The facility serves more than one lot; and
(2) All owners sign a stormwater facility agreement; and
(3) Treatment accommodates reasonable worst case impervious area for full build-out, stormwater equivalent to existing or proposed roof area is privately treated in LIDA facilities, and any detention occurs on each lot.

The plans show a public stormwater facility at the northwest corner of this development. This facility was constructed under AR 10-4, Marquis Phase 1. In a unique arrangement the facility was designed to treat 50% of AR 10-04, Marquis Phase 1's impervious area, the remainder of their residential development, plus considerable additional acreage of existing offsite untreated impervious area. The facility was also designed to provide 25-year detention for this site. The proposed development collects stormwater from SW 90th Place, SW Nasoma Lane, and all residential lots as previously planned. As a non-residential lot, the community center will need to treat stormwater onsite in a private facility. The plans do not clearly indicate treatment remaining on the lot. The applicant will need to submit revised plans that show treatment of the community center lot prior to release into the public stormwater system, for review and approval.

Stormwater laterals are proposed to each lot. This is acceptable. The applicant will need to submit final stormwater plans that show private stormwater laterals for each lot, for review and approval.

Stormwater treatment, detention, and conveyance calculations are needed to verify City code is met. The previous AR 10-04, Marquis Phase 1's stormwater treatment, detention, and conveyance calculations from this same applicant preliminarily showed adequate capacity. Construction of public stormwater lines are proposed in SW 90th Place in Phase 3 of this development. The applicant will need to submit final stormwater treatment, detention, and conveyance calculations matching final plans, for review and approval.

Note: Onsite trees are proposed. Private laterals should be located so that tree roots will not damage laterals.

Note: Any trees within 10 feet of a public stormwater line will need a 24-inch deep, 10-foot long root barrier centered on the tree trunk at the edge of the public stormwater easement.

All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy. The applicant has not completed all public improvements. The applicant will need to complete all the public improvements and have them accepted by the City.

Prior to issuance of a Water Quality Permit for the 1st phase:

- *The applicant shall revised plans that show treatment of the community center lot prior to release into the public stormwater system, for review and approval.*

Prior to issuance of a Public Works Permit for the 1st phase:

- *The applicant shall submit final stormwater plans that show private stormwater laterals for each lot for the 1st phase, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 1st phase:

- *The applicant shall complete all the public improvements for the 1st phase and have them accepted by the City.*

Prior to issuance of a Public Works Permit for the 2nd phase:

- *The applicant shall submit final stormwater plans that show private stormwater laterals for each lot for the 2nd phase, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 2nd phase:

- *The applicant shall complete all the public improvements for the 2nd phase and have them accepted by the City.*

Prior to issuance of a Public Works Permit for the 3rd phase:

- *The applicant shall submit final stormwater plans that show private stormwater laterals for each lot for the 3rd phase, for review and approval.*
- *The applicant shall submit final stormwater treatment, detention, and conveyance calculations matching final plans, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 3rd phase:

- *The applicant shall complete all the public improvements for the 3rd phase and have them accepted by the City.*

Prior to issuance of a Public Works Permit for the 4th phase:

- *The applicant shall submit final stormwater plans that show private stormwater laterals for each lot for the 4th phase, for review and approval.*

Prior to issuance of a Certificate of Occupancy for the 4th phase:

- *The applicant shall complete all the public improvements for the 4th phase and have them accepted by the City.*

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7. Grading:
TDC 74.640 (1) Development sites shall be graded to minimize the impact of storm water runoff onto adjacent properties and to allow adjacent properties to drain as they did before the new development. (2) A development applicant shall submit a grading plan showing that all lots in all portions of the development will be served by gravity drainage from the building crawl spaces; and that this development will not affect the drainage on adjacent properties. The City Engineer may require the applicant to remove all excess materials from the development site.

The submitted plans appear to minimize the impact of stormwater runoff to adjacent properties and allow adjacent properties to drain as they did before the development. This requirement is met.

8. Erosion Control:
TDC 74.650 (3) ..the applicant shall submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site shall occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City. In order to reduce the amount of sediment discharged into the public storm system, erosion control measures are required during construction. If the site is over 1 acre in size a NPDES Erosion Control Permit is required.

If the development's disturbed area during construction is between 1 and 5 acres in size, a 1200-CN NPDES Erosion Control Permit is required. If it is over 5 acres, a 1200-C NPDES Erosion Control Permit is required. The proposed disturbed area of the development site is a total of approximately 12 acres. A NPDES Erosion Control Permit is required. The applicant has obtained NPDES Erosion Control Permit. This requirement is met.

A City of Tualatin erosion control permit is required if there is construction or disturbing of the site. The applicant has obtained a City of Tualatin erosion control permit. This requirement is met.

9. Stormwater Connection Permit:
TDC 74.650 Water Quality, Storm Water Detention and Erosion Control (2) On all other development applications, prior to issuance of any building permit, the applicant shall arrange to construct a permanent on-site water quality facility and storm water detention facility and submit a design and calculations indicating that the requirements of the Surface Water Management Ordinance will be met and obtain a Stormwater Connection Permit from the Unified Sewerage Agency.

The applicant has submitted a CWS Service Provider Letter (SPL) indicating that Sensitive Areas exist on-site. In the SPL the applicant has received an initial response indicating that their proposed development meets CWS requirements. CWS has submitted a Memorandum dated July 18, 2014, with review comments.

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CWS will indicate final approval of activities relating to wetlands & buffers after final permit plans are submitted prior to issuance of associated permits. Any vegetated corridor mitigation required in the SPL will need to be included in the Water Quality Permit. The applicant will need to submit final plans that comply with the Service Provider Letter and CWS Memorandum comments, for review and approval. The applicant will need to obtain a Stormwater Connection Permit.

Prior to the issuance of a Water Quality Permit for the 1st phase:

- *The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.*
- *The applicant shall obtain a Stormwater Connection Permit.*

Prior to the issuance of a Public Works Permit for the 2nd phase:

- *The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.*
- *The applicant shall obtain a Stormwater Connection Permit.*

Prior to the issuance of a Public Works Permit for the 3rd phase:

- *The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.*
- *The applicant shall obtain a Stormwater Connection Permit.*

Prior to the issuance of a Public Works Permit for the 4th phase:

- *The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.*
- *The applicant shall obtain a Stormwater Connection Permit.*

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PUBLIC FACILITIES REQUIREMENTS

The following are the Public Facilities requirements for AR 14-07, Tualatin Marquis Cottages:

PRIOR TO ISSUANCE OF A WATER QUALITY PERMIT FOR THE 1ST PHASE:

PFR-1 The applicant shall submit final sanitary sewer plans that show private sanitary sewer laterals for each lot for the 4th phase, for review and approval.

PFR-2 The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.

PFR-3 The applicant shall obtain a Stormwater Connection Permit.

PRIOR TO ISSUANCE OF A PUBLIC WORKS PERMIT FOR THE 1ST PHASE:

PFR-4 The applicant shall submit final plans of SW Nasoma Lane for the 1st phase, for review and approval.

PFR-5 The applicant shall submit revised plans that show an access to the community center of between 32 and 40 feet wide, for review and approval.

PFR-6 The applicant shall submit revised plans that show residential driveways at least 10-feet wide for the 1st phase, for review and approval.

PFR-7 The applicant shall submit final water system plans that show 8-inch public water lines within SW Nasoma Lane with domestic service to each lot and double check valve assemblies to meet the requirements of TMC 3-3.120(4) for the 1st phase, for review and approval.

PFR-8 The applicant shall submit final sanitary sewer plans that show private sanitary sewer laterals for each lot for the 1st phase, for review and approval.

PFR-9 The applicant shall submit final stormwater plans that show private stormwater laterals for each lot for the 1st phase, for review and approval.

PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE 1ST PHASE:

PFR-10 The applicant shall submit plans for the 1st phase that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).

PFR-11 Prior to dedication of SW Nasoma Lane or SW 90th Place right-of-way that would bisect lot 501 the applicant will need to appropriately adjust lot lines, for review and approval.

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PFR-12 The applicant shall obtain a Public Works Permit and Water Quality Permit needed for the 1st phase of this development.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR THE 1ST PHASE:

PFR-13 The applicant shall dedicate a total of 50-feet of right-of-way for SW Nasoma Lane and for the 1st phase, for review and approval.

PFR-14 The applicant shall complete all the public improvements for the 1st phase and have them accepted by the City.

PRIOR TO ISSUANCE OF A PUBLIC WORKS PERMIT FOR THE 2ND PHASE:

PFR-15 The applicant shall final plans that show two public fire hydrants on SW 90th Place, for review and approval.

PFR-16 The applicant shall submit final plans of SW Nasoma Lane and SW 90th Place for the 2nd phase, for review and approval.

PFR-17 The applicant shall submit revised plans that show residential driveways at least 10-feet wide for the 2nd phase, for review and approval.

PFR-18 The applicant shall submit final water system plans that show 8-inch public water lines within SW Nasoma Lane and SW 90th Place with domestic service to each lot and double check valve assemblies to meet the requirements of TMC 3-3.120(4) for the 2nd phase, for review and approval.

PFR-19 The applicant shall submit final sanitary sewer plans that show private sanitary sewer laterals for each lot for the 2nd phase, for review and approval.

PFR-20 The applicant shall submit final stormwater plans that show private stormwater laterals for each lot for the 2nd phase, for review and approval.

PFR-21 The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.

PFR-22 The applicant shall obtain a Stormwater Connection Permit.

PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE 2ND PHASE:

PFR-23 The applicant shall submit plans for the 2nd phase that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).

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PFR-24 The applicant shall obtain a Public Works Permit needed for the 2nd phase of this development.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR THE 2ND PHASE:

PFR-25 The applicant shall dedicate a total of 50-feet of right-of-way for SW Nasoma Lane and SW 90th Place for the 2nd phase, for review and approval.

PFR-26 The applicant shall complete all the public improvements for the 2nd phase and have them accepted by the City.

PRIOR TO ISSUANCE OF A PUBLIC WORKS PERMIT FOR THE 3RD PHASE:

PFR-27 The applicant shall final plans that show two public fire hydrants on SW 90th Place, for review and approval.

PFR-28 The applicant shall submit final plans of SW 90th Place for the 3rd phase, for review and approval.

PFR-29 The applicant shall submit final plans that show the SW Sagert Street half-street improvements, from the centerline to the north right-of-way, of a full cross-section consisting of two 12-foot travel lanes, one 8-foot parking lane on the south side, 6-foot bike lanes, 6–foot curbside planter strips with curbs, streetlights, and trees, 6–foot sidewalks for the 4th phase, for review and approval.

PFR-30 The applicant shall submit revised plans that show residential driveways at least 10-feet wide for the 3rd phase, for review and approval.

PFR-31 The applicant shall submit final water system plans that show 8-inch public water lines within SW Nasoma Lane with domestic service to each lot and double check valve assemblies to meet the requirements of TMC 3-3.120(4) for the 3rd phase, for review and approval.

PFR-32 The applicant shall submit final sanitary sewer plans that show private sanitary sewer laterals for each lot for the 3rd phase, for review and approval.

PFR-33 The applicant shall submit revised plans that show the public sanitary sewer line adjacent to the development from the west side to the proposed line in SW 90th Place upsized to 12 inches, for review and approval.

PFR-34 The applicant shall submit final stormwater plans that show private stormwater laterals for each lot for the 3rd phase, for review and approval.

PFR-35 The applicant shall submit final stormwater treatment, detention, and conveyance calculations matching final plans, for review and approval.

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PFR-36 The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.

PFR-37 The applicant shall obtain a Stormwater Connection Permit.

PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE 3RD PHASE:

PFR-38 The applicant shall submit plans for the 3rd phase that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).

PFR-39 The applicant shall obtain a Public Works Permit needed for the 3rd phase of this development.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR THE 3RD PHASE:

PFR-40 The applicant shall dedicate a total of 50-feet of right-of-way for SW 90th Place for the 3rd phase, for review and approval.

PFR-41 The applicant shall dedicate a total of 34-feet of right-of-way from the centerline of SW Sagert Street for the 3rd phase, for review and approval.

PFR-42 The applicant shall complete all the public improvements for the 3rd phase and have them accepted by the City.

PFR-43 The applicant shall submit public sanitary sewer easements for sanitary sewer lines on private property, for review and approval.

PFR-44 The applicant shall complete all the public improvements for the 3rd phase and have them accepted by the City.

PRIOR TO ISSUANCE OF A PUBLIC WORKS PERMIT FOR THE 4TH PHASE:

PFR-45 The applicant shall submit final plans that show the SW Sagert Street half-street improvements, from the centerline to the north right-of-way, of a full cross-section consisting of two 12-foot travel lanes, one 8-foot parking lane on the south side, 6-foot bike lanes, 6–foot curbside planter strips with curbs, streetlights, and trees, 6–foot sidewalks for the 5th phase, for review and approval.

PFR-46 The applicant shall submit revised plans that show residential driveways at least 10-feet wide for the 4th phase, for review and approval.

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PFR-47 The applicant shall submit final plans that show shared private easements for flag lots 47 to 52 and 59 to 64, for review and approval. The applicant will need to submit copies of the recorded shared private easements for flag lots 47 to 52 and 59 to 64, for review and approval.

PFR-48 The applicant shall submit final sanitary sewer plans that show private sanitary sewer laterals for each lot for the 4th phase, for review and approval.

PFR-49 The applicant shall submit final stormwater plans that show private stormwater laterals for each lot for the 4th phase, for review and approval.

PFR-50 The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.

PFR-51 The applicant shall obtain a Stormwater Connection Permit.

PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR THE 4TH PHASE:

PFR-52 The applicant shall submit plans for the 4th phase that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).

PFR-53 The applicant shall obtain a Public Works Permit needed for the 4th phase of this development.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR THE 4TH PHASE:

PFR-54 The applicant shall dedicate a total of 34-feet of right-of-way from the centerline of SW Sagert Street for the 4th phase, for review and approval.

PFR-55 The applicant shall complete all the public improvements for the 4th phase and have them accepted by the City.

PFR-56 The applicant shall submit public sanitary sewer easements for sanitary sewer lines on private property, for review and approval.

PFR-57 The applicant shall complete all the public improvements for the 4th phase and have them accepted by the City.

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APPEAL

The Public Facilities Review portion of this decision is final after the expiration of 14 calendar days from the date of this decision, unless a written appeal is received on or before 5:00 p.m., on xx, 2014 by the Engineering Division at 18880 SW Martinazzi Avenue, Tualatin, Oregon 97062. The appeal must be signed by the appellant, contain the information required by TDC 31.078 on the City appeal form, and contain the $135 appeal filing fee. The plans and appeal forms are available at the Tualatin Library and at the City offices. Public Facilities appeals are reviewed by City Council.

Typed on behalf of the City Engineer,

Tony Doran, EIT
Engineering Associate

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CleanWater Services

MEMORANDUM

Date: July 18, 2014

To: Colin Cortes, Assistant Planner, City of Tualatin

From: Jackie Sue Humphreys, Clean Water Services (the District)

Subject: Marquis Tualatin Cottages, AR-14-07, 2S123DD00501, 00502

Please include the following comments when writing your conditions of approval:

PRIOR TO ANY WORK ON THE SITE

A Clean Water Services (the District) Storm Water Connection Permit Authorization must be obtained. Application for the District's Permit Authorization must be in accordance with the requirements of the Design and Construction Standards, Resolution and Order No. 07-20, (or current R&O in effect at time of Engineering plan submittal), and is to include:

a. Detailed plans prepared in accordance with Chapter 2, Section 2.04.2.b-l.

b. Detailed grading and erosion control plan. An Erosion Control Permit will be required. Area of Disturbance must be clearly identified on submitted construction plans. If site area and any offsite improvements required for this development exceed one-acre of disturbance, project will require a 1200-CN Erosion Control Permit. If site area and any offsite improvements required for this development exceed five-acres of disturbance, project will require a 1200-C Erosion Control Permit.

c. Detailed plans showing the development having direct access by gravity to public storm and sanitary sewer.

d. Provisions for water quality in accordance with the requirements of the above named design standards. Water Quality is required for all new development and redevelopment areas per R&O 07-20, Section 4.05.5, Table 4-1. Access shall be provided for maintenance of facility per R&O 07-20, Section 4.02.4.

e. If use of an existing, offsite or regional Water Quality Facility is proposed, it must be clearly identified on plans, showing its location, condition, capacity to treat this site and, any additional improvements and/or upgrades that may be needed to utilize that facility.

2550 SW Hillsboro Highway • Hillsboro, Oregon 97123
Phone: (503) 681-3600 • Fax: (503) 681-3603 • cleanwaterservices.org

f. If private lot LIDA systems proposed, must comply with the current CWS Design and Construction Standards. A private maintenance agreement, for the proposed private lot LIDA systems, needs to be provided to the City for review and acceptance.

g. Show all existing and proposed easements on plans. Any required storm sewer, sanitary sewer, and water quality related easements must be granted to the City.

h. Site contains a "Sensitive Area." Applicant shall comply with the conditions as set forth in the Service Provider Letter No. 10-001901, amended August 8, 2012.

i. Clean Water Services shall require an easement over the Vegetated Corridor conveying storm and surface water management to Clean Water Services that would prevent the owner of the Vegetated Corridor from activities and uses inconsistent with the purpose of the corridor and any easements therein.

j. Detailed plans showing the sensitive area and corridor delineated, along with restoration and enhancement of the corridor.

k. Provide DSL and Corps of Engineers permits for any work in the wetlands or creek prior to any on site work, including grading and erosion control. Include permit number on cover sheet of plans or provide concurrence with the delineation.

l. Any proposed offsite construction activities will require an update or amendment to the current Service Provider Letter for this project.

CONCLUSION

This Land Use Review does not constitute the District's approval of storm or sanitary sewer compliance to the NPDES permit held by the District. The District, prior to issuance of any connection permits, must approve final construction plans and drainage calculations.

Colin Cortes

From: Lynette C. Sanford
Sent: Wednesday, July 09, 2014 1:55 PM
To: Colin Cortes
Subject: FW: Application Submittal AR-14-07 - Marquis Tualatin Cottages

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From: Cousineau, John [mailto:John.Cousineau@ftr.com]
Sent: Wednesday, July 09, 2014 1:53 PM
To: Lynette C. Sanford
Subject: Application Submittal AR-14-07 - Marquis Tualatin Cottages

No changes to physical plant but customer should contact Frontier for range of services for job trailers and residents when completed. Thank you for the information.

John Cousineau
Network Engineer, Network Engineering & Planning
Frontier Communications
4155 SW Cedar Hills Blvd.
Beaverton, OR. 97055
503-643-0371(o)
503-643-0977(f)
john.cousineau@ftr.com

"I Can Help You"

Colin Cortes

From: Clare Fuchs
Sent: Thursday, July 17, 2014 8:52 AM
To: Colin Cortes
Subject: FW: Application Submittal AR-14-07 - Marquis Tualatin Cottages

I think this was meant for you.

From: Darby, Ty M. [mailto:Ty.Darby@tvfr.com]
Sent: Thursday, July 17, 2014 8:15 AM
To: Lynette C. Sanford
Cc: Clare Fuchs
Subject: RE: Application Submittal AR-14-07 - Marquis Tualatin Cottages

Lynette,

The Fire District has reviewed the site plan for this subdivision. Fire apparatus access is acceptable. Fire hydrant spacing is subject to City of Tualatin standards. We have no other comments for this project.

Thank you.

Ty Darby | Deputy Fire Marshal
Tualatin Valley Fire & Rescue
Direct: 503-259-1409
www.tvfr.com

From: Lynette C. Sanford [mailto:LSanford@ci.tualatin.or.us]
Sent: Tuesday, July 08, 2014 2:55 PM
To: Clean Water Services; Frontier Communications; NW Natural Gas; ODOT; PGE; PGE; PGE; Republic Services; Tigard Tualatin School District; Tri Met; Darby, Ty M.; US Postal Service; Washington County - Naomi Vogel; WCCCA; Alice Cannon; AQUILLA HURD-RAVICH; CARL SWITZER; Don Hudson; Jerald Postema; JIM SAYERS; Kaaren Hofmann; KENT BARKER; Linda Moholt; Linda Odermott; Martin Loring; MICK WILSON; Paul Hennon; Sean T. Brady; Sherilyn Lombos; TOM SCOTT; TOM STEIGER; TONY DORAN; afamhouse@gmail.com; alan.jo@frontier.com; alex.simshaw@gmail.com; atasaedi@hotmail.com; cjben5915@hotmail.com; cmdarby@comcast.net; cphill9@comcast.net; dormanc@wcb.com; doug_ulmer@comcast.net; erik@johannesfamily.com; famtunstall1@frontier.com; gannett@oregonrn.org; jan.giunta@gmail.com; jbcgmag@comcast.net; jmakarowsky@comcast.net; jodiskis@gmail.com; john.howorth@3j.consulting.com; jon@tualatinlife.com; jraikoglo@aol.com; jrpride@frontier.com; kaydix@comcast.net; lloop@klcorp.com; rachelcarpenterrealty@gmail.com; rfco@earthlink.com; robertekellogg@yahoo.com; roy@rueckco.com; s.caporale@comcast.net; s.caporale@yahoo.com; sander5389@comcast.net; Scott Miller; stefan@feuerherdtlaw.com; tualatincommercialcio@gmail.com; tualatinindustrialcio@gmail.com; willie.fisher@gmail.com
Cc: Colin Cortes; CINDY HAHN; Clare Fuchs
Subject: Application Submittal AR-14-07 - Marquis Tualatin Cottages

We've received an application for an Architectural Review to develop a community building and a set of 65 single-story duplexes/townhouses and other multi-family housing types. This project is located north and west of 19945 SW Boones Ferry Rd.

You may view the application materials on our web page: http://www.tualatinoregon.gov/planning/ar-14-07-marquis-tualatin-cottages

Lynette Sanford

Office Coordinator
City of Tualatin | Planning Division
503.691.3026 | www.tualatinoregon.gov

Colin Cortes

From: Clare Fuchs
Sent: Monday, July 21, 2014 3:10 PM
To: Colin Cortes
Cc: Naomi Vogel
Subject: FW: Application Submittal AR-14-07 - Marquis Tualatin Cottages

Here you go Colin-

From: Naomi Vogel [mailto:Naomi_Vogel@co.washington.or.us]
Sent: Monday, July 21, 2014 3:09 PM
To: Clare Fuchs
Subject: FW: Application Submittal AR-14-07 - Marquis Tualatin Cottages

No comments from the County. I thought this was your project.

Naomi

From: Lynette C. Sanford [mailto:LSanford@ci.tualatin.or.us]
Sent: Tuesday, July 08, 2014 2:55 PM
To: Clean Water Services; Frontier Communications; NW Natural Gas; ODOT; PGE; PGE; PGE; Republic Services; Tigard Tualatin School District; Tri Met; TVFR; US Postal Service; Naomi Vogel; WCCCA; Alice Cannon; AQUILLA HURD-RAVICH; CARL SWITZER; Don Hudson; Jerald Postema; JIM SAYERS; Kaaren Hofmann; Kent Barker; Linda Moholt; Linda Odermott; Martin Loring; MICK WILSON; Paul Hennon; Sean T. Brady; Sherilyn Lombos; TOM SCOTT; TOM STEIGER; TONY DORAN; afamhouse@gmail.com; alan.jo@frontier.com; alex.simshaw@gmail.com; atasaedi@hotmail.com; cjben5915@hotmail.com; cmdarby@comcast.net; cphill9@comcast.net; dormanc@wcb.com; doug_ulmer@comcast.net; erik@johannesfamily.com; famtunstall1@frontier.com; gannett@oregonrn.org; jan.giunta@gmail.com; jbcgmag@comcast.net; jmakarowsky@comcast.net; jodiskis@gmail.com; john.howorth@3j.consulting.com; jon@tualatinlife.com; jraikoglo@aol.com; jrpride@frontier.com; kaydix@comcast.net; lloop@klcorp.com; rachelcarpenterrealty@gmail.com; rfco@earthlink.com; robertekellogg@yahoo.com; roy@rueckco.com; s.caporale@comcast.net; s.caporale@yahoo.com; sander5389@comcast.net; Scott Miller; stefan@feuerherdtlaw.com; tualatincommercialcio@gmail.com; tualatinindustrialcio@gmail.com; willie.fisher@gmail.com
Cc: Colin Cortes; CINDY HAHN; Clare Fuchs
Subject: Application Submittal AR-14-07 - Marquis Tualatin Cottages

We've received an application for an Architectural Review to develop a community building and a set of 65 single-story duplexes/townhouses and other multi-family housing types. This project is located north and west of 19945 SW Boones Ferry Rd.

You may view the application materials on our web page: http://www.tualatinoregon.gov/planning/ar-14-07-marquis-tualatin-cottages

Lynette Sanford
Office Coordinator
City of Tualatin | Planning Division
503.691.3026 | www.tualatinoregon.gov

Colin Cortes

From: Kelsey Lewis
Sent: Wednesday, July 30, 2014 11:36 AM
To: Colin Cortes
Cc: Paul Hennon
Subject: Marquis Cottages AR

Hi Colin,

I spoke with Paul again today about the heritage trees at Marquis Cottages and find that we need a little more information. As we discussed earlier this week, in the application the developer states that they will save the historic/heritage trees on the property; however, it appears that they overlooked one catalpa that stands separate from the others.

Could you follow up with the developer on whether or not they plan to keep or remove that catalpa tree? If they plan to remove it, which seems likely considering that it's not shown on any site plans, please refer the developer to Paul.

We'll also want a condition in the final decision indicating that the applicant shall amend the recorded historic tree agreement to reflect that now 3, not 4, catalpa trees stand on that property, and rerecord the document.

Please give me a call if you have any questions.

Kelsey Lewis
Program Coordinator
City of Tualatin | Community Services
Mail: 18880 SW Martinazzi Avenue | Located: 8515 SW Tualatin Road
Tualatin, OR 97062-7092
503.691.3062 | klewis@ci.tualatin.or.us

LEGEND

- UNIT 1 & 3 CONFIGURATION
- UNIT 1 & 3 ALTERNATE
- UNIT 2 & 2 CONFIGURATION
- UNIT 2 & 2 ALTERNATE
- UNIT 1 & 1 CONFIGURATION
- UNIT 1 & 1 ALTERNATE
- UNIT 1 & 2 CONFIGURATION
- UNIT 1 & 2 ALTERNATE
- UNIQUE DESIGN MULTIFAMILY UNITS
- POTENTIAL FUTURE PROPERTY LINES
- POTENTIAL FUTURE SETBACK LINES

UNIT MIX

UNIT 1	17
UNIT 1A	1
UNIT 2	32
UNIT 3	11
UNIT 3A	1
UNIQUE DESIGN	3
TOTAL	65

1 SITE PLAN
1" = 60'-0"

OVERALL SITE PLAN

A1

CONCEPTUAL

PROJECT INFORMATION:

BUILDING CONSTRUCTION TYPE:
Single Story, Wood Framed, Independent Living Town Homes & Single Story Wood Framed Community Center

SITE INFORMATION:
Total area of planned unit development: 12.5± ACRES

Multifamily Residences:
UNIT 1: 1,057 S.F.
UNIT 2: 1,200 S.F.
UNIT 3: 1,492 S.F.

Community Center: 9331 S.F.

CONTACT INFO:

APPLICANT:
Marquis Companies
Tualatin Properties, LLC
4560 SE International Way, Suite 100
Milwaukie, OR 97222
Contact: Scott Miller
Phone: (971) 206-2330
Fax: (971) 206-5201
Email: smiller@marquiscompanies.com

ARCHITECT:
CBITwo Architects, LLC
500 Liberty St SE, Suite 100
Salem, OR 97301
Contact: Matt Stoffregen
Phone: (503) 480-8700
Fax: (503) 480-8701
Email: matts@cbtwoarchitects.com

CIVIL:
Emerio Design
8285 SW Nimbus Avenue, Suite 180
Beaverton, OR 97008
Contact:
Phone: (503) 347-6004
Fax:
Email:

BUILDING AGENCY/JURISDICTION:
City of Tualatin

ARCHITECTURAL SHEET INDEX:

A1: OVERALL SITE PLAN
A2: OVERALL LANDSCAPE PLAN
B1: ENLARGED COTTAGE LANDSCAPE PLANS
B2: TYP. UNIT 1-3 PLAN AND ELEVATION
B3: TYP. UNIT 2-2 PLAN AND ELEVATION
B4: COTTAGES RENDERING
B5: COTTAGES RENDERING
C1: ENLARGED COMMUNITY CENTER LANDSCAPE PLAN
C2: COMMUNITY CENTER PLAN AND ELEVATIONS
C3: COMMUNITY CENTER RENDERING
C4: COMMUNITY CENTER RENDERING
D1: DETAILS

2 VICINITY MAP
1" = 200'-0"

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

MAY 20, 2014

MARQUIS COMPANIES

CB|Two ARCHITECTS
A LIMITED LIABILITY COMPANY
500 Liberty Street SE, Suite 100 / Salem, Oregon 97301
Ph: 503.480.8700 / Fx: 503.480.8701

LEGEND

- UNIT 1 & 3 CONFIGURATION
- UNIT 1 & 3 ALTERNATE
- UNIT 2 & 2 CONFIGURATION
- UNIT 2 & 2 ALTERNATE
- UNIT 1 & 1 CONFIGURATION
- UNIT 1 & 1 ALTERNATE
- UNIT 1 & 2 CONFIGURATION
- UNIT 1 & 2 ALTERNATE
- UNIQUE DESIGN MULTIFAMILY UNITS
- POTENTIAL FUTURE PROPERTY LINES
- POTENTIAL FUTURE SETBACK LINES
- OCTOBER GLORY RED MAPLE
- KATSURA TREE
- CAPITAL FLOWERING PEAR OR WHITE CREPE MYRTLE
- GRASS
- BARK MULCH
- SEE ENLARGED LANDSCAPE PLANS FOR INDICATION OF SHRUBS

1 OVERALL LANDSCAPE PLAN
1" = 50'-0"

OVERALL LANDSCAPE PLAN

A2

CONCEPTUAL

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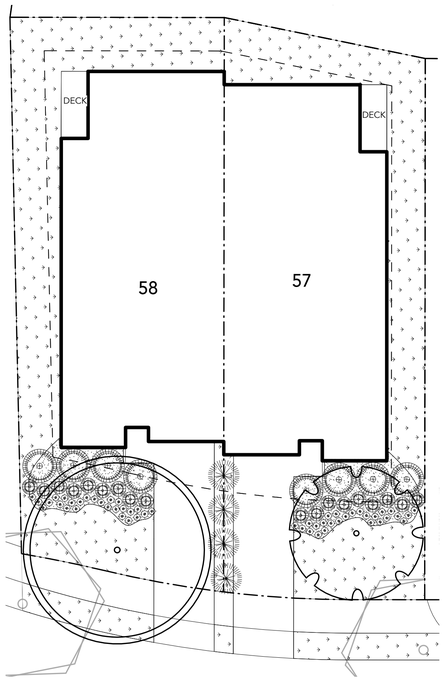
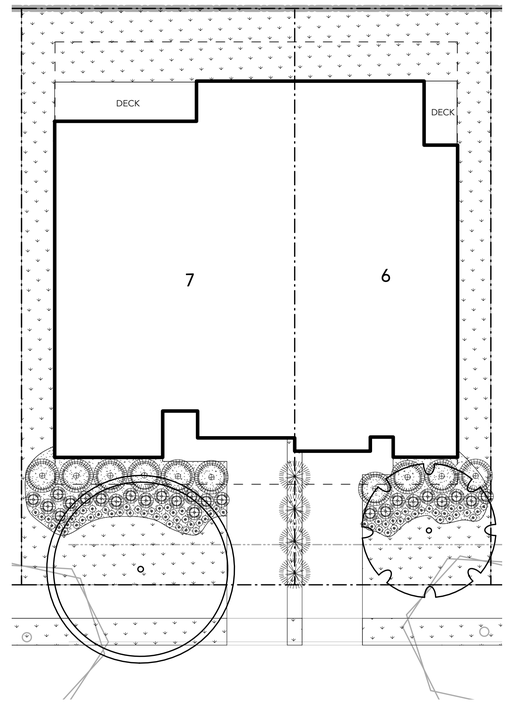
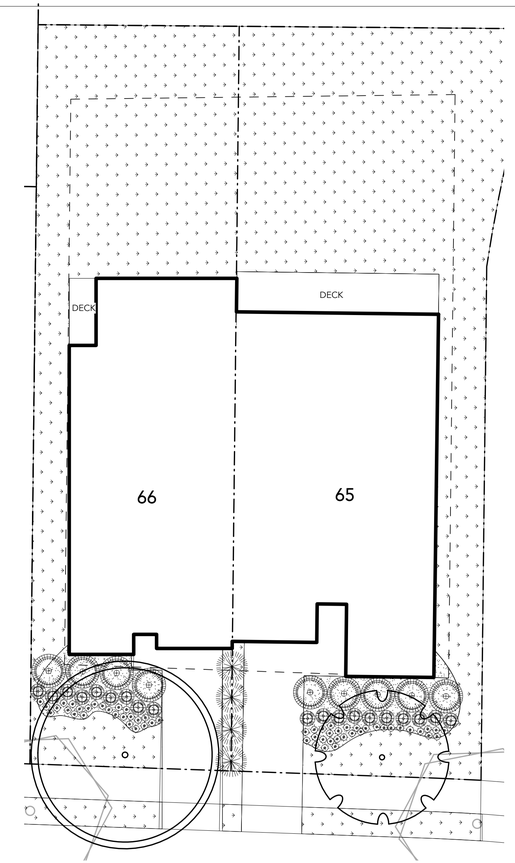


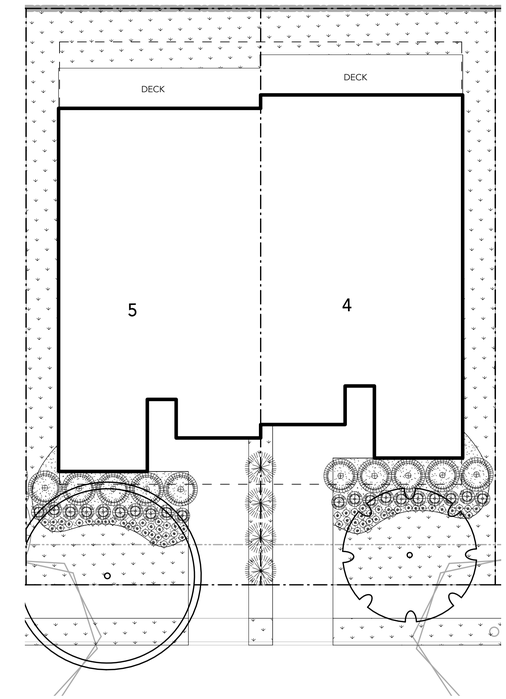
4 TYP. UNIT 1-1 LANDSCAPE PLAN
3/32" = 1'-0"



3 TYP. UNIT 1-3 LANDSCAPE PLAN
3/32" = 1'-0"



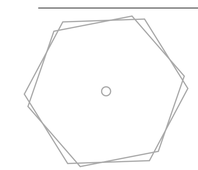
2 TYP. UNIT 1-2 LANDSCAPE PLAN
3/32" = 1'-0"



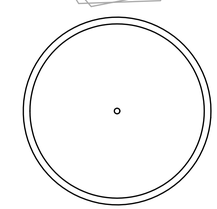
1 TYP. UNIT 2-2 LANDSCAPE PLAN
3/32" = 1'-0"

ALL DRIVEWAY WIDTHS TO BE 10'.

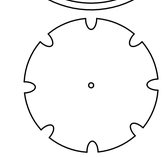
PLANT MATERIALS LEGEND



OCTOBER GLORY RED MAPLE STREET TREES PER PREVIOUSLY APPROVED DEVELOPMENT



KATSURA TREE



CAPITAL FLOWERING PEAR OR WHITE CREPE MYRTLE

RHODODENDRON, HYDRANGEA, & LAVENDER SHRUB VARIETIES

BOXWOOD SHRUB VARIETIES

TALL GRASSES: ICE DANCER SEDGE & BLUE OAT GRASS

PERENNIAL GROUND COVER VARIETIES: BERGENIA & LENTEN ROSE

GRASS

BARK MULCH

ENLARGED COTTAGE LANDSCAPE PLANS

B1

CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

MAY 20, 2014

MARQUIS COMPANIES

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A LIMITED LIABILITY COMPANY
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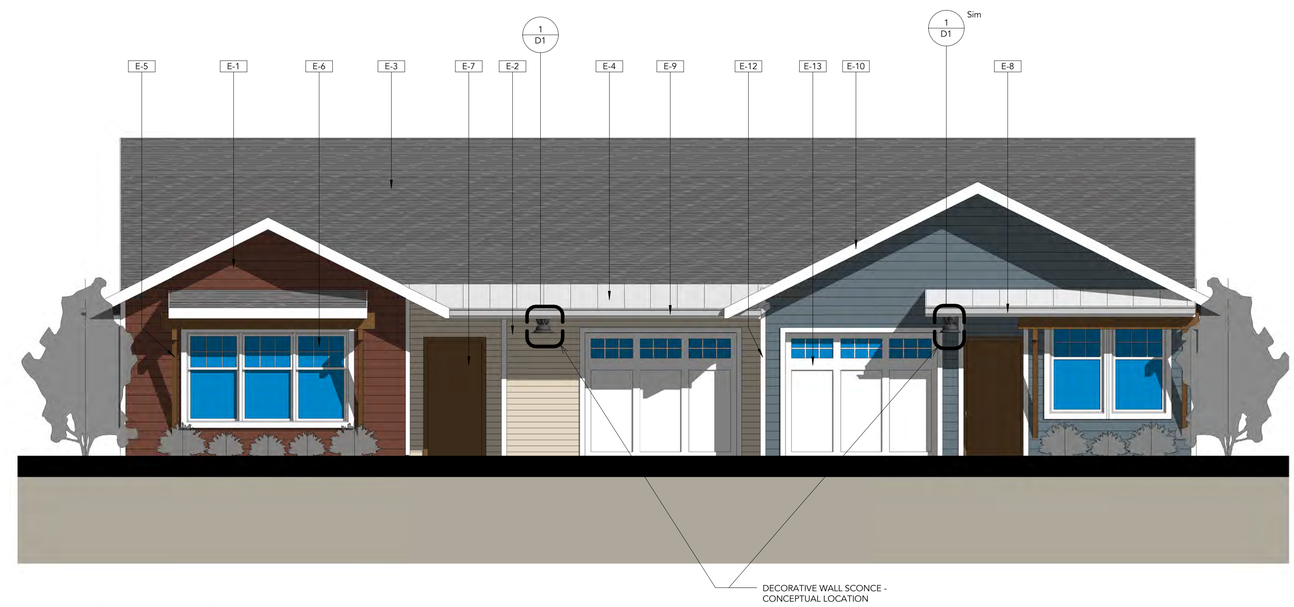
PLAN - 3
1,493 S.F.

PLAN - 1
1,058 S.F.

1 FLOOR PLAN
1/4" = 1'-0"

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
E-1	FIBER CEMENT LAP SIDING (7" EXPOSURE)
E-2	FIBER CEMENT LAP SIDING (4" EXPOSURE)
E-3	ARCHITECTURAL COMPOSITION ROOFING
E-4	STANDING SEAM METAL ROOFING
E-5	TIMBER KNEE BRACE
E-6	WINDOW
E-7	DOOR
E-8	GUTTER OVER 2X8 FASCIA
E-9	GUTTER OVER METAL FASCIA
E-10	2X8 BARGE RAFTER
E-11	POST PER PLAN
E-12	5/4 X 4 CORNER BOARD
E-13	GARAGE DOOR



2 FRONT ELEVATION
1/4" = 1'-0"

TYP. UNIT 1-3
PLAN &
ELEVATION

B2

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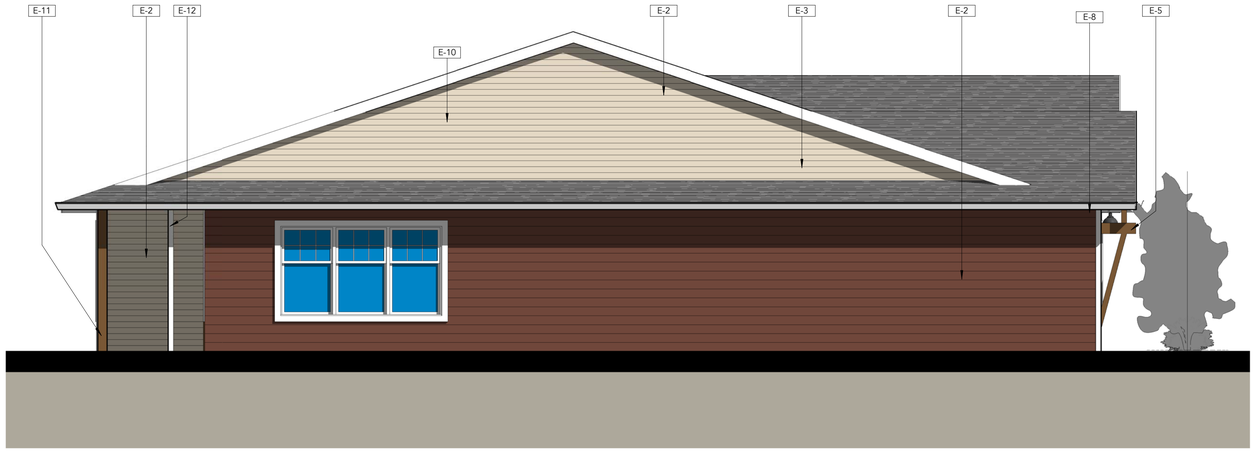
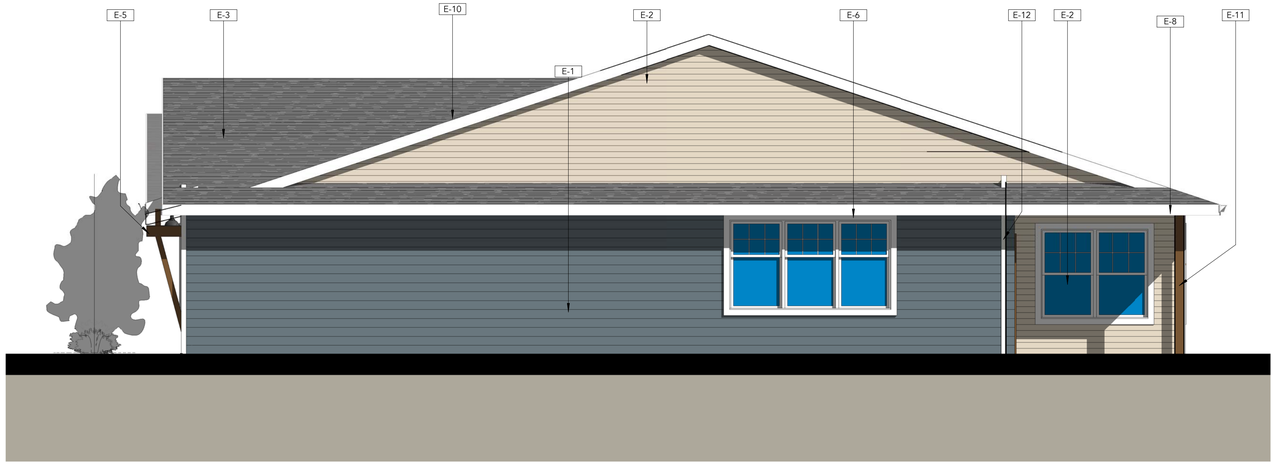


1 LEFT ELEVATION
1/4" = 1'-0"



2 RIGHT ELEVATION
1/4" = 1'-0"

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
E-1	EXTERIOR FIBER CEMENT SIDING - HORIZONTAL LAP WITH 7" EXPOSURE WIDTH, RUSTIC CEDAR FINISH
E-2	EXTERIOR FIBER CEMENT SIDING - HORIZONTAL LAP WITH 4" EXPOSURE WIDTH, SMOOTH FINISH
E-3	DOOR PER SCHEDULE
E-4	GARAGE DOOR PER SCHEDULE
E-5	DOOR TRIM
E-6	WINDOW PER SCHEDULE
E-7	WINDOW TRIM
E-8	EXTERIOR CORNER BUILDING TRIM
E-9	INTERIOR CORNER BUILDING TRIM
E-10	WALL-TO-SOFFIT BUILDING TRIM
E-11	BARGE BOARD WITH DECORATIVE TRIM
E-12	FASCIA BOARD WITH DECORATIVE TRIM
E-13	PRE-FINISHED ALUMINUM GUTTER - BOX STYLE (K STYLE NOT ACCEPTABLE) *FIELD PAINTED ACCEPTABLE AS ALTERNATE

TYP. UNIT 1-3
SIDE
ELEVATIONS

B3

CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

07/25/14

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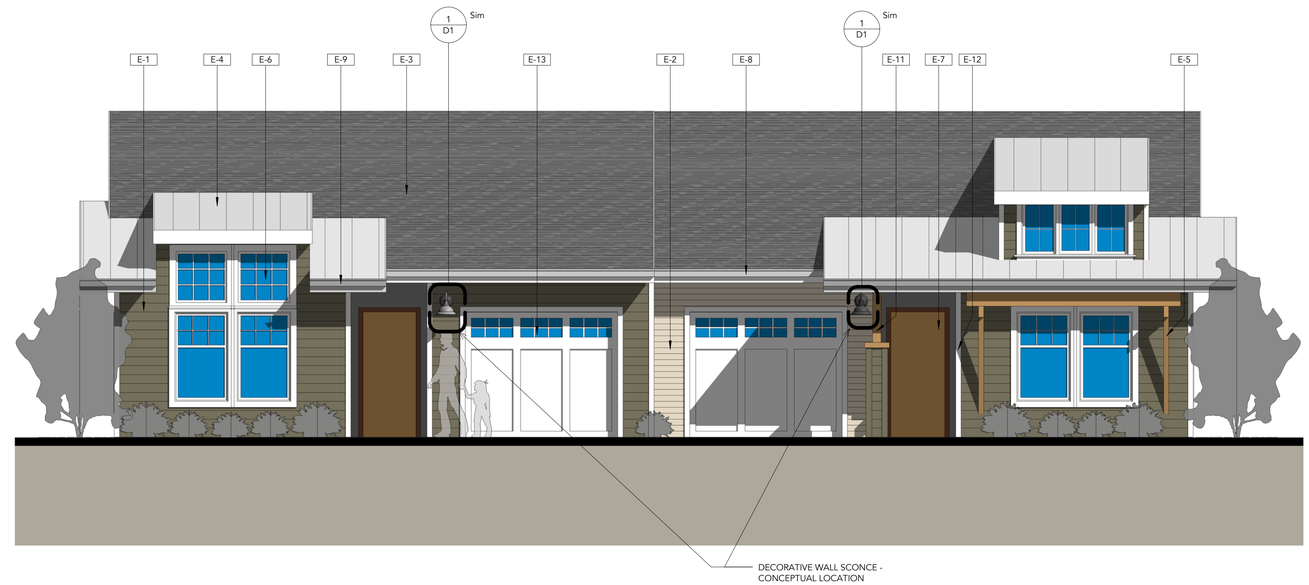
PLAN - 2
1,260 S.F.

PLAN - 2
1,260 S.F.

1 FLOOR PLAN
1/4" = 1'-0"

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
E-1	EXTERIOR FIBER CEMENT SIDING - HORIZONTAL LAP WITH 7" EXPOSURE WIDTH, RUSTIC CEDAR FINISH
E-2	EXTERIOR FIBER CEMENT SIDING - HORIZONTAL LAP WITH 4" EXPOSURE WIDTH, SMOOTH FINISH
E-3	DOOR PER SCHEDULE
E-4	GARAGE DOOR PER SCHEDULE
E-5	DOOR TRIM
E-6	WINDOW PER SCHEDULE
E-7	WINDOW TRIM
E-8	EXTERIOR CORNER BUILDING TRIM
E-9	INTERIOR CORNER BUILDING TRIM
E-11	BARGE BOARD WITH DECORATIVE TRIM
E-12	FASCIA BOARD WITH DECORATIVE TRIM
E-13	PRE-FINISHED ALUMINUM GUTTER - BOX STYLE (K STYLE NOT ACCEPTABLE) *FIELD PAINTED ACCEPTABLE AS ALTERNATE



2 FRONT ELEVATION
1/4" = 1'-0"

TYP. UNIT 2-2
PLAN &
ELEVATION

B4

CONCEPTUAL

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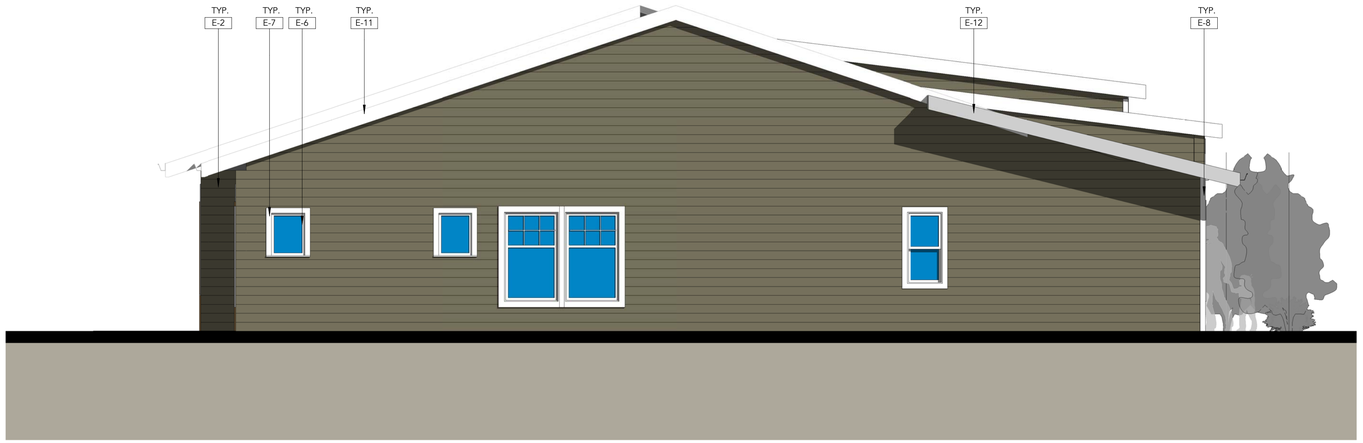

1 LEFT ELEVATION *(RIGHT ELEVATION SIM.)*
1/4" = 1'-0"

KEYNOTE LEGEND	
KEY VALUE	KEYNOTE TEXT
E-1	EXTERIOR FIBER CEMENT SIDING - HORIZONTAL LAP WITH 7" EXPOSURE WIDTH, RUSTIC CEDAR FINISH
E-2	EXTERIOR FIBER CEMENT SIDING - HORIZONTAL LAP WITH 4" EXPOSURE WIDTH, SMOOTH FINISH
E-3	DOOR PER SCHEDULE
E-4	GARAGE DOOR PER SCHEDULE
E-5	DOOR TRIM
E-6	WINDOW PER SCHEDULE
E-7	WINDOW TRIM
E-8	EXTERIOR CORNER BUILDING TRIM
E-9	INTERIOR CORNER BUILDING TRIM
E-11	BARGE BOARD WITH DECORATIVE TRIM
E-12	FASCIA BOARD WITH DECORATIVE TRIM
E-13	PRE-FINISHED ALUMINUM GUTTER - BOX STYLE (K STYLE NOT ACCEPTABLE) *FIELD PAINTED ACCEPTABLE AS ALTERNATE

TYP. UNIT 2-2
SIDE
ELEVATION

B5

CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

07/25/14

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COTTAGES
RENDERING

B4 CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

MAY 20, 2014

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COTTAGES
RENDERING

B5 CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

MAY 20, 2014

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COTTAGES
RENDERING

B6 CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

07/25/14

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COTTAGES
RENDERING

B7

CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

07/25/14

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COMPANIES

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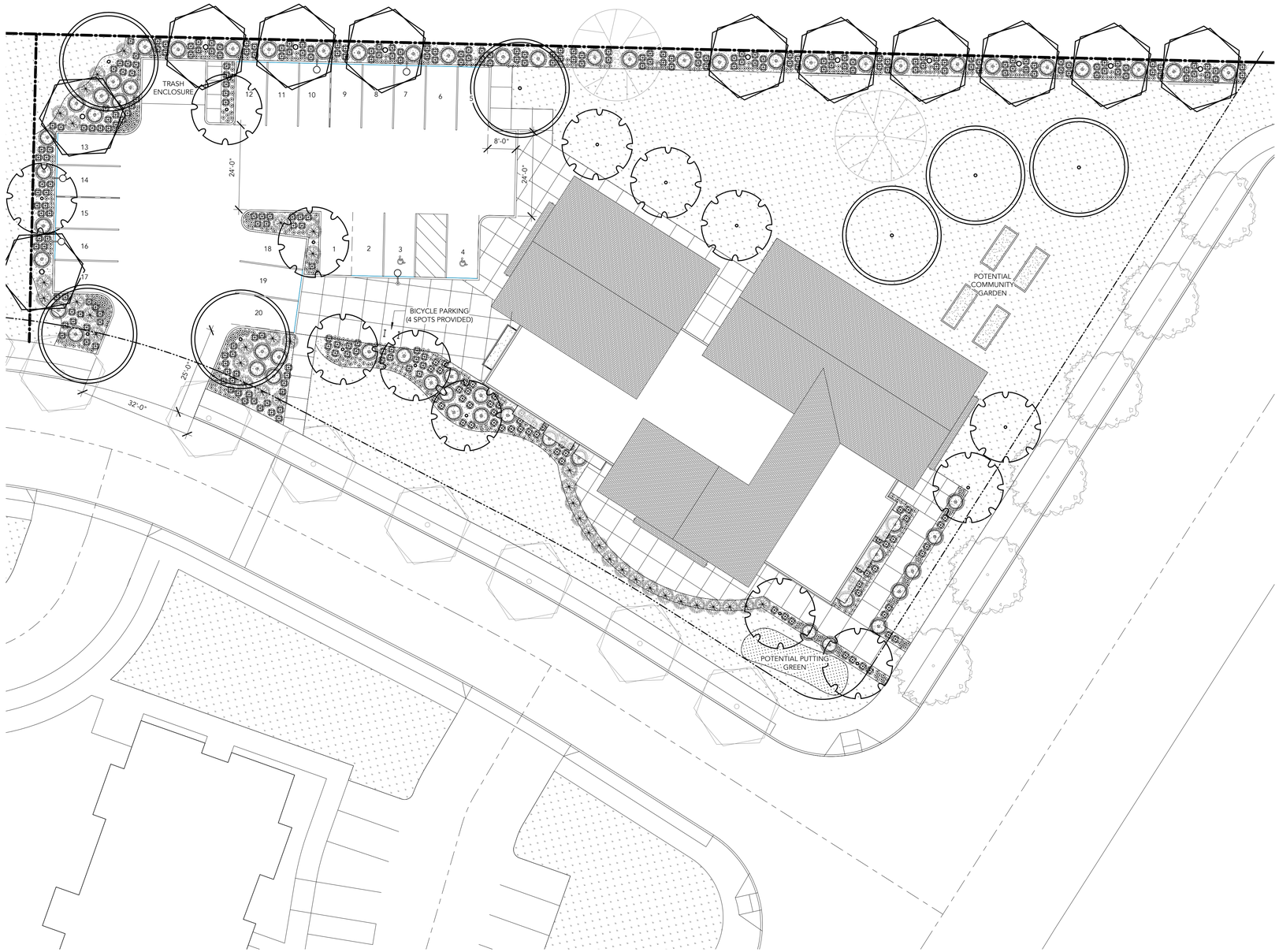

1 LANDSCAPE PLAN
1/16" = 1'-0"

PLANT MATERIALS LEGEND

- OCTOBER GLORY RED MAPLE
- EXISTING STREET TREE: VILLAGE GREEN ZELKOVA
- KATSURA TREE
- EXISTING STREET TREE: OCTOBER GLORY RED MAPLE
- CAPITAL FLOWERING PEAR OR WHITE CREPE MYRTLE
- EXISTING DECIDUOUS TREE
- RHODODENDRON, HYDRANGEA, AND LAVENDER SHRUB VARIETIES
- GRASS
- BOXWOOD SHRUB VARIETIES
- BARK MULCH
- TALL GRASSES: ICE DANCER SEDGE & BLUE OAT GRASS
- POTENTIAL PUTTING GREEN
- PERENNIAL GROUND COVER VARIETIES: BERGENIA & LENTEN ROSE
- POLE LIGHT

ENLARGED COMMUNITY CENTER LANDSCAPE PLAN

C1

CONCEPTUAL

MARQUIS TUALATIN

JULY 24, 2014

MARQUIS COMPANIES

CB|Two ARCHITECTS
A LIMITED LIABILITY COMPANY

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Ph: 503.480.8700 / Fx: 503.480.8701

1 SOUTH ELEVATION
1" = 10'-0"

2 EAST ELEVATION
1" = 10'-0"

3 NORTH ELEVATION
1" = 10'-0"

4 WEST ELEVATION
1" = 10'-0"

KEYNOTE LEGEND	
KEYNOTE #	DESCRIPTION
A3-01	EXTERIOR FIBER CEMENT HORIZONTAL SIDING WITH 4" EXPOSURE WIDTH
A3-02	EXTERIOR FIBER CEMENT HORIZONTAL SIDING WITH 7" EXPOSURE WIDTH
A3-03	2X8 FASCIA BOARD WITH CONTINUOUS METAL GUTTER. PRIME AT ALL CUT ENDS
A3-04	2X8 BARGE BOARD. PRIME AT ALL CUT ENDS
A3-05	WINDOW AND FRAME PER WINDOW SCHEDULE
A3-06	DOOR AND FRAME PER DOOR SCHEDULE
A3-07	WOOD BRACKET
A3-10	ROOF SHINGLES
A3-11	BRICK VENEER SIDING OVER STUD WALL
A3-12	CANVAS AWNING
A3-13	PRE-FINISHED CONT. METAL PARAPET CAP
A3-14	BLACKED OUT WINDOWS

COLORS

A PAINT
SHERWIN WILLIAMS
ROCKWOOD
TERRA COTTA
SW 2803

B PAINT
SHERWIN WILLIAMS
SLATE TILE
SW 7624

C PAINT
SHERWIN WILLIAMS
COCOON
SW 6173

D PAINT
SHERWIN WILLIAMS
AURORA BROWN
SW 2837

E PAINT
SHERWIN WILLIAMS
OYSTER BAR
SW 7565

F WINDOW & DOOR TRIM; DOORS FASCIA & BARGE BOARDS; EAVES SOFFITS; GABLE END VENTS
WHITE

G BRICK
MUTUAL MATERIALS
MOUNTAIN BLEND
MISSION TEXTURE

H METAL
TO MATCH ADJACENT
BODY COLOR

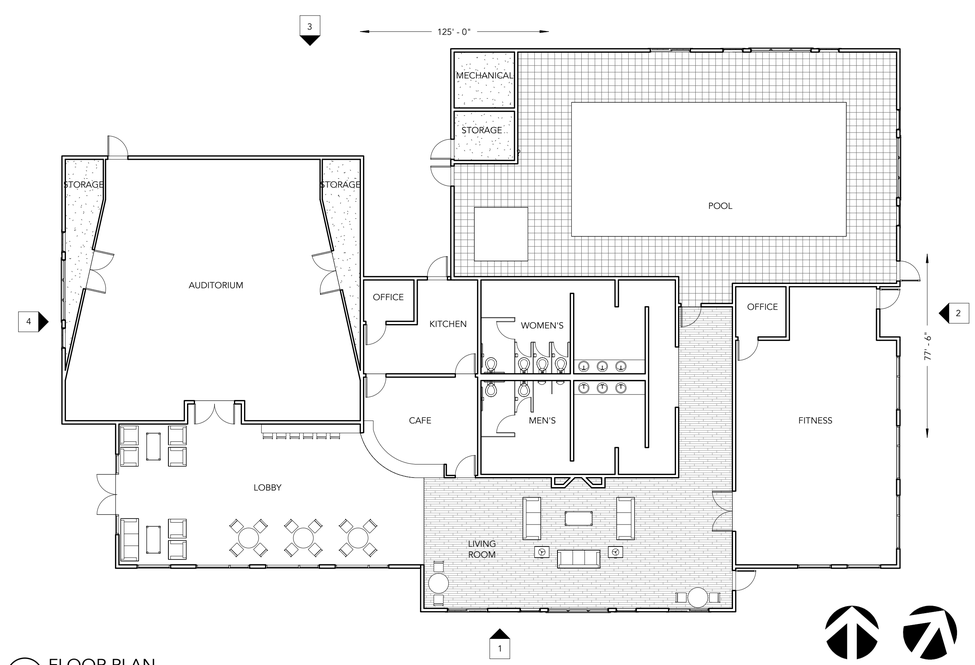
J COMP. ROOF
PABCO WEATHERED
WOOD

K CORNER TRIM
TO MATCH ADJACENT
BODY COLOR

L WOOD BRACKET
WOOD - CLEAR COAT STAIN
KNIFE PLATE CONNECTION -
BLACK POWDER COAT

M CONCRETE
STANDARD GREY

N AWNINGS
SUNBRELLA
TRESCO CLAY



5 FLOOR PLAN
3/32" = 1'-0"

PROJECT NORTH TRUE NORTH

COMMUNITY CENTER PLAN AND ELEVATIONS

C2

CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

MAY 20, 2014

MARQUIS COMPANIES

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COMMUNITY
CENTER
RENDERING

C3 CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

MAY 20, 2014

MARQUIS
COMPANIES

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COMMUNITY
CENTER
RENDERING

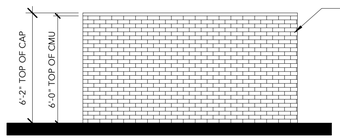
C4 CONCEPTUAL

MARQUIS TUALATIN COTTAGES & COMMUNITY CENTER

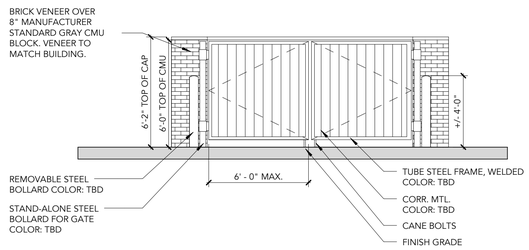
MAY 20, 2014

MARQUIS
COMPANIES

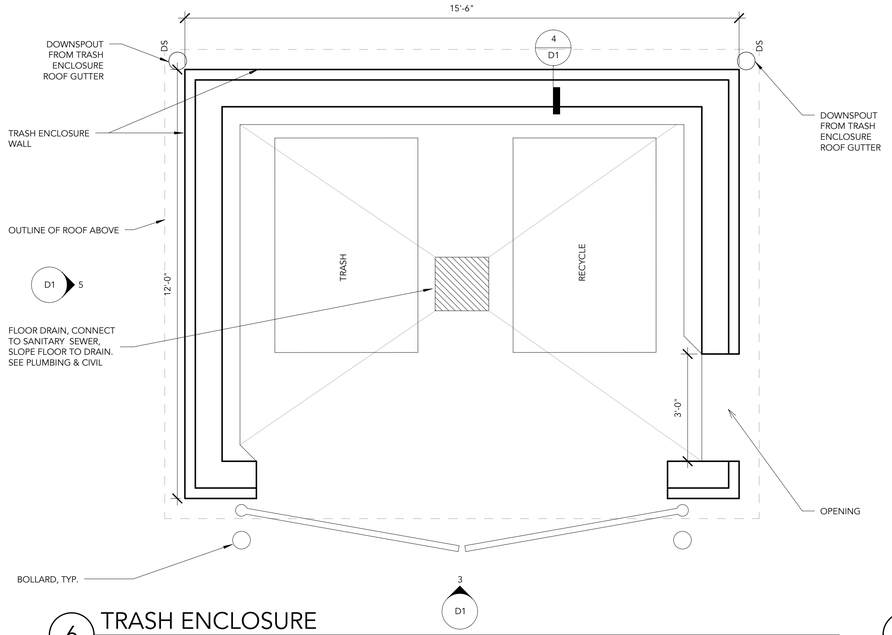
CB|Two ARCHITECTS
A LIMITED LIABILITY COMPANY
500 Liberty Street SE, Suite 100 / Salem, Oregon 97301
Ph: 503.480.8700 / Fx: 503.480.8701



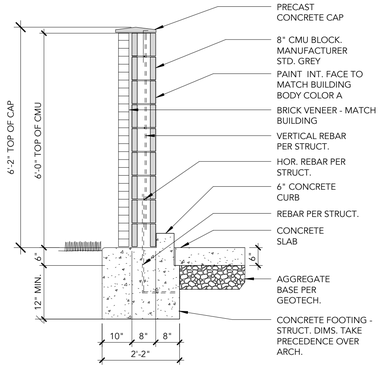
5 TRASH ENCLOSURE SIDE ELEVATION
1/4" = 1'-0"



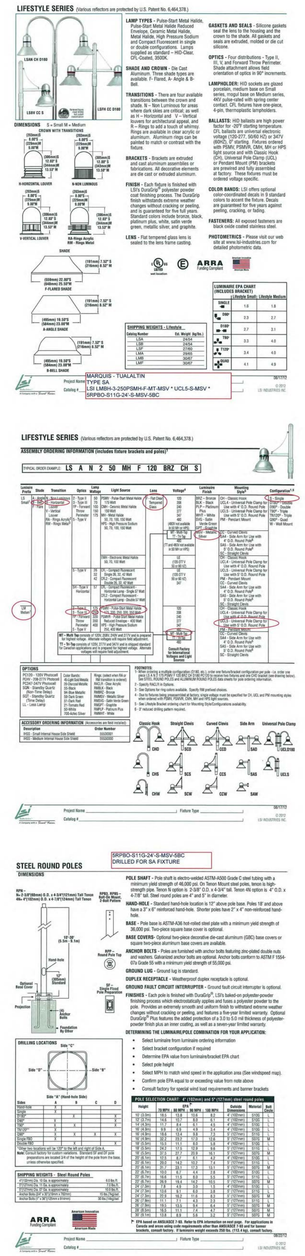
3 TRASH ENCLOSURE FRONT ELEVATION
1/4" = 1'-0"



6 TRASH ENCLOSURE
1/2" = 1'-0"



4 TRASH ENCLOSURE - WALL SECTION
1/2" = 1'-0"

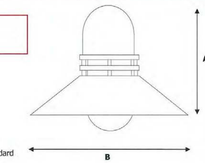


2 COMMUNITY CENTER POLE LIGHT

HORIZON HCX SERIES

PREPARED BY: MARQUIS - TUALALTIN
TYPE: TYPE SH
JOB NAME: HCX18/58-CF42 * WM15/58 * FR4

MODEL#	A (Height In Inches)	B (Diameter In Inches)
HCX14	13	14
HCX16	14	16
HCX18	16	18



FINISH-Five stage pretreatment process, coated with a lead free TGI C polyester powder coat finish. White is standard inside reflectors, Except #49-Galvanized, #62-Arnodized Bronze and #63-Iron Rust, Unless specified. Custom colors and Marine are available upon request.

LAMP HOLDERS- Accommodates **Incandescent** medium base porcelain socket, copper shell with nicked plate, rated 250V, 660W. **Compact Fluorescent** 4 pin heat resistant thermoplastic socket accommodates 26/32W (Gx24q-3 base) and 42W (Gx24q-4 base). Twist lock design provides for vibration and earthquake resistance, rated 75W, 600V. **High Intensity Discharge (H.I.D.)** medium base, 4KV pulse start socket, rated 660W/600V.

MOUNTING- 1/2" or 3/4" tapped hub is supplied. Top or side mount available. Fixtures are pre-wired with 48" or 96" leads. Available with cord or stem sets.

REFLECTOR- Spun from heavy gauge 1100-0 aluminum, ranging in thickness from .050 to .125. Galvanized is from 20 gauge sheets. Copper is spun from .040 gauge and 110 soft alloy.

MODEL#	FINISH	LIGHT SOURCE		
		INC	CF	HID(MH & HPS)
HCX14	40,41,42,43,44,45,46,48,49,50,	200W	26,32, OR 42W*	35,50,70W*
HCX16	51,52,53,54,55,57,58,59,60,61,	200W	26,32, OR 42W*	35,50,70,100W*
HCX18	62,63	200W	26,32, OR 42W*	35,50,70,100,150W*

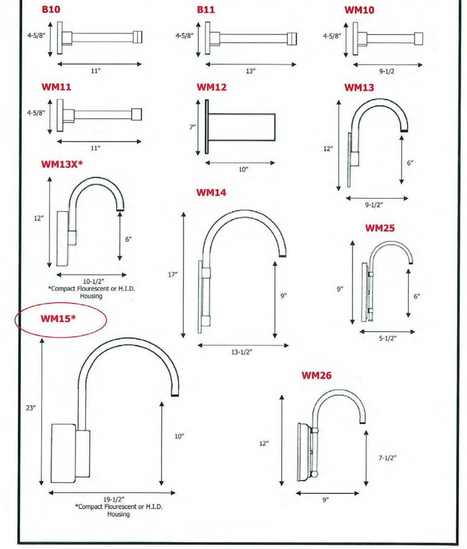
***FOR REMOTE BALLAST SEE MOUNTING SOURCE**

GLASS: FR4
MOUNTING SOURCE:
ACCESSORIES: WM15 WALL MNT

BASELITE CORPORATION

PHONE: 877-999-1990
FAX: 877-999-1955
12260 EAST END AVE. CHINO, CA 91710

WALL MOUNTS



1 COTTAGE EXTERIOR LIGHT

DETAILS

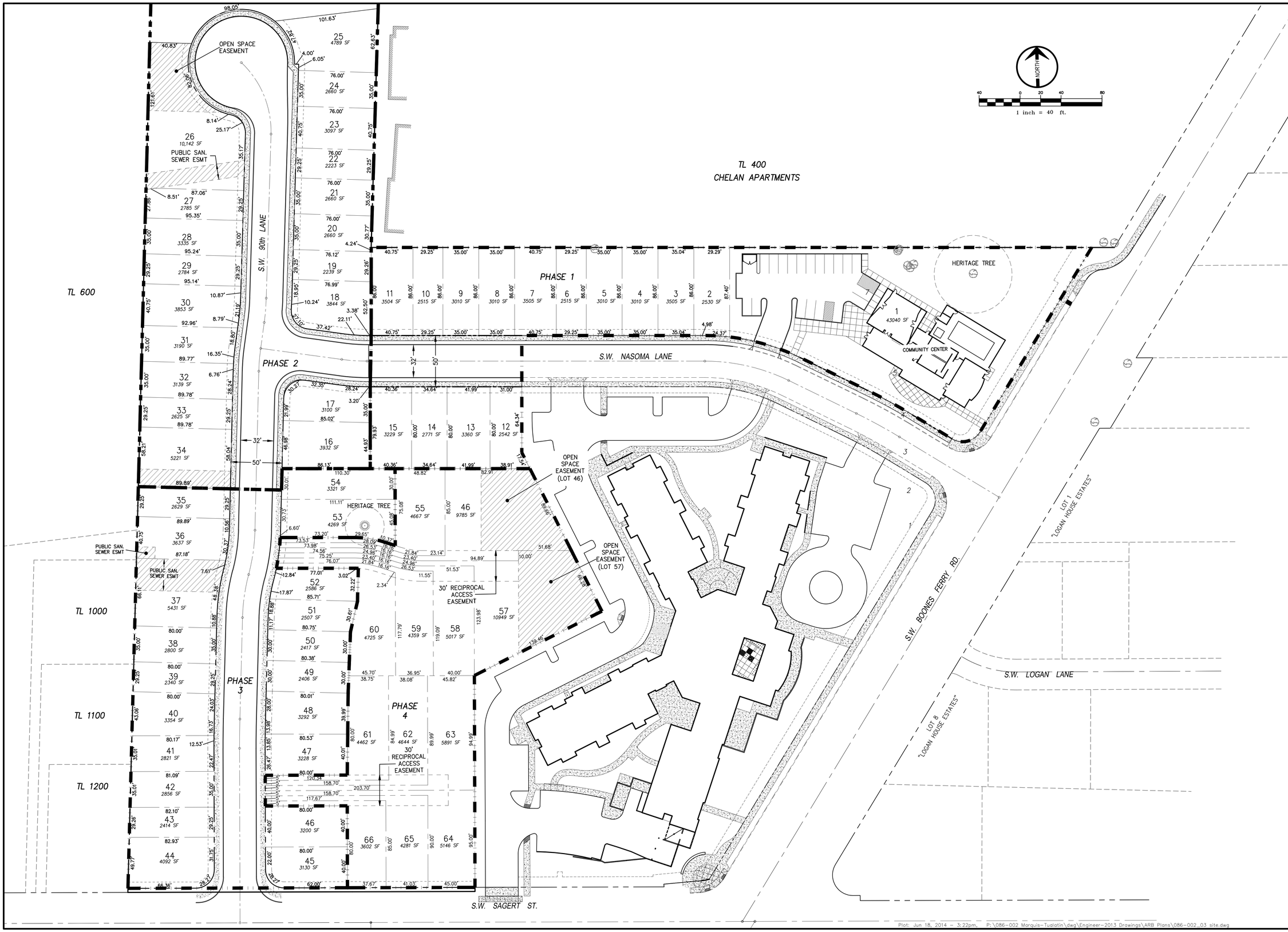
D1 CONCEPTUAL

MARQUIS TUALATIN

MAY 20, 2014

MARQUIS COMPANIES

CB|TWO ARCHITECTS
A LIMITED LIABILITY COMPANY
500 Liberty Street SE, Suite 100 / Salem, Oregon 97301
Ph: 503.480.8700 / Fx: 503.480.8701



MARQUIS TUALATIN RESIDENTIAL

TAX LOT 500
SE 1/4 SE 1/4 OF SEC. 23, T2S R1W
CITY OF TUALATIN, OREGON

EMERIO PROJ. NO. 086-002

SITE PLAN

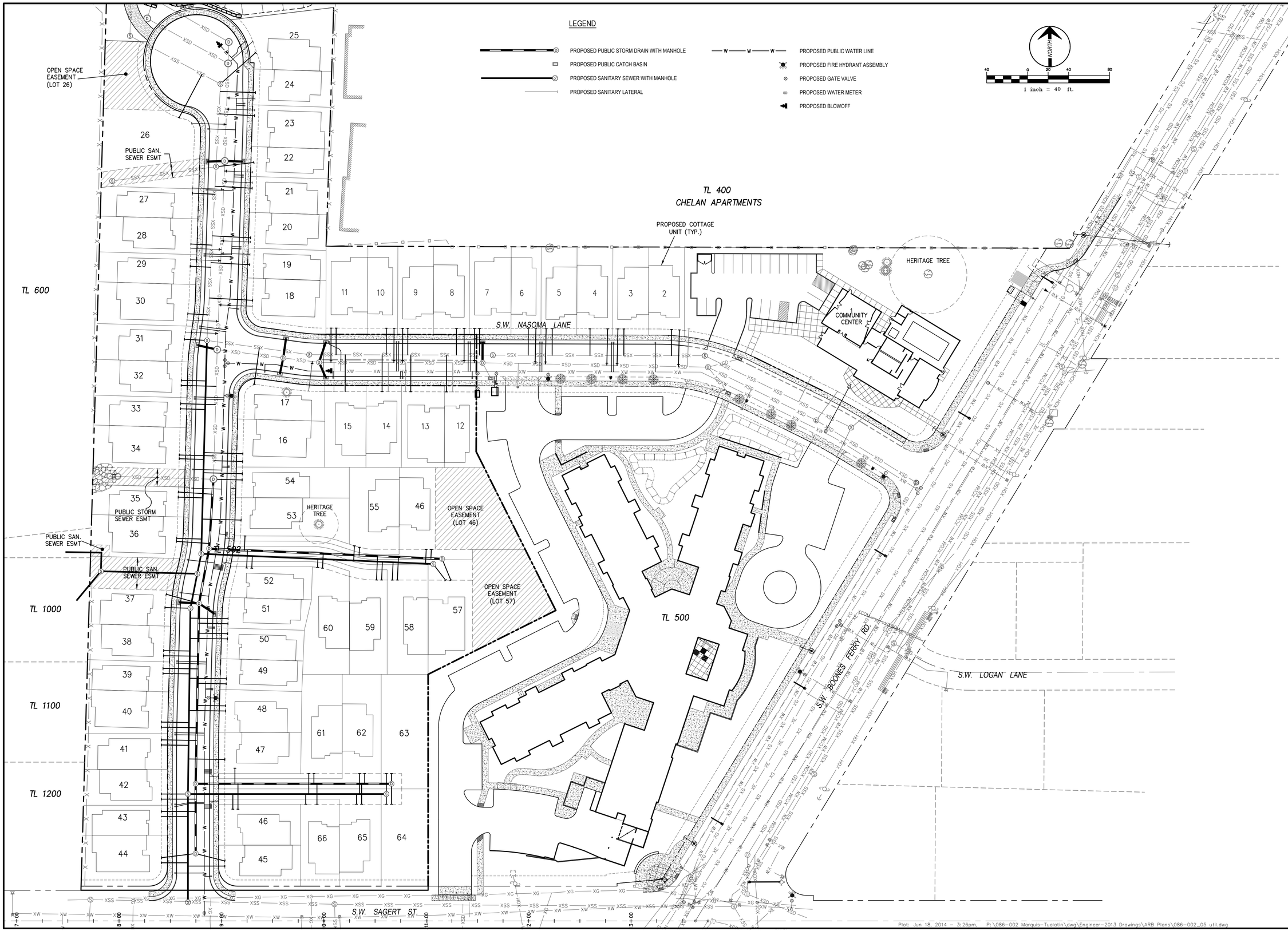
REVISIONS

NO.	DATE	DESCRIPTION

EMERIO Design
6107 SW MURRAY BLVD. SUITE 147
BEAVERTON, OREGON 97008
PH: (503) 515-5528

SHEET 1 OF

Plot: Jun 18, 2014 – 3:22pm, P:\086-002 Marquis-Tualatin\dwg\Engineer-2013 Drawings\ARB Plans\086-002_03 site.dwg



MARQUIS TUALATIN RESIDENTIAL

TAX LOT 500
SE 1/4 SE 1/4 OF SEC. 23, T2S R1W
CITY OF TUALATIN, OREGON

EMERIO PROJ. NO. 086-002

COMPOSITE UTILITY PLAN

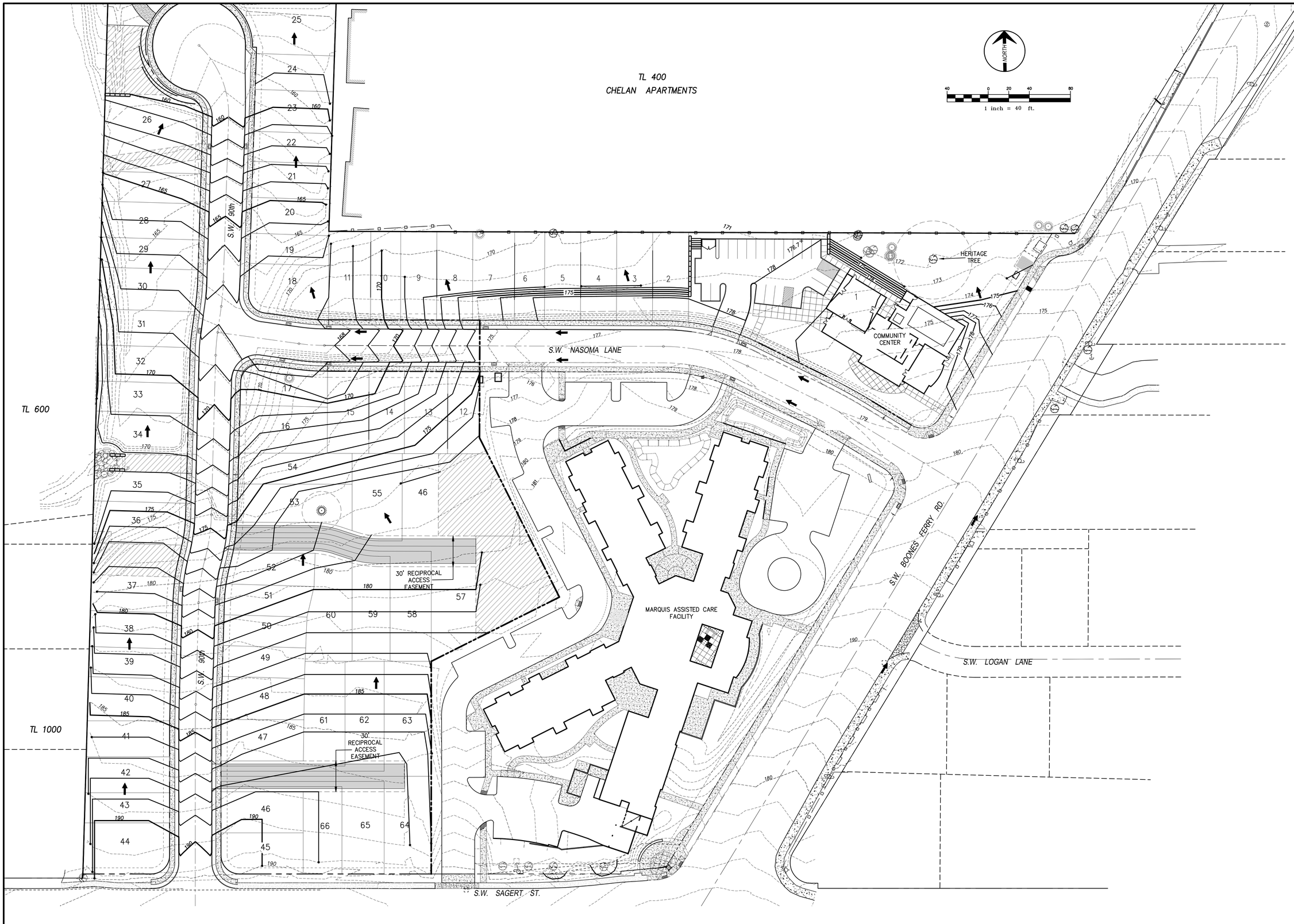
REVISIONS

NO.	DATE	DESCRIPTION

EMERIO Design
6107 SW MURRAY BLVD. SUITE 147
BEAVERTON, OREGON 97008
PH: (503) 515-5528

SHEET 2 OF

Plot: Jun 18, 2014 - 3:26pm, P:\086-002 Marquis-Tualatin\dwg\Engineer-2013 Drawings\ARB Plans\086-002_05 util.dwg



MARQUIS TUALATIN RESIDENTIAL

TAX LOT 500
SE 1/4 SE 1/4 OF SEC. 23, T2S R1W
CITY OF TUALATIN, OREGON

EMERIO PROJ. NO. 086-002

PRELIMINARY GRADING PLAN

REVISIONS

NO.	DATE	DESCRIPTION

EMERIO Design
6107 SW MURRAY BLVD. SUITE 147
BEAVERTON, OREGON 97008
PH: (503) 515-5528

SHEET 3 OF

Plot: Jun 18, 2014 – 3:30pm, P:\086-002 Marquis-Tualatin\dwg\Engineer-2013 Drawings\ARB Plans\086-002_06_gra.dwg

CITY OF TUALATIN
RECEIVED

APR 18 2014

COMMUNITY DEVELOPMENT
PLANNING DIVISION

APPLICATION FOR ARCHITECTURAL REVIEW

Direct Communication to	
Name: Scott Miller	Title: Director of Property Development
Address: 4560 SE International Way Milwaukie, OR 97222	E-mail address: smiller@marquiscompanies.com
Phone Number: 503-819-3610	Fax Number: 971-206-5201
Applicant's Name: Tualatin LTC Properties II, LLC	E-mail address: smiller@marquiscompanies.com
Address: 4560 SE International Way Milwaukie, OR 97222	
Phone Number: 971-206-2330	Fax Number: 971-206-5201
Applicant's Signature: Scott T. Miller	Date: 4-15-14
Property Owner's Name: Tualatin LTC Properties II, LLC	Phone Number: 971-206-5100
Address: 4560 SE International Way Milwaukie, OR 97222	
Property Owner's Signature:	Date: 4-15-14
(NOTE: Letter of authorization is required if not signed by owner.)	
Architect CB TWO ARCHITECTS	E-mail address: matts@cbtwoarchitects.com
Address: 500 Liberty St. SE, Suite 100 Salem, OR 97301	
Phone Number: 503-480-8700	Fax Number:
Landscape Architect: Shapiro Didway	E-mail address: blair@shapiro-la.com
Address: 1204 SE Water Ave Portland, OR 97214	
Phone Number: 503-232-0520	Fax Number:
Engineer: EMERIO DESIGN	E-mail address: eric@emeriodesign.com
Address: 8285 SW Nimbus Ave, Suite 180 Beaverton, OR 97008	
Phone Number: 503-746-8812	Fax Number: 503-639-9592
Project Title: MARQUIS TUALATIN COTTAGES	
Project Address: 19945 SW Boones Ferry Rd., Tualatin, OR	
Brief Project Description: Phase 1 of Cottages to include 14 units and a 9,700 S.F. Community Center	
Proposed Use: Independent Senior Living	
VALUE OF IMPROVEMENTS: $ 5,000,000	

AS THE PERSON RESPONSIBLE FOR THIS APPLICATION, I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION ABOVE, ON THE FACT SHEET AND THE SURROUNDING PROPERTY OWNER MAILING LIST IS CORRECT. I AGREE TO COMPLY WITH ALL APPLICABLE CITY AND COUNTY ORDINANCES AND STATE LAWS REGULATING BUILDING CONSTRUCTION AND LAND USE.

APPLICANT'S SIGNATURE Scott T. Miller DATE 4-15-14

Case No. AR-14-07 Date Received 4/18/14 Application Complete as of _____
Received by _____ Receipt No. 125013 ARB hearing date (if applicable) _____
Fee: complete review ($60- $2635) $2410.00 Posting verification _____
9 copies of drawings (folded) _____ 1 reproducible 8½ x 11" site, grading, LS, Public Facilities plan _____
1 reproducible 8½" X 11" vicinity map __ Neighborhood / Developer meeting materials _____

CITY OF TUALATIN
RECEIVED

APR 18 2014

COMMUNITY DEVELOPMENT
PLANNING DIVISION

CITY OF TUALATIN FACT SHEET

General

Proposed use: Single-story, Independent Living Townhomes			
Site area:	1.27 acres	Building footprint:	20,657 sq. ft.
Development area:	0.66 acres 28,792 Sq. ft.	Paved area:	8,135 sq. ft.
		Development area coverage:	52 %

Parking

Spaces required (see TDC 73.400) *(example: warehouse @ 0.3/1000 GFA)* _____ Townhouse @ 2/unit = 28 _____ @ _____/1000 GFA = _____ _____ @ _____/1000 GFA = _____ Total parking required: 28 spaces Handicapped accessible = N/A Van pool = N/A Compact = *(max. 35% allowed)* = N/A Loading berths = N/A	Spaces provided: 28 Total parking provided: 28 spaces Standard = 28 Handicapped accessible = N/A Van pool = N/A Compact = N/A Loading berths = N/A

Bicycles

Covered spaces required: N/A	Covered spaces provided: N/A

Landscaping

Landscaping required: 25% of dvpt. area 7,198 Square feet	Landscaping provided: 48 % of dvpt. area 13,820 Square feet
Landscaped parking island area required: N/A %	Landscaped parking island area provided: N/A %

Trash and recycling facility

Minimum standard method: N/A square feet
Other method: _____ square feet

For commercial/industrial projects only

Total building area: N/A sq. ft. Main floor: sq. ft. Mezzanine: sq. ft.	2nd floor: sq. ft. 3rd floor: sq. ft. 4th floor: sq. ft.

For residential projects only

Number of buildings: 7	Total sq. ft. of buildings: 20,657 sq. ft.
Building stories: 1	

CITY OF TUALATIN FACT SHEET

General

Proposed use: Community Center for resident use			
Site area:	1.44 acres	Building footprint:	8,636.5 sq. ft.
Development area:	0.48 acres 20,974.5 Sq. ft.	Paved area:	12,338 sq. ft.
		Development area coverage:	33 %

Parking

Spaces required (see TDC 73.400) *(example: warehouse @ 0.3/1000 GFA)* Dance Hall @ 4.3/1000 GFA = 7 Health Club @ 1/1000 GFA = 7 ____ @ ____/1000 GFA = ____ Total parking required: 14 spaces Handicapped accessible = 1 Van pool = N/A Compact = *(max. 35% allowed)* = 5 Loading berths = 1	Spaces provided: 19 Total parking provided: 19 spaces Standard = 16 Handicapped accessible = 3 Van pool = N/A Compact = 0 Loading berths = 1

Bicycles

Covered spaces required: N/A	Covered spaces provided: N/A

Landscaping

Landscaping required: 25 % of dvpt. area 5,243.6 Square feet	Landscaping provided: 67 % of dvpt. area 41,751.9 Square feet
Landscaped parking island area required: N/A %	Landscaped parking island area provided: N/A %

Trash and recycling facility

Minimum standard method: N/A square feet
Other method: _____ square feet

For commercial/industrial projects only

Total building area: 8,636.5 sq. ft. Main floor: 8,636.5 sq. ft. Mezzanine: sq. ft.	2nd floor: sq. ft. 3rd floor: sq. ft. 4th floor: sq. ft.

For residential projects only

Number of buildings: 1	Total sq. ft. of buildings: 8,636.5 sq. ft.
Building stories: 1	

I. PROPOSAL SUMMARY

GENERAL INFORMATION

Property Owner/Applicant	Marquis Development Scott Miller 4560 SE International Way, Ste. 100 Milwaukie, OR 97222 [T] 971.206.2330
Applicant's Representative	Emerio Design Kirsten Van Loo 8285 SW Nimbus, Suite 180 Beaverton, OR 97008 [T] 503.956.4180
Map and Tax Lot	TL 500, 501, 502 – 2S1 23 DD
Site Location	19945 SW Boones Ferry Rd.
Size	2.12 Acres for this phase
Comprehensive Plan Designation	RML
Zoning	RML – Medium Low Density Residential
Pre-Application Meeting Date	January 2014
Neighborhood Meeting Dates	January 26, 2014
Request	Architectural Review for a Community Building and Duette Single Story Townhomes

Project Summary

The Tualatin Marquis project consists of a proposed skilled nursing and assisted living community augmented with a Community Building and 65 proposed Duette Townhomes – single story – designed in pairs with the potential for future subdivision onto individual lots. This project follows a new direction for the older adult market providing a range of services that addresses everything from short term post-acute care (typically 28 days) to assisted living in individual units that offer all of the amenities of home and further opportunity for independent living as well as recreation, healthful workouts and community involvement in the Community Building.

Phase 1 is a building comprised of 54 skilled nursing beds in combinations of private, semi-private, and shared rooms along with accessory uses on the first floor. This building is almost complete and will open soon for service to the Tualatin Community.

The current application will include a community building directly north that will serve the residents of the skilled nursing and assisted living community, and independent cottages to the west and north. The cottages component of the community will offer one and two bedroom independent living duette units.

Access to the site will be from SW Sagert Street and from an approved public street that will be constructed off of SW Boones Ferry Road – Nasoma Lane.

Site Description

The subject site is located on the northwest corner of the intersection of SW Boones Ferry Road and Sagert Street. The site was the original Tualatin Elementary School, closed in the spring of 2004.

The area surrounding the site contains a mix of residential uses. There are single family residences along the south side of Sagert Street. Several detached homes and a small cluster of attached dwellings abut the old school district property at the SW corner, on the north side of Sagert. Boones Ferry Road is a major arterial winding through Multnomah County, Washington County and into Clackamas County. There is a new subdivision across Boones Ferry Road containing a historic house – the Logan House. Single family homes abut Boones Ferry Road, and a condo project is located east of the Logan House Estates project, on the north side of Sagert, east of Boones Ferry Road. Multi-family development abuts both sides of Boones Ferry Road as it travels north towards central Tualatin.

PRIOR LAND USE ACTIONS

Tualatin City Council approved the removal of the Gerald Avery Building from the Tualatin Historic Registry, and facilitated the removal of the existing buildings from the property. In addition, plan map amendments were approved for a zone change from RL to RML. Architectural Review for the main building was completed, and that building is nearing completion. A subdivision for the remaining property was approved in 2013, however, changes to the location of the community building have rendered that land use approval obsolete. The desire to rent the Duette cottages upon completion, rather than sell them, combined with the need to start construction of these units in Summer 2014 has led the developer to take a different approval approach with the remaining buildings in the project.

PUBLIC FACILITIES AND SERVICES

Public water supply is provided by the City of Tualatin – There is a 12 inch line providing water in the ROW of Boones Ferry Road and a 12 inch line in Sagert Street. Public water will be provided by an 8" public water line in Nasoma Lane and 90th.

Wastewater treatment in this area is provided by CleanWater Services – There is an 8 inch line in Boones Ferry Road and an 8 inch line in Sagert Street. Public sanitary will be provided by an 8" public line in Nasoma Lane and 90th. Emergency services are provided to this area by The City of Tualatin, TVF & R and Washington County

Tri-Met transit service is available on weekdays via line No. 96 and the WES stop is in downtown Tualatin approximately ½ mile from the site. The No. 76 line runs within 3 blocks of the subject site (to the east or north) and provides weekday and weekend service.

Architectural Review for Community Building and Duette Cottages

Chapter 41 Medium Low Density Residential Planning District

Section 41.020 Permitted Uses

(8) Residential Facilities

Response: The proposed use is a senior housing community including a community building and independent living cottages.

Section 41.040 Lot Size for Permitted Uses.

(1) Except for lots for public utility facilities, natural gas pumping stations and wireless communication facilities which shall be established through the Subdivision, Partition or Lot Line Adjustment process and as otherwise provided, the lot size for a permitted use pursuant to TDC 41.020(1) is:

(a) Except for townhouses whose minimum lot size shall be 1,400 square feet, the minimum lot area shall be 10,000 square feet.

Response: The lot is 2.12 acres in size for this phase.

(b) Except for townhouses whose minimum average lot width shall be 14 feet, the minimum average lot width shall be 75 feet.

Response: The minimum average lot width exceeds 75 feet.

(c) Except for townhouses whose minimum lot width shall be 14 feet on a cul-de-sac street, the minimum lot width shall be 40 feet on a cul-de-sac street.

Response: No cul-de-sacs are proposed with this phase.

(d) Except for townhouses which shall not occupy more than 90 percent of the lot area, buildings shall not occupy more than 40 percent of the lot area.

Response: The proposed building will occupy approximately ~40% of the lot area.

Section 41.060 Setback Requirements for Permitted Uses.

Except as otherwise provided, the setbacks for permitted uses are:

(1) The front yard setback shall be a minimum of 20 feet for 1 story, 25 feet for 1 1/2-story, 30 feet for 2-story, and 35 feet for 2 1/2-story structure…

(2) The side yard setback shall be a minimum of 5 feet for 1-story, 7 feet for 1 1/2-story, 10 feet for 2-story, and 12 feet for 2 1/2-story structures…

(3) On corner lots, the setback is the same as the front yard setback on any side facing a street other than an alley.

(4) The rear yard setback is the same as the side yard setback.

Response: The building setbacks are shown on the accompanying plans and meet the minimum setback requirements in all cases on all sides.

(5) Where buildings are grouped as one project on one tract of land, the minimum distance between two buildings…

Response: All buildings meet the required setbacks and building separation requirements.

(6) Off-street parking and vehicular circulation areas shall be set back a minimum of 10 feet from any public right-of-way or property line…
Response: The setbacks to off-street parking and circulation are a minimum of 10 feet.

Section 41.090 Structure Height.
(1) Except as otherwise provided, the maximum structure height is 35 feet.
Response: The buildings all comply with the maximum height of 35' based on the definition of building height as determined by Section 31.060, Height, Structure (2). Height is measured from a point 10' above the lowest point of grade along the building (45'). See ARB submittal.

Section 41.100 Access
All lots created after September 1, 1979 shall abut a public street…
Response: The site abuts SW Sagert and SW Boones Ferry Road, two public streets.

Chapter 73 Community Design Standards

Section 73.140 Site Planning - Commercial, Industrial, Public and Semi-Public Uses

Section 73.160 Standards.
The following standards are minimum requirements for commercial, industrial, public and semi-public development, and it is expected that development proposals shall meet or exceed these minimum requirements.
(1) Pedestrian and Bicycle Circulation.
(a) For commercial, public and semi-public uses:
Response: A system of walkways and plazas has been designed to provide convenient pedestrian access to all areas of the site. See the AR plans for the Community building outdoor areas. The goal of the entire pedestrian circulation system is to create an inviting experience for residents and visitors, free of barriers and creating links to entrances and parking within the site.

All walkways and accessways will meet or exceed the City's standards and will be ADA compliant.

(b) For Industrial Uses:
Response: No industrial uses are proposed.

(c) Curb ramps shall be provided wherever a walkway or accessway crosses a curb.
Response: Curb ramps will be provided as required.

(*d)* *Accessways shall be a minimum of 8 feet wide and constructed in accordance with the Public Works Construction Code if they are public accessways, and if they are private accessways they shall be constructed of asphalt, concrete or a pervious surface such as pervious asphalt or concrete, pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable.*

Response: All accessways will be a minimum 8 feet wide, constructed to City standards, and be ADA compliant and barrier free to create the best living environment possible for the future residents.

(e) *Accessways to undeveloped parcels or undeveloped transit facilities need not be constructed at the time the subject property is developed…*

Response: Accessways to undeveloped parcels or undeveloped transit facilities are not proposed at this time.

(f) *Where a bridge or culvert would be necessary to span a designated greenway or wetland to provide a connection to a bike or pedestrian path, the City may limit the number and location of accessways to reduce the impact on the greenway or wetland.*

Response: No bridges or culverts are proposed at this time.

(g) *Accessways shall be constructed, owned and maintained by the property owner.*

Response: All accessways will be constructed, owned and maintained by the property owner.

(2) *Drive-up Uses*

Response: No drive-up uses are proposed.

(3) *Safety and Security.*

Response: Lighting, landscaping and signage design will comply with these standards.

(4) *Service, Delivery and Screening*

(a) *On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.*

Response: Enhanced landscaping will hide service areas for the Community Building from view.

(b) *Outdoor storage, excluding mixed solid waste and source separated recyclables storage areas listed under TDC 73.227, shall be screened with a sight obscuring fence, wall, berm or dense evergreen landscaping.*

Response: Outdoor storage is not proposed.

(c) Above ground pumping stations, pressure reading stations, water reservoirs; electrical substations, and above ground natural gas pumping stations shall be screened with sight-obscuring fences or walls and landscaping.

Response: None proposed.

(5) The Federal Americans With Disabilities Act (ADA) applies to development in the City of Tualatin. Although TDC, Chapter 73 does not include the Oregon Structural Specialty Code' s (OSSC) accessibility standards as requirements to be reviewed during the Architectural Review process, compliance with the OSSC is a requirement at the Building Permit step. It is strongly recommended all materials submitted for Architectural Review show compliance with the OSSC.

Response: The proposed development will be fully ADA compliant and will meet or exceed the accessibility standards of the OSSC.

Section 73.200 Structure Design - Commercial, Industrial, Public and Semi-Public Uses.

Section 73.210 Objectives.

All commercial, industrial, public and semi-public projects should strive to meet the following objectives to the maximum extent practicable…

Response: The architecture of Marquis Tualatin is intended to create a sense of place. For the residents of the Marquis community, it is a place that will become home; a place to welcome family and visitors; a place of vitality and health. For the greater Tualatin community, Marquis Tualatin is an iconic addition to the fabric of the existing neighborhoods on a landmark site within the City.

The unique opportunity presented by the existing Gerald Avery Building is one that the design team desired to take full advantage of from the start. To the greatest extent possible, existing materials are reused and repurposed on the new building to tell the story of the evolution of the site. Bricks from the Gerald Avery Building will be used as design accents wherever feasible and portions of the existing interior wood elements, such as the beams from the gymnasium, are being used in the new community building.

Excerpt of Notes from the Tualatin Historic Society…….

1) Original maple gymnasium flooring will be reused in Phase II, a separate community center which is to be built on NE corner of property. The gym flooring will be re-used in a public gathering/meeting hall, in a deli-type restaurant and in a small health center/gym. Deli will be open to the public, assisted living residents and single family rental housing occupants. Kirsten Van Loo said she has been working with Bill Avery and consideration is being given to name the meeting hall after Gerald Avery, who served on the Tualatin-Tigard School Board for years.

2) Timbers above gymnasium were of various woods and in various conditions but some will be reduced in size and used in decorations in deli and public places.
3) The original outside bricks were stored and are of questionable durability so could not be used on the facade or on the walkways (too un-even ground for walking) but will be used along the walkways in front of the buildings on Boones Ferry Road in addition to placement of an historic marker telling history of the grade school.
4) At the request of THS, display cases will be built for the deli/cafe (re-using school materials) to display historic objects, materials, school momentos, etc. pertinent to the community and school. THS will be in charge of these displays according to Miller (similar to our agreement with the city library) so the display committee needs to be getting some ideas regarding our displays. As I recall, they will be opening part of the current buildings this summer or fall. Contact Scott.
5) The historic Catalpa trees along Sagert Street will remain. The historic tree honoring Evie Andrews as an Oregon Teacher of the Year has been moved to site of the new grade school on Avery Street.
6) As recommended by THS, the city street to be built to serve the public and the single family housing area will be named Nasoma Street, This was the prior and historic name of Avery Street and the present OERR crossing designation.

The use of color on the community building conveys wellness, energy and vitality, and the location of windows and interior spaces allow for eyes on the street and outdoor spaces.

Section 73.220 Standards.

The following standards are minimum requirements for commercial, industrial, public and semi-public development and it is expected that development proposals shall meet or exceed these minimum requirements.

(1) Safety and Security.

(a) Locate, orient and select on-site lighting to facilitate surveillance of on-site activities from the public right-of-way or other public areas without shining into public rights-of-way or fish and wildlife habitat areas .

(b) Provide an identification system which clearly identifies and locates buildings and their entries.

(c) Shrubs in parking areas shall not exceed 30 inches in height, and tree canopies must not extend below 8 feet measured from grade, except for parking structures and underground parking where this provision shall not apply.

Response: Lighting, landscaping and signage design will comply with these standards.

Section 73.225 Mixed Solid Waste and Source Separated Recyclables Storage Areas for New or Expanded Multi-Unit Residential, Including Townhouses, Commercial, Industrial, Public and Semi-Public Development

Section 73.227 Standards

The following standards are minimum requirements for mixed solid waste and source separated recyclables storage areas. To provide for flexibility in designing functional storage areas, this section provides four different methods to meet the objectives of providing adequate storage for mixed solid waste and source separated recyclables and improving the efficiency of collection. An applicant shall choose and implement one of the following four methods to demonstrate compliance: 1) minimum standards; 2) waste assessment; 3) comprehensive recycling plan; or 4) franchised hauler review, as more fully described in subsections (2), (3), (4) and (5) of this section.

(2) Minimum Standards Method. This method specifies a minimum storage area requirement based on the size and general use category of the new or expanded development…

(a) The size and location of the storage area(s) shall be indicated on the site plan. Compliance with the requirements set forth below are reviewed through the Architectural Review process.

(v) Commercial, industrial, public and semi-public developments shall provide a minimum storage area of 10 square feet plus…

Response: As shown on the plans, the proposed trash and mixed recyclables area for the Community Building is approximately 100 square feet in size. Plans were sent to the hauler for review and comment.

(6) Location, Design and Access Standards for Storage Areas. The following location, design and access standards are applicable for storage areas:

(a) Location Standards

Response: The solid waste and recyclables area will be co-located at the northwestern corner of the parking lot, and will be appropriately screened.

(b) Design Standards

Response: The storage area is sized to accommodate containers that are commonly in use at this time. The containers will meet Fire Code standards and will be clearly labeled as to the type of material accepted. The storage area will be fenced and screened.

(c) Access Standards

Response: The storage area for solid waste and recyclables is designed to be convenient to users and easily accessible to hauler personnel. The area will be paved and adequate horizontal and vertical clearance will be maintained.

LANDSCAPING

Section 73.240 Landscaping General Provisions.

(1) The following standards are minimum requirements.

(2) The minimum area requirement for landscaping for conditional uses for RL, RML, RMH, RH and RH/HR Planning Districts, listed in 40.030, 41.030, 42.030, 43.030 and 44.030, excluding 40.030(3), 40.030 (4)(j), 40.030 (4)(m), 40.030 (4)(n) and 41.030(2) shall be twenty-five (25) percent of the total area to be developed…

Response: No conditional uses are proposed. Proposed landscape area amounts to 25% or more of the total parcel area.

(9) Yards adjacent to public streets, except as described in the Hedges Creek Wetlands Mitigation Agreement, TDC 73.240(7), shall be planted to lawn or live groundcover and trees and shrubs and be perpetually maintained in a manner providing a park-like character to the property as approved through the Architectural Review process.

Response: The entire site will be extensively landscaped to create a pleasant environment for living and working. Yards adjacent to public streets will include lawn or live groundcover and shrubs and will provide a park-like setting to the property. Please see the Landscape Plans.

(10) Yards not adjacent to public streets or Low Density Residential (RL) or Manufacturing Park (MP) Planning Districts shall be planted with trees, shrubs, grass or other live groundcover, and maintained consistent with a landscape plan indicating areas of future expansion, as approved through the Architectural Review process.

Response: The entire site will be extensively landscaped and will meet or exceed City standards.

(11) Any required landscaped area shall be designed, constructed, installed, and maintained so that within three years the ground shall be covered by living grass or other plant materials…

Response: The entire site will be extensively landscaped and will meet or exceed City standards. Please see the Landscape Plans included with this submittal.

(13) Landscape plans for required landscaped areas that include fences should carefully integrate any fencing into the plan to guide wild animals toward animal crossings under, over, or around transportation corridors.

Response: Proposed fencing is shown on the landscape plans, primarily around the trash enclosure.

Section 73.250 Tree Preservation

(1) Trees and other plant materials to be retained shall be identified on the landscape plan and grading plan.

Response: Trees to be retained are shown on the plans.

(2) During the construction process:

(a) The owner or the owner's agents shall provide above and below ground protection for existing trees and plant materials identified to remain.

(b) Trees and plant materials identified for preservation shall be protected by chain link or other sturdy fencing placed around the tree at the drip line.

(c) If it is necessary to fence within the drip line, such fencing shall be specified by a qualified arborist as defined in 31.060.

(d) Neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.

(e) Where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's dripline area, such grading, paving, trenching, boring, digging, or similar encroachment shall only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met.

(f) Tree root ends shall not remain exposed.

Response: Tree protection will be implemented to comply with City standards, and where necessary, under the direction of a qualified arborist.

(3) Landscaping under preserved trees shall be compatible with the retention and health of said tree.

Response: Landscaping has been designed to incorporate the preserved trees into the overall plan.

Section 73.260 Tree and Plant Specifications.

Response: The proposed landscaping meets or exceeds all City standards.

Section 73.270 Grading.

(1) After completion of site grading, topsoil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.

(2) All planting areas shall be graded to provide positive drainage.

(3 Neither soil, water, plant materials nor mulching materials shall be allowed to wash across roadways or walkways.

(4 Impervious surface drainage shall be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.

Response: Topsoil will be retained and restored for landscaping. Grading and drainage will meet all City standards.

Section 73.280 Irrigation System Required.

Except for townhouse lots, landscaped areas shall be irrigated with an automatic underground or drip irrigation system.

Response: Irrigation will be provided as required and will be detailed on the final landscape construction plans.

Section 73.290 Revegetation in Unlandscaped Areas

The purpose of this section is to ensure erosion protection, and in appropriate areas to encourage soil amendment, for those areas not included within the landscape percentage requirements so native plants will be established, and trees will not be lost.

Response: Any area of the site outside of the development area that is disturbed will be revegetated. All landscaping will meet or exceed City standards.

Section 73.310 Landscape Standards - Commercial, Industrial, Public and Semi-Public Uses

(1) A minimum 5-foot-wide landscaped area must be located along all building perimeters which are viewable by the general public from parking lots or the public right-of-way, excluding loading areas, bicycle parking areas and pedestrian egress/ingress locations. Pedestrian amenities such as landscaped plazas and arcades may be substituted for this requirement. This requirement shall not apply where the distance along a wall between two vehicle or pedestrian access openings (such as entry doors, garage doors, carports and pedestrian corridors) is less than 8 feet.

(2) Areas exclusively for pedestrian use that are developed with pavers, bricks, etc., and contain pedestrian amenities, such as benches, tables with umbrellas, children's play areas, shade trees, canopies, etc., may be included as part of the site landscape area requirement.

(3) All areas not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas or undisturbed natural areas shall be landscaped.

Response: The site will be extensively landscaped to help provide a pleasant environment for living and working and will meet or exceed all City landscape standards. Please see the landscape plans included with this submittal.

OFF-STREET PARKING LOT LANDSCAPING

Section 73.340 Off-Street Parking Lot and Loading Area Landscaping - Commercial, Industrial, Public and Semi-Public Uses, and Residential and Mixed Use Residential Uses within the Central Design District

(1) A clear zone shall be provided for the driver at ends of on-site drive aisles and at driveway entrances, vertically between a maximum of 30 inches and a minimum of 8 feet as measured from the ground level, except for parking structures and underground parking where this provision shall not apply.

(2) Perimeter site landscaping of at least 5 feet in width shall be provided in all off-street parking and vehicular circulation areas (including loading areas). For conditional uses in multifamily residential planning districts the landscape width shall be at least 10 feet except for uses allowed by TDC 40.030(3), 40.030(5)(j), 40.030(5)(m), 40.030(5)(n) and 41.030(2).

(a) The landscape area shall contain:

(i) Deciduous trees an average of not more than 30 feet on center. The trees shall meet the requirements of 73.360(7).

(ii) Plantings which reach a mature height of 30 inches in three years which provide screening of vehicular headlights year round.
(iii) Shrubs or ground cover, planted so as to achieve 90 percent coverage within three years.
(iv) Native trees and shrubs are encouraged.

Response: Off-street parking lot and loading area landscaping will meet or exceed City standards. Please see landscape plans for details.

Section 73.360 Off-Street Parking Lot Landscape Islands - Commercial, Industrial, Public, and Semi-Public Uses.

(1) A minimum of 25 square feet per parking stall shall be improved with landscape island areas...
(2) Landscaped island areas with deciduous parking lot shade trees shall be a minimum of 5 feet in width (from inside of curb to curb).
(3) A minimum of one deciduous shade tree shall be provided for every four (4) parking spaces to lessen the adverse impacts of glare, reduce heat from paved surfaces, and to emphasize circulation patterns...
(4) Landscape islands shall be utilized at aisle ends to protect parked vehicles from moving vehicles and emphasize vehicular circulation patterns...
(5) Required plant material in landscape islands shall achieve 90 percent coverage within three years. Native shrubs and trees are encouraged.
(6) (a) Except as in (b) below, site access from the public street shall be defined with a landscape area not less than 5 feet in width on each side...
(7) Deciduous shade trees shall meet the following criteria...

Response: All proposed landscaping meets or exceeds City standards. Please see landscape plans for details.

Section 73.370 Off-Street Parking and Loading

(2) Off-Street Parking Provisions
(a) The following are the minimum and maximum requirements for off-street motor vehicle parking in the City...

Response: Vehicle parking is provided as follows:

Use	Standard	Min. Required	Spaces Provided
Community Building			19
Each cottage		1	2

Section 73.380 Off-Street Parking Lots.

A parking lot, whether an accessory or principal use, intended for the parking of automobiles or trucks, shall comply with the following:
(1) Off-street parking lot design shall comply with the dimensional standards set forth in Figure 73-1 of this section...

Response: The parking spaces meet the dimensional standards required by the Code.

(2) Parking stalls for sub-compact vehicles shall not exceed 35 percent of the total parking stalls required by TDC 73.370(2). Stalls in excess of the number required by TDC 73.370(2) can be sub-compact stalls.
Response: No compact spaces are proposed.

(3) Off-street parking stalls shall not exceed eight continuous spaces in a row without a landscape separation, except for parking structures and underground parking. For parking lots within the Central Design District that are designed to frame views of the central water feature or identified architectural focal elements as provided in TDC 73.350(3), this requirement shall not apply and the location of parking lot landscape islands shall be determined through the Architectural Review process.
Response: All proposed landscaping meets or exceeds City standards. Please see landscape plans for details.

(4) Parking lot drive aisles shall be constructed of asphalt or concrete, including pervious concrete. Parking stalls shall be constructed of asphalt or concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material...
Response: Parking lot drive aisles will be constructed to comply with this section.

(5) Except for parking to serve residential uses, parking areas adjacent to or within residential planning districts or adjacent to residential uses shall be designed to minimize disturbance of residents.
Response: Parking lot and landscape design will provide for minimal disturbance of neighbors.

(6) Artificial lighting, which may be provided, shall be deflected to not shine or create glare in a residential planning district, an adjacent dwelling, street right-of-way in such a manner as to impair the use of such way or a Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor.
Response: Lighting will comply with all City standards.

(7) Groups of more than 4 parking spaces shall be so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.
Response: No maneuvering within a street right-of-way is proposed.

(8) Service drives to off-street parking areas shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.

(9) Parking bumpers or wheel stops or curbing shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.
Response: Wheel stops, parking bumper or curbing shall be provided as required.

(10) Disability parking spaces and accessibility shall be provided in accordance with applicable federal and state requirements.
Response: Disability (ADA compliant) parking spaces comply with applicable standards and are shown on the plans.

(11) On-site drive aisles without parking spaces, which provide access to parking areas with regular spaces or with a mix of regular and sub-compact spaces, shall have a minimum width of 22 feet for two-way traffic and 12 feet for one-way traffic. On-site drive aisles without parking spaces, which provide access to parking areas with only sub-compact spaces, shall have a minimum width of 20 feet for two-way traffic and 12 feet for one-way traffic.
Response: All on-site drive aisles comply with this standard.

Section 73.390 Off-Street Loading Facilities.
Response: No loading berths are necessary for the community building or the residential units.

Section 73.400 Access

(1) The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this Code are continuing requirements for the use of any structure or parcel of real property in the City of Tualatin. No building or other permit shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled…
Response: As shown on the plans, the total site has two main public street entries; one from a new public street from SW Boones Ferry Road on the northeast side and one from SW Sagert Street to the south.

(4) Requirements for Development on Less than the Entire Site
Response: As stated above, future connections for all phases are shown on the plans.

(5) Lots that front on more than one street may be required to locate motor vehicle accesses on the street with the lower functional classification as determined by the City Engineer.
Response: Access is proposed from SW Sagert Street, and from a new public street that will connect to Boones Ferry Road. Direct access onto Boones Ferry Road is not proposed.

(6) Except as provided in TDC 53.100, all ingress and egress shall connect directly with public streets.

Response: All ingress and egress connect directly to a public street.

(8) To afford safe pedestrian access and egress for properties within the City, a sidewalk shall be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property.

Response: Sidewalks will be constructed to City standards along all street frontages.

(*11) Minimum Access Requirements for Commercial, Public and Semi-Public Uses. In the Central Design District, when driveway access is on local streets, not collectors or arterials and the building(s) on the property is(are) less than 5,000 square feet in gross floor area, or parking is the only use on the property, ingress and egress shall not be less than 24 feet. In all other cases, ingress and egress for commercial uses shall not be less than the following:*

REQUIRED PARKING SPACES	*MINIMUM NUMBER REQUIRED*	*MINIMUM PAVEMENT WIDTH*	*MINIMUM PAVEMENT WALKWAYS, ETC.*
1-99	*1*	*32 feet for first 50 feet from ROW, 24' thereafter.*	*Curbs required; walkway 1 side only*

Response: The access from SW Sagert Street is via a proposed public street.

(14) Maximum Driveway Widths and Other Requirements.

(a) Unless otherwise provided in this chapter, maximum driveway widths shall not exceed 40 feet.

Response: Driveways over 40 feet in width are not proposed.

(b) Except for townhouse lots, no driveways shall be constructed within 5 feet of an adjacent property line…

Response: No driveways within 5 feet of an adjacent property line are proposed.

(c) There shall be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Engineer.

Response: Residential driveways will comply with the City Engineers requirements.

(15) Distance between Driveways and Intersections. Except for single-family dwellings, the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection.

(a) At the intersection of collector or arterial streets, driveways shall be located a minimum of 150 feet from the intersection.
Response: NA

(16) Vision Clearance Area.
Response: Vision Clearance Areas will be created and maintained as required.

Section 73.410 Street Tree Plan
A person who desires to plant a street tree shall comply with TDC 74.765, which comprises the street tree plan.
Response: Any street trees proposed will comply with Section 74.765, and be included on the final landscape plans.

Supplemental Findings – June 2014 – Response to Incomplete Status

Section 34.230 Criteria.
The Community Development Director shall consider the following criteria when approving, approving with conditions, or denying a request to cut trees.
(1) An applicant must satisfactorily demonstrate that any of the following criteria are met:

(c) It is necessary to remove the tree to construct proposed improvements based on Architectural Review approval, building permit, or approval of a Subdivision or Partition Review.

Response: This entire site was reviewed for a subdivision and was approved in July 2013. This subsequent land use review is required because several of the elements in the development have been rearranged, and the developer has decided that "sales" of the proposed units is not necessary at this time. Two heritage trees will be protected during the development of the site.

Removal of the 64 trees along the western property line was contemplated and approved in the subdivision review SB 13-01. This stand of trees will be removed to relocate the existing sanitary sewer line that is currently under/around the trees, and to fill the eroded ditch that runs along the western edge of the property. Significant work was accomplished with CWS and the entire western property line area was evaluated for resource and vegetated corridor values. These trees are not protected by the CWS service provider letter, however, as illustrated on the picture they are not beneficial to the project, and must be removed to achieve the required engineering goals for the project.

January 2014 Pre-submittal Meeting for Architectural Review and Future Subdivision of the campus remainder for the Marquis Project – Senior Housing Campus – Boones Ferry Road and Sagert Street.

This informational session was held on a Sunday afternoon @ the Tualatin Library Community Meeting Room. This get-together was the 5th or 6th such meeting on this project, so the attendance was not very high, even though over 600 postcard invitations were mailed out and the site was posted with the meeting time and place.

The latest concept designs for the Duette residential units were presented, along with the preliminary future subdivision plan. Floor Plans, Elevations and Perspective Drawings were shown, with a range of potential colors and material selections. Additionally the proposed Community Building was unveiled, with plans, perspectives, and site layout.

The participants reviewed the floor plans and spent time discussing the proposed Community Building. Most attendees were/are interested in moving to this Campus, so the majority of the discussion centered on rental units vs. sales, prices for the various rental units, and timing for the construction of the Duette Units. There was some discussion of the existing building that was under construction during the winter.

All attendees were invited to participate in the forthcoming public hearing process for the Architectural Review of the project.

REPUBLIC SERVICES

June 9, 2014

Mathew Stoffregen, AIA
CB Two Architects
500 Liberty ST SE, Suite 100
Salem, Oregon 97301

Re: Tualatin Community Center

Dear Matthew,

Thank you, for sending me the site plans for the Community Center located at; Marquis Tualatin Cottages in Tualatin.

My Company: Republic Services of Clackamas & Washington Counties has the franchise agreement to service this area with the City of Tualatin. We provide complete commercial waste removal services and recycling services as needed on a weekly basis for this location.

I sincerely appreciate your willingness to relocate the enclosure. After reviewing your plans; the enclosure is still on the narrow side and will need manual pull-outs for the containers however I do not see anything that will affect us servicing the waste and recycling needs; either safely, or as often as needed. This site looks very adequate, for service. As I had mentioned please make sure the gates are hinged so they will open more than 120 degrees and be able to lock in the open position.

Sincerely,

Frank J. Lonergan

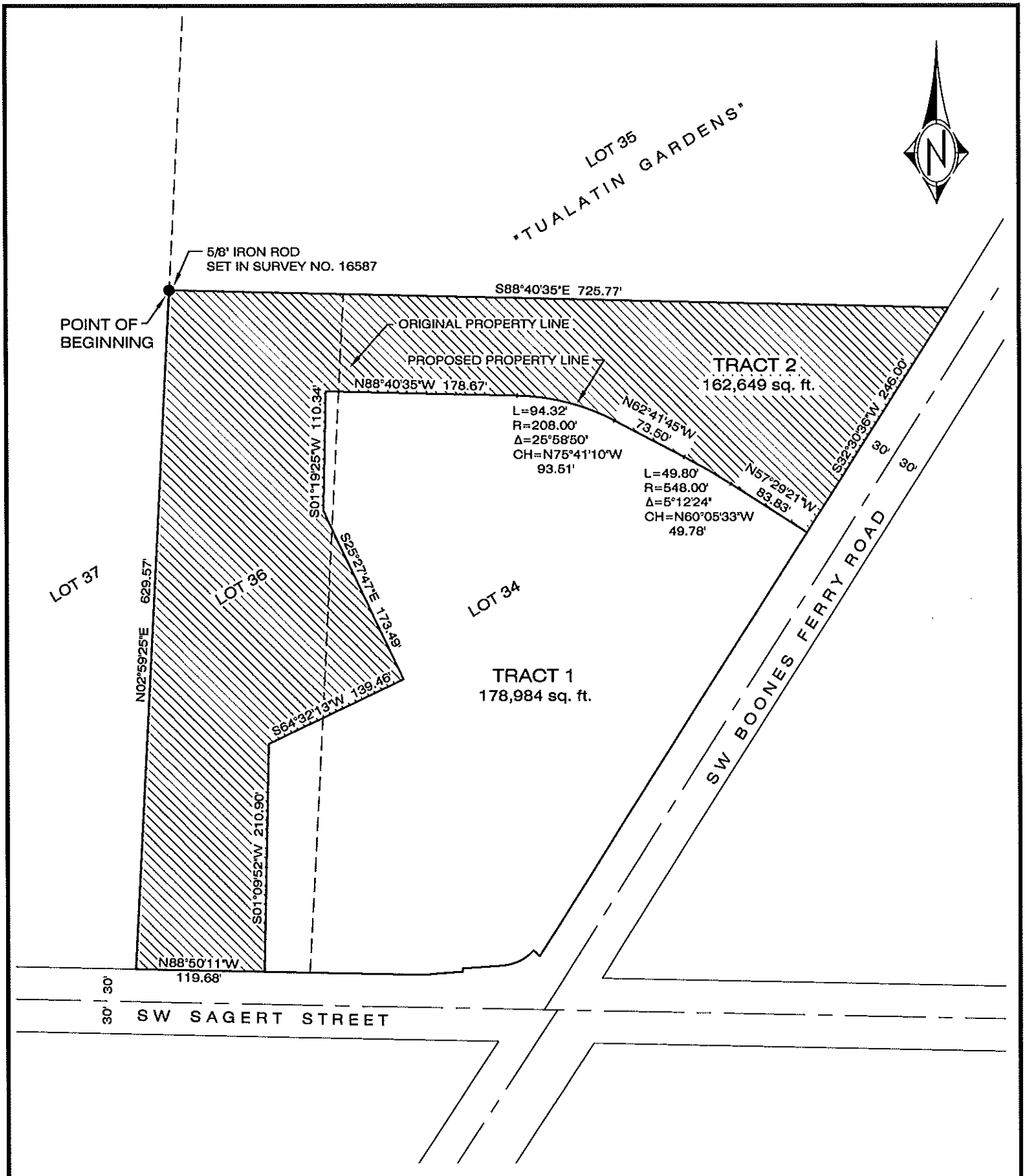
Frank J. Lonergan
Operations Manager
Republic Services

CITY OF TUALATIN
RECEIVED

JUN 20 2014

COMMUNITY DEVELOPMENT
PLANNING DIVISION

10295 SW Ridder Road
Wilsonville, OR 97070
503-570-0626 • Fax 503-570-0523
republicservices.com



SUMMIT LAND SURVEYORS

P.O. BOX 230149, TIGARD, OR 97281
PHONE & FAX: 503.928.5589
www.summitlandsurveyors.com

TRACT 2 - PROPERTY LINE ADJUSTMENT

A PORTION OF LOTS 34 AND 36, "TUALATIN GARDENS",
SITUATED IN THE SOUTHEAST 1/4 OF SECTION 23,
TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,
CITY OF TUALATIN, COUNTY OF WASHINGTON, STATE OF OREGON

JOB NO.:	DATE:	SCALE:	PREPARED FOR:
103-009	06/16/10	N.T.S.	MARQUIS DEVELOPMENT

Monty, Plotted: Jun 16, 2010 – 4:01pm, P:\103-009_Tualatin Sub\dwg\Maps\103-009-EXH_TRACT 2.dwg

Summit Land Surveyors, LLC
PO Box 230149
Tigard, OR 97281
Phone & Fax 503.928.5589
www.summitlandsurveyors.com

June 16, 2010

Tract 2 - Property Line Adjustment

Basis of Bearings:

The bearings noted hereon are based upon the NAD 83 Oregon State Plane Coordinate System.

Legal Description:

A portion of Lots 34 and 36, "Tualatin Gardens", situated in the Southeast ¼ of Section 23, Township 2 South, Range 1 West of the Willamette Meridian, City of Tualatin, Washington County, the State of Oregon, more particularly described as follows:

Beginning at a 5/8" iron rod at the intersection of the west line of Lot 36 and the westerly projection of the north line of Lot 34, said "Tualatin Gardens"; thence along the projected north line of said Lot 34 and continuing along the north line of Lot 34, S 88°40'35" E, 725.77 feet to a point on the westerly right of way line of SW Boones Ferry Road, said point being 30.00 feet westerly of the centerline thereof; thence along said right of way, S 32°30'36" W, 246.00 feet; thence leaving said right of way, N 57°29'21" W, 83.83 feet to a point of tangent curvature; thence 49.80 feet along the arc of a curve to the left with a radius of 548.00 feet through a central angle of 05°12'24" (the chord of which bears N 60°05'33" W, 49.78 feet) to a point of tangency; thence N 62°41'45" W, 73.50 feet to a point of tangent curvature; thence 94.32 feet along the arc of a curve to the left with a radius of 208.00 feet through a central angle of 25°58'50" (the chord of which bears N 75°41'10" W, 93.51 feet) to a point of tangency; thence N 88°40'35" W, 178.67 feet; thence S 01°19'25" W, 110.34 feet; thence S 25°27'47" E, 173.49 feet; thence S 64°32'13" W, 139.46 feet; thence S 01°09'52" W, 210.90 feet to a point on the north line of SW Sagert Street, said point being 30.00 feet northerly of the centerline thereof; thence along said north right of way line, N 88°50'11" W, 119.68 feet to the southwest corner of Lot 36, "Tualatin Gardens"; thence along the west line of said Lot 36, N 02°59'25" E, 629.57 feet to the point of beginning.

Containing: 162,649 Sq.Ft. or 3.73 Acres

City of Tualatin – Affidavit of Posting and Affidavit of Neighborhood Meeting Mailing

Subdivision and Architectural Review for Cottages and Community Building

2 South 1 –Section 23 DD TL 501 and 502

I, **Kirsten Van Loo**, Applicants Representative for **Marquis Companies**, do swear and affirm that I represent the party initiating interest in a proposed **Senior Housing Project and Community Building** affecting land located at the **intersection of Boones Ferry Road and Sagert Street in Tualatin, Oregon.**

I further swear and affirm that on **January 8, 2014** I did personally post two public notice signs on the property indicating that the site is subject to a public meeting regarding a **subdivision and architectural review** for the proposed development.

The signs were posted on each street frontage of the property, **along Boones Ferry Road and Sagert Street** as required by the adopted ordinance.

This 14th day of April, 2014

Kirsten AM Van Loo

I, **Kirsten Van Loo**, Applicants Representative for **Marquis Companies**, do swear and affirm that I represent the party initiating interest in a proposed **Senior Housing Project and Community Building** affecting land located at the **intersection of Boones Ferry Road and Sagert Street in Tualatin, Oregon.**

I further swear and affirm that on **January 8, 2014** I did cause to have mailed to each of the persons on the attached list a notice of a public meeting regarding a **subdivision and architectural review** for the proposed development. A copy of said notice is attached.

The notices were plainly address to said persons and were deposited on the date indicated above in the United States Post Office with postage prepaid thereon.

This 14th day of April, 2014

Kirsten AM Van Loo

Suscribed and sworn to, or affirmed, before me on this 14th day of April, 2014

Pamela Boyd

Notary Public for the State of Oregon

County of Washington

OFFICIAL SEAL
PAMELA J BOYD
NOTARY PUBLIC-OREGON
COMMISSION NO. 480894
MY COMMISSION EXPIRES AUGUST 20, 2017

My Commission expires August 20, 2017

Architectural Review for the Comm. Bldg @ Marquis Tualatin

The meeting date is: Sunday January 26, 2014
The meeting will be held at: Tualatin Library Community Room
18878 SW Martinazzi Ave, Tualatin, Oregon
The meeting will start at: 4:00 PM
The property involved is: a portion of Tax Lot 500 , 501, 502 2S1 23 DD
The purpose of this meeting is to describe the proposed land use application, and to provide a neighborhood forum for input and comments.
Your attendance is encouraged, so you can be informed regarding the project, the process, and your opportunities for participation in the land use approval. No decisions will be made at this meeting, this is an informational gathering as required by City of Tualatin Development Code section 31.063.

Architectural Plans and a revised Site Plan will be presented
The preliminary Subdivision Approval will be revised as well
e-mail Kirsten@emeriodesign.com for questions about project

Architectural Review for the Comm. Bldg @ Marquis Tualatin

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18878 SW Martinazzi Ave, Tualatin, Oregon
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The preliminary Subdivision Approval will be revised as well
e-mail Kirsten@emeriodesign.com for questions about project

AR-14-07

To lessen the bulk of the notice of application and to address privacy concerns, this sheet substitutes for the photocopy of the mailing labels. A copy is available upon request.

EMERIO Design
8285 SW Nimbus Avenue Suite 180
Beaverton, OR 97008

EMERIO Design
8285 SW Nimbus Avenue Suite 180
Beaverton, OR 97008

NEIGHBORHOOD MEETING ATTENDANCE ROSTER

PROJECT: _____ MEETING DATE: _____

PLEASE PRINT LEGIBLY!

PRINTED NAME	FULL MAILING ADDRESS & E-MAIL ADDRESS	CITY, STATE	ZIP CODE	PHONE #
Bud + Brenda Wilkins	[redacted]			
Alex Sander				
Yvonne Addington				
Del Judy				
Colin Cortes				
Ron & Hazel Nether				
Eileen & Charles Wirtz				

Figure 11-1: Functional Classification and Traffic Signal Plan

TUALGIS

The projects embodied in this map that could affect rivers, streams and wetlands have not been analyzed in terms of Statewide Planning Goal 5 (Natural Resources) as required by Oregon Administrative Rule 660-12-0025(2) and (3)(b). Thus, prior to construction a Goal 5 analysis will be completed and proper permits obtained.

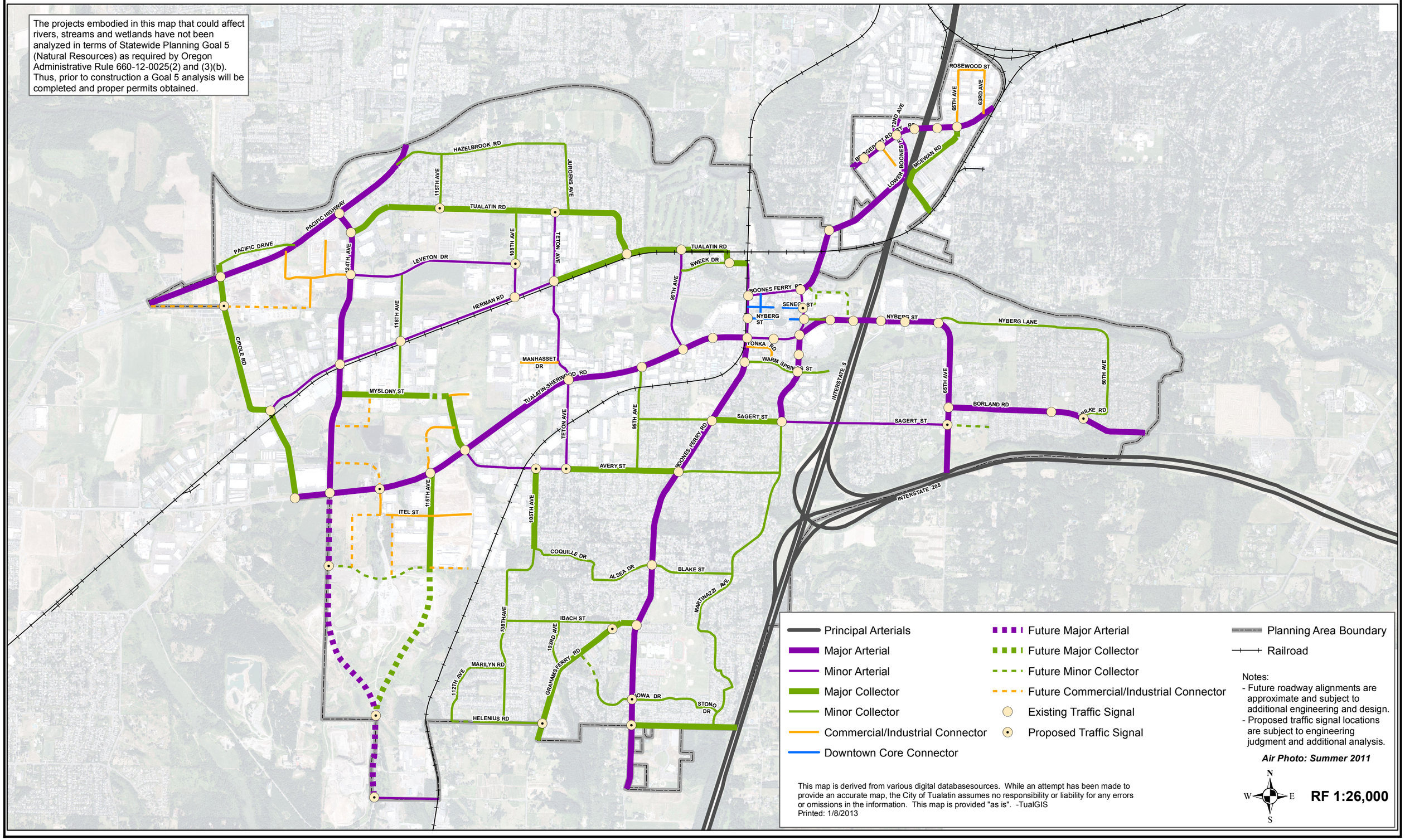
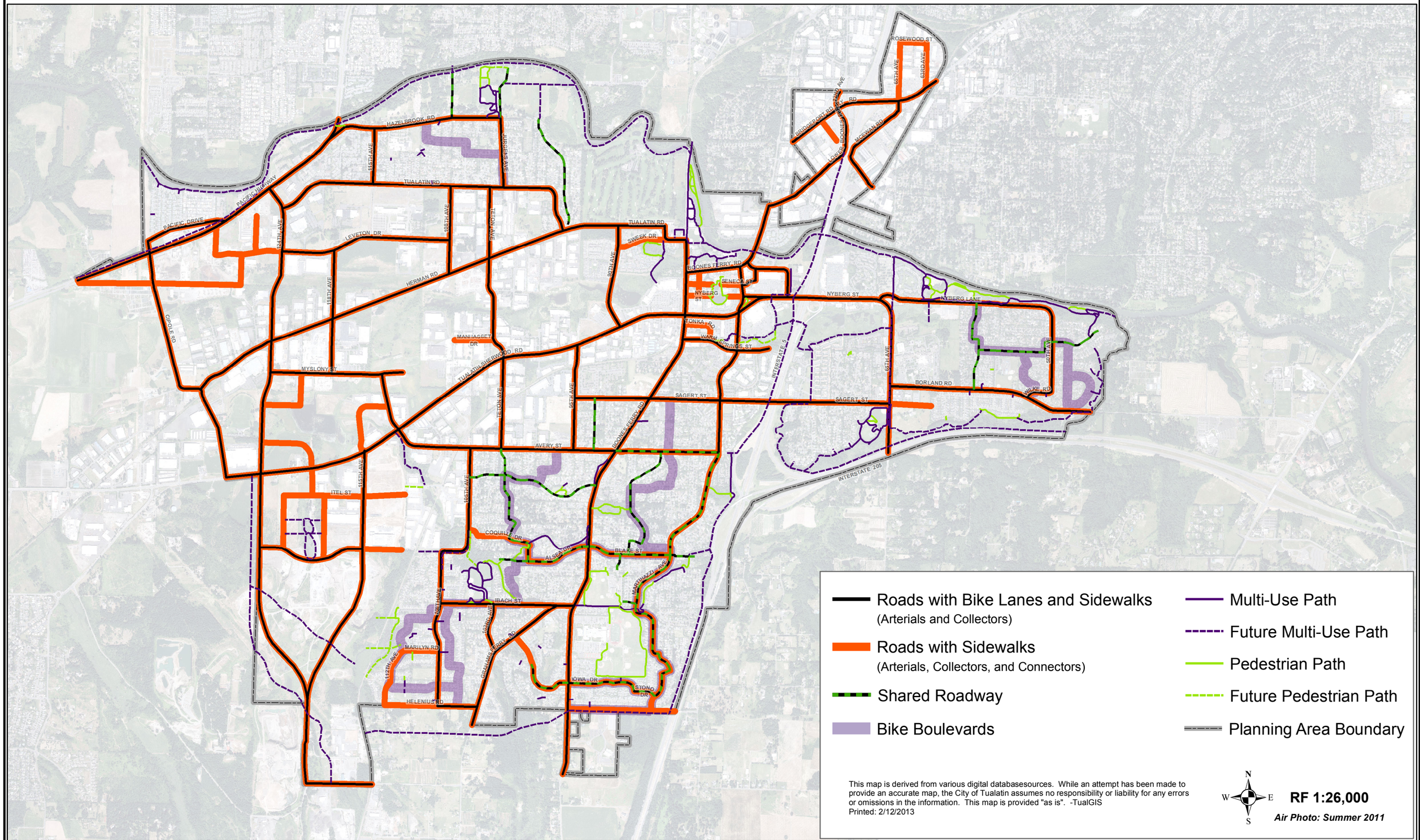


Figure 11-4: Bicycle and Pedestrian Plan

TUALGIS



Roads with Bike Lanes and Sidewalks
(Arterials and Collectors)

Roads with Sidewalks
(Arterials, Collectors, and Connectors)

Shared Roadway

Bike Boulevards

Multi-Use Path

Future Multi-Use Path

Pedestrian Path

Future Pedestrian Path

Planning Area Boundary

This map is derived from various digital databasesources. While an attempt has been made to provide an accurate map, the City of Tualatin assumes no responsibility or liability for any errors or omissions in the information. This map is provided "as is". -TualGIS
Printed: 2/12/2013

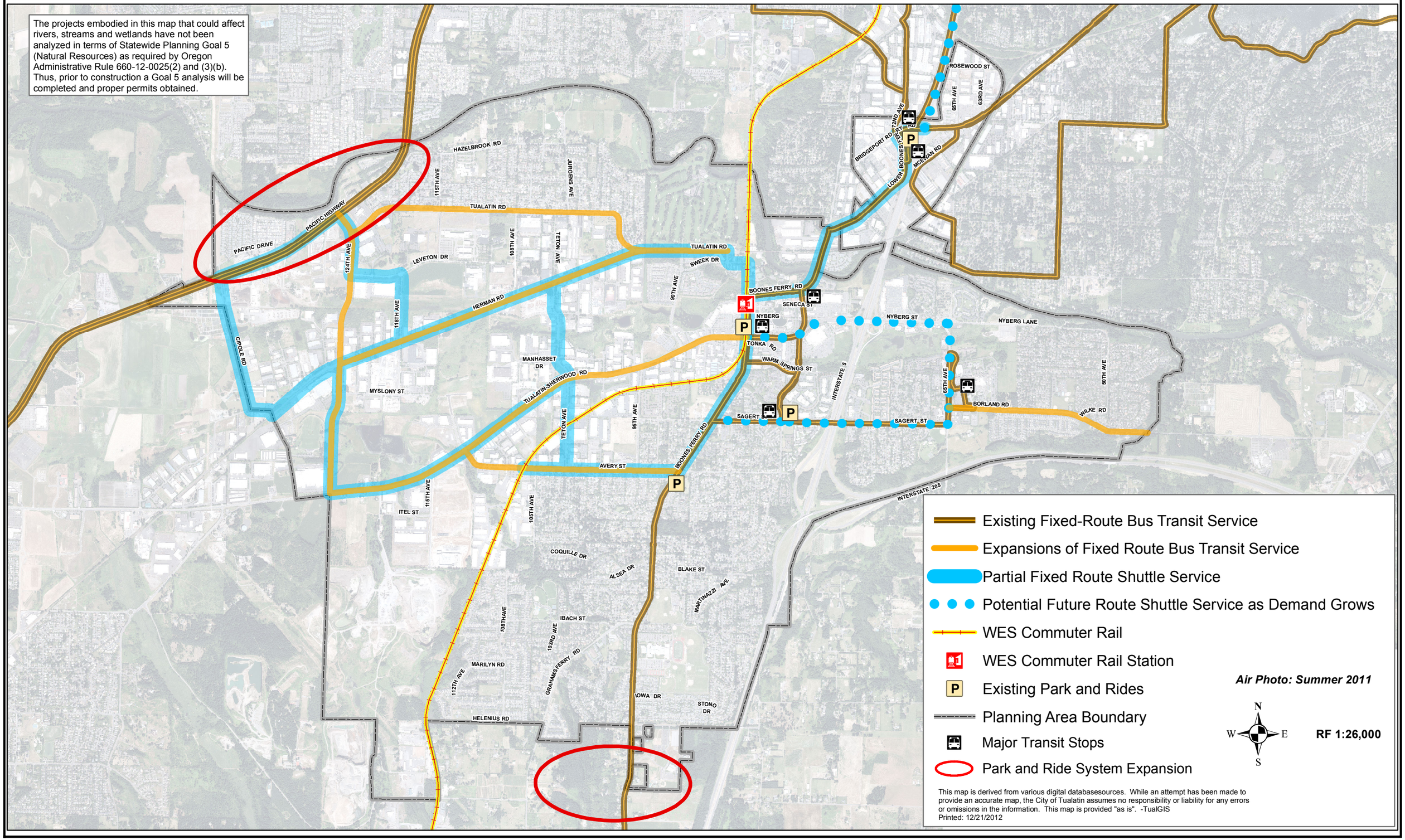
N W E S

RF 1:26,000

Air Photo: Summer 2011

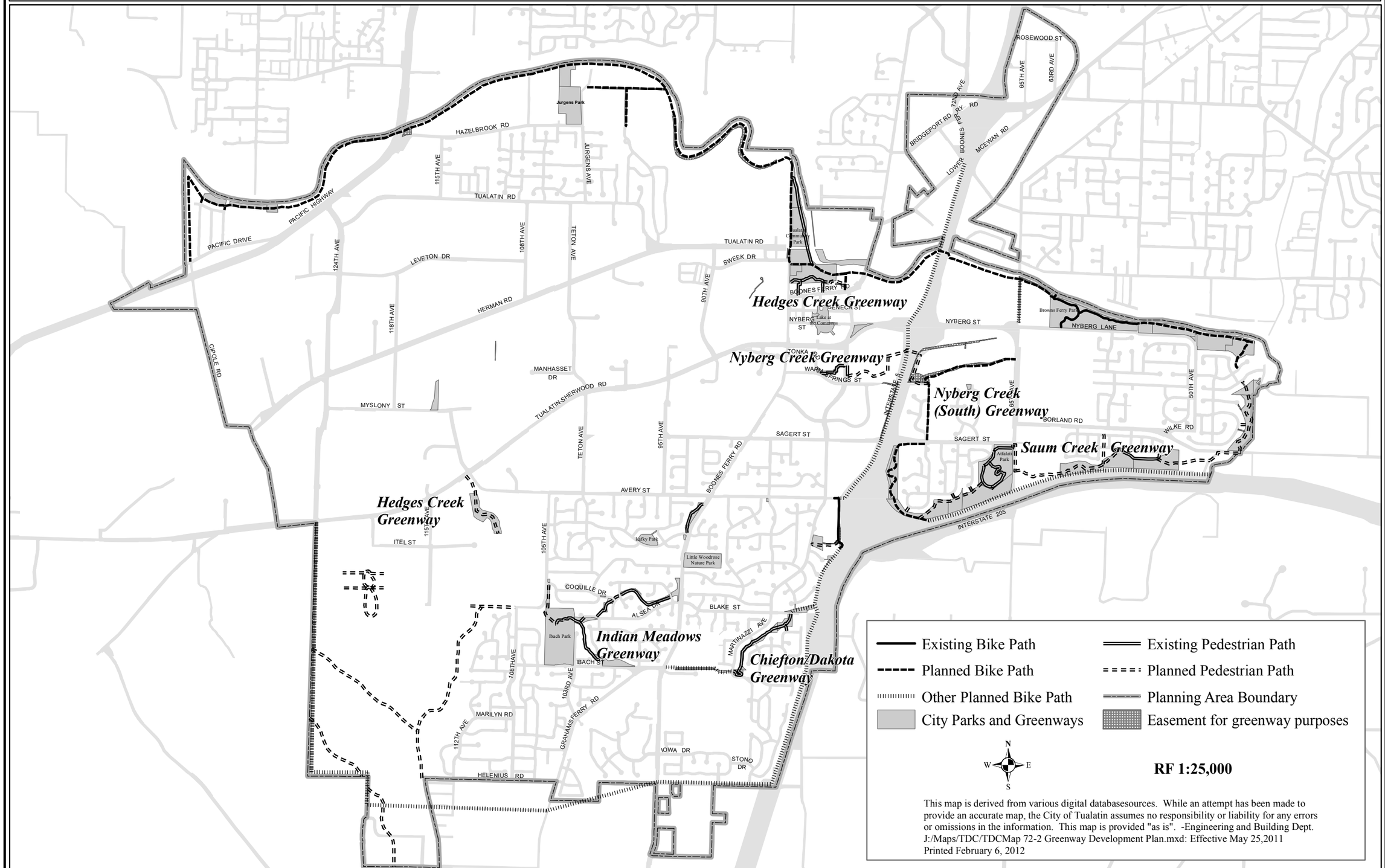
Figure 11-5: Tualatin Transit Plan

TUALGIS



Map 72-2: Greenway Development Plan Pedestrian and Bike Path Locations

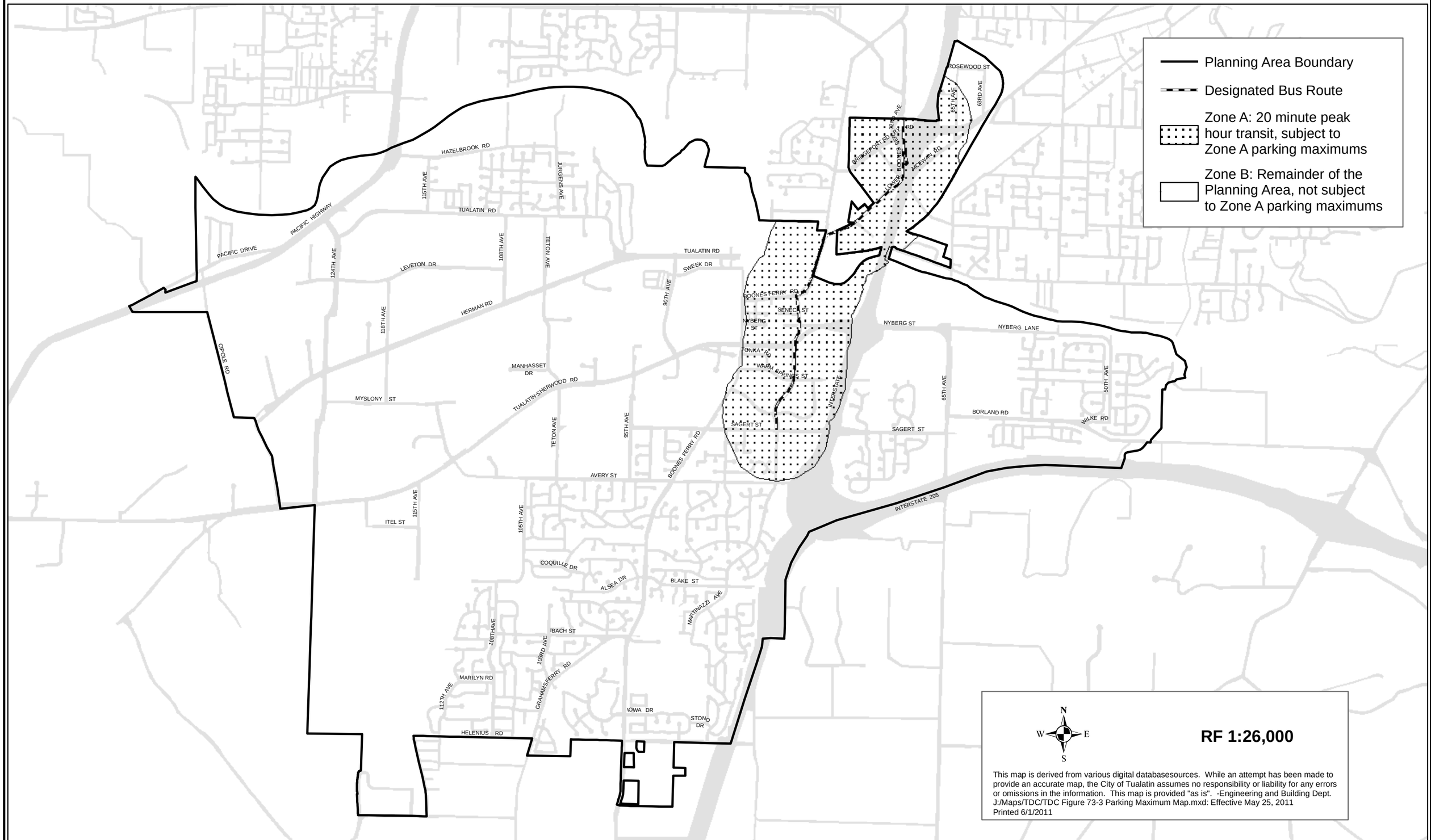
TUALGIS



This map is derived from various digital databasesources. While an attempt has been made to provide an accurate map, the City of Tualatin assumes no responsibility or liability for any errors or omissions in the information. This map is provided "as is". -Engineering and Building Dept.
J:/Maps/TDC/TDCMap 72-2 Greenway Development Plan.mxd: Effective May 25,2011
Printed February 6, 2012

Figure 73-3: Parking Maximum Map

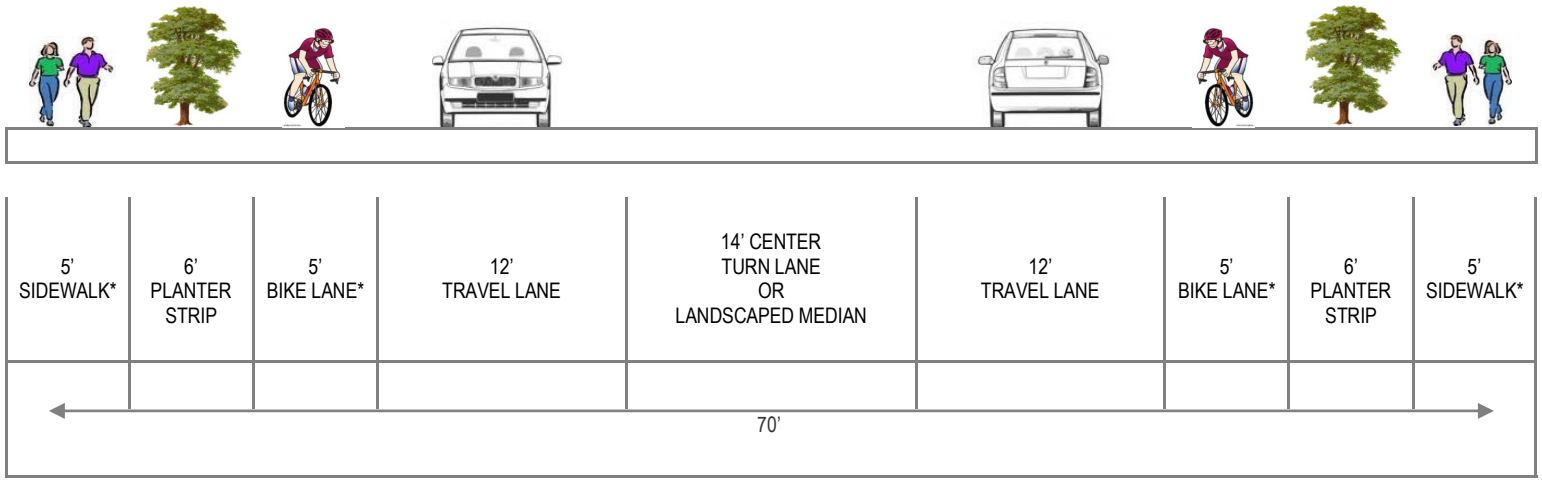
TUALGIS



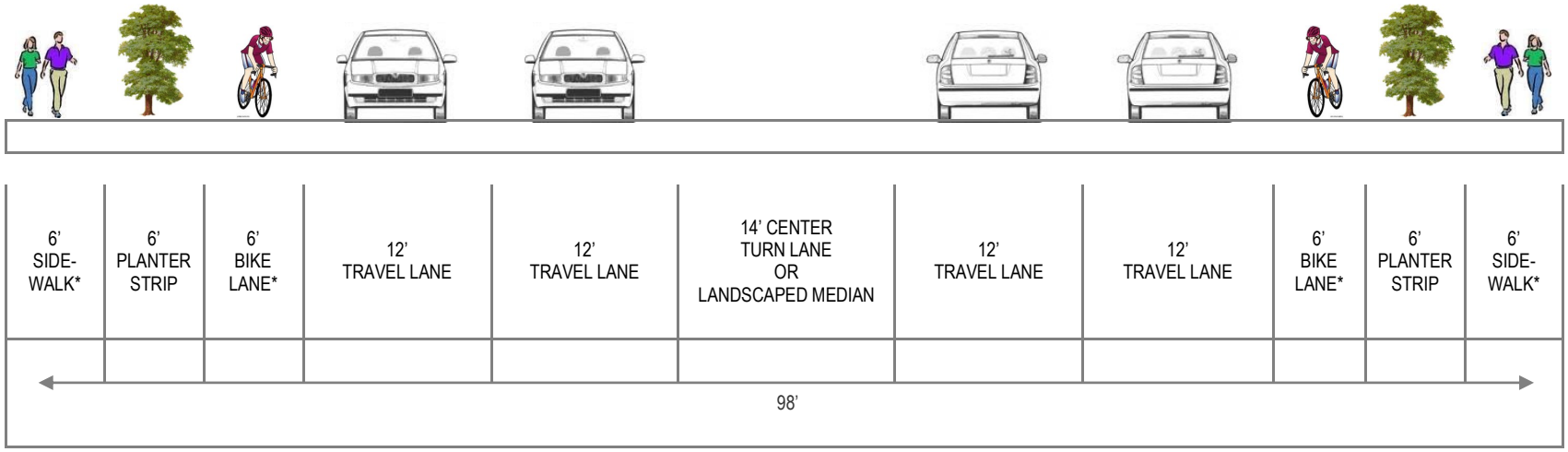
This map is derived from various digital databasesources. While an attempt has been made to provide an accurate map, the City of Tualatin assumes no responsibility or liability for any errors or omissions in the information. This map is provided "as is". -Engineering and Building Dept.
J:/Maps/TDC/TDC Figure 73-3 Parking Maximum Map.mxd: Effective May 25, 2011
Printed 6/1/2011

MAJOR ARTERIAL

Minimum



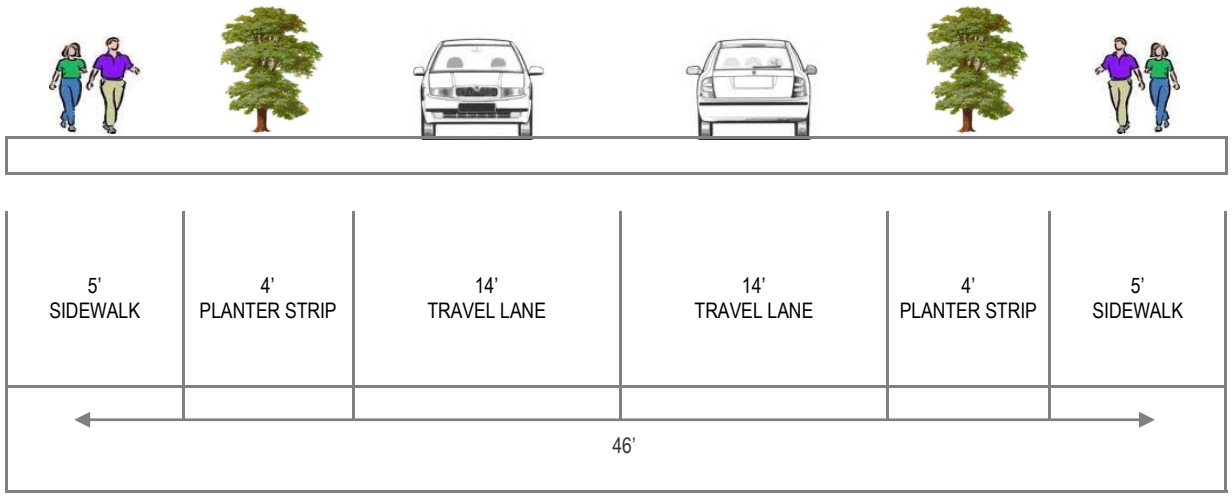
Preferred



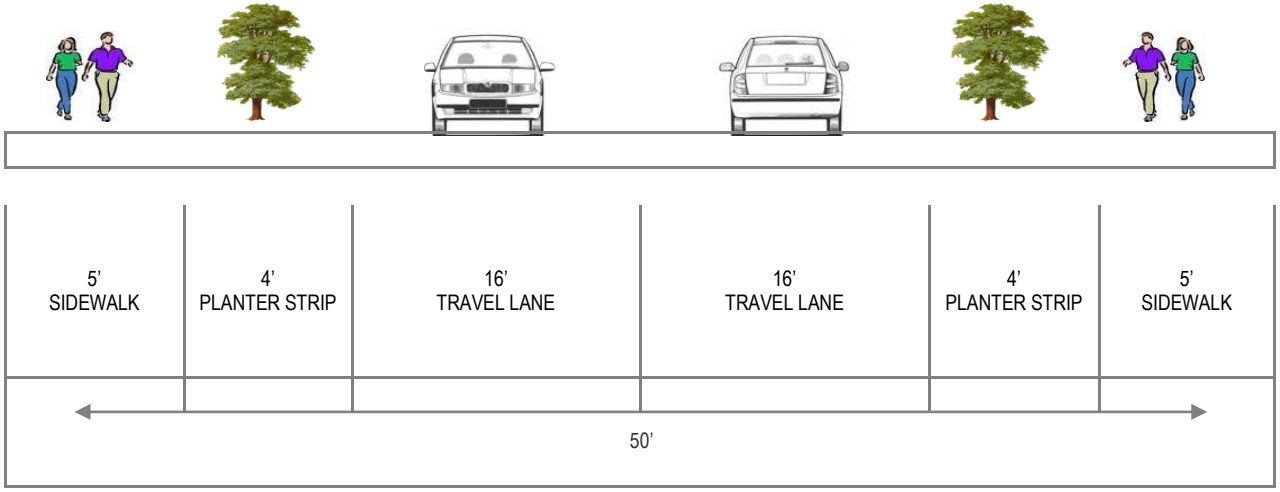
*The City of Tualatin may allow a 12' multi-use path to be substituted for the sidewalk and bicycle lane on either or both sides. If allowed, the planter strip must be installed between the travel lane and the multi-use path.

LOCAL

Minimum



Preferred



GUIDELINES FOR GOOD EXTERIOR LIGHTING PLANS

Prepared by: The Dark Sky Society (http://www.darkskysociety.org/) 2009

These guidelines have been developed in consultation with lighting professionals (with experience in developing good lighting plans) to aid communities wishing to control light pollution and preserve the night sky.

Outdoor lighting should be carefully designed with regard to placement, intensity, timing, duration, and color. Good lighting will:

- **Promote Safety**
  "More light" is not necessarily" better". If not designed and installed correctly, unsafe glare can result, reducing the effect of lighting which can contribute to accidents and hinder visibility. Lighting that is too bright interferes with the eye's ability to adapt to darker areas.

- **Save Money**
  Adhering to professionally recommended light levels provides adequate illumination. Shielded fixtures with efficient light bulbs are more cost-effective because they use less energy by directing the light toward the ground. See this website for cost comparisons: http://www.netacc.net/~poulsen/lightcost.html

- **Conserve Natural Resources**
  Inappropriate or excessive lighting wastes our limited natural resources and pollutes the air and water by unnecessarily burning our limited supply of fossil fuels.

- **Be Better Neighbors**
  Excessive or misdirected lighting can intrude on the privacy of others when light or glare trespasses over property lines.

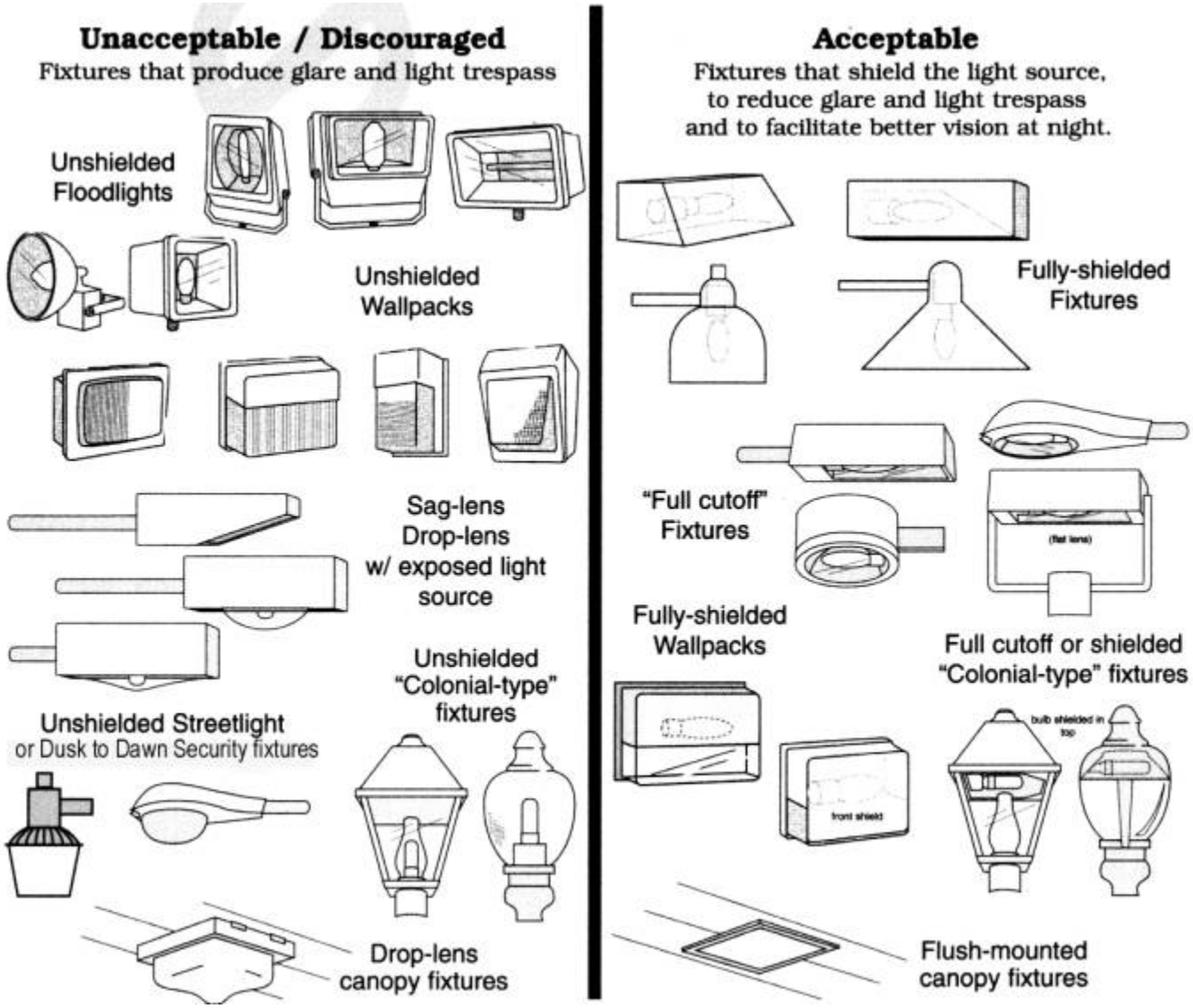
- **Retain Community's Character and Reduce Skyglow**
  Our clear view of the dark starry night sky is a resource to be preserved and protected. Stray and excessive lighting contributes to "light pollution", clutter, and unnatural "sky glow".

- **Protect Ecology of Flora and Fauna**
  Research studies indicate that artificial night lighting disrupts the migrating, feeding, and breeding habits of many wildlife species, as well as growth patterns of trees. See references in The Ecological Consequences of Artificial Night Lighting.

- **Reduce Health Risks**
  Light at night not only disrupts your sleep but also interferes with your circadian rhythms. Recent research indicates that intrusive lighting may reduce the production of melatonin, a beneficial hormone, and a resulting raise in the rates of breast and other cancers.

Included:
1. **Diagrams of Acceptable/Unacceptable Lighting Fixtures**
2. **How to Develop an Acceptable Lighting Plan**
3. **Definitions of Full Cut Off, Shielded, and RLM sign lighting Fixtures**
4. **Lighting Plan Submissions**
5. **Recommended Illumination Levels for various tasks**

UNSHIELDED FIXTURES **Full Cutoff and Fully Shielded Fixtures**



Diagrams courtesy of Bob Crelin

*****Ask your local electrical suppliers for "full-cut off" or "fully shielded" light fixtures. Once you have selected fixtures which are compatible with your architecture and community, contact the manufacturer's representative to see a sample of the fixture(s) and to ask for a free lighting plan. If you have a CAD file, the plan can be easily provided in a short period of time. *****

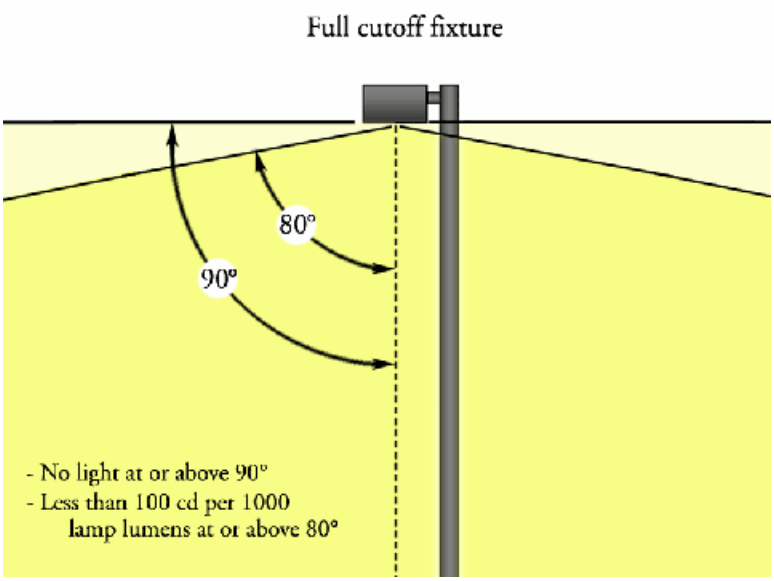
Most lighting manufacturers have Application Departments which will execute free lighting plans to meet local lighting codes.

See this website for links to manufacturers:
http://www.darksky.org/mc/page.do?sitePageId=56422&orgId=idsa
Sample of Web retailers:
www.starrynightlights.com and www.greenearthlighting.com

How to Develop an Acceptable Lighting Plan

1. Identify where as well as when lighting is needed. Confine and minimize lighting to the extent necessary to meet safety purposes**.** Plans should define the areas for which illumination is planned. Itemizing each area (e.g. parking lot, doorways, walkways, signage, foliage) with the anticipated hours of use. Commercial outdoor lighting should be used for safe pedestrian passage and property identification, and lit during active business hours and shut off afterward.
2. Direct light downward by choosing the correct type of light fixtures**.** (See Appendix 3). Specify IES (Illuminating Engineering Society) "Full Cut Off" designated or "fully shielded" fixtures, so that no light is emitted above the lowest light emitting part of the fixture. Top mounted sign lighting is recommended with "RLM" (dish) type shields, and aimed so that the light falls entirely on the sign and is positioned so that the light source (bulb) is not visible from any point off the property or into the roadway to reduce glare. For each one square foot of sign, usually no more than 200 lumens is necessary for good visibility.
3. Select the correct light source (bulb type). Compact fluorescent (2300K) or High Pressure Sodium is recommended unless the light is motion sensor activated, in which case incandescent or the instant start compact fluorescent bulbs can be used. Metal Halide (due to its higher costs, energy use, impact on the environment, and greater contribution to "sky glow") is discouraged, as well as light sources rated over 3000 Kelvin; and outdated Mercury Vapor bulbs are prohibited.
4. Utilize "shut off" controls such as sensors, timers, motion detectors, etc**.** Automatic controls turn off lights when not needed. All lights should be extinguished no later than one half hour after the close of business. Additional motion sensor activated lighting can be used for emergency access. Avoid "dusk-to-dawn" sensors without a middle of the night shut off control. Lights alone will not serve to "protect" property and are a poor "security" device. Examine other means of protecting property and to discourage criminal activity. Let your local police know that you have a "lights out" policy so that they can investigate if they see lights or activity after hours.
5. Limit the height of fixtures**.** Locate fixtures no closer to the property line than four times the mounting height of the fixture, and not to exceed the height of adjacent structures. (Exceptions may be made for larger parking areas, commercial zones adjacent to highways, or for fixtures with greater cut off shielding behind the pole mount in commercial zones.)
6. Limit light crossing property lines, i.e. "light trespass"**.** Limit light to spill across the property lines. Light levels at the property line should not exceed 0.1 footcandles (fc) adjacent to business properties, and 0.05 fc at residential property boundaries. Utility leased floodlight fixtures mounted on public utility poles in the public right-of-way should not be used.
7. Use the correct amount of light. Light levels and uniformity ratios should not exceed recommended values, per IESNA RP-33 or 20. (See Appendix 5, Recommended Illumination Levels for various tasks.) "Lumen cap" recommendations for areas to be illuminated are as follows: commercial properties in non-urban commercial zones = 25,000 lumens per acre; for projects in residential and LBO zones = 10,000 lumens per acre. For residential properties: for suburban: 50,000 lumens per acre cap, and in urban areas: 100,000.
8. Ask for Assistance Your Planning Department and local lighting sales representatives can assist you in obtaining the necessary information for good lighting. For large projects over 15,000 lumens: greater energy conservation and control of light pollution, light trespass and glare, may be achieved with the help of a professional lighting designer with "dark sky" lighting plan experience.
9. A post installation inspection should be conducted to check for compliance. Substitutions by electricians and contractors are common and should not be accepted. Final Approved Site Plans will not allow additional exterior fixtures or substitutes without reviews.
10. Design interior lighting so that it does not illuminate the outdoors. Provide interior lighting photometrics for the building's perimeter areas, demonstrating that the interior lighting falls substantially within the building and not through the windows. After closing, interior lighting that extends outdoors needs to be extinguished by the use of shut off timers.

Definition of Acceptable Fixtures:
"Full Cut Off", "Fully Shielded", and RLM shield.



- "Full Cut Off" fixtures are independently certified by the manufacturers, and do not allow light to be emitted above the fixture and the fixture reduces glare by limiting the light output to less than 10% at and below 10 degrees below the horizontal.
- If the manufacturer is unable to provide the "cut off" characteristics for a fixture (also called a "luminaire"), the following definition needs to be met, which can usually be determined by a visual inspection:

"Fully Shielded": a fixture constructed and installed in such a manner that all light emitted by it, either directly from the lamp (bulb) or a diffusing element, or indirectly by reflection or refraction from any part of the fixture, is projected below the horizontal. This can be determined by a "field test" or a visual assessment of an operating sample.

- Manufacturers and their representatives can provide photographs of light fixtures as "cut sheets" as well as literature confirming the independently tested "cut off" characteristics of their products. These IES files may be assessed for compliance in a computer program: http://www.3dop.com/index1.html
- Photometric layouts for different heights, light sources, and wattages, are also available as "IES" files, upon request or through manufacturers' websites.
- Fixtures must be installed properly, so that the bottom of the fixture is level with the ground. Exceptions are often given for sign lighting which requires vertical lighting:

"RLM" sign lighting shield:

Lighting Plan Submissions

The following information needs to be provided to your municipality's review board which will enable them to evaluate the Site Plan for proper exterior lighting:

The Lighting Plan should be depicted on a site plan, indicating the location of each current and proposed outdoor lighting fixture with projected hours of use. This plan will need to be stamped and certified by a licensed professional, such as an architect or engineer. Many lighting manufacturers can provide free photometric layouts on prepared site plans, to conform to your local requirements.

(1) The lighting plan should include a KEY to the proposed lighting that provides the following information:

- Type and number of luminaire equipment (fixtures), including the "cut off characteristics", indicating manufacturer and model number(s).
- Lamp source type (bulb type, i.e. high pressure sodium), lumen output, and wattage.
- Mounting height with distance noted to the nearest property line for each luminaire.
- Types of timing devices used to control the hours set for illumination, as well as the proposed hours when each fixture will be operated.
- Total Lumens for each fixture, and total square footage of areas to be illuminated. For projects that are in commercial zones, the lumens per net acre to be lit, need not exceed 25,000 lumens. For projects in residential or LBO zones: 10,000 lumens.
- For all plans of more than three fixtures: A Calculation Summary indicating footcandle levels on the lighting plan, noting the maximum, average and minimum, as well as the uniformity ratio of maximum to minimum, and average to minimum levels*.

(2) Lighting manufacturer-supplied specifications ("cut sheets") that include photographs of the fixtures, indicating the certified "cut off characteristics" of the fixture.

(3) Footcandle Distribution, plotting the light levels in footcandles on the ground, at the designated mounting heights for the proposed fixtures. Maximum illuminance levels should be expressed in footcandle measurements on a grid of the site showing footcandle readings in every five or ten-foot square. The grid shall include light contributions from all sources (i.e. pole mounted, wall mounted, sign, and street lights.) Show footcandle renderings five feet beyond the property lines.*

(4) If requested by the reviewing agency, a statement from a lighting professional that a plan, other than that set forth, is needed to meet the intent of these standards.

(5) An environmental impact statement may be required as to the impact of the exterior lighting proposed on flora, fauna, and the night sky. Location of species sensitive to light at night or the proximity to nature preserves or astronomical observatories or "Dark Sky Parks", needs to be indicated.

(6) On the Approved Plan it should be noted that no substitutions, additions, or changes may be made without prior approval by the governing authority.

* This information can be obtained from the manufacturer, your lighting supplier, or the manufacturer's representative.

Recommended Illumination Levels for various tasks*

I. Table of Limits of Illumination, measured in footcandles (fc) at ground level unless noted:

Task Area	Avg.	Not to exceed:
1. Active Building Entrance	2.0 fc	5 fc
Approach	0.2 fc	
2. Gas Station Approach		2 fc
3. Gas Station Pump Area		avg: 5 fc
4. Gas Station Service Area		avg. 3 fc
5. Sidewalks	0.2 fc	5 fc
6. Surface of signs		2 fc

II. Average/Minimum/Uniformity Ratio Limits for Parking Lots:

I. Public Parking Lots -- not to exceed:

Average	Minimum	Uniformity Ratio (Max to Min/Avg to Min)
0.8	0.2	20:1 / 4:1

II. Private Parking Lots -- not to exceed:

Average	Minimum	Uniformity Ratio (Max to Min / Avg to Min)
0.5	0.13	20:1 / 4:1

OR:

III. If illuminance grid lighting plans cannot be reviewed or if fixtures do not provide photometrics and bulbs are under 2000 lumens, use these guidelines:

1. Pole shall be no greater in height than four times the distance to the property line.
2. Maximum Lumen Levels for different fixture heights:

Mounting Height (Feet)	Recommended Lumen Maximums
6	500 - 1000 lumens
8	600 - 1,600 lumens
10	1,000 - 2,000 lumens
12	1,600 - 2,400 lumens

FOOTCANDLE: ("FC") – Is the basic unit of illuminance (the amount of light falling on a surface). Footcandle measurement is taken with a hand held light meter. One footcandle is equivalent to the illuminance produced on one square foot of surface area by a source of one candle at a distance of one foot. Horizontal footcandles measure the illumination striking a horizontal plane. Footcandle values can be measured directly with certain handheld incident light meters.

LUMEN – A unit used to measure the actual amount of light that is produced by a bulb. The lumen quantifies the amount of light energy produced by a lamp at the lamp, not by the energy input, which is indicated by the "wattage". For example, a 75-watt incandescent lamp can produce 1000 lumens while a 70-watt high-pressure sodium lamp produces 6000 lumens. Lumen output is listed by the manufacturer on the packaging.

* IES, Recommended Practices, (RP-33-99): Lighting for Exterior Environments; and (RP-20): Parking Lots. The Illuminating Engineering Society of North America (IES or IESNA), is an organization that establishes updated standards and illumination guidelines for the lighting industry.
http://www.iesna.org/shop/item-detail.cfm?ID=RP-33-99&storeid=1
http://www.iesna.org/shop/item-detail.cfm?ID=RP-20-98&storeid=1

MEMORANDUM
CITY OF TUALATIN

Architectural Review Board **4. B.**

Meeting Date: 08/13/2014

THROUGH: Aquilla Hurd-Ravich, Planning Manager

FROM: Clare Fuchs, Senior Planner

Department: Community Development

Information

SUBJECT:

River Ridge Apartment Complex Recommendation and Staff Report for AR-14-10

ISSUE BEFORE ARCHITECTURAL REVIEW BOARD:

Consideration of a request for Architectural Review AR-14-10 approval to develop a 180 apartment homes in 15 separate buildings along with a clubhouse and pool.

EXECUTIVE SUMMARY:

Staff recommends the ARB continue the hearing to a date after the applicant is able to get revised plans that can feasibly meet the TDC requirements with conditions of approval. There are three main issues with the application.
1. The applicant has not shown that 81,000 square feet of recreational area and 27,000 square feet of children's recreational area can be provided.
2. The applicant has not shown that the parking they are proposing can meet code. The parking overhang is proposed over a walkway and shrubbery.
3. The applicant has not shown that 20% of the property can be landscaped in drawn form.

DISCUSSION:

Mountain West Investment Corporation, represented by AKS Engineering and Hill Architects proposes to develop an approximately 12-acre site as River River Apartment Complex consisting of 180 one to three bedroom apartments, a clubhouse, pool, storage facility, outdoor recreation amenities in a 16 building complex. The apartment buildings are proposed to be 3 stories. The project necessitates Architectural Review Board (ARB) review and decision because over 100 units are proposed pursuant to Tualatin Development Code (TDC) 73.030(2).

There are three issues where staff is unsure that a revision will make the proposal compliant with the TDC. The first issue is providing adequate recreational area per TDC 73.130(3). This section requires at least 450 square feet of recreational area per unit and 150 square of children's play area per unit. The applicant has calculated their total required recreational area at 81,000 square feet and 27,000 square feet of children's recreational area required inside of that 81,000 square feet. Only lawn, pavedent, decks, and wood chips ground coverings count toward the total per TDC 73.130(3)(b)(vi). The applicant has provided an exhibit (Sheet L3.0) that includes shrubbery and treed areas that cannot count towards the recreational area square footage. The applicant also does not show on Sheet L3.0 that 81,000 square feet of recreational area is being provided. The sheet shows 57,340 square feet of recreational area is being provided. The applicant needs to prove it is feasible to provide the required recreational area before staff can recommend approval with conditions.

Staff recommends that the applicant work on the following to try to reach the recreational area square footage minimum: (1) The Tualatin River cannot count towards the recreational area. (2) The portion of the Tualatin River Greenway easement path that will remain on private property can count towards the recreational area requirement. (3) The non-water property to be dedicated to the City of Tualatin can count towards the recreational area minimum.

The second issue is a conflict between required parking space length, drive aisles width, and required walkway width. All walkways are required to be a minimum of 6-feet wide. Regular 90-degree parking stalls are required to be 18.5-feet long. A 2.5-foot overhang is allowed. The problem is the applicant is proposing the 2.5 overhang be provided over the 6-foot wide sidewalk and over shrubbery. This will only leave 3.5-feet to walk and shrubbery will impede the car overhang. Also, there are several areas where the minimum 24-foot wide drive aisles between parking stalls and 22-foot drive aisles not between parking stalls for standard parking stall sizes is not proposed. The applicant needs to show that the required amount and size of parking and parking drive aisles and 6-foot wide clear walkways can be provided. Staff is unsure whether the applicant can feasibly provide this.

Staff recommends the following to attempt meeting the parking code: (1) Either the applicant widen all applicable sidewalks 2.5-feet or (2) Push back all sidewalks 2.5-feet. (3) The landscaping plan shall also be revised to show only groundcover in the 2.5-foot overhang area. (4) Use the 35% compact allowance, up to 154 spaces may be compact size. The applicant is currently showing approximately 20 compact spaces. (5) Drive aisles may be narrower when that drive aisles leads to solely compact spaces.

The third issue is providing 20% of the site as landscaping for multi-family. Staff could not find this calculation in the narrative or in drawn form on the plans per TDC 73.240(2). Staff is unsure whether the applicant can meet this requirement along with the other code requirements.

RECOMMENDATION:

Staff recommends that the ARB continue the hearing to a date certain after the applicant can get revised plans to staff. The Architectural Review Board has four options:
1. Approve with staff recommended findings and conditions of approval.
2. Approve with amended findings and conditions of approval.
3. Deny the application.
4. Continue the Hearing.

Attachments

Attachment A - Staff Report and Recommendation

Attachment B - Draft Public Facilities Report

Attachment C - Exhibit A - Site Plan

Attachment D - Application Materials (Engineering)

Attachment E - Application Materials (Architectural)

August 6, 2014

STAFF REPORT

RECOMMENDATION TO THE ARCHITECTURAL REVIEW BOARD

Case #:	AR-14-10
Project:	River Ridge Apartment Complex (formerly known as Espedal)
Location:	17865 and 17985 SW Pacific Highway (Highway 99W) (Tax Map 2S1 15C Tax Lots 2191, 2202, and 2300)
Applicant:	Mountain West Investment Corporation Represented by: AKS Engineering and Hill Architects

INTRODUCTION

Mountain West Investment Corporation proposes 14, 3-story apartment buildings and a clubhouse. The majority of the parking will be located behind the apartment homes. The clubhouse is proposed to be in the middle of the development.

The applicant indicates plans to consolidate or adjust the tax lots into one parcel, however, no information on proposed consolidation or property line adjustment is provided in this application. This review considers consolidation of the three properties into one parcel.

Based on County building permit research, the RV and Manufactured home park was demolished in 2007 and 2008. Many concrete foundations remain. These are proposed to be removed during the grading process. Additionally, a home is located on the property. This will be demolished prior to construction of the apartment homes.

The subject property is in the High Density Residential (RH) Planning District. The subject site is located in the northwest portion of the City on SW Pacific Highway just north of SW 124th Avenue. The total building floor area is 176,551 square feet in a 73,856 building footprint. The site area is 505,731 square feet or 11.61 acres. The buildable site area is 379,410 square feet. The parking and vehicular circulation area is 122,761 square feet. There are 322 parking spaces proposed.

ARRANGEMENTS CAN BE MADE TO PROVIDE THESE MATERIALS IN ALTERNATIVE FORMATS, SUCH AS LARGE TYPE OR AUDIO CASSETTE TAPE. PLEASE CONTACT THE PLANNING DIVISION AT 503-691-3026 AND ALLOW AS MUCH LEAD TIME AS POSSIBLE.

As of the draft of this staff report no public comments have been received. Notice was mailed July 24, 2014 for the August 13, 2014 hearing.

The Public Facilities Decision for this project will be issued separately by the City Engineer. The City Engineer shall render a decision on the Public Facilities within 10 City Business days after the Architectural Review Board adopts a final order [31.073(5)]. A draft copy of the Public Facilities Decision is provided to the Board for informational purposes, but is not to be considered by the Board in the matter of the AR-14-10 Architectural Features review.

ARCHITECTURAL REVIEW RECOMMENDED FINDINGS & CONCLUSIONS

FINDINGS

Reviewing this application in terms of the Tualatin Development Code (TDC) and other ordinances, the following findings are relevant. All references are to sections in the TDC unless otherwise noted.

1. Previous Land Use Actions:

Tax Lot 2191, 2202, and 2300: ANN-14-01 approved the annexation of these three parcels into the City of Tualatin from unincorporated Washington County. PMA-14-01 amended the City of Tualatin plan designation from Commercial Recreational (CR) (tax lot 2202) and General Commercial (CG) (tax lot 2191) to High Density Residential (RH).

2. Other Permit Actions:

Washington County has record of two permits obtained while under their jurisdiction for these three tax lots. A demolition permit was approved in 2008 for 10 mobile homes. A face change sign permit was approved in 1991 for "Kaddie's Kafe."

3. Planning Districts and Adjacent Land Uses:

The site is now in the High Density Residential (RH) planning district.

Adjacent Planning Districts and land uses include:

Number	Tax Lot	Description
1.	1400	Tax lot 1400 is abuts the subject site to the south and is developed with a residence in Washington County's Future Development 10 Acre Minimum (FD-10) plan designation.
2.	2203	Tax lot 2203 abuts the subject site to the east and is developed with Nacho Mama's restaurant in the City's General Commercial (CG) plan district.
3.	2200	Tax lot 220 abuts the subject site to the east and is developed with Sanchez Towing in the City's CG plan district.
4.	2190	Tax lot 2190 abuts the subject site to the east and is developed as a used car dealership named Oregon Auto Center in the City's CG plan district.

5	1800	Tax lot 1800 abuts the subject site to the northeast and is developed with a motor home park in the City Commercial Recreational (CR) plan district.

4. Lot Sizes:

43.050 Lot Sizes for Permitted Uses

(1) Except for lots for public utility facilities, natural gas pumping stations and wireless communication facilities which shall be established through the Subdivision, Partition or Lot Line Adjustment process and as otherwise provided, the lot size for a permitted use pursuant to TDC 43.020(1) is:

(a) Except for townhouses whose minimum lot size shall be 1,400 square feet, the minimum lot area shall be 10,000 square feet.

(i) When used for multiple-family residential purposes on less than an acre of land, the minimum lot area shall be according to the following table:

Number of Dwelling Units	*Square Feet of Lot Area Required*
2	*10,000*
3 and above	*10,000 square feet, plus 1,459 square feet for each unit exceeding two.*

(ii) For multiple-family residential purposes on one acre and larger, the minimum lot area shall be 1,742 square feet per dwelling unit.

(b) Except for townhouses whose minimum average lot width shall be 14 feet, the minimum average lot width shall be 75 feet except on a cul-de-sac, where the minimum lot width shall be 40 feet at the street.

(c) Except for townhouses which shall not occupy more than 90 percent of the lot area, buildings shall not occupy more than 45 percent of the lot area.

(d) For flag lots, the minimum lot width at the street shall be sufficient to comply with at least the minimum access requirements contained in TDC 73.400(7) - (12).

Tax lot 2191, 2202, and 2300 meet the lot size and dimension requirements as the smallest parcel is 43,560 square feet, well above the 10,000 square foot requirement.

The applicant indicates plans to consolidate or adjust Tax Lots 1800 and 1900 into one parcel; staff has recommended a condition to consolidate all three tax lots prior to building permit. Consolidation will satisfy setback requirements.

5. Setbacks:

43.070 Setback Requirements:

(1) Front yard. The front yard setback is a minimum of 20 feet for 1-story, 25 feet for 1 1/2-story, 30 feet for 2-story, and 35 feet for 2 1/2-story structures.

The applicant proposes a 22.75 front yard setback. This is allowed based on TDC 43.070(8). Please refer to section 43.070(8) for a response.

(2) The side yard setback shall be a minimum of 5 feet for 1-story, 7 feet for 1 1/2-story, 10 feet for 2-story, and 12 feet for 2 1/2-story structures. Where living spaces face a side yard, the minimum setback shall be 10 feet.

The applicant proposes a 7.75 (7-feet 8-inches) foot side yard setback. This is allowed based on TDC 43.070(8). Please refer to section 43.070(8) for a response.

(3) The rear yard setback is the same as the side-yard setback.

The applicant proposes a 7.75 foot side yard setback. This is allowed based on TDC 43.070(8). Please refer to section 43.070(8) for a response.

(5) Where buildings are grouped as one project on one tract of land, the minimum distance between two buildings at any given point shall not be less than the sum of the maximum required side yards, computed separately for each building at that point. The minimum distance between two buildings on separate lots for townhouses shall be determined in the Architectural Review process.

Subsection (8) below allows reduced setbacks down to 7.75-feet for all side yards. Double 7.75 feet calculates to a minimum required separation of 15.5-feet between buildings. All buildings are at least 15.5 feet apart in accordance with this section except for the following: (1) Building 2 and 3 are shown less than 15.5 feet apart (2) Buildings 13 and 14 are shown less than 15.5 feet apart. Staff recommends a condition that the building layout be revised to meet the requirements of this section.

(6) Off-street parking and vehicular circulation areas shall be set back a minimum of 10 feet from any public right-of-way or property line. The

setback for such areas for townhouses shall be determined in the Architectural Review process.

All parking and drive aisle areas are at least 10-feet away from the public right-of-way or property line.

(8) Except for setbacks abutting property lines in the RL District, the decision authority may allow a reduction of up to 35% of the required front, side or rear yard setbacks, as determined in the Architectural Review process, if as a result the buildings are farther away from fish and wildlife habitat areas, and provided the following criteria are met:

(a) A portion of the parcel must be:

(i) in the Natural Resource Protection Overlay District (NRPO), or
(ii) in an Other Natural Area identified in Figure 3-4 of the Parks and Recreation Master Plan, or
(iii) in a Clean Water Services Vegetated Corridor; and

(b) The portion of the parcel which meets the applicable criteria set forth in (a)(i), (ii), or (iii) must be placed in a Tract and must meet one of the following ownership criteria:

(i) be dedicated to the City at the City's option, or
(ii) be dedicated in a manner approved by the City to a nonprofit conservation organization, or
(iii) be retained in private owner-ship by the developer.

A 35% reduction for all setbacks is requested. The subject site contains NRPO land area and Clean Water Services vegetated corridor. In order to set back the apartment complex as far as possible from the natural area, reduced setbacks are needed to also meet density requirements.

A 35% reduction of the required front yard setback of 35-feet calculates to 22.75-feet. The front yard setback is shown at just over 22.75-feet, therefore this requirement is met.

A 35% reduction of the required side and rear yard setbacks of 12-feet calculates to 7.8-feet. A 7.8-foot side and rear yard setback for all side and rear yards is requested. The site plan shows a minimum 7.8-foot side and rear yard setback for all buildings, therefore this requirement is met.

6. <u>Structure Height</u>:

43.100 Except as other provided, the maximum structure height is 35 feet.

All elevations for all building show a height of either 34-feet, 3-inches or 34-feet, 8-inches, just under the building height maximum. This requirement is met.

7. Site Planning:

73.050 Criteria and Standards

(1) In exercising or performing his or her powers, duties, or functions, the Community Development Director shall determine whether there is compliance with the following:

(a) The proposed site development, including the site plan, architecture, landscaping and graphic design, conforms to the standards of this and other applicable City ordinances, insofar as the location, height, appearance, etc. of the proposed development are involved.

This project has been reviewed based on the TDC standards and other applicable general ordinances of the City of Tualatin. The proposed location, height, appearance, etc. of the development either complies with the TDC and other applicable City ordinances as identified in this report or, with applicable conditions of approval will be in compliance.

Private Outdoor Areas, Entry Areas, and Shared Outdoor Areas and Children's Play Areas

Multi-family and townhouse development:

73.130 The following standards are minimum requirements for multi-family and townhouse development.

(1) Private Outdoor Areas

(a) Except within the Central Design District, or within the Mixed Use Commercial Overlay District in which case the Architectural Review process shall determine the appropriate outdoor area, a separate outdoor area of not less than 80 square feet shall be attached to each ground level dwelling unit. These areas shall be separated from common outdoor areas in a manner which enables the resident to control access from separate to common areas with elements, such as walls, fences or shrubs.

(b) Except for townhouses, a separate outdoor area of not less than 48 square feet in the form of balconies, terraces, or loggias shall be provided for each unit located above the ground level, except that within the Central Design District or the Mixed Use Commercial Overlay District such outdoor areas may be less than 48 square feet.

The subject site is not within the Central Design District or a Mixed Use Commercial Overlay District. All balconies on all floor plans are shown to be at least 48 square feet. The floor plans show the patios to be at least 80 square feet. However, it is not clear if the grading plan allows for these patios. Staff recommends a condition that the grading plans be revised to show minimum 80 square foot patios on all units on the ground floors. The landscape plan shall show that 80-square feet of concrete is being provided for each patio and mature planting around each patio allows for a minimum patio size of 80 square feet.

(2) Entry Areas.

(a) Except as provided in TDC73.130(2)(b), a private main entry area shall be provided in addition to required private outdoor areas and designed so that they are considered a private extension of each dwelling unit. Except for townhouses, each entrance area shall be a minimum of 24 square feet in area for each dwelling unit and may be combined to serve more than a single unit, subject to the following minimum area requirements:

(i) Two dwelling units for one-story buildings or two-story townhouses (48 square feet).
(ii) Four dwelling units for two-story buildings (96 square feet).
(iii) Six dwelling units for three-story buildings (144 square feet).
(iv) Unlimited for four-story and greater and for buildings with dwelling unit entries from interior corridors.

(b) Within the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, a private main entry area need not meet the minimum square footage requirements in TDC 73.130(2)(a).

(c) Entry areas shall be separated from onsite parking areas and public streets with landscaping, change of grade, low fences, walls or other means that enable the resident to supervise and control access and to retain privacy.

All units are provided with a minimum of 24 square feet of entry area, in some buildings this area is combined as allowed by code. All entry areas are separated from parking and public streets.

73.130(3) Shared Outdoor Areas and Children's Play Areas.

(a) Except for townhouses, projects with 12 or more dwelling units shall provide year round shared outdoor areas for both active and passive recreation (gazebos and other covered spaces are encouraged to satisfy part of this requirement) totaling not less than 450 square feet per dwelling unit. Except adult only projects, a minimum of 150 square feet of the 450 square feet shall be provided as a children's play area.

(b) The shared outdoor and children's play areas shall be located and designed in a manner which:

(i) Provides approximately the same accessibility to the maximum number of dwelling units possible;
(ii) Allows residents to watch over these areas from windows in at least two adjacent dwelling units. These windows must provide viewing from the kitchen, living room, dining room or other activity room (bedrooms or bathrooms are not included);
(iii) Provides a separation from all entryway and parking areas with a landscaped transition area measuring a minimum of 10 feet wide;
(iv) Controls access to shared outdoor areas from off-site as well as from on-site parking and entrance areas with features such as fencing, walls and landscaping;
(v) Provides both sunny and shady spots; and
(vi) Provides a usable floor surface (material such as lawn, decks, wood chips, sand and hard surface materials qualify).

(c) These standards shall not apply to townhouses or within the Central Design District or within the Mixed Use Commercial Overlay District. Within the Mixed Use Commercial Overlay District the amount of shared outdoor areas and children's play areas shall be consistent with the intent of the Mixed Use Commercial Overlay District and shall be appropriate for the design and scale of residential use proposed as determined through the Architectural Review process.

Staff could not locate recreational areas calculated on the site or landscape plan for adults or children. The narrative states that 81,000 square feet of recreational area is being provided and that 27,000 square feet of children's play area is being provided. Staff cannot find how this was calculated on the plans. Staff recommends a condition that the applicant show where the

minimum required square footage is being provided in drawn form on the plans. Sheet L1.5 of the plan set does not contain this information as directed by the applicant's representative.

<u>Walkways</u>

Multi-family and townhouse development:

73.130(7) Walkways

(a) Except for townhouses, walkways for multi-family development shall be a minimum of 6 feet in width and be constructed of asphalt, concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable.

Some of the drive aisles crossings are shown as 5-feet wide. Staff is unable to determine if raised and different material is proposed for the drive aisle crossings. Staff recommends a condition that the plans be revised to show minimum of 6-foot wide walkways and drive aisle crossings. Staff also recommends revised civil plans that show all drive aisle crossings visibly raised and made of different material than the parking lot.

Multi-family and townhouse development:

73.130(6)Accessways

(a) Accessways shall be constructed, owned and maintained by the property owner.
(b) Accessways shall be provided between the development's walkway and bikeway circulation system and all of the following locations that apply:

(i) adjoining publicly-owned land intended for public use, including schools, parks, or bike lanes. Where a bridge or culvert would be necessary to span a designated greenway or wetland to provide a connection, the City may limit the number and location of accessways to reduce the impact on the greenway or wetland;
(ii) adjoining arterial or collector streets upon which transit stops or bike lanes are provided or designated;
(iii) adjoining undeveloped residential or commercial property; and
(iv) adjoining developed sites where an accessway is planned or provided.

The Tualatin River Greenway path will satisfy these requirements. Two accessways to adjoining properties (tax lot 1400 and 1800) are proposed. These accessways will be built according to Community Services Department requirements. For additional findings see 73.160(1)(e) below.

Multi-family and townhouse development:

73.130(6)(c)

Three types of accessways are proposed with this project. The first type of accessway is from the future apartment property to the future Tualatin River Greenway parcel. Two of these accessways are proposed. The first one is between building 5 and 6. The second one goes between building 10 and 11. Staff recommends a condition that these accessways be constructed as proposed in Exhibit A between the buildings mentioned above.

The second type of accessway proposed is from the future Tualatin River Greenway property to tax lot 2S115C001800 to the north and tax lot 2S116D001400 to the south. Staff recommends a condition that these to accessways be constructed as proposed in Exhibit A except that the southern stub must fully match up with the property line to tax lot 1400.

The third type of accessway proposed is from the subject apartment property to the sidewalk along Highway 99W. The first of these accessways goes from the sidewalk along Highway 99W to just south of building 12. The second of these accessways goes from the sidewalk on Highway 99W to just south of building 15. Staff recommends a condition that these accessway are built as proposed in Exhibit A. The final design will be coordinated with the Community Services Department.

Multi-family and townhouse development:

73.130(6)(d) Accessways for multi-family development shall:

(i) be a minimum of 8 feet in width;
(ii) be constructed in accordance with the Public Works Construction Code if they are public accessways, and if they are private accessways they shall be constructed of asphalt, concrete or a pervious surface such as pervious asphalt or concrete, pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable;
(iii) not have fences or gates which prevent pedestrian and bike access at the entrance to or exit from any accessway; and
(iv) have curb ramps wherever the accessway crosses a curb.

All proposed and required accessways are shown to be at least 8-feet wide. Staff recommends a condition that all accessways be paved.

The applicant has indicated that an application including review of a proposed fence will be submitted separately from this application.

Curb Ramps

Multi-family and townhouse development:

73.170(7)(b)

Commercial, public and semi-public uses:

73.160(1)(c) Curb ramps shall be provided wherever a walkway or accessway crosses a curb.

Civil plans have not been submitted yet to show ramps at all curb crossings. Staff recommends a condition that all walkways, sidewalks, and accessways feature a curb ramp wherever a curb is crossed.

Safety and Security

Multi-family and townhouse development:

73.130(4)

(a) Except for townhouses, private outdoor areas shall be separated from shared outdoor areas and children's play areas with elements such as walls, buildings, landscaping, and changes in grade in a manner which enables residents to utilize these areas as an extension of their units.

(b) Windows shall be located to encourage watching over entry areas, shared outdoor areas, walkways and parking areas.

***(c) An outdoor lighting system shall be provided which facilitates police observation and resident observation through strategic location, orientation and brightness without* shining into residential units, public rights-of-way, or fish and wildlife habitat areas.**

All private outdoor areas are separated as required. Windows are located for observation over parking lots, accessways, and outdoor areas. Staff recommends a condition that all front doors feature a peephole since no windows over look the entry to each home unit.

Sheet E100 was submitted with some indication of lights, but not sufficient to determine code compliance. Staff recommends a condition that a lighting plan be approved by Planning prior to issuance of the first building permit on site. This lighting plan shall contain photometric plans that show all light down to zero foot candles and all produced light as it passes over the property line. Photometrics shall not cut off at the subject site property line. This photometric plan shall show that no light greater

than one tenth foot candles shine onto neighboring properties. Photometric/Light Plan shall show that no light will shine into residences or any sensitive natural areas. To facilitate this staff recommends a condition that only lights with full-cutoff be installed.

Identification System

Multi-family and townhouse development:

73.130(4)(d) An identification system shall be established which clearly orients visitors and emergency services as to the location of residential units. Where possible, this system should be evident from the primary vehicle entryway.

On and Above Grade Electrical and Mechanical Equipment

Multi-family and townhouse development:

73.130(5)(c) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.

73.160(4)(a) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.

The submitted plans do not indicate the location of on and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners, therefore, staff is unable to determine whether the equipment will be adequately screened with sight obscuring fences, walls or landscaping. The requirement is not met. To meet the requirements of 73.130(5)(c) and 73.160(4)(a), the Site Plan and other plans, as appropriate, shall be revised to show that on and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners, be adequately screened with sight obscuring fences, walls or landscaping. Screening of roof-mounted mechanical equipment shall be integrated with exterior building design.

Service, Delivery and Screening

Multi-family and townhouse development:

73.130(5)

(a) Provisions for postal delivery shall be conveniently located and efficiently designed for residents and mail delivery personnel.

(b) Safe pedestrian access from unit entries to postal delivery areas, shared activity areas, and parking areas shall be provided. Elements such as, but not limited to, concrete paths, raised walkways through vehicular areas or bark chip trails will meet this requirement.

Staff could not find where the postal mail will be located. Staff recommends a condition that a postal mail delivery system plan be approved prior to building permit. Mail delivery shall be well lit and provide safe pedestrian access.

Commercial, public and semi-public uses:

73.227(6)(b) (iii) Exterior storage areas shall be enclosed by a sight obscuring fence or wall at least 6 feet in height. In multi-family, commercial, public and semi-public developments evergreen plants shall be placed around the enclosure walls, excluding the gate or entrance openings. Gate openings for haulers shall be a minimum of 10 feet wide and shall be capable of being secured in a closed and open position. A separate pedestrian access shall also be provided in multi-family, commercial, public and semi-public developments.

The applicant proposes one screened trash and recycling location for the entire development. A trash compactor is proposed. Staff is unsure that this one location will be adequate for the entire development. Should more trash or recycling be needed, staff recommends a condition that all recycling or trash cans or dumpsters be fully screened at all times. Any additional screening needed for trash or recycling will obtain an AR prior to construction.

<u>Federal Americans with Disabilities Act (ADA)</u>

Multi-family and townhouse development:

73.130 (8)

Commercial, public and semi-public uses:

73.160(5) The Federal Americans with Disabilities Act (ADA) applies to development in the City of Tualatin. Although TDC, Chapter 73 does not include the Oregon Structural Specialty Code's (OSSC) accessibility standards as requirements to be reviewed during the Architectural Review process, compliance with the OSSC is a requirement at the Building Permit step. It is strongly recommended all materials submitted for Architectural Review show compliance with OSSC.

The proposed project must comply with The Federal Americans with Disabilities Act (ADA) and all buildings and improvements within the project have been design in compliance with the Act.

8. Structure Design:

73.050(1)(b) The proposed design of the development is compatible with the design of other developments in the same general vicinity.

The architecture of the proposed residential buildings and clubhouse is a classic design. The colors and materials chosen are contemporary. There is a new commercial building and another apartment complex nearby that complementary. Staff finds that the materials and architecture are in compliance with this Section.

73.050(1)(c) The location, design, size, color and materials of the exterior of all structures are compatible with the proposed development and appropriate to the design character of other developments in the same vicinity.

73.100(2) All building exterior improvements approved through the Architectural Review Process shall be continually maintained including necessary painting and repair so as to remain substantially similar to original approval through the Architectural Review Process, unless subsequently altered with Community Development Director approval.

The proposed project will be required to comply with this section over time. To meet the requirement of 73.100(2), all building exterior improvements approved through the Architectural Review Process shall be continually maintained including necessary painting and repair so as to remain substantially similar to original approval through the Architectural Review Process, unless subsequently altered with Community Development Director approval.

73.190 Standards – Single-family and Multi-family Uses.

(2) Standards - Multi-family Uses.

The following standards are minimum requirements for multi-family and townhouse development.

(a) Storage.

(i) Except as provided in Subsection (a)(ii), enclosed storage areas are required and shall be attached to the exterior of each dwelling unit to accommodate garden equipment, patio furniture, barbecues, bicycles, etc. Garages are not intended to satisfy storage requirements. Each storage area shall be a minimum of 6 feet in height and have a minimum floor area of:

(A) 24 square feet for studio and one bedroom units;

(B) 36 square feet for two bed-room units; and

(C) 48 square feet for greater than two bedroom units.

(ii) For townhouses and residential and mixed use residential developments in the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, some provision shall be made for outdoor storage adjacent to private outdoor areas. Such provisions shall be reviewed for adequacy through Architectural Review and shall be designed to accommodate barbecues or other small deck equipment.

(b) Carports and Garages.

(i) If carports and garages are provided for multi-family development, except townhouses, the form, materials, color and construction shall be compatible with the complex they serve.

(ii) At least one garage space shall be provided for townhouses.

Storage units next to each balcony or patio are being provided. However, only 24 square feet of storage is being provided next to the units. Storage units in the clubhouse are proposed to be provided in addition. Staff recommends a condition that a plan be submitted that shoes an adequate amount of square footage is being provided in those storage units to meet the standards of this section. This plan should also show which apartments will be assigned to which storage units. The storage units should be constructed prior to the first certificate of occupancy for the first residential building.

73.220(1)(a) Locate, orient and select on-site lighting to facilitate surveillance of on-site activities from the public right-of-way or other public areas.

This standard was addressed under 73.130(4)(a)-(c) and 73.160(3)(a)-(c) and conditions requiring compliance recommended.

73.220(1)(b) Provide an identification system which clearly identifies and locates buildings and their entries.

This standard was addressed under 73.130(4)(d) and 73.160(3)(d) and a condition requiring compliance was recommended.

73.220(1)(c) Shrubs in parking areas shall not exceed 30 inches in height, and tree canopies must not extend below 8 feet measured from grade, except for parking structures and underground parking where this provision shall not apply.

Staff recommends a condition that a revised landscaping plan be submitted with this above code as a note on the plans.

9. Mixed Solid Waste and Source Separated Recyclables Storage Areas:

73.227(1) The Mixed Solid Waste and Source Separated Recyclables storage standards shall apply to all new or expanded multi-family residential developments containing five or more units and to new or expanded commercial, industrial, public and semi-public development.

This is a new multi-family development, therefore these standards apply.

73.227(5) Franchised Hauler Review Method. The franchised hauler review method provides for a coordinated review of the pro-posed site plan by the franchised hauler serving the subject property. This method can be used when there are unique conditions associated with the site, use, or waste stream that make compliance with any of the three other methods impracticable. The objective of this method is to match a specific hauler program (types of equipment, frequency of collection, etc.) to the unique characteristic(s) of the site or development. The applicant shall coordinate with the franchised hauler to develop a plan for storage and collection of mixed solid waste and source separated recyclables to be generated. A narrative describing how the proposed site meets one or more unique conditions, plus site plan and architectural drawings showing the size and location of storage area(s) required to accommodate anticipated volumes shall be submitted for Architectural Review. Additionally, a letter from the franchised hauler shall be submitted with the application that de-scribes the level of service to be provided by the hauler, including any special equipment and collection frequency, which will keep the storage area from exceeding its capacity. For purposes of this subsection the following constitute unique conditions:

(a) Use of either of the three other methods of compliance would interfere with the use of the proposed development by reducing the productive space of the proposed development, or make it impossible to comply with the minimum off-street parking requirements of the underlying planning district, or

(b) The site is of an irregular shape or possesses steep slopes that do not allow for access by collection vehicles typically used by the franchised hauler to serve uses similar in size and scope to the proposed use, or

(c) The proposed use will generate unique wastes that can be stacked, folded, or easily consolidated without the need for specialized equipment, such as a compactor, and can therefore be stored in less space than is required by the Minimum Standards Method.

If the application does not demonstrate that the franchised hauler method requires less space, through the Architectural Review process the minimum standards method may be required. The franchised hauler method shall be reviewed and approved as part of the Architectural Review process.

The letter from the trash hauler does not address whether the capacity of the one trash compactor and the one recycling storage location proposed will be sufficient for 180 residential units. The letter needs to address how often the compactor and recycling will need to be emptied to keep it from overflowing. Staff recommends a condition that the application obtain a revised letter from the trash hauler specifically stating whether the one compactor and one recycling location proposed will be adequate for 180 residential units. The letter shall also state how many times a week or month the compactor and recycling will need to be emptied. If the compactor and the frequency of service will not be sufficient, the applicant shall revise their trash plan and propose a second full screened location for trash and recycling that meets all applicable codes.

73.227(6)(a)

(i) To encourage its use, the storage area for source separated recyclables may be co-located with the storage area for mixed solid waste.
(iii) Storage area space requirements can be satisfied with a single location or multiple locations, and can combine both interior and exterior locations.
(iv) Exterior storage areas shall not be located within a required front yard setback or in a yard adjacent to a public or private street.
(v) Exterior storage areas shall be located in central and visible locations on the site to enhance security for users.
(vii) Storage areas shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on site or on public streets adjacent to the site.

The applicant proposes a combined trash and recycling area. The location is not within a required yard. The enclosure is centrally located and can be seen from many residences for security. The placement of the enclosure will not cause a traffic problem.

73.227(6)(b)

(ii) ***Exterior storage areas shall be enclosed by a sight obscuring fence or wall at least 6 feet in height. In multi-family, commercial, public and semi-public developments evergreen plants shall be placed around the enclosure walls, excluding the gate or entrance openings. Gate openings for haulers shall be a minimum of 10 feet wide and shall be capable of being secured in a closed and open position. A separate pedestrian access shall also be provided in multi-family, commercial, public and semi-public developments.***

(iv) Exterior storage areas shall have either a concrete or asphalt floor surface.

The plans do not provide specifications of whether the vehicular trash enclosure door can be secured in the open and closed positions. Staff recommends a condition that the trash specification be revised to show that the vehicular doors can be locked in the open and

closed positions. The trash enclosure is at least 6-feet in height and vehicular doors are at least 10-feet wide. An asphalt surface for the trash enclosure is proposed. A separate door for pedestrians is not shown. Staff recommends a condition that the trash plan be revised to includes a pedestrian door.

10. Landscaping:

73.100(1) All landscaping approved through the Architectural Review Process shall be continually maintained, including necessary watering, weeding, pruning and replacement, in a manner substantially similar to that originally approved through the Architectural Review Process, unless subsequently altered with Community Development Director approval.

Staff recommends a condition that the applicant abide by Section 73.100(1).

73.240(2) (2) The minimum area requirement for landscaping for conditional uses for RL, RML, RMH, RH and RH/HR Planning Districts, listed in TDC 40.030, 41.030, 42.030, 43.030 and 44.030, excluding40.030(3), 40.030 (4)(j), 40.030 (4)(m), 40.030 (4)(n) and 41.030(2) shall be twenty-five (25) percent of the total area to be developed. When a dedication is granted in accordance with the planning district provisions on the subject property for a fish and wildlife habitat area, the minimum area requirement for landscaping shall be twenty (20) percent of the total area to be developed as determined through the AR process.

Staff could not find this information in the application. The applicant qualifies for the 5% reduction of landscaping from 25% because of the Natural Resource Protection Overlay on their property. Staff recommends a condition that the applicant provide a calculation and drawing that shows at least 20% of subject site is landscaped.

73.240(11) Any required landscaped area shall be designed, constructed, installed, and maintained so that within three years the ground shall be covered by living grass or other plant materials. (The foliage crown of trees shall not be used to meet this requirement.) A maximum of 10% of the landscaped area may be covered with unvegetated areas of bark chips, rock or stone.

Staff was unable to tell if this landscaping plan will meet this requirement. Staff recommends a condition that the applicant provide enough landscaping for the ground to be covered in vegetation in three years. The applicant needs to also provide a note on the plans that the landscaping plan does meet this requirement.

73.260(1)(a) Deciduous shade and ornamental trees shall be a minimum one and one-half inch (1½") caliper measured six inches (6") above ground, balled and burlapped. Bare root trees will be accepted to plant during their dormant season. Trees shall be characteristically shaped specimens.

All trees on landscaping plan meet this requirement.

73.260(1)(b) Coniferous trees shall be a minimum five feet (5') in height above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be well branched and characteristically shaped specimens.

The one coniferous tree species proposed meets this requirement.

73.260(1)(c) Shrubs. Evergreen and deciduous shrubs shall be at least one (1) to five (5) gallon size. Shrubs shall be characteristically branched. Side of shrub with best foliage shall be oriented to public view.

All shrubs have been proposed to be 5 gallons. Staff recommends that applicant be conditioned to provide all shrubs at 5 gallons as proposed.

73.280 Landscaped areas shall be irrigated with an automatic underground or drip irrigation system.

No irrigation plan has been provided. Staff recommends a condition that a full irrigation plan be provided prior to building permit.

Section 73.300 Landscape Standards - Multi-family Uses.
All areas within a development, including townhouses, not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas, or undisturbed natural areas shall be landscaped. Townhouse developments may include hard surfaces in outdoor areas such as patios and storage areas as determined in the Architectural Review process.

A review of the submitted Landscape Plan shows that the requirement of 73.300 is met.

Section 73.330 Parking Lot Landscaping - Multi-family Uses.

(1) Locate landscaping or approved substitute materials in all areas not necessary for vehicular parking and maneuvering.

(2) A clear zone shall be provided for the driver at ends of on-site drive aisles and at driveway entrances, vertically between a maximum of 30 inches and a minimum of 8 feet as measured from the ground level.

(3) Except for townhouse lots, a minimum 10-foot landscape setback shall be provided between the property lines and parking areas. This area shall be planted with deciduous trees an average of not more than 30 feet on center and shrubs at least 30 inches in height which provide screening of vehicular headlights. Trees

shall meet the requirements of TDC 73.360(7). Native trees and shrubs are encouraged.

(4) Except for townhouse lots, provide a landscaped transition area of at least 10 feet in width between parking and vehicle circulation areas and buildings and shared outdoor areas. Deciduous shade trees located at not less than 30 feet on center shall be located in this transition area. The trees shall meet the requirements of TDC 73.360(7). Groundcover plants mixed with low shrubs must completely cover the remainder of this area within three years. Native trees and shrubs are encouraged.

A review of the submitted Landscape Plan shows that there are no plantings proposed at the ends of on-site drive aisles or at driveway entrances that will intrude on the clear zone. With proper pruning and maintenance, the requirement of 73.340(1) will be met.

The submitted Landscape Plan shows enough trees and landscaping to meet the above requirement. The parking lot faces the perimeter of the subject site on two sides.

73.350(1) Except for townhouse lots that are not required to have landscape island areas, a minimum of 25 square feet per parking stall shall be improved with landscape island areas. They may be lower than the surrounding parking surface to allow them to receive stormwater run-off and function as water quality facilities as well as parking lot landscaping. They shall be protected from vehicles by curbs, but the curbs may have spaces to allow drainage into the islands. They shall be dispersed throughout the parking area (see TDC 73.380(3). They shall be planted with groundcover or shrubs. They shall be planted with deciduous shade trees when needed to meet the parking lot shade tree requirements. Native plant materials are encouraged. Landscape square footage requirements shall not apply to parking structures and underground parking.

Staff could not locate this information in the landscaping plan. Staff recommends a condition that the revised landscaping plan show that at least 25 square feet of landscaping is provided per parking stall.

73.350(2) Landscape island areas with trees shall be a minimum of 5 feet in width (from inside of curb to curb).

The landscaping plan shows a minimum of 5-foot wide landscaping islands**.**

73.350(3) A minimum of one deciduous shade tree shall be provided for every four parking spaces to lessen the adverse impacts of glare, reduce heat from paved surfaces, and to emphasize circulation patterns. Required shade trees shall be within 5 feet of the face of a perimeter parking lot curb and shall be uniformly distributed throughout the parking lot (see TDC 73.380(3)), except that within the Central Design District landscape islands and shade trees may be placed to frame

views of the Tualatin Commons water feature or identified architectural focal elements. The trees shall meet the requirements of TDC 73.360(7).

Staff could not find this information on the landscaping plan or in the narrative. Staff recommends a condition that the applicant provide a calculation that shows this requirement is met.

73.350(4) Required plant material in landscape islands shall achieve 90 percent coverage within three years. Native shrubs and trees are encouraged.

Staff could not find this information on the plans. Staff recommends a condition that the landscape plan be revised to meet this requirement.

74.765 All trees, plants or shrubs planted in the right-of-way of the City shall conform in species and location and in accordance with the street tree plan in Schedule A.

Staff recommends the landscaping plan be submitted to Tom Steiger of the City's Maintenance Division for approval.

11. Tree Preservation:

73.050(4) As part of Architectural Review, the property owner may apply for approval to cut trees, in addition to those exemptions allowed in TDC 34.200(3), by submitting information concerning proposed tree removal, pursuant to TDC 34.210(1). The granting or denial of tree cutting permits shall be based on the criteria in TDC 34.230.

The applicant has submitted tree cutting plans for approval.

34.230 The Community Development Director shall consider the following criteria when approving, approving with conditions, or denying a request to cut trees:

(1) An applicant must satisfactorily demonstrate that any of the following criteria are met:

(a) The tree is diseased, and

- ***(i) The disease threatens the structural integrity of the tree; or***
- ***(ii) The disease permanently and severely diminishes the aesthetic value of the tree; or***
- ***(i) The continued retention of the tree could result in other trees being infected with a disease that threatens either their structural integrity or aesthetic value.***

(b) The tree represents a hazard which may include but not be limited to:

(i) The tree is in danger of falling;
(ii) Substantial portions of the tree are in danger of falling.

(e) It is necessary to remove the tree to construct proposed improvements based on Architectural Review approval, building permit, or approval of a Subdivision or Partition Review.

(2) If none of the conditions in TDC 34.200(1) are met, the Community Development Director shall evaluate the condition of each tree based on the following criteria. A tree given a rating of one on a factor will not be required to be retained.

All the trees proposed for cutting are necessary for construction of the apartment building complex. Some trees are shown to be preserved. These trees includes some close to the outside property lines and the trees in the area to be dedicated to the City as a natural area.

73.250(1) Trees and other plant materials to be retained shall be identified on the landscape plan and grading plan.

The tree cutting plans does provide trees to be retained through the construction process.

73.250(2)(a) During the construction process: The owner or the owner's agents shall provide above and below ground protection for existing trees and plant materials identified to remain.

73.250(2)(b) Trees and plant materials identified for preservation shall be protected by chain link or other sturdy fencing placed around the tree at the drip line.

The applicant has submitted a tree cutting and preservation plan. The plan shows that all preserved trees will be protected with chain link fencing.

73.250(2)(d) Neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.

Staff recommends that a note be placed on the demolition and grading plans that no storage will be located within the drop line of preserved trees.

73.250(2)(f) Tree root ends shall not remain exposed.

The submitted Grading Plans (C4-C7) do not include a note to this effect and the requirement is not met. To meet the requirements of 73.250(2)(f) the Grading Plans shall be revised to include a note specifying that tree root ends shall not remain exposed.

12. Bicycle Parking, Off-Street Parking and Loading:

73.370(2)(a)(i) Bicycle and off-street parking requirements:

Required and proposed parking is shown in the following table:

	Proposed Amount	Required Spaces	
Automobile			
- Multi-family [73.370(2)(a)(i)]			
- 1 bedrm	107	1.25/unit	75
- 2 bedrm	107	1.5/unit	153
- 3 bedrm	108	1.75/unit	31.5
Subtotal	322		259.5
Bicycle			
- Multi-family	238	1/unit; 100% covered	180

73.370(1)(n) Bicycle parking facilities shall either be lockable enclosures in which the bicycle is stored, or secure stationary racks which accommodate a bicyclist's lock securing the frame and both wheels.

Bike parking is being provided in three ways. The first type of bike parking will be available in each storage unit inside each home adjacent to the patio or balcony. The second type of bike parking will be available to each unit in a long term storage unit inside the clubhouse. The third type of bike parking will be available under each stairwell on each floor. Users will have access to a concrete walkway or inside floor to move their bikes from storage to the parking lot.

73.370(1)(o) Each bicycle parking space shall be at least 6 feet long and 2 feet wide, and overhead clearance in covered areas shall be at least 7 feet, unless a lower height is approved through the Architectural Review process.

The lockable racks underneath the staircases will meet the requirements of this section. Staff recommends that the applicant provide the lockable rack under all staircases and on all floors of each building.

73.370(1)(r) Required bicycle parking shall be located in convenient, secure, and well lighted locations approved through the Architectural Review process.

73.370(1)(s) Bicycle parking facilities may be provided inside a building in suitable secure and accessible locations.

Bicycle parking will be located indoors in under the staircase of the hallways in each building.

73.380(1) Off-street parking lot design shall comply with the dimensional standards set forth in Figure 73-1 of this section, except for parking structures and underground parking where stall length and width requirements for a standard size stall shall be reduced by .5 feet and vehicular access at the entrance if gated shall be a minimum of 18 feet in width.

(9) Parking bumpers or wheel stops or curbing shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.

The parking is designed for 16-foot long parking spaces. The code requires 18.5 foot long spaces for 90-degree angle parking. The applicant proposes allowing the rest of the 2.5 feet to be placed in the front bumper overhang area. The code allows 2.5-feet of overhang space. The problem is that if 2.5 feet of the parking stall is in the overhang area, this will block 2.5 feet of the 6-foot wide sidewalks. This will only leave 3.5-feet for walking. Staff recommends the applicant widen all sidewalks by 2.5-feet or push the sidewalks back towards the buildings 2.5-feet. In the areas where an 8-foot wide sidewalk is required, these sidewalks should also be widened or pushed back. Only groundcover should be proposed for landscaping in these overhang area. Currently, shrubs are proposed in these overhang area. Staff recommends that the applicant be conditioned to one or the other solution and revise the landscaping plan to plant groundcover in overhang areas.

There are three areas of the drive aisle that do not meet the 22-foot minimum drive aisle width where aisles do not abut parking stalls. There are also a few areas where the drive aisles do not meet 24-feet width abutting parking stalls. Staff recommends a condition that all drive aisles are a minimum of 22-feet wide where there are no parking spaces and 24-feet wide where abutting parking spaces. Narrower drive aisles can be proposed leading to areas with only compact size parking.

Staff notes that all parking proposed over the minimum required amounts can be compact size. The applicant may also propose that 35% of the required spaces be compact. The applicant can utilize more compact spaces to aide in the redesign of the parking lot and abutting sidewalks. There are 259.5 parking spaces required. Therefore, 91 of those spaces can be compact. All of the spaces over the minimum required can also be compact. So overall, a total of 154 spaces may be compact.

73.380(2) Parking stalls for sub-compact vehicles shall not exceed 35 percent of the total parking stalls required by Section 73.370(2).

Staff has reviewed the proposed site plan and this requirement is met. Compact stall do not exceed 35% of all stalls. Staff recommends a condition that all compact stall be labeled "compact."

73.380(3) Off-street parking stalls shall not exceed eight continuous spaces in a row without a landscape separation, except for parking structures and underground parking.

All parking spaces have a landscape island at a minimum of every eight spaces.

73.380(4) Areas used for standing or maneuvering of vehicles shall have paved asphalt or concrete surfaces maintained adequately for all-weather use and so drained as to avoid the flow of water across sidewalks.

All parking spaces are proposed to be paved.

73.380(5) Except for parking to serve residential uses, parking areas adjacent to or within residential planning districts or adjacent to residential uses shall be designed to minimize disturbance of residents.

There are only about 10 spaces which will face residentially designated properties. One property is designated high density residential and the other is designated Commercial Recreational. Staff recommends a condition that these two small areas be planted with dense site obscuring landscaping at least 3-feet tall at time of planting such as arborvitae.

73.380(6) Artificial lighting, which may be provided, shall be so deflected as not to shine or create glare in any residential planning district or on any adjacent dwelling, or any street right-of-way in such a manner as to impair the use of such way.

Staff previously recommended a lighting and photometric plan be conditioned to be approved by the Planning staff prior to building permit. This lighting plan will show that no more than 0.1 candle feet of light shall pass onto the neighboring properties.

73.380(8) Service drives to off-street parking areas shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.

In previous findings staff has recommended that the applicant be conditioned to provide all pedestrian crossings shown with a change of material and visibly raised. Staff finds that with this condition the requirements of this subsection will be met.

73.380(9) Parking bumpers or wheel stops or curbing shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.

Curbing is proposed as a wheel stop for all parking spaces.

73.380(11) On-site drive aisles without parking spaces, which provide access to parking areas with regular spaces or with a mix of regular and sub-compact spaces, shall have a minimum width of 22 feet for two-way traffic and 12 feet for one-way traffic. On-site drive aisles without parking spaces, which provide access to parking areas with only sub-compact spaces, shall have a minimum width of 20 feet for two-way traffic and 12 feet for one-way traffic.

Staff has previously recommended a condition that the site plan be revised to show a minimum of 22-foot and 24-foot wide drive aisles where required.

13. Access:

73.400(2) Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use.

Four reciprocal cross access easements are recommended to be conditioned prior to building permit to help this application meet Chapter 74 of the TDC. Further findings can be found in the Public Facilities Report. Staff recommends that the applicant be further conditioned to provide these easements with language satisfactory to the City Attorney prior to the first building permit on site to meet the requirements of this section.

73.400(3) Joint and Cross Access (a) Adjacent commercial uses may be required to provide cross access drive and pedestrian access to allow circulation between sites. (b) A system of joint use driveways and cross access easements may be required and may incorporate the following: (i) a continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management classification system and standards. (ii) a design speed of 10 mph and a maximum width of 24 feet to accommodate two way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles; (iii) stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross access via a service drive; (iv) a unified access and circulation system plan for coordinated or shared parking areas. (c) Pursuant to this section, property owners may be required to: (i) Record an easement with the deed allowing cross

access to and from other properties served by the joint use driveways and cross access or service drive; (ii) Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the city and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway; (iii) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners; (iv) If (i-iii) above involve access to the state highway system or county road system, ODOT or the county shall be contacted and shall approve changes to (i-iii) above prior to any changes.

Four access connections are shown on Exhibit A. However, the site plan also proposes to block off these four connections with landscaping, curb, and parking spaces. Staff recommends that applicant be conditioned to stub the four "access connections" or "emergency access connections" labeled on exhibit A prior to the first Certificate of Occupancy on site. Staff also recommends that the applicant be conditioned to provide cross over access easement and maintenance agreement to the properties abutting these connections prior to building permit.

73.400(16)(c) Vertical Height Restriction – Except for items associated with utilities or publicly owned structures such as poles and signs and existing street trees, no vehicular parking, hedge, planting, fence, wall structure, or temporary or permanent physical obstruction shall be permitted between 30 inches and 8 feet above the established height of the curb in the clear vision area.

Staff recommends that the landscaping plans be revised to show that this requirement is met.

14. Signs:

Existing signage on the subject site is subject to the standards of TDC 38 Sign Regulations and TDC 35.200 Non-conforming Signs. Any new signage proposed for the site shall be submitted separately for sign permits. This includes, but is not limited to directional signage.

15. Community Services (Parks):

TDC 72.030 (2) Riverbank Greenway (NRPO-GR)

The NRPO District along the south bank of the Tualatin River, at the Subject Property, has a width as measured from a line 40 feet inland from the top of the bank extending to the middle of the river.

TDC 72.110 Easements for Pedestrian and Bicycle Access
(TDC 11.650 Pedestrian, Bicycle, and Multi-Use Path Modal Plan)

In any portion of the NRPO District, the City may, through the subdivision, partition, conditional use, architectural review, or other applicable development approval process, require that easements for pedestrian and bicycle access and maintenance uses be granted as a condition of approval when said easements are necessary to achieve the purposes of the Parks and Recreation Master Plan, Greenways Development Plan, or Bikeways Plan. Map 72-2 identifies a Bike Path crossing the Subject Property running parallel to the Tualatin River. The path is also included in TDC 11.650 Pedestrian, Bicycle, and Multi-Use Path Modal Plan, Figure 11-4, Bicycle and Pedestrian.

16. Time Limit on Approval:

73.056 Architectural Review approvals shall be void after one year unless:

(1) A building, or grading permit submitted in conjunction with a building permit application, has been issued and substantial construction pursuant thereto has taken place and an inspection performed by a member of the Building Division; or

(2) An extension is requested by the applicant of the Architectural Review and approved by the Community Development Director and City Engineer. Before approving an extension the Community Development Director and City Engineer shall find that there have been no significant changes in any ordinances, standards, regulations or other conditions affecting the previously approved project so as to warrant its resubmittal. The following conditions shall also apply:

(a) An extension request shall be submitted prior to the initial one year expiration, and

(b) No more than one 6-month extension shall be granted for a project receiving Architectural Review approval.

Staff recommends the applicant be conditioned to this time limit.

ARCHITECTURAL REVIEW RECOMMENDATIONS:

Based on the Findings and Conclusions presented in the Staff Report, staff recommends that the Architectural Features of AR-14-10 be approved, subject to the following Architectural Review conditions:

AR-1. All submittals shall be sent in one complete and full set. No piecemeal submittals will be accepted. Submittals prior to building permit shall contain one plan set, with one table of contents that includes all pages submitted. The 5 separate plan sets currently submitted shall be combined into one plan set with one table of

contents. All plan set pages shall be numbered in accordance with table of contents. All plan submittals must be on 24 x 36 inch paper. All submittals shall be stapled together down the length of the bound side. The entire set will be reviewed at one time. A narrative shall be included and will address each condition of approval. Each applicant narrative response shall include how the Condition is being addressed and on what set revised plan page the condition is shown to be met in drawn form. Each resubmittal will start a new 2-week minimum review period by staff.

AR-2 Prior to issuance of a the first Building Permit on site, five (5) revised Plan Sets shall be submitted for review and approval to the Planning Division with the following changes:

A. Civil/Site Plan

1. The separation between buildings 2 and 3 shall be at least 15.5-feet at their closest points per 43.070(5). The separation between buildings 13 and 14 shall be at least 15.5-feet at their closest points per 43.070(5). All other buildings shall also remain at least 15.5-feet from each other.

2. To meet the requirement of 73.370(1)u) the Site Plan shall be revised to show that bicycle parking areas and facilities shall be identified with appropriate signing as specified in the Manual on Uniform Traffic Control Devices (MUTCD) (latest edition). At a minimum, bicycle parking signs shall be located at the main entrance and at the location of the bicycle parking facilities.

3. To meet the requirement of 73.130 the landscape and site plan shall be revised to show a minimum of 80 square foot concrete patios for all units on the ground floor.

4. Per 73.130(3) show in drawn form how a minimum of 81,000 square feet of recreational area is being provided. Show in drawn form how a minimum of 27,000 square feet of children's recreational area is being provided.

5. To meet the requirement of 73.170(7)(b) the Site Plan shall be revised to provide curb ramps wherever a walkway or accessway crosses a curb.

6. Minimum of 6-foot wide walkways and drive aisle crossings. All drive aisle crossings shall be visibly raised and made of different material than the parking lot per 73.160(1) and 73.130(7).

7. All walkways, sidewalks, and accessways feature a curb ramp wherever a curb is crossed.

8. To meet the requirement of 73.130(4)(d) the Site Plan shall be revised to include an identification system that clearly orients visitors and emergency services as to the location of residential units and other facilities and their entries within the site.

9. To meet the requirements of 73.130(5)(c) the Site Plan and other plans, as appropriate, shall be revised to show that on and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners, be adequately screened with sight obscuring fences, walls or landscaping.

10. A postal mail delivery system plan. Mail delivery shall be well lit and provide safe pedestrian access per 73.130(5) (a) and (b).

11. Obtain a revised letter from the trash hauler specifically stating whether the one compactor and one recycling location proposed will be adequate for 180 residential units. The letter shall also state how many times a week or month the compactor and recycling will need to be emptied to prevent overflow. Otherwise, a revised trash plan shall show a secondary fully screened trash and recycling location.

12. Per 73.227(6)(b) provide a revised trash plan that shows a separate pedestrian door and vehicular trash enclosure doors that are lockable in the open and closed positions.

13. Per 73.250(2)(d) Place a note on the grading and demolition plans that neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.

14. Staff recommends that a note be placed on the demolition and grading plans that no storage will be located within the drop line of preserved trees.\

15. To meet the requirements of 73.250(2)(f) the Grading Plans shall be revised to include a note specifying that tree root ends shall not remain exposed.

16. Per 73.380(2) Provide a plan that shows all compact spaces will be marked, ”compact.”

17. All drive aisles shall be revised to meet a minimum 22-foot width in places not abutting parking stalls and 24-feet wide where abutting parking stalls for areas with standard size stalls.

18. All parking spaces shall be revised to be 18.5-feet for standard spaces or all parking lot abutting sidewalks shall be widened or pushed back by 2.5-feet.

19. Four vehicular cross access stubs shall be provided to neighboring properties shown on Exhibit A as “access connection” or “emergency access connection” at

least a 22-foot pavement width. Gates shall be provided at each stub to prevent use until such time as neighboring property redevelops.

20. Show an adequate amount of square footage is being provided in clubhouse storage units to meet Section 73.190. This plan shall also show which apartments will be assigned to which storage units.

21. Six accessways shall be constructed and paved:

    a. An accessway between building 5 and 6 from the subject property to the Tualatin River Greenway parcel as proposed in Exhibit A.
    b. An accessway between building 10 and 11 from the subject apartment property to the Tualatin River Greenway parcel as proposed in Exhibit A.
    c. An accessway shall be stubbed from the future Tualatin River Greenway parcel to tax lot 1800 to the north as proposed in Exhibit A.
    d. An accessway shall be stubbed from the future Tualatin River Greenway parcel to tax lot 1400 as proposed in Exhibit A except that the stub shall fully match up with the property line.
    e. An accessway shall be built from Highway 99W sidewalk to just south of building 15 as proposed in Exhibit A.
    f. An accessway shall be built from Highway 99W sidewalk to just south of building 12 as proposed in Exhibit A.

B. Landscaping

1. To meet the requirement of 73.130 the landscape plan shall be revised to show a minimum of 80 square foot concrete patios for all units on the ground floor. Plantings shall be shown to allow an 80 square foot patio at maturity on revised landscaping plan.

2. To meet the requirements of 73.130(5)(c), 73.160(4)(a) the Site Plan and other plans, as appropriate, shall be revised to show all on and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners as fully screened with dense landscaping, fencing, or a wall.

3. To meet the requirement of 73.260(1)(d) the Landscape Plan shall be revised to specify that groundcovers shall be fully rooted and well branched or leafed.

4. To meet the requirement of 73.260(1)(e) the Landscape Plan shall be revised to specify that grasses, including sod, or seeds shall be of acceptable mix within the local landscape industry and shall be 100% coverage and weed free.

5. To meet the requirement of 74.765 the Landscape Plan shall be revised to show street trees approved by the Operations and Maintenance Division.

6. To meet the requirement of 73.250(3) the Landscape Plan shall be revised to include a note specifying that landscaping under preserved trees shall be compatible with the retention and health of said tree.

7. A note shall be placed on the plans that states, “shrubs in parking areas shall not exceed 30 inches in height, and tree canopies must not extend below 8 feet measured from grade”

8. Provide a calculation on the landscaping plan that shows at least 1 shade tree is provided for every 4 parking spaces.

9. The revised landscaping plan show that at least 25 square feet of landscaping is provided per parking stall.

10. Per 73.240(2) the applicant shall provide a calculation and drawing that shows at least 25% of subject site is landscaped.

11. Per 73.240(11) required landscaped area shall be designed, constructed, installed, and maintained so that within three years the ground shall be covered by living grass or other plant materials. (The foliage crown of trees shall not be used to meet this requirement.) A maximum of 10% of the landscaped area may be covered with unvegetated areas of bark chips, rock or stone. Revise plans to show this level of landscaping and provide a note that the ground will be covered with vegetation within three years of planting.

12. Provide all shrubs at 5 gallons as proposed.

13. Per 74.765 submit the landscaping plan be submitted to Tom Steiger of the City’s Maintenance Division for street tree approval.

14. Plant dense site obscuring landscaping such as arborvitae in front of the 10 parking spaces that face neighboring residential properties. This landscaping shall be at last 3-feet tall at time of planting.

15. Only groundcovers shall be proposed in bumper overhang areas.

16. Per 73.350(1) the revised landscaping plan shall show in a calculation and in drawn form that at least 25 square feet of landscaping is provided per parking stall.

17. Show that required plant material in landscape islands shall achieve 90 coverage within 3-years per 73.350.

C. Architecture

1. Any roof mounted equipment shall be shown and fully screened on a revised set of elevations.

2. Building construction plans shall contain a specification that each home unit entry door contain a peephole.

D. Lighting

1. A lighting plan shall be approved by staff. This lighting plan shall contain photometrics that show all light down to zero foot candles and all produced light as it passes over the property line. Photometrics shall not cut off at the subject site property line. This photometric plan shall show that no light greater than one tenth foot candles shines onto neighboring properties. Photometric/Light Plan shall show that no light will shine into residences or any sensitive natural areas. Light plan shall provide specifications and elevations of each type of light proposed. Only lights with full cutoff are allowed.

E. Grading

1. To meet the requirement of 73.250(2)(d) the Grading Plans shall be revised to include a note specifying that neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.

2. To meet the requirements of 73.250(2)(e) the Grading Plans shall be revised to include a note specifying that where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's drip line area, such grading, paving, trenching, boring, digging, or similar encroachment shall only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met.

3. To meet the requirements of 73.250(2)(f) the Grading Plans shall be revised to include a note specifying that tree root ends shall not remain exposed.

4. Revise grading to allow for 4 stubbed access connections where "access connection' or "emergency access connection" is shown on Exhibit A.

5. To meet the requirement of 73.130 the grading plans shall be revised to show a minimum of 80 square foot concrete patio grading for all units on the ground floor.

AR-3 Prior to issuance of a Certificate of Occupancy for the first building on site and before each Certificate of Occupancy thereafter:

A, On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened fully with sight obscuring fences, walls or landscaping [TDC 73.160(4)(a)].

B. The applicant shall install lockable racks as proposed under all staircases and on all floors of each building.

AR-4 Prior to issuance of a Certificate of Occupancy, all conditions of approval shall be built and accepted as complete by the Planning Division. Construction must comply with the approved plans as modified by the future plan revisions to be submitted and approved according to the conditions in this decision.

AR-5 To meet the requirements of 73.100(1) and (2) all landscaping approved through the Architectural Review Process shall be continually maintained, including necessary watering, weeding, pruning and replacement, in a manner substantially similar to that originally approved through the Architectural Review Process, unless subsequently altered with Community Development Director approval.

AR-6 To ensure the development standards are met, prior to issuance of building permits, the applicant shall provide evidence that all three lots were consolidated by recordation with Washington County.

AR-7 Any signage proposed for the site shall be submitted separately for sign permits.

AR-8 This decision shall be void after two years from the date of this decision unless development has substantially commenced.

AR-9 Prior to issuance of the first building permit for the subject site a lot consolidation of all three subject site parcel shall be executed, except for the Tualatin River Greenway dedication area shown in Exhibit A. This consolidation shall be recorded by Washington County. A recorded copy shall be submitted to the City of Tualatin prior to issuance of the first building permit on-site.

AR-10 Per 73.227 All trash and recycling cans or dumpsters shall be fully screened at all times will a site obscuring wall or wooden fence. No chain link enclosures are allowed. Any new trash or recycling enclosures shall obtain an AR prior construction.

AR-11 The proposed project must comply with The Federal Americans with Disabilities Act (ADA) and all buildings and improvements within the project shall be designed in compliance with the Act.

AR-12 Per 73.400 prior to first building permit on site: Cross over access easements and maintenance agreements shall be provided to all neighboring parcels at at-least a 24-foot width where the site plan (Exhibit A) shows an "access connection" or an

"emergency access connection." The easement language shall be satisfactory to the City Attorney prior to release of first building permit on-site.

AR-13 Per 73.400 prior to first Certificate of Occupancy on site: Four vehicular cross access stubs shall be provided to neighboring properties shown on Exhibit A as "access connection" or "emergency access connection" at at-least a 22-foot pavement width. Gates shall be provided at each stub to prevent use until such time as neighboring property redevelops.

AR-14 Prior to a Certificate of Occupancy for the first residential building on-site, the clubhouse storage units shall be fully constructed and ready for use. The proposed basketball court, horse shoes and bocce ball court, sandbox, and two jungle gyms as proposed and shown on sheet L3.0 of the applicant's materials shall be built and ready to use.

AR-15 All building exterior improvements and landscaping approved through the Architectural Review Process shall be continually maintained including necessary painting and repair so as to remain substantially similar to original approval through the Architectural Review Process, unless subsequently altered with Community Development Director approval. This also includes watering, weeding, pruning, and replanting.

AR-16 Prior to any building permit the applicant shall perform the following for the Community Services Department:

A. Greenway Tract
The applicant shall grant a greenway land dedication of land on the riverbank in the NRPO and areas within the flood plain as a tract as shown on the amended site plan A1.1 (July 23, 2014). The dedication shall be in the form of a statutory warranty deed.

B. Greenway Path Easement
The applicant shall grant a 16 foot wide easement to accommodate a 12 foot shared use pathway for the pathway segments not located in the NRPO as identified in amended site plan A1.1 (July 23, 2014).

C. Temporary Outdoor Recreation Access Route Easement
The applicant shall grant a temporary 8 foot Outdoor Recreation Access Route easement from Highway 99 to connect to the greenway trail on the NE of the subject property as shown on the amended site plan A1.1 (July 23, 2014). This easement shall include a wider area near Highway 99 for an interim entry monument (gateway) to the Tualatin River Greenway Trail. The route is to be approved by Community Services Director. This easement may be extinguished when the Greenway Path is extended south and a permanent connection with Highway 99 is established near the intersection with 124th Avenue.

D. Permanent Outdoor Recreation Access Route
The applicant shall show on final plans a permanent outdoor recreation access route between Buildings 6 and 7. No public access easement is required in that location.

E. Maintenance Access Easement
The applicant shall grant a maintenance access easement on all drive aisles and parking lots within the development.

F. Fencing
The developer shall not install fences or gates that would prohibit access to the path or greenway, though safety fencing may be installed along the south property line where a high bank exists and along retaining walls that support the greenway path as required by City Code.

G. Greenway Path Construction
The applicant shall show on final plans the shared use pathway, required mitigation, enhancement, and related facilities such as handrails and guardrails, bollards, signs, overlooks, benches, trash receptacles, and interpretive displays at the time of the housing development construction. Final design and construction standards for the pathway and related facilities shall be approved by the Community Services Director.

H. Temporary Outdoor Recreation Access Route Construction
The applicant shall show on final plans the temporary outdoor recreation access route and entry monument. Design shall be approved by the Community Services Director.

I. Visual Barrier Plantings
Trees and shrubs shall be shown on final plans to be planted between the Greenway Path and the properties adjoining the Subject Property to create and maintain visual privacy. The need for screening and plant selection shall be approved by the Community Services Director.

J. Tualatin River Visibility
Required mitigation and enhancement plantings shall be shown on final plans to be selected and placed in a manner that, when plantings are mature, retains open views of the Tualatin River in several areas along the path as well as the planned overlooks.

AR-17 Prior to Acceptance of the Greenway Easement:

A. Survey
The applicant shall survey and stake the area of the greenway tract, greenway path easement, and outdoor recreation access route easement. The Community Services Director shall approve the location of the tract and easements prior to its acceptance.

B. Structure Removal and Site Restoration

All existing structures within the greenway tract shall be shown on final plans to be removed prior to acceptance, and the site shall be restored pursuant to mitigation and enhancement plantings required in the Clean Water Services service provider letter.

C. Tree Preservation

Trees within the greenway tract shall be preserved to comply with development restrictions of natural resources within the NRPO, except any specific modifications approved by the City. Trees that potentially prevent a hazard to users of the Greenway Path shall be assessed and appropriate actions taken to reduce hazards as recommended by an ISA-certified arborist and approved by the Community Services Director.

AR-18 Prior to Issuance of a Certificate of Occupancy:

A. Permanent Outdoor Recreation Access Route

The applicant shall construct a permanent outdoor recreation access route between Buildings 6 and 7. No public access easement is required in that location.

B. Greenway Path Construction

The applicant shall construct the shared use pathway, required mitigation, enhancement, and related facilities such as handrails and guardrails, bollards, signs, overlooks, benches, trash receptacles, and interpretive displays at the time of the housing development construction. Final design and construction standards for the pathway and related facilities shall be approved by the Community Services Director.

C. Temporary Outdoor Recreation Access Route Construction

The applicant shall construct the temporary outdoor recreation access route and entry monument. Design shall be approved by the Community Services Director.

D. Structure Removal and Site Restoration

All existing structures within the greenway tract shall be removed prior to acceptance, and the site shall be restored pursuant to mitigation and enhancement plantings required in the Clean Water Services service provider letter.

E. Visual Barrier Plantings

Trees and shrubs shall be planted between the Greenway Path and the properties adjoining the Subject Property to create and maintain visual privacy. The need for screening and plant selection shall be approved by the Community Services Director.

F. Tualatin River Visibility

Required mitigation and enhancement plantings shall be selected and placed in a manner that, when plantings are mature, retains open views of the Tualatin River in several areas along the path as well as the planned overlooks.

Submitted by:

Clare L. Fuchs, AICP
Senior Planner

file: AR-14-10

CITY ENGINEER'S PUBLIC FACILITIES FINDINGS & RECOMMENDED DECISION

** APPROVAL WITH CONDITIONS **

DRAFT xx, 2014

Case #:	AR-14-10
Project:	River Ridge Apartment Complex (formerly known as Espedal)
Location:	17865 and 17985 SW Pacific Highway (Highway 99W) (Tax Map 2S1 15C Tax Lots 2191, 2202, and 2300)
Applicant:	Mountain West Investment Corporation Represented by: AKS Engineering and Hill Architects

INTRODUCTION

Mountain West Investment Corporation proposes 14, 3-story apartment buildings and a clubhouse. The majority of the parking will be located behind the apartment homes. The clubhouse is proposed to be in the middle of the development.

The applicant indicates plans to consolidate or adjust the tax lots into one parcel, however, no information on proposed consolidation or property line adjustment is provided in this application. This review considers consolidation of the three properties into one parcel.

Based on County building permit research, the RV and Manufactured home park was demolished in 2007 and 2008. Many concrete foundations remain. These are proposed to be removed during the grading process. Additionally, a home is located on the property. This will be demolished prior to construction of the apartment homes.

The subject property is in the High Density Residential (RH) Planning District. The subject site is located in the northwest portion of the City on SW Pacific Highway just north of SW 124th Avenue. The total building floor area is 176,551 square feet in a 73,856 building footprint. The site area is 505,731 square feet or 11.61 acres. The buildable site area is 379,410 square feet. The parking and vehicular circulation area is 122,761 square feet. There are 322 parking spaces proposed.

As of the draft of this staff report no public comments have been received. Notice was mailed July 24, 2014 for the August 13, 2014 hearing.

The Public Facilities Decision for this project will be issued separately by the City Engineer. The City Engineer shall render a decision on the Public Facilities within 10 City Business days after the Architectural Review Board adopts a final order [31.073(5)]. A draft copy of the Public Facilities Decision is provided to the Board for informational purposes, but is not to be considered by the Board in the matter of the AR-14-10 Architectural Features review.

PUBLIC FACILITIES RECOMMENDATION

The following are the Public Facilities findings for AR 14-10, River Ridge Apartments. All references are to sections in the Tualatin Development Code (TDC) or Tualatin Municipal Code (TMC) unless otherwise noted.

TDC 74.120 ...No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit issued and the required fees paid.

TDC 74.140 (1) All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy.

TDC 74.330 Utility Easements
(1) Utility easements for water, sanitary sewer and storm drainage facilities, telephone, television cable, gas, electric lines and other public utilities shall be granted to the City.
(4) ...For both on-site and off-site easement areas, a utility easement shall be granted to the City; Building Permits shall not be issued for the development prior to acceptance of the easement by the City.
(5) The width of the public utility easement shall meet the requirements of the Public Works Construction Code.

TMC 4-1.010 This development is subject to all applicable building code requirements and all applicable building and development fees.

FINDINGS
These comments are a result of site investigation, developer comments, and review of the submitted plan sheets dated June 30, 2014.

1. Fire and Life Safety:
   TMC 4-2.010 (1) Every application for a building permit and accompanying plans shall be submitted to the Building Division for review of water used for fire protection, the approximate location and size of hydrants to be connected, and the provisions for access and egress for firefighting equipment. If upon such review it is determined that the fire protection facilities are not required or that they are adequately provided for in the plans, the Fire and Life Safety Reviewer shall recommend approval to the City Building Official.

   The submitted plans show three existing public fire hydrants within 150 feet of this development. Three private fire hydrants are proposed. This is acceptable. During the review of Building Permits the Building Official may determine that additional fire protection devices may be necessary upon recommendation of Tualatin Valley Fire & Rescue (TVF&R). The applicant will need to submit plans that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).

   Note: any new fire hydrants will be private onsite.

Prior to issuance of a Building Permit:

- *The applicant shall submit plans that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).*

2. Transportation:

TDC 11.610 Transportation Goals and Objectives (2) (e) For development applications, including, but not limited to subdivisions and architectural reviews, a LOS of at least D and E are encouraged for signalized and unsignalized intersections, respectively.

TDC 73.400 (5)…a sidewalk shall be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to City standards,...

TDC 74.420 (6) All required street improvements shall include curbs, sidewalks, storm drainage, streetlights, street signs, street trees, and, where designated, bikeways and transit facilities.

TDC 74.660 Underground.
(1) All utility lines including, but not limited to, those required for gas, electric, communication, lighting and cable television services and related facilities shall be placed underground. Surface-mounted transformers, surface-mounted connection boxes and meter cabinets may be placed above ground. Temporary utility service facilities, high capacity electric and communication feeder lines, and utility transmission lines operating at 50,000 volts or above may be placed above ground. The applicant shall make all necessary arrangements with all utility companies to provide the underground services. The City reserves the right to approve the location of all surface-mounted transformers.

TDC 75.060 Existing Driveways and Street Intersections (2) The City Engineer may restrict existing driveways and street intersections to right-in and right-out by construction of raised median barriers or other means.

TDC 74.120 ...No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit issued and the required fees paid.

TDC 74.140 (1) All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy.

The applicant submitted a Tualatin Apartments Transportation Impact Study dated May 2014 prepared by DKS. This study recommends the following mitigations:

- Frontage improvements along SW Pacific Highway (OR 99W) consistent with the City's Transportation System Plan and ODOT Highway Design Manual (including sidewalks and bike lands) is recommended in conjunction with construction of the site.
- A right-turn deceleration lane is warranted westbound on SW Pacific Highway (OR 99W) at the restricted project access. The right-turn lane will provide safe deceleration without impacting through traffic.

- The sight triangle at the driveway should be clear of objects (large signs, landscaping, etc.) that could potentially limit vehicle sight distance. All proposed site driveways should meet American Associate of State Highway and Transportation Officials (AASHTO) intersection sight distance requirements as measured from 14.5 feet back from the edge of pavement. Prior to occupancy, intersection sight distance at the proposed driveway along SW Pacific Highway (OR 99W) will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.

The City Engineer generally agrees with the traffic study.

ODOT submitted a Response to Local Land Use Notification dated July 21, 2014. The response provides requirements for street construction, right-of-way dedication, ODOT Approach Permits for access to SW Pacific Highway, cross-over access easements with adjacent properties, an ODOT Miscellaneous Permit for work within SW Pacific Highway, ODOT Drainage Permit for connection to their stormwater system. The applicant will need to submit a copy of the ODOT Miscellaneous, Drainage, and Approach Permits.

<u>SW Pacific Highway</u>
SW Pacific Highway is an ODOT facility designated as a Major Arterial. The City of Tualatin designates this facility as a Major Arterial with a right-of-way width of 98 feet, 49 feet from centerline. The cross-section includes:

- 74 feet of pavement and gutters which includes:
  - four 12-foot travel lanes
  - one 14-foot center turn lane
  - two 6-foot bike lanes
- Two 6–foot planter strips with curb, trees, and streetlights
- Two 6–foot sidewalks

SW Pacific Highway is constructed with a right-of-way width of approximately 160 feet. The cross-section varies from four travel lanes with a median to four travel lanes and two turn lanes with two medians, curb-tight sidewalks, and a bus pull out lane on the south side.

The plans show adjacent to lot 2191 the addition of a 6-foot wide bike lane, 15-foot wide deceleration lane for the main site access, meandering the 6-foot wide curb-tight sidewalk, and dedicating additional right-of-way to construct these improvements. Adjacent to lot 2300 the plans show a 6-foot wide bike lane, 6-foot planter strip with street trees, 6-foot sidewalk that meanders to match adjacent existing curb-tight sidewalk, and a 24-foot wide bollarded emergency access. Street lights are proposed on existing poles on both frontages. This is acceptable. The applicant will need to submit final plans that show adjacent to 2191 the addition of a 6-foot wide bike lane, 15-foot wide deceleration lane for the main site access, and meandering the 6-foot wide curb-tight sidewalk plus adjacent to lot 2300 a 6-foot wide bike lane, 6-foot planter strip with street trees, 6-foot sidewalk that meanders to match adjacent existing curb-tight sidewalk, and a 24-foot wide bollarded emergency access, for review and approval.

Note: Any street trees will need a 24-inch deep, 10-foot long root barrier centered on the tree trunk at the edge of public sidewalks and curbs.

No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit and Water Quality Permit issued and the required fees paid. The applicant has not obtained a Public Works Permit or Water Quality Permit. The applicant will need to obtain a Public Works Permit and Water Quality Permit needed for this development.

All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy. The applicant has not completed all public improvements. The applicant will need to complete all the public improvements and have them accepted by the City.

Prior to Issuance of a Public Works Permit:

- *The applicant shall submit a copy of the ODOT Miscellaneous, Drainage, and Approach Permits.*
- *The applicant shall submit final plans that show adjacent to 2191 the addition of a 6-foot wide bike lane, 15-foot wide deceleration lane for the main site access, and meandering the 6-foot wide curb-tight sidewalk plus adjacent to lot 2300 a 6-foot wide bike lane, 6-foot planter strip with street trees, 6-foot sidewalk that meanders to match adjacent existing curb-tight sidewalk, and a 24-foot wide bollarded emergency access, for review and approval.*

Prior to Issuance of a Building Permit:

- *The applicant shall obtain a Public Works Permit and Water Quality Permit needed for this development.*

Prior to Issuance of a Certificate of Occupancy:

- *The applicant shall complete all the public improvements and have them accepted by the City.*

3. Access:

73.400 Access

(2) Owners of two or more uses, structures or parcels of land may agree to utilize jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use.

(10) Minimum access requirements for residential uses: (b) Ingress and egress for multi-family residential uses shall not be less than the following:…for 50-499 parking spaces a minimum of one 32-foot wide access or two 24-foot wide accesses are required.

(11) Minimum Access Requirements for Commercial, Public and Semi-Public Uses. If 1-99 parking spaces are required, only one access is required. If 100-249 parking spaces are required, two accesses are required. Ingress and egress shall not be less than 32 feet wide for the first 50 feet from the right-of-way and 24 feet thereafter.

(12) Minimum Access Requirements for Industrial Uses. If 1-250 parking spaces are required, only one access is required. Ingress and egress shall not be less than 36 feet wide for the first 50 feet from the right-of-way and 24 feet thereafter.

(14) (a) Unless otherwise herein provided, maximum driveway widths shall not exceed 40 feet.
(15) Distance between Driveways and Intersections. Distances listed shall be measured from the stop bar at the intersection. (a) At the intersection of collector or arterial streets, driveways shall be located a minimum of 150 feet from the intersection.

TDC 75.120 Existing Streets
(3) PACIFIC HIGHWAY 99W
Between 124th Avenue and the Tualatin River on the northwesterly side of Pacific Highway 99W existing accesses will remain except as noted below for development or redevelopment due to the median of Pacific Highway 99W these will be limited to right-turn in, right-turn out. Any redevelopment in this area will require that the driveway accesses be consolidated to a minimum number as determined by the City Engineer.

The plans show a 32-foot wide main site entrance to SW Pacific Highway and 322 parking spaces. Additionally, a 24-foot wide emergency vehicle access with bollards to SW Pacific Highway is shown near tax lot 1400. This is acceptable. The applicant will need to submit final plans that show one 32-foot wide main site entrance and one 24-foot wide emergency vehicle access with bollards near tax lot 1400 to SW Pacific Highway, for review and approval.

SW Pacific Highway is an access limited facility. Several private shared accesses are allowed to exist as right-in-right out restricted and shared by lots between SW Pacific Highway and the Tualatin River within this vicinity. The plans show private shared access easements with lots 1400, 1800, 2190, 2192, 2200, and 2203. This is acceptable. The applicant will need to submit final plans that show private shared access easements with lots 1400, 1800, 2190, 2192, 2200, and 2203, for review and approval. The applicant will need to submit copies of the recorded private shared access easements.

Access to SW Pacific Highway will need an ODOT Approach Permit. The applicant will need to submit a copy of the ODOT Approach Permit.

Prior to Issuance of a Public Works Permit:

- *The applicant shall submit final plans that show one 32-foot wide main site entrance and one 24-foot wide emergency vehicle access with bollards near tax lot 1400 to SW Pacific Highway, for review and approval.*
- *The applicant shall submit final plans that show private shared access easements with lots 1400, 1800, 2190, 2192, 2200, and 2203, for review and approval. The applicant will need to submit copies of the recorded private shared access easements.*
- *The applicant shall submit a copy of the ODOT Approach Permit.*

4. <u>Water</u>:
TDC 74.610 (1) Water lines shall be installed to serve each property in accordance with the Public Works Construction Code. Water line construction plans shall be submitted to the City Engineer for review and approval prior to construction.

TMC 3-3.040 (2) For nonresidential uses, separate meters shall be provided for each structure.

TMC 3-3.120 (2) The owner of property to which City water is furnished for human consumption shall install in accordance with City standards an appropriate backflow prevention device on the premises where any of the following circumstances exist: (b) Where there is a fire protection service, and irrigation service or a nonresidential service connection which is two inches or larger in size;

TMC 3-3.120 (4) requires all irrigation systems to be installed with a double check valve assembly.

TDC74.610 (3) As set forth in TDC Chapter 12, Water Service, the City has three water service levels. All development applicants shall be required to connect the proposed development site to the service level in which the development site is located.

The plans show a connection to the public water line in SW Pacific Highway extended through the site to serve all buildings and private fire hydrants. This connection includes a domestic meter with DCDA for fire service. This is acceptable. The domestic water service will need to include a reduced pressure backflow valve. The applicant will need to submit revised water plans that show a reduced pressure backflow valve for the domestic water service, for review and approval.

Note: Any trees within 10 feet of a public water line will need a 24-inch deep, 10-foot long root barrier centered on the tree trunk at the edge of the public water easement.

Note: This site is located in service level 'A' and the proposed connection to the public system is within this service level. The 'A' water service level has unique operating characteristics. It needs to be noted that flow tests need to be performed, or calculated, under summertime conditions.

All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy. The applicant has not completed all public improvements. The applicant will need to complete all the public improvements and have them accepted by the City.

Prior to issuance of a Public Works Permit:

- *The applicant shall submit revised water plans that show a reduced pressure backflow valve for the domestic water service, for review and approval.*

Prior to issuance of a Certificate of Occupancy:

- *The applicant shall complete all the public improvements and have them accepted by the City.*

5. Sanitary Sewer:

TDC 74.620 (1) Sanitary sewer lines shall be installed to serve each property in accordance with the Public Works Construction Code. Sanitary sewer construction plans and calculations shall be submitted to the City Engineer for review and approval prior to construction.

TDC 74.330 Utility Easements (1) Utility easements for water, sanitary sewer and storm drainage facilities, telephone, television cable, gas, electric lines and other public utilities shall be granted to the City.

The plans show an existing Clean Water Services sanitary sewer line through the development from SW Pacific Highway towards the Tualatin River than east crossing the site. A Clean Water Services capital improvement project coinciding with this development will relocate and upsize a majority of their sanitary sewer line. The portions that will no longer be needed will be abandoned in place. As this is a Clean Water Services capital project, the developer has been working with Clean Water Services to assure their plans are compatible. Clean Water Services has submitted a letter acknowledging the coordination and requesting approval of their design to be included with the River Ridge Apartments Architectural Review. This is acceptable.

The plans show onsite sanitary sewer connecting to the Clean Water Services sanitary sewer line that will be constructed as part of a Clean Water Services capital improvement project. This is acceptable. The applicant will need to submit final plans that show onsite sanitary sewer laterals connecting to the Clean Water Services capital improvement project, for review and approval. The applicant will need to submit approval from Clean Water Services as to the timing of when they may connect to Clean Water Services sanitary sewer lines.

The plans show private sanitary sewer laterals crossing lot lines. Private laterals should directly connect to public sanitary sewer lines without crossing lot lines. The applicant has expressed intention to consolidate lots which would provide direct access to a public sanitary sewer line, which would be acceptable. The applicant will need to submit revised plans that show private laterals directly connecting to public sanitary sewer lines without crossing lot lines or consolidate lots with the remainder of the development, for review and approval.

Note: No trees are allowed within public easements and any trees within 10 feet of a public sanitary sewer line will need a 24-inch deep, 10-foot long root barrier centered on the tree trunk at the edge of the public sanitary sewer easement.

All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy. The applicant has not completed all public improvements. The applicant will need to complete all the public improvements and have them accepted by the City.

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Prior to issuance of a Public Works Permit:

- *The applicant shall submit final plans that show onsite sanitary sewer laterals connecting to the Clean Water Services capital improvement project, for review and approval.*
- *The applicant shall submit approval from Clean Water Services as to the timing of when they may connect to Clean Water Services sanitary sewer lines.*
- *The applicant shall submit revised plans that show private laterals directly connecting to public sanitary sewer lines without crossing lot lines or consolidate lots with the remainder of the development, for review and approval.*

Prior to issuance of a Certificate of Occupancy:

- *The applicant shall complete all the public improvements and have them accepted by the City.*

6. Storm Drainage & Water Quality:

TDC 74.630 Storm Drainage System

(1) Storm drainage lines shall be installed to serve each property in accordance with City standards. Storm drainage construction plans and calculations shall be submitted to the City Engineer for review and approval prior to construction.

(2) The storm drainage calculations shall confirm that adequate capacity exists to serve the site. The discharge from the development shall be analyzed in accordance with the City's Storm and Surface Water Regulations (TMC 3-5).

TDC 74.650 Water Quality, Storm Water Detention and Erosion Control

(2) On all other development applications, prior to issuance of any building permit, the applicant shall arrange to construct a permanent on-site water quality facility and storm water detention facility and submit a design and calculations indicating that the requirements of the Surface Water Management Ordinance will be met and obtain a Stormwater Connection Permit from Clean Water Services.

(3) For on-site private and regional non-residential public facilities, the applicant shall submit a stormwater facility agreement, which will include an operation and maintenance plan provided by the City, for the water quality facility for the City's review and approval. The applicant shall submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site shall occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City.

TMC 3-5-220 Criteria for Requiring On-Site Detention to be Constructed.

(1) There is an identified downstream deficiency, as defined in TMC 3-5.210, and detention rather than conveyance system enlargement is determined to be the more effective solution.

(2) There is an identified regional detention site within the boundary of the development.

TMC 3-5-330 Permit Required. Except as provided in TMC 3-5.310, no person shall cause any change to improved or unimproved real property that will, or is likely to, increase the rate or quantity of run-off or pollution from the site without first obtaining a permit from the City and following the conditions of the permit.

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TMC 3-5-380 Criteria for Granting Exemptions to Construction of On-Site Water Quality Facilities. A regional public facility may be constructed to serve private non-residential development provided:
(1) The facility serves more than one lot; and
(2) All owners sign a stormwater facility agreement; and
(3) Treatment accommodates reasonable worst case impervious area for full build-out, stormwater equivalent to existing or proposed roof area is privately treated in LIDA facilities, and any detention occurs on each lot.

The initial plans show a proposed public stormwater line matching a supposedly existing private system within a 15-foot wide public easement capturing runoff from two adjacent parcels (lots 2200 and 2190) which currently connect to an existing private stormwater line on this development. This public line flows north, capturing stormwater from this development prior to outfalling into the Tualatin River.

Subsequent submittals and site investigation show the lots adjacent to SW Pacific Highway do not have existing connections to a private system as shown in the plans. ODOT has confirmed that on redevelopment that those lots will be allowed to connect to ODOTs stormwater system in SW Pacific Highway. Other adjacent lots do not naturally flow towards the river: lot 2203 would outfall to SW Pacific Highway and Lot 2192 flows towards lot 1800. The applicant is proposing to consolidate their development's lots and create greenway tract adjacent to the river. With this configuration, no public stormwater system would be needed. A private line from the consolidated lots within a private easement can provide an outfall in the future tract, prior to dedicating the tract to the City for greenway purposes. The applicant will need to submit revised plans that show a private stormwater line within private easements over a future tract adjacent to the greenway with consolidated lots for the remainder of the development, for review and approval. The applicant will need to submit an easement over the future tract adjacent to the river prior to dedicating the tract for greenway purposes, for review and approval.

Private stormwater is treated in a private swale. This is acceptable. The applicant will need to submit final plans that show the private water quality facility, for review and approval.

The applicant has submitted preliminary calculations that show the proposed private swale can treat the entire development. This is acceptable. The applicant will need to submit final stormwater treatment calculations, for review and approval.

Private stormwater needs to be treated per lot prior to releasing directly to a public stormwater line. The applicant will need to submit revised plans that show private stormwater treated on each lot prior to a direct connection to the public stormwater line, for review and approval. Note: lots can be adjusted or consolidated through a property line adjustment process to accomplish this requirement.

The applicant has not submitted conveyance calculations. Conveyance needs to be evaluated. The applicant will need to submit conveyance calculations, for review and approval.

The plans show stormwater from the improvements on SW Pacific Highway flowing into the ODOT stormwater system. This is acceptable. The applicant will need to submit final plans that show improvements on SW Pacific Highway flowing into the ODOT stormwater system, for review and approval.

Work within SW Pacific Highway needs an ODOT Miscellaneous Permit. Connection to ODOT's stormwater system requires and ODOT Drainage Permit. The applicant will need to submit a copy of an ODOT Miscellaneous Permit and Drainage Permit.

Note: Any trees within 10 feet of a public stormwater line will need a 24-inch deep, 10-foot long root barrier centered on the tree trunk at the edge of the public stormwater easement.

All the public improvements required under this chapter shall be completed and accepted by the City prior to issuance of a Certificate of Occupancy. The applicant has not completed all public improvements. The applicant will need to complete all the public improvements and have them accepted by the City.

Prior to issuance of a Water Quality Permit:

- *The applicant shall submit revised plans that show a private stormwater line within private easements over a future tract adjacent to the greenway with consolidated lots for the remainder of the development, for review and approval.*
- *The applicant shall submit an easement over the future tract adjacent to the river prior to dedicating the tract for greenway purposes, for review and approval.*
- *The applicant shall submit final plans that show the private water quality facility, for review and approval.*
- *The applicant shall submit final stormwater treatment calculations, for review and approval.*
- *The applicant shall submit conveyance calculations, for review and approval.*
- *The applicant shall submit final plans that show improvements on SW Pacific Highway flowing into the ODOT stormwater system, for review and approval.*
- *The applicant shall submit a copy of an ODOT Miscellaneous Permit and Drainage Permit.*

Prior to issuance of a Certificate of Occupancy:

- *The applicant shall complete all the public improvements and have them accepted by the City.*

7. <u>Grading</u>:

TDC 74.640 (1) Development sites shall be graded to minimize the impact of storm water runoff onto adjacent properties and to allow adjacent properties to drain as they did before the new development. (2) A development applicant shall submit a grading plan showing that all lots in all portions of the development will be served by gravity drainage from the building crawl spaces; and that this development will not affect the drainage on adjacent properties. The City Engineer may require the applicant to remove all excess materials from the development site.

The submitted plans appear to minimize the impact of stormwater runoff to adjacent properties and allow adjacent properties to drain as they did before the development. This requirement is met.

8. Erosion Control:
TDC 74.650 (3) ..the applicant shall submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site shall occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City. In order to reduce the amount of sediment discharged into the public storm system, erosion control measures are required during construction. If the site is over 1 acre in size a NPDES Erosion Control Permit is required.

If the development's disturbed area during construction is between 1 and 5 acres in size, a 1200-CN NPDES Erosion Control Permit is required. If it is over 5 acres, a 1200-C NPDES Erosion Control Permit is required. The proposed disturbed area of the development site is a total of approximately 12 acres. A NPDES Erosion Control Permit is required. The applicant has obtained NPDES Erosion Control Permit. This is acceptable.

A City of Tualatin erosion control permit is required if there is construction or disturbing of the site. The applicant has not obtained a City of Tualatin erosion control permit. The applicant will need to obtain a City of Tualatin erosion control permit.

Prior to the issuance of a Public Works Permit:
- *The applicant shall obtain a City of Tualatin erosion control permit.*

9. Stormwater Connection Permit:
TDC 74.650 Water Quality, Storm Water Detention and Erosion Control (2) On all other development applications, prior to issuance of any building permit, the applicant shall arrange to construct a permanent on-site water quality facility and storm water detention facility and submit a design and calculations indicating that the requirements of the Surface Water Management Ordinance will be met and obtain a Stormwater Connection Permit from the Unified Sewerage Agency.

The applicant has submitted a CWS Service Provider Letter (SPL) indicating that Sensitive Areas exist on-site. In the SPL the applicant has received an initial response indicating that their proposed development meets CWS requirements. CWS has submitted a Memorandum dated July 10, 2014, with review comments.

CWS will indicate final approval of activities relating to wetlands & buffers after final permit plans are submitted prior to issuance of associated permits. Any vegetated corridor mitigation required in the SPL will need to be included in the Water Quality Permit. The applicant will need to submit final plans that comply with the Service Provider Letter and CWS Memorandum comments, for review and approval. The applicant will need to obtain a Stormwater Connection Permit.

Prior to the issuance of a Water Quality Permit:
- *The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.*
- *The applicant shall obtain a Stormwater Connection Permit.*

10. Floodplain District:

TDC 70.110 Development Permit Required.
A development permit shall be obtained before construction or development begins within any area of special flood hazard established by TDC 70.050. The permit shall be for all structures, including manufactured homes, as set forth in the "Definitions," and for all other development, including fill and other activities, also as set forth in the "Definitions."

This site includes zones “A10” and “B” floodplain based on FEMA FIRM 410238 0518 B, dated September 30, 1982. A revision to the FIRM is in process that is expected to be adopted by FEMA. While not officially approved by FEMA for insurance purposes, as responsible managers of the local floodplain the best known information will be used. This revision shows the Base Flood Elevation for this area is 133.1 based on the NAVD 1988 datum. Note: to convert the NAVD datum to the NGVD 1929 within Tualatin subtract 3.52 feet. A Flood Hazard Area Development Permit (FHADP) is required.

The FHADP requires a 1st survey (that shows existing conditions) prior to a building permit, a 2nd survey (that shows the finished floor elevation at least one foot above the base flood elevation) prior to a framing inspection, and a 3rd survey (that shows the as-built finished floor elevation at least one foot above the base flood elevation) prior to occupancy.

The applicant has obtained a FHADP and submitted a 1st survey to obtain mass grading. This is acceptable. Note: if plans are modified prior to building permits, an updated 1st survey and plans will be needed. The applicant will need to submit a 2nd survey prior to a framing inspection. The applicant will need to submit a 3rd survey prior to a certificate of occupancy.

Balanced cut and fill in the floodway and floodplain is required. The plans show that balanced cut and fill will be performed. This is acceptable. The applicant will need to submit final plans that show balanced cut and fill within the floodway and floodplain, for review and approval.

Prior to the issuance of a Building Permit:

- *The applicant shall submit final plans that show balanced cut and fill within the floodway and floodplain, for review and approval.*

Prior to a Framing Inspection:

- *The applicant shall submit a 2nd survey.*

Prior to issuance of a Certificate of Occupancy:

- *The applicant shall submit a 3rd survey.*

11. Natural Resource Protection Overlay District (NRPO):

72.020(1) (1) The designated significant natural resources are the Greenways and Natural Areas on Map 72-1, which shows the general location of the NRPO District. The general locations of Other Natural Areas are shown on the Recreation Resources Map (Figure 3-4) of the Parks and Recreation Master Plan.

72.030 Greenways.

(1) Greenways can exhibit diverse characteristics. Those along the Tualatin River and Hedges, Nyberg and Saum Creeks can be natural in some sections and have pedestrian and bike paths in other sections. Greenways in built-up areas such as in subdivisions are typically landscaped with lawn and often include concrete pedestrian/bike paths.

(2) Riverbank Greenway (NRPO-GR).

(a) Except as provided in Subsection (b), the NRPO District along the south bank of the Tualatin River, beginning at the City's western Urban Growth Boundary (UGB) and extending to the City' s eastern UGB, and along the north bank of the Tualatin River from the northwest corner of Tax Lot 1007 to the southeast corner of Tax Lot 1006, Washington County Tax Map 2S1 24B, shall have a width as measured from a line 40 feet inland from the top of the bank extending to the middle of the river. The top of the bank shall be where the landform called "the bank" changes from a generally up-slope feature to a generally flat feature. The NRPO District shall automatically apply to property annexed to the City, except as provided for in Appendix G to the Parks and Recreation Master Plan.

(b) For the area 300 feet east and west of the I-5 right-of-way as shown on Map 72-1, the NRPO District on the south bank of the Tualatin River shall have a width as measured from a line 75 feet in-land from the top of the bank extending to the middle of the river.

72.060(1) Except as provided in Subsection (2), no building, structure, grading, excavation, placement of fill, vegetation removal, impervious surface, use, activity or other development shall occur within Riverbank, Creek and Other Greenways, and Wetland and Open Space Natural Areas.

72.060(2) The following uses, activities and types of development are permitted within Riverbank, Creek and Other Greenways, and Wetland and Open Space Natural Areas provided they are designed to minimize intrusion into riparian areas:

(a) Public bicycle or pedestrian ways, subject to the provisions of TDC 72.070.

(b) Public streets, including bridges, when part of a City approved transportation plan, and public utility facilities, when part of a City approved plan and provided appropriate restoration is completed.

(c) Except in Wetland Natural Areas, private driveways and pedestrian ways when necessary to afford access between portions of private property that may be bisected by a Greenway or Open Space Natural Area.

(d) Except in Creek Greenways and Wetland Natural Areas, outdoor seating for a restaurant within the Central Urban Renewal District, but outside of any sensitive area or its vegetated corridor.

(e) Public parks and recreational facilities including, but not limited to, boat ramps, benches, interpretive stations, trash receptacles and directional signage, when part of a City-approved Greenway or Natural Area enhancement plan.

(f) Landscaping, when part of a landscape plan approved through the Architectural Review process. City initiated landscape projects are exempt from the Architectural Review process. Landscaping in Greenways and

Natural Areas shall comply with the approved Plant List in the Parks and Recreation Master Plan. When appropriate, technical advice shall be obtained from the Oregon Department of Fish and Wildlife, U.S. Soil Conservation Service, or similar agency, to ensure the proposed landscaping will enhance the preservation of any existing fish or wildlife habitats in the vicinity.

(g) Wildlife protection and enhancement, including the removal of non-native vegetation and replacement with native plant species.

(h) Except in Wetland Natural Areas, public boating facilities, irrigation pumps, water-related and water-dependent uses including the removal of vegetation necessary for the development of water-related and water-dependent uses, and replacement of existing structures with structures in the same location that do not disturb additional riparian surface.

(i) In Wetland Natural Areas, perimeter mowing and other cutting necessary for hazard prevention.

72.060(3) The City may, through the subdivision, conditional use, architectural review, or other development approval process, attach appropriate conditions to approval of a development permit. Such conditions may include, but are not limited to:

(a) Use of Greenways and Natural Areas for storm drainage purposes;

(b) Location of approved landscaping, pedestrian and bike access areas, and other non-building uses and activities in Greenways and Natural Areas;

(c) Setback of proposed buildings, parking lots, and loading areas away from the Greenway and Natural Area boundary.

72.110 Easements for Pedestrian and Bicycle Access. In any portion of the NRPO District, the City may, through the subdivision, partition, conditional use, architectural review, or other applicable development approval process, require that easements for pedestrian and bicycle access and maintenance uses be granted as a condition of approval when said easements are necessary to achieve the purposes of the Parks and Recreation Master Plan, Greenways Development Plan, or Bikeways Plan.

74.310 Greenway, Natural Area, Bike, and Pedestrian Path Dedications and Easements.

(1) Areas dedicated to the City for Greenway or Natural Area purposes or easements or dedications for bike and pedestrian facilities during the development application process shall be surveyed, staked and marked with a City approved boundary marker prior to acceptance by the City.

Site Location:

The Subject Property, comprising approximately 12 acres of land generally located northeast of the intersection of SW Pacific Highway (Hwy 99W) and SW 124th Avenue. The Subject Property is adjacent to SW Pacific Highway, northwest of the highway, and adjacent to and east of the Tualatin River and a portion is located within the Natural Resource Protection Overlay District (NRPO). The Tualatin River Greenway shared use path is planned to cross the Subject Property located parallel to the Tualatin River.

Annexation of this property into city limits was approved by the City Council on March 24, 2014. In the annexation agreement the applicant agreed, as condition of any Architectural Review approval for development of the property, to grant to the City, by Statutory Warranty Deed or by a permanent public Greenway Easement, land for the Tualatin River Greenway as generally described in the Natural Resources Protection Overlay District (NRPO), and related accessways with at least one connection to Pacific Highway. There will be no financial compensation for land dedication and easements.

The Applicant also agreed to construct a public Shared Pathway within the Tualatin River Greenway in exchange for a credit against the Park System Development Charge, if mutually agreed, or to coordinate with the City to ensure the feasibility of constructing the pathway in the future and to pay the Parks System Development Charge in effect at the time of the Owner's building permits and, if necessary due to such Parks System Development Charges being insufficient to cover the pathway costs, compensate the City for all costs of offsite mitigation and enhancement as required by Clean Water Services for construction of the Shared Pathway within the Tualatin River Greenway on the subject property.

No Other Natural Areas as defined in TDC, Chapter 72 exist on the project site. There are no Heritage Trees on the project site. Sidewalks and bike lanes are planned within the Highway 99 right of way.

<u>Comments Regarding Applicable Code:</u>

TDC 72.030 (2) Riverbank Greenway (NRPO-GR)
The NRPO District along the south bank of the Tualatin River, at the Subject Property, has a width as measured from a line 40 feet inland from the top of the bank extending to the middle of the river.

TDC 72.110 Easements for Pedestrian and Bicycle Access
(TDC 11.650 Pedestrian, Bicycle, and Multi-Use Path Modal Plan)
In any portion of the NRPO District, the City may, through the subdivision, partition, conditional use, architectural review, or other applicable development approval process, require that easements for pedestrian and bicycle access and maintenance uses be granted as a condition of approval when said easements are necessary to achieve the purposes of the Parks and Recreation Master Plan, Greenways Development Plan, or Bikeways Plan. Map 72-2 identifies a Bike Path crossing the Subject Property running parallel to the Tualatin River. The path is also included in TDC 11.650 Pedestrian, Bicycle, and Multi-Use Path Modal Plan, Figure 11-4, Bicycle and Pedestrian.

TDC 74.460 Accessways in Residential, Commercial and Industrial Subdivisions and Partitions
(2) Accessways shall be located between the proposed subdivision or partition and adjoining publicly-owned land intended for public use, including schools and parks.
(13) Outdoor Recreation Access Routes shall be provided between a subdivision or partition and parks, bikeways and greenways where a bike or pedestrian path is designated.

Conditions of Approval- Prior to Obtaining Building Permits:

Greenway Tract
The applicant shall grant a greenway land dedication of land on the riverbank in the NRPO and areas within the flood plain as a tract as shown on the amended site plan A1.1 (July 23, 2014). The dedication shall be in the form of a statutory warranty deed.

Greenway Path Easement
The applicant shall grant a 16 foot wide easement to accommodate a 12 foot shared use pathway for the pathway segments not located in the NRPO as identified in amended site plan A1.1 (July 23, 2014).

Temporary Outdoor Recreation Access Route Easement
The applicant shall grant a temporary 8 foot Outdoor Recreation Access Route easement from Highway 99 to connect to the greenway trail on the NE of the subject property as shown on the amended site plan A1.1 (July 23, 2014). This easement shall include a wider area near Highway 99 for an interim entry monument (gateway) to the Tualatin River Greenway Trail. The route is to be approved by Community Services Director. This easement may be extinguished when the Greenway Path is extended south and a permanent connection with Highway 99 is established near the intersection with 124th Avenue.

Permanent Outdoor Recreation Access Route
The applicant shall show on final plans a permanent outdoor recreation access route between Buildings 6 and 7. No public access easement is required in that location.

Maintenance Access Easement
The applicant shall grant a maintenance access easement on all drive aisles and parking lots within the development.

Fencing
The developer shall not install fences or gates that would prohibit access to the path or greenway, though safety fencing may be installed along the south property line where a high bank exists and along retaining walls that support the greenway path as required by City Code.

Greenway Path Construction
The applicant shall show on final plans the shared use pathway, required mitigation, enhancement, and related facilities such as handrails and guardrails, bollards, signs, overlooks, benches, trash receptacles, and interpretive displays at the time of the housing development construction. Final design and construction standards for the pathway and related facilities shall be approved by the Community Services Director.

Temporary Outdoor Recreation Access Route Construction
The applicant shall show on final plans the temporary outdoor recreation access route and entry monument. Design shall be approved by the Community Services Director.

Visual Barrier Plantings
Trees and shrubs shall be shown on final plans to be planted between the Greenway Path and the properties adjoining the Subject Property to create and maintain visual privacy. The need for screening and plant selection shall be approved by the Community Services Director.

Tualatin River Visibility
Required mitigation and enhancement plantings shall be shown on final plans to be selected and placed in a manner that, when plantings are mature, retains open views of the Tualatin River in several areas along the path as well as the planned overlooks.

Conditions of Approval- Prior to Acceptance of the Dedications of the Greenway Tract and Easements:

Survey
The applicant shall survey and stake the area of the greenway tract, greenway path easement, and outdoor recreation access route easement. The Community Services Director shall approve the location of the tract and easements prior to its acceptance.

Structure Removal and Site Restoration
All existing structures within the greenway tract shall be shown on final plans to be removed prior to acceptance, and the site shall be restored pursuant to mitigation and enhancement plantings required in the Clean Water Services service provider letter.

Tree Preservation
Trees within the greenway tract shall be preserved to comply with development restrictions of natural resources within the NRPO, except any specific modifications approved by the City. Trees that potentially prevent a hazard to users of the Greenway Path shall be assessed and appropriate actions taken to reduce hazards as recommended by an ISA-certified arborist and approved by the Community Services Director.

Conditions of Approval- Prior to Issuance of a Certificate of Occupancy:

Permanent Outdoor Recreation Access Route
The applicant shall construct a permanent outdoor recreation access route between Buildings 6 and 7. No public access easement is required in that location.

Greenway Path Construction
The applicant shall construct the shared use pathway, required mitigation, enhancement, and related facilities such as handrails and guardrails, bollards, signs, overlooks, benches, trash receptacles, and interpretive displays at the time of the housing development construction. Final design and construction standards for the pathway and related facilities shall be approved by the Community Services Director.

Temporary Outdoor Recreation Access Route Construction
The applicant shall construct the temporary outdoor recreation access route and entry monument. Design shall be approved by the Community Services Director.

Structure Removal and Site Restoration
All existing structures within the greenway tract shall be removed prior to acceptance, and the site shall be restored pursuant to mitigation and enhancement plantings required in the Clean Water Services service provider letter.

Visual Barrier Plantings
Trees and shrubs shall be planted between the Greenway Path and the properties adjoining the Subject Property to create and maintain visual privacy. The need for screening and plant selection shall be approved by the Community Services Director.

Tualatin River Visibility
Required mitigation and enhancement plantings shall be selected and placed in a manner that, when plantings are mature, retains open views of the Tualatin River in several areas along the path as well as the planned overlooks.

Prior to issuance of a Building Permit:

- *The applicant shall grant a greenway land dedication of land on the riverbank in the NRPO and areas within the flood plain as a tract as shown on the amended site plan A1.1 (July 23, 2014) in the form of a statutory warranty deed, for review and approval.*
- *The applicant shall grant a 16 foot wide easement to accommodate a 12 foot shared use pathway for the pathway segments not located in the NRPO as identified in amended site plan A1.1 (July 23, 2014) for review and approval.*
- *The applicant shall grant a temporary 8 foot Outdoor Recreation Access Route easement from Highway 99 to connect to the greenway trail on the NE of the subject property as shown on the amended site plan A1.1 (July 23, 2014), for review and approval.*
- *The applicant shall show on final plans a permanent outdoor recreation access route between Buildings 6 and 7, for review and approval.*
- *The applicant shall grant a maintenance access easement on all drive aisles and parking lots within the development, for review and approval.*
- *The applicant shall not install fences or gates that would prohibit access to the path or greenway, though safety fencing may be installed along the south property line where a high bank exists and along retaining walls that support the greenway path as required by City Code, for review and approval.*
- *The applicant shall show on final plans the shared use pathway, required mitigation, enhancement, and related facilities such as handrails and guardrails, bollards, signs, overlooks, benches, trash receptacles, and interpretive displays at the time of the housing development construction, for review and approval.*
- *The applicant shall show on final plans the temporary outdoor recreation access route and entry monument, for review and approval.*
- *The applicant shall show trees and shrubs on final plans to be planted between the Greenway Path and the properties adjoining the Subject Property to create and maintain visual privacy, for review and approval.*
- *The applicant shall show required mitigation and enhancement plantings on final plans to be selected and placed in a manner that, when plantings are mature, retains open views of the Tualatin River in several areas along the path as well as the planned overlooks*

Prior to Acceptance of the Dedications of the Greenway Tract and Easements:

- *The applicant shall survey and stake the area of the greenway tract, greenway path easement, and outdoor recreation access route easement, for review and approval.*
- *The applicant shall show all existing structures within the greenway tract on final plans to be removed prior to acceptance, and the site shall be restored pursuant to mitigation and enhancement plantings required in the Clean Water Services service provider letter, for review and approval.*
- *The applicant shall preserve trees within the greenway tract to comply with development restrictions of natural resources within the NRPO, except any specific modifications approved by the City, for review and approval.*

Prior to issuance of Issuance of a Certificate of Occupancy:

- *The applicant shall construct a permanent outdoor recreation access route between Buildings 6 and 7, for review and approval.*
- *The applicant shall construct the shared use pathway, required mitigation, enhancement, and related facilities such as handrails and guardrails, bollards, signs, overlooks, benches, trash receptacles, and interpretive displays at the time of the housing development construction, for review and approval.*
- *The applicant shall construct the temporary outdoor recreation access route and entry monument, for review and approval.*
- *The applicant shall remove all existing structures within the greenway tract prior to acceptance, and the site shall be restored pursuant to mitigation and enhancement plantings required in the Clean Water Services service provider letter, for review and approval.*
- *The applicant shall plant trees and shrubs between the Greenway Path and the properties adjoining the Subject Property to create and maintain visual privacy, for review and approval.*
- *The applicant shall select and place required mitigation and enhancement plantings in a manner that, when plantings are mature, retains open views of the Tualatin River in several areas along the path as well as the planned overlooks, for review and approval.*

DRAFT

PUBLIC FACILITIES REQUIREMENTS

The following are the Public Facilities requirements for AR 14-10, River Ridge Apartments:

PRIOR TO ISSUANCE OF A WATER QUALITY PERMIT:

PFR-1 The applicant shall submit revised plans that show a private stormwater line within private easements over a future tract adjacent to the greenway with consolidated lots for the remainder of the development, for review and approval.

PFR-2 The applicant shall submit an easement over the future tract adjacent to the river prior to dedicating the tract for greenway purposes, for review and approval.

PFR-3 The applicant shall submit final plans that show the private water quality facility, for review and approval.

PFR-4 The applicant shall submit final stormwater treatment calculations, for review and approval.

PFR-5 The applicant shall submit conveyance calculations, for review and approval.

PFR-6 The applicant shall submit final plans that show improvements on SW Pacific Highway flowing into the ODOT stormwater system, for review and approval.

PFR-7 The applicant shall submit a copy of an ODOT Miscellaneous Permit and Drainage Permit.

PFR-8 The applicant shall submit final plans that comply with the Service Provider Letter conditions and Clean Water Services Memorandum comments, for review and approval.

PFR-9 The applicant shall obtain a Stormwater Connection Permit.

PRIOR TO ISSUANCE OF A PUBLIC WORKS PERMIT:

PFR-10 The applicant shall submit a copy of the ODOT Miscellaneous, Drainage, and Approach Permits.

PFR-11 The applicant shall submit final plans that show adjacent to 2191 the addition of a 6-foot wide bike lane, 15-foot wide deceleration lane for the main site access, and meandering the 6-foot wide curb-tight sidewalk plus adjacent to lot 2300 a 6-foot wide bike lane, 6-foot planter strip with street trees, 6-foot sidewalk that meanders to match adjacent existing curb-tight sidewalk, and a 24-foot wide bollarded emergency access, for review and approval.

PFR-12 The applicant shall submit final plans that show one 32-foot wide main site entrance and one 24-foot wide emergency vehicle access with bollards near tax lot 1400 to SW Pacific Highway, for review and approval.

PFR-13 The applicant shall submit final plans that show private shared access easements with lots 1400, 1800, 2190, 2192, 2200, and 2203, for review and approval. The applicant will need to submit copies of the recorded private shared access easements.

PFR-14 The applicant shall submit a copy of the ODOT Approach Permit.

PFR-15 The applicant shall submit revised water plans that show a reduced pressure backflow valve for the domestic water service, for review and approval.

PFR-16 The applicant shall submit final plans that show onsite sanitary sewer laterals connecting to the Clean Water Services capital improvement project, for review and approval.

PFR-17 The applicant shall submit approval from Clean Water Services as to the timing of when they may connect to Clean Water Services sanitary sewer lines.

PFR-18 The applicant shall submit revised plans that show private laterals directly connecting to public sanitary sewer lines without crossing lot lines or consolidate lots with the remainder of the development, for review and approval.

PFR-19 The applicant shall obtain a City of Tualatin erosion control permit.

PRIOR TO ISSUANCE OF A BUILDING PERMIT:

PFR-20 The applicant shall submit plans that comply with fire protection requirements as determined through the Building Division and Tualatin Valley Fire & Rescue (TVF&R).

PFR-21 The applicant shall obtain a Public Works Permit and Water Quality Permit needed for this development.

PFR-22 The applicant shall submit final plans that show balanced cut and fill within the floodway and floodplain, for review and approval.

PFR-23 The applicant shall grant a greenway land dedication of land on the riverbank in the NRPO and areas within the flood plain as a tract as shown on the amended site plan A1.1 (July 23, 2014) in the form of a statutory warranty deed, for review and approval.

PFR-24 The applicant shall grant a 16 foot wide easement to accommodate a 12 foot shared use pathway for the pathway segments not located in the NRPO as identified in amended site plan A1.1 (July 23, 2014) for review and approval.

PFR-25 The applicant shall grant a temporary 8 foot Outdoor Recreation Access Route easement from Highway 99 to connect to the greenway trail on the NE of the subject property as shown on the amended site plan A1.1 (July 23, 2014), for review and approval.

PFR-26 The applicant shall show on final plans a permanent outdoor recreation access route between Buildings 6 and 7, for review and approval.

PFR-27 The applicant shall grant a maintenance access easement on all drive aisles and parking lots within the development, for review and approval.

PFR-28 The applicant shall not install fences or gates that would prohibit access to the path or greenway, though safety fencing may be installed along the south property line where a high bank exists and along retaining walls that support the greenway path as required by City Code, for review and approval.

PFR-29 The applicant shall show on final plans the shared use pathway, required mitigation, enhancement, and related facilities such as handrails and guardrails, bollards, signs, overlooks, benches, trash receptacles, and interpretive displays at the time of the housing development construction, for review and approval.

PFR-30 The applicant shall show on final plans the temporary outdoor recreation access route and entry monument, for review and approval.

PFR-31 The applicant shall show trees and shrubs on final plans to be planted between the Greenway Path and the properties adjoining the Subject Property to create and maintain visual privacy, for review and approval.

PFR-32 The applicant shall show required mitigation and enhancement plantings on final plans to be selected and placed in a manner that, when plantings are mature, retains open views of the Tualatin River in several areas along the path as well as the planned overlooks

<u>PRIOR TO A FRAMING INSPECTION:</u>

PFR-33 The applicant shall submit a 2nd survey.

<u>PRIOR TO ACCEPTANCE OF THE DEDICATIONS OF THE GREENWAY TRACT AND EASEMENTS:</u>

PFR-34 The applicant shall survey and stake the area of the greenway tract, greenway path easement, and outdoor recreation access route easement, for review and approval.

PFR-35 The applicant shall show all existing structures within the greenway tract on final plans to be removed prior to acceptance, and the site shall be restored pursuant to mitigation and enhancement plantings required in the Clean Water Services service provider letter, for review and approval.

PFR-36 The applicant shall preserve trees within the greenway tract to comply with development restrictions of natural resources within the NRPO, except any specific modifications approved by the City, for review and approval.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY:

PFR-37 The applicant shall complete all the public improvements and have them accepted by the City.

PFR-38 The applicant shall submit a 3rd survey.

PFR-39 The applicant shall construct a permanent outdoor recreation access route between Buildings 6 and 7, for review and approval.

PFR-40 The applicant shall construct the shared use pathway, required mitigation, enhancement, and related facilities such as handrails and guardrails, bollards, signs, overlooks, benches, trash receptacles, and interpretive displays at the time of the housing development construction, for review and approval.

PFR-41 The applicant shall construct the temporary outdoor recreation access route and entry monument, for review and approval.

PFR-42 The applicant shall remove all existing structures within the greenway tract prior to acceptance, and the site shall be restored pursuant to mitigation and enhancement plantings required in the Clean Water Services service provider letter, for review and approval.

PFR-43 The applicant shall plant trees and shrubs between the Greenway Path and the properties adjoining the Subject Property to create and maintain visual privacy, for review and approval.

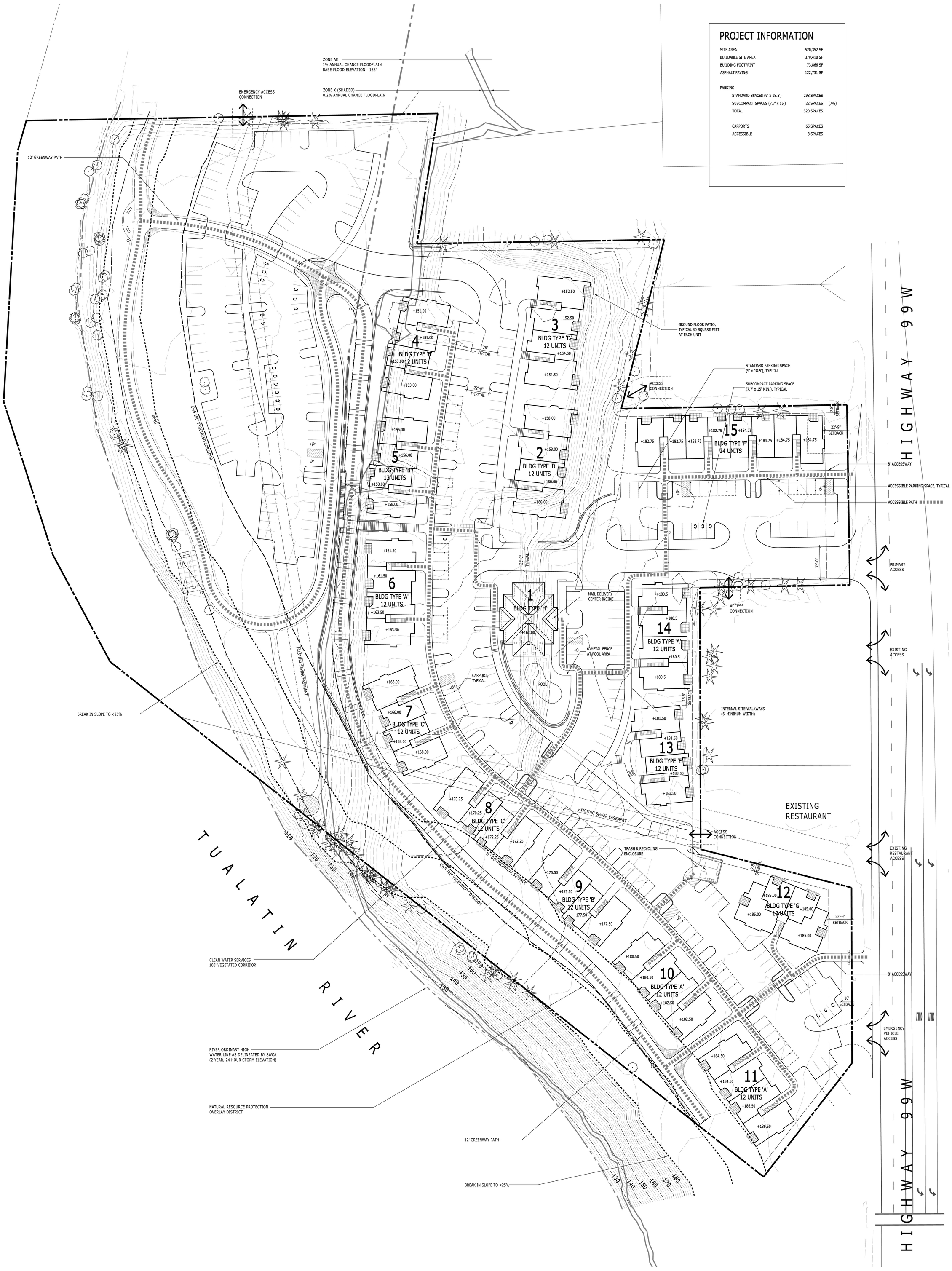
PFR-44 The applicant shall select and place required mitigation and enhancement plantings in a manner that, when plantings are mature, retains open views of the Tualatin River in several areas along the path as well as the planned overlooks, for review and approval.

APPEAL

The Public Facilities Review portion of this decision is final after the expiration of 14 calendar days from the date of this decision, unless a written appeal is received on or before 5:00 p.m., on xx, 2014 by the Engineering Division at 18880 SW Martinazzi Avenue, Tualatin, Oregon 97062. The appeal must be signed by the appellant, contain the information required by TDC 31.078 on the City appeal form, and contain the $135 appeal filing fee. The plans and appeal forms are available at the Tualatin Library and at the City offices. Public Facilities appeals are reviewed by City Council.

Typed on behalf of the City Engineer,

Tony Doran, EIT
Engineering Associate



PROJECT INFORMATION

SITE AREA	520,352 SF	
BUILDABLE SITE AREA	379,410 SF	
BUILDING FOOTPRINT	73,866 SF	
ASPHALT PAVING	122,731 SF	
PARKING		
STANDARD SPACES (9' x 18.5')	298 SPACES	
SUBCOMPACT SPACES (7.7' x 15')	22 SPACES	(7%)
TOTAL	320 SPACES	
CARPORTS	65 SPACES	
ACCESSIBLE	8 SPACES	

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

SITE PLAN **A1.1**

JULY 23, 2014

1750 BLANKENSHIP ROAD • SUITE 400 • WEST LINN • OREGON 97068
#13663

© 2014

Exhibit A - Site Plan

City of Tualatin

www.tualatinoregon.gov

"NECESSARY PARTIES" MARKED BELOW

NOTICE OF APPLICATION SUBMITTAL

☐ ANNEXATION ☐ CONDITIONAL USE PERMIT ☐ PLAN TEXT AMENDMENT
☒ ARCHITECTURAL REVIEW ☐ PLAN MAP AMENDMENT ☐ OTHER:

CASE/FILE: AR-14-10 (Community Development Dept.: Planning Division) .

PROPOSAL	To construct 180-unit apartment complex

PROPERTY	**Name of Application**	RIVER RIDGE APARTMENTS (FORMERLY KNOWN AS ESPEDAL)			
☐ n/a	**Street Address**	17865 and 17985 SW Pacific Hwy			
	Tax Map and Lot No(s).	2S1 15C 2191, 2202, and 2300			
	Planning District	General Commercial (CG)	**Overlays** ☐	**NRPO** ☒	**Flood Plain** ☒
	Previous Applications	ANN&PMA-14-01	**Additional Applications:** VAR-14-01 (Withdrawn)	**CIO** RIVERPARK	

DATES	**Receipt of application**	6/11/2014	**Deemed Complete**	N/A	**CONTACT**	**Name:** Clare Fuchs
	Notice of application submittal			6/30/2014		**Title:** Senior Planner
	Project Status / Development Review meeting			6/26/2014		**E-mail:** cfuchs@ci.tualatin.or.us
	Comments due for staff report			7/15/2014		**Phone:** 503-691-3027
	Public meeting: ☒ **ARB** ☐ **TPC** ☐ **n/a**			TBD		**Notes:**
	City Council (CC) ☒ **n/a**					

City Staff
- ☒ City Manager
- ☒ Building Official
- ☒ Chief of Police
- ☒ City Attorney
- ☒ City Engineer
- ☒ Community Dev. Director
- ☒ Community Services Director
- ☒ Economic Dev. liaison
- ☒ Engineering Associate*
- ☒ Finance Director
- ☒ GIS technician(s)
- ☒ IS Manager
- ☒ Operations Director*
- ☒ Parks and Recreation Coordinator
- ☒ Planning Manager
- ☒ Street/Sewer Supervisor
- ☒ Water Supervisor

Neighboring Cities
- ☐ Durham
- ☒ King City Planning Commission
- ☐ Lake Oswego
- ☐ Rivergrove PC
- ☐ Sherwood Planning Dept.
- ☐ Tigard Community Dev. Dept.
- ☐ Wilsonville Planning Div.

Counties
- ☐ Clackamas County Dept. of Transportation and Dev.
- ☒ Washington County Dept. of Land Use and Transportation (AR's)
- ☐ Washington County LRP (Annexations)

Regional Government
- ☐ Metro

School Districts
- ☐ Lake Oswego School Dist. 7J
- ☐ Sherwood SD 88J
- ☒ Tigard-Tualatin SD 23J (TTSD)
- ☐ West Linn-Wilsonville SD 3J

State Agencies
- ☐ Oregon Dept. of Aviation
- ☐ Oregon Dept. of Land Conservation and Development (DLCD) (via proprietary notice)
- ☒ Oregon Dept. of State Lands: Wetlands Program
- ☒ Oregon Dept. of Transportation (ODOT) Region 1
- ☐ ODOT Maintenance Dist. 2A
- ☐ ODOT Rail Div.

Utilities
- ☒ Republic Services
- ☒ Clean Water Services (CWS)
- ☒ Comcast [cable]*
- ☒ Frontier Communications [phone]
- ☒ Northwest Natural [gas]
- ☒ Portland General Electric (PGE)
- ☒ TriMet
- ☒ Tualatin Valley Fire & Rescue (TVF&R)
- ☒ United States Postal Service (USPS) (Washington; 18850 SW Teton Ave)
- ☐ USPS (Clackamas)
- ☒ Washington County Consolidated Communications Agency (WCCCA)

Additional Parties
- ☒ Tualatin Citizen Involvement Organization (CIO)
- ☐

***Paper Copies**

☒ *1.032: Burden of Proof*

☒ *31.071 Architectural Review Procedure*

☒ *31.074 Architectural Review Application Review Process*

☒ *31.077 Quasi-Judicial Evidentiary Hearing Procedures*

☐ *Metro Code 3.09.045 Annexation Review Criteria*

☐ *32.030 Criteria for Review of Conditional Uses*

☐ *33.020 Conditions for Granting a Variance that is not a Sign or a Wireless Communication Facility*

☐ *33.022 Criteria for Granting a Sign Variance*

☐ *33.024 Criteria for Granting a Minor Variance*

☐ *33.025 Criteria for Granting a Variance*

☐ *34.200 Tree Cutting on Private Property without Architectural Review, Subdivision or Partition Approval, or Tree Removal Permit Prohibited*

☒ *34.210 Application for Architectural Review, Subdivision or Partition Review, or Permit*

☒ *34.230 Criteria (tree removal)*

☐ *35.060 Conditions for Granting Reinstatement of Nonconforming Use*

☐ *36.160 Subdivision Plan Approval*

☐ *36.230 Review Process (partitioning)*

☐ *36.330 Review Process (property line adjustment)*

☐ *37.030 Criteria for Review (IMP)*

☐ *40.030 Conditional Uses Permitted (RL)*

☐ *40.060 Lot Size for Conditional Uses (RL)*

☐ *40.080 Setback Requirements for Conditional Uses (RL)*

☐ *41.030 Conditional Uses Permitted (RML)*

☐ *41.050 Lot Size for Conditional Uses (RML)*

☐ *41.070 Setback Requirements for Conditional Uses (RML)*

☐ *42.030 Conditional Uses Permitted (RMH)*

☐ *42.050 Lot Size for Conditional Uses (RMH)*

☐ *42.070 Setback Requirements for Conditional Uses (RMH)*

☐ *43.030 Conditional Uses Permitted (RH)*

☒ *43.060 Lot Size for Conditional Uses (RH)*

☒ *43.090 Setback Requirements for Conditional Uses (RH)*

☐ *44.030 Conditional Uses Permitted (RH-HR)*

☐ *44.050 Lot Size for Conditional Uses (RH-HR)*

☐ *44.070 Setback Requirements for Conditional Uses (RH-HR)*

☐ *49.030 Conditional Uses (IN)*

☐ *49.040 Lot Size for Permitted and Conditional Uses (IN)*

☐ *49.060 Setback Requirements for Conditional Uses (IN)*

☐ *50.020 Permitted Uses (CO)*

☐ *50.030 Central Urban Renewal Plan – Additional Permitted Uses and Conditional Uses (CO)*

☐ *50.040 Conditional Uses (CO)*

☐ *52.030 Conditional Uses (CR)*

☐ *53.050 Conditional Uses (CC)*

☐ *53.055 Central Urban Renewal Area – Conditional Uses (CC)*

☐ *54.030 Conditional Uses (CG)*

☐ *56.030 Conditional Uses (MC)*

☐ *56.045 Lot Size for Conditional Uses (MC)*

☐ *57.030 Conditional Uses (MUCOD)*

☐ *60.040 Conditional Uses (ML)*

☐ *60.041 Restrictions on Conditional Uses (ML)*

☐ *61.030 Conditional Uses (MG)*

☐ *61.031 Restrictions on Conditional Uses (MG)*

☐ *62.030 Conditional Uses (MP)*

☐ *62.031 Restrictions on Conditional Uses (MP)*

☐ *64.030 Conditional Uses (MBP)*

☐ *64.050 Lot Size for Permitted and Conditional Uses (MBP)*

☐ *64.065 Setback Requirements for Conditional Uses (MBP)*

☐ *68.030 Criteria for Designation of a Landmark*

☒ *68.060 Demolition Criteria*

☐ *68.070 Relocation Criteria*

☒ *68.100 Alteration and New Construction Criteria*

☒ *68.110 Alteration and New Construction Approval Process*

☒ *73.130 Standards*

☒ *73.160 Standards*

☒ *73.190 Standards – Single-Family and Multi-Family Uses*

☒ *73.220 Standards*

☒ *73.227 Standards*

☒ *73.230 Landscaping Standards*

☒ *73.300 Landscape Standards – Multi-Family Uses*

☐ *73.310 Landscape Standards – Commercial, Industrial, Public and Semi-Public Uses*

☒ *73.320 Off-Street Parking Lot Landscaping Standards*

☒ *73.470 Standards*

☒ *73.500 Standards*

River Ridge Apartments
Architectural Review

Date:	June 11, 2014
Submitted to:	City of Tualatin Community Development Department 18880 SW Martinazzi Avenue Tualatin, OR 97062
Property Owners:	Donna J. Degele 16182 Bimini Lane Huntington Beach, CA 92649 Kenneth R. Espedal, Joyce L. Poppert 11515 SW Hazelbrook Road Tualatin, OR 97062
Prepared For:	Mountain West Investment Corporation 201 Ferry Street SE, # 400 Salem, OR 97301
Prepared by:	AKS Engineering & Forestry 12965 SW Herman Road, Suite 100 Tualatin, OR 97062

AKS Engineering & Forestry
12965 SW Herman Road, Suite 100
Tualatin, OR 97062
P: (503) 400-6028
F: (503) 400-7722
www.aks-eng.com

River Ridge Apartments
Architectural Review

Table of Contents

Application Packet:

- Architectural Review Application Form
- Architectural Review Checklist
- CWS Service Provider Letter
- CWS Upper Tualatin Interceptor Letter
- Legal Description
- Architectural Review Narrative
- Letter from Franchise Hauler
- Vicinity Map
- Washington County Tax Assessors Maps
- List of Property Owners (Mailing Labels)
- Neighborhood / Developer Meeting Information
- Arborist Tree Assessment

Under Separate Cover:

- Plan Set (9 Copies)
  - Preliminary Site Plan (18 x 24)
  - Preliminary Elevations (36 x 36)
  - Preliminary Floor Plan (36 x 36)
  - Preliminary Landscape Plan (36 x 36)
- Civil Plan Set (9 Copies)
  - Preliminary River ridge Apartments Architectural Review Set (24 x 36)
  - Preliminary Hwy 99W Frontage Improvements (24 x 36)
  - Preliminary CWS Sewer Realignment (24 x 36)
- Reduced Plans - 8 ½" X 11"
- Reduced Plans – 11" x 17"
- Traffic impact study (5 Copies)
- Preliminary Stormwater Report
- Natural Resource Assessment
- City of Tualatin Architectural Review Application Fee
- Certification of Sign Posting (Per conversation with City Staff, affidavit of sign posting will be provided upon receipt of case file number from City Staff)
- Digital (pdf) Copy of Application (1 Compact Disk)

Architectural Review Application Form

APPLICATION FOR ARCHITECTURAL REVIEW

Direct Communication to	
Name: Michael Poissant/AKS	Title: Principal
Address: 528 Cottage St. SE Ste. 160 Salem, OR 97301	E-mail address: michaelp@aks-eng.com
Phone Number: 503-400-6028	Fax Number: 503-400-7722
Applicant's Name: Mountain West Investment Corp.	E-mail address: brian@mwinv.com
Address: 201 Ferry St SE, #400 Salem, OR 97301	
Phone Number: 503-584-4592	Fax Number: 503-581-7061
Applicant's Signature:	Date: 6·5·14
Property Owner's Name: Donna J. Degele	Phone Number: 503-581-4654
Address: 16182 Bimini Lane Huntington Beach, CA 92649	
Property Owner's Signature:	Date: June 3, 2014
(NOTE: Letter of authorization is required if not signed by owner.)	
Architect Hill Architects	E-mail address: lloyd@hillarchitects.com
Address: 1914 Willamette Falls Dr. Suite 280 West Linn, OR 97068	
Phone Number: 503-305-8033	Fax Number:
Landscape Architect: AKS Engineering and Forestry	E-mail address:
Address: 9600 NE 126th Ave. Suite 2520 Vancouver, WA 98682	
Phone Number: 360-882-0419	Fax Number: 360-882-0426
Engineer: AKS, Michael Poissant	E-mail address: michaelp@aks-eng.com
Address: 528 Cottage St. NE Salem, OR 97301	
Phone Number: 503-400-6028	Fax Number: 503-400-7722
Project Title: River Ridge Apartments	
Project Address: 17865 and 17985 SW Pacific HWY, Tualatin, OR 97062	
Brief Project Description: Redevelopment of existing vacant property and construction of 180 apartment units and club house.	
Proposed Use: High Density Residential	

VALUE OF IMPROVEMENTS: $ 14,370,000

AS THE PERSON RESPONSIBLE FOR THIS APPLICATION, I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION ABOVE, ON THE FACT SHEET AND THE SURROUNDING PROPERTY OWNER MAILING LIST IS CORRECT. I AGREE TO COMPLY WITH ALL APPLICABLE CITY AND COUNTY ORDINANCES AND STATE LAWS REGULATING BUILDING CONSTRUCTION AND LAND USE.

APPLICANT'S SIGNATURE _____ DATE 6-5-14

Case No. _____ Date Received _____ Application Complete as of _____
Received by _____ Receipt No. _____ ARB hearing date (if applicable) _____
Fee: complete review ($60- $2635) _____ Posting verification _____
9 copies of drawings (folded) _____ 1 reproducible 8½ x 11" site, grading, LS, Public Facilities plan _____
1 reproducible 8½" X 11" vicinity map __ Neighborhood / Developer meeting materials _____

APPLICATION FOR ARCHITECTURAL REVIEW

Direct Communication to	
Name: Michael Poissant/AKS	Title: Principal
Address: 528 Cottage St. SE Ste. 160 Salem, OR 97301	E-mail address: michaelp@aks-eng.com
Phone Number: 503-400-6028	Fax Number: 503-400-7722
Applicant's Name: Mountain West Investment Corp.	E-mail address: brian@mwinv.com
Address: 201 Ferry St SE, #400 Salem, OR 97301	
Phone Number: 503-584-4592	Fax Number: 503-581-7061
Applicant's Signature:	Date:
Property Owner's Name: Joyce L. Poppert	Phone Number:
Address: 11515 SW Hazelbrook Rd Tualatin, OR 97062	
Property Owner's Signature: Joyce L Poppert	Date: 6-4-14
(NOTE: Letter of authorization is required if not signed by owner.)	
Architect Hill Architects	E-mail address: lloyd@hillarchitects.com
Address: 1914 Willamette Falls Dr. Suite 280 West Linn, OR 97068	
Phone Number: 503-305-8033	Fax Number:
Landscape Architect: AKS Engineering and Forestry	E-mail address:
Address: 9600 NE 126th Ave. Suite 2520 Vancouver, WA 98682	
Phone Number: 360-882-0419	Fax Number: 360-882-0426
Engineer: AKS, Michael Poissant	E-mail address: michaelp@aks-eng.com
Address: 528 Cottage St. NE Salem, OR 97301	
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Phone Number: 503-584-4592	Fax Number: 503-581-7061
Applicant's Signature:	Date:
Property Owner's Name: Kenneth Espedal	Phone Number:
Address: 11515 SW Hazelbrook Rd Tualatin, OR 97062	
Property Owner's Signature: Kenneth R Espedal	Date: 6-4-14
(NOTE: Letter of authorization is required if not signed by owner.)	
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Engineer: AKS, Michael Poissant	E-mail address: michaelp@aks-eng.com
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9 copies of drawings (folded) _____ 1 reproducible 8½ x 11" site, grading, LS, Public Facilities plan _____
1 reproducible 8½" X 11" vicinity map __ Neighborhood / Developer meeting materials _____

GENERAL INFORMATION	
Site Address:	17865 and 17985 SW Pacific HWY Tualatin, OR 97062
Assessor's Map and Tax Lot #:	2S 1 15C; 2191,2202,2300
Planning District:	RH
Parcel Size:	12 Acres +/-
Property Owner:	Kenneth R. Espedal, Joyce L. Poppert, Donna J. Degele
Applicant:	Mountain West Investment Corporation
Proposed Use:	Residential High Density

ARCHITECTURAL REVIEW DETAILS	
☒ Residential ☐ Commercial ☐ Industrial	
Number of parking spaces:	322
Square footage of building(s):	73,866
Square footage of landscaping:	182,813+/-
Square footage of paving:	122,731+/-
Proposed density (for residential):	180

For City Personnel to complete:
Type of case and file number:
Staff contact person:
Proposal:

Decision criteria:

CITY OF TUALATIN FACT SHEET

General

Proposed use: Residential High Density	
Site area: 12 +/- acres	Building footprint: 73,866 sq. ft.
Development area: 8.7 acres 379,410 Sq. ft.	Paved area: 122,731 sq. ft. Development area coverage: 52 %

Parking

Spaces required (see TDC 73.400) *(example: warehouse @ 0.3/1000 GFA)* _____ @ ____/1000 GFA = ____ _____ @ ____/1000 GFA = ____ _____ @ ____/1000 GFA = ____ Total parking required: 259.5 spaces Handicapped accessible = 6 Van pool = Compact = *(max. 35% allowed)* = 16 Loading berths =	Spaces provided: Total parking provided: 322 spaces Standard = 306 Handicapped accessible = 9 Van pool = Compact = 16 Loading berths =

Bicycles

Covered spaces required:	Covered spaces provided: 58

Landscaping All areas pursuant to TDC 73.300 shall be landscaped

Landscaping required: ____% of dvpt. area Square feet	Landscaping provided: 48 % of dvpt. area 193,597+/- Square feet
Landscaped parking island area required: 6.7 %	Landscaped parking island area provided: 13 %

Trash and recycling facility

Minimum standard method: square feet
Other method: Franchise Hauler Method - 625 +/- square feet

For commercial/industrial projects only

Total building area: sq. ft. Main floor: N/A sq. ft. Mezzanine: sq. ft.	2nd floor: sq. ft. 3rd floor: N/A sq. ft. 4th floor: sq. ft.

For residential projects only

Number of buildings: 15	Total sq. ft. of buildings: 73,866 sq. ft.
Building stories: 3	

Architectural Review Checklist

City of Tualatin

www.ci.tualatin.or.us

ARCHITECTURAL REVIEW CHECKLIST
FOR
MULTI-FAMILY DEVELOPMENT

The following information shall be submitted with each Architectural Review application. Incomplete applications will not be processed.

✓A. COMPLETE APPLICATION FORM AND FEE

✓B. SIGNED AFFIDAVIT OF POSTING To be provided upon receipt of case file number from City Staff.

✓C. 1 REPRODUCIBLE 8½ X 11" COPY OF SITE, GRADING, LANDSCAPE & PUBLIC FACILITY PLANS

✓D. 8½ X 11" VICINITY MAP INDICATING FRONTAGE STREET(S) AND CROSS STREET(S) Within a one-half mile radius.

✓E. THREE (3) COPIES OF WETLAND DELINEATION REPORT (if applicable)

✓F. A CLEAN WATER SERVICES (CWS) SERVICE PROVIDER LETTER OR PRE-SCREEN FOR THE PROPOSED DEVELOPMENT

✓G. ONE COPY OF A LEGAL DESCRIPTION AS IT APPEARS ON THE DEED

✓H. SITE PLAN (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

1. North arrow and scale of drawing (Scale 1":10', 1":20': 1":30', for larger developments 1":40' or 1":50').
2. Site Data to include Planning District designation and planned density, square footage of site, square footage of development area, square footage of landscaping, square footage of parking lot landscaping, square footage of asphalt, number of parking spaces (standard, and subcompact and disability), square footage of buildings (gross and perimeter), number of units, dwelling units per acre (density), land area per unit and lot coverage, calculations showing square footage of private outdoor areas per unit, square footage of various private entry areas and square footage of children's play areas. Identify shifts in density and how undeveloped areas will not be developed. Information must contain existing and proposed square footage of parking spaces.
3. Correct lot area and lot line dimensions of the site. Correct location of Natural Resource Protection Overlay District, including greenways, wetland natural areas and open space natural areas, and 25’ vegetated corridors adjacent to a sensitive area. Also show top of bank and centerline for rivers and creeks. Indicate if wetlands or greenways are proposed to be dedicated.
4. Location of buildings, dimensions and square footage of existing and proposed development, including setback distances to property lines and setback distances between buildings. Include location of bicycle parking and covered bicycle parking.
5. Identify adjacent uses and building locations.
6. Location of accessways, walkways and on-site bikeways.
7. Fronting street(s), right-of-way lines, driveways, sidewalks, curbs, paths, railroad right-of-way, bicycle paths, pedestrian paths, transit stop locations, and easements (include dimensions).

8. Parking and loading areas (dimensions of spaces). Show entrances, exits, direction of traffic flow, maneuvering areas and setbacks. Indicate location of subcompact spaces, van pool and car pool parking and type of curbing. Identify disability stall locations and stall dimensions.

9. Location of fences, walls, trash enclosures, recycling areas, electric transformer pads, rooftop mechanical equipment, exterior light fixtures, and mail delivery centers.

10. Location of children's play areas and private outdoor areas.

11. Future development areas and outdoor storage areas, if applicable.

✓ I. GRADING PLAN (Please submit nine [9] 11"x17" copies and nine [9] plan size folded sets)

1. North arrow and scale of drawing (scale 1":10', 1":20', 1":30'). Included as part of the civil Architectural Review Plan Set

2. Correct lot area and lot line dimensions of the site. Correct location of Natural Resource Protection Overlay District, including greenways, wetland natural areas and open space natural areas, and 25' vegetated corridors adjacent to a sensitive area. Also show top of bank and centerline for rivers and creeks. Indicate if wetlands or greenways are proposed to be dedicated.

3. Show site contour lines and elevations (existing and proposed, referenced from mean sea level).

4. Location, size and species of all existing trees having a trunk diameter of 8" or greater measured at a point 4' above the ground. Indicate trees to be removed or retained.

5. Place a note on the plan stating that existing trees to be retained shall be fenced around the dripline with chainlink or other sturdy fencing during construction. Indicate topsoil replacement in all landscape areas. Tree protective fencing placement is outlined in the Tree Preservation

6. Location, size and grading plan of water quality facility, if applicable.

✓ J. TREE PRESERVATION PLAN (Please submit nine [9] 11"x17" copies and nine [9] plan size folded sets)
Included as part of the civil Architectural Review Plan Set

1. Tree Preservation Site Plan (drawn to scale 1:10, 1:20, or 1:30), including a north arrow, property lines, existing and proposed topographical contour lines, structures, impervious surfaces, wells, septic systems, stormwater retention/detention facilities, utility and access locations/easements, vision clearance areas, and all trees having a trunk diameter of 8" or greater as measured at a point 4' above the ground. All trees proposed for removal and all trees proposed for preservation shall be indicated on the site plan as such by identifying symbols. For each tree illustrated, include information on size, species, and tag i.d. number.

2. Tree Assessment Report, prepared by a qualified arborist, including the following information: an analysis as to whether trees proposed for preservation can in fact be preserved in light of the development proposed, are healthy specimens, and do not pose an imminent hazard to persons or property if preserved; an analysis as to whether any trees proposed for removal could be reasonably preserved in light of the development proposed and health of the tree; a statement addressing the tree removal approval criteria set forth in TDC 34.230; and arborist's signature and contact information. The Tree Assessment Report shall have been prepared no more than one calendar year preceding the date the Architectural Review application is deemed complete by the City.

3. Tagging. All trees on-site shall be physically identified and numbered in the field with an arborist-approved tagging system. The tag i.d. numbers shall correspond with the tag i.d. numbers illustrated on the Tree Preservation Site Plan.

4. Where Clean Water Services (CWS) has approved delineation of a "sensitive area" or "vegetated corridor" on the subject property, and CWS has required dedication of an easement that prohibits encroachment into the delineated area, and the CWS-required easement boundary is clearly

illustrated and identified on the site plan, then all trees located within the CWS-required easement need not be individually identified on the Tree Preservation Site Plan, need not be addressed in the Tree Assessment Report, and need not be tagged.

✓ K. ELEVATIONS (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

1. Elevations of proposed structures drawn at scale of 1/16":1', 1/8":1', 1/4":1' (buildings, carports, garages, covered bicycle parking and mixed solid waste and source separated recyclable storage areas).
2. Elevations of exterior light fixtures, electrical transformer pads, and rooftop mechanical equipment.
3. An 8½ x 11" materials board sample and specifications as to materials and colors to be used in the development, including walls, roof, windows, doors, garages and trim. An accurately colored elevation with a detailed description of materials and colors to be used may be substituted for a materials board.
4. Cut sheet of exterior lighting units.

✓ L. FLOOR PLAN (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

1. Plans drawn at scale of 1/16":1', 1/8":1' or 1/4":1'.

✓ M. LANDSCAPE PLAN (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

1. North arrow and scale of drawing (scale of 1":10', 1":20', 1":30').
2. Correct lot area and lot line dimensions of the site. Correct location of Natural Resource Protection Overlay District, including greenways, wetland natural areas and open space natural areas, and 25’ vegetated corridors adjacent to a sensitive area. Also show top of bank and centerline for rivers and creeks. Indicate if wetlands or greenways are proposed to be dedicated.
3. Specific locations of all proposed and existing landscaping, including greenway landscaping (if applicable). Identify location of sensitive area buffer landscaping.
4. Location, size and species of all existing trees having a trunk diameter of 8" or greater as measured at a point 4' above the ground. Designate existing trees to be removed and retained.
5. Take-off sheet indicating square footage of landscaping. Indicate square footage of landscape islands in parking lot.
6. Plant legend that includes:
   a. Total percentage and square footage of landscaped areas.
   b. Square footage of parking lot landscaping.
   c. Common and botanical names of plants.
   d. Quantity and spacing of plants.
   e. Size of plants (caliper, height or container size).
   f. Landscaping materials to be used (bark dust, river rock, etc.).
   g. Notation on type of irrigation system (automatic underground or drip).
   h. Replacement of topsoil.
7. Location of street trees.

✓ N. PUBLIC FACILITIES PLAN (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

Criteria for this has been included as part of the civil Architectural Review Plan Set

1. North arrow and scale of drawing (scale of 1":10', 1":20', 1":30').
2. Correct lot area and lot line dimensions of the site. Correct location of Natural Resource Protection Overlay District, including greenways, wetland natural areas and open space natural areas, and 25’ vegetated corridors adjacent to a sensitive area. Also show top of bank and centerline for rivers and creeks. Indicate if wetlands or greenways are proposed to be dedicated.

3. Street - existing and proposed. Show centerline, right-of way lines, dimensions, sidewalks, curbs, bike lanes, access ways, walkways landscape strips, signalized intersections and nearby transit stops. Included OR99W Frontage Improvements Plan Set

4. Water - show existing and proposed water lines, fire hydrants, meters, line sizes, easements, public or private lines. Included as part of the civil Architectural Review Plan Set

5. Sanitary Sewer - existing and proposed. Sewer lines laterals, manholes and cleanouts, line sizes, easements, public or private line. Included as part of the civil Architectural Review and CWS Sewer Realignment Plan Sets

6. Storm Sewer - existing and proposed. Storm lines, catch basins, manholes, line sizes, easement, public or private line. Included as part of the civil Architectural Review Plan Set

7. Flood Plain - If applicable, show flood plain and/or 100-year floodway boundaries.

8. Location, size and design details of water quality facility, if applicable. Also submit complete calculations supporting the water quality facility design.

9. Traffic Study Information - as required by City Engineer. (Please submit 5 copies)

10. Identify greenway areas, bicycle paths and pedestrian paths.

11. Location of all signs in the public right-of-way adjacent to the parcel.

✓O. MIXED SOLID WASTE AND SOURCE SEPARATED RECYCLABLES PLAN (Please submit 2 copies)

1. A letter from the franchise solid waste and recycling hauler reviewing the proposed solid waste and recyclables method and facility.

✓P. ASSESSOR'S MAPS AND LIST OF PROPERTY OWNERS (Please submit 1 copy)

1. Include a copy of the Washington and/or Clackamas County Assessor's Map(s) showing the subject property and properties within 1,000 feet of the subject property. If the 1,000-foot area includes lots within a platted residential subdivision the notice area shall extend to include the entire subdivision of which the lots are part and the applicant shall identify these subdivisions for staff as part of the mailing notification list. If the residential subdivision is one of two or more individually platted phases sharing a single subdivision name the notice area need not include the additional phases. (One set of maps is sufficient.)

2. Address List. Provide pre-gummed address labels listing the correct names and addresses of all owners of the subject property and of real property within 1,000' of the subject property. If the 1,000-foot area (Ordinance No. 1304-10 page 59 of 61) includes lots within a platted residential subdivision the notice area shall extend to include the entire subdivision of which the lots are part and the applicant shall identify these subdivisions for staff as part of the mailing notification list. If the residential subdivision is one of two or more individually platted phases sharing a single subdivision name the notice area need not include the additional phases. The current computer roll shall be used. The Tax Lot number and Assessor's Map number must be included with each name and address. If there are more than 25 properties, you may provide pre-gummed address labels that are available for purchase at Washington and Clackamas Counties. Preparation of the list of property owners shall be the applicant's responsibility and shall be prepared by one of the following: a land title company, a land use planning consultant authorized by the State of Oregon to conduct business in the State, registered architect, landscape architect, engineer, surveyor, or attorney. The list of property owners shall be updated not less than every 90 days by the applicant. **All parties listed on the application form shall also be included on the mailing list.**

✓Q. NEIGHBORHOOD/DEVELOPER MEETING REPORT The following materials related to the Neighborhood/Developer Meeting (as required in TDC 31.063) must be submitted:

1. Mailing list for the Neighborhood/Developer Meeting notice.

2. Copy of the Neighborhood/Developer Meeting notice.
3. An affidavit of the mailing and posting.
4. Original sign-in sheet of the participants.
5. Meeting notes identifying persons who attended the meeting and the major points that were discussed and expressed.

✓R. CENTRAL DESIGN DISTRICT For development proposals in the Central Design District, narrative statements considering each of the Design Guidelines in TDC 73.610 must be submitted. N/A

✓S. SIGN SUBMITTAL A separate application must be submitted for signs. N/A

✓T. A COMPLETED CITY FACT SHEET

✓U. ADDITIONAL INFORMATION Please submit an **Electronic Digital CD** (Adobe Acrobat Reader (pdf), or Microsoft Word and Excel are the preferable file types) of the entire Architectural Review packet and supporting documentation, including drawings to the City of Tualatin Community Development Department - Planning Division.

Additional information may be required in order to complete the review process.

ARCHITECTURAL REVIEW IN TUALATIN

The City of Tualatin welcomes new development. In December of 1984 the City Council adopted a goal to "Become one of the premier activity centers of the metropolitan area, achieving commercial and industrial growth within the framework of high environmental standards and excellence in urban design." The purpose of Architectural Review is to promote excellence in urban design.

What is Architectural Review

The Architectural Review (AR) process has two components consisting of Architectural Features and Public Facilities. Architectural features are reviewed by the Community Development Department - Planning Division and include all on site improvements such as building design and height, lighting, landscaping, parking, bicycle parking, loading facilities, pedestrian circulation, lot size and screening of service areas. The Public Facilities portion of the AR is reviewed by the Engineering Department and includes fire and life safety, transportation, sewer, water, storm drainage, water quality, erosion control, greenway and riverbank protection, floodplain, wetland protection and access management. These two departments coordinate with other City departments to ensure compliance with all applicable development standards.

When Architectural Review is Required

Architectural Review is required for all new buildings (except single family homes), major exterior remodeling, mobile home parks, condominiums, awnings, small lot subdivisions, and for site improvements such as paving and landscaping. AR may also be required for a change in use, for example one commercial activity to another or from one industrial activity to another industrial activity.

Who Reviews Plans

Most projects receive staff review and a staff decision, which is final unless it is appealed to the Architectural Review Board (ARB) for Architectural Features or to the City Council for Public Facilities.

The following sizes of projects go directly to the ARB for a review and decision for Architectural Features:

Commercial Buildings	50,000 square feet and larger
Industrial Buildings	150,000 square feet and larger
Multifamily Housing	100 units and above (or any number of units abutting a single family district)
Other Projects	as requested by the Community Development Director

Review Process

When an application is submitted, the Community Development and Engineering staff will review it for completeness. Once it is deemed complete, notice will be sent to surrounding property owners, potentially affected government agencies and neighborhood associations. These entities have 14 calendar days to review the application and submit comments on it. Once this 14-day period ends, the staff will write a draft decision letter and schedule a Mid-AR meeting with you to discuss conditions of approval. After this meeting, a letter of decision shall be mailed to the applicant, property owner, design team, and all persons who commented. There is a fourteen-day period in which someone may file a Request for Review of the decision. The City of Tualatin staff aim to have this entire process complete within eight weeks. This will vary depending on complexity of your project.

Projects that go directly to the ARB have a public hearing scheduled within 30 days of deeming the application complete. ARB hearings are publicly noticed and held on Wednesday evenings at 7:00 p.m. If a Staff Decision is appealed and goes before either the ARB or City Council, more review time will be added. Always let our staff know your anticipated construction schedule, and we will do our best to accommodate your needs.

Who Receives AR Decisions

Staff Decisions are mailed to the applicant and project team, property owners and those persons who commented on the application during the review stage. Only those persons who commented with sufficient detail and clarity and are adversely affected by the decision may request a review of the decision. If a project is appealed, it will either go to the ARB for Architectural Features, or to the City Council for Public Facilities. An ARB decision can also be appealed to the City Council.

Getting Started

For new development on a vacant site, you may request a Site Investigation Report (SIR) from the Economic Development Department. The SIR is a tailor-made report that outlines the City requirements and anticipated application fees for your project. The next step is to schedule a required **Pre-Application meeting** with the Community Development Department - Planning Division (Will Harper, AICP, Senior Planner at 503-691-3027 or wharper@ci.tualatin.or.us). The Pre-Application meeting should occur as the earliest step of your project. The application to request a Pre-Application meeting is available on the city website and the fee is $195.00. Our staff will discuss the AR process, Code standards which apply to the site, and development expectations. Once the pre-application meeting is held, the applicant shall hold a **Neighborhood/Developer meeting** pursuant to TDC 31.063.

Plan Submittal

After the Pre-Application Conference, submit the required sets of plans and other required application information to the Community Development Department - Planning Division for Architectural Review. We recommend you call ahead when you are submitting your application to ensure a staff person is available. The application packet has a checklist describing in detail what is to be shown on each plan and what needs to be submitted. It is very important the checklist be followed carefully, because the Community Development Department will not accept an incomplete application. Plan on staying in close contact with the Community Development Department - Planning Division throughout the review process. If there are substantial changes made by the applicant after submittal of the application, the changes may be significant enough to warrant starting a new application and review.

Posting AR Sign

On the same day plans are submitted for AR, you must post a sign on the subject property announcing your development plans. The application packet describes sign posting criteria. The sign is supplied by the City.

Review Criteria

The objectives and standards of the Tualatin Development Code (TDC) and other applicable City ordinances are applied during Architectural Review. The Architectural Features portion of the review utilizes Chapter 73, Community Design Standards. This chapter contains design standards, which include site planning and structure design, landscaping, parking lot landscaping, and off-street parking and loading. Each of these sections has objectives (guidelines), which are to be considered when developing a project and specific standards (requirements) which implement the objectives. The Public Facilities review utilizes access provisions in Chapter 75 and sections of the TDC concerning transportation, water, sewer, storm drainage, and ordinances for water quality and erosion control. Each of these elements is discussed in detail in the Architectural Review Findings and Decision. The Staff Decision based on the review criteria and analysis will be one of the following:

(a) approval;
(b) approval with conditions; or
(c) denial.

If the Architectural Features decision is appealed to the ARB, a hearing must be scheduled no sooner than seven calendar days and no more than 21 calendar days from the end of the appeal period

If the Public Facilities decision is appealed to the City Council, a hearing will be held at the next available regular Council meeting, generally within 6 - 8 weeks from the end of the appeal period.

After Architectural Review

Architectural Review (Architectural Features and Public Facilities), public works permit review and Building Permit Plan Check Review must occur before issuance of a Building Permit for a project. Any required changes to the AR plans to meet conditions of approval should be turned in to the Community Development Department - Planning Division as soon as possible after the Architectural Review Decision is final. You may submit plans to the Building Division after you review the draft decision letter. The Architectural Review Decision is valid for one year with the possibility of one six-month extension.

Obtaining a Building Permit and Occupancy

After the Building Division completes Plan Check Review, they will circulate a sign-off form to all applicable departments. Each department must sign off before a Building Permit is issued. Before the Community Development and Engineering Departments sign the form, all conditions of approval of the Architectural Features and Public Facilities Decisions must be met. Prior to issuing a Certificate of Occupancy, the Building Division circulates a second sign-off sheet. Before the Planning Division signs off, a site inspection is conducted to determine the project complies with approved plans for the building exterior, parking, landscaping, etc. It is **very important** to clear any Architectural Features changes to the development plans during construction with the Community Development Department - Planning Division. All construction **must** occur in accordance with the approved AR Decision.

A Special Word About Trees

The City Council has adopted tree protection and landscape standards which require mature trees be retained in developments whenever possible. If there are mature trees on your property, they cannot be cut nor can site grading begin before permission has been given by the Community Development Department. To do so may result in expensive fines. We value trees in Tualatin and include retained trees as meeting part of the landscape requirements.

Fee Schedule

Fees are based on the value of the project to be reviewed. The project value ranges and the associated fees are:

NONEXPEDITED PROCESS

As of September, 2012

Estimated Project Value	Fee
$5,000.00 and under	$115.00
5,001.00 - $24,999.00	$550.00
25,000.00 - $ 99,999.00	$990.00
100,000.00 - $499,999.99	$1,645.00
500,000.00 and greater	$2,410.00

EXPEDITED PROCESS (Residential Development Only)

Estimated Project Value	Fee
$5,000.00 and under	$115.00
5,001.00 - $24,999.00	$1,100.00
25,000.00 - $ 99,999.00	$2,185.00
$499,999.99 – 499,999.99	$3,290.00
500,000.00 and greater	$5,040.00

Our staff is eager to assist you through the AR process. Please call the Community Development Department - Planning Division at 503-691-3026 if you have any questions on the Architectural Features review or the Engineering Department at 503-692-2000 for questions on Public Facilities review.

WE WELCOME YOUR BUSINESS IN TUALATIN.

CWS Service Provider Letter

Clean Water Services
Our commitment is clear.

Service Provider Letter

CWS File Number
13-002601

This form and the attached conditions will serve as your Service Provider Letter in accordance with Clean Water Services Design and Construction Standards (R&O 07-20).

Jurisdiction: Tualatin

Review Type: Allowed Use

Site Address / Location: 17865 SW Pacific HWY, Tualatin, OR 97062

SPL Issue Date: March 28, 2014

SPL Expiration Date: March 27, 2016

Applicant Information:

Name: BRIAN MOORE
Company: MOUNTAIN WEST INVESTMENT CORP
Address: 201 FERRY ST. #400, SALEM, OR 97301
Phone/Fax:
E-mail:

Owner Information:

Name: KENNETH ESPEDAL, DONNA DEGELE, AND JOYCE POPPERTY
Company:
Address: 11515 SW HAZELBROOK ROAD, TUALATIN, OR 97062
Phone/Fax:
E-mail:

Tax lot ID

2S115C002202,
2S115C002300

Development Activity

Multi-Family Residential Development; Tualatin Apartments

TRAIL SHOWN ON PLANS IS NOT APPROVED

Pre-Development Site Conditions:

Sensitive Area Present: [X] On-Site [X] Off-Site
Vegetated Corridor Width: 50
Vegetated Corridor Condition: Marginal/ Degraded

Post Development Site Conditions:

Sensitive Area Present: [X] On-Site [X] Off-Site
Vegetated Corridor Width: 50

Enhancement of Remaining Vegetated Corridor Required: [X]

Square Footage to be enhanced: 37,981

Encroachments into Pre-Development Vegetated Corridor:

Type and location of Encroachment:	Square Footage:
Demo and Stormwater pipe outfall (Temporary Encroachment; Mitigation/ Planting-in-place)	5,367

Mitigation Requirements:

Type/Location	Sq. Ft./Ratio/Cost
None	0

[X] Conditions Attached [X] Development Figures Attached (2) [ ] Planting Plan Attached [X] Geotech Report Required

This Service Provider Letter does NOT eliminate the need to evaluate and protect water quality sensitive areas if they are subsequently discovered on your property.

In order to comply with Clean Water Services water quality protection requirements the project must comply with the following conditions:

1. No structures, development, construction activities, gardens, lawns, application of chemicals, uncontained areas of hazardous materials as defined by Oregon Department of Environmental Quality, pet wastes, dumping of materials of any kind, or other activities shall be permitted within the sensitive area or Vegetated Corridor which may negatively impact water quality, except those allowed in R&O 07-20, Chapter 3.
2. Prior to any site clearing, grading or construction the Vegetated Corridor and water quality sensitive areas shall be surveyed, staked, and temporarily fenced per approved plan. During construction the Vegetated Corridor shall remain fenced and undisturbed except as allowed by R&O 07-20, Section 3.06.1 and per approved plans.
3. **Prior to any activity within the sensitive area, the applicant shall gain authorization for the project from the Oregon Department of State Lands (DSL) and US Army Corps of Engineers (USACE). The applicant shall provide Clean Water Services or its designee (appropriate city) with copies of all DSL and USACE project authorization permits.**
4. An approved Oregon Department of Forestry Notification is required for one or more trees harvested for sale, trade, or barter, on any non-federal lands within the State of Oregon.
5. **Appropriate Best Management Practices (BMP's) for Erosion Control, in accordance with Clean Water Services' Erosion Prevention and Sediment Control Planning and Design Manual, shall be used prior to, during, and following earth disturbing activities.**
6. Prior to construction, a Stormwater Connection Permit from Clean Water Services or its designee is required pursuant to Ordinance 27, Section 4.B.
7. Activities located within the 100-year floodplain shall comply with R&O 07-20, Section 5.10.
8. Removal of native, woody vegetation shall be limited to the greatest extent practicable.
9. **Should final development plans differ significantly from those submitted for review by Clean Water Services, the applicant shall provide updated drawings, and if necessary, obtain a revised Service Provider Letter.**

SPECIAL CONDITIONS

10. The Vegetated Corridor width for sensitive areas within the project site shall be a minimum of 100 feet wide, as measured horizontally from the delineated boundary of the sensitive area.
11. For Vegetated Corridors greater than 50 feet in width, the applicant shall enhance the first 50 feet closest to the sensitive area to meet or exceed good corridor condition as defined in R&O 07-20, Section 3.14.2, Table 3-3.
12. **Prior to any site clearing, grading or construction, the applicant shall provide Clean Water Services with a Vegetated Corridor enhancement/restoration plan. Enhancement/restoration of the Vegetated Corridor shall be provided in accordance with R&O 07-20, Appendix A, and shall include planting specifications for all Vegetated Corridor, including any cleared areas larger than 25 square feet in Vegetated Corridor rated ""good.""**
13. **Prior to installation of plant materials, all invasive vegetation within the Vegetated Corridor shall be removed per methods described in Clean Water Services' Integrated Pest Management Plan. During removal of invasive vegetation care shall be taken to minimize impacts to existing native tree and shrub species.**
14. Clean Water Services shall be notified 72 hours prior to the start and completion of enhancement/restoration activities. Enhancement/restoration activities shall comply with the guidelines provided in Landscape Requirements (R&0 07-20, Appendix A).
15. **Maintenance and monitoring requirements shall comply with R&O 07-20, Section 2.11.2. If at any time during the warranty period the landscaping falls below the 80% survival level, the owner shall reinstall all deficient planting at the next appropriate planting**

opportunity and the two-year maintenance period shall begin again from the date of replanting.

16. **Performance assurances for the Vegetated Corridor shall comply with R&O 07-20, Section 2.06.2, Table 2-1 and Section 2.10, Table 2-2.**
17. **Clean Water Services shall require an easement over the Vegetated Corridor conveying storm and surface water management to Clean Water Services or the City that would prevent the owner of the Vegetated Corridor from activities and uses inconsistent with the purpose of the corridor and any easements therein.**

FINAL PLANS

18. **Final construction plans shall include landscape plans.** In the details section of the plans, a description of the methods for removal and control of exotic species, location, distribution, condition and size of plantings, existing plants and trees to be preserved, and installation methods for plant materials is required. Plantings shall be tagged for dormant season identification and shall remain on plant material after planting for monitoring purposes.
19. **A Maintenance Plan shall be included on final plans** including methods, responsible party contact information, and dates (minimum two times per year, by June 1 and September 30).
20. **Final construction plans shall clearly depict the location and dimensions of the sensitive area and the Vegetated Corridor** (indicating good, marginal, or degraded condition). Sensitive area boundaries shall be marked in the field.
21. Protection of the Vegetated Corridors and associated sensitive areas shall be provided by the installation of permanent fencing and signage between the development and the outer limits of the Vegetated Corridors. **Fencing and signage details to be included on final construction plans.**

This Service Provider Letter is not valid unless CWS-approved site plan is attached.

Please call (503) 681-3653 with any questions.

Amber Wierck
Environmental Plan Review

Attachments (2)

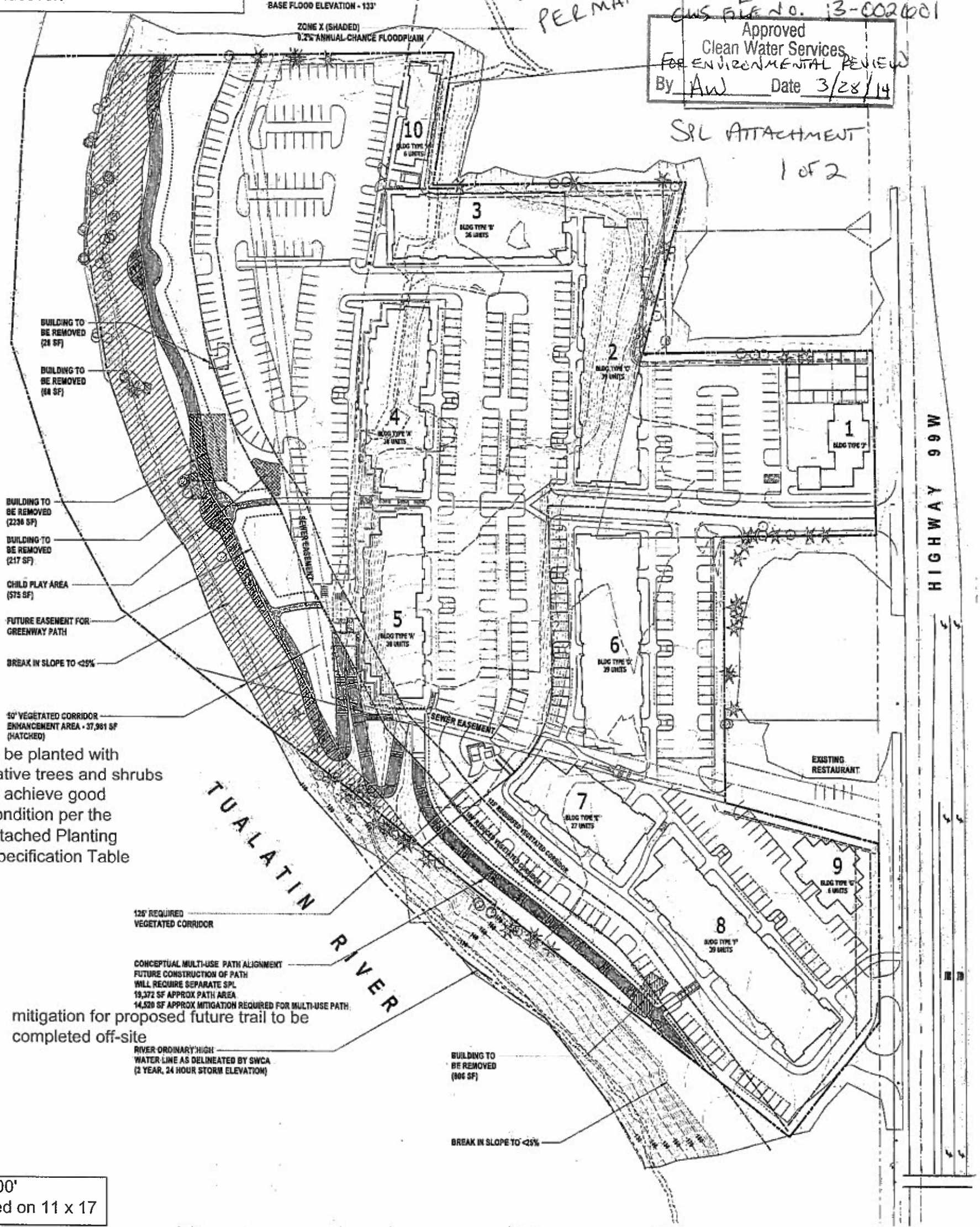
A total of 3,347 SF of temporary impacts are proposed for demolition of buildings in vegetated corridor. Portions of temporary impacted vegetated corridor within the 50 foot enhancement area will be planted with native trees, shrubs, and groundcover.

NOTE: TRAIL IS NOT APPROVED UNDER THIS SPL. TRAIL AND ANY ADDITIONAL DEVELOPMENT WILL REQUIRE A SEPARATE SERVICE PROVIDER LETTER WITH REQUIRED MITIGATION FOR PERMANENT VEGETATED CORRIDOR ENCROACHMENT.

CWS FILE NO. 13-002001

Approved
Clean Water Services
FOR ENVIRONMENTAL REVIEW
By AW Date 3/28/14

SPL ATTACHMENT 1 of 2



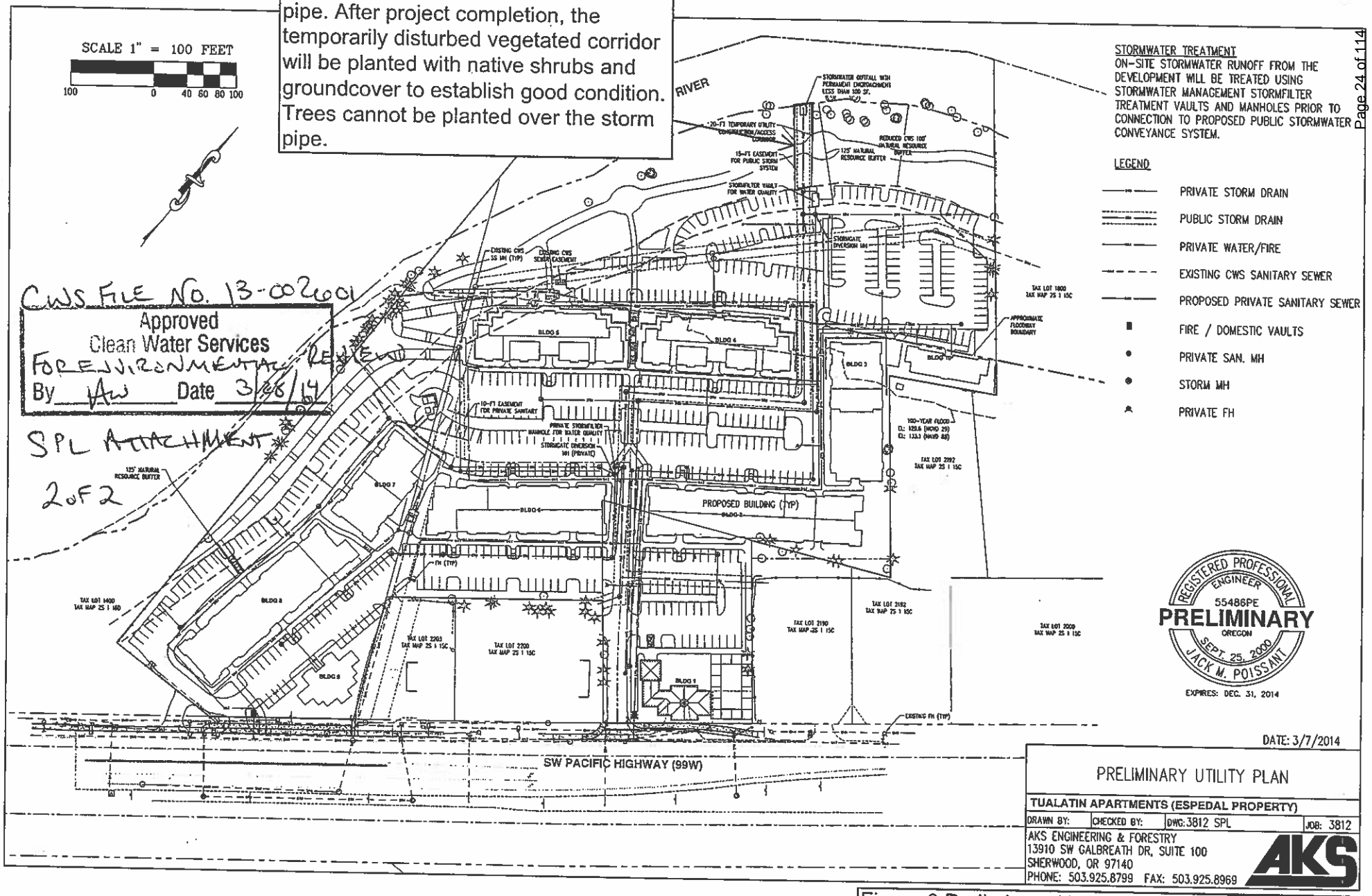
to be planted with native trees and shrubs to achieve good condition per the attached Planting Specification Table

mitigation for proposed future trail to be completed off-site

1"=100'
printed on 11 x 17

Figure 6 Site Plan
Tualatin Apartments / Espedal Property
Natural Resource Assessment

~2,020 SF of marginal and degraded condition vegetated corridor will be disturbed for the installation of the storm pipe. After project completion, the temporarily disturbed vegetated corridor will be planted with native shrubs and groundcover to establish good condition. Trees cannot be planted over the storm pipe.



CWS FILE NO. 13-002601

Approved
Clean Water Services
FOR ENVIRONMENTAL REVIEW
By AW Date 3/28/14

SPL ATTACHMENT
2 OF 2

Figure 8 Preliminary Utility Plan
Tualatin Apartments / Espedal Property
Natural Resource Assessment

CWS Upper Tualatin Interceptor Letter

Clean Water Services
Our commitment is clear.

June 2, 2014

Tony Doran
Community Development - Engineering
City of Tualatin
18800 SW Martinazzi Avenue
Tualatin, Oregon 97062

RE: River Ridge Development – Upper Tualatin Interceptor

Mr. Doran,

This letter is notice that Clean Water Services (District) has contracted with AKS Engineering & Forestry to facilitate the relocation of the Upper Tualatin Interceptor in conjunction with the River Ridge Development located at 17865 & 17985 SW Pacific Highway (taxlots 2S115C002202 & 2S115C002300 respectively). District is currently engaged with the Developer to coordinate the relocation of the Interceptor, and has requested the Interceptor design be incorporated with the Development Architectural Review (AR) to facilitate permitting and coordination with other utilities. District's Capital Projects department will closely review, comment, and approve the design and construction of the Interceptor, although no formal permit will be issued. The review will only be in relation to the Interceptor alignment, and shall not constitute review or approval of any other kind including environmental, water quality, or erosion control. It is assumed a Service Provider Letter will still be required for the Development (including Interceptor), and all requirements of that SPL shall be upheld. District requests that the City of Tualatin accept the Interceptor design as part of the AR package, and approve its construction along with the Development. If you have any questions regarding the Interceptor project, or wish to coordinate our review efforts, please feel free to contact me at (503) 681-4426.

Sincerely,

Brad Crement, PE
Project Engineer

Legal Description

Pacific NW Title
02213959-W
T.O.

10-6
2003.
11-

Washington County, Oregon
10/11/2002 02:34:16 PM
D-DW Cnt=1 Stn=7 K GRUNEWALD
$10.00 $6.00 $11.00 $223.00 - Total=$250.00

2002-119631

00180021200201196310020020

I, Jerry Hanson, Director of Assessment and Taxation and Ex-Officio County Clerk for Washington County, do hereby certify that the within instrument of writing was received and recorded in the book of records of said county.

Jerry Hanson

Jerry R. Hanson, Director of Assessment and Taxation, Ex-Officio County Clerk

After Recording Return To:
Sean P Casey
45617 N State Street
Lake Oswego, OR 97035

Send Tax Statements To:
Sean P Casey
45617 State Street
Lake Oswego OR 97035

KEY TITLE COMPANY

Title Order No. 02213959
Escrow No. 21-22962

Tax Account No.

WARRANTY DEED
(ORS 93.850)

Emilia P Camara, an estate in fee simple, Grantor, conveys and warrants to **Sean P Casey, an estate in fee simple, Grantee,** the following described real property free of encumbrances except as specifically set forth herein:

See Exhibit 'A' attached hereto and by reference made a part hereof.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

The true consideration for this conveyance is $223,000.00.

Dated this 10th day of OCTOBER, 2002.

WASHINGTON COUNTY
REAL PROPERTY TRANSFER TAX
$223.00 FEE PAID
10-11-02 DATE

Emilia P Camara

State of OR, County of Washington)ss.

This instrument was acknowledged before me on OCTOBER 10, 2002 by Emilia P Camara.

Carol C. Jackson
Notary Public

My commission expires: 6/15/06

OFFICIAL SEAL
CAROL C JACKSON
NOTARY PUBLIC - OREGON
COMMISSION NO. 356293
MY COMMISSION EXPIRES JUNE 15, 2006

Exhibit A

Part of Lot 42, HAZELBROOK FARM, in the County of Washington and State of Oregon, also being a portion of that tract of land conveyed to Angelo Ed Garcia, et ux, by Deed recorded December 10, 1945 in Book 252, Page 545, Washington County, Oregon, Deed Records, more particularly described as follows:

BEGINNING at an iron pipe on the Northwesterly right of way line of the West Side Pacific (State Highway), which iron pipe bears North 89°52' East, a distance of 143.4 feet and North 51°48' East, a distance of 175.0 feet from the Southwest corner of Lot 42 and which corner is also the Southwest corner of Section 15, Township 2 South, Range 1 West, of the Willamette Meridian; thence from the described place of beginning, North 51°48' East along the Northwesterly line of said highway, a distance of 121.7 feet; thence North 38°12' West, a distance of 150 feet; thence South 51°48' West, a distance of 81 feet, more or less, to the West line of said Garcia Tract; thence South 23°45' East along the West line of said Garcia Tract, a distance of 155 feet, more or less, to the place of beginning.

Subject to:

Statutory powers of the Clean Water Services; Access Restrictions Recorded July 6, 1953, Book 346, Page 464; amended by instrument Recorded 8/8/58; Book 407, Page 626; Easement Recorded 9/22/54, Book 360, Page 616; Easement Recorded 1/10/77, Book 1137, Page 301; Easement Recorded 9/29/78, Fee No. 78043411; Easement Recorded 11/18/81, Fee No. 81038748 .

Washington County, Oregon
03/26/2007 03:45:59 PM 2007-033192
D-DBS Cnt=1 Stn=13 I CASTILLO
$25.00 $6.00 $11.00 - Total = $42.00

01092472200700331920050051

I, Richard Hobernicht, Director of Assessment and Taxation and Ex-Officio County Clerk for Washington County, Oregon, do hereby certify that the within instrument of writing was received and recorded in the book of records of said county.

Richard Hobernicht, Director of Assessment and Taxation, Ex-Officio County Clerk

AFTER RECORDING, RETURN TO:

John H. Rosenfeld
Tonkon Torp LLP
888 SW Fifth Avenue, Suite 1600
Portland, OR 97204-2099

UNTIL A CHANGE IS REQUESTED,
SEND ALL TAX STATEMENTS TO:

No Change Requested

BARGAIN AND SALE DEED

Joyce Lee Poppert, Donna June Degele and Kenneth Russell Espedal, successor Trustees of the Espedal Family Trust U/T/A dtd 3/18/93, Grantor, conveys to Kenneth R. Espedal, Joyce L. Poppert and Donna J. Degele, Trustee of the Degele Family Trust U/T/A dtd 1/19/93, each as to an undivided one-third interest, Grantees, that certain real property located in Washington County, Oregon, and more particularly described on the attached Exhibit "1."

The true consideration for this conveyance is property or value other than money.

By reason of the deaths of Helen L. Espedal (on 10/2/05) and Russell M. Espedal (on 2/18/06), Joyce Lee Poppert, Donna June Degele and Kenneth Russell Espedal are the successor co-Trustees of the Espedal Family Trust. This Deed represents a distribution from the Espedal Family Trust.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 197.352. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930 AND TO INQUIRE

ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 197.352.

DATED: February 26, 2007.

GRANTOR:

ESPEDAL FAMILY TRUST U/T/A
DTD 3/18/93

Joyce Lee Poppert

Joyce Lee Poppert, Trustee

Donna June Degele

Donna June Degele, Trustee

Kenneth Russell Espedal

Kenneth Russell Espedal, Trustee

STATE OF ~~OREGON~~ CALIFORNIA)
) ss.
County of ORANGE)

The foregoing instrument was acknowledged before me on the 26 day of February, 2007, by ~~Joyce Lee Poppert~~ Donna June Degele, co-Trustee of the Espedal Family Trust U/T/A dtd 3/18/93.

Notary Public for ~~Oregon~~ CALIFORNIA
My commission expires: Nov 20, 2010

D.J.R. BRIMMER
Commission # 1706292
Notary Public - California
Orange County
My Comm. Expires Nov 20, 2010

STATE OF OREGON)
) ss.
County of Multnomah)

The foregoing instrument was acknowledged before me on the 1st day of March, 2007, by Joyce Lee Poppert, co-Trustee of the Espedal Family Trust U/T/A dtd 3/18/93.

OFFICIAL SEAL
MARY SCANLON KNOWLES
NOTARY PUBLIC-OREGON
COMMISSION NO. 401967
MY COMMISSION EXPIRES MARCH 8, 2010

Mary Scanlon Knowles
Notary Public for Oregon
My commission expires: 3-8-10

STATE OF OREGON)
) ss.
County of Multomah)

The foregoing instrument was acknowledged before me on the 1st day of March, 2007, by Kenneth Russell Espedal, co-Trustee of the Espedal Family Trust U/T/A dtd 3/18/93.

OFFICIAL SEAL
MARY SCANLON KNOWLES
NOTARY PUBLIC-OREGON
COMMISSION NO. 401967
MY COMMISSION EXPIRES MARCH 8, 2010

Mary Scanlon Knowles
Notary Public for Oregon
My commission expires: 3-8-10

50551-1/744294

EXHIBIT "1" (Page 1 of 2)

PARCEL I

A portion of that tract of land in Lot 42, HAZELBROOK FARM, Washington County, Oregon, conveyed to Percy Howarth by deed recorded March 24, 1958, in Book 403, page 242, Washington County, Oregon Deed Records, more particularly described as follows: BEGINNING at the most southerly corner of said Howarth tract, which is on the Northerly boundary line of the West side Pacific (State) Highway; thence North 51° 05' East along said highway boundary line 180 feet; thence North 39 ° 00' West a distance of 220 feet, more or less, to the Northerly line of said Howarth tract; thence South 66 ° 15' West along said Northerly line a distance of 190 feet, more or less, to the most westerly corner of said Howarth tract; thence South 39° 00' East a distance of 273.3 feet to the point of beginning; subject to a common easement or roadway as described in Suit to Effie Duncan, plaintiff, against Inez I. Duncan, defendant, Register No. 11645, in the Circuit Court of the State of Oregon for Washington County. (Tax Account No. R523473)

PARCEL II

A part of Lot 42, HAZELBROOK FARM, Washington County, Oregon, lying Westerly of the tract conveyed to C. W. Ryder et ux by deed recorded in Book 252, Page 545, described as follows: Beginning at an iron pipe on the Northwesterly right of way line of the West Side Pacific (State) Highway, which iron pipe bears North 89° 52' East 143.4 feet and North 51° 48' East 175.0 feet from the Southwest corner of Lot numbered Forty-two, is also the Southwest corner of Section 15, Township 2 South Range 1 West, W.M,.; thence from the described place of beginning North 23° 45' West 564.0 feet to an iron pipe; thence continuing North 23° 45' West 133.5 feet to a point in the Tualatin River and on the West line of said lot numbered Forty-two; at a distance of 746.9 feet North of the Southwest corner of said lot; thence North on said Lot line 73.1 feet to a point in the center of the Tualatin River at the Northwest corner of said lot; thence North 23° 48' East in the center of said river; 129.8 feet to a point; thence North 34° 10' East in the center of said river a distance of 160.0 feet to a point; thence North 55° 11' East in the center of said river a distance of 250.0 feet to a point; thence South 30° 00' East parallel to the Easterly line of said lot a distance of 413.3 feet to an iron pipe; thence South 61° 00' West a distance of 100.8 feet to an iron pipe; thence South 39° 00' East parallel to the Easterly line of said lot a distance of 246.1 feet to an iron pipe; thence South 66° 15' West a distance of 359.6 feet to an iron pipe; thence South 39° 00' East parallel to the Easterly line of said lot a distance of 273.3 feet to an iron pipe on the Northwesterly right of way line of the West Side Pacific (State) Highway; thence South 51° 05' West along said right of way line a distance of 50.7 feet to an iron right of way marker at Engineer's Station (Highway) 263+29.7; thence South 51° 48' West along said right of way line a distance of 250.5 feet to the place of beginning, EXCEPT THAT portion thereof conveyed to the State of Oregon by Deed recorded in Book 346, Page 464,

ALSO, an easement for road purposes of a strip of land 40 feet in width along the westerly line for egress from and ingress to the hereinabove described property.

EXCEPTING THEREFROM THE FOLLOWING PORTION:

Beginning at the most southerly corner of said premises, thence north 51° 48' East along the northwesterly line of said highway 250.5 feet; thence North 51° 5' along said highway 50.7 feet to an angle corner of said premises; thence north 39° 00' West along the line of said premises 150 feet; thence southwesterly parallel with the northwesterly line of said highway 260 feet more or less to the westerly line thereof; thence south 23° 45' East 160 feet more or less to the place of beginning. (Tax Account No. R523507).

PARCEL III

Beginning at the most Northerly corner of Lot 42, Hazelbrook Farm; thence South 67° 56' West 180.9 feet to the place of beginning of the tract to be described; thence South 39° 00' East 413.3 feet to a point; thence North 67° 56' East to a point which is 30 feet distant from, when measured at right angles, to the last mentioned line and a Southerly extension thereof; thence North 39° 00' West, parallel with and 30.0 feet distant from said last mentioned line, 413.3 feet to a point on the Northwesterly line of said Lot 42; thence South 67° 56' West to the place of beginning, in Washington County, Oregon.

PARCEL IV

A portion of Lot 42, HAZELBROOK FARM, a duly recorded subdivision in T 2S R1W W.M., Washington County, Oregon, more particularly described as follows, to-wit: Beginning at the SW corner of Lot 42, Hazelbrook Farm, which SW corner is also the SW corner of Section 15, T 2S R1W W.M; thence from the described place of beginning N along the W line of said Lot 42 a distance of 634.9 feet to an iron pipe; thence continuing N along said line a distance of 112.0 feet to a point in the Tualatin River; thence S 23° 45' E 113.5 feet to an iron pipe; thence continuing S 23° 45' E a distance of 564.0 feet to an iron pipe on the Northwesterly line of the W side Pacific (State) Highway; thence S 51° 48' W along said Highway right of way a distance of 175.0 feet to a point on the S line of said Lot 42 Hazelbrook Farm; thence S 89° 52' W along the lot line a distance of 143.4 feet to the place of beginning. Containing 2.586 acres.

Washington County, Oregon
05/29/2008 10:06:24 AM **2008-048434**
D-DW Cnt=1 Stn=16 D HOFFMAN
$20.00 $5.00 $11.00 - Total = $36.00

01255484200800484340040042

I, Richard Hobernicht, Director of Assessment and Taxation and Ex-Officio County Clerk for Washington County, Oregon, do hereby certify that the within instrument of writing was received and recorded in the book of records of said county.

Richard Hobernicht, Director of Assessment and Taxation, Ex-Officio County Clerk

THIS SPACE RESERVED

After recording return to:
Reza Lankarani
3944 Croisan Mt. Drive S
Salem, OR 97302

Until a change is requested all tax statements shall be sent to the following address:
Reza Lankarani
3944 Croisan Mt. Drive S
Salem, OR 97302

File No.: NCS-342689-OR1 (nc)
Date: March 04, 2008

STATUTORY WARRANTY DEED

ASR, LLC, an Oregon limited liability company, Grantor, conveys and warrants to **Reza Lankarani and Farah Pakseresht, as tenants by the entirety** , Grantee, the following described real property free of liens and encumbrances, except as specifically set forth herein:

See Legal Description attached hereto as Exhibit A and by this reference incorporated herein.

Subject to:

1. Covenants, conditions, restrictions and/or easements, if any, affecting title, which may appear in the public record, including those shown on any recorded plat or survey.

The true consideration for this conveyance is **$this deed is being given to amend the vesting only.**
(Here comply with requirements of ORS 93.030)

FATCO No 7019-1173962 (NCS-342689)

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195-336 AND SECTIONS 5 TO 11, OF CHAPTER 424, OREGON LAWS 2007. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930 AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195-336 AND SECTIONS 5 TO 11, OF CHAPTER 424, OREGON LAWS 2007.

Dated this 28th day of May, 2008.

ASR, LLC, an Oregon limited liability company

Managing Member

By: Reza Lankarani, Managing Member

STATE OF Oregon)
)ss.
County of Multnomah

This instrument was acknowledged before me on this 28 day of May, 2008 by Reza Lankarani as Managing Member of ASR, LLC, on behalf of the limited liability company.

OFFICIAL SEAL
NICOLE M CARLSON
NOTARY PUBLIC-OREGON
COMMISSION NO. 395661
MY COMMISSION EXPIRES AUG. 4, 2009

NICOLE M CARLSON
Notary Public for Oregon
My commission expires: 080409

EXHIBIT A

LEGAL DESCRIPTION:

PARCEL I:

A PORTION OF THAT TRACT OF LAND IN LOT 42, HAZELBROOK FARM, (PLAT BOOK 2, PAGE 0066) IN THE COUNTY OF WASHINGTON AND STATE OF OREGON, CONVEYED TO ARTHUR J. POULIN, ET UX, BY DEED RECORDED JUNE 03, 1964 IN BOOK 514, PAGE 0344, WASHINGTON COUNTY DEED RECORDS AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY CORNER OF SAID POULIN TRACT, SAID CORNER BEING ON THE NORTHERLY BOUNDARY LINE OF THE WEST SIDE PACIFIC (STATE) HIGHWAY; THENCE SOUTH 51° 05' WEST ALONG SAID HIGHWAY BOUNDARY LINE A DISTANCE OF 119.5 FEET TO A POINT WHICH IS THE TRUE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED; THENCE SOUTH 51° 05' WEST ALONG SAID HIGHWAY BOUNDARY LINE A DISTANCE OF 119.7 FEET TO THE SOUTHWESTERLY CORNER OF SAID POULIN TRACT; THENCE NORTH 39° 00' WEST ALONG THE WESTERLY LINE OF SAID POULIN TRACT A DISTANCE OF 220.0 FEET, MORE OR LESS, TO THE NORTHERLY LINE OF SAID POULIN TRACT; THENCE NORTH 66° 15' EAST, A DISTANCE OF 121 FEET, MORE OR LESS, TO A LINE BEARING NORTH 30° WEST FROM THE TRUE POINT OF BEGINNING; THENCE SOUTH 39° EAST A DISTANCE OF 185.0 FEET, MORE OR LESS, TO THE TRUE POINT OF BEGINNING.

PARCEL II:

A PORTION OF THAT TRACT OF LAND IN LOT 42, HAZELBROOK FARM, (PLAT BOOK 2, PAGE 0066) IN THE COUNTY OF WASHINGTON AND STATE OF OREGON, CONVEYED TO ARTHUR J. POULIN, ET UX, BY DEED RECORDED JUNE 03, 1964, IN BOOK 514, PAGE 0344, WASHINGTON COUNTY DEED RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY CORNER OF SAID POULIN TRACT, SAID CORNER BEING ON THE NORTHERLY BOUNDARY LINE OF THE WEST SIDE PACIFIC (STATE) HIGHWAY; THENCE SOUTH 51° 05' WEST ALONG SAID HIGHWAY BOUNDARY LINE, A DISTANCE OF 119.5 FEET;
THENCE NORTH 39° 00' WEST A DISTANCE OF 185 FEET, MORE OR LESS, TO THE MOST SOUTHERLY NORTHWESTERLY LINE OF SAID POULIN TRACT; THENCE NORTH 66° 15' EAST ALONG SAID NORTHWESTERLY LINE A DISTANCE OF 40 FEET, MORE OR LESS, TO AN ANGLE CORNER; THENCE NORTH 39° 00' WEST A DISTANCE OF 246.1 FEET TO THE MOST NORTHERLY NORTHWESTERLY CORNER OF SAID POULIN TRACT; THENCE NORTH 61° 00' EAST ALONG THE MOST NORTHERLY NORTHWESTERLY LINE OF SAID POULIN TRACT, A DISTANCE OF 100.8 FEET TO THE MOST NORTHERLY CORNER OF SAID POULIN TRACT; THENCE SOUTHEASTERLY ALONG THE NORTHWESTERLY LINE OF POULIN TRACT, A DISTANCE OF 220 FEET, MORE OR LESS, TO A POINT ON THE NORTHWESTERLY LINE OF THAT TRACT OF LAND CONVEYED TO S.H. JOSEY, ET UX, BY DEED RECORDED IN BOOK 143, PAGE 0072, WASHINGTON COUNTY DEED RECORDS; THENCE SOUTH 51° 06' WEST ALONG THE NORTHWESTERLY LINE OF SAID JOSEY TRACT, A DISTANCE OF 45 FEET TO THE MOST WESTERLY CORNER OF SAID JOSEY TRACT; THENCE SOUTH 39° 00' EAST ALONG THE SOUTHWESTERLY LINE OF SAID JOSEY TRACT, A DISTANCE OF 179.3 FEET TO THE POINT OF BEGINNING.

THE LEGAL WAS CREATED PRIOR TO JANUARY 01, 2008

Architectural review narrative

River Ridge Apartments
Architectural Review

Submitted:	June 2014
Submitted to:	City of Tualatin Community Development Department 18880 SW Martinazzi Avenue Tualatin, OR 97062
Property Owners:	Donna J. Degele 16182 Bimini Lane Huntington Beach, CA 92649 Kenneth R. Espedal, Joyce L. Poppert 11515 SW Hazelbrook Road Tualatin, OR 97062
Applicant:	Mountain West Investment Corporation 201 Ferry Street SE, #400 Salem, OR 97301
Location:	17958 SW Pacific Highway
Site Size:	+/- 12 acres
Assessor's Information:	Washington County Assessor's Map Map 2S1 15D, Tax Lots 2191, 2202, & 2300
Comprehensive Plan/ Zoning Designation:	Residential High Density (RH)

I. Executive Summary

The applicant is pleased to submit this application for the River Ridge Apartment project for Mountain West Investment Corporation. The project involves a request for approval through Architectural Review to allow the construction of 14 new multi-family residential buildings containing a total of 180 units. The project includes a club house and pool area, common open space areas, a paved parking and vehicular circulation area, pedestrian connections, greenway path, landscaping improvements and all necessary supporting infrastructure.

Extensive research, detailed site investigations, and careful planning have led to the creation of this application. The essential components of the project are as follows:

- **Natural Resource Protection and Preservation.** The future River Ridge apartment project is adjacent to the Tualatin River. The subject site has approximately 3.38 acres of associated greenway, of which, +/- 2.22 acres is to be placed in a tract and donated to the City of Tualatin. The bulk of the development has been clustered to the south of the property toward SW Pacific Hwy. in order to preserve and protect as much of the site's natural resources as possible.

- **Housing.** The multi-family residential development of this property will provide opportunities for individuals and families to live in a high quality area with the river as a positive amenity all while being in close proximity to the employment, services, and transportation. Such residential development will provide housing opportunity for a broad spectrum of income levels, particularly as an alternative to home ownership in a traditional, single-family residential setting (e.g. a residential subdivision).

- includes a +/-1.2 acres parking area located in the 1.64 acres of land located in the associated floodway and approximately 510 cubic yards of fill for future buildings within the floodplain. Construction within the floodplain and floodway is addressed in greater detail under Chapter 70 located further in this narrative. The River Ridge apartments will protect and preserves 2.22 acres of the associated greenway in a tract, which will be donated to the City.

- **Open Space Opportunities.** Understanding that the opportunity to access and utilize open space is an important part of a successful and desirable residential project, the application features a variety of planned recreational amenities. This includes connections to the future Greenway path on adjacent properties as they develop, open lawns, sport court, children's playground, sand box and other appealing landscape features to enhance the livability of future residents.

- **Connectivity.** This application provides key infrastructure component connectivity. This includes secondary access for fire department and other emergency response providers, desirable looped public water system that improves water pressures, relocation and upsizing of the Upper Tualatin Sanitary Sewer Interceptor, sewer connection to adjoining properties to the northeast pedestrian and vehicular connectivity to Pacific Hwy., which will include 1.7 feet of dedication for new curb gutter and sidewalks for pedestrian connections to adjacent parcels.

The findings in this written narrative, together with the accompanying reports, studies, and preliminary plans demonstrate that the application satisfies applicable approval criteria. This evidence is substantial and provides the necessary factual basis supporting the City's approval of the application.

II. Site Description

1. **Zoning/Permitted Use:** The subject site is located in an area of properties with a number of different zoning designations. The subject site has recently been annexed and re-zoned (RH) High Density Residential the City's Zoning Map. Properties to the northeast of the subject site are designated (CR) Recreational Commercial and (CG) General Commercial. Properties to the southwest are designated (CG) General Commercial with properties across Pacific Highway to the south also zoned (CG) and (RH). Properties to the northwest across the Tualatin River have a residential zoning designation; however, they are located outside of city limits.

2. **Site Description**: The applicant's property is approximately 12 acres in size and is generally located northwest of the intersection of SW Pacific Hwy. and 124th Ave. at 17958 SW Pacific Hwy. existing site topography slopes generally from the southeast to the northwest toward the Tualatin River. The property has a fair number of trees and greenway corridor associated with the Tualatin River and 100-year flood plain.

3. **Project Description:** The project involves the creation of 180 multi-family apartments. Internal circulation is included so that services can be provided to all portions of the property. Each of the buildings will be provided with sanitary sewer, storm sewer, and water service, as well as utilities such as electrical, gas, phone, cable, etc. Additional details concerning the application can be gleaned from the preliminary plans, which are included in the application materials along with this project narrative and other written materials.

- **Sanitary Sewer**

As shown on the preliminary plans, this application connects to the existing onsite CWS sewer main. CWS has identified the sewer main as needing to be upsized in their master plan and intends to take advantage of the opportunity for this project to realign and upsize their existing infrastructure. The realigned 42" sanitary sewer line will extend service to the site and each building will be provided sanitary sewer laterals and connect to the main at the new manhole locations.

- **Stormwater Management**

On-site stormwater is collected and conveyed to the stormwater treatment swale located in the lower parking lot. Currently stormwater from neighboring parcels is conveyed underground through the site to an existing outfall on the Tualatin River. This application will realign the existing storm line and convert into a new public storm line and easement. Onsite stormwater will be collected, (no detention required) treated in the stormwater facility and then discharged into the new public storm line that will ultimately outfall to the Tualatin River. For additional information, please refer to the preliminary stormwater report and plans that are included in the application submittal materials.

- **Water Service**

This application abandons the existing onsite water meter services and connects to the 12" water main located at the Pacific Hwy frontage. The new service will create a looped water system. Each building will be provided with water laterals, fire service laterals and fire department connections (FDCs).

- **Transportation**

The subject site has frontage along SW Pacific Hwy. Site access will be provided by way of a 32' access drive from SW Pacific Hwy. A 20' emergency access is provided at the southwest end of the project. This application includes 1.7 feet of ROW dedication to Pacific Hwy. Planned improvements to Pacific Hwy. include construction of a deceleration lane, curb and sidewalk to ODOT standards along the main access and replacing the existing curb aligned sidewalk with landscape separated sidewalk to City standards along the emergency access. The future internal circulation will comply with City requirements.

4. **Dimensional Standards:**

   Setbacks in the (RH) residential district and for this project with the permitted 35% reduction (allowed by section 43.070) are as follows:

	Requested 35% Reduction
Minimum Lot Area:	**1,742 square feet**
Minimum Average Lot Width:	**75 feet**
Maximum Building Height:	**35 feet**
Front Yard Setback:	**Min: 22.75 feet (2 ½ story building)**
Side Yard:	**Min: 7.8 feet (2 ½ story building)**
Corner Side Yard:	**N/A**
Rear Yard Setback:	**Min: 7.8 feet (2 ½ story building)**
Off-Street Parking:	**N/A**

5. **Citizen Participation:** The applicant and project representatives have held two separate neighborhood meetings. The first meeting on January 9th 2014 was held to discuss the already approved annexation and plan map amendment and on March 11th 2014 to discuss the project. Copies of the March 11th meeting attendance roster, and a summary of the topics discussed at the neighborhood meeting are included in the application package. The City will send notice of this application to property owners within three hundred feet of the subject property, as well as various City departments, and other agencies to solicit public input.

6. **Residential Density Calculations:** The site is approximately 522,720 square feet (12 acres) in size. Due to right-of-way dedications and greenway tract, the net developable area for the project site is 379,410 square feet. Net developable area (8.7 acres), multiplied by 25, the maximum number of lots (density) is 217 units. Eighty percent of 217 is 174 units. Therefore, the project (180 units) complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable area.

III. Applicable Review Criteria

CITY OF TUALATIN LAND DEVELOPMENT CODE

Chapter 43 - High Density Residential Planning District

Section 43.015 Permitted Density.

Housing density shall not exceed 25 dwelling units per net acre, except as set forth below:

(1) Where provided by TDC 43.180.

(2) The maximum density for nursing and convalescent homes and retirement housing in accordance with 34.170(2) shall not exceed 37.5 dwelling units per net acre. [Ord. 956-96 §29, 1/8/96. Ord. 1026-99 §35, 8/9/99; Ord. 1272-08 §9, 11/10/08]

RESPONSE: The subject site consists of 3 units of land with a total square footage of 12 acres in size. Due to right-of-way dedications and area in the "Greenway," the net developable area for the project site is 8.7 acres.

Based on Tualatin's Density calculations which state "Housing density shall not exceed 25 dwelling units per net acre." The site is approximately 522,720 square feet (12 acres) in size. Due to right-of-way dedications and greenway tract, the net developable area for the project site is 379,410 square feet. Net developable area (8.7 acres), multiplied by 25, the maximum number of lots (density) is 215 units. Eighty percent of 217 is 174 units. Therefore, the project (180 units) complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable area.

SITE AREA			
Tax Lots:	Developable Area	Undevelopable (Greenway/Vegetated Corridor Etc.) Area	Total Acres
2191	+/-1.03 ac.	-	+/-1.03 ac.
2202	+/-5.66 ac.	+/-2.72ac.	+/-8.38 ac.
2300	+/-1.93 ac.	+/-0.66 ac.	+/-2.59 ac.
Total	**+/-8.7 ac.**	**+/-3.38 ac.**	**+/-12.0 ac.**

Section 43.020 Permitted Uses.

No building, structures or land shall be used and no building or structures shall be erected, enlarged or altered except for the following uses:

(1) Townhouses and multi-family dwellings, including duplexes and triplexes.

*(2) Condominium dwellings constructed in accordance with **TDC 40.030(2)**.*

(3) Greenways and Natural Areas, including but not limited to bike and pedestrian paths and interpretive stations.

(4) Residential homes.

(5) Residential facilities.

(6) Family day care provider, provided that all exterior walls and outdoor play areas shall be a minimum distance of 400 feet from the exterior walls and pump islands of any automobile service station, irrespective of any structures in between.

(7) Sewer and water pump stations and pressure reading stations.

(8) Wireless communication facility attached.

(9) Wireless communication facility located within 300 feet of the centerline of I-5.

(10) Transportation facilities and improvements. [Ord. 824-91, § 4, 2/11/91; Ord. 849-91, § 14, 11/25/91; Ord. 965-96, § 24, 12/9/96; Ord. 979-97, § 15, 7/14/97; Ord. 1025-99, §18, 7/26/99; Ord. 1103-02, 03/25/02]

RESPONSE: The subject site is located in an area that has recently been annexed into the City of Tualatin and rezoned to RH (High Density Residential). The subject site's future use is to be multi-family residential, which is an allowed use in the RH zoning district.

Section 43.070 Permitted Uses.

Except as otherwise provided, the set-backs for permitted uses are:

(1) The front yard setback is a minimum of 20 feet for 1-story, 25 feet for 1 1/2-story, 30 feet for 2-story, and 35 feet for 2 1/2-story structures. The front yard setback for townhouses shall be 0-20 feet as determined in the Architectural Review process. The minimum setback to a garage door shall be 20 feet.

(2) The side yard setback shall be a minimum of 5 feet for 1-story, 7 feet for 1 1/2-story, 10 feet for 2-story, and 12 feet for 2 1/2-story structures. Where living spaces face a side yard, the minimum setback shall be 10 feet. The side yard setback for townhouses shall be determined in the Architectural Review process.

(3) On corner lots, the setback is the same as the front yard setback on any side facing a street other than an alley.

(4) The rear yard setback is the same as the side-yard setback.

(5) Where buildings are grouped as one project on one tract of land, the minimum distance between two buildings at any given point shall not be less than the sum of the maximum required side yards, computed separately for each building at that point. The minimum distance between two buildings on separate lots for townhouses shall be determined in the Architectural Review process.

(6) Off-street parking and vehicular circulation areas shall be set back a minimum of 10 feet from any public right-of-way or property line. The setback for such areas for townhouses shall be determined in the Architectural Review process.

*(7) Setbacks for a wireless communication facility shall be established through the Architectural Review process, which shall consider **TDC 73.510**, be a minimum of 5 feet, and shall be set back from an RL District, or an RML District with an approved small lot subdivision, no less than 175 feet for a monopole that is no more than 35 feet in height and the setback shall increase five feet for each one foot increase in height up to 80 feet in height, and the setback shall increase 10 feet for each one foot increase in height above 80 feet.*

(8) Except for setbacks abutting property lines in the RL District, the decision authority may allow a reduction of up to 35% of the required front, side or rear yard setbacks, as determined in the Architectural Review process, if as a result the buildings are farther away from fish and wildlife habitat areas, and provided the following criteria are met:

(a) A portion of the parcel must be:

> *(i) in the Natural Resource Protection Overlay District (NRPO), or*
> *(ii) in an Other Natural Area identified in **Figure 3-4** of the Parks and Recreation Master Plan, or*
> *(iii) in a Clean Water Services Vegetated Corridor; and*

(b) The portion of the parcel which meets the applicable criteria set forth in (a)(i), (ii), or (iii) must be placed in a Tract and must meet one of the following ownership criteria:

> *(i) be dedicated to the City at the City's option, or*
> *(ii) be dedicated in a manner approved by the City to a nonprofit conservation organization, or*
> *(iii) be retained in private owner-ship by the developer.*

RESPONSE: As allowed by section 8 of this standard, the applicant requests a 35% reduction to the maximum front, side and rear yard setbacks for the 2 ½ story buildings of the project. Setbacks for individual buildings are shown on the preliminary plan set. Approximately 2.22 acres of the associated "greenway" which includes NRPO, is indicated on the City's Parks and Recreation master Plan and has a CWS vegetated corridor which will be placed in a tract (created by a lot line adjustment) and donated to the City. The following table provides the dimensional requirements of the RH zoning district and the dimensional requirements with the requested 35% reduction. The criteria for the requested setback reduction are satisfied.

	Dimensional Requirements	**Requested 35% Reduction**
Minimum Lot Area:	1,742 square feet	
Minimum Average Lot Width:	75 feet	**75 feet**
Maximum Building Height:	35 feet	**35 feet**
Front Yard Setback:	Min: 20 feet (1-story building) Min: 35 feet (2 ½ story building0	**Min: 22.75 feet (2 ½ story building)**
Side Yard:	Min: 5 feet (1 story building) Min: 12 feet (2 ½ story building)	**Min: 7.8 feet (2 ½ story building)**
Corner Side Yard:	Min: 20 feet (1-story building) Min: 35 feet (2 ½ story building	**N/A**
Rear Yard Setback:	Min: 5 feet (1 story building) Min: 12 feet (2 ½ story building)	**Min: 7.8 feet (2 ½ story building)**
Off-Street Parking:	Min: 10 feet (from any public right-of-way or property line)	**N/A**

Section 43.080 Projections Into Required Yards.

Cornices, eaves, canopies, decks, sun-shades, gutters, chimneys, flues, belt courses, leaders, sills, pilasters, lintels, ornamental features, and other similar architectural features may extend or project into a required front and rear yard setback area not more than three feet and into a required side yard not more than two feet, or into the required open space as established by coverage standards in this chapter. The distances for such projections for townhouses shall be determined in the Architectural Review process. [Ord. 731-87, § 2, 9/14/87; Ord. 1025-99, §23, 7/26/99]

RESPONSE: Projections into required setbacks include the eaves of the future buildings. The requested projections will not exceed 3' as permitted. This criterion is satisfied.

Section 43.100 Structure Height.

(1) Except as otherwise provided, the maximum structure height is 35 feet.

(2) Maximum structure height for a wire-less communication support structure and antennas located within 300 feet of the centerline of I-5 is 120 feet. [Ord. 956-96, § 30, 1/8/96; Ord. 1116-02, 08/26/02]

RESPONSE: All future buildings of the project will satisfy maximum height standards as shown in the preliminary plan set. Therefore, this standard has been satisfied.

Section 43.120 Access.

All lots created after September 1, 1979, shall abut a public street, except secondary condominium lots, which shall conform to TDC 73.400 and TDC Chapter 75. Lots and tracts created to preserve wetlands, greenways, Natural Areas and Stormwater Quality Control Facilities identified by TDC Chapters 71, 72, Figure 3-4 of the Parks and Recreation Master Plan and the Surface Water Management Ordinance TMC Chapter 3-5, as amended, respectively, or for the purpose of preserving park lands in accordance with the Parks and Recreation Master Plan, may not be required to abut a public street. [Ord. 872-92, §6, 6/29/92; Ord. 956-96, §31, 1/8/96; Ord. 1025-99, §25, 7/26/99]

RESPONSE: The subject site has 355 feet frontage onto SW Pacific Hwy. The site will take access from SW Pacific Hwy. by means of a 32 foot access drive to serve the property. A 20 foot secondary emergency access drive will be located at the southwest end of the property. This standard has been satisfied.

Section 43.130 Off-Street Parking and Loading

Refer to TDC Chapter 73.

RESPONSE: Off-street parking is addressed further in this narrative under Chapter 73. This standard is satisfied.

Section 43.140 Floodplain District

Refer to TDC Chapter 70.

RESPONSE: Topics relevant to the Floodplain District are addressed further in this narrative under Chapter 70. This standard is satisfied.

Section 43.150 Wetland Protection District

Refer to TDC Chapter 70.

RESPONSE: There are no wetlands associated with this project. This section does not apply.

Section 43.160 Community Design Standard.

Refer to TDC Chapter 73.

RESPONSE: The Community Design Standards are addressed further in this narrative under Chapter 73. This standard is satisfied.

Section 43.170 Landscape Standards.

Refer to TDC Chapter 73.

RESPONSE: The Community Design Standards are addressed further in this narrative under Chapter 73. This standard is satisfied.

Section 43.180 Shift of Density for Multi-Family Residential Development Adjacent to a Greenway or Natural Area.

(1) The decision authority may allow the remainder of the parcel to be developed to the same number of residential units as would be permitted by the RH District standards if none of the parcel were in the NRPO District, Other Natural Area or Vegetated Corridor, provided the following criteria are met:

(a) A portion of the parcel must be:

(i) in the Natural Resource Protection Overlay District (NRPO), or

(ii) in an Other Natural Area identified in Figure 3-4 of the Parks and Recreation Master Plan, or

(iii) in a Clean Water Services Vegetated Corridor.

(b) The portion of the parcel which meets the applicable criteria set forth in (a)(i), (ii), or (iii) must be placed in a Tract and must meet one of the following ownership criteria:

(i) dedicated to the City at the City's option, or

(ii) dedicated in a manner approved by the City to a nonprofit conservation organization, or

(iii) retained in private ownership by the developer.

(c) Other TDC and RH District regulations shall be met, including, but not limited to building height, setbacks and building separations.

RESPONSE: An approximate 3.38 acre portion of the site is located within the Natural Resource Protection overlay District. However, No shift in density is requested. Therefore, this standard does not apply.

(2) The decision authority shall consider, but is not limited to, the following factors:

(a) Does the Park and Recreation Master Plan designate the Tract for a greenway, pedestrian or bike path, public park, recreation, overlook or interpretive facility, or other public facility;

(b) Does the Tract include one or more designated Heritage Trees, or one or more significant trees;

(c) Does the Tract provide a significant view or aesthetic element, or does it include a unique or intrinsically valuable element;

(d) Does the Tract connect publicly owned or publicly accessible properties;

(e) Does the Tract abut an existing park, greenway, natural area or other public facility;

(f) Does the Tract provide a public benefit or serve a public need;

(g) Does the Tract contain environmental hazards;

(h) Geologic stability of the Tract; and

(i) Future maintenance costs for the Tract. [Ord. 933-94, §23, 11/28/94; Ord. 956-96, §32, 1/8/96; Ord. 979-97, § 16, 7/14/97; Ord. 1136-03, 04/28/03; Ord. 1224-06 §10, 11/13/06]

RESPONSE: As mentioned in section #1 above, no shift in density is requested. This standard does not apply.

Chapter 70 – FLOOD PLAIN DISTRICT

Section 70.170 General Standards.

In all areas of special flood hazards, the following standards are required:

(1) Anchoring.

(a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

(b) All manufactured dwellings must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. (Reference FEMA' s "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques.)

RESPONSE: Portions of the future buildings and future storm and sanitary lines at the northeast end of the property are shown to encroach into the floodplain. The portions of the future buildings are to be

elevated out of the floodplain as indicated in the preliminary plan set. Storm and sanitary lines will be placed in utility easements. All utilities and buildings that are shown in the associated floodplain and floodway will be constructed/anchored to not allow flotation, collapse or lateral movement.

A parking area, greenway path and further extension of storm and sanitary lines associated with the project are shown to be constructed within the floodway. These amenities will be constructed/anchored to not allow flotation, collapse or lateral movement. This standard is satisfied.

(2) Construction Materials and Methods.

(a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(c) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(d) AH Zone Drainage. Adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.

RESPONSE: Portions of the future buildings and the future extension of sanitary and storm lines at the northeast end of the property are shown to encroach into the floodplain and floodway. The portions of the future buildings are to be elevated out of the floodplain as indicated in the preliminary plan set. Buildings and utilities will all be constructed of materials and methods that will be resistant to flood damage.

The future parking area and pedestrian path shown within the associated floodway will be constructed of materials and methods that will be resistant to flood damage during flooding. Tis standard is met.

(3) Utilities.

(a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

(b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

(c) On-site waste disposal systems shall be located so as to avoid impairment to them or contamination from them during flooding.

RESPONSE: A 20' public sanitary sewer easement and a 15' public stormwater easement will be located in the associated floodplain and floodway. The new lines within these easements are designed to

minimize infiltration of flood waters into the system and are located to avoid impairment to them. Therefore, these standards are satisfied.

(4) Subdivision Proposals.

(a) All subdivision proposals shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed so as to minimize flood damage.

(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

(d) here base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

RESPONSE: The requested approval is for a multi-family development and does not include a subdivision application. Therefore, these standards do not apply.

(5) Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (TDC 70.140(2)), applications for buildings permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates. [Ord. 717-87, §14, 4/27/87; Ord. 988-97, §10, 12/8/97; Ord. 1265-08 §4, 7/28/08.

RESPONSE: The portions of the future buildings located in the associated floodplain will be elevated above the established floodplain by a minimum of 2 feet as shown on the preliminary plan set. Therefore, this standard is satisfied.

The future parking area and pedestrian path shown within the associated floodway will be constructed to withstand flooding. This standard is met.

Section 70.180 Specific Standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in TDC 70.050, "BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD," or TDC 70.140(2), "USE OF OTHER BASE FLOOD DATA," the following provisions are required:

(1) Residential Construction.

(a) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation.

(b) New public streets providing vehicle access to residences, including residences within mixed use developments, shall be constructed at or above the base flood elevation. Public street rights-of-way in existence as of January 14, 1993, shall not be subject to this requirement.

(c) Below grade crawl-space construction in the floodplain shall comply with all NFIP specifications and applicable Building Code Requirements.

RESPONSE: The portions of the future buildings located in the associated floodplain will be elevated above the established floodplain by a minimum of 2 feet as shown on the preliminary plan set.

The future parking area and pedestrian path shown within the associated floodway will be constructed to withstand flooding. Vehicular access to future buildings will not be compromised. This standard is met.

(2) Nonresidential Construction.

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated at least one foot above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

(a) Be floodproofed so that below the base flood level the structure is watertight, with walls substantially impermeable to the passage of water.

(b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(c) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and review of the structural design, specifications and plans. Such certification shall be provided to the official as set forth in TDC 70.140(3)(b).

(d) Fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

(ii) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

(e) Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).

RESPONSE: The portions of the future buildings located in the associated floodplain will be elevated above the established floodplain by a minimum of 2 feet as shown on the preliminary plan set.

The future parking area and pedestrian path shown within the associated floodway will be constructed to withstand flooding. Vehicular access to future buildings will not be compromised. This standard is met.

(3) Manufactured Dwellings. Manufactured dwellings placed or substantially improved within Zones A1-30, AH, and AE shall be on a permanent foundation and shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation and shall be securely anchored to a foundation system in accordance with TDC 70.170(1)(b).

RESPONSE: No manufactured dwellings are located in the associated floodplain or the floodway. Therefore, these standards do not apply.

(4) Recreational Vehicles. Recreational vehicles that are permanently placed or substantially improved within Zones A1-30, AH, and AE shall be on a permanent foundation and shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation and shall be securely anchored to a foundation system in accordance with TDC 70.170(1)(b). [Ord. 717-87, 4/27/87; Ord. 882-92 §11, 12/14/99; Ord. 988-97, §11, 12/8/97; Ord. 993-98 §1, 2/23/98; Ord. 1048-00 §2, 2/28/00; Ord. 1265-08 §5, 7/28/08]

RESPONSE: No permanently placed recreational vehicles are associated with this project. Therefore, these standards do not apply.

Section 70.190 Floodways.

Located within areas of special flood hazard established by TDC 70.050 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters that carry debris, potential projectiles, and erosion potential, the following provisions apply:

(1) Prohibit encroachments, including fill, new construction, substantial improvements, and other development that will increase in flood levels during the occurrence of the base flood discharge.

(2) If TDC 70.190(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of TDC 70.170 to and including 70.190, Provisions for Flood Hazard Reduction. [Ord. 717-87, 4/27/87]

RESPONSE: A future parking area, greenway path and new storm and sanitary lines have been shown within the floodway on the preliminary plan set. The parking area, path and utilities have been designed by a Civil Engineer that certifies that no increase in flood levels will occur due to the future amenities. Please see the response to TDC 70.170 above.

Chapter 72 - NATURAL RESOURCE PROTECTION OVERLAY DISTRICT (NRPO)

Section 72.030 Greenways.

> *(1) Greenways can exhibit diverse characteristics. Those along the Tualatin River and Hedges, Nyberg and Saum Creeks can be natural in some sections and have pedestrian and bike paths in other sections. Greenways in built-up areas such as in subdivisions are typically landscaped with lawn and often include concrete pedestrian/bike paths.*

RESPONSE: The associated greenway will remain in its natural state and be placed in a tract and donated to the City. The planned pedestrian/bike path is shown to be located on the subject site and will extend the full width of the project.

Chapter 73 - COMMUNITY DESIGN STANDARDS

ARCHITECTURAL REVIEW APPROVAL

Section 73.050 Criteria and Standards.

> *(1) In exercising or performing his or her powers, duties, or functions, the Community Development Director shall determine whether there is compliance with the following:*
>
> > *(a) The proposed site development, including the site plan, architecture, landscaping, parking and graphic design, is in conformance with the standards of this and other applicable City ordinances insofar as the location, height, and appearance of the proposed development are involved;*
> >
> > *(b) The proposed design of the development is compatible with the design of other developments in the general vicinity; and*
> >
> > *(c) The location, design, size, color and materials of the exterior of all structures are compatible with the proposed development and appropriate to the design character of other developments in the vicinity.*

RESPONSE: The future development is consistent with the existing high density residential development in the area, more specifically the Woodridge Apartment Complex located across SW Pacific Hwy at 11865 SW Tualatin Rd. and will be a gleaming example of future trends in residential living in the Tualatin area. The location of structures, design, size and color of exterior materials will be of a quality that will be mimicked in future development in the area. As shown below and on the associated plans, the proposed development meets the applicable standards of the City of Tualatin Development Code.

(2) In making his or her determination of compliance with the above requirements, the Community Development Director shall be guided by the objectives and standards set forth in this chapter. If the architectural review plan includes utility facilities or public utility facilities, then the City Engineer shall determine whether those aspects of the proposed plan comply with applicable standards.

RESPONSE: This application includes architectural features as well as utility facilities and public improvements. AKS Engineering has worked closely with the City of Tualatin to plan utilities in a manner consistent with city code and beneficial for both the subject site and the surrounding area. This standard is met.

(3) In determining compliance with the requirements set forth, the Community Development Director shall consider the effect of his or her action on the availability and cost of needed housing. The Community Development Director shall not use the requirements of this section to exclude needed housing types. However, consideration of these factors shall not prevent the Community Development Director from imposing conditions of approval necessary to meet the requirements of this section. The costs of such conditions shall not unduly increase the cost of housing beyond the minimum necessary to achieve the purposes of this Code. As part of the Architectural Review process, the Community Development Director has no authority to reduce dwelling unit densities.

RESPONSE: The developer, Mountain West Investment Corp., has performed market studies for the area and determined that housing demands make this project feasible. We are confident that City Staff will not impose any unnecessary conditions that make this project unfeasible from a monetary perspective.

(4) As part of Architectural Review, the property owner may apply for approval to remove trees, in addition to those exemptions allowed in TDC 34.200(3), by submitting information concerning proposed tree removal, pursuant to TDC 34.210(1). The granting or denial of a tree removal permit shall be based on the criteria in TDC 34.230.

RESPONSE: The future construction of the subject site will include removal of 123 trees on the subject site due to grading needs for future buildings and associated amenities and trees having a hazardous rating. Trees to be removed will be replaced after the site is developed. A tree preservation and removal plan consistent with Criteria of TDC 34.230 has been included in the preliminary plan set.

(5) Conflicting Standards. In addition to the MUCOD requirements, the requirements in TDC Chapter 73 (Community Design Standards) and other applicable Chapters apply. If TDC Chapters 57, 73 and other applicable Chapters, conflict or are different, they shall be resolved in accordance with TDC 57.200(2).

RESPONSE: The subject site is not within the MUCOD. This standard does not apply.

COMMUNITY DESIGN STANDARDS

Section 73.130 Standards.

The following standards are minimum requirements for multi-family and townhouse development:

(1) Private Outdoor Areas.

(a) Except within the Central Design District, or within the Mixed Use Commercial Overlay District in which case the Architectural Review process shall determine the appropriate outdoor area, a separate outdoor area of not less than 80 square feet shall be attached to each ground level dwelling unit. These areas shall be separated from common outdoor areas in a manner which enables the resident to control access from separate to common areas with elements, such as walls, fences or shrubs.

(b) Except for townhouses, a separate outdoor area of not less than 48 square feet in the form of balconies, terraces, or loggias shall be provided for each unit located above the ground level, except that within the Central Design District or the Mixed Use Commercial Overlay District such outdoor areas may be less than 48 square feet.

RESPONSE: All ground floor units in the project will have private patios or no less than 80 square feet. Private patios will be separate from common outdoor areas and will be separated from common outdoor areas by means of decorative fencing and shrubbery. All 2nd and 3rd floor units will have private outdoor patios that are shown to be at least 48 square feet and/or 63 square feet depending on building layouts. These standards are satisfied.

(2) Entry Areas.

(a) Except as provided in TDC 73.130(2)(b), a private main entry area shall be provided in addition to required private outdoor areas and designed so that they are considered a private extension of each dwelling unit. Except for townhouses, each entrance area shall be a minimum of 24 square feet in area for each dwelling unit and may be combined to serve more than a single unit, subject to the following mini-mum area requirements:

(i) Two dwelling units for one-story buildings or two-story townhouses (48 square feet).

(ii) Four dwelling units for two-story buildings (96 square feet).

(iii) Six dwelling units for three-story buildings (144 square feet).

(iv) Unlimited for four-story and greater and for buildings with dwelling unit entries from interior corridors.

(b) Within the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, a private main entry area need not meet the minimum square footage requirements in TDC 73.130(2)(a).

(c) Entry areas shall be separated from on-site parking areas and public streets with landscaping, change of grade, low fences, walls or other means that enable the resident to supervise and control access and to retain privacy.

RESPONSE: Each of the future buildings will have its own private entrance that residents will use to access their individual units. Private entrances to buildings will be a minimum 144 square feet and include design features such as landscaping and walkways that direct residents to building access points. This standard is met.

(3) Shared Outdoor Areas and Children's Play Areas.

(a) Except for townhouses, projects with 12 or more dwelling units shall provide year round shared outdoor areas for both active and passive recreation (gazebos and other covered spaces are encouraged to satisfy part of this requirement) totaling not less than 450 square feet per dwelling unit. Except adult only projects, a minimum of 150 square feet of the 450 square feet shall be provided as a children's play area.

(b) The shared outdoor and children's play areas shall be located and designed in a manner which:

(i) Provides approximately the same accessibility to the maximum number of dwelling units possible;

(ii) Allows residents to watch over these areas from windows in at least two adjacent dwelling units. These windows must provide viewing from the kitchen, living room, dining room or other activity room (bedrooms or bathrooms are not included);

(iii) Provides a separation from all entryway and parking areas with a landscaped transition area measuring a minimum of 10 feet wide;

(iv) Controls access to shared outdoor areas from off-site as well as from on-site parking and entrance areas with features such as fencing, walls and landscaping;

(v) Provides both sunny and shady spots; and

(vi) Provides a usable floor surface (material such as lawn, decks, wood chips, sand and hard surface materials qualify).

(c) These standards shall not apply to townhouses or within the Central Design District or within the Mixed Use Commercial Overlay District. Within the Mixed Use Commercial Overlay District the amount of shared outdoor areas and children's play areas shall be consistent with the intent of the Mixed Use Commercial Overlay District and shall be appropriate for the design and scale of residential use proposed as determined through the Architectural Review process.

RESPONSE: This section requires projects with 12 or more dwelling units shall provide both active and passive recreation spaces totaling not less than 450 square feet per dwelling unit. The River Ridge Apartment project includes a total of 180 units. Therefore, 81,000 sq. ft. of both active and passive recreation spaces is required. Of the required open space, 27,000 sq. ft. shall be provided as children's play area. The planned outdoor recreation space is shown to be approximately 85,162 sq. ft. which 30,502 square feet of the future area is considered "children's play area," which meets this requirement. Please see preliminary plan set for specifics.

All shared open space areas and children's play areas are designed to be seen by a majority of future residential buildings as shown on the preliminary plan set. Access to shared outdoor areas will be by internal pedestrian walkways. All children's play areas will be separated from vehicular access by abutting landscaping at a minimum of 10'.

(4) Safety and Security.

(a) Except for townhouses, private outdoor areas shall be separated from shared outdoor areas and children's play areas with elements such as walls, buildings, landscaping, and changes in grade in a manner which enables residents to utilize these areas as an extension of their units.

(b) Windows shall be located to encourage watching over entry areas, shared outdoor areas, walkways and parking areas.

(c) An outdoor lighting system shall be provided which facilitates police observation and resident observation through strategic location, orientation and brightness without shining into residential units, public rights-of-way, or fish and wildlife habitat areas.

(d) An identification system shall be established which clearly orients visitors and emergency services as to the location of residential units. Where possible, this system should be evident from the primary vehicle entryway.

RESPONSE: All private outdoor areas (patios) of individual dwelling units will be separated from public areas by a combination of low walls and/or landscaping. Patios will be accessed by back doors of individual units. Windows will be located at either end of individual units, which will overlook landscape areas, associated parking areas, shared outdoor areas and entryways to individual buildings.

Appropriate and strategic outdoor lighting will be provided for each of the future buildings, parking areas and outdoor areas which will facilitate police and resident observation. Project lighting will be oriented so it won't shine into residential units, public rights-of-way or habitat areas.

Appropriate signage will be placed at the project's entrance and throughout the property to direct visitors and emergency services toward residential buildings. This standard is satisfied.

(5) Service, Delivery and Screening.

(a) Provisions for postal delivery shall be conveniently located and efficiently designed for residents and mail delivery personnel.

(b) Safe pedestrian access from unit entries to postal delivery areas, shared activity areas, and parking areas shall be provided. Elements such as, but not limited to, concrete paths, raised walkways through vehicular areas or bark chip trails will meet this requirement.

(c) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.

RESPONSE: Mail boxes will be conveniently located for postal delivery services, internal pedestrian walkways will be provided that will facilitate safe and convenient on-site access to resident facilities such as the club house, pool area, outdoor recreation and parking areas. All above ground mechanical equipment will be placed in areas away from residents and be screened from view using a combination of fencing and/or landscaping, depending on the type of equipment and its location.

(6) Accessways.

(a) Accessways shall be constructed, owned and maintained by the property owner.

(b) Accessways shall be provided between the development's walkway and bikeway circulation system and all of the following locations that apply:

(i) adjoining publicly-owned land intended for public use, including schools, parks, or bike lanes. Where a bridge or culvert would be necessary to span a designated greenway or wetland to provide a connection, the City may limit the number and location of accessways to reduce the impact on the greenway or wetland;

(ii) adjoining arterial or collector streets upon which transit stops or bike lanes are provided or designated;

(iii) adjoining undeveloped residential or commercial property; and

(iv) adjoining developed sites where an accessway is planned or provided.

(c) Accessways to undeveloped parcels or undeveloped transit facilities need not be constructed at the time the subject property is developed. In such cases the applicant for development of a parcel adjacent to a vacant parcel shall enter into a written agreement with the City guaranteeing future performance by the applicant and any successors in interest of the property being developed to construct an accessway when the adjacent undeveloped parcel is developed. The agreement shall be subject to the City's review and approval.

(d) Accessways for multi-family development shall:

(i) be a minimum of 8 feet in width;

(ii) be constructed in accordance with the Public Works Construction Code if they are public accessways, and if they are private accessways they shall be constructed of asphalt, concrete or a pervious surface such as pervious asphalt or concrete, pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable;

(iii) not have fences or gates which prevent pedestrian and bike access at the entrance to or exit from any accessway; and

(iv) have curb ramps wherever the accessway crosses a curb.

(e) Outdoor Recreation Access Routes shall be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.

RESPONSE: All accessways will be 8' in width as shown on the preliminary plan set, be constructed in accordance to the Public Works Construction Code, be constructed of concrete and have curb ramps wherever the accessway crosses a curb. All future accessways will provide access to planned outdoor recreation areas. This standard is satisfied.

(7) Walkways.

(a) Except for townhouses, walkways for multi-family development shall be a minimum of 6 feet in width and be constructed of asphalt, concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable.

(b) Curb ramps shall be provided wherever a walkway crosses a curb.

RESPONSE: Internal walkways adjacent to associated parking areas will be 7' in width, all other internal walkways will be 6' in width and will facilitate movement to project amenities such as the future clubhouse and pool and outdoor recreation areas. The future greenway path is planned to be 12' in width. Accessways will be concrete and be separated from vehicular movement by raised curbs. Walkway ramps will comply with ADA requirements and will be provided where accessways cross curbs. These standards have been satisfied.

(8) The Federal Americans With Disabilities Act (ADA) applies to development in the City of Tualatin. Although TDC Chapter 73, does not include the Oregon Structural Specialty Code' s (OSSC) accessibility standards as requirements to be reviewed during the Architectural Review process, compliance with the OSSC is a requirement at the Building Permit step. It is strongly recommended all materials submitted for Architectural Review show compliance with the OSSC.

RESPONSE: The site plan and buildings are generated with the knowledge that ADA, Fair Housing and OSSC standards must be met. This standard is satisfied.

Section 73.170 Structure Design – Single-family and Multi-family Uses.

(1) Purpose – Single-family Uses.

The purpose of single-family building design objectives and standards is to implement the purposes and objectives of TDC 73.020(2). The objectives and standards are intended to promote functional, safe, innovative and attractive buildings that are compatible with the surrounding environment. This concerns the building form including the articulation of walls, roof design, materials, and placement of elements such as windows, doors, and identification features.

(2) Purpose – Multi-family Uses.

The purpose of multi-family, including townhouse, building design objectives and standards is to implement the purposes and objectives of TDC 73.020(2). The objectives and standards are intended to promote functional, safe, innovative and attractive buildings which are compatible with the surrounding environment. This concerns the building form including the articulation of walls, roof design, materials, colors, placement of elements such as windows, doors, mechanical equipment and identification features. [Ord. 862-92, §51, 3/23/92. Ord. 1025-99, §36, 7/26/99; Ord. 1260-08 §7, 5/12/08]

RESPONSE: This project has been designed to be compatible with the surrounding environment to the greatest extent possible starting with building design, layout and building materials. Project landscaping has also taken the surrounding environment into consideration to help soften and integrate the project into the site's natural layout. This standard has been satisfied.

Section 73.180 Structure Design – Single-family and Multi-family Uses.

(2) Objectives – Multi-family Uses.

All multi-family projects, including town-houses, should strive to meet the following objectives to the maximum extent practicable. Architects and developers should consider these elements in designing new projects. In the Central Design District, the Design Guidelines of TDC 73.610 shall be considered. In the case of conflicts between objectives, the proposal shall provide a desirable balance between the objectives. Townhouses may necessitate a different balancing than multi-family developments, such as apartments. Buildings shall be designed, to the maximum extent practicable, to:

(a) Provide a composition of building elements which responds to function, land form, identity and image, accessibility, orientation and climatic factors.

(b) Enhance energy efficiency through the use of landscape and architectural elements, such as arcades, sun-screens, lattice, trellises, roof overhangs and window orientation.

(c) Create subclusters and stagger unit alignments.

(d) Utilize functional building elements such as carports and garages, balconies, entry areas and sun screens where possible to accomplish unit identity, pride of place and visual diversity.

(e) Give consideration to organization, design and placement of windows as viewed on each elevation. The system may be a variation on a theme or consistent symmetry and must operate in concert with the provision of adequate interior privacy, safety, daylight and ventilation.

(f) Select building materials which contribute to the project's identity, form and function, as well as to the existing site and surrounding natural landscape and development.

(g) Select colors in consideration of lighting conditions under which the structure is viewed, the ability of the material to absorb, reflect or transmit light, and the color's functional role (whether to blend into the environment, express a particular character, discriminate materials, define form and volume or simply as an identification feature such as with color coding).

(h) Minimize disruption of natural site features such as topography, trees and water features. [Ord. 727-87, §7, 7/13/87; Ord. 862-92, §51, 3/23/92; Ord. 1025-99, §37, 7/26/99; Ord. 1097-02, 02/11/02; Ord. 1260-08 §8, 5/12/08]

RESPONSE: This project has been designed with consideration of the site's unique characteristics. The majority of the future residential buildings have been sited to maximize the view of the Tualatin River and associated greenway. Topography of the site has been a contributing factor to building placement and building height in order to provide views for buildings located on the interior of the site. Building separation has been shown in order to maximize natural light infiltration. Building materials and colors have been selected to create a quality identity that blends with the natural environment and enhances the residential experience of living in the area. The design of the project has taken the preservation of the associated greenway into consideration by minimizing the amount of impact to the site by developing under the maximum allowable density which minimizes the disruption of natural site features. This standard is satisfied.

Section 73.190 Standards – Single-family and Multi-family Uses.

(2) Standards - Multi-family Uses.

The following standards are minimum requirements for multi-family and townhouse development.

(a) Storage.

(i) Except as provided in Subsection (a)(ii), enclosed storage areas are required and shall be attached to the exterior of each dwelling unit to accommodate garden equipment, patio furniture, barbecues, bicycles, etc. Garages are not intended to satisfy storage requirements. Each storage area shall be a minimum of 6 feet in height and have a minimum floor area of:

(A) 24 square feet for studio and one bedroom units;

(B) 36 square feet for two bed-room units; and

(C) 48 square feet for greater than two bedroom units.

(ii) For townhouses and residential and mixed use residential developments in the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, some provision shall be made for outdoor storage adjacent to private outdoor areas. Such provisions shall be reviewed for adequacy through Architectural Review and shall be designed to accommodate barbecues or other small deck equipment.

RESPONSE: Each unit will be provided with 24 sq. ft. of storage off of the associated decks. An additional 1,800 sq. ft. of storage will be provided at the lower level of the future clubhouse. According to this standard, "some provision shall be made for outdoor storage adjacent to private outdoor areas." Based on this information, the following table reflects the amount of storage provided, which exceeds the required storage imposed by this section.

Unit Type	# of Units	Required Storage	Planned Storage
1 Bedroom Units	60	1,440 sq. ft.	1,440 sq. ft.
2 Bedroom Units	102	3,672 sq. ft.	2,448 sq. ft.
3 Bedroom Units	18	864 sq. ft.	432 sq. ft.
Clubhouse			1,800 sq. ft.
TOTAL	**180 Units Provided**	**5,976 sq. ft. Required**	**6,120 sq. ft. Provided**

(b) Carports and Garages.

(i) If carports and garages are provided for multi-family development, except townhouses, the form, materials, color and construction shall be compatible with the complex they serve.

(ii) At least one garage space shall be provided for townhouses. [Ord. 705-86, § 6, 9/8/86; Ord. 862-92, § 51, 3/23/92; Ord. 882-92, § 14, 12/14/92; Ord. 1025-99, §38, 7/26/99; Ord. 1252-08 §2, 2/11/08; Ord. 1260-08 §9, 5/12/08]

RESPONSE: Carports will be provided for residents, which will be located at the front of each building. Carports will be constructed using the same color scheme and materials of the buildings they serve in order to have a uniform appearance. This standard has been satisfied.

Section 73.225 Mixed Solid Waste and Source Separated Recyclables Storage Areas for New or Expanded Multi-Unit Residential, Including Townhouses, Commercial, Industrial, Public and Semi-Public Development.

Purpose.

The purpose of mixed solid waste and source separated recyclables storage areas objectives and standards is to implement the purposes and objectives of TDC 73.020(2). The objectives and standards are intended to be flexible, easy and efficient to administer, and allow creativity. [Ord. 898-93, §6, 6/14/93. Ord. 1025-99, §39, 7/26/99; Ord. 1097-02, 2/11/02]

RESPONSE: A solid waste and recyclable storage area has been designed with the objectives of TDC 73.020(2) in mind. This area will mimic design standards and color schemes of the development in order to blend in with other amenities of the project. This standard has been satisfied.

Section 73.227 Standards.

The following standards are minimum requirements for mixed solid waste and source separated recyclables storage areas. To provide for flexibility in designing functional storage areas, this section provides four different methods to meet the objectives of providing adequate storage for mixed solid waste and source separated recyclables and improving the efficiency of collection. An applicant shall choose and implement one of the following four methods to demonstrate compliance: 1) minimum standards; 2) waste assessment; 3) comprehensive recycling plan; or 4) franchised hauler review, as more fully described in subsections (2), (3), (4) and (5) of this section.

> *(1) The mixed solid waste and source separated recyclables storage standards shall apply to all new or expanded multi-family residential developments containing five or more units and to new or expanded commercial, industrial, public and semi-public development.*

RESPONSE: This application is for a new multi-family residential development. These standards apply and are addressed below. The applicant has chosen to implement the Franchised Hauler Review Method, which is addressed below.

> *(5) Franchised Hauler Review Method. The franchised hauler review method provides for a coordinated review of the pro-posed site plan by the franchised hauler serving the subject property. This method can be used when there are unique conditions associated with the site, use, or waste stream that make compliance with any of the three other methods impracticable. The objective of this method is to match a specific hauler program (types of equipment, frequency of collection, etc.) to the unique characteristic(s) of the site or development. The applicant shall coordinate with the franchised hauler to develop a plan for storage and collection of mixed solid waste and source separated recyclables to be generated. A narrative describing how the proposed site meets one or more unique conditions, plus site plan and architectural drawings showing the size and location of storage area(s) required to accommodate anticipated volumes shall be submitted for Architectural Review. Additionally, a letter from the franchised hauler shall be submitted with the application that de-scribes the level of service to be provided by the hauler, including any special equipment and collection frequency, which will keep the storage area from exceeding its capacity. For purposes of this subsection the following constitute unique conditions:*

RESPONSE: The Franchised Hauler Review Method has been chosen due to the unique site conditions (floodplain, floodway, greenway, topography). A letter from the franchise hauler has been included with this application that approves the location, size of the future waste and recyclable area.

> > *(a) Use of either of the three other methods of compliance would interfere with the use of the proposed development by reducing the productive space of the proposed development, or make it impossible to comply with the minimum off-street parking requirements of the underlying planning district, or*

RESPONSE: Due to the unique site characteristics and the applicant's wishes to stay out of and preserve the natural amenities of the site, it has been determined that the other methods of compliance would interfere with the intent of this application.

(b) The site is of an irregular shape or possesses steep slopes that do not allow for access by collection vehicles typically used by the franchised hauler to serve uses similar in size and scope to the proposed use, or

RESPONSE: The site's topography has been a challenge throughout the design of this project. The placement of the waste and recyclable storage area is the most efficient and safe placement for collection vehicles to access such facility.

(c) The proposed use will generate unique wastes that can be stacked, folded, or easily consolidated without the need for specialized equipment, such as a compactor, and can therefore be stored in less space than is required by the Minimum Standards Method.

RESPONSE: The future use of the property is high density residential. Waste and recyclables from future residents does not require specialized equipment, however, a compactor is planned for this project to reduce the area needed for waste and recyclables. A letter from the franchise hauler approving the future waste and recyclable area is included with this application. This standard is satisfied.

If the application does not demonstrate that the franchised hauler method requires less space, through the Architectural Review process the minimum standards method may be required. The franchised hauler method shall be reviewed and approved as part of the Architectural Review process.

RESPONSE: As mentioned above, a letter from the franchise hauler approving the future trash and recyclable storage area has been included with this application. The future use of a compactor will significantly reduce the need for additional area for storage on an already constrained site. This standard is satisfied.

(6) Location, Design and Access Standards for Storage Areas. The following location, design and access standards are applicable for storage areas:

(a) Location Standards

(i) To encourage its use, the storage area for source separated recyclables may be co-located with the storage area for mixed solid waste.

(ii) Indoor and outdoor storage areas shall comply with Building and Fire Code requirements.

(iii) Storage area space requirements can be satisfied with a single location or multiple locations, and can combine both interior and exterior locations.

(iv) Exterior storage areas shall not be located within a required front yard setback or in a yard adjacent to a public or private street.

(v) Exterior storage areas shall be located in central and visible locations on the site to enhance security for users.

(vi) Exterior storage areas can be located in a parking area, if the proposed use provides parking spaces required through the Architectural Review process. Storage areas shall be appropriately screened according to TDC 73.227(6)(b)(iii).

(vii) Storage areas shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on site or on public streets adjacent to the site.

RESPONSE: The planned mixed solid waste and recyclable storage area is shown to be co-located at the south end of the subject site at a single location. The storage area is not located in a required front yard setback or in a yard adjacent to a public or private street. The storage area shall comply with Building and Fire Code requirements and is located in a visible area to enhance security for the project's future residents. Screening of the facility shall include fencing and/or masonry walls with security doors that will be sight obscuring. The planned storage area will be accessible for collection vehicles and will not obstruct pedestrian or vehicle movement. These standards are satisfied.

(b) Design Standards

(i) The dimensions of the storage area shall accommodate containers consistent with current methods of local collection at the time of Architectural Review approval.

(ii) Storage containers shall meet Fire Code standards and be made and covered with water proof materials or situated in a covered area.

(iii) Exterior storage areas shall be enclosed by a sight obscuring fence or wall at least 6 feet in height. In multi-family, commercial, public and semi-public developments evergreen plants shall be placed around the enclosure walls, excluding the gate or entrance openings. Gate openings for haulers shall be a minimum of 10 feet wide and shall be capable of being secured in a closed and open position. A separate pedestrian access shall also be provided in multi-family, commercial, public and semi-public developments.

(iv) Exterior storage areas shall have either a concrete or asphalt floor surface.

(v) Storage areas and containers shall be clearly labeled to indicate the type of material accepted.

RESPONSE: The planned storage area will be dimensioned to accommodate containers consistent with current methods of collection; it will be covered and as mentioned above, will include a sight obscuring gate. The remainder of the facility will be screened with fencing and/or masonry walls with appropriate landscaping. The floor of the storage area will be constructed of concrete and containers will be clearly labeled. These standards are satisfied.

(c) Access Standards

(i) Access to storage areas can be limited for security reasons. However, the storage areas shall be accessible to users at convenient times of the day, and to hauler personnel on the day and approximate time they are scheduled to provide hauler service.

(ii) Storage areas shall be designed to be easily accessible to hauler trucks and equipment, considering paving, grade, gate clearance and vehicle access. A minimum of 10 feet horizontal clearance and 8 feet vertical clearance is required if the storage area is covered.

(iii) Storage areas shall be accessible to collection vehicles without requiring backing out of a driveway onto a public street. If only a single access point is available to the storage area, adequate turning radius shall be provided to allow vehicles to safely exit the site in a forward motion. [Ord. 898-93, §8, 6/4/93]

RESPONSE: The future facility has been designed for easy access by both future residents and franchise collection vehicle and will not require backing movement onto a public street. Adequate turning radius for collection vehicles is provided as shown on the preliminary plan set. These standards have been satisfied.

LANDSCAPING

Section 73.230 Landscaping Standards.

Purpose.

The purpose of this section is to establish standards for landscaping within Tualatin in order to enhance the environmental and aesthetic quality of the City:

(1) By encouraging the retention and protection of existing trees and requiring the planting of trees in new developments;

(2) By using trees and other landscaping materials to temper the effects of the sun, wind, noise, and air pollution.

(3) By using trees and other landscaping materials to define spaces and the uses of specific areas; and

(4) Through the use of trees and other landscaping materials as a unifying element within the urban environment. [Ord. 705-86, §6, Sept. 8, 1986]

RESPONSE: The landscape plan submitted with this application shows a number of existing trees to remain and the planting of trees throughout the project in order to temper the effects of the sun, wind, noise and air pollution. The future planting of trees in conjunction with other landscape materials within the development will soften the impact of the project on the natural landscape and create a more pleasing atmosphere for residents and surrounding neighborhoods that are within view of the development.

Section 73.240 Landscaping General Provisions.

> *(9) Yards adjacent to public streets, except as described in the Hedges Creek Wetlands Mitigation Agreement, **TDC 73.240(7)**, shall be planted to lawn or live groundcover and trees and shrubs and be perpetually maintained in a manner providing a park-like character to the property as approved through the Architectural Review process.*

RESPONSE: The subject site is adjacent to SW Pacific Hwy. and provides a setback of 22.9'. This area is considered "yard area" and will be planted with lawn, trees and shrubs and be maintained as a park-like character. Please see the landscape plan included in our preliminary plan set for further details. This standard is satisfied.

> *(10) Yards not adjacent to public streets or Low Density Residential (RL) or Manufacturing Park (MP) Planning Districts shall be planted with trees, shrubs, grass or other live groundcover, and maintained consistent with a landscape plan indicating areas of future expansion, as approved through the Architectural Review process.*

RESPONSE: All future yard areas abutting adjacent properties, which are not zoned either (RL) or (MP), will be planted with trees, shrubs and grass as shown on the landscape plan submitted with our preliminary plan set. This standard is satisfied.

> *(11) Any required landscaped area shall be designed, constructed, installed, and maintained so that within three years the ground shall be covered by living grass or other plant materials. (The foliage crown of trees shall not be used to meet this requirement.) A maximum of 10% of the landscaped area may be covered with un-vegetated areas of bark chips, rock or stone. Disturbed soils are encouraged to be amended to an original or higher level of porosity to regain infiltration and stormwater storage capacity.*

RESPONSE: All landscaped areas will be covered with living plant materials, including trees, shrubs and groundcover. Bark mulch will cover ground in the landscaped areas between plantings, suppressing weeds and retaining moisture. No areas will be covered exclusively in bark chips, rock or stone. disturbed soils on the site will be amended to an original or higher level of porosity. This standard is met.

> *(13) Landscape plans for required landscaped areas that include fences should carefully integrate any fencing into the plan to guide wild animals toward animal crossings under, over, or around transportation corridors.*

RESPONSE: A 6' fence will be installed at the pool enclosure, which will deter wild animals from entering the pool area. This standard is satisfied.

Section 73.250 Tree Preservation.

(1) Trees and other plant materials to be retained shall be identified on the landscape plan and grading plan.

RESPONSE: The landscape plan and grading plan show all existing trees to be retained. Separate tree removal plans have been included in the preliminary plan set. Therefore, this standard has been satisfied.

(2) During the construction process:

(a) The owner or the owner's agents shall provide above and below ground protection for existing trees and plant materials identified to remain.

(b) Trees and plant materials identified for preservation shall be protected by chain link or other sturdy fencing placed around the tree at the drip line.

(c) If it is necessary to fence within the drip line, such fencing shall be specified by a qualified arborist as defined in TDC 31.060.

(d) Neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.

(e) Where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's drip-line area, such grading, paving, trenching, boring, digging, or similar encroachment shall only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met.

(f) Tree root ends shall not remain exposed.

RESPONSE: All trees and plant material indicated on the landscape plan, grading plan and tree preservation and removal plan to remain will be protected by providing sturdy fencing. All tree protection fencing will be placed at the drip line of trees or as otherwise noted by the project's arborist. No storage of materials including soil will be placed or stored within the drip line of trees to be saved and no grading or other activities associated with the development of the site will compromise the established protection measures unless allowed by the project's arborist. These standards are satisfied.

(3) Landscaping under preserved trees shall be compatible with the retention and health of said tree.

RESPONSE: No trees will be compromised by the installation of additional landscaping associated with the project. This standard is satisfied.

(4) When it is necessary for a preserved tree to be removed in accordance with TDC 34.210 the landscaped area surrounding the tree or trees shall be maintained and replanted with trees that relate to the present landscape plan, or if there is no landscape plan, then trees that are complementary with existing, nearby landscape materials. Native trees are encouraged

RESPONSE: If the removal of trees originally planned to be saved is necessary, nearby landscaping and trees will be protected to the extent possible. If need be, surrounding landscaping and trees will be replaced with like species.

(5) Pruning for retained deciduous shade trees shall be in accordance with National Arborist Association "Pruning Standards For Shade Trees," revised 1979.

RESPONSE: All pruning of deciduous shade trees shall be in accordance with National Arborist Association "Pruning Standards for Shade Trees."

(6) Except for impervious surface areas, one hundred percent (100%) of the area preserved under any tree or group of trees retained in the landscape plan (as approved through the Architectural Review process) shall apply directly to the percentage of landscaping required for a development.

RESPONSE: The area of all preserved trees has been included in the total percentage of landscaping for the development. This standard is satisfied.

Section 73.260 Tree and Plant Specifications.

(1) The following specifications are minimum standards for trees and plants:

(a) Deciduous Trees:

Deciduous shade and ornamental trees shall be a minimum one and one-half inch (1 1/2") caliper measured six inches (6") above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be characteristically shaped specimens.

(b) Coniferous Trees.

Coniferous trees shall be a minimum five feet (5') in height above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be well branched and characteristically shaped specimens.

(c) Evergreen and Deciduous Shrubs.

Evergreen and deciduous shrubs shall be at least one (1) to five (5) gallon size. Shrubs shall be characteristically branched. Side of shrub with best foliage shall be oriented to public view.

(d) Groundcovers.

Groundcovers shall be fully rooted and shall be well branched or leafed. English ivy (Hedera helix) is considered a high maintenance material which is detrimental to other landscape materials and buildings and is therefore prohibited.

(e) Lawns.

Lawns shall consist of grasses, including sod, or seeds of acceptable mix within the local landscape industry. Lawns shall be 100 percent coverage and weed free.

RESPONSE: As shown in the attached landscape plan, the planned development includes a variety of appropriate landscaping elements including deciduous trees, coniferous trees, evergreen and deciduous shrubs and groundcovers. All lawns associated with the development will consist of a mix that is acceptable to the local landscape industry and be planted to ensure 100 percent coverage. All lawns will be maintained and weed free. This standard has been satisfied.

(2) Landscaping shall be installed in accordance with the provisions of Sunset New Western Garden Book (latest edition), Lane Publishing Company, Menlo Park, California or the American Nurserymen Association Standards (latest edition).

RESPONSE: Landscaping will be installed in accordance with the Sunset New Western Garden Book standards and has been designed by a professional landscape architect. This standard is satisfied.

(3) The following guidelines are suggested to ensure the longevity and continued vigor of plant materials:

(a) Select and site permanent landscape materials in such a manner as to produce a hardy and drought-resistant landscaped area.

(b) Consider soil type and depth, spacing, exposure to sun and wind, slope and contours of the site, building walls and overhangs, and compatibility with existing native vegetation preserved on the site or in the vicinity.

RESPONSE: Hardy, drought-resistant plants, appropriate to the site and region have been selected for the site. The site will be redeveloped prior to planting, therefore, new soil will be added. The project contractor will test and amend the soil as needed. These guidelines are satisfied.

(4) All trees and plant materials shall be healthy, disease-free, damage-free, well-branched stock, characteristic of the species.

RESPONSE: All plant materials will be new and healthy. This standard is satisfied.

(5) All plant growth in landscaped areas of developments shall be controlled by pruning, trimming or otherwise so that:

(a) It will not interfere with designated pedestrian or vehicular access; and

(b) It will not constitute a traffic hazard because of reduced visibility. [Ord. 904-93, §57, 9/13/93]

RESPONSE: The selected plant materials are appropriate for the site and climate and will not interfere with visibility or movement in clear vision areas. Responsibility for maintenance of landscaping is accepted by the property owner. This standard is met.

Section 73.270 Grading.

(1) After completion of site grading, top-soil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.

(2) All planting areas shall be graded to provide positive drainage.

(3) Neither soil, water, plant materials nor mulching materials shall be allowed to wash across roadways or walkways.

(4) Impervious surface drainage shall be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.

RESPONSE: Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time. All planting areas shall be graded to provide positive drainage and all soil, plant and mulching materials will be contained in landscape areas and will not cross roadways or walkways. These standards have been satisfied.

Section 73.280 Irrigation System Required.

Except for townhouse lots, landscaped areas shall be irrigated with an automatic underground or drip irrigation system. [Ord. 1025-99, §42, 7/26/99]

RESPONSE: According to the landscape plan the landscaped areas will be irrigated. This standard is satisfied.

Section 73.290 Re-vegetation in Un-landscaped Areas.

The purpose of this section is to ensure erosion protection, and in appropriate areas to encourage soil amendment, for those areas not included within the landscape percentage requirements so native plants will be established, and trees will not be lost.

(1) Where vegetation has been removed or damaged in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements, vegetation shall be replanted.

(2) Plant materials shall be watered at intervals sufficient to ensure survival and growth for a minimum of two growing seasons.

(3) The use of native plant materials is encouraged to reduce irrigation and maintenance demands.

(4) Disturbed soils should be amended to an original or higher level of porosity to regain infiltration and stormwater storage capacity. [Ord. 1224-06 §27, 11/13/06]

RESPONSE: All areas disturbed outside of future landscaping or occupied by future site amenities will be re-established with native vegetation and maintained to ensure survival and growth for a minimum of two growing seasons. Disturbed soils will be amended to an original or higher level of porosity that will help facilitate retention for stormwater. These standards are satisfied.

Section 73.300 Landscape Standards - Multi-family Uses.

All areas within a development, including townhouses, not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas, or undisturbed natural areas shall be landscaped. Townhouse developments may include hard surfaces in outdoor areas such as patios and storage areas as determined in the Architectural Review process. [Ord. 1025-99, §43, 7/2/99

RESPONSE: All areas not occupied by the future development of the subject site will be landscaped as required above and shown on the preliminary landscape plan. This standard is satisfied.

OFF-STREET PARKING LOT LANDSCAPING

Section 73.320 Off-Street Parking Lot Landscaping Standards.

(1) General Provisions. In addition to the goals stated in TDC 73.110 and 73.140, the goals of the off-street parking lot standards are to create shaded areas in parking lots, to reduce glare and heat buildup, provide visual relief within paved parking areas, emphasize circulation patterns, reduce the total number of spaces, reduce the impervious surface area and stormwater runoff and enhance the visual environment. The design of the off-street parking area shall be the responsibility of the developer and should consider visibility of signage, traffic circulation, comfortable pedestrian access, and aesthetics. Trees shall not be cited as a reason for applying for or granting a variance on placement of signs.

(2) Application. Off-street parking lot landscaping standards shall apply to any surface vehicle parking or circulation area.
[Ord. 904-93, §59, 9/13/93; Ord. 1224-06 §28, 11/13/06]

RESPONSE: As shown on the attached landscape plan, all vehicle parking and circulation areas will be landscaped to off-street parking lot landscaping standards that meet the above goals. This standard is met.

Section 73.330 Parking Lot Landscaping - Multi-family Uses.

> *(1) Locate landscaping or approved substitute materials in all areas not necessary for vehicular parking and maneuvering.*
>
> *(2) A clear zone shall be provided for the driver at ends of on-site drive aisles and at driveway entrances, vertically between a maximum of 30 inches and a minimum of 8 feet as measured from the ground level.*
>
> *(3) Except for townhouse lots, a minimum 10-foot landscape setback shall be provided between the property lines and parking areas. This area shall be planted with deciduous trees an average of not more than 30 feet on center and shrubs at least 30 inches in height which provide screening of vehicular headlights. Trees shall meet the requirements of TDC 73.360(7). Native trees and shrubs are encouraged.*
>
> *(4) Except for townhouse lots, provide a landscaped transition area of at least 10 feet in width between parking and vehicle circulation areas and buildings and shared outdoor areas. Deciduous shade trees located at not less than 30 feet on center shall be located in this transition area. The trees shall meet the requirements of TDC 73.360(7). Groundcover plants mixed with low shrubs must completely cover the remainder of this area within three years. Native trees and shrubs are encouraged. [Ord. 882-92, §17, 12/14/92. Ord. 1025-99, §44, 7/26/99; Ord. 1224-06 §29, 11/13/06]*

RESPONSE: As shown on the landscape plan included with the preliminary plan set, all vehicle parking and circulation areas will be landscaped to off-street parking lot landscaping standards. A 10-foot wide landscape setback between future parking areas and property lines has also been shown on the landscape plan that will be planted with deciduous trees that are spaced according to the above criterion. A 10-foot wide landscape transition area is also shown between all vehicle parking and circulation areas, buildings and shared outdoor areas. The landscape transition areas will be planted with groundcover plants mixed with low shrubs and trees. These standards are satisfied.

Section 73.350 Off-Street Parking Lot Landscape Island Requirements - Multi-Family Uses.

> *(1) Except for townhouse lots that are not required to have landscape island areas, a minimum of 25 square feet per parking stall shall be improved with landscape island areas. They may be lower than the surrounding parking surface to allow them to receive stormwater run-off and function as water quality facilities as well as parking lot landscaping. They shall be protected from vehicles by curbs, but the curbs may have spaces to allow drainage into the islands. They shall be dispersed throughout the parking area (see TDC 73.380(3). They shall be planted with groundcover or shrubs. They shall be planted with deciduous shade trees when needed to meet the parking lot shade tree requirements. Native plant materials are encouraged. Landscape square footage requirements shall not apply to parking structures and underground parking.*

(2) Landscape island areas with trees shall be a minimum of 5 feet in width (from inside of curb to curb).

(3) A minimum of one deciduous shade tree shall be provided for every four parking spaces to lessen the adverse impacts of glare, reduce heat from paved surfaces, and to emphasize circulation patterns. Required shade trees shall be within 5 feet of the face of a perimeter parking lot curb and shall be uniformly distributed throughout the parking lot (see TDC 73.380(3)), except that within the Central Design District landscape islands and shade trees may be placed to frame views of the Tualatin Commons water feature or identified architectural focal elements. The trees shall meet the requirements of TDC 73.360(7).

(4) Required plant material in landscape islands shall achieve 90 percent coverage within three years. Native shrubs and trees are encouraged. [Ord. 882-92, §19, 12/14/92; Ord. 904-93, §62, 9/13/93; Ord. 1025-99, §45, 7/26/99; Ord. 1224-06 §31, 11/13/06]

RESPONSE: A total of 322 parking stalls are associated with the future development of the site. Based on the above requirement, a total of 8,050 square feet of landscape islands is required. This standard is met through the standard 16'-18' deep landscape islands located every 8 or fewer parking spaces, as well as through the landscaped areas at the ends of parking bays. The City of Tualatin considers any landscape area continued through the horizontal (bumper) line of the parking spaces as a "landscape island area." Across the site, approximately 15,955 square feet of "landscape island areas" will be provided in the parking lot. Deciduous shade trees are provided for every four parking spaces and planted within 5 feet of the perimeter of future parking areas. This standard is met.

Section 73.370 Off-Street Parking and Loading.

(1) General Provisions.

(n) Bicycle parking facilities shall include long-term parking that consists of covered, secure stationary racks, lockable enclosures, or rooms (indoor or outdoor) in which the bicycle is stored and short-term parking provided by secure stationary racks (covered or not covered), which accommodate a bicyclist's lock securing the frame and both wheels. The Community Development Director, their designee, or the Architectural Review Board may approve a form of bicycle parking not specified in these provisions but that meets the needs of long-term and/or short-term parking pursuant to Section 73.370.

RESPONSE: The future development of the subject site will include 2 covered bicycle parking spaces at each stairwell of the planned buildings. There are a total of 29 stairwells planned for a total of 58 covered spaces. Each unit will also have 1 covered bicycle space in the associated balcony storage area for a total of 180 stalls. Therefore, a total of 238 bicycle parking stalls are provided.

(o) Each bicycle parking space shall be at least 6 feet long and 2 feet wide, and overhead clearance in covered areas shall be at least 7 feet, unless a lower height is approved through the Architectural Review process.

RESPONSE: the future bicycle parking stalls will be at least 6' long and 2' wide. Overhead clearance of covered bicycle parking stalls will be at least 7 feet.

(p) A 5-foot-wide bicycle maneuvering area shall be provided beside or between each row of bicycle parking. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

RESPONSE: A minimum 5' wide bicycle maneuvering area shall be provided on either side of the future bicycle parking stalls. The area for which bicycle parking will be provided shall be concrete. This standard is satisfied.

(q) Access to bicycle parking shall be provided by an area at least 3 feet in width. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

RESPONSE: As mentioned above, bicycle parking will be provided at the stairwells of the associated residential buildings. This area will be concrete and be a minimum of 3' in width. This standard is satisfied.

(r) Required bicycle parking shall be located in convenient, secure, and well-lighted locations approved through the Architectural Review process. Lighting, which may be provided, shall be deflected to not shine or create glare into street rights-of-way or fish and wildlife habitat areas.

RESPONSE: As mentioned above, bicycle parking will be provided at the stairwells of the associated residential buildings. This area will have appropriate lighting which will not shine or create glare into street rights-of-way or wildlife habitat areas. This standard is satisfied.

(s) Long-term bicycle parking facilities may be provided inside a building in suitable secure and accessible locations.

RESPONSE: One bicycle parking stall will be provided on the patio of each unit, which is considered suitably secured and accessible. This standard is satisfied.

(t) Bicycle parking may be provided within the public right-of-way in the Core Area Parking District subject to approval of the City Engineer and provided it meets the other requirements for bicycle parking.

RESPONSE: The subject site is not within the "Core Area Parking District." Therefore, this standard does not apply.

(u) Bicycle parking areas and facilities shall be identified with appropriate signing as specified in the Manual on Uniform Traffic Control Devices (MUTCD) (latest edition). At a minimum, bicycle parking signs shall be located at the main entrance and at the location of the bicycle parking facilities.

RESPONSE: Appropriate signage will be placed on the subject site that will direct residents to bicycle parking areas. This standard is satisfied.

(v) Required bicycle parking spaces shall be provided at no cost to the bicyclist, or with only a nominal charge for key deposits, etc. This shall not preclude the operation of private for-profit bicycle parking businesses.

RESPONSE: There will be no additional cost for bicycle parking on the subject site. This standard is satisfied.

(w) Parking on existing residential, commercial and industrial development may be redeveloped as a transit facility as a way to encourage the development of transit supportive facilities such as bus stops and pullouts, bus shelters and park and ride stations. Parking spaces converted to such uses in conjunction with the transit agency and approved through the Architectural Review process will not be required to be replaced.

RESPONSE: No parking associated with this project will be dedicated for transit facilities. This standard does not apply.

*(x) Required vanpool and carpool parking shall meet the 9-foot parking stall standards in **Figure 73-1** and be identified with appropriate signage.*

RESPONSE: No parking associated with this project will be dedicated for vanpool or carpooling. This standard does not apply.

(2) Off-Street Parking Provisions.

> *(a) The following are the minimum and maximum requirements for off-street motor vehicle parking in the City, except for minimum parking requirements for the uses in TDC 73.370(2)(a) (Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv) within the Core Area Parking District (CAPD). Minimum standards for off-street motor vehicle parking for the uses in 73.370(2)(a) Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv in the CAPD are in TDC 73.370(2)(b). The maximum requirements are divided into Zone A and Zone B, as shown on the Tualatin Parking Zone Map, Figure 73-3. The following are exempt from calculation of maximum parking requirements: parking structures; fleet parking; parking for vehicles for sale, lease or rent; car/vanpool parking; dedicated valet parking; and user-paid parking.*

USE	*MINIMUM MOTOR VEHICLE PARKING REQUIREMENT*	*MAXIMUM MORTOR VEHICLE PARKING REQUIREMENT*	*BICYCLE PARKING REQUIREMENT*	*PERCENTAGE OF BICYCLE PARKING TO BE COVERED*
RESIDENTIAL USES:				
(iii) Multi-family dwellings in complexes with private internal driveways	*1.0 space/studio, 1.25 space/1 bedr., 1.50 space/2 bedr., 1.75 space/3=bedr. In addition to garage*	*none*	*Developments with four or more units; none required if a garage is provided as an integral element of a unit; otherwise 1.00 space pre unit*	*100*

RESPONSE: The future use of the subject site is a multi-family complex. The following chart indicates the number and type of each unit, the minimum and maximum number of parking and bicycle stalls required and planned for the project.

Unit Type	# of Units	Required Parking	Proposed Parking	Required # Bike Parking	# of Bike Stalls
1 BR Units	60	75	Avg: 107	60	Avg: 80
2 BR Units	102	153	Avg: 107	102	Avg: 121
3 BR Units	18	31.5	Avg: 108	18	Avg: 37
TOTAL	**180 Units Provided**	**259.5 Parking Stalls Required**	**322 Parking Stalls Provided**	**180 Bicycle Stalls Required**	**238 Bicycle Stalls Provided**

Section 73.380 Off-Street Parking Lots.

A parking lot, whether an accessory or principal use, intended for the parking of automobiles or trucks, shall comply with the following:

> *(1) Off-street parking lot design shall comply with the dimensional standards set forth in Figure 73-1 of this section, except for parking structures and underground parking where stall length and width requirements for a standard size stall shall be reduced by .5 feet and vehicular access at the entrance if gated shall be a minimum of 18 feet in width.*

RESPONSE: The future 322 parking stalls are shown at a 90 degree angle. Each standard stall will be 9 feet in width, 18.5 feet in length (striped) with a 2.5' overhang, which is consistent with Figure 37-1 of this section. Therefore, this standard has been satisfied.

(2) Parking stalls for sub-compact vehicles shall not exceed 35 percent of the total parking stalls required by TDC 73.370(2). Stalls in excess of the number required by TDC 73.370(2) can be sub-compact stalls.

RESPONSE: A total of 16 sub-compact parking stalls are shown at 7.7' wide and 15' long. This standard is satisfied.

(3) Off-street parking stalls shall not exceed eight continuous spaces in a row without a landscape separation, except for parking structures and underground parking. For parking lots within the Central Design District that are designed to frame views of the central water feature or identified architectural focal elements as provided in TDC 73.350(3), this requirement shall not apply and the location of parking lot landscape islands shall be determined through the Architectural Review process.

RESPONSE: As shown on the attached plans, typical landscape islands are proposed to be spaced every 8 or fewer parking spaces, as well as through landscaped areas at the ends of parking bays. This standard is satisfied.

(4) Parking lot drive aisles shall be constructed of asphalt or concrete, including pervious concrete. Parking stalls shall be constructed of asphalt or concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material. Drive aisles and parking stalls shall be maintained adequately for all-weather use and drained to avoid water flow across sidewalks. Pervious surfaces such as pervious concrete, pavers and grasscrete, but not gravel or woody material, are encouraged for parking stalls in or abutting the Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or in a Clean Water Services Vegetated Corridor.Parking lot landscaping shall be provided pursuant to the requirements of TDC 73.350 and TDC 73.360. Walkways in parking lots shall be provided pursuant to TDC 73.160.

RESPONSE: All parking areas will be constructed using an impervious surface. Water from the paved parking areas will drain to storm drains in order to avoid the flow of water across pedestrian walkways; storm lines will flow into the on-site water quality and detention facility associated with the project. Walkways will be provided in all parking areas that will make for convenient and safe pedestrian maneuvering to other site amenities. This standard is met.

(5) Except for parking to serve residential uses, parking areas adjacent to or within residential planning districts or adjacent to residential uses shall be designed to minimize disturbance of residents.

RESPONSE: The adjoining property to the southwest of the project site is also zoned High Density Residential. However, only 4 parking stalls abut the southwestern property line, which will have a minimum 10' landscaped separation planted with a combination of low lying shrubs and trees. This standard is met.

(6) Artificial lighting, which may be pro-vided, shall be deflected to not shine or create glare in a residential planning district, an adjacent dwelling, street right-of-way in such a manner as to impair the use of such way or a Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor.

RESPONSE: Project lighting will be installed to not create glare or shine on any adjoining property, right-of-way or natural resource protection overlay district. This standard is satisfied.

(7) Groups of more than 4 parking spaces shall be so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.

RESPONSE: All parking associated with this project is internal. There will be no opportunity to back onto a street right-of-way. This standard is met.

(8) Service drives to off-street parking areas shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.

RESPONSE: All drive isles are designed to provide the maximum safety of traffic access and egress and pedestrian movement on the site. This standard is satisfied.

(9) Parking bumpers or wheel stops or curbing shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.

RESPONSE: As shown on the attached plans, curbing will be provided in front of all parking stalls to protect pedestrians and landscape material. This standard is satisfied.

(10) Disability parking spaces and accessibility shall be provided in accordance with applicable federal and state requirements.

RESPONSE: As shown on the attached plans handicapped parking spaces will be provided with this development. This standard is met.

(11) On-site drive aisles without parking spaces, which provide access to parking areas with regular spaces or with a mix of regular and sub-compact spaces, shall have a minimum width of 22 feet for two-way traffic and 12 feet for one-way traffic. On-site drive aisles without parking spaces, which provide access to parking areas with only sub-compact spaces, shall have a minimum width of 20 feet for two-way traffic and 12 feet for one-way traffic. [Ord. 882-92, §22, 12/14/92; Ord. 904-93, §68, 69 and 70, 9/13/93; Ord. 920-94, §22, 4/11/94; Ord. 956-96, §38, 1/8/96; Ord. 1224-06 §34, 11/13/06; Ord. 1354-13 §14, 02/25/13

RESPONSE: As shown on the attached plans, drive isles on the site provide access to parking areas with regular parking spaces. Drive aisles will be at least 22' wide to accommodate two-way traffic. Therefore, this standard is satisfied.

Section 73.400 Access.

(1) The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this Code are continuing requirements for the use of any structure or parcel of real property in the City of Tualatin. Access management and spacing standards are provided in this section of the TDC and TDC Chapter 75. No building or other permit shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled. If the owner or occupant of a lot or building changes the use to which the lot or building is put, thereby increasing ingress and egress requirements, it shall be unlawful and a violation of this code to begin or maintain such altered use until the required increase in ingress and egress is provided.

RESPONSE: The provision and maintenance of vehicular and pedestrian accesses on the site will be provided prior to occupancy. This standard is met.

(2) Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use. Copies of said deeds, easements, leases or contracts shall be placed on permanent file with the City Recorder.

RESPONSE: Joint access is not proposed with this application. Therefore, this standard does not apply.

(3) Joint and Cross Access.

(a) Adjacent commercial uses may be required to provide cross access drive and pedestrian access to allow circulation between sites.

(b) A system of joint use driveways and cross access easements may be required and may incorporate the following:

(i) a continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management classification system and standards.

(ii) a design speed of 10 mph and a maximum width of 24 feet to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;

(iii) stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross access via a service drive;

(iv) a unified access and circulation system plan for coordinated or shared parking areas.

(c) Pursuant to this section, property owners may be required to:

(i) Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;

(ii) Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the city and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway;

(iii) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners;

(iv) If (i-iii) above involve access to the state highway system or county road system, ODOT or the county shall be contacted and shall approve changes to (i-iii) above prior to any changes.

RESPONSE: Joint access is not proposed with this application. Therefore, this standard does not apply.

(4) Requirements for Development on Less than the Entire Site.

(a) To promote unified access and circulation systems, lots and parcels under the same ownership or consolidated for the purposes of development and comprised of more than one building site shall be reviewed as one unit in relation to the access standards. The number of access points permitted shall be the minimum number necessary to provide reasonable access to these properties, not the maximum available for that frontage. All necessary easements, agreements, and stipulations shall be met. This shall also apply to phased development plans. The owner and all lessees within the affected area shall comply with the access requirements.

(b) All access must be internalized using the shared circulation system of the principal commercial development or retail center. Driveways should be designed to avoid queuing across surrounding parking and driving aisles.

RESPONSE: This application addresses the entire site. This standard is met.

(5) Lots that front on more than one street may be required to locate motor vehicle accesses on the street with the lower functional classification as determined by the City Engineer.

RESPONSE: The subject site only has frontage onto Pacific Hwy. Therefore, this standard does not apply.

(6) Except as provided in TDC 53.100, all ingress and egress shall connect directly with public streets. [Ord. 882-92, § 24,12/14/92]

RESPONSE: The subject site will provide all ingress and egress to Pacific Hwy. This standard is met.

(7) Vehicular access for residential uses shall be brought to within 50 feet of the ground floor entrances or the ground floor landing of a stairway, ramp or elevator leading to dwelling units.

RESPONSE: The future vehicular access will connect to planned parking areas that are within 50 feet of future residential buildings. This standard is met.

(8) To afford safe pedestrian access and egress for properties within the City, a sidewalk shall be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to City standards, except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established, in which case the sidewalks shall be constructed to a design and in a manner approved by the City Engineer. Sidewalks approved by the City Engineer may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks shall provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction shall include construction of the curb and gutter section to grades and alignment established by the City Engineer.

RESPONSE: Sidewalks built to city standards along the site's frontage on Pacific Hwy will be provided. This standard is met.

(9) The standards set forth in this Code are minimum standards for access and egress, and may be increased through the Architectural Review process in any particular instance where the standards provided herein are deemed insufficient to protect the public health, safety, and general welfare.

RESPONSE: This standard is understood.

(10) Minimum access requirements for residential uses:

(a) Ingress and egress for single-family residential uses, including townhouses, shall be paved to a minimum width of 10 feet. Maximum driveway widths shall not exceed 26 feet for one and two car garages, and 37 feet for three or more car garages. For the purposes of this section, driveway widths shall be measured at the property line.

(b) Ingress and egress for multi-family residential uses shall not be less than the following:

Dwelling Units	*Minimum Number Required*	*Minimum Width*	*Walkways, Etc.*
2	*1*	*16 feet*	*No walkways or curbs required*
3-19	*1*	*24 feet*	*No walkways or curbs required*
20-49	*1* *or* *2*	*24 feet* *16 feet (one way)*	*6-foot walkway, 1 side only; curbs required*
50-499	*1* *or* *2*	*32 feet* *24 feet*	*6-foot walkway, 1 side only; curbs required*
Over 500	*As required by City Engineer*	*As required by City Engineer*	*As required by City Engineer*

RESPONSE: The future River Ridge apartment complex will have 180 residential units. Based on this standard, one 32' wide access with a 6' walkway on one side is required. This development provides a 32' wide access with two 8' wide walkways that will connect to SW Pacific Hwy., which has been provided on the plan set submitted with this application. This standard is met.

(14) Maximum Driveway Widths and Other Requirements.

(a) Unless otherwise provided in this chapter, maximum driveway widths shall not exceed 40 feet.

(b) Except for townhouse lots, no driveways shall be constructed within 5 feet of an adjacent property line, except when two adjacent property owners elect to provide joint access to their respective properties, as provided by Subsection (2).

(c) There shall be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Engineer.

RESPONSE: The future access of the site is shown to be 32' in width, is approximately 6' from the adjoining property to the southwest and approximately 75' from the access of the adjoining property to the south. This standard is satisfied.

(15) Distance between Driveways and Intersections.

Except for single-family dwellings, the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection.

(a) At the intersection of collector or arterial streets, driveways shall be located a minimum of 150 feet from the intersection.

(b) At the intersection of two local streets, driveways shall be located a minimum of 30 feet from the intersection.

(c) If the subject property is not of sufficient width to allow for the separation between driveway and intersection as provided, the driveway shall be constructed as far from the intersection as possible, while still maintaining the 5-foot setback between the driveway and property line as required by TDC 73.400(14)(b).

(d) When considering a public facilities plan that has been submitted as part of an Architectural Review plan in accordance with TDC 31.071(6), the City Engineer may approve the location of a driveway closer than 150 feet from the intersection of collector or arterial streets, based on written findings of fact in support of the decision. The written approval shall be incorporated into the decision of the City Engineer for the utility facilities portion of the Architectural Review plan under the process set forth in TDC 31.071 through 31.077.

RESPONSE: The future access to the subject site is approximately 600' +/- from the intersection of Pacific Hwy and 124th Ave. This standard is met.

(16) Vision Clearance Area.

(a) Local Streets - A vision clearance area for all local street intersections, local street and driveway intersections, and local street or driveway and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 10 feet from the intersection point of the right-of-way lines, as measured along such lines (see Figure 73-2 for illustration).

(b) Collector Streets - A vision clearance area for all collector/arterial street intersections, collector/arterial street and local street intersections, and collector/arterial street and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 25 feet from the intersection point of the right-of-way lines, as measured along such lines. Where a driveway intersects with a collector/arterial street, the distance measured along the driveway line for the triangular area shall be 10 feet (see Figure 73-2 for illustration).

(c) Vertical Height Restriction - Except for items associated with utilities or publicly owned structures such as poles and signs and existing street trees, no vehicular parking, hedge, planting, fence, wall structure, or temporary or permanent physical obstruction shall be permitted between 30 inches and 8 feet above the established height of the curb in the clear vision area (see Figure 73-2 for illustration).

RESPONSE: The subject site takes access from SW Pacific Hwy., which is neither a local or collector/arterial street. Therefore, this standard does not apply.

(17) Major driveways, as defined in 31.060, in new residential and mixed-use areas are required to connect with existing or planned streets except where prevented by topography, rail lines, freeways, pre-existing development or leases, easements or covenants, or other barriers. [Ord. 895-93 §3, 5/24/93; Ord. 945-95, 5/8/95; Ord. 1025-99, §7, 7/26/99; Ord. 1026-99 §97, 8/9/99; Ord. 1103-02, 3/25/02; Ord. 1096-02, 1/28/02; Ord. 1354-13 §16, 02/25/13

RESPONSE: The primary access point for the subject property connects to SW Pacific Hwy. There are no barriers that will conflict with the connection point at Pacific Hwy. Appropriate visual clearance areas will be provided per ODOT standards.

Chapter 34 - Special Regulations

Section 34.210 Application for Architectural Review, Sub-division or Partition Review, or Tree Removal Permit.

(1) Architectural Review, Subdivision, or Partition. When a property owner wishes to remove trees, other than the exemptions permitted under TDC 34.200(3), to develop property, and the development is subject to Architectural Review, Subdivision Review, or Partition Review approval, the property owner shall apply for approval to remove trees as part of the Architectural Review, Subdivision Review, or Partition Review application process.

(a) The application for tree removal shall include:

(i) A Tree Preservation Site Plan, drawn to a legible scale, showing the following information: a north arrow; existing and proposed property lines; existing and proposed topographical contour lines; existing and proposed structures, impervious surfaces, wells, septic systems, and stormwater retention/detention facilities; existing and proposed utility and access locations/easements; illustration of vision clearance areas; and illustration of all trees on-site that are eight inches or more in diameter (including size, species, and tag i.d. number). All trees proposed for removal and all trees proposed for preservation shall be indicated on the site plan as such by identifying symbols, except as follows:

(A) Where Clean Water Services (CWS) has issued a Service Provider Letter that addresses the proposed development currently under consideration, and

(B) Where CWS has approved delineation of a "sensitive area" or "vegetated corridor" on the subject property, and

(C) Where CWS has required dedication of an easement that prohibits encroachment into the delineated area, then

(D) All trees located within the CWS-required easement need not be individually identified on the Tree Preservation Site Plan if the CWS-required easement boundary is clearly illustrated and identified on the Tree Preservation Site Plan.

(ii) A tree assessment prepared by a qualified arborist, including the following information: an analysis as to whether trees proposed for preservation can in fact be preserved in light of the development proposed, are healthy specimens, and do not pose an imminent hazard to persons or property if preserved; an analysis as to whether any trees proposed for removal could be reasonably preserved in light of the development proposed and health of the tree; a statement addressing the approval criteria set forth in TDC 34.230; and arborist's signature and contact information. The tree assessment report shall have been prepared and dated no more than one calendar year proceeding the date the development application is deemed complete by the City. Where TDC 34.210(1)(a)(i)(A) through (D) are applicable, trees located within the CWS-required easement need not be included in the tree assessment report.

(iii) All trees on-site shall be physically identified and numbered in the field with an arborist-approved tagging system. The tag i.d. numbers shall correspond with the tag i.d. numbers illustrated on the site plan. Where TDC 34.210(1)(a)(i)(A) through (D) are applicable, trees located in the CWS-required easement need not be tagged.

(b) The application for tree removal shall be approved or denied based on the criteria in TDC 34.230.

(c) The approval or denial of an application to remove trees shall be a part of the Architectural Review, Subdivision Review, or Partition Review decision.

RESPONSE: A preliminary tree preservation and removal plan has been prepared by a certified arborist and includes the information mentioned in this standard. This standard is met.

Section 34.270 Tree Protection During Construction.

(1) Any tree required to be retained either through Architectural Review, Subdivision or Partition Review, or permit process that will be impacted by nearby construction activities must be protected in accordance with the TDC 73.250(2).

RESPONSE: Tree protection has been indicated on the Tree Preservation plan submitting with this application. Therefore, this standard has been satisfied.

IV. Conclusion

The required findings have been made and the written narrative and accompanying documentation demonstrate that the application is consistent with the applicable provisions of the City of Tualatin Development Code. The evidence in the record is substantial and supports approval of the application. Therefore, the applicant respectfully requests approval of this application for Architectural Review for the River Ridge Apartment project.

Letter from Franchise Hauler

P★R★I★D★E
DISPOSAL COMPANY
P.O. Box 820 Sherwood, OR 97140
Phone: (503) 625-6177 Fax: (503) 625-6179

June 2, 2014

Marcus Jones
Hill Architects
1914 Willamette Falls Dr #280
West Linn, OR 97068

Re: River Ridge project

We have reviewed the site plan for the enclosure on this project.

SK-045 shows we will have straight on access and at least 75' of unobstructed clearance in front of the enclosure.

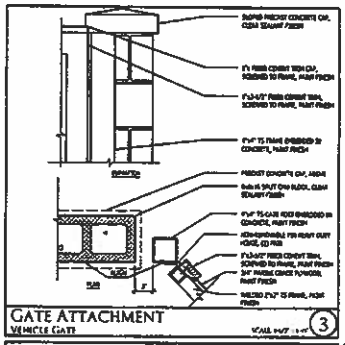
SK-046 shows the detail of the enclosure with inside dimensions of approximately 24' width and 22' depth. This enclosure size will give us adequate space to access the compactor, the recycling container, and the glass totes. As indicated in the drawing, the posts need to be hinged in front of, not inside the walls, and allow for the full 120 degree opening angle required. The gates will also have cane bolts and holes to hold the doors in the open and closed positions. There should be no center post at the access point.

Please note that the compactor must be built to be compatible with our trucks. When purchasing the compactor you need to make sure your manufacturer works with us to ensure compatibility.

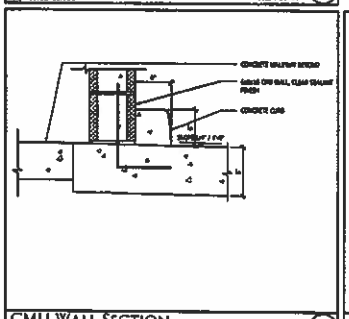
If you have any questions, feel free to contact me.

Sincerely,

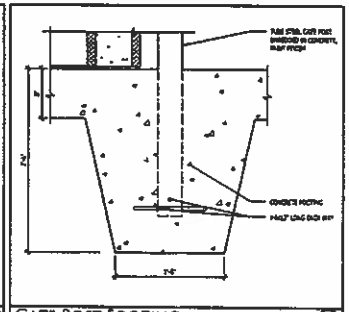
Kristin Leichner
Pride Disposal Co.
(503) 625-6177
kristinl@pridedisposal.com



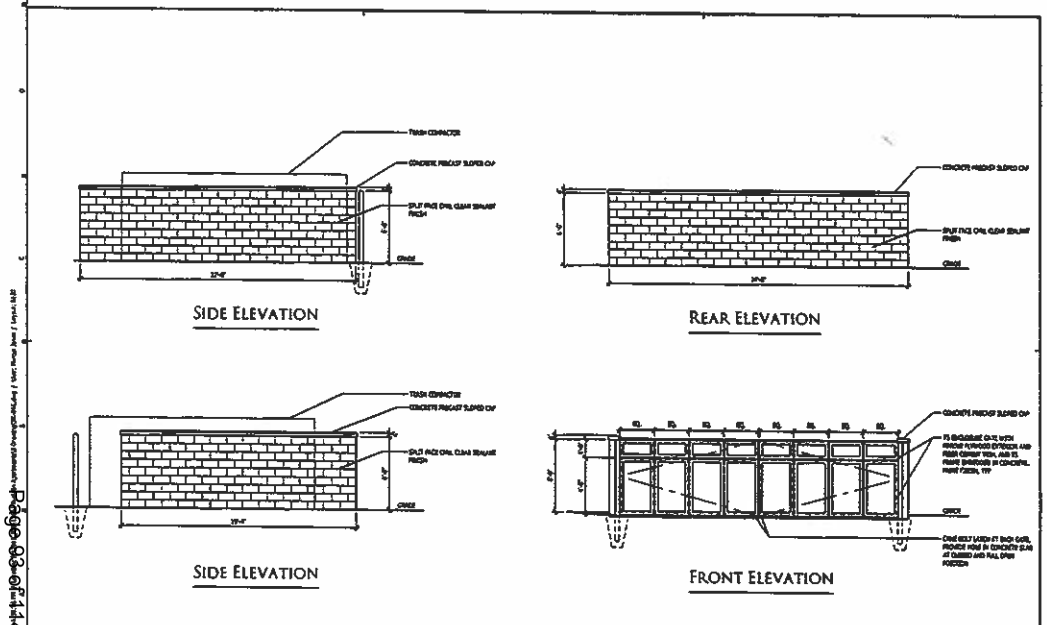
GATE ATTACHMENT
VEHICLE GATE
SCALE 1½" = 1'-0" (3)



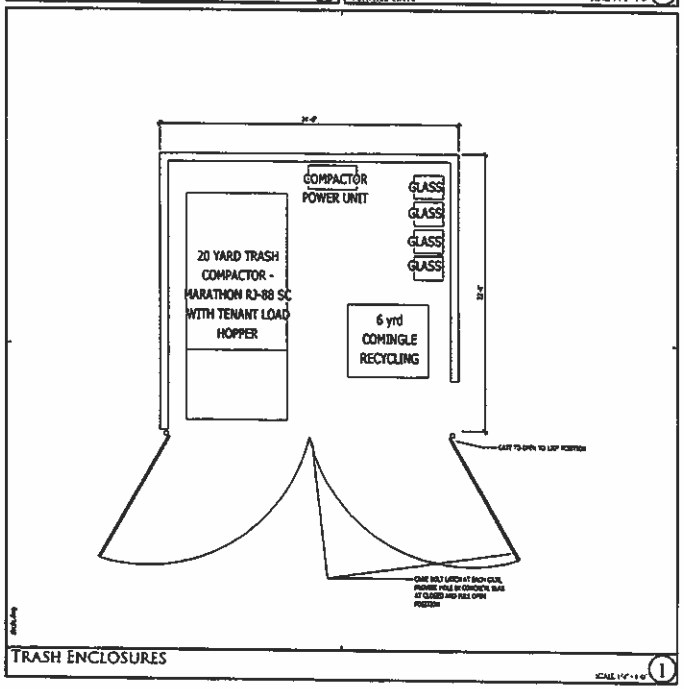
CMU WALL SECTION
SCALE 1½" = 1'-0" (2)



GATE POST FOOTING
VEHICLE GATE
SCALE 1½" = 1'-0" (1)



EXTERIOR ELEVATIONS - COMPACTOR ENCLOSURE
SCALE 1/4" = 1'-0" (9)



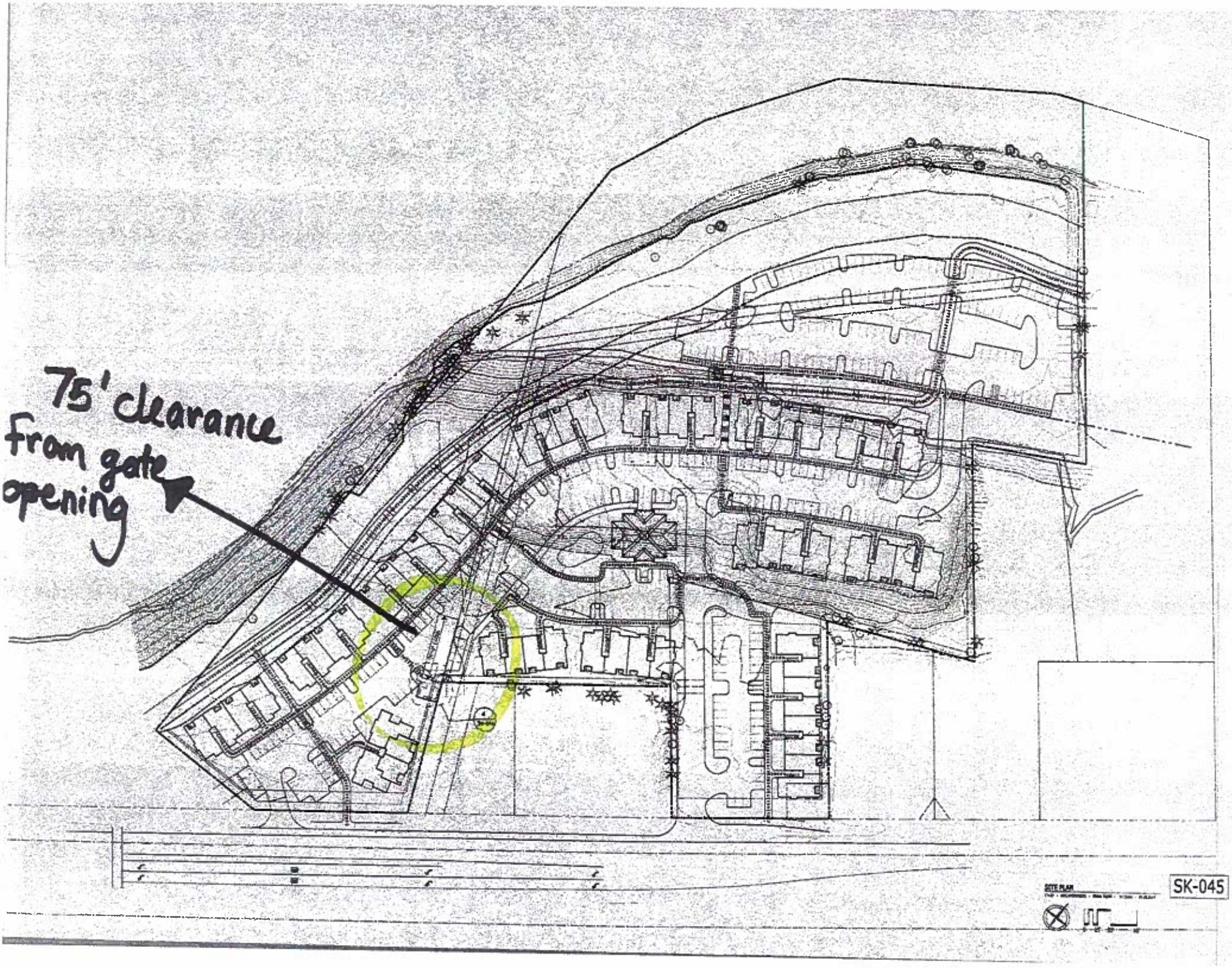
TRASH ENCLOSURES
SCALE 1/4" = 1'-0" (1)

HILL ARCHITECTS

RIVER RIDGE

TRASH ENCLOSURE

SK-046


75' clearance
from gate
opening
SITE PLAN
SK-045

Vicinity Map

SCALE: 1" = 1000'

DATE: 6/11/2014

RIVER RIDGE APARTMENTS

DRAWN BY: JMW	CHECKED BY: RCW	DWG: 3812 VICINITY MAP	JOB: 3812

AKS ENGINEERING & FORESTRY SALEM, LLC
528 COTTAGE ST NE SUITE 160
SALEM, OR 97301 www.aks-eng.com
PHONE: 503.400.6028 FAX: 503.400.7722

AKS

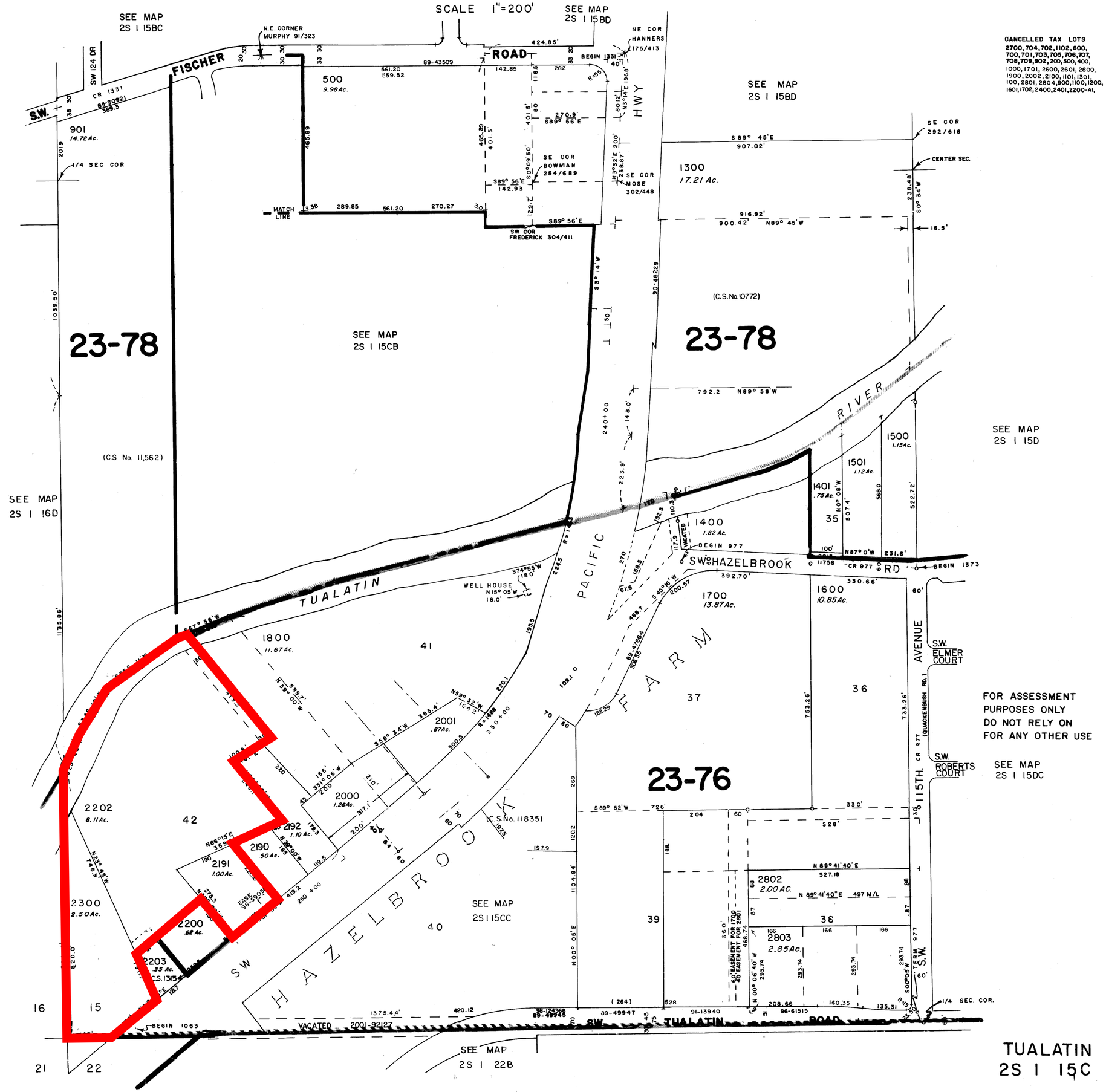
Washington County Tax Assessors Maps

SW1/4 SECTION 15 T2S R1W W.M.

WASHINGTON COUNTY OREGON

2S 1 15C
TUALATIN

SCALE 1"=200'



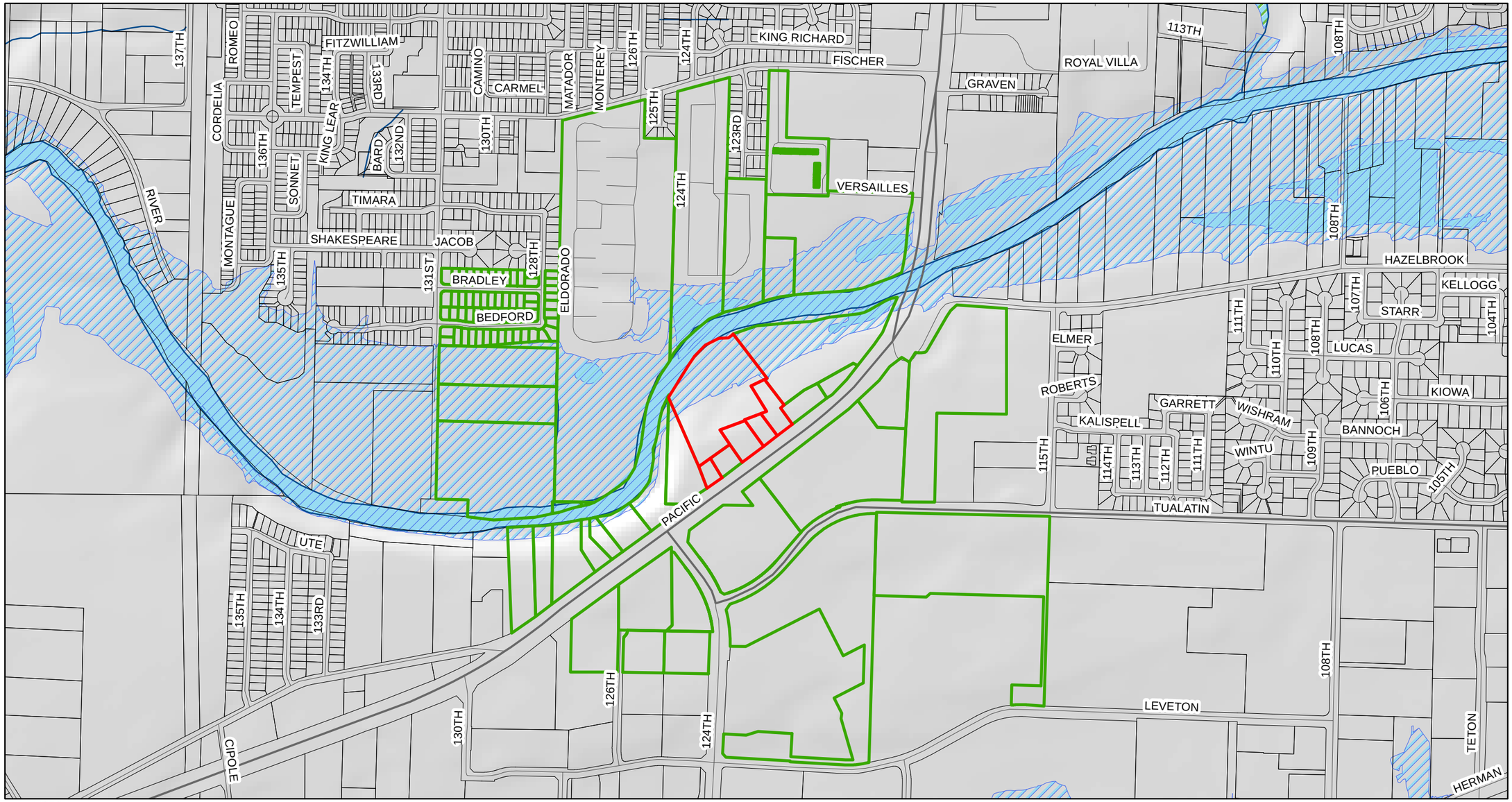
CANCELLED TAX LOTS
2700, 704, 702, 1102, 600, 700, 701, 703, 705, 706, 707, 708, 709, 902, 200, 300, 400, 1000, 1701, 2600, 2601, 2800, 1900, 2002, 2100, 1101, 1301, 100, 2801, 2804, 900, 1100, 1200, 1601, 1702, 2400, 2401, 2200-A1,

TUALATIN
2S 1 15C

List of Property Owners

Tualatin Apartments (Espedal Property)

Subject Properties
Tax Lots selection
Streams
Flood Plain
Wetlands



0 250 500 1,000 1,500 2,000 Feet

WFG National Title Insurance Company
a Williston Financial Group company

Customer Service Department
12909 SW 68th Parkway, Suite 350
Portland, OR 97223
(503) 603-1700 cs@wfgnationaltitle.com

N

AR-14-10

To lessen the bulk of the notice of application and to address privacy concerns, this sheet substitutes for the photocopy of the mailing labels. A copy is available upon request.

Neighborhood/Developer Meeting Information

February 24, 2014

First Last
Address
Address

Re: Notice of Neighborhood/Developer Meeting for the property located at 17985 SW Pacific Hwy, Tualatin, OR.

Dear ,

You are cordially invited to attend a meeting on Tuesday March 11, 2014 at 5:30 pm at the East Dining Room of the Juanita Pohl Center, located at 8513 SW Tualatin Road. This meeting shall be held to discuss a proposed project located at 17985 SW Pacific Hwy, Tax Map 2S115C Tax Lots 2191, 2202 and 2300. The meeting will discuss the Architectural Review application that addresses the site plan, building exterior elements such as landscaping and parking, and potential variances to building heights and setbacks.

The purpose of this meeting is to provide a means for the applicant and surrounding property owners to meet and discuss this proposal and identify any issues regarding this proposal.

Regards,

Brian Moore
Mountain West Investment
(503) 581-4654

Letterhead (if available)

(Date)

(Name)
(Address)
(City, State Zip)

RE: (Project name, description, location)

Dear Property Owner:

You are cordially invited to attend a meeting on (this date) at (this time) and at (this location). This meeting shall be held to discuss a proposed project located at (address of property, cross streets). The proposal is to (describe proposal here).

The purpose of this meeting is to provide a means for the applicant and surrounding property owners to meet and discuss this proposal and identify any issues regarding this proposal.

Regards,

(Your name)
(Company name)
(Contact phone number and email)

As the applicant for the 17865 & 17985 SW pacific Hwy (2S 115C tax lot 2191, 2202, 2300) project, I hereby certify that on this day, February 25, 2014 notice of the Neighborhood / Developer meeting was mailed in accordance with the requirements of the Tualatin Development Code and the Community Development Department - Planning Division.

Applicant's Name: Brian Moore
(PLEASE PRINT)

Applicant's Signature: Brian Moore

Date: 2·25·14

NEIGHBORHOOD/DEVELOPER MEETING
AFFIDAVIT OF MAILING

STATE OF OREGON)
) SS
COUNTY OF WASHINGTON)

I, Brian Moore, being first duly sworn, depose and say:

That on the 25 day of February, 2014, I served upon the persons shown on Exhibit "A," attached hereto and by this reference incorporated herein, a copy of the Notice of Neighborhood/Developer meeting marked Exhibit "B," attached hereto and by this reference incorporated herein, by mailing to them a true and correct copy of the original hereof. I further certify that the addresses shown on said Exhibit "A" are their regular addresses as determined from the books and records of the Washington County and/or Clackamas County Departments of Assessment and Taxation Tax Rolls, and that said envelopes were placed in the United States Mail with postage fully prepared thereon.

Brian Moore
Signature

SUBSCRIBED AND SWORN to before me this 25 day of February, 2014.

OFFICIAL SEAL
HILLARY ROSE BANKS
NOTARY PUBLIC - OREGON
COMMISSION NO. 458239
MY COMMISSION EXPIRES MAY 04, 2015

Hillary Banks
Notary Public for Oregon
My commission expires:

RE: 17865 & 17985 SW Pacific Hwy (2S 1 15C tax lot 2191, 2202, 2300)

Neighborhood Meeting
Affidavit of Posting Notice

STATE OF OREGON)
County of Washington)SS

I, Rochelle Wasula, being duly sworn, state that I represent the party initiating interest in a proposed Land Use Application affecting the land located at 17865 and 17985 SW Pacific Hwy and that I personally posted a notice on this 25 day of February, 2014 indicating that the site may be proposed for a land use application and notice of meeting to be held regarding such action.

The sign was posted at 17865 SW Pacific Hwy
(state location on property)

R Wasula
Signature

Constance E Hansen

Subscribed and sworn to or affirmed, before me this 25th day of February, 2014

Notary Public for the State of Oregon

County of Washington

My Commission expires: July 14, 2017

OFFICIAL SEAL
CONSTANCE E HANSEN
NOTARY PUBLIC-OREGON
COMMISSION NO. 478699
MY COMMISSION EXPIRES JULY 14, 2017

SHERWOOD · VANCOUVER · SALEM
13910 SW GALBREATH DR., SUITE 100 · SHERWOOD, OR 97140
AKS ENGINEERING & FORESTRY
WWW.AKS-ENG.COM
P: (503) 925-8799 F: (503) 925-8969

Re: 17985 SW Pacific Hwy	***Juanita Pohl Center***
03/11/2014	***8513 SW Tualatin Road***
5:30 PM	

NAME
STREET ADDRESS
PHONE/EMAIL

PLEASE PRINT CLEARLY

1. DOUG WATSON
[redacted]

2. Clare Fuchs - COT
18880 SW Martinazzi Ave
Tualatin, OR 97062
503-691-3027 cfuchs@ci.tualatin.or.us

3. Michael Poissant - AKS
[redacted]

4. CHRIS GOODELL - AKS
[redacted]

5. Christine Hermann
[redacted]

6. Kenny Espedal
[redacted]

7. Joyce Poppert
[redacted]

8.

9.

10.

11.

12.

13.

14.

SHERWOOD · VANCOUVER · SALEM
AKS ENGINEERING & FORESTRY
WWW.AKS-ENG.COM
13910 SW GALBREATH DR., SUITE 100 · SHERWOOD, OR 97140
P: (503) 925-8799 F: (503) 925-8969

March 11, 2014 – 5:30 PM
Juanita Pohl Center
8513 SW Tualatin Road
Tualatin, OR 97062

RE: Neighborhood Meeting – "Espedal Property" (17985 SW Pacific Highway)

Dear Neighbors:

Thank you for attending our neighborhood meeting for the project located on the "Espedal Property" located at 17985 SW Pacific Highway. The purpose of tonight's meeting is to introduce the project team, briefly discuss the site, the project, and City of Tualatin process. Please recognize that tonight's meeting is preliminary in nature and is the first step in the City land use process. We hope that the conversation tonight is informative and helpful to understanding the project and process.

Meeting Agenda:

I. Introduction
II. Site Information
III. Project and Application Details
IV. Questions and Answers

Thank you again for your attendance and participation in tonight's meeting.

Sincerely,
AKS Engineering & Forestry, LLC

Chris Goodell, AICP, LEED[AP]
Associate

SHERWOOD · VANCOUVER · SALEM
AKS ENGINEERING & FORESTRY
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P: (503) 925-8799 F: (503) 925-8969

Neighborhood Meeting Summary: Espedal Property (17985 SW Pacific Highway)

Date: March 11, 2014
Time: 5:30 PM
Location: Juanita Pohl Center, 8513 SW Tualatin Road, Tualatin, Oregon 97062

The following serves as a summary of the primary subjects covered at the Neighborhood Meeting. Business cards with contact information were provided. Representatives from Hill Architects, Mountain West and the City of Tualatin were in attendance. A brief presentation was made by Hill Architects, followed by a time for questions and answers. In addition, an attendance sheet was also made available for attendees to sign.

General discussion of proposed project:

- ODOT access from Hwy 99, U-turns and traffic flow in and out of site
- Property values of the proposed rentals and the area market
- Property amenities for residence and their children
- Access to public transportation
- Sidewalk additions or improvements
- Status of the zone change
- Interest in fencing styles at property boundaries
- Status of the project design
- Views of the project from adjacent properties
- Discussion of building heights and appearances from the river and across the river
- Desire for tree preservation near river

Chris Goodell
AKS ENGINEERING & FORESTRY, LLC

Arborist Tree Assessment

TUALATIN · VANCOUVER · SALEM
12965 SW HERMAN RD., SUITE 100 · TUALATIN, OR 97062
AKS ENGINEERING & FORESTRY
WWW.AKS-ENG.COM
P: (503) 563-6151 F: (503) 563-6152

June 11, 2014

Brian Moore
Mountain West Investment Corporation
201 Ferry Street SE, #400
Salem, OR 97301

RE: River Ridge Apartments – Arborist Tree Assessment

Mr. Moore:

Trees associated with this development have been evaluated and assessed. A detailed tree inventory and tree preservation and removal plan are included in the plan set titled "River Ridge Apartments Architectural Review Set" dated June 11, 2014. Trees shown to be preserved should reasonably be able to be preserved in light of the development proposed, appear healthy, and do not appear to pose an imminent hazard to persons or property. Trees proposed for removal cannot be reasonably preserved in light of the development proposed and/or health/condition of the tree. Proposed tree removal is in accordance with TDC 34.230.

Sincerely,
AKS ENGINEERING & FORESTRY, LLC

Keith Jehnke, PE, PLS, Principal
ISA Certified Arborist #PN1908
ISA Qualified Tree Risk Assessor

Arborist Disclosure Statement

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the health of trees, and attempt to reduce the risk of living near trees. The Client and/or Jurisdiction may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like medicine, cannot be guaranteed.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

TUALATIN · VANCOUVER · SALEM
12965 SW HERMAN RD., SUITE 100 · TUALATIN, OR 97062
AKS ENGINEERING & FORESTRY
WWW.AKS-ENG.COM
P: (503) 563-6151 F: (503) 563-6152

June 30, 2014

City of Tualatin
Attn: Clare Fuchs, AICP, Senior Planner
18880 SW Martinazzi Avenue
Tualatin, Oregon 97062

RE: River Ridge – Supplemental Information
Case File No. AR 14-01

Dear Ms. Fuchs:

Thank you for your timely review of our Architectural Review application for the River Ridge project and allowing us to supplement the application with this additional information. This information is based on requests for information that you have provided to us.

1. *Physical access to adjoining properties at the 4 points that were previously discussed.*

Response: A revised preliminary Site Plan and new preliminary Circulation Plan show access points to adjoining properties at the 4 points previously discussed.

2. *Location of children's play equipment.*

Response: A preliminary Landscape Plan is included that shows the area planned for children's play equipment and other recreation facilities.

3. *Availability of the storage area in the clubhouse for residents.*

Response: Clubhouse storage will be for residents. An 8 ½ x 11 "Preliminary Clubhouse Storage Plan" has been included with the updated application materials that more clearly illustrates the clubhouse storage area.

4. *Trash enclosure information*

Response: The project team has carefully considered the location and design of the garbage facility in the preliminary design. To that end, Pride Disposal, the applicable franchise hauler has been consulted and feedback obtained. Email correspondence with Kristen Tabscott from Pride Disposal is included with the updated application materials. A trash compactor specifications sheet has also been included with this submittal.

5. *Demolition and Grading Plans – Show chain link fencing around all trees shown to be protected on tree preservation plan. Installing chain link fencing around those same trees prior to demo permit.*

Response: A preliminary Tree Preservation plan is included with the updated submittal materials that shows chain link fencing around all trees shown to be protected.

6. *Irrigation Plan – required prior to building permits*

Response: An irrigation plan will be submitted prior to building permits.

7. *Parking and Bike Parking - I need to see plans of how your short term bike parking will work. How will the hook work? How will people lock up their bikes? Show there is enough space dimensionally. How will the space under the stairs be lit?*

Response: Photographs of a typical bike rack that is planned to be used is provided with this updated submittal package. An exterior lighting plan will be submitted prior to building permits.

Items Included with this Updated Information

1. *Written application narrative update*
   - *Language to reflect changes in*
     - *Landscaping*
     - *Lighting*
     - *Bicycle Parking*
     - *Greenway*

2. *Trash Enclosure*
   - *Original letter from franchise hauler*
   - *Email from Kristen Tabscott, Pride Disposal*
   - *Compactor Specifications*

3. *Bicycle Parking*
   - *Example photographs of bicycle parking facilities in building breezeways*

4. *Outdoor Storage*
   - *Preliminary Clubhouse Storage Plan*

Updated plans

1. *Full sized sheets (9 copies)*
   - *Hill Architect Preliminary Plan Set*
     - *Preliminary Site Plan*
     - *Preliminary Landscape Plans*
     - *Preliminary Vegetated Corridor Enhancement Plan*
     - *Preliminary Outdoor Recreation Area Plan*

- Full Size Preliminary Civil Plan Set (Onsite only, not CWS or ODOT)
  - *C000 Cover Sheet*
  - *C005 Preliminary Circulation Plan*
  - *C070, C071, C072 Preliminary Tree Preservation Plans*
  - *C200-208 Preliminary Grading Plans*

- 11 x 17 Preliminary Plan Sets (9 copies)
  - *Assembled Hill Architect Preliminary Plan Set*
  - *Preliminary Civil Plan Set (Onsite only, not CWS or ODOT)*

- 8.5 x 11 Plan Sets (9 copies)
  - *Assembled Hill Architect Preliminary Plan Set*
  - *Preliminary Civil Plan Set (Onsite only, not CWS or ODOT)*

Thank you for your consideration of this information. If you have any questions or need anything else, please let me know.

Sincerely,
AKS Engineering & Forestry, LLC

Matt Scheidegger - Planner

Architectural review narrative
(Updated)

River Ridge Apartments
Architectural Review

Submitted:	June 2014 (updated)
Submitted to:	City of Tualatin Community Development Department 18880 SW Martinazzi Avenue Tualatin, OR 97062
Property Owners:	Donna J. Degele 16182 Bimini Lane Huntington Beach, CA 92649 Kenneth R. Espedal, Joyce L. Poppert 11515 SW Hazelbrook Road Tualatin, OR 97062
Applicant:	Mountain West Investment Corporation 201 Ferry Street SE, #400 Salem, OR 97301
Location:	17958 & 17865 SW Pacific Highway Tualatin, OR 97062
Site Size:	+/- 12 acres
Assessor's Information:	Washington County Assessor's Map Map 2S 1 15C, Tax Lots 2191, 2202, & 2300
Comprehensive Plan/ Zoning Designation:	Residential High Density (RH)

I. Executive Summary

The applicant is pleased to submit this application for the River Ridge Apartment project. The project involves a request for approval through Architectural Review to allow the construction of 15 new multi-family residential buildings containing a total of 180 units. The project includes a club house and pool area, common open space areas, a paved parking and vehicular circulation area, pedestrian connections, greenway path, landscaping improvements and all necessary supporting infrastructure.

Extensive research, detailed site investigations, and careful planning have led to the creation of this application. The essential components of the project are as follows:

- **Natural Resource Protection and Preservation.** The River Ridge apartment project is adjacent to the Tualatin River. The subject site has approximately 3.26 acres of associated greenway, of which, +/- 2.22 acres is proposed for placement into a tract and donated to the City of Tualatin. The bulk of the project has been clustered on the south side of the property toward SW Pacific Hwy. in order to preserve and protect as much of the site's natural resources as possible.

- **Needed Housing.** Multi-family residential homes on this property will provide opportunities for individuals and families to live in a high quality area with the river as a positive amenity all while being in close proximity to employment lands, public services, and transportation options. This needed housing will appeal to and serve a broad spectrum of income levels, particularly as an alternative to home ownership in a traditional, single-family residential setting (e.g. a residential subdivision).

- **Open Space/Recreation Opportunities.** Understanding that the opportunity to access and utilize open space is an important part of a successful and desirable residential project, the application features a variety of planned recreational amenities. This includes connections to the greenway path on adjacent properties in the future as they develop, open lawns, sport court, children's playground, sand box, and other appealing landscape features to enhance the livability for residents.

- **Connectivity.** This application provides key infrastructure component connectivity. This includes secondary access for fire department and other emergency response providers, relocation and upsizing of the Upper Tualatin Sanitary Sewer Interceptor, pedestrian and vehicular connectivity between adjacent properties and a new deceleration lane on Pacific Hwy., which will include right-of-way (ROW) dedication for new curb gutter and sidewalks.

  The findings in this written narrative, together with the accompanying reports, studies, and preliminary plans demonstrate that the application satisfies applicable approval criteria. This evidence is substantial and provides the necessary factual basis supporting the City's approval of the application.

II. Site Description

1. **Zoning/Permitted Use:** The subject site is located in an area of properties with a number of different zoning designations. The subject site has recently been annexed and re-zoned (RH) High Density Residential on the City's Zoning Map. Properties to the northeast of the subject site are designated (CR) Recreational Commercial and (CG) General Commercial. Properties to the southwest are designated (CG) General Commercial with properties across Pacific Highway to the south also zoned (CG) and (RH). Properties to the northwest across the Tualatin River have residential zoning designations; however, they are located outside of city limits.

2. **Site Description**: The applicant's property is approximately 12 acres in size and is generally located northwest of the intersection of SW Pacific Hwy. and 124th Ave. at 17958 and 17865 SW Pacific Hwy. existing site topography slopes generally from the southeast to the northwest toward the Tualatin River. The property has a fair number of trees and greenway corridor associated with the Tualatin River and 100-year flood plain.

3. **Project Description:** The project involves the creation of 180 multi-family apartments. Internal circulation is included so that services can be provided to all portions of the property. Each of the buildings will be provided with sanitary sewer, storm sewer, and water service, as well as utilities such as electrical, phone, cable. Additional details concerning the application can be obtained from the preliminary plans, which are included in the application materials along with this project narrative and other written materials.

- **Sanitary Sewer**
  As shown on the preliminary plans, CWS has identified the sewer main as needing to be upsized in their master plan and intends for this project to realign and upsize the existing infrastructure. The realigned 42" sanitary sewer line will extend service to the site and each building will be provided sanitary sewer laterals and connect to the main at new manhole locations.

- **Stormwater Management**
  On-site stormwater is collected and conveyed to the stormwater treatment swale located in the lower parking lot. Currently stormwater from the site and neighboring parcels is conveyed in underground pipe draining through the site to an existing outfall on the Tualatin River. This application will realign the existing storm line and convert into a new public storm line and easement. Onsite stormwater will be collected, (no detention required) treated in the stormwater facility and then discharged into the new public storm line that will ultimately outfall to the Tualatin River. For additional information, please refer to the preliminary stormwater report and plans that are included in the application submittal materials.

- **Water Service**
  This application abandons the existing onsite water services and connects to the 12" water main located at the Pacific Hwy frontage. Each building will be provided with water laterals, fire service laterals and fire department connections (FDCs).

- **Transportation**
  The subject site has frontage along SW Pacific Hwy. Site access will be provided by way of a 32' access drive from SW Pacific Hwy. A 20' emergency access is provided at the southwest end of the project. This project will include 1.7 feet of ROW dedication along a portion of Pacific Hwy. Planned improvements to Pacific Hwy. include construction of a deceleration lane, curb and sidewalk to ODOT standards along the main access and replacing the existing curb aligned sidewalk with landscape separated sidewalk to City standards along the emergency access. The internal circulation will comply with City requirements.

4. **Dimensional Standards:**

   Setbacks in the (RH) residential district and for this project with the permitted 35% reduction (allowed by TDC section 43.070) are as follows:

	Required	Requested 35% Reduction
Front Yard Setback:	**Min: 35 feet for 2 ½ story structures**	**Min: 22.75 feet (2 ½ story building)**
Side Yard:	**Min: 12 feet for 2 ½ story structures**	**Min: 7.8 feet (2 ½ story building)**
Rear Yard Setback:	**Min: 12 feet for 2 ½ story structures**	**Min: 7.8 feet (2 ½ story building)**

5. **Citizen Participation:** The applicant and project representatives have held two separate neighborhood meetings. The first meeting on January 9th 2014 was held to discuss the annexation and plan map amendment which was granted by the City recently and on March 11th 2014 to discuss the AR and TRP project. A copy of the March 11th meeting attendance roster along with a summary of the topics discussed at the neighborhood meeting is included herein. The City will send notice of this application to property owners within three hundred feet of the subject property, as well as various City departments, and other agencies to solicit public input.

6. **Residential Density Calculations:** The site is approximately 522,720 square feet (+/- 12 acres) in size. Due to right-of-way dedication and the proposed greenway tract, the net developable area for the project site is 379,410 square feet. Net developable area (+/- 8.7 acres), multiplied by 25,indicates that the maximum number of lots (density) is 217 units. Eighty percent of 217 is 174 units. Therefore, the project (180 units) complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable area.

III. Applicable Review Criteria

CITY OF TUALATIN LAND DEVELOPMENT CODE

Chapter 43 - High Density Residential Planning District

Section 43.015 Permitted Density.

Housing density shall not exceed 25 dwelling units per net acre, except as set forth below:

(1) Where provided by TDC 43.180.

(2) The maximum density for nursing and convalescent homes and retirement housing in accordance with 34.170(2) shall not exceed 37.5 dwelling units per net acre. [Ord. 956-96 §29, 1/8/96. Ord. 1026-99 §35, 8/9/99; Ord. 1272-08 §9, 11/10/08]

RESPONSE: The subject site consists of 3 units of land with a total square footage of +/- 12 acres in size. Due to right-of-way dedications and area in the "Greenway," the net developable area for the project site is +/- 8.7 acres.

Based on Tualatin's Density calculations which state "Housing density shall not exceed 25 dwelling units per net acre." The site is approximately 522,720 square feet (12 acres) in size. Due to right-of-way dedication and the proposed greenway tract, the net developable area for the project site is +/- 379,410 square feet. Net developable area (+/- 8.7 acres), multiplied by 25, indicates that the maximum number of lots (density) is 215 units. Eighty percent of 217 is 174 units. Therefore, the project (180 units) complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable area.

SITE AREA			
Tax Lots:	Developable Area	Undevelopable (Greenway/Vegetated Corridor Etc.) Area	Total Acres
2191	+/-1.03 ac.	-	+/-1.03 ac.
2202	+/-5.73 ac.	+/-2.64ac.	+/-8.37 ac.
2300	+/-1.96 ac.	+/-0.62 ac.	+/-2.58 ac.
Total	**+/-8.72 ac.**	**+/-3.26 ac.**	**+/-12.0 ac.**

Section 43.020 Permitted Uses.

No building, structures or land shall be used and no building or structures shall be erected, enlarged or altered except for the following uses:

(1) Townhouses and multi-family dwellings, including duplexes and triplexes.

(2) Condominium dwellings constructed in accordance with ***TDC 40.030(2)****.*

(3) Greenways and Natural Areas, including but not limited to bike and pedestrian paths and interpretive stations.

(4) Residential homes.

(5) Residential facilities.

(6) Family day care provider, provided that all exterior walls and outdoor play areas shall be a minimum distance of 400 feet from the exterior walls and pump islands of any automobile service station, irrespective of any structures in between.

(7) Sewer and water pump stations and pressure reading stations.

(8) Wireless communication facility attached.

(9) Wireless communication facility located within 300 feet of the centerline of I-5.

(10) Transportation facilities and improvements. [Ord. 824-91, § 4, 2/11/91; Ord. 849-91, § 14, 11/25/91; Ord. 965-96, § 24, 12/9/96; Ord. 979-97, § 15, 7/14/97; Ord. 1025-99, §18, 7/26/99; Ord. 1103-02, 03/25/02]

RESPONSE: The subject site is located in an area that has recently been annexed into the City of Tualatin and rezoned to RH (High Density Residential). The subject site's use is to be multi-family residential, which is an allowed use in the RH zoning district.

Section 43.070 Permitted Uses.

Except as otherwise provided, the set-backs for permitted uses are:

(1) The front yard setback is a minimum of 20 feet for 1-story, 25 feet for 1 1/2-story, 30 feet for 2-story, and 35 feet for 2 1/2-story structures. The front yard setback for townhouses shall be 0-20 feet as determined in the Architectural Review process. The minimum setback to a garage door shall be 20 feet.

(2) The side yard setback shall be a minimum of 5 feet for 1-story, 7 feet for 1 1/2-story, 10 feet for 2-story, and 12 feet for 2 1/2-story structures. Where living spaces face a side yard, the minimum

setback shall be 10 feet. The side yard setback for townhouses shall be determined in the Architectural Review process.

(3) On corner lots, the setback is the same as the front yard setback on any side facing a street other than an alley.

(4) The rear yard setback is the same as the side-yard setback.

(5) Where buildings are grouped as one project on one tract of land, the minimum distance between two buildings at any given point shall not be less than the sum of the maximum required side yards, computed separately for each building at that point. The minimum distance between two buildings on separate lots for townhouses shall be determined in the Architectural Review process.

(6) Off-street parking and vehicular circulation areas shall be set back a minimum of 10 feet from any public right-of-way or property line. The setback for such areas for townhouses shall be determined in the Architectural Review process.

*(7) Setbacks for a wireless communication facility shall be established through the Architectural Review process, which shall consider **TDC 73.510**, be a minimum of 5 feet, and shall be set back from an RL District, or an RML District with an approved small lot subdivision, no less than 175 feet for a monopole that is no more than 35 feet in height and the setback shall increase five feet for each one foot increase in height up to 80 feet in height, and the setback shall increase 10 feet for each one foot increase in height above 80 feet.*

(8) Except for setbacks abutting property lines in the RL District, the decision authority may allow a reduction of up to 35% of the required front, side or rear yard setbacks, as determined in the Architectural Review process, if as a result the buildings are farther away from fish and wildlife habitat areas, and provided the following criteria are met:

(a) A portion of the parcel must be:

> *(i) in the Natural Resource Protection Overlay District (NRPO), or*
> *(ii) in an Other Natural Area identified in **Figure 3-4** of the Parks and Recreation Master Plan, or*
> *(iii) in a Clean Water Services Vegetated Corridor; and*

(b) The portion of the parcel which meets the applicable criteria set forth in (a)(i), (ii), or (iii) must be placed in a Tract and must meet one of the following ownership criteria:

> *(i) be dedicated to the City at the City's option, or*
> *(ii) be dedicated in a manner approved by the City to a nonprofit conservation organization, or*
> *(iii) be retained in private owner-ship by the developer.*

RESPONSE: As allowed by section (8) of this standard, the applicant requests a 35% reduction to the maximum front, side and rear yard setbacks for the 3 story buildings on the project. Proposed setbacks for individual buildings are shown on the preliminary plan included with the application. Approximately 2.22 acres of the associated "greenway" which includes NRPO, is indicated on the City's Parks and Recreation Master Plan and has a CWS vegetated corridor will be placed in a tract (created by a lot line adjustment) and donated to the City. The following table provides the dimensional requirements of the RH zoning district and the dimensional requirements with the requested 35% reduction. The criteria for the requested setback reduction are satisfied.

	Dimensional Requirements	**Requested 35% Reduction**
Front Yard Setback:	Min: 20 feet (1-story building) Min: 35 feet (2 ½ story building)	**No change requested** **Min: 22.75 feet (2 ½ story building)**
Side Yard:	Min: 5 feet (1 story building) Min: 12 feet (2 ½ story building)	**No change requested** **Min: 7.8 feet (2 ½ story building)**
Rear Yard Setback:	Min: 5 feet (1 story building) Min: 12 feet (2 ½ story building)	**No change requested** **Min: 7.8 feet (2 ½ story building)**

Section 43.080 Projections Into Required Yards.

Cornices, eaves, canopies, decks, sun-shades, gutters, chimneys, flues, belt courses, leaders, sills, pilasters, lintels, ornamental features, and other similar architectural features may extend or project into a required front and rear yard setback area not more than three feet and into a required side yard not more than two feet, or into the required open space as established by coverage standards in this chapter. The distances for such projections for townhouses shall be determined in the Architectural Review process. [Ord. 731-87, § 2, 9/14/87; Ord. 1025-99, §23, 7/26/99]

RESPONSE: Projections into required setbacks will not exceed TDC allowances. This criterion is satisfied.

Section 43.100 Structure Height.

(1) Except as otherwise provided, the maximum structure height is 35 feet.

(2) Maximum structure height for a wire-less communication support structure and antennas located within 300 feet of the centerline of I-5 is 120 feet. [Ord. 956-96, § 30, 1/8/96; Ord. 1116-02, 08/26/02]

RESPONSE: All project buildings will satisfy maximum height standards as shown in the preliminary plan set. Therefore, this standard has been satisfied.

Section 43.120 Access.

All lots created after September 1, 1979, shall abut a public street, except secondary condominium lots, which shall conform to TDC 73.400 and TDC Chapter 75. Lots and tracts created to preserve wetlands, greenways, Natural Areas and Stormwater Quality Control Facilities identified by TDC Chapters 71, 72, Figure 3-4 of the Parks and Recreation Master Plan and the Surface Water Management Ordinance TMC Chapter 3-5, as amended, respectively, or for the purpose of preserving park lands in accordance with the Parks and Recreation Master Plan, may not be required to abut a public street. [Ord. 872-92, §6, 6/29/92; Ord. 956-96, §31, 1/8/96; Ord. 1025-99, §25, 7/26/99]

RESPONSE: The subject site has +/- 354.09 feet frontage on SW Pacific Hwy. The site will take access from SW Pacific Hwy. by means of a 32 foot access drive to serve the property. A 20 foot secondary emergency access drive will be located at the southwest end of the property. This standard has been satisfied.

Section 43.130 Off-Street Parking and Loading

Refer to TDC Chapter 73.

RESPONSE: Off-street parking is addressed further in this narrative under Chapter 73. This standard is satisfied.

Section 43.140 Floodplain District

Refer to TDC Chapter 70.

RESPONSE: Topics relevant to the Floodplain District are addressed further in this narrative under Chapter 70. This standard is satisfied.

Section 43.150 Wetland Protection District

Refer to TDC Chapter 70.

RESPONSE: There are no wetlands associated with this project as indicated in the NRA included with the application. This section does not apply.

Section 43.160 Community Design Standard.

Refer to TDC Chapter 73.

RESPONSE: The Community Design Standards are addressed further in this narrative under Chapter 73. This standard is satisfied.

Section 43.170 Landscape Standards.

Refer to TDC Chapter 73.

RESPONSE: The landscape standards are addressed further in this narrative under Chapter 73. This standard is satisfied.

Section 43.180 Shift of Density for Multi-Family Residential Development Adjacent to a Greenway or Natural Area.

(1) The decision authority may allow the remainder of the parcel to be developed to the same number of residential units as would be permitted by the RH District standards if none of the parcel were in the NRPO District, Other Natural Area or Vegetated Corridor, provided the following criteria are met:

(a) A portion of the parcel must be:

(i) in the Natural Resource Protection Overlay District (NRPO), or

(ii) in an Other Natural Area identified in Figure 3-4 of the Parks and Recreation Master Plan, or

(iii) in a Clean Water Services Vegetated Corridor.

(b) The portion of the parcel which meets the applicable criteria set forth in (a)(i), (ii), or (iii) must be placed in a Tract and must meet one of the following ownership criteria:

(i) dedicated to the City at the City's option, or

(ii) dedicated in a manner approved by the City to a nonprofit conservation organization, or

(iii) retained in private ownership by the developer.

(c) Other TDC and RH District regulations shall be met, including, but not limited to building height, setbacks and building separations.

RESPONSE: No shift in density is requested. Therefore, this standard does not apply.

(2) The decision authority shall consider, but is not limited to, the following factors:

(a) Does the Park and Recreation Master Plan designate the Tract for a greenway, pedestrian or bike path, public park, recreation, overlook or interpretive facility, or other public facility;

(b) Does the Tract include one or more designated Heritage Trees, or one or more significant trees;

(c) Does the Tract provide a significant view or aesthetic element, or does it include a unique or intrinsically valuable element;

(d) Does the Tract connect publicly owned or publicly accessible properties;

(e) Does the Tract abut an existing park, greenway, natural area or other public facility;

(f) Does the Tract provide a public benefit or serve a public need;

(g) Does the Tract contain environmental hazards;

(h) Geologic stability of the Tract; and

(i) Future maintenance costs for the Tract. [Ord. 933-94, §23, 11/28/94; Ord. 956-96, §32, 1/8/96; Ord. 979-97, § 16, 7/14/97; Ord. 1136-03, 04/28/03; Ord. 1224-06 §10, 11/13/06]

RESPONSE: As mentioned in the response to section 43.180(1) above, no shift in density is requested. Therefore, this standard does not apply.

Chapter 70 – FLOOD PLAIN DISTRICT

Section 70.170 General Standards.

In all areas of special flood hazards, the following standards are required:

(1) Anchoring.

(a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

(b) All manufactured dwellings must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. (Reference FEMA' s "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques.)

RESPONSE: Portions of the public and private storm and sanitary lines at the northeast end of the property are shown to encroach into the floodplain. Public storm and sanitary lines will be placed in utility easements as required. All utilities that are shown in the associated floodplain will be constructed/anchored to not allow flotation, collapse or lateral movement.

A parking area, greenway path and further extension of storm and sanitary lines associated with the project are shown to be constructed within the floodplain. These amenities will be constructed/anchored to not allow flotation, collapse or lateral movement. This standard is satisfied.

(2) Construction Materials and Methods.

(a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(c) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(d) AH Zone Drainage. Adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.

RESPONSE: Portions of the sanitary and storm lines at the northeast end of the property are shown to encroach into the floodplain. Utilities will all be constructed of materials and methods that will be resistant to flood damage.

The parking area and greenway path shown within the associated floodplain will be constructed of materials and methods that will be resistant to flood damage during flooding. This standard is met.

(3) Utilities.

(a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

(b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

(c) On-site waste disposal systems shall be located so as to avoid impairment to them or contamination from them during flooding.

RESPONSE: A 20' public sanitary sewer easement and a 15' public stormwater easement will be located in the associated floodplain and floodway. The new lines within these easements are designed to minimize infiltration of flood waters into the system and are located to avoid impairment to them. All required easements will be recorded after completion of construction and prior to occupancy. These standards are satisfied.

(4) Subdivision Proposals.

(a) All subdivision proposals shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed so as to minimize flood damage.

(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

(d) here base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

RESPONSE: The requested approval is for a multi-family development and does not include a subdivision application. Therefore, these standards do not apply.

(5) Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (TDC 70.140(2)), applications for buildings permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates. [Ord. 717-87, §14, 4/27/87; Ord. 988-97, §10, 12/8/97; Ord. 1265-08 §4, 7/28/08.

RESPONSE: No buildings are associated with the 100-year floodplain. Therefore, this standard does not apply.

The parking area and greenway path shown within the associated floodplain will be constructed to minimize the potential for damage during flooding. This standard is met.

Section 70.180 Specific Standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in TDC 70.050, "BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD," or TDC 70.140(2), "USE OF OTHER BASE FLOOD DATA," the following provisions are required:

(1) Residential Construction.

(a) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation.

(b) New public streets providing vehicle access to residences, including residences within mixed use developments, shall be constructed at or above the base flood elevation. Public street rights-of-way in existence as of January 14, 1993, shall not be subject to this requirement.

(c) Below grade crawl-space construction in the floodplain shall comply with all NFIP specifications and applicable Building Code Requirements.

RESPONSE: There are no buildings associated with the 100-year floodplain. Therefore, this standard does not apply.

The parking area and greenway path shown within the associated floodplain will be constructed to minimize the potential for damage during flooding. This standard is met.

(2) Nonresidential Construction.

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated at least one foot above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

(a) Be floodproofed so that below the base flood level the structure is watertight, with walls substantially impermeable to the passage of water.

(b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(c) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and review of the structural design, specifications and plans. Such certification shall be provided to the official as set forth in TDC 70.140(3)(b).

(d) Fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

(ii) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

(e) Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).

RESPONSE: No buildings are associated with the 100-year floodplain. Therefore, this standard does not apply.

The parking area and greenway path shown within the associated floodplain will be constructed to minimize the potential for damage during flooding. This standard is met.

(3) Manufactured Dwellings. Manufactured dwellings placed or substantially improved within Zones A1-30, AH, and AE shall be on a permanent foundation and shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation and shall be securely anchored to a foundation system in accordance with TDC 70.170(1)(b).

RESPONSE: No manufactured dwellings are shown as part of the project. Therefore, these standards do not apply.

(4) Recreational Vehicles. Recreational vehicles that are permanently placed or substantially improved within Zones A1-30, AH, and AE shall be on a permanent foundation and shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation and shall be securely anchored to a foundation system in accordance with TDC 70.170(1)(b). [Ord. 717-87, 4/27/87; Ord. 882-92 §11, 12/14/99; Ord. 988-97, §11, 12/8/97; Ord. 993-98 §1, 2/23/98; Ord. 1048-00 §2, 2/28/00; Ord. 1265-08 §5, 7/28/08]

RESPONSE: No permanently placed recreational vehicles are associated with this project. Therefore, these standards do not apply.

Section 70.190 Floodways.

Located within areas of special flood hazard established by TDC 70.050 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters that carry debris, potential projectiles, and erosion potential, the following provisions apply:

(1) Prohibit encroachments, including fill, new construction, substantial improvements, and other development that will increase in flood levels during the occurrence of the base flood discharge.

(2) If TDC 70.190(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of TDC 70.170 to and including 70.190, Provisions for Flood Hazard Reduction. [Ord. 717-87, 4/27/87]

RESPONSE: A parking area, greenway path and new storm and sanitary lines have been shown within the floodway on the preliminary plan set. The parking area, path and utilities have been designed by a Civil Engineer that will certify no increase in flood levels will occur due to the amenities. Please see the response to TDC 70.170 above.

Chapter 72 - NATURAL RESOURCE PROTECTION OVERLAY DISTRICT (NRPO)

Section 72.030 Greenways.

(1) Greenways can exhibit diverse characteristics. Those along the Tualatin River and Hedges, Nyberg and Saum Creeks can be natural in some sections and have pedestrian and bike paths in other sections. Greenways in built-up areas such as in subdivisions are typically landscaped with lawn and often include concrete pedestrian/bike paths.

RESPONSE: The associated greenway is to be placed in a tract and donated to the City. The planned greenway path is shown to be located on the subject site and will extend the full width of the project.

(2) Riverbank Greenway (NRPO-GR).

> *(a) Except as provided in Subsection (b), the NRPO District along the south bank of the Tualatin River, beginning at the City's western Urban Growth Boundary (UGB) and extending to the City' s eastern UGB, and along the north bank of the Tualatin River from the northwest corner of Tax Lot 1007 to the southeast corner of Tax Lot 1006, Washington County Tax Map 2S1 24B, shall have a width as measured from a line 40 feet inland from the top of the bank extending to the middle of the river. The top of the bank shall be where the landform called "the bank" changes from a generally up-slope feature to a generally flat feature. The NRPO District shall automatically apply to property annexed to the City, except as provided for in Appendix G to the Parks and Recreation Master Plan.*

RESPONSE: The associated greenway on the subject site has been established using the criteria of this section. Therefore, this standard has been satisfied.

> *(b) For the area 300 feet east and west of the I-5 right-of-way as shown on **Map 72-1**, the NRPO District on the south bank of the Tualatin River shall have a width as measured from a line 75 feet in-land from the top of the bank extending to the middle of the river.*

RESPONSE: This criterion applies to area 300 feet east and west of the I-5 right-of-way. The subject site is outside of the 300 feet from I-5 as mentioned. Therefore, this standard does not apply.

Section 72.060 Development Restrictions in Greenways and Natural Areas.

(1) Except as provided in Subsection (2), no building, structure, grading, excavation, placement of fill, vegetation removal, impervious surface, use, activity or other development shall occur within Riverbank, Creek and Other Greenways, and Wetland and Open Space Natural Areas.

RESPONSE: No development is planned in the Greenway associated with the subject site. The greenway will be placed in a tract and donated to the City.

(2) The following uses, activities and types of development are permitted within Riverbank, Creek and Other Greenways, and Wetland and Open Space Natural Areas provided they are designed to minimize intrusion into riparian areas:

> *(a) Public bicycle or pedestrian ways, subject to the provisions of TDC 72.070.*
>
> *(b) Public streets, including bridges, when part of a City approved transportation plan, and public utility facilities, when part of a City approved plan and provided appropriate restoration is completed.*
>
> *(c) Except in Wetland Natural Areas, private driveways and pedestrian ways when necessary to afford access between portions of private property that may be bisected by a Greenway or Open Space Natural Area.*
>
> *(d) Except in Creek Greenways and Wetland Natural Areas, outdoor seating for a restaurant within the Central Urban Renewal District, but outside of any sensitive area or its vegetated corridor.*
>
> *(e) Public parks and recreational facilities including, but not limited to, boat ramps, benches, interpretive stations, trash receptacles and directional signage, when part of a City-approved Greenway or Natural Area enhancement plan.*
>
> *(f) Landscaping, when part of a landscape plan approved through the Architectural Review process. City initiated landscape projects are exempt from the Architectural Review process. Landscaping in Greenways and Natural Areas shall comply with the approved Plant List in the Parks and Recreation Master Plan. When appropriate, technical advice shall be obtained from the Oregon Department of Fish and Wildlife, U.S. Soil Conservation Service, or similar agency, to ensure the proposed landscaping will enhance the preservation of any existing fish or wildlife habitats in the vicinity.*
>
> *(g) Wildlife protection and enhancement, including the removal of non-native vegetation and replacement with native plant species.*
>
> *(h) Except in Wetland Natural Areas, public boating facilities, irrigation pumps, water-related and water-dependent uses including the removal of vegetation necessary for the development of water-related and water-dependent uses, and replacement of existing*

structures with structures in the same location that do not disturb additional riparian surface.

(i) In Wetland Natural Areas, perimeter mowing and other cutting necessary for hazard prevention.

RESPONSE: No development is planned in the Greenway associated with the subject site. The greenway will be placed in a tract and donated to the City.

(3) The City may, through the subdivision, conditional use, architectural review, or other development approval process, attach appropriate conditions to approval of a development permit. Such conditions may include, but are not limited to:

(a) Use of Greenways and Natural Areas for storm drainage purposes;

(b) Location of approved landscaping, pedestrian and bike access areas, and other non-building uses and activities in Greenways and Natural Areas;

(c) Setback of proposed buildings, parking lots, and loading areas away from the Greenway and Natural Area boundary.

RESPONSE: A new stormwater easement is shown to extend into the 100 year floodplain associated with the property, however, no lines will extend into the greenway, which will be placed in a tract and donated to the City of Tualatin.

(4) Greenways and Natural Areas in which an access easement is owned by the City, but retained in private ownership, shall be maintained by the property owner in their natural state and may only be modified if a landscape and maintenance plan complies with the approved Plant List in the Parks and Recreation Master Plan, and has been approved through the Architectural Review process or by the Parks and Recreation Director when Architectural Review is not required.

(5) The Parks and Recreation Director shall be included as a commentor when a development application proposes dedication of Greenway or Natural Area property to the City or when development is pro-posed on Greenway or Natural Areas property maintained by the Parks and Recreation Department. [Ord. 673-85, §2, 8/12/85; Ord. 933-94, §34, 11/28/94; Ord. 947-95, §5, 7/24/95; Ord. 979-97, §38, 7/14/97]

RESPONSE: The Greenway associated with the subject site is shown in a tract and will be donated to the City. No access easements are shown within the greenway tract.

Section 72.070 General Guidelines for Pedestrian and Bike Paths in Greenways.

To construct bike and pedestrian paths in greenways, the developer of the path shall adhere to the following guidelines, wherever practicable:

(1) Incorporate trails into the surrounding topography.

(2) Provide viewing opportunities for special vistas, wetlands, and unique natural features.

(3) Protect existing vegetation to the greatest extent possible. In wooded areas meander paths through the woods to avoid significant trees. An arborist should be consulted to determine methods for minimizing impact of construction of paths near trees greater than 5 inch caliper as measured 4 feet above-grade.

(4) Replant trees in the vicinity where they were removed. Use native species as outlined in the approved plant list incorporated in the Parks and Recreation Master Plan.

(5) Minimize impact on wetland environments. Build paths above wetlands wherever possible. Use boardwalks, bridges or other elevated structures when passing through a wetland. Direct trails away from sensitive habitat areas such as nesting or breeding grounds.

(6) Provide interpretive opportunities along the trail. Use interpretive signage and displays to describe plant and animal species, nesting areas, wildlife food sources, and geologic, cultural and historic features.

(7) Provide amenities along the trail. Place benches, picnic tables, trash receptacles and interpretive signage where appropriate.

(8) Where paths are placed in utility corridors, path design should be coordinated with the City's Engineering and Building Department and Operations Department to allow utility maintenance.

(9) Mitigate surface water drainage near wetlands and streams. Where hard surface trails occur adjacent to wetlands or creeks, provide, when appropriate, an open water system through swales, trench percolation, or on-site detention ponds to prevent erosion and negative impacts.
(10) Incorporate signage. Place properly scaled and sited regulatory and guide signs to instruct users on accessibility, local conditions, safety concerns and mileage information. [Ord. 635-84, §35, 6/11/84 and Ord. 933-94, §35, 11/28/94; Ord. 947-95, §5, 7/24/95]

RESPONSE: The Greenway associated with the subject site is shown in a tract and will be donated to the City. A greenway trail is planned to be constructed, however, the trail is shown outside of the Greenway tract for the width of the property. These standards do not apply.

Section 72.100 Parks Systems Development Charge (SDC) Credit.

Ordinance 833-91 establishes a System Development Charge for Parks in residential planning districts. The ordinance contains provisions for credits against the Parks SDC, subject to certain limitations and procedures. Credit may be received up to the full amount of the Parks SDC fee. Dedication of NRPO District Areas, Other Natural Areas or vegetated corridors located within or adjacent to the NRPO District listed in the SDC capital improvement list are eligible for a SDC credit. Dedication and improvement of bicycle and pedestrian paths may also be eligible for a SDC credit. [Ord. 933-94, §39, 11/28/94; Ord. 947-95, §5, 7/24/95; Ord. 979-97, §43, 7/14/97]

RESPONSE: it is understood that SDC's will be assessed by the City of Tualatin. We request that all credits against the SDC's imposed, be applied.

Chapter 73 - COMMUNITY DESIGN STANDARDS

ARCHITECTURAL REVIEW APPROVAL

Section 73.050 Criteria and Standards.

(1) In exercising or performing his or her powers, duties, or functions, the Community Development Director shall determine whether there is compliance with the following:

(a) The proposed site development, including the site plan, architecture, landscaping, parking and graphic design, is in conformance with the standards of this and other applicable City ordinances insofar as the location, height, and appearance of the proposed development are involved;

(b) The proposed design of the development is compatible with the design of other developments in the general vicinity; and

(c) The location, design, size, color and materials of the exterior of all structures are compatible with the proposed development and appropriate to the design character of other developments in the vicinity.

RESPONSE: This project is consistent with the existing high density residential development in the area, more specifically the Woodridge Apartment Complex located across SW Pacific Hwy at 11865 SW Tualatin Rd. and will be a gleaming example of trends in residential living in the Tualatin area. The location of structures, design, size and color of exterior materials will be of a quality that we anticipate will be mimicked in developments in the area. As shown below and on the associated plans, the proposed project meets the applicable standards of the City of Tualatin Development Code.

(2) In making his or her determination of compliance with the above requirements, the Community Development Director shall be guided by the objectives and standards set forth in this chapter. If the architectural review plan includes utility facilities or public utility facilities, then the City Engineer shall determine whether those aspects of the proposed plan comply with applicable standards.

RESPONSE: This application includes architectural features as well as utility facilities and public improvements. AKS Engineering has worked closely with the City of Tualatin to plan utilities in a manner consistent with the City's code and to benefit both the subject site and the surrounding area. This standard is met.

(3) In determining compliance with the requirements set forth, the Community Development Director shall consider the effect of his or her action on the availability and cost of needed housing. The Community Development Director shall not use the requirements of this section to exclude needed housing types. However, consideration of these factors shall not prevent the Community Development Director from imposing conditions of approval necessary to meet the requirements of this section. The costs of such conditions shall not unduly increase the cost of

housing beyond the minimum necessary to achieve the purposes of this Code. As part of the Architectural Review process, the Community Development Director has no authority to reduce dwelling unit densities.

RESPONSE: Market studies have been performed for the area and determined that housing demands make this project feasible. We are confident that City Staff will not impose any unnecessary conditions that make this project (which involves a need for housing) unfeasible from a monetary perspective.

(4) As part of Architectural Review, the property owner may apply for approval to remove trees, in addition to those exemptions allowed in TDC 34.200(3), by submitting information concerning proposed tree removal, pursuant to TDC 34.210(1). The granting or denial of a tree removal permit shall be based on the criteria in TDC 34.230.

RESPONSE: The construction of the project will include removal of trees on the subject site due to grading needs for the buildings and associated amenities. Trees to be removed will be replaced after the site is developed. A tree preservation and removal plan consistent with Criteria of TDC 34.230 has been included in the preliminary plan set.

(5) Conflicting Standards. In addition to the MUCOD requirements, the requirements in TDC Chapter 73 (Community Design Standards) and other applicable Chapters apply. If TDC Chapters 57, 73 and other applicable Chapters, conflict or are different, they shall be resolved in accordance with TDC 57.200(2).

RESPONSE: The subject site is not within the MUCOD. This standard does not apply.

COMMUNITY DESIGN STANDARDS

Section 73.130 Standards.

The following standards are minimum requirements for multi-family and townhouse development:

(1) Private Outdoor Areas.

(a) Except within the Central Design District, or within the Mixed Use Commercial Overlay District in which case the Architectural Review process shall determine the appropriate outdoor area, a separate outdoor area of not less than 80 square feet shall be attached to each ground level dwelling unit. These areas shall be separated from common outdoor areas in a manner which enables the resident to control access from separate to common areas with elements, such as walls, fences or shrubs.

(b) Except for townhouses, a separate outdoor area of not less than 48 square feet in the form of balconies, terraces, or loggias shall be provided for each unit located above the ground level, except that within the Central Design District or the Mixed Use Commercial Overlay District such outdoor areas may be less than 48 square feet.

RESPONSE: All ground floor units in the project will have private patios of no less than 80 square feet. Private patios will be separate from common outdoor areas by means of decorative fencing and shrubbery. All 2nd and 3rd floor units will have private outdoor decks that are shown to be at least 48 square feet and/or 63 square feet depending on building layouts. These standards are satisfied.

(2) Entry Areas.

(a) Except as provided in TDC 73.130(2)(b), a private main entry area shall be provided in addition to required private outdoor areas and designed so that they are considered a private extension of each dwelling unit. Except for townhouses, each entrance area shall be a minimum of 24 square feet in area for each dwelling unit and may be combined to serve more than a single unit, subject to the following mini-mum area requirements:

(i) Two dwelling units for one-story buildings or two-story townhouses (48 square feet).

(ii) Four dwelling units for two-story buildings (96 square feet).

(iii) Six dwelling units for three-story buildings (144 square feet).

(iv) Unlimited for four-story and greater and for buildings with dwelling unit entries from interior corridors.

(b) Within the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, a private main entry area need not meet the minimum square footage requirements in TDC 73.130(2)(a).

(c) Entry areas shall be separated from on-site parking areas and public streets with landscaping, change of grade, low fences, walls or other means that enable the resident to supervise and control access and to retain privacy.

RESPONSE: Each of the buildings will have its own private entrance that residents will use to access their individual units. Private entrances to buildings will be a minimum 144 square feet and include design features such as landscaping and walkways that direct residents to building access points. This standard is met.

(3) Shared Outdoor Areas and Children's Play Areas.

(a) Except for townhouses, projects with 12 or more dwelling units shall provide year round shared outdoor areas for both active and passive recreation (gazebos and other covered spaces are encouraged to satisfy part of this requirement) totaling not less than 450 square feet per dwelling unit. Except adult only projects, a minimum of 150 square feet of the 450 square feet shall be provided as a children's play area.

(b) The shared outdoor and children's play areas shall be located and designed in a manner which:

(i) Provides approximately the same accessibility to the maximum number of dwelling units possible;

(ii) Allows residents to watch over these areas from windows in at least two adjacent dwelling units. These windows must provide viewing from the kitchen, living room, dining room or other activity room (bedrooms or bathrooms are not included);

(iii) Provides a separation from all entryway and parking areas with a landscaped transition area measuring a minimum of 10 feet wide;

(iv) Controls access to shared outdoor areas from off-site as well as from on-site parking and entrance areas with features such as fencing, walls and landscaping;

(v) Provides both sunny and shady spots; and

(vi) Provides a usable floor surface (material such as lawn, decks, wood chips, sand and hard surface materials qualify).

(c) These standards shall not apply to townhouses or within the Central Design District or within the Mixed Use Commercial Overlay District. Within the Mixed Use Commercial Overlay District the amount of shared outdoor areas and children's play areas shall be consistent with the intent of the Mixed Use Commercial Overlay District and shall be appropriate for the design and scale of residential use proposed as determined through the Architectural Review process.

RESPONSE: This section requires projects with 12 or more dwelling units to provide both active and passive recreation spaces totaling not less than 450 square feet per dwelling unit. The River Ridge Apartment project includes a total of 180 units. Therefore, 81,000 sq. ft. of both active and passive recreation spaces are required. Of the required open space, 27,000 sq. ft. shall be provided as children's play area. The planned outdoor recreation space is shown to be approximately +/-84,982 sq. ft. of which +/- 27,642 square feet of the area is considered "children's play area," which meets this requirement. Please see preliminary plan set for specifics.

The sport court and play equipment can be viewed from the living, dining and decks of building 3 and the living room of end units of building 4. The horse shoe/ bocce ball area can be viewed from the dining rooms and decks of buildings 4 and 5. The sandbox play area can be viewed from the dining area and decks of building 6. The greenway path (part of the children's play area) can be viewed from the dining rooms and decks of buildings 4 – 11. Access to shared outdoor areas will be via internal pedestrian walkways. All children's play areas will be separated from vehicular access by abutting landscaping at a minimum of 10'.

(4) Safety and Security.

(a) Except for townhouses, private outdoor areas shall be separated from shared outdoor areas and children's play areas with elements such as walls, buildings, landscaping, and changes in grade in a manner which enables residents to utilize these areas as an extension of their units.

(b) Windows shall be located to encourage watching over entry areas, shared outdoor areas, walkways and parking areas.

(c) An outdoor lighting system shall be provided which facilitates police observation and resident observation through strategic location, orientation and brightness without shining into residential units, public rights-of-way, or fish and wildlife habitat areas.

(d) An identification system shall be established which clearly orients visitors and emergency services as to the location of residential units. Where possible, this system should be evident from the primary vehicle entryway.

RESPONSE: All private outdoor areas (patios) of individual dwelling units will be separated from public areas by a combination of low walls and/or landscaping. Patios will be accessed by back doors of individual units. Windows will be located at either end of individual units, which will overlook landscape areas, associated parking areas, shared outdoor areas and entryways to individual buildings.

Appropriate and strategic outdoor lighting will be provided for each of the buildings, parking areas and outdoor areas which will facilitate police and resident observation. Project lighting will be oriented so it won't shine into residential units, public rights-of-way or habitat areas.

Appropriate signage will be placed at the project's entrance and throughout the property to direct visitors and emergency services toward residential buildings. This standard is satisfied.

(5) Service, Delivery and Screening.

(a) Provisions for postal delivery shall be conveniently located and efficiently designed for residents and mail delivery personnel.

(b) Safe pedestrian access from unit entries to postal delivery areas, shared activity areas, and parking areas shall be provided. Elements such as, but not limited to, concrete paths, raised walkways through vehicular areas or bark chip trails will meet this requirement.

(c) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.

RESPONSE: Mail boxes will be conveniently located for postal delivery services, internal pedestrian walkways will be provided that will facilitate safe and convenient on-site access to resident facilities such as the club house, pool area, outdoor recreation and parking areas. All above ground mechanical equipment will be placed in areas away from residents and be screened from view using a combination of fencing and/or landscaping, depending on the type of equipment and its location.

(6) Accessways.

(a) Accessways shall be constructed, owned and maintained by the property owner.

(b) Accessways shall be provided between the development's walkway and bikeway circulation system and all of the following locations that apply:

(i) adjoining publicly-owned land intended for public use, including schools, parks, or bike lanes. Where a bridge or culvert would be necessary to span a designated greenway or wetland to provide a connection, the City may limit the number and location of accessways to reduce the impact on the greenway or wetland;

(ii) adjoining arterial or collector streets upon which transit stops or bike lanes are provided or designated;

(iii) adjoining undeveloped residential or commercial property; and

(iv) adjoining developed sites where an accessway is planned or provided.

(c) Accessways to undeveloped parcels or undeveloped transit facilities need not be constructed at the time the subject property is developed. In such cases the applicant for development of a parcel adjacent to a vacant parcel shall enter into a written agreement with the City guaranteeing future performance by the applicant and any successors in interest of the property being developed to construct an accessway when the adjacent undeveloped parcel is developed. The agreement shall be subject to the City's review and approval.

(d) Accessways for multi-family development shall:

(i) be a minimum of 8 feet in width;

(ii) be constructed in accordance with the Public Works Construction Code if they are public accessways, and if they are private accessways they shall be constructed of asphalt, concrete or a pervious surface such as pervious asphalt or concrete, pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable;

(iii) not have fences or gates which prevent pedestrian and bike access at the entrance to or exit from any accessway; and

(iv) have curb ramps wherever the accessway crosses a curb.

(e) Outdoor Recreation Access Routes shall be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.

RESPONSE: All accessways will be 8' in width as shown on the preliminary plan set, be constructed in accordance to the Public Works Construction Code, be constructed of concrete and have curb ramps wherever the accessway crosses a curb. This standard is satisfied.

(7) Walkways.

(a) Except for townhouses, walkways for multi-family development shall be a minimum of 6 feet in width and be constructed of asphalt, concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable.

(b) Curb ramps shall be provided wherever a walkway crosses a curb.

RESPONSE: Internal walkways adjacent to associated parking areas will be 7' in width, all other internal walkways will be 6' in width and will facilitate movement to project amenities such as the clubhouse and pool and outdoor recreation areas. The greenway path is planned to be 12' in width. Walkways will be concrete and be separated from vehicular movement by raised curbs. Accessible Walkway ramps will comply with ADA requirements along accessible routes and will be provided where accessible routes cross curbs. These standards have been satisfied.

(8) The Federal Americans with Disabilities Act (ADA) applies to development in the City of Tualatin. Although TDC Chapter 73, does not include the Oregon Structural Specialty Code' s (OSSC) accessibility standards as requirements to be reviewed during the Architectural Review process, compliance with the OSSC is a requirement at the Building Permit step. It is strongly recommended all materials submitted for Architectural Review show compliance with the OSSC.

RESPONSE: The site plan and buildings are generated with the knowledge that ADA, Fair Housing and OSSC standards must be met. This standard is satisfied.

Section 73.170 Structure Design – Single-family and Multi-family Uses.

(1) Purpose – Single-family Uses.

The purpose of single-family building design objectives and standards is to implement the purposes and objectives of TDC 73.020(2). The objectives and standards are intended to promote functional, safe, innovative and attractive buildings that are compatible with the surrounding environment. This concerns the building form including the articulation of walls, roof design, materials, and placement of elements such as windows, doors, and identification features.

(2) Purpose – Multi-family Uses.

The purpose of multi-family, including townhouse, building design objectives and standards is to implement the purposes and objectives of TDC 73.020(2). The objectives and standards are intended to promote functional, safe, innovative and attractive buildings which are compatible with the surrounding environment. This concerns the building form including the articulation of walls, roof design, materials, colors, placement of elements such as windows, doors, mechanical equipment and identification features. [Ord. 862-92, §51, 3/23/92. Ord. 1025-99, §36, 7/26/99; Ord. 1260-08 §7, 5/12/08]

RESPONSE: This project has been designed to be compatible with the surrounding environment to the greatest extent possible starting with building design, layout and building materials. Project landscaping has also taken the surrounding environment into consideration to help soften and integrate the project into the site's natural environment. This standard has been satisfied.

Section 73.180 Structure Design – Single-family and Multi-family Uses.

(2) Objectives – Multi-family Uses.

All multi-family projects, including town-houses, should strive to meet the following objectives to the maximum extent practicable. Architects and developers should consider these elements in designing new projects. In the Central Design District, the Design Guidelines of TDC 73.610 shall be considered. In the case of conflicts between objectives, the proposal shall provide a desirable balance between the objectives. Townhouses may necessitate a different balancing than multi-family developments, such as apartments. Buildings shall be designed, to the maximum extent practicable, to:

(a) Provide a composition of building elements which responds to function, land form, identity and image, accessibility, orientation and climatic factors.

(b) Enhance energy efficiency through the use of landscape and architectural elements, such as arcades, sun-screens, lattice, trellises, roof overhangs and window orientation.

(c) Create subclusters and stagger unit alignments.

(d) Utilize functional building elements such as carports and garages, balconies, entry areas and sun screens where possible to accomplish unit identity, pride of place and visual diversity.

(e) Give consideration to organization, design and placement of windows as viewed on each elevation. The system may be a variation on a theme or consistent symmetry and must operate in concert with the provision of adequate interior privacy, safety, daylight and ventilation.

(f) Select building materials which contribute to the project's identity, form and function, as well as to the existing site and surrounding natural landscape and development.

(g) Select colors in consideration of lighting conditions under which the structure is viewed, the ability of the material to absorb, reflect or transmit light, and the color's functional role (whether to blend into the environment, express a particular character, discriminate materials, define form and volume or simply as an identification feature such as with color coding).

(h) Minimize disruption of natural site features such as topography, trees and water features. [Ord. 727-87, §7, 7/13/87; Ord. 862-92, §51, 3/23/92; Ord. 1025-99, §37, 7/26/99; Ord. 1097-02, 02/11/02; Ord. 1260-08 §8, 5/12/08]

RESPONSE: This project has been designed with consideration of the site's unique characteristics. The majority of the buildings have been sited to maximize the view of the Tualatin River and associated greenway. Topography of the site has been a contributing factor to building placement and building height in order to provide views for buildings located on the interior of the site. Building separation has been shown in order to permit natural light infiltration. Building materials and colors have been selected to create a quality identity that blends with the natural environment and enhances the residential experience of living in the area. The design of the project has taken the preservation of the associated greenway into consideration by developing under the maximum allowable density which minimizes the disruption of natural site features. This standard is satisfied.

Section 73.190 Standards – Single-family and Multi-family Uses.

(2) Standards - Multi-family Uses.

The following standards are minimum requirements for multi-family and townhouse development.

(a) Storage.

(i) Except as provided in Subsection (a)(ii), enclosed storage areas are required and shall be attached to the exterior of each dwelling unit to accommodate garden equipment, patio furniture, barbecues, bicycles, etc. Garages are not intended to satisfy storage requirements. Each storage area shall be a minimum of 6 feet in height and have a minimum floor area of:

(A) 24 square feet for studio and one bedroom units;

(B) 36 square feet for two bed-room units; and

(C) 48 square feet for greater than two bedroom units.

(ii) For townhouses and residential and mixed use residential developments in the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, some provision shall be made for outdoor storage adjacent to private outdoor areas. Such provisions shall be reviewed for adequacy through Architectural Review and shall be designed to accommodate barbecues or other small deck equipment.

RESPONSE: Each unit will be provided with 24 sq. ft. of storage off of the associated patios and decks. An additional 1,800 sq. ft. of storage will be provided at the lower level of the clubhouse. According to this standard, "some provision shall be made for outdoor storage adjacent to private outdoor areas." Based on this information, the following table reflects the amount of storage provided, which exceeds the required storage imposed by this section.

Unit Type	# of Units	Required Storage	Planned Storage
1 Bedroom Units	60	1,440 sq. ft.	1,440 sq. ft.
2 Bedroom Units	102	3,672 sq. ft.	2,448 sq. ft.
3 Bedroom Units	18	864 sq. ft.	432 sq. ft.
Clubhouse			1,800 sq. ft.
TOTAL	**180 Units Provided**	**5,976 sq. ft. Required**	**6,120 sq. ft. Provided**

As indicated above, approximately 1,800 sq. ft. of outdoor storage is provided adjacent to private outdoor areas (Please refer to sketch showing layout of storage in lower level of clubhouse).

(b) Carports and Garages.

(i) If carports and garages are provided for multi-family development, except townhouses, the form, materials, color and construction shall be compatible with the complex they serve.

(ii) At least one garage space shall be provided for townhouses. [Ord. 705-86, § 6, 9/8/86; Ord. 862-92, § 51, 3/23/92; Ord. 882-92, § 14, 12/14/92; Ord. 1025-99, §38, 7/26/99; Ord. 1252-08 §2, 2/11/08; Ord. 1260-08 §9, 5/12/08]

RESPONSE: Carports will be provided for residents, carports will be constructed using the same color scheme and compatible materials (the carports are steel per the submitted photos and cut sheets) of the buildings they serve in order to have a uniform appearance. This standard has been satisfied.

Section 73.225 Mixed Solid Waste and Source Separated Recyclables Storage Areas for New or Expanded Multi-Unit Residential, Including Townhouses, Commercial, Industrial, Public and Semi-Public Development.

Purpose.

The purpose of mixed solid waste and source separated recyclables storage areas objectives and standards is to implement the purposes and objectives of TDC 73.020(2). The objectives and standards are intended to be flexible, easy and efficient to administer, and allow creativity. [Ord. 898-93, §6, 6/14/93. Ord. 1025-99, §39, 7/26/99; Ord. 1097-02, 2/11/02]

RESPONSE: A solid waste and recyclable storage area has been designed with the objectives of TDC 73.020(2) in mind. This area will mimic design standards and color schemes of the development in order to blend in with other amenities of the project. This standard has been satisfied.

Section 73.227 Standards.

The following standards are minimum requirements for mixed solid waste and source separated recyclables storage areas. To provide for flexibility in designing functional storage areas, this section provides four different methods to meet the objectives of providing adequate storage for mixed solid waste and source separated recyclables and improving the efficiency of collection. An applicant shall choose and implement one of the following four methods to demonstrate compliance: 1) minimum standards; 2) waste assessment; 3) comprehensive recycling plan; or 4) franchised hauler review, as more fully described in subsections (2), (3), (4) and (5) of this section.

> *(1) The mixed solid waste and source separated recyclables storage standards shall apply to all new or expanded multi-family residential developments containing five or more units and to new or expanded commercial, industrial, public and semi-public development.*

RESPONSE: This application is for a new multi-family residential project. These standards apply and are addressed below. The applicant has chosen to implement the Franchised Hauler Review Method, which is addressed below.

> *(5) Franchised Hauler Review Method. The franchised hauler review method provides for a coordinated review of the pro-posed site plan by the franchised hauler serving the subject property. This method can be used when there are unique conditions associated with the site, use, or waste stream that make compliance with any of the three other methods impracticable. The objective of this method is to match a specific hauler program (types of equipment, frequency of collection, etc.) to the unique characteristic(s) of the site or development. The applicant shall coordinate with the franchised hauler to develop a plan for storage and collection of mixed solid waste and source separated recyclables to be generated. A narrative describing how the proposed site meets one or more unique conditions, plus site plan and architectural drawings showing the size and location of storage area(s) required to accommodate anticipated volumes shall be submitted for Architectural Review. Additionally, a letter from the franchised hauler shall be submitted with the application that de-scribes the level of service to be provided by the hauler, including any special equipment and collection frequency, which will keep the storage area from exceeding its capacity. For purposes of this subsection the following constitute unique conditions:*

RESPONSE: The Franchised Hauler Review Method has been chosen due to the unique site conditions (floodplain, floodway, greenway, topography). A letter from the franchise hauler has been included with this application that approves the location and size of the waste and recyclable area.

> > *(a) Use of either of the three other methods of compliance would interfere with the use of the proposed development by reducing the productive space of the proposed development, or make it impossible to comply with the minimum off-street parking requirements of the underlying planning district, or*

RESPONSE: In order to avoid disturbance to and preserve the natural amenities of the site, it has been determined that the other methods of compliance would interfere with the intent of this application.

(b) The site is of an irregular shape or possesses steep slopes that do not allow for access by collection vehicles typically used by the franchised hauler to serve uses similar in size and scope to the proposed use, or

RESPONSE: The site's topography has been a challenge throughout the design of this project. The placement of the waste and recyclable storage area is the most efficient and safe location for collection vehicles to access such facility.

(c) The proposed use will generate unique wastes that can be stacked, folded, or easily consolidated without the need for specialized equipment, such as a compactor, and can therefore be stored in less space than is required by the Minimum Standards Method.

RESPONSE: The planned use of the property is high density residential. Waste and recyclables from residents does not require specialized equipment, however, a compactor is planned for this project to reduce the area needed for waste and recyclables. A letter from the franchise hauler approving the waste and recyclable area is included with this application. This standard is satisfied.

If the application does not demonstrate that the franchised hauler method requires less space, through the Architectural Review process the minimum standards method may be required. The franchised hauler method shall be reviewed and approved as part of the Architectural Review process.

RESPONSE: As mentioned above, a letter from the franchise hauler approving the trash and recyclable storage area has been included with this application. The use of a compactor will significantly reduce the need for additional area for storage on an already constrained site. This standard is satisfied.

(6) Location, Design and Access Standards for Storage Areas. The following location, design and access standards are applicable for storage areas:

(a) Location Standards

(i) To encourage its use, the storage area for source separated recyclables may be co-located with the storage area for mixed solid waste.

(ii) Indoor and outdoor storage areas shall comply with Building and Fire Code requirements.

(iii) Storage area space requirements can be satisfied with a single location or multiple locations, and can combine both interior and exterior locations.

(iv) Exterior storage areas shall not be located within a required front yard setback or in a yard adjacent to a public or private street.

(v) Exterior storage areas shall be located in central and visible locations on the site to enhance security for users.

(vi) Exterior storage areas can be located in a parking area, if the proposed use provides parking spaces required through the Architectural Review process. Storage areas shall be appropriately screened according to TDC 73.227(6)(b)(iii).

(vii) Storage areas shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on site or on public streets adjacent to the site.

RESPONSE: The planned mixed solid waste and recyclable storage area is shown to be co-located at the south end of the subject site at a single location. The storage area is not located in a required front yard setback or in a yard adjacent to a public or private street. The storage area will comply with Building and Fire Code requirements and is located in a visible area to enhance security for the project's residents. Screening of the facility will include fencing and/or masonry walls with sight obscuring security doors. The planned storage area will be accessible for collection vehicles and will not obstruct pedestrian or vehicle movement. These standards are satisfied.

(b) Design Standards

(i) The dimensions of the storage area shall accommodate containers consistent with current methods of local collection at the time of Architectural Review approval.

(ii) Storage containers shall meet Fire Code standards and be made and covered with water proof materials or situated in a covered area.

(iii) Exterior storage areas shall be enclosed by a sight obscuring fence or wall at least 6 feet in height. In multi-family, commercial, public and semi-public developments evergreen plants shall be placed around the enclosure walls, excluding the gate or entrance openings. Gate openings for haulers shall be a minimum of 10 feet wide and shall be capable of being secured in a closed and open position. A separate pedestrian access shall also be provided in multi-family, commercial, public and semi-public developments.

(iv) Exterior storage areas shall have either a concrete or asphalt floor surface.

(v) Storage areas and containers shall be clearly labeled to indicate the type of material accepted.

RESPONSE: The planned storage area will be dimensioned to accommodate containers consistent with current methods of collection. The containers will be covered with water proof materials or a roof structure will be constructed over the entire storage area. The planned facility will include sight obscuring doors or a gate. The remainder of the facility will be screened with fencing and/or masonry walls with appropriate landscaping. The floor of the storage area will be constructed of concrete and containers will be clearly labeled. These standards are satisfied.

(c) Access Standards

(i) Access to storage areas can be limited for security reasons. However, the storage areas shall be accessible to users at convenient times of the day, and to hauler personnel on the day and approximate time they are scheduled to provide hauler service.

(ii) Storage areas shall be designed to be easily accessible to hauler trucks and equipment, considering paving, grade, gate clearance and vehicle access. A minimum of 10 feet horizontal clearance and 8 feet vertical clearance is required if the storage area is covered.

(iii) Storage areas shall be accessible to collection vehicles without requiring backing out of a driveway onto a public street. If only a single access point is available to the storage area, adequate turning radius shall be provided to allow vehicles to safely exit the site in a forward motion. [Ord. 898-93, §8, 6/4/93]

RESPONSE: The facility has been designed for easy access by both residents and franchise collection vehicles and will not require backing movement onto a public street. Adequate turning radius for collection vehicles is provided as shown on the preliminary plan set. These standards have been satisfied.

LANDSCAPING

Section 73.230 Landscaping Standards.

Purpose.

The purpose of this section is to establish standards for landscaping within Tualatin in order to enhance the environmental and aesthetic quality of the City:

(1) By encouraging the retention and protection of existing trees and requiring the planting of trees in new developments;

(2) By using trees and other landscaping materials to temper the effects of the sun, wind, noise, and air pollution.

(3) By using trees and other landscaping materials to define spaces and the uses of specific areas; and

(4) Through the use of trees and other landscaping materials as a unifying element within the urban environment. [Ord. 705-86, §6, Sept. 8, 1986]

RESPONSE: The landscape plan submitted with this application shows a number of existing trees to remain and the planting of trees throughout the project in order to temper the effects of the sun, wind, noise and air pollution. The planting of trees in conjunction with other landscape materials within the development will soften the impact of the project on the natural landscape and create a more pleasing atmosphere for residents and surrounding neighborhoods that are within view of the development.

Section 73.240 Landscaping General Provisions.

> *(9) Yards adjacent to public streets, except as described in the Hedges Creek Wetlands Mitigation Agreement, **TDC 73.240(7)**, shall be planted to lawn or live groundcover and trees and shrubs and be perpetually maintained in a manner providing a park-like character to the property as approved through the Architectural Review process.*

RESPONSE: The subject site is adjacent to SW Pacific Hwy. This area is considered "yard area" and will be planted with lawn, trees and shrubs and be maintained as a park-like character. Please see the preliminary landscape plan included with the preliminary plan set for further details. This standard is satisfied.

> *(10) Yards not adjacent to public streets or Low Density Residential (RL) or Manufacturing Park (MP) Planning Districts shall be planted with trees, shrubs, grass or other live groundcover, and maintained consistent with a landscape plan indicating areas of future expansion, as approved through the Architectural Review process.*

RESPONSE: All yard areas abutting adjacent properties, which are not zoned either (RL) or (MP), will be planted with trees, shrubs and grass as shown on the preliminary landscape plan included with the preliminary plan set. This standard is satisfied.

> *(11) Any required landscaped area shall be designed, constructed, installed, and maintained so that within three years the ground shall be covered by living grass or other plant materials. (The foliage crown of trees shall not be used to meet this requirement.) A maximum of 10% of the landscaped area may be covered with un-vegetated areas of bark chips, rock or stone. Disturbed soils are encouraged to be amended to an original or higher level of porosity to regain infiltration and stormwater storage capacity.*

RESPONSE: Landscaped areas will be covered with living plant materials, including trees, shrubs and groundcover. Bark mulch will cover ground in the landscaped areas between plantings, suppressing weeds and retaining moisture. No areas will be covered exclusively in bark chips, rock or stone. This standard is met.

> *(13) Landscape plans for required landscaped areas that include fences should carefully integrate any fencing into the plan to guide wild animals toward animal crossings under, over, or around transportation corridors.*

RESPONSE: A 6' fence will be installed at the pool enclosure, which will deter wild animals from entering the pool area. This standard is satisfied.

Section 73.250 Tree Preservation.

(1) Trees and other plant materials to be retained shall be identified on the landscape plan and grading plan.

RESPONSE: The landscape plan and grading plan show all existing trees to be retained. Separate tree removal plans have been included in the preliminary plan set. Therefore, this standard has been satisfied.

(2) During the construction process:

(a) The owner or the owner's agents shall provide above and below ground protection for existing trees and plant materials identified to remain.

(b) Trees and plant materials identified for preservation shall be protected by chain link or other sturdy fencing placed around the tree at the drip line.

(c) If it is necessary to fence within the drip line, such fencing shall be specified by a qualified arborist as defined in TDC 31.060.

(d) Neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.

(e) Where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's drip-line area, such grading, paving, trenching, boring, digging, or similar encroachment shall only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met.

(f) Tree root ends shall not remain exposed.

RESPONSE: All trees and plant material indicated on the landscape plan, grading plan and tree preservation and removal plan to remain will be protected by providing sturdy fencing. All tree protection fencing will be placed at the drip line of trees or as otherwise noted by the project's arborist. No storage of materials including soil will be placed or stored within the drip line of trees to be saved and no grading or other activities associated with the development of the site will compromise the established protection measures unless allowed by the project's arborist. These standards are satisfied.

(3) Landscaping under preserved trees shall be compatible with the retention and health of said tree.

RESPONSE: No trees will be compromised by the installation of additional landscaping associated with the project. This standard is satisfied.

(4) When it is necessary for a preserved tree to be removed in accordance with TDC 34.210 the landscaped area surrounding the tree or trees shall be maintained and replanted with trees that relate to the present landscape plan, or if there is no landscape plan, then trees that are complementary with existing, nearby landscape materials. Native trees are encouraged

RESPONSE: If the removal of trees originally planned to be saved is necessary, nearby landscaping and trees will be protected to the extent possible. If need be, surrounding landscaping and trees will be replaced with like species.

(5) Pruning for retained deciduous shade trees shall be in accordance with National Arborist Association "Pruning Standards For Shade Trees," revised 1979.

RESPONSE: All pruning of deciduous shade trees shall be in accordance with National Arborist Association "Pruning Standards for Shade Trees."

(6) Except for impervious surface areas, one hundred percent (100%) of the area preserved under any tree or group of trees retained in the landscape plan (as approved through the Architectural Review process) shall apply directly to the percentage of landscaping required for a development.

RESPONSE: The area of all preserved trees has been included in the total percentage of landscaping for the development. This standard is satisfied.

Section 73.260 Tree and Plant Specifications.

(1) The following specifications are minimum standards for trees and plants:

(a) Deciduous Trees:

Deciduous shade and ornamental trees shall be a minimum one and one-half inch (1 1/2") caliper measured six inches (6") above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be characteristically shaped specimens.

(b) Coniferous Trees.

Coniferous trees shall be a minimum five feet (5') in height above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be well branched and characteristically shaped specimens.

(c) Evergreen and Deciduous Shrubs.

Evergreen and deciduous shrubs shall be at least one (1) to five (5) gallon size. Shrubs shall be characteristically branched. Side of shrub with best foliage shall be oriented to public view.

(d) Groundcovers.

Groundcovers shall be fully rooted and shall be well branched or leafed. English ivy (Hedera helix) is considered a high maintenance material which is detrimental to other landscape materials and buildings and is therefore prohibited.

(e) Lawns.

Lawns shall consist of grasses, including sod, or seeds of acceptable mix within the local landscape industry. Lawns shall be 100 percent coverage and weed free.

RESPONSE: As shown in the attached landscape plan, the planned development includes a variety of appropriate landscaping elements including deciduous trees, coniferous trees, evergreen and deciduous shrubs and groundcovers. All lawns associated with the development will consist of a mix that is acceptable to the local landscape industry and be planted to ensure 100 percent coverage. All lawns will be maintained and weed free. This standard has been satisfied.

(2) Landscaping shall be installed in accordance with the provisions of Sunset New Western Garden Book (latest edition), Lane Publishing Company, Menlo Park, California or the American Nurserymen Association Standards (latest edition).

RESPONSE: Landscaping will be installed in accordance with the Sunset New Western Garden Book standards and has been designed by a professional landscape architect. This standard is satisfied.

(3) The following guidelines are suggested to ensure the longevity and continued vigor of plant materials:

(a) Select and site permanent landscape materials in such a manner as to produce a hardy and drought-resistant landscaped area.

(b) Consider soil type and depth, spacing, exposure to sun and wind, slope and contours of the site, building walls and overhangs, and compatibility with existing native vegetation preserved on the site or in the vicinity.

RESPONSE: Hardy, drought-resistant plants, appropriate to the site and region have been selected for the site. The site will be redeveloped prior to planting, therefore, new soil will be added. The project contractor will test and amend the soil as needed. These guidelines are satisfied.

(4) All trees and plant materials shall be healthy, disease-free, damage-free, well-branched stock, characteristic of the species.

RESPONSE: All plant materials will be healthy. This standard is satisfied.

(5) All plant growth in landscaped areas of developments shall be controlled by pruning, trimming or otherwise so that:

(a) It will not interfere with designated pedestrian or vehicular access; and

(b) It will not constitute a traffic hazard because of reduced visibility. [Ord. 904-93, §57, 9/13/93]

RESPONSE: The selected plant materials are appropriate for the site and climate and will not interfere with visibility or movement in clear vision areas. Responsibility for maintenance of landscaping is accepted by the property owner. This standard is met.

Section 73.270 Grading.

(1) After completion of site grading, top-soil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.

(2) All planting areas shall be graded to provide positive drainage.

(3) Neither soil, water, plant materials nor mulching materials shall be allowed to wash across roadways or walkways.

(4) Impervious surface drainage shall be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.

RESPONSE: Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time. All planting areas shall be graded to provide positive drainage and all soil, plant and mulching materials will be contained in landscape areas and will not cross roadways or walkways. These standards have been satisfied.

Section 73.280 Irrigation System Required.

Except for townhouse lots, landscaped areas shall be irrigated with an automatic underground or drip irrigation system. [Ord. 1025-99, §42, 7/26/99]

RESPONSE: According to the landscape plan the landscaped areas will be irrigated by utilizing a private irrigation well. This standard is satisfied.

Section 73.290 Re-vegetation in Un-landscaped Areas.

The purpose of this section is to ensure erosion protection, and in appropriate areas to encourage soil amendment, for those areas not included within the landscape percentage requirements so native plants will be established, and trees will not be lost.

(1) Where vegetation has been removed or damaged in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements, vegetation shall be replanted.

(2) Plant materials shall be watered at intervals sufficient to ensure survival and growth for a minimum of two growing seasons.

(3) The use of native plant materials is encouraged to reduce irrigation and maintenance demands.

(4) Disturbed soils should be amended to an original or higher level of porosity to regain infiltration and stormwater storage capacity. [Ord. 1224-06 §27, 11/13/06]

RESPONSE: All areas disturbed outside of landscaping or occupied by site amenities will be re-established with native vegetation and maintained to ensure survival and growth for a minimum of two growing seasons. Disturbed soils will be amended to an original or higher level of porosity that will help facilitate retention for stormwater. These standards are satisfied.

Section 73.300 Landscape Standards - Multi-family Uses.

All areas within a development, including townhouses, not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas, or undisturbed natural areas shall be landscaped. Townhouse developments may include hard surfaces in outdoor areas such as patios and storage areas as determined in the Architectural Review process. [Ord. 1025-99, §43, 7/2/99

RESPONSE: All areas not occupied by the development of the subject site will be landscaped as required above and shown on the preliminary landscape plan. This standard is satisfied.

OFF-STREET PARKING LOT LANDSCAPING

Section 73.320 Off-Street Parking Lot Landscaping Standards.

(1) General Provisions. In addition to the goals stated in TDC 73.110 and 73.140, the goals of the off-street parking lot standards are to create shaded areas in parking lots, to reduce glare and heat buildup, provide visual relief within paved parking areas, emphasize circulation patterns, reduce the total number of spaces, reduce the impervious surface area and stormwater runoff and enhance the visual environment. The design of the off-street parking area shall be the responsibility of the developer and should consider visibility of signage, traffic circulation, comfortable pedestrian access, and aesthetics. Trees shall not be cited as a reason for applying for or granting a variance on placement of signs.

(2) Application. Off-street parking lot landscaping standards shall apply to any surface vehicle parking or circulation area.
[Ord. 904-93, §59, 9/13/93; Ord. 1224-06 §28, 11/13/06]

RESPONSE: As shown on the attached landscape plan, all vehicle parking and circulation areas will be landscaped to off-street parking lot landscaping standards that meet the above goals. This standard is met.

Section 73.330 Parking Lot Landscaping - Multi-family Uses.

(1) Locate landscaping or approved substitute materials in all areas not necessary for vehicular parking and maneuvering.

(2) A clear zone shall be provided for the driver at ends of on-site drive aisles and at driveway entrances, vertically between a maximum of 30 inches and a minimum of 8 feet as measured from the ground level.

(3) Except for townhouse lots, a minimum 10-foot landscape setback shall be provided between the property lines and parking areas. This area shall be planted with deciduous trees an average of not more than 30 feet on center and shrubs at least 30 inches in height which provide screening of vehicular headlights. Trees shall meet the requirements of TDC 73.360(7). Native trees and shrubs are encouraged.

(4) Except for townhouse lots, provide a landscaped transition area of at least 10 feet in width between parking and vehicle circulation areas and buildings and shared outdoor areas. Deciduous shade trees located at not less than 30 feet on center shall be located in this transition area. The trees shall meet the requirements of TDC 73.360(7). Groundcover plants mixed with low shrubs must completely cover the remainder of this area within three years. Native trees and shrubs are encouraged. [Ord. 882-92, §17, 12/14/92. Ord. 1025-99, §44, 7/26/99; Ord. 1224-06 §29, 11/13/06]

RESPONSE: As shown on the landscape plan included with the preliminary plan set, all vehicle parking and circulation areas will be landscaped to off-street parking lot landscaping standards. A 10-foot wide landscape setback between parking areas and property lines has also been shown on the landscape plan that will be planted with deciduous trees spaced according to the above criterion. A 10-foot wide landscape transition area is also shown between all vehicle parking and circulation areas, buildings and shared outdoor areas. The landscape transition areas will be planted with groundcover plants mixed with low shrubs and trees. These standards are satisfied.

Section 73.350 Off-Street Parking Lot Landscape Island Requirements - Multi-Family Uses.

(1) Except for townhouse lots that are not required to have landscape island areas, a minimum of 25 square feet per parking stall shall be improved with landscape island areas. They may be lower than the surrounding parking surface to allow them to receive stormwater run-off and function as water quality facilities as well as parking lot landscaping. They shall be protected from vehicles by curbs, but the curbs may have spaces to allow drainage into the islands. They shall be dispersed throughout the parking area (see TDC 73.380(3). They shall be planted with groundcover or shrubs. They shall be planted with deciduous shade trees when needed to meet the parking lot shade tree requirements. Native plant materials are encouraged. Landscape square footage requirements shall not apply to parking structures and underground parking.

(2) Landscape island areas with trees shall be a minimum of 5 feet in width (from inside of curb to curb).

(3) A minimum of one deciduous shade tree shall be provided for every four parking spaces to lessen the adverse impacts of glare, reduce heat from paved surfaces, and to emphasize circulation patterns. Required shade trees shall be within 5 feet of the face of a perimeter parking lot curb and shall be uniformly distributed throughout the parking lot (see TDC 73.380(3)), except that within the Central Design District landscape islands and shade trees may be placed to frame views of the Tualatin Commons water feature or identified architectural focal elements. The trees shall meet the requirements of TDC 73.360(7).

(4) Required plant material in landscape islands shall achieve 90 percent coverage within three years. Native shrubs and trees are encouraged. [Ord. 882-92, §19, 12/14/92; Ord. 904-93, §62, 9/13/93; Ord. 1025-99, §45, 7/26/99; Ord. 1224-06 §31, 11/13/06]

RESPONSE: A total of 322 parking stalls are associated with the project. Based on the above requirement, a total of 8,050 square feet of landscape islands is required. This standard is met by the 16'-18' deep landscape islands located every 8 or fewer parking spaces, as well as through the landscaped areas at the ends of parking bays. The City of Tualatin considers any landscape area continued through the horizontal (bumper) line of the parking spaces as a "landscape island area." Across the site, approximately 15,955 square feet of "landscape island areas" will be provided in the parking areas. Deciduous shade trees are provided for every four parking spaces and planted within 5 feet of the perimeter of parking areas. This standard is met.

Section 73.370 Off-Street Parking and Loading.

(1) General Provisions.

(n) Bicycle parking facilities shall include long-term parking that consists of covered, secure stationary racks, lockable enclosures, or rooms (indoor or outdoor) in which the bicycle is stored and short-term parking provided by secure stationary racks (covered or not covered), which accommodate a bicyclist's lock securing the frame and both wheels. The Community Development Director, their designee, or the Architectural Review Board may approve a form of bicycle parking not specified in these provisions but that meets the needs of long-term and/or short-term parking pursuant to Section 73.370.

RESPONSE: The development of the subject site will include 2 covered bicycle parking spaces at each stairwell of the planned buildings. There are a total of 29 stairwells planned for a total of 58 covered spaces. Each unit will also have 1 covered bicycle space in the associated patio storage area for a total of 180 stalls.

(o) Each bicycle parking space shall be at least 6 feet long and 2 feet wide, and overhead clearance in covered areas shall be at least 7 feet, unless a lower height is approved through the Architectural Review process.

RESPONSE: The bicycle parking stalls will be at least 6' long and 2' wide. At the entrance to the bike parking stall under the exterior stair the overhead clearance begins at over 6' and narrows as the stair run continues to grade. This type of bike parking strategy has been used successfully in numerous multifamily developments. A dimensioned picture from a development that we have copied for this development is provided.

(p) A 5-foot-wide bicycle maneuvering area shall be provided beside or between each row of bicycle parking. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

RESPONSE: A minimum 5' wide bicycle maneuvering area shall be provided on either side of the bicycle parking stalls. The area for which bicycle parking will be provided shall be concrete. This standard is satisfied.

(q) Access to bicycle parking shall be provided by an area at least 3 feet in width. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

RESPONSE: As mentioned above, bicycle parking will be provided at the stairwells of the associated residential buildings. This area will be concrete and be a minimum of 3' in width. This standard is satisfied.

(r) Required bicycle parking shall be located in convenient, secure, and well-lighted locations approved through the Architectural Review process. Lighting, which may be provided, shall be deflected to not shine or create glare into street rights-of-way or fish and wildlife habitat areas.

RESPONSE: As mentioned above, bicycle parking will be provided at the stairwells of the associated residential buildings. This area will have appropriate lighting which will not shine or create glare into street rights-of-way or wildlife habitat areas. This standard is satisfied.

(s) Long-term bicycle parking facilities may be provided inside a building in suitable secure and accessible locations.

RESPONSE: One bicycle parking stall will be provided on the patio of each unit, which is considered suitably secured and accessible. This standard is satisfied.

(t) Bicycle parking may be provided within the public right-of-way in the Core Area Parking District subject to approval of the City Engineer and provided it meets the other requirements for bicycle parking.

RESPONSE: The subject site is not within the "Core Area Parking District." Therefore, this standard does not apply.

(u) Bicycle parking areas and facilities shall be identified with appropriate signing as specified in the Manual on Uniform Traffic Control Devices (MUTCD) (latest edition). At a minimum, bicycle parking signs shall be located at the main entrance and at the location of the bicycle parking facilities.

RESPONSE: Appropriate signage will be placed on the subject site that will direct residents to bicycle parking areas. This standard is satisfied.

(v) Required bicycle parking spaces shall be provided at no cost to the bicyclist, or with only a nominal charge for key deposits, etc. This shall not preclude the operation of private for-profit bicycle parking businesses.

RESPONSE: There will be no additional cost for bicycle parking on the subject site. This standard is satisfied.

(w) Parking on existing residential, commercial and industrial development may be redeveloped as a transit facility as a way to encourage the development of transit supportive facilities such as bus stops and pullouts, bus shelters and park and ride stations. Parking spaces converted to such uses in conjunction with the transit agency and approved through the Architectural Review process will not be required to be replaced.

RESPONSE: No parking associated with this project will be dedicated for transit facilities. This standard does not apply.

*(x) Required vanpool and carpool parking shall meet the 9-foot parking stall standards in **Figure 73-1** and be identified with appropriate signage.*

RESPONSE: No parking associated with this project will be dedicated for vanpool or carpooling. This standard does not apply.

(2) Off-Street Parking Provisions.

> *(a) The following are the minimum and maximum requirements for off-street motor vehicle parking in the City, except for minimum parking requirements for the uses in TDC 73.370(2)(a) (Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv) within the Core Area Parking District (CAPD). Minimum standards for off-street motor vehicle parking for the uses in 73.370(2)(a) Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv in the CAPD are in TDC 73.370(2)(b). The maximum requirements are divided into Zone A and Zone B, as shown on the Tualatin Parking Zone Map, Figure 73-3. The following are exempt from calculation of maximum parking requirements: parking structures; fleet parking; parking for vehicles for sale, lease or rent; car/vanpool parking; dedicated valet parking; and user-paid parking.*

USE	*MINIMUM MOTOR VEHICLE PARKING REQUIREMENT*	*MAXIMUM MORTOR VEHICLE PARKING REQUIREMENT*	*BICYCLE PARKING REQUIREMENT*	*PERCENTAGE OF BICYCLE PARKING TO BE COVERED*
RESIDENTIAL USES:				
(iii) Multi-family dwellings in complexes with private internal driveways	*1.0 space/studio, 1.25 space/1 bedr., 1.50 space/2 bedr., 1.75 space/3=bedr. In addition to garage*	*none*	*Developments with four or more units; none required if a garage is provided as an integral element of a unit; otherwise 1.00 space pre unit*	*100*

RESPONSE: The use of the subject site is a multi-family complex. The following chart indicates the number and type of each unit, the minimum and maximum number of parking and bicycle stalls required and planned for the project.

Unit Type	# of Units	Required Parking	Proposed Parking	Required # Bike Parking	# of Bike Stalls
1 BR Units	60	75	Avg: 107	60	Avg: 80
2 BR Units	102	153	Avg: 107	102	Avg: 121
3 BR Units	18	31.5	Avg: 108	18	Avg: 37
TOTAL	**180 Units Provided**	**259.5 Parking Stalls Required**	**322 Parking Stalls Provided**	**180 Bicycle Stalls Required**	**238 Bicycle Stalls Provided**

Section 73.380 Off-Street Parking Lots.

A parking lot, whether an accessory or principal use, intended for the parking of automobiles or trucks, shall comply with the following:

> *(1) Off-street parking lot design shall comply with the dimensional standards set forth in Figure 73-1 of this section, except for parking structures and underground parking where stall length and width requirements for a standard size stall shall be reduced by .5 feet and vehicular access at the entrance if gated shall be a minimum of 18 feet in width.*

RESPONSE: The 322 parking stalls are shown at a 90 degree angle. Each parking stall will be consistent with Figure 73-1 of this section. Therefore, this standard has been satisfied.

(2) Parking stalls for sub-compact vehicles shall not exceed 35 percent of the total parking stalls required by TDC 73.370(2). Stalls in excess of the number required by TDC 73.370(2) can be sub-compact stalls.

RESPONSE: A total of 16 sub-compact parking stalls are planned, which is below the maximum 35 percent allowed. This standard is satisfied.

(3) Off-street parking stalls shall not exceed eight continuous spaces in a row without a landscape separation, except for parking structures and underground parking. For parking lots within the Central Design District that are designed to frame views of the central water feature or identified architectural focal elements as provided in TDC 73.350(3), this requirement shall not apply and the location of parking lot landscape islands shall be determined through the Architectural Review process.

RESPONSE: As shown on the attached plans, typical landscape islands are proposed to be spaced every 8 or fewer parking spaces, as well as through landscaped areas at the ends of parking bays. This standard is satisfied.

(4) Parking lot drive aisles shall be constructed of asphalt or concrete, including pervious concrete. Parking stalls shall be constructed of asphalt or concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material. Drive aisles and parking stalls shall be maintained adequately for all-weather use and drained to avoid water flow across sidewalks. Pervious surfaces such as pervious concrete, pavers and grasscrete, but not gravel or woody material, are encouraged for parking stalls in or abutting the Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or in a Clean Water Services Vegetated Corridor. Parking lot landscaping shall be provided pursuant to the requirements of TDC 73.350 and TDC 73.360. Walkways in parking lots shall be provided pursuant to TDC 73.160.

RESPONSE: All parking areas will be constructed using an impervious surface. Water from the paved parking areas will drain to storm drains in order to avoid the flow of water across pedestrian walkways; storm lines will flow into the on-site water quality facility associated with the project. Walkways will be provided in all parking areas that will make for convenient and safe pedestrian maneuvering to other site amenities. This standard is met.

(5) Except for parking to serve residential uses, parking areas adjacent to or within residential planning districts or adjacent to residential uses shall be designed to minimize disturbance of residents.

RESPONSE: The adjoining property to the south of the project site is also zoned High Density Residential. However, only 4 parking stalls abut the southwestern property line, which will have a minimum 10' landscaped separation planted with a combination of low lying shrubs and trees. This standard is met.

(6) Artificial lighting, which may be pro-vided, shall be deflected to not shine or create glare in a residential planning district, an adjacent dwelling, street right-of-way in such a manner as to impair the use of such way or a Natural Resource Protection Overlay District, Other Natural Areas

identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor.

RESPONSE: Project lighting will be installed to not create glare or shine on any adjoining property, right-of-way or natural resource protection overlay district. This standard is satisfied.

(7) Groups of more than 4 parking spaces shall be so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.

RESPONSE: All parking associated with this project is internal. There will be no opportunity to back onto a street right-of-way. This standard is met.

(8) Service drives to off-street parking areas shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.

RESPONSE: All drive isles are designed to provide the maximum safety of traffic access and egress and pedestrian movement on the site. This standard is satisfied.

(9) Parking bumpers or wheel stops or curbing shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.

RESPONSE: As shown on the attached plans, curbing will be provided in front of all parking stalls to protect pedestrians and landscape material. This standard is satisfied.

(10) Disability parking spaces and accessibility shall be provided in accordance with applicable federal and state requirements.

RESPONSE: As shown on the attached plans handicapped parking spaces will be provided with this project. This standard is met.

(11) On-site drive aisles without parking spaces, which provide access to parking areas with regular spaces or with a mix of regular and sub-compact spaces, shall have a minimum width of 22 feet for two-way traffic and 12 feet for one-way traffic. On-site drive aisles without parking spaces, which provide access to parking areas with only sub-compact spaces, shall have a minimum width of 20 feet for two-way traffic and 12 feet for one-way traffic. [Ord. 882-92, §22, 12/14/92; Ord. 904-93, §68, 69 and 70, 9/13/93; Ord. 920-94, §22, 4/11/94; Ord. 956-96, §38, 1/8/96; Ord. 1224-06 §34, 11/13/06; Ord. 1354-13 §14, 02/25/13

RESPONSE: As shown on the attached plans, drive isles on the site provide access to parking areas with regular parking spaces. Drive aisles will be wide enough to accommodate two-way traffic. Therefore, this standard is satisfied.

Section 73.400 Access.

(1) The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this Code are continuing requirements for the use of any structure or parcel of real property in the City of Tualatin. Access management and spacing standards are provided in this section of the TDC and TDC Chapter 75. No building or other permit shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled. If the owner or occupant of a lot or building changes the use to which the lot or building is put, thereby increasing ingress and egress requirements, it shall be unlawful and a violation of this code to begin or maintain such altered use until the required increase in ingress and egress is provided.

RESPONSE: The provision and maintenance of vehicular and pedestrian accesses on the site will be provided prior to occupancy. This standard is met.

(2) Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use. Copies of said deeds, easements, leases or contracts shall be placed on permanent file with the City Recorder.

RESPONSE: Joint and cross access is planned as shown on the "Preliminary Circulation Plan" included with the application. The property owner will work with the City to develop the appropriate agreement and or easements prior to occupancy.

(3) Joint and Cross Access.

(a) Adjacent commercial uses may be required to provide cross access drive and pedestrian access to allow circulation between sites.

(b) A system of joint use driveways and cross access easements may be required and may incorporate the following:

(i) a continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management classification system and standards.

(ii) a design speed of 10 mph and a maximum width of 24 feet to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;

(iii) stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross access via a service drive;

(iv) a unified access and circulation system plan for coordinated or shared parking areas.

(c) Pursuant to this section, property owners may be required to:

(i) Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;

(ii) Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the city and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway;

(iii) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners;

(iv) If (i-iii) above involve access to the state highway system or county road system, ODOT or the county shall be contacted and shall approve changes to (i-iii) above prior to any changes.

RESPONSE: Joint and cross access is planned as shown on the "Preliminary Circulation Plan" included with the application. The property owner will work with the City to develop the appropriate agreement and or easements prior to occupancy.

(4) Requirements for Development on Less than the Entire Site.

(a) To promote unified access and circulation systems, lots and parcels under the same ownership or consolidated for the purposes of development and comprised of more than one building site shall be reviewed as one unit in relation to the access standards. The number of access points permitted shall be the minimum number necessary to provide reasonable access to these properties, not the maximum available for that frontage. All necessary easements, agreements, and stipulations shall be met. This shall also apply to phased development plans. The owner and all lessees within the affected area shall comply with the access requirements.

(b) All access must be internalized using the shared circulation system of the principal commercial development or retail center. Driveways should be designed to avoid queuing across surrounding parking and driving aisles.

RESPONSE: This application addresses the entire site. This standard is met.

(5) Lots that front on more than one street may be required to locate motor vehicle accesses on the street with the lower functional classification as determined by the City Engineer.

RESPONSE: The subject site only has frontage onto Pacific Hwy. Therefore, this standard does not apply.

(6) Except as provided in TDC 53.100, all ingress and egress shall connect directly with public streets. [Ord. 882-92, § 24,12/14/92]

RESPONSE: The subject site will provide all ingress and egress to Pacific Hwy. This standard is met.

(7) Vehicular access for residential uses shall be brought to within 50 feet of the ground floor entrances or the ground floor landing of a stairway, ramp or elevator leading to dwelling units.

RESPONSE: The vehicular access will connect to planned parking areas that are within 50 feet of residential buildings. This standard is met.

(8) To afford safe pedestrian access and egress for properties within the City, a sidewalk shall be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to City standards, except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established, in which case the sidewalks shall be constructed to a design and in a manner approved by the City Engineer. Sidewalks approved by the City Engineer may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks shall provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction shall include construction of the curb and gutter section to grades and alignment established by the City Engineer.

RESPONSE: Sidewalks built to ODOT standards along the site's frontage on Pacific Hwy will be provided. This standard is met.

(9) The standards set forth in this Code are minimum standards for access and egress, and may be increased through the Architectural Review process in any particular instance where the standards provided herein are deemed insufficient to protect the public health, safety, and general welfare.

RESPONSE: This standard is understood.

(10) Minimum access requirements for residential uses:

(a) Ingress and egress for single-family residential uses, including townhouses, shall be paved to a minimum width of 10 feet. Maximum driveway widths shall not exceed 26 feet for one and two car garages, and 37 feet for three or more car garages. For the purposes of this section, driveway widths shall be measured at the property line.

(b) Ingress and egress for multi-family residential uses shall not be less than the following:

Dwelling Units	*Minimum Number Required*	*Minimum Width*	*Walkways, Etc.*
2	*1*	*16 feet*	*No walkways or curbs required*
3-19	*1*	*24 feet*	*No walkways or curbs required*
20-49	*1* *or* *2*	*24 feet* *16 feet (one way)*	*6-foot walkway, 1 side only; curbs required*
50-499	*1* *or* *2*	*32 feet* *24 feet*	*6-foot walkway, 1 side only; curbs required*
Over 500	*As required by City Engineer*	*As required by City Engineer*	*As required by City Engineer*

RESPONSE: The River Ridge Apartment project will have 180 residential units. Based on this standard, one 32' wide access with a 6' walkway on one side is required. This development provides a 32' wide ingress/egress right turn only access and two 8' wide walkway connections to the sidewalk along SW Pacific Hwy. A secondary 20 foot wide emergency access is also shown at the south end of the project, which has been provided on the plan set submitted with this application. This standard is met.

(14) Maximum Driveway Widths and Other Requirements.

(a) Unless otherwise provided in this chapter, maximum driveway widths shall not exceed 40 feet.

(b) Except for townhouse lots, no driveways shall be constructed within 5 feet of an adjacent property line, except when two adjacent property owners elect to provide joint access to their respective properties, as provided by Subsection (2).

(c) There shall be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Engineer.

RESPONSE: The access to the site is shown to be 32' in width, is approximately 6' from the adjoining property to the southwest and approximately 75' from the access of the adjoining property to the south. This standard is satisfied.

(15) Distance between Driveways and Intersections.

Except for single-family dwellings, the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection.

(a) At the intersection of collector or arterial streets, driveways shall be located a minimum of 150 feet from the intersection.

(b) At the intersection of two local streets, driveways shall be located a minimum of 30 feet from the intersection.

(c) If the subject property is not of sufficient width to allow for the separation between driveway and intersection as provided, the driveway shall be constructed as far from the intersection as possible, while still maintaining the 5-foot setback between the driveway and property line as required by TDC 73.400(14)(b).

(d) When considering a public facilities plan that has been submitted as part of an Architectural Review plan in accordance with TDC 31.071(6), the City Engineer may approve the location of a driveway closer than 150 feet from the intersection of collector or arterial streets, based on written findings of fact in support of the decision. The written approval shall be incorporated into the decision of the City Engineer for the utility facilities portion of the Architectural Review plan under the process set forth in TDC 31.071 through 31.077.

RESPONSE: The access to the subject site is approximately 600' +/- from the intersection of Pacific Hwy and 124th Ave. This standard is met.

(16) Vision Clearance Area.

(a) Local Streets - A vision clearance area for all local street intersections, local street and driveway intersections, and local street or driveway and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 10 feet from the intersection point of the right-of-way lines, as measured along such lines (see Figure 73-2 for illustration).

(b) Collector Streets - A vision clearance area for all collector/arterial street intersections, collector/arterial street and local street intersections, and collector/arterial street and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 25 feet from the intersection point of the right-of-way lines, as measured along such lines. Where a driveway intersects with a collector/arterial street, the distance measured along the driveway line for the triangular area shall be 10 feet (see Figure 73-2 for illustration).

(c) Vertical Height Restriction - Except for items associated with utilities or publicly owned structures such as poles and signs and existing street trees, no vehicular parking, hedge, planting, fence, wall structure, or temporary or permanent physical obstruction shall be permitted between 30 inches and 8 feet above the established height of the curb in the clear vision area (see Figure 73-2 for illustration).

RESPONSE: The subject site takes access from SW Pacific Hwy., which is neither a local or collector/arterial street. Therefore, this standard does not apply.

(17) Major driveways, as defined in 31.060, in new residential and mixed-use areas are required to connect with existing or planned streets except where prevented by topography, rail lines, freeways, pre-existing development or leases, easements or covenants, or other barriers. [Ord. 895-93 §3, 5/24/93; Ord. 945-95, 5/8/95; Ord. 1025-99, §7, 7/26/99; Ord. 1026-99 §97, 8/9/99; Ord. 1103-02, 3/25/02; Ord. 1096-02, 1/28/02; Ord. 1354-13 §16, 02/25/13

RESPONSE: The primary access point for the subject property connects to SW Pacific Hwy. There are no barriers that will conflict with the connection point at Pacific Hwy. Appropriate visual clearance areas will be provided per ODOT and City standards.

Chapter 34 - Special Regulations

Section 34.210 Application for Architectural Review, Sub-division or Partition Review, or Tree Removal Permit.

(1) Architectural Review, Subdivision, or Partition. When a property owner wishes to remove trees, other than the exemptions permitted under TDC 34.200(3), to develop property, and the development is subject to Architectural Review, Subdivision Review, or Partition Review approval, the property owner shall apply for approval to remove trees as part of the Architectural Review, Subdivision Review, or Partition Review application process.

(a) The application for tree removal shall include:

(i) A Tree Preservation Site Plan, drawn to a legible scale, showing the following information: a north arrow; existing and proposed property lines; existing and proposed topographical contour lines; existing and proposed structures, impervious surfaces, wells, septic systems, and stormwater retention/detention facilities; existing and proposed utility and access locations/easements; illustration of vision clearance areas; and illustration of all trees on-site that are eight inches or more in diameter (including size, species, and tag i.d. number). All trees proposed for removal and all trees proposed for preservation shall be indicated on the site plan as such by identifying symbols, except as follows:

(A) Where Clean Water Services (CWS) has issued a Service Provider Letter that addresses the proposed development currently under consideration, and

(B) Where CWS has approved delineation of a "sensitive area" or "vegetated corridor" on the subject property, and

(C) Where CWS has required dedication of an easement that prohibits encroachment into the delineated area, then

(D) All trees located within the CWS-required easement need not be individually identified on the Tree Preservation Site Plan if the CWS-required easement boundary is clearly illustrated and identified on the Tree Preservation Site Plan.

(ii) A tree assessment prepared by a qualified arborist, including the following information: an analysis as to whether trees proposed for preservation can in fact be preserved in light of the development proposed, are healthy specimens, and do not pose an imminent hazard to persons or property if preserved; an analysis as to whether any trees proposed for removal could be reasonably preserved in light of the development proposed and health of the tree; a statement addressing the approval criteria set forth in TDC 34.230; and arborist's signature and contact information. The tree assessment report shall have been prepared and dated no more than one calendar year proceeding the date the development application is deemed complete by the City. Where TDC 34.210(1)(a)(i)(A) through (D) are applicable, trees located within the CWS-required easement need not be included in the tree assessment report.

(iii) All trees on-site shall be physically identified and numbered in the field with an arborist-approved tagging system. The tag i.d. numbers shall correspond with the tag i.d. numbers illustrated on the site plan. Where TDC 34.210(1)(a)(i)(A) through (D) are applicable, trees located in the CWS-required easement need not be tagged.

(b) The application for tree removal shall be approved or denied based on the criteria in TDC 34.230.

(c) The approval or denial of an application to remove trees shall be a part of the Architectural Review, Subdivision Review, or Partition Review decision.

RESPONSE: A Preliminary Tree Preservation and Removal plan has been prepared by a certified arborist and includes the information required by this standard. This standard is met.

Section 34.270 Tree Protection During Construction.

(1) Any tree required to be retained either through Architectural Review, Subdivision or Partition Review, or permit process that will be impacted by nearby construction activities must be protected in accordance with the TDC 73.250(2).

RESPONSE: Tree protection has been indicated on the Preliminary Tree Preservation Plan submitted with this application. Therefore, this standard has been satisfied.

IV. Conclusion

The required findings have been made as part of the written narrative and accompanying documentation, which demonstrate that the application is consistent with the applicable provisions of the City of Tualatin Development Code. The evidence in the record is substantial and supports approval of the application. Therefore, the applicant respectfully requests approval of this application for Architectural Review for the River Ridge Apartment project.

Trash Enclosure Supplemental Information

P★R★I★D★E
DISPOSAL COMPANY
P.O. Box 820 Sherwood, OR 97140
Phone: (503) 625-6177 Fax: (503) 625-6179

June 2, 2014

Marcus Jones
Hill Architects
1914 Willamette Falls Dr #280
West Linn, OR 97068

Re: River Ridge project

We have reviewed the site plan for the enclosure on this project.

SK-045 shows we will have straight on access and at least 75' of unobstructed clearance in front of the enclosure.

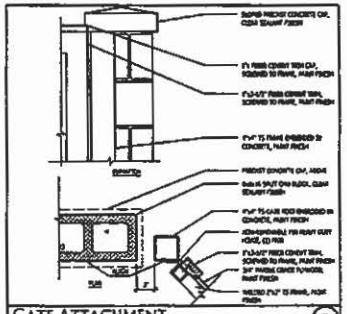
SK-046 shows the detail of the enclosure with inside dimensions of approximately 24' width and 22' depth. This enclosure size will give us adequate space to access the compactor, the recycling container, and the glass totes. As indicated in the drawing, the posts need to be hinged in front of, not inside the walls, and allow for the full 120 degree opening angle required. The gates will also have cane bolts and holes to hold the doors in the open and closed positions. There should be no center post at the access point.

Please note that the compactor must be built to be compatible with our trucks. When purchasing the compactor you need to make sure your manufacturer works with us to ensure compatibility.

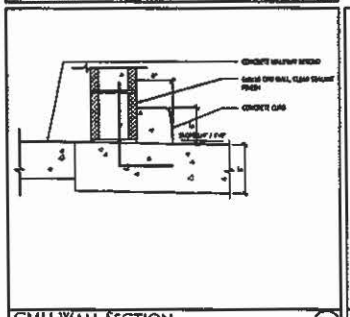
If you have any questions, feel free to contact me.

Sincerely,

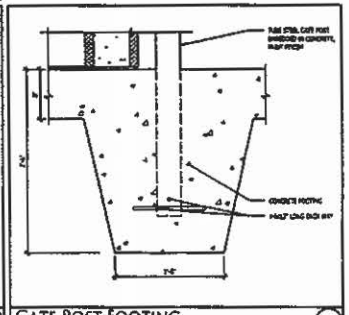
Kristin Leichner
Pride Disposal Co.
(503) 625-6177
kristinl@pridedisposal.com



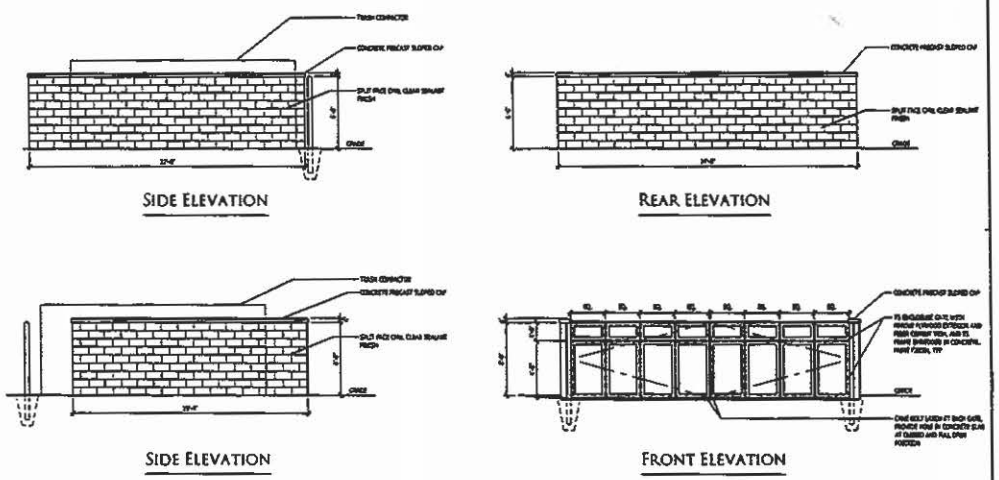
GATE ATTACHMENT
VEHICLE GATE
3



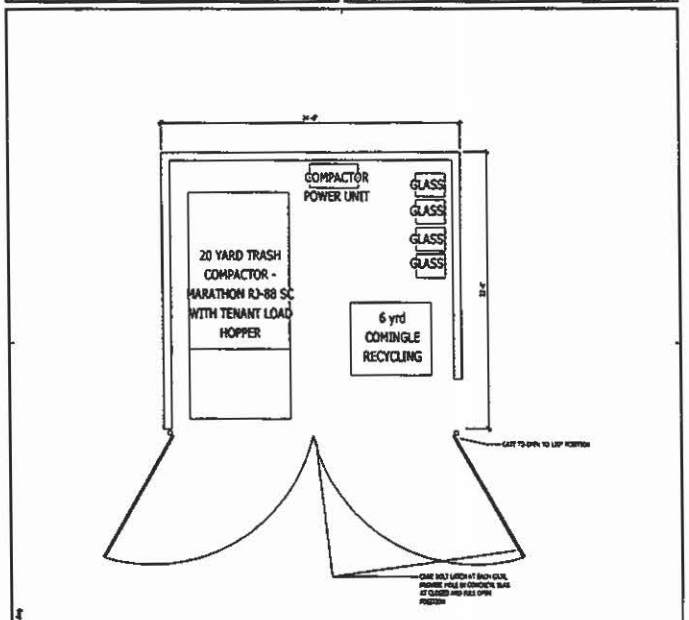
CMU WALL SECTION
2



GATE POST FOOTING
VEHICLE GATE
1



EXTERIOR ELEVATIONS - COMPACTOR ENCLOSURE
9



TRASH ENCLOSURES
1

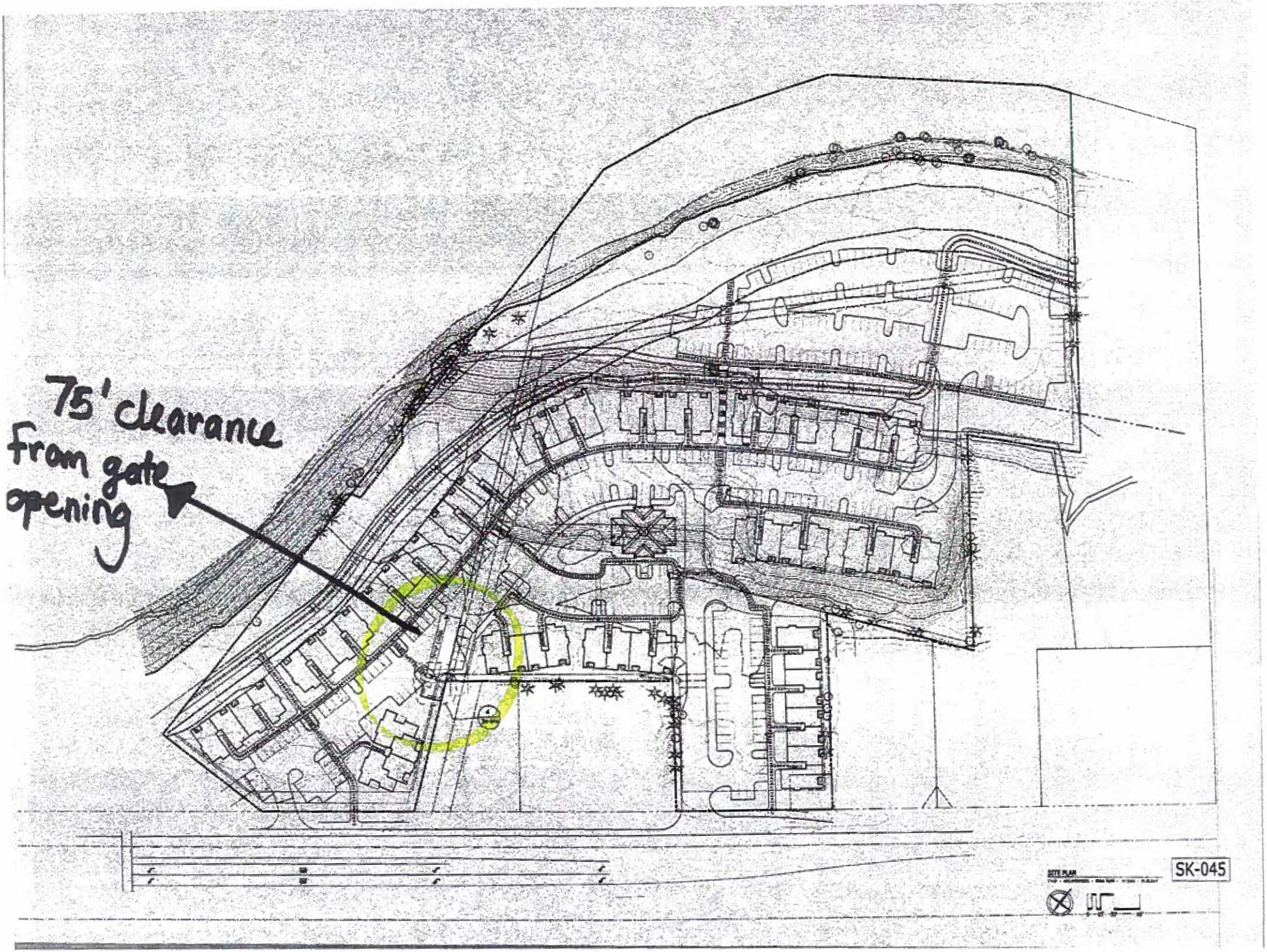
HILL
ARCHITECTS

REGISTERED ARCHITECT
Preliminary
NOT FOR CONSTRUCTION
STATE OF OREGON

RIVER RIDGE

TRASH ENCLOSURE

SK-046


75' clearance
from gate
opening
SK-045

Email from Franchise Hauler regarding Garbage Enclosures

Marcus,

A lot of this is dependent on your situation, your complex, and your tenants as there isn't really a standard for this type of service. Choosing to do multiple enclosure with front load containers vs. a compactor is ultimately your decision.

Hopefully this will be enough to get you started on your project; here are the answers to your specific questions.

Glass totes: They are 32g-45g capacity. If you opt for the multiple enclosure choice, I would recommend starting with (2) glass totes at each enclosure. They would be picked up every other week, and this of course can be increased or decreased depending on need.

We do not have a trash generation calculation as you asked, but I can tell you that in looking at our other multi-family complexes, we have 5 customers with a similar unit count to you that all have 15 or 20yd compactors. We also have 2 complexes that are larger that chose to have multiple enclosure with front load containers. As you can see, it varies based on the management's decision. We can try and help you come to the best conclusion for your situation.

If you opt for a compactor, we still need the same 75' of unobstructed access from the front of the enclosure so we can back up the truck to the compactor and hook up to it.

If you opt for a compactor, would you plan on putting the recycling container(s) with it or in separate areas? That would affect the enclosure design.

Kristin, our office manager,will review your site plans and approve them.

Feel free to contact us with any other questions. I've CCed Kristin on this e-mail also.

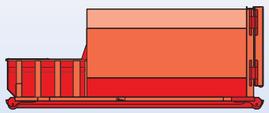
Thanks,
Kristen Tabscott

PANDORA
INTELLIGENT NETWORKS

You can add the Pandora Remote Monitoring System to many of our most popular compactors. Pandora enables you to measurably reduce your waste management costs. To find out more, contact your Marathon representative today.

Pandora Platform Functionality

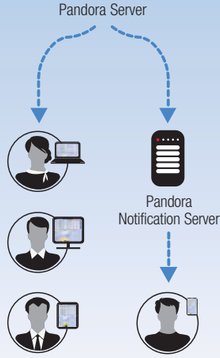
Optional on all RJ-88SC Compactors



RJ-88SC
Compactor with PLC and wireless modem

Secure wireless
custom network

Pandora Server



Pandora
Notification Server

- Pandora can display daily equipment status on a desktop or mobile PC, tablet, or smart phone
- Staff can login from any desktop or wireless device
- Pandora can send notifications to superintendent or directly to haulers

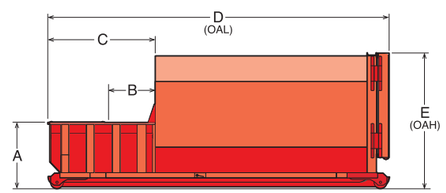
RJ-88SC and RJ-88HT Self-Contained Compactor/Container

Dimensions and Specifications

Specifications		
Charge Box Capacity		
[Mfr. Rating]	1.0 cu yd	0.76 m³
[WASTEC Rating]	0.70 cu yd	0.54 m³
Clear Top Opening	30.5"L x 48"W	775mm x 1219mm
Performance Characteristics:		
Cycle Time	44 sec.	44 sec.
Total Normal Force	36,600 lbs.	163 kN
Total Maximum Force	43,100 lbs.	192 kN
Normal Ram Face Pressure	34.7 psi	239 kPa
Maximum Ram Face Pressure	40.8 psi	281 kPa
Ram Penetration	6"	152mm
Electrical Equipment:		
Electric Motor 3/60/230-460	**5 hp**	**3.7kW**
Electric Control Voltage	120 VAC	120VAC
Panel Box Assembly		
UL® and CUL® Listed	Key Operated	120 VAC
All Circuits Fused	2 Push Button Station Start/Stop	
Hydraulic Equipment:		
Hydraulic Pump	6 gpm	23 L/min
Normal Pressure	1700 psi	117 bar
Maximum Pressure	2000 psi	138 bar
Hydraulic Cylinders (2) - Bore	4"	102mm
- Rod	2.5"	64mm

RJ-88SC	A	B	C	D**	E	WT.
15 cu yds	43" 1092mm	30 ½" 777mm	70" 1778mm	187" 4750mm	89" 2261mm	7,200 lbs. 3265 kg
20 cu yds	43" 1092mm	30 ½" 777mm	70" 1778mm	222" 5639mm	89" 2261mm	7,700 lbs. 3493 kg
24 cu yds	43" 1092mm	30 ½" 777mm	70" 1778mm	256" 6502mm	89" 2261mm	8,100 lbs. 3674 kg
RJ-88HT	**A**	**B**	**C**	**D****	**E**	**WT.**
15 cu yds	44" 1092mm	30 ½" 777mm	70" 1778mm	216" 5486mm	95" 2413mm	7,700 lbs. 3493 kg
20 cu yds	44" 1092mm	30 ½" 777mm	70" 1778mm	250" 6350mm	95" 2413mm	8,100 lbs. 3674 kg
24 cu yds	44" 1092mm	30 ½" 777mm	70" 1778mm	284 ½" 7226mm	95" 2413mm	8,490 lbs. 3851 kg

** Overall height with hydraulic tailgate raised: 16'6". Hoist should be equipped with selector valve (1500 psi minimum) in order to control hydraulic tailgate.*
*** Other lengths available. Call factory for details.*



Dimensions not shown: 8'4⅛" (2543mm) Overall Width
Ground Roller Widths: 61 ⅛" (1569mm) Inside Rollers
67 ⅜" (1712mm) Roller Centers
72 ⅛" (1851mm) Outside Rollers

GREEN BUILT
Solar power for our environment.
By MARATHON

Also available as Green Built®, featuring Solar or 5 hp high-efficiency power units and other environmentally friendly components.

Compactor Rental and Leasing Programs Available

For detailed specifications, recommendations, or free economic studies comparing various systems, contact Marathon Customer Care at *1-800-633-8974*.

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Stationary and self-contained compactors.

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P.O. Box 1798
Vernon, AL 35592-1798
800.633.8974
www.marathonequipment.com

NJPA Contract #060612-ESG

Environmental Solutions Group
A DOVER COMPANY
www.doveresg.com

Pictures in this literature are illustrative only. Specifications are subject to change without notice in order to accommodate improvements to the equipment. Certified in compliance with ANSI standard Z245.2, applicable OSHA Regulations, and certified under WASTEC's Stationary Compactor Certification Program. Products must be used with safe practice and in accordance with said regulations and standards.

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SELF-CONTAINED COMPACTORS

MARATHON®
A DOVER COMPANY

RJ-88SC and RJ-88HT Self-Contained Compactor/Container

Malls
Shopping centers
Dairies
Large restaurants
Cafeterias
In-flight kitchens
Supermarkets
Food processors
Theme parks/ resorts
Hospitals and institutions
Hotels and motels

RJ-88SC

RJ-88HT

RAMJET
Stationary and self-contained compactors.

Environmental Solutions Group
A DOVER COMPANY

Quik Clean® Tank

Full door seal with P-Seal

CYNCON Life-Xtender® Cyclic Control System

Load from both ground and dock level

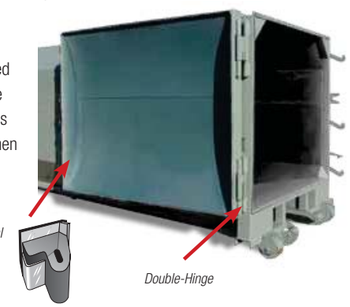
RJ-88SC and RJ-88HT Compactors with 15, 20, and 24 Cubic Yard Capacity Container

Marathon Engineering

Marathon's RJ-88SC self-contained compactor/container is ideal for waste with high liquid content. Each RJ-88SC stores liquid and helps control insects and odor problems. Each container is factory tested and certified to be free from leaks. With standard double-end pickup, the RJ-88SC can be loaded for hauling from either end. This is especially useful if installed perpendicular to a dock. The RJ-88HT is equipped with a hydraulic tailage, which makes it particularly well suited for security chute-fed and dock-fed applications where maneuvering space for a collection vehicle is limited. The compactor is built into the same door through which the compacted refuse is later emptied, eliminating the need for the additional space needed for the time-consuming double "turn-around" maneuver required for conventional self-contained models.

P-Seal

The P-shaped **Door Seal** is specially designed for portable compaction containers to provide a superior watertight closure. The mounting is engineered for quick and easy installation when replacement is necessary, requiring no field fitting, cutting, or welding.



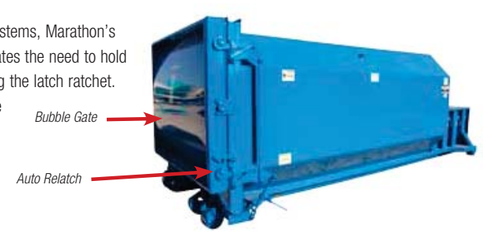
Double-Hinge with Bronze Bushing

Every RJ-88SC is tested for watertightness before leaving the factory. Liquid retention is ensured by Marathon's **Double-Hinge**. It creates uniform seal compression while eliminating the seal "scrubbing" and damage so often encountered with competitive designs. The **Double-Hinge** also saves expensive driver and truck time because only one easy-to-operate ratchet makes it work.

Bubble Gate and Auto Relatch

The innovative "**Bubble Gate**" adds a full cubic yard to container capacity. Superior compaction ratios result from its special curved shape. These two unique benefits **reduce costs of disposal**.

The ultimate in latch systems, Marathon's "**Auto Relatch**" eliminates the need to hold the door while operating the latch ratchet. This design enables the operator to use both hands on the ratchet.



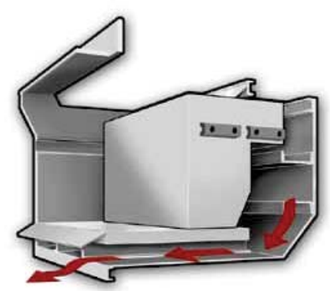
Images shown with optional equipment

SELF-CONTAINED COMPACTORS

*Marathon's **Remote Power Pack**, separate from the compactor/container, remains free of damage caused during hauling to and from disposal sites and free of problems caused by landfill dust. No electrical connections to make or break — two simple-to-use, hydraulic quick disconnects couple the power unit to the packing head. **Weather Cover** and the **UL® & CUL® listed Motor Control Panel** are standard equipment.*

All Marathon Remote Power Packs are built in-house to our quality standards and each unit must pass a series of stringent tests before it can be shipped with the selected compactor.

The optional doghouse offers a totally enclosed charge box with heavy-duty "T" handle latches.



The Qwik Clean® Tank feature, standard on all RJ-88SC compactors, funnels any liquid seepage which can occur during compaction into an enclosed area underneath the charge box floor. The liquid is automatically discharged at the disposal site, in effect flushing the container and the area behind the ram. The 12-inches (305mm) high, 750-gallon (2839 liters) capacity sump area is designed to provide easier hook access for roll-off drivers.

CYNCON Cyclic Control System

Standard on all RJ-88SC Compactors

- Reliable, solid state circuitry eliminates all pressure and limit switches
- CYNCON's no-shock cycle control extends cylinder and hose wear life
- Automatic "container full assurance system" — the ram dwells against the load at full pressure, resulting in better compaction
- Smoother running, quieter operation
- Advanced hydraulic design enables the system to operate at minimum pressure levels except when actually packing solid waste
- More accurate Advanced Warning or Container Full options
- Dramatically improved cold weather performance

Pandora Remote Monitoring System

The revolutionary Pandora Remote Monitoring System from Marathon enables you to monitor your compaction and baling equipment remotely, right from your desktop or mobile device using integrated wireless communications. The Pandora system combines onsite factory built-in or external add-on hardware with an industry-leading software platform – Pandora Intelligent Networks™ - to give you, real-time compactor and baler data, 24 hours per day, seven days per week.

Pandora gives you the tools to optimize your equipment and measurably reduce your waste management costs. You can eliminate unnecessary pickups, service your equipment to prevent downtime, and substantially reduce your overall carbon footprint.

View the Compactor
- Check performance
- Monitor fullness
- Identify misuse

Manage the Network
- Automate the scheduling of pickups and service calls
- Track performance trends
- Identify and address areas of inefficiency

Stay Connected
- Receive email or text alerts on your mobile device
- Communicate important decisions from any location
- Automatically escalate missed pickups or service call notifications

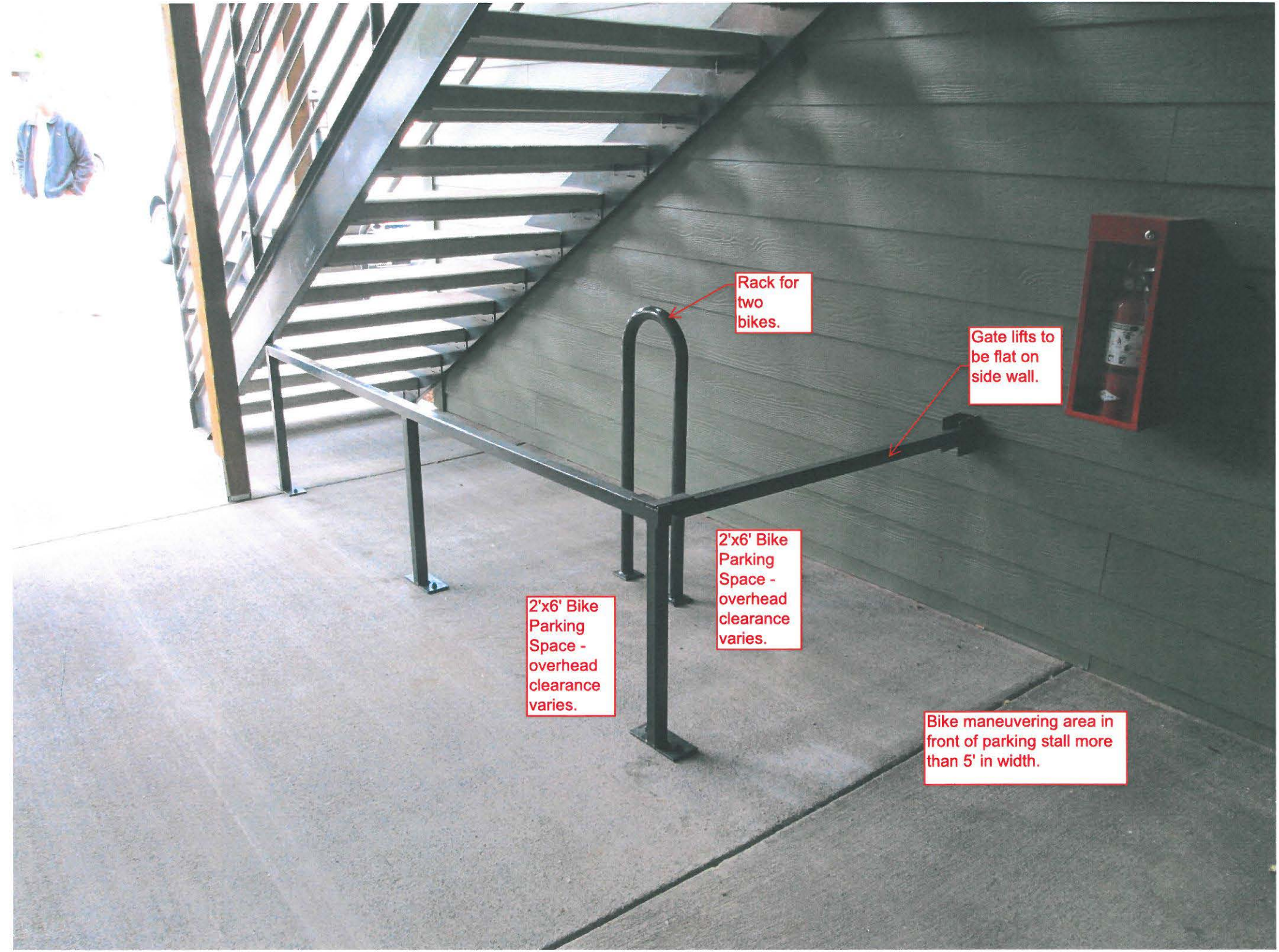
Repairs
- Schedule service before costly breakdowns
- Keep equipment operating at peak efficiency
- Receive malfunction and online alerts
- Reduce service and replacement costs

Metrics
- Create a custom dashboard to view equipment data and analyze operating trends
- Identify ways to enhance performance

Pickups
- Automatically notify the hauler when compactors reach their desired fullness level
- Pay only for necessary pickups

RAMJET By MARATHON®
Stationary and self-contained compactors.
For more information or to order, call 1-800-633-8974 or visit us at www.marathonequipment.com.

Bicycle Parking Supplemental Information


Rack for two bikes.
Gate lifts to be flat on side wall.
2'x6' Bike Parking Space - overhead clearance varies.
2'x6' Bike Parking Space - overhead clearance varies.
Bike maneuvering area in front of parking stall more than 5' in width.

Outdoor Storage Supplemental Information

REQUIRED STORAGE-

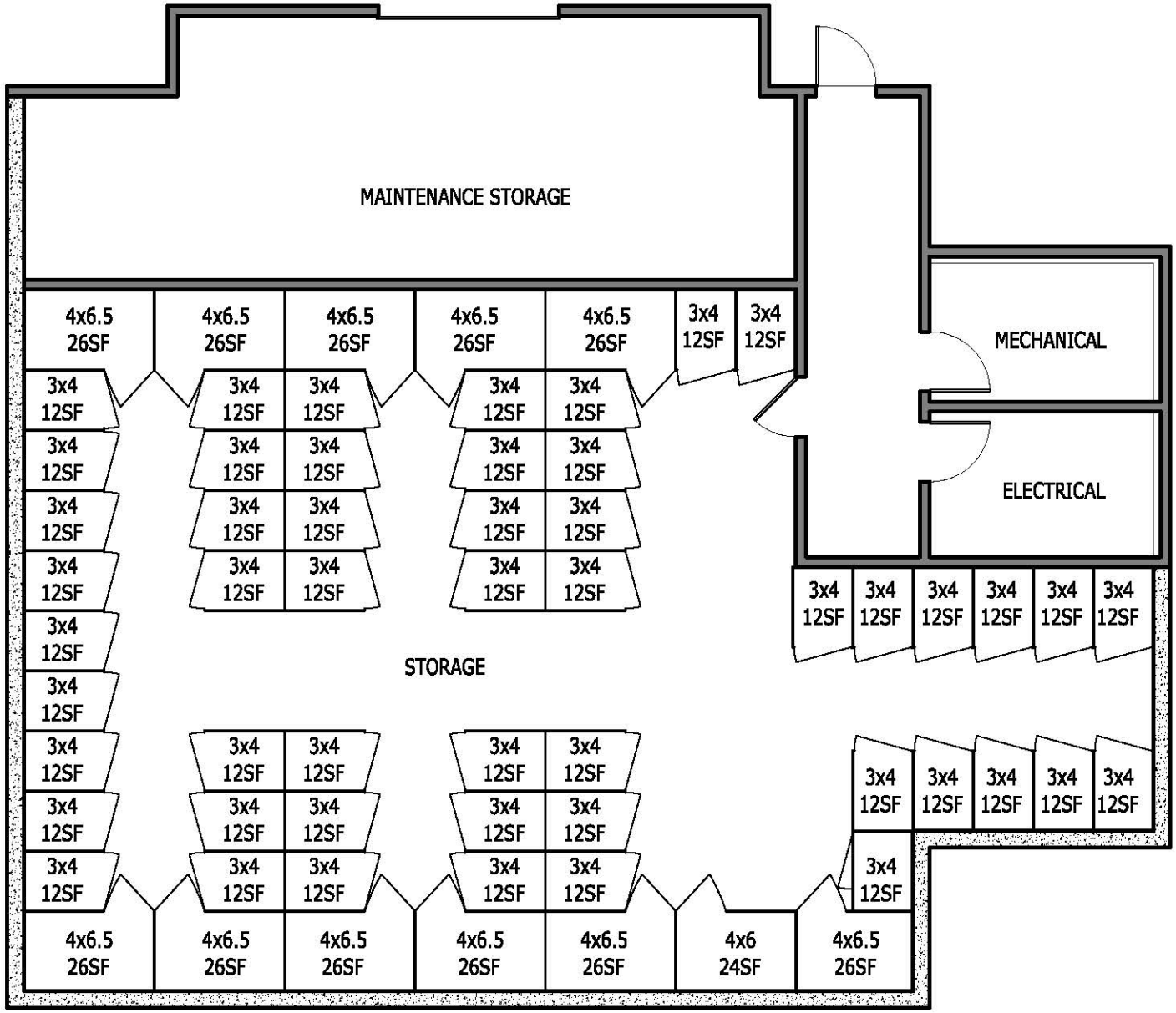
102 - 2 BED UNIT 12SF EACH
18 - 3 BED UNIT 24SF EACH

(IN ADDITION TO OUTDOOR STORAGE PROVIDED AT UNITS)

PROVIDED STORAGE -

102 - 12SF (3'x4') EACH
24 - 24SF OR GREATER (4'x6', 4'x6.5') EACH

(EACH ALLOCATED SPACE IS STACKED (2) HIGH, QUANTITIES SHOWN ARE DOUBLED)



SK - 064
Clubhouse Storage Lower Level

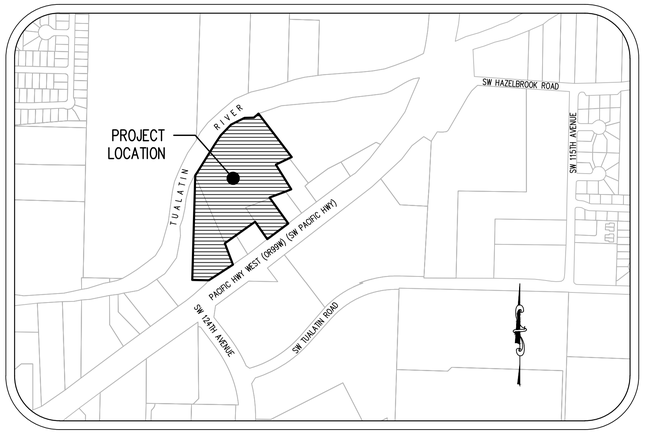
SCALE: 1/8" = 1'-0"

RIVER RIDGE APARTMENTS
job # 13663 . Hill Architects

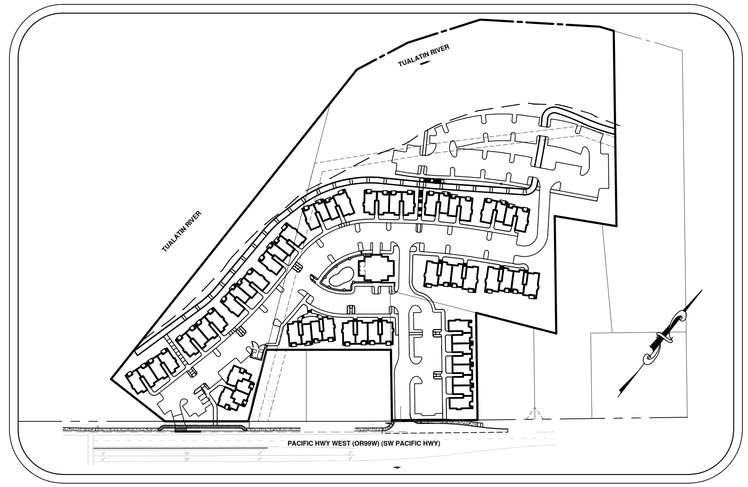
06-25-2014

RIVER RIDGE APARTMENTS

ARCHITECTURAL REVIEW SET



VICINITY MAP
NOT TO SCALE



SITE MAP
NOT TO SCALE

LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
DECIDUOUS TREE			STORM SEWER CLEAN OUT		
CONIFEROUS TREE			STORM SEWER CATCH BASIN		
FIRE HYDRANT			STORM SEWER MANHOLE		
WATER BLOWOFF			GAS METER		
WATER METER			GAS VALVE		
WATER VALVE			GUY WIRE ANCHOR		
DOUBLE CHECK VALVE			POWER POLE		
AIR RELEASE VALVE			POWER VAULT	P	P
SANITARY SEWER CLEAN OUT			POWER JUNCTION BOX		
SANITARY SEWER MANHOLE			POWER PEDESTAL		
SIGN			COMMUNICATIONS VAULT	C	C
STREET LIGHT			COMMUNICATIONS JUNCTION BOX		
MAILBOX	MB	MB	COMMUNICATIONS RISER		

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE		
BOUNDARY LINE		
PROPERTY LINE		
CENTERLINE		
DITCH		
CURB		
EDGE OF PAVEMENT		
EASEMENT		
FENCE LINE		
GRAVEL EDGE		
POWER LINE	PWR	PWR
OVERHEAD WIRE	OHW	OHW
COMMUNICATIONS LINE	COM	COM
FIBER OPTIC LINE	CFO	CFO
GAS LINE	GAS	GAS
STORM SEWER LINE	STM	STM
SANITARY SEWER LINE	SAN	SAN
WATER LINE	WAT	WAT

PROPERTY DESCRIPTION

TAX LOTS 2191, 2202, & 2300 (WASHINGTON COUNTY MAP 23-76) LOCATED IN THE SOUTHWEST 1/4 OF SECTION 15, TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON

VERTICAL DATUM

VERTICAL DATUM: ELEVATIONS ARE BASED ON WASHINGTON COUNTY BENCHMARK NO. 348, A BRASS DISK SET IN CONCRETE AT THE NORTHEAST CORNER OF THE HIGHWAY 99W SOUTHBOUND LANES OVER THE TUALATIN RIVER. WITH A NGVD 29 ELEVATION OF 139.829 FEET.

PROJECT RECORD DRAWING

CONTRACTOR SHALL PROVIDE THE OWNER'S REPRESENTATIVE WITH A REDLINED COPY OF THESE CONSTRUCTION PLANS SHOWING AS-BUILT ELEVATIONS, LOCATIONS, AND PLAN DEVIATIONS. REDLINED AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE ONE WEEK PRIOR TO REQUESTING WALK-THROUGH AND/OR ACCEPTANCE OF SUBSTANTIAL COMPLETION.

I, THE UNDERSIGNED, STATE I HAVE CHECKED AND VERIFIED THAT THESE REDLINED AS-BUILT DRAWINGS ARE ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE (CONTRACTOR) _____ DATE _____

ATTENTION EXCAVATORS

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS BUT NOT MORE THAN TEN BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

OREGON UTILITY NOTIFICATION CENTER
Know what's below. Call before you dig.
811
DIG SAFELY OREGON 1-800-332-2344

CIVIL ENGINEERING / SURVEYING FIRM

AKS ENGINEERING & FORESTRY SALEM, LLC.
CONTACT: J. MICHAEL POISSANT, PE
528 COTTAGE ST. NE, SUITE 160
SALEM, OR 97301
PH: 503-400-6028
FAX: 503-400-7722

DEVELOPER/OWNER

MOUNTAIN WEST INVESTMENT CORPORATION
CONTACT: BRIAN MOORE
201 FERRY STREET SE
SALEM, OREGON 97301
PH: 503-851-4654
FAX: 503-581-7061

ARCHITECT

HILL ARCHITECTS
CONTACT: LLOYD HILL, AIA
1914 WILLAMETTE FALLS DR., SUITE 280
WEST LINN, OREGON 97068
PH: 503-305-8033

GENERAL CONTRACTOR

PHOENIX CONTRACTING INC.
CONTACT: JIM TOKARSKI
201 FERRY STREET, SE, SUITE 400
SALEM, OREGON 97301
PH: 503-932-3565

CITY AND UTILITY CONTACTS

POWER

PORTLAND GENERAL ELECTRIC
CONTACT: TOD SHATTUCK
9480 SW BOECKMAN ROAD
WILSONVILLE, OR 97070
PH: 503-672-5466

CATV

FRONTIER COMMUNICATIONS
CONTACT: JOHN COUSINEAU
4155 SW CEDAR HILLS BLVD
BEAVERTON, OR 97005
PH: 503-643-0371

CITY OF TUALATIN

ENGINEERING DEPARTMENT
CONTACT: TONY DORAN
18880 SW MARTINAZZI AVE.
TUALATIN, OR 97062
PH: 503-691-3035
FAX: 503-692-5421

SITE ADDRESS

17865 AND 17985 SW PACIFIC HWY
TUALATIN, OR 97062

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ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY SALEM, LLC
528 COTTAGE ST NE
SUITE 160
SALEM, OR 97301
PHONE: 503.400.6028
FAX: 503.400.7722
www.aks-eng.com
ENGINEERING · PLANNING · SURVEYING
FORESTRY · LANDSCAPE ARCHITECTURE

RIVER RIDGE APARTMENTS
TUALATIN OREGON
TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

COVER SHEET WITH VICINITY AND SITE MAP

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 24, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JACKSON M. PARKER POISSANT
EXPIRES: DEC. 31, 2014
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS:

JOB NUMBER 3812

SHEET C000

AKS DRAWING FILE: 3812 C000 COVER.DWG | LAYOUT: C000

GENERAL CIVIL NOTES

1. CONTRACTOR SHALL PROCURE AND CONFORM TO ALL CONSTRUCTION PERMITS REQUIRED BY THE CITY OF TUALATIN, ODOT, DEQ, AND CLEAN WATER SERVICES (CWS).
2. CONTRACTOR SHALL COORDINATE WITH THE GOVERNING JURISDICTION TO DETERMINE ALL APPROPRIATE FEES AND COSTS ASSOCIATED WITH CONNECTING TO EXISTING WATER, SANITARY SEWER AND STORM SEWER FACILITIES, INCLUDING SERVICES AND INSPECTIONS BY THE GOVERNING JURISDICTIONS. THE COSTS SHALL INCLUDE AS APPLICABLE BUT NOT BE LIMITED TO FEES FOR CONNECTION, TAPPING, INSPECTION, TESTING, CHLORINATION, WATER METERS, BACKFLOW CERTIFICATIONS, OR OTHER SIMILAR OR RELATED COSTS. OWNER TO PAY ALL PROJECT PERMIT COSTS, INCLUDING BUT NOT LIMITED TO UTILITY TAPPING, TV, AND CHLORINATION COSTS. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH 48 HOURS NOTICE PRIOR TO THE REQUIRED PAYMENT OF FEES OR COSTS.
3. OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (800) 332-2344.
4. CONTRACTOR TO NOTIFY CITY, CWS, ODOT AND ALL UTILITY COMPANIES A MINIMUM OF 48 BUSINESS HOURS PRIOR TO START OF CONSTRUCTION, AND COMPLY WITH ALL OTHER NOTIFICATION REQUIREMENTS OF AGENCIES WITH JURISDICTION OVER THE WORK.
5. CONTRACTOR SHALL PROCURE A RIGHT-OF-ENTRY PERMIT FROM ODOT STATE HIGHWAY DIVISION FOR ALL WORK WITHIN THE STATE RIGHT-OF-WAY AND CONFORM TO ALL CONDITIONS OF THE PERMIT.
6. CONTRACTOR SHALL PROVIDE ALL BONDS AND INSURANCE REQUIRED BY PUBLIC AND/OR PRIVATE AGENCIES HAVING JURISDICTION. WHERE REQUIRED BY PUBLIC AND/OR PRIVATE AGENCIES HAVING JURISDICTION, THE CONTRACTOR SHALL SUBMIT A SUITABLE MAINTENANCE BOND PRIOR TO FINAL PAYMENT.
7. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING ITEMS TO THE OWNER'S REPRESENTATIVE.
   a. LIST OF SUBCONTRACTORS
   b. PROJECT SCHEDULE
   c. TRAFFIC CONTROL PLAN
   d. EMERGENCY CONTACT NAME AND PHONE NUMBER
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DOCUMENTS AND PLANS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS/PLANS RELATIVE TO THE SPECIFICATIONS OR THE APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE OWNER'S REPRESENTATIVE SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DOCUMENTS/PLANS IN FULL COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS AND CODES.
9. THE FOLLOWING DOCUMENT IS INCORPORATED INTO THE PROJECT BY REFERENCE HEREIN: GEOTECHNICAL ENGINEERING EVALUATION TUALATIN APARTMENTS PREPARED BY APEX COMPANIES, LLC DATED MARCH 14, 2014 INCLUDING ANY SUPPLEMENTS THERETO. PRIOR TO STARTING CONSTRUCTION CONTRACTOR SHALL REVIEW THE LATEST EDITION OF THIS DOCUMENT. CONTRACTOR SHALL CONFORM TO ALL RECOMMENDATIONS LISTED IN THE REPORT.
10. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE APPROVED PLANS AND THE APPLICABLE PROVISIONS OF THE APPROVING AGENCIES' CONSTRUCTION STANDARDS, THE MOST RECENT EDITION OF THE UNIFORM PLUMBING CODE, THE MOST RECENT EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), APWA STANDARDS, OREGON HEALTH DIVISION (OHD), CLEAN WATER SERVICES (CWS), OREGON DEPARTMENT OF TRANSPORTATION (ODOT), AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) WHEREIN EACH HAS JURISDICTION.
11. CONTRACTOR SHALL AT ALL TIMES ABIDE BY APPLICABLE SAFETY RULES OF OSHA, IN PARTICULAR THOSE REGULATIONS PERTAINING TO ADEQUATE SHORING AND TRENCH PROTECTION FOR WORKMEN.
12. CONSTRUCTION OF ALL PUBLIC FACILITIES SHALL BE DONE WITHIN THE HOURS PERMITTED BY THE GOVERNING JURISDICTION.
13. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DRAWINGS INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO MEET APPLICABLE AGENCY REQUIREMENTS AND PROVIDE A COMPLETED PROJECT.
14. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL REVIEW AND COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE SITE PLAN AND LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE AND ARCHITECT OF ANY DISCREPANCIES.
15. CONTRACTOR SHALL REFER TO ARCHITECTURAL BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDING ENTRY/EXIT LOCATIONS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT UTILITY CONNECTION LOCATIONS.
16. ANY INSPECTION BY THE CITY, CWS, DEQ, ODOT, AKS, OWNER'S REPRESENTATIVE, OR OTHER AGENCIES SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE CONTRACT DOCUMENTS, APPLICABLE CODES, AND AGENCY REQUIREMENTS.
17. IF THE CONTRACTOR DEVIATES FROM THE APPROVED PLANS, INCLUDING THESE NOTES, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS.
18. THE ENGINEER HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND CONSTRUCTION REVIEW SERVICES RELATING TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED FOR THE CONTRACTOR TO PERFORM HIS WORK.
19. CONTRACTOR SHALL MAINTAIN ONE (1) COMPLETE SET OF APPROVED PLANS ON THE CONSTRUCTION SITE AT ALL TIMES WHEREON HE WILL RECORD ALL APPROVED DEVIATIONS IN CONSTRUCTION FROM THE APPROVED DRAWINGS, AS WELL AS LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES ENCOUNTERED. THESE FIELD RECORD DRAWINGS SHALL BE KEPT UP TO DATE AT ALL TIMES AND SHALL BE AVAILABLE FOR INSPECTION BY THE CITY OR OWNER'S REPRESENTATIVE UPON REQUEST.
20. UPON COMPLETION OF CONSTRUCTION OF ALL NEW FACILITIES, CONTRACTOR SHALL SUBMIT A CLEAN SET OF FIELD RECORD DRAWINGS CONTAINING ALL AS-BUILT INFORMATION TO THE OWNER'S REPRESENTATIVE. ALL INFORMATION SHOWN ON THE CONTRACTOR'S FIELD RECORD DRAWINGS SHALL BE SUBJECT TO VERIFICATION. IF SIGNIFICANT ERRORS OR DEVIATIONS ARE NOTED, AN AS-BUILT SURVEY PREPARED AND STAMPED BY A REGISTERED PROFESSIONAL LAND SURVEYOR SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
21. CONTRACTOR SHALL CONFORM TO DEQ STORMWATER PERMIT NO. 1200C FOR CONSTRUCTION ACTIVITIES WHERE 1 ACRE OR MORE ARE DISTURBED.
22. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH DEQ'S EROSION AND SEDIMENT CONTROL MANUAL, CURRENT EDITION, AND EROSION CONTROL STANDARDS OF THE LOCAL JURISDICTION.
23. ELEVATIONS SHOWN ON THE DRAWINGS ARE BASED FROM WASHINGTON COUNTY BENCHMARK NO. 348, ELEVATION 139.829 FEET (NGVD 1929 DATUM) WHICH IS APPROXIMATELY 3.52 FEET LOWER THAN THE NAVD 1988 DATUM, CONSISTING OF A BRASS DISK SET IN CONCRETE AT THE NORTHEAST CORNER OF THE HIGHWAY 99W SOUTHBOUND LANES OVER THE TUALATIN RIVER. SURVEYING FOR DESIGN WAS COMPLETED BY AKS ENGINEERING & FORESTRY. AKS ENGINEERING & FORESTRY WILL PROVIDE CONSTRUCTION STAKING ON THIS PROJECT.
24. THE CONTRACTOR SHALL COORDINATE WITH THE SURVEYOR RETAINED BY THE OWNER TO ESTABLISH CONSTRUCTION CONTROL AND PERFORM INITIAL CONSTRUCTION SURVEYS TO ESTABLISH THE LINES AND GRADES OF IMPROVEMENTS AS INDICATED ON THE DRAWINGS. STAKING FOR BUILDINGS, STRUCTURES, CURBS, GRAVITY DRAINAGE PIPES/STRUCTURES AND OTHER CRITICAL IMPROVEMENTS SHALL BE COMPLETED USING EQUIPMENT ACCURATE TO 0.04 FEET HORIZONTALLY AND 0.02 FEET VERTICALLY, OR BETTER. USE OF GPS EQUIPMENT FOR CONSTRUCTION STAKING OF THESE IMPROVEMENTS IS PROHIBITED.
25. SEE ARCHITECTURAL DRAWINGS FOR SITE LIGHTING, SITE DIMENSIONING, AND CONTINUATION OF ALL UTILITIES.
26. CONTRACTOR SHALL ERECT AND MAINTAIN BARRICADES, WARNING SIGNS, TRAFFIC CONES PER CITY AND ODOT REQUIREMENTS IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) INCLUDING OREGON AMENDMENTS. ACCESS TO DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES. ALL TRAFFIC CONTROL MEASURES SHALL BE APPROVED AND IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITY.
27. PRIOR TO ANY WORK IN THE EXISTING PUBLIC RIGHT-OF-WAY, CONTRACTOR SHALL SUBMIT FINAL TRAFFIC CONTROL PLAN TO THE CITY, COUNTY AND/OR ODOT FOR REVIEW AND ISSUANCE OF A LANE CLOSURE OR WORK IN RIGHT-OF-WAY PERMIT.
28. PRIOR TO ANY WORK IN THE EXISTING RIGHT-OF-WAY, CONTRACTOR SHALL SUBMIT FINAL TRAFFIC CONTROL PLAN TO THE CITY AND ODOT FOR REVIEW AND ISSUANCE OF LANE CLOSURE PERMIT.
29. CONTRACTOR SHALL CONDUCT CONSTRUCTION ACTIVITIES IN SUCH A MANNER AS TO INSURE MINIMUM INTERFERENCE WITH THE CONTINUED USE OF ADJACENT BUSINESSES BY THEIR EMPLOYEES, SUPPLIERS, AND CUSTOMERS. CONTRACTOR SHALL CONTACT AND DISCUSS PLANNED CONSTRUCTION ACTIVITIES AND TIMING WITH THE ADJACENT PROPERTY OWNER'S AT LEAST 72 HOURS PRIOR TO STARTING WORK. CONTRACTOR SHALL COOPERATE AND ACCOMMODATE ADJACENT PROPERTY OWNER'S REQUESTS TO THE MAXIMUM EXTENT POSSIBLE.
30. PRIOR TO FINAL ACCEPTANCE AND PAYMENT, THE CONTRACTOR SHALL CLEAN THE PROJECT SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED MATERIAL, OR OTHER ITEMS DEPOSITED BY THE CONTRACTOR'S PERSONNEL DURING THE PERFORMANCE OF THE WORK.
31. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED OR NECESSARY INSPECTIONS ARE COMPLETED BY AUTHORIZED INSPECTORS PRIOR TO PROCEEDING WITH SUBSEQUENT WORK WHICH COVERS OR THAT IS DEPENDENT ON THE WORK TO BE INSPECTED. FAILURE TO OBTAIN NECESSARY INSPECTION(S) AND APPROVAL(S) SHALL RESULT IN THE CONTRACTOR BEING FULLY RESPONSIBLE FOR ALL PROBLEMS ARISING FROM UNINSPECTED WORK.
32. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY INSPECTIONS OR NECESSARY OBSERVATIONS FOR ALL WORK PERFORMED INCLUDING ANY RE-TESTING THAT MAY BE REQUIRED TO MEET SPECIFICATION. THE CONTRACTOR SHALL PERFORM PRE-TESTS PRIOR TO SCHEDULING TESTS THAT MUST BE WITNESSED. TESTING MUST BE PERFORMED BY AN APPROVED THIRD PARTY INDEPENDENT TESTING LABORATORY RETAINED BY THE CONTRACTOR. CONTRACTOR IS SOLELY RESPONSIBLE FOR SCHEDULING TESTING. ALL TESTING MUST BE COMPLETED PRIOR TO PERFORMING SUBSEQUENT WORK. A COPY OF ALL TESTING RESULTS MUST BE PROVIDED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY UPON COMPLETION OF THE TEST.
33. THE FOLLOWING TESTING IS THE MINIMUM REQUIRED FOR THE PROJECT.

SUBGRADE	1 TEST/4000 S.F./LIFT (4 TESTS MINIMUM)
ENGINEERED FILLS	1 TEST/4000 S.F./LIFT (4 TESTS MINIMUM)
BASEROCK	1 TEST/4000 S.F./LIFT (4 TESTS MINIMUM)
ASPHALT	1 TEST/6000 S.F./LIFT (4 TESTS MINIMUM)
TRENCH BACKFILL	1 TEST/200 FOOT TRENCH/LIFT (4 TESTS MINIMUM)
TRENCH AC RESTORATION	1 TEST/200 FOOT TRENCH/LIFT (4 TESTS MINIMUM)
WATER PRESSURE	WITNESSED BY CITY OR OWNER'S REP.
WATER BACTERIAL	PER OREGON HEALTH DIVISION REQUIREMENTS
WATER CHLORINE	RESIDUAL TEST PER CITY REQUIREMENTS
SEWER AIR TEST	PER CITY/APWA REQUIREMENTS. WITNESSED BY OWNER'S REP.
SEWER MANDREL	95% OF ACTUAL PIPE DIAMETER. WITNESSED BY OWNER'S REP.
SEWER MANHOLE	1 VACUUM TEST PER MANHOLE (CITY/APWA STANDARDS). WITNESSED BY OWNER'S REP.
STORM MANDREL	95% OF ACTUAL PIPE DIAMETER. WITNESSED BY OWNER'S REP.
CONCRETE SLUMP	1 SET OF CYLINDERS/100 C.Y. OF CONCRETE POURED PER DAY.
AIR AND CYLINDERS	SLUMP AND AIR TESTS REQUIRED ON SAME LOAD AS CYLINDERS.

34. IN ADDITION TO IN-PLACE DENSITY TESTING, THE SUBGRADE AND BASEROCK SHALL BE PROOF-ROLLED WITH A LOADED 10-YARD DUMP TRUCK PROVIDED BY THE CONTRACTOR. BASEROCK PROOF ROLL SHALL TAKE PLACE IMMEDIATELY PRIOR TO (WITHIN 24 HOURS OF) PAVING, AND SHALL BE WITNESSED BY THE OWNER'S REPRESENTATIVE. LOCATION AND PATTERN OF PROOF ROLL TO BE AS DIRECTED BY OWNER'S REPRESENTATIVE OR APPROVING AGENCY.
35. ALL ENGINEERED FILLS REQUIRE AN APPROVED INDEPENDENT TESTING LABORATORY RETAINED BY THE CONTRACTOR OR THE PROJECT GEOTECHNICAL ENGINEER, TO PROVIDE WRITTEN CERTIFICATION, STAMPED BY AN OREGON REGISTERED PROFESSIONAL ENGINEER, STATING THAT THE SUBGRADE WAS PREPARED AND ALL ENGINEERED FILLS WERE PLACED IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND CONTRACT DOCUMENTS.
36. THE LOCATION AND DESCRIPTIONS OF EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEYS. WE DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. ADDITIONAL UTILITIES MAY EXIST WITHIN THE WORK AREA. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND SIZES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
37. ANY UTILITIES LOCATED IN THE FIELD THAT THE CONTRACTOR DISRUPTS OR DAMAGES SHALL BE PROMPTLY REPARIED TO NEW CONDITION. IF REQUIRED, CONTRACTOR SHALL INSTALL SUITABLE TEMPORARY SERVICE UNTIL REPAIR CAN BE COMPLETED. THE COST OF THE REPAIR OR TEMPORARY SERVICE SHALL BE BORNE BY THE CONTRACTOR.
38. NOTIFY THE OWNER AND OWNER'S REPRESENTATIVE IMMEDIATELY OF ALL UTILITIES EXPOSED. UNIDENTIFIED UTILITIES SHALL NOT BE DISRUPTED OR CUT UNTIL OWNER OR OWNER'S REPRESENTATIVE HAS APPROVED THE CUT OR DISRUPTION.
39. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND MARKING ALL EXISTING SURVEY MONUMENTS OF RECORD (INCLUDING BUT NOT LIMITED TO PROPERTY AND STREET MONUMENTS) PRIOR TO CONSTRUCTION. IF ANY SURVEY MONUMENTS ARE REMOVED, DISTURBED OR DESTROYED DURING CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL RETAIN AND PAY FOR THE SERVICES OF A REGISTERED PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF OREGON TO REFERENCE AND REPLACE ALL SUCH MONUMENTS PRIOR TO SUBSTANTIAL COMPLETION OF THE PROJECT. THE MONUMENTS SHALL BE REPLACED WITHIN A MAXIMUM OF 90 DAYS, AND THE COUNTY SURVEYOR SHALL BE NOTIFIED IN WRITING AS REQUIRED BY PER ORS 209.150.
40. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES WHERE NEW FACILITIES CROSS. ALL UTILITY CROSSINGS SHOWN ON THE DRAWINGS SHALL BE POTHOLED USING HAND TOOLS OR OTHER NON-INVASIVE METHODS PRIOR TO EXCAVATING OR BORING. CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING POTENTIAL UTILITY CONFLICTS FAR ENOUGH AHEAD OF CONSTRUCTION TO MAKE NECESSARY GRADE OR ALIGNMENT MODIFICATIONS WITHOUT DELAYING THE WORK. IF GRADE OR ALIGNMENT MODIFICATION IS NECESSARY, CONTRACTOR SHALL NOTIFY THE ENGINEER, AND THE ENGINEER OR THE OWNER'S REPRESENTATIVE SHALL OBTAIN APPROVAL FROM THE CITY PRIOR TO CONSTRUCTION.
41. ALL FACILITIES SHALL BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO SUPPORT, MAINTAIN, OR OTHERWISE PROTECT EXISTING UTILITIES AND OTHER FACILITIES AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER-THAN-ORIGINAL CONDITION.
42. UTILITIES OR INTERFERING PORTIONS OF UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL HAVE ALL OPENINGS CLOSED WITH CONCRETE PLUGS WITH A MINIMUM LENGTH EQUAL TO 2 TIMES THE DIAMETER OF THE ABANDONED PIPE.
43. CONTRACTOR SHALL REMOVE ALL EXISTING SIGNS, MAILBOXES, FENCES, LANDSCAPING, ETC., AS REQUIRED TO AVOID DAMAGE DURING CONSTRUCTION AND REPLACE THEM TO EXISTING OR BETTER CONDITION.
44. IF SPRINGS OR GROUNDWATER ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF THE CONDITIONS FOUND AND COORDINATE THE ACTIVITIES IN A MANNER THAT WILL ALLOW TIME TO REVIEW THE SITUATION AND PREPARE A PLAN TO PROPERLY MITIGATE THE WATER ENCOUNTERED.
45. ANY SEPTIC TANKS ENCOUNTERED DURING CONSTRUCTION SHALL BE PUMPED OUT AND ABANDONED OR REMOVED IN ACCORDANCE WITH COUNTY SANITARIAN REQUIREMENTS.
46. ANY WELLS ENCOUNTERED SHALL BE ABANDONED PER STATE OF OREGON WATER RESOURCES DEPARTMENT REQUIREMENTS.
47. ANY FUEL TANKS ENCOUNTERED SHALL BE REMOVED AND DISPOSED OF PER STATE OF OREGON DEQ REQUIREMENTS. BACKFILL WITH COMPACTED GRANULAR MATERIAL.
48. CONTRACTOR SHALL COORDINATE AND PAY ALL COSTS ASSOCIATED WITH REMOVING OR ABANDONING ANY SEPTIC TANKS, WELLS (INCLUDING BOREHOLE PIEZOMETERS), AND FUEL TANKS ENCOUNTERED AS PER REGULATING AGENCY REQUIREMENTS. WHEN SHOWN ON THE DRAWINGS, THESE STRUCTURES SHALL BE REMOVED OR ABANDONED AT THE CONTRACTOR'S EXPENSE. WHEN NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY UPON DISCOVERY OF ANY SEPTIC TANKS, WELLS, OR FUEL TANKS, AND OBTAIN APPROVAL FROM THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A DETAILED COST BREAKDOWN OF ALL WORK RELATED TO REMOVING OR ABANDONING SAID STRUCTURES. THE CONTRACTOR WILL BE REIMBURSED ON A TIME & MATERIALS BASIS OR AT A NEGOTIATED PRICE AS AGREED.
49. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGING CONSTRUCTION ACTIVITIES TO ENSURE THAT PUBLIC STREETS AND RIGHT-OF-WAYS ARE KEPT CLEAN OF MUD, DUST OR DEBRIS. DUST ABATEMENT SHALL BE MAINTAINED BY ADEQUATE WATERING OF THE SITE BY THE CONTRACTOR.
50. PRIVATE GRADING, ROCKING AND PAVING TO CONFORM TO OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION (OSSC/ODOT/APWA) AND IBC, CURRENT EDITIONS.
51. CLEAR AND GRUB WITHIN WORK LIMITS ALL SURFACE VEGETATION, TREES, STUMPS, BRUSH, ROOTS, ETC. DO NOT DAMAGE OR REMOVE TREES EXCEPT AS APPROVED BY THE OWNER'S REPRESENTATIVE OR AS SHOWN ON THE DRAWINGS. PROTECT ALL ROOTS TWO INCHES IN DIAMETER OR LARGER.
52. STRIP WORK LIMITS, REMOVING ALL ORGANIC MATTER, WHICH CANNOT BE COMPACTED INTO A STABLE MASS. ALL TREES, BRUSH, AND DEBRIS ASSOCIATED WITH CLEARING, STRIPPING OR GRADING SHALL BE REMOVED AND DISPOSED OF OFF-SITE.
53. IMMEDIATELY FOLLOWING STRIPPING AND GRADING OPERATIONS, COMPACT SUBGRADE TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR). SUBGRADE MUST BE INSPECTED AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE AND WRITTEN COMPACTION TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY MUST BE RECEIVED BEFORE PLACING EMBANKMENTS, ENGINEERED FILLS OR FINE GRADING FOR BASE ROCK.
54. ALL FILLS SHALL BE ENGINEERED. ENGINEERED FILLS SHALL BE CONSTRUCTED WITH MAXIMUM 8" LIFTS (LOOSE MEASURE) OVER APPROVED SUBGRADE. EACH LIFT SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR).
55. AREAS TO RECEIVE ENGINEERED OR STRUCTURAL FILL SHALL BE PREPARED BY REMOVING ALL ORGANIC AND UNSUITABLE MATERIALS AND PROOF ROLLING. MATERIAL IN SOFT SPOTS WITHIN AREAS TO BE IMPROVED SHALL BE REMOVED TO THE DEPTH REQUIRED (AS DIRECTED BY THE OWNER'S REPRESENTATIVE) TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH SUITABLE COMPACTED BACKFILL.
56. PRIVATE GRANULAR BASEROCK SHALL CONFORM TO THE REQUIREMENTS OF OSSC (ODOT/APWA) 02630.10 (DENSE GRADED BASE AGGREGATE). COMPACT BASEROCK TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR). WRITTEN BASEROCK COMPACTION TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY MUST BE RECEIVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE BEFORE PLACING AC PAVEMENT.
57. PRIVATE A.C. PAVEMENT SHALL BE 1/2" DENSE GRADED MIX CONFORMING TO OSSC (ODOT/APWA) 00744 HOT MIXED ASPHALT CONCRETE (HMAC) PAVEMENT. A.C. PAVEMENT SHALL BE LEVEL 2 HMAC PER OSSC (ODOT/APWA) 00744.13. A.C. PAVEMENT SHALL BE COMPACTED TO A MINIMUM OF 91% OF MAXIMUM DENSITY AS DETERMINED BY THE RICE STANDARD METHOD. WRITTEN AC PAVEMENT COMPACTION TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY MUST BE RECEIVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE BEFORE FINAL PAYMENT.
58. FOR PARKING LOTS OR PRIVATE ACCESS DRIVES, THE FINAL LIFT OF AC PAVEMENT SHALL NOT BE PLACED UNTIL AFTER THE BUILDINGS ARE FULLY ENCLOSED AND WEATHERPROOF, UNLESS OTHERWISE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
59. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, STRAIGHT GRADES SHALL BE RUN BETWEEN ALL FINISH GRADE ELEVATIONS AND/OR FINISH CONTOUR LINES SHOWN.
60. FINISH PAVEMENT GRADES AT TRANSITION TO EXISTING PAVEMENT SHALL MATCH EXISTING PAVEMENT GRADES OR BE FEATHERED PAST JOINTS WITH EXISTING PAVEMENT AS REQUIRED TO PROVIDE A SMOOTH, FREE DRAINING SURFACE.
61. ALL EXISTING OR CONSTRUCTED MANHOLES, CLEANOUTS, MONUMENT BOXES, GAS VALVES, WATER VALVES AND SIMILAR STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH GRADE OF THE PAVEMENT, SIDEWALK, LANDSCAPED AREA OR MEDIAN STRIP WHEREIN THEY LIE. VERIFY THAT ALL VALVE BOXES AND RISERS ARE CLEAN AND CENTERED OVER THE OPERATING NUT.
62. FINISHED RIM ELEVATIONS OF MANHOLES SHOWN WITHIN PAVEMENT ARE APPROXIMATE AND SHALL MATCH FINAL FINISHED PAVEMENT GRADES. RIM ELEVATIONS OUTSIDE OF PAVEMENT SHALL BE SET 3" ABOVE FINISHED GRADE, UNLESS OTHERWISE DIRECTED OR SHOWN ON THE DRAWINGS.
63. NO CUT OR FILL SLOPES SHALL BE CONSTRUCTED STEEPER THAN 2 FT. HORIZONTAL TO 1 FT. VERTICAL (2H:1V) UNLESS OTHERWISE SHOWN ON THE DRAWINGS AND APPROVED BY THE GEOTECHNICAL ENGINEER FOR THE PROJECT.
64. WHERE RETAINING WALLS ARE IDENTIFIED ON THE PLANS, ELEVATIONS IDENTIFIED ARE FOR THE EXPOSED PORTION OF THE WALL. WALL FOOTING/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED AND ARE TO BE DETERMINED BY THE CONTRACTOR.
65. ALL PLANTER AREAS AND OPEN SPACE SHALL BE BACKFILLED WITH APPROVED TOPSOIL IN CONFORMANCE WITH THE LANDSCAPE PLAN FOR THE PROJECT. STRIPPING MATERIALS SHALL NOT BE USED FOR BACKFILL, UNLESS APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
66. CONTRACTOR SHALL SEED AND MULCH ALL EXPOSED SLOPES AND DISTURBED AREAS, WHICH ARE NOT SCHEDULED TO BE LANDSCAPED.
67. THE CONTRACTOR IS RESPONSIBLE TO INSURE 1.0% MINIMUM SLOPE ON ALL NEW CONCRETE AND ASPHALT SURFACES TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT ADA COMPLIANCE, PUBLIC SAFETY, OR PROJECT COST MUST BE IDENTIFIED IN WRITING TO THE OWNER'S REPRESENTATIVE IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT OWNER'S REPRESENTATIVE AUTHORIZATION AND REVIEW OF THE DISCREPANCY IS AT THE CONTRACTOR'S OWN COST RISK.
68. 6-INCHES NOMINAL CURB EXPOSURE USED FOR DESIGN OF ALL PARKING LOT GRADES, UNLESS OTHERWISE SHOWN OR INDICATED ON THE DRAWINGS.
69. WHERE NEW CURBING CONNECTS TO EXISTING CURBING OR IS INSTALLED ALONG EXISTING STREETS OR PAVEMENT, THE GUTTER GRADE SHALL MATCH THE EXISTING STREET GRADES SO AS TO ALLOW DRAINAGE FROM THE STREET TO THE GUTTER AND THROUGH ANY TRANSITIONS. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING OF ANY GRADE DISCREPANCIES OR PROBLEMS PRIOR TO CURB PLACEMENT.
70. CONTRACTOR SHALL CONSTRUCT HANDICAP ACCESS RAMPS WHERE SHOWN IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.
71. SIDEWALKS SHALL BE A MINIMUM OF 4-INCHES THICK. ALL CURBS AND SIDEWALKS SHALL BE CONSTRUCTED USING 3300-PSI CONCRETE, AND SHALL BE CURED WITH TYPE 1 OR TYPE 1D CLEAR CURING COMPOUND.
72. PRIOR TO INSTALLATION OF CURB, ADA RAMPS, OR SIDEWALK THE OWNER'S REPRESENTATIVE AND/OR CITY INSPECTOR SHALL BE CONTACTED TO INSPECT STRING LINE, BASEROCK, AND FORMWORK.
73. WHERE TRENCH EXCAVATION REQUIRES REMOVAL OF PCC CURBS AND/OR SIDEWALKS, THE CURBS AND/OR SIDEWALKS SHALL BE SAWCUT AND REMOVED AT A TOOLED JOINT UNLESS OTHERWISE AUTHORIZED IN WRITING THE CITY OR OWNER'S REPRESENTATIVE. THE SAWCUT LINES SHOWN ON THE DRAWINGS ARE SCHEMATIC AND NOT INTENDED TO SHOW THE EXACT ALIGNMENT OF SUCH CUTS.
74. ALL TAPPING OF EXISTING MUNICIPAL SANITARY SEWER, STORM DRAIN MAINS, AND MANHOLES MUST BE DONE BY CONTRACTOR FORCES.
75. THE CONTRACTOR SHALL HAVE APPROPRIATE EQUIPMENT ON SITE TO PRODUCE A FIRM, SMOOTH, UNDISTURBED SUBGRADE AT THE TRENCH BOTTOM, TRUE TO GRADE. THE BOTTOM OF THE TRENCH EXCAVATION SHALL BE SMOOTH, FREE OF LOOSE MATERIALS OR TOOTH GROOVES FOR THE ENTIRE WIDTH OF THE TRENCH PRIOR TO PLACING THE GRANULAR BEDDING MATERIAL.
76. ALL PIPES SHALL BE BEDDED WITH MINIMUM 6-INCHES OF 3/4"-0 CRUSHED ROCK BEDDING AND BACKFILLED WITH COMPACTED 3/4"-0 CRUSHED ROCK IN THE PIPE ZONE (CRUSHED ROCK SHALL EXTEND A MINIMUM OF 12-INCHES OVER THE TOP OF THE PIPE IN ALL CASES). CRUSHED ROCK TRENCH BACKFILL SHALL BE USED UNDER ALL AREAS TO BE IMPROVED, INCLUDING PAVEMENT, SIDEWALKS, FOUNDATION SLABS, BUILDINGS, ETC.
77. PRIVATE GRANULAR TRENCH BEDDING AND BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF OSSC (ODOT/APWA) 02630.10 (DENSE GRADED BASE AGGREGATE), 3/4"-0. COMPACT GRANULAR BACKFILL TO 92% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR).
78. CONTRACTOR SHALL ARRANGE TO ABANDON EXISTING SANITARY AND WATER SERVICES NOT SCHEDULED TO REMAIN IN SERVICE IN ACCORDANCE WITH APPROVING AGENCY REQUIREMENTS.
79. THE END OF ALL UTILITY SERVICE LINES SHALL BE MARKED WITH A 2-X-4 PAINTED WHITE AND WIRED TO PIPE STUB. THE PIPE DEPTH SHALL BE WRITTEN ON THE POST IN 2" BLOCK LETTERS.
80. ALL NON-METALLIC WATER, SANITARY AND STORM SEWER PIPING SHALL HAVE AN ELECTRICALLY CONDUCTIVE INSULATED 12 GAUGE COPPER TRACER WIRE THE FULL LENGTH OF THE INSTALLED PIPE USING BLUE WIRE FOR WATER AND GREEN WIRE FOR STORM AND SANITARY PIPING. TRACER WIRE SHALL BE EXTENDED UP INTO ALL VALVE BOXES, CATCH BASINS, MANHOLES AND LATERAL CLEANOUT BOXES. TRACER WIRE PENETRATIONS INTO MANHOLES SHALL BE WITHIN 18 INCHES OF THE RIM ELEVATION AND ADJACENT TO MANHOLE STEPS. THE TRACER WIRE SHALL BE TIED TO THE TOP MANHOLE STEP OR OTHERWISE SUPPORTED TO ALLOW RETRIEVAL FROM THE OUTSIDE OF THE MANHOLE.
81. NO TRENCHES IN SIDEWALKS, ROADS, OR DRIVEWAYS SHALL BE LEFT IN AN OPEN CONDITION OVERNIGHT. ALL SUCH TRENCHES SHALL BE CLOSED BEFORE THE END OF EACH WORKDAY AND NORMAL TRAFFIC AND PEDESTRIAN FLOWS RESTORED.
82. CITY FORCES TO OPERATE ALL VALVES, INCLUDING FIRE HYDRANTS, ON EXISTING PUBLIC MAINS.
83. NO CONNECTION TO EXISTING WATER LINES SHALL BE MADE WITHOUT AUTHORIZATION FROM THE CITY.
84. ALL WATER LINES AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH AWWA STANDARDS, OREGON ADMINISTRATIVE RULES (OAR), THE OREGON PLUMBING SPECIALTY CODE (OPSC), AND LOCAL APPROVING JURISDICTION STANDARDS.
85. ALL WATER MAINS SHALL BE CLASS 52 DUCTILE IRON OR C-900 PVC (DR 18). ALL FITTINGS 4-INCHES THROUGH 24-INCHES IN DIAMETER SHALL BE DUCTILE IRON FITTINGS IN CONFORMANCE WITH AWWA C-153 OR AWWA C-110. THE MINIMUM WORKING PRESSURE FOR ALL MJ CAST IRON OR DUCTILE IRON FITTINGS 4-INCHES THROUGH 24-INCH IN DIAMETER SHALL BE 350 PSI FOR MJ FITTINGS AND 250 PSI FOR FLANGED FITTINGS.
86. ALL WATER MAINS TO BE INSTALLED WITH A MINIMUM 36 INCH COVER TO FINISH GRADE UNLESS OTHERWISE NOTED OR DIRECTED. WATER SERVICE LINES SHALL BE INSTALLED WITH A MINIMUM 30-INCH COVER. DEEPER DEPTHS MAY BE REQUIRED AS SHOWN ON THE DRAWINGS OR TO AVOID OBSTRUCTIONS AND CONFLICTS.
87. THRUST RESTRAINT SHALL BE PROVIDED ON ALL BENDS, TEES AND OTHER DIRECTION CHANGES PER LOCAL JURISDICTION REQUIREMENTS AND AS SPECIFIED OR SHOWN ON THE DRAWINGS. ALL RESTRAINED MECHANICAL JOINT FITTINGS SHALL INCLUDE THE REQUIRED NUMBER OF PUSH-ON PIPE JOINT RESTRAINTS TO OBTAIN THE NECESSSARY PIPE RESTRAINED LENGTH.
88. ALL VALVES SHALL BE FLANGE CONNECTED TO ADJACENT TEES OR CROSSES, UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.
89. WATER SERVICE PIPE ON THE PUBLIC SIDE OF THE METER SHALL CONFORM TO APPROVING AGENCY CONSTRUCTION STANDARDS.
90. WATER SERVICE PIPE 3-INCH AND SMALLER ON THE PRIVATE SIDE OF THE METER SHALL BE SCHEDULE 80 PVC. WATER SERVICE PIPE 4-INCHES AND LARGER ON THE PRIVATE SIDE OF THE METER SHALL BE ASTM D2241 DR 21 (200 PSI), WITH RUBBER GASKETS CONFORMING TO ASTM F477. PRIVATE WATER SERVICE PIPING SHALL BE HYDROSTATICALLY PRESSURE TESTED TO A MINIMUM OF 150% OF THE MAXIMUM STATIC PRESSURE AT THE SITE. ALL MATERIALS AND WORKMANSHIP FOR PRIVATE WATER LINES SHALL BE INSTALLED IN CONFORMANCE WITH OPSC REQUIREMENTS BY A LICENSED PLUMBER.
91. DOMESTIC, IRRIGATION AND FIRE BACKFLOW PREVENTION DEVICES AND VAULTS SHALL CONFORM TO REQUIREMENTS OF PUBLIC AND/OR PRIVATE AGENCIES HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING BACKFLOW DEVICES TESTED AND CERTIFIED PRIOR TO FINAL ACCEPTANCE OF THE WORK.
92. CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT AND MATERIALS (INCLUDING PLUGS, BLOWOFFS, VALVES, SERVICE TAPS, ETC.) REQUIRED TO FLUSH, TEST AND DISINFECT WATERLINES PER PUBLIC AGENCY REQUIREMENTS PRIOR TO PLACING INTO SERVICE.
93. THE WORK SHALL BE PERFORMED IN A MANNER DESIGNATED TO MAINTAIN WATER SERVICE TO BUILDINGS SUPPLIED FROM THE EXISTING WATERLINES. IN NO CASE SHALL SERVICE TO ANY MAIN LINE OR BUILDING BE INTERRUPTED FOR MORE THAN FOUR (4) HOURS IN ANY ONE-DAY. CONTRACTOR SHALL NOTIFY THE CITY AND ALL AFFECTED RESIDENTS AND BUSINESSES A MINIMUM OF 24 BUSINESS HOURS (1 BUSINESS DAY) BEFORE ANY INTERRUPTION OF SERVICE.
94. WHERE SANITARY SEWER LINES CROSS ABOVE OR WITHIN 18-INCHES VERTICAL SEPARATION BELOW A WATERLINE, SEWER MAINS AND/OR SERVICE LATERALS SHALL BE REPLACED WITH A 12 FOOT LENGTH OF C-900 PVC PIPE (DR 18) CENTERED AT THE CROSSING IN ACCORDANCE WITH OAR 333. CONNECT TO EXISTING SEWER LINES WITH APPROVED RUBBER COUPLINGS.
95. A MINIMUM OF TEN FEET (10') HORIZONTAL SEPARATION, MEASURED FROM EDGE-TO-EDGE, IS REQUIRED BETWEEN WATER LINE AND SANITARY SEWER LINES AND MANHOLES. ALL CONSTRUCTION SHALL CONFORM TO DEQ AND OAR 333 REQUIREMENTS FOR SEPARATION.
96. SANITARY SEWER PIPE SHALL BE SOLID WALL PVC IN CONFORMANCE WITH ASTM D3034, SDR 35. MINIMUM STIFFNESS SHALL BE 46 PSI PER ASTM D-2412 AND JOINT TYPE SHALL BE ELASTOMERIC GASKET CONFORMING TO ASTM D-3212. ALL OTHER APPURTENANCES AND INSTALLATION TO CONFORM TO THE CITY SPECIFICATIONS. ALL MATERIALS AND WORKMANSHIP FOR PRIVATE SANITARY SEWERS SHALL BE INSTALLED IN CONFORMANCE WITH OPSC REQUIREMENTS.
97. ALL PRECAST MANHOLES SHALL BE PROVIDED WITH INTEGRAL RUBBER BOOTS. WHERE MANHOLES WITHOUT INTEGRAL RUBBER BOOTS ARE APPROVED BY THE OWNER'S REPRESENTATIVE AND AGENCY WITH JURISDICTION, A PIPE JOINT SHALL BE PROVIDED ON ALL MAINLINES WITHIN 1.5 FEET OF THE OUTSIDE FACE OF THE MANHOLE.
98. SANITARY SEWER MANHOLES SHALL BE WATER-TIGHT WITH O-RING OR MASTIC KEYLOCK JOINTS. ALL INTERIOR AND EXTERIOR JOINTS AND PIPE OPENINGS ARE TO BE GROUTED WITH NON-SHRINK GROUT. PIPE PENETRATIONS SHALL HAVE NEOPRENE RUBBER BOOTS.
99. ALL STORM DRAIN AND SANITARY SEWER MANHOLES LOCATED WITHIN THE 100 YEAR FLOOD PLAIN SHALL HAVE WATER-TIGHT LOCK DOWN MANHOLE FRAMES AND COVERS.
100. OPENINGS FOR CONNECTIONS TO EXISTING MANHOLES SHALL BE MADE BY CORE-DRILLING THE EXISTING MANHOLE STRUCTURE, AND INSTALLING A RUBBER BOOT. CONNECTIONS SHALL BE WATERTIGHT AND SHALL PROVIDE A SMOOTH FLOW INTO AND THROUGH THE MANHOLE WITH NO PONDING. SMALL CHIPPING HAMMERS OR SIMILAR LIGHT TOOLS WHICH WILL NOT DAMAGE OR CRACK THE MANHOLE BASE MAY BE USED TO SHAPE CHANNELS, BUT MAY BE USED TO ENLARGE EXISTING OPENINGS ONLY IF AUTHORIZED IN WRITING BY THE OWNER'S REPRESENTATIVE. USE OF PNEUMATIC JACKHAMMERS SHALL BE PROHIBITED.
101. CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS, EQUIPMENT AND FACILITIES TO TEST SANITARY SEWER PIPE AND APPURTENANCES FOR LEAKAGE IN ACCORDANCE WITH TESTING SCHEDULE STATED ABOVE OR THE CITY'S CONSTRUCTION STANDARDS, WHICHEVER ARE MORE STRINGENT. SANITARY SEWER PIPE AND APPURTENANCES SHALL BE TESTED FOR LEAKAGE. LEAKAGE TESTS SHALL INCLUDE AN AIR TEST OF ALL SEWER MAINS AND LATERALS AND VACUUM TESTING OF THE MANHOLES. MANHOLE TESTING SHALL BE PERFORMED AFTER COMPLETION OF AC PAVEMENT AND FINAL SURFACE RESTORATION.
102. BEFORE MANDREL TESTING AND/OR TV INSPECTION, FLUSH AND CLEAN ALL SEWERS, AND REMOVE ALL FOREIGN MATERIAL FROM THE MAINLINES AND MANHOLES.
103. CONTRACTOR SHALL CONDUCT DEFLECTION TEST OF FLEXIBLE SANITARY SEWER PIPES BY PULLING AN APPROVED MANDREL THROUGH THE COMPLETED PIPELINE FOLLOWING TRENCH COMPACTION. THE DIAMETER OF THE MANDREL SHALL BE 95% OF THE INITIAL PIPE DIAMETER. TEST SHALL BE CONDUCTED NOT LESS THAN 30 DAYS AFTER THE TRENCH BACKFILLING AND COMPACTION HAS BEEN COMPLETED, UNLESS OTHERWISE APPROVED BY THE CITY AND OWNER'S REPRESENTATIVE.
104. STORM SEWER PIPE MATERIALS TO CONFORM TO THE CONSTRUCTION DRAWINGS AND CITY REQUIREMENTS. STORM SEWER PIPE MUST BE INSTALLED WITH WATERTIGHT JOINTS. CONTRACTOR SHALL USE UNIFORM PIPE MATERIAL ON EACH PIPE RUN BETWEEN STRUCTURES UNLESS OTHERWISE DIRECTED OR APPROVED. JOINTED HDPE PIPE SHALL NOT BE USED FOR SLOPES EXCEEDING TEN PERCENT (10%). ALL MATERIALS AND WORKMANSHIP FOR ALL PRIVATE STORM DRAINS SHALL BE INSTALLED IN CONFORMANCE WITH OPSC REQUIREMENTS.

STORM PIPE COVER DEPTH (MEASURED FROM FINISH GRADE TO TOP OF PIPE)	STORM PIPE MATERIAL
LESS THAN 2 FEET	CLASS 52 DUCTILE IRON PIPE (4"); CLASS 50 DUCTILE IRON PIPE (6" TO 12"); CLASS 51 DUCTILE IRON PIPE (14" TO 18") WITH BELL AND SPIGOT JOINTS AND RUBBER GASKETS.
2 FEET OR MORE	CLASS 3, ASTM C-14 NON-REINFORCED CONCRETE PIPE ASTM 150 TYPE II CEMENT; OR PVC PIPE CONFORMING TO AWWA C900 DR 18 (4" TO 12") OR AWWA C-905 (14" TO 18") WITH BELL AND SPIGOT JOINTS AND RUBBER GASKETS. 21" TO 30" PIPE SHALL BE CLASS IV, ASTM C-76 REINFORCED CONCRETE PIPE WITH BELL AND SPIGOT JOINTS AND RUBBER GASKETS WITH ASTM 150 TYPE II CEMENT.
2.5 FEET OR MORE	PVC PIPE CONFORMING TO ASTM D-3034 SOLID WALL PVC SDR 35 WITH BELL AND SPIGOT JOINTS AND RUBBER GASKETS (4" TO 18"); OR HDPE ADS N-12 IB ST, HANCOR SURE-LOK F477 PIPE SHALL BE INSTALLED FOR PIPE SLOPES LESS THAN 6% (6" TO 30") AND HDPE ADS N-12 IB WT, HANCOR BLUE SEAL PIPE SHALL BE INSTALLED FOR PIPE SLOPES GREATER THAN OR EQUAL TO 6% BUT LESS THAN 10% (6" TO 30"). HDPE PIPE IF USED SHALL CONFORM TO AASHTO M-252 (8" TO 10") OR AASHTO M-294 (12" TO 30").

105. CONTRACTOR SHALL DESIGNATE THE PIPE MATERIAL ACTUALLY INSTALLED ON THE FIELD RECORD DRAWINGS AND PROVIDE THIS INFORMATION FOR INCLUSION ON THE AS-BUILT DRAWINGS.
106. STORM DRAIN INLETS SHALL BE SET SQUARE WITH BUILDINGS OR WITH THE EDGE OF THE PARKING LOT OR STREET WHEREIN THEY LIE. STORM DRAIN INLET STRUCTURES AND PAVING SHALL BE ADJUSTED SO WATER FLOWS INTO THE STRUCTURE WITHOUT PONDING WATER.
107. UNLESS OTHERWISE APPROVED BY THE ENGINEER, ALL STORM DRAIN CONNECTIONS SHALL BE BY MANUFACTURED TEES, WYES OR SADDLES.
108. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, ALL STORM PIPE INLETS & OUTFALLS SHALL BE BEVELED FLUSH TO MATCH THE SLOPE WHEREIN THEY LIE.
109. DEFLECT STORM SEWER PIPE INTO CATCH BASINS AND MANHOLES AS REQUIRED. MAXIMUM JOINT DEFLECTION SHALL NOT EXCEED 5 DEGREES OR MANUFACTURERS RECOMMENDATIONS, WHICHEVER IS LESS.
110. UNLESS OTHERWISE SHOWN OR DIRECTED, INSTALL STORM SEWER PIPE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDELINES.
111. BEFORE MANDREL TESTING OR FINAL ACCEPTANCE, FLUSH AND CLEAN ALL STORM DRAINS, AND REMOVE ALL FOREIGN MATERIAL FROM THE PIPES, MANHOLES AND CATCH BASINS.
112. CONTRACTOR SHALL CONDUCT DEFLECTION TEST OF FLEXIBLE STORM SEWER PIPES BY PULLING AN APPROVED MANDREL THROUGH THE COMPLETED PIPELINE FOLLOWING TRENCH COMPACTION. THE DIAMETER OF THE MANDREL SHALL BE 95% OF THE INITIAL PIPE DIAMETER. TEST SHALL BE CONDUCTED NOT MORE THAN 30 DAYS AFTER THE TRENCH BACKFILLING AND COMPACTION HAS BEEN COMPLETED.
113. UPON COMPLETION OF ALL PUBLIC STORM SEWER CONSTRUCTION, TESTING, AND REPAIR THE CONTRACTOR SHALL CONDUCT A COLOR TV ACCEPTANCE INSPECTION OF ALL PUBLIC MAINLINES IN ACCORDANCE WITH OSSC (ODOT/APWA) 445.74 TO DETERMINE COMPLIANCE WITH GRADE REQUIREMENTS OF OSSC (ODOT/APWA) 445.40.B. THE TV INSPECTION SHALL BE CONDUCTED BY AN APPROVED TECHNICAL SERVICE, WHICH IS EQUIPPED TO MAKE AUDIO-VISUAL RECORDINGS OF THE TV INSPECTIONS. UNLESS OTHERWISE REQUIRED BY AGENCY WITH JURISDICTION, A STANDARD 1-INCH DIAMETER BALL SHALL BE SUSPENDED IN FRONT OF THE CAMERA DURING THE INSPECTION. SUFFICIENT WATER TO REVEAL LOW AREAS OR REVERSE GRADES SHALL BE DISCHARGED INTO THE PIPE IMMEDIATELY BEFORE INITIATION OF THE TV INSPECTION. THE RECORDING AND WRITTEN REPORT SHALL BE DELIVERED TO THE CITY AND CWS AS REQUIRED.
114. PARKING LOT LIGHTS SHALL BE INSTALLED AFTER ALL OTHER EARTHWORK AND UTILITY INSTALLATIONS ARE COMPLETED AND AFTER ROUGH GRADING IS ACCOMPLISHED TO PREVENT DAMAGE TO THE POLES.
115. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES AND PAY ALL COSTS FOR PROCUREMENT, INSTALLATION, WIRING, HOOK UP AND ACTIVATION OF PARKING LOT AND STREET LIGHTS.
116. ALL NEW FRANCHISE AND PRIVATE UTILITIES (POWER, CABLE TV, TELEPHONE, GAS, DATA, COMMUNICATION, ALARMS, ETC.) SHALL BE INSTALLED UNDERGROUND IN CONFORMANCE WITH UTILITY SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS. INSTALLATION OF SUCH UTILITIES OR ASSOCIATED CONDUITS IN A COMMON TRENCH WITH WATER, SANITARY SEWER, OR STORM SEWER IS PROHIBITED.
117. CONTRACTOR SHALL COORDINATE WITH POWER, TELEPHONE AND CABLE TV COMPANIES FOR LOCATION OR RELOCATION OF VAULTS, PEDESTALS, ETC. ALL ABOVE-GRADE FACILITIES SHALL BE PLACED IN A LOCATION OUTSIDE THE PROPOSED SIDEWALK LOCATION.
118. POWER, TELEPHONE AND TV TRENCHING AND CONDUITS SHALL BE INSTALLED PER UTILITY COMPANY REQUIREMENTS WITH PULL WIRE. CONTRACTOR SHALL VERIFY WITH UTILITY COMPANY FOR SIZE, LOCATION AND TYPE OF CONDUIT BEFORE CONSTRUCTION, AND SHALL INSURE THAT TRENCHES ARE ADEQUATELY PREPARED FOR INSTALLATION PER UTILITY COMPANY REQUIREMENTS. ALL CHANGES IN DIRECTION OF UTILITY CONDUIT RUNS SHALL HAVE LONG RADIUS STEEL BENDS.
119. CONTRACTOR SHALL NOTIFY AND COORDINATE WITH FRANCHISE UTILITIES FOR REMOVAL OR RELOCATION OF POWER POLES, VAULTS, PEDESTALS, MANHOLES, ETC. TO AVOID CONFLICT WITH PROPOSED UTILITY STRUCTURES, FIRE HYDRANTS, METERS, SEWER OR STORM LATERALS, ETC.
120. ALL FRANCHISE UTILITY STRUCTURES (VAULTS, PEDESTALS, LIGHT POLES, ETC.) SHALL BE SET A MINIMUM OF 1 FOOT FROM ANY PROPERTY CORNER OR SURVEY MONUMENT.

AMERICANS WITH DISABILITIES ACT (ADA) NOTES

1. CONTRACTORS SHALL EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA ACCESSIBLE COMPONENTS ON THE PROJECT, THE ADA COMPONENTS MUST COMPLY WITH ALL LOCAL, STATE, AND FEDERAL ACCESSIBILITY RULES, CODES, AND REGULATIONS.
2. FINISHED SURFACES ALONG THE ACCESSIBLE PATH OF TRAVEL FROM PARKING STALLS, PUBLIC TRANSPORTATION, AND PEDESTRIAN ACCESSWAYS TO THE POINT(S) OF ACCESSIBLE BUILDING INGRESS AND EGRESS SHALL COMPLY WITH ADA CODE REQUIREMENTS.
3. PARKING SPACE AND AISLE SLOPE SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
4. CURB RAMP SLOPE SHALL NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.
5. LANDINGS SHALL BE PROVIDED AT EACH END OF RAMPS, SHALL HAVE POSITIVE DRAINAGE, AND SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
6. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE SHALL PROVIDE A MINIMUM OF 36 INCH UNOBSTRUCTED WIDTH OF TRAVEL. THE SLOPE SHALL BE NO GREATER THAN 1:20 (5.0% OR 5/8" PER FOOT) IN THE DIRECTION OF TRAVEL, AND SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), AN ACCESSIBLE RAMP WITH A MAXIMUM SLOPE OF 1:12 (8.3%) FOR A MAXIMUM DISTANCE OF 30 FEET SHALL BE PROVIDED INCLUDING HANDRAILS. THE RAMP SHALL HAVE ACCESSIBLE HAND RAILS AND LANDINGS ON EACH END WITH A SLOPE IN ANY DIRECTION NOT EXCEEDING 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%).
7. DOORWAYS SHALL HAVE A LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA SHALL BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ACCESSIBILITY STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS AND APPROVED BY THE OWNER'S REPRESENTATIVE.

ARCHITECTURAL REVIEW SET

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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

GENERAL CIVIL NOTES

DESIGNED BY: RCW
DRAWN BY: RCC
CHECKED BY: JMP
SCALE: AS NOTED
DATE: JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER 54868PE OREGON JACK ... POISSANT
EXPIRES: DEC. 31, 2014
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER 3812

SHEET C001

AKS DRAWING FILE: 3812 C001 NOTES.DWG | LAYOUT: C001

EXISTING STORM STRUCTURES

10593 EX STM MH
RIM: 162.09
IE IN: 158.65 (4"SW)
IE IN: 154.61 (10"SW)
IE OUT: 154.57 (10"NE)

10594 EX STM CB
RIM: 162.70
IE OUT: 161.10 (4"NE)
SUMP: 160.4±

10610 EX STM CB
RIM: 144.13
IE OUT: 143.03 (4"NE)
SUMP: 142.8±

10611 EX STM MH
RIM: 143.80
IE IN: 140.03 (4"SW)
IE IN: 139.01 (4"E)
IE IN: 136.12 (10"SW)
IE OUT: 135.30 (12"NE)

20403 EX STM MH
RIM: 182.96
IE FL: 175.86 (8"NE/SW)

20412 EX STM CB
RIM: 176.53
IE OUT: 174.77 (4"W)
SUMP: 174.33

20413 EX STM CB
RIM: 176.47
IE OUT: 174.62 (4"NE)
SUMP: 174.37

20414 EX STM MH
RIM: 180.46
IE IN: 175.36 (6"S)
IE OUT: 175.13 (8"N)

21216 EX STM MH
RIM: 119.02
IE IN: 109.02 (10"S)
IE OUT: 106.52 (10"N)
SUMP: 105.22

21424 EX STM CB
RIM: 185.32
IE OUT: 181.22 (12"NE)
SUMP: 181.12

21425 EX STM CB
RIM: 184.87
IE IN: 181.17 (12"SW)
IE OUT: 180.97 (12"NE)
SUMP: 180.87

21426 EX STM CB
RIM: 184.85
IE IN: 181.15 (12"NE)
IE IN: 181.05 (12"SW)
IE OUT: 180.85 (12"SE)
SUMP: 180.85

21427 EX STM AD
RIM: 184.32
IE IN: 181.02 (12"SE)
IE OUT: 181.12 (12"NE)
SUMP: 181.02

21428 EX STM CB
RIM: 184.90
IE OUT: 180.95 (12"SW)
SUMP: 180.90

21508 EX STM AD
RIM: 183.90
IE OUT: 181.77 (12"SW)
SUMP: 181.60

21530 EX STM CB
RIM: 186.32
IE IN: 182.49 (12"NW)
IE OUT: 182.34 (12"SE)
SUMP: 182.38

21537 EX STM AD
RIM: 185.39
IE OUT: 182.44 (12"SE)
SUMP: 182.17

21580 EX STM MH
RIM: 183.33

21605 EX STM MH
RIM: 183.80

21634 EX STM CB
RIM: 186.29
IE OUT: 184.84 (12"NE)
SUMP: 184.59

21670 EX STM MH
RIM: 183.05
IE IN: 180.35 (12"NW)
IE IN: 180.10 (6"SSW)
IE IN: 175.76 (18"SW)
IE OUT: 175.56 (18"NE)

21773 EX STM MH
RIM: 176.50
IE IN: 171.37 (4"E)
IE IN: 171.34 (4"SW)
IE FL: 167.95 (8"N/S)

EXISTING SANITARY STRUCTURES

21186 EX SAN MH
RIM: 123.25
UNABLE TO DIP, HAS A SCREEN DOWN 8.0';CONE IS UP 8.0± FROM GROUND

21539 EX SAN MH
RIM: 186.03
IE IN: 171.81 (27"SE)
IE OUT: 171.86 (27"NW)

21574 EX SAN MH
RIM: 185.12

21581 EX SAN MH
RIM: 184.65

21606 EX SAN MH
RIM: 186.75

21766 EX SAN MH
RIM: 125.42
IE IN: 109.54 (8"SE)
POSSIBLE STUB, NO FLOW
IE IN: 108.52 (27"SW)
IE OUT: 108.37 (27"NE)

21767 EX SAN MH
RIM: 123.52
IE IN: 114.45 (8"SE)
IE IN: 113.12 (27"SW)
IE OUT: 113.02 (27"NE)

21768 EX SAN MH
RIM: 123.68
IE IN: 118.39 (8"SE)
PLUGGED
IE OUT: 118.08 (8"NW)
NO FLOW IN MH

21769 EX SAN MH
RIM: 127.62
IE IN: 115.27 (18"SE)
IE OUT: 115.12 (27"NE)

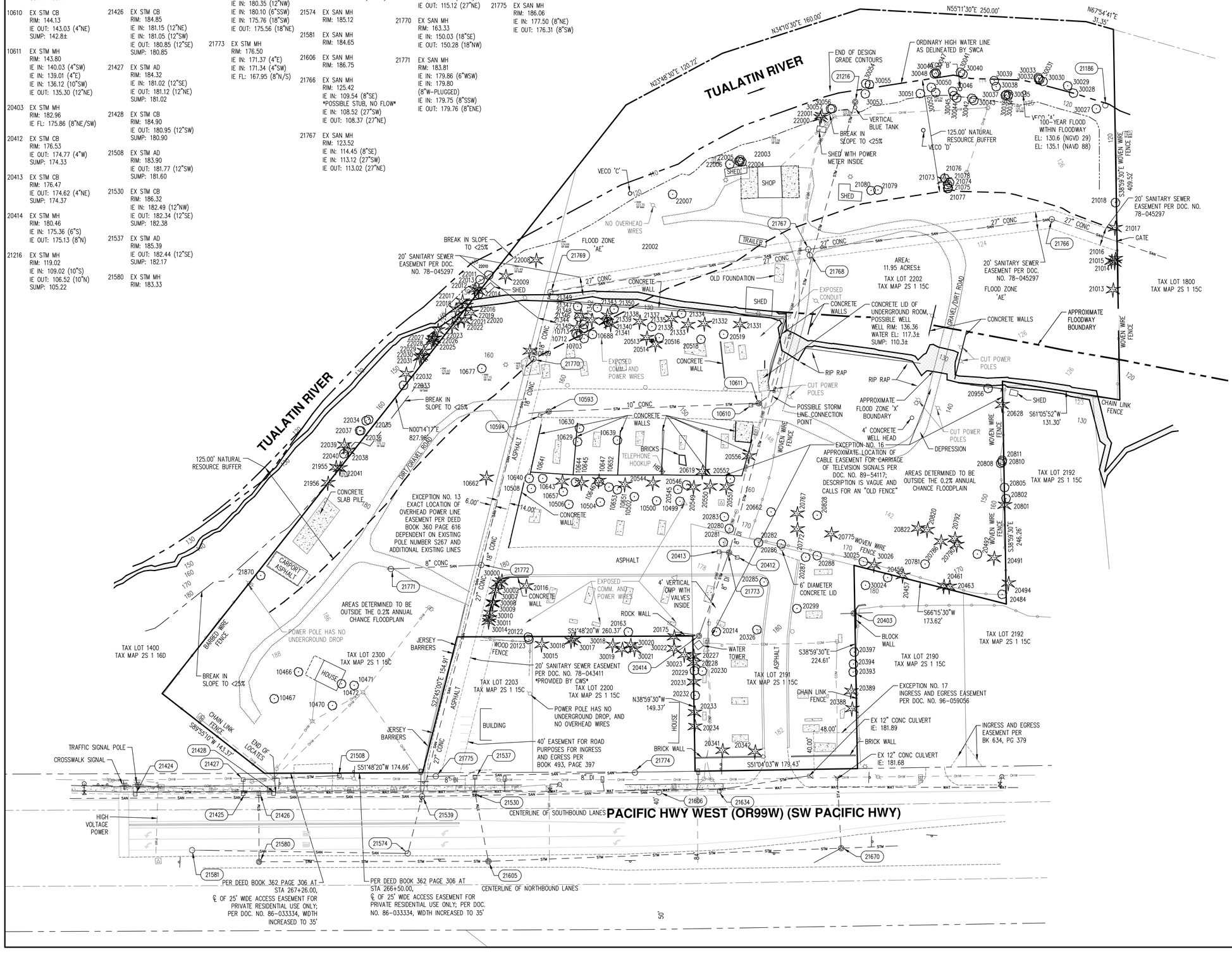
21770 EX SAN MH
RIM: 163.33
IE IN: 150.03 (18"SE)
IE OUT: 150.28 (18"NW)

21771 EX SAN MH
RIM: 183.81
IE IN: 179.86 (6"WSW)
IE IN: 179.80
(8"W-PLUGGED)
IE IN: 179.75 (8"SSW)
IE OUT: 179.76 (8"ENE)

21772 EX SAN MH
RIM: 179.80
IE IN: 172.42 (8"SW)
IE IN: 171.24 (27"SE)
IE OUT: 170.90 (18"NW)

21774 EX SAN MH
RIM: 188.15
IE OUT: 182.06 (8"SW)

21775 EX SAN MH
RIM: 186.06
IE IN: 177.50 (8"NE)
IE OUT: 176.31 (8"SW)



SCALE 1" = 50 FEET

50 0 20 30 40 50

NOTES:

1. UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBERS 14002849, 14007613, AND 14014083. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
2. FIELD WORK WAS CONDUCTED NOVEMBER 4–8, 2013, JANUARY 8–15 AND JANUARY 23, 2014.
3. VERTICAL DATUM: ELEVATIONS ARE BASED ON WASHINGTON COUNTY BENCHMARK NO. 348, A BRASS DISK SET IN CONCRETE AT THE NORTHEAST CORNER OF THE HIGHWAY 99W SOUTHBOUND LANES OVER THE TUALATIN RIVER. WITH A NGVD 29 ELEVATION OF 139.829 FEET.
4. THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY TO BE RECORDED.
5. SURVEY IS ONLY VALID WITH SURVEYOR'S STAMP AND SIGNATURE.
6. BUILDING FOOTPRINTS ARE MEASURED TO SIDING UNLESS NOTED OTHERWISE.
7. CONTOUR INTERVAL IS 1 FOOT.
8. ONLY TREES HAVING A DIAMETER OF 8" AND GREATER, MEASURED AT BREAST HEIGHT, FALLING OUTSIDE OF THE NATURAL RESOURCE BUFFER WERE SURVEYED AT THIS TIME; AND TREES HAVING A DIAMETER OF 6" AND GREATER, MEASURED AT BREAST HEIGHT FALLING BETWEEN THE BREAK IN SLOPE <25% AND THE NATURAL RESOURCE BUFFER WERE SURVEYED AT THIS TIME.
9. THE FLOOD ZONE BOUNDARIES AND FLOODWAY ARE PER THE PROPOSED WASHINGTON COUNTY FEMA MAP AND IS PER A GIS OVERLAY AND A SHAPE FILE AS PROVIDED BY THE OREGON DLCD WHICH IS WHAT THE CITY OF TUALATIN IS HOLDING AS THEIR BEST AVAILABLE STUDY. THE 100-YEAR FLOOD ELEVATION WITHIN ZONE 'AE' AS SHOWN IS PER THE PRELIMINARY FLOOD INSURANCE STUDY THAT ACCOMPANIES THE PROPOSED WASHINGTON COUNTY FEMA MAP. THE HORIZONTAL ACCURACY IS SUBJECT TO THE ACCURACY OF GIS AND OVERLAYS AND COULD VARY 10–20 FEET.

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TUALATIN APARTMENTS (ESPEDAL PROPERTY)

TUALATIN OREGON

EXISTING CONDITIONS PLAN

DESIGNED BY:	
DRAWN BY:	MSK
CHECKED BY:	RDR
SCALE:	AS NOTED
DATE:	05/03/2014

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JANUARY 11, 2005
ROBERT D. RETTIG
50124LS
RENEWS: 12/31/14

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C002

AKS DRAWING FILE: 3812 C002 EXISDWG | LAYOUT: C002

Detailed Tree Inventory for Espedal Property

AKS JOB NO. 3812

AKS Survey Reference #	Total DBH (In)	Tree Species common name *(Scientific name)*	Basal Area (sq. feet)	Condition/Comments	Hazard Rating 1-4*	Reason for Removal	Wind-throw Rating**
10466	42	poplar *(Populus spp.)*	9.62	Decay, Large Scars, Some Dead, Declining	3	HAZARD	C
10467	51	bigleaf maple *(Acer macrophyllum)*	14.19	Burls, Kankers, Some Dead, Decay, Declining	3	HAZARD	C
10470	24	Pacific yew *(Taxus brevifolia)*	3.14	Scars, OK	2	CONSTR	B
10471	16	birch *(Betula spp.)*	1.40	Near Power Lines, OK	2	CONSTR	B
10472	32	elm *(Ulmus spp.)*	5.58	Codominant, Includes Bark, Heavy Limb	2	CONSTR	B
10499	21	sweetgum *(Liquidambar styraciflua)*	2.41	Ivy, OK	2	CONSTR	B
10500	21	sweetgum *(Liquidambar styraciflua)*	2.41	Ivy, OK	2	CONSTR	B
10502	16	bigleaf maple *(Acer macrophyllum)*	1.40	Codominant, Ivy, OK	2	CONSTR	B
10504	20	cherry *(Prunus spp.)*	2.18	Codominant, Ivy, OK	2	CONSTR	B
10506	9	cherry *(Prunus spp.)*	0.44	Ivy, OK	2	CONSTR	B
10508	26	sweetgum *(Liquidambar styraciflua)*	3.69	Codominant, Includes Bark, Ivy, OK	2	CONSTR	B
10629	13	maple *(Acer spp.)*	0.92	OK	2	CONSTR	B
10630	13	maple *(Acer spp.)*	0.92	Codominant, Included Bark, Poor Root Area, OK	2	CONSTR	B
10639	14	cherry *(Prunus spp.)*	1.07	Codominant, Some Dead, OK	2	CONSTR	B
10640	11	cherry *(Prunus spp.)*	0.66	slight lean, OK	1	CONSTR	A
10641	20	cherry *(Prunus spp.)*	2.18	Codominant, Ivy, OK	2	CONSTR	B
10643	21	spruce *(Picea spp.)*	2.41	OK	2	CONSTR	B
10644	18	cherry *(Prunus spp.)*	1.77	Codominant, Lean, OK	2	CONSTR	B
10645	14	spruce *(Picea spp.)*	1.07	Dead Limbs, Multiple Tops, Pitch, Ivy	3	HAZARD	C
10646	26	bigleaf maple *(Acer macrophyllum)*	3.69	Codominant, OK	2	CONSTR	B
10647	14	spruce *(Picea spp.)*	1.07	Broken Top, Multiple Leaders	2	CONSTR	B
10651	17	spruce *(Picea spp.)*	1.58	Two Tops, OK	2	CONSTR	B
10652	19	bigleaf maple *(Acer macrophyllum)*	1.97	Codominant, Ivy,OK	2	CONSTR	B
10653	23	bigleaf maple *(Acer macrophyllum)*	2.89	Codominant, OK	2	CONSTR	B
10657	9	cherry *(Prunus spp.)*	0.44	Codominant, OK	2	CONSTR	B
10662	8	Douglas-fir *(Pseudotsuga menziesii)*	0.35	OK	1	N/A	A
10669	20	Douglas-fir *(Pseudotsuga menziesii)*	2.18	On slope, Healthy	2	N/A	B
10677	7	bigleaf maple *(Acer macrophyllum)*	0.27	OK	1	CONSTR	A
10688	7	bigleaf maple *(Acer macrophyllum)*	0.27	OK	1	CONSTR	A
10703	13	bigleaf maple *(Acer macrophyllum)*	0.92	Burls, Leans, OK	2	CONSTR	B
10712	15	sweetgum *(Liquidambar styraciflua)*	1.23	Ivy, OK	2	CONSTR	B
10713	8	bigleaf maple *(Acer macrophyllum)*	0.35	Leans	1	CONSTR	A
20116	25	lodgepole pine *(Pinus contorta)*	3.41	Deformed Stem, Scars, Crooked, OK	2	CONSTR	B
20122	10	willow *(Salix spp.)*	0.55	Slight lean, OK	2	N/A	B
20123	9	willow *(Salix spp.)*	0.44	Leans, OK	2	N/A	B
20163	15	cherry *(Prunus spp.)*	1.23	Codominant, Leans, Ivy, Suppressed	3	HAZARD	C
20175	31	cedar *(Cedrus spp.)*	5.24	Large Scars,Undermined Roots, OK	2	N/A	B
20214	11	plum *(Prunus spp.)*	0.66	Codominant, Heavy Decay, Declining	3	HAZARD	C
20227	27	Douglas-fir *(Pseudotsuga menziesii)*	3.98	OK	2	N/A	B
20228	26	Douglas-fir *(Pseudotsuga menziesii)*	3.69	OK	2	N/A	B
20229	10	sweetgum *(Liquidambar styraciflua)*	0.55	Suppressed	1	CONSTR	A
20230	17	cherry *(Prunus spp.)*	1.58	Codominant, Includes Bark, Leans	2	N/A	B
20231	32	Douglas-fir *(Pseudotsuga menziesii)*	5.58	Healthy	2	N/A	B
20232	15	sweetgum *(Liquidambar styraciflua)*	1.23	Suppressed	2	CONSTR	B
20233	30	Douglas-fir *(Pseudotsuga menziesii)*	4.91	Crooked, OK	2	N/A	B
20234	32	Douglas-fir *(Pseudotsuga menziesii)*	5.58	Healthy	2	N/A	B
20280	37	bigleaf maple *(Acer macrophyllum)*	7.47	Codominant, Multiple Stems, Ivy, OK	2	CONSTR	B
20281	15	plum *(Prunus spp.)*	1.23	Codominant, OK	1	CONSTR	A
20282	17	cherry *(Prunus spp.)*	1.58	Codominant, Ivy, OK	2	CONSTR	B
20283	24	bigleaf maple *(Acer macrophyllum)*	3.14	Codominant, Slight Lean, Ivy, Steep Slope, OK	2	CONSTR	B
20285	15	plum *(Prunus spp.)*	1.23	Codominant	2	CONSTR	B
20286	15	bigleaf maple *(Acer macrophyllum)*	1.23	Multiple Stems, OK	1	CONSTR	A
20287	19	sweetgum *(Liquidambar styraciflua)*	1.97	Heavy Limb, OK	2	CONSTR	B
20288	13	magnolia *(Disambiguation)*	0.92	OK	1	CONSTR	A
20299	23	cherry *(Prunus spp.)*	2.89	Codominant, Decay, Declining	3	HAZARD	C
20326	21	cherry *(Prunus spp.)*	2.41	Codominant, Kankers, OK	2	CONSTR	B
20341	8	lodgepole pine *(Pinus contorta)*	0.35	Pitch, OK	1	CONSTR	A
20342	32	Douglas-fir *(Pseudotsuga menziesii)*	5.58	Codominant, Pitch, Deformed Bole, Pruning Scars, OK	2	CONSTR	B
20388	26	Douglas-fir *(Pseudotsuga menziesii)*	3.69	Crooked, OK	2	CONSTR	B
20389	28	Douglas-fir *(Pseudotsuga menziesii)*	4.28	Deformed Stem, OK	2	CONSTR	B
20393	14	cherry *(Prunus spp.)*	1.07	OK	2	CONSTR	B
20394	8	cherry *(Prunus spp.)*	0.35	Codominant, OK	1	CONSTR	A
20397	11	cherry *(Prunus spp.)*	0.66	Codominant, Slight Lean, Pruning Scars	1	CONSTR	A
20456	25	bigleaf maple *(Acer macrophyllum)*	3.41	Codominant, Decay, Scars, Multiple Stems, Some Dead	3	N/A	C
20457	27	Douglas-fir *(Pseudotsuga menziesii)*	3.98	Ivy, OK	2	N/A	B
20461	24	Douglas-fir *(Pseudotsuga menziesii)*	3.14	Healthy	2	N/A	B
20463	25	Douglas-fir *(Pseudotsuga menziesii)*	3.41	Healthy	2	N/A	B
20484	11	bigleaf maple *(Acer macrophyllum)*	0.66	OK	2	N/A	B
20491	13	Douglas-fir *(Pseudotsuga menziesii)*	0.92	Crooked, OK	1	N/A	A
20492	10	hazelnut *(Corylus avellana)*	0.55	Sweep, Multiple Tops, Crooked, OK	1	CONSTR	A
20494	22	Douglas-fir *(Pseudotsuga menziesii)*	2.64	Broken Top, Deformed Stem	3	N/A	C
20513	23	Douglas-fir *(Pseudotsuga menziesii)*	2.89	Slight Lean, Ivy, OK	2	CONSTR	B
20514	25	Douglas-fir *(Pseudotsuga menziesii)*	3.41	Slight Lean, OK	2	CONSTR	B
20516	11	red alder *(Alnus rubra)*	0.66	Codominant, OK	1	CONSTR	A
20518	16	sweetgum *(Liquidambar styraciflua)*	1.40	OK	2	CONSTR	B
20519	10	Oregon white oak *(Quercus garryana)*	0.55	Multiple Tops, Some Dead, Ivy, Declining	2	CONSTR	B
20544	20	spruce *(Picea spp.)*	2.18	Two Tops, OK	2	CONSTR	B
20545	25	bigleaf maple *(Acer macrophyllum)*	3.41	Multiple Stems, Leans, Ivy, OK	2	CONSTR	B
20546	11	bigleaf maple *(Acer macrophyllum)*	0.66	OK	1	CONSTR	A
20549	20	spruce *(Picea spp.)*	2.18	Two Tops, OK	2	CONSTR	B
20550	20	spruce *(Picea spp.)*	2.18	Two Tops, OK	2	CONSTR	B
20551	16	spruce *(Picea spp.)*	1.40	Multiple Tops, Previously Broken Top, Pitch	3	HAZARD	C
20552	22	bigleaf maple *(Acer macrophyllum)*	2.64	Codominant, OK	2	CONSTR	B
20556	15	white fir *(Abies concolor)*	1.23	Ivy, Healthy	1	CONSTR	A
20619	12	spruce *(Picea spp.)*	0.79	Healthy	1	CONSTR	A
20628	36	Douglas-fir *(Pseudotsuga menziesii)*	7.07	Fence Grown In, On Slope, Crooked, Some Pitch, OK	2	CONSTR	B
20662	10	bigleaf maple *(Acer macrophyllum)*	0.55	Codominant, OK	1	CONSTR	A
20767	9	Douglas-fir *(Pseudotsuga menziesii)*	0.44	Sucker Stem, OK	1	CONSTR	A
20772	8	Douglas-fir *(Pseudotsuga menziesii)*	0.35	Crooked, OK	1	CONSTR	A
20775	9	Douglas-fir *(Pseudotsuga menziesii)*	0.44	Ivy, Healthy	1	CONSTR	A
20781	10	bigleaf maple *(Acer macrophyllum)*	0.55	Sweep, OK	1	N/A	A
20786	11	Douglas-fir *(Pseudotsuga menziesii)*	0.66	Codominant, Slight Lean, OK	2	CONSTR	B
20790	8	Douglas-fir *(Pseudotsuga menziesii)*	0.35	Healthy	1	CONSTR	A
20792	10	Douglas-fir *(Pseudotsuga menziesii)*	0.55	Healthy	1	CONSTR	A
20801	22	Douglas-fir *(Pseudotsuga menziesii)*	2.64	Decay in Base, Slight Lean	3	N/A	C
20802	17	bigleaf maple *(Acer macrophyllum)*	1.58	Codominant, Leans, OK	2	N/A	B
20805	9	bigleaf maple *(Acer macrophyllum)*	0.44	Slight Lean, OK	1	N/A	A
20808	30	bigleaf maple *(Acer macrophyllum)*	4.91	Codominant, Some Dead, Ivy, OK	2	N/A	B
20810	9	bigleaf maple *(Acer macrophyllum)*	0.44	Leans, OK	2	N/A	B
20811	12	bigleaf maple *(Acer macrophyllum)*	0.79	Leans, OK	2	N/A	B
20820	13	Douglas-fir *(Pseudotsuga menziesii)*	0.92	Healthy	1	CONSTR	A
20822	15	Douglas-fir *(Pseudotsuga menziesii)*	1.23	Healthy	2	CONSTR	B
20828	14	bigleaf maple *(Acer macrophyllum)*	1.07	Codominant, OK	1	CONSTR	A
20956	20	willow *(Salix spp.)*	2.18	Heavy Limb Some Dead, OK	2	CONSTR	B
21013	40	redwood *(Sequoia sempervirens)*	8.73	Pruned on one Side, OK	2	CONSTR	B
21014	47	redwood *(Sequoia sempervirens)*	12.05	Deformed Stem, Topped, Pruning Scars	3	HAZARD	C
21015	14	redwood *(Sequoia sempervirens)*	1.07	Suppressed, OK	2	CONSTR	B
21016	8	redwood *(Sequoia sempervirens)*	0.35	OK	1	CONSTR	A
21017	24	redwood *(Sequoia sempervirens)*	3.14	Butt Swell, Healthy	2	CONSTR	B
21018	8	willow *(Salix spp.)*	0.35	Codominant, multiple stems, OK	1	N/A	A
21073	16	western redcedar *(Thuja plicata)*	1.40	Heavy decay, large scars, Declining	4	HAZARD	C
21074	6	bigleaf maple *(Acer macrophyllum)*	0.20	OK	1	CONSTR	A
21075	6	bigleaf maple *(Acer macrophyllum)*	0.20	OK	1	CONSTR	A
21076	8	bigleaf maple *(Acer macrophyllum)*	0.35	Codominant, multiple stems, OK	1	CONSTR	A
21077	7	bigleaf maple *(Acer macrophyllum)*	0.27	OK	1	CONSTR	A
21078	6	bigleaf maple *(Acer macrophyllum)*	0.20	OK	1	CONSTR	A
21079	24	bigleaf maple *(Acer macrophyllum)*	3.14	Decay, broken top, Declining	3	HAZARD	B
21080	32	bigleaf maple *(Acer macrophyllum)*	5.58	Codominant, some dead, hanging limb, leans, scars	2	CONSTR	B
21331	12	blue spruce *(Picea pungens)*	0.79	Healthy	1	CONSTR	A
21332	13	lodgepole pine *(Pinus contorta)*	0.92	Ivy, Declining	2	CONSTR	B
21333	16	spruce *(Picea spp.)*	1.40	Ivy, OK	2	CONSTR	B
21334	11	cherry *(Prunus spp.)*	0.66	Lenas, Ivy, OK	2	CONSTR	B
21335	16	spruce *(Picea spp.)*	1.40	Ivy, OK	2	CONSTR	B
21336	25	poplar *(Populus spp.)*	3.41	Codominant, included bark, some dead, multiple stems	3	HAZARD	B
21337	16	spruce *(Picea spp.)*	1.40	Broken Top, Declining	2	CONSTR	B
21338	23	Douglas-fir *(Pseudotsuga menziesii)*	2.89	Ivy, OK	2	CONSTR	B
21339	12	spruce *(Picea spp.)*	0.79	Crooked, Ivy, OK	2	CONSTR	B
21340	11	red alder *(Alnus rubra)*	0.66	Slight Lean, OK	2	CONSTR	B
21341	16	spruce *(Picea spp.)*	1.40	Slight Lean, Crooked Top, Ivy, OK	2	CONSTR	B
21342	16	spruce *(Picea spp.)*	1.40	Slgiht lean, OK	2	CONSTR	B
21343	7	cherry *(Prunus spp.)*	0.27	Ivy	2	CONSTR	B
21344	16	red alder *(Alnus rubra)*	1.40	Ivy, OK	2	CONSTR	B
21345	15	spruce *(Picea spp.)*	1.23	Slight lean, ivy, OK	2	CONSTR	B
21346	11	maple *(Acer spp.)*	0.66	Slight photometric lean, OK	2	CONSTR	B
21347	11	spruce *(Picea spp.)*	0.66	OK	2	CONSTR	B
21348	16	maple *(Acer spp.)*	1.40	Codominant, slight lean, OK	2	CONSTR	B
21349	13	cherry *(Prunus spp.)*	0.92	Codominant, sligh tlean, crooked, ivy	3	HAZARD	C
21350	6	maple *(Acer spp.)*	0.20	Leans, OK	2	CONSTR	B
21870	26	Oregon white oak *(Quercus garryana)*	3.69	Slight lean, Healthy	2	N/A	B
21955	17	Douglas-fir *(Pseudotsuga menziesii)*	1.58	Self-corrected lean, cooked, no roots on downhill side	2	N/A	B
21956	37	Douglas-fir *(Pseudotsuga menziesii)*	7.47	No roots on downhill side	2	N/A	B
22000	38	Douglas-fir *(Pseudotsuga menziesii)*	7.88	Slight lean, OK	2	N/A	B
22001	17	western redcedar *(Thuja plicata)*	1.58	Crowded, OK	2	N/A	B
22002	23	bigleaf maple *(Acer macrophyllum)*	2.89	Scars, OK	2	N/A	B
22003	7	bigleaf maple *(Acer macrophyllum)*	0.27	Broken top, OK	2	N/A	B
22004	13	bigleaf maple *(Acer macrophyllum)*	0.92	Healthy	2	N/A	B
22005	6	bigleaf maple *(Acer macrophyllum)*	0.20	Decay, leans, OK	2	N/A	B
22006	16	bigleaf maple *(Acer macrophyllum)*	1.40	Codominant, slight lean, OK	2	N/A	B
22007	32	red alder *(Alnus rubra)*	5.58	Codominant, heavy decay, near dead, Hazard	4	HAZARD	C
22008	20	western redcedar *(Thuja plicata)*	2.18	Wire, some dead, thin crown, Declining	3	N/A	C
22009	32	Douglas-fir *(Pseudotsuga menziesii)*	5.58	Sweep, pitch, OK	2	N/A	B
22010	12	bigleaf maple *(Acer macrophyllum)*	0.79	Some dead, undermined roots	3	N/A	C
22011	14	bigleaf maple *(Acer macrophyllum)*	1.07	Slight lean, OK	2	N/A	B
22012	35	Douglas-fir *(Pseudotsuga menziesii)*	6.68	Healthy	2	N/A	B
22013	12	Douglas-fir *(Pseudotsuga menziesii)*	0.79	Deformed stem	2	N/A	B
22014	19	bigleaf maple *(Acer macrophyllum)*	1.97	Broken top, scars, ivy, Declining	3	N/A	B
22016	27	Douglas-fir *(Pseudotsuga menziesii)*	3.98	Healthy	2	N/A	B
22017	12	Douglas-fir *(Pseudotsuga menziesii)*	0.79	Many visible concs, Hazard	4	N/A	C
22018	14	Douglas-fir *(Pseudotsuga menziesii)*	1.07	Slight lean, OK	2	N/A	B
22019	21	western redcedar *(Thuja plicata)*	2.41	Codominant, OK	2	N/A	B
22020	17	Douglas-fir *(Pseudotsuga menziesii)*	1.58	Crowded, OK	2	N/A	B
22021	32	Douglas-fir *(Pseudotsuga menziesii)*	5.58	Self-corrected lean, OK	2	N/A	B
22022	19	Douglas-fir *(Pseudotsuga menziesii)*	1.97	Deformed stem, ivy	2	N/A	B
22023	10	Douglas-fir *(Pseudotsuga menziesii)*	0.55	Suppressed	1	N/A	A
22025	7	Douglas-fir *(Pseudotsuga menziesii)*	0.27	Crooked top, Suppressed	2	N/A	B
22026	6	Douglas-fir *(Pseudotsuga menziesii)*	0.20	Suppressed	1	N/A	A
22027	23	bigleaf maple *(Acer macrophyllum)*	2.89	Codominant, on bank, slight lean	2	N/A	B
22028	18	Douglas-fir *(Pseudotsuga menziesii)*	1.77	OK	2	N/A	B
22029	13	Douglas-fir *(Pseudotsuga menziesii)*	0.92	Sucker stem	2	N/A	B
22030	28	Douglas-fir *(Pseudotsuga menziesii)*	4.28	Healthy	2	N/A	B
22031	13	Douglas-fir *(Pseudotsuga menziesii)*	0.92	Crowded, OK	2	N/A	B
22032	33	Douglas-fir *(Pseudotsuga menziesii)*	5.94	OK	2	N/A	B
22033	18	bigleaf maple *(Acer macrophyllum)*	1.77	Burls, Broken top, OK	2	N/A	B
22034	20	bigleaf maple *(Acer macrophyllum)*	2.18	Burls, OK	2	N/A	B
22035	18	bigleaf maple *(Acer macrophyllum)*	1.77	Dead	4	N/A	C
22036	9	bigleaf maple *(Acer macrophyllum)*	0.44	Codominant, heavy lean, OK	2	N/A	B
22037	6	bigleaf maple *(Acer macrophyllum)*	0.20	Leans, OK	2	N/A	B
22038	31	Douglas-fir *(Pseudotsuga menziesii)*	5.24	No roots on downhill side, self-corrected lean, OK	2	N/A	B
22039	38	Douglas-fir *(Pseudotsuga menziesii)*	7.88	No roots on downhill side, OK	3	N/A	B
22040	33	bigleaf maple *(Acer macrophyllum)*	5.94	No roots on downhill side, OK	3	N/A	B
22041	13	Douglas-fir *(Pseudotsuga menziesii)*	0.92	No roots on downhill side, self-corrected lean, OK	2	N/A	B
30000	11	western redcedar *(Thuja plicata)*	0.66	Codominant, Scars, Decay	3	HAZARD	C
30002	8	western redcedar *(Thuja plicata)*	0.35	Decay, Scars, OK	2	CONSTR	B
30007	10	western redcedar *(Thuja plicata)*	0.55	Codominant, Decay, Large Scars	3	HAZARD	C
30008	9	western redcedar *(Thuja plicata)*	0.44	Codominant, OK	2	CONSTR	B
30009	9	western redcedar *(Thuja plicata)*	0.44	Codominant, OK	2	CONSTR	B
30010	11	western redcedar *(Thuja plicata)*	0.66	Codominant, Scars, OK	2	CONSTR	B
30011	10	western redcedar *(Thuja plicata)*	0.55	Codominant, Decay, Scars, OK	2	CONSTR	B
30014	11	western redcedar *(Thuja plicata)*	0.66	Decay, Large Scar	3	HAZARD	C
30015	68	giant sequoia *(Sequoiadendron giganteum)*	25.22	Healthy	2	N/A	B
30016	25	Douglas-fir *(Pseudotsuga menziesii)*	3.41	Scars, OK	2	N/A	B
30017	19	Douglas-fir *(Pseudotsuga menziesii)*	1.97	OK	2	N/A	B
30018	36	Douglas-fir *(Pseudotsuga menziesii)*	7.07	Puning scars, OK	2	N/A	B
30019	21	Douglas-fir *(Pseudotsuga menziesii)*	2.41	Healthy	2	N/A	B
30020	30	Douglas-fir *(Pseudotsuga menziesii)*	4.91	OK	2	N/A	B
30021	36	Douglas-fir *(Pseudotsuga menziesii)*	7.07	Slight lean, OK	2	N/A	B
30022	30	Douglas-fir *(Pseudotsuga menziesii)*	4.91	Pruning Scars, Pitch, OK	2	N/A	B
30023	54	giant sequoia *(Sequoiadendron giganteum)*	15.90	Slight Lean, OK	2	N/A	B
30024	30	bigleaf maple *(Acer macrophyllum)*	4.91	Codominant, Slight Lean, OK	2	N/A	B
30025	25	bigleaf maple *(Acer macrophyllum)*	3.41	Codominant, Dead Stem, OK	2	CONSTR	B
30026	21	Douglas-fir *(Pseudotsuga menziesii)*	2.41	Crooked Stem, Healthy	2	CONSTR	B
30027	21	red alder *(Alnus rubra)*	2.41	Codominant, slight lean, OK	2	N/A	B
30028	18	bigleaf maple *(Acer macrophyllum)*	1.77	Codominant, OK	1	N/A	A
30029	36	bigleaf maple *(Acer macrophyllum)*	7.07	Codominant, OK	2	N/A	B
30030	29	bigleaf maple *(Acer macrophyllum)*	4.59	Codominant, leans, OK	3	N/A	C
30031	27	bigleaf maple *(Acer macrophyllum)*	3.98	Codominant, multiple stems, decay	3	N/A	C
30032	8	bigleaf maple *(Acer macrophyllum)*	0.35	OK	1	N/A	A
30033	24	bigleaf maple *(Acer macrophyllum)*	3.14	Dead snag, heavy lean	4	N/A	C
30034	13	bigleaf maple *(Acer macrophyllum)*	0.92	Ivy, Crooked, OK	2	N/A	B
30035	7	bigleaf maple *(Acer macrophyllum)*	0.27	OK	1	N/A	A
30036	7	bigleaf maple *(Acer macrophyllum)*	0.27	OK	1	N/A	A
30037	10	bigleaf maple *(Acer macrophyllum)*	0.55	Deformed, ivy, scars	3	N/A	C
30038	12	bigleaf maple *(Acer macrophyllum)*	0.79	Leans, scars	2	N/A	B
30039	37	bigleaf maple *(Acer macrophyllum)*	7.47	Two stems, some dead, OK	2	N/A	B
30040	30	bigleaf maple *(Acer macrophyllum)*	4.91	Scars, OK	2	N/A	B
30041	18	bigleaf maple *(Acer macrophyllum)*	1.77	Healthy	1	N/A	A
30042	11	bigleaf maple *(Acer macrophyllum)*	0.66	Leans	2	N/A	B
30043	12	bigleaf maple *(Acer macrophyllum)*	0.79	Codominant, decay at base	3	N/A	C
30044	7	bigleaf maple *(Acer macrophyllum)*	0.27	OK	1	N/A	A
30045	12	bigleaf maple *(Acer macrophyllum)*	0.79	Healthy	1	N/A	A
30046	7	bigleaf maple *(Acer macrophyllum)*	0.27	OK	1	N/A	A
30047	12	bigleaf maple *(Acer macrophyllum)*	0.79	Slight lean, crooked, OK	2	N/A	B
30048	6	bigleaf maple *(Acer macrophyllum)*	0.20	OK	1	N/A	A
30049	8	bigleaf maple *(Acer macrophyllum)*	0.35	OK	1	N/A	A
30050	8	bigleaf maple *(Acer macrophyllum)*	0.35	Healthy	1	N/A	A
30051	15	bigleaf maple *(Acer macrophyllum)*	1.23	Healthy	1	N/A	A
30052	13	bigleaf maple *(Acer macrophyllum)*	0.92	Healthy	1	N/A	A
30053	29	oregon white oak (Quercus garryana)	4.59	Slight lean, OK	2	N/A	B
30054	18	bigleaf maple *(Acer macrophyllum)*	1.77	Broken top, OK	2	N/A	B
30055	11	bigleaf maple *(Acer macrophyllum)*	0.66	Codominant, OK	2	N/A	B
30056	15	bigleaf maple *(Acer macrophyllum)*	1.23	Scars, OK	2	N/A	B
30057	7	bigleaf maple *(Acer macrophyllum)*	0.27	Broken top, slight lean	2	N/A	B
Totals	4,224		542.61				

Total # of Existing Trees= 232

Total Existing Basal Area (Sq. Ft)= 542.61

HAZARD RATING	****Windthrow Rating:**
1=LOW RISK	A=Most Windthrow Resistant
2=MODERATE RISK	B=Moderate Windthrow Resistance
3=HIGH RISK	C=Least Windthrow Resistant
4=EXTREME RISK	

Tree Root Protection Zone: The tree root protection zone for each tree is a circle with a radius equal to 1 foot per 1 inch DBH.

Arborist Disclosure Statement:
Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the health of trees, and attempt to reducethe risk of living near trees. The Client and Jurisdiction may choose to accept or disregard the recommendations of the arborist, or seek additional advice.
Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand.

CERTIFIED ARBORIST
BRANDT D. THISSELL
CERTIFICATE NUMBER: PN-7391A
EXPIRATION DATE: 06/30/15

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY SALEM, LLC
528 COTTAGE ST NE
SUITE 160
SALEM, OR 97301
PHONE: 503.400.6028
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ENGINEERING · PLANNING · SURVEYING
FORESTRY · LANDSCAPE ARCHITECTURE

RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

TREE INVENTORY TABLE

DESIGNED BY: RCW
DRAWN BY: RCC
CHECKED BY: JMP
SCALE: AS NOTED
DATE: JUNE 11, 2014

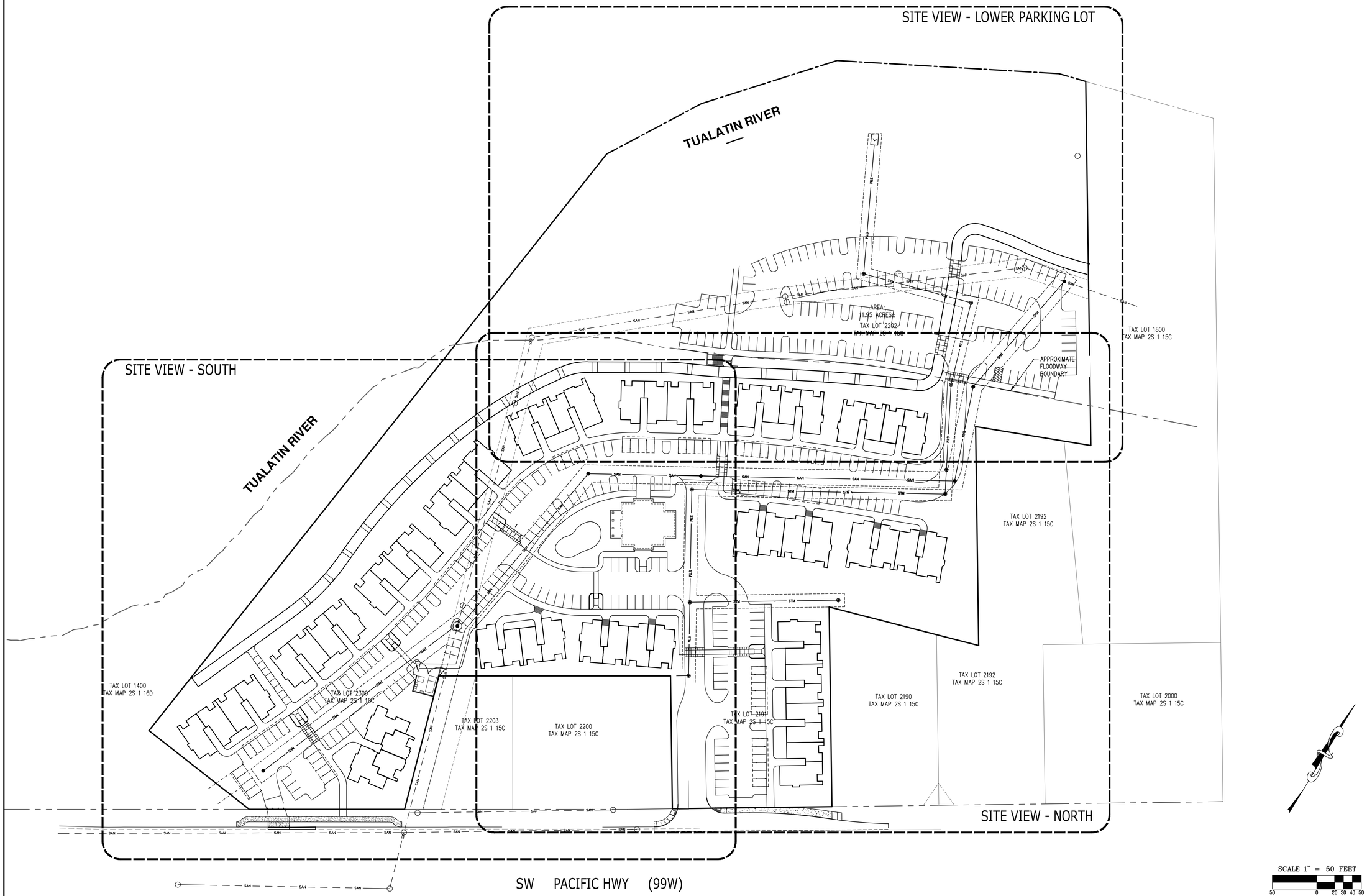
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER 3812

SHEET **C003**

AKS DRAWING FILE: 3812 C003 TREE TABLE.DWG | LAYOUT: C003



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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

KEY PLAN

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

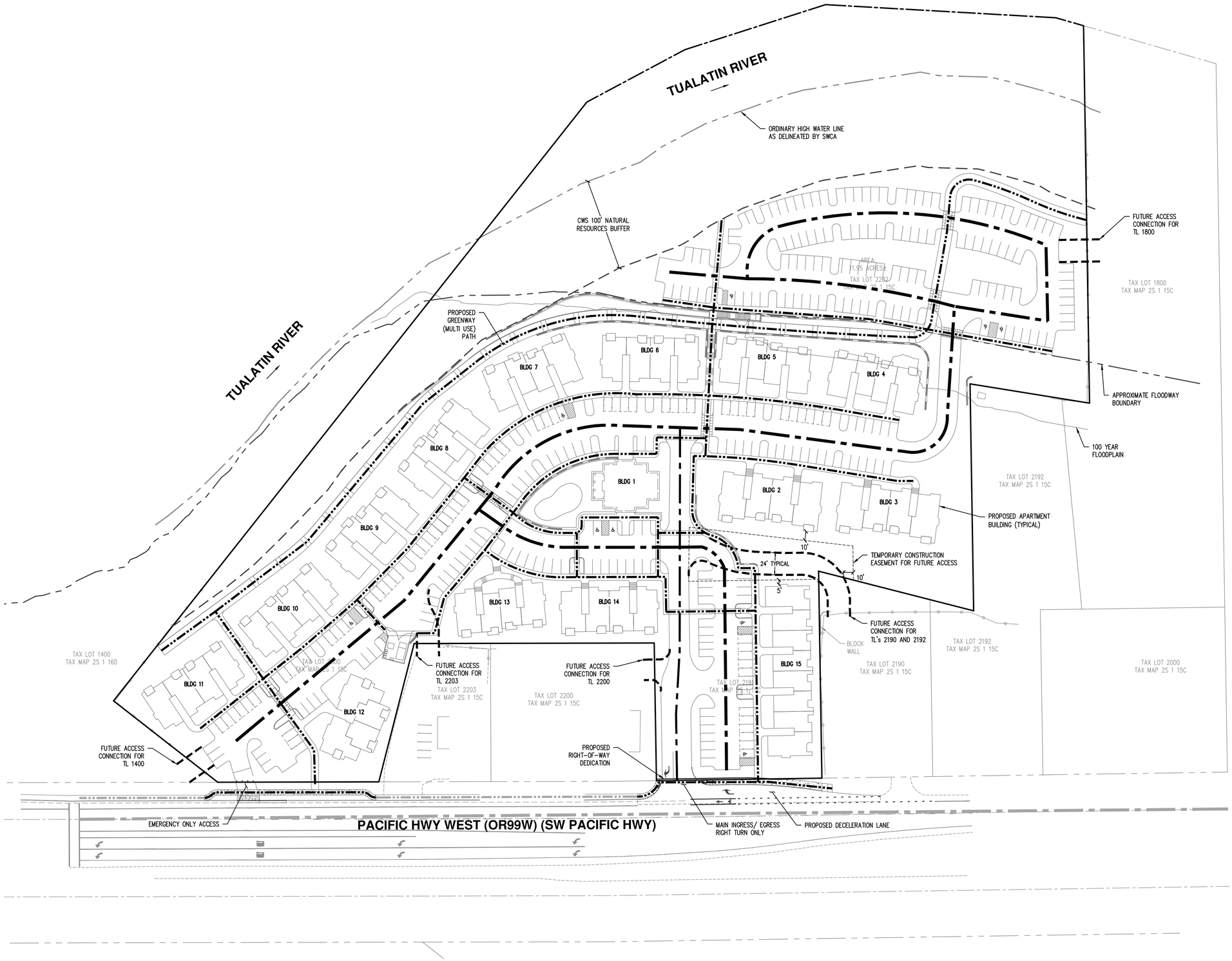
REVISIONS

JOB NUMBER
3812

SHEET
C004

ARCHITECTURAL REVIEW SET

AKS DRAWING FILE: 3812 C004 KEY.DWG | LAYOUT: C004



NOTE:
THIS IS A CONCEPTUAL PLAN INTENDED TO SHOW POTENTIAL FUTURE ACCESS CONNECTIONS FOR ILLUSTRATIVE PURPOSES ONLY. IT SHALL NOT BE BINDING ON THE CITY OR PROPERTY OWNERS, EXCEPT AS MAY BE REQUIRED THROUGH CONDITIONS OF LAND USE APPROVAL.

ARCHITECTURAL REVIEW SET

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RIVER RIDGE APARTMENTS

TUALATIN, OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

PRELIMINARY CIRCULATION PLAN

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 24, 2014

REGISTERED PROFESSIONAL ENGINEER
JACK M. POISSANT
OREGON
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER
3812

SHEET
C005

AKS DRAWING FILE: 3812 C005 CONNECTIVITY.DWG | LAYOUT: C005

EROSION AND SEDIMENT CONTROL PLAN

BMP MATRIX FOR CONSTRUCTION PHASES

REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S.

	CLEARING	MASS GRADING		FINAL STABILIZATION	WET WEATHER (OCT. 1 – MAY 31ST)
EROSION PREVENTION					
PRESERVE NATURAL VEGETATION	X +	X +		X +	X
GROUND COVER				X	X
HYDRAULIC APPLICATIONS					
PLASTIC SHEETING		X		X	X
MATTING		X		X	X
DUST CONTROL	X	X		X	X
TEMPORARY/ PERMANENT SEEDING		X		X	X
BUFFER ZONE	X +	X +		X +	X
OTHER:					
SEDIMENT CONTROL					
SEDIMENT FENCE (PERIMETER)	** X	X		X	X
SEDIMENT FENCE (INTERIOR)		X		X	X
STRAW WATTLES				X	X
FILTER BERM		X		X	X
INLET PROTECTION	** X	X		X	X
DEWATERING					
SEDIMENT TRAP		X		X	X
OTHER:					
RUN OFF CONTROL					
CONSTRUCTION ENTRANCE	** X	X		X	X
PIPE SLOPE DRAIN					
OUTLET PROTECTION					
SURFACE ROUGHENING		X		X	X
CHECK DAMS		X		X	X
OTHER:					
POLLUTION PREVENTION					
PROPER SIGNAGE	** X	X		X	X
HAZ WASTE MGMT	X	X		X	X
SPILL KIT ON-SITE	X	X		X	X
CONCRETE WASHOUT AREA					
OTHER:					

** SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY.

+ CONTRACTOR SHALL MINIMIZE GROUND DISTURBANCE WITHIN THE NATURAL RESOURCE BUFFER AT ALL TIMES.

INSPECTION FREQUENCY		
	SITE CONDITION	MINIMUM FREQUENCY
1.	ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING. AT LEAST ONCE EVERY TWO (2) WEEKS REGARDLESS OF WEATHER STORMWATER RUNOFF IS OCCURRING.
2.	PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3.	INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.	ONCE EVERY TWO (2) WEEKS.
4.	PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.

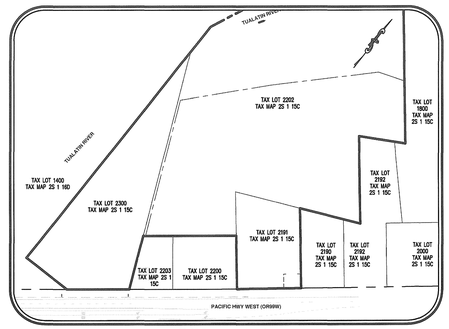
* HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS.
* ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS.
* INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS.
* REVISIONS TO APPROVED ESC PLAN OR INSPECTOR MUST BE SUBMITTED TO DEQ OR AGENT IN ACCORDANCE WITH CURRENT 1200-C PERMIT.

RATIONALE STATEMENT

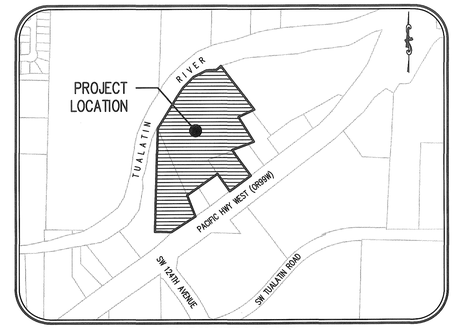
A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEQ's GUIDANCE MANUAL HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMP's WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS, TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.

INITIAL

NOTE:
THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200-C PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200-C PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200-C PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.



SITE MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:

1. ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SCHEDULE A 8.A)
2. THE ESCP MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE MEASURES AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS. (SCHEDULE A.8.C.II.(1)(C))
3. SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT. (SCHEDULE A.12.C.III)
4. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A.8.C.II.(1)(D))
5. IDENTIFY, MARK, AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.C.I.(1) & (2))
6. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.B.II(1) AND A.7.B.III(3))
7. EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED, REPAIRED, AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORMWATER POLLUTION CONTROLS. (SCHEDULE A.7.D.I AND A.8.C)
8. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
9. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS. (SCHEDULE A.8.C.II.(2))
10. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7))
11. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SCHEDULE A 7.D.II.(1) AND A.8.C.I.(4))
12. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.D.II.(3))
13. USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
14. IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCH A 7.E.III.)
15. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A 7.B.II)
16. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.B.III)
17. IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.9.D)
18. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A 7.B)
19. AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A 7.E.II.(2))
20. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER. (SCHEDULE A.7.A.I)
21. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.C.I)
22. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT. AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.II)
23. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III & IV)
24. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.B.I)
25. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SCHEDULE A.9.B.II)
26. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I)
27. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)
28. PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. HOWEVER, DO REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AS EXPOSED AREAS BECOME STABILIZED, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. PROPERLY DISPOSE OF CONSTRUCTION MATERIALS AND WASTE, INCLUDING SEDIMENT RETAINED BY TEMPORARY BMPS. (SCHEDULE A.7.B.III(2) AND A.8.C.III)

LOCAL AGENCY-SPECIFIC EROSION CONTROL NOTES:

1. IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAT SEPTEMBER 1; THE TYPE AND PERCENTAGES OF SEED IN THE MIX MUST BE IDENTIFIED ON THE PLANS.
2. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP I.E. (FILTER BAG).
3. ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD, OCTOBER 01 – MAY 31.

SUPPLEMENTAL ESC NOTES

1. THE IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN INCLUDING CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THE EROSION AND SEDIMENT CONTROL MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY THE LOCAL JURISDICTION AND VEGETATION/LANDSCAPING IS ESTABLISHED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH LOCAL, STATE, OR FEDERAL REGULATIONS.
3. BEGIN LAND CLEARING, EXCAVATION, TRENCHING, CUTTING OR GRADING AFTER INSTALLING APPLICABLE SEDIMENT, EROSION PREVENTION AND RUNOFF CONTROL MEASURES NOT IN THE DIRECT PATH OF WORK.
4. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND ON SLOPES GREATER THAN FIVE (5) PERCENT.
5. CONTRACTOR SHALL USE BIONET SC150BN EROSION CONTROL BLANKETS, OR APPROVED EQUAL, ON SLOPES GREATER THAN 3H:1V. EROSION CONTROL BLANKET AND INSTALLATION METHOD SHALL BE IN ACCORDANCE WITH APPLICABLE JURISDICTIONS AND MANUFACTURER'S RECOMMENDATIONS.
6. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ALONG THE SITE PERIMETER ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE, AND AT ALL ACTIVE AND OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION.
7. PRIOR TO ANY LAND DISTURBING ACTIVITIES EACH SITE MUST HAVE GRAVELED, PAVED, OR CONSTRUCTED ENTRANCES, EXITS AND PARKING AREAS TO REDUCE THE TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS.
8. CONTRACTOR SHALL LOCATE STOCK PILES SUCH THAT POSITIVE SITE DRAINAGE IS MAINTAINED AT ALL TIMES. PONDING AROUND STOCK PILE BASE IS NOT ACCEPTABLE.
9. ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL.
10. THE CONTRACTOR SHALL PROPERLY MANAGE HAZARDOUS WASTES, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION AND MEET ALL STATE AND FEDERAL REGULATIONS AND APPROVALS.
11. VACUUMING OR DRY SWEEPING MUST BE USED TO CLEAN-UP RELEASED SEDIMENT AND MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES.
12. THE CONTRACTOR SHALL PERFORM DAILY INSPECTIONS OF THE EROSION AND SEDIMENT CONTROL MEASURES AND DISCHARGE OUTFALLS.
13. EROSION AND SEDIMENT CONTROL MEASURES AND DISCHARGE OUTFALLS MUST BE INSPECTED BEFORE, DURING, AND AFTER SIGNIFICANT STORM EVENTS.
14. EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED VISUALLY TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN PROPER WORKING ORDER PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY. EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED VISUALLY ONCE EVERY TWO (2) WEEKS DURING INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.
15. IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION DURING PERIODS WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.
16. GROUND SURFACES EXPOSED DURING THE WET SEASON (OCTOBER 1ST THROUGH MAY 31ST) SHALL HAVE TEMPORARY GRASS COVER MEASURES FULLY ESTABLISHED BY OCTOBER 1, OR OTHER COVER MEASURES WILL HAVE TO BE IMPLEMENTED UNTIL ADEQUATE GRASS COVERAGE IS ACHIEVED. TO ESTABLISH AN ADEQUATE GRASS STAND FOR CONTROLLING EROSION BY OCTOBER 1, IT IS RECOMMENDED THAT SEEDING AND MULCHING OCCUR BY SEPTEMBER 1.
17. HYDROMULCH (TACKIFIED WOOD-FIBER MULCH) SHALL BE APPLIED TO THE PROJECT SITE WITH GRASS SEED AT A RATE OF 2000 LB./ACRE. A BONDING AGENT (BONDER) SHALL BE USED ALONG WITH THE HYDROMULCH ON SLOPES STEEPER THAN 10 PERCENT. THE METHODS USED AND APPLICATION RATE WILL BE PER THE SEED SUPPLIER'S RECOMMENDATIONS.
18. DRY, LOOSE, WEED-FREE STRAW, OR GRINDINGS FROM CLEARING OF BRUSH TREES (3" THICK MIN.) USED AS MULCH SHALL BE APPLIED AT DOUBLE THE HYDROMULCH APPLICATION REQUIREMENT (4000 LB./ACRE). ANCHOR STRAW BY WORKING BY HAND OR WITH EQUIPMENT (ROLLERS, CLEAT TRACKS, ETC.). IF THIS IS UTILIZED AS MULCH, IT SHALL BE SPREAD UNIFORMLY IMMEDIATELY FOLLOWING SEEDING.
19. SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:
    - 19.1. DWARF GRASS MIX (MIN. 2.5 LB/1000 SF)
      DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
      CREEPING RED FESCUE (20% BY WEIGHT)
    - 19.2. STANDARD HEIGHT GRASS MIX (MIN. 2.5 LB/1000 SF)
      ANNUAL RYEGRASS (40% BY WEIGHT)
      TURF-TYPE FESCUE (60% BY WEIGHT)
20. SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
21. IN ACCORDANCE WITH SUPPLIER'S RECOMMENDATIONS, CONTRACTOR SHALL ONLY USE NON-PHOSPHOROUS FERTILIZER.
22. SEEDING SHALL BE SUPPLIED WITH ADEQUATE MOISTURE TO ESTABLISH GRASS. SUPPLY WATER AS NEEDED, ESPECIALLY IN UNUSUALLY HOT OR DRY WEATHER CONDITIONS OR ON ADVERSE SITES. WATER APPLICATION RATES SHOULD BE CONTROLLED TO PROVIDE ADEQUATE MOISTURE WITHOUT CAUSING RUNOFF.
23. AREAS WHICH FAIL TO ESTABLISH GRASS COVER ADEQUATE TO PREVENT EROSION SHALL BE RESEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED, AND ALL APPROPRIATE MEASURES SHALL BE TAKEN TO ESTABLISH ADEQUATE COVER.
24. SEED MIX SHALL BE INSTALLED ON EXPOSED SOIL AREAS ONCE GRADING ACTIVITY HAS BEEN COMPLETED ON EACH PORTION OF THE SITE PRIOR TO PROCEEDING TO ANOTHER AREA OF THE SITE.
25. CONTRACTOR MAY BE REQUIRED TO RESEED SOME AREAS DUE TO FURTHER DISTURBANCE AFTER PLANT MATERIAL HAS BEEN INSTALLED ON EXPOSED SOIL AREAS. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A FULL STAND OF GRASS PRIOR TO FINAL APPROVAL.
26. CONTRACTOR SHALL WATER OR USE A SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL.

APPLICANT

MOUNTAIN WEST INVESTMENT CORPORATION
CONTACT: BRIAN MOORE
201 FERRY STREET SE
SALEM, OREGON 97301
PH: 503-851-4654
FAX: 503-581-7061

ENGINEERING / SURVEYING FIRM

COMPANY: AKS ENGINEERING & FORESTRY
CONTACT: J. MICHAEL POISSANT, PE
ADDRESS: 528 COTTAGE ST. NE, SUITE 160
SALEM, OR 97301
PHONE: 503-400-6028
FAX: 503-400-7222

NARRATIVE DESCRIPTIONS

EXISTING SITE CONDITIONS
* RESIDENTIAL IMPROVEMENTS (HOUSE, BARN, SHEDS, ROADS, ETC.)

NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE
* CLEARING: JULY
* MASS GRADING: JULY
* MASS GRADING FINAL STABILIZATION: SEPTEMBER-OCTOBER

TOTAL SITE AREA = 10.8 ACRES

TOTAL DISTURBED AREA = 8.6 ACRES

SITE SOIL CLASSIFICATION:
CHEHALIS SILT LOAM, 0 TO 3 PERCENT SLOPES
HILLSBORO LOAM, 3 TO 7 PERCENT SLOPES
XEROCHREPTS AND HAPLOXEROLLS, VERY STEEP

ON-SITE SOILS HAVE A MODERATE TO HIGH EROSION POTENTIAL. ALL FILL MATERIAL SHALL BE EITHER GRANULAR IMPORT OR GENERATED ON-SITE FROM GRADING EXCAVATION.

RECEIVING WATER BODIES:
NEAREST WATER BODY: TUALATIN RIVER

PROJECT LOCATION:

17865 & 17985 SW PACIFIC HWY,
TUALATIN, OREGON
TAX LOTS 2191, 2202, & 2300
(WASHINGTON COUNTY MAP 23-76) 2S 1 15C
LATITUDE = 45.392°, LONGITUDE = -122.805°

PROPERTY DESCRIPTION:

TAX LOTS 2191, 2202, & 2300 (WASHINGTON COUNTY MAP 23-76) LOCATED IN THE SOUTHWEST 1/4 OF SECTION 15, TOWNSHIP 2 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON

PERMITTEE'S SITE INSPECTOR: J. MICHAEL POISSANT, P.E.

COMPANY/AGENCY: AKS ENGINEERING AND FORESTRY SALEM, LLC
PHONE: 503-400-6028
FAX: 503-400-7722
E-MAIL: MICHAELP@AKS-ENG.COM
DESCRIPTION OF EXPERIENCE: 18 YEARS EXPERIENCE IN SITE DEVELOPMENT DESIGN AND CONSTRUCTION INCLUDING DESIGN, IMPLEMENTATION, AND INSPECTION OF EROSION AND SEDIMENT CONTROL MEASURES.

NOTES:
1. AT LEAST TEN (10) WORKING DAYS PRIOR TO STARTING CONSTRUCTION, CONTRACTOR SHALL IDENTIFY A DEQ CERTIFIED EROSION AND SEDIMENT CONTROL INSPECTOR RETAINED BY THE CONTRACTOR AND SHALL SUBMIT AN "ACTION PLAN" TO DEQ IDENTIFYING THEIR NAME, CONTACT INFORMATION, TRAINING AND EXPERIENCE AS REQUIRED IN SCHEDULE A.6.B.I-II OF THE 1200-C PERMIT.
2. PRIOR TO ANY SITE CLEARING, GRADING OR CONSTRUCTION, A VEGETATED CORRIDOR ENHANCEMENT/RESTORATION PLAN SHALL BE PROVIDED TO THE CITY.

ATTENTION EXCAVATORS:

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

SHEET INDEX
EROSION AND SEDIMENT CONTROL PLANS

C050 EROSION AND SEDIMENT CONTROL COVER SHEET
C051 PRE-CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN
C052 MASS GRADING EROSION AND SEDIMENT CONTROL PLAN
C053 EROSION AND SEDIMENT CONTROL DETAILS
C054 EROSION AND SEDIMENT CONTROL DETAILS

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

EROSION AND SEDIMENT CONTROL COVER SHEET
MASS GRADING

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED

DATE: MARCH 31, 2014

REGISTERED PROFESSIONAL ENGINEER
55486PE
OREGON
SEPT. 25, 2009
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

REVISIONS
1 – CWS COMMENTS 5/13/2014

JOB NUMBER
3812

SHEET
C050

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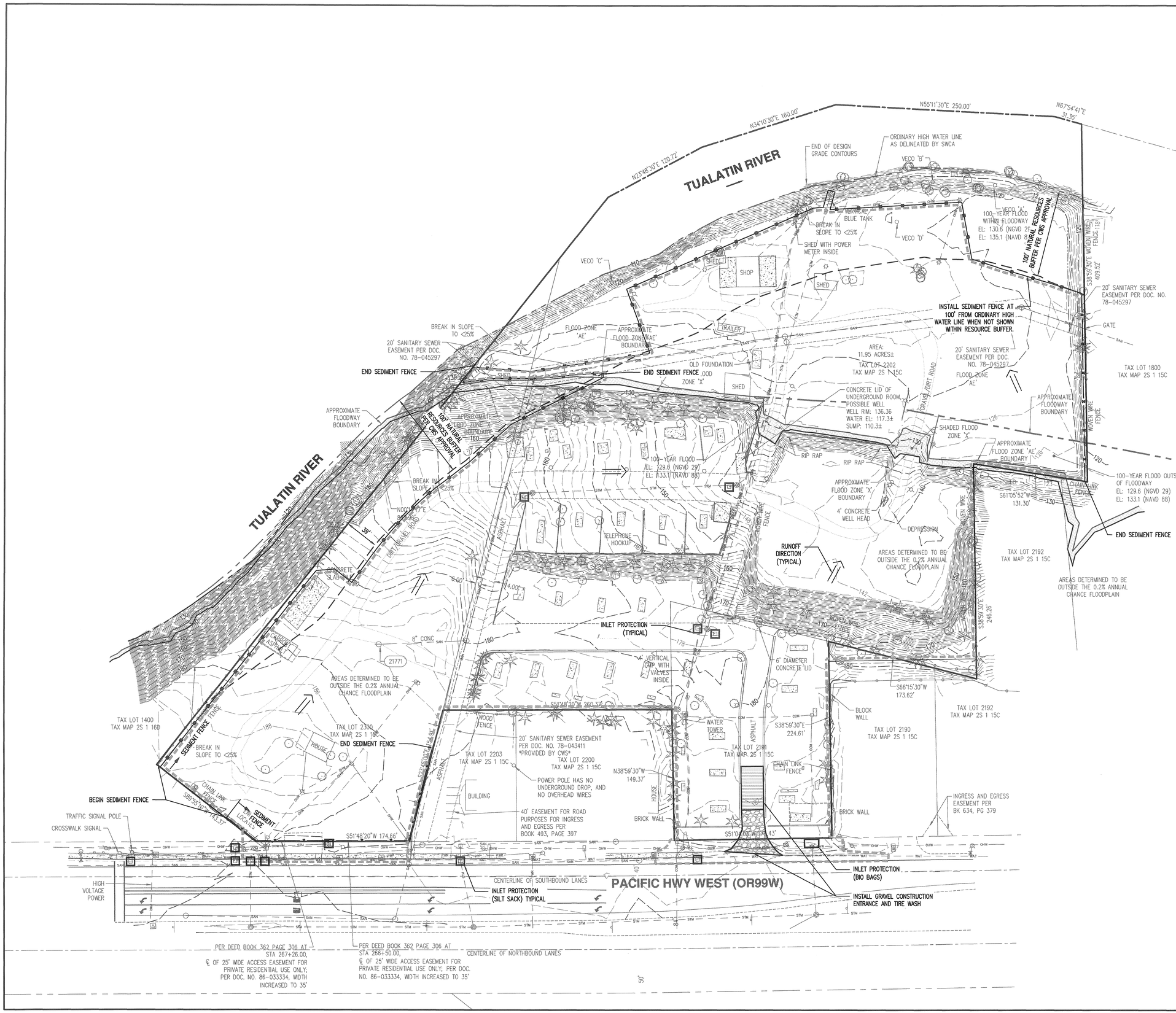

PRE-CONSTRUCTION, CLEARING, AND DEMOLITION NOTES:

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, OR OTHER APPROVED MATERIALS.
3. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
4. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
5. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.
6. ALL PROPOSED SLOPE GRADING SHALL CONFORM TO I.B.C. REQUIREMENTS FOR BENCHING AND DRAINAGE.
7. CONTRACTOR SHALL MINIMIZE DISTURBANCE OF EXISTING GRADE FOR ACTIVITIES REQUIRED WITHIN THE 100 FT. NATURAL RESOURCE AREA. DISTURBANCE WITHIN BUFFER MUST HAVE TEMPORARY GROUND COVER MEASURES INSTALLED AT THE END OF EACH WORK DAY.

THESE EROSION AND SEDIMENT CONTROL PLANS ASSUME "DRY WEATHER" CONSTRUCTION. "WET WEATHER" CONSTRUCTION MEASURES NEED TO BE APPLIED BETWEEN OCTOBER 1ST AND MAY 31ST.

LEGEND

- DIRECTION OF POST-DEVELOPED RUNOFF
- INLET PROTECTION
- SEDIMENT FENCE
- LIMITS OF DISTURBANCE
- ORANGE SEDIMENT/ CONSTRUCTION FENCE
- EXISTING CONTOUR — 145 —
- GRAVEL CONSTRUCTION ENTRANCE

SCALE 1" = 50 FEET

50 0 20 30 40 50

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

PRE-CONSTRUCTION EROSION & SEDIMENT CONTROL PLAN

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	MARCH 31, 2014

REGISTERED PROFESSIONAL ENGINEER 55488PE OREGON SEPT. 25, 2009 JACK M. POISSANT

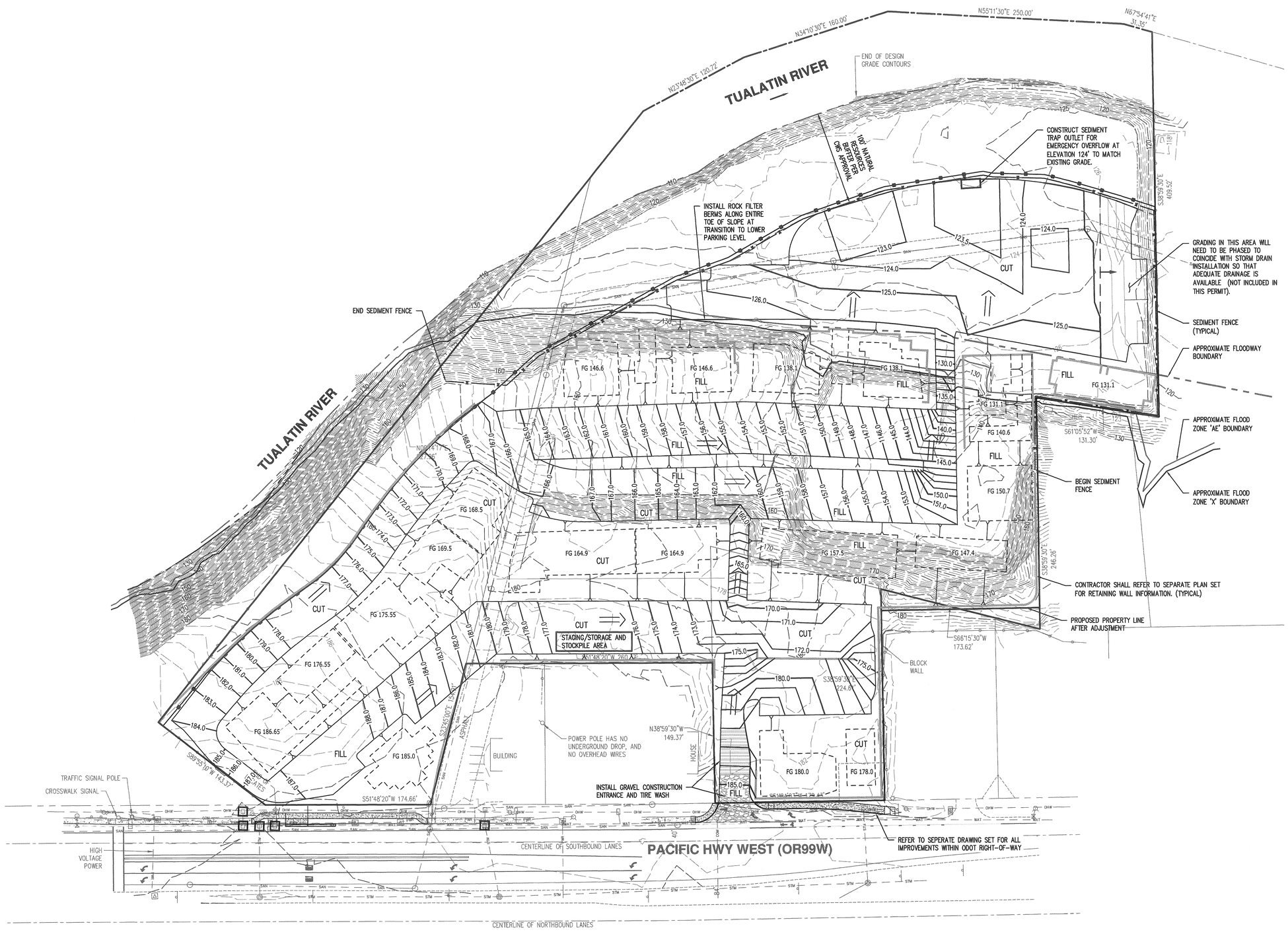
EXPIRES: DEC. 31, 2014

REVISIONS
1 – CWS COMMENTS 5/13/2014

JOB NUMBER
3812

SHEET
C051

AKS DRAWING FILE: 3812 C051 ESCP.DWG | LAYOUT: C051



EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION;

1. ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
2. ALL "SEDIMENT BARRIERS (TO BE INSTALLED AFTER GRADING)" SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS INDICATED ON THESE PLANS.
3. LONG TERM SLOPE STABILIZATION MEASURES "INCLUDING MATTING" SHALL BE IN PLACE OVER ALL EXPOSED SOILS BY OCTOBER 1.
4. ALL PROPOSED SLOPE GRADING SHALL CONFORM TO I.B.C. REQUIREMENTS FOR BENCHING AND DRAINAGE.
5. ALL EMBANKMENTS AND SLOPES SHALL HAVE SURFACE ROUGHENING AND MATTING INSTALLED TO MINIMIZE THE POTENTIAL FOR EROSION.
6. ANY EXCAVATED MATERIAL STOCKPILED ON-SITE SHALL HAVE PLASTIC SHEETING COVER INSTALLED AT THE END OF EACH WORKDAY.
7. SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
8. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
9. RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS AND BANK STABILIZATION.
10. GRADING SLOPES FROM LOWEST LEVEL GRADING AREA (131.1 & 132.1) TO NEXT SHALL BE MAXIMUM TEMPORARY SLOPE OF 1H:1V. CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS.
11. GRADING SLOPES AT ALL OTHER TRANSITIONS SHALL BE 2H:1V.

THESE EROSION AND SEDIMENT CONTROL PLANS ASSUME "DRY WEATHER" CONSTRUCTION. "WET WEATHER" CONSTRUCTION MEASURES NEED TO BE APPLIED BETWEEN OCTOBER 1ST AND MAY 31ST.

LEGEND

- DIRECTION OF POST-DEVELOPED RUNOFF
- INLET PROTECTION
- CHECK DAM
- ORANGE CONSTRUCTION FENCE
- SEDIMENT FENCE
- LIMITS OF DISTURBED AREA
- GRAVEL CONSTRUCTION ENTRANCE
- EXISTING CONTOURS — 145 —
- PROPOSED CONTOURS — 150 —
- EXTENT OF AREA WITH LEVEL GRADING

SCALE 1" = 50 FEET

50 0 20 30 40 50

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C
OREGON

MASS GRADING EROSION & SEDIMENT CONTROL PLAN

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	MARCH 31, 2014

REGISTERED PROFESSIONAL ENGINEER
55496PE
OREGON
SEPT. 25, 2009
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

REVISIONS
1 – CWS COMMENTS 5/13/2014

JOB NUMBER
3812

SHEET
C052

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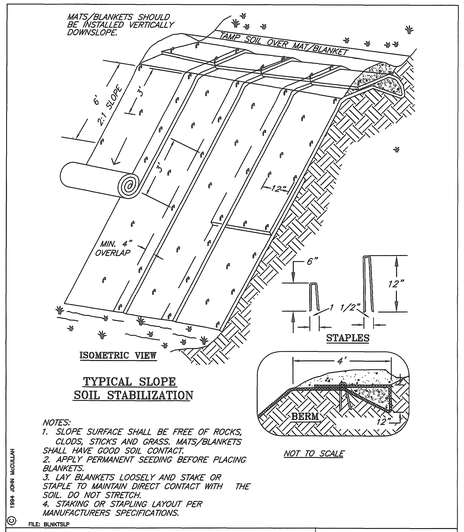

TYPICAL SLOPE SOIL STABILIZATION

NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. STAKING OR STAPLING LAYOUT PER MANUFACTURERS SPECIFICATIONS.

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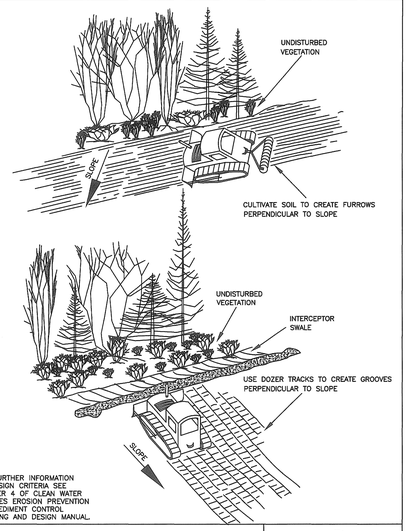
FILE: BLNKTSLP

MATTING SLOPE INSTALLATION

DRAWING NO. 805 REVISED 12-06

Clean Water Services — Our commitment is clear.



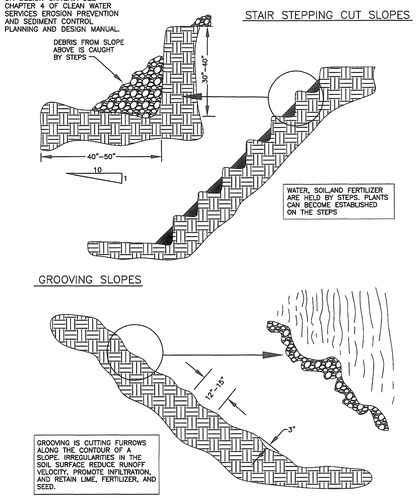
FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SURFACE ROUGHENING
CAT TRACKING

DRAWING NO. 830 REVISED 12-06

Clean Water Services — Our commitment is clear.

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



SURFACE ROUGHENING
STAIR STEPPING/GROOVING SLOPES

DRAWING NO. 835 REVISED 12-06

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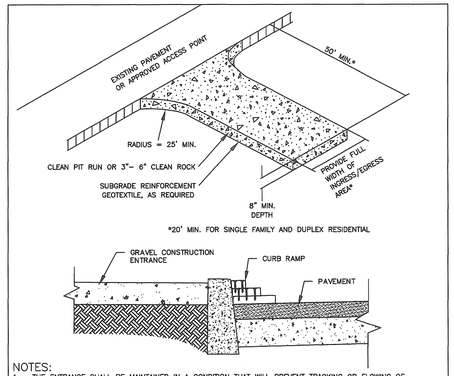

NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF- WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
5. DIMENSIONS
   SINGLE FAMILY
   20' LONG BY 20' WIDE 8" DEEP OF ¾" MINUS CLEAN ROCK.
   COMMERCIAL
   50' LONG BY 20' WIDE 3-6" CLEAN ROCK. GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

CONSTRUCTION ENTRANCE

Detail Drawing 855 REVISED 12-06

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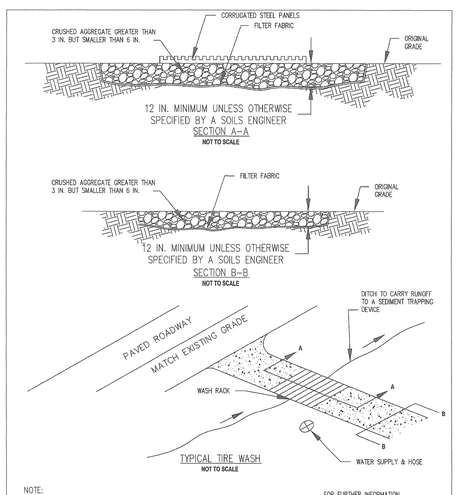

NOTE:
MANY DESIGNS CAN BE FIELD FABRICATED OR PRE-FABRICATED UNITS MAY BE USED

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

TIRE WASH-(MANUAL HOSE WASH)

DRAWING NO. 865 REVISED 12-06

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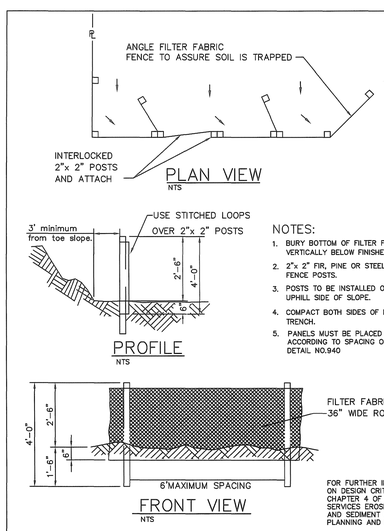

NOTES:
1. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
2. 2"x 2" FIR, PINE OR STEEL FENCE POSTS.
3. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.
4. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.
5. PANELS MUST BE PLACED ACCORDING TO SPACING ON DETAIL NO.940

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SEDIMENT FENCE

DRAWING NO. 875 REVISED 12-06

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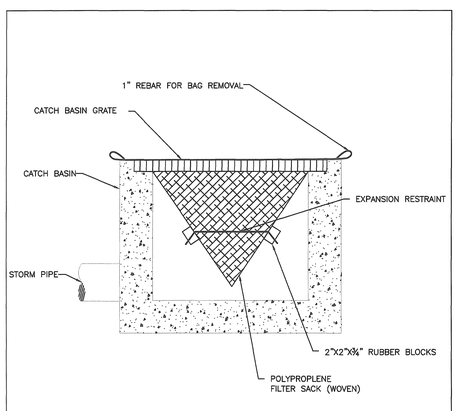

WOVEN POLYPROPLENE SACK

NOTE:
1. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS. SIZE OF FILTER FABRIC INLET SACKS TO BE DETERMINED BY MANUFACTURER.

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

INLET PROTECTION
TYPE 5

DRAWING NO. 920 REVISED 12-06

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

EROSION & SEDIMENT CONTROL DETAILS

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	MARCH 31, 2014

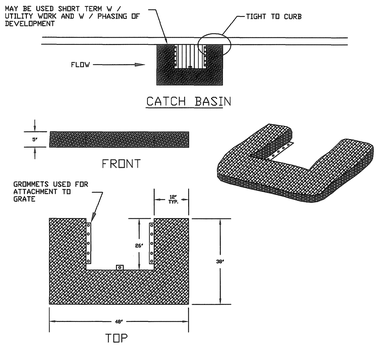
REGISTERED PROFESSIONAL ENGINEER 55486PE OREGON SEPT. 25, 2009 JACK M. POLISSANT
EXPIRES: DEC. 31, 2014

REVISIONS
1 - CWS COMMENTS 5/13/2014

JOB NUMBER
3812

SHEET
C053

AKS DRAWING FILE: 3812 C053 ESCP DETAILS.DWG | LAYOUT: C053



INSTALLATION NOTES:
1. INSTALL SOLID FABRIC SIDE DOWN MESH SIDE UP.
2. ATTACH TO CATCH BASIN GRATE AT A MINIMUM OF 3 LOCATIONS TIGHT TO CURB WITH 1/4" ZIP TIES.

MAINTENANCE NOTES:
1. ANY VISIBLE SIGN OF SEDIMENT ACCUMULATION TO BE CLEANED UP AT THE END OF EACH WORKDAY.
2. REPLACE U - SHAPED FILTER BAG AS NECESSARY TO PREVENT WOOD CHIPS FROM ENTERING THE STORM SYSTEM.

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

INLET PROTECTION TYPE 6

DRAWING NO. 925 REVISED 12-06

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FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SPACING FOR CHECK DAMS

DITCH GRADE	6 INCH	12 INCH	18 INCH
6%	NOT ALLOWED	16 FT O.C.	26 FT O.C.
5%	NOT ALLOWED	20 FT	30 FT
4%	NOT ALLOWED	26 FT	40 FT
3%	15 FT	33 FT	50 FT
2%	25 FT	50 FT	80 FT

BARRIER SPACING FOR GENERAL APPLICATION

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS

% SLOPE	SLOPE	MAXIMUM SPACING ON SLOPE
10% OR FLATTER	10:1 OR FLATTER	300 FT
>10% OR <15%	>10:1 OR <7.5:1	150 FT
>15% OR <20%	>7.5:1 OR <5:1	100 FT
>20% OR <30%	>5:1 OR <3.5:1	50 FT
>30% OR <50%	>3.5:1 OR <2:1	25 FT

FOR MORE INFORMATION REGARDING THESE TABLES SEE CHAPTER 4 TABLES 4-3 AND 4-7 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL DESIGN MANUAL

SPACING TABLES

DRAWING NO. 940 REVISED 12-06

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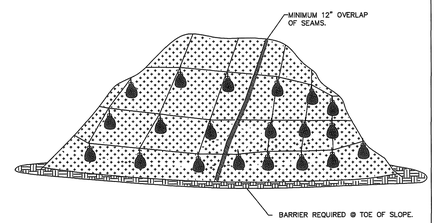

PLASTIC SHEETING

NOTES:
1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
2. BARRIER REQUIRED @ TOE OF STOCK PILE.
3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.

PLASTIC SHEETING

DRAWING NO. 810 REVISED 12-06

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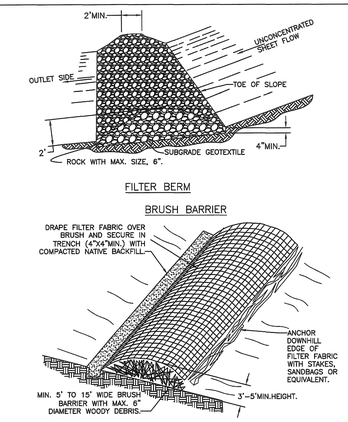

NOTES:
1. DIRECT THE OUTLET SIDE OF THE ROCK FILTER BERM/DAMS ONTO A STABILIZED AREA, SUCH AS VEGETATION AND OR ROCK.
2. EMBED A MIN. OF 4" INTO THE EXISTING GROUND/EMBANKMENT.
3. USE 3:1 OR FLATTER SIDE SLOPES. WITHIN THE SAFETY CLEAR ZONE. USE 6:1 OR FLATTER SIDE SLOPES.

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

FILTER BERMS ROCK/BRUSH

DRAWING NO. 890 REVISED 12-06

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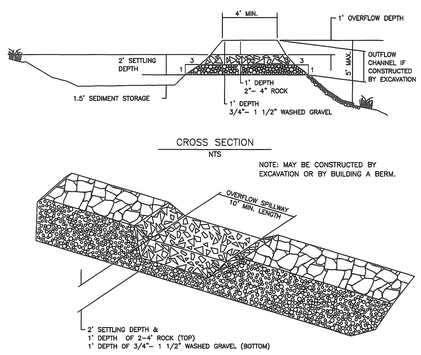

NOTE:
A FILTER FABRIC FENCE OR SIMILAR FILTER MUST BE CONSTRUCTED TO FILTER RUNOFF FROM THE SEDIMENT TRAP PRIOR TO DISCHARGE FROM THE CONSTRUCTION SITE.

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SEDIMENT TRAP

DRAWING NO. 930 REVISED 12-06

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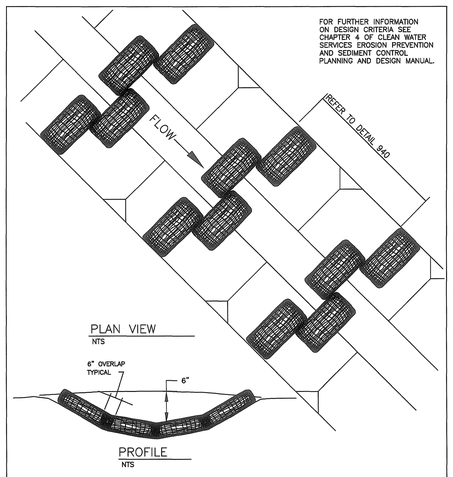

NOTES:
1. STAKING OF BAGS REQUIRED USING (2) 1"x2" WOOD STAKES OR APPROVED EQUAL PER BAG.
2. SURFACE MUST BE SMOOTH BEFORE APPLICATION.
3. CHECK DAMS CAN BE CONSTRUCTED USING STRAW WATTLES OR OTHER MATERIALS AS APPROVED BY THE DISTRICT OR CITY.

CHECK DAM BIO-FILTER BAG

DRAWING NO. 845 REVISED 12-06

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RIVER RIDGE APARTMENTS

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DESIGNED BY:	RCW
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DATE:	MARCH 31, 2014

REGISTERED PROFESSIONAL ENGINEER 55486PE OREGON SEPT. 25, 2009 JACK M. POISSANT
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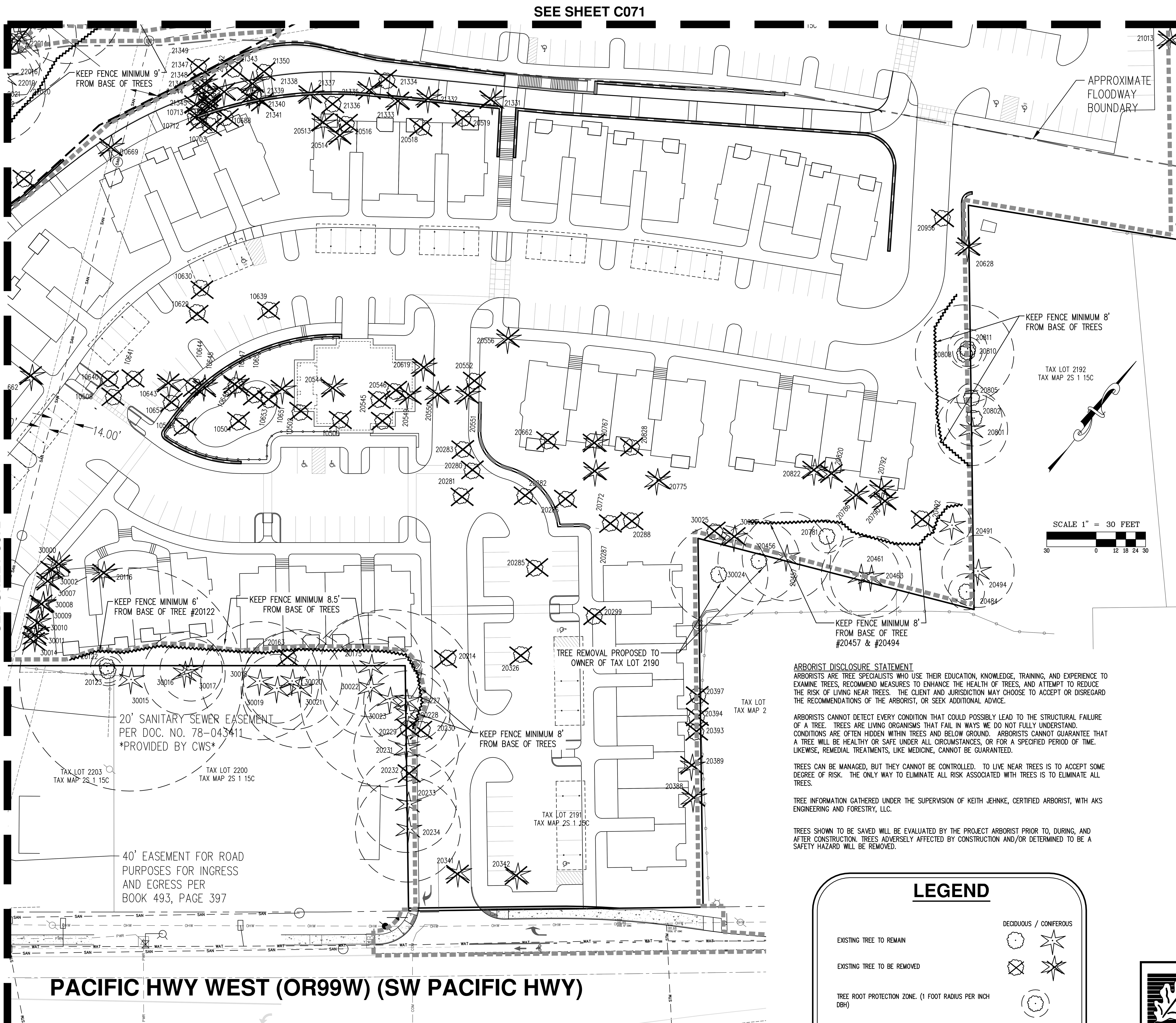
JOB NUMBER 3812

SHEET C054

AKS DRAWING FILE: 3812 C053 ESCP DETAILS.DWG | LAYOUT: C054



ARBORIST DISCLOSURE STATEMENT

ARBORISTS ARE TREE SPECIALISTS WHO USE THEIR EDUCATION, KNOWLEDGE, TRAINING, AND EXPERIENCE TO EXAMINE TREES, RECOMMEND MEASURES TO ENHANCE THE HEALTH OF TREES, AND ATTEMPT TO REDUCE THE RISK OF LIVING NEAR TREES. THE CLIENT AND JURISDICTION MAY CHOOSE TO ACCEPT OR DISREGARD THE RECOMMENDATIONS OF THE ARBORIST, OR SEEK ADDITIONAL ADVICE.

ARBORISTS CANNOT DETECT EVERY CONDITION THAT COULD POSSIBLY LEAD TO THE STRUCTURAL FAILURE OF A TREE. TREES ARE LIVING ORGANISMS THAT FAIL IN WAYS WE DO NOT FULLY UNDERSTAND. CONDITIONS ARE OFTEN HIDDEN WITHIN TREES AND BELOW GROUND. ARBORISTS CANNOT GUARANTEE THAT A TREE WILL BE HEALTHY OR SAFE UNDER ALL CIRCUMSTANCES, OR FOR A SPECIFIED PERIOD OF TIME. LIKEWISE, REMEDIAL TREATMENTS, LIKE MEDICINE, CANNOT BE GUARANTEED.

TREES CAN BE MANAGED, BUT THEY CANNOT BE CONTROLLED. TO LIVE NEAR TREES IS TO ACCEPT SOME DEGREE OF RISK. THE ONLY WAY TO ELIMINATE ALL RISK ASSOCIATED WITH TREES IS TO ELIMINATE ALL TREES.

TREE INFORMATION GATHERED UNDER THE SUPERVISION OF KEITH JEHNKE, CERTIFIED ARBORIST, WITH AKS ENGINEERING AND FORESTRY, LLC.

TREES SHOWN TO BE SAVED WILL BE EVALUATED BY THE PROJECT ARBORIST PRIOR TO, DURING, AND AFTER CONSTRUCTION. TREES ADVERSELY AFFECTED BY CONSTRUCTION AND/OR DETERMINED TO BE A SAFETY HAZARD WILL BE REMOVED.

LEGEND

DECIDUOUS / CONIFEROUS

- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- TREE ROOT PROTECTION ZONE. (1 FOOT RADIUS PER INCH DBH)
- TREE PROTECTION FENCE
- DISTURBED AREA

CERTIFIED ARBORIST
KEITH R. JEHNKE
CERTIFICATE NUMBER: PN 1908
EXPIRATION DATE: 06/30/15

TOTAL # OF TREES ON SITE = 232
TOTAL EXISTING BASAL AREA (SQ FT) ON SITE = 542.61

NUMBER OF TREES REMOVED FOR CONSTRUCTION = 108
NUMBER OF TREES REMOVED FOR HAZARD RATING = 16
TOTAL # OF TREES TO BE REMOVED = 124
TOTAL ON SITE BASAL AREA (SQ FT) TO BE REMOVED = 237.46

TREE PROTECTION NOTES

1. TIMELINE FOR CLEARING, GRADING, AND INSTALLATION OF TREE PROTECTION MEASURES: WORK WILL BEGIN WITHIN THREE (3) WEEKS OF FINAL APPROVAL BY THE CITY. TREE PROTECTION MEASURES WILL BE DONE DURING CLEARING AND ANY GRADING WILL FOLLOW.
2. THERE WILL BE NO GRADE CHANGES AROUND TREES TO BE PRESERVED.
3. NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE PROTECTED AREA OF ANY TREE DESIGNATED TO REMAIN, INCLUDING, BUT NOT LIMITED TO, PARKING EQUIPMENT, PLACING SOLVENTS, STORING BUILDING MATERIAL AND SOIL DEPOSITS, DUMPING CONCRETE WASHOUT AND LOCATING BURN HOLES.
4. DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY OBJECT TO ANY TREE DESIGNATED FOR PROTECTION.
5. BEFORE DEVELOPMENT, LAND CLEARING, FILLING OR ANY LAND ALTERATION FOR WHICH A TREE REMOVAL PERMIT IS REQUIRED, THE CONTRACTOR:
6. THE GRADE SHALL NOT BE ELEVATED OR REDUCED WITHIN THE CRITICAL ROOT ZONE OF TREES TO BE PRESERVED WITHOUT THE URBAN FORESTER'S AUTHORIZATION. THE URBAN FORESTER MAY ALLOW COVERAGE OF UP TO ONE HALF OF THE AREA OF THE TREE'S CRITICAL ROOT ZONE WITH LIGHT SOILS (NO CLAY) TO THE MINIMUM DEPTH NECESSARY TO CARRY OUT GRADING OR LANDSCAPING PLANS, IF IT WILL NOT IMPERIL THE SURVIVAL OF THE TREE. AERATION DEVICES MAY BE REQUIRED TO ENSURE THE TREE'S SURVIVAL.
7. IF THE GRADE ADJACENT TO A PRESERVED TREE IS RAISED SUCH THAT IT COULD SLOUGH OR ERODE INTO THE TREE'S CRITICAL ROOT ZONE, IT SHALL BE PERMANENTLY STABILIZED TO PREVENT SUFFOCATION OF THE ROOTS.
8. THE APPLICANT SHALL NOT INSTALL AN IMPERVIOUS SURFACE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE TO BE RETAINED WITHOUT THE AUTHORIZATION OF THE URBAN FORESTER. THE URBAN FORESTER MAY REQUIRE SPECIFIC CONSTRUCTION METHODS AND/OR USE OF AERATION DEVICES TO ENSURE THE TREE'S SURVIVAL AND TO MINIMIZE THE POTENTIAL FOR ROOT INDUCED DAMAGE TO THE IMPERVIOUS SURFACE.
9. TO THE GREATEST EXTENT PRACTICAL, UTILITY TRENCHES SHALL BE LOCATED OUTSIDE OF THE CRITICAL ROOT ZONE OF TREES TO BE RETAINED. THE URBAN FORESTER MAY REQUIRE THAT UTILITIES BE TUNNELED UNDER THE ROOTS OF TREES TO BE RETAINED IF THE URBAN FORESTER DETERMINES THAT TRENCHING WOULD SIGNIFICANTLY REDUCE THE CHANCES OF THE TREES SURVIVAL.
10. TREES AND OTHER VEGETATION TO BE RETAINED SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. CLEARING OPERATIONS SHALL BE CONDUCTED SO AS TO EXPOSE THE SMALLEST PRACTCIAL AREA OF SOIL TO EROSION FOR THE LEAST POSSIBLE TIME. TO CONTROL EROSION, SHRUBS, GROUND COVER AND STUMPS SHALL BE MAINTAINED ON THE INDIVIDUAL LOTS, WHERE FEASIBLE. WHERE NOT FEASIBLE APPROPRIATE EROSION CONTROL PRACTICES SHALL BE IMPLEMENTED PURSUANT TO 1200C PERMIT.
11. DIRECTIONAL FELLING OF TREES SHALL BE USED TO AVOID DAMAGE TO DESIGNATED FOR RETENTION.
12. THE CITY OF TUALATIN OR CWS MAY REQUIRE ADDITIONAL TREE PROTECTION MEASURES.
13. EXCAVATION WITHIN TREE ROOT PROTECTION ZONES:
    A. EXCAVATION IN THE TOP 24" OF THE SOIL IN THE TREE ROOT PROTECTION ZONE AREA SHOULD BEGIN AT THE EXCAVATION LINE THAT IS CLOSEST TO THE TREE.
    B. THE EXCAVATION SHOULD BE DONE BY HAND/SHOVEL OR WITH A BACKHOE AND A MAN WITH A SHOVEL, PRUNING SHEARS, AND A PRUNING SAW.
    C. IF DONE BY HAND, ALL ROOTS 1" OR LARGER SHOULD BE PRUNED AT THE EXCAVATION LINE.
    D. IF DONE WITH A BACKHOE (MOST LIKELY SCENARIO), THEN THE OPERATOR SHALL START THE CUT AT THE EXCAVATION LINE AND CAREFULLY "FEEL" FOR ROOTS/RESISTANCE. WHEN THERE IS RESISTANCE, THE MAN WITH THE SHOVEL HAND DIGS AROUND THE ROOTS AND PRUNES THE ROOTS LARGER THAN 1" DIAMETER.
    E. THE BACKHOE IS TO REMAIN OFF OF THE TREE ROOTS TO BE PRESERVED AT ALL TIMES.
    F. ALL ROOTS SHALL BE CUT CLEANLY WITH PRUNING SHEARS OR A PRUNING SAW.
    G. THE PROJECT ARBORIST MUST BE ON SITE DURING ANY WORK WITHIN THE TREE ROOT PROTECTION ZONE.
14. NO EXCAVATION, TRENCHING, GRADING, ROOT PRUNING OR OTHER ACTIVITY SHALL OCCUR WITHIN THE TREE PROTECTION ZONE AND/OR A PRESERVED TREE ROOT ZONE UNLESS DIRECTED BY AN ARBORIST PRESENT ON SITE AND APPROVED BY THE PROJECT ARBORIST. THE PROJECT ARBORIST SHALL BE KEITH JEHNKE, CERTIFIED ARBORIST #PN-1908, AKS ENGINEERING AND FORESTRY, LLC.
15. THE WORK TO BE COMPLETED UNDER THIS PROJECT SHALL CONSIST OF TREE REMOVAL AND TREE TRIMMING AS LISTED.
    A. THE CONTRACTOR SHALL PROVIDE ADEQUATE CREW OF MEN, EQUIPMENT AND MATERIALS TO SAFELY AND EFFICIENTLY COMPLETE THE ASSIGNED WORK. EACH SUCH CREW SHALL INCLUDE AN INDIVIDUAL WHO SHALL BE DESIGNATED AS THE CREW SUPERVISOR AND WHO SHALL BE RESPONSIBLE FOR THE CREW'S ACTIVITIES AND WHO SHALL RECEIVE INSTRUCTION FROM THE OWNER OR THE OWNER'S REPRESENTATIVE AND DIRECT THE CREW TO ACCOMPLISH SUCH WORK.
    B. WHENEVER A TREE, WHICH IS NOT SCHEDULED TO BE REMOVED, MUST BE TRIMMED OR PRUNED, THE CONTRACTOR SHALL INSURE THAT SUCH TRIMMING AND PRUNING IS CARRIED OUT UNDER THE DIRECT SUPERVISION OF A LICENSED ARBORIST. ALL PRUNING AND TRIMMING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF ANSI A 300 "STANDARD PRACTICES FOR TREE, SHRUB AND OTHER WOODY PLANT MAINTENANCE".
    C. THE CONTRACTOR SHALL BE REQUIRED TO CUT TREES TO A HEIGHT OF APPROXIMATELY 12'. THE STUMPS AND ROOTS SHALL BE GROUND DOWN A MINIMUM OF TWELVE (12) INCHES BELOW NORMAL GROUND LEVEL.
    D. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE LATEST GOVERNMENTAL SAFETY REGULATIONS. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ANSI Z133.1 "PRUNING, TRIMMING, REPAIRING, MAINTAINING AND REMOVING TREES AND CUTTING BRUSH–SAFETY REQUIREMENTS" WITH SPECIAL EMPHASIS GIVEN TO THE REQUIREMENT THAT ONLY QUALIFIED LINE-CLEARANCE TREE TRIMMERS BE ASSIGNED TO WORK WHERE A POTENTIAL ELECTRICAL HAZARD EXISTS.
    E. THE CONTRACTOR SHALL MAKE ALL THE NECESSARY ARRANGEMENTS WITH ANY UTILITY THAT MUST BE PROTECTED OR RELOCATED IN ORDER TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF THE OPERATING CONDITION OF ALL ACTIVE UTILITIES WITHIN THE AREA OF CONSTRUCTION AND HE SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING UTILITIES.
    F. ANY MATERIAL RESULTING FROM THE TRIMMING OR REMOVAL OF ANY TREES SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.
    G. HAZARDOUS TREES–REPORTING – ANY PERSON ENGAGED IN TRIMMING OR PRUNING WHO BECOMES AWARE OF A TREE OF DOUBTFUL STRENGTH, THAT COULD BE DANGEROUS TO PERSONS AND PROPERTY, SHALL REPORT SUCH TREE(S) TO THE OWNER OR THE OWNERS REPRESENTATIVE. SUCH TREES SHALL INCLUDE THOSE THAT ARE OVER MATURE, DISEASED, OR SHOWING SIGNS OF DECAY OR OTHER STRUCTURAL WEAKNESS.
    H. DAMAGES–ANY DAMAGE CAUSED BY THE CONTRACTOR, INCLUDING, BUT NOT LIMITED TO, BROKEN SIDEWALK, CURB, RUTTED LAWN, BROKEN WATER SHUT-OFFS, WIRE DAMAGE, BUILDING DAMAGE, STREET DAMAGE, ETC., WILL BE REPAIRED OR REPLACED IN A TIMELY MANNER, TO THE OWNER'S SATISFACTION, AND ALL COSTS PAID BY THE CONTRACTOR.
    I. ANY BRUSH CLEARING REQUIRED WITHIN THE TREE PROTECTION ZONE SHALL BE ACCOMPLISHED WITH HAND OPERATED EQUIPMENT.
    J. TREES TO BE REMOVED SHALL BE FELLED SO AS TO FALL AWAY FROM TREE ROOT PROTECTION ZONES AND TO AVOID PULLING AND BREAKING OF ROOTS TO REMAIN.
    K. ALL DOWNED BRUSH AND TREES SHALL BE REMOVED FROM THE TREE PROTECTION ZONE EITHER BY HAND OR WITH EQUIPMENT SITTING OUTSIDE THE TREE ROOT PROTECTION ZONE. EXTRACTION SHALL OCCUR BY LIFTING THE MATERIAL OUT, NOT BY SKIDDING IT ACROSS THE GROUND.
    L. IF TEMPORARY HAUL OR ACCESS ROADS MUST PASS OVER THE ROOT AREA OF TREES TO BE RETAINED A ROADBED OF 6 INCHES OF MULCH OR GRAVEL SHALL BE CREATED TO PROTECT THE SOIL. THE ROADBED MATERIAL SHALL BE REPLENISHED AS NECESSARY TO MAINTAIN A 6-INCH DEPTH.
    M. PRUNING. TREES SHALL BE PRUNED PRIOR TO THE START OF CONSTRUCTION. TREES SHALL BE CROWN CLEANED TO REMOVE THE DEADWOOD 2 INCHES IN DIAMETER AND OVER. TREES SHALL BE CROWN THINNED BY 10–20%. CROWNS MAY BE RAISED BY REMOVING BOTTOM BRANCHES AS NECESSARY UP TO 14 FEET HIGH TO GIVE CLEARANCE FOR ANY CONSTRUCTION TRAFFIC, ACTIVITIES, ETC. ALL WORK TO BE DONE IN ACCORDANCE WITH ANSI A300 PRUNING STANDARDS. REMOVE ANY LIMBS OF DOUBTFUL STRENGTH THAT COULD BE DANGEROUS TO PERSONS AND PROPERTY.
16. THE PROJECT ARBORIST IS TO REVIEW ALL OF THE PRESERVED TREES AT THE END OF CONSTRUCTION.

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TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

TREE PRESERVATION AND REMOVAL PLAN - NORTH

DESIGNED BY: RCW
DRAWN BY: RCC
CHECKED BY: JMP
SCALE: AS NOTED
DATE: JUNE 24, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JACK A. POISSANT
EXPIRES: DEC. 31, 2014
PRELIMINARY NOT FOR CONSTRUCTION

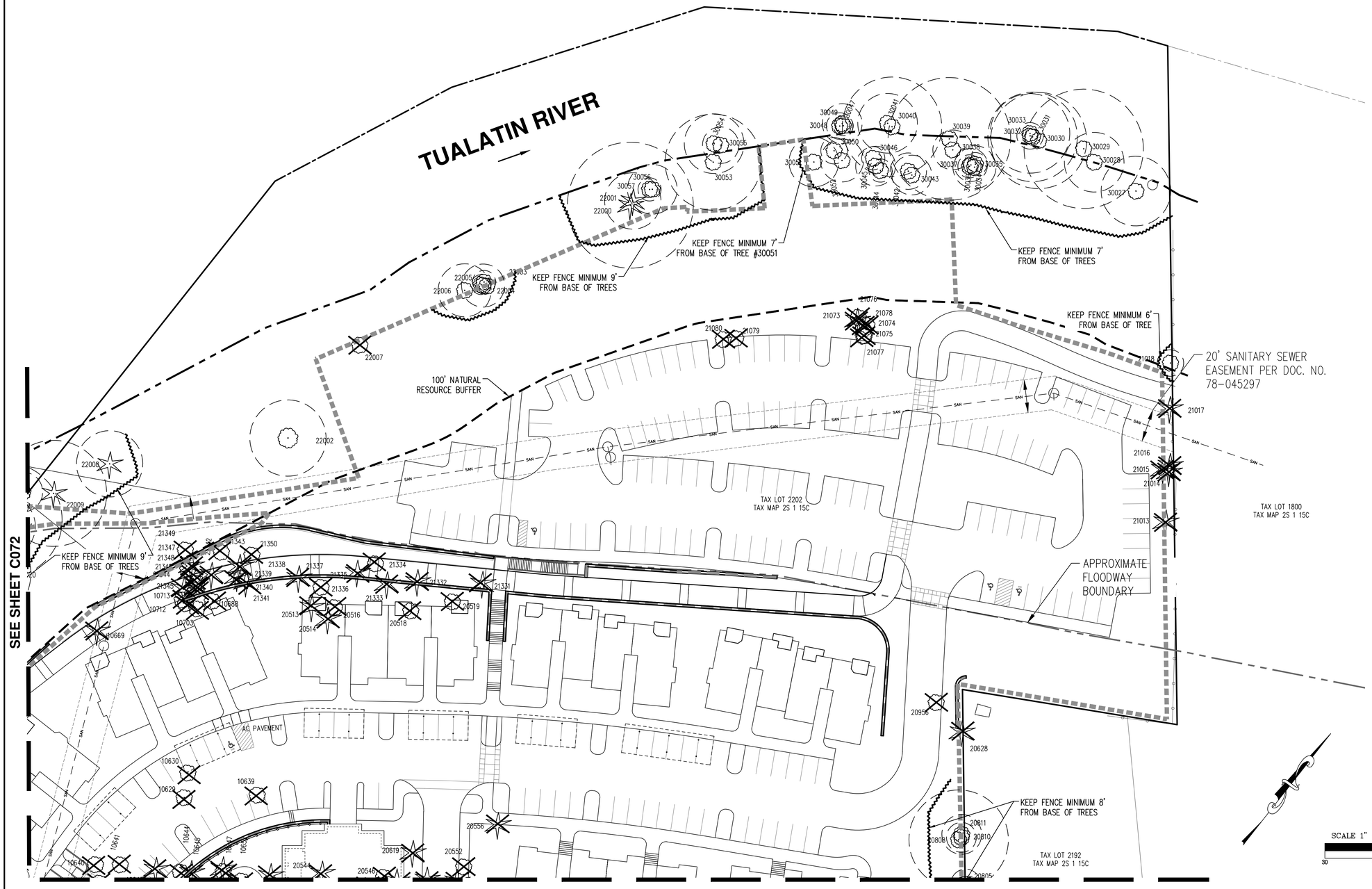
REVISIONS

JOB NUMBER
3812

SHEET
C070

ARCHITECTURAL REVIEW SET

AKS DRAWING FILE: 3812 C070 TREE PRES.DWG | LAYOUT: C070



CERTIFIED ARBORIST
KEITH R. JEHNKE
CERTIFICATE NUMBER: PN 1908
EXPIRATION DATE: 06/30/15

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY SALEM, LLC
528 COTTAGE ST NE
SUITE 160
SALEM, OR 97301
PHONE: 503.400.6028
FAX: 503.400.7722
www.aks-eng.com

AKS ENGINEERING · PLANNING · SURVEYING
FORESTRY · LANDSCAPE ARCHITECTURE

RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

TREE PRESERVATION AND REMOVAL PLAN - LOWER PARKING LOT

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 24, 2014

REGISTERED PROFESSIONAL FORESTER
JACKSON M. POISSANT
EXPIRES: DEC. 31, 2014

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C071

AKS DRAWING FILE: 3812 C070 TREE PRESLDWG | LAYOUT: C071

SEE SHEET C071

TUALATIN RIVER

20' SANITARY SEWER EASEMENT PER DOC. NO. 78-045297

KEEP FENCE MINIMUM 9' FROM BASE OF TREES

100' NATURAL RESOURCE BUFFER

KEEP FENCE MINIMUM 9' FROM BASE OF TREES

KEEP FENCE MINIMUM 8' FROM BASE OF TREE

TAX LOT 1400
TAX MAP 2S 1 16D

TAX LOT 2300
TAX MAP 2S 1 15C

KEEP FENCE MINIMUM 6' FROM BASE OF TREE #20122

KEEP FENCE MINIMUM 8.5' FROM BASE OF TREES

WHEN TREE 20163 IS REMOVED, CONTRACTOR SHALL DROP THE TREE PROTECTION FENCE BUT SHALL NOT HAVE ANY EQUIPMENT ON THE PROTECTED AREA. ANY COMPACTION IS THE ROOT PROTECTION ZONE (RPZ) ASSOCIATED WITH REMOVING THE TREE SHALL BE MINIMIZED. UPON COMPLETION OF TREE REMOVAL THE FENCE SHALL BE PUT BACK INTO POSITION.

20' SANITARY SEWER EASEMENT PER DOC. NO. 78-043411 *PROVIDED BY CWS*

TAX LOT 2203
TAX MAP 2S 1 15C

TAX LOT 2200
TAX MAP 2S 1 15C

40' EASEMENT FOR ROAD PURPOSES FOR INGRESS AND EGRESS PER BOOK 493, PAGE 397

6.00'

14.00'

SEE SHEET C070

PACIFIC HWY WEST (OR99W) (SW P

SCALE 1" = 30 FEET

30 0 12 18 24 30

CERTIFIED ARBORIST

KEITH R. JEHNKE
CERTIFICATE NUMBER: PN 1908
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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

TREE PRESERVATION AND REMOVAL PLAN - SOUTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 24, 2014

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE M. POISSANT
EXPIRES: DEC. 31, 2014

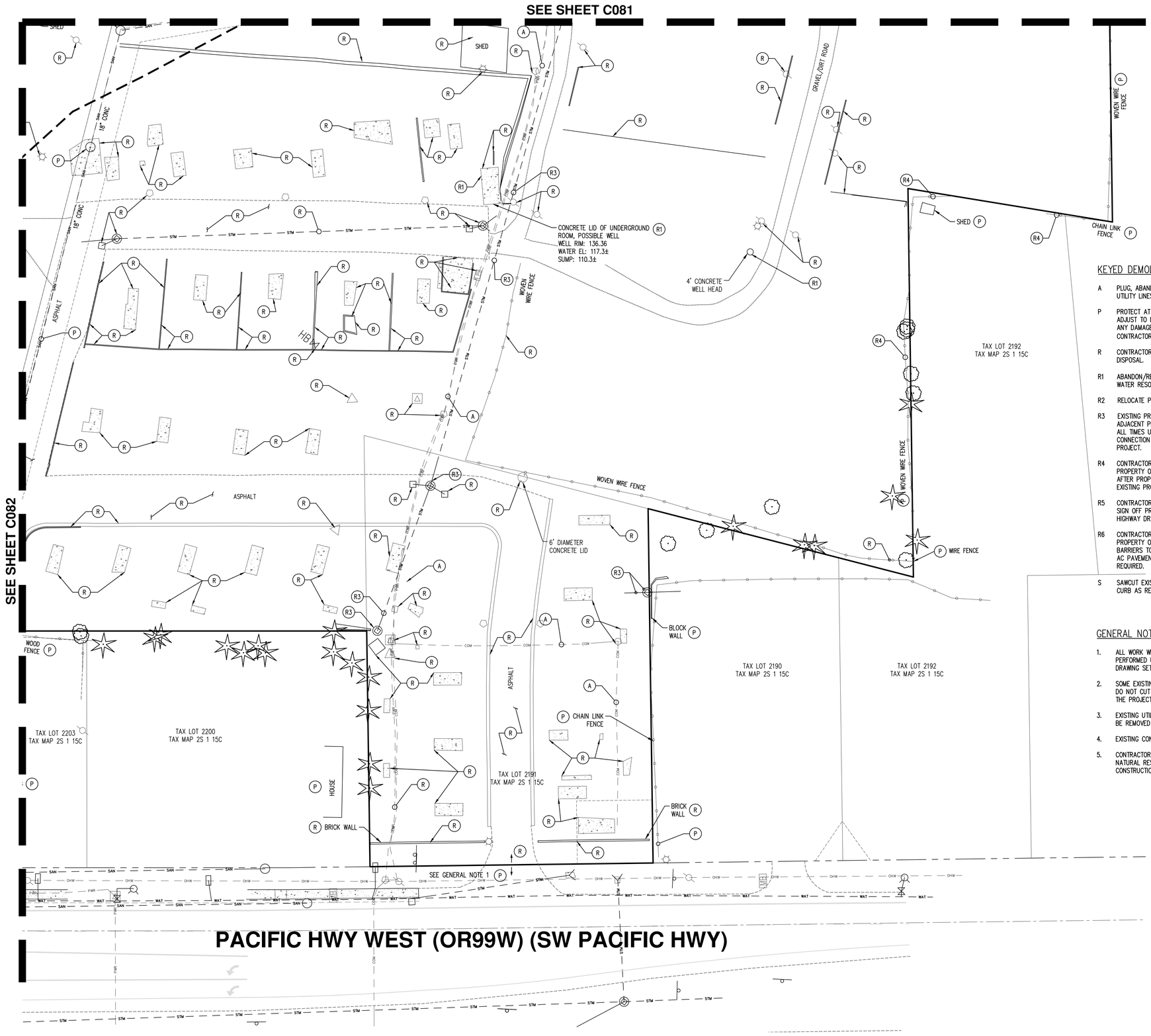
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C072

AKS DRAWING FILE: 3812 C070 TREE PRESLDWG | LAYOUT: C072



KEYED DEMOLITION NOTES

A	PLUG, ABANDON, AND/OR REMOVE EXISTING UTILITY LINES AS REQUIRED.
P	PROTECT AT ALL TIMES DURING CONSTRUCTION. ADJUST TO NEW FINISHED GRADE AS REQUIRED. ANY DAMAGE SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
R	CONTRACTOR TO REMOVE AND HAUL OFF SITE FOR DISPOSAL.
R1	ABANDON/REMOVE WELL PER STATE OF OREGON WATER RESOURCE DEPARTMENT REQUIREMENTS.
R2	RELOCATE PER APPLICABLE UTILITY STANDARDS.
R3	EXISTING PRIVATE STORM DRAIN FLOWS FROM ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES UNTIL SUCH TIME AS NEW STORM DRAIN CONNECTION IS PROVIDED AS PART OF THE PROJECT.
R4	CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER TO REMOVE & RELOCATE FENCE AFTER PROPERTY LINE ADJUSTMENT OR TO THE EXISTING PROPERTY LINE LOCATION AS REQUIRED.
R5	CONTRACTOR SHALL RELOCATE EXISTING ODOT SIGN OFF PRIVATE PROPERTY. REFER TO ODOT HIGHWAY DRAWINGS UNDER SEPARATE COVER.
R6	CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNERS TO RELOCATE JERSEY BARRIERS TO COMMON PROPERTY LINE & REMOVE AC PAVEMENT ON THIS PROJECT SITE, AS REQUIRED.
S	SAWCUT EXISTING PAVEMENT, SIDEWALK, AND/OR CURB AS REQUIRED.

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4. EXISTING CONTOURS ARE NOT SHOWN FOR CLARITY.
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SCALE 1" = 30 FEET

30 0 12 18 24 30

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

DEMOLITION PLAN - NORTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	MARCH 31, 2014

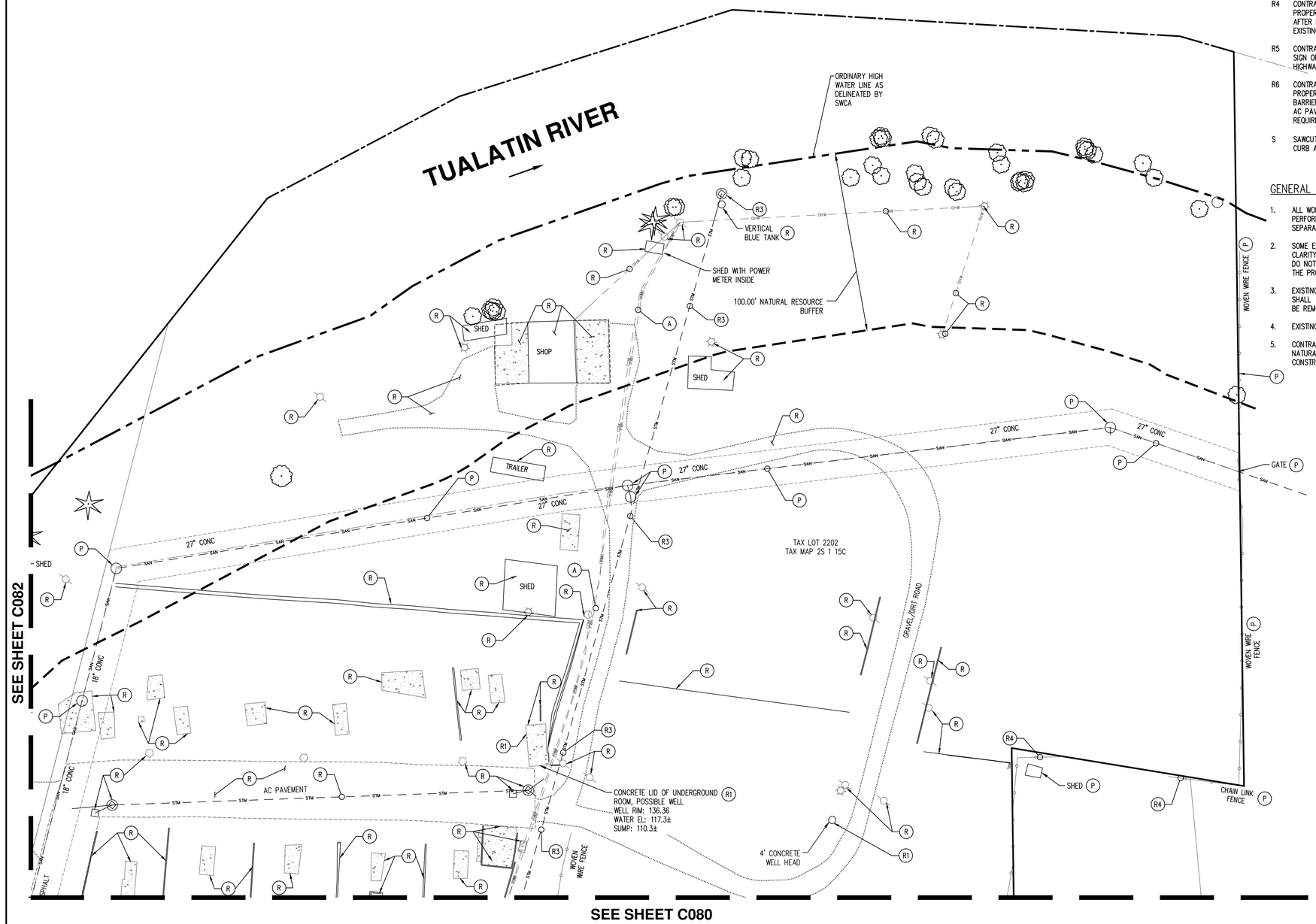
REGISTERED PROFESSIONAL ENGINEER
55496PE
OREGON
SEPT. 25, 2000
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

REVISIONS
1-6/11/2014
UPDATED SHEET TITLE

JOB NUMBER
3812

SHEET
C080

AKS DRAWING FILE: 3812 C080 DEMO.DWG | LAYOUT: C080



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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

DEMOLITION PLAN - LOWER PARKING LOT

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	MARCH 31, 2014

REGISTERED PROFESSIONAL ENGINEER 55496PE OREGON SEPT. 25, 2000 JACK M. POISSANT

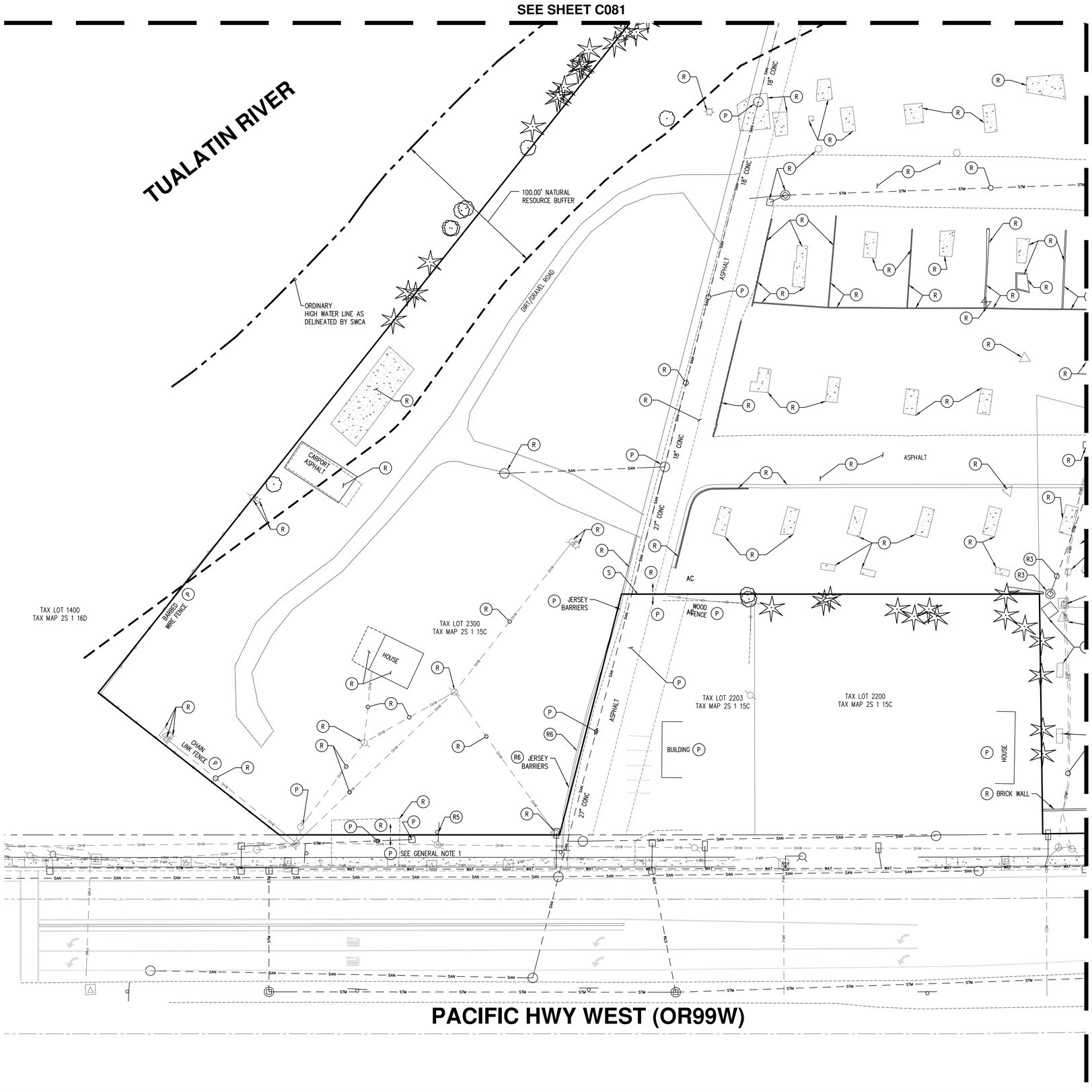
EXPIRES: DEC. 31, 2014

REVISIONS
1-6/11/2014
UPDATED SHEET TITLE

JOB NUMBER
3812

SHEET
C081

AKS DRAWING FILE: 3812 C080 DEMO.DWG | LAYOUT: C081



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DEMOLITION NOTES

1. PRIOR TO STARTING DEMOLITION OPERATIONS THE CONTRACTOR SHALL APPLY FOR AND OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, AND LOCAL LAWS, CODES, AND REGULATIONS.
2. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES AND/OR IMPROVEMENTS TO REMAIN ON OR OFF SITE. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING STRUCTURES AND/OR IMPROVEMENTS TO REMAIN, AND SHALL RESTORE ANY DAMAGE TO THE PRE-DEMOLITION CONDITION OR BETTER USING NEW MATERIALS. ANY REPAIRS REQUIRED SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE COST AND EXPENSE.
3. CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO OWNER'S REPRESENTATIVE PRIOR TO INITIATING WORK.
4. CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES IN CONFORMANCE WITH THE EROSION CONTROL PLAN, NOTES AND DETAILS PRIOR TO STARTING DEMOLITION OPERATIONS.
5. THE LOCATION OF ALL UTILITIES SHALL BE MARKED IN THE FIELD PRIOR TO DEMOLITION. CONTRACTOR SHALL PROTECT AND MAINTAIN IN A SAFE AND OPERABLE CONDITION ALL UTILITIES INDICATED TO REMAIN, AND PREVENT INTERRUPTION OF EXISTING UTILITY SERVICES EXCEPT WHEN AUTHORIZED IN WRITING BY THE AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES, ACCEPTABLE TO GOVERNING AUTHORITIES AND OWNER'S REPRESENTATIVE, FOR BUILDING(S) TO REMAIN AS REQUIRED DURING INTERRUPTIONS TO EXISTING UTILITY SERVICES.
6. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE PROJECT LIMITS WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE AND /OR GOVERNMENTAL AGENCIES HAVING JURISDICTION IF APPLICABLE.
7. THE CONTRACTOR SHALL KEEP ALL STREETS AND PUBLIC RIGHT-OF-WAYS CLEAN OF MUD, DIRT, AND DEMOLITION DEBRIS. THE CONTRACTOR SHALL MONITOR THE HAULING OF DEBRIS TO INSURE THAT ANY SPILLAGE FROM TRUCKS IS PROMPTLY AND COMPLETELY REMOVED AND CLEANED UP. IF REQUIRED AND/OR NECESSARY THE CONTRACTOR SHALL COVER ALL HAUL VEHICLES.
8. CONTRACTOR SHALL CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO INSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES.
9. CONTRACTOR SHALL CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITIONS EXISTING PRIOR TO THE START OF THE WORK.
10. DEBRIS SHALL NOT BE BURIED OR STOCKPILED ON THE PROPERTY. ALL DEMOLITION DEBRIS AND MATERIALS SHALL BE DISPOSED OF AT OFFSITE LOCATIONS IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, CODES, AND REGULATIONS. THE CONTRACTOR SHALL MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES AND SHALL PROVIDE A COPY TO THE OWNER OR OWNER'S REPRESENTATIVE UPON REQUEST. CONTRACTOR TO COORDINATE AND PAY ALL COSTS INCLUDING DISPOSAL CHARGES.
11. PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, SHALL EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. THE SAWCUT LINES SHOWN ON THE DRAWINGS ARE SCHEMATIC AND NOT INTENDED TO SHOW THE EXACT ALIGNMENT OF SUCH CUTS.
12. CONTRACTOR SHALL CONFORM TO APPLICABLE REGULATORY PROCEDURES IF HAZARDOUS OR CONTAMINATED MATERIALS ARE DISCOVERED.
13. CONTRACTOR IS RESPONSIBLE FOR JOB SAFETY AND SHALL PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS, WARNING SIGNS, TRAFFIC CONES, AND PROTECTION AS NECESSARY DURING DEMOLITION ACTIVITIES.
14. CONTRACTOR SHALL REMOVE ALL EXISTING STRUCTURES, FACILITIES, IMPROVEMENTS, ETC. AS SHOWN, UNLESS OTHERWISE DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
15. CONTRACTOR SHALL DISCONNECT, ABANDON, PLUG OR REMOVE ALL POWER, TELEPHONE, TV AND GAS UTILITIES SERVING THE EXISTING STRUCTURES. CONTRACTOR TO CONTACT LOCAL FRANCHISE UTILITY COMPANIES IN ADVANCE OF PROJECT DEMOLITION TO COORDINATE SERVICE DISCONNECTS AND OBTAIN PERMITS.
16. CONTRACTOR TO COORDINATE WITH GOVERNING JURISDICTION FOR DISCONNECTION OF EXISTING STORM DRAIN, SANITARY SEWER, FIRE, DOMESTIC WATER, AND IRRIGATION LINES CURRENTLY SERVING THE SITE IF REQUIRED. DEMOLISH, ABANDON, PLUG OR REMOVE ALL UTILITIES IF INDICATED ON THE DRAWINGS.
17. CONTRACTOR SHALL BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL SHALL BE ACCOMPLISHED WITH APPROVED MATERIALS, AND SHALL BE PLACED AS COMPACTED ENGINEERED FILL AS REQUIRED TO SUPPORT NEW IMPROVEMENTS. BACKFILLING SHALL OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES UNLESS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE.
18. DEMOLITION AREAS SHALL BE GRADED TO MATCH ADJACENT TERRAIN TO FORM A SMOOTH, CLEAN (FREE OF DEBRIS), FREE DRAINING SURFACE, UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR APPROVED BY THE OWNER'S REPRESENTATIVE.
19. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES AND OWNER'S REPRESENTATIVE FOR RELOCATION OF EXISTING UTILITIES, POLES, ETC., IF SHOWN ON THE DRAWINGS. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND PAY ALL COSTS FOR EXCAVATION, BACKFILL, CONDUIT, WIRING, BASES, AND APPURTENANCES REQUIRED TO COMPLETE THE WORK.
20. ANY SEPTIC TANKS ENCOUNTERED DURING CONSTRUCTION SHALL BE PUMPED OUT AND ABANDONED OR REMOVED IN ACCORDANCE WITH COUNTY SANITARIAN REQUIREMENTS.
21. ANY DRAINFIELDS ENCOUNTERED DURING CONSTRUCTION SHALL BE REMOVED AND ABANDONED.

SCALE 1" = 30 FEET

30 0 12 18 24 30

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY, LLC
AKS
5285 COTTAGE ST NE
SUITE 160
SALEM, OR 97301
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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

DEMOLITION PLAN - SOUTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	MARCH 31, 2014

REGISTERED PROFESSIONAL ENGINEER
55496PE
OREGON
SEPT. 25, 2001
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

REVISIONS
1-6/11/2014
UPDATED SHEET TITLE

JOB NUMBER
3812

SHEET
C082

AKS DRAWING FILE: 3812 C080 DEMO.DWG | LAYOUT: C082

CURB AND WALL LEGEND

A	TYPE 'A' CURB AND GUTTER
C	TYPE 'C' CURB
D	DEEP CURB
L	LOW PROFILE CURB
M	MONOLITHIC CURB AND SIDEWALK.
RC	RETAINING CURB
RW	RETAINING WALL (BY OTHERS).

SURFACING LEGEND

- LIGHT DUTY PAVEMENT
- HEAVY DUTY PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW CONCRETE PAVEMENT
- NEW CONCRETE BY ARCHITECT

SCALE 1" = 30 FEET

30 0 12 18 24 30

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY SALEM, LLC
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SALEM, OR 97301
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RIVER RIDGE APARTMENTS

TUALATIN, OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

SURFACING PLAN - NORTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JACQUELINE M. POISSANT
EXPIRES: DEC. 31, 2014

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS:

JOB NUMBER
3812

SHEET
C101

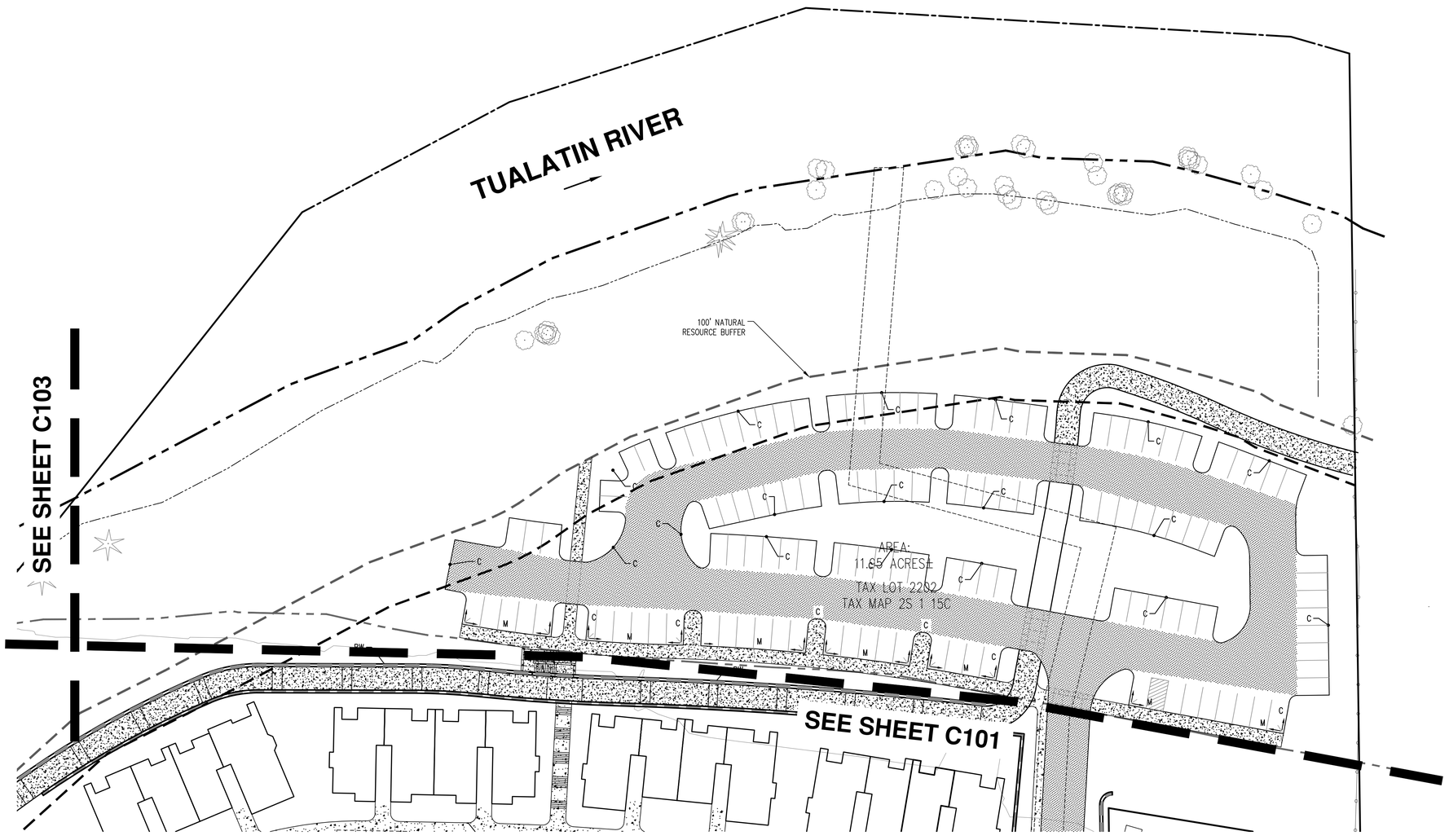
AKS DRAWING FILE: 3812 C101 SURFACING.DWG | LAYOUT: C101

CURB AND WALL LEGEND

A	TYPE "A" CURB AND GUTTER
C	TYPE "C" CURB
D	DEEP CURB
L	LOW PROFILE CURB
M	MONOLITHIC CURB AND SIDEWALK.
RC	RETAINING CURB
RW	RETAINING WALL (BY OTHERS).

SURFACING LEGEND

- LIGHT DUTY PAVEMENT
- HEAVY DUTY PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW CONCRETE PAVEMENT
- NEW CONCRETE BY ARCHITECT



SCALE 1" = 30 FEET

30 0 12 18 24 30

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RIVER RIDGE APARTMENTS

TUALATIN, OREGON

TAX LOTS 2191, 2202, 2300

WASHINGTON COUNTY TAX MAP 2S 1 15C

SURFACING PLAN - LOWER PARKING LOT

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

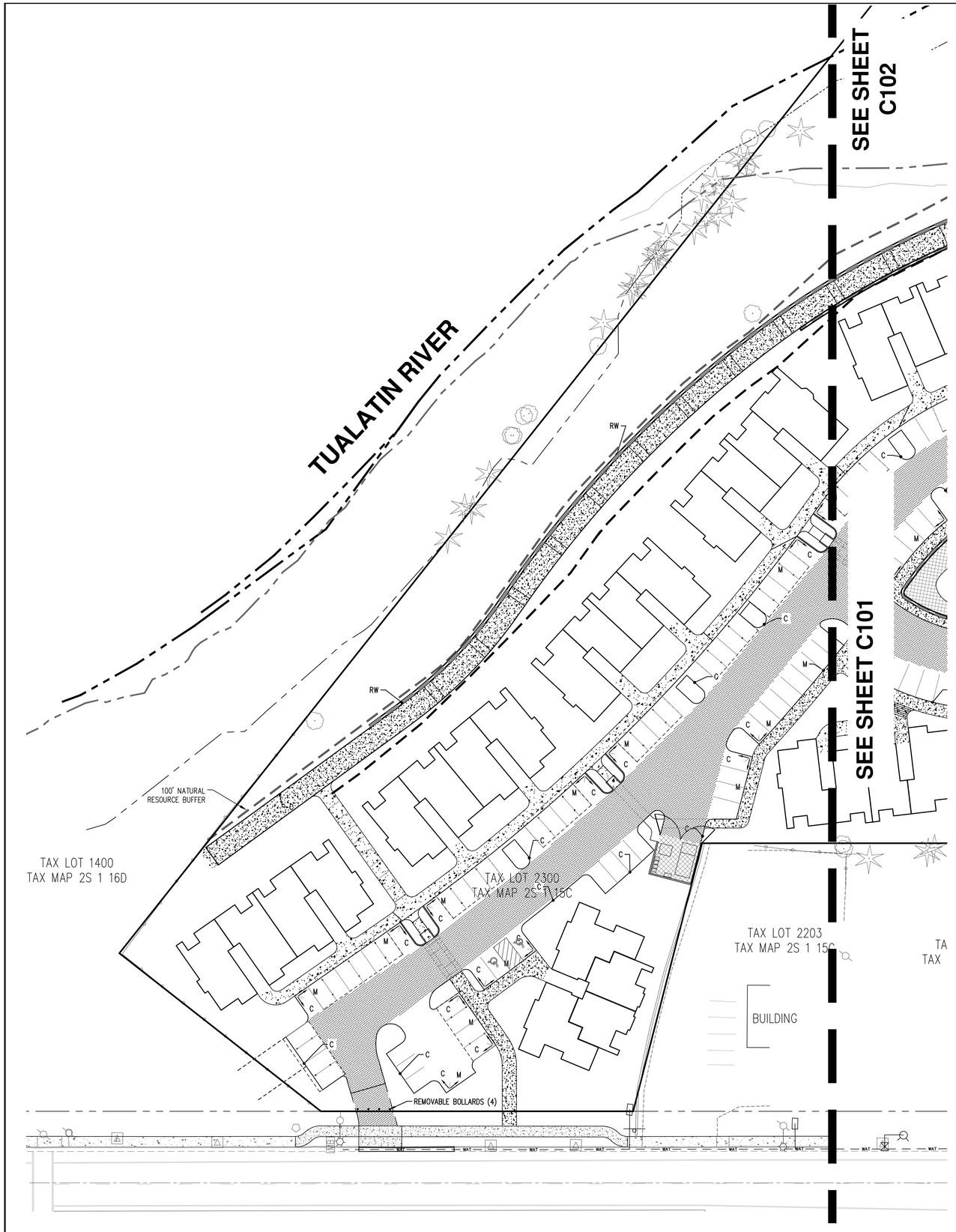
REGISTERED PROFESSIONAL ENGINEER
OREGON
JACK M. POISSANT
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER
3812

SHEET
C102

AKS DRAWING FILE: 3812 C101 SURFACING.DWG | LAYOUT: C102



CURB AND WALL LEGEND

A	TYPE 'A' CURB AND GUTTER
C	TYPE 'C' CURB
D	DEEP CURB
L	LOW PROFILE CURB
M	MONOLITHIC CURB AND SIDEWALK.
RC	RETAINING CURB
RW	RETAINING WALL (BY OTHERS).

SURFACING LEGEND

- LIGHT DUTY PAVEMENT
- HEAVY DUTY PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW CONCRETE PAVEMENT
- NEW CONCRETE BY ARCHITECT

SCALE 1" = 30 FEET

30 0 12 18 24 30

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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

SURFACING PLAN - SOUTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

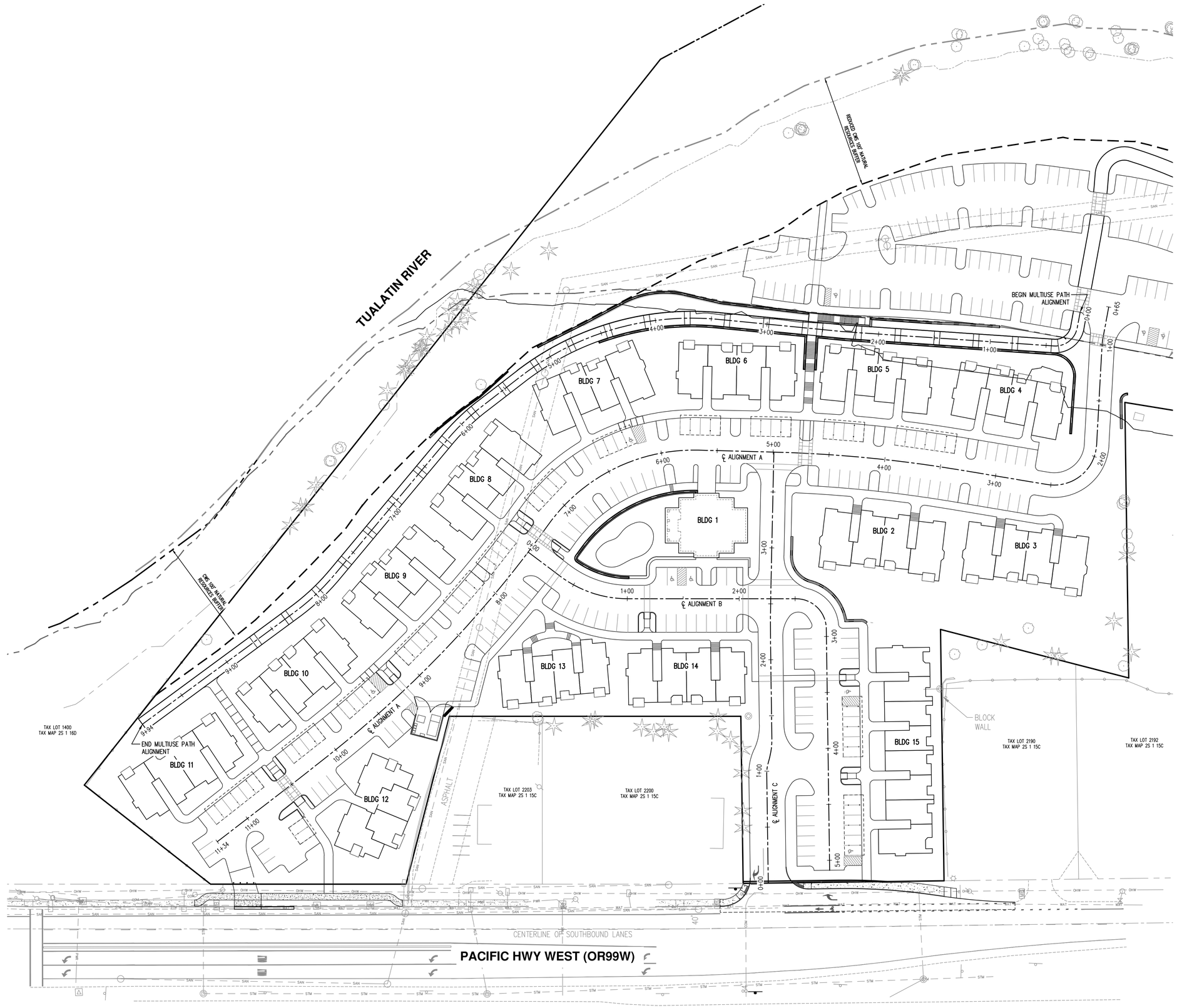
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS:

JOB NUMBER
3812

SHEET
C103

AKS DRAWING FILE: 3812 C101 SURFACING.DWG | LAYOUT: C103



NOTE:

1. REFER TO SHEET C205 AND C206 FOR ALIGNMENT "A", "B" AND "C" PROFILES.
2. REFER TO SHEET C207 FOR MULTIUSE PATH CENTERLINE ALIGNMNET PROFILE.

ARCHITECTURAL REVIEW SET

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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

CENTERLINE ALIGNMENTS PLAN

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 24, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JACQUELINE M. POISSANT
EXPIRES: DEC. 31, 2014

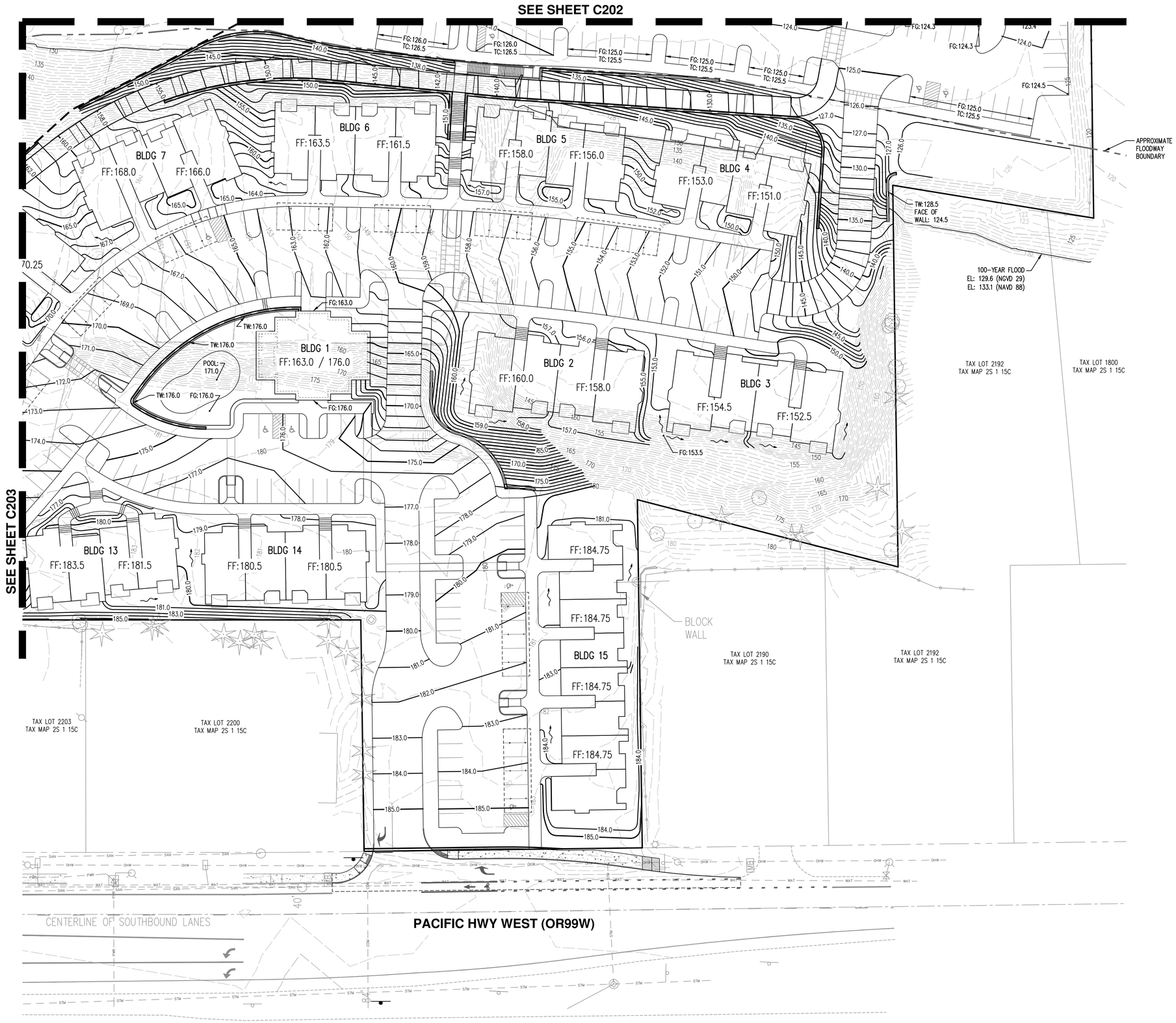
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C200

AKS DRAWING FILE: 3812 C200 GRADING.DWG | LAYOUT: C200



NOTES:

1. THE CONTRACTOR SHALL REFER TO THE BUILDING ELEVATION INFORMATION PREPARED BY HILL ARCHITECTS FOR REQUIRED BASEROCK AND GRADING UNDER THE PROPOSED BUILDINGS.
2. ELEVATIONS SHOWN ARE ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) WHICH IS APPROXIMATELY 3.52 FEET LOWER THAN THE NORTH AMERICAN VERTICAL DATUM OF 198 (NGVD88).
3. SLOPE LANDSCAPING AWAY FROM BUILDING MINIMUM 2% LANDSCAPING GRADE SHALL BE A MINIMUM OF 12" BELOW FF ELEVATION ADJACENT TO BUILDINGS.
4. REFER TO SHEETS C205 AND C206 FOR ALIGNMENT A, B AND C PROFILES.
5. REFER TO SHEET C207 FOR MULTI-USE PATH PROFILE.
6. REFER TO SHEET C208 FIOR RETAINING WALL PROFILES.

LEGEND

EXISTING CONTOURS — 145 —
PROPOSED CONTOURS — 150 —
RETAINING WALL
FF = FINISH FLOOR
TW = TOP OF WALL
FG = FINISH GRADE
TC = TOP OF CURB ELEVATION
SW = SIDEWALK ELEVATION

PROJECT NORTH

SCALE 1" = 30 FEET

30 0 12 18 24 30

ARCHITECTURAL REVIEW SET

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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

GRADING PLAN - NORTH

DESIGNED BY: RCW
DRAWN BY: RCC
CHECKED BY: JMP
SCALE: AS NOTED
DATE: JUNE 24, 2014

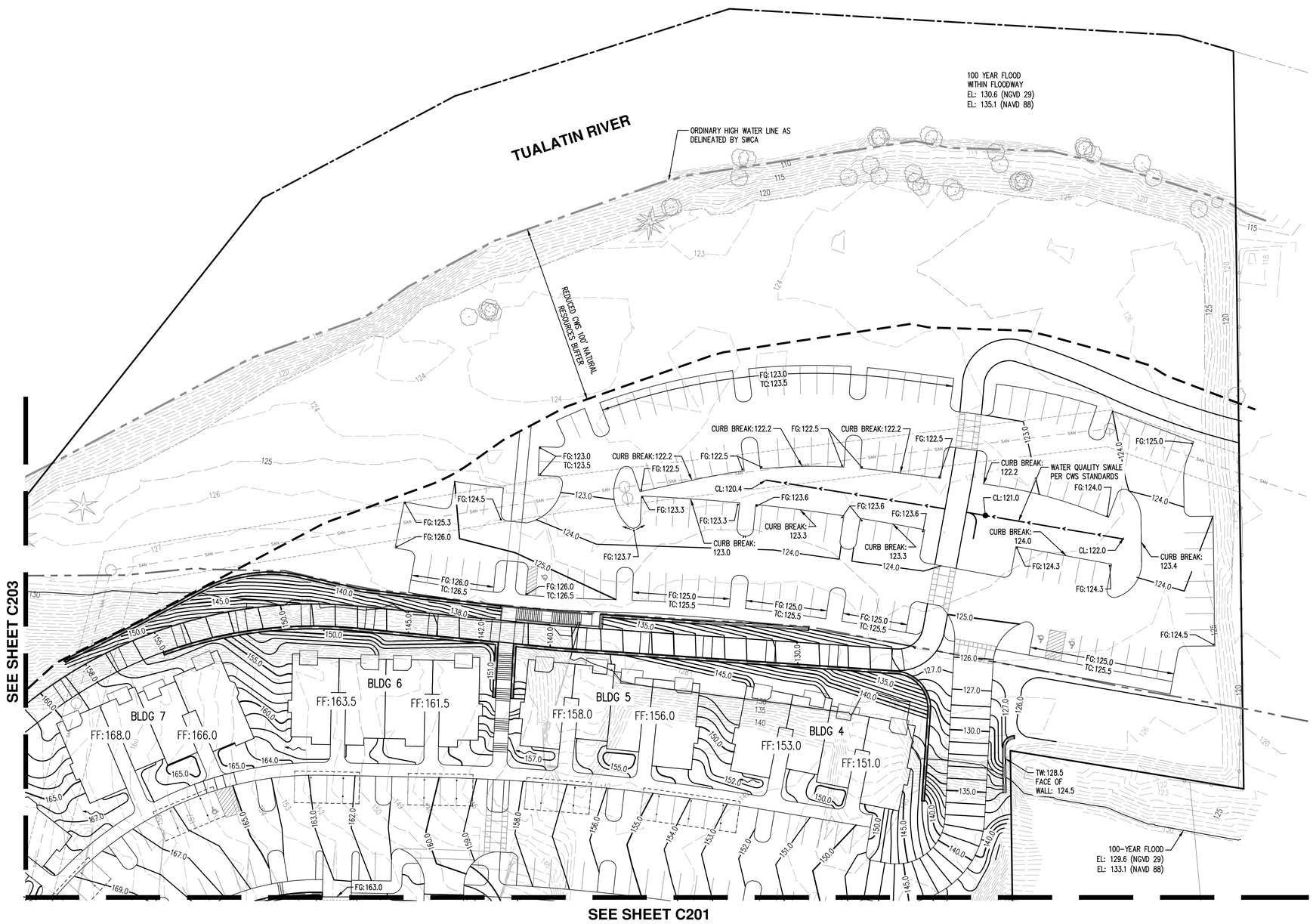
REGISTERED PROFESSIONAL ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER
3812

SHEET
C201

AKS DRAWING FILE: 3812 C200 GRADING.DWG | LAYOUT: C201



NOTES:

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3. SLOPE LANDSCAPING AWAY FROM BUILDING MINIMUM 2%. LANDSCAPING GRADE SHALL BE A MINIMUM OF 12" BELOW FF ELEVATION ADJACENT TO BUILDINGS.
4. THE FLOOD ZONE BOUNDARIES AND FLOODWAY ARE PER THE PROPOSED WASHINGTON COUNTY FEMA MAP AND IS PER GIS OVERLAY WHICH IS WHAT THE CITY OF TUALATIN IS HOLDING AS THEIR BEST AVAILABLE STUDY. THE 100 YEAR FLOOD ELEVATION WITHIN ZONE "AE" AS SHOWN IS PER THE PRELIMINARY FLOOD INSURANCE STUDY THAT ACCOMPANIES THE PROPOSED WASHINGTON COUNTY FEMA MAP.
5. REFER TO SHEETS C205 AND C206 FOR ALIGNMENT A, B AND C PROFILES.
6. REFER TO SHEET C207 FOR MULTI-USE PATH PROFILE.
7. REFER TO SHEET C208 FIOR RETAINING WALL PROFILES.

FLOODPLAIN EARTHWORK:

- EXISTING FLOODPLAIN VOLUME: 1900 CY
- PROPOSED FLOODPLAIN VOLUME AFTER GRADING: 440 CY
- NET REQUIRED FLOODWAY BALANCE: 1460 CY OF CUT

FLOODWAY EARTHWORK BASED ON PROPOSED GRADES:

- CUT VOLUME: 2110 CY
- FILL VOLUME: 15 CY
- NET: 2095 CY OF CUT

THE PROPOSED GRADING WILL CREATE 635 CY OF NET CUT (INCREASED STORAGE VOLUME) WITHIN THE FLOODPLAIN.

*SEE SHEET C204 FOR FLOODWAY GRADING SECTIONS.

LEGEND

SWALE CL
EXISTING CONTOURS — 145 —
PROPOSED CONTOURS — 150 —
RETAINING WALL
FF = FINISH FLOOR
TW = TOP OF WALL
FG = FINISH GRADE
CB = CURB BREAK
CL = CENTERLINE OF SWALE
TC = TOP OF CURB ELEVATION
SW = SIDEWALK ELEVATION

PROJECT NORTH

SCALE 1" = 30 FEET

30 0 12 18 24 30

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY, SALEM, LLC
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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

GRADING PLAN - LOWER PARKING LOT

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE: JUNE 24, 2014	

REGISTERED PROFESSIONAL ENGINEER
OREGON
JEFFREY M. POISSANT
EXPIRES: DEC. 31, 2014

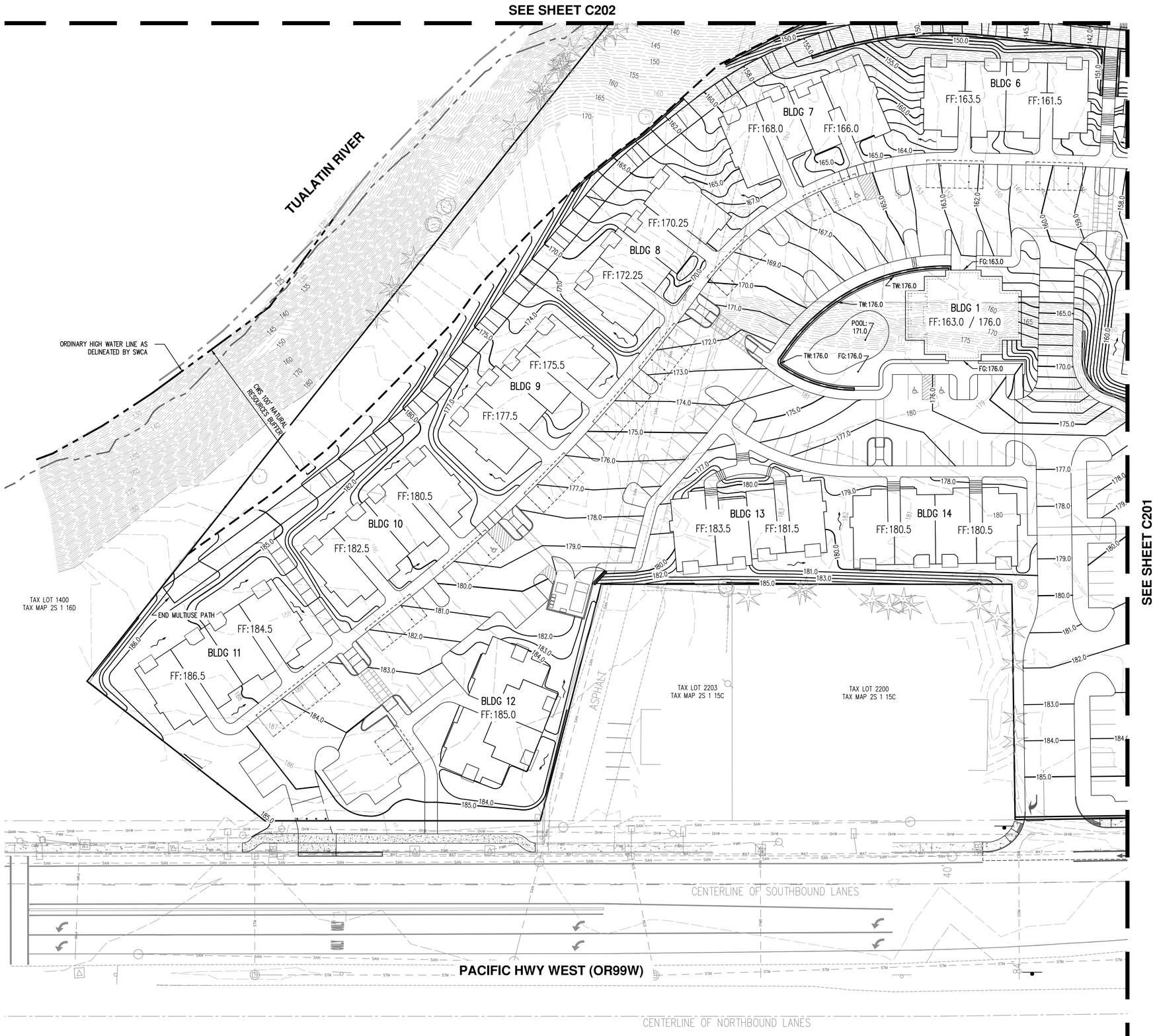
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C202

AKS DRAWING FILE: 3812 C200 GRADING.DWG | LAYOUT: C202



NOTES:

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2. ELEVATIONS SHOWN ARE ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) WHICH IS APPROXIMATELY 3.52 FEET LOWER THAN THE NORTH AMERICAN VERTICAL DATUM OF 198 (NGVD88).
3. SLOPE LANDSCAPING AWAY FROM BUILDING MINIMUM 2% LANDSCAPING GRADE SHALL BE A MINIMUM OF 12" BELOW FF ELEVATION ADJACENT TO BUILDINGS.
4. REFER TO SHEETS C205 AND C206 FOR ALIGNMENT A, B AND C PROFILES.
5. REFER TO SHEET C207 FOR MULTI-USE PATH PROFILE.
6. REFER TO SHEET C208 FOR RETAINING WALL PROFILES.

LEGEND

EXISTING CONTOURS — 145 —
PROPOSED CONTOURS — 150 —
RETAINING WALL
FF = FINISH FLOOR
TW = TOP OF WALL
FG = FINISH GRADE
TC = TOP OF CURB ELEVATION
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PROJECT NORTH

SCALE 1" = 30 FEET

30 0 12 18 24 30

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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

GRADING PLAN - SOUTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 24, 2014

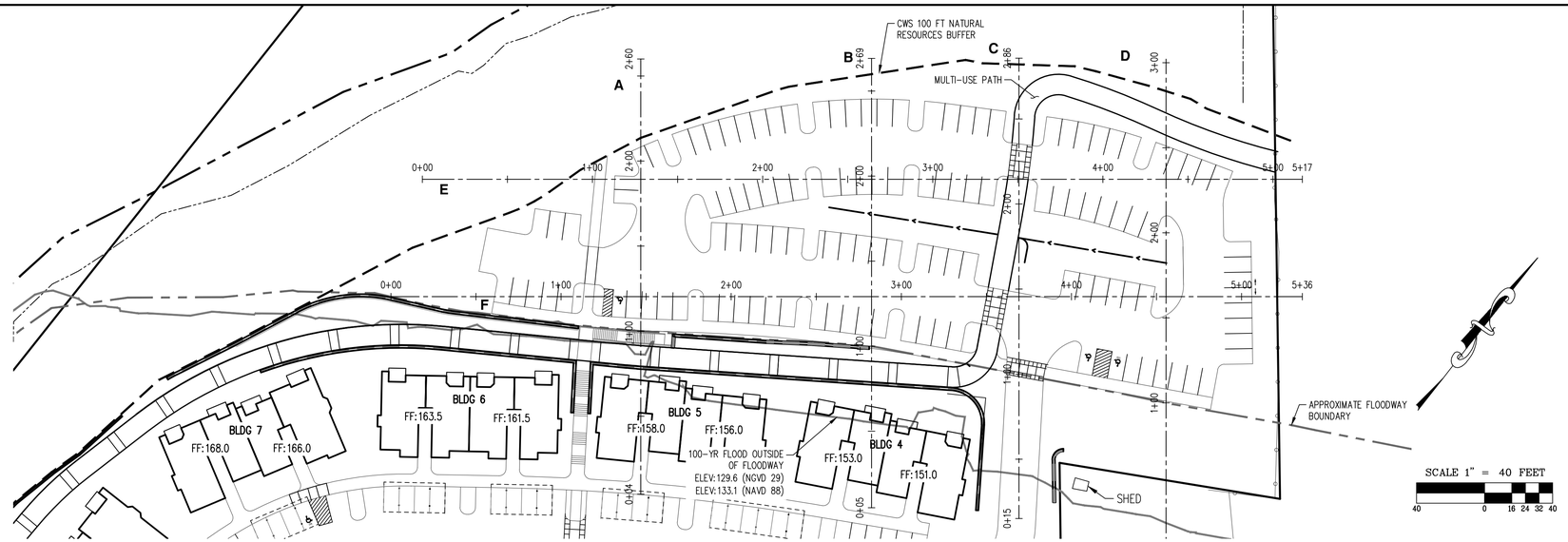
REGISTERED PROFESSIONAL ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

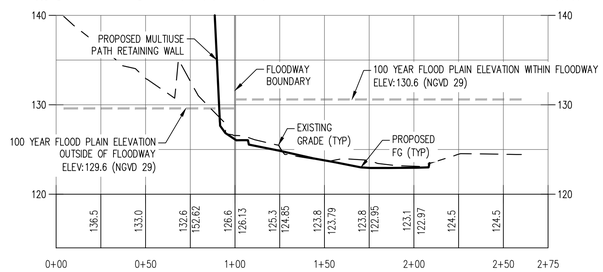
REVISIONS

JOB NUMBER
3812

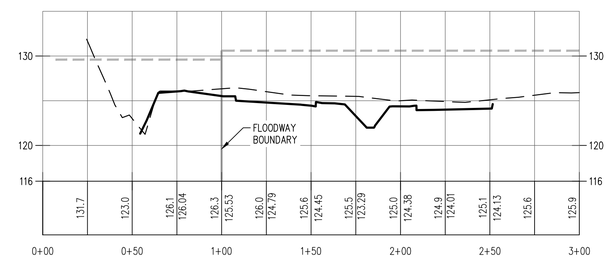
SHEET
C203

AKS DRAWING FILE: 3812 C200 GRADING.DWG | LAYOUT: C203





A
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'



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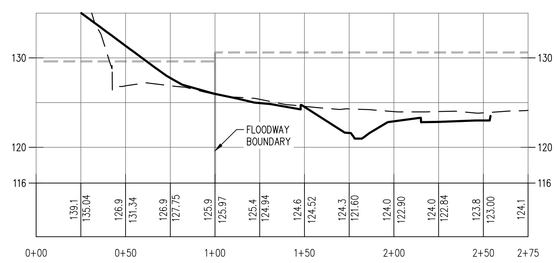
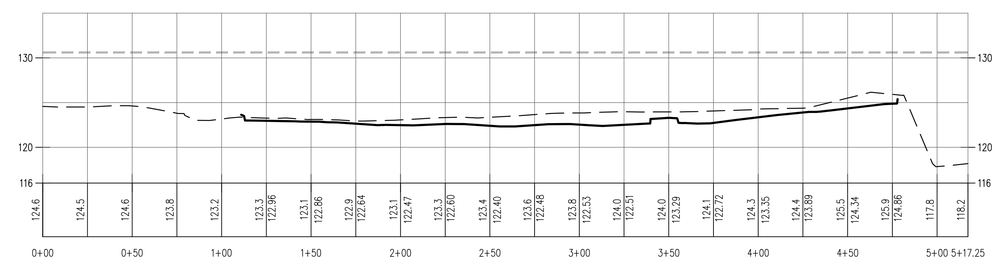
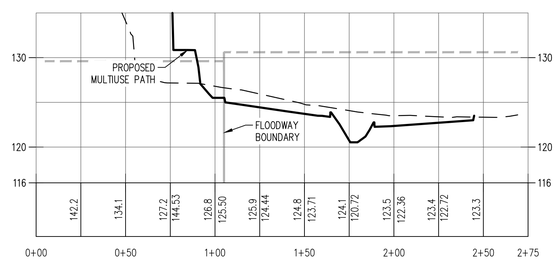
Vert. Scale: 1"= 8'



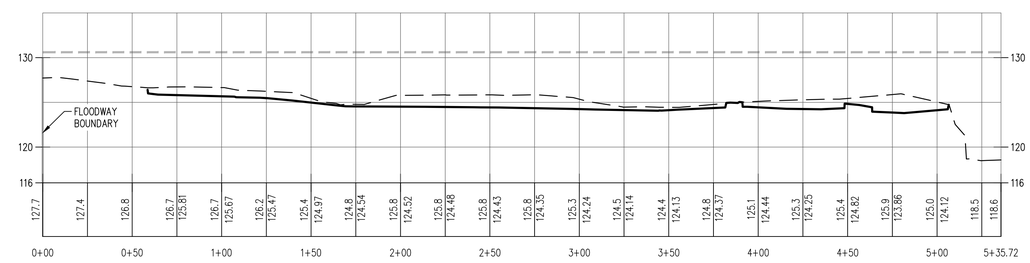
C
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'



E
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'



B
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'



F
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'

*SEE SHEET C202 FOR GRADING PLAN

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY SALEM, LLC
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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

GRADING SECTIONS (LOWER PARKING LOT)

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE: JUNE 24, 2014	

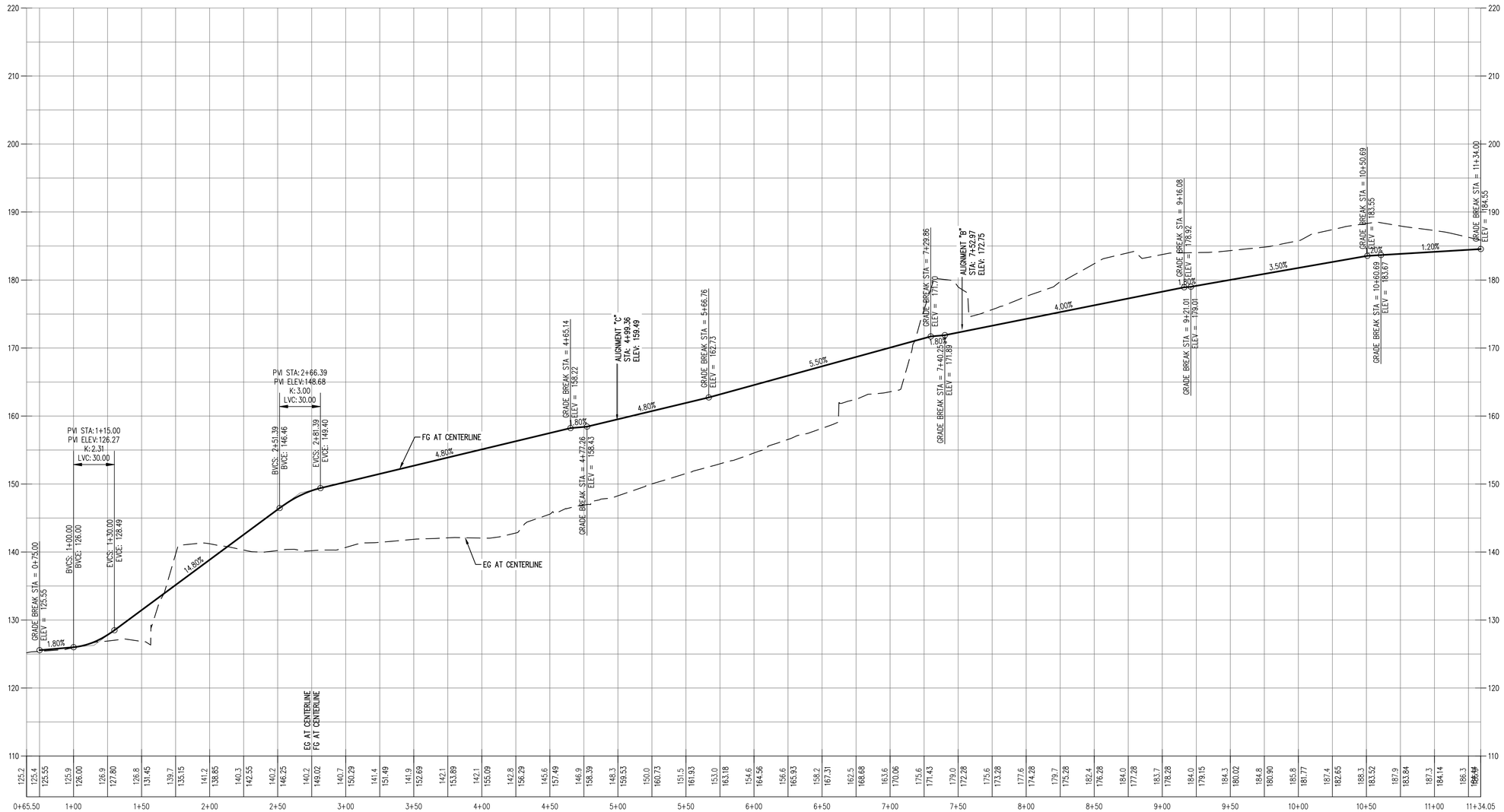
REGISTERED PROFESSIONAL ENGINEER
JACQUELINE M. POISSANT
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER
3812

SHEET
C204

AKS DRAWING FILE: 3812 C204 FLOODWAY PROFILES.DWG | LAYOUT: C204



CL ALIGNMENT A
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'

REFER TO SHEETS C200, C201, C202 & C203 FOR PLAN VIEW

ARCHITECTURAL REVIEW SET

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS: 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1.15C

ALIGNMENT 'A' CENTERLINE PROFILE

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 24, 2014

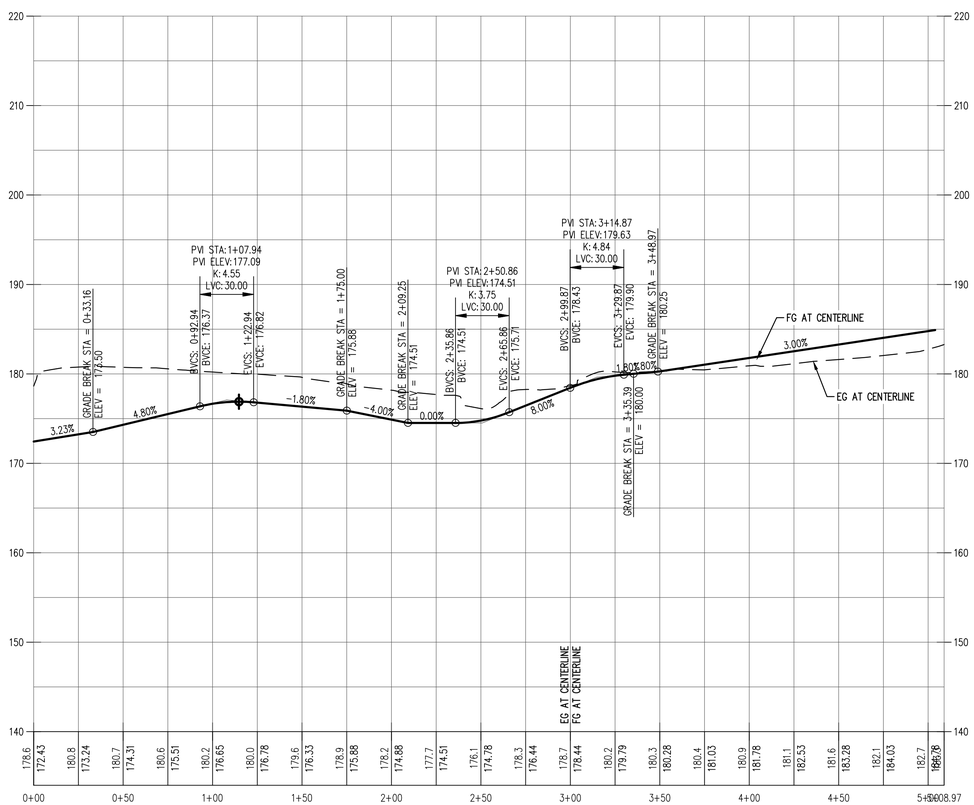
REGISTERED PROFESSIONAL ENGINEER
JACQUELINE M. POISSANT
OREGON
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

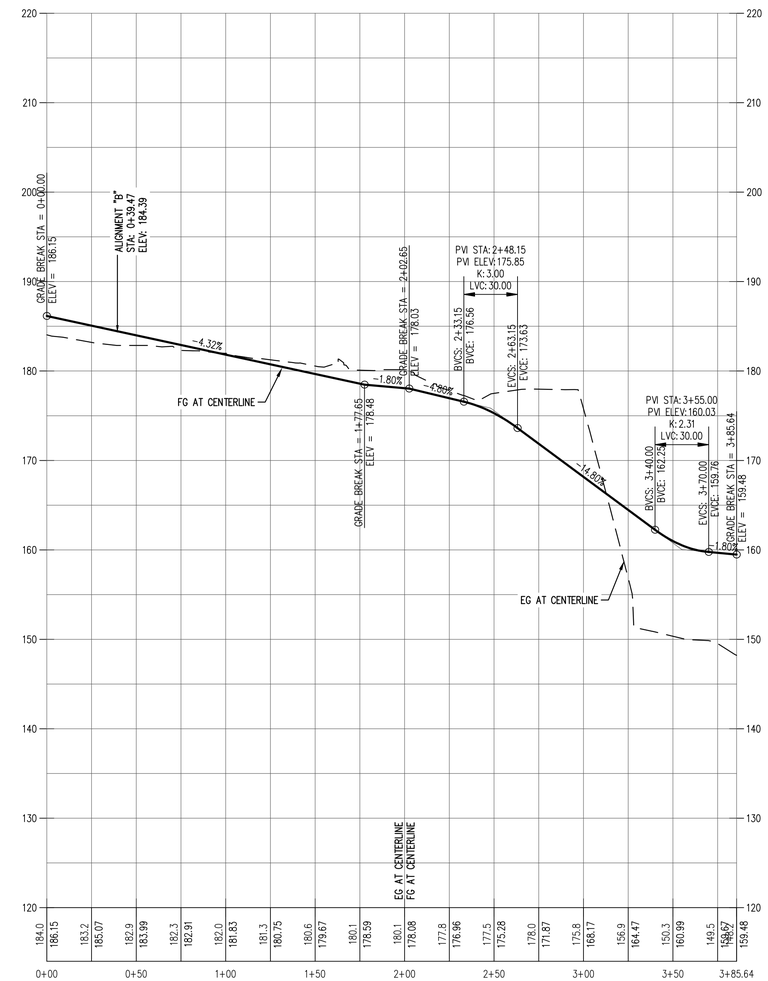
JOB NUMBER
3812

SHEET
C205

AKS DRAWING FILE: 3812 GRADING WORKSHEET.DWG | LAYOUT: 205



CL ALIGNMENT B
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'



CL ALIGNMENT C
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'

REFER TO SHEETS C200, C201, C202 & C203 FOR PLAN VIEW

ARCHITECTURAL REVIEW SET

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RIVER RIDGE APARTMENTS

TUALATIN OREGON

TAX LOTS: 2191, 2202, 2300

WASHINGTON COUNTY TAX MAP 2S 1 15C

ALIGNMENTS 'B' AND 'C' CENTERLINE PROFILES

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 24, 2014

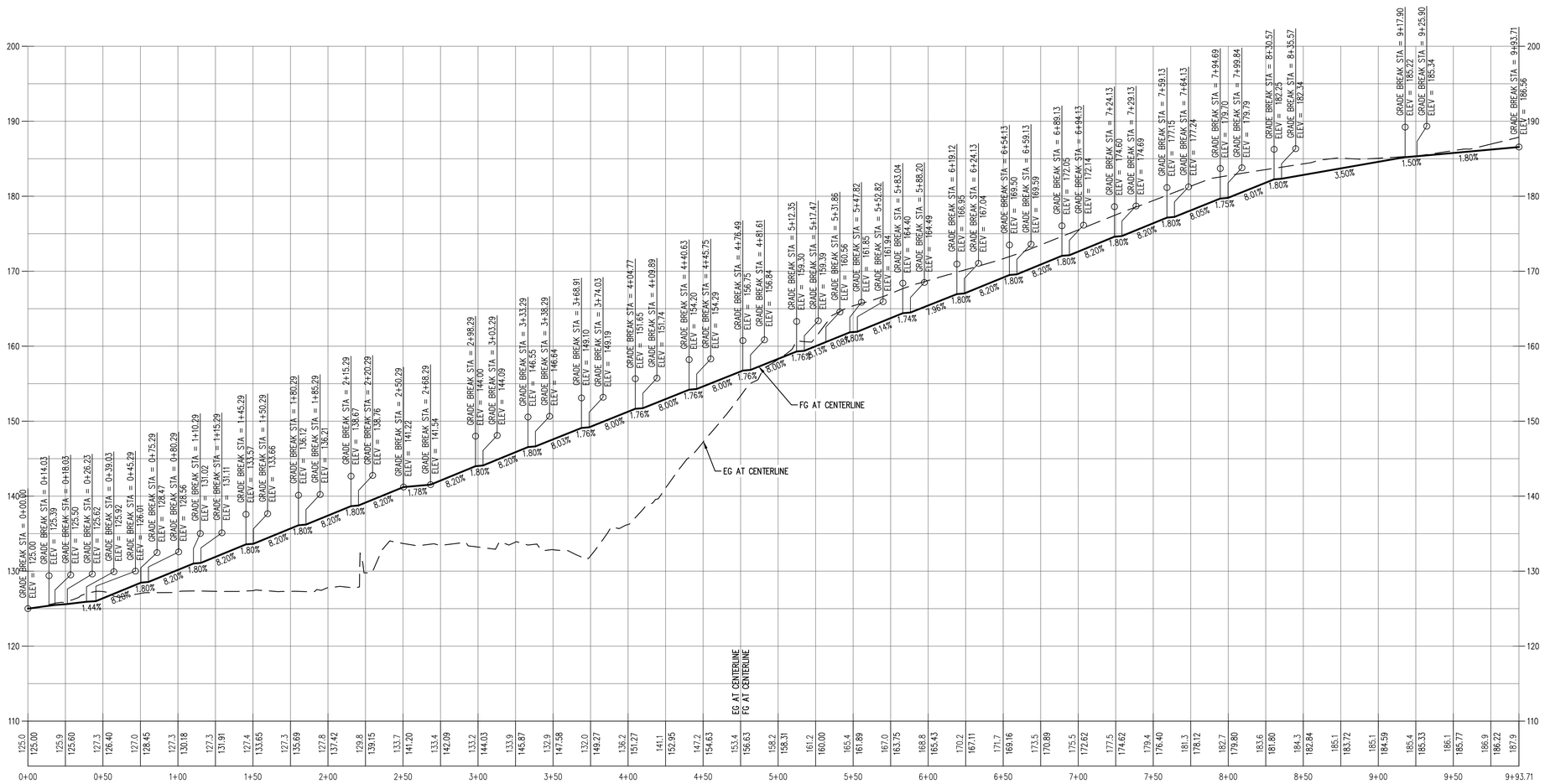
REGISTERED PROFESSIONAL ENGINEER
JACQUELINE M. POISSANT
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER
3812

SHEET
C206

AKS DRAWING FILE: 3812 GRADING WORKSHEET.DWG | LAYOUT: 206



Multiuse Path CL
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'

REFER TO SHEETS C200, C201, C202 & C203 FOR PLAN VIEW

ARCHITECTURAL REVIEW SET

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

MULTIUSE PATH CENTERLINE PROFILE

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 24, 2014

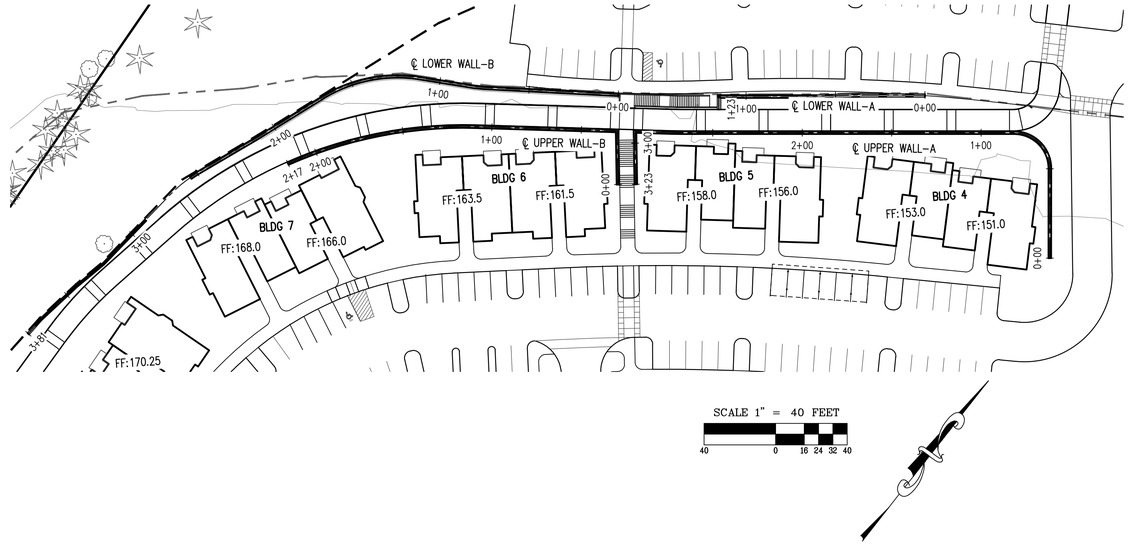
REGISTERED PROFESSIONAL ENGINEER
JACK M. POISSANT
OREGON
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

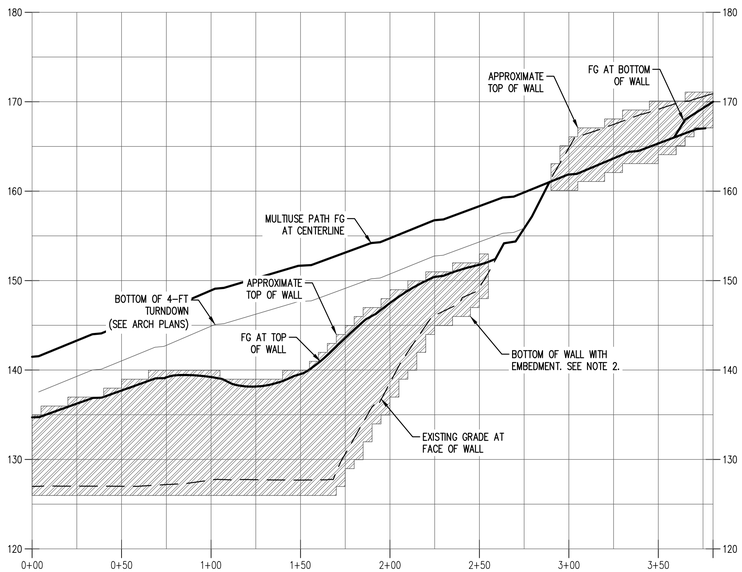
REVISIONS

JOB NUMBER
3812

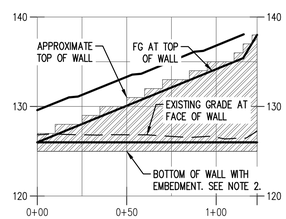
SHEET
C207

AKS DRAWING FILE: 3812 GRADING WORKSHEET.DWG | LAYOUT: 207

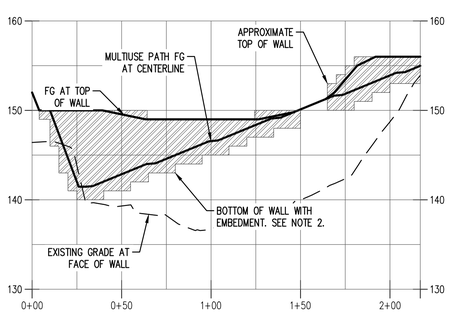




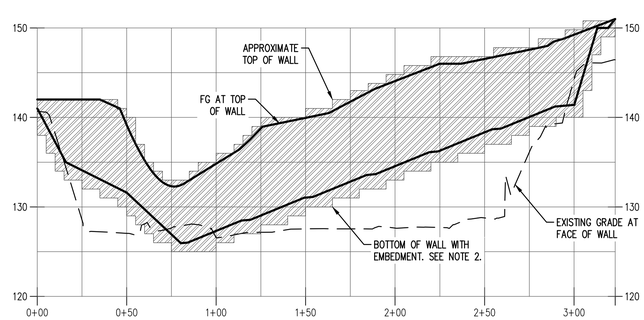
Lower Wall – B
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'



Lower Wall – A
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'



Upper Wall – B
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'



Upper Wall – A
Hor. Scale: 1"= 40'
Vert. Scale: 1"= 8'

NOTES:

1. RETAINING WALL DESIGN, TYPICAL SECTION, FENCE, FALL PROTECTION AND CALCULATIONS ARE TO BE DESIGN/ BUILD BY CONTRACTOR. RETAINING WALL PLAN AND PROFILE ARE SHOWN FOR GRADING AND UTILITY INSTALLATION PURPOSES ONLY.
2. BASE OF RETAINING WALL (BOTTOM OF FOOTING) TO BE DETERMINED BY GEOTECHNICAL ENGINEER AND COORDINATED BY CONTRACTOR DURING CONSTRUCTION. EMBEDMENT IS ASSUMED TO BE AT LEAST ONE FOOT BELOW FINISH GRADE AT FACE OF WALL BUT WILL VARY DEPENDING ON WALL TYPE AND METHOD OF CONSTRUCTION.
3. APEX COMPANIES, LLC PROVIDED GEOTECHNICAL REPORT DATED 03/26/2014 FOR GENERAL WALL CONSTRUCTION AND DESIGN. THIS REPORT CAN BE USED AS A DESIGN GUIDE. DESIGN OF THE REINFORCED SITE RETAINING WALL SHALL BE BASED ON SPECIFIC WALL GEOMETRY AND SPECIFIC PROPERTIES OF THE BACKFILL MATERIAL, WALL UNITS, GEOGRIDS AND SPECIFIC WALL LOADS. CONTRACTOR SHALL PROVIDE WALL DESIGN CONSISTING OF PLANS, CALCULATIONS, FALL PROTECTION, AND CONSTRUCTION SPECIFICATIONS STAMPED BY A QUALIFIED ENGINEER REGISTERED IN OREGON. THE CONTRACTOR'S WALL DESIGN SHALL BE REVIEWED AND APPROVED BY THE CITY AND PROJECT TEAM.
4. TOP OF WALL AND BOTTOM OF FOOTING STEPPING TO BE ADJUSTED PER WALL TYPE AND MANUFACTURER RECOMENDATIONS.
5. CONTRACTOR SHALL SUBMIT ALL INFORMATION NECESSARY TO OBTAIN CITY PERMITS FOR WALL CONSTRUCTION.
6. CONTRACTOR SHALL REFER TO MULTIUSE PATH TYPICAL SECTION PREPARED BY OTHERS FOR DETAILS, HANDRAILS, ETC.

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY SALEM, LLC
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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

MULTIUSE PATH RETAINING WALLS PLAN AND PROFILE

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE: JUNE 24, 2014	

REGISTERED PROFESSIONAL ENGINEER
OREGON
JEFFREY M. PORTER
JOSSANT
EXPIRES: DEC. 31, 2014

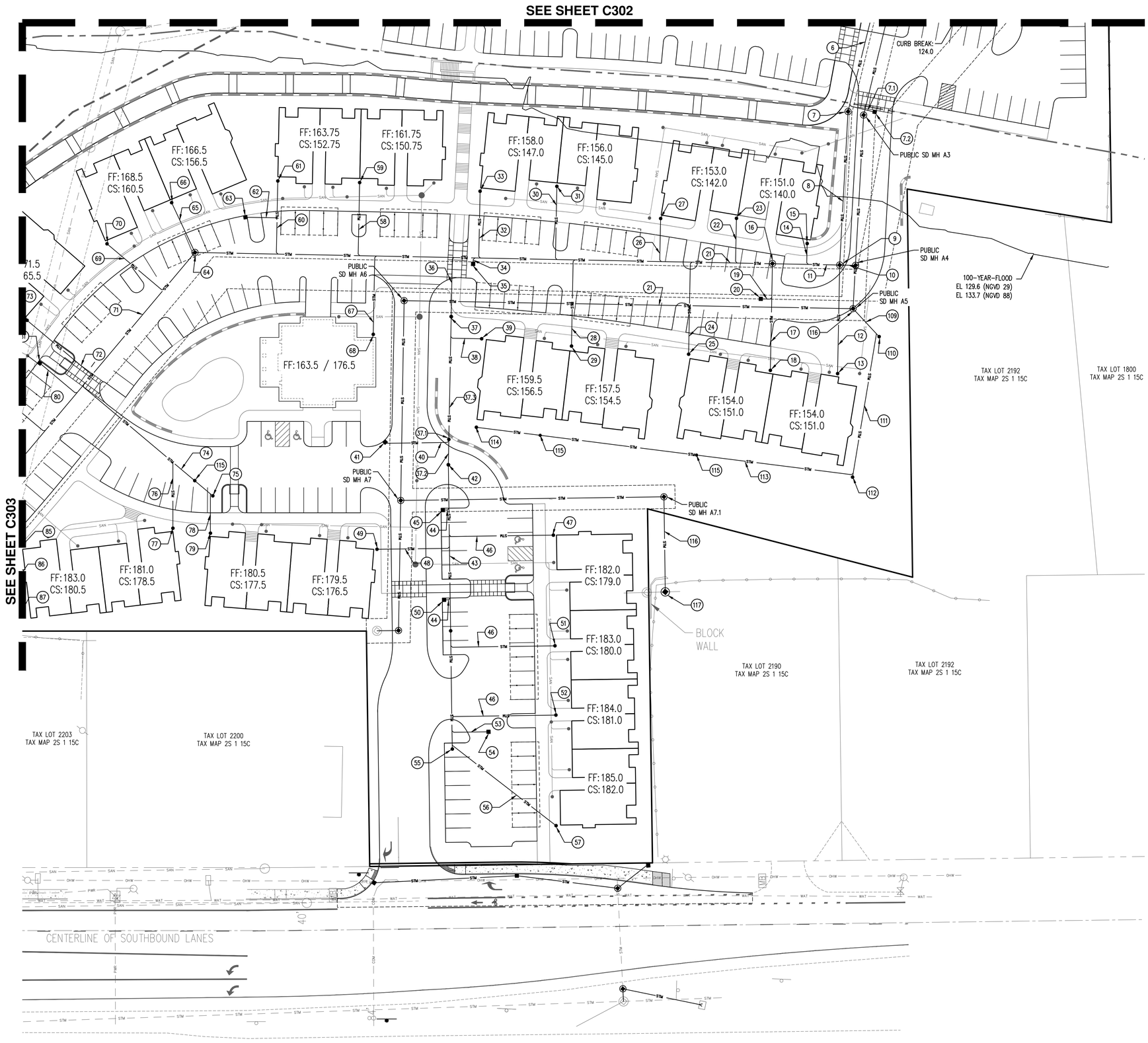
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C208

AKS DRAWING FILE: 3812 GRADING WORKSHEET.DWG | LAYOUT: 208



NOTES:

1. ALL WORK WITHIN PACIFIC HIGHWAY WEST (OR99W) RIGHT-OF-WAY TO BE PERFORMED UNDER SEPARATE ODOT PERMIT. REFER TO SEPARATE DRAWING SET FOR ALL WORK WITHIN ODOT RIGHT-OF-WAY.
2. SEE SHEET C305 FOR PUBLIC STORM DRAIN.

SCALE 1" = 30 FEET

30 0 12 18 24 30

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY, LLC
5285 COTTAGE ST NE
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SALEM, OR 97301
PHONE: 503.400.6028
FAX: 503.400.7722
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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

STORM DRAINAGE PLAN - NORTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

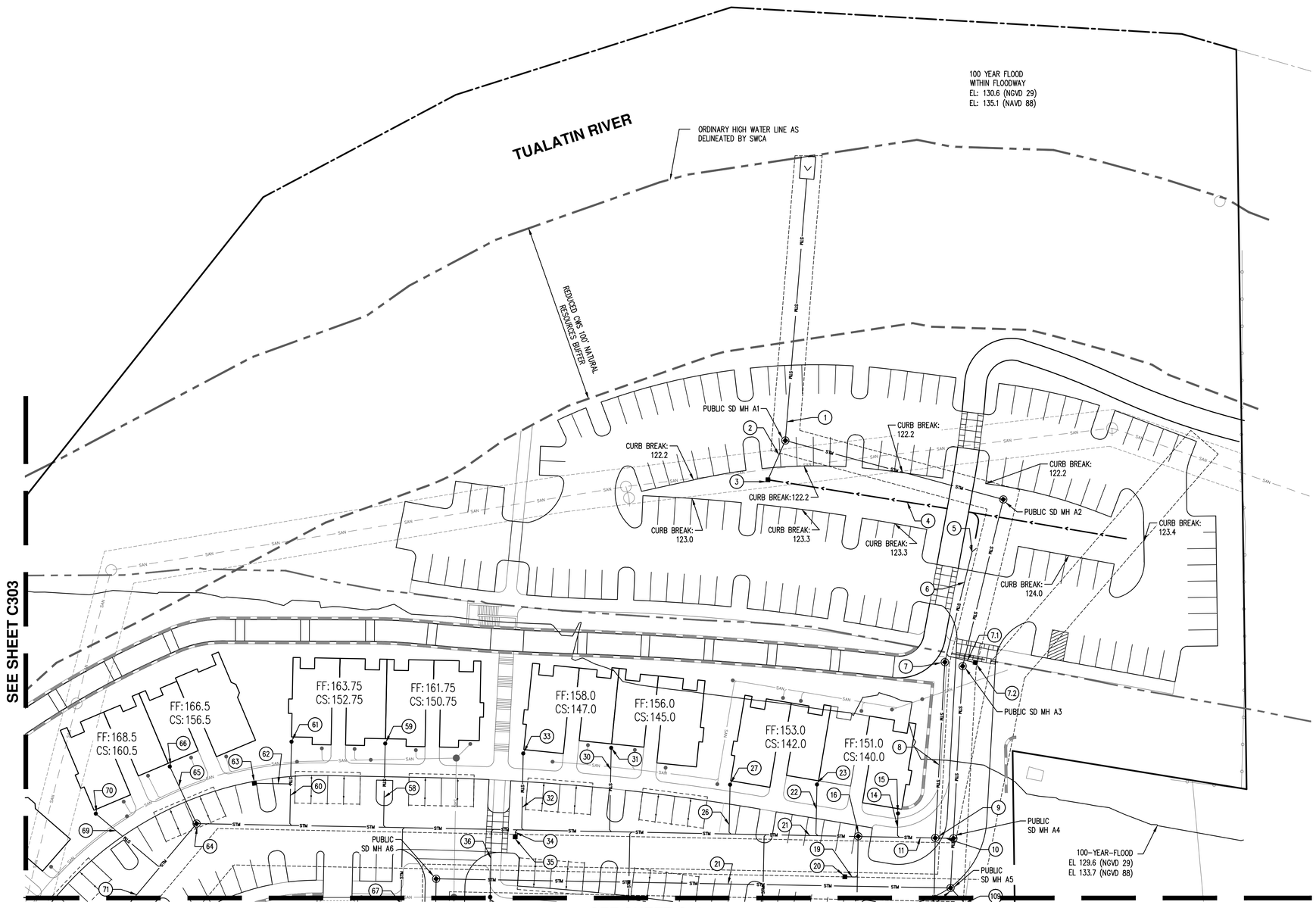
JOB NUMBER
3812

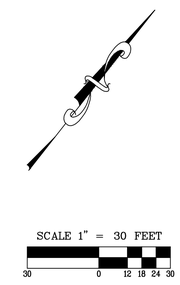
SHEET
C301

AKS DRAWING FILE: 3812 C301-C303 STORM.DWG | LAYOUT: C301

NOTE:

1. SEE SHEET C305 FOR PUBLIC STORM DRAIN.





ARCHITECTURAL REVIEW SET

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RIVER RIDGE APARTMENTS

TUALATIN OREGON

TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

STORM DRAINAGE PLAN - LOWER PARKING LOT

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

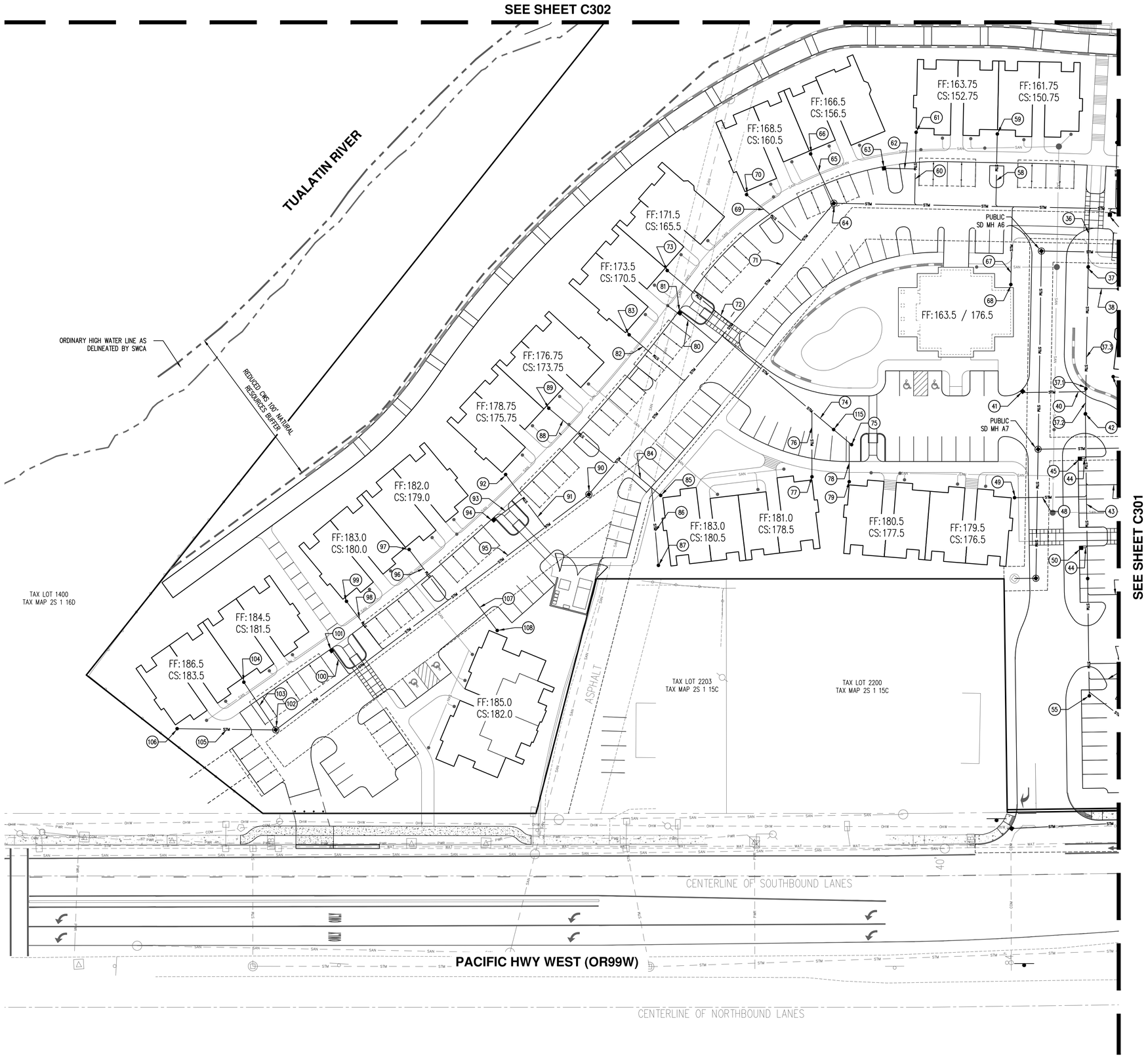
REGISTERED PROFESSIONAL ENGINEER
JACK M. POISSANT
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER 3812

SHEET C302

AKS DRAWING FILE: 3812 C301-C303 STORM.DWG | LAYOUT: C302



NOTES:

1. ALL WORK WITHIN PACIFIC HIGHWAY WEST (OR99W) RIGHT-OF-WAY TO BE PERFORMED UNDER SEPARATE ODOT PERMIT. REFER TO SEPARATE DRAWING SET FOR ALL WORK WITHIN ODOT RIGHT-OF-WAY.
2. SEE SHEET C305 FOR PUBLIC STORM DRAIN.

SCALE 1" = 30 FEET

30 0 12 18 24 30

ARCHITECTURAL REVIEW SET

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SALEM, OR 97301
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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

STORM DRAINAGE PLAN - SOUTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
JACK M. POISSANT
REGISTERED PROFESSIONAL ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER
3812

SHEET
C303

AKS DRAWING FILE: 3812 C301-C303 STORM.DWG | LAYOUT: C303

STORM DRAIN (SD) KEYED NOTES

1. CONNECT TO PUBLIC SD MH A1
2. 12" SD, L=24' , S=1% MIN
3. DOME INLET, RIM: 120.4, 12"IE OUT:117.4
4. WATER QUALITY SWALE PER CWS STANDARDS.
   BOTTOM WIDTH = 4-FT, S=0.5%
5. 8" OUTLET, IE= 121.5
6. 8" SD, L=63', S= 2%
7. SD MINI MH, RIM=127.0, 8" IE=122.8

7.1 6" SD, L=17', S=1% MIN

7.2 CB, RIM=126.0, 6" IE=123

8. 6" SD, L=97.5', S=14.6%
9. 48" SD MH
   RIM=142
   4" IE IN (SE)=137.92
   15" IE IN (SW)=137.0
   6" IE OUT (NW)=137.0
   15" IE OUT (NE)=137.5
10. 15" SD, L=10', S=1% MIN
11. 15" SD, L=43', S=18.6%
12. 4" SD STUB FOR ROOF DRAIN, L=69', S=2% MIN
13. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=145
14. 4" SD STUB FOR ROOF DRAIN, L=13', S=2% MIN
15. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=143.5
16. 48"SD MH
    RIM=149.6
    6" IE IN (SE)=145.9
    15" IE=145.44
17. 6" SD STUB FOR ROOF DRAIN, L=68', S=1% MIN
18. CO AT BLDG FOR ROOF DRAIN CONNECTION, 6" IE=146.6
19. 6" SD, L=7', S=2% MIN
20. CB, RIM=149.0, 6" IE=146.0
21. 18" SD, L=366', S=4.0%
22. 4" SD STUB FOR ROOF DRAIN, L=22', S=2% MIN
23. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=147.4
24. 6" SD STUB FOR ROOF DRAIN, L=58', S=1% MIN
25. CO AT BLDG FOR ROOF DRAIN CONNECTION, 6" IE=148.5
26. 4" SD STUB FOR ROOF DRAIN, L=27', S=2% MIN
27. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=149.25
28. 4" SD STUB FOR ROOF DRAIN, L=55', S=2% MIN
29. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=152.04
30. 4" SD STUB FOR ROOF DRAIN, L=46', S=2% MIN
31. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=152.34
32. 4" SD STUB FOR ROOF DRAIN, L=42', S=2% MIN
33. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=154.18
34. 6" SD, L=4', S=2% MIN
35. CB, RIM=158.0, 6" IE=155.0
36. 10" SD, L=38', S=3.1%
37. SD MINI MH, RIM=160.0, 10" IE=155

37.1 SD CO, 8" IE=161.0

37.2 10" SD, L=16', S=53%

37.3 10" SD, L=78, S=7.7%

38. 4" SD STUB FOR ROOF DRAIN, L=20', S=2% MIN
39. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=155.65
40. 6" SD, L=40', S=2% MIN
41. CB, RIM=173.0, 6" IE=170.0
42. SD MINI MH, RIM=174.5, 8" IE=169.5
43. 8" SD, L=180', S=5.83%
44. 6" SD, L=4', S=2% MIN
45. CB, RIM=177.5, 6" IE=174.5
46. 4" SD STUB FOR ROOF DRAIN, L=65', S=2% MIN
47. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=176
48. 4" SD STUB FOR ROOF DRAIN, L=46', S=2% MIN
49. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=175.5
50. CB, RIM=179.0, 6" IE:176.0
51. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=177.2
52. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=178.5
53. 6" SD, L=23', S=2% MIN
54. CB, RIM=182.7, 6" IE=179.7
55. SD CO, 8" IE=180.0
56. 4" SD STUB FOR ROOF DRAIN, L=83', S=2% MIN
57. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=180.5
58. 4" SD STUB FOR ROOF DRAIN, L=46', S=2% MIN
59. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=157.34
60. 6" SD STUB FOR ROOF DRAIN, L=46', S=2% MIN
61. CO AT BLDG FOR ROOF DRAIN CONNECTION, 6" IE=159.42
62. 6" SD, L=20', S=2% MIN
63. CB, RIM=164.6, 6" IE=161.6
64. 48" SD MH
    RIM=165.3
    4" IE IN=161.0
    12" IE IN=160.33
    15" IE OUT=160.08
65. 4" SD STUB FOR ROOF DRAIN, L=35', S=2% MIN
66. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=161.7
67. 4" SD STUB FOR ROOF DRAIN, L=51', S=2% MIN
68. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=157.02
69. 4" SD STUB FOR ROOF DRAIN, L=46', S=2% MIN
70. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=163.20
71. 12" SD, L=243', S=5.0%
72. 4" SD STUB FOR ROOF DRAIN, L=54', S=2% MIN
73. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=166.84
74. 6" SD, L=108', S=7.24%
75. 6" CO, IE=173.0
76. 4" SD STUB FOR ROOF DRAIN, L=42', S=2% MIN
77. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=173.25
78. 4" SD STUB FOR ROOF DRAIN, L=25', S=2% MIN
79. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=173.5
80. 6" SD, L=30', S=2% MIN
81. CB, RIM=171.5, 6" IE=168.5
82. 4" SD STUB FOR ROOF DRAIN, L=46', S=2% MIN
83. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=169.07
84. 6" SD, L=36', S=2% MIN
85. CO AT BLDG FOR ROOF DRAIN CONNECTION, 6" IE=172.14
86. 4" SD STUB FOR ROOF DRAIN, L=50', S=2% MIN
87. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=173.08
88. 4" SD STUB FOR ROOF DRAIN, L=55', S=2% MIN
89. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=172.76
90. 48" SD MH
    RIM=178.5
    8" IE IN=172.81
    12" IE OUT=172.48
91. 6" SD STUB FOR ROOF DRAIN, L=42', S=2% MIN
92. CO AT BLDG FOR ROOF DRAIN CONNECTION, 6" IE=174.78
93. 6" SD, L=24', S=2% MIN
94. CB, RIM=179.5, 6" IE=176.5
95. 8" SD, L=250', S=2.5%
96. 4" SD STUB FOR ROOF DRAIN, L=41', S=2% MIN
97. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=176.79
98. 4" SD STUB FOR ROOF DRAIN, L=39', S=2% MIN
99. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=178.05
100. 6" SD, L=19', S=2% MIN
101. CB, RIM=182.7, 6" IE=179.7
102. 48" SD MH
     RIM=184.3
     4" IE=179.43
     8" IE=179.10
103. 4" SD STUB FOR ROOF DRAIN, L=37', S=2% MIN
104. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=180.17
105. 4" SD STUB FOR ROOF DRAIN, L=63', S=2% MIN
106. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=182.5
107. 4" SD STUB FOR ROOF DRAIN, L=34', S=2% MIN
108. CO AT BLDG FOR ROOF DRAIN CONNECTION, 4" IE=178.0
109. 8" PERFORATED PIPE TRENCH DRAIN, L=24', S=11.1%
110. CO, 8" IE=141
111. 8" PERFORATED PIPE TRENCH DRAIN, L=92', S=9.8%
112. CO, 8" IE=150
113. 8" PERFORATED PIPE TRENCH DRAIN, L=241', S=2.3%
114. CO, 8" IE=155.5
115. CO AT EVERY 100-FT MAX PER UNIFORM PLUMBING CODE
116. 8" SD, L=60', S=2% MIN
117. CONNECT TO EXISTING STORM SEWER SERVICE FOR TL 2190

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RIVER RIDGE APARTMENTS

TUALATIN, OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C
TAX LOTS 2191, 2202, 2300

STORM DRAINAGE KEYED NOTES

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
JACQUELINE M. POISSANT
OREGON
EXPIRES: DEC. 31, 2014

PRELIMINARY NOT FOR CONSTRUCTION

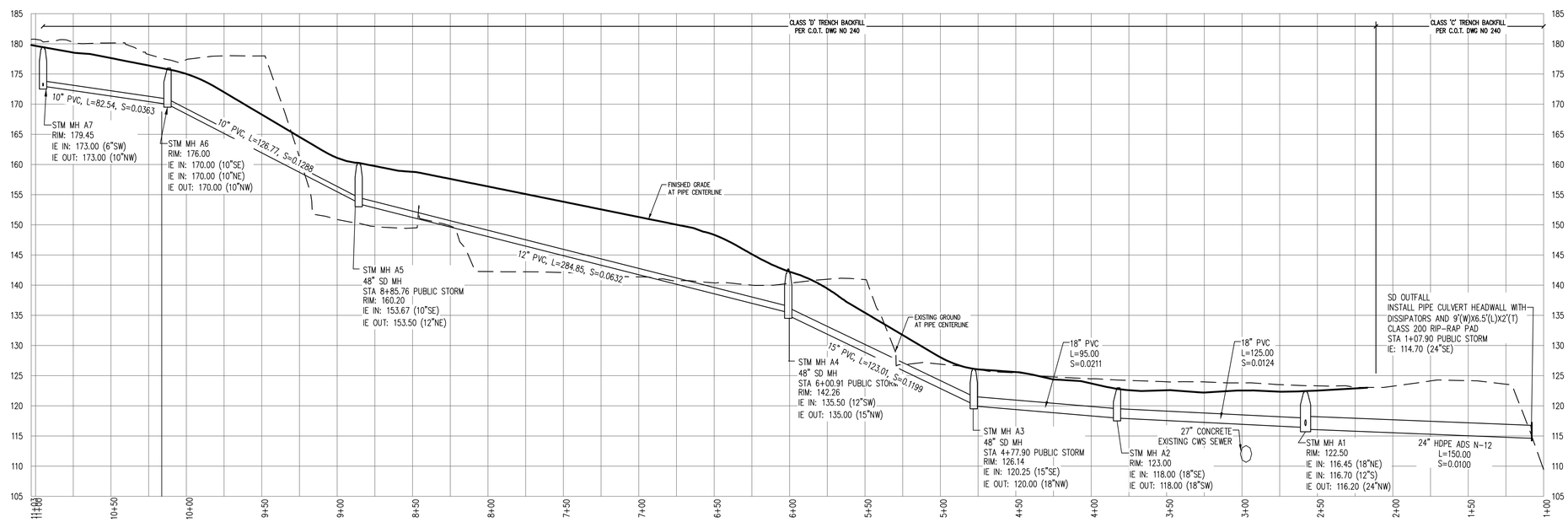
REVISIONS

JOB NUMBER
3812

SHEET
C304

NOTES:

1. CONNECT PUBLIC STORM DRAIN TO EXISTING STORM DRAIN FOR NEIGHBORING PROPERTY AND INSTALL CLEAN OUT AT CONNECTION.
2. CONTRACTOR SHALL POTHOLE EXISTING STORM DRAIN AND FIELD VERIFY EXACT LOCATION, DEPTH, MATERIAL TYPE, SIZE AND ALIGNMENT PRIOR TO STARTING CONSTRUCTION.



PUBLIC STORM
HOR: 1"= 40'
VERT: 1"= 10'

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300
OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

PUBLIC STORM DRAIN PLAN AND PROFILE

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

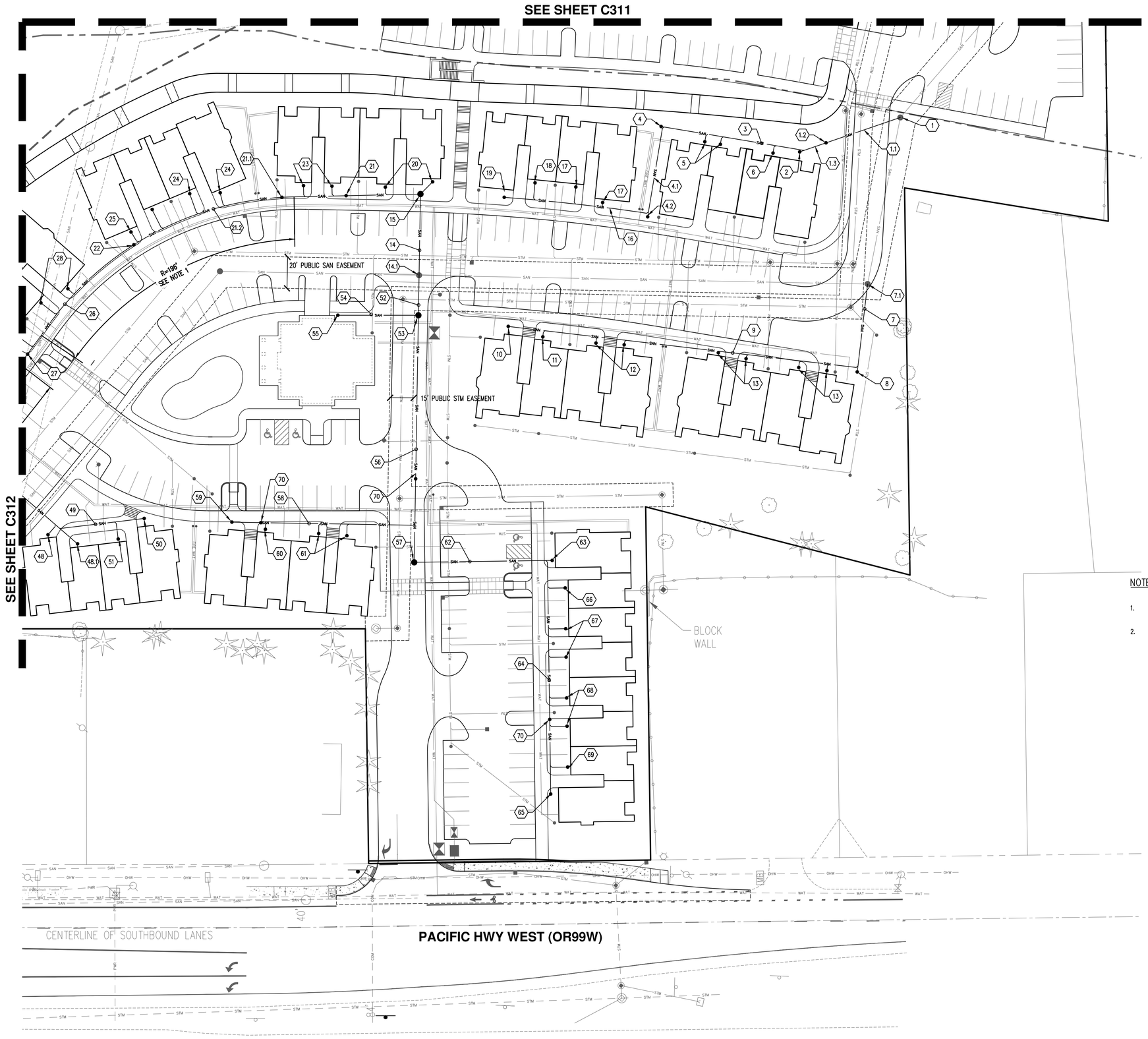
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C305

AKS DRAWING FILE: 3812 RTGN WALL & PUBLIC STM PROFILES.DWG | LAYOUT: C305



NOTES:

1. DEFLECT SEWER MAIN PIPE TO MAINTAIN ALIGNMENT SHOWN BUT DO NOT EXCEED MANUFACTURERS RECOMMENDATIONS.
2. SEE PUBLIC SEWER REALIGNMENT PLANS FOR PUBLIC SEWER CONSTRUCTION.

SCALE 1" = 30 FEET

30 0 12 18 24 30

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RIVER RIDGE APARTMENTS

TUALATIN, OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY, TAX MAP 2S 1 15C

SANITARY SEWER PLAN - NORTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JACKSON M. POISSANT
EXPIRES: DEC. 31, 2014

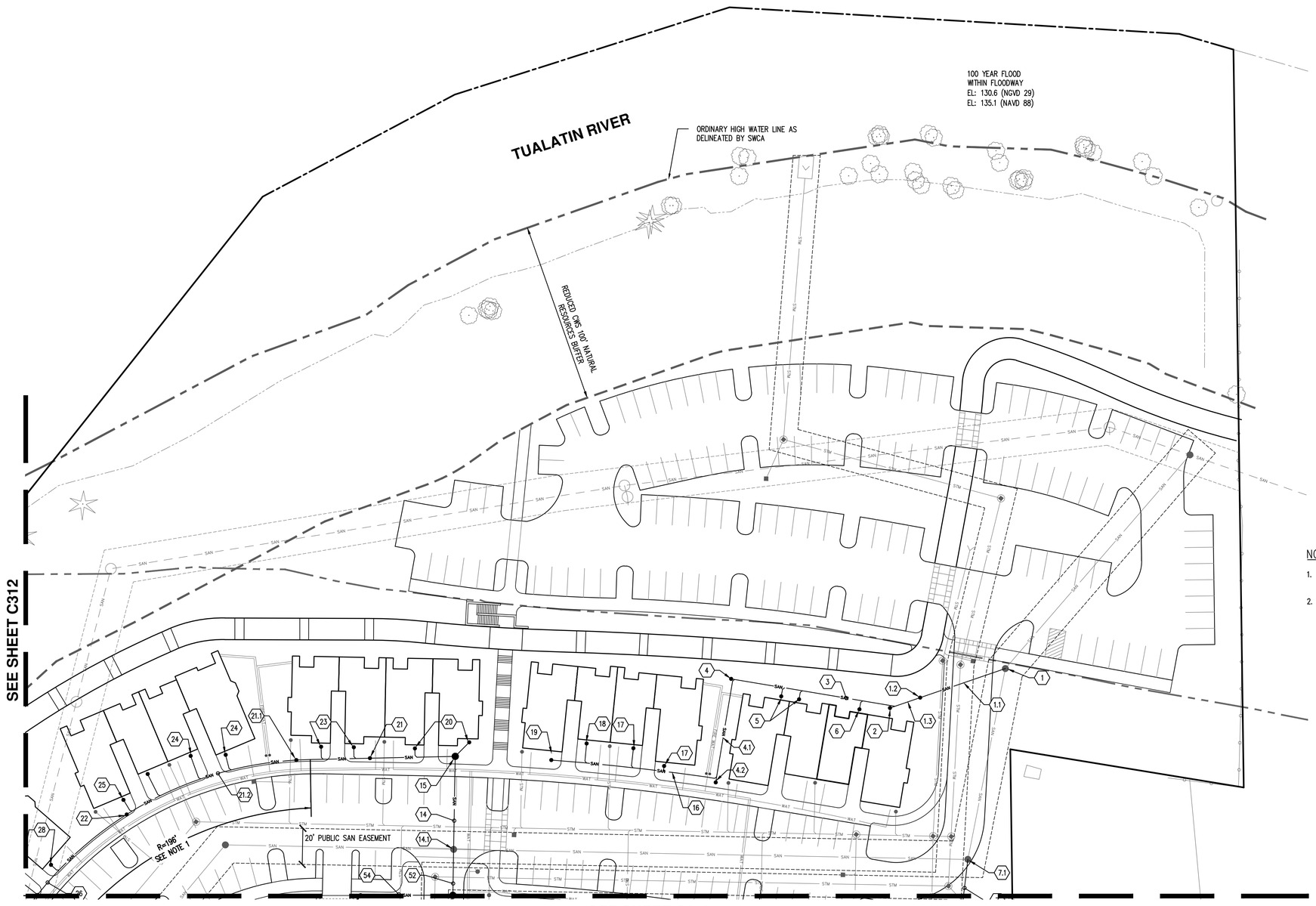
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C310

AKS DRAWING FILE: 3812 C310 SAN.DWG | LAYOUT: C310



NOTES:

1. DEFLECT SEWER MAIN PIPE TO MAINTAIN ALIGNMENT SHOWN BUT DO NOT EXCEED MANUFACTURER'S RECOMMENDATIONS.
2. SEE PUBLIC SEWER REALIGNMENT PLANS FOR PUBLIC SEWER CONSTRUCTION.

SCALE 1" = 30 FEET

30 0 12 18 24 30

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RIVER RIDGE APARTMENTS

TUALATIN OREGON

TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

SANITARY SEWER PLAN - LOWER PARKING LOT

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER OREGON JACK M. POISSANT

PRELIMINARY NOT FOR CONSTRUCTION

EXPIRES: DEC. 31, 2014

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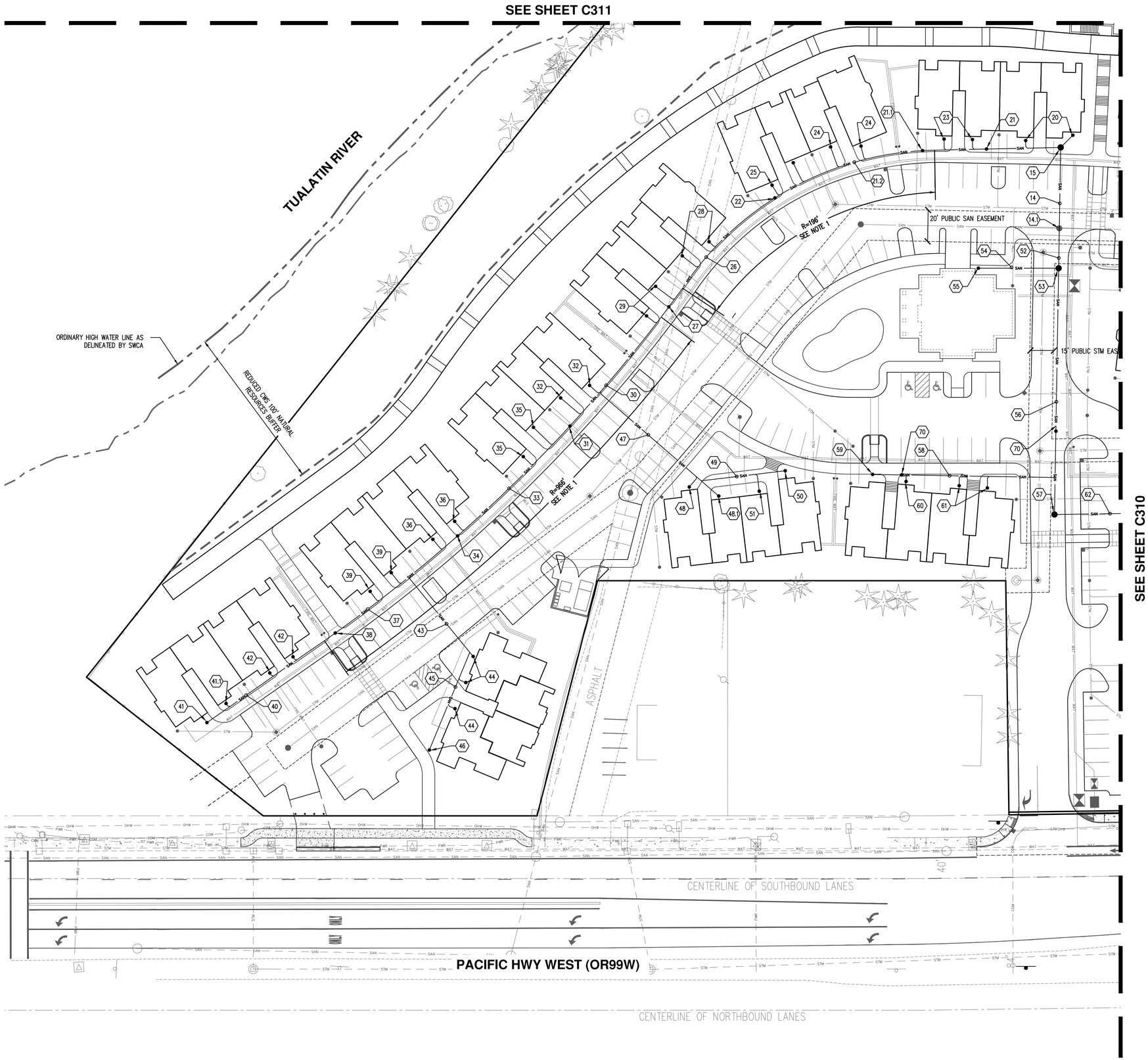
JOB NUMBER 3812

SHEET C311

AKS DRAWING FILE: 3812 C310 SANLOWG | LAYOUT: C311



NOTES:

1. DEFLECT SEWER MAIN PIPE TO MAINTAIN ALIGNMENT SHOWN BUT DO NOT EXCEED MANUFACTURERS RECOMMENDATIONS.
2. SEE PUBLIC SEWER REALIGNMENT PLANS FOR PUBLIC SEWER CONSTRUCTION.

SCALE 1" = 30 FEET

30 0 12 18 24 30

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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

SANITARY SEWER PLAN - SOUTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
JACK M. POISSANT
OREGON
EXPIRES: DEC. 31, 2014

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C312

AKS DRAWING FILE: 3812 C310 SAN.DWG | LAYOUT: C312

SANITARY SEWER (SS) KEYED NOTES

1. CONNECT TO CSW SAN MH-2
   6" IE: 119.2
   SEE PUBLIC SAN REALIGNMENT PLANS

1.1 6" SS
   L=50'
   S=2%

1.2 DEEP CONNECTION RISER

1.3 6" SS
   L=18'
   S=2% MIN

2. SS CO
   6" IE: 137.5

3. 6" SS
   L=67'
   S=3%

4. SS CO
   6" IE: 140.0

4.1 6" SS
   L=55'
   S=15.5%

4.2 SS CO
   6" IE: 148.5

5. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 140.0

6. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 138.0

7. 6" SS
   L=54'
   S=4.3%

7.1 CONNECT TO CWS SAN MH-3
   6" IE: 134.45
   SEE PUBLIC SAN REALIGNMENT PLANS

8. SS CO
   6" IE: 136.75

9. 6" SS
   L=225'
   S=5%

10. SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 148.0

11. SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 153.5

12. SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 151.5

13. SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 148.0

14. 8" SS
   L=51.5'
   S=1% MIN

14.1 CONNECT TO CWS SAN MH-4
   6" IE" 152.66 (SE)
   8" IE: 152.58 (SW)

15. 48" SAN MH
   RIM: 160
   4" IN: 154.8
   8" IN: 154.5
   8" OUT: 154.3

16. 6" SS
   L=92'
   S=5.5%

17. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 151.0

18. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 140.0

19. SS CO
   6" IE: 153.1

20. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 156.75

21. 8" SS
   L=88'
   S= 4.4%

21.1 SS CO AT 100' MAX PER UPC
   8" IE: 158.4

21.2 8" SS
   L=100'
   S=4.3%

22. SS CO AT 100' MAX PER UPC
   8" IE: 162.7'

23. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 158.75

24. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 161.5

25. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 163.5

26. 8" SS
   L=100'
   S=4.1%

27. SS CO AT 100' MAX PER UPC
   8" IE: 166.8

28. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 166.5

29. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 168.5

30. 8" SS
   L=100'
   S=4.2%

31. SS CO AT 100' MAX PER UPC
   8" IE: 171.0

32. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 171.75

33. 8" SS
   L= 100'
   S=3.6%

34. SS CO AT 100' MAX PER UPC
   8" IE: 174.6

35. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 173.75

36. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 177.0

37. 8" SS
   L=100'
   S=2.9%

38. SS CO AT 100' MAX PER UPC
   8" IE: 177.5

39. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 178.0

40. 8" SS
   L=100'
   S=1.5%

41. SS CO
   8" IE: 179.0

41.1 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 181.5

42. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 179.5

43. 6" SS
   L=64'
   S= 3.4%

44. SS SERVICE WITH CO AT BLDG
   S=2% MIN
   6" IE: 178.0

45. 6" SS
   L=67.5'
   S=1% MIN

46. SS CO
   6" IE: 178.67

47. 6" SS
   L=100'
   S=2.2%

48. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 175

48.1 SS CO
   6" IE: 172'

49. 6" SS
   L=54'
   S= 1% MIN

50. SS CO
   6" IE:172

51. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 175

52. 8" SS
   L=25.5'
   S=1% MIN

53. 24" SAN MINI MH
   RIM= 161.1
   6" IN: 156.47
   8" IN: 156.3
   8" OUT: 156.1

54. 4" SS
   L= 51.5'
   S= 2% MIN

55. SS CO
   4" IE: 158.5

56. 8" SS
   L=157'
   S=10.5%

57. 24" SAN MINI MH
   RIM: 177.8
   6" IN: 173.0
   8" OUT: 172.8

58. 6" SS
   L=117'
   S=2.2%

59. SS CO
   6" IE: 173

60. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 173

61. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 172

62. 6" SS
   L=88'
   S=4%

63. SS CO
   6" IE: 176.5

64. 6" SS
   L=149'
   S=2.3%

65. SS CO
   6" IE: 180

66. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 177

67. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 178

68. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 179

69. 4" SS SERVICE WITH CO AT BLDG
   S=2% MIN
   4" IE: 180

70. SS CO @ 100' MAX PER UPC

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY, TAX MAP 2S 1 15C
OREGON

SANITARY SEWER KEYED NOTES

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED

DATE: JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

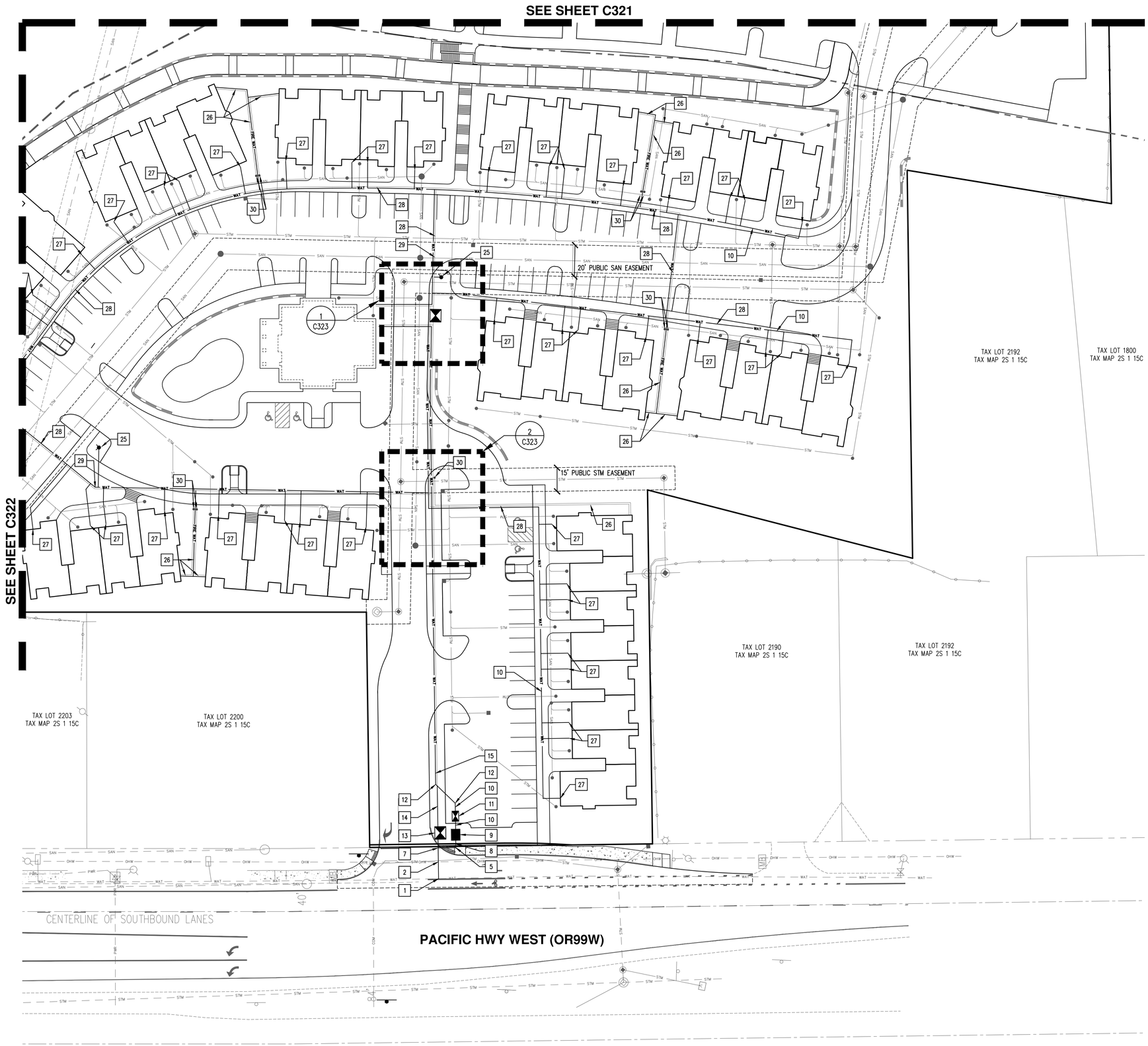
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER
3812

SHEET
C313

AKS DRAWING FILE: 3812 C310 SAN.DWG | LAYOUT: C313



SCALE 1" = 30 FEET

30 0 12 18 24 30

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RIVER RIDGE APARTMENTS

TUALATIN OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C
TAX LOTS 2191, 2202, 2300

WATER PLAN - NORTH

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
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JACK M. POISSANT
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SHEET
C320

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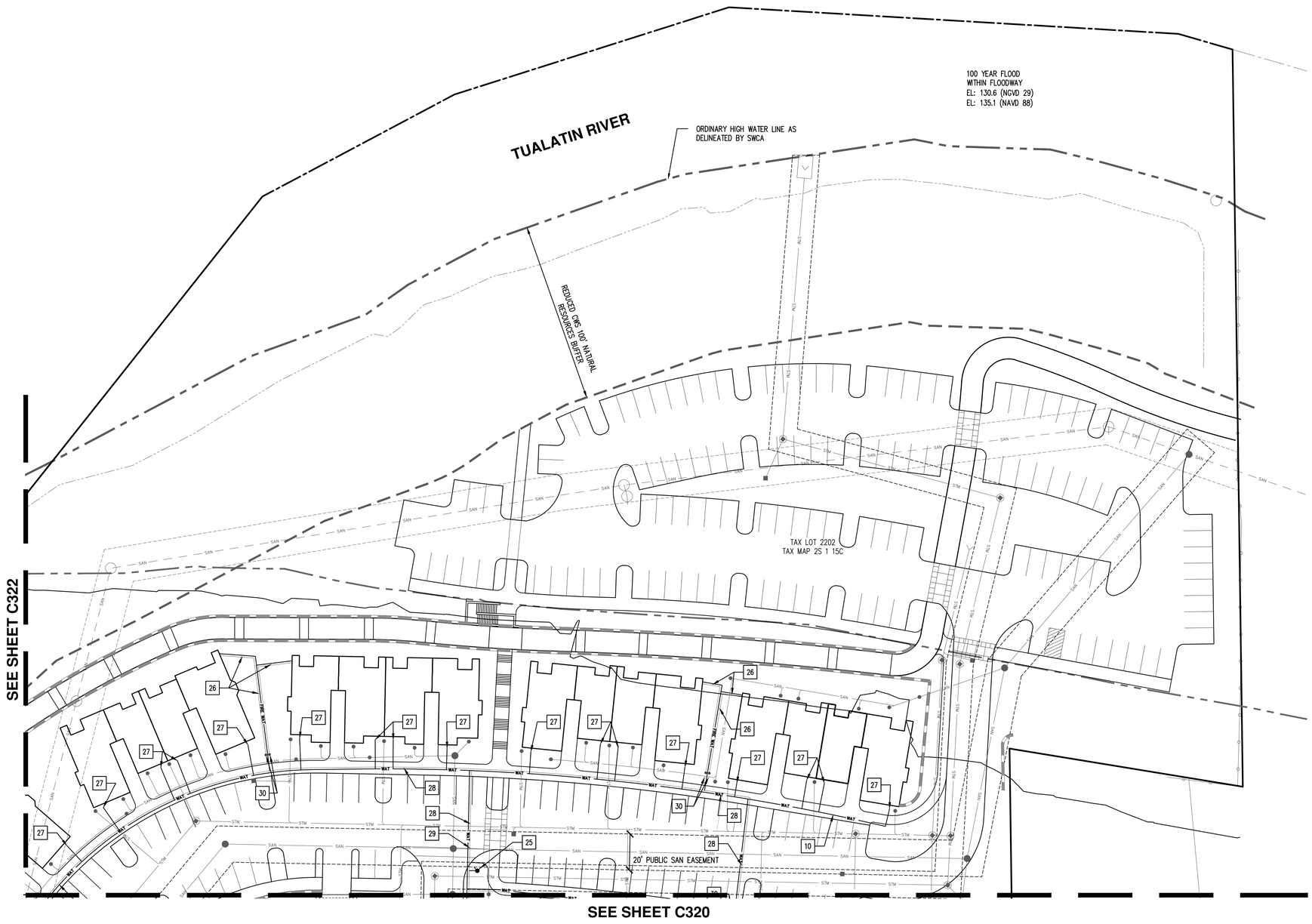

SCALE 1" = 30 FEET

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RIVER RIDGE APARTMENTS

TUALATIN OREGON

TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

WATER PLAN - LOWER PARKING LOT

DESIGNED BY:	RCW
DRAWN BY:	RCC
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SCALE:	AS NOTED
DATE:	JUNE 11, 2014

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EXPIRES DEC. 31, 2014

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REVISIONS

JOB NUMBER
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SHEET
C321

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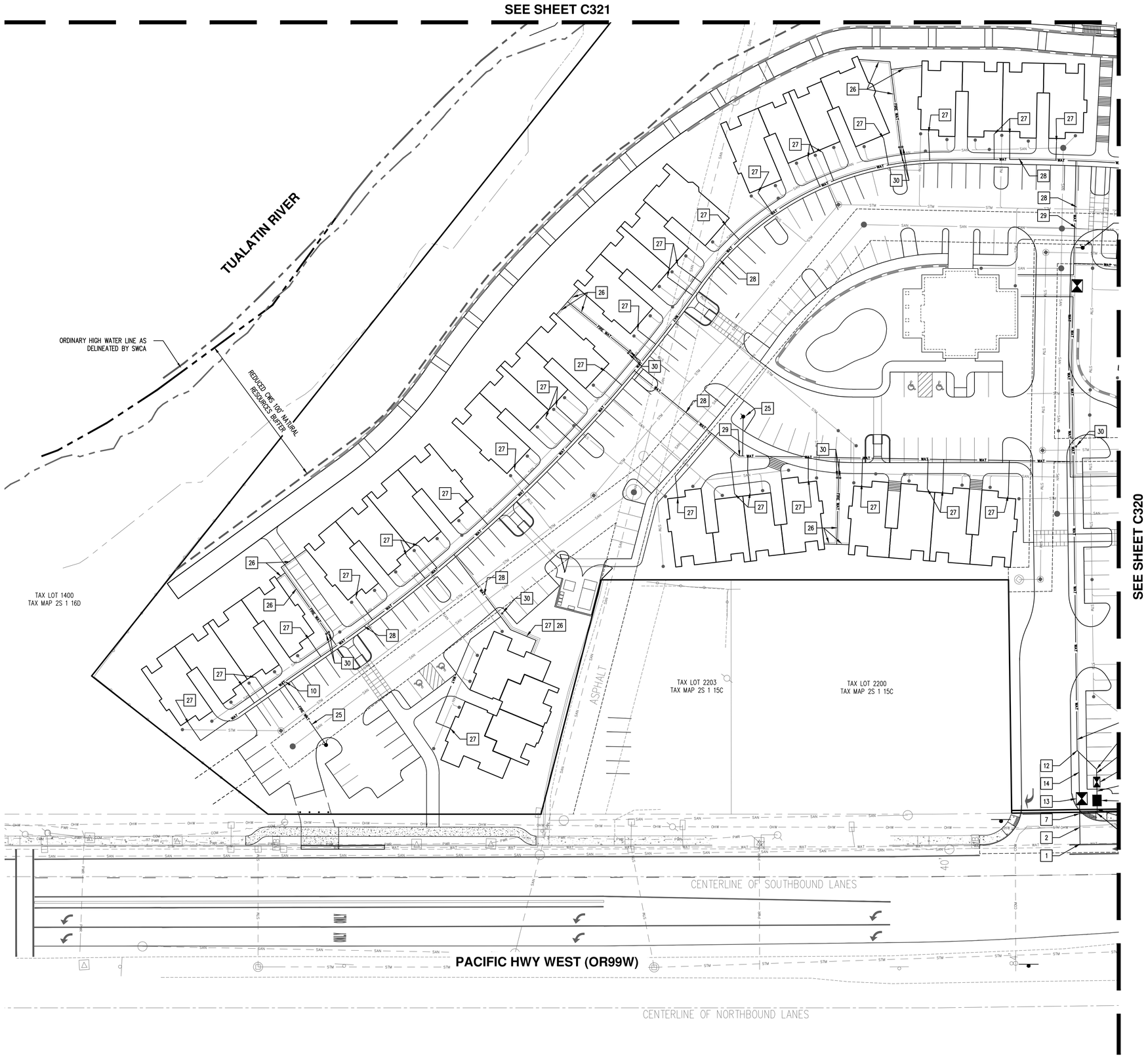

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RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300
WASHINGTON COUNTY TAX MAP 2S 1 15C

WATER PLAN - SOUTH

DESIGNED BY:	RCW
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PRELIMINARY NOT FOR CONSTRUCTION
JACK M. POISSANT
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER
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SHEET
C322

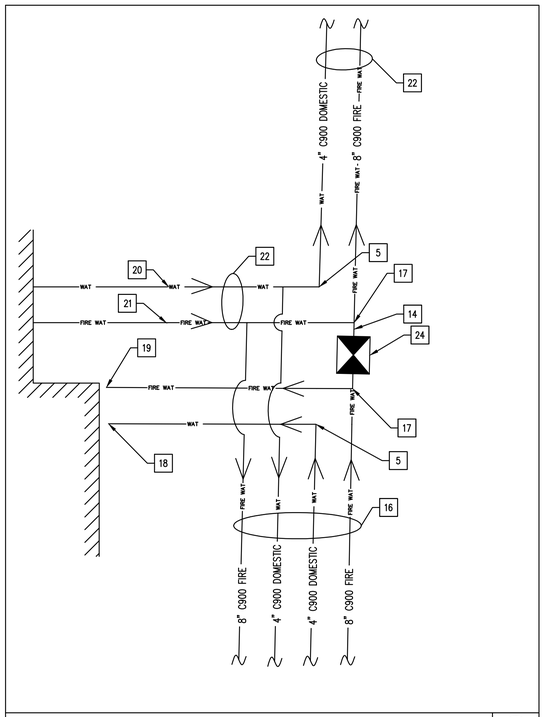
AKS DRAWING FILE: 3812 C320 WAT.DWG | LAYOUT: C322

WATER AND FIRE KEYED NOTES

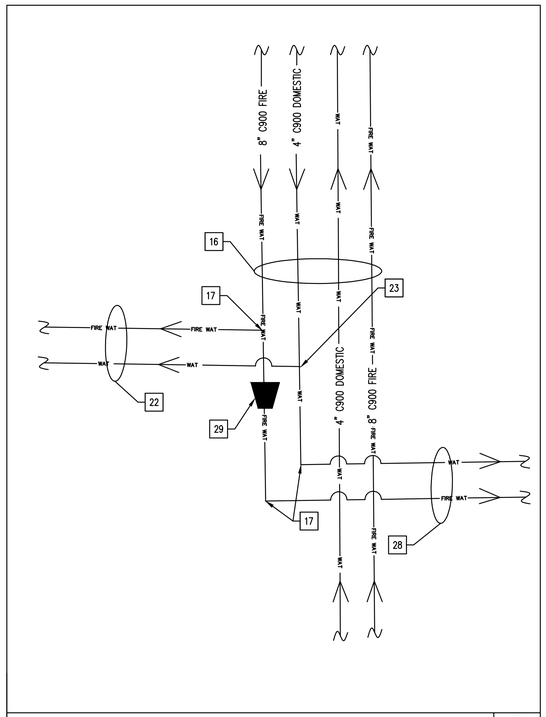
1. CONTRACTOR SHALL COORDINATE WITH CITY FORCES FOR INSTALLATION OF 12"X8" TAPPING TEE AND GATE VALVE. COORDINATION, TRAFFIC CONTROL, PERMITS, EXCAVATION, THRUST BLOCK, BACKFILL AND SURFACE RESTORATION BY CONTRACTOR. NEW FIRE SERVICE MAIN SHALL CONNECT TO EXISTING 12" PUBLIC MAIN.
2. 8" DUCTILE IRON (DI)
3. 8"x6" TEE, THRUST BLOCK (TB) AND 6" GATE VALVE
4. 6" DI
5. 90° BEND AND TB
6. NOT USED
7. 8"x4" TEE AND TB
8. 4" DI DOMESTIC SERVICE
9. CONTRACTOR SHALL COORDINATE WITH CITY TO INSTALL NEW 4" DOMESTIC SERVICE AND METER VAULT.
10. 4" C900 DOMESTIC WATER
11. 4" DOMESTIC DOUBLE CHECK
12. 45° BEND AND TB
13. 8" DOUBLE CHECK DETECTOR ASSEMBLY AND VAULT PER CITY AND TVFR STANDARDS
14. 8" C900 FIRE LINE
15. COMMON TRENCH
    8" C900 FIRE LINE (SUCTION SIDE OF BOOSTER PUMP)
    4" C900 DOMESTIC WATER (SUCTION SIDE OF BOOSTER PUMP)
16. COMMON TRENCH
    8" C900 FIRE LINE (SUCTION SIDE OF BOOSTER PUMP)
    8" C900 FIRE LINE (DISCHARGE SIDE OF BOOSTER PUMP)
    4" C900 DOMESTIC WATER (SUCTION SIDE OF BOOSTER PUMP)
    4" C900 DOMESTIC WATER (DISCHARGE SIDE OF BOOSTER PUMP)
17. 8" TEE AND TB
18. SUCTION INLET – 4" C900 DOMESTIC WATER
    CONNECTION TO BUILDING FOR DOMESTIC BOOSTER PUMP
19. SUCTION INLET – 8" C900 FIRE LINE
    CONNECTION TO BUILDING FOR FIRE LINE BOOSTER PUMP
20. SUCTION DISCHARGE – 4" C900 DOMESTIC WATER
    CONNECTION TO BUILDING FOR DOMESTIC BOOSTER PUMP
21. SUCTION DISCHARGE – 8" C900 FIRE LINE
    CONNECTION TO BUILDING FOR FIRE LINE BOOSTER PUMP
22. COMMON TRENCH
    8" C900 FIRE LINE (DISCHARGE SIDE OF BOOSTER PUMP)
    4" C900 DOMESTIC WATER (DISCHARGE SIDE OF BOOSTER PUMP)
23. 4" TEE AND TB
24. 8" SINGLE CHECK AND VAULT
25. 8"x6" TEE, TB, GATE VALVE AND PRIVATE FIRE HYDRANT
26. COMMON TRENCH
    2" SCH. 80 FIRE SERVICE
    4" DI FDC SERVICE FOR EACH BLDG
27. 2" SCH. 80 DOMESTIC SERVICE
28. COMMON TRENCH
    4" C900 FIRE LINE (DISCHARGE SIDE OF BOOSTER PUMP)
    4" C900 DOMESTIC WATER (DISCHARGE SIDE OF BOOSTER PUMP)
29. 8"x4" REDUCER
30. FIRE DEPARTMENT CONNECTION (FDC), ONE FOR EACH BLDG

WATER NOTES

1. TB=THRUST BLOCK OR JOINT RESTRAINT PER DETAILS
2. SITE CONTRACTOR TO COORDINATE WITH ARCHITECT PRIOR TO INSTALLATION OF UTILITY SERVICE CONNECTIONS TO THE INDIVIDUAL BUILDINGS TO CONFIRM ALL FINAL UTILITY SERVICE CONNECTION LOCATIONS PRIOR TO INSTALLATION.
3. MAINTAIN MINIMUM 5-FT HORIZONTAL AND 18-INCH VERTICAL SEPARATION BETWEEN DOMESTIC WATER SERVICES AND ALL SANITARY SEWER LINES.



BOOSTER PUMP INLET AND DISCHARGE LINE CONNECTION DETAIL
NTS
1 / C323



WATER CROSSING DETAIL
NTS
2 / C323

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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

WATER KEYED NOTES AND DETAILS

DESIGNED BY:	RCW
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SCALE:	AS NOTED
DATE:	JUNE 11, 2014

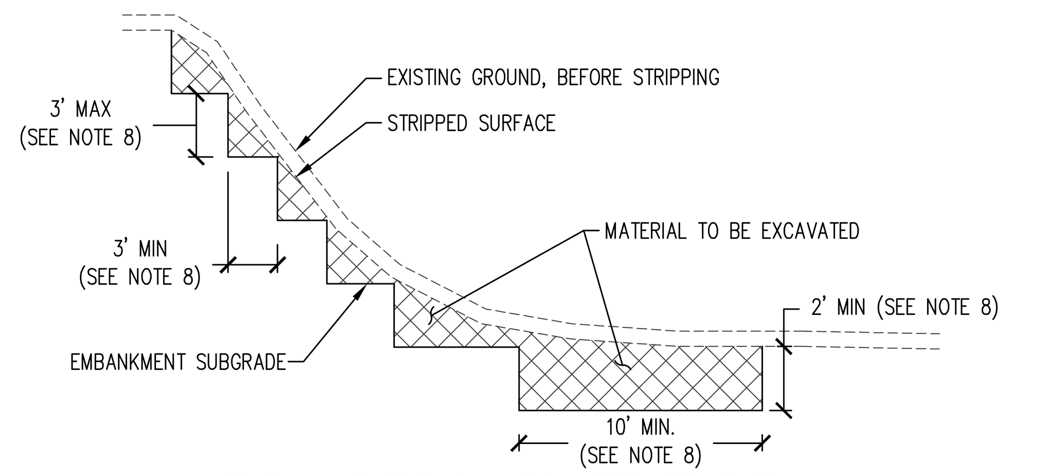
REGISTERED PROFESSIONAL ENGINEER
OREGON
JACQUELINE M. POISSANT
EXPIRES: DEC. 31, 2014
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS:

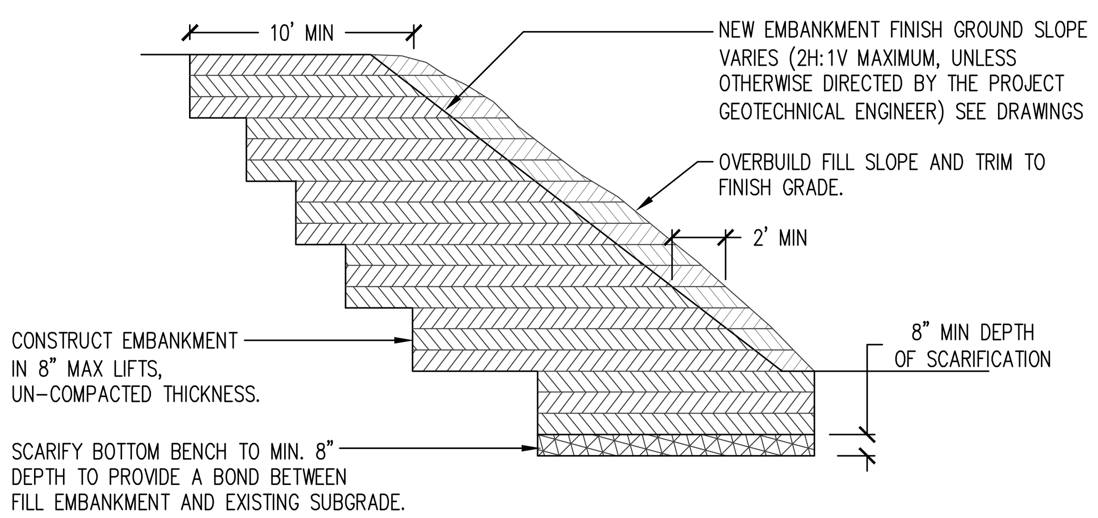
JOB NUMBER
3812

SHEET
C323

AKS DRAWING FILE: 3812 C320 WATLDWG | LAYOUT: C323



EMBANKMENT EXCAVATION REQUIREMENTS

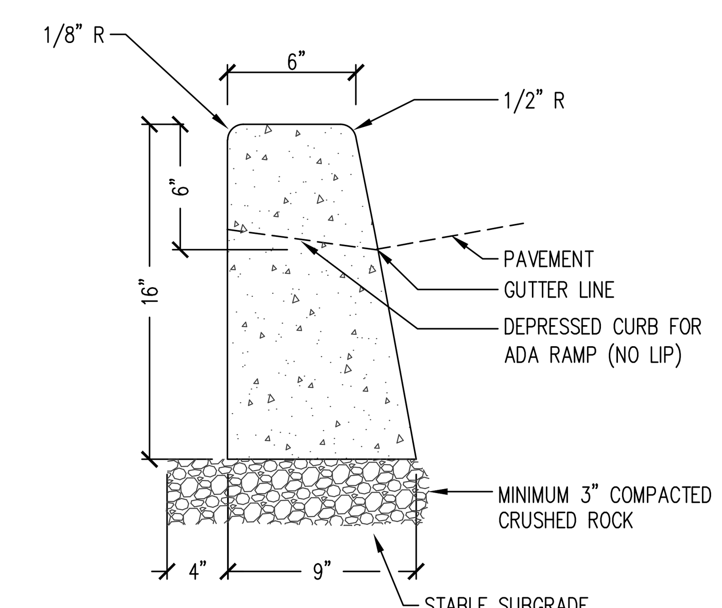


EMBANKMENT FILL REQUIREMENTS

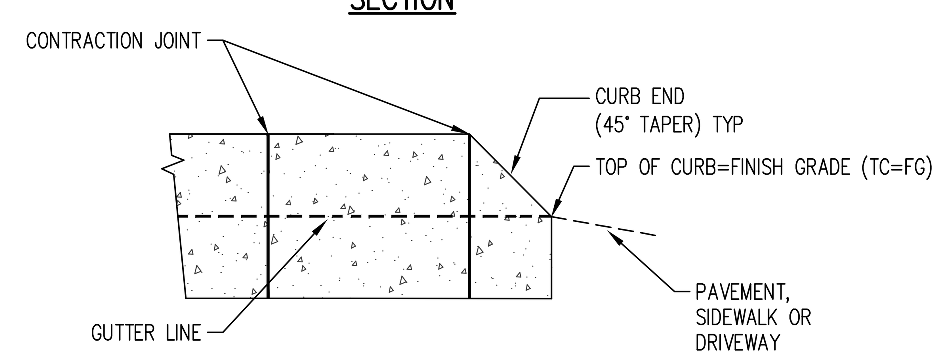
NOTES:

1. BENCHING OF EXISTING GROUND REQUIRED FOR ALL FILLS ON EXISTING SLOPES OF 5H:1V, OR STEEPER.
2. CONSTRUCT BENCHES ON ALL SIDES TO PROVIDE POSITIVE BOND WITH EXISTING GROUND.
3. EXCAVATE AND FILL IN A CONTINUOUS OPERATION.
4. BENCH WORK IS INCIDENTAL TO EMBANKMENT CONSTRUCTION.
5. TEXTURE FINISHED SLOPES BY DRIVING A CRAWLER TRACTOR UP AND DOWN THE SLOPE TO LEAVE A PATTERN OF CLEAT IMPRINTS HORIZONTAL ACROSS THE FACE OF THE SLOPE.
6. PROVIDE EROSION CONTROL DURING CONSTRUCTION AND MAINTAIN UNTIL FINAL STABILIZATION. SEE EROSION CONTROL PLAN WHERE APPLICABLE.
7. EMBANKMENT FILL MATERIAL SHALL BE APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER.
8. FINAL BENCH AND KEYWAY DIMENSIONS TO BE DETERMINED BY THE PROJECT GEOTECHNICAL ENGINEER BUT SHALL NOT BE LESS THAN SHOWN HERE.

STANDARD EMBANKMENT
NTS



SECTION

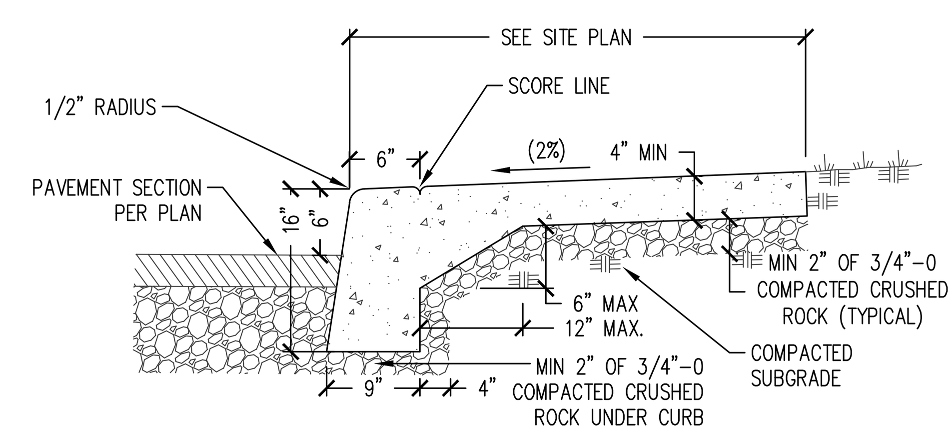


ELEVATION

NOTES:

1. CONCRETE SHALL BE 3300 PSI AT 28 DAYS.
2. CONTRACTION JOINTS ARE REQUIRED AT 15-FT INTERVALS AND AT INLET STRUCTURES AND WHEELCHAIR RAMPS. DEPTH OF JOINTS SHALL BE AT LEAST 1-1/2".
3. CONSTRUCT EXPANSION JOINTS (MIN. 1/2" THICK PREMOLDED BITUMINOUS MATERIAL) AT MAXIMUM 200 FEET SPACING AND AT SIDES OF DRIVEWAY APPROACHES AND POINTS OF TANGENCY.
4. CURBS TO CURE A MINIMUM OF 7 DAYS PRIOR TO PLACING FINAL BASEROCK AND PAVING.

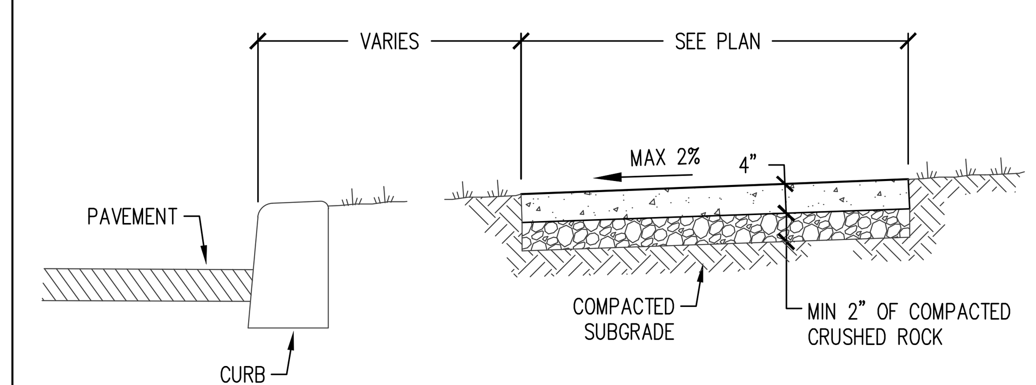
TYPE C CURB
NTS



NOTES:

1. CONCRETE SHALL BE 3300 PSI AT 28 DAYS.
2. CONTRACTION JOINTS ARE REQUIRED AT 5-FT INTERVALS WITH EXPANSION JOINT (MIN. 1/2" THICK PREMOLDED BITUMINOUS MATERIAL) SPACING NOT TO EXCEED 45 FEET AND PLACED AT SIDES OF DRIVEWAY APPROACHES, UTILITY VAULTS, AND WHEELCHAIR RAMPS.
3. SIDEWALKS 10-FT. AND WIDER SHALL HAVE LONGITUDINAL CONTRACTION JOINT(S) AT 5-FT ON CENTER.
4. CONCRETE DEPTH FOR STANDARD SIDEWALKS SHALL BE 4" MINIMUM.
5. SUBMIT JOINT LAYOUT TO OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO PLACING CONCRETE.
6. CURBS TO CURE A MINIMUM OF 7 DAYS PRIOR TO PLACING FINAL BASEROCK AND PAVING.

MONOLITHIC CURB AND SIDEWALK
NTS



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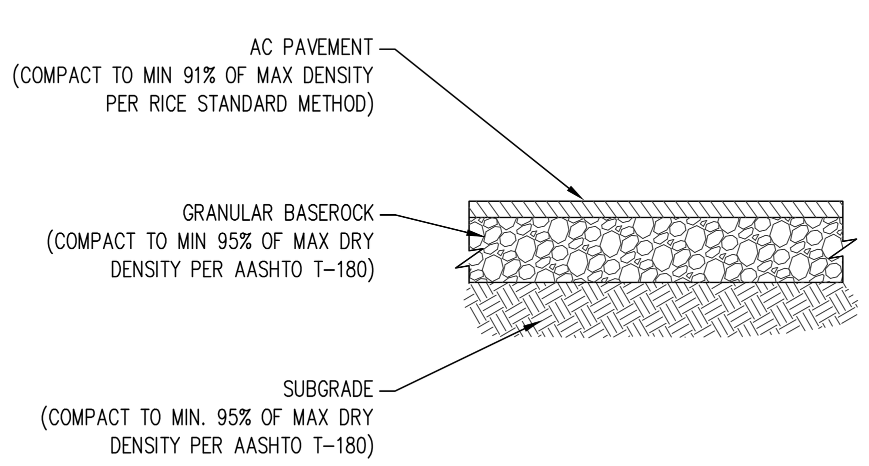
6. CURBS TO CURE A MINIMUM OF 7 DAYS PRIOR TO PLACING FINAL BASEROCK AND PAVING.

PRIVATE SIDEWALK
NTS

**SITE TO BE WINTERIZED. PAVEMENT SECTIONS BELOW ARE FOR DRY WEATHER CONSTRUCTION AND NEED TO BE INCREASED PER GEOTHERMAL ENGINEER'S RECOMMENDATIONS.



PAVEMENT & BASEROCK SECTIONS:

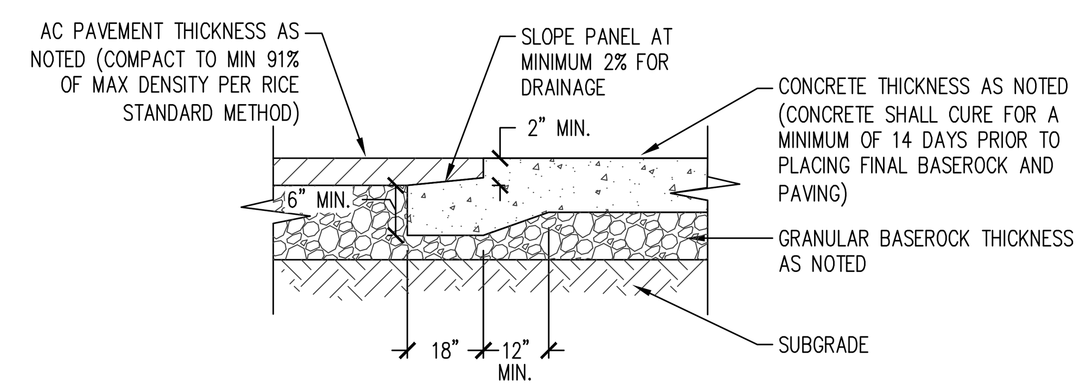
LIGHT DUTY PAVEMENT
3" AC PAVEMENT
10" OF 1"-0 GRANULAR BASEROCK

HEAVY DUTY PAVEMENT
3.5" AC PAVEMENT
10" OF 1"-0 GRANULAR BASEROCK

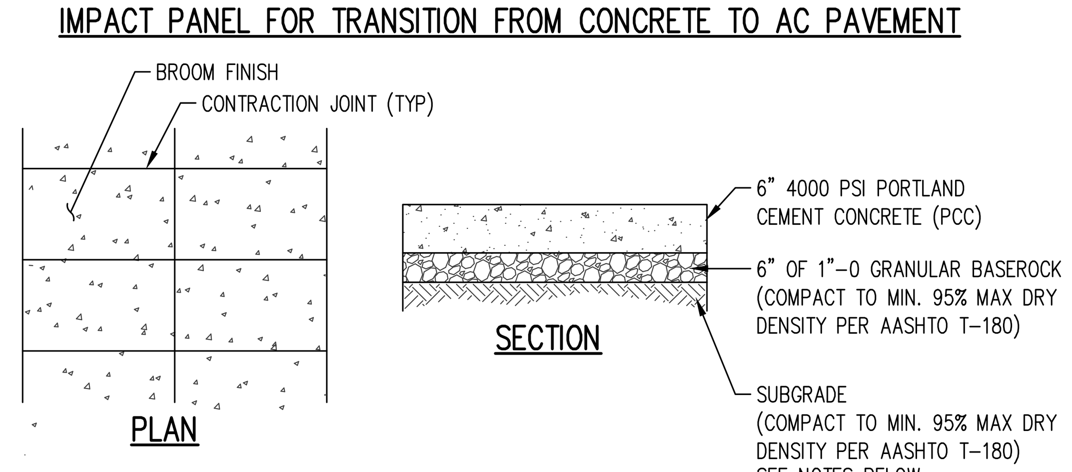
NOTES:

1. SEE PLANS FOR LOCATION OF LIGHT AND HEAVY DUTY PAVEMENT.
2. DESIGN SUBGRADES SHALL BE COMPACTED AND PROOF-ROLLED PRIOR TO PLACEMENT OF BASEROCK. IF SUBGRADE PASSES PROOF-ROLL BUT FAILS DENSITY TESTING, INSTALL MIN. 4.5 OZ NON-WOVEN GEOTEXTILE FABRIC ON SUBGRADE PRIOR TO PLACEMENT OF BASEROCK. FAILURE OF PROOF-ROLL WILL REQUIRE OVEREXCAVATION OR REPAIR AS DIRECTED BY PROJECT GEOTECHNICAL ENGINEER OR OWNER'S REPRESENTATIVE.
3. IF SUBGRADE FAILS THE PROOF-ROLL, SUBGRADE SHALL BE OVEREXCAVATED TO FIRM AND UNYIELDING SOIL AND BACKFILLED WITH COMPACTED BASEROCK OVER MIN. 8.0-OZ. NON-WOVEN FABRIC AS REQUIRED TO ALLOW COMPACTION OF UPPER (DESIGN) BASEROCK SECTION AND TO MAINTAIN STRUCTURAL INTEGRITY OF SUBGRADE SOILS. TYPICAL MINIMUM OVEREXCAVATION REQUIRED IS 12-INCHES. NO RUBBER TIRED EQUIPMENT ALLOWED ON SUBGRADE FOLLOWING OVEREXCAVATION.
4. PASSING PROOF-ROLL ON BASEROCK IS ALSO REQUIRED IMMEDIATELY PRIOR TO PAVING.
5. CONTRACTOR SHALL CONFORM TO ALL RECOMMENDATIONS IN GEOTECHNICAL REPORT.

AC PAVEMENT SECTION
NTS



IMPACT PANEL FOR TRANSITION FROM CONCRETE TO AC PAVEMENT



NOTES:

1. SEE PLANS FOR LOCATIONS OF CONCRETE PAVEMENT(S).
2. PCC CONSTRUCTION SHALL CONFORM TO PORTLAND CEMENT ASSOCIATION (PCA) SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED.
3. MAXIMUM JOINT SPACING IS 15 FEET BY 15 FEET.
4. PROPOSED JOINT PATTERN SHALL BE PREPARED BY CONTRACTOR AND SUBMITTED TO OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO PLACING PCC.
5. DEPTH OF JOINTS SHALL BE MINIMUM OF 1/3 TO MAXIMUM 1/2 THE PAVEMENT THICKNESS.
6. DESIGN SUBGRADES SHALL BE COMPACTED AND PROOF-ROLLED PRIOR TO PLACEMENT OF BASEROCK. IF SUBGRADE PASSES PROOF-ROLL BUT FAILS DENSITY TESTING, INSTALL MIN. 4.5 OZ NON-WOVEN GEOTEXTILE FABRIC ON SUBGRADE PRIOR TO PLACEMENT OF BASEROCK. FAILURE OF PROOF-ROLL WILL REQUIRE OVEREXCAVATION OR REPAIR AS DIRECTED BY PROJECT GEOTECHNICAL ENGINEER OR OWNER'S REPRESENTATIVE.
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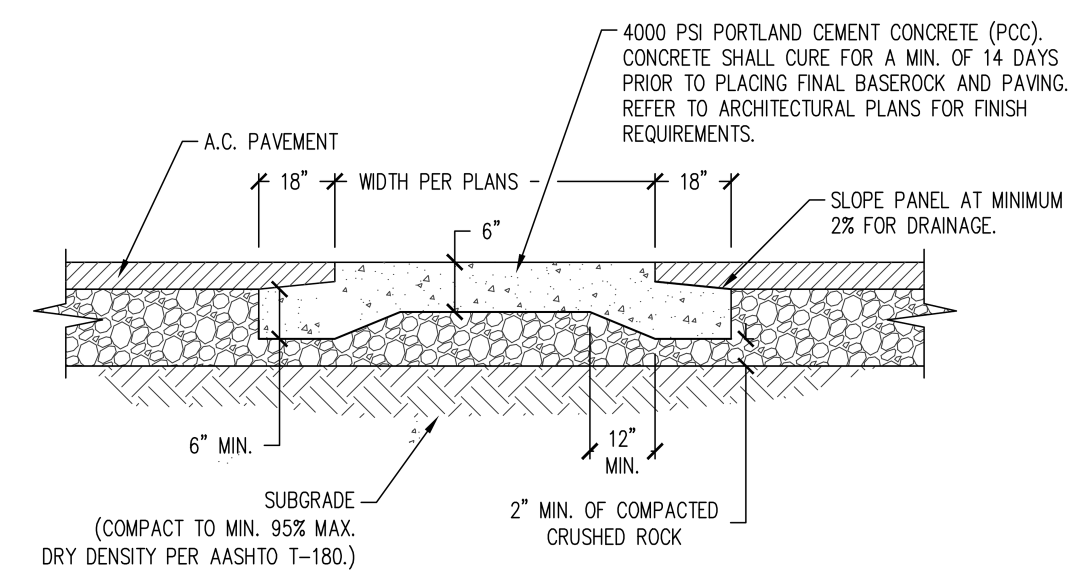
8. PASSING PROOF-ROLL ON BASEROCK IS ALSO REQUIRED IMMEDIATELY PRIOR TO PLACING PCC.
9. CONTRACTOR SHALL CONFORM TO ALL RECOMMENDATIONS IN GEOTECHNICAL REPORT.

CONCRETE PAVEMENT SECTION
NTS



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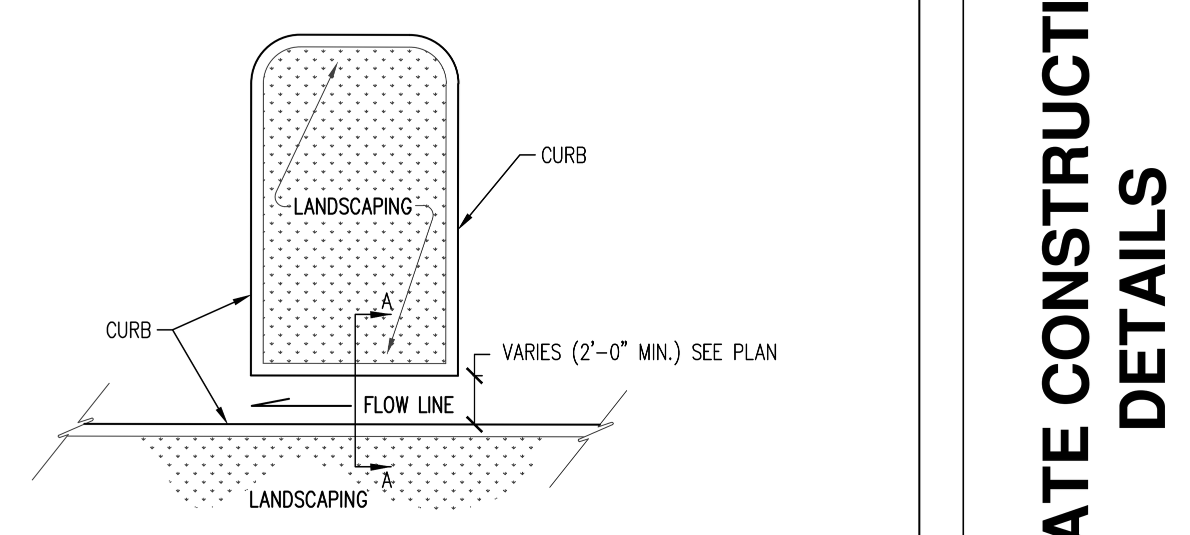
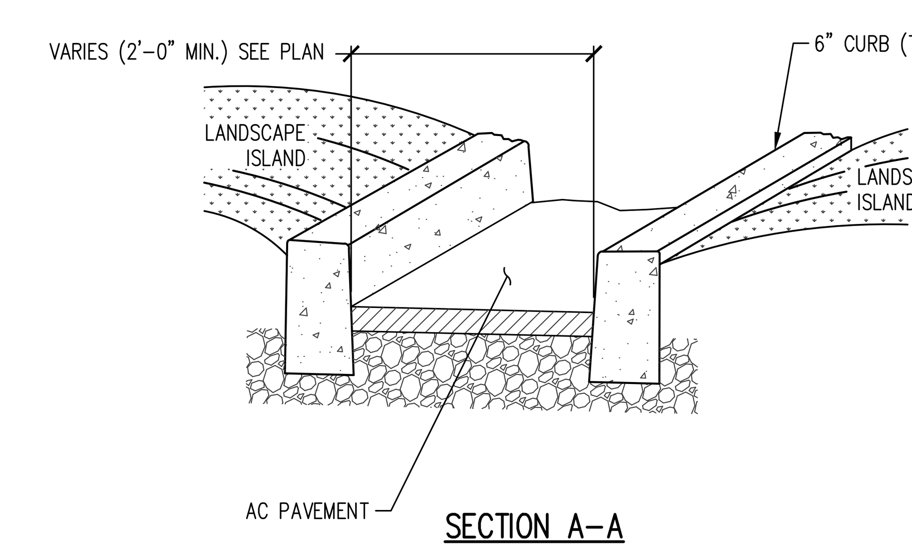
CONCRETE PEDESTRIAN CROSSING
NTS



PLAN



SECTION A-A

LANDSCAPE ISLAND CURB BREAK
NTS

AKS ENGINEERING AND FORESTRY SALEM, LLC
528 COTTAGE ST NE
SUITE 160
SALEM, OR 97301
PHONE: 503.400.6028
FAX: 503.400.7722
www.aks-eng.com

ENGINEERING · PLANNING · SURVEYING
FORESTRY · LANDSCAPE ARCHITECTURE

RIVER RIDGE APARTMENTS

TUALATIN OREGON
TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

PRIVATE CONSTRUCTION DETAILS

DESIGNED BY: RCW
DRAWN BY: RCC
CHECKED BY: JMP
SCALE: AS NOTED
DATE: JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER 54868PE OREGON SEPT. 26, 2000 JACK A. POISSANT
EXPIRES: DEC. 31, 2014
PRELIMINARY NOT FOR CONSTRUCTION

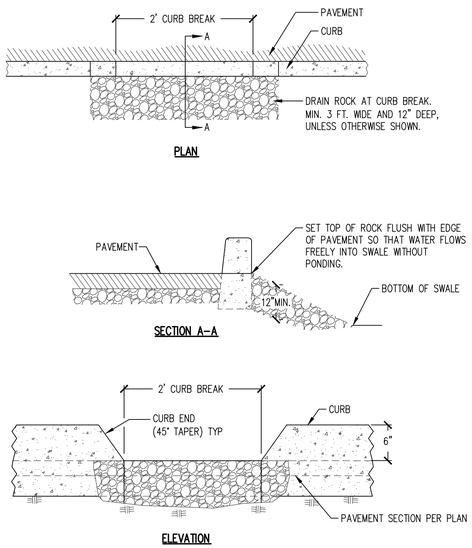
REVISIONS

JOB NUMBER
3812

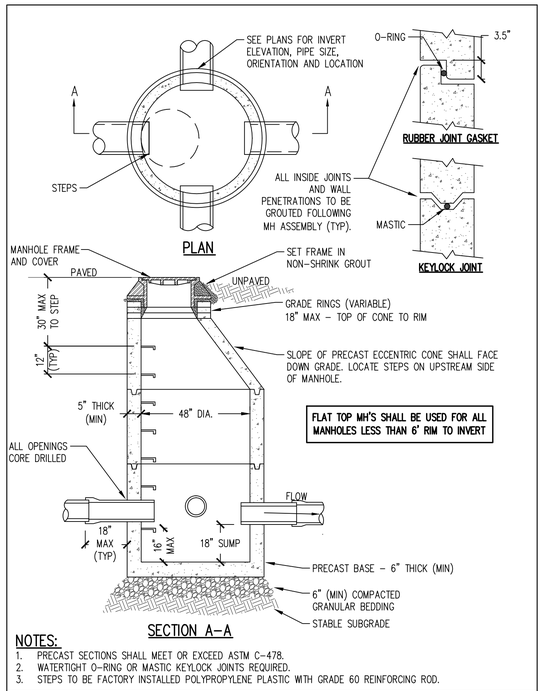
SHEET
C400

ARCHITECTURAL REVIEW SET

AKS DRAWING FILE: 3812 C400 PRIV DETAILS.DWG | LAYOUT: C400

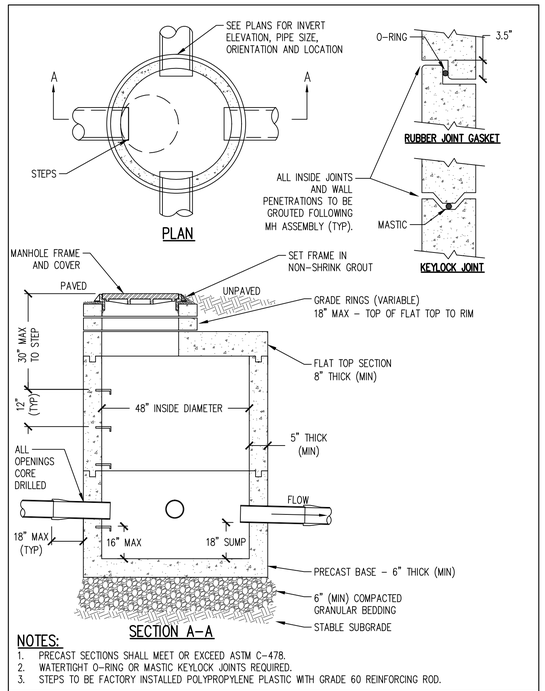


2' CURB BREAK
NTS



NOTES:
1. PRECAST SECTIONS SHALL MEET OR EXCEED ASTM C-478.
2. WATERTIGHT O-RING OR MASTIC KEYLOCK JOINTS REQUIRED.
3. STEPS TO BE FACTORY INSTALLED POLYPROPYLENE PLASTIC WITH GRADE 60 REINFORCING ROD.

48" STORM DRAIN MANHOLE
NTS



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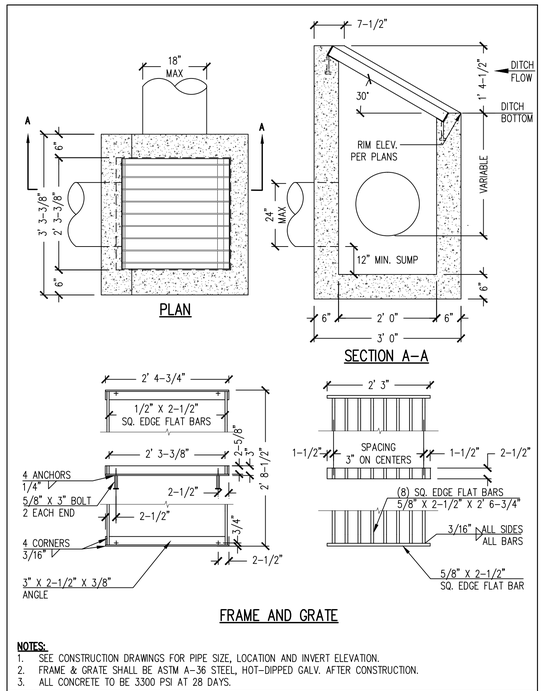
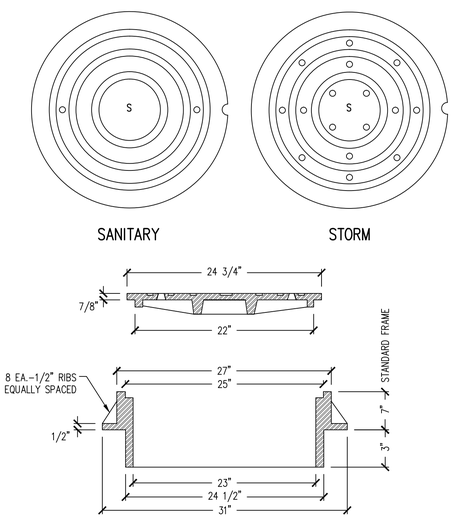
48" STORM DRAIN FLAT-TOP MANHOLE
NTS



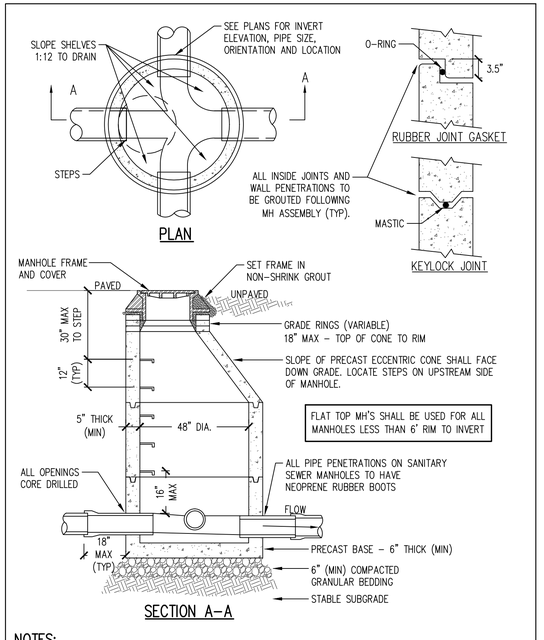
NOTES:
1. SEE CONSTRUCTION DRAWINGS FOR PIPE SIZE, LOCATION AND INVERT ELEVATION.
2. FRAME & GRATE SHALL BE ASTM A-36 STEEL, HOT-DIPPED GALV. AFTER CONSTRUCTION.
3. ALL CONCRETE TO BE 3300 PSI AT 28 DAYS.

TYPE 3 DITCH INLET
NTS



NOTES:
1. COVER AND FRAME SHALL BE GRAY CAST IRON ASTM A-48, CLASS 30.
2. COVER AND FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
3. NOTCH LID FOR LIFTING HOOK.

MANHOLE FRAME AND COVER
NTS



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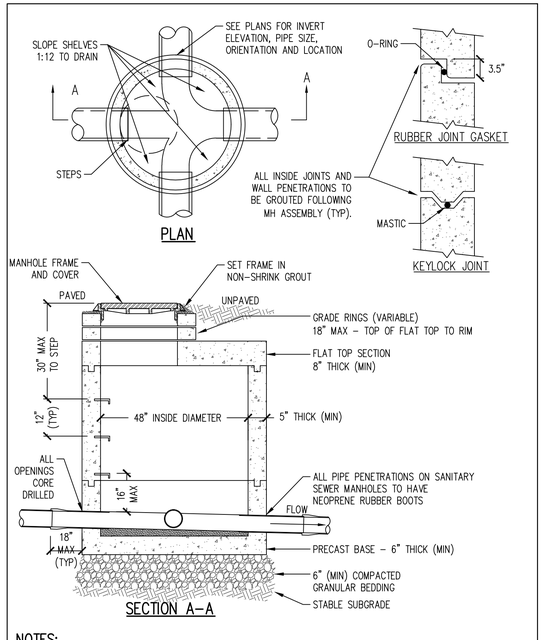
3. STEPS TO BE FACTORY INSTALLED POLYPROPYLENE PLASTIC WITH GRADE 60 REINFORCING ROD.

48" SANITARY MANHOLE
NTS



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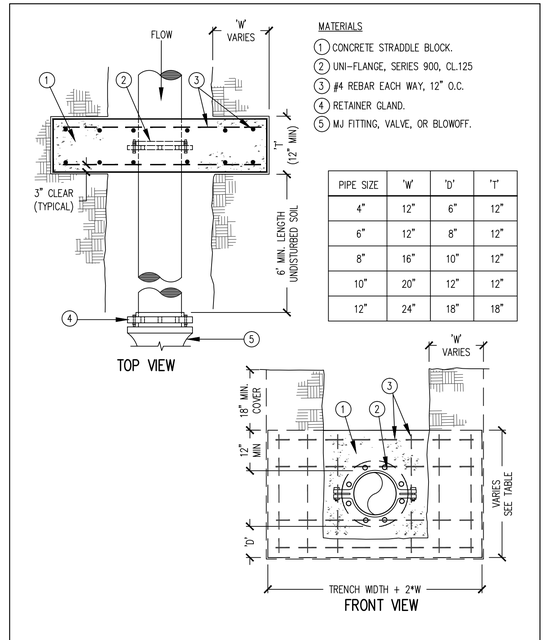
48" SANITARY FLAT-TOP MANHOLE
NTS



MATERIALS
1. CONCRETE STRADDLE BLOCK.
2. UNI-FLANGE, SERIES 900, CL.125
3. #4 REBAR EACH WAY, 12" O.C.
4. RETAINER GLAND.
5. MJ FITTING, VALVE, OR BLOWOFF.

PIPE SIZE	'W'	'D'	'T'
4"	12"	6"	12"
6"	12"	8"	12"
8"	16"	10"	12"
10"	20"	12"	12"
12"	24"	18"	18"

NOTES:
1. BEARING AREA OF BLOCK SHALL BE AGAINST UNDISTURBED SOIL.
2. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3300 PSI.

PRIVATE STRADDLE BLOCK
NTS

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY, LLC
528 COTTAGE ST NE
SUITE 160
SALEM, OR 97301
PHONE: 503.400.6028
FAX: 503.400.7722
www.aks-eng.com
AKS
ENGINEERING · PLANNING · SURVEYING
FORESTRY · LANDSCAPE ARCHITECTURE

RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

PRIVATE CONSTRUCTION DETAILS

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JAMES M. POISSANT
EXPIRES: DEC. 31, 2014
PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

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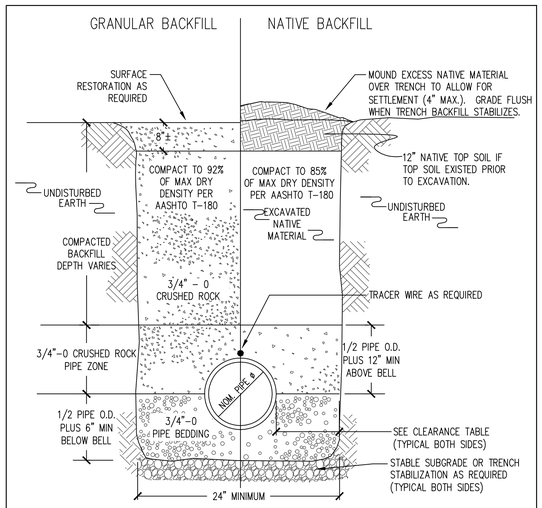
AKS DRAWING FILE: 3812 C400 PRIV DETAILS.DWG | LAYOUT: C401

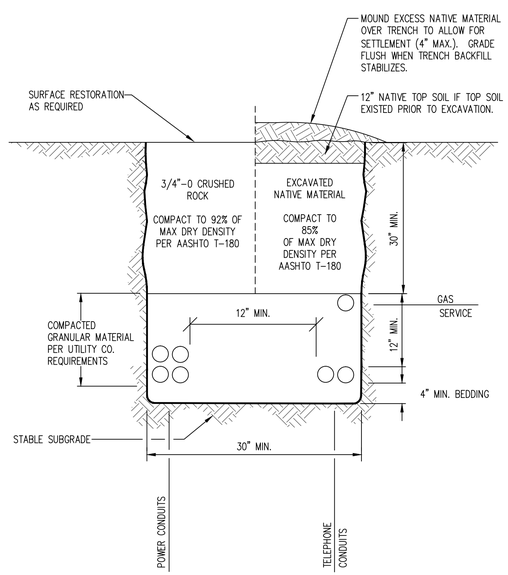


CLEARANCE TABLE	
NOM. PIPE DIAMETER	MIN/MAX CLEARANCE
≤10"	10"/18"
12"-16"	12"/18"
18"-21"	16"/24"
24"-30"	18"/30"
>30"	24"/36"

MULTIPLE PIPE INSTALLATIONS	
DIAMETER UP TO 21"	SPACE BETWEEN PIPES 8" MIN / 12" MAX

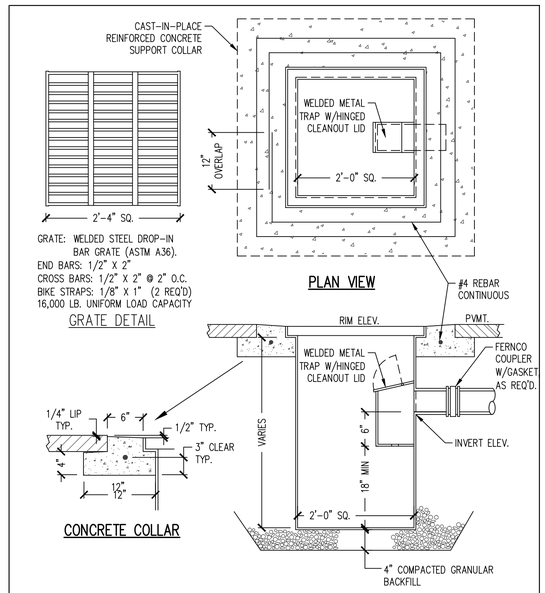
NOTES:
1. GRANULAR BACKFILL REQUIRED UNDER ALL EXISTING OR FUTURE IMPROVED AREAS INCLUDING SIDEWALKS.
2. WHERE NEW PIPING IS IN SAME ALIGNMENT AS EXISTING PIPING, THE PIPE EMBEDMENT SHALL EXTEND TO A MINIMUM OF 6" BELOW THE NEW PIPING OR 6" BELOW EXISTING PIPING, WHICHEVER IS DEEPER.
3. FOR FLEXIBLE PIPE, BOTTOM OF TRENCH SHORING SHALL BE ABOVE SPRINGLINE AND UNDER THE PIPE HAUNCHES.

TRENCH BACKFILL
NTS



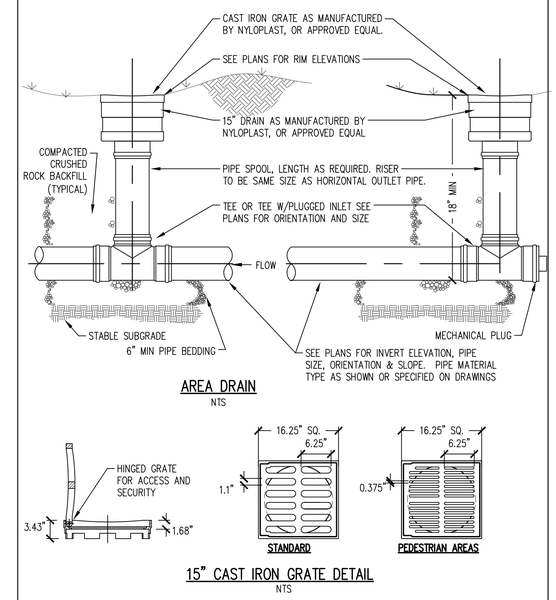
NOTES:
1. SEE UTILITY PLAN FOR LOCATION, ALIGNMENT, SIZE AND NUMBER OF CONDUITS. VERIFY WITH LOCAL UTILITY COMPANY PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY REPRESENTATIVES AS REQUIRED.

PRIVATE UTILITY TRENCH
NTS



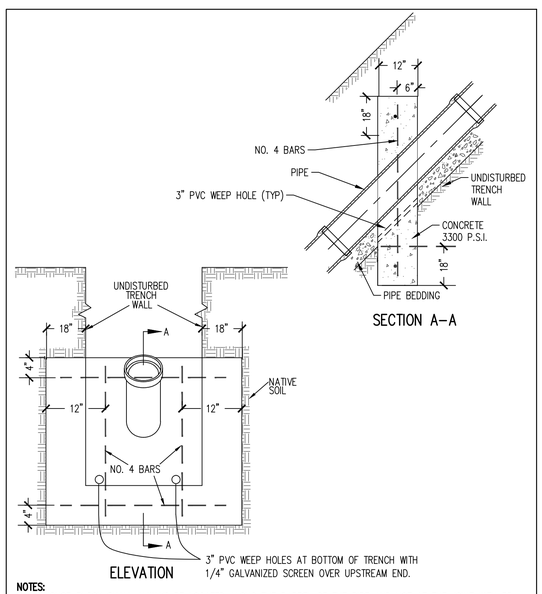
NOTES:
1. SEE CONSTRUCTION DRAWINGS FOR PIPE SIZE, LOCATION AND INVERT ELEVATION.
2. OUTLET: SIZE AS REQ'D. FOR INDICATED PIPE SIZE.
3. CONCRETE SHALL BE 4,000 PSI AT 28 DAYS.
4. CONSTRUCT BASIN OF WELDED 1/4" STEEL. COAT ALL SURFACES WITH ASPHALTIC PAINT.

STANDARD CATCH BASIN (LYNCH STYLE)
NTS



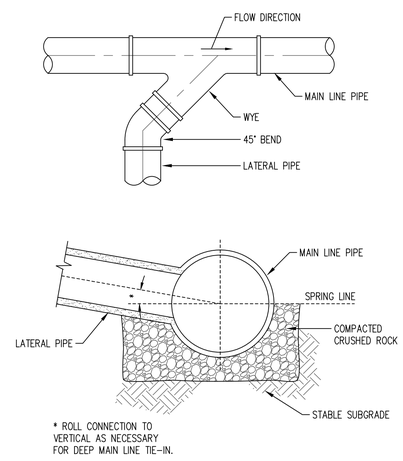
NOTES:
1. AREA DRAIN NOT FOR USE IN AREAS SUBJECT TO VEHICLE TRAFFIC.
2. USE WATERTIGHT GASKETED FITTINGS AND ADAPTORS FOR ALL PIPE CONNECTIONS.
3. ALL GRATES IN PEDESTRIAN AREAS SHALL CONFORM WITH ADA REQUIREMENTS INCLUDING GRATE OPENING SIZE.

AREA DRAIN
NTS

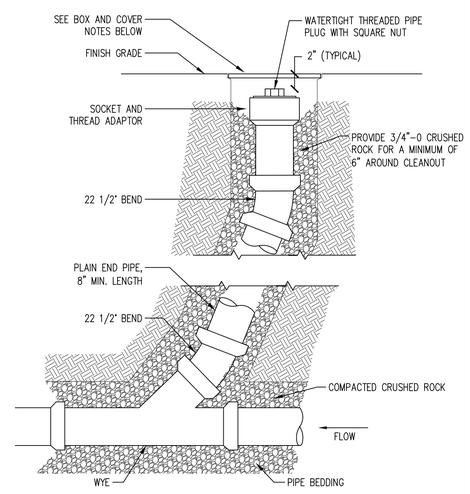


NOTES:
1. ANCHOR BLOCK SHALL ALWAYS BE LOCATED ALONG THE BARREL OF THE PIPE AND NOT AT THE JOINT WITH 35 FEET MINIMUM SPACING FOR SLOPES UP TO 35%.
2. CONCRETE ANCHOR BLOCK SHALL BE CONSTRUCTED USING FORMS WHEN SLOPES ARE 20% OR GREATER. REMOVE FORMS PRIOR TO BACKFILLING TRENCH.
3. MINIMUM SPACING FOR ANCHOR BLOCKS SHALL BE 25 FEET FOR SLOPES BETWEEN 35 AND 50%, AND 15 FT MINIMUM FOR SLOPES GREATER THAN 50%.
4. FOR 4" PIPE, THE ANCHOR BLOCK IS REQUIRED BUT NO REINFORCEMENT IS NECESSARY.
5. INSTALL BLOCK AS NEAR TO VERTICAL AS POSSIBLE.

PIPE ANCHOR BLOCK
NTS

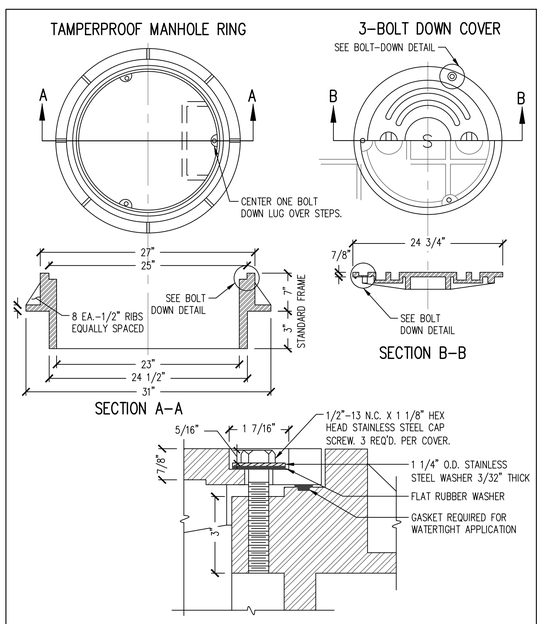


TYPICAL GRAVITY LATERAL CONNECTION
NTS



NOTES:
1. CLEANOUT RISER SHALL BE SAME SIZE AND MATERIAL AS LATERAL PIPE.
2. CLEANOUT PIPE SHALL BE LEFT 18" ABOVE EXISTING GRADE UNTIL ALL CURBS ARE INSTALLED AND PRIVATE UTILITY TRENCHES ARE BACKFILLED. CLEANOUTS SHALL THEN BE SET FLUSH WITH FINISH GRADE.
3. TRAFFIC AREA CLEANOUT SHALL BE 8"X4" CAST IRON FRAME AND COVER, OLYMPIC M1007 OR APPROVED EQUAL.
5. NON-TRAFFIC AREA CLEANOUT: CARSON MODEL 910 T-COVER OR APPROVED EQUAL (GREEN FOR SEWER, GRAY FOR STORM)
6. ALL STORM SEWER LIDS TO READ "STORM" OR "C/O".
7. ALL SANITARY SEWER LIDS TO READ "SEWER"

CLEANOUT
NTS



NOTES:
1. COVER AND FRAME SHALL BE GRAY CAST IRON ASTM A-48, CLASS 30.
2. COVER AND FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
3. WATERTIGHT LIDS SHALL BE USED WITH NO HOLES.
4. LOCKDOWN/ WATERTIGHT LIDS REQUIRED ON ALL MANHOLES WITHIN THE FLOODWAY OR FLOOD PLAIN.

BOLT-DOWN DETAIL
LOCKDOWN/WATERTIGHT MANHOLE FRAME AND COVER
NTS

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RIVER RIDGE APARTMENTS

TUALATIN, OREGON
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TAX LOTS 2191, 2202, 2300

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REGISTERED PROFESSIONAL ENGINEER
OREGON
JAMES M. POISSANT
EXPIRES: DEC. 31, 2014
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REVISIONS:

JOB NUMBER
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SHEET
C402

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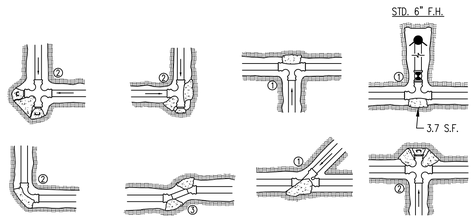
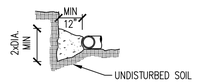


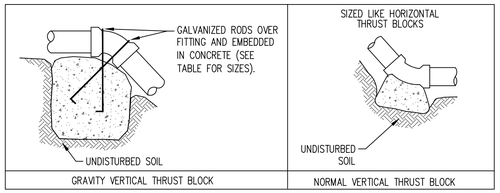
FITTING SIZE (Inches)	TEE, WYE, & ① HYDRANTS	90° BEND ② PLUGGED CROSS TEE PLUGGED-RUNS	45° BEND ③	22 1/2° BEND ③	11 1/4° BEND ③
2	*	*	*	*	*
4	1.7	2.4	1.3	*	*
6	3.7	5.3	2.9	1.5	*
8	6.7	9.5	5.1	2.7	1.3
10	10.5	14.8	8	4.1	2
12	15.1	21.3	11.6	5.9	2.9
16	26.8	37.9	20.5	10.4	5.2
18	33.9	47.9	25.9	12.8	6.7
BEARING AREA OF THRUST BLOCKS (S.F.)					
* BLOCK TO UNDISTURBED TRENCH WALLS (SEE MINIMUMS BELOW)					



***MINIMUM THRUST RESTRAINTS**

NOTES:
1. ALL FITTINGS SHALL BE WRAPPED IN PLASTIC PRIOR TO PLACEMENT OF CONCRETE.
2. BEARING SURFACE OF THRUST BLOCKING SHALL BE AGAINST UNDISTURBED SOIL.
3. ALL CONCRETE MIX SHALL HAVE A MIN. 28 DAY STRENGTH OF 3300 PSI.
4. ALL PIPE ZONES SHALL BE BACKFILLED WITH COMPACTED CRUSHED ROCK.
5. THRUST BLOCKS FOR PLUGGED CROSS AND PLUGGED TEE SHALL HAVE #4 REBAR LIFTING LOOPS INSTALLED.

HORIZONTAL THRUST BLOCKING
NTS



GRAVITY VERTICAL THRUST BLOCK | NORMAL VERTICAL THRUST BLOCK

FITTING SIZE	VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS) BEND ANGLE 45°	22 1/2°	11 1/4°
4	1.1	0.5	0.2
6	2.7	1.0	0.5
8	4.0	1.7	0.9
10	5.5	2.7	1.4
12	7.0	4.0	2.0
14	10	5.3	2.7
16	13.0	7.0	3.5

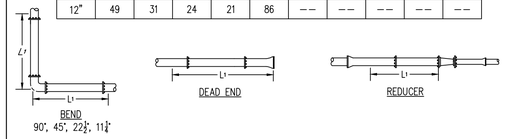
FITTING SIZE	ROD SIZE	EMBED-MENT
10" AND LESS	#5	18"
12" – 14"	#8	27"
16"	#9	30"

NOTES:
1. KEEP CONCRETE CLEAR OF JOINT AND JOINT ACCESSORIES. FITTINGS SHALL BE WRAPPED IN PLASTIC PRIOR TO PLACEMENT OF CONCRETE.
2. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
3. CONCRETE MIX SHALL HAVE A MIN. 28 DAY STRENGTH OF 3300 P.S.I.
4. THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS ARE BASED ON TEST PRESSURE OF 150 P.S.I.G. AND THE WEIGHT OF CONCRETE = 4050 LBS./CU.YD.
5. ALL REBAR SHALL BE MINIMUM GRADE 40 AND GALVANIZED IN ACCORDANCE WITH ASTM-123 (MIN. 3.4 MIL). REBAR SHALL BE BENT BEFORE GALVANIZATION, AND LAST 4" OF BAR SHALL BE BENT 90 DEGREES WITH A 1/2" RADIUS BEND. REBAR SHALL BE TIGHTLY FIT TO RESTRAINED FITTING.

VERTICAL THRUST BLOCKING
NTS

LENGTH (L1) OF PIPE REQUIRED FOR RESTRAINT (FEET)

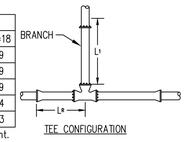
Diameter	Horizontal Bend 90°	45°	22 1/2°	11 1/4°	Dead End	Reducer (Increaser) (Restrained Length for Large Diameter Side) 4"	6"	8"	10"	12"
4"	30	23	20	19	44	--	37	53	65	77
6"	35	25	21	20	55	--	--	38	53	67
8"	40	27	22	20	66	--	--	--	37	54
10"	44	29	23	21	76	--	--	--	--	51
12"	49	31	24	21	86	--	--	--	--	--



LENGTH (L) OF PIPE REQUIRED FOR RESTRAINT WHEN USING TEES (FEET)

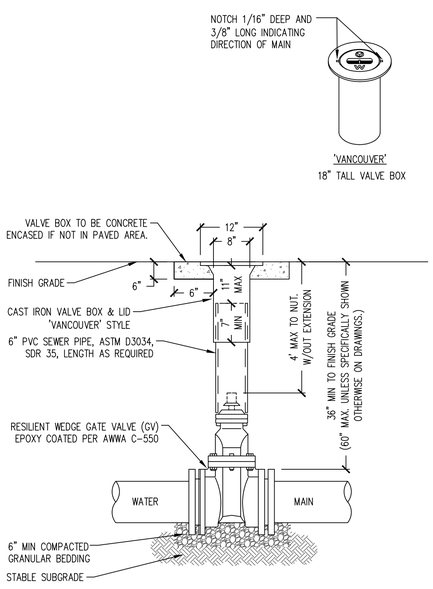
Branch Dia.	Tee Configurations (Restraint Length for Branch) LB=0	LB=2	LB=4	LB=6	LB=8	LB=10	LB=12	LB=14	LB=16	LB=18
4"	44	30	19	19	19	19	19	19	19	19
6"	55	45	36	26	19	19	19	19	19	19
8"	66	59	52	44	37	30	23	19	19	19
10"	76	70	64	58	53	47	41	35	30	24
12"	86	81	76	71	67	62	57	52	47	43

LB is the minimum length in either direction from tee to nearest adjacent joint.



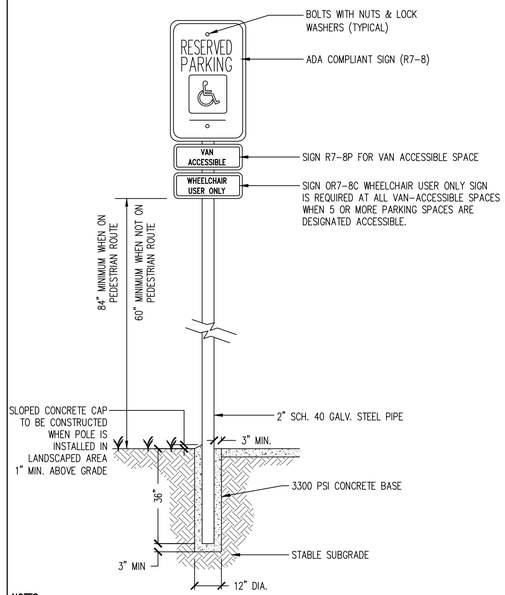
NOTES:
1. ALL JOINTS WITHIN THE LENGTH "L1" FROM THE ABOVE TABLE, SHALL BE RESTRAINED.
2. THE JOINT RESTRAINT LENGTHS CALCULATED ARE FOR FITTINGS USED TO CHANGE PIPE HORIZONTAL ALIGNMENT ONLY.
3. IF AN UNANTICIPATED NEED FOR JOINT RESTRAINT ARISES TO CHANGE THE SLOPE OF THE PIPE, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER FOR JOINT RESTRAINT REQUIREMENTS.
4. THE SMALL DIAMETER SIDE OF A REDUCER DOES NOT REQUIRE RESTRAINT IF THE LARGE DIAMETER SIDE IS PROPERLY RESTRAINED.
5. ABOVE RESTRAINED LENGTHS ARE BASED ON:
   - TEST PRESSURE OF 150 POUNDS PER SQUARE INCH
   - MINIMUM OF 3 FEET COVER
   - COMPACTED CRUSHED ROCK PIPE ZONE CONDITIONS
   - UNCOATED PIPE, THIS TABLE IS NOT APPLICABLE FOR PIPE ENCASED IN POLYETHYLENE
6. ANY REDUCTION OF THESE VALUES AS A RESULT OF OTHER CONDITIONS ENCOUNTERED SHALL BE BASED ON THE APPROPRIATE EVALUATION AND RECOMMENDATION BY A QUALIFIED, REGISTERED ENGINEER.

RESTRAINED JOINT DETAIL
NTS



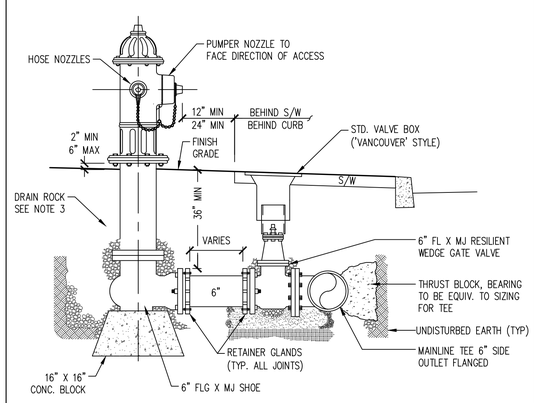
NOTES:
1. GATE VALVE SHALL CONFORM TO AWWA C-509.
2. VALVE BOXES SHALL BE PLUMB AND CENTERED DIRECTLY OVER THE VALVE NUT.
3. VALVE BOX TOP SHALL BE ADJUSTED TO MEET FINISHED GRADE.
4. PVC SHALL BE ONE CONTINUOUS PIECE, NO BELLS OR COUPLERS.
5. ALL CONCRETE TO BE 3300 PSI @ 28 DAYS.

GATE VALVE AND VALVE BOX (VANCOUVER STYLE)
NTS



NOTES:
1. ADA REGULATIONS CONTINUALLY CHANGE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR SIGN MOUNTING, TYPE OF SIGNS, AND PENALTIES ARE CORRECTLY DETAILED.
2. ALL LETTER AND SYMBOL SIZES SHALL BE IN ACCORDANCE WITH THE LATEST ADA STANDARDS.
3. STANDARD 2" WELDED STEEL PIPE HOT DIP GALVANIZED AFTER FABRICATION CONFORMING TO ASTM A120 & A123.

ACCESSIBLE PARKING SIGNAGE
NTS



NOTES:
1. HYDRANT TO BE MODEL & COLOR ACCEPTABLE TO APPROVING AGENCY STANDARDS.
2. ALL FITTINGS IN CONTACT WITH CONCRETE SHALL BE WRAPPED IN PLASTIC. HYDRANT DRAIN HOLES TO REMAIN OPEN TO DRAIN ROCK AND OPERATIONAL.
3. 1-1/2" TO 3/4" CLEAN DRAIN ROCK SHALL BE PLACED A MIN. OF 6" ABOVE AND AROUND DRAIN OUTLET.
4. ALL HYDRANTS SHALL BE SET PLUMB.
5. THERE SHALL BE A MINIMUM OF 36" HORIZONTAL CLEARANCE AROUND HYDRANT.
6. WHERE PLANTER STRIPS EXIST, HYDRANT SHALL BE PLACED SO FRONT PORT IS A MINIMUM OF 24" BEHIND FACE OF CURB.
7. FOR HYDRANT LEADS LONGER THAN 30', AN ADDITIONAL GATE VALVE SHALL BE PROVIDED WITHIN 3' OF THE HYDRANT.

PRIVATE FIRE HYDRANT ASSEMBLY
NTS

ARCHITECTURAL REVIEW SET

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AKS
ENGINEERING · PLANNING · SURVEYING
FORESTRY · LANDSCAPE ARCHITECTURE

RIVER RIDGE APARTMENTS

TUALATIN, OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C
TAX LOTS 2191, 2202, 2300

PRIVATE CONSTRUCTION DETAILS

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

REGISTERED PROFESSIONAL ENGINEER
OREGON
JACQUES M. PONSIOLA
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER
3812

SHEET
C403

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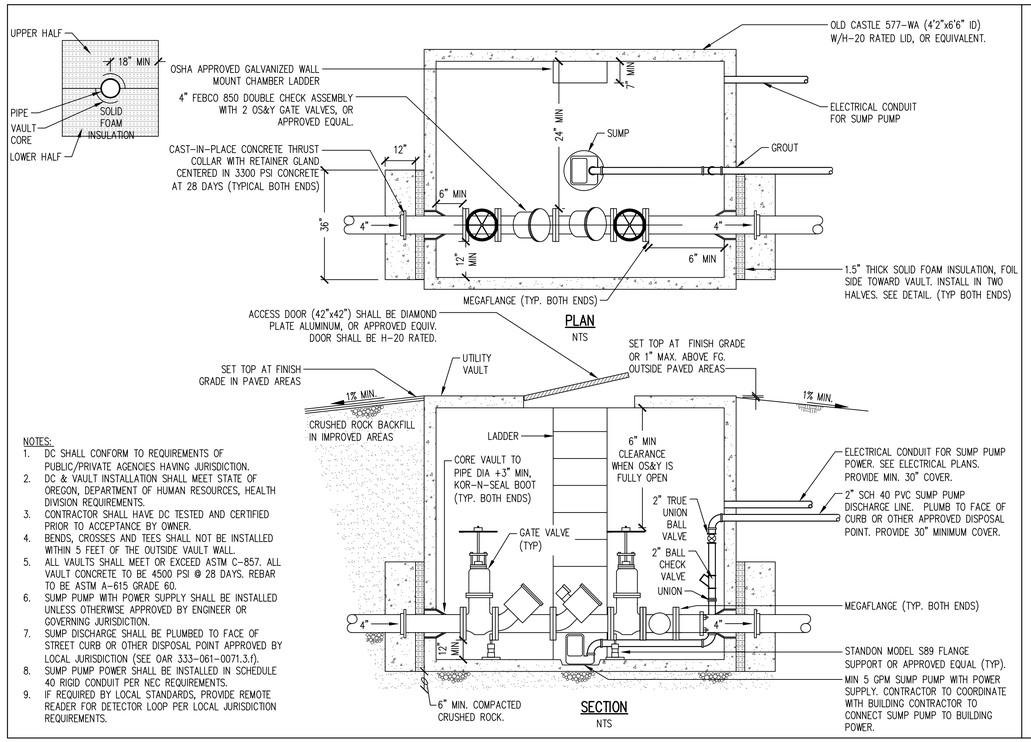
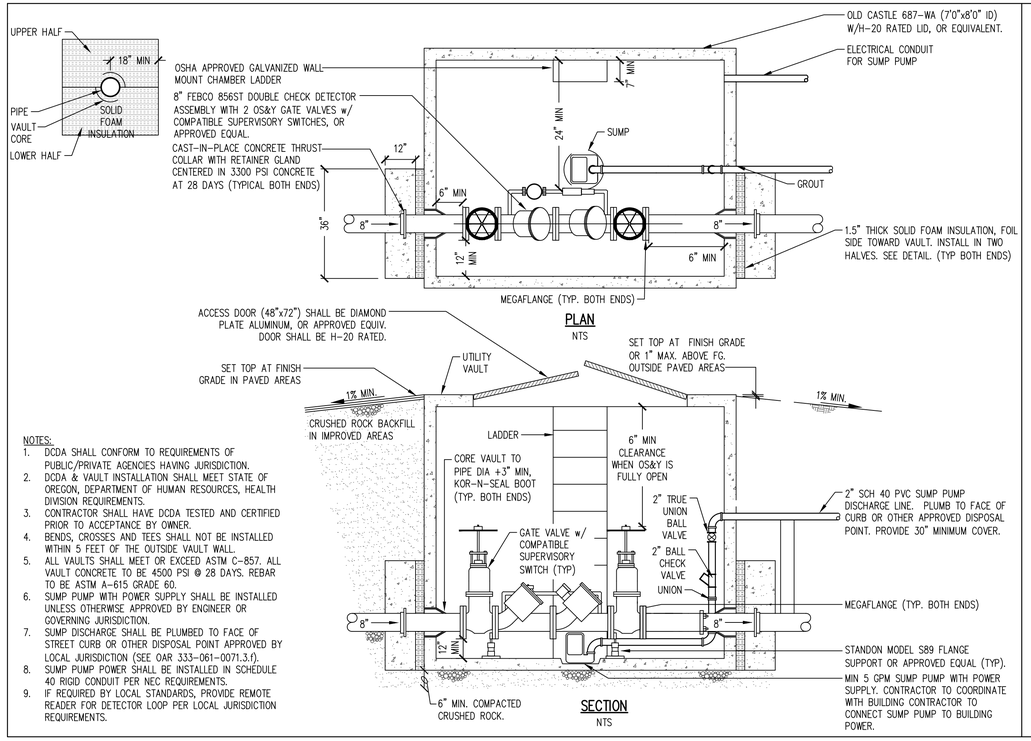


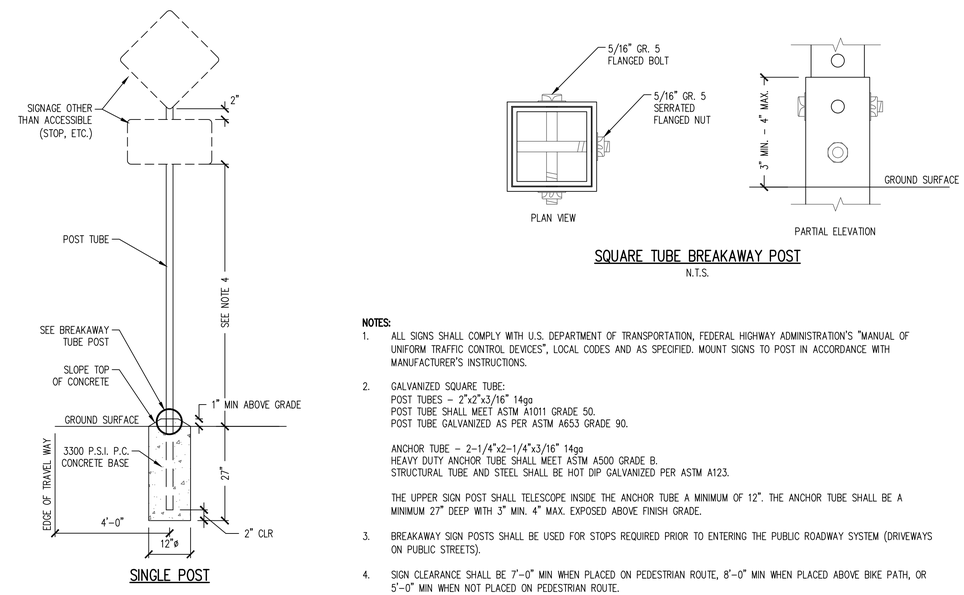
NOTES:
1. DC SHALL CONFORM TO REQUIREMENTS OF PUBLIC/PRIVATE AGENCIES HAVING JURISDICTION.
2. DC & VAULT INSTALLATION SHALL MEET STATE OF OREGON, DEPARTMENT OF HUMAN RESOURCES, HEALTH DIVISION REQUIREMENTS.
3. CONTRACTOR SHALL HAVE DC TESTED AND CERTIFIED PRIOR TO ACCEPTANCE BY OWNER.
4. BENDS, CROSSES AND TEES SHALL NOT BE INSTALLED WITHIN 5 FEET OF THE OUTSIDE VAULT WALL.
5. ALL VAULTS SHALL MEET OR EXCEED ASTM C-857. ALL VAULT CONCRETE TO BE 4500 PSI @ 28 DAYS. REBAR TO BE ASTM A-615 GRADE 60.
6. SUMP PUMP WITH POWER SUPPLY SHALL BE INSTALLED UNLESS OTHERWISE APPROVED BY ENGINEER OR GOVERNING JURISDICTION.
7. SUMP DISCHARGE SHALL BE PLUMBED TO FACE OF STREET CURB OR OTHER DISPOSAL POINT APPROVED BY LOCAL JURISDICTION (SEE OAR 333-061-0071.3.f).
8. SUMP PUMP POWER SHALL BE INSTALLED IN SCHEDULE 40 RIGID CONDUIT PER NEC REQUIREMENTS.
9. IF REQUIRED BY LOCAL STANDARDS, PROVIDE REMOTE READER FOR DETECTOR LOOP PER LOCAL JURISDICTION REQUIREMENTS.

4" DOUBLE CHECK (DC) ASSEMBLY
NTS



NOTES:
1. DCDA SHALL CONFORM TO REQUIREMENTS OF PUBLIC/PRIVATE AGENCIES HAVING JURISDICTION.
2. DCDA & VAULT INSTALLATION SHALL MEET STATE OF OREGON, DEPARTMENT OF HUMAN RESOURCES, HEALTH DIVISION REQUIREMENTS.
3. CONTRACTOR SHALL HAVE DCDA TESTED AND CERTIFIED PRIOR TO ACCEPTANCE BY OWNER.
4. BENDS, CROSSES AND TEES SHALL NOT BE INSTALLED WITHIN 5 FEET OF THE OUTSIDE VAULT WALL.
5. ALL VAULTS SHALL MEET OR EXCEED ASTM C-857. ALL VAULT CONCRETE TO BE 4500 PSI @ 28 DAYS. REBAR TO BE ASTM A-615 GRADE 60.
6. SUMP PUMP WITH POWER SUPPLY SHALL BE INSTALLED UNLESS OTHERWISE APPROVED BY ENGINEER OR GOVERNING JURISDICTION.
7. SUMP DISCHARGE SHALL BE PLUMBED TO FACE OF STREET CURB OR OTHER DISPOSAL POINT APPROVED BY LOCAL JURISDICTION (SEE OAR 333-061-0071.3.f).
8. SUMP PUMP POWER SHALL BE INSTALLED IN SCHEDULE 40 RIGID CONDUIT PER NEC REQUIREMENTS.
9. IF REQUIRED BY LOCAL STANDARDS, PROVIDE REMOTE READER FOR DETECTOR LOOP PER LOCAL JURISDICTION REQUIREMENTS.

8" DOUBLE CHECK DETECTOR (DCDA) ASSEMBLY
NTS



NOTES:
1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. GALVANIZED SQUARE TUBE:
   POST TUBES – 2"x2"x3/16" 14ga
   POST TUBE SHALL MEET ASTM A1011 GRADE 50.
   POST TUBE GALVANIZED AS PER ASTM A653 GRADE 90.

   ANCHOR TUBE – 2-1/4"x2-1/4"x3/16" 14ga
   HEAVY DUTY ANCHOR TUBE SHALL MEET ASTM A500 GRADE B.
   STRUCTURAL TUBE AND STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123.

   THE UPPER SIGN POST SHALL TELESCOPE INSIDE THE ANCHOR TUBE A MINIMUM OF 12". THE ANCHOR TUBE SHALL BE A MINIMUM 27" DEEP WITH 3" MIN. 4" MAX. EXPOSED ABOVE FINISH GRADE.
3. BREAKAWAY SIGN POSTS SHALL BE USED FOR STOPS REQUIRED PRIOR TO ENTERING THE PUBLIC ROADWAY SYSTEM (DRIVEWAYS ON PUBLIC STREETS).
4. SIGN CLEARANCE SHALL BE 7'-0" MIN WHEN PLACED ON PEDESTRIAN ROUTE, 8'-0" MIN WHEN PLACED ABOVE BIKE PATH, OR 5'-0" MIN WHEN NOT PLACED ON PEDESTRIAN ROUTE.

BREAKAWAY SIGN POST DETAIL
NTS

ARCHITECTURAL REVIEW SET

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PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

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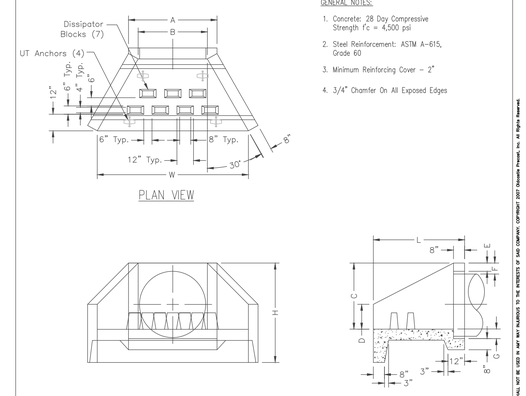

GENERAL NOTES:

1. Concrete: 28 Day Compressive Strength f'c = 4,500 psi
2. Steel Reinforcement: ASTM A–615, Grade 60
3. Minimum Reinforcing Cover – 2"
4. 3/4" Chamfer On All Exposed Edges

PIPE SIZE	HOLE SIZE	"W"	"L"	"H"	"A"	"B"	"C"	"D"	"E"	"F"	"G"	WT.
30" RCP	40"	110"	60"	72"	64"	50"	48"	18"	13"	14.5"	5"	9615 Lbs.
36" RCP	48"								6"	8"	6"	
42" RCP	54"	146"	74"	87"	80"	70"	63"	27"	16"	16.5"	6"	15,065 Lbs.
48" RCP	62"								8"	8"	7"	
54" RCP	70"	172"	88"	98"	89"	80"	74"	33"	6"	9"	8"	20,428 Lbs.
60" RCP	76"											

Hole Size For All Other Pipe Types Will Be Pipe O.D.+ 2"–4"

SCALE: 1/4" = 1'–0"

Oldcastle Precast®
Cloud Concrete
747 Alexridge Point, Lexington, KY 40510
Phone: 859-259-1484 Fax: 859-233-9351

DIH3060HWDS

FILE NAME: 3840IH3060HWDS.DWG
ISSUE DATE: January, 2002
www.oldcastleprecast.com

Pipe Culvert Headwalls w/ Dissipators

SW–570

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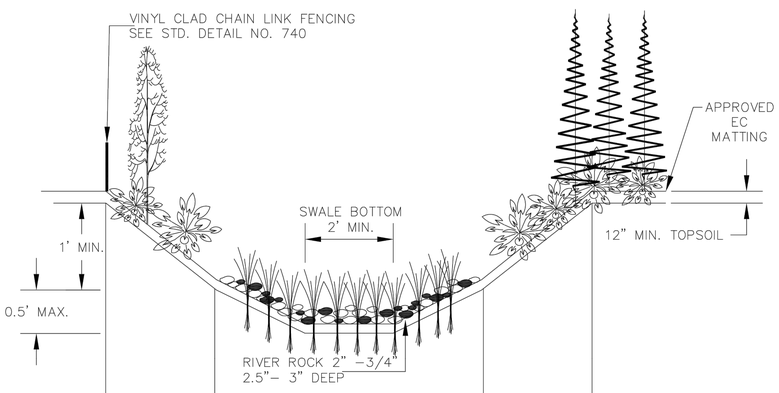
WATER QUALITY SWALE

DRAWING NO. 700

REVISED 12–06

Clean Water Services
Our commitment is clear.



SWALE AREA	FREEBOARD AREA	TREATMENT AREA 6' MINIMUM WIDTH			FREEBOARD AREA	BUFFER/MITIGATION AREA
EC MATTING	ECONOJUTE*	COCONUT FIBER OR GEOJUTE PLUS*			ECONOJUTE*	ECONOJUTE* (S> 20%)
SEED MIX	LOW GROW MIX SEE NOTE #5	NONE			LOW GROW MIX SEE NOTE #5	AS APPROVED BY DISTRICT OR CITY
MAX. SLOPE	2.5:1	4:1	FLAT BOTTOM	4:1	2.5:1	NA

* OR AS APPROVED

NOTES:

1. REFER TO APPENDIX A, CWS DESIGN & CONSTRUCTION STANDARDS, FOR LANDSCAPING REQUIREMENTS INCLUDING TREE PLACEMENT, TOPSOIL AND PLANTING SPECIFICATIONS.
2. PROVIDE IRRIGATION AS APPROVED BY CWS.
3. JUTE MATTING– GEOJUTE PLUS IN TREATMENT AREA, ECONOJUTE FOR ALL OTHER AREAS, OR SIMILIAR FABRICS. COCONUT FIBER IS ALSO ACCEPTABLE.
4. 12–INCHES OF TOPSOIL SHALL BE PLACED THROUGHOUT THE WATER QUALITY TRACT.
5. FREEBOARD AREA SEED MIX, DWARF TALL FESCUE 40%, DWARF PERENIAL RYE 30%, CREEPING RED FESCUE 25%, COLONIAL BENT GRASS 5%. APPLY AT A RATE OF 120# / ACRE.

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY, LLC
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ENGINEERING · PLANNING · SURVEYING
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RIVER RIDGE APARTMENTS

TUALATIN
TAX LOTS 2191, 2202, 2300

OREGON
WASHINGTON COUNTY TAX MAP 2S 1 15C

PRIVATE CONSTRUCTION DETAILS

DESIGNED BY:	RCW
DRAWN BY:	RCC
CHECKED BY:	JMP
SCALE:	AS NOTED
DATE:	JUNE 11, 2014

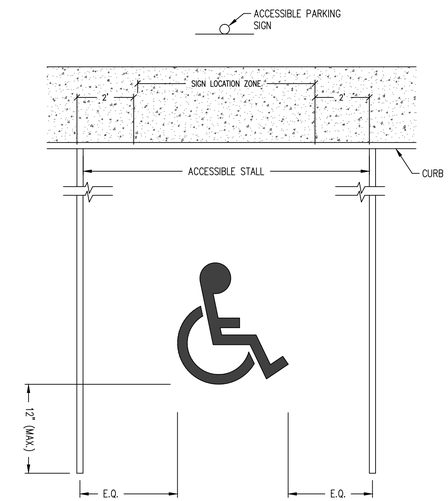
REGISTERED PROFESSIONAL ENGINEER
OREGON
JACK M. POISSANT
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: DEC. 31, 2014

REVISIONS

JOB NUMBER
3812

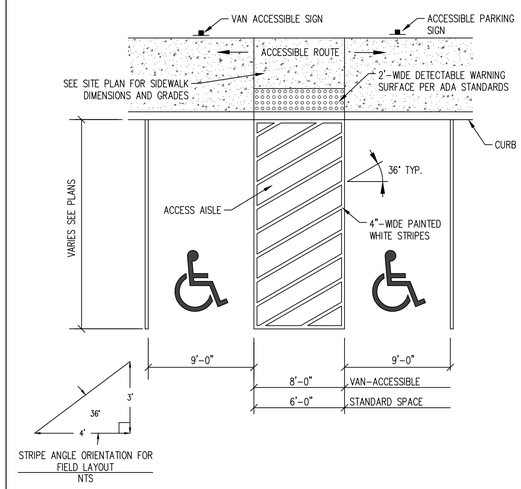
SHEET
C405

AKS DRAWING FILE: 3812 C400 PRIV DETAILS.DWG | LAYOUT: C405



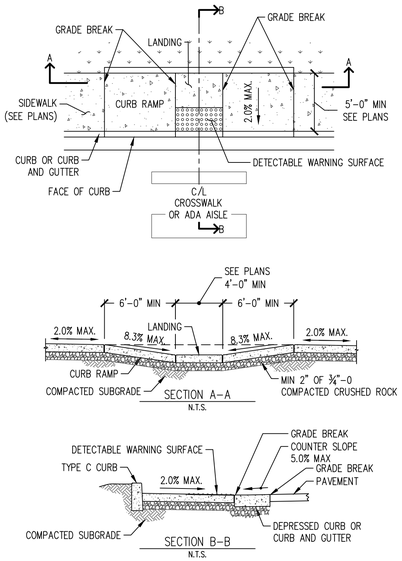
NOTES:
1. PAINT WHEELCHAIR SYMBOL WHITE UNLESS A DIFFERENT COLOR IS REQUIRED TO CONFORM TO LOCAL AND/OR STATE REQUIREMENTS.
2. SYMBOL SHALL BE CENTERED IN THE STALL.

ACCESSIBLE PARKING SPACE PAINTING DETAIL
NTS



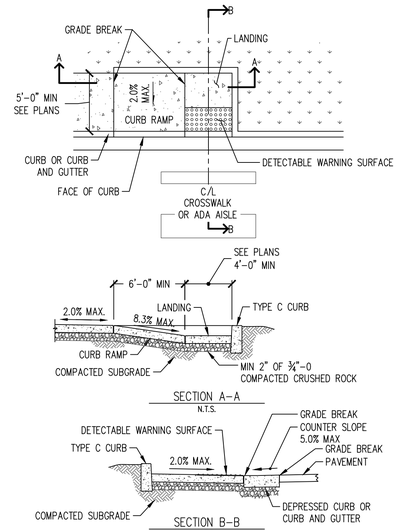
NOTES:
1. SLOPES OF ACCESSIBLE PARKING SPACES AND PARKING ACCESS AISLES SHALL NOT EXCEED 1:50 (2.0%) MAX. IN ANY DIRECTION.
2. WHERE FIVE OR MORE PARKING SPACES ARE DESGINATED ACCESSIBLE, ANY SPACE THAT IS DESIGNATED AS VAN ACCESSIBLE SHALL BE RESERVED FOR WHEELCHAIR USERS.
3. FOR EVERY SIX OR FRACTION OF SIX ACCESSIBLE PARKING SPACES, AT LEAST ONE SHALL BE A VAN-ACCESSIBLE PARKING SPACE.

ACCESSIBLE RAMP STRIPING DETAIL
NTS



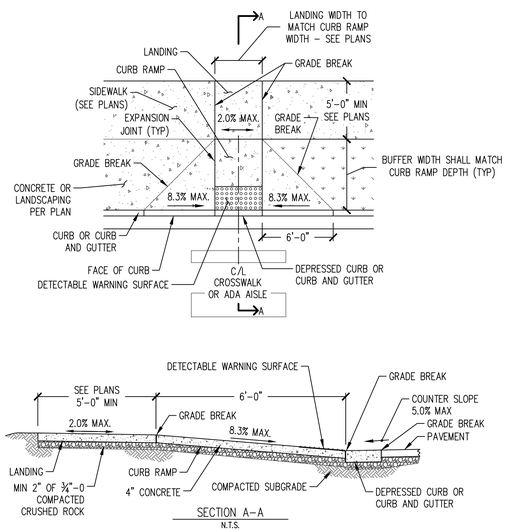
NOTES:
1. CONCRETE SHALL BE 3300 PSI AT 28 DAYS.
2. WHERE "GRADE BREAK" IS CALLED OUT, THE ENTIRE LENGTH OF THE GRADE BREAK BETWEEN THE TWO ADJACENT SURFACE PLANS SHALL BE FLUSH.
3. DO NOT PLACE GRATINGS, JUNCTION BOXES, ACCESS COVERS, OR OTHER APPURTENANCES IN FRONT OF THE CURB RAMP OR ON ANY PART OF THE CURB RAMP OR LANDING.
4. BROOM FINISH CURB RAMP, LANDING, AND FLARES.
5. LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 2.0% IN ANY DIRECTION.

ACCESSIBLE RAMP – PARALLEL TYPE A
NTS



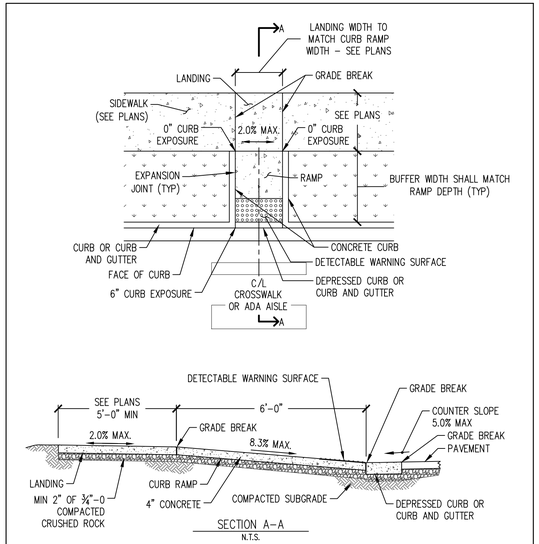
NOTES:
1. CONCRETE SHALL BE 3300 PSI AT 28 DAYS.
2. WHERE "GRADE BREAK" IS CALLED OUT, THE ENTIRE LENGTH OF THE GRADE BREAK BETWEEN THE TWO ADJACENT SURFACE PLANS SHALL BE FLUSH.
3. DO NOT PLACE GRATINGS, JUNCTION BOXES, ACCESS COVERS, OR OTHER APPURTENANCES IN FRONT OF THE CURB RAMP OR ON ANY PART OF THE CURB RAMP OR LANDING.
4. BROOM FINISH CURB RAMP, LANDING, AND FLARES.
5. LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 2.0% IN ANY DIRECTION.

ACCESSIBLE RAMP – PARALLEL TYPE B
NTS



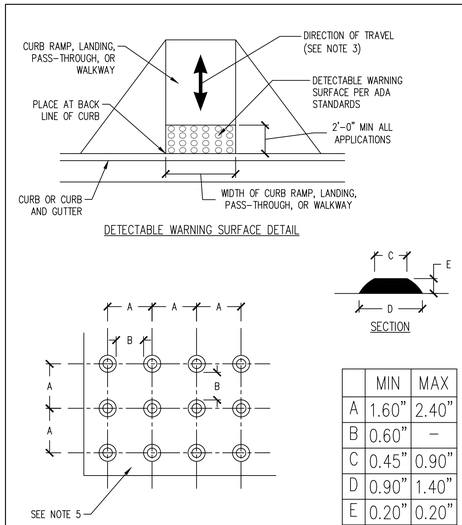
NOTES:
1. CONCRETE SHALL BE 3300 PSI AT 28 DAYS.
2. WHERE "GRADE BREAK" IS CALLED OUT, THE ENTIRE LENGTH OF THE GRADE BREAK BETWEEN THE TWO ADJACENT SURFACE PLANS SHALL BE FLUSH.
3. DO NOT PLACE GRATINGS, JUNCTION BOXES, ACCESS COVERS, OR OTHER APPURTENANCES IN FRONT OF THE CURB RAMP OR ON ANY PART OF THE CURB RAMP OR LANDING.
4. BROOM FINISH CURB RAMP, LANDING, AND FLARES.
5. LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 2.0% IN ANY DIRECTION.

ACCESSIBLE RAMP – PERPENDICULAR TYPE A
NTS



NOTES:
1. CONCRETE SHALL BE 3300 PSI AT 28 DAYS.
2. WHERE "GRADE BREAK" IS CALLED OUT, THE ENTIRE LENGTH OF THE GRADE BREAK BETWEEN THE TWO ADJACENT SURFACE PLANS SHALL BE FLUSH.
3. DO NOT PLACE GRATINGS, JUNCTION BOXES, ACCESS COVERS, OR OTHER APPURTENANCES IN FRONT OF THE CURB RAMP OR ON ANY PART OF THE CURB RAMP OR LANDING.
4. BROOM FINISH CURB RAMP, LANDING, AND FLARES.
5. LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 2.0% IN ANY DIRECTION.

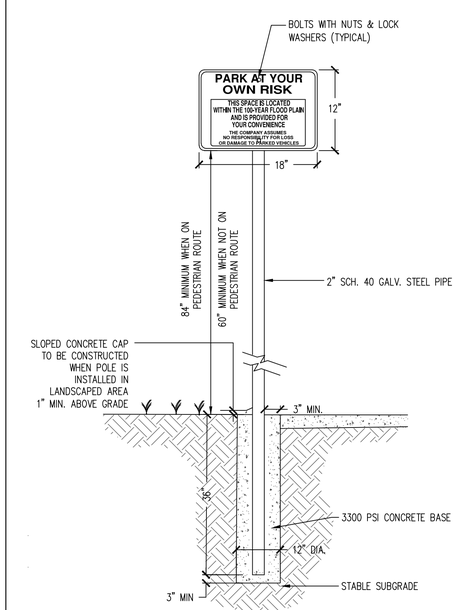
ACCESSIBLE RAMP – PERPENDICULAR TYPE B
NTS



	MIN	MAX
A	1.60"	2.40"
B	0.60"	–
C	0.45"	0.90"
D	0.90"	1.40"
E	0.20"	0.20"

NOTES:
1. THE DETECTABLE WARNING SURFACE (DWS) SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP (EXCLUSIVE OF FLARES) OR THE LANDING.
2. THE EDGE OF THE DWS, SHALL BE PLACED ALONG THE BACK OF THE CURB LINE.
3. THE ROWS OF TRUNCATED DOMES IN A DWS SHALL BE PARALLEL WITH THE DIRECTION OF TRAVEL.
4. IF A CURB IS NOT PRESENT PLANCE THE DWS AT THE EDGE OF PAVEMENT.
5. DWS SHALL CONTRAST VISUALLY WITH THE ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. CONTRACTOR SHALL PROVIDE 2-FOOT ARMOR-TILE TRUNCATED DOMES EMBEDDED INTO THE CONCRETE OR SIMILAR MATERIAL IN ACCORDANCE WITH OWNER AND LOCAL ADA REQUIREMENTS.

DETECTABLE WARNING SURFACES
NTS



NOTES:
1. STANDARD 2" WELDED STEEL PIPE HOT DIP GALVANIZED AFTER FABRICATION CONFORMING TO ASTM A120 & A123.

FLOODPLAIN PARKING SIGN
NTS

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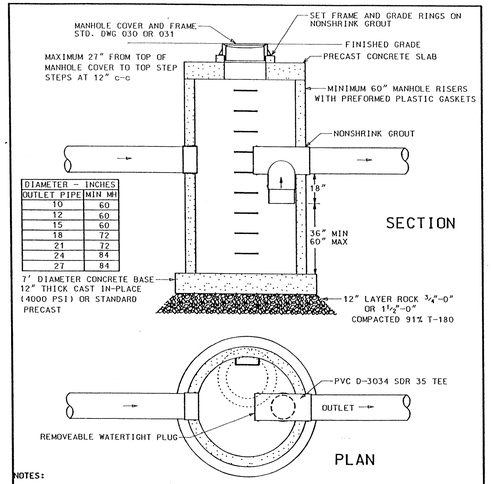
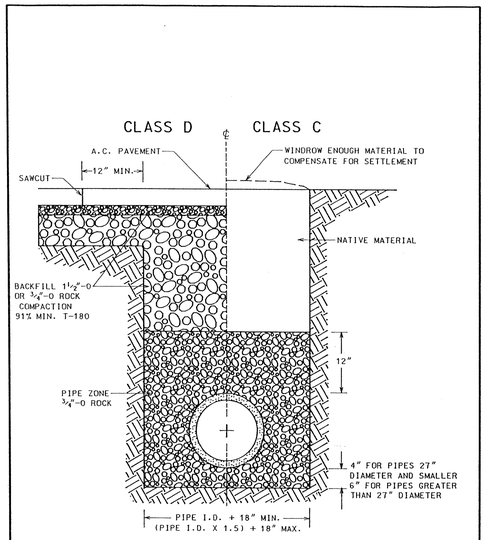


DIAMETER - INCHES	
OUTLET PIPE	MIN MH
10	60
12	60
15	60
18	72
21	72
24	84
27	84

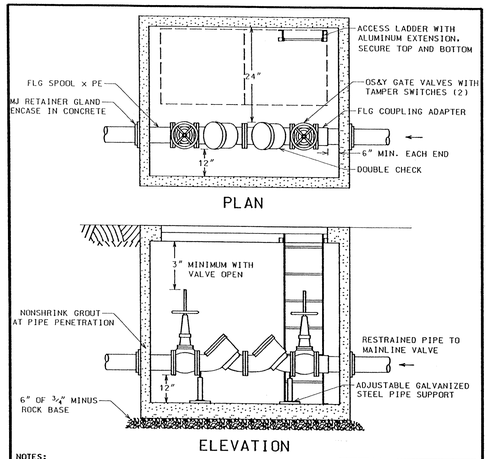
NOTES:

1. MANHOLE TO CONFORM WITH ASTM C-478
2. MANHOLE DIAMETER VARIES WITH OUTLET PIPE DIAMETER. SEE TABLE ABOVE. MAINTAIN PIPE TEE/PLUG TO OPPOSITE WALL CLEARANCE OF 36"
4. IN PAVEMENT. PLACE MINIMUM 12" OF ¾"-0" OR 1½"-0" COMPACTED ROCK OUTSIDE RISERS
5. HYDRAULIC FALL THROUGH MANHOLE = 0.02 FT
6. PVC D-3034 SDR 35 TEE (SOLVENT SOFTEN EXTERIOR AND SAND). GROUT THROUGH WALL AND FASTEN TO WALL WITH S.S. BAND AND ½" S.S. ANCHOR BOLTS
7. MINIMUM SUMP VOLUME 20 CUBIC FEET PER 1.0 CFS FLOW. WITH 25 YEAR EVENT. IF THIS IS EXCEEDED CONSTRUCT UPSTREAM FLOW SPLITTER OR INCREASE MANHOLE DIAMETER TO SUIT

CITY OF TUALATIN, OR	MANHOLE WATER QUALITY		
REVISED: 11/2002 VALID: 3/2003	SCALE: 1:40	DRAWN: D.L. APPROVED: K.L.H.	DWG NO. 060



CITY OF TUALATIN, OR	PIPE TRENCH BACKFILL		
DATE OF LAST REVISION: 10/2001	SCALE: NONE	DRAWN: D.L. APPROVED: K.L.H.	DWG NO. 240

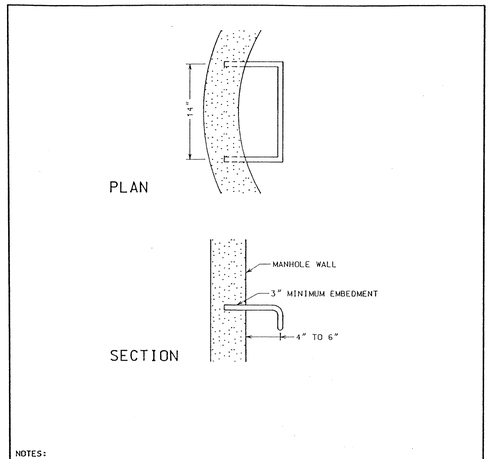


NOTES:

1. USE DUCTILE IRON PIPE THROUGH VAULT
2. PLUGS SHALL BE INSTALLED IN TEST COCKS.
3. ASSEMBLY MAY ALSO BE MOUNTED ABOVE GROUND IN AN INSULATED PROTECTIVE ENCLOSURE OR BUILDING.
4. CHECK VAULT FLOTATION AND CORRECT IF NECESSARY.
5. INSTALLATION AND BACKFLOW ASSEMBLY SHALL COMPLY WITH AWWA C510 AND OAR 333-61-070.
6. PROVIDE RULE A535 SUMP PUMP WITH 1" PVC CHECK VALVE AND PIPE DISCHARGE TO DAYLIGHT. SUPPLY POWER THRU GFCI WALL MOUNT INTERNAL 12" MAX. BELOW CEILING.
7. CLEARANCES SHOWN ARE MINIMUM AND SHALL BE MAINTAINED IF A DIFFERENT VAULT IS REQUIRED.

PIPE SIZE	UTILITY VAULT	COVER OFFSET
3"	660-LA	332P
4"	577-WA	2-332P
6"	577-WA	2-332P
8"	687-WA	2-332P
10"	5106-WA	3-332P

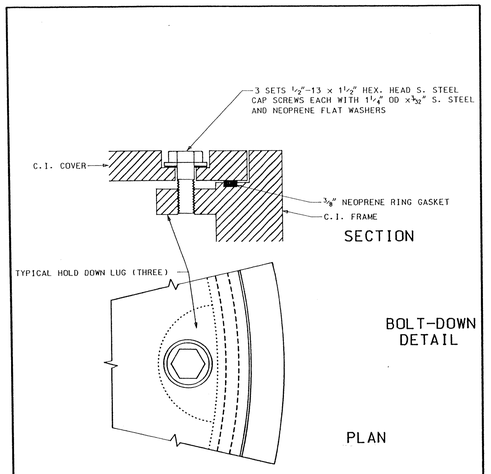
CITY OF TUALATIN, OR	BACKFLOW ASSEMBLY DOUBLE CHECK 3" THRU 10"		
REVISED: 11/2002 VALID: 3/2003	SCALE: 1:30	DRAWN: D.L. APPROVED: K.L.H.	DWG NO. 613



NOTES:

1. STEPS SHALL BE MANUFACTURED FROM ½" REINFORCING BAR (ASTM A-615 GRADE 60) ENCAPSULATED IN INJECTION MOLDED COPOLYMER POLYPROPYLENE WITH SERRATED NON-SLIP TOP SURFACE
2. STEPS SHALL BE VERTICALLY SPACED ON 12" CENTERS AND MUST BE FIRMLY EMBEDDED IN THE CONCRETE WALL MEETING THE PULLOUT REQUIREMENTS OF ASTM C-478
3. THE MINIMUM CLEAR HORIZONTAL DISTANCE BETWEEN THE RUNG AND THE OPPOSITE WALL OR OTHER OBSTRUCTION SHALL BE 24" MEASURED AT THE CENTER FACE OF THE STEP
4. THE MAXIMUM VERTICAL DISTANCE BETWEEN THE TOP RUNG AND THE MANHOLE COVER TOP SHALL BE 27"

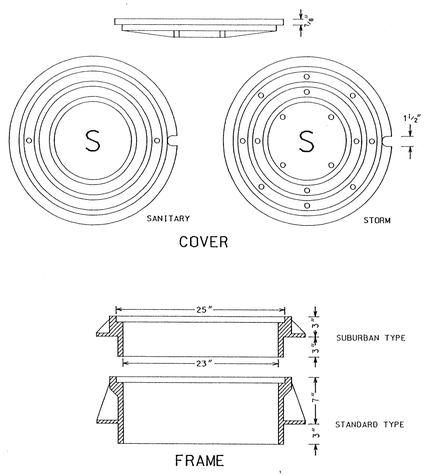
CITY OF TUALATIN, OR	MANHOLE STEPS		
DATE OF LAST REVISION: 9/2001	SCALE: 1:10	DRAWN: D.L. APPROVED: K.L.H.	DWG NO. 032



NOTES:

1. REFER TO STANDARD DWG 030
2. COVER SHALL INCORPORATE TWO DEPRESSED LIFTING HANDLES AND SHALL NOT INCLUDE THE NOTCH FOR A LIFTING HOOK OR DRAINAGE HOLES
3. THE THREE HOLD DOWN LUGS SHALL BE EVENLY SPACED AROUND THE INTERIOR OF THE FRAME
4. TO BE USED WHENEVER AN ASSOCIATED SANITARY SEWER MANHOLE IS LOCATED WITHIN A FLOODWAY, GREENWAY OR IS NOT IN A PAVED AREA

CITY OF TUALATIN, OR	MANHOLE COVER AND FRAME WATERTIGHT		
DATE OF LAST REVISION: 6/97	SCALE: 1:2	DRAWN: D.L. APPROVED: K.L.H.	DWG NO. 031



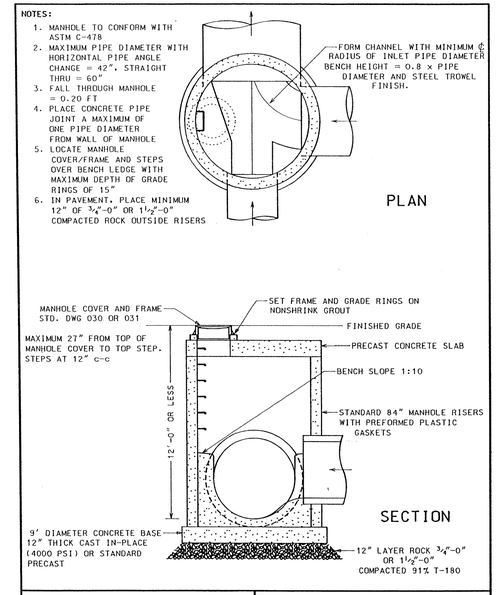
NOTES:

1. ALL ASSEMBLIES ARE TO BE RATED FOR H-20 TRAFFIC LOADING
2. COVER & FRAME SHALL BE GRAY CAST IRON ASTM A-48 CLASS 30. WITH MATCHING SURFACES MACHINED TO A TRUE BEARING
3. NOTCH LID FOR LIFTING HOOK
4. REFER TO STD DWG 031 FOR WATERTIGHT ASSEMBLY MODIFICATIONS

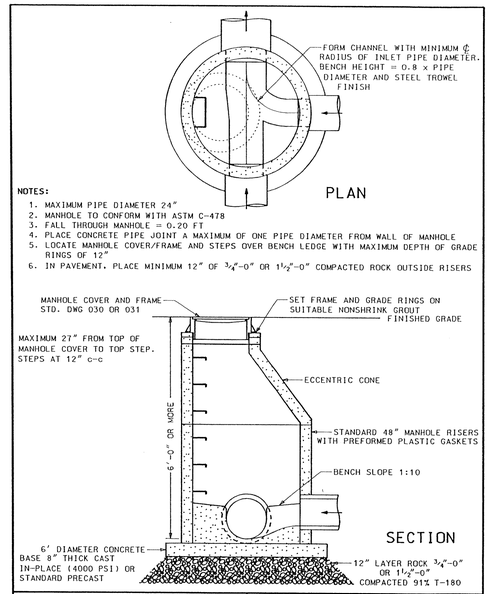
CITY OF TUALATIN, OR	MANHOLE COVER AND FRAME STANDARD		
DATE OF LAST REVISION: 7/96	SCALE: 1:10	DRAWN: D.L. APPROVED: M.L.B.	DWG NO. 030

NOTES:

1. MANHOLE TO CONFORM WITH ASTM C-478
2. MAXIMUM PIPE DIAMETER WITH HORIZONTAL PIPE ANGLE CHANGE = 42". STRAIGHT THRU = 60"
3. FALL THROUGH MANHOLE = 0.20 FT
4. PLACE CONCRETE PIPE JOINT A MAXIMUM OF ONE PIPE DIAMETER FROM WALL OF MANHOLE
5. LOCATE MANHOLE COVER/FRAME AND STEPS OVER BENCH LEDGE WITH MAXIMUM DEPTH OF GRADE RINGS OF 15"
6. IN PAVEMENT. PLACE MINIMUM 12" OF ¾"-0" OR 1½"-0" COMPACTED ROCK OUTSIDE RISERS



CITY OF TUALATIN, OR	MANHOLE 84-INCH FLAT TOP		
DATE OF LAST REVISION: 12/2001	SCALE: 1:50	DRAWN: D.L. APPROVED: K.L.H.	DWG NO. 017



CITY OF TUALATIN, OR	MANHOLE 48-INCH ECCENTRIC CONE TOP		
DATE OF LAST REVISION: 12/2001	SCALE: 1:30	DRAWN: D.L. APPROVED: K.L.H.	DWG NO. 010

NOTE:
DETAILS APPLY TO PUBLIC WATER AND STORM DRAIN ONLY.

ARCHITECTURAL REVIEW SET

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3812

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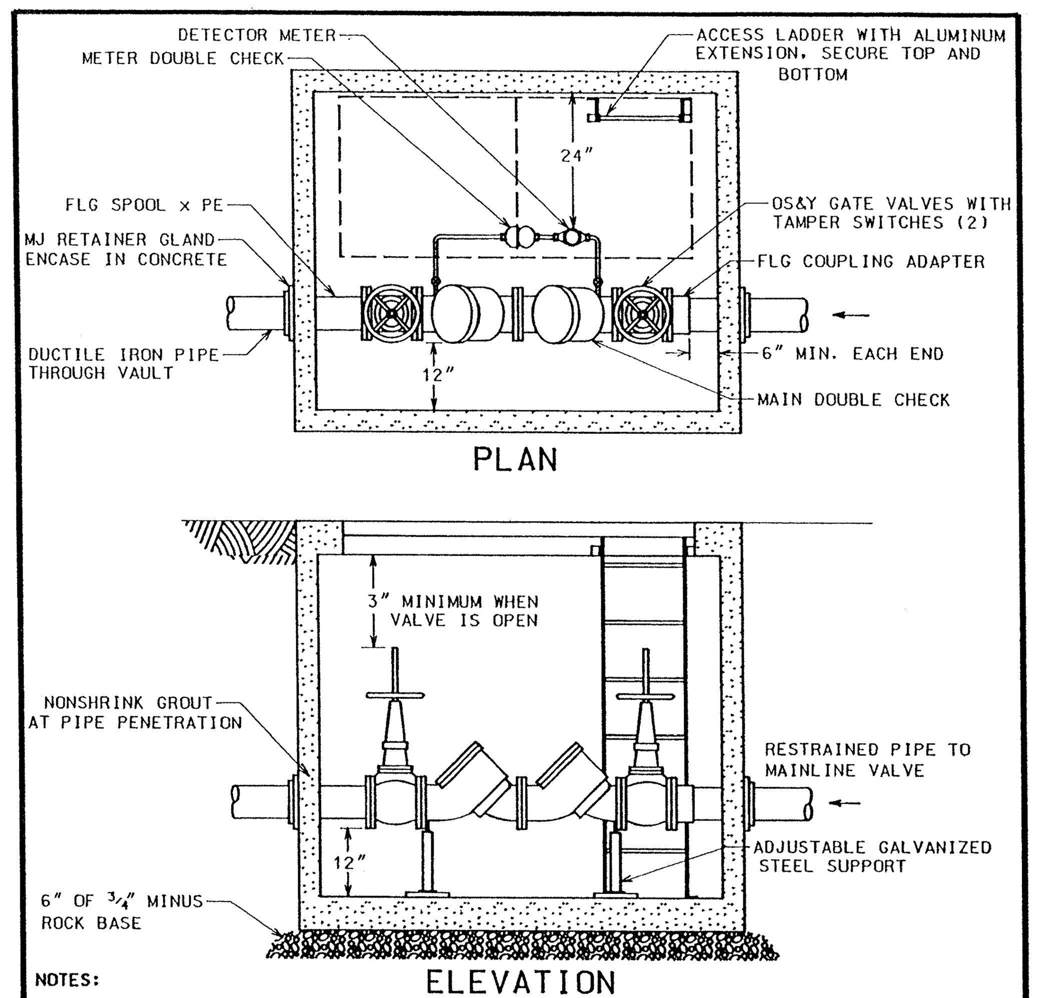
AKS DRAWING FILE: 3812 C500 PUBLIC DETAILS.DWG | LAYOUT: C500



NOTES:

1. USE DUCTILE IRON PIPE THROUGH VAULT
2. PLUGS SHALL BE INSTALLED IN TEST COCKS
3. ASSEMBLY MAY ALSO BE MOUNTED ABOVE GROUND IN AN INSULATED PROTECTIVE ENCLOSURE OR BUILDING
4. CHECK VAULT FLOTATION AND CORRECT IF NECESSARY
5. INSTALLATION AND BACKFLOW ASSEMBLY SHALL COMPLY WITH AWWA C510 AND OAR 333-61-070
6. PROVIDE RULE A53S SUMP PUMP WITH 1" PVC CHECK VALVE AND PIPE DISCHARGE TO DAYLIGHT. SUPPLY POWER THRU GFCI WALL MOUNT INTERNAL 12" MAX. BELOW CEILING.
7. CLEARANCES SHOWN ARE MINIMUM AND SHALL BE MAINTAINED IF A DIFFERENT VAULT IS REQUIRED

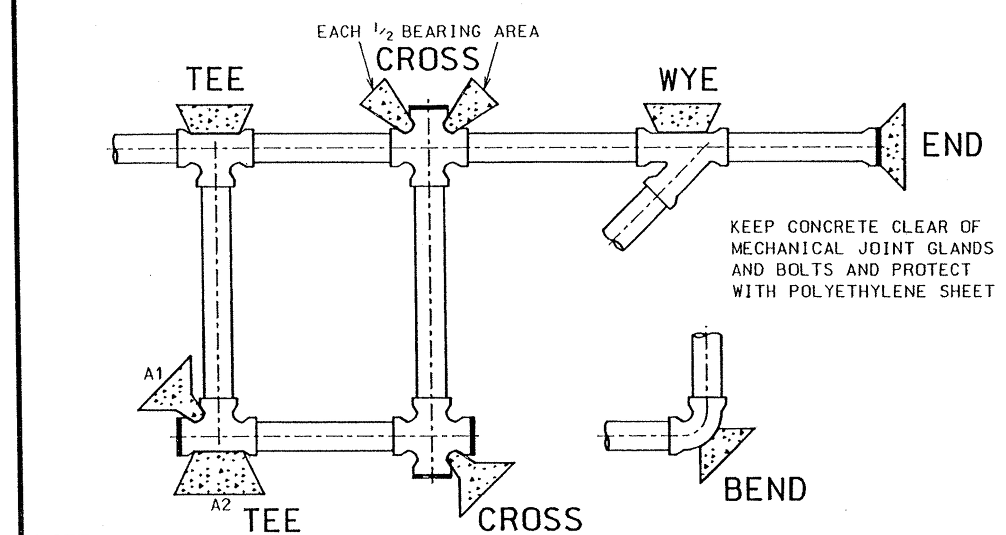
PIPE SIZE	UTILITY VAULT	COVER OFFSET
4"	676-WA	2-332P
6"	676-WA	2-332P
8"	687-WA	2-332P
10"	5106-WA	3-332P

CITY OF TUALATIN, OR

BACKFLOW ASSEMBLY FIRE PROTECTION WITHOUT FDC

REVISED: 11/2002 VALID: 3/2003 | SCALE: 1:30 | DRAWN: D.L. APPROVED: K.L.H. | DWG NO. 614

THRUST BLOCK REQUIREMENTS AT SOIL/CONCRETE INTERFACE
1. BLOCK HEIGHT TO BE LESS THAN 1/2 TOTAL DEPTH SOIL SURFACE TO BOTTOM OF BLOCK BUT NOT LESS THAN PIPE DIAMETER
2. BLOCK WIDTH TO VARY BETWEEN EQUAL TO OR NOT GREATER THAN TWICE BLOCK HEIGHT



NOTE:
THRUST BLOCKS TO BE USE ONLY WHEN CONNECTING TO AN UNKNOWN LENGTH OF PIPE OTHERWISE USE APPROVED MJ RETAINER GLANDS AND RESTRAINED PIPE

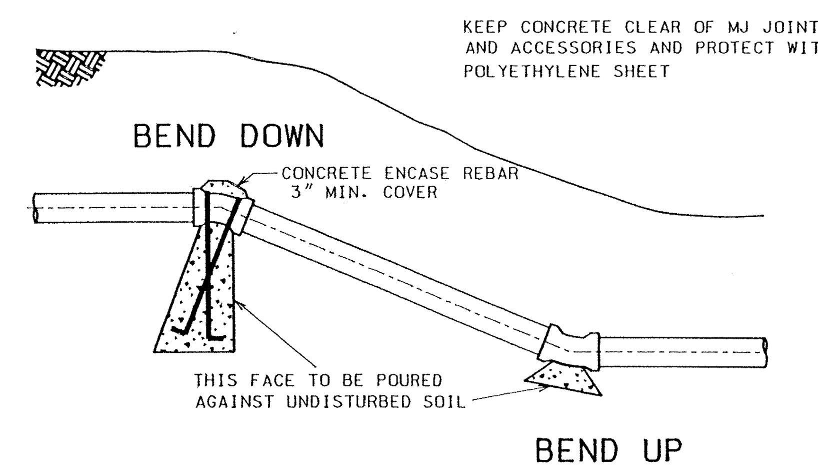
FITTING SIZE INCHES	BEARING AREA SQ. FT.					
	BEND 90° CROSS TEE A1	TEE A2	TEE WYE END	BEND 45°	BEND 22.5°	BEND 11.25°
3	1.31	1.85	0.92	0.71	0.36	0.18
4	1.92	2.71	1.36	1.04	0.53	0.27
6	3.97	5.61	2.80	2.15	1.09	0.55
8	6.82	9.65	4.82	3.69	1.88	0.95
10	10.26	14.52	7.26	5.55	2.83	1.42
12	14.51	20.53	10.26	7.86	4.00	2.01
14	19.50	27.58	13.79	10.55	5.38	2.70
16	25.22	35.67	17.83	13.65	6.96	3.50
18	31.68	44.80	22.40	17.14	8.74	4.39
20	38.87	54.97	27.48	21.03	10.72	5.39
24	55.45	78.42	39.21	30.01	15.30	7.69

DESIGN CRITERIA:
1. TEST PRESSURE 150 LB/SQ.IN., CONCRETE 3300-1 1/2", AFTER POURING BLOCK DO NOT APPLY TEST PRESSURE FOR AT LEAST FIVE DAYS.
2. SAFETY FACTOR 1.5, SOIL SANDY SILY WITH BEARING STRENGTH 3,000 LB/SQ.FT.
3. CONCRETE POURED AGAINST UNDISTURBED SOIL OR SOIL COMPACTED TO AT LEAST 91% MODIFIED PROCTOR DENSITY, T-180
4. SUBMIT BEARING AREA CALCULATIONS WITH CHANGE IN SOIL OR TEST PRESSURE

CITY OF TUALATIN, OR

PIPE JOINT RESTRAINT BEARING THRUST BLOCKS

DATE OF LAST REVISION: 2/2002 | SCALE: NOT TO SCALE | DRAWN: D.L. APPROVED: K.L.H. | DWG NO. 620



NOTE:
ALWAYS USE APPROVED RETAINER GLANDS AND RESTRAINED PIPE INSTEAD OF GRAVITY AND BEARING THRUST BLOCKS WHENEVER POSSIBLE

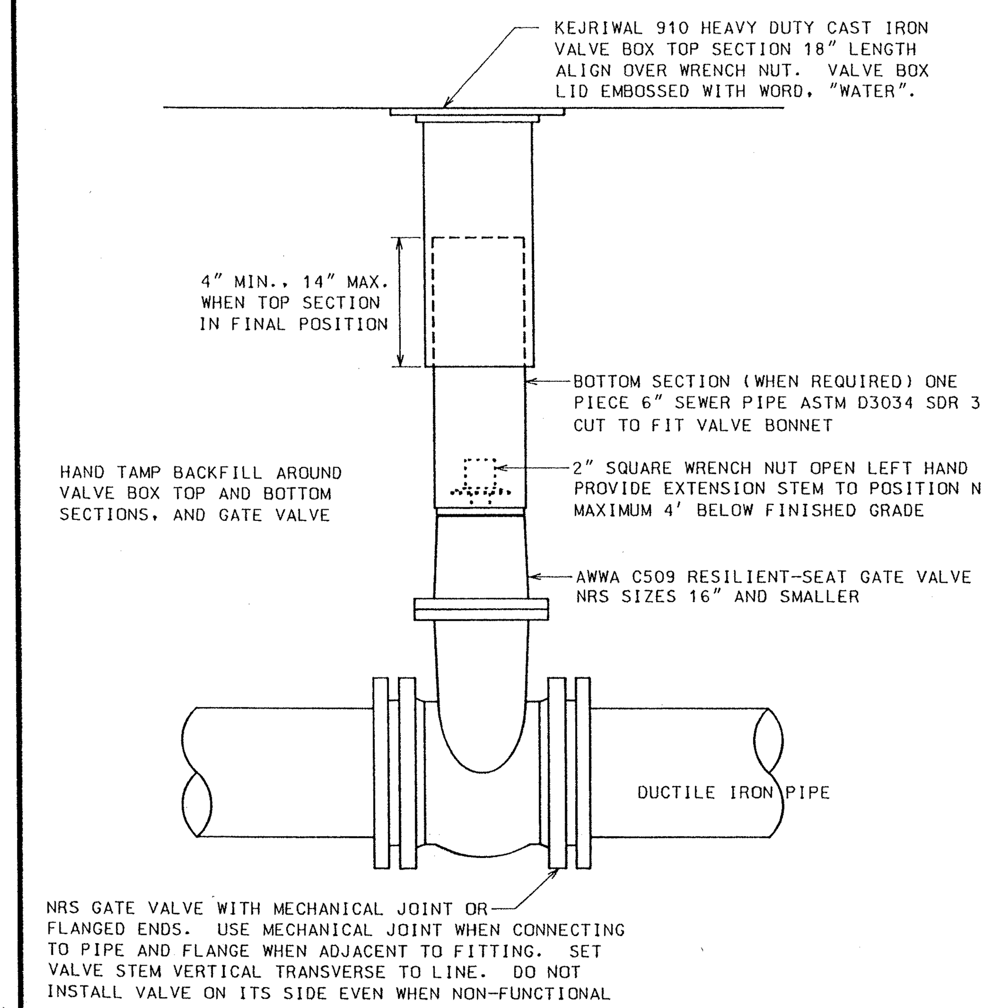
DESIGN CRITERIA:
1. TEST PRESSURE 150 LB/SQ.IN. CONCRETE 3300-1 1/2", DO NOT APPLY TEST PRESSURE BEFORE FIVE DAYS AFTER POURING THRUST BLOCK
2. SAFETY FACTOR 1.5
3. WEIGHT CONCRETE 140 LB/CU.FT.
4. SOIL SANDY SILT BEARING STRENGTH 3000 LB/SQ.FT.
5. SUBMIT REDESIGN WITH CHANGE IN SOIL OR TEST PRESSURE

FITTING SIZE INCHES	REBAR SIZE	CUBIC YARDS CONCRETE			BEARING AREA SQ. FT.		
		VERTICAL BEND DOWN			VERTICAL BEND UP		
		45°	22.5°	11.25°	45°	22.5°	11.25°
3	# 4	0.52	0.28	0.14	0.71	0.36	0.18
4		0.76	0.41	0.21	1.04	0.53	0.27
6		1.57	0.85	0.43	2.15	1.09	0.55
8		2.71	1.47	0.75	3.69	1.88	0.95
10	# 6	4.07	2.20	1.12	5.55	2.83	1.42
12	# 8	5.76	3.12	1.59	7.86	4.00	2.01
14		7.74	4.19	2.14	10.55	5.38	2.70
16	# 10	10.01	5.42	2.76	13.65	6.96	3.50
18		12.57	6.80	3.47	17.14	8.74	4.39
20	# 14	15.42	8.35	4.28	21.03	10.72	5.39
24		22.00	11.91	6.07	30.01	15.30	7.69

CITY OF TUALATIN, OR

PIPE JOINT RESTRAINT GRAVITY THRUST BLOCKS

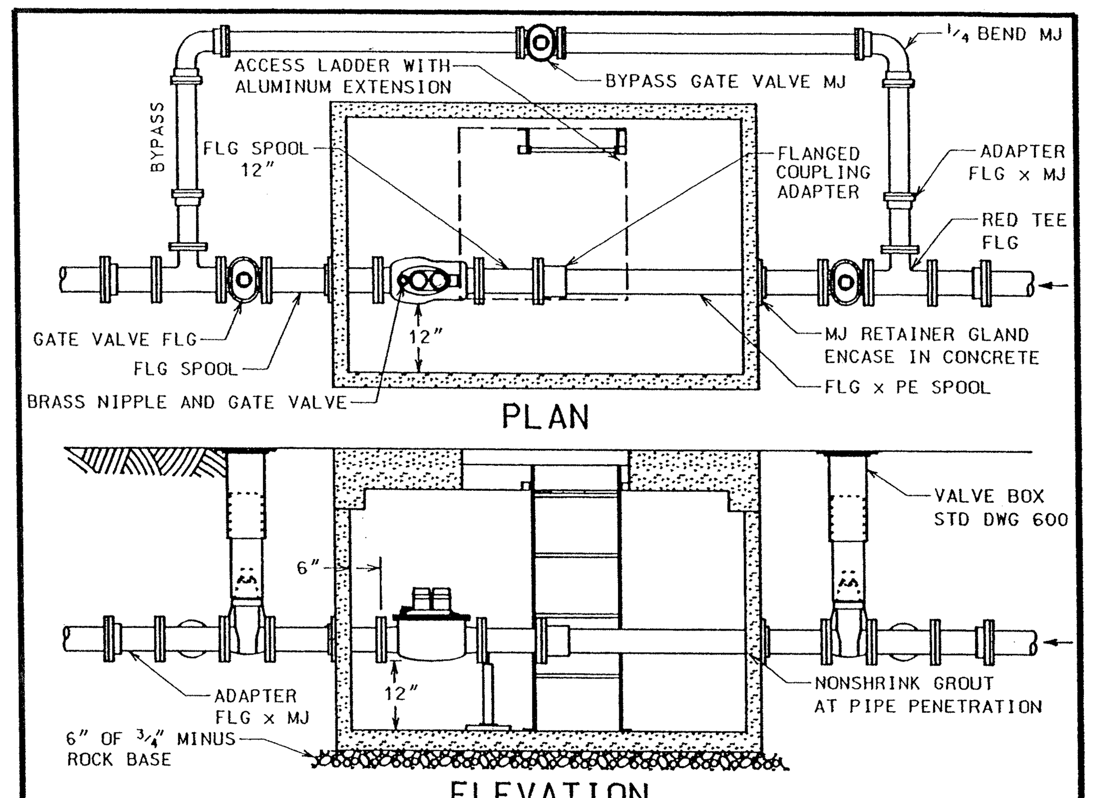
DATE OF LAST REVISION: 10/2001 | SCALE: NOT TO SCALE | DRAWN: D.L. APPROVED: K.L.H. | DWG NO. 621



CITY OF TUALATIN, OR

VALVE GATE

REVISED: 11/2003 VALID: 3/2004 | SCALE: 1:10 | DRAWN: D.L. APPROVED: K.L.H. | DWG NO. 600



METER SIZE	UTILITY VAULT	COVER	BY-PASS DIAMETER	MAX. CONTINUOUS FLOW RATE GPM	METER LENGTH
3"	504-LA-48	1-332P	3"	320	17"
4"	504-LA-48	1-332P	3"	500	20"
6"	575-LA	1-332P	4"	1000	24"
8"	675-WA	2-332P	6"	1600	55 3/8"

NOTES:
1. USE DUCTILE IRON PIPE CL 52 THROUGH VAULT AND BYPASS
2. NEPTUNE TRU/FLO COMPOUND METER COMPLYING WITH AWWA C702 READING IN 100 CUBIC FEET AND INCORPORATING A NEPTUNE PROREAD ENCODER WITH EACH PIT RECEPTACLE FASTENED TO THE VAULT TOP WITH TWO S.S. ANCHOR BOLTS, LABEL S AND L. ELECTRICAL WIRING FED THROUGH HOLES DRILLED IN CONCRETE TOP AND NEATLY SPIRAL WRAP PROTECTED AND TIED. PROVIDE CERTIFIED TEST FOR METER AND ENCODER BEFORE ACCEPTANCE.
3. PROVIDE MANUFACTURED ADJUSTABLE GALVANIZED STEEL SUPPORT AT INLET END OF METER
4. USE APPROVED RETAINER GLANDS WITH MJ FITTINGS. USE NO THRUST BLOCKS OR RODS.
5. CHECK VAULT FLOTATION AND CORRECT IF NECESSARY
6. PROVIDE RULE A53S SUMP PUMP WITH 1" PVC CHECK VALVE AND PIPE DISCHARGE TO DAYLIGHT. SUPPLY POWER THRU GFCI WALL MOUNT INTERNALLY 12" MAX. BELOW CEILING.

CITY OF TUALATIN, OR

WATER SERVICE 3" AND LARGER METER COMPOUND TYPE

REVISED: 12/2002 VALID: 3/2003 | SCALE: 1:30 | DRAWN: D.L. APPROVED: K.L.H. | DWG NO. 634

RIPRAP:
- ROCK FOR RIPRAP SHALL BE ANGULAR IN SHAPE.
- THICKNESS OF A SINGLE ROCK SHALL NOT BE LESS THAN ONE-THIRD ITS LENGTH.
- ROUNDED ROCK WILL NOT BE ACCEPTED UNLESS APPROVED BY THE DISTRICT.

RIPRAP INSTALLATION:
- EXCAVATE BELOW FINISH GRADE TO DEPTH & DIMENSIONS SHOWN ON APPROVED PLANS.
- INSTALL WOVEN GEOTEXTILE FABRIC.
- PLACE RIP RAP TO FINISH GRADE.

- GRADE RIPRAP SHALL BE THE CLASS AND SIZE OF ROCK ACCORDING TO THE FOLLOWING:

CLASS 50	CLASS 100	CLASS 200	CLASS 700	CLASS 2000	PERCENT (BY WEIGHT)
WEIGHT OF ROCK (LBS)					
50-30	100-60	200-140	700-500	2000-1400	20
30-15	60-25	140-80	500-200	1400-700	30
15-2	25-2	80-8	200-20	700-40	40
2-0	2-0	8-0	20-0	40-0	10

RIP RAP DETAILS

DRAWING NO. 770 REVISED 3-07

CleanWater Services
Our commitment is clear.

12"X18" SIGNS SHALL BE PLACED IN A MANNER AS TO CLEARLY IDENTIFY THE SENSITIVE AREA AND VEGETATED CORRIDOR AS WELL AS AT ALL POINTS OF ENTRY SUCH AS THE BEGINNING OF PATHS. TRAIL HEADS AND ANY PLACE THAT THE PUBLIC MAY WANT OR BE ABLE TO ENTER AREA.

4"X4" SIGNS SHALL BE USED FOR AREAS WHERE A LARGE NUMBER OF SIGNS ARE NEEDED SUCH AS THE BACK OR SIDE YARDS ON EACH LOT ADJACENT TO THE SENSITIVE AREA OR VEGETATED CORRIDOR IN NEW SUBDIVISIONS OF PARTITIONS.

VEGETATED CORRIDOR SIGNAGE

DRAWING NO. 790 REVISED 12-06

CleanWater Services
Our commitment is clear.

NOTE:
DETAILS APPLY TO PUBLIC WATER AND STORM DRAIN ONLY.

ARCHITECTURAL REVIEW SET

AKS ENGINEERING AND FORESTRY SALEM, LLC
528 COTTAGE ST NE
SUITE 160
SALEM, OR 97301
PHONE: 503.400.6028
FAX: 503.400.7722
www.aks-eng.com
ENGINEERING · PLANNING · SURVEYING
FORESTRY · LANDSCAPE ARCHITECTURE

RIVER RIDGE APARTMENTS

TUALATIN OREGON

TAX LOTS 2191, 2202, 2300 WASHINGTON COUNTY TAX MAP 2S 1 15C

PUBLIC CONSTRUCTION DETAILS

DESIGNED BY: RCW
DRAWN BY: RCC
CHECKED BY: JMP
SCALE: AS NOTED
DATE: JUNE 11, 2014

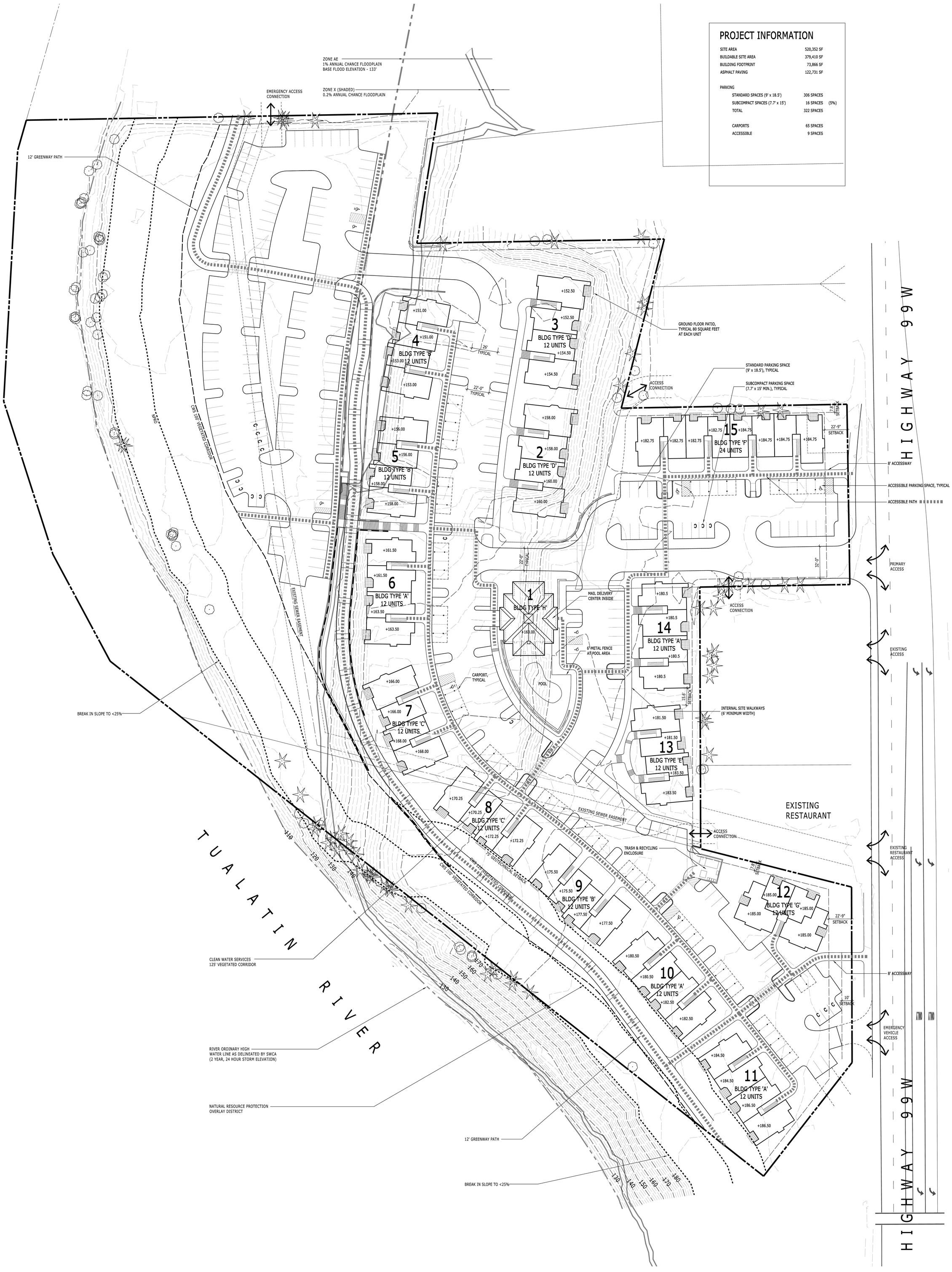
REGISTERED PROFESSIONAL ENGINEER 54869PE OREGON JACK A. POISSANT EXPIRES: DEC. 31, 2014

PRELIMINARY NOT FOR CONSTRUCTION

REVISIONS

JOB NUMBER 3812

SHEET C501



PROJECT INFORMATION

SITE AREA	520,352 SF	
BUILDABLE SITE AREA	379,410 SF	
BUILDING FOOTPRINT	73,866 SF	
ASPHALT PAVING	122,731 SF	
PARKING		
STANDARD SPACES (9' x 18.5')	306 SPACES	
SUBCOMPACT SPACES (7.7' x 15')	16 SPACES	(5%)
TOTAL	322 SPACES	
CARPORTS	65 SPACES	
ACCESSIBLE	9 SPACES	

0 15' 30' 60'

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

SITE PLAN **A1.1**

JUNE 24, 2014

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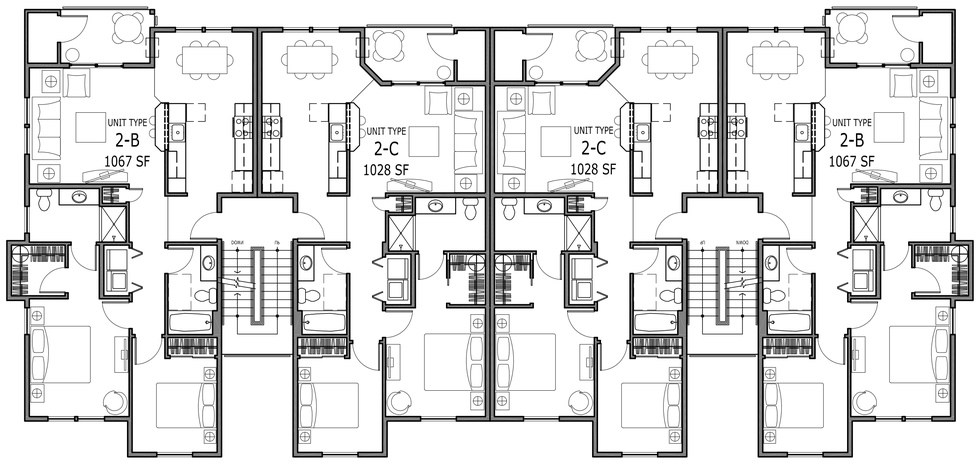
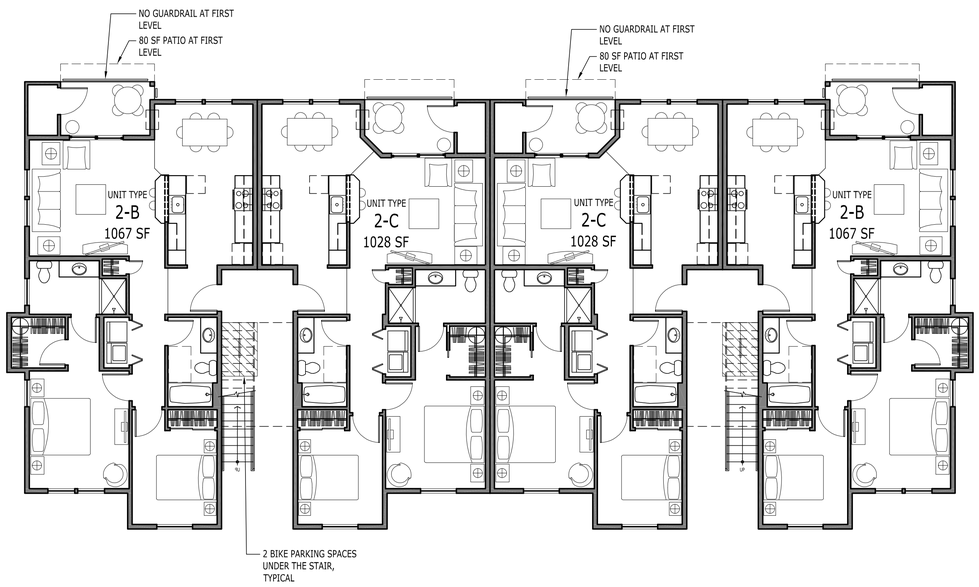


LEVEL 2 PLAN



LEVEL 1 PLAN

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

0 4' 8' 16'

BUILDING TYPE A
LEVEL 1 & 2 PLANS **2.1A**
JUNE 11, 2014

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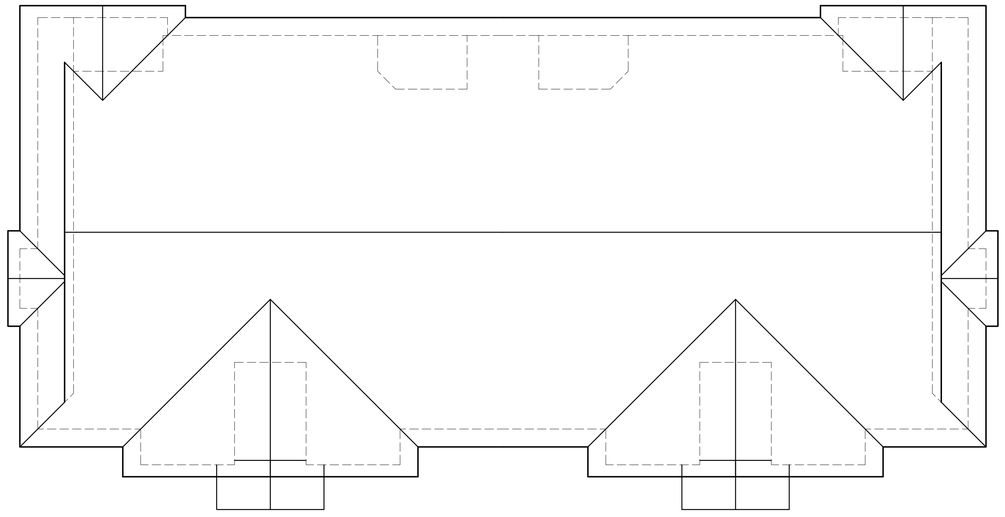
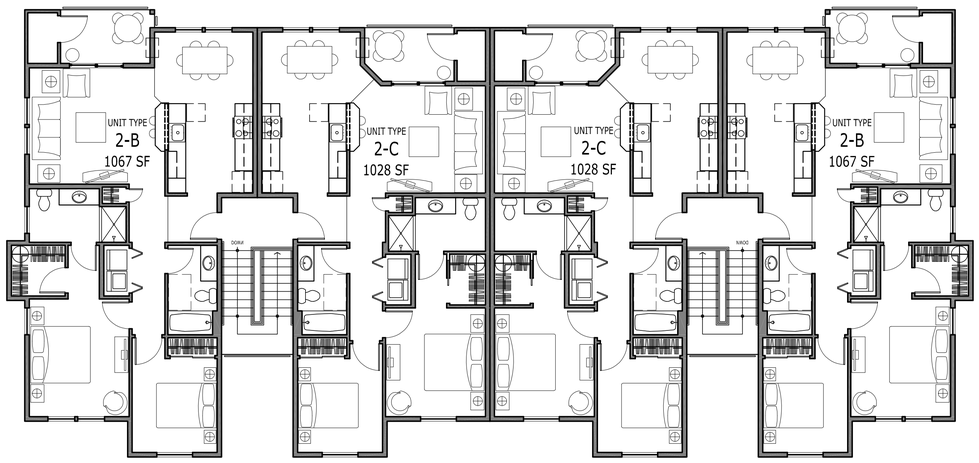


ROOF PLAN



LEVEL 3 PLAN

0 4' 8' 16'

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

BUILDING TYPE A
LEVEL 3 & ROOF PLANS **2.2A**
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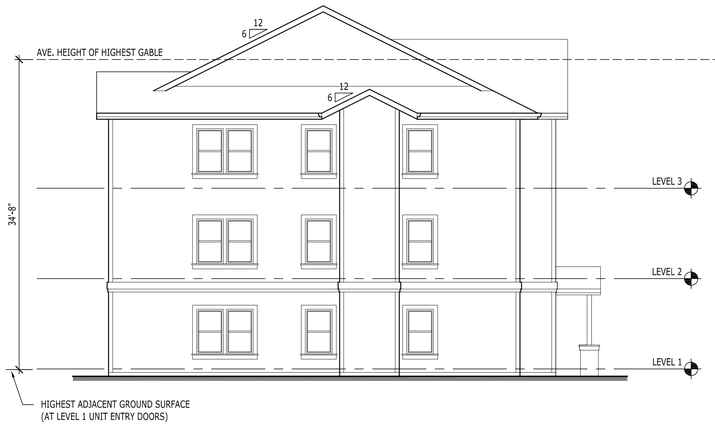

LEFT SIDE ELEVATION

FRONT ELEVATION

RIGHT SIDE ELEVATION

REAR ELEVATION

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE A step dn. to right
EXTERIOR ELEVATIONS **3.1A**
JUNE 11, 2014

HILL ARCHITECTS

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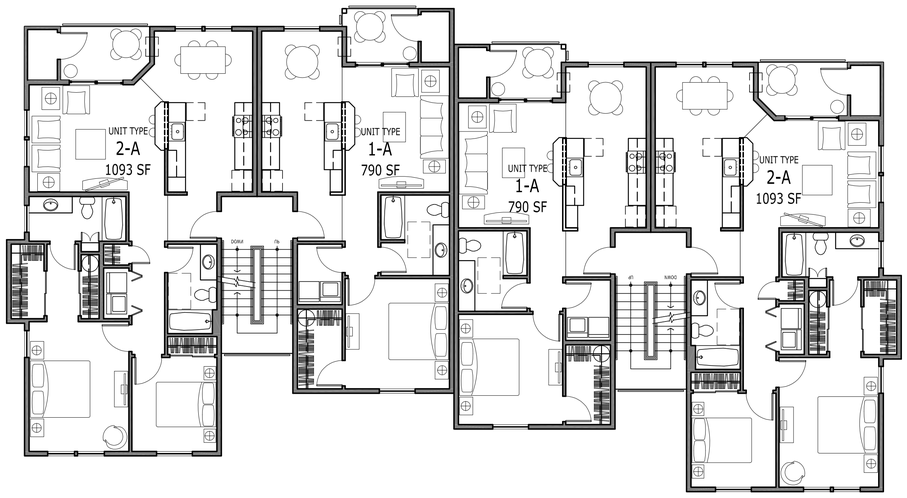
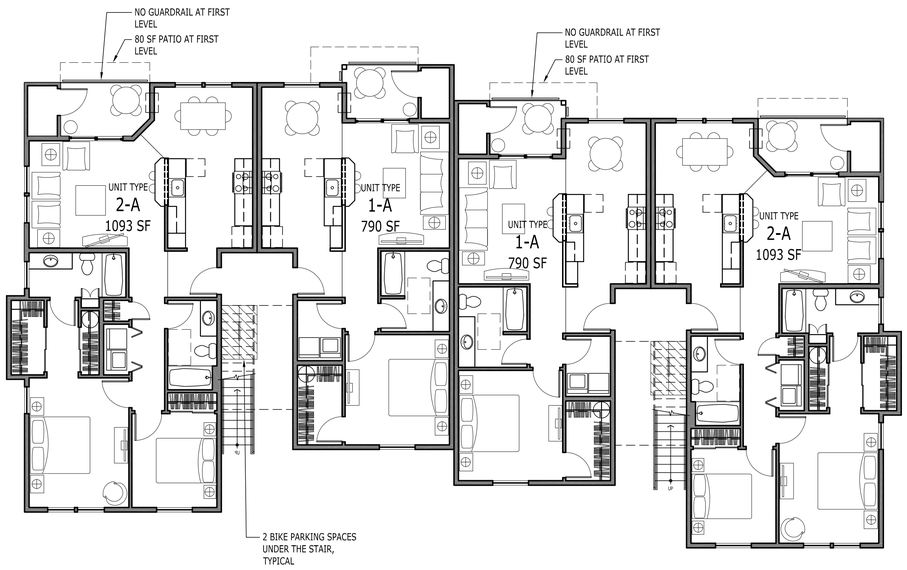


LEVEL 2 PLAN



LEVEL 1 PLAN

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE B
LEVEL 1 & 2 PLANS **2.1B**
JUNE 11, 2014

HILL ARCHITECTS

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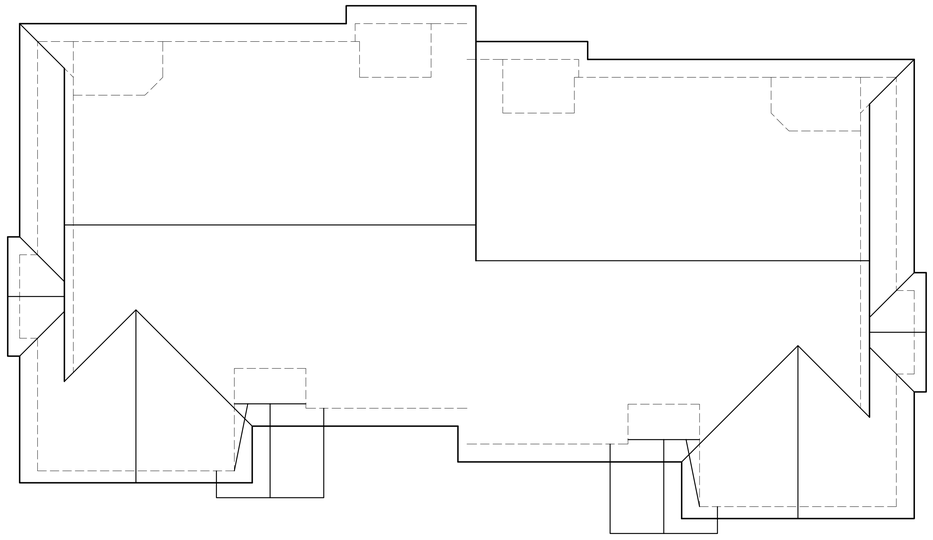
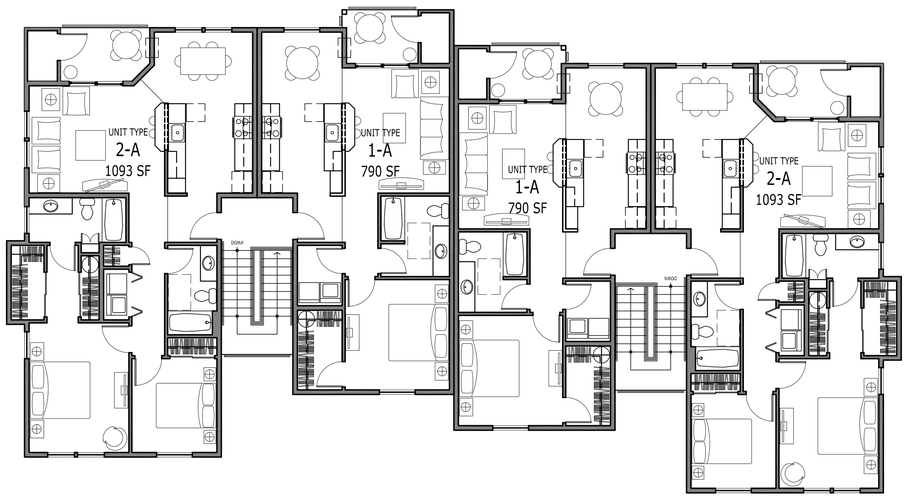


ROOF PLAN



LEVEL 3 PLAN

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

0 4' 8' 16'

BUILDING TYPE B
LEVEL 3 & ROOF PLANS **2.2B**
JUNE 11, 2014

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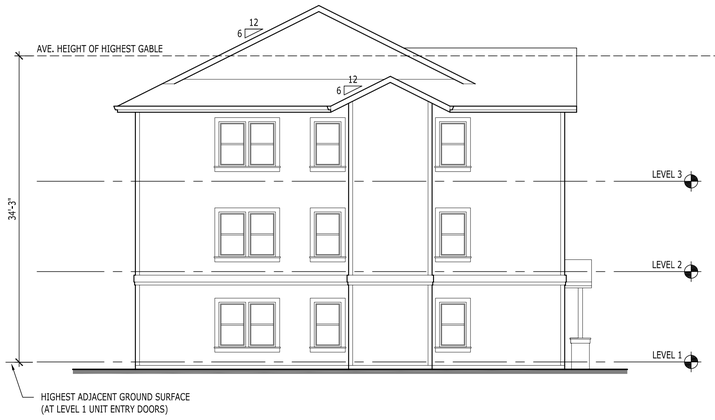

LEFT SIDE ELEVATION

FRONT ELEVATION

RIGHT SIDE ELEVATION

REAR ELEVATION

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE B
EXTERIOR ELEVATIONS **3.1B**
JUNE 11, 2014

HILL ARCHITECTS

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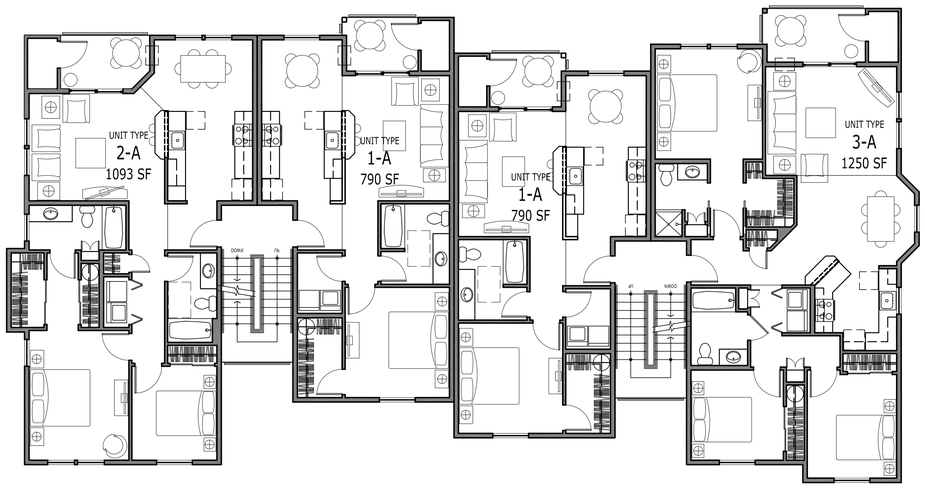
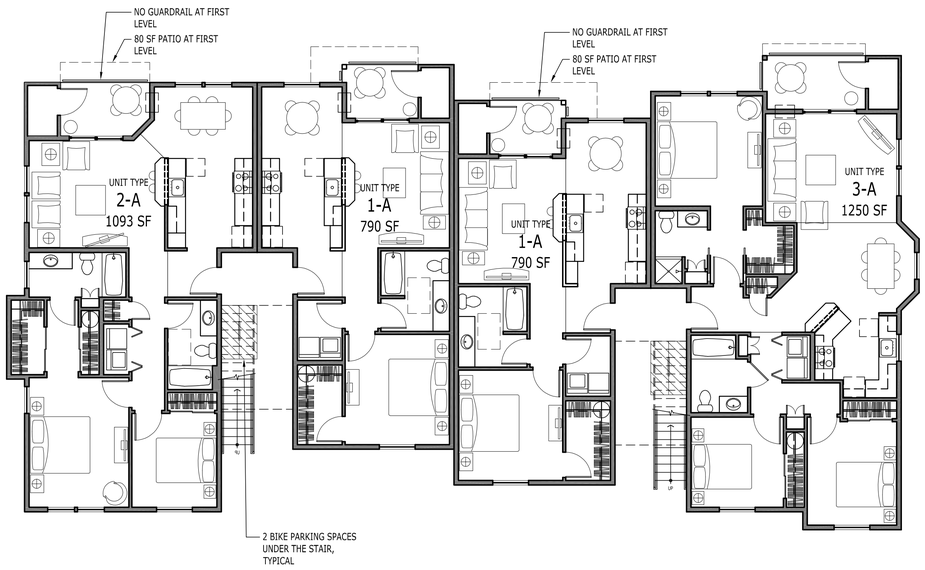


LEVEL 2 PLAN



LEVEL 1 PLAN

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE C
LEVEL 1 & 2 PLANS **2.1C**
JUNE 11, 2014

HILL ARCHITECTS

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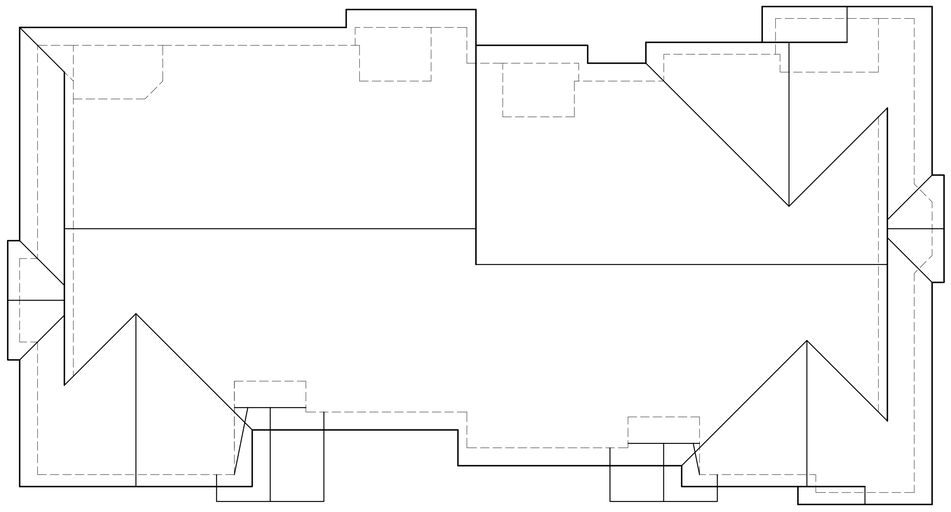
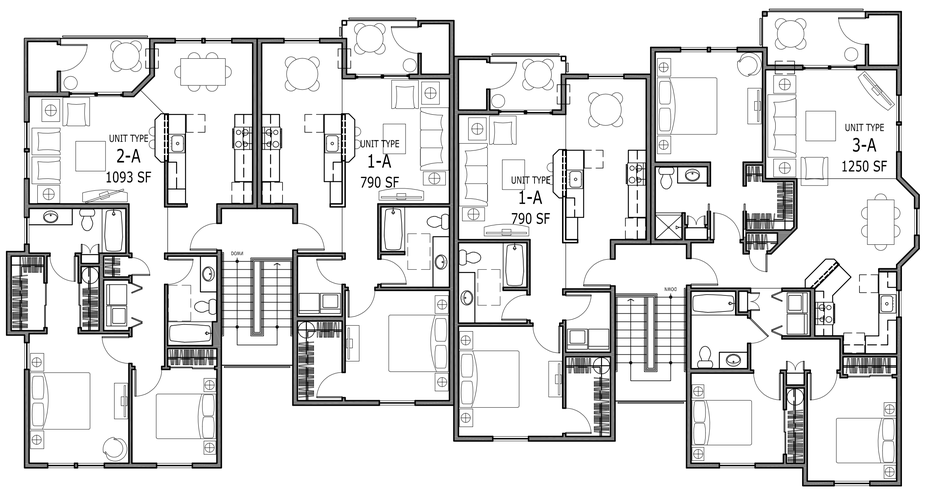


ROOF PLAN



LEVEL 3 PLAN

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE C
LEVEL 3 & ROOF PLANS **2.2C**
JUNE 11, 2014

HILL ARCHITECTS

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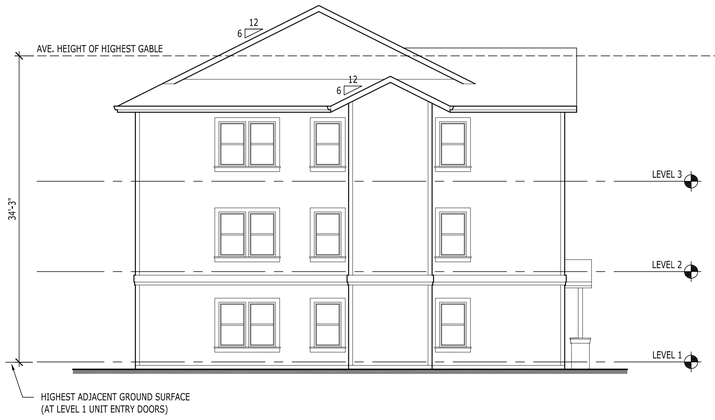
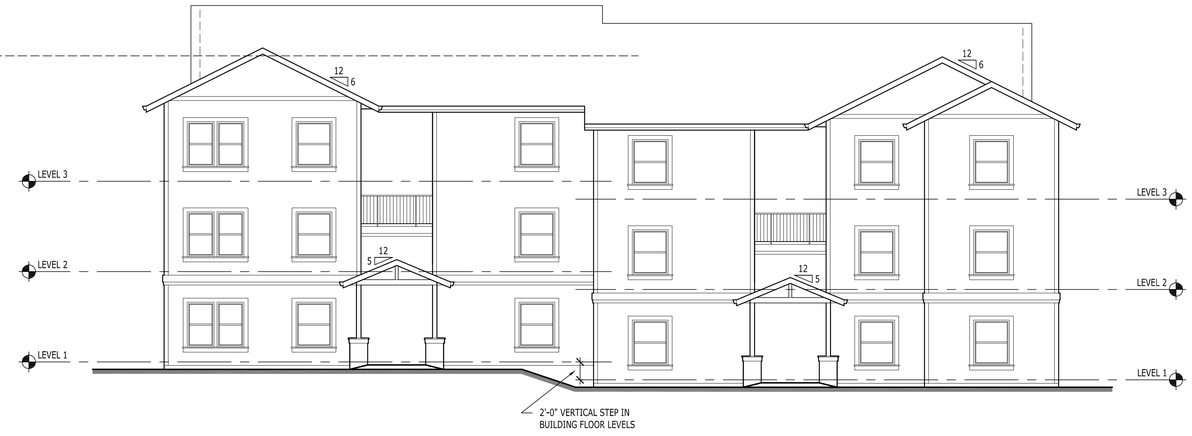


LEFT SIDE ELEVATION



FRONT ELEVATION

RIGHT SIDE ELEVATION

REAR ELEVATION

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE C
EXTERIOR ELEVATIONS **3.1C**
JUNE 11, 2014

HILL ARCHITECTS

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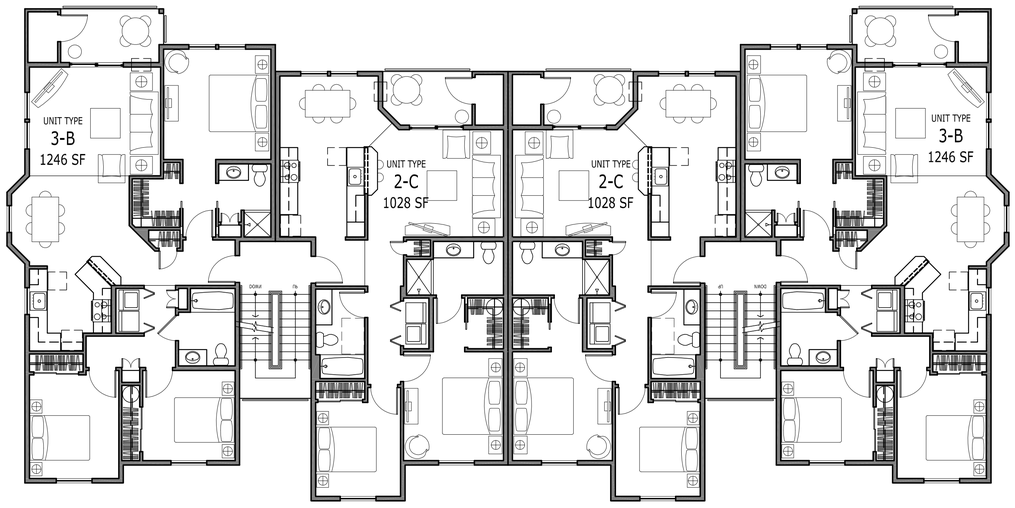
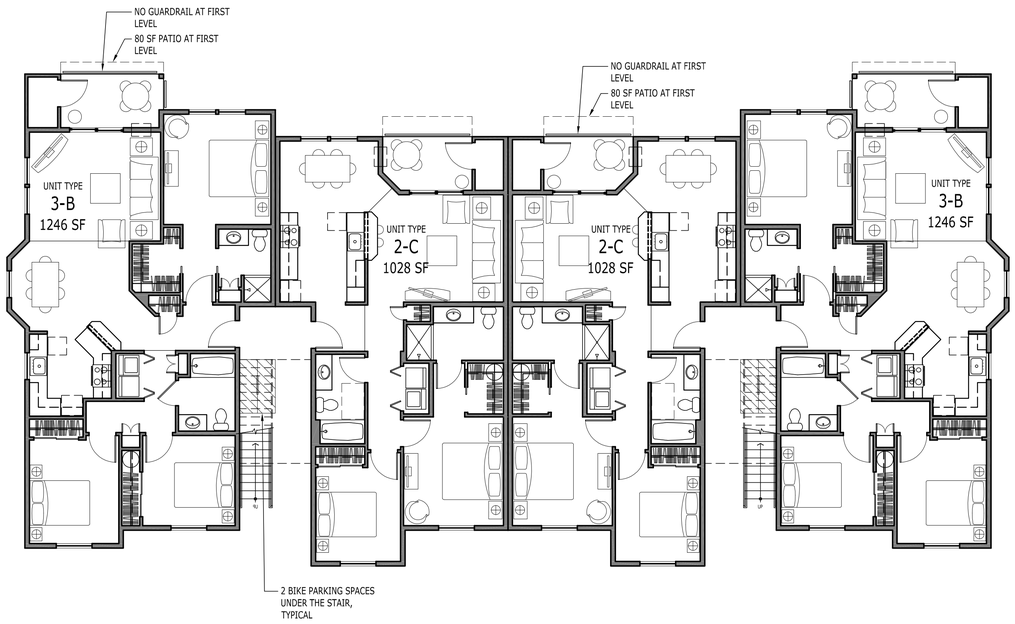


LEVEL 2 PLAN



LEVEL 1 PLAN

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE D
LEVEL 1 & 2 PLANS **2.1D**
JUNE 11, 2014

HILL ARCHITECTS

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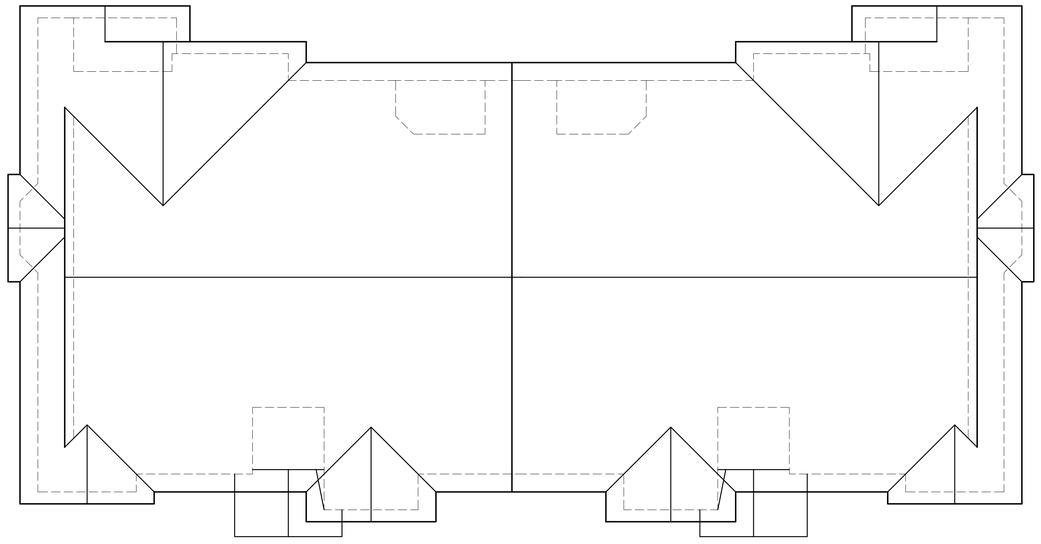
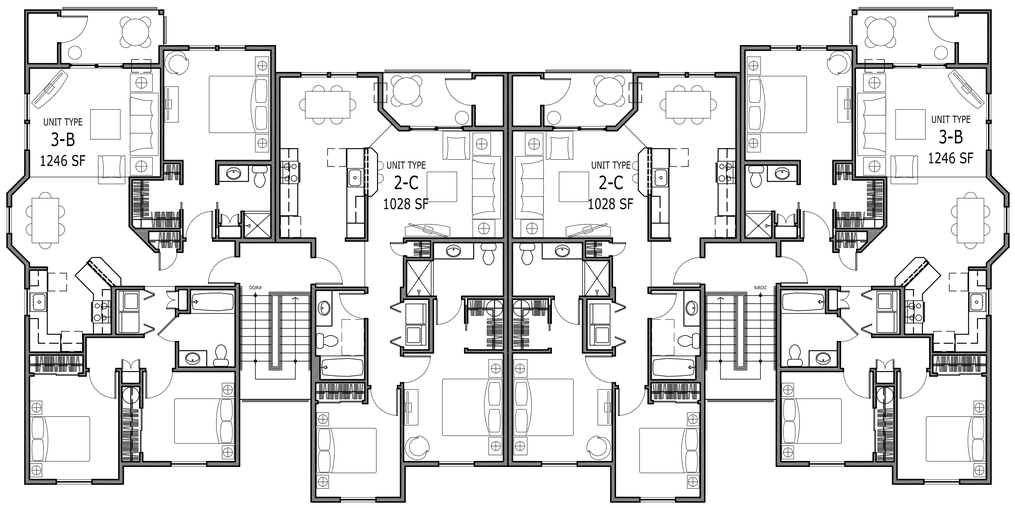


ROOF PLAN



LEVEL 3 PLAN

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

0 4' 8' 16'

BUILDING TYPE D
LEVEL3 & ROOF PLANS **2.2D**
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LEFT SIDE ELEVATION

FRONT ELEVATION

RIGHT SIDE ELEVATION

REAR ELEVATION

0 4' 8' 16'

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

BUILDING TYPE D
EXTERIOR ELEVATIONS **3.1D**
JUNE 11, 2014

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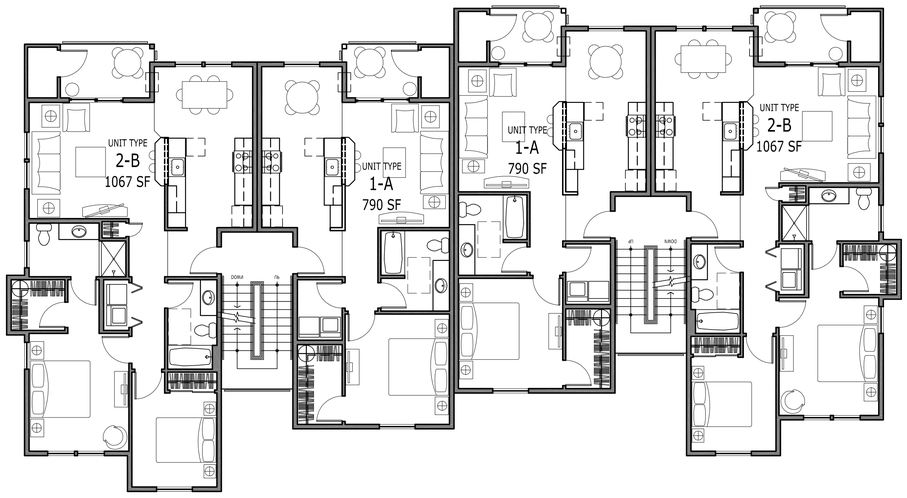
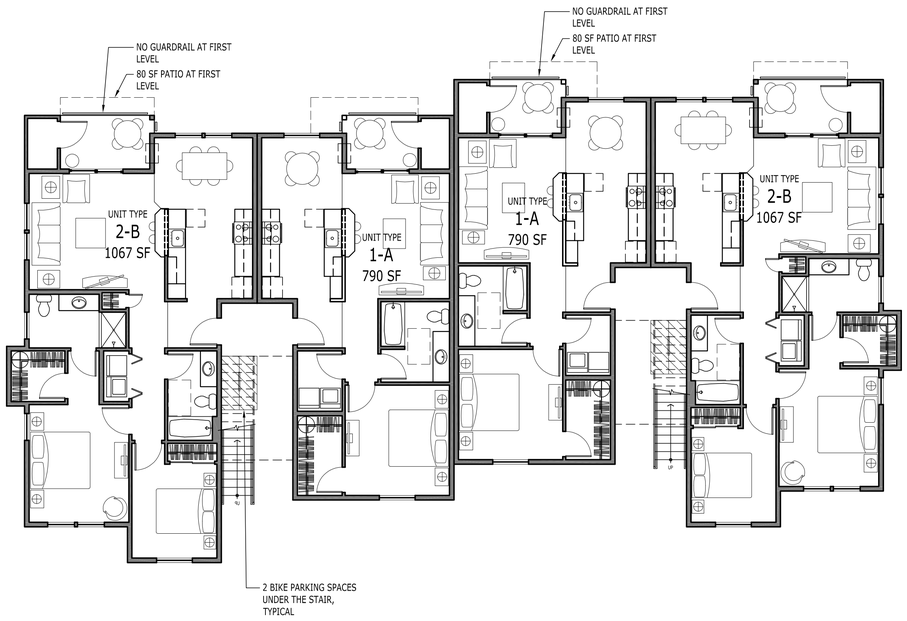


LEVEL 2 PLAN



LEVEL 1 PLAN

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

HILL ARCHITECTS

BUILDING TYPE E
LEVEL 1 & 2 PLANS **2.1E**
JUNE 11, 2014

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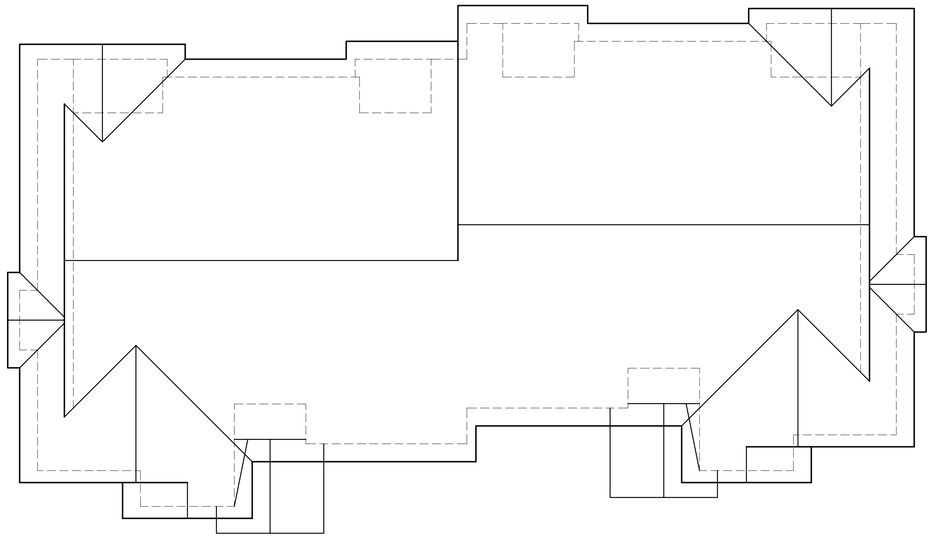
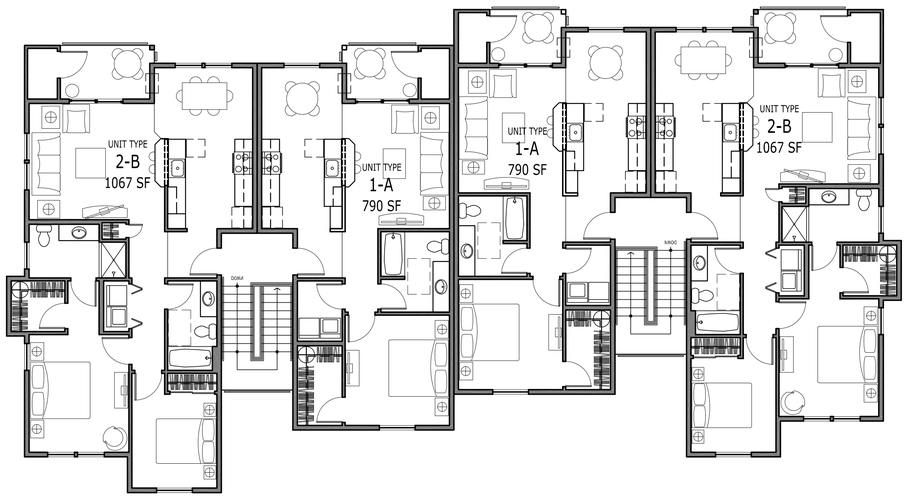


ROOF PLAN



LEVEL 3 PLAN

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE E
LEVEL 3 & ROOF PLANS **2.2E**
JUNE 11, 2014

HILL ARCHITECTS

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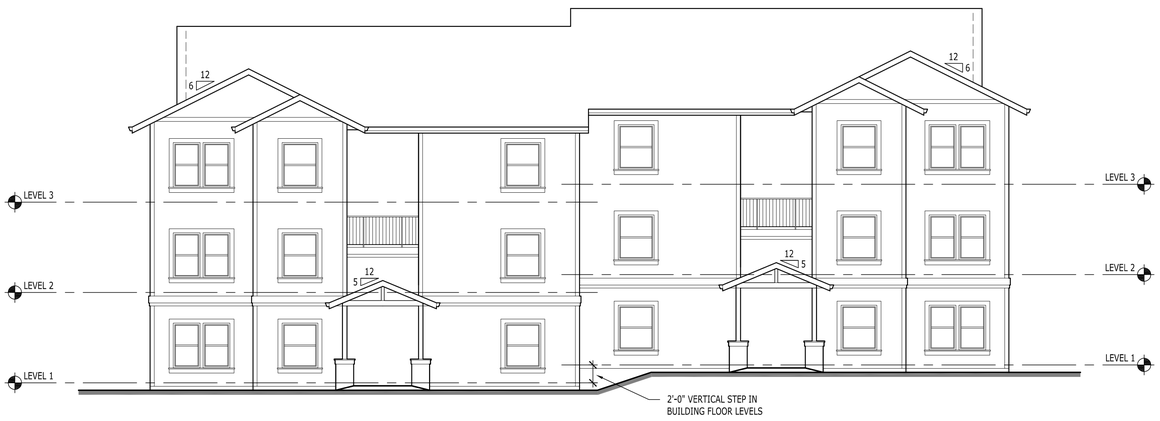
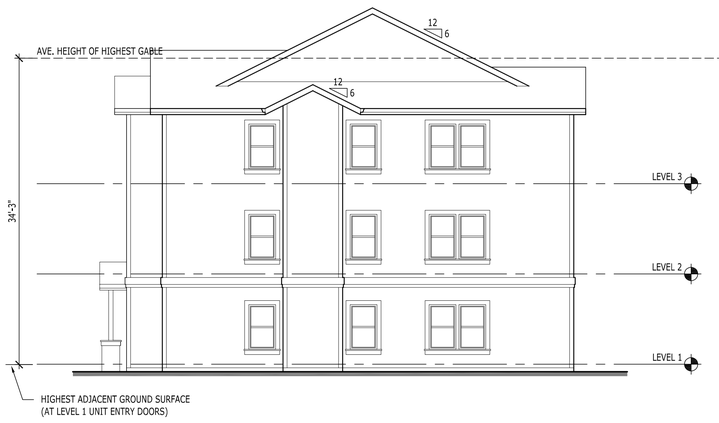
LEFT SIDE ELEVATION



FRONT ELEVATION



RIGHT SIDE ELEVATION

REAR ELEVATION

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

0 4' 8' 16'

BUILDING TYPE E
EXTERIOR ELEVATIONS **3.1E**
JUNE 11, 2014

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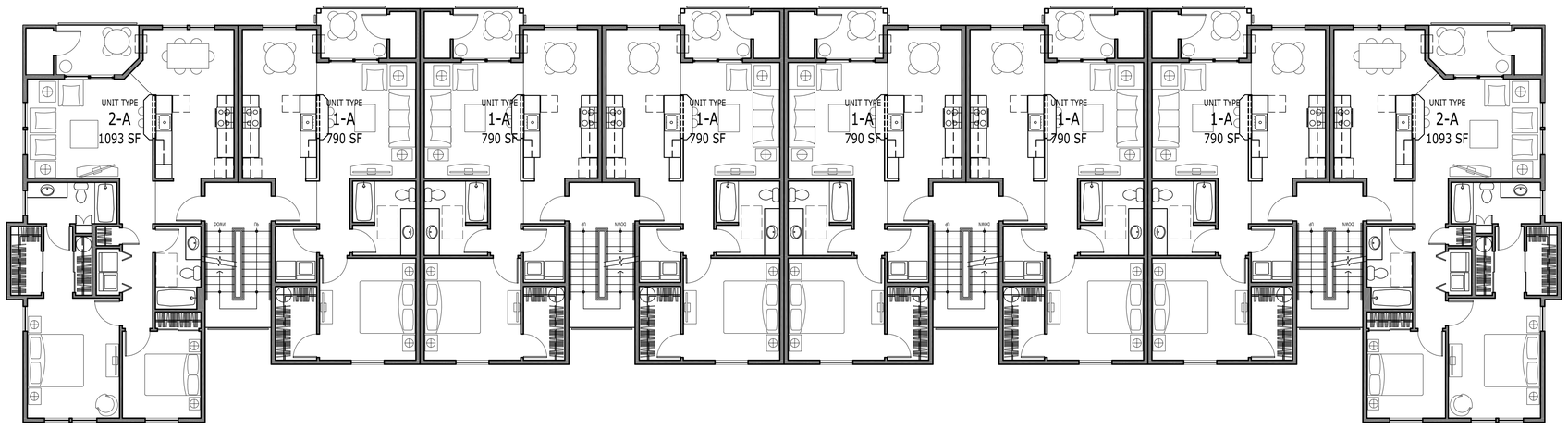
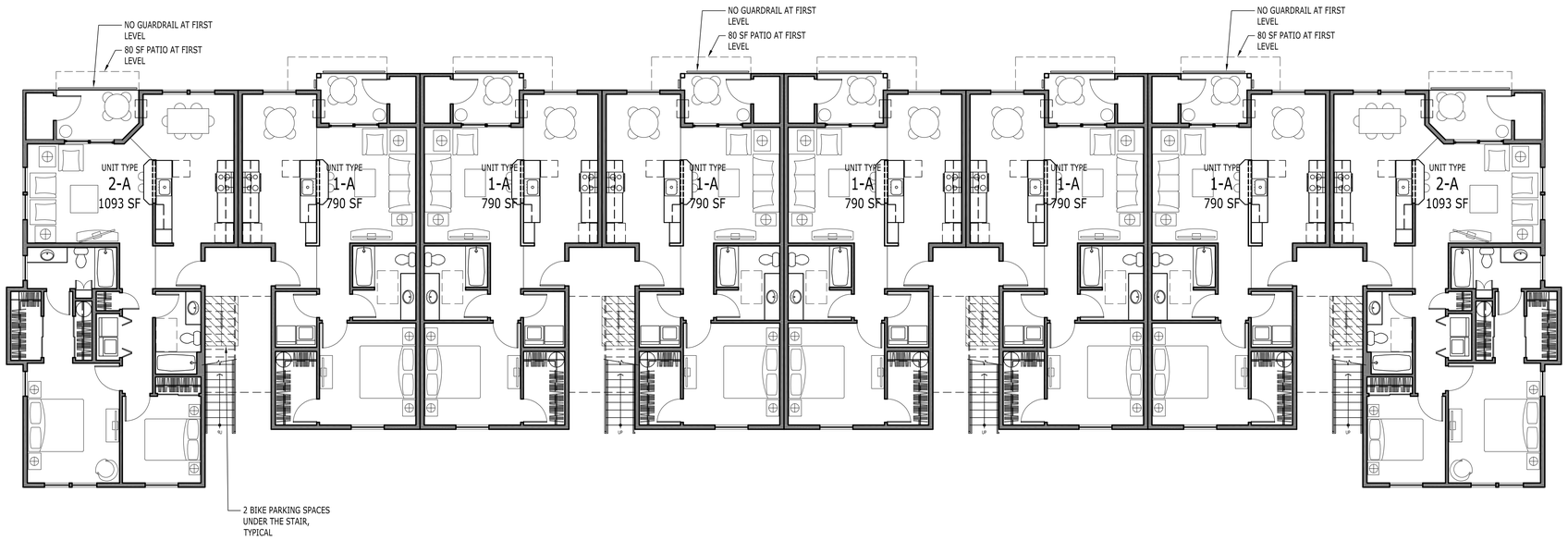


LEVEL 2 PLAN



LEVEL 1 PLAN

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

HILL ARCHITECTS

BUILDING TYPE F
LEVEL 1 & 2 PLANS **2.1F**
JUNE 11, 2014

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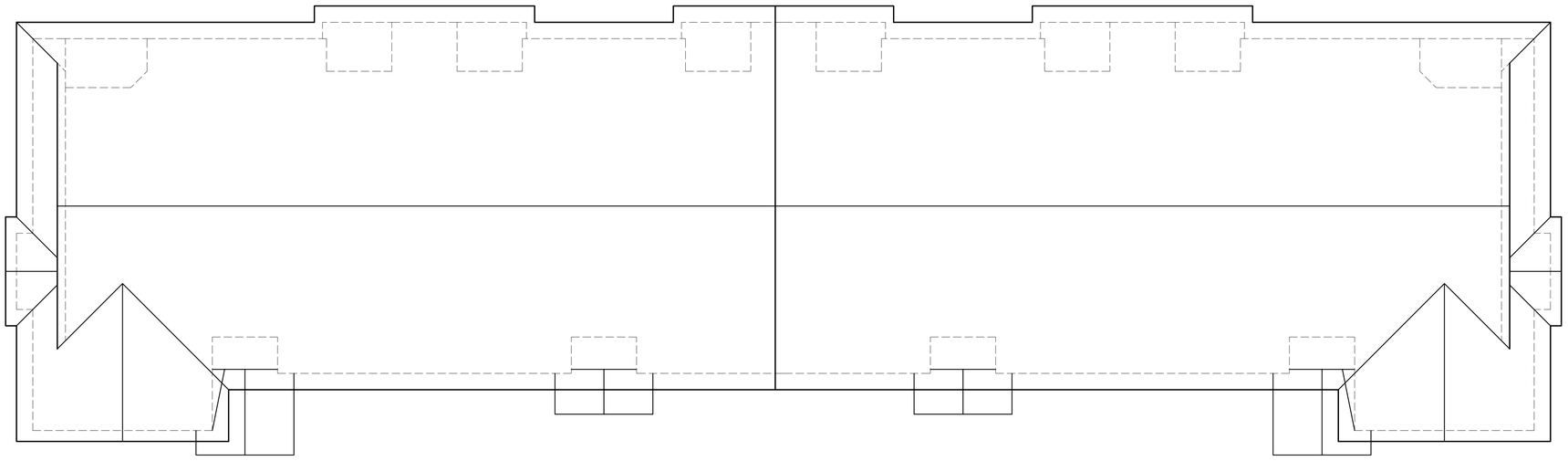
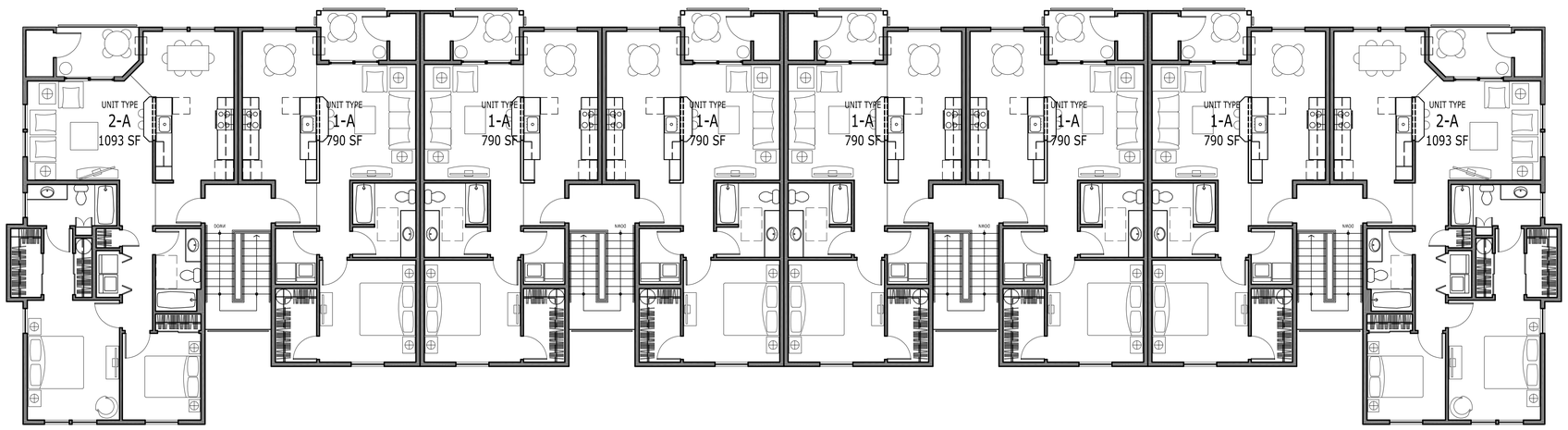


ROOF PLAN



LEVEL 3 PLAN

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

HILL ARCHITECTS

BUILDING TYPE F
LEVEL 3 & ROOF PLANS **2.2F**
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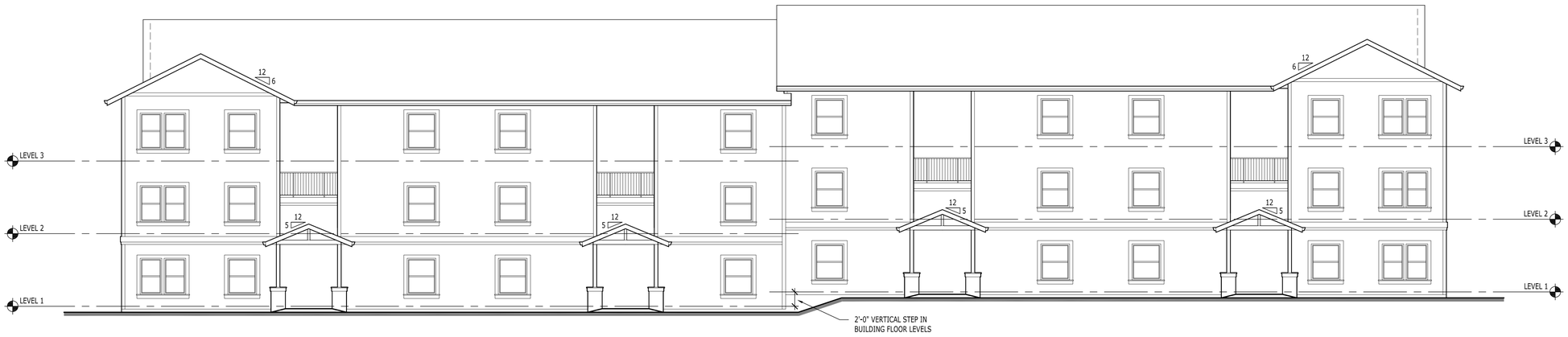

FRONT ELEVATION

REAR ELEVATION

0 4' 8' 16'

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

BUILDING TYPE F
EXTERIOR ELEVATIONS **3.1F**
JUNE 11, 2014

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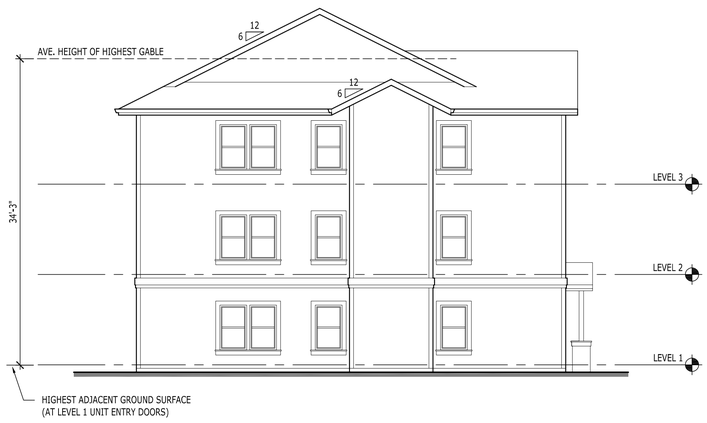

LEFT SIDE ELEVATION

RIGHT SIDE ELEVATION

0 4' 8' 16'

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

BUILDING TYPE F
EXTERIOR ELEVATIONS **3.2F**
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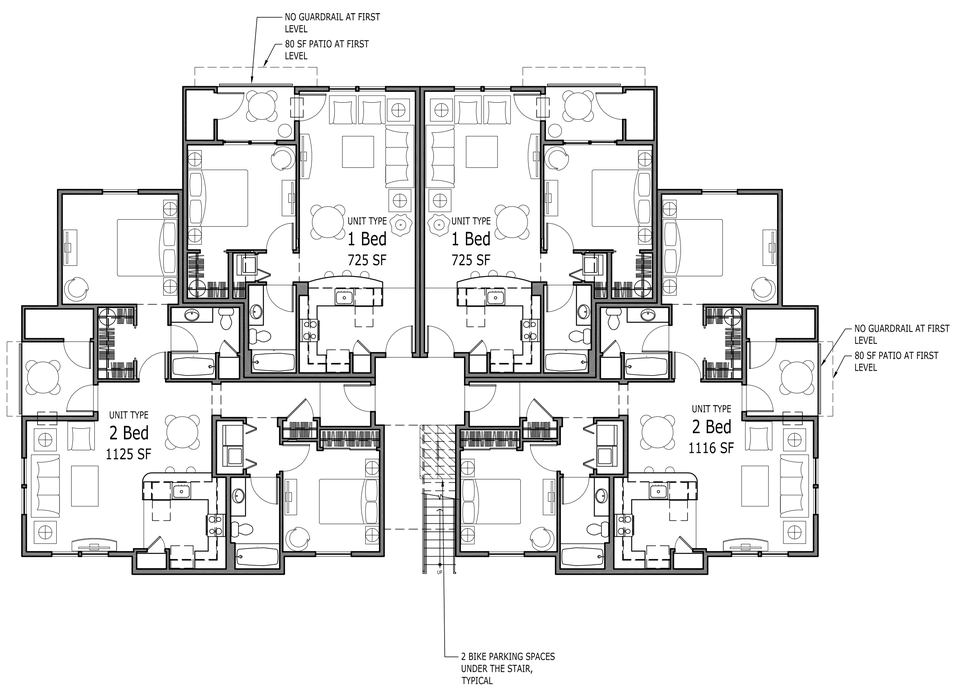
LEVEL 2 PLAN



LEVEL 1 PLAN

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE G
LEVEL 1 & 2 PLANS **2.1G**
JUNE 11, 2014

HILL ARCHITECTS

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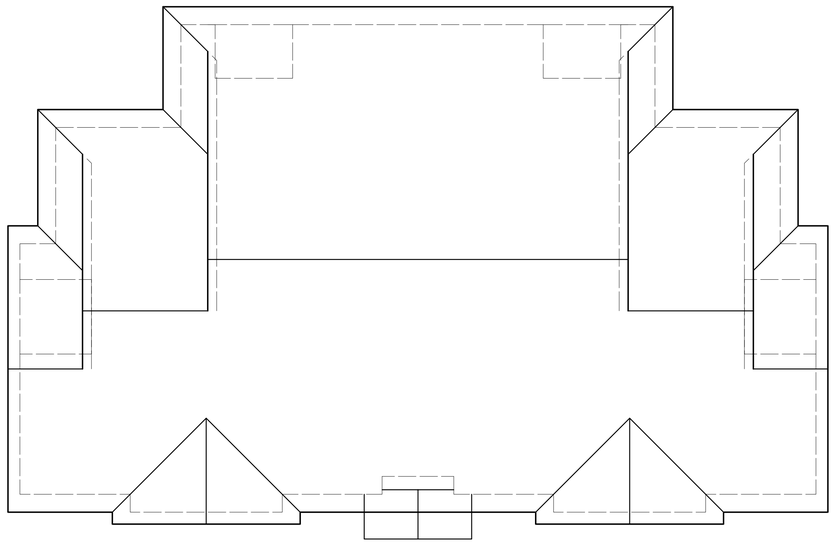
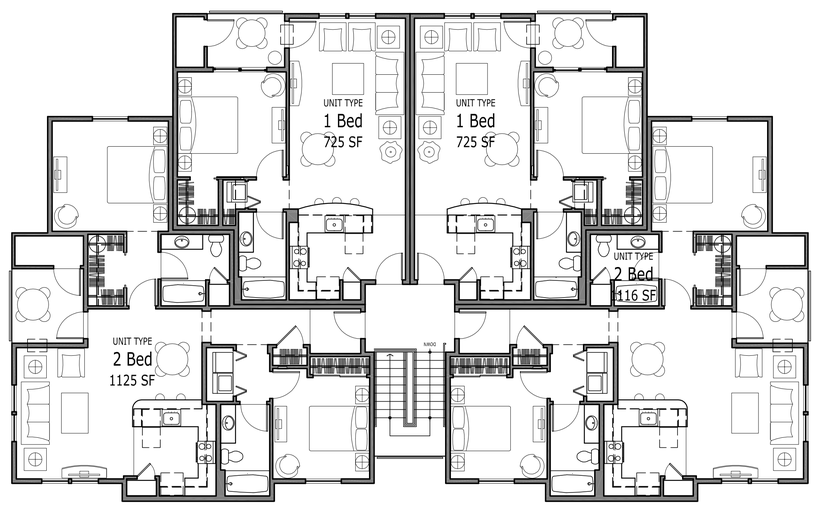


ROOF PLAN



LEVEL 3 PLAN

0 4' 8' 16'

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

BUILDING TYPE G
LEVEL 3 & ROOF PLANS **2.2G**
JUNE 11, 2014

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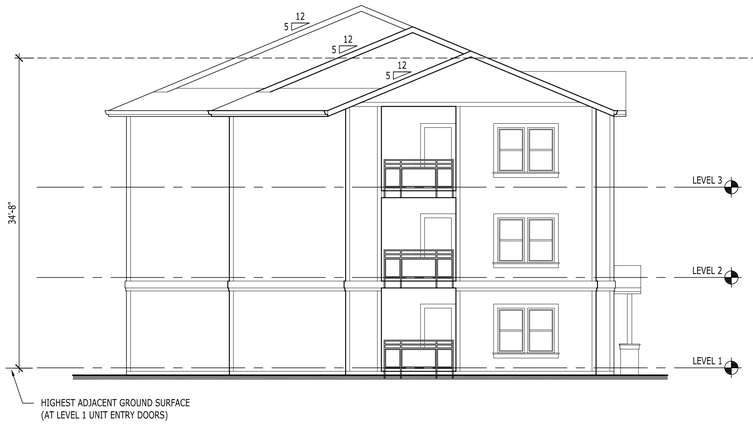
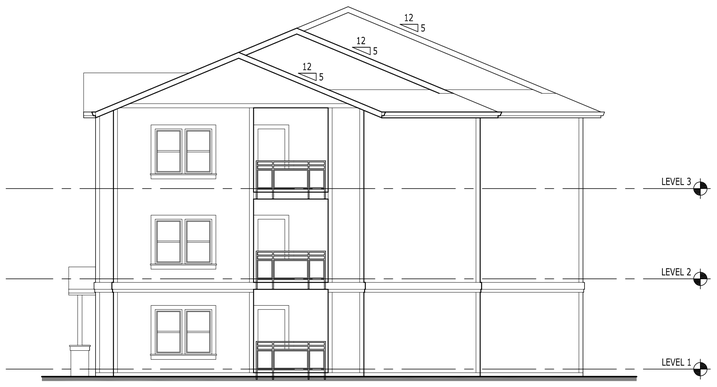


LEFT SIDE ELEVATION

FRONT ELEVATION



RIGHT SIDE ELEVATION

REAR ELEVATION

RIVER RIDGE

TUALATIN, OREGON

HILL ARCHITECTS

0 4' 8' 16'

BUILDING TYPE G
EXTERIOR ELEVATIONS **3.1G**
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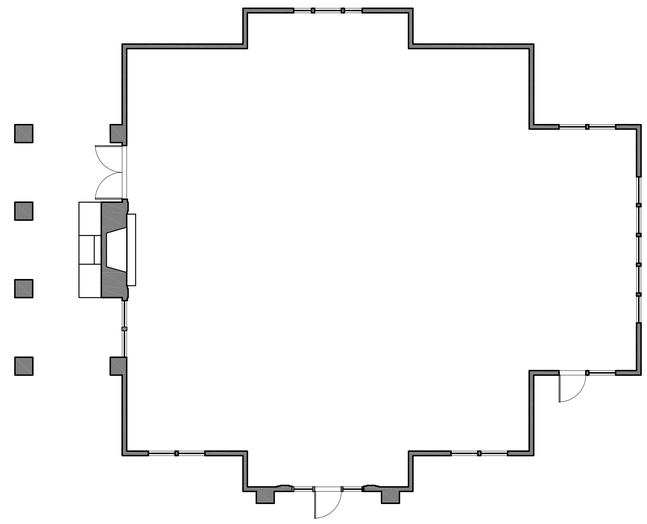
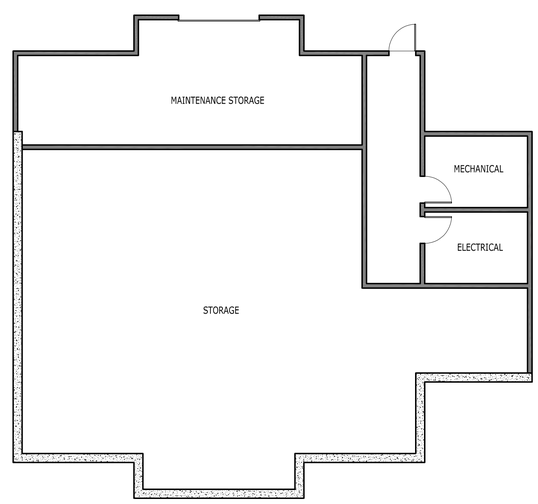


LEVEL 1 PLAN



STORAGE PLAN

RIVER RIDGE
TUALATIN, OREGON

HILL ARCHITECTS

0 4' 8' 16'

BUILDING TYPE H
STORAGE & LEVEL 1 PLANS **2.1H**
JUNE 11, 2014

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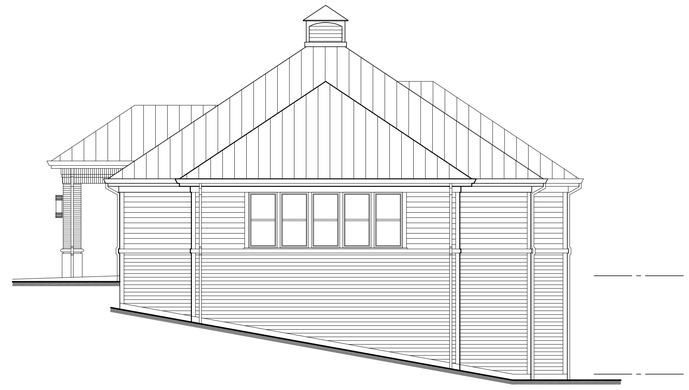
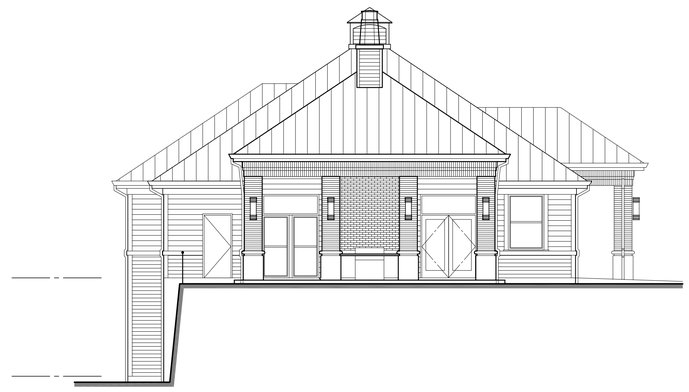
FRONT ELEVATION



RIGHT SIDE ELEVATION

REAR ELEVATION



LEFT SIDE ELEVATION

RIVER RIDGE

TUALATIN, OREGON

0 4' 8' 16'

BUILDING TYPE H
EXTERIOR ELEVATIONS **3.1H**
JUNE 11, 2014

HILL ARCHITECTS

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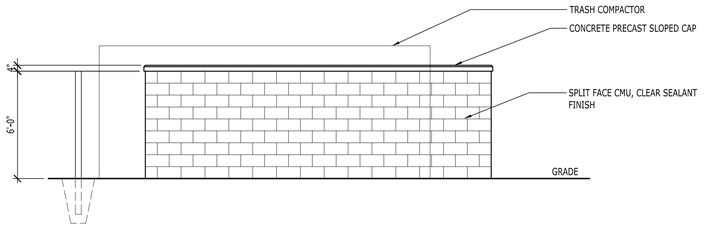
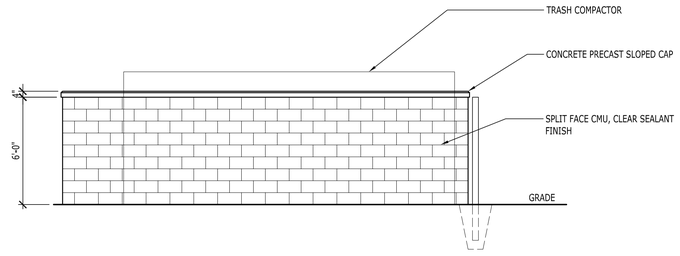
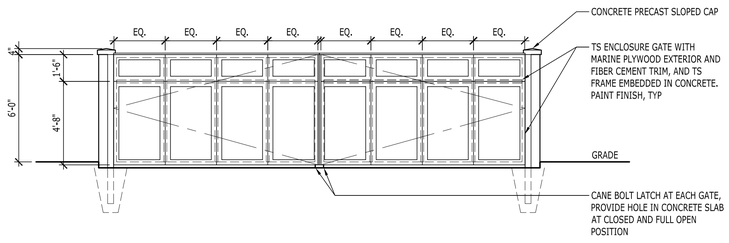


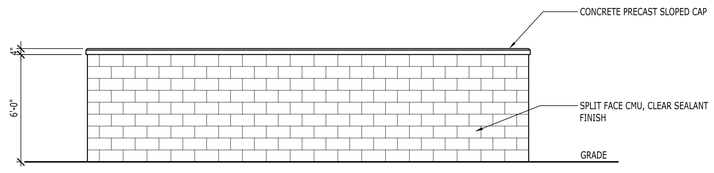
SIDE



SIDE

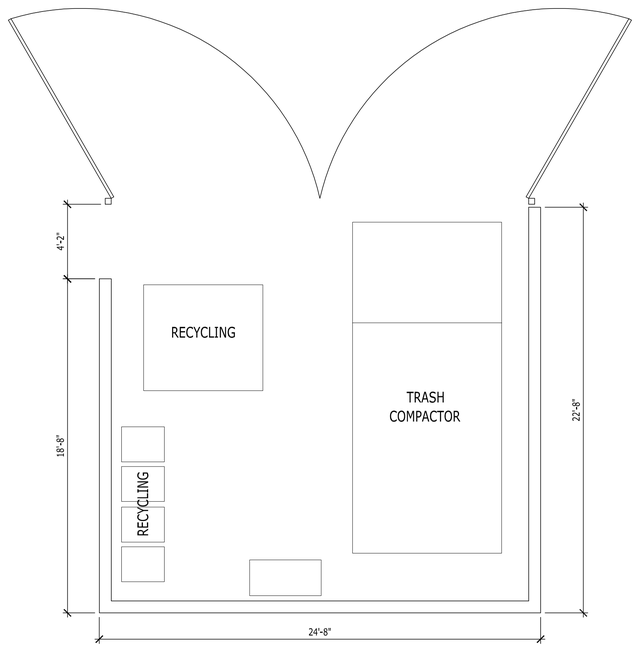


FRONT



REAR

ELEVATIONS



ENCLOSURE PLAN

0 2' 4' 8'

RIVER RIDGE
TUALATIN, OREGON

HILL ARCHITECTS

TRASH ENCLOSURE PLAN & ELEVATIONS **2.1T**
JUNE 11, 2014

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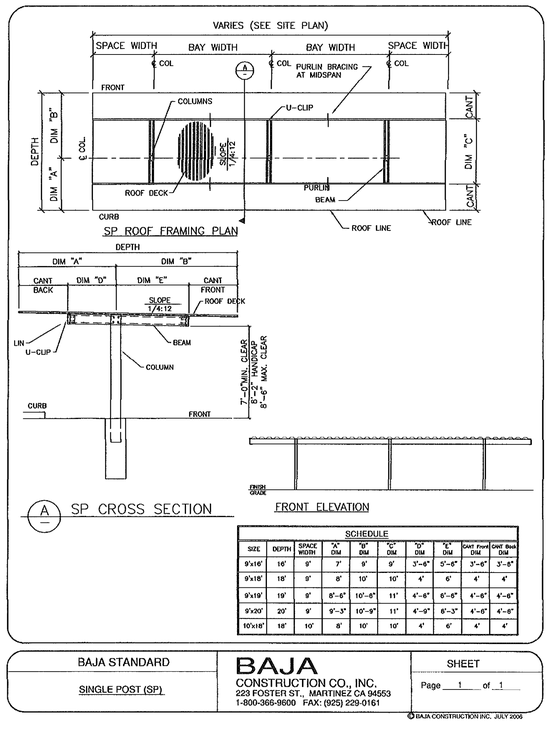

SCHEDULE

SIZE	DEPTH	SPACE WIDTH	"A" DIM	"B" DIM	"C" DIM	"D" DIM	"E" DIM	CANT Front DIM	CANT Back DIM
9'x16'	16'	9'	7'	9'	9'	3'-6"	5'-6"	3'-6"	3'-6"
9'x18'	18'	9'	8'	10'	10'	4'	6'	4'	4'
9'x19'	19'	9'	8'-6"	10'-6"	11'	4'-6"	6'-6"	4'-6"	4'-6"
9'x20'	20'	9'	9'-3"	10'-9"	11'	4'-9"	6'-3"	4'-6"	4'-6"
10'x18'	18'	10'	8'	10'	10'	4'	6'	4'	4'

BAJA STANDARD

SINGLE POST (SP)

BAJA
CONSTRUCTION CO., INC.
223 FOSTER ST., MARTINEZ CA 94553
1-800-366-9600 FAX: (925) 229-0161

SHEET
Page 1 of 1

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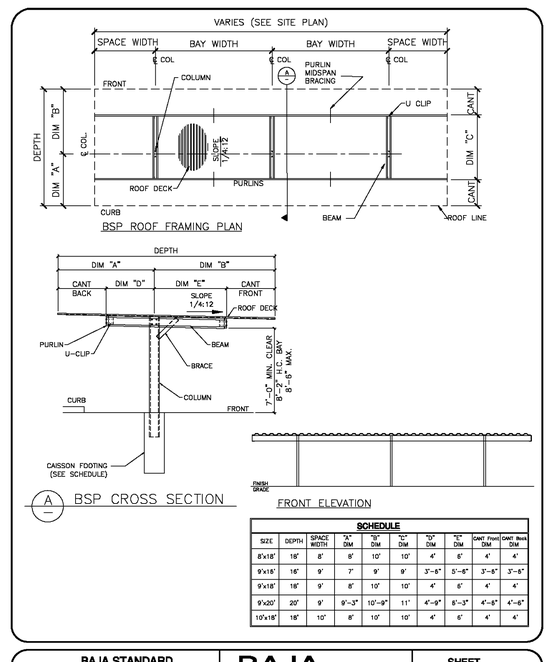

SCHEDULE

SIZE	DEPTH	SPACE WIDTH	"A" DIM	"B" DIM	"C" DIM	"D" DIM	"E" DIM	CANT Front DIM	CANT Back DIM
8'x18'	18'	8'	8'	10'	10'	4'	6'	4'	4'
9'x18'	18'	9'	7'	9'	9'	3'-6"	5'-6"	3'-6"	3'-6"
9'x18'	18'	9'	8'	10'	10'	4'	6'	4'	4'
9'x20'	20'	9'	9'-3"	10'-9"	11'	4'-9"	6'-3"	4'-6"	4'-6"
10'x18'	18'	10'	8'	10'	10'	4'	6'	4'	4'

BAJA STANDARD

BSP (BRACED SINGLE POST) CARPORTS

BAJA
CONSTRUCTION CO., INC.
223 FOSTER ST., MARTINEZ CA 94553
1-800-366-9600 FAX: (925) 229-0161

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RIVER RIDGE

TUALATIN, OREGON

0 2' 4' 8'

CARPORTS ELEVATIONS **3.1CP**

JUNE 11, 2014

HILL ARCHITECTS

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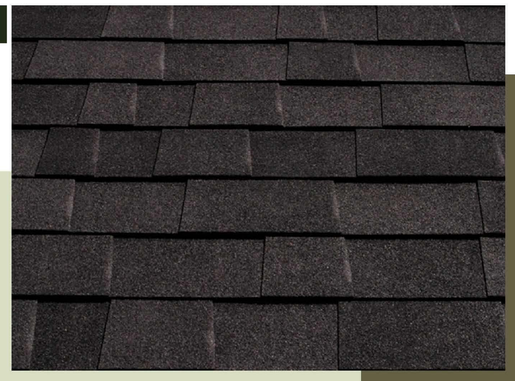
roofing:
midnight black
malarkey laminate shingle

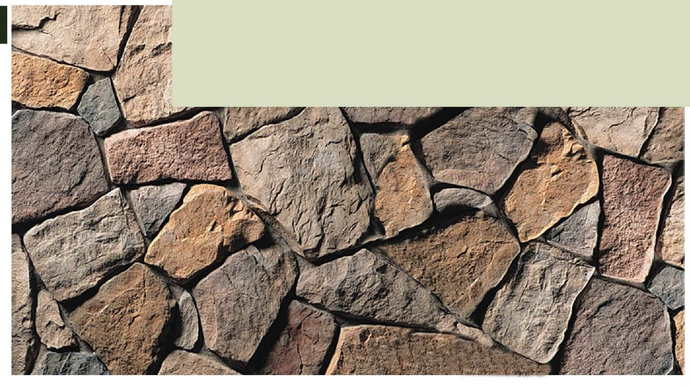


main body:
hardiplank lap siding
sherwin williams
sw 2822 downing sand

trim:
sherwin williams
sw7033 brainstorm bronze

upper body color
hardiplank accent shingles
sherwin williams
sw 2845 bunglehouse gray

Cultered Stone Shale
Monument Sign
Pro-Fit Ledgestone
(PF-8016)



window frames & gutters:
white vinyl

River Ridge

TUALATIN, OREGON

Hill Architects

MATERIAL BOARD
JUNE 11, 2014

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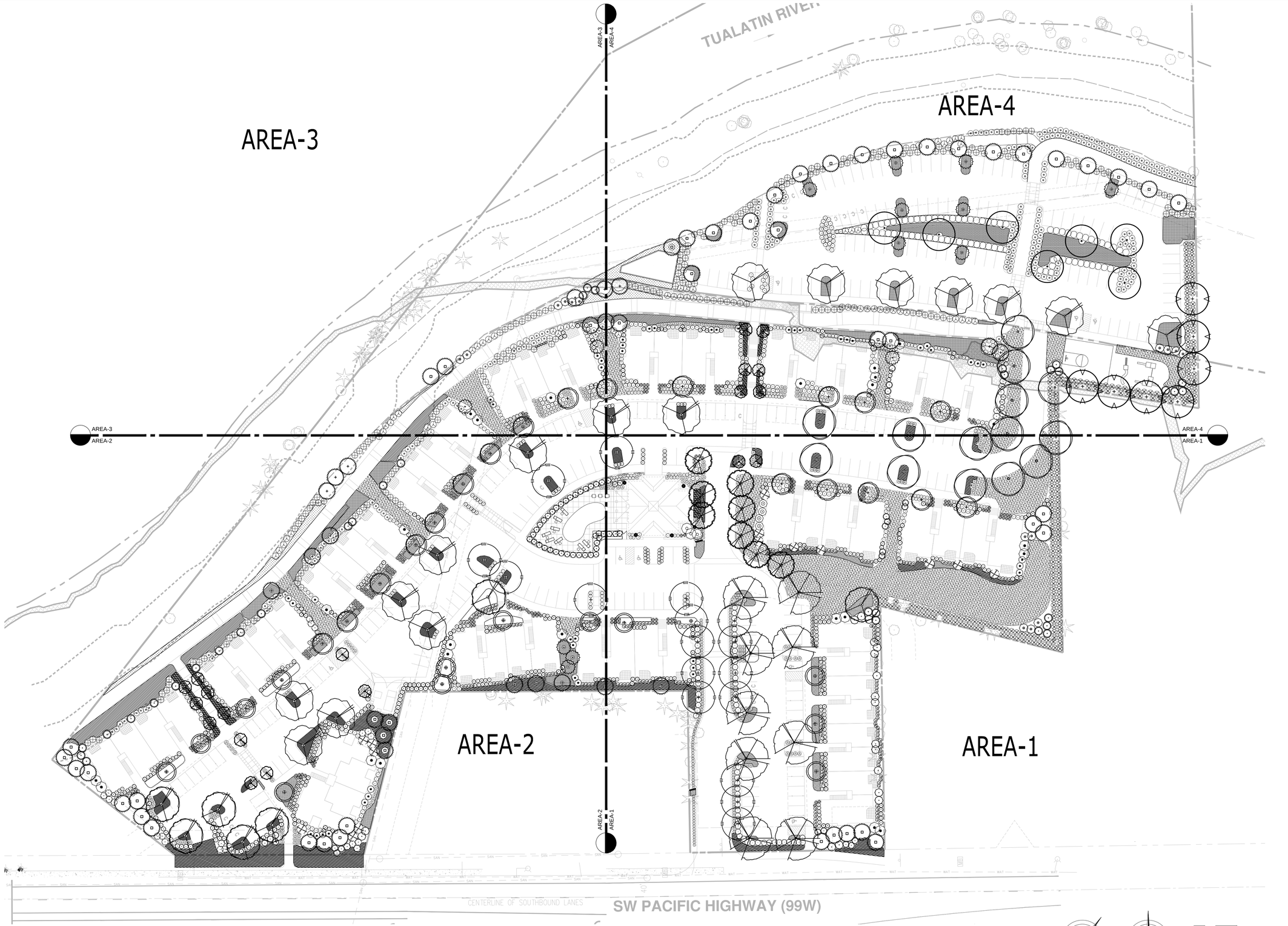

1 LANDSCAPE PLAN SITE PLAN
1" = 40'

PLAN

0 20' 40' 80'

HILL
ARCHITECTS
1750 BLANKENSHIP ROAD
SUITE 400
WEST LINN, OREGON 97068
TEL 503.305.8033 FAX 503.305.8034

KOCH LANDSCAPE ARCHITECTURE
1621 NORTHEAST SECOND AVENUE
PORTLAND, OREGON 97232
p503.286.7175 f503.286.7979

RIVER RIDGE

TUALATIN, OREGON
FOR MOUNTAIN WEST INVESTMENT CORPORATION

THIS WIDTH SHOULD BE 3"

MARK	DATE	REVISION/ISSUE

PROJECT NUMBER	DRAWN BY	CHECKED BY
13663	RK	SK

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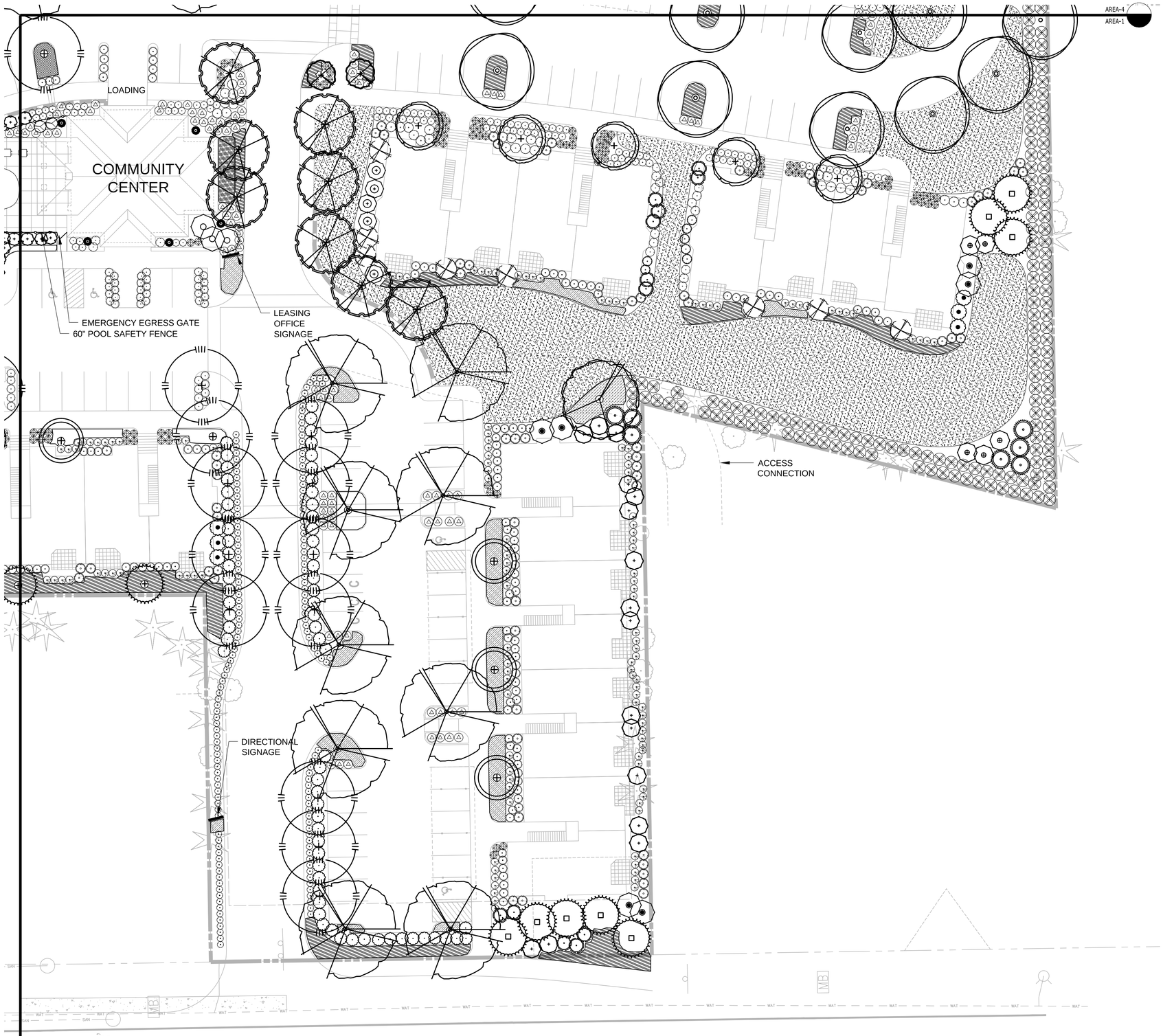
LANDSCAPE SITE PLAN

L1.0

Date: Thursday, June 26, 2014 3:08:04 PM / Location: \\Kla-svr\kla\ACTIVE\COMMERCIAL CLIENTS\1409 River Ridge\drawings\Drawing sheets\L1.0 LANDSCAPE SITE PLAN.dwg / User: Deven Young / Layout: L1.0 LANDSCAPE SITE PLAN



1 LANDSCAPE PLAN AREA 1

1" = 20'

PLAN

0 10' 20' 40'

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1750 BLANKENSHIP ROAD
SUITE 400
WEST LINN, OREGON 97068
TEL 503.305.8033 FAX 503.305.8034

KOCH LANDSCAPE ARCHITECTURE
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PORTLAND, OREGON 97232
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RIVER RIDGE

TUALATIN, OREGON
FOR: MOUNTAIN WEST INVESTMENT CORPORATION

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LANDSCAPE PLAN

L1.1

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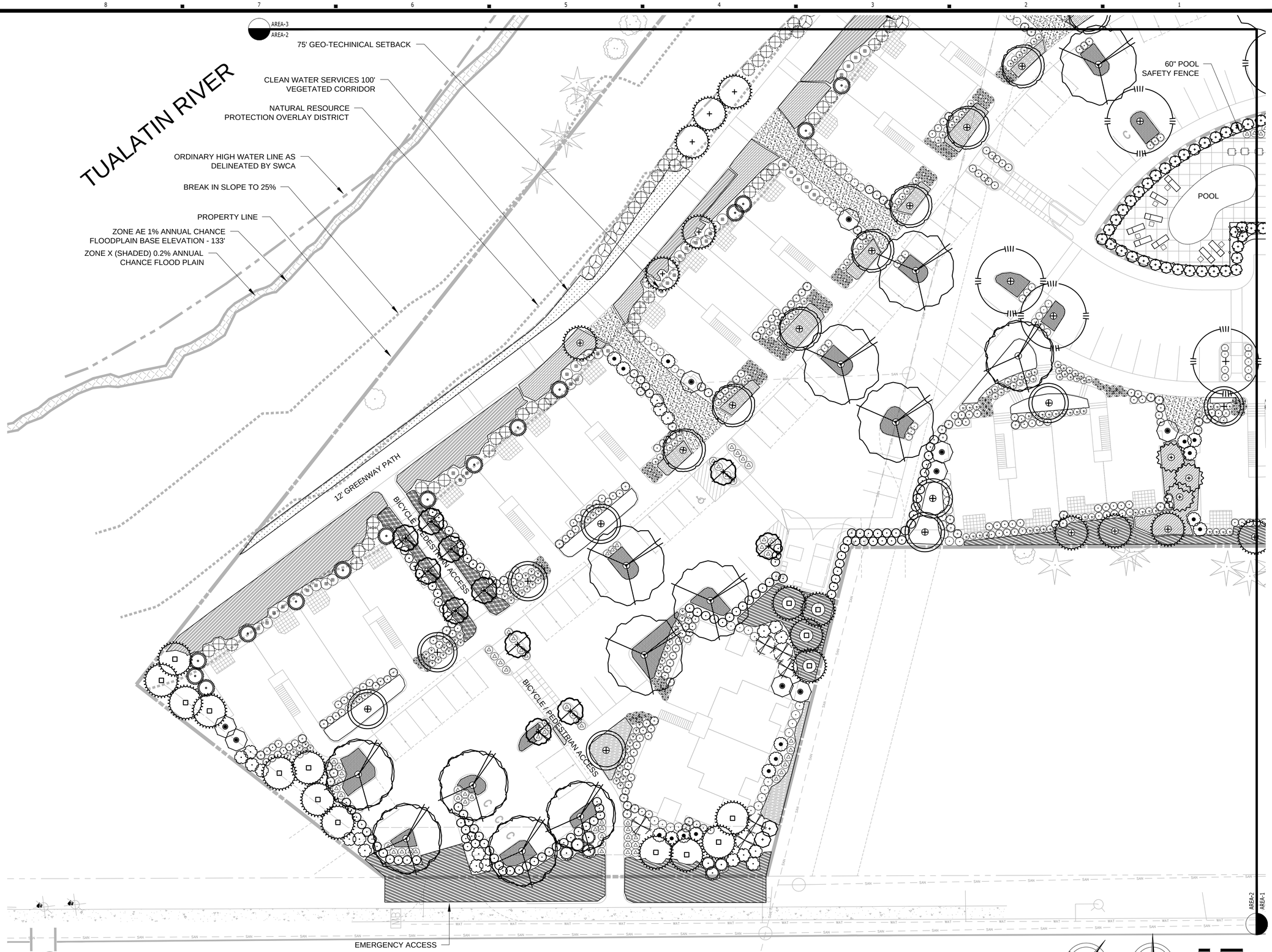

1 LANDSCAPE PLAN AREA 2

1" = 20'

PLAN

0 10' 20' 40'

HILL
ARCHITECTS
1750 BLANKENSHIP ROAD
SUITE 400
WEST LINN, OREGON 97068
TEL 503.305.8033 FAX 503.305.8034

KLA
KOCH LANDSCAPE ARCHITECTURE
1621 NORTHEAST SECOND AVENUE
PORTLAND, OREGON 97232
p503.286.7175 f503.286.7979

RIVER RIDGE

TUALATIN, OREGON
FOR MOUNTAIN WEST INVESTMENT CORPORATION

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MARK	DATE	REVISION/ISSUE

PROJECT NUMBER	DRAWN BY	CHECKED BY
13663	RK	SK

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LANDSCAPE PLAN

L1.2

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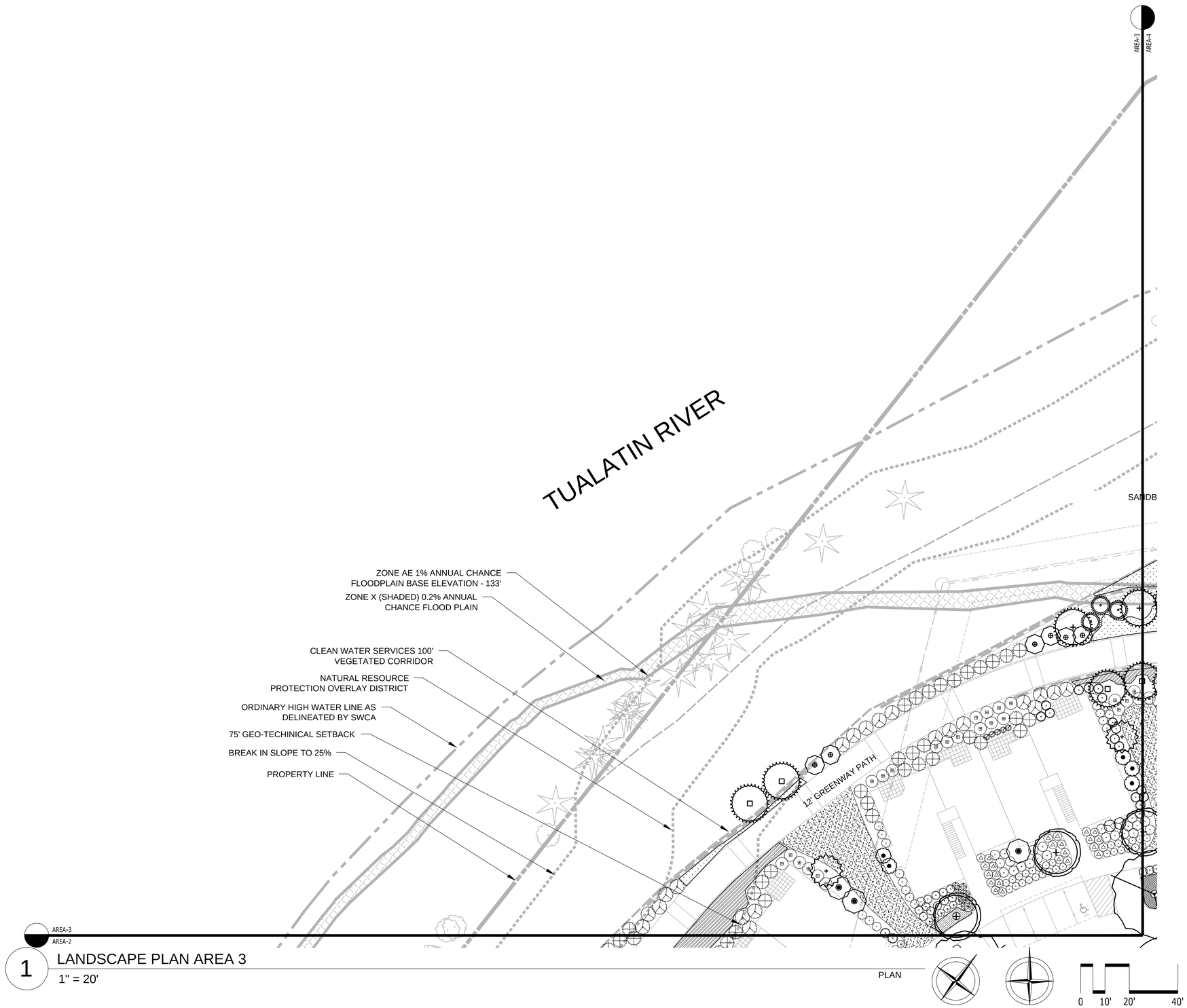

1 LANDSCAPE PLAN AREA 3

1" = 20'

PLAN

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SUITE 400
WEST LINN, OREGON 97068
TEL 503.305.8033 FAX 503.305.8034

KOCH LANDSCAPE ARCHITECTURE
1621 NORTHEAST SECOND AVENUE
PORTLAND, OREGON 97232
p503.286.7175 f503.286.7979

RIVER RIDGE

TUALATIN, OREGON
FOR: MOUNTAIN WEST INVESTMENT CORPORATION

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LANDSCAPE PLAN

L1.3

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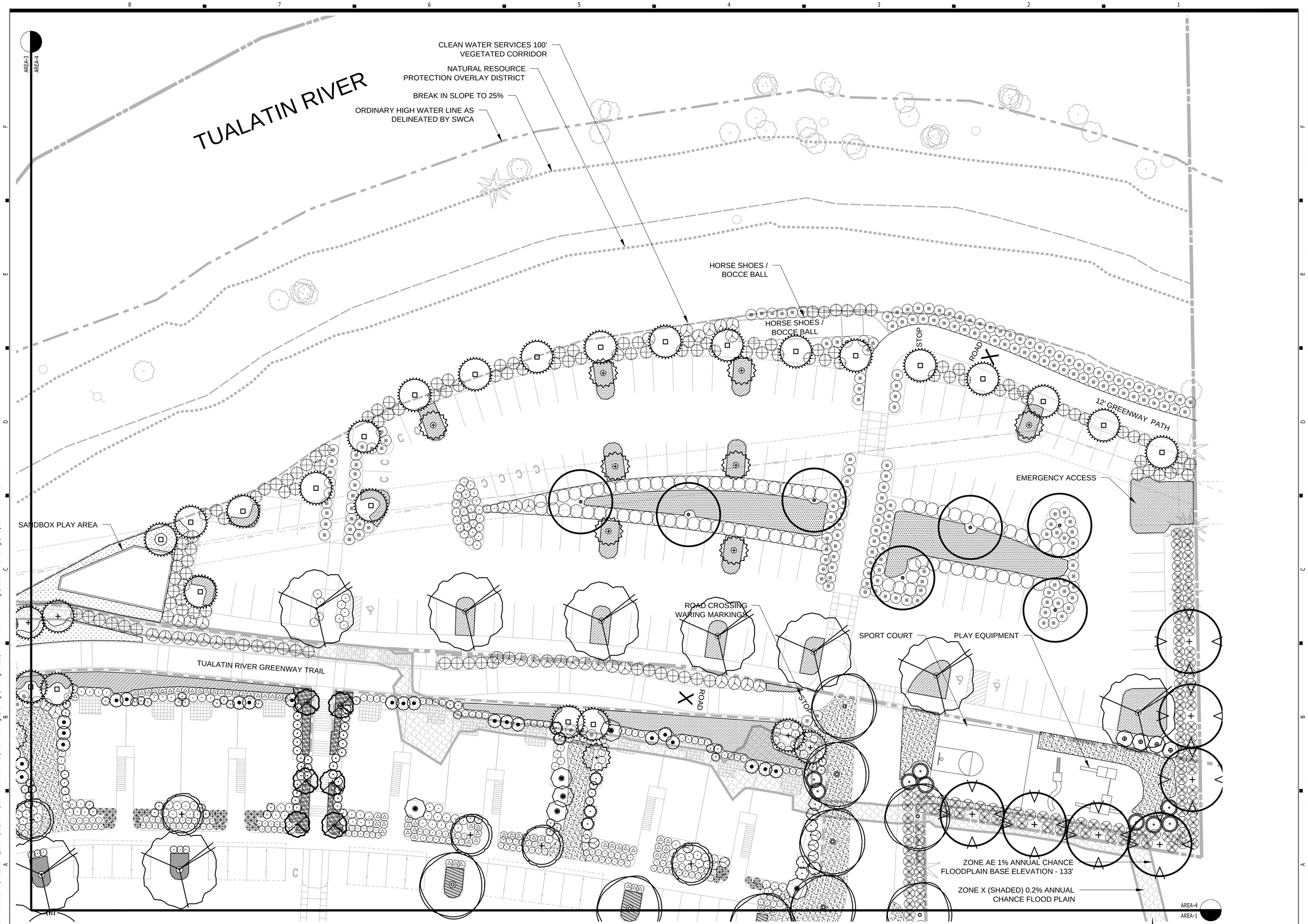

1 LANDSCAPE PLAN AREA 4

13/256" = 1'

Description

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ARCHITECTS
1750 BLANKENSHIP ROAD
SUITE 400
WEST LINN, OREGON 97068
TEL 503.305.8033 FAX 503.305.8034

KOCH LANDSCAPE ARCHITECTURE
1621 NORTHEAST SECOND AVENUE
PORTLAND, OREGON 97232
p503.286.7175 f503.286.7979

RIVER RIDGE

TUALATIN, OREGON
FOR MOUNTAIN WEST INVESTMENT CORPORATION

| THIS WIDTH SHOULD BE 3" |

Mark	Date	Revisson/Issue

Project Number	Drawn By	Checked By
13663	RK	SK

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LANDSCAPE PLAN

L1.4

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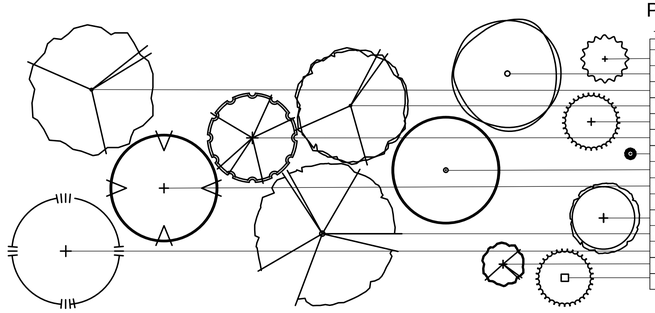

PLANTING LEGEND

TREES

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
ACER CIRCINATUM VINE MAPLE	1.5" CAL.	AS SHOWN	14
ACER RUBRUM 'FRANKSRED' RED SUNSET MAPLE	1.5" CAL.	AS SHOWN	14
ACER RUBRUM 'KARPICK' KARPICK MAPLE	1.5" CAL.	AS SHOWN	16
CERCIDIPHYLLUM JAPONICUM KATSURA TREE	1.5" CAL.	AS SHOWN	7
CORNUS EDDIE'S WHITE WONDER' WONDER DOGWOOD	1.5" CAL.	AS SHOWN	16
CORNUS FLORIDA 'RUBRA' PINK FLOWERING DOGWOOD	1.5" CAL.	AS SHOWN	8
CUPRESSUS SEMPERVIRENS ITALIAN CYPRESS	5' HT.	AS SHOWN	5
FRAXINUS LATIFOLIA OREGON ASH	1.5" CAL.	AS SHOWN	7
FRAXINUS OXYCARPA 'RAYWOOD' RAYWOOD ASH	1.5" CAL.	AS SHOWN	7
MAGNOLIA GRANDIFLORA 'EDITH BOGUE' EDITH BOGUE MAGNOLIA	1.5" CAL.	AS SHOWN	13
MAGNOLIA X SOULANGEANA SAUCER MAGNOLIA	1.5" CAL.	AS SHOWN	19
NYSSA SYLVATICA 'DAVID ODOM' DAVID ODOM BLACK TUPELO	1.5" CAL.	AS SHOWN	9
QUERCUS ALBA X ROBUR 'CRIMSCHMID'T' CRIMSON SPIRE OAK	1.5" CAL.	AS SHOWN	17
STEWARTIA PSEUDOCAMELLIA JAPANESE STEWARTIA	1.5" CAL.	AS SHOWN	19
THUJA PLICATA 'HOGAN' HOGAN'S WESTERN RED CEDAR	5' HT.	AS SHOWN	51

INTERIOR SHRUBS: DECIDUOUS

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
AMELANCHIER CANADENSIS 'RAINBOW PILLAR' RAINBOW PILLAR SERVICEBERRY	2 GAL	36" O.C.	3
AMELANCHIER CANADENSIS 'TRAZAM' TRAZAM SERVICEBERRY	2 GAL	36" O.C.	24
BERBERIS THUNBERGII 'CRIMSON PYGMY' WINTERGREEN BARBERRY	2 GAL	36" O.C.	276
CORNUS SERICEA REDTWIG DOGWOOD	2 GAL	36" O.C.	80
ELIONYMOUS ALATUS 'COMPACTA' BURNING BUSH	5 GAL	60" O.C.	26
HYDRANGEA MACROPHYLLA 'LACECAP' BIG LEAF HYDRANGEA	5 GAL	AS SHOWN	46
HYDRANGEA QUERCIFOLIA OAK-LEAFED HYDRANGEA	5 GAL	AS SHOWN	24
HOLODISCUS DISCOLOR OCEAN SPRAY	5 GAL	AS SHOWN	15
ITEA VIRGINICA 'LITTLE HENRY' LITTLE HENRY SWEETSPIRE	5 GAL	AS SHOWN	5
PHYSOCARPUS OPULIFOLIUS 'MINDIA' COPPERTINA NINEBARK	5 GAL	AS SHOWN	36
SPIRAEA DOUGLASII DOUGLAS SPIREA	5 GAL	AS SHOWN	79
SPIRAEA X VANHOUTTEI VANHOUTTE SPIREA	5 GAL	60" O.C.	14
SPIRAEA JAPONICA 'GOLDMOUND' GOLDMOUND SPIREA	5 GAL	36" O.C.	259
VIBURNUM CARLESII FRAGRANT VIBURNUM	BB 48" TALL	AS SHOWN	10

INTERIOR SHRUBS: EVERGREEN

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
ABELIA X GRANDIFLORA 'EDWARD GOUCHER' GLOSSY ABELIA	5 GAL	36" O.C.	283
ARBUTUS UNEDO 'COMPACTA' COMPACT STRAWBERRY TREE	5 GAL	60" O.C.	209
AZALEA 'KNAP HILL' KNAP HILL EXBURY AZALEAS	5 GAL	30" O.C.	69
FATSIA JAPONICA JAPANESE ARALIA	5 GAL	60" O.C.	18
ILEX CRENATA 'CONVEXA' CONVEX JAPANESE HOLLY	5 GAL	36" O.C.	98
MAHONIA AQUIFOLIUM OREGON GRAPE	5 GAL	48" O.C.	253
MYRICA CALIFORNICA PACIFIC WAXMYRTLE	5 GAL	72" O.C.	255
NANDINA DOMESTICA 'GOLFSTREAM' GOLFSTREAM HEAVENLY BAMBOO	5 GAL	36" O.C.	329
PHOTINIA X FRASERI FRASERS PHOTINIA	5 GAL	60" O.C.	39
PRUNUS LAUROCERASUS 'OTTO LUYKEN' OTTO LUYKEN LAUREL	5 GAL	48" O.C.	92
RHODODENDRON AUGUSTINII AUGUSTINII RHODODENDRON	5 GAL	72' O.C.	5
RHODODENDRON 'HINO-CRIMSON' HINO CRIMSON AZALEA	5 GAL	36" O.C.	240
RHODODENDRON 'UNIQUE' UNIQUE RHODODENDRON	5 GAL	48" O.C.	49
SARCOCOCCA RUSCIFOLIA SWEET BOX	5 GAL	48" O.C.	38
VIBURNUM DAVIDII DAVID VIBURNUM	3 GAL	48" O.C.	203
VIBURNUM TINUS 'SPRING BOUQUET' SPRING BOUQUET LAURUSTINUS	5 GAL	60" O.C.	68

LOW GROWERS

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
ARCTOSTAPHYLOS UVA-URSI KINNIKNICK	4" POT	12" O.C.	4,208
COTONEASTER DAMERI 'LOWFAST' LOWFAST COTONEASTER	4" POT	12" O.C.	6,258
EPIMEDIUM X MEDII BISHOP'S HAT	1 GAL	18" O.C.	107
LIRIOPE MUSCARI LILY TURF	1 GAL	18" O.C.	1,696
HELLEBORUS X ROYAL HERITAGE ROYAL HERITAGE LENTEN ROSE	1 GAL	18" O.C.	578
MAHONIA NERVOSA DWARF OREGON GRAPE	1 GAL	18" O.C.	2,550
RUBUS CALYCNOIDES CREEPING BRAMBLE	4" POT	12" O.C	2,016

GRASSES

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
JUNCUS EFFUSUS SOFT RUSH	4" POT	12" O.C.	2,737
LAWN - AS SPECIFIED			25,425 S.F.
MISCANTHUS SINENSIS 'GRACILLIMUS' JAPANESE MAIDEN GRASS	1 GAL	12" O.C.	152
PENNISETUM ALOPECUROIDES FOUNTAIN GRASS	1 GAL	12" O.C.	165

SEED MIX

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
BROMUS CARINATUS NATIVE CALIFORNIA BROME	SEED	10 LBS PLS / ACRE	AS NEEDED
ELYMUS GLAUCUS BLUE WILDRYE	SEED	10 LBS PLS / ACRE	AS NEEDED
FESTUCA RUBRA VAR. RUBRA NATIVE RED FESCUE	SEED	5 LBS PLS / ACRE	AS NEEDED
LUPINUS POLYPHYLLUS LARGE-LEAFED LUPINE	SEED	8 LBS PLS / ACRE	AS NEEDED
	TOTAL AREA	0.04 AC	

EXISTING TREE TO REMAIN

NOTES

1. ALL PLANTS AND PLANTINGS TO CONFORM TO CITY OF TUALATIN PLANT SPECIIFICATION STANDARDS 73.260. PLANT IN ACCORDANCE TO STANDARDS ADOPTED BY OREGON ASSOCIATION OF LANDSCAPE PROFESSIONALS.
2. ALL LANDSCAPING SHALL BE INSTALLED IN A SOUND WORKMAN-LIKE MANNER AND ACCORDANCE TO ACCEPTED GOOD PLANTING PROCEDURES WITH QUALITY PLANT MATERIAL.
3. ALL LAWNS TO BE SODDED
4. LANDSCAPE DRAINAGE SWALES NOT TO EXCEED 2% SLOPE. DO NOT PLACE TREES IN BOTTOM OF SWALES.
5. REFER TO ENGINEERS DRAWINGS FOR LOCATION OF INFILTRATION TRENCHES. DO NOT PLANT TREES IN INFILTRATION TRENCHES.
6. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES. IN CASE DISCREPANCIES, DESIGN INTENT PREVAILS OVER PLANT COUNT.
7. THE OWNER, OR OWNERS AGENT, SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL LANDSCAPING WHICH SHALL BE KEPT FREE FROM REFUSE AND DEBRIS. ALL LANDSCAPING MAINTENANCE SHALL FOLLOW ESTABLISHED LANDSCAPE MAINTENANCE INDUSTRY STANDARDS FOR MOWING, PRUNING, WEEDING, FERTILIZATION, ETC.
8. TOPSOIL AND SOIL AMENITY SPECIFICATIONS SHALL BE PROVIDED BY LANDSCAPING CONTRACTOR.
9. STREET TREES TO BE LIMBED TO 8' TO MAINTAIN SIGHT AND VISION CLEARANCE REQUIREMENTS.
10. PLANTING PLAN IS DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES. IN CASE OF DISCREPANCIES, DESIGN INTENT PREVAILS OVER PLANT QUANTITIES.
11. ALL LANDSCAPE AREAS TO BE IRRIGATED BY AN UNDER GROUND AUTOMATIC IRRIGATION SYSTEM.
12. ALL LANDSCAPE BEAD AREAS AND TREE RINGS TO RECEIVE 2" DEPTH OF DARK HEMLOCK BARK MULCH TOP DRESSING

EXISTING TREE NOTES

1. SEE CIVIL TREE REMOVAL PLAN FOR PROTECTION AND DEMOLITION OF EXISTING TREES.

AREA TAKEOFFS

SHARED OUTDOOR AREAS: 84,982 SF

CHILDREN'S PLAY AREAS: 27,642 SF

SEE ARCHITECTURE SITE PLAN FOR:
- SITE AREA
- BUILDABLE SITE AREA
- ASPHALT AREA
- PARKING LOT LANDSCAPE AREA
- TOTAL PERCENTAGE AND SQUARE FOOTAGE OF LANDSCAPE AREA

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RIVER RIDGE

TUALATIN, OREGON
FOR MOUNTAIN WEST INVESTMENT CORPORATION

| THIS WIDTH SHOULD BE 3" |

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13663	RK	SK

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LANDSCAPE NOTES AND LEGENDS

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50' VEGETATED CORRIDOR ENHANCEMENT AREA

TREES

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
ALNUS RUBRA RED ALDER	1 GAL	10' O.C.	126
ACER TRUNCATUM BIG LEAF MAPLE	1 GAL	10' O.C.	127
PSEUDOTSUGA MENZIESII DOUGLAS FIR	1 GAL	10' O.C.	127

SHRUBS

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
ACER CIRCINATUM VINE MAPLE	2 GAL	4-0 O.C.	380
HOLODISCUS DISCOLOR OCEANSPRAY	1 GAL	4-0 O.C.	380
POLYSTICHUM MUNITUM SWORD FERN	2 GAL	4-0 O.C.	380
RUBUS PARVIFLORUM THIMBLEBERRY	1 GAL	4-0 O.C.	379
SYMPHOCARPOS ALBUS SNOWBERRY	1 GAL	4-0 O.C.	380

SEED MIX

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
BROMUS CARINATUS NATIVE CALIFORNIA BROME	SEED	10 LBS PLS/ACRE	AS NEEDED
ELYMUS GLAUCUS BLUE WILDRYE	SEED	10 LBS PLS/ACRE	AS NEEDED
FESTUCA RUBRA VAR. RUBRA NATIVE RED FESCUE	SEED	10 LBS PLS/ACRE	AS NEEDED
LUPINUS POLYPHYLLUS LARGE-LEAFED LUPINE	SEED	10 LBS PLS/ACRE	AS NEEDED

TEMPORARY IMPACTED VEGETATED CORRIDOR RESTORATION AREA

SHRUBS

BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
ACER CIRCINATUM VINE MAPLE	2 GAL	4-0 O.C.	20
HOLODISCUS DISCOLOR OCEANSPRAY	1 GAL	4-0 O.C.	21
POLYSTICHUM MUNITUM SWORD FERN	2 GAL	4-0 O.C.	20
RUBUS PARVIFLORUM THIMBLEBERRY	1 GAL	4-0 O.C.	20
SYMPHOCARPOS ALBUS SNOWBERRY	1 GAL	4-0 O.C.	20

SEED MIX

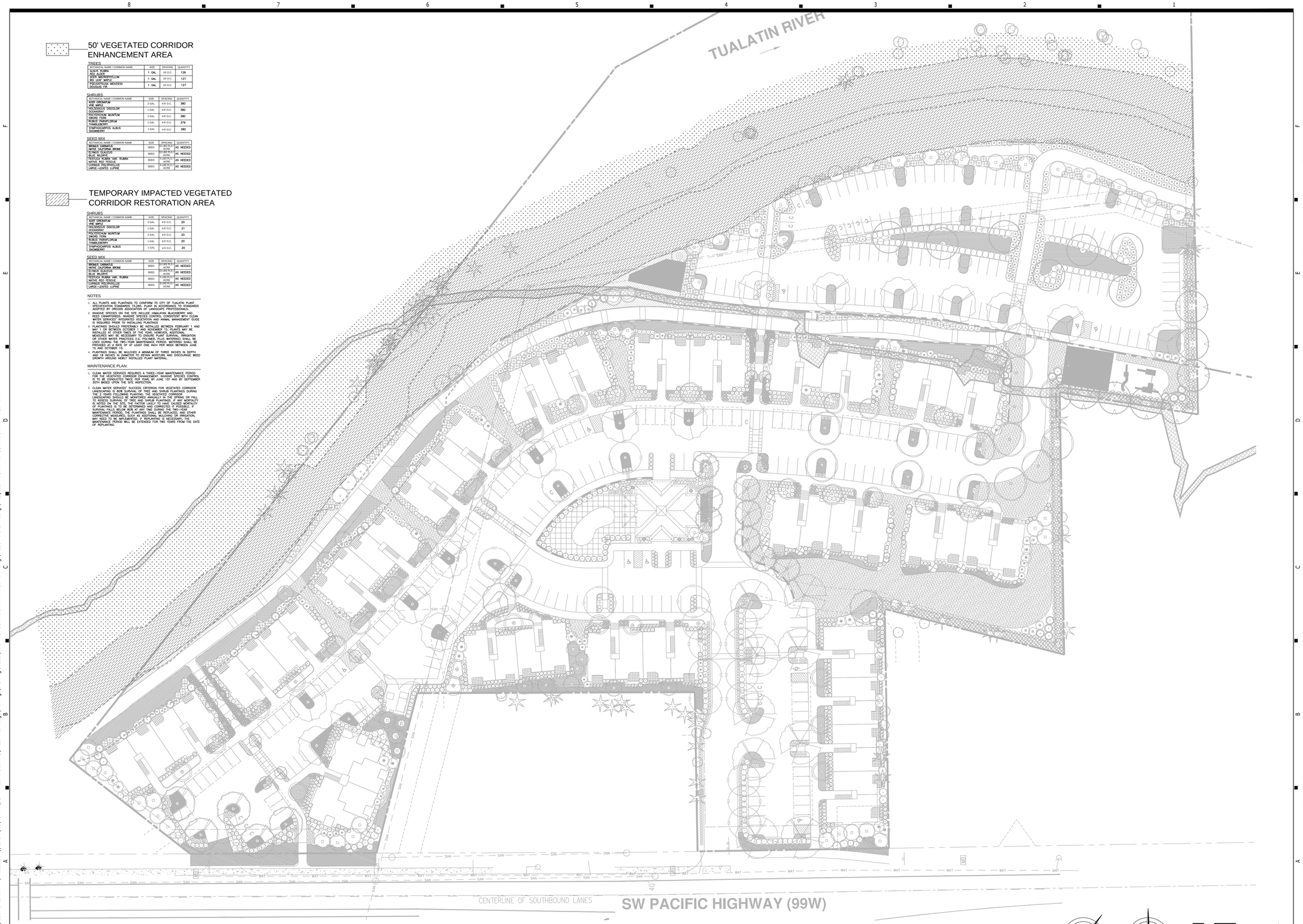
BOTANICAL NAME / COMMON NAME	SIZE	SPACING	QUANTITY
BROMUS CARINATUS NATIVE CALIFORNIA BROME	SEED	10 LBS PLS/ACRE	AS NEEDED
ELYMUS GLAUCUS BLUE WILDRYE	SEED	10 LBS PLS/ACRE	AS NEEDED
FESTUCA RUBRA VAR. RUBRA NATIVE RED FESCUE	SEED	10 LBS PLS/ACRE	AS NEEDED
LUPINUS POLYPHYLLUS LARGE-LEAFED LUPINE	SEED	10 LBS PLS/ACRE	AS NEEDED

NOTES

1. ALL PLANTS AND PLANTINGS TO CONFORM TO CITY OF TUALATIN PLANT SPECIFICATION STANDARDS 73.200: PLANT IN ACCORDANCE TO STANDARDS ADOPTED BY OREGON ASSOCIATION OF LANDSCAPE PROFESSIONALS.
2. INVASIVE SPECIES ON THE SITE INCLUDE HIMALAYAN BLACKBERRY AND REED CANARYGRASS. INVASIVE SPECIES CONTROL CONSISTENT WITH CLEAN WATER SERVICES' DESIGN AND CONSTRUCTION STANDARDS ANIMAL MANAGEMENT GUIDE IS REQUIRED PRIOR TO INSTALLING PLANTINGS
3. PLANTINGS SHOULD PREFERABLY BE INSTALLED BETWEEN FEBRUARY 1 AND MAY 1 OR BETWEEN SEPTEMBER 1 AND NOVEMBER 15. ALTERNATE DATES MAY BE ALLOWED DEPENDING ON WEATHER CONDITIONS. ADDITIONAL MEASURES MAY BE NECESSARY TO ENSURE PLANT SURVIVAL. IRRIGATION OR OTHER WATER PRACTICES (I.E. POLYMER, PLUS WATERING) SHALL BE USED DURING THE TWO-YEAR MAINTENANCE PERIOD. WATERING SHALL BE SUFFICIENT TO SUPPLY AT LEAST ONE INCH PER WEEK BETWEEN JUNE 15 AND OCTOBER 15.
4. PLANTINGS SHALL BE MULCHED A MINIMUM OF THREE INCHES IN DEPTH AND 18 INCHES IN DIAMETER TO RETAIN MOISTURE AND DISCOURAGE WEED GROWTH AROUND NEWLY INSTALLED PLANT MATERIAL.

MAINTENANCE PLAN

1. CLEAN WATER SERVICES REQUIRES A THREE-YEAR MAINTENANCE PERIOD FOR THE VEGETATED CORRIDOR ENHANCEMENT. INVASIVE SPECIES CONTROL IS TO BE CONDUCTED TWICE PER YEAR, BY JUNE 1ST AND BY SEPTEMBER 30TH BASED UPON THE SITE INSPECTION.
2. CLEAN WATER SERVICES' SUCCESS CRITERION FOR VEGETATED CORRIDOR LANDSCAPING IS 80% SURVIVAL OF TREE AND SHRUB PLANTINGS DURING THE TWO-YEAR MAINTENANCE PERIOD. VEGETATED CORRIDOR LANDSCAPING SHOULD BE MONITORED ANNUALLY IN THE SPRING OR FALL TO ASSESS SURVIVAL OF TREE AND SHRUB PLANTINGS. IF ANY MORTALITY OCCURS, THE CAUSE OF THE PLANT DEATH SHOULD BE DETERMINED AND REPLACEMENT OF PLANTINGS IS TO BE DETERMINED AND CORRECTED IF POSSIBLE. IF SURVIVAL FALLS BELOW 80% AT ANY TIME DURING THE TWO-YEAR MONITORING PERIOD, THE CAUSE OF THE PLANT DEATH AND OTHER CORRECTIVE MEASURES, SUCH AS ADDITIONAL MULCHING OR IRRIGATION, MAY NEED TO BE IMPLEMENTED. IF REPLANTING IS NECESSARY, THE MAINTENANCE PERIOD WILL BE EXTENDED FOR TWO YEARS FROM THE DATE OF REPLANTING.



1 VEGETATED CORRIDOR PLANTING PLAN

1" = 40' - 0"

PLAN

0 20' 40' 80'

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RIVER RIDGE

TUALATIN, OREGON
FOR MOUNTAIN WEST INVESTMENT CORPORATION

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VEGETATED CORRIDOR ENHANCEMENT

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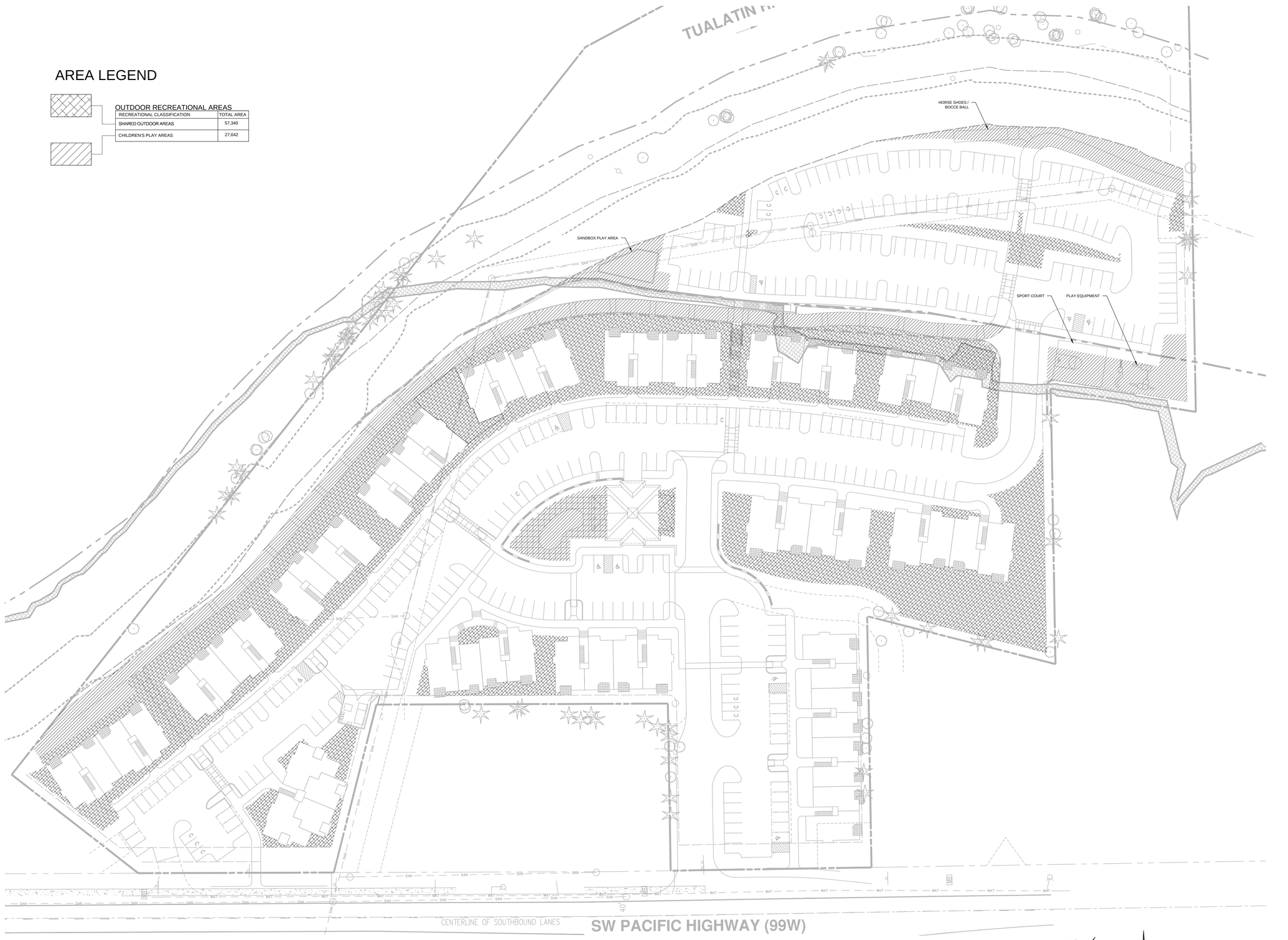
AREA LEGEND

OUTDOOR RECREATIONAL AREAS

RECREATIONAL CLASSIFICATION	TOTAL AREA
SHARED OUTDOOR AREAS	57,340
CHILDREN'S PLAY AREAS	27,642



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RIVER RIDGE

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OUTDOOR RECREATIONAL AREAS

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Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Geotechnical Evaluation Mountain West Investments Proposed Tualatin Apartments Tualatin, Oregon	Project Number: **2106-00**
		Test Pit Number: **TP-7**
Test Pit Location: See Figure 2		Surface Elevation: Not Measured
Excavation Contractor: Dan Fischer Excavation		Date Completed: November 14, 2013
Excavation Equipment: Case 580N Extendahoe		Logged By: A. Reese

Depth, feet	Material Description
	Grass surface over TOPSOIL; dark brown, moist, rootlets, soft.
	Silty SAND; brown, slightly moist, loose to medium dense.
	Tree roots to 3'.
5	
	Becomes mottled.
10	
	Becomes wet.
15	Bottom of Test Pit at 15.0 Feet. No Seepage or Groundwater Encountered.
20	
25	
30	
35	

TUALATIN APARTMENTS / ESPEDAL PROPERTY
Vegetated Corridor Enhancement Planting Specification Table
March 6, 2014

Planting Specifications for the **37,981 SF** 50 foot vegetated corridor enhancement area

Scientific Name	Common Name	Size*	Spacing	Quantity
Trees (380)				
Alnus rubra	red alder	1 gallon	10 feet on center	126
Acer macrophyllum	big leaf maple	1 gallon	10 feet on center	127
Pseudotsuga menziesii	Douglas-fir	1 gallon	10 feet on center	127
Shrubs (1,899)				
Acer circinatum	vine maple	2 gallon	4-5 feet on center	380
Holodiscus discolor	oceanspray	1 gallon	4-5 feet on center	380
Polystichum munitum	sword fern	2 gallon	4-5 feet on center	380
Rubus parvifolium	thimbleberry	1 gallon	4-5 feet on center	379
Symphoricarpos albus	snowberry	1 gallon	4-5 feet on center	380
Seed Mix				
Bromus carinatus	native California brome	seed	10 lbs pls/acre	As needed for bare soil areas >25 sq. ft. following invasive species removal
Elymus glaucus	blue wildrye	seed	10 lbs pls/acre	
Festuca rubra var. *rubra*	native red fescue	seed	5 lbs pls/acre	
Lupinus polyphyllus	large-leafed lupine	seed	8 lbs pls/acre	

*Bare root may be substituted for container plants based on availability. If bare root plants are used, they must be planted during the late winter / early spring dormancy period.

Planting Specifications for the **2,020 SF** temporary impacted vegetated corridor restoration area for storm line

Scientific Name	Common Name	Size*	Spacing	Quantity
Shrubs (101)				
Acer circinatum	vine maple	2 gallon	4-5 feet on center	20
Holodiscus discolor	oceanspray	1 gallon	4-5 feet on center	21
Polystichum munitum	sword fern	2 gallon	4-5 feet on center	20
Rubus parvifolium	thimbleberry	1 gallon	4-5 feet on center	20
Symphoricarpos albus	snowberry	1 gallon	4-5 feet on center	20
Seed Mix				
Bromus carinatus	native California brome	seed	10 lbs pls/acre	As needed for bare soil areas >25 sq. ft. following invasive species removal
Elymus glaucus	blue wildrye	seed	10 lbs pls/acre	
Festuca rubra var. *rubra*	native red fescue	seed	5 lbs pls/acre	
Lupinus polyphyllus	large-leafed lupine	seed	8 lbs pls/acre	

Planting Notes for Vegetated Corridor Planting Areas (per CWS Design & Construction Standards, Appendix D Landscape Requirements, March 2004):

1) Invasive species on the site include Himalayan blackberry and reed canarygrass. Invasive species control consistent with Clean Water Services' *Integrated Vegetation and Animal Management Guide* is required prior to installing plantings.

2) Plantings should preferably be installed between February 1 and May 1 or between October 1 and November 15. Plants may be installed at other times of the year; however, additional measures may be necessary to ensure plant survival. Irrigation or other water practices (i.e. polymer, plus watering) shall be used during the two-year maintenance period. Watering shall be provided at a rate of at least one inch per week between June 15 and October 15.

3) Plantings shall be mulched a minimum of three inches in depth and 18 inches in diameter to retain moisture and discourage weed growth around newly installed plant material.

Maintenance Plan:

1) Clean Water Services requires a three-year maintenance period for the vegetated corridor enhancement. Invasive species control is to be conducted twice per year; by June 1st and by September 30th based upon the site inspection.

2) Clean Water Services' success criterion for vegetated corridor landscaping is 80% survival of tree and shrub plantings during the 2 years following planting. The vegetated corridor landscaping should be monitored annually in the spring or fall to assess survival of tree and shrub plantings. If any mortality is noted on the site, the factor likely to have caused mortality of plantings is to be determined and corrected if possible. If survival falls below 80% at any time during the two-year maintenance period, the plantings shall be replaced, and other corrective measures, such as additional mulching or irrigation, may need to be implemented. If replanting is necessary, the maintenance period will be extended for two years from the date of replanting.

LED INTREPID DECORATIVE AREA LIGHTS (XINM3)

Crossover® LED LIGHTING TECHNOLOGY

Crossover LED Lighting

lighting factsCM

A Program of the U.S. DOE

Light Output (Lumens)	5712
Watts	77.3
Lumens per Watt (Efficacy)	73
Color Accuracy Color Rendering Index (CRI)	70
Light Color Correlated Color Temperature (CCT)	6000 (Daylight)

Warm White | Bright White | Daylight

2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: KGGN-132HM3

Model Number: XINM SA FT LED 63 CW UE

Type: Outdoor decorative fixture

US patent 782456 and US & Int'l. patents pending

SMARTTEC™ THERMAL CONTROL - Sensors in the driver enclosure reduce drive current when ambient temperatures exceed 50°C. Current is lowered in imperceptible 5% increments every 5 minutes until safe operating temperature is reached.

EXPECTED LIFE - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

LEDS - Select high-brightness LEDs in Cool White (5800ºK nominal) or Neutral White (4000ºK nominal) color temperature, 70CRI (nominal).

DISTRIBUTION/PERFORMANCE - Types 2, 3, FT, and 5. Exceptional uniformity creates bright environment at lower light levels. Improved backlight cutoff minimizes light trespass.

HOUSING - Modular fixture is available in two mounting styles - Post Top and Side Mount. One piece housing/support frame is die-cast aluminum. Combination mounting arm/driver enclosure on side mount versions is die-cast with integral ribs for heat dissipation. Access cover and support arms for post top versions are die-cast aluminum.

HOUSING TOP CAP - Removable spun aluminum cap/post top driver enclosure is retained by captive stainless steel fasteners and safety cables. Housing and top cap interface is sealed with a one-piece extruded silicone gasket. Tool-less entry option is available.

SEALED OPTICAL UNIT - Lens is clear, flat tempered glass, sealed to aluminum optics housing. Pressure stabilizing breather allows super-tight protection while preventing temperature cycling from building up internal pressures and vacuums that can stress optical unit seals and components.

FASTENERS - All exposed fasteners are black oxide coated stainless steel. Internal fasteners are stainless steel or zinc electroplated steel.

ELECTRICAL - Terminal block for attachment of incoming primary wiring is supplied. Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Location Category C. Available with universal voltage power supply 120-277VAC (50/60Hz input), 347VAC and 480VAC. Optional button-type photocells (PCI) are available in 120, 208, 240, 277 or 347 volt (supply voltage must be specified). Fixture Watts: 350mA - 75, 450mA - 98 nominal.

DRIVER - Available in 350mA and 450mA drive currents (Drive currents are factory programmed). State-of-the-art driver technology designed specifically for LSI LED light sources provides unsurpassed system efficiency. Components are fully encased in potting material for IP65 moisture resistance. Driver complies with IEC and FCC standards.

OPERATING TEMPERATURE - -40ºC to +50ºC (-40ºF to +122ºF).

MOUNTING - Post Top, Side Arm and Wall mounting available. Pole selection information shown under fixture drawings.

FINISH - Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years. Standard colors include bronze, black, platinum plus, graphite, satin verde green, metallic silver and white.

WARRANTY - LSI LED fixtures carry a limited 5-year warranty.

PHOTOMETRICS - Application layouts are available upon request. Contact LSI Applications Group at lighting.apps@lsi-industries.com

LISTING - Listed to U.S. and Canadian safety standards. Suitable for wet locations.

LIGHT OUTPUT - XINM3

ARM MOUNT

		# of LEDS	Lumens (Nominal) Type 2	Type 3	Type FT	Type 5
Cool White	350 mA	63	5500	4900	5700	4500
	450 mA	63	6300	5600	6400	5100
Neutral White	350 mA	63	5300	4700	5500	4300
	450 mA	63	6100	5400	6100	4900

POST TOP MOUNT

		# of LEDS	Lumens (Nominal) Type 2	Type 3	Type FT	Type 5
Cool White	350 mA	63	5000	4200	5100	4100
	450 mA	63	6100	5300	6300	5000
Neutral White	350 mA	63	4800	4000	4900	4000
	450 mA	63	5900	5100	6000	4800

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.

American Innovation American Made | RoHS COMPLIANT | Intertek wet location | IP65

Also available in traditional light sources

LSI Industries™ American Innovation Through Technology

Project Name _____ Fixture Type _____

Catalog # _____

10/28/13

© 2013 LSI INDUSTRIES INC.

LED INTREPID DECORATIVE AREA LIGHTS (XINM3)

Crossover® LED LIGHTING TECHNOLOGY

LUMINAIRE ORDERING INFORMATION

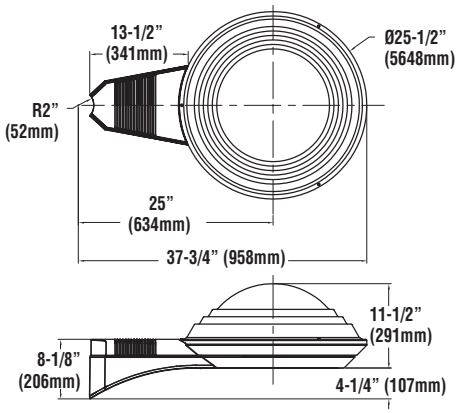
TYPICAL ORDER EXAMPLE: **XINM3 PT 5 LED 63 450 CW UE MSV PCI120**

Prefix	Mounting Style	Distribution	Light Source	# of LEDs	Drive Current	Color Temperature	Input Voltage	Finish	Options
XINM3	PT - Post Top SA4 - Side Arm Mount for 4" Poles[1] SA5 - Side Arm Mount for 5" Poles[1]	2 - Type II 3 - Type III FT - Forward Throw 5 - Type V	LED	63	350 - 350mA 450 - 450mA	CW- Cool White (5800°K nom.) NW- Neutral White (4000°K nom.)	UE - Universal Electronic (120-277V 50/60Hz) 347-480	BRZ – Bronze BLK – Black PLP – Platinum Plus WHT – White SVG - Satin Verde Green GPT - Graphite MSV - Metallic Silver	**Button Type Photocells** PCI 120 - 120v PCHV208-277 - 208-277v PCI 347 - 347v TE - Tool-less Entry **Accessories** SPA - Square Pole Adaptor (SA only) WM - Wall Mount (PT only) SAWM - Side Arm Wall Mount (SA4 or SA5) BK MPT BO4 - Medium Bolt on Bracket (for PT 180) For 4" Dia. Round Poles[1,2] BK MPT BO5 - Medium Bolt on Bracket (for PT 180) For 5" Dia. Round Poles[1,2]

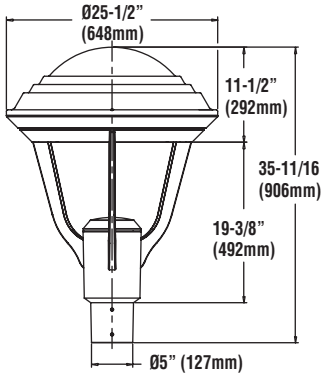
FOOTNOTES:

1- For correct mounting, order poles with 3" reduced drilling pattern.

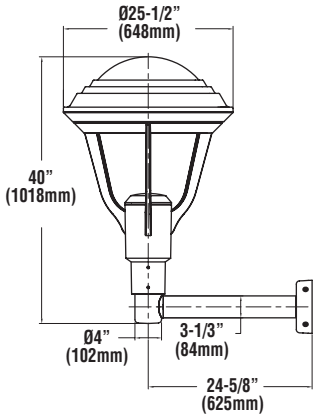
2- For PT mounting configurations other than D180, consult factory. Order one bracket per fixture.



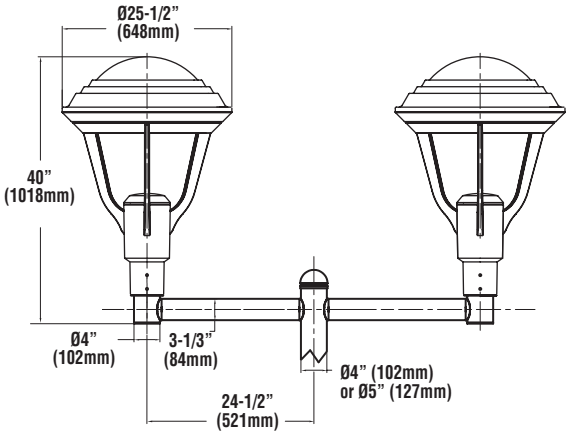
Side Arm Pole Mount
(select 3" reduced drilling pattern)



Post Top
Slipfits 4" Dia. Tenon (4N) or Pole



Post Top with WM Accessory



Post Top with BK MPT BO (x2)
Mounts to 4" or 5" Dia. D180 Bolt-on Pole
(select 3" reduced drilling pattern)

LUMINAIRE EPA CHART - Crossover Intrepid

	MOUNTING STYLE	
PT Single	PT	1.2
PT D180° with BK MPT BO (2)	PT	2.5
Single	SA	1.3
D180°	SA	2.5
D90°	SA	2.2
T90°	SA	3.4
T120°	SA	3.4
Q90°	SA	4.0

SHIPPING WEIGHTS - Crossover Intrepid

Catalog Number	Est. Weight (kg/lbs.)
XINM3 (PT or SA)	29/64

© 2013 LSI INDUSTRIES INC.

Intersection: 10: OR 99W & Access

Movement	SB
Directions Served	R
Maximum Queue (ft)	82
Average Queue (ft)	27
95th Queue (ft)	60
Link Distance (ft)	333
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 4

City of Tualatin

www.tualatinoregon.gov

"NECESSARY PARTIES" MARKED BELOW

NOTICE OF APPLICATION SUBMITTAL

☐ ANNEXATION ☐ CONDITIONAL USE PERMIT ☐ PLAN TEXT AMENDMENT
☒ ARCHITECTURAL REVIEW ☐ PLAN MAP AMENDMENT ☐ OTHER:

CASE/FILE: AR-14-10 (Community Development Dept.: Planning Division) .

PROPOSAL	To construct 180-unit apartment complex

PROPERTY	**Name of Application**	RIVER RIDGE APARTMENTS (FORMERLY KNOWN AS ESPEDAL)			
☐ n/a	**Street Address**	17865 and 17985 SW Pacific Hwy			
	Tax Map and Lot No(s).	2S1 15C 2191, 2202, and 2300			
	Planning District	General Commercial (CG)	**Overlays** ☐	**NRPO** ☒	**Flood Plain** ☒
	Previous Applications	ANN&PMA-14-01	**Additional Applications:** VAR-14-01 (Withdrawn)	**CIO** RIVERPARK	

DATES	**Receipt of application**	6/11/2014	**Deemed Complete**	N/A	**CONTACT**	**Name:** Clare Fuchs
	Notice of application submittal			6/30/2014		**Title:** Senior Planner
	Project Status / Development Review meeting			6/26/2014		**E-mail:** cfuchs@ci.tualatin.or.us
	Comments due for staff report			7/15/2014		**Phone:** 503-691-3027
	Public meeting: ☒ **ARB** ☐ **TPC** ☐ **n/a**			TBD		**Notes:**
	City Council (CC) ☒ **n/a**					

City Staff
- ☒ City Manager
- ☒ Building Official
- ☒ Chief of Police
- ☒ City Attorney
- ☒ City Engineer
- ☒ Community Dev. Director
- ☒ Community Services Director
- ☒ Economic Dev. liaison
- ☒ Engineering Associate*
- ☒ Finance Director
- ☒ GIS technician(s)
- ☒ IS Manager
- ☒ Operations Director*
- ☒ Parks and Recreation Coordinator
- ☒ Planning Manager
- ☒ Street/Sewer Supervisor
- ☒ Water Supervisor

Neighboring Cities
- ☐ Durham
- ☒ King City Planning Commission
- ☐ Lake Oswego
- ☐ Rivergrove PC
- ☐ Sherwood Planning Dept.
- ☐ Tigard Community Dev. Dept.
- ☐ Wilsonville Planning Div.

Counties
- ☐ Clackamas County Dept. of Transportation and Dev.
- ☒ Washington County Dept. of Land Use and Transportation (AR's)
- ☐ Washington County LRP (Annexations)

Regional Government
- ☐ Metro

School Districts
- ☐ Lake Oswego School Dist. 7J
- ☐ Sherwood SD 88J
- ☒ Tigard-Tualatin SD 23J (TTSD)
- ☐ West Linn-Wilsonville SD 3J

State Agencies
- ☐ Oregon Dept. of Aviation
- ☐ Oregon Dept. of Land Conservation and Development (DLCD) (via proprietary notice)
- ☒ Oregon Dept. of State Lands: Wetlands Program
- ☒ Oregon Dept. of Transportation (ODOT) Region 1
- ☐ ODOT Maintenance Dist. 2A
- ☐ ODOT Rail Div.

Utilities
- ☒ Republic Services
- ☒ Clean Water Services (CWS)
- ☒ Comcast [cable]*
- ☒ Frontier Communications [phone]
- ☒ Northwest Natural [gas]
- ☒ Portland General Electric (PGE)
- ☒ TriMet
- ☒ Tualatin Valley Fire & Rescue (TVF&R)
- ☒ United States Postal Service (USPS) (Washington; 18850 SW Teton Ave)
- ☐ USPS (Clackamas)
- ☒ Washington County Consolidated Communications Agency (WCCCA)

Additional Parties
- ☒ Tualatin Citizen Involvement Organization (CIO)
- ☐

***Paper Copies**

☒ *1.032: Burden of Proof*

☒ *31.071 Architectural Review Procedure*

☒ *31.074 Architectural Review Application Review Process*

☒ *31.077 Quasi-Judicial Evidentiary Hearing Procedures*

☐ *Metro Code 3.09.045 Annexation Review Criteria*

☐ *32.030 Criteria for Review of Conditional Uses*

☐ *33.020 Conditions for Granting a Variance that is not a Sign or a Wireless Communication Facility*

☐ *33.022 Criteria for Granting a Sign Variance*

☐ *33.024 Criteria for Granting a Minor Variance*

☐ *33.025 Criteria for Granting a Variance*

☐ *34.200 Tree Cutting on Private Property without Architectural Review, Subdivision or Partition Approval, or Tree Removal Permit Prohibited*

☒ *34.210 Application for Architectural Review, Subdivision or Partition Review, or Permit*

☒ *34.230 Criteria (tree removal)*

☐ *35.060 Conditions for Granting Reinstatement of Nonconforming Use*

☐ *36.160 Subdivision Plan Approval*

☐ *36.230 Review Process (partitioning)*

☐ *36.330 Review Process (property line adjustment)*

☐ *37.030 Criteria for Review (IMP)*

☐ *40.030 Conditional Uses Permitted (RL)*

☐ *40.060 Lot Size for Conditional Uses (RL)*

☐ *40.080 Setback Requirements for Conditional Uses (RL)*

☐ *41.030 Conditional Uses Permitted (RML)*

☐ *41.050 Lot Size for Conditional Uses (RML)*

☐ *41.070 Setback Requirements for Conditional Uses (RML)*

☐ *42.030 Conditional Uses Permitted (RMH)*

☐ *42.050 Lot Size for Conditional Uses (RMH)*

☐ *42.070 Setback Requirements for Conditional Uses (RMH)*

☐ *43.030 Conditional Uses Permitted (RH)*

☒ *43.060 Lot Size for Conditional Uses (RH)*

☒ *43.090 Setback Requirements for Conditional Uses (RH)*

☐ *44.030 Conditional Uses Permitted (RH-HR)*

☐ *44.050 Lot Size for Conditional Uses (RH-HR)*

☐ *44.070 Setback Requirements for Conditional Uses (RH-HR)*

☐ *49.030 Conditional Uses (IN)*

☐ *49.040 Lot Size for Permitted and Conditional Uses (IN)*

☐ *49.060 Setback Requirements for Conditional Uses (IN)*

☐ *50.020 Permitted Uses (CO)*

☐ *50.030 Central Urban Renewal Plan – Additional Permitted Uses and Conditional Uses (CO)*

☐ *50.040 Conditional Uses (CO)*

☐ *52.030 Conditional Uses (CR)*

☐ *53.050 Conditional Uses (CC)*

☐ *53.055 Central Urban Renewal Area – Conditional Uses (CC)*

☐ *54.030 Conditional Uses (CG)*

☐ *56.030 Conditional Uses (MC)*

☐ *56.045 Lot Size for Conditional Uses (MC)*

☐ *57.030 Conditional Uses (MUCOD)*

☐ *60.040 Conditional Uses (ML)*

☐ *60.041 Restrictions on Conditional Uses (ML)*

☐ *61.030 Conditional Uses (MG)*

☐ *61.031 Restrictions on Conditional Uses (MG)*

☐ *62.030 Conditional Uses (MP)*

☐ *62.031 Restrictions on Conditional Uses (MP)*

☐ *64.030 Conditional Uses (MBP)*

☐ *64.050 Lot Size for Permitted and Conditional Uses (MBP)*

☐ *64.065 Setback Requirements for Conditional Uses (MBP)*

☐ *68.030 Criteria for Designation of a Landmark*

☒ *68.060 Demolition Criteria*

☐ *68.070 Relocation Criteria*

☒ *68.100 Alteration and New Construction Criteria*

☒ *68.110 Alteration and New Construction Approval Process*

☒ *73.130 Standards*

☒ *73.160 Standards*

☒ *73.190 Standards – Single-Family and Multi-Family Uses*

☒ *73.220 Standards*

☒ *73.227 Standards*

☒ *73.230 Landscaping Standards*

☒ *73.300 Landscape Standards – Multi-Family Uses*

☐ *73.310 Landscape Standards – Commercial, Industrial, Public and Semi-Public Uses*

☒ *73.320 Off-Street Parking Lot Landscaping Standards*

☒ *73.470 Standards*

☒ *73.500 Standards*

River Ridge Apartments
Architectural Review

Date:	June 11, 2014
Submitted to:	City of Tualatin Community Development Department 18880 SW Martinazzi Avenue Tualatin, OR 97062
Property Owners:	Donna J. Degele 16182 Bimini Lane Huntington Beach, CA 92649 Kenneth R. Espedal, Joyce L. Poppert 11515 SW Hazelbrook Road Tualatin, OR 97062
Prepared For:	Mountain West Investment Corporation 201 Ferry Street SE, # 400 Salem, OR 97301
Prepared by:	AKS Engineering & Forestry 12965 SW Herman Road, Suite 100 Tualatin, OR 97062

AKS Engineering & Forestry
12965 SW Herman Road, Suite 100
Tualatin, OR 97062
P: (503) 400-6028
F: (503) 400-7722
www.aks-eng.com

River Ridge Apartments
Architectural Review

Table of Contents

Application Packet:

- Architectural Review Application Form
- Architectural Review Checklist
- CWS Service Provider Letter
- CWS Upper Tualatin Interceptor Letter
- Legal Description
- Architectural Review Narrative
- Letter from Franchise Hauler
- Vicinity Map
- Washington County Tax Assessors Maps
- List of Property Owners (Mailing Labels)
- Neighborhood / Developer Meeting Information
- Arborist Tree Assessment

Under Separate Cover:

- Plan Set (9 Copies)
  - Preliminary Site Plan (18 x 24)
  - Preliminary Elevations (36 x 36)
  - Preliminary Floor Plan (36 x 36)
  - Preliminary Landscape Plan (36 x 36)
- Civil Plan Set (9 Copies)
  - Preliminary River ridge Apartments Architectural Review Set (24 x 36)
  - Preliminary Hwy 99W Frontage Improvements (24 x 36)
  - Preliminary CWS Sewer Realignment (24 x 36)
- Reduced Plans - 8 ½" X 11"
- Reduced Plans – 11" x 17"
- Traffic impact study (5 Copies)
- Preliminary Stormwater Report
- Natural Resource Assessment
- City of Tualatin Architectural Review Application Fee
- Certification of Sign Posting (Per conversation with City Staff, affidavit of sign posting will be provided upon receipt of case file number from City Staff)
- Digital (pdf) Copy of Application (1 Compact Disk)

Architectural Review Application Form

APPLICATION FOR ARCHITECTURAL REVIEW

Direct Communication to	
Name: Michael Poissant/AKS	Title: Principal
Address: 528 Cottage St. SE Ste. 160 Salem, OR 97301	E-mail address: michaelp@aks-eng.com
Phone Number: 503-400-6028	Fax Number: 503-400-7722
Applicant's Name: Mountain West Investment Corp.	E-mail address: brian@mwinv.com
Address: 201 Ferry St SE, #400 Salem, OR 97301	
Phone Number: 503-584-4592	Fax Number: 503-581-7061
Applicant's Signature:	Date: 6·5·14
Property Owner's Name: Donna J. Degele	Phone Number: 503-581-4654
Address: 16182 Bimini Lane Huntington Beach, CA 92649	
Property Owner's Signature:	Date: June 3, 2014
(NOTE: Letter of authorization is required if not signed by owner.)	
Architect Hill Architects	E-mail address: lloyd@hillarchitects.com
Address: 1914 Willamette Falls Dr. Suite 280 West Linn, OR 97068	
Phone Number: 503-305-8033	Fax Number:
Landscape Architect: AKS Engineering and Forestry	E-mail address:
Address: 9600 NE 126th Ave. Suite 2520 Vancouver, WA 98682	
Phone Number: 360-882-0419	Fax Number: 360-882-0426
Engineer: AKS, Michael Poissant	E-mail address: michaelp@aks-eng.com
Address: 528 Cottage St. NE Salem, OR 97301	
Phone Number: 503-400-6028	Fax Number: 503-400-7722
Project Title: River Ridge Apartments	
Project Address: 17865 and 17985 SW Pacific HWY, Tualatin, OR 97062	
Brief Project Description: Redevelopment of existing vacant property and construction of 180 apartment units and club house.	
Proposed Use: High Density Residential	

VALUE OF IMPROVEMENTS: $ 14,370,000

AS THE PERSON RESPONSIBLE FOR THIS APPLICATION, I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION ABOVE, ON THE FACT SHEET AND THE SURROUNDING PROPERTY OWNER MAILING LIST IS CORRECT. I AGREE TO COMPLY WITH ALL APPLICABLE CITY AND COUNTY ORDINANCES AND STATE LAWS REGULATING BUILDING CONSTRUCTION AND LAND USE.

APPLICANT'S SIGNATURE _____ DATE 6-5-14

Case No. _____ Date Received _____ Application Complete as of _____
Received by _____ Receipt No. _____ ARB hearing date (if applicable) _____
Fee: complete review ($60- $2635) _____ Posting verification _____
9 copies of drawings (folded) _____ 1 reproducible 8½ x 11" site, grading, LS, Public Facilities plan _____
1 reproducible 8½" X 11" vicinity map __ Neighborhood / Developer meeting materials _____

APPLICATION FOR ARCHITECTURAL REVIEW

Direct Communication to	
Name: Michael Poissant/AKS	Title: Principal
Address: 528 Cottage St. SE Ste. 160 Salem, OR 97301	E-mail address: michaelp@aks-eng.com
Phone Number: 503-400-6028	Fax Number: 503-400-7722
Applicant's Name: Mountain West Investment Corp.	E-mail address: brian@mwinv.com
Address: 201 Ferry St SE, #400 Salem, OR 97301	
Phone Number: 503-584-4592	Fax Number: 503-581-7061
Applicant's Signature:	Date:
Property Owner's Name: Joyce L. Poppert	Phone Number:
Address: 11515 SW Hazelbrook Rd Tualatin, OR 97062	
Property Owner's Signature: Joyce L Poppert	Date: 6-4-14
(NOTE: Letter of authorization is required if not signed by owner.)	
Architect Hill Architects	E-mail address: lloyd@hillarchitects.com
Address: 1914 Willamette Falls Dr. Suite 280 West Linn, OR 97068	
Phone Number: 503-305-8033	Fax Number:
Landscape Architect: AKS Engineering and Forestry	E-mail address:
Address: 9600 NE 126th Ave. Suite 2520 Vancouver, WA 98682	
Phone Number: 360-882-0419	Fax Number: 360-882-0426
Engineer: AKS, Michael Poissant	E-mail address: michaelp@aks-eng.com
Address: 528 Cottage St. NE Salem, OR 97301	
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Phone Number: 503-584-4592	Fax Number: 503-581-7061
Applicant's Signature:	Date:
Property Owner's Name: Kenneth Espedal	Phone Number:
Address: 11515 SW Hazelbrook Rd Tualatin, OR 97062	
Property Owner's Signature: Kenneth R Espedal	Date: 6-4-14
(NOTE: Letter of authorization is required if not signed by owner.)	
Architect Hill Architects	E-mail address: lloyd@hillarchitects.com
Address: 1914 Willamette Falls Dr. Suite 280 West Linn, OR 97068	
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Landscape Architect: AKS Engineering and Forestry	E-mail address:
Address: 9600 NE 126th Ave. Suite 2520 Vancouver, WA 98682	
Phone Number: 360-882-0419	Fax Number: 360-882-0426
Engineer: AKS, Michael Poissant	E-mail address: michaelp@aks-eng.com
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9 copies of drawings (folded) _____ 1 reproducible 8½ x 11" site, grading, LS, Public Facilities plan _____
1 reproducible 8½" X 11" vicinity map __ Neighborhood / Developer meeting materials _____

GENERAL INFORMATION	
Site Address:	17865 and 17985 SW Pacific HWY Tualatin, OR 97062
Assessor's Map and Tax Lot #:	2S 1 15C; 2191,2202,2300
Planning District:	RH
Parcel Size:	12 Acres +/-
Property Owner:	Kenneth R. Espedal, Joyce L. Poppert, Donna J. Degele
Applicant:	Mountain West Investment Corporation
Proposed Use:	Residential High Density

ARCHITECTURAL REVIEW DETAILS	
☒ Residential ☐ Commercial ☐ Industrial	
Number of parking spaces:	322
Square footage of building(s):	73,866
Square footage of landscaping:	182,813+/-
Square footage of paving:	122,731+/-
Proposed density (for residential):	180

For City Personnel to complete:
Type of case and file number:
Staff contact person:
Proposal:

Decision criteria:

CITY OF TUALATIN FACT SHEET

General

Proposed use: Residential High Density	
Site area: 12 +/- acres	Building footprint: 73,866 sq. ft.
Development area: 8.7 acres 379,410 Sq. ft.	Paved area: 122,731 sq. ft. Development area coverage: 52 %

Parking

Spaces required (see TDC 73.400) *(example: warehouse @ 0.3/1000 GFA)* _____ @ ____/1000 GFA = ____ _____ @ ____/1000 GFA = ____ _____ @ ____/1000 GFA = ____ Total parking required: 259.5 spaces Handicapped accessible = 6 Van pool = Compact = *(max. 35% allowed)* = 16 Loading berths =	Spaces provided: Total parking provided: 322 spaces Standard = 306 Handicapped accessible = 9 Van pool = Compact = 16 Loading berths =

Bicycles

Covered spaces required:	Covered spaces provided: 58

Landscaping All areas pursuant to TDC 73.300 shall be landscaped

Landscaping required: ____% of dvpt. area Square feet	Landscaping provided: 48 % of dvpt. area 193,597+/- Square feet
Landscaped parking island area required: 6.7 %	Landscaped parking island area provided: 13 %

Trash and recycling facility

Minimum standard method: square feet
Other method: Franchise Hauler Method - 625 +/- square feet

For commercial/industrial projects only

Total building area: sq. ft. Main floor: N/A sq. ft. Mezzanine: sq. ft.	2nd floor: sq. ft. 3rd floor: N/A sq. ft. 4th floor: sq. ft.

For residential projects only

Number of buildings: 15	Total sq. ft. of buildings: 73,866 sq. ft.
Building stories: 3	

Architectural Review Checklist

City of Tualatin

www.ci.tualatin.or.us

ARCHITECTURAL REVIEW CHECKLIST
FOR
MULTI-FAMILY DEVELOPMENT

The following information shall be submitted with each Architectural Review application. Incomplete applications will not be processed.

✓A. COMPLETE APPLICATION FORM AND FEE

✓B. SIGNED AFFIDAVIT OF POSTING To be provided upon receipt of case file number from City Staff.

✓C. 1 REPRODUCIBLE 8½ X 11" COPY OF SITE, GRADING, LANDSCAPE & PUBLIC FACILITY PLANS

✓D. 8½ X 11" VICINITY MAP INDICATING FRONTAGE STREET(S) AND CROSS STREET(S) Within a one-half mile radius.

✓E. THREE (3) COPIES OF WETLAND DELINEATION REPORT (if applicable)

✓F. A CLEAN WATER SERVICES (CWS) SERVICE PROVIDER LETTER OR PRE-SCREEN FOR THE PROPOSED DEVELOPMENT

✓G. ONE COPY OF A LEGAL DESCRIPTION AS IT APPEARS ON THE DEED

✓H. SITE PLAN (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

1. North arrow and scale of drawing (Scale 1":10', 1":20': 1":30', for larger developments 1":40' or 1":50').
2. Site Data to include Planning District designation and planned density, square footage of site, square footage of development area, square footage of landscaping, square footage of parking lot landscaping, square footage of asphalt, number of parking spaces (standard, and subcompact and disability), square footage of buildings (gross and perimeter), number of units, dwelling units per acre (density), land area per unit and lot coverage, calculations showing square footage of private outdoor areas per unit, square footage of various private entry areas and square footage of children's play areas. Identify shifts in density and how undeveloped areas will not be developed. Information must contain existing and proposed square footage of parking spaces.
3. Correct lot area and lot line dimensions of the site. Correct location of Natural Resource Protection Overlay District, including greenways, wetland natural areas and open space natural areas, and 25’ vegetated corridors adjacent to a sensitive area. Also show top of bank and centerline for rivers and creeks. Indicate if wetlands or greenways are proposed to be dedicated.
4. Location of buildings, dimensions and square footage of existing and proposed development, including setback distances to property lines and setback distances between buildings. Include location of bicycle parking and covered bicycle parking.
5. Identify adjacent uses and building locations.
6. Location of accessways, walkways and on-site bikeways.
7. Fronting street(s), right-of-way lines, driveways, sidewalks, curbs, paths, railroad right-of-way, bicycle paths, pedestrian paths, transit stop locations, and easements (include dimensions).

8. Parking and loading areas (dimensions of spaces). Show entrances, exits, direction of traffic flow, maneuvering areas and setbacks. Indicate location of subcompact spaces, van pool and car pool parking and type of curbing. Identify disability stall locations and stall dimensions.

9. Location of fences, walls, trash enclosures, recycling areas, electric transformer pads, rooftop mechanical equipment, exterior light fixtures, and mail delivery centers.

10. Location of children's play areas and private outdoor areas.

11. Future development areas and outdoor storage areas, if applicable.

✓ I. GRADING PLAN (Please submit nine [9] 11"x17" copies and nine [9] plan size folded sets)

1. North arrow and scale of drawing (scale 1":10', 1":20', 1":30'). Included as part of the civil Architectural Review Plan Set

2. Correct lot area and lot line dimensions of the site. Correct location of Natural Resource Protection Overlay District, including greenways, wetland natural areas and open space natural areas, and 25' vegetated corridors adjacent to a sensitive area. Also show top of bank and centerline for rivers and creeks. Indicate if wetlands or greenways are proposed to be dedicated.

3. Show site contour lines and elevations (existing and proposed, referenced from mean sea level).

4. Location, size and species of all existing trees having a trunk diameter of 8" or greater measured at a point 4' above the ground. Indicate trees to be removed or retained.

5. Place a note on the plan stating that existing trees to be retained shall be fenced around the dripline with chainlink or other sturdy fencing during construction. Indicate topsoil replacement in all landscape areas. Tree protective fencing placement is outlined in the Tree Preservation

6. Location, size and grading plan of water quality facility, if applicable.

✓ J. TREE PRESERVATION PLAN (Please submit nine [9] 11"x17" copies and nine [9] plan size folded sets)
Included as part of the civil Architectural Review Plan Set

1. Tree Preservation Site Plan (drawn to scale 1:10, 1:20, or 1:30), including a north arrow, property lines, existing and proposed topographical contour lines, structures, impervious surfaces, wells, septic systems, stormwater retention/detention facilities, utility and access locations/easements, vision clearance areas, and all trees having a trunk diameter of 8" or greater as measured at a point 4' above the ground. All trees proposed for removal and all trees proposed for preservation shall be indicated on the site plan as such by identifying symbols. For each tree illustrated, include information on size, species, and tag i.d. number.

2. Tree Assessment Report, prepared by a qualified arborist, including the following information: an analysis as to whether trees proposed for preservation can in fact be preserved in light of the development proposed, are healthy specimens, and do not pose an imminent hazard to persons or property if preserved; an analysis as to whether any trees proposed for removal could be reasonably preserved in light of the development proposed and health of the tree; a statement addressing the tree removal approval criteria set forth in TDC 34.230; and arborist's signature and contact information. The Tree Assessment Report shall have been prepared no more than one calendar year preceding the date the Architectural Review application is deemed complete by the City.

3. Tagging. All trees on-site shall be physically identified and numbered in the field with an arborist-approved tagging system. The tag i.d. numbers shall correspond with the tag i.d. numbers illustrated on the Tree Preservation Site Plan.

4. Where Clean Water Services (CWS) has approved delineation of a "sensitive area" or "vegetated corridor" on the subject property, and CWS has required dedication of an easement that prohibits encroachment into the delineated area, and the CWS-required easement boundary is clearly

illustrated and identified on the site plan, then all trees located within the CWS-required easement need not be individually identified on the Tree Preservation Site Plan, need not be addressed in the Tree Assessment Report, and need not be tagged.

✓ K. ELEVATIONS (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

1. Elevations of proposed structures drawn at scale of 1/16":1', 1/8":1', 1/4":1' (buildings, carports, garages, covered bicycle parking and mixed solid waste and source separated recyclable storage areas).
2. Elevations of exterior light fixtures, electrical transformer pads, and rooftop mechanical equipment.
3. An 8½ x 11" materials board sample and specifications as to materials and colors to be used in the development, including walls, roof, windows, doors, garages and trim. An accurately colored elevation with a detailed description of materials and colors to be used may be substituted for a materials board.
4. Cut sheet of exterior lighting units.

✓ L. FLOOR PLAN (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

1. Plans drawn at scale of 1/16":1', 1/8":1' or 1/4":1'.

✓ M. LANDSCAPE PLAN (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

1. North arrow and scale of drawing (scale of 1":10', 1":20', 1":30').
2. Correct lot area and lot line dimensions of the site. Correct location of Natural Resource Protection Overlay District, including greenways, wetland natural areas and open space natural areas, and 25’ vegetated corridors adjacent to a sensitive area. Also show top of bank and centerline for rivers and creeks. Indicate if wetlands or greenways are proposed to be dedicated.
3. Specific locations of all proposed and existing landscaping, including greenway landscaping (if applicable). Identify location of sensitive area buffer landscaping.
4. Location, size and species of all existing trees having a trunk diameter of 8" or greater as measured at a point 4' above the ground. Designate existing trees to be removed and retained.
5. Take-off sheet indicating square footage of landscaping. Indicate square footage of landscape islands in parking lot.
6. Plant legend that includes:
   a. Total percentage and square footage of landscaped areas.
   b. Square footage of parking lot landscaping.
   c. Common and botanical names of plants.
   d. Quantity and spacing of plants.
   e. Size of plants (caliper, height or container size).
   f. Landscaping materials to be used (bark dust, river rock, etc.).
   g. Notation on type of irrigation system (automatic underground or drip).
   h. Replacement of topsoil.
7. Location of street trees.

✓ N. PUBLIC FACILITIES PLAN (Please submit nine [9] 11”x17” copies and nine [9] plan size folded sets)

Criteria for this has been included as part of the civil Architectural Review Plan Set

1. North arrow and scale of drawing (scale of 1":10', 1":20', 1":30').
2. Correct lot area and lot line dimensions of the site. Correct location of Natural Resource Protection Overlay District, including greenways, wetland natural areas and open space natural areas, and 25’ vegetated corridors adjacent to a sensitive area. Also show top of bank and centerline for rivers and creeks. Indicate if wetlands or greenways are proposed to be dedicated.

3. Street - existing and proposed. Show centerline, right-of way lines, dimensions, sidewalks, curbs, bike lanes, access ways, walkways landscape strips, signalized intersections and nearby transit stops. Included OR99W Frontage Improvements Plan Set

4. Water - show existing and proposed water lines, fire hydrants, meters, line sizes, easements, public or private lines. Included as part of the civil Architectural Review Plan Set

5. Sanitary Sewer - existing and proposed. Sewer lines laterals, manholes and cleanouts, line sizes, easements, public or private line. Included as part of the civil Architectural Review and CWS Sewer Realignment Plan Sets

6. Storm Sewer - existing and proposed. Storm lines, catch basins, manholes, line sizes, easement, public or private line. Included as part of the civil Architectural Review Plan Set

7. Flood Plain - If applicable, show flood plain and/or 100-year floodway boundaries.

8. Location, size and design details of water quality facility, if applicable. Also submit complete calculations supporting the water quality facility design.

9. Traffic Study Information - as required by City Engineer. (Please submit 5 copies)

10. Identify greenway areas, bicycle paths and pedestrian paths.

11. Location of all signs in the public right-of-way adjacent to the parcel.

✓O. MIXED SOLID WASTE AND SOURCE SEPARATED RECYCLABLES PLAN (Please submit 2 copies)

1. A letter from the franchise solid waste and recycling hauler reviewing the proposed solid waste and recyclables method and facility.

✓P. ASSESSOR'S MAPS AND LIST OF PROPERTY OWNERS (Please submit 1 copy)

1. Include a copy of the Washington and/or Clackamas County Assessor's Map(s) showing the subject property and properties within 1,000 feet of the subject property. If the 1,000-foot area includes lots within a platted residential subdivision the notice area shall extend to include the entire subdivision of which the lots are part and the applicant shall identify these subdivisions for staff as part of the mailing notification list. If the residential subdivision is one of two or more individually platted phases sharing a single subdivision name the notice area need not include the additional phases. (One set of maps is sufficient.)

2. Address List. Provide pre-gummed address labels listing the correct names and addresses of all owners of the subject property and of real property within 1,000' of the subject property. If the 1,000-foot area (Ordinance No. 1304-10 page 59 of 61) includes lots within a platted residential subdivision the notice area shall extend to include the entire subdivision of which the lots are part and the applicant shall identify these subdivisions for staff as part of the mailing notification list. If the residential subdivision is one of two or more individually platted phases sharing a single subdivision name the notice area need not include the additional phases. The current computer roll shall be used. The Tax Lot number and Assessor's Map number must be included with each name and address. If there are more than 25 properties, you may provide pre-gummed address labels that are available for purchase at Washington and Clackamas Counties. Preparation of the list of property owners shall be the applicant's responsibility and shall be prepared by one of the following: a land title company, a land use planning consultant authorized by the State of Oregon to conduct business in the State, registered architect, landscape architect, engineer, surveyor, or attorney. The list of property owners shall be updated not less than every 90 days by the applicant. **All parties listed on the application form shall also be included on the mailing list.**

✓Q. NEIGHBORHOOD/DEVELOPER MEETING REPORT The following materials related to the Neighborhood/Developer Meeting (as required in TDC 31.063) must be submitted:

1. Mailing list for the Neighborhood/Developer Meeting notice.

2. Copy of the Neighborhood/Developer Meeting notice.
3. An affidavit of the mailing and posting.
4. Original sign-in sheet of the participants.
5. Meeting notes identifying persons who attended the meeting and the major points that were discussed and expressed.

✓R. CENTRAL DESIGN DISTRICT For development proposals in the Central Design District, narrative statements considering each of the Design Guidelines in TDC 73.610 must be submitted. N/A

✓S. SIGN SUBMITTAL A separate application must be submitted for signs. N/A

✓T. A COMPLETED CITY FACT SHEET

✓U. ADDITIONAL INFORMATION Please submit an **Electronic Digital CD** (Adobe Acrobat Reader (pdf), or Microsoft Word and Excel are the preferable file types) of the entire Architectural Review packet and supporting documentation, including drawings to the City of Tualatin Community Development Department - Planning Division.

Additional information may be required in order to complete the review process.

ARCHITECTURAL REVIEW IN TUALATIN

The City of Tualatin welcomes new development. In December of 1984 the City Council adopted a goal to "Become one of the premier activity centers of the metropolitan area, achieving commercial and industrial growth within the framework of high environmental standards and excellence in urban design." The purpose of Architectural Review is to promote excellence in urban design.

What is Architectural Review

The Architectural Review (AR) process has two components consisting of Architectural Features and Public Facilities. Architectural features are reviewed by the Community Development Department - Planning Division and include all on site improvements such as building design and height, lighting, landscaping, parking, bicycle parking, loading facilities, pedestrian circulation, lot size and screening of service areas. The Public Facilities portion of the AR is reviewed by the Engineering Department and includes fire and life safety, transportation, sewer, water, storm drainage, water quality, erosion control, greenway and riverbank protection, floodplain, wetland protection and access management. These two departments coordinate with other City departments to ensure compliance with all applicable development standards.

When Architectural Review is Required

Architectural Review is required for all new buildings (except single family homes), major exterior remodeling, mobile home parks, condominiums, awnings, small lot subdivisions, and for site improvements such as paving and landscaping. AR may also be required for a change in use, for example one commercial activity to another or from one industrial activity to another industrial activity.

Who Reviews Plans

Most projects receive staff review and a staff decision, which is final unless it is appealed to the Architectural Review Board (ARB) for Architectural Features or to the City Council for Public Facilities.

The following sizes of projects go directly to the ARB for a review and decision for Architectural Features:

Commercial Buildings	50,000 square feet and larger
Industrial Buildings	150,000 square feet and larger
Multifamily Housing	100 units and above (or any number of units abutting a single family district)
Other Projects	as requested by the Community Development Director

Review Process

When an application is submitted, the Community Development and Engineering staff will review it for completeness. Once it is deemed complete, notice will be sent to surrounding property owners, potentially affected government agencies and neighborhood associations. These entities have 14 calendar days to review the application and submit comments on it. Once this 14-day period ends, the staff will write a draft decision letter and schedule a Mid-AR meeting with you to discuss conditions of approval. After this meeting, a letter of decision shall be mailed to the applicant, property owner, design team, and all persons who commented. There is a fourteen-day period in which someone may file a Request for Review of the decision. The City of Tualatin staff aim to have this entire process complete within eight weeks. This will vary depending on complexity of your project.

Projects that go directly to the ARB have a public hearing scheduled within 30 days of deeming the application complete. ARB hearings are publicly noticed and held on Wednesday evenings at 7:00 p.m. If a Staff Decision is appealed and goes before either the ARB or City Council, more review time will be added. Always let our staff know your anticipated construction schedule, and we will do our best to accommodate your needs.

Who Receives AR Decisions

Staff Decisions are mailed to the applicant and project team, property owners and those persons who commented on the application during the review stage. Only those persons who commented with sufficient detail and clarity and are adversely affected by the decision may request a review of the decision. If a project is appealed, it will either go to the ARB for Architectural Features, or to the City Council for Public Facilities. An ARB decision can also be appealed to the City Council.

Getting Started

For new development on a vacant site, you may request a Site Investigation Report (SIR) from the Economic Development Department. The SIR is a tailor-made report that outlines the City requirements and anticipated application fees for your project. The next step is to schedule a required **Pre-Application meeting** with the Community Development Department - Planning Division (Will Harper, AICP, Senior Planner at 503-691-3027 or wharper@ci.tualatin.or.us). The Pre-Application meeting should occur as the earliest step of your project. The application to request a Pre-Application meeting is available on the city website and the fee is $195.00. Our staff will discuss the AR process, Code standards which apply to the site, and development expectations. Once the pre-application meeting is held, the applicant shall hold a **Neighborhood/Developer meeting** pursuant to TDC 31.063.

Plan Submittal

After the Pre-Application Conference, submit the required sets of plans and other required application information to the Community Development Department - Planning Division for Architectural Review. We recommend you call ahead when you are submitting your application to ensure a staff person is available. The application packet has a checklist describing in detail what is to be shown on each plan and what needs to be submitted. It is very important the checklist be followed carefully, because the Community Development Department will not accept an incomplete application. Plan on staying in close contact with the Community Development Department - Planning Division throughout the review process. If there are substantial changes made by the applicant after submittal of the application, the changes may be significant enough to warrant starting a new application and review.

Posting AR Sign

On the same day plans are submitted for AR, you must post a sign on the subject property announcing your development plans. The application packet describes sign posting criteria. The sign is supplied by the City.

Review Criteria

The objectives and standards of the Tualatin Development Code (TDC) and other applicable City ordinances are applied during Architectural Review. The Architectural Features portion of the review utilizes Chapter 73, Community Design Standards. This chapter contains design standards, which include site planning and structure design, landscaping, parking lot landscaping, and off-street parking and loading. Each of these sections has objectives (guidelines), which are to be considered when developing a project and specific standards (requirements) which implement the objectives. The Public Facilities review utilizes access provisions in Chapter 75 and sections of the TDC concerning transportation, water, sewer, storm drainage, and ordinances for water quality and erosion control. Each of these elements is discussed in detail in the Architectural Review Findings and Decision. The Staff Decision based on the review criteria and analysis will be one of the following:

(a) approval;
(b) approval with conditions; or
(c) denial.

If the Architectural Features decision is appealed to the ARB, a hearing must be scheduled no sooner than seven calendar days and no more than 21 calendar days from the end of the appeal period

If the Public Facilities decision is appealed to the City Council, a hearing will be held at the next available regular Council meeting, generally within 6 - 8 weeks from the end of the appeal period.

After Architectural Review

Architectural Review (Architectural Features and Public Facilities), public works permit review and Building Permit Plan Check Review must occur before issuance of a Building Permit for a project. Any required changes to the AR plans to meet conditions of approval should be turned in to the Community Development Department - Planning Division as soon as possible after the Architectural Review Decision is final. You may submit plans to the Building Division after you review the draft decision letter. The Architectural Review Decision is valid for one year with the possibility of one six-month extension.

Obtaining a Building Permit and Occupancy

After the Building Division completes Plan Check Review, they will circulate a sign-off form to all applicable departments. Each department must sign off before a Building Permit is issued. Before the Community Development and Engineering Departments sign the form, all conditions of approval of the Architectural Features and Public Facilities Decisions must be met. Prior to issuing a Certificate of Occupancy, the Building Division circulates a second sign-off sheet. Before the Planning Division signs off, a site inspection is conducted to determine the project complies with approved plans for the building exterior, parking, landscaping, etc. It is **very important** to clear any Architectural Features changes to the development plans during construction with the Community Development Department - Planning Division. All construction **must** occur in accordance with the approved AR Decision.

A Special Word About Trees

The City Council has adopted tree protection and landscape standards which require mature trees be retained in developments whenever possible. If there are mature trees on your property, they cannot be cut nor can site grading begin before permission has been given by the Community Development Department. To do so may result in expensive fines. We value trees in Tualatin and include retained trees as meeting part of the landscape requirements.

Fee Schedule

Fees are based on the value of the project to be reviewed. The project value ranges and the associated fees are:

NONEXPEDITED PROCESS

As of September, 2012

Estimated Project Value	Fee
$5,000.00 and under	$115.00
5,001.00 - $24,999.00	$550.00
25,000.00 - $ 99,999.00	$990.00
100,000.00 - $499,999.99	$1,645.00
500,000.00 and greater	$2,410.00

EXPEDITED PROCESS (Residential Development Only)

Estimated Project Value	Fee
$5,000.00 and under	$115.00
5,001.00 - $24,999.00	$1,100.00
25,000.00 - $ 99,999.00	$2,185.00
$499,999.99 – 499,999.99	$3,290.00
500,000.00 and greater	$5,040.00

Our staff is eager to assist you through the AR process. Please call the Community Development Department - Planning Division at 503-691-3026 if you have any questions on the Architectural Features review or the Engineering Department at 503-692-2000 for questions on Public Facilities review.

WE WELCOME YOUR BUSINESS IN TUALATIN.

CWS Service Provider Letter

Clean Water Services
Our commitment is clear.

Service Provider Letter

CWS File Number
13-002601

This form and the attached conditions will serve as your Service Provider Letter in accordance with Clean Water Services Design and Construction Standards (R&O 07-20).

Jurisdiction: Tualatin

Review Type: Allowed Use

Site Address / Location: 17865 SW Pacific HWY, Tualatin, OR 97062

SPL Issue Date: March 28, 2014

SPL Expiration Date: March 27, 2016

Applicant Information:

Name: BRIAN MOORE
Company: MOUNTAIN WEST INVESTMENT CORP
Address: 201 FERRY ST. #400, SALEM, OR 97301
Phone/Fax:
E-mail:

Owner Information:

Name: KENNETH ESPEDAL, DONNA DEGELE, AND JOYCE POPPERTY
Company:
Address: 11515 SW HAZELBROOK ROAD, TUALATIN, OR 97062
Phone/Fax:
E-mail:

Tax lot ID

2S115C002202,
2S115C002300

Development Activity

Multi-Family Residential Development; Tualatin Apartments

TRAIL SHOWN ON PLANS IS NOT APPROVED

Pre-Development Site Conditions:

Sensitive Area Present: [X] On-Site [X] Off-Site
Vegetated Corridor Width: 50
Vegetated Corridor Condition: Marginal/ Degraded

Post Development Site Conditions:

Sensitive Area Present: [X] On-Site [X] Off-Site
Vegetated Corridor Width: 50

Enhancement of Remaining Vegetated Corridor Required: [X]

Square Footage to be enhanced: 37,981

Encroachments into Pre-Development Vegetated Corridor:

Type and location of Encroachment:	Square Footage:
Demo and Stormwater pipe outfall (Temporary Encroachment; Mitigation/ Planting-in-place)	5,367

Mitigation Requirements:

Type/Location	Sq. Ft./Ratio/Cost
None	0

[X] Conditions Attached [X] Development Figures Attached (2) [ ] Planting Plan Attached [X] Geotech Report Required

This Service Provider Letter does NOT eliminate the need to evaluate and protect water quality sensitive areas if they are subsequently discovered on your property.

In order to comply with Clean Water Services water quality protection requirements the project must comply with the following conditions:

1. No structures, development, construction activities, gardens, lawns, application of chemicals, uncontained areas of hazardous materials as defined by Oregon Department of Environmental Quality, pet wastes, dumping of materials of any kind, or other activities shall be permitted within the sensitive area or Vegetated Corridor which may negatively impact water quality, except those allowed in R&O 07-20, Chapter 3.
2. Prior to any site clearing, grading or construction the Vegetated Corridor and water quality sensitive areas shall be surveyed, staked, and temporarily fenced per approved plan. During construction the Vegetated Corridor shall remain fenced and undisturbed except as allowed by R&O 07-20, Section 3.06.1 and per approved plans.
3. **Prior to any activity within the sensitive area, the applicant shall gain authorization for the project from the Oregon Department of State Lands (DSL) and US Army Corps of Engineers (USACE). The applicant shall provide Clean Water Services or its designee (appropriate city) with copies of all DSL and USACE project authorization permits.**
4. An approved Oregon Department of Forestry Notification is required for one or more trees harvested for sale, trade, or barter, on any non-federal lands within the State of Oregon.
5. **Appropriate Best Management Practices (BMP's) for Erosion Control, in accordance with Clean Water Services' Erosion Prevention and Sediment Control Planning and Design Manual, shall be used prior to, during, and following earth disturbing activities.**
6. Prior to construction, a Stormwater Connection Permit from Clean Water Services or its designee is required pursuant to Ordinance 27, Section 4.B.
7. Activities located within the 100-year floodplain shall comply with R&O 07-20, Section 5.10.
8. Removal of native, woody vegetation shall be limited to the greatest extent practicable.
9. **Should final development plans differ significantly from those submitted for review by Clean Water Services, the applicant shall provide updated drawings, and if necessary, obtain a revised Service Provider Letter.**

SPECIAL CONDITIONS

10. The Vegetated Corridor width for sensitive areas within the project site shall be a minimum of 100 feet wide, as measured horizontally from the delineated boundary of the sensitive area.
11. For Vegetated Corridors greater than 50 feet in width, the applicant shall enhance the first 50 feet closest to the sensitive area to meet or exceed good corridor condition as defined in R&O 07-20, Section 3.14.2, Table 3-3.
12. **Prior to any site clearing, grading or construction, the applicant shall provide Clean Water Services with a Vegetated Corridor enhancement/restoration plan. Enhancement/restoration of the Vegetated Corridor shall be provided in accordance with R&O 07-20, Appendix A, and shall include planting specifications for all Vegetated Corridor, including any cleared areas larger than 25 square feet in Vegetated Corridor rated ""good.""**
13. **Prior to installation of plant materials, all invasive vegetation within the Vegetated Corridor shall be removed per methods described in Clean Water Services' Integrated Pest Management Plan. During removal of invasive vegetation care shall be taken to minimize impacts to existing native tree and shrub species.**
14. Clean Water Services shall be notified 72 hours prior to the start and completion of enhancement/restoration activities. Enhancement/restoration activities shall comply with the guidelines provided in Landscape Requirements (R&0 07-20, Appendix A).
15. **Maintenance and monitoring requirements shall comply with R&O 07-20, Section 2.11.2. If at any time during the warranty period the landscaping falls below the 80% survival level, the owner shall reinstall all deficient planting at the next appropriate planting**

opportunity and the two-year maintenance period shall begin again from the date of replanting.

16. **Performance assurances for the Vegetated Corridor shall comply with R&O 07-20, Section 2.06.2, Table 2-1 and Section 2.10, Table 2-2.**
17. **Clean Water Services shall require an easement over the Vegetated Corridor conveying storm and surface water management to Clean Water Services or the City that would prevent the owner of the Vegetated Corridor from activities and uses inconsistent with the purpose of the corridor and any easements therein.**

FINAL PLANS

18. **Final construction plans shall include landscape plans.** In the details section of the plans, a description of the methods for removal and control of exotic species, location, distribution, condition and size of plantings, existing plants and trees to be preserved, and installation methods for plant materials is required. Plantings shall be tagged for dormant season identification and shall remain on plant material after planting for monitoring purposes.
19. **A Maintenance Plan shall be included on final plans** including methods, responsible party contact information, and dates (minimum two times per year, by June 1 and September 30).
20. **Final construction plans shall clearly depict the location and dimensions of the sensitive area and the Vegetated Corridor** (indicating good, marginal, or degraded condition). Sensitive area boundaries shall be marked in the field.
21. Protection of the Vegetated Corridors and associated sensitive areas shall be provided by the installation of permanent fencing and signage between the development and the outer limits of the Vegetated Corridors. **Fencing and signage details to be included on final construction plans.**

This Service Provider Letter is not valid unless CWS-approved site plan is attached.

Please call (503) 681-3653 with any questions.

Amber Wierck
Environmental Plan Review

Attachments (2)

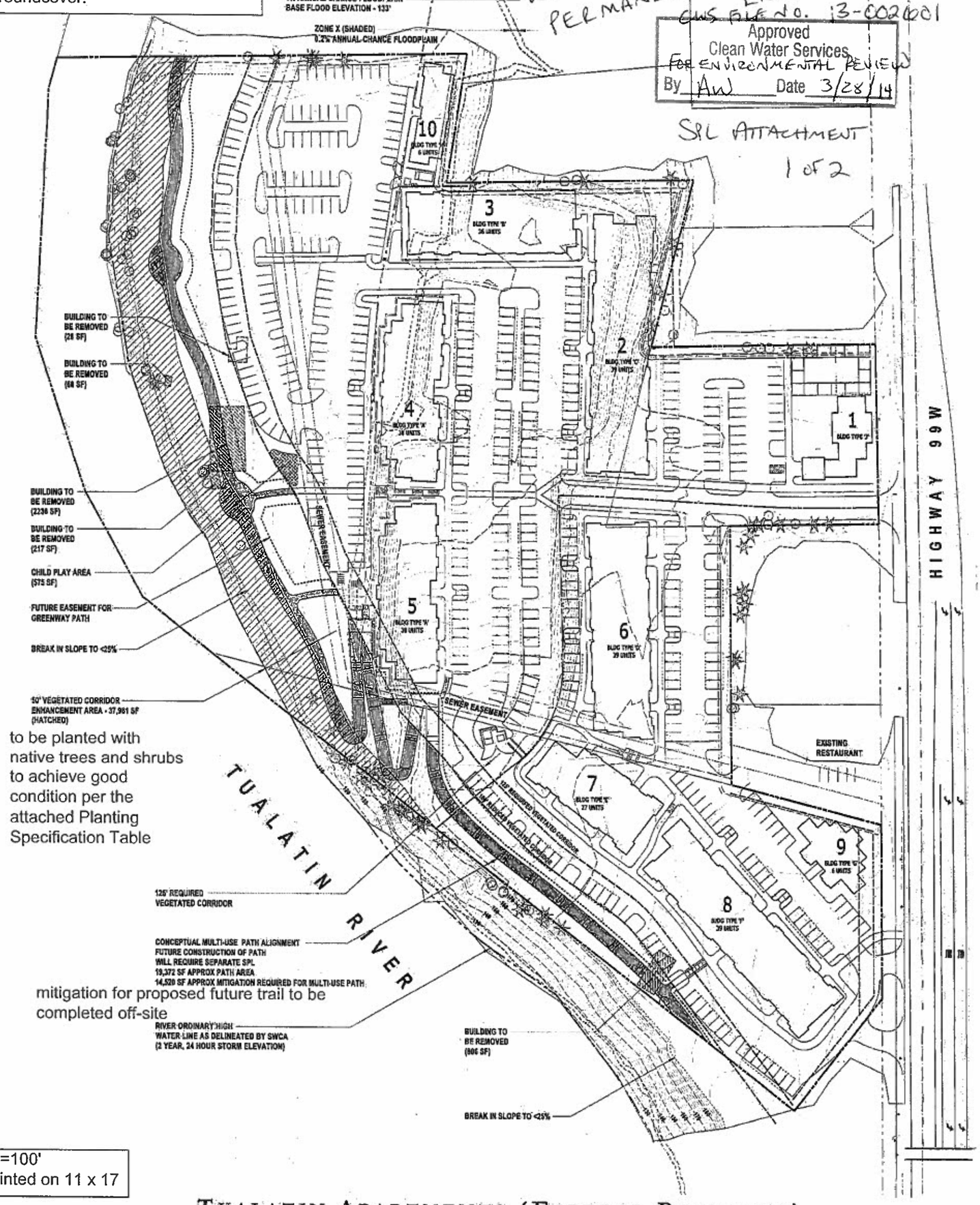
A total of 3,347 SF of temporary impacts are proposed for demolition of buildings in vegetated corridor. Portions of temporary impacted vegetated corridor within the 50 foot enhancement area will be planted with native trees, shrubs, and groundcover.

NOTE: TRAIL IS NOT APPROVED UNDER THIS SPL. TRAIL AND ANY ADDITIONAL DEVELOPMENT WILL REQUIRE A SEPARATE SERVICE PROVIDER LETTER WITH REQUIRED MITIGATION FOR PERMANENT VEGETATED CORRIDOR ENCROACHMENT.

CWS FILE NO. 13-002001

Approved
Clean Water Services
FOR ENVIRONMENTAL REVIEW
By AW Date 3/28/14

SPL ATTACHMENT 1 of 2



1"=100'
printed on 11 x 17

TUALATIN APARTMENTS (ESPEDAL PROPERTY)
TUALATIN, OREGON

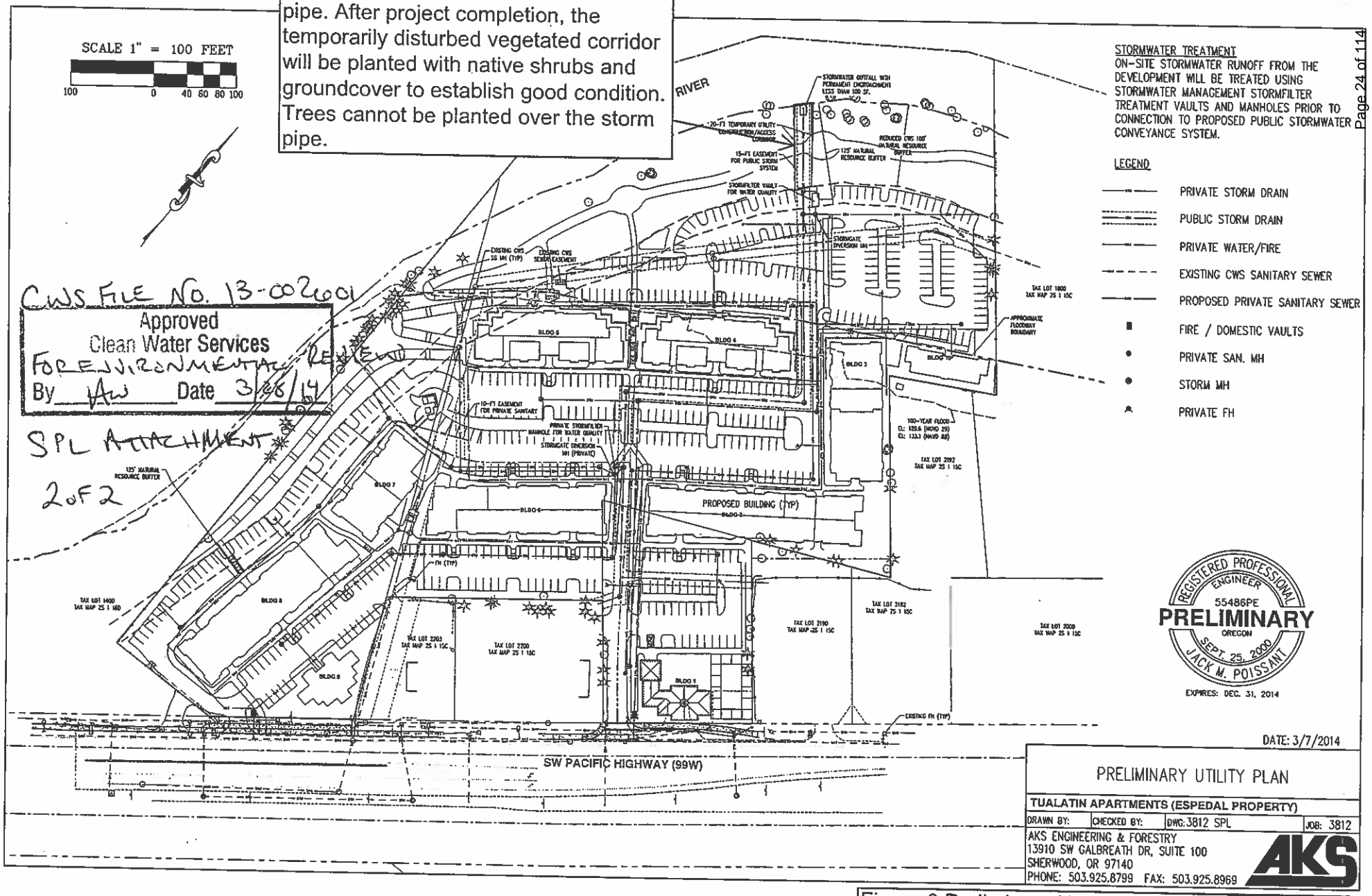
HILL ARCHITECTS

SPL SITE PLAN
MARCH 6, 2014

1 9 1 4 WILLAMETTE FALLS DRIVE • SUITE 2 5 0 • WEST LINN • OREGON 9 7 0 6 8

Figure 6 Site Plan
Tualatin Apartments / Espedal Property
Natural Resource Assessment

~2,020 SF of marginal and degraded condition vegetated corridor will be disturbed for the installation of the storm pipe. After project completion, the temporarily disturbed vegetated corridor will be planted with native shrubs and groundcover to establish good condition. Trees cannot be planted over the storm pipe.



CWS FILE NO. 13-002601

Approved
Clean Water Services
FOR ENVIRONMENTAL REVIEW
By AW Date 3/28/14

SPL ATTACHMENT
2 OF 2

Figure 8 Preliminary Utility Plan
Tualatin Apartments / Espedal Property
Natural Resource Assessment

CWS Upper Tualatin Interceptor Letter

Clean Water Services
Our commitment is clear.

June 2, 2014

Tony Doran
Community Development - Engineering
City of Tualatin
18800 SW Martinazzi Avenue
Tualatin, Oregon 97062

RE: River Ridge Development – Upper Tualatin Interceptor

Mr. Doran,

This letter is notice that Clean Water Services (District) has contracted with AKS Engineering & Forestry to facilitate the relocation of the Upper Tualatin Interceptor in conjunction with the River Ridge Development located at 17865 & 17985 SW Pacific Highway (taxlots 2S115C002202 & 2S115C002300 respectively). District is currently engaged with the Developer to coordinate the relocation of the Interceptor, and has requested the Interceptor design be incorporated with the Development Architectural Review (AR) to facilitate permitting and coordination with other utilities. District's Capital Projects department will closely review, comment, and approve the design and construction of the Interceptor, although no formal permit will be issued. The review will only be in relation to the Interceptor alignment, and shall not constitute review or approval of any other kind including environmental, water quality, or erosion control. It is assumed a Service Provider Letter will still be required for the Development (including Interceptor), and all requirements of that SPL shall be upheld. District requests that the City of Tualatin accept the Interceptor design as part of the AR package, and approve its construction along with the Development. If you have any questions regarding the Interceptor project, or wish to coordinate our review efforts, please feel free to contact me at (503) 681-4426.

Sincerely,

Brad Crement, PE
Project Engineer

Legal Description

Pacific NW Title
02213959-W
T.O.

10-6
2003.
11-

Washington County, Oregon
10/11/2002 02:34:16 PM
D-DW Cnt=1 Stn=7 K GRUNEWALD
$10.00 $6.00 $11.00 $223.00 - Total=$250.00

2002-119631

00180021200201196310020020

I, Jerry Hanson, Director of Assessment and Taxation and Ex-Officio County Clerk for Washington County, do hereby certify that the within instrument of writing was received and recorded in the book of records of said county.

Jerry Hanson

Jerry R. Hanson, Director of Assessment and Taxation, Ex-Officio County Clerk

After Recording Return To:
Sean P Casey
45617 N State Street
Lake Oswego, OR 97035

Send Tax Statements To:
Sean P Casey
45617 State Street
Lake Oswego OR 97035

KEY TITLE COMPANY

Title Order No. 02213959
Escrow No. 21-22962

Tax Account No.

WARRANTY DEED
(ORS 93.850)

Emilia P Camara, an estate in fee simple, Grantor, conveys and warrants to **Sean P Casey, an estate in fee simple, Grantee,** the following described real property free of encumbrances except as specifically set forth herein:

See Exhibit 'A' attached hereto and by reference made a part hereof.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

The true consideration for this conveyance is $223,000.00.

Dated this 10th day of OCTOBER, 2002.

WASHINGTON COUNTY
REAL PROPERTY TRANSFER TAX
$223.00 FEE PAID
10-11-02 DATE

Emilia P Camara

State of OR, County of Washington)ss.

This instrument was acknowledged before me on OCTOBER 10, 2002 by Emilia P Camara.

Carol C. Jackson
Notary Public

My commission expires: 6/15/06

OFFICIAL SEAL
CAROL C JACKSON
NOTARY PUBLIC - OREGON
COMMISSION NO. 356293
MY COMMISSION EXPIRES JUNE 15, 2006

Exhibit A

Part of Lot 42, HAZELBROOK FARM, in the County of Washington and State of Oregon, also being a portion of that tract of land conveyed to Angelo Ed Garcia, et ux, by Deed recorded December 10, 1945 in Book 252, Page 545, Washington County, Oregon, Deed Records, more particularly described as follows:

BEGINNING at an iron pipe on the Northwesterly right of way line of the West Side Pacific (State Highway), which iron pipe bears North 89°52' East, a distance of 143.4 feet and North 51°48' East, a distance of 175.0 feet from the Southwest corner of Lot 42 and which corner is also the Southwest corner of Section 15, Township 2 South, Range 1 West, of the Willamette Meridian; thence from the described place of beginning, North 51°48' East along the Northwesterly line of said highway, a distance of 121.7 feet; thence North 38°12' West, a distance of 150 feet; thence South 51°48' West, a distance of 81 feet, more or less, to the West line of said Garcia Tract; thence South 23°45' East along the West line of said Garcia Tract, a distance of 155 feet, more or less, to the place of beginning.

Subject to:

Statutory powers of the Clean Water Services; Access Restrictions Recorded July 6, 1953, Book 346, Page 464; amended by instrument Recorded 8/8/58; Book 407, Page 626; Easement Recorded 9/22/54, Book 360, Page 616; Easement Recorded 1/10/77, Book 1137, Page 301; Easement Recorded 9/29/78, Fee No. 78043411; Easement Recorded 11/18/81, Fee No. 81038748 .

Washington County, Oregon
03/26/2007 03:45:59 PM 2007-033192
D-DBS Cnt=1 Stn=13 I CASTILLO
$25.00 $6.00 $11.00 - Total = $42.00

01092472200700331920050051

I, Richard Hobernicht, Director of Assessment and Taxation and Ex-Officio County Clerk for Washington County, Oregon, do hereby certify that the within instrument of writing was received and recorded in the book of records of said county.

Richard Hobernicht, Director of Assessment and Taxation, Ex-Officio County Clerk

AFTER RECORDING, RETURN TO:

John H. Rosenfeld
Tonkon Torp LLP
888 SW Fifth Avenue, Suite 1600
Portland, OR 97204-2099

UNTIL A CHANGE IS REQUESTED,
SEND ALL TAX STATEMENTS TO:

No Change Requested

BARGAIN AND SALE DEED

Joyce Lee Poppert, Donna June Degele and Kenneth Russell Espedal, successor Trustees of the Espedal Family Trust U/T/A dtd 3/18/93, Grantor, conveys to Kenneth R. Espedal, Joyce L. Poppert and Donna J. Degele, Trustee of the Degele Family Trust U/T/A dtd 1/19/93, each as to an undivided one-third interest, Grantees, that certain real property located in Washington County, Oregon, and more particularly described on the attached Exhibit "1."

The true consideration for this conveyance is property or value other than money.

By reason of the deaths of Helen L. Espedal (on 10/2/05) and Russell M. Espedal (on 2/18/06), Joyce Lee Poppert, Donna June Degele and Kenneth Russell Espedal are the successor co-Trustees of the Espedal Family Trust. This Deed represents a distribution from the Espedal Family Trust.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 197.352. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930 AND TO INQUIRE

ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 197.352.

DATED: February 26, 2007.

GRANTOR:

ESPEDAL FAMILY TRUST U/T/A
DTD 3/18/93

Joyce Lee Poppert

Joyce Lee Poppert, Trustee

Donna June Degele

Donna June Degele, Trustee

Kenneth Russell Espedal

Kenneth Russell Espedal, Trustee

STATE OF ~~OREGON~~ CALIFORNIA)
) ss.
County of ORANGE)

The foregoing instrument was acknowledged before me on the 26 day of February, 2007, by ~~Joyce Lee Poppert~~ Donna June Degele, co-Trustee of the Espedal Family Trust U/T/A dtd 3/18/93.

Notary Public for ~~Oregon~~ CALIFORNIA
My commission expires: Nov 20, 2010

D.J.R. BRIMMER
Commission # 1706292
Notary Public - California
Orange County
My Comm. Expires Nov 20, 2010

STATE OF OREGON)
) ss.
County of Multnomah)

The foregoing instrument was acknowledged before me on the 1st day of March, 2007, by Joyce Lee Poppert, co-Trustee of the Espedal Family Trust U/T/A dtd 3/18/93.

OFFICIAL SEAL
MARY SCANLON KNOWLES
NOTARY PUBLIC-OREGON
COMMISSION NO. 401967
MY COMMISSION EXPIRES MARCH 8, 2010

Mary Scanlon Knowles
Notary Public for Oregon
My commission expires: 3-8-10

STATE OF OREGON)
) ss.
County of Multomah)

The foregoing instrument was acknowledged before me on the 1st day of March, 2007, by Kenneth Russell Espedal, co-Trustee of the Espedal Family Trust U/T/A dtd 3/18/93.

OFFICIAL SEAL
MARY SCANLON KNOWLES
NOTARY PUBLIC-OREGON
COMMISSION NO. 401967
MY COMMISSION EXPIRES MARCH 8, 2010

Mary Scanlon Knowles
Notary Public for Oregon
My commission expires: 3-8-10

50551-1/744294

EXHIBIT "1" (Page 1 of 2)

PARCEL I

A portion of that tract of land in Lot 42, HAZELBROOK FARM, Washington County, Oregon, conveyed to Percy Howarth by deed recorded March 24, 1958, in Book 403, page 242, Washington County, Oregon Deed Records, more particularly described as follows: BEGINNING at the most southerly corner of said Howarth tract, which is on the Northerly boundary line of the West side Pacific (State) Highway; thence North 51° 05' East along said highway boundary line 180 feet; thence North 39 ° 00' West a distance of 220 feet, more or less, to the Northerly line of said Howarth tract; thence South 66 ° 15' West along said Northerly line a distance of 190 feet, more or less, to the most westerly corner of said Howarth tract; thence South 39° 00' East a distance of 273.3 feet to the point of beginning; subject to a common easement or roadway as described in Suit to Effie Duncan, plaintiff, against Inez I. Duncan, defendant, Register No. 11645, in the Circuit Court of the State of Oregon for Washington County. (Tax Account No. R523473)

PARCEL II

A part of Lot 42, HAZELBROOK FARM, Washington County, Oregon, lying Westerly of the tract conveyed to C. W. Ryder et ux by deed recorded in Book 252, Page 545, described as follows: Beginning at an iron pipe on the Northwesterly right of way line of the West Side Pacific (State) Highway, which iron pipe bears North 89° 52' East 143.4 feet and North 51° 48' East 175.0 feet from the Southwest corner of Lot numbered Forty-two, is also the Southwest corner of Section 15, Township 2 South Range 1 West, W.M,.; thence from the described place of beginning North 23° 45' West 564.0 feet to an iron pipe; thence continuing North 23° 45' West 133.5 feet to a point in the Tualatin River and on the West line of said lot numbered Forty-two; at a distance of 746.9 feet North of the Southwest corner of said lot; thence North on said Lot line 73.1 feet to a point in the center of the Tualatin River at the Northwest corner of said lot; thence North 23° 48' East in the center of said river; 129.8 feet to a point; thence North 34° 10' East in the center of said river a distance of 160.0 feet to a point; thence North 55° 11' East in the center of said river a distance of 250.0 feet to a point; thence South 30° 00' East parallel to the Easterly line of said lot a distance of 413.3 feet to an iron pipe; thence South 61° 00' West a distance of 100.8 feet to an iron pipe; thence South 39° 00' East parallel to the Easterly line of said lot a distance of 246.1 feet to an iron pipe; thence South 66° 15' West a distance of 359.6 feet to an iron pipe; thence South 39° 00' East parallel to the Easterly line of said lot a distance of 273.3 feet to an iron pipe on the Northwesterly right of way line of the West Side Pacific (State) Highway; thence South 51° 05' West along said right of way line a distance of 50.7 feet to an iron right of way marker at Engineer's Station (Highway) 263+29.7; thence South 51° 48' West along said right of way line a distance of 250.5 feet to the place of beginning, EXCEPT THAT portion thereof conveyed to the State of Oregon by Deed recorded in Book 346, Page 464,

ALSO, an easement for road purposes of a strip of land 40 feet in width along the westerly line for egress from and ingress to the hereinabove described property.

EXCEPTING THEREFROM THE FOLLOWING PORTION:

Beginning at the most southerly corner of said premises, thence north 51° 48' East along the northwesterly line of said highway 250.5 feet; thence North 51° 5' along said highway 50.7 feet to an angle corner of said premises; thence north 39° 00' West along the line of said premises 150 feet; thence southwesterly parallel with the northwesterly line of said highway 260 feet more or less to the westerly line thereof; thence south 23° 45' East 160 feet more or less to the place of beginning. (Tax Account No. R523507).

PARCEL III

Beginning at the most Northerly corner of Lot 42, Hazelbrook Farm; thence South 67° 56' West 180.9 feet to the place of beginning of the tract to be described; thence South 39° 00' East 413.3 feet to a point; thence North 67° 56' East to a point which is 30 feet distant from, when measured at right angles, to the last mentioned line and a Southerly extension thereof; thence North 39° 00' West, parallel with and 30.0 feet distant from said last mentioned line, 413.3 feet to a point on the Northwesterly line of said Lot 42; thence South 67° 56' West to the place of beginning, in Washington County, Oregon.

PARCEL IV

A portion of Lot 42, HAZELBROOK FARM, a duly recorded subdivision in T 2S R1W W.M., Washington County, Oregon, more particularly described as follows, to-wit: Beginning at the SW corner of Lot 42, Hazelbrook Farm, which SW corner is also the SW corner of Section 15, T 2S R1W W.M; thence from the described place of beginning N along the W line of said Lot 42 a distance of 634.9 feet to an iron pipe; thence continuing N along said line a distance of 112.0 feet to a point in the Tualatin River; thence S 23° 45' E 113.5 feet to an iron pipe; thence continuing S 23° 45' E a distance of 564.0 feet to an iron pipe on the Northwesterly line of the W side Pacific (State) Highway; thence S 51° 48' W along said Highway right of way a distance of 175.0 feet to a point on the S line of said Lot 42 Hazelbrook Farm; thence S 89° 52' W along the lot line a distance of 143.4 feet to the place of beginning. Containing 2.586 acres.

Washington County, Oregon
05/29/2008 10:06:24 AM **2008-048434**
D-DW Cnt=1 Stn=16 D HOFFMAN
$20.00 $5.00 $11.00 - Total = $36.00

01255484200800484340040042

I, Richard Hobernicht, Director of Assessment and Taxation and Ex-Officio County Clerk for Washington County, Oregon, do hereby certify that the within instrument of writing was received and recorded in the book of records of said county.

Richard Hobernicht, Director of Assessment and Taxation, Ex-Officio County Clerk

THIS SPACE RESERVED

After recording return to:
Reza Lankarani
3944 Croisan Mt. Drive S
Salem, OR 97302

Until a change is requested all tax statements shall be sent to the following address:
Reza Lankarani
3944 Croisan Mt. Drive S
Salem, OR 97302

File No.: NCS-342689-OR1 (nc)
Date: March 04, 2008

STATUTORY WARRANTY DEED

ASR, LLC, an Oregon limited liability company, Grantor, conveys and warrants to **Reza Lankarani and Farah Pakseresht, as tenants by the entirety** , Grantee, the following described real property free of liens and encumbrances, except as specifically set forth herein:

See Legal Description attached hereto as Exhibit A and by this reference incorporated herein.

Subject to:

1. Covenants, conditions, restrictions and/or easements, if any, affecting title, which may appear in the public record, including those shown on any recorded plat or survey.

The true consideration for this conveyance is **$this deed is being given to amend the vesting only.**
(Here comply with requirements of ORS 93.030)

FATCO No 7019-1173962 (NCS-342689)

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195-336 AND SECTIONS 5 TO 11, OF CHAPTER 424, OREGON LAWS 2007. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930 AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195-336 AND SECTIONS 5 TO 11, OF CHAPTER 424, OREGON LAWS 2007.

Dated this 28th day of May, 2008.

ASR, LLC, an Oregon limited liability company

Managing Member

By: Reza Lankarani, Managing Member

STATE OF Oregon)
)ss.
County of Multnomah

This instrument was acknowledged before me on this 28 day of May, 2008 by Reza Lankarani as Managing Member of ASR, LLC, on behalf of the limited liability company.

OFFICIAL SEAL
NICOLE M CARLSON
NOTARY PUBLIC-OREGON
COMMISSION NO. 395661
MY COMMISSION EXPIRES AUG. 4, 2009

NICOLE M CARLSON
Notary Public for Oregon
My commission expires: 080409

EXHIBIT A

LEGAL DESCRIPTION:

PARCEL I:

A PORTION OF THAT TRACT OF LAND IN LOT 42, HAZELBROOK FARM, (PLAT BOOK 2, PAGE 0066) IN THE COUNTY OF WASHINGTON AND STATE OF OREGON, CONVEYED TO ARTHUR J. POULIN, ET UX, BY DEED RECORDED JUNE 03, 1964 IN BOOK 514, PAGE 0344, WASHINGTON COUNTY DEED RECORDS AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY CORNER OF SAID POULIN TRACT, SAID CORNER BEING ON THE NORTHERLY BOUNDARY LINE OF THE WEST SIDE PACIFIC (STATE) HIGHWAY; THENCE SOUTH 51° 05' WEST ALONG SAID HIGHWAY BOUNDARY LINE A DISTANCE OF 119.5 FEET TO A POINT WHICH IS THE TRUE POINT OF BEGINNING OF THE TRACT HEREIN DESCRIBED; THENCE SOUTH 51° 05' WEST ALONG SAID HIGHWAY BOUNDARY LINE A DISTANCE OF 119.7 FEET TO THE SOUTHWESTERLY CORNER OF SAID POULIN TRACT; THENCE NORTH 39° 00' WEST ALONG THE WESTERLY LINE OF SAID POULIN TRACT A DISTANCE OF 220.0 FEET, MORE OR LESS, TO THE NORTHERLY LINE OF SAID POULIN TRACT; THENCE NORTH 66° 15' EAST, A DISTANCE OF 121 FEET, MORE OR LESS, TO A LINE BEARING NORTH 30° WEST FROM THE TRUE POINT OF BEGINNING; THENCE SOUTH 39° EAST A DISTANCE OF 185.0 FEET, MORE OR LESS, TO THE TRUE POINT OF BEGINNING.

PARCEL II:

A PORTION OF THAT TRACT OF LAND IN LOT 42, HAZELBROOK FARM, (PLAT BOOK 2, PAGE 0066) IN THE COUNTY OF WASHINGTON AND STATE OF OREGON, CONVEYED TO ARTHUR J. POULIN, ET UX, BY DEED RECORDED JUNE 03, 1964, IN BOOK 514, PAGE 0344, WASHINGTON COUNTY DEED RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY CORNER OF SAID POULIN TRACT, SAID CORNER BEING ON THE NORTHERLY BOUNDARY LINE OF THE WEST SIDE PACIFIC (STATE) HIGHWAY; THENCE SOUTH 51° 05' WEST ALONG SAID HIGHWAY BOUNDARY LINE, A DISTANCE OF 119.5 FEET;
THENCE NORTH 39° 00' WEST A DISTANCE OF 185 FEET, MORE OR LESS, TO THE MOST SOUTHERLY NORTHWESTERLY LINE OF SAID POULIN TRACT; THENCE NORTH 66° 15' EAST ALONG SAID NORTHWESTERLY LINE A DISTANCE OF 40 FEET, MORE OR LESS, TO AN ANGLE CORNER; THENCE NORTH 39° 00' WEST A DISTANCE OF 246.1 FEET TO THE MOST NORTHERLY NORTHWESTERLY CORNER OF SAID POULIN TRACT; THENCE NORTH 61° 00' EAST ALONG THE MOST NORTHERLY NORTHWESTERLY LINE OF SAID POULIN TRACT, A DISTANCE OF 100.8 FEET TO THE MOST NORTHERLY CORNER OF SAID POULIN TRACT; THENCE SOUTHEASTERLY ALONG THE NORTHWESTERLY LINE OF POULIN TRACT, A DISTANCE OF 220 FEET, MORE OR LESS, TO A POINT ON THE NORTHWESTERLY LINE OF THAT TRACT OF LAND CONVEYED TO S.H. JOSEY, ET UX, BY DEED RECORDED IN BOOK 143, PAGE 0072, WASHINGTON COUNTY DEED RECORDS; THENCE SOUTH 51° 06' WEST ALONG THE NORTHWESTERLY LINE OF SAID JOSEY TRACT, A DISTANCE OF 45 FEET TO THE MOST WESTERLY CORNER OF SAID JOSEY TRACT; THENCE SOUTH 39° 00' EAST ALONG THE SOUTHWESTERLY LINE OF SAID JOSEY TRACT, A DISTANCE OF 179.3 FEET TO THE POINT OF BEGINNING.

THE LEGAL WAS CREATED PRIOR TO JANUARY 01, 2008

Architectural review narrative

River Ridge Apartments
Architectural Review

Submitted:	June 2014
Submitted to:	City of Tualatin Community Development Department 18880 SW Martinazzi Avenue Tualatin, OR 97062
Property Owners:	Donna J. Degele 16182 Bimini Lane Huntington Beach, CA 92649 Kenneth R. Espedal, Joyce L. Poppert 11515 SW Hazelbrook Road Tualatin, OR 97062
Applicant:	Mountain West Investment Corporation 201 Ferry Street SE, #400 Salem, OR 97301
Location:	17958 SW Pacific Highway
Site Size:	+/- 12 acres
Assessor's Information:	Washington County Assessor's Map Map 2S1 15D, Tax Lots 2191, 2202, & 2300
Comprehensive Plan/ Zoning Designation:	Residential High Density (RH)

I. Executive Summary

The applicant is pleased to submit this application for the River Ridge Apartment project for Mountain West Investment Corporation. The project involves a request for approval through Architectural Review to allow the construction of 14 new multi-family residential buildings containing a total of 180 units. The project includes a club house and pool area, common open space areas, a paved parking and vehicular circulation area, pedestrian connections, greenway path, landscaping improvements and all necessary supporting infrastructure.

Extensive research, detailed site investigations, and careful planning have led to the creation of this application. The essential components of the project are as follows:

- **Natural Resource Protection and Preservation.** The future River Ridge apartment project is adjacent to the Tualatin River. The subject site has approximately 3.38 acres of associated greenway, of which, +/- 2.22 acres is to be placed in a tract and donated to the City of Tualatin. The bulk of the development has been clustered to the south of the property toward SW Pacific Hwy. in order to preserve and protect as much of the site's natural resources as possible.

- **Housing.** The multi-family residential development of this property will provide opportunities for individuals and families to live in a high quality area with the river as a positive amenity all while being in close proximity to the employment, services, and transportation. Such residential development will provide housing opportunity for a broad spectrum of income levels, particularly as an alternative to home ownership in a traditional, single-family residential setting (e.g. a residential subdivision).

- includes a +/-1.2 acres parking area located in the 1.64 acres of land located in the associated floodway and approximately 510 cubic yards of fill for future buildings within the floodplain. Construction within the floodplain and floodway is addressed in greater detail under Chapter 70 located further in this narrative. The River Ridge apartments will protect and preserves 2.22 acres of the associated greenway in a tract, which will be donated to the City.

- **Open Space Opportunities.** Understanding that the opportunity to access and utilize open space is an important part of a successful and desirable residential project, the application features a variety of planned recreational amenities. This includes connections to the future Greenway path on adjacent properties as they develop, open lawns, sport court, children's playground, sand box and other appealing landscape features to enhance the livability of future residents.

- **Connectivity.** This application provides key infrastructure component connectivity. This includes secondary access for fire department and other emergency response providers, desirable looped public water system that improves water pressures, relocation and upsizing of the Upper Tualatin Sanitary Sewer Interceptor, sewer connection to adjoining properties to the northeast pedestrian and vehicular connectivity to Pacific Hwy., which will include 1.7 feet of dedication for new curb gutter and sidewalks for pedestrian connections to adjacent parcels.

The findings in this written narrative, together with the accompanying reports, studies, and preliminary plans demonstrate that the application satisfies applicable approval criteria. This evidence is substantial and provides the necessary factual basis supporting the City's approval of the application.

II. Site Description

1. **Zoning/Permitted Use:** The subject site is located in an area of properties with a number of different zoning designations. The subject site has recently been annexed and re-zoned (RH) High Density Residential the City's Zoning Map. Properties to the northeast of the subject site are designated (CR) Recreational Commercial and (CG) General Commercial. Properties to the southwest are designated (CG) General Commercial with properties across Pacific Highway to the south also zoned (CG) and (RH). Properties to the northwest across the Tualatin River have a residential zoning designation; however, they are located outside of city limits.

2. **Site Description**: The applicant's property is approximately 12 acres in size and is generally located northwest of the intersection of SW Pacific Hwy. and 124th Ave. at 17958 SW Pacific Hwy. existing site topography slopes generally from the southeast to the northwest toward the Tualatin River. The property has a fair number of trees and greenway corridor associated with the Tualatin River and 100-year flood plain.

3. **Project Description:** The project involves the creation of 180 multi-family apartments. Internal circulation is included so that services can be provided to all portions of the property. Each of the buildings will be provided with sanitary sewer, storm sewer, and water service, as well as utilities such as electrical, gas, phone, cable, etc. Additional details concerning the application can be gleaned from the preliminary plans, which are included in the application materials along with this project narrative and other written materials.

- **Sanitary Sewer**

As shown on the preliminary plans, this application connects to the existing onsite CWS sewer main. CWS has identified the sewer main as needing to be upsized in their master plan and intends to take advantage of the opportunity for this project to realign and upsize their existing infrastructure. The realigned 42" sanitary sewer line will extend service to the site and each building will be provided sanitary sewer laterals and connect to the main at the new manhole locations.

- **Stormwater Management**

On-site stormwater is collected and conveyed to the stormwater treatment swale located in the lower parking lot. Currently stormwater from neighboring parcels is conveyed underground through the site to an existing outfall on the Tualatin River. This application will realign the existing storm line and convert into a new public storm line and easement. Onsite stormwater will be collected, (no detention required) treated in the stormwater facility and then discharged into the new public storm line that will ultimately outfall to the Tualatin River. For additional information, please refer to the preliminary stormwater report and plans that are included in the application submittal materials.

- **Water Service**

This application abandons the existing onsite water meter services and connects to the 12" water main located at the Pacific Hwy frontage. The new service will create a looped water system. Each building will be provided with water laterals, fire service laterals and fire department connections (FDCs).

- **Transportation**

The subject site has frontage along SW Pacific Hwy. Site access will be provided by way of a 32' access drive from SW Pacific Hwy. A 20' emergency access is provided at the southwest end of the project. This application includes 1.7 feet of ROW dedication to Pacific Hwy. Planned improvements to Pacific Hwy. include construction of a deceleration lane, curb and sidewalk to ODOT standards along the main access and replacing the existing curb aligned sidewalk with landscape separated sidewalk to City standards along the emergency access. The future internal circulation will comply with City requirements.

4. **Dimensional Standards:**

   Setbacks in the (RH) residential district and for this project with the permitted 35% reduction (allowed by section 43.070) are as follows:

	Requested 35% Reduction
Minimum Lot Area:	**1,742 square feet**
Minimum Average Lot Width:	**75 feet**
Maximum Building Height:	**35 feet**
Front Yard Setback:	**Min: 22.75 feet (2 ½ story building)**
Side Yard:	**Min: 7.8 feet (2 ½ story building)**
Corner Side Yard:	**N/A**
Rear Yard Setback:	**Min: 7.8 feet (2 ½ story building)**
Off-Street Parking:	**N/A**

5. **Citizen Participation:** The applicant and project representatives have held two separate neighborhood meetings. The first meeting on January 9th 2014 was held to discuss the already approved annexation and plan map amendment and on March 11th 2014 to discuss the project. Copies of the March 11th meeting attendance roster, and a summary of the topics discussed at the neighborhood meeting are included in the application package. The City will send notice of this application to property owners within three hundred feet of the subject property, as well as various City departments, and other agencies to solicit public input.

6. **Residential Density Calculations:** The site is approximately 522,720 square feet (12 acres) in size. Due to right-of-way dedications and greenway tract, the net developable area for the project site is 379,410 square feet. Net developable area (8.7 acres), multiplied by 25, the maximum number of lots (density) is 217 units. Eighty percent of 217 is 174 units. Therefore, the project (180 units) complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable area.

III. Applicable Review Criteria

CITY OF TUALATIN LAND DEVELOPMENT CODE

Chapter 43 - High Density Residential Planning District

Section 43.015 Permitted Density.

Housing density shall not exceed 25 dwelling units per net acre, except as set forth below:

(1) Where provided by TDC 43.180.

(2) The maximum density for nursing and convalescent homes and retirement housing in accordance with 34.170(2) shall not exceed 37.5 dwelling units per net acre. [Ord. 956-96 §29, 1/8/96. Ord. 1026-99 §35, 8/9/99; Ord. 1272-08 §9, 11/10/08]

RESPONSE: The subject site consists of 3 units of land with a total square footage of 12 acres in size. Due to right-of-way dedications and area in the "Greenway," the net developable area for the project site is 8.7 acres.

Based on Tualatin's Density calculations which state "Housing density shall not exceed 25 dwelling units per net acre." The site is approximately 522,720 square feet (12 acres) in size. Due to right-of-way dedications and greenway tract, the net developable area for the project site is 379,410 square feet. Net developable area (8.7 acres), multiplied by 25, the maximum number of lots (density) is 215 units. Eighty percent of 217 is 174 units. Therefore, the project (180 units) complies with the maximum allowed density and achieves at least 80 percent of the maximum density of the base zone for the net developable area.

SITE AREA			
Tax Lots:	Developable Area	Undevelopable (Greenway/Vegetated Corridor Etc.) Area	Total Acres
2191	+/-1.03 ac.	-	+/-1.03 ac.
2202	+/-5.66 ac.	+/-2.72ac.	+/-8.38 ac.
2300	+/-1.93 ac.	+/-0.66 ac.	+/-2.59 ac.
Total	**+/-8.7 ac.**	**+/-3.38 ac.**	**+/-12.0 ac.**

Section 43.020 Permitted Uses.

No building, structures or land shall be used and no building or structures shall be erected, enlarged or altered except for the following uses:

(1) Townhouses and multi-family dwellings, including duplexes and triplexes.

*(2) Condominium dwellings constructed in accordance with **TDC 40.030(2)**.*

(3) Greenways and Natural Areas, including but not limited to bike and pedestrian paths and interpretive stations.

(4) Residential homes.

(5) Residential facilities.

(6) Family day care provider, provided that all exterior walls and outdoor play areas shall be a minimum distance of 400 feet from the exterior walls and pump islands of any automobile service station, irrespective of any structures in between.

(7) Sewer and water pump stations and pressure reading stations.

(8) Wireless communication facility attached.

(9) Wireless communication facility located within 300 feet of the centerline of I-5.

(10) Transportation facilities and improvements. [Ord. 824-91, § 4, 2/11/91; Ord. 849-91, § 14, 11/25/91; Ord. 965-96, § 24, 12/9/96; Ord. 979-97, § 15, 7/14/97; Ord. 1025-99, §18, 7/26/99; Ord. 1103-02, 03/25/02]

RESPONSE: The subject site is located in an area that has recently been annexed into the City of Tualatin and rezoned to RH (High Density Residential). The subject site's future use is to be multi-family residential, which is an allowed use in the RH zoning district.

Section 43.070 Permitted Uses.

Except as otherwise provided, the set-backs for permitted uses are:

(1) The front yard setback is a minimum of 20 feet for 1-story, 25 feet for 1 1/2-story, 30 feet for 2-story, and 35 feet for 2 1/2-story structures. The front yard setback for townhouses shall be 0-20 feet as determined in the Architectural Review process. The minimum setback to a garage door shall be 20 feet.

(2) The side yard setback shall be a minimum of 5 feet for 1-story, 7 feet for 1 1/2-story, 10 feet for 2-story, and 12 feet for 2 1/2-story structures. Where living spaces face a side yard, the minimum setback shall be 10 feet. The side yard setback for townhouses shall be determined in the Architectural Review process.

(3) On corner lots, the setback is the same as the front yard setback on any side facing a street other than an alley.

(4) The rear yard setback is the same as the side-yard setback.

(5) Where buildings are grouped as one project on one tract of land, the minimum distance between two buildings at any given point shall not be less than the sum of the maximum required side yards, computed separately for each building at that point. The minimum distance between two buildings on separate lots for townhouses shall be determined in the Architectural Review process.

(6) Off-street parking and vehicular circulation areas shall be set back a minimum of 10 feet from any public right-of-way or property line. The setback for such areas for townhouses shall be determined in the Architectural Review process.

*(7) Setbacks for a wireless communication facility shall be established through the Architectural Review process, which shall consider **TDC 73.510**, be a minimum of 5 feet, and shall be set back from an RL District, or an RML District with an approved small lot subdivision, no less than 175 feet for a monopole that is no more than 35 feet in height and the setback shall increase five feet for each one foot increase in height up to 80 feet in height, and the setback shall increase 10 feet for each one foot increase in height above 80 feet.*

(8) Except for setbacks abutting property lines in the RL District, the decision authority may allow a reduction of up to 35% of the required front, side or rear yard setbacks, as determined in the Architectural Review process, if as a result the buildings are farther away from fish and wildlife habitat areas, and provided the following criteria are met:

(a) A portion of the parcel must be:

> *(i) in the Natural Resource Protection Overlay District (NRPO), or*
> *(ii) in an Other Natural Area identified in **Figure 3-4** of the Parks and Recreation Master Plan, or*
> *(iii) in a Clean Water Services Vegetated Corridor; and*

(b) The portion of the parcel which meets the applicable criteria set forth in (a)(i), (ii), or (iii) must be placed in a Tract and must meet one of the following ownership criteria:

> *(i) be dedicated to the City at the City's option, or*
> *(ii) be dedicated in a manner approved by the City to a nonprofit conservation organization, or*
> *(iii) be retained in private owner-ship by the developer.*

RESPONSE: As allowed by section 8 of this standard, the applicant requests a 35% reduction to the maximum front, side and rear yard setbacks for the 2 ½ story buildings of the project. Setbacks for individual buildings are shown on the preliminary plan set. Approximately 2.22 acres of the associated "greenway" which includes NRPO, is indicated on the City's Parks and Recreation master Plan and has a CWS vegetated corridor which will be placed in a tract (created by a lot line adjustment) and donated to the City. The following table provides the dimensional requirements of the RH zoning district and the dimensional requirements with the requested 35% reduction. The criteria for the requested setback reduction are satisfied.

	Dimensional Requirements	**Requested 35% Reduction**
Minimum Lot Area:	1,742 square feet	
Minimum Average Lot Width:	75 feet	**75 feet**
Maximum Building Height:	35 feet	**35 feet**
Front Yard Setback:	Min: 20 feet (1-story building) Min: 35 feet (2 ½ story building0	**Min: 22.75 feet (2 ½ story building)**
Side Yard:	Min: 5 feet (1 story building) Min: 12 feet (2 ½ story building)	**Min: 7.8 feet (2 ½ story building)**
Corner Side Yard:	Min: 20 feet (1-story building) Min: 35 feet (2 ½ story building	**N/A**
Rear Yard Setback:	Min: 5 feet (1 story building) Min: 12 feet (2 ½ story building)	**Min: 7.8 feet (2 ½ story building)**
Off-Street Parking:	Min: 10 feet (from any public right-of-way or property line)	**N/A**

Section 43.080 Projections Into Required Yards.

Cornices, eaves, canopies, decks, sun-shades, gutters, chimneys, flues, belt courses, leaders, sills, pilasters, lintels, ornamental features, and other similar architectural features may extend or project into a required front and rear yard setback area not more than three feet and into a required side yard not more than two feet, or into the required open space as established by coverage standards in this chapter. The distances for such projections for townhouses shall be determined in the Architectural Review process. [Ord. 731-87, § 2, 9/14/87; Ord. 1025-99, §23, 7/26/99]

RESPONSE: Projections into required setbacks include the eaves of the future buildings. The requested projections will not exceed 3' as permitted. This criterion is satisfied.

Section 43.100 Structure Height.

(1) Except as otherwise provided, the maximum structure height is 35 feet.

(2) Maximum structure height for a wire-less communication support structure and antennas located within 300 feet of the centerline of I-5 is 120 feet. [Ord. 956-96, § 30, 1/8/96; Ord. 1116-02, 08/26/02]

RESPONSE: All future buildings of the project will satisfy maximum height standards as shown in the preliminary plan set. Therefore, this standard has been satisfied.

Section 43.120 Access.

All lots created after September 1, 1979, shall abut a public street, except secondary condominium lots, which shall conform to TDC 73.400 and TDC Chapter 75. Lots and tracts created to preserve wetlands, greenways, Natural Areas and Stormwater Quality Control Facilities identified by TDC Chapters 71, 72, Figure 3-4 of the Parks and Recreation Master Plan and the Surface Water Management Ordinance TMC Chapter 3-5, as amended, respectively, or for the purpose of preserving park lands in accordance with the Parks and Recreation Master Plan, may not be required to abut a public street. [Ord. 872-92, §6, 6/29/92; Ord. 956-96, §31, 1/8/96; Ord. 1025-99, §25, 7/26/99]

RESPONSE: The subject site has 355 feet frontage onto SW Pacific Hwy. The site will take access from SW Pacific Hwy. by means of a 32 foot access drive to serve the property. A 20 foot secondary emergency access drive will be located at the southwest end of the property. This standard has been satisfied.

Section 43.130 Off-Street Parking and Loading

Refer to TDC Chapter 73.

RESPONSE: Off-street parking is addressed further in this narrative under Chapter 73. This standard is satisfied.

Section 43.140 Floodplain District

Refer to TDC Chapter 70.

RESPONSE: Topics relevant to the Floodplain District are addressed further in this narrative under Chapter 70. This standard is satisfied.

Section 43.150 Wetland Protection District

Refer to TDC Chapter 70.

RESPONSE: There are no wetlands associated with this project. This section does not apply.

Section 43.160 Community Design Standard.

Refer to TDC Chapter 73.

RESPONSE: The Community Design Standards are addressed further in this narrative under Chapter 73. This standard is satisfied.

Section 43.170 Landscape Standards.

Refer to TDC Chapter 73.

RESPONSE: The Community Design Standards are addressed further in this narrative under Chapter 73. This standard is satisfied.

Section 43.180 Shift of Density for Multi-Family Residential Development Adjacent to a Greenway or Natural Area.

(1) The decision authority may allow the remainder of the parcel to be developed to the same number of residential units as would be permitted by the RH District standards if none of the parcel were in the NRPO District, Other Natural Area or Vegetated Corridor, provided the following criteria are met:

(a) A portion of the parcel must be:

(i) in the Natural Resource Protection Overlay District (NRPO), or

(ii) in an Other Natural Area identified in Figure 3-4 of the Parks and Recreation Master Plan, or

(iii) in a Clean Water Services Vegetated Corridor.

(b) The portion of the parcel which meets the applicable criteria set forth in (a)(i), (ii), or (iii) must be placed in a Tract and must meet one of the following ownership criteria:

(i) dedicated to the City at the City's option, or

(ii) dedicated in a manner approved by the City to a nonprofit conservation organization, or

(iii) retained in private ownership by the developer.

(c) Other TDC and RH District regulations shall be met, including, but not limited to building height, setbacks and building separations.

RESPONSE: An approximate 3.38 acre portion of the site is located within the Natural Resource Protection overlay District. However, No shift in density is requested. Therefore, this standard does not apply.

(2) The decision authority shall consider, but is not limited to, the following factors:

(a) Does the Park and Recreation Master Plan designate the Tract for a greenway, pedestrian or bike path, public park, recreation, overlook or interpretive facility, or other public facility;

(b) Does the Tract include one or more designated Heritage Trees, or one or more significant trees;

(c) Does the Tract provide a significant view or aesthetic element, or does it include a unique or intrinsically valuable element;

(d) Does the Tract connect publicly owned or publicly accessible properties;

(e) Does the Tract abut an existing park, greenway, natural area or other public facility;

(f) Does the Tract provide a public benefit or serve a public need;

(g) Does the Tract contain environmental hazards;

(h) Geologic stability of the Tract; and

(i) Future maintenance costs for the Tract. [Ord. 933-94, §23, 11/28/94; Ord. 956-96, §32, 1/8/96; Ord. 979-97, § 16, 7/14/97; Ord. 1136-03, 04/28/03; Ord. 1224-06 §10, 11/13/06]

RESPONSE: As mentioned in section #1 above, no shift in density is requested. This standard does not apply.

Chapter 70 – FLOOD PLAIN DISTRICT

Section 70.170 General Standards.

In all areas of special flood hazards, the following standards are required:

(1) Anchoring.

(a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

(b) All manufactured dwellings must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. (Reference FEMA' s "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques.)

RESPONSE: Portions of the future buildings and future storm and sanitary lines at the northeast end of the property are shown to encroach into the floodplain. The portions of the future buildings are to be

elevated out of the floodplain as indicated in the preliminary plan set. Storm and sanitary lines will be placed in utility easements. All utilities and buildings that are shown in the associated floodplain and floodway will be constructed/anchored to not allow flotation, collapse or lateral movement.

A parking area, greenway path and further extension of storm and sanitary lines associated with the project are shown to be constructed within the floodway. These amenities will be constructed/anchored to not allow flotation, collapse or lateral movement. This standard is satisfied.

(2) Construction Materials and Methods.

(a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(c) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(d) AH Zone Drainage. Adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.

RESPONSE: Portions of the future buildings and the future extension of sanitary and storm lines at the northeast end of the property are shown to encroach into the floodplain and floodway. The portions of the future buildings are to be elevated out of the floodplain as indicated in the preliminary plan set. Buildings and utilities will all be constructed of materials and methods that will be resistant to flood damage.

The future parking area and pedestrian path shown within the associated floodway will be constructed of materials and methods that will be resistant to flood damage during flooding. Tis standard is met.

(3) Utilities.

(a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

(b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

(c) On-site waste disposal systems shall be located so as to avoid impairment to them or contamination from them during flooding.

RESPONSE: A 20' public sanitary sewer easement and a 15' public stormwater easement will be located in the associated floodplain and floodway. The new lines within these easements are designed to

minimize infiltration of flood waters into the system and are located to avoid impairment to them. Therefore, these standards are satisfied.

(4) Subdivision Proposals.

(a) All subdivision proposals shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed so as to minimize flood damage.

(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

(d) here base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

RESPONSE: The requested approval is for a multi-family development and does not include a subdivision application. Therefore, these standards do not apply.

(5) Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (TDC 70.140(2)), applications for buildings permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates. [Ord. 717-87, §14, 4/27/87; Ord. 988-97, §10, 12/8/97; Ord. 1265-08 §4, 7/28/08.

RESPONSE: The portions of the future buildings located in the associated floodplain will be elevated above the established floodplain by a minimum of 2 feet as shown on the preliminary plan set. Therefore, this standard is satisfied.

The future parking area and pedestrian path shown within the associated floodway will be constructed to withstand flooding. This standard is met.

Section 70.180 Specific Standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in TDC 70.050, "BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD," or TDC 70.140(2), "USE OF OTHER BASE FLOOD DATA," the following provisions are required:

(1) Residential Construction.

(a) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation.

(b) New public streets providing vehicle access to residences, including residences within mixed use developments, shall be constructed at or above the base flood elevation. Public street rights-of-way in existence as of January 14, 1993, shall not be subject to this requirement.

(c) Below grade crawl-space construction in the floodplain shall comply with all NFIP specifications and applicable Building Code Requirements.

RESPONSE: The portions of the future buildings located in the associated floodplain will be elevated above the established floodplain by a minimum of 2 feet as shown on the preliminary plan set.

The future parking area and pedestrian path shown within the associated floodway will be constructed to withstand flooding. Vehicular access to future buildings will not be compromised. This standard is met.

(2) Nonresidential Construction.

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated at least one foot above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

(a) Be floodproofed so that below the base flood level the structure is watertight, with walls substantially impermeable to the passage of water.

(b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(c) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and review of the structural design, specifications and plans. Such certification shall be provided to the official as set forth in TDC 70.140(3)(b).

(d) Fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

(ii) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

(e) Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).

RESPONSE: The portions of the future buildings located in the associated floodplain will be elevated above the established floodplain by a minimum of 2 feet as shown on the preliminary plan set.

The future parking area and pedestrian path shown within the associated floodway will be constructed to withstand flooding. Vehicular access to future buildings will not be compromised. This standard is met.

(3) Manufactured Dwellings. Manufactured dwellings placed or substantially improved within Zones A1-30, AH, and AE shall be on a permanent foundation and shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation and shall be securely anchored to a foundation system in accordance with TDC 70.170(1)(b).

RESPONSE: No manufactured dwellings are located in the associated floodplain or the floodway. Therefore, these standards do not apply.

(4) Recreational Vehicles. Recreational vehicles that are permanently placed or substantially improved within Zones A1-30, AH, and AE shall be on a permanent foundation and shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation and shall be securely anchored to a foundation system in accordance with TDC 70.170(1)(b). [Ord. 717-87, 4/27/87; Ord. 882-92 §11, 12/14/99; Ord. 988-97, §11, 12/8/97; Ord. 993-98 §1, 2/23/98; Ord. 1048-00 §2, 2/28/00; Ord. 1265-08 §5, 7/28/08]

RESPONSE: No permanently placed recreational vehicles are associated with this project. Therefore, these standards do not apply.

Section 70.190 Floodways.

Located within areas of special flood hazard established by TDC 70.050 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters that carry debris, potential projectiles, and erosion potential, the following provisions apply:

(1) Prohibit encroachments, including fill, new construction, substantial improvements, and other development that will increase in flood levels during the occurrence of the base flood discharge.

(2) If TDC 70.190(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of TDC 70.170 to and including 70.190, Provisions for Flood Hazard Reduction. [Ord. 717-87, 4/27/87]

RESPONSE: A future parking area, greenway path and new storm and sanitary lines have been shown within the floodway on the preliminary plan set. The parking area, path and utilities have been designed by a Civil Engineer that certifies that no increase in flood levels will occur due to the future amenities. Please see the response to TDC 70.170 above.

Chapter 72 - NATURAL RESOURCE PROTECTION OVERLAY DISTRICT (NRPO)

Section 72.030 Greenways.

> *(1) Greenways can exhibit diverse characteristics. Those along the Tualatin River and Hedges, Nyberg and Saum Creeks can be natural in some sections and have pedestrian and bike paths in other sections. Greenways in built-up areas such as in subdivisions are typically landscaped with lawn and often include concrete pedestrian/bike paths.*

RESPONSE: The associated greenway will remain in its natural state and be placed in a tract and donated to the City. The planned pedestrian/bike path is shown to be located on the subject site and will extend the full width of the project.

Chapter 73 - COMMUNITY DESIGN STANDARDS

ARCHITECTURAL REVIEW APPROVAL

Section 73.050 Criteria and Standards.

> *(1) In exercising or performing his or her powers, duties, or functions, the Community Development Director shall determine whether there is compliance with the following:*
>
> > *(a) The proposed site development, including the site plan, architecture, landscaping, parking and graphic design, is in conformance with the standards of this and other applicable City ordinances insofar as the location, height, and appearance of the proposed development are involved;*
> >
> > *(b) The proposed design of the development is compatible with the design of other developments in the general vicinity; and*
> >
> > *(c) The location, design, size, color and materials of the exterior of all structures are compatible with the proposed development and appropriate to the design character of other developments in the vicinity.*

RESPONSE: The future development is consistent with the existing high density residential development in the area, more specifically the Woodridge Apartment Complex located across SW Pacific Hwy at 11865 SW Tualatin Rd. and will be a gleaming example of future trends in residential living in the Tualatin area. The location of structures, design, size and color of exterior materials will be of a quality that will be mimicked in future development in the area. As shown below and on the associated plans, the proposed development meets the applicable standards of the City of Tualatin Development Code.

(2) In making his or her determination of compliance with the above requirements, the Community Development Director shall be guided by the objectives and standards set forth in this chapter. If the architectural review plan includes utility facilities or public utility facilities, then the City Engineer shall determine whether those aspects of the proposed plan comply with applicable standards.

RESPONSE: This application includes architectural features as well as utility facilities and public improvements. AKS Engineering has worked closely with the City of Tualatin to plan utilities in a manner consistent with city code and beneficial for both the subject site and the surrounding area. This standard is met.

(3) In determining compliance with the requirements set forth, the Community Development Director shall consider the effect of his or her action on the availability and cost of needed housing. The Community Development Director shall not use the requirements of this section to exclude needed housing types. However, consideration of these factors shall not prevent the Community Development Director from imposing conditions of approval necessary to meet the requirements of this section. The costs of such conditions shall not unduly increase the cost of housing beyond the minimum necessary to achieve the purposes of this Code. As part of the Architectural Review process, the Community Development Director has no authority to reduce dwelling unit densities.

RESPONSE: The developer, Mountain West Investment Corp., has performed market studies for the area and determined that housing demands make this project feasible. We are confident that City Staff will not impose any unnecessary conditions that make this project unfeasible from a monetary perspective.

(4) As part of Architectural Review, the property owner may apply for approval to remove trees, in addition to those exemptions allowed in TDC 34.200(3), by submitting information concerning proposed tree removal, pursuant to TDC 34.210(1). The granting or denial of a tree removal permit shall be based on the criteria in TDC 34.230.

RESPONSE: The future construction of the subject site will include removal of 123 trees on the subject site due to grading needs for future buildings and associated amenities and trees having a hazardous rating. Trees to be removed will be replaced after the site is developed. A tree preservation and removal plan consistent with Criteria of TDC 34.230 has been included in the preliminary plan set.

(5) Conflicting Standards. In addition to the MUCOD requirements, the requirements in TDC Chapter 73 (Community Design Standards) and other applicable Chapters apply. If TDC Chapters 57, 73 and other applicable Chapters, conflict or are different, they shall be resolved in accordance with TDC 57.200(2).

RESPONSE: The subject site is not within the MUCOD. This standard does not apply.

COMMUNITY DESIGN STANDARDS

Section 73.130 Standards.

The following standards are minimum requirements for multi-family and townhouse development:

(1) Private Outdoor Areas.

(a) Except within the Central Design District, or within the Mixed Use Commercial Overlay District in which case the Architectural Review process shall determine the appropriate outdoor area, a separate outdoor area of not less than 80 square feet shall be attached to each ground level dwelling unit. These areas shall be separated from common outdoor areas in a manner which enables the resident to control access from separate to common areas with elements, such as walls, fences or shrubs.

(b) Except for townhouses, a separate outdoor area of not less than 48 square feet in the form of balconies, terraces, or loggias shall be provided for each unit located above the ground level, except that within the Central Design District or the Mixed Use Commercial Overlay District such outdoor areas may be less than 48 square feet.

RESPONSE: All ground floor units in the project will have private patios or no less than 80 square feet. Private patios will be separate from common outdoor areas and will be separated from common outdoor areas by means of decorative fencing and shrubbery. All 2nd and 3rd floor units will have private outdoor patios that are shown to be at least 48 square feet and/or 63 square feet depending on building layouts. These standards are satisfied.

(2) Entry Areas.

(a) Except as provided in TDC 73.130(2)(b), a private main entry area shall be provided in addition to required private outdoor areas and designed so that they are considered a private extension of each dwelling unit. Except for townhouses, each entrance area shall be a minimum of 24 square feet in area for each dwelling unit and may be combined to serve more than a single unit, subject to the following mini-mum area requirements:

(i) Two dwelling units for one-story buildings or two-story townhouses (48 square feet).

(ii) Four dwelling units for two-story buildings (96 square feet).

(iii) Six dwelling units for three-story buildings (144 square feet).

(iv) Unlimited for four-story and greater and for buildings with dwelling unit entries from interior corridors.

(b) Within the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, a private main entry area need not meet the minimum square footage requirements in TDC 73.130(2)(a).

(c) Entry areas shall be separated from on-site parking areas and public streets with landscaping, change of grade, low fences, walls or other means that enable the resident to supervise and control access and to retain privacy.

RESPONSE: Each of the future buildings will have its own private entrance that residents will use to access their individual units. Private entrances to buildings will be a minimum 144 square feet and include design features such as landscaping and walkways that direct residents to building access points. This standard is met.

(3) Shared Outdoor Areas and Children's Play Areas.

(a) Except for townhouses, projects with 12 or more dwelling units shall provide year round shared outdoor areas for both active and passive recreation (gazebos and other covered spaces are encouraged to satisfy part of this requirement) totaling not less than 450 square feet per dwelling unit. Except adult only projects, a minimum of 150 square feet of the 450 square feet shall be provided as a children's play area.

(b) The shared outdoor and children's play areas shall be located and designed in a manner which:

(i) Provides approximately the same accessibility to the maximum number of dwelling units possible;

(ii) Allows residents to watch over these areas from windows in at least two adjacent dwelling units. These windows must provide viewing from the kitchen, living room, dining room or other activity room (bedrooms or bathrooms are not included);

(iii) Provides a separation from all entryway and parking areas with a landscaped transition area measuring a minimum of 10 feet wide;

(iv) Controls access to shared outdoor areas from off-site as well as from on-site parking and entrance areas with features such as fencing, walls and landscaping;

(v) Provides both sunny and shady spots; and

(vi) Provides a usable floor surface (material such as lawn, decks, wood chips, sand and hard surface materials qualify).

(c) These standards shall not apply to townhouses or within the Central Design District or within the Mixed Use Commercial Overlay District. Within the Mixed Use Commercial Overlay District the amount of shared outdoor areas and children's play areas shall be consistent with the intent of the Mixed Use Commercial Overlay District and shall be appropriate for the design and scale of residential use proposed as determined through the Architectural Review process.

RESPONSE: This section requires projects with 12 or more dwelling units shall provide both active and passive recreation spaces totaling not less than 450 square feet per dwelling unit. The River Ridge Apartment project includes a total of 180 units. Therefore, 81,000 sq. ft. of both active and passive recreation spaces is required. Of the required open space, 27,000 sq. ft. shall be provided as children's play area. The planned outdoor recreation space is shown to be approximately 85,162 sq. ft. which 30,502 square feet of the future area is considered "children's play area," which meets this requirement. Please see preliminary plan set for specifics.

All shared open space areas and children's play areas are designed to be seen by a majority of future residential buildings as shown on the preliminary plan set. Access to shared outdoor areas will be by internal pedestrian walkways. All children's play areas will be separated from vehicular access by abutting landscaping at a minimum of 10'.

(4) Safety and Security.

(a) Except for townhouses, private outdoor areas shall be separated from shared outdoor areas and children's play areas with elements such as walls, buildings, landscaping, and changes in grade in a manner which enables residents to utilize these areas as an extension of their units.

(b) Windows shall be located to encourage watching over entry areas, shared outdoor areas, walkways and parking areas.

(c) An outdoor lighting system shall be provided which facilitates police observation and resident observation through strategic location, orientation and brightness without shining into residential units, public rights-of-way, or fish and wildlife habitat areas.

(d) An identification system shall be established which clearly orients visitors and emergency services as to the location of residential units. Where possible, this system should be evident from the primary vehicle entryway.

RESPONSE: All private outdoor areas (patios) of individual dwelling units will be separated from public areas by a combination of low walls and/or landscaping. Patios will be accessed by back doors of individual units. Windows will be located at either end of individual units, which will overlook landscape areas, associated parking areas, shared outdoor areas and entryways to individual buildings.

Appropriate and strategic outdoor lighting will be provided for each of the future buildings, parking areas and outdoor areas which will facilitate police and resident observation. Project lighting will be oriented so it won't shine into residential units, public rights-of-way or habitat areas.

Appropriate signage will be placed at the project's entrance and throughout the property to direct visitors and emergency services toward residential buildings. This standard is satisfied.

(5) Service, Delivery and Screening.

(a) Provisions for postal delivery shall be conveniently located and efficiently designed for residents and mail delivery personnel.

(b) Safe pedestrian access from unit entries to postal delivery areas, shared activity areas, and parking areas shall be provided. Elements such as, but not limited to, concrete paths, raised walkways through vehicular areas or bark chip trails will meet this requirement.

(c) On and above grade electrical and mechanical equipment such as transformers, heat pumps and air conditioners shall be screened with sight obscuring fences, walls or landscaping.

RESPONSE: Mail boxes will be conveniently located for postal delivery services, internal pedestrian walkways will be provided that will facilitate safe and convenient on-site access to resident facilities such as the club house, pool area, outdoor recreation and parking areas. All above ground mechanical equipment will be placed in areas away from residents and be screened from view using a combination of fencing and/or landscaping, depending on the type of equipment and its location.

(6) Accessways.

(a) Accessways shall be constructed, owned and maintained by the property owner.

(b) Accessways shall be provided between the development's walkway and bikeway circulation system and all of the following locations that apply:

(i) adjoining publicly-owned land intended for public use, including schools, parks, or bike lanes. Where a bridge or culvert would be necessary to span a designated greenway or wetland to provide a connection, the City may limit the number and location of accessways to reduce the impact on the greenway or wetland;

(ii) adjoining arterial or collector streets upon which transit stops or bike lanes are provided or designated;

(iii) adjoining undeveloped residential or commercial property; and

(iv) adjoining developed sites where an accessway is planned or provided.

(c) Accessways to undeveloped parcels or undeveloped transit facilities need not be constructed at the time the subject property is developed. In such cases the applicant for development of a parcel adjacent to a vacant parcel shall enter into a written agreement with the City guaranteeing future performance by the applicant and any successors in interest of the property being developed to construct an accessway when the adjacent undeveloped parcel is developed. The agreement shall be subject to the City's review and approval.

(d) Accessways for multi-family development shall:

(i) be a minimum of 8 feet in width;

(ii) be constructed in accordance with the Public Works Construction Code if they are public accessways, and if they are private accessways they shall be constructed of asphalt, concrete or a pervious surface such as pervious asphalt or concrete, pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable;

(iii) not have fences or gates which prevent pedestrian and bike access at the entrance to or exit from any accessway; and

(iv) have curb ramps wherever the accessway crosses a curb.

(e) Outdoor Recreation Access Routes shall be provided between the development's walkway and bikeway circulation system and parks, bikeways and greenways where a bike or pedestrian path is designated.

RESPONSE: All accessways will be 8' in width as shown on the preliminary plan set, be constructed in accordance to the Public Works Construction Code, be constructed of concrete and have curb ramps wherever the accessway crosses a curb. All future accessways will provide access to planned outdoor recreation areas. This standard is satisfied.

(7) Walkways.

(a) Except for townhouses, walkways for multi-family development shall be a minimum of 6 feet in width and be constructed of asphalt, concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be ADA compliant, if applicable.

(b) Curb ramps shall be provided wherever a walkway crosses a curb.

RESPONSE: Internal walkways adjacent to associated parking areas will be 7' in width, all other internal walkways will be 6' in width and will facilitate movement to project amenities such as the future clubhouse and pool and outdoor recreation areas. The future greenway path is planned to be 12' in width. Accessways will be concrete and be separated from vehicular movement by raised curbs. Walkway ramps will comply with ADA requirements and will be provided where accessways cross curbs. These standards have been satisfied.

(8) The Federal Americans With Disabilities Act (ADA) applies to development in the City of Tualatin. Although TDC Chapter 73, does not include the Oregon Structural Specialty Code' s (OSSC) accessibility standards as requirements to be reviewed during the Architectural Review process, compliance with the OSSC is a requirement at the Building Permit step. It is strongly recommended all materials submitted for Architectural Review show compliance with the OSSC.

RESPONSE: The site plan and buildings are generated with the knowledge that ADA, Fair Housing and OSSC standards must be met. This standard is satisfied.

Section 73.170 Structure Design – Single-family and Multi-family Uses.

(1) Purpose – Single-family Uses.

The purpose of single-family building design objectives and standards is to implement the purposes and objectives of TDC 73.020(2). The objectives and standards are intended to promote functional, safe, innovative and attractive buildings that are compatible with the surrounding environment. This concerns the building form including the articulation of walls, roof design, materials, and placement of elements such as windows, doors, and identification features.

(2) Purpose – Multi-family Uses.

The purpose of multi-family, including townhouse, building design objectives and standards is to implement the purposes and objectives of TDC 73.020(2). The objectives and standards are intended to promote functional, safe, innovative and attractive buildings which are compatible with the surrounding environment. This concerns the building form including the articulation of walls, roof design, materials, colors, placement of elements such as windows, doors, mechanical equipment and identification features. [Ord. 862-92, §51, 3/23/92. Ord. 1025-99, §36, 7/26/99; Ord. 1260-08 §7, 5/12/08]

RESPONSE: This project has been designed to be compatible with the surrounding environment to the greatest extent possible starting with building design, layout and building materials. Project landscaping has also taken the surrounding environment into consideration to help soften and integrate the project into the site's natural layout. This standard has been satisfied.

Section 73.180 Structure Design – Single-family and Multi-family Uses.

(2) Objectives – Multi-family Uses.

All multi-family projects, including town-houses, should strive to meet the following objectives to the maximum extent practicable. Architects and developers should consider these elements in designing new projects. In the Central Design District, the Design Guidelines of TDC 73.610 shall be considered. In the case of conflicts between objectives, the proposal shall provide a desirable balance between the objectives. Townhouses may necessitate a different balancing than multi-family developments, such as apartments. Buildings shall be designed, to the maximum extent practicable, to:

(a) Provide a composition of building elements which responds to function, land form, identity and image, accessibility, orientation and climatic factors.

(b) Enhance energy efficiency through the use of landscape and architectural elements, such as arcades, sun-screens, lattice, trellises, roof overhangs and window orientation.

(c) Create subclusters and stagger unit alignments.

(d) Utilize functional building elements such as carports and garages, balconies, entry areas and sun screens where possible to accomplish unit identity, pride of place and visual diversity.

(e) Give consideration to organization, design and placement of windows as viewed on each elevation. The system may be a variation on a theme or consistent symmetry and must operate in concert with the provision of adequate interior privacy, safety, daylight and ventilation.

(f) Select building materials which contribute to the project's identity, form and function, as well as to the existing site and surrounding natural landscape and development.

(g) Select colors in consideration of lighting conditions under which the structure is viewed, the ability of the material to absorb, reflect or transmit light, and the color's functional role (whether to blend into the environment, express a particular character, discriminate materials, define form and volume or simply as an identification feature such as with color coding).

(h) Minimize disruption of natural site features such as topography, trees and water features. [Ord. 727-87, §7, 7/13/87; Ord. 862-92, §51, 3/23/92; Ord. 1025-99, §37, 7/26/99; Ord. 1097-02, 02/11/02; Ord. 1260-08 §8, 5/12/08]

RESPONSE: This project has been designed with consideration of the site's unique characteristics. The majority of the future residential buildings have been sited to maximize the view of the Tualatin River and associated greenway. Topography of the site has been a contributing factor to building placement and building height in order to provide views for buildings located on the interior of the site. Building separation has been shown in order to maximize natural light infiltration. Building materials and colors have been selected to create a quality identity that blends with the natural environment and enhances the residential experience of living in the area. The design of the project has taken the preservation of the associated greenway into consideration by minimizing the amount of impact to the site by developing under the maximum allowable density which minimizes the disruption of natural site features. This standard is satisfied.

Section 73.190 Standards – Single-family and Multi-family Uses.

(2) Standards - Multi-family Uses.

The following standards are minimum requirements for multi-family and townhouse development.

(a) Storage.

(i) Except as provided in Subsection (a)(ii), enclosed storage areas are required and shall be attached to the exterior of each dwelling unit to accommodate garden equipment, patio furniture, barbecues, bicycles, etc. Garages are not intended to satisfy storage requirements. Each storage area shall be a minimum of 6 feet in height and have a minimum floor area of:

(A) 24 square feet for studio and one bedroom units;

(B) 36 square feet for two bed-room units; and

(C) 48 square feet for greater than two bedroom units.

(ii) For townhouses and residential and mixed use residential developments in the Central Design District, or within the Mixed Use Commercial Overlay District as determined in the Architectural Review process, some provision shall be made for outdoor storage adjacent to private outdoor areas. Such provisions shall be reviewed for adequacy through Architectural Review and shall be designed to accommodate barbecues or other small deck equipment.

RESPONSE: Each unit will be provided with 24 sq. ft. of storage off of the associated decks. An additional 1,800 sq. ft. of storage will be provided at the lower level of the future clubhouse. According to this standard, "some provision shall be made for outdoor storage adjacent to private outdoor areas." Based on this information, the following table reflects the amount of storage provided, which exceeds the required storage imposed by this section.

Unit Type	# of Units	Required Storage	Planned Storage
1 Bedroom Units	60	1,440 sq. ft.	1,440 sq. ft.
2 Bedroom Units	102	3,672 sq. ft.	2,448 sq. ft.
3 Bedroom Units	18	864 sq. ft.	432 sq. ft.
Clubhouse			1,800 sq. ft.
TOTAL	**180 Units Provided**	**5,976 sq. ft. Required**	**6,120 sq. ft. Provided**

(b) Carports and Garages.

(i) If carports and garages are provided for multi-family development, except townhouses, the form, materials, color and construction shall be compatible with the complex they serve.

(ii) At least one garage space shall be provided for townhouses. [Ord. 705-86, § 6, 9/8/86; Ord. 862-92, § 51, 3/23/92; Ord. 882-92, § 14, 12/14/92; Ord. 1025-99, §38, 7/26/99; Ord. 1252-08 §2, 2/11/08; Ord. 1260-08 §9, 5/12/08]

RESPONSE: Carports will be provided for residents, which will be located at the front of each building. Carports will be constructed using the same color scheme and materials of the buildings they serve in order to have a uniform appearance. This standard has been satisfied.

Section 73.225 Mixed Solid Waste and Source Separated Recyclables Storage Areas for New or Expanded Multi-Unit Residential, Including Townhouses, Commercial, Industrial, Public and Semi-Public Development.

Purpose.

The purpose of mixed solid waste and source separated recyclables storage areas objectives and standards is to implement the purposes and objectives of TDC 73.020(2). The objectives and standards are intended to be flexible, easy and efficient to administer, and allow creativity. [Ord. 898-93, §6, 6/14/93. Ord. 1025-99, §39, 7/26/99; Ord. 1097-02, 2/11/02]

RESPONSE: A solid waste and recyclable storage area has been designed with the objectives of TDC 73.020(2) in mind. This area will mimic design standards and color schemes of the development in order to blend in with other amenities of the project. This standard has been satisfied.

Section 73.227 Standards.

The following standards are minimum requirements for mixed solid waste and source separated recyclables storage areas. To provide for flexibility in designing functional storage areas, this section provides four different methods to meet the objectives of providing adequate storage for mixed solid waste and source separated recyclables and improving the efficiency of collection. An applicant shall choose and implement one of the following four methods to demonstrate compliance: 1) minimum standards; 2) waste assessment; 3) comprehensive recycling plan; or 4) franchised hauler review, as more fully described in subsections (2), (3), (4) and (5) of this section.

> *(1) The mixed solid waste and source separated recyclables storage standards shall apply to all new or expanded multi-family residential developments containing five or more units and to new or expanded commercial, industrial, public and semi-public development.*

RESPONSE: This application is for a new multi-family residential development. These standards apply and are addressed below. The applicant has chosen to implement the Franchised Hauler Review Method, which is addressed below.

> *(5) Franchised Hauler Review Method. The franchised hauler review method provides for a coordinated review of the pro-posed site plan by the franchised hauler serving the subject property. This method can be used when there are unique conditions associated with the site, use, or waste stream that make compliance with any of the three other methods impracticable. The objective of this method is to match a specific hauler program (types of equipment, frequency of collection, etc.) to the unique characteristic(s) of the site or development. The applicant shall coordinate with the franchised hauler to develop a plan for storage and collection of mixed solid waste and source separated recyclables to be generated. A narrative describing how the proposed site meets one or more unique conditions, plus site plan and architectural drawings showing the size and location of storage area(s) required to accommodate anticipated volumes shall be submitted for Architectural Review. Additionally, a letter from the franchised hauler shall be submitted with the application that de-scribes the level of service to be provided by the hauler, including any special equipment and collection frequency, which will keep the storage area from exceeding its capacity. For purposes of this subsection the following constitute unique conditions:*

RESPONSE: The Franchised Hauler Review Method has been chosen due to the unique site conditions (floodplain, floodway, greenway, topography). A letter from the franchise hauler has been included with this application that approves the location, size of the future waste and recyclable area.

> > *(a) Use of either of the three other methods of compliance would interfere with the use of the proposed development by reducing the productive space of the proposed development, or make it impossible to comply with the minimum off-street parking requirements of the underlying planning district, or*

RESPONSE: Due to the unique site characteristics and the applicant's wishes to stay out of and preserve the natural amenities of the site, it has been determined that the other methods of compliance would interfere with the intent of this application.

(b) The site is of an irregular shape or possesses steep slopes that do not allow for access by collection vehicles typically used by the franchised hauler to serve uses similar in size and scope to the proposed use, or

RESPONSE: The site's topography has been a challenge throughout the design of this project. The placement of the waste and recyclable storage area is the most efficient and safe placement for collection vehicles to access such facility.

(c) The proposed use will generate unique wastes that can be stacked, folded, or easily consolidated without the need for specialized equipment, such as a compactor, and can therefore be stored in less space than is required by the Minimum Standards Method.

RESPONSE: The future use of the property is high density residential. Waste and recyclables from future residents does not require specialized equipment, however, a compactor is planned for this project to reduce the area needed for waste and recyclables. A letter from the franchise hauler approving the future waste and recyclable area is included with this application. This standard is satisfied.

If the application does not demonstrate that the franchised hauler method requires less space, through the Architectural Review process the minimum standards method may be required. The franchised hauler method shall be reviewed and approved as part of the Architectural Review process.

RESPONSE: As mentioned above, a letter from the franchise hauler approving the future trash and recyclable storage area has been included with this application. The future use of a compactor will significantly reduce the need for additional area for storage on an already constrained site. This standard is satisfied.

(6) Location, Design and Access Standards for Storage Areas. The following location, design and access standards are applicable for storage areas:

(a) Location Standards

(i) To encourage its use, the storage area for source separated recyclables may be co-located with the storage area for mixed solid waste.

(ii) Indoor and outdoor storage areas shall comply with Building and Fire Code requirements.

(iii) Storage area space requirements can be satisfied with a single location or multiple locations, and can combine both interior and exterior locations.

(iv) Exterior storage areas shall not be located within a required front yard setback or in a yard adjacent to a public or private street.

(v) Exterior storage areas shall be located in central and visible locations on the site to enhance security for users.

(vi) Exterior storage areas can be located in a parking area, if the proposed use provides parking spaces required through the Architectural Review process. Storage areas shall be appropriately screened according to TDC 73.227(6)(b)(iii).

(vii) Storage areas shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on site or on public streets adjacent to the site.

RESPONSE: The planned mixed solid waste and recyclable storage area is shown to be co-located at the south end of the subject site at a single location. The storage area is not located in a required front yard setback or in a yard adjacent to a public or private street. The storage area shall comply with Building and Fire Code requirements and is located in a visible area to enhance security for the project's future residents. Screening of the facility shall include fencing and/or masonry walls with security doors that will be sight obscuring. The planned storage area will be accessible for collection vehicles and will not obstruct pedestrian or vehicle movement. These standards are satisfied.

(b) Design Standards

(i) The dimensions of the storage area shall accommodate containers consistent with current methods of local collection at the time of Architectural Review approval.

(ii) Storage containers shall meet Fire Code standards and be made and covered with water proof materials or situated in a covered area.

(iii) Exterior storage areas shall be enclosed by a sight obscuring fence or wall at least 6 feet in height. In multi-family, commercial, public and semi-public developments evergreen plants shall be placed around the enclosure walls, excluding the gate or entrance openings. Gate openings for haulers shall be a minimum of 10 feet wide and shall be capable of being secured in a closed and open position. A separate pedestrian access shall also be provided in multi-family, commercial, public and semi-public developments.

(iv) Exterior storage areas shall have either a concrete or asphalt floor surface.

(v) Storage areas and containers shall be clearly labeled to indicate the type of material accepted.

RESPONSE: The planned storage area will be dimensioned to accommodate containers consistent with current methods of collection; it will be covered and as mentioned above, will include a sight obscuring gate. The remainder of the facility will be screened with fencing and/or masonry walls with appropriate landscaping. The floor of the storage area will be constructed of concrete and containers will be clearly labeled. These standards are satisfied.

(c) Access Standards

(i) Access to storage areas can be limited for security reasons. However, the storage areas shall be accessible to users at convenient times of the day, and to hauler personnel on the day and approximate time they are scheduled to provide hauler service.

(ii) Storage areas shall be designed to be easily accessible to hauler trucks and equipment, considering paving, grade, gate clearance and vehicle access. A minimum of 10 feet horizontal clearance and 8 feet vertical clearance is required if the storage area is covered.

(iii) Storage areas shall be accessible to collection vehicles without requiring backing out of a driveway onto a public street. If only a single access point is available to the storage area, adequate turning radius shall be provided to allow vehicles to safely exit the site in a forward motion. [Ord. 898-93, §8, 6/4/93]

RESPONSE: The future facility has been designed for easy access by both future residents and franchise collection vehicle and will not require backing movement onto a public street. Adequate turning radius for collection vehicles is provided as shown on the preliminary plan set. These standards have been satisfied.

LANDSCAPING

Section 73.230 Landscaping Standards.

Purpose.

The purpose of this section is to establish standards for landscaping within Tualatin in order to enhance the environmental and aesthetic quality of the City:

(1) By encouraging the retention and protection of existing trees and requiring the planting of trees in new developments;

(2) By using trees and other landscaping materials to temper the effects of the sun, wind, noise, and air pollution.

(3) By using trees and other landscaping materials to define spaces and the uses of specific areas; and

(4) Through the use of trees and other landscaping materials as a unifying element within the urban environment. [Ord. 705-86, §6, Sept. 8, 1986]

RESPONSE: The landscape plan submitted with this application shows a number of existing trees to remain and the planting of trees throughout the project in order to temper the effects of the sun, wind, noise and air pollution. The future planting of trees in conjunction with other landscape materials within the development will soften the impact of the project on the natural landscape and create a more pleasing atmosphere for residents and surrounding neighborhoods that are within view of the development.

Section 73.240 Landscaping General Provisions.

> *(9) Yards adjacent to public streets, except as described in the Hedges Creek Wetlands Mitigation Agreement, **TDC 73.240(7)**, shall be planted to lawn or live groundcover and trees and shrubs and be perpetually maintained in a manner providing a park-like character to the property as approved through the Architectural Review process.*

RESPONSE: The subject site is adjacent to SW Pacific Hwy. and provides a setback of 22.9'. This area is considered "yard area" and will be planted with lawn, trees and shrubs and be maintained as a park-like character. Please see the landscape plan included in our preliminary plan set for further details. This standard is satisfied.

> *(10) Yards not adjacent to public streets or Low Density Residential (RL) or Manufacturing Park (MP) Planning Districts shall be planted with trees, shrubs, grass or other live groundcover, and maintained consistent with a landscape plan indicating areas of future expansion, as approved through the Architectural Review process.*

RESPONSE: All future yard areas abutting adjacent properties, which are not zoned either (RL) or (MP), will be planted with trees, shrubs and grass as shown on the landscape plan submitted with our preliminary plan set. This standard is satisfied.

> *(11) Any required landscaped area shall be designed, constructed, installed, and maintained so that within three years the ground shall be covered by living grass or other plant materials. (The foliage crown of trees shall not be used to meet this requirement.) A maximum of 10% of the landscaped area may be covered with un-vegetated areas of bark chips, rock or stone. Disturbed soils are encouraged to be amended to an original or higher level of porosity to regain infiltration and stormwater storage capacity.*

RESPONSE: All landscaped areas will be covered with living plant materials, including trees, shrubs and groundcover. Bark mulch will cover ground in the landscaped areas between plantings, suppressing weeds and retaining moisture. No areas will be covered exclusively in bark chips, rock or stone. disturbed soils on the site will be amended to an original or higher level of porosity. This standard is met.

> *(13) Landscape plans for required landscaped areas that include fences should carefully integrate any fencing into the plan to guide wild animals toward animal crossings under, over, or around transportation corridors.*

RESPONSE: A 6' fence will be installed at the pool enclosure, which will deter wild animals from entering the pool area. This standard is satisfied.

Section 73.250 Tree Preservation.

(1) Trees and other plant materials to be retained shall be identified on the landscape plan and grading plan.

RESPONSE: The landscape plan and grading plan show all existing trees to be retained. Separate tree removal plans have been included in the preliminary plan set. Therefore, this standard has been satisfied.

(2) During the construction process:

(a) The owner or the owner's agents shall provide above and below ground protection for existing trees and plant materials identified to remain.

(b) Trees and plant materials identified for preservation shall be protected by chain link or other sturdy fencing placed around the tree at the drip line.

(c) If it is necessary to fence within the drip line, such fencing shall be specified by a qualified arborist as defined in TDC 31.060.

(d) Neither top soil storage nor construction material storage shall be located within the drip line of trees designated to be preserved.

(e) Where site conditions make necessary a grading, building, paving, trenching, boring, digging, or other similar encroachment upon a preserved tree's drip-line area, such grading, paving, trenching, boring, digging, or similar encroachment shall only be permitted under the direction of a qualified arborist. Such direction must assure that the health needs of trees within the preserved area can be met.

(f) Tree root ends shall not remain exposed.

RESPONSE: All trees and plant material indicated on the landscape plan, grading plan and tree preservation and removal plan to remain will be protected by providing sturdy fencing. All tree protection fencing will be placed at the drip line of trees or as otherwise noted by the project's arborist. No storage of materials including soil will be placed or stored within the drip line of trees to be saved and no grading or other activities associated with the development of the site will compromise the established protection measures unless allowed by the project's arborist. These standards are satisfied.

(3) Landscaping under preserved trees shall be compatible with the retention and health of said tree.

RESPONSE: No trees will be compromised by the installation of additional landscaping associated with the project. This standard is satisfied.

(4) When it is necessary for a preserved tree to be removed in accordance with TDC 34.210 the landscaped area surrounding the tree or trees shall be maintained and replanted with trees that relate to the present landscape plan, or if there is no landscape plan, then trees that are complementary with existing, nearby landscape materials. Native trees are encouraged

RESPONSE: If the removal of trees originally planned to be saved is necessary, nearby landscaping and trees will be protected to the extent possible. If need be, surrounding landscaping and trees will be replaced with like species.

(5) Pruning for retained deciduous shade trees shall be in accordance with National Arborist Association "Pruning Standards For Shade Trees," revised 1979.

RESPONSE: All pruning of deciduous shade trees shall be in accordance with National Arborist Association "Pruning Standards for Shade Trees."

(6) Except for impervious surface areas, one hundred percent (100%) of the area preserved under any tree or group of trees retained in the landscape plan (as approved through the Architectural Review process) shall apply directly to the percentage of landscaping required for a development.

RESPONSE: The area of all preserved trees has been included in the total percentage of landscaping for the development. This standard is satisfied.

Section 73.260 Tree and Plant Specifications.

(1) The following specifications are minimum standards for trees and plants:

(a) Deciduous Trees:

Deciduous shade and ornamental trees shall be a minimum one and one-half inch (1 1/2") caliper measured six inches (6") above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be characteristically shaped specimens.

(b) Coniferous Trees.

Coniferous trees shall be a minimum five feet (5') in height above ground, balled and burlapped. Bare root trees will be acceptable to plant during their dormant season. Trees shall be well branched and characteristically shaped specimens.

(c) Evergreen and Deciduous Shrubs.

Evergreen and deciduous shrubs shall be at least one (1) to five (5) gallon size. Shrubs shall be characteristically branched. Side of shrub with best foliage shall be oriented to public view.

(d) Groundcovers.

Groundcovers shall be fully rooted and shall be well branched or leafed. English ivy (Hedera helix) is considered a high maintenance material which is detrimental to other landscape materials and buildings and is therefore prohibited.

(e) Lawns.

Lawns shall consist of grasses, including sod, or seeds of acceptable mix within the local landscape industry. Lawns shall be 100 percent coverage and weed free.

RESPONSE: As shown in the attached landscape plan, the planned development includes a variety of appropriate landscaping elements including deciduous trees, coniferous trees, evergreen and deciduous shrubs and groundcovers. All lawns associated with the development will consist of a mix that is acceptable to the local landscape industry and be planted to ensure 100 percent coverage. All lawns will be maintained and weed free. This standard has been satisfied.

(2) Landscaping shall be installed in accordance with the provisions of Sunset New Western Garden Book (latest edition), Lane Publishing Company, Menlo Park, California or the American Nurserymen Association Standards (latest edition).

RESPONSE: Landscaping will be installed in accordance with the Sunset New Western Garden Book standards and has been designed by a professional landscape architect. This standard is satisfied.

(3) The following guidelines are suggested to ensure the longevity and continued vigor of plant materials:

(a) Select and site permanent landscape materials in such a manner as to produce a hardy and drought-resistant landscaped area.

(b) Consider soil type and depth, spacing, exposure to sun and wind, slope and contours of the site, building walls and overhangs, and compatibility with existing native vegetation preserved on the site or in the vicinity.

RESPONSE: Hardy, drought-resistant plants, appropriate to the site and region have been selected for the site. The site will be redeveloped prior to planting, therefore, new soil will be added. The project contractor will test and amend the soil as needed. These guidelines are satisfied.

(4) All trees and plant materials shall be healthy, disease-free, damage-free, well-branched stock, characteristic of the species.

RESPONSE: All plant materials will be new and healthy. This standard is satisfied.

(5) All plant growth in landscaped areas of developments shall be controlled by pruning, trimming or otherwise so that:

(a) It will not interfere with designated pedestrian or vehicular access; and

(b) It will not constitute a traffic hazard because of reduced visibility. [Ord. 904-93, §57, 9/13/93]

RESPONSE: The selected plant materials are appropriate for the site and climate and will not interfere with visibility or movement in clear vision areas. Responsibility for maintenance of landscaping is accepted by the property owner. This standard is met.

Section 73.270 Grading.

(1) After completion of site grading, top-soil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.

(2) All planting areas shall be graded to provide positive drainage.

(3) Neither soil, water, plant materials nor mulching materials shall be allowed to wash across roadways or walkways.

(4) Impervious surface drainage shall be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.

RESPONSE: Topsoil will be stockpiled during excavation to be used for backfill of landscape areas. Additionally, amendments will be added to the topsoil at that time. All planting areas shall be graded to provide positive drainage and all soil, plant and mulching materials will be contained in landscape areas and will not cross roadways or walkways. These standards have been satisfied.

Section 73.280 Irrigation System Required.

Except for townhouse lots, landscaped areas shall be irrigated with an automatic underground or drip irrigation system. [Ord. 1025-99, §42, 7/26/99]

RESPONSE: According to the landscape plan the landscaped areas will be irrigated. This standard is satisfied.

Section 73.290 Re-vegetation in Un-landscaped Areas.

The purpose of this section is to ensure erosion protection, and in appropriate areas to encourage soil amendment, for those areas not included within the landscape percentage requirements so native plants will be established, and trees will not be lost.

(1) Where vegetation has been removed or damaged in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements, vegetation shall be replanted.

(2) Plant materials shall be watered at intervals sufficient to ensure survival and growth for a minimum of two growing seasons.

(3) The use of native plant materials is encouraged to reduce irrigation and maintenance demands.

(4) Disturbed soils should be amended to an original or higher level of porosity to regain infiltration and stormwater storage capacity. [Ord. 1224-06 §27, 11/13/06]

RESPONSE: All areas disturbed outside of future landscaping or occupied by future site amenities will be re-established with native vegetation and maintained to ensure survival and growth for a minimum of two growing seasons. Disturbed soils will be amended to an original or higher level of porosity that will help facilitate retention for stormwater. These standards are satisfied.

Section 73.300 Landscape Standards - Multi-family Uses.

All areas within a development, including townhouses, not occupied by buildings, parking spaces, driveways, drive aisles, pedestrian areas, or undisturbed natural areas shall be landscaped. Townhouse developments may include hard surfaces in outdoor areas such as patios and storage areas as determined in the Architectural Review process. [Ord. 1025-99, §43, 7/2/99

RESPONSE: All areas not occupied by the future development of the subject site will be landscaped as required above and shown on the preliminary landscape plan. This standard is satisfied.

OFF-STREET PARKING LOT LANDSCAPING

Section 73.320 Off-Street Parking Lot Landscaping Standards.

(1) General Provisions. In addition to the goals stated in TDC 73.110 and 73.140, the goals of the off-street parking lot standards are to create shaded areas in parking lots, to reduce glare and heat buildup, provide visual relief within paved parking areas, emphasize circulation patterns, reduce the total number of spaces, reduce the impervious surface area and stormwater runoff and enhance the visual environment. The design of the off-street parking area shall be the responsibility of the developer and should consider visibility of signage, traffic circulation, comfortable pedestrian access, and aesthetics. Trees shall not be cited as a reason for applying for or granting a variance on placement of signs.

(2) Application. Off-street parking lot landscaping standards shall apply to any surface vehicle parking or circulation area.
[Ord. 904-93, §59, 9/13/93; Ord. 1224-06 §28, 11/13/06]

RESPONSE: As shown on the attached landscape plan, all vehicle parking and circulation areas will be landscaped to off-street parking lot landscaping standards that meet the above goals. This standard is met.

Section 73.330 Parking Lot Landscaping - Multi-family Uses.

> *(1) Locate landscaping or approved substitute materials in all areas not necessary for vehicular parking and maneuvering.*
>
> *(2) A clear zone shall be provided for the driver at ends of on-site drive aisles and at driveway entrances, vertically between a maximum of 30 inches and a minimum of 8 feet as measured from the ground level.*
>
> *(3) Except for townhouse lots, a minimum 10-foot landscape setback shall be provided between the property lines and parking areas. This area shall be planted with deciduous trees an average of not more than 30 feet on center and shrubs at least 30 inches in height which provide screening of vehicular headlights. Trees shall meet the requirements of TDC 73.360(7). Native trees and shrubs are encouraged.*
>
> *(4) Except for townhouse lots, provide a landscaped transition area of at least 10 feet in width between parking and vehicle circulation areas and buildings and shared outdoor areas. Deciduous shade trees located at not less than 30 feet on center shall be located in this transition area. The trees shall meet the requirements of TDC 73.360(7). Groundcover plants mixed with low shrubs must completely cover the remainder of this area within three years. Native trees and shrubs are encouraged. [Ord. 882-92, §17, 12/14/92. Ord. 1025-99, §44, 7/26/99; Ord. 1224-06 §29, 11/13/06]*

RESPONSE: As shown on the landscape plan included with the preliminary plan set, all vehicle parking and circulation areas will be landscaped to off-street parking lot landscaping standards. A 10-foot wide landscape setback between future parking areas and property lines has also been shown on the landscape plan that will be planted with deciduous trees that are spaced according to the above criterion. A 10-foot wide landscape transition area is also shown between all vehicle parking and circulation areas, buildings and shared outdoor areas. The landscape transition areas will be planted with groundcover plants mixed with low shrubs and trees. These standards are satisfied.

Section 73.350 Off-Street Parking Lot Landscape Island Requirements - Multi-Family Uses.

> *(1) Except for townhouse lots that are not required to have landscape island areas, a minimum of 25 square feet per parking stall shall be improved with landscape island areas. They may be lower than the surrounding parking surface to allow them to receive stormwater run-off and function as water quality facilities as well as parking lot landscaping. They shall be protected from vehicles by curbs, but the curbs may have spaces to allow drainage into the islands. They shall be dispersed throughout the parking area (see TDC 73.380(3). They shall be planted with groundcover or shrubs. They shall be planted with deciduous shade trees when needed to meet the parking lot shade tree requirements. Native plant materials are encouraged. Landscape square footage requirements shall not apply to parking structures and underground parking.*

(2) Landscape island areas with trees shall be a minimum of 5 feet in width (from inside of curb to curb).

(3) A minimum of one deciduous shade tree shall be provided for every four parking spaces to lessen the adverse impacts of glare, reduce heat from paved surfaces, and to emphasize circulation patterns. Required shade trees shall be within 5 feet of the face of a perimeter parking lot curb and shall be uniformly distributed throughout the parking lot (see TDC 73.380(3)), except that within the Central Design District landscape islands and shade trees may be placed to frame views of the Tualatin Commons water feature or identified architectural focal elements. The trees shall meet the requirements of TDC 73.360(7).

(4) Required plant material in landscape islands shall achieve 90 percent coverage within three years. Native shrubs and trees are encouraged. [Ord. 882-92, §19, 12/14/92; Ord. 904-93, §62, 9/13/93; Ord. 1025-99, §45, 7/26/99; Ord. 1224-06 §31, 11/13/06]

RESPONSE: A total of 322 parking stalls are associated with the future development of the site. Based on the above requirement, a total of 8,050 square feet of landscape islands is required. This standard is met through the standard 16'-18' deep landscape islands located every 8 or fewer parking spaces, as well as through the landscaped areas at the ends of parking bays. The City of Tualatin considers any landscape area continued through the horizontal (bumper) line of the parking spaces as a "landscape island area." Across the site, approximately 15,955 square feet of "landscape island areas" will be provided in the parking lot. Deciduous shade trees are provided for every four parking spaces and planted within 5 feet of the perimeter of future parking areas. This standard is met.

Section 73.370 Off-Street Parking and Loading.

(1) General Provisions.

(n) Bicycle parking facilities shall include long-term parking that consists of covered, secure stationary racks, lockable enclosures, or rooms (indoor or outdoor) in which the bicycle is stored and short-term parking provided by secure stationary racks (covered or not covered), which accommodate a bicyclist's lock securing the frame and both wheels. The Community Development Director, their designee, or the Architectural Review Board may approve a form of bicycle parking not specified in these provisions but that meets the needs of long-term and/or short-term parking pursuant to Section 73.370.

RESPONSE: The future development of the subject site will include 2 covered bicycle parking spaces at each stairwell of the planned buildings. There are a total of 29 stairwells planned for a total of 58 covered spaces. Each unit will also have 1 covered bicycle space in the associated balcony storage area for a total of 180 stalls. Therefore, a total of 238 bicycle parking stalls are provided.

(o) Each bicycle parking space shall be at least 6 feet long and 2 feet wide, and overhead clearance in covered areas shall be at least 7 feet, unless a lower height is approved through the Architectural Review process.

RESPONSE: the future bicycle parking stalls will be at least 6' long and 2' wide. Overhead clearance of covered bicycle parking stalls will be at least 7 feet.

(p) A 5-foot-wide bicycle maneuvering area shall be provided beside or between each row of bicycle parking. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

RESPONSE: A minimum 5' wide bicycle maneuvering area shall be provided on either side of the future bicycle parking stalls. The area for which bicycle parking will be provided shall be concrete. This standard is satisfied.

(q) Access to bicycle parking shall be provided by an area at least 3 feet in width. It shall be constructed of concrete, asphalt or a pervious surface such as pavers or grasscrete, but not gravel or woody material, and be maintained.

RESPONSE: As mentioned above, bicycle parking will be provided at the stairwells of the associated residential buildings. This area will be concrete and be a minimum of 3' in width. This standard is satisfied.

(r) Required bicycle parking shall be located in convenient, secure, and well-lighted locations approved through the Architectural Review process. Lighting, which may be provided, shall be deflected to not shine or create glare into street rights-of-way or fish and wildlife habitat areas.

RESPONSE: As mentioned above, bicycle parking will be provided at the stairwells of the associated residential buildings. This area will have appropriate lighting which will not shine or create glare into street rights-of-way or wildlife habitat areas. This standard is satisfied.

(s) Long-term bicycle parking facilities may be provided inside a building in suitable secure and accessible locations.

RESPONSE: One bicycle parking stall will be provided on the patio of each unit, which is considered suitably secured and accessible. This standard is satisfied.

(t) Bicycle parking may be provided within the public right-of-way in the Core Area Parking District subject to approval of the City Engineer and provided it meets the other requirements for bicycle parking.

RESPONSE: The subject site is not within the "Core Area Parking District." Therefore, this standard does not apply.

(u) Bicycle parking areas and facilities shall be identified with appropriate signing as specified in the Manual on Uniform Traffic Control Devices (MUTCD) (latest edition). At a minimum, bicycle parking signs shall be located at the main entrance and at the location of the bicycle parking facilities.

RESPONSE: Appropriate signage will be placed on the subject site that will direct residents to bicycle parking areas. This standard is satisfied.

(v) Required bicycle parking spaces shall be provided at no cost to the bicyclist, or with only a nominal charge for key deposits, etc. This shall not preclude the operation of private for-profit bicycle parking businesses.

RESPONSE: There will be no additional cost for bicycle parking on the subject site. This standard is satisfied.

(w) Parking on existing residential, commercial and industrial development may be redeveloped as a transit facility as a way to encourage the development of transit supportive facilities such as bus stops and pullouts, bus shelters and park and ride stations. Parking spaces converted to such uses in conjunction with the transit agency and approved through the Architectural Review process will not be required to be replaced.

RESPONSE: No parking associated with this project will be dedicated for transit facilities. This standard does not apply.

*(x) Required vanpool and carpool parking shall meet the 9-foot parking stall standards in **Figure 73-1** and be identified with appropriate signage.*

RESPONSE: No parking associated with this project will be dedicated for vanpool or carpooling. This standard does not apply.

(2) Off-Street Parking Provisions.

> *(a) The following are the minimum and maximum requirements for off-street motor vehicle parking in the City, except for minimum parking requirements for the uses in TDC 73.370(2)(a) (Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv) within the Core Area Parking District (CAPD). Minimum standards for off-street motor vehicle parking for the uses in 73.370(2)(a) Residential Uses: iii, iv, v, vi, vii; Places of Public Assembly: I, ii, iv; Commercial Amusements: I, ii; and Commercial: I, ii, xi, xii, xiv in the CAPD are in TDC 73.370(2)(b). The maximum requirements are divided into Zone A and Zone B, as shown on the Tualatin Parking Zone Map, Figure 73-3. The following are exempt from calculation of maximum parking requirements: parking structures; fleet parking; parking for vehicles for sale, lease or rent; car/vanpool parking; dedicated valet parking; and user-paid parking.*

USE	*MINIMUM MOTOR VEHICLE PARKING REQUIREMENT*	*MAXIMUM MORTOR VEHICLE PARKING REQUIREMENT*	*BICYCLE PARKING REQUIREMENT*	*PERCENTAGE OF BICYCLE PARKING TO BE COVERED*
RESIDENTIAL USES:				
(iii) Multi-family dwellings in complexes with private internal driveways	*1.0 space/studio, 1.25 space/1 bedr., 1.50 space/2 bedr., 1.75 space/3=bedr. In addition to garage*	*none*	*Developments with four or more units; none required if a garage is provided as an integral element of a unit; otherwise 1.00 space pre unit*	*100*

RESPONSE: The future use of the subject site is a multi-family complex. The following chart indicates the number and type of each unit, the minimum and maximum number of parking and bicycle stalls required and planned for the project.

Unit Type	# of Units	Required Parking	Proposed Parking	Required # Bike Parking	# of Bike Stalls
1 BR Units	60	75	Avg: 107	60	Avg: 80
2 BR Units	102	153	Avg: 107	102	Avg: 121
3 BR Units	18	31.5	Avg: 108	18	Avg: 37
TOTAL	**180 Units Provided**	**259.5 Parking Stalls Required**	**322 Parking Stalls Provided**	**180 Bicycle Stalls Required**	**238 Bicycle Stalls Provided**

Section 73.380 Off-Street Parking Lots.

A parking lot, whether an accessory or principal use, intended for the parking of automobiles or trucks, shall comply with the following:

> *(1) Off-street parking lot design shall comply with the dimensional standards set forth in Figure 73-1 of this section, except for parking structures and underground parking where stall length and width requirements for a standard size stall shall be reduced by .5 feet and vehicular access at the entrance if gated shall be a minimum of 18 feet in width.*

RESPONSE: The future 322 parking stalls are shown at a 90 degree angle. Each standard stall will be 9 feet in width, 18.5 feet in length (striped) with a 2.5' overhang, which is consistent with Figure 37-1 of this section. Therefore, this standard has been satisfied.

(2) Parking stalls for sub-compact vehicles shall not exceed 35 percent of the total parking stalls required by TDC 73.370(2). Stalls in excess of the number required by TDC 73.370(2) can be sub-compact stalls.

RESPONSE: A total of 16 sub-compact parking stalls are shown at 7.7' wide and 15' long. This standard is satisfied.

(3) Off-street parking stalls shall not exceed eight continuous spaces in a row without a landscape separation, except for parking structures and underground parking. For parking lots within the Central Design District that are designed to frame views of the central water feature or identified architectural focal elements as provided in TDC 73.350(3), this requirement shall not apply and the location of parking lot landscape islands shall be determined through the Architectural Review process.

RESPONSE: As shown on the attached plans, typical landscape islands are proposed to be spaced every 8 or fewer parking spaces, as well as through landscaped areas at the ends of parking bays. This standard is satisfied.

(4) Parking lot drive aisles shall be constructed of asphalt or concrete, including pervious concrete. Parking stalls shall be constructed of asphalt or concrete, or a pervious surface such as pavers or grasscrete, but not gravel or woody material. Drive aisles and parking stalls shall be maintained adequately for all-weather use and drained to avoid water flow across sidewalks. Pervious surfaces such as pervious concrete, pavers and grasscrete, but not gravel or woody material, are encouraged for parking stalls in or abutting the Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or in a Clean Water Services Vegetated Corridor.Parking lot landscaping shall be provided pursuant to the requirements of TDC 73.350 and TDC 73.360. Walkways in parking lots shall be provided pursuant to TDC 73.160.

RESPONSE: All parking areas will be constructed using an impervious surface. Water from the paved parking areas will drain to storm drains in order to avoid the flow of water across pedestrian walkways; storm lines will flow into the on-site water quality and detention facility associated with the project. Walkways will be provided in all parking areas that will make for convenient and safe pedestrian maneuvering to other site amenities. This standard is met.

(5) Except for parking to serve residential uses, parking areas adjacent to or within residential planning districts or adjacent to residential uses shall be designed to minimize disturbance of residents.

RESPONSE: The adjoining property to the southwest of the project site is also zoned High Density Residential. However, only 4 parking stalls abut the southwestern property line, which will have a minimum 10' landscaped separation planted with a combination of low lying shrubs and trees. This standard is met.

(6) Artificial lighting, which may be pro-vided, shall be deflected to not shine or create glare in a residential planning district, an adjacent dwelling, street right-of-way in such a manner as to impair the use of such way or a Natural Resource Protection Overlay District, Other Natural Areas identified in Figure 3-4 of the Parks and Recreation Master Plan, or a Clean Water Services Vegetated Corridor.

RESPONSE: Project lighting will be installed to not create glare or shine on any adjoining property, right-of-way or natural resource protection overlay district. This standard is satisfied.

(7) Groups of more than 4 parking spaces shall be so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.

RESPONSE: All parking associated with this project is internal. There will be no opportunity to back onto a street right-of-way. This standard is met.

(8) Service drives to off-street parking areas shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.

RESPONSE: All drive isles are designed to provide the maximum safety of traffic access and egress and pedestrian movement on the site. This standard is satisfied.

(9) Parking bumpers or wheel stops or curbing shall be provided to prevent cars from encroaching on the street right-of-way, adjacent landscaped areas, or adjacent pedestrian walkways.

RESPONSE: As shown on the attached plans, curbing will be provided in front of all parking stalls to protect pedestrians and landscape material. This standard is satisfied.

(10) Disability parking spaces and accessibility shall be provided in accordance with applicable federal and state requirements.

RESPONSE: As shown on the attached plans handicapped parking spaces will be provided with this development. This standard is met.

(11) On-site drive aisles without parking spaces, which provide access to parking areas with regular spaces or with a mix of regular and sub-compact spaces, shall have a minimum width of 22 feet for two-way traffic and 12 feet for one-way traffic. On-site drive aisles without parking spaces, which provide access to parking areas with only sub-compact spaces, shall have a minimum width of 20 feet for two-way traffic and 12 feet for one-way traffic. [Ord. 882-92, §22, 12/14/92; Ord. 904-93, §68, 69 and 70, 9/13/93; Ord. 920-94, §22, 4/11/94; Ord. 956-96, §38, 1/8/96; Ord. 1224-06 §34, 11/13/06; Ord. 1354-13 §14, 02/25/13

RESPONSE: As shown on the attached plans, drive isles on the site provide access to parking areas with regular parking spaces. Drive aisles will be at least 22' wide to accommodate two-way traffic. Therefore, this standard is satisfied.

Section 73.400 Access.

(1) The provision and maintenance of vehicular and pedestrian ingress and egress from private property to the public streets as stipulated in this Code are continuing requirements for the use of any structure or parcel of real property in the City of Tualatin. Access management and spacing standards are provided in this section of the TDC and TDC Chapter 75. No building or other permit shall be issued until scale plans are presented that show how the ingress and egress requirement is to be fulfilled. If the owner or occupant of a lot or building changes the use to which the lot or building is put, thereby increasing ingress and egress requirements, it shall be unlawful and a violation of this code to begin or maintain such altered use until the required increase in ingress and egress is provided.

RESPONSE: The provision and maintenance of vehicular and pedestrian accesses on the site will be provided prior to occupancy. This standard is met.

(2) Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same ingress and egress when the combined ingress and egress of both uses, structures, or parcels of land satisfies their combined requirements as designated in this code; provided that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases or contracts to establish joint use. Copies of said deeds, easements, leases or contracts shall be placed on permanent file with the City Recorder.

RESPONSE: Joint access is not proposed with this application. Therefore, this standard does not apply.

(3) Joint and Cross Access.

(a) Adjacent commercial uses may be required to provide cross access drive and pedestrian access to allow circulation between sites.

(b) A system of joint use driveways and cross access easements may be required and may incorporate the following:

(i) a continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management classification system and standards.

(ii) a design speed of 10 mph and a maximum width of 24 feet to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;

(iii) stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross access via a service drive;

(iv) a unified access and circulation system plan for coordinated or shared parking areas.

(c) Pursuant to this section, property owners may be required to:

(i) Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;

(ii) Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the city and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway;

(iii) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners;

(iv) If (i-iii) above involve access to the state highway system or county road system, ODOT or the county shall be contacted and shall approve changes to (i-iii) above prior to any changes.

RESPONSE: Joint access is not proposed with this application. Therefore, this standard does not apply.

(4) Requirements for Development on Less than the Entire Site.

(a) To promote unified access and circulation systems, lots and parcels under the same ownership or consolidated for the purposes of development and comprised of more than one building site shall be reviewed as one unit in relation to the access standards. The number of access points permitted shall be the minimum number necessary to provide reasonable access to these properties, not the maximum available for that frontage. All necessary easements, agreements, and stipulations shall be met. This shall also apply to phased development plans. The owner and all lessees within the affected area shall comply with the access requirements.

(b) All access must be internalized using the shared circulation system of the principal commercial development or retail center. Driveways should be designed to avoid queuing across surrounding parking and driving aisles.

RESPONSE: This application addresses the entire site. This standard is met.

(5) Lots that front on more than one street may be required to locate motor vehicle accesses on the street with the lower functional classification as determined by the City Engineer.

RESPONSE: The subject site only has frontage onto Pacific Hwy. Therefore, this standard does not apply.

(6) Except as provided in TDC 53.100, all ingress and egress shall connect directly with public streets. [Ord. 882-92, § 24,12/14/92]

RESPONSE: The subject site will provide all ingress and egress to Pacific Hwy. This standard is met.

(7) Vehicular access for residential uses shall be brought to within 50 feet of the ground floor entrances or the ground floor landing of a stairway, ramp or elevator leading to dwelling units.

RESPONSE: The future vehicular access will connect to planned parking areas that are within 50 feet of future residential buildings. This standard is met.

(8) To afford safe pedestrian access and egress for properties within the City, a sidewalk shall be constructed along all street frontage, prior to use or occupancy of the building or structure proposed for said property. The sidewalks required by this section shall be constructed to City standards, except in the case of streets with inadequate right-of-way width or where the final street design and grade have not been established, in which case the sidewalks shall be constructed to a design and in a manner approved by the City Engineer. Sidewalks approved by the City Engineer may include temporary sidewalks and sidewalks constructed on private property; provided, however, that such sidewalks shall provide continuity with sidewalks of adjoining commercial developments existing or proposed. When a sidewalk is to adjoin a future street improvement, the sidewalk construction shall include construction of the curb and gutter section to grades and alignment established by the City Engineer.

RESPONSE: Sidewalks built to city standards along the site's frontage on Pacific Hwy will be provided. This standard is met.

(9) The standards set forth in this Code are minimum standards for access and egress, and may be increased through the Architectural Review process in any particular instance where the standards provided herein are deemed insufficient to protect the public health, safety, and general welfare.

RESPONSE: This standard is understood.

(10) Minimum access requirements for residential uses:

(a) Ingress and egress for single-family residential uses, including townhouses, shall be paved to a minimum width of 10 feet. Maximum driveway widths shall not exceed 26 feet for one and two car garages, and 37 feet for three or more car garages. For the purposes of this section, driveway widths shall be measured at the property line.

(b) Ingress and egress for multi-family residential uses shall not be less than the following:

Dwelling Units	*Minimum Number Required*	*Minimum Width*	*Walkways, Etc.*
2	*1*	*16 feet*	*No walkways or curbs required*
3-19	*1*	*24 feet*	*No walkways or curbs required*
20-49	*1* *or* *2*	*24 feet* *16 feet (one way)*	*6-foot walkway, 1 side only; curbs required*
50-499	*1* *or* *2*	*32 feet* *24 feet*	*6-foot walkway, 1 side only; curbs required*
Over 500	*As required by City Engineer*	*As required by City Engineer*	*As required by City Engineer*

RESPONSE: The future River Ridge apartment complex will have 180 residential units. Based on this standard, one 32' wide access with a 6' walkway on one side is required. This development provides a 32' wide access with two 8' wide walkways that will connect to SW Pacific Hwy., which has been provided on the plan set submitted with this application. This standard is met.

(14) Maximum Driveway Widths and Other Requirements.

(a) Unless otherwise provided in this chapter, maximum driveway widths shall not exceed 40 feet.

(b) Except for townhouse lots, no driveways shall be constructed within 5 feet of an adjacent property line, except when two adjacent property owners elect to provide joint access to their respective properties, as provided by Subsection (2).

(c) There shall be a minimum distance of 40 feet between any two adjacent driveways on a single property unless a lesser distance is approved by the City Engineer.

RESPONSE: The future access of the site is shown to be 32' in width, is approximately 6' from the adjoining property to the southwest and approximately 75' from the access of the adjoining property to the south. This standard is satisfied.

(15) Distance between Driveways and Intersections.

Except for single-family dwellings, the minimum distance between driveways and intersections shall be as provided below. Distances listed shall be measured from the stop bar at the intersection.

(a) At the intersection of collector or arterial streets, driveways shall be located a minimum of 150 feet from the intersection.

(b) At the intersection of two local streets, driveways shall be located a minimum of 30 feet from the intersection.

(c) If the subject property is not of sufficient width to allow for the separation between driveway and intersection as provided, the driveway shall be constructed as far from the intersection as possible, while still maintaining the 5-foot setback between the driveway and property line as required by TDC 73.400(14)(b).

(d) When considering a public facilities plan that has been submitted as part of an Architectural Review plan in accordance with TDC 31.071(6), the City Engineer may approve the location of a driveway closer than 150 feet from the intersection of collector or arterial streets, based on written findings of fact in support of the decision. The written approval shall be incorporated into the decision of the City Engineer for the utility facilities portion of the Architectural Review plan under the process set forth in TDC 31.071 through 31.077.

RESPONSE: The future access to the subject site is approximately 600' +/- from the intersection of Pacific Hwy and 124th Ave. This standard is met.

(16) Vision Clearance Area.

(a) Local Streets - A vision clearance area for all local street intersections, local street and driveway intersections, and local street or driveway and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 10 feet from the intersection point of the right-of-way lines, as measured along such lines (see Figure 73-2 for illustration).

(b) Collector Streets - A vision clearance area for all collector/arterial street intersections, collector/arterial street and local street intersections, and collector/arterial street and railroad intersections shall be that triangular area formed by the right-of-way lines along such lots and a straight line joining the right-of-way lines at points which are 25 feet from the intersection point of the right-of-way lines, as measured along such lines. Where a driveway intersects with a collector/arterial street, the distance measured along the driveway line for the triangular area shall be 10 feet (see Figure 73-2 for illustration).

(c) Vertical Height Restriction - Except for items associated with utilities or publicly owned structures such as poles and signs and existing street trees, no vehicular parking, hedge, planting, fence, wall structure, or temporary or permanent physical obstruction shall be permitted between 30 inches and 8 feet above the established height of the curb in the clear vision area (see Figure 73-2 for illustration).

RESPONSE: The subject site takes access from SW Pacific Hwy., which is neither a local or collector/arterial street. Therefore, this standard does not apply.

(17) Major driveways, as defined in 31.060, in new residential and mixed-use areas are required to connect with existing or planned streets except where prevented by topography, rail lines, freeways, pre-existing development or leases, easements or covenants, or other barriers. [Ord. 895-93 §3, 5/24/93; Ord. 945-95, 5/8/95; Ord. 1025-99, §7, 7/26/99; Ord. 1026-99 §97, 8/9/99; Ord. 1103-02, 3/25/02; Ord. 1096-02, 1/28/02; Ord. 1354-13 §16, 02/25/13

RESPONSE: The primary access point for the subject property connects to SW Pacific Hwy. There are no barriers that will conflict with the connection point at Pacific Hwy. Appropriate visual clearance areas will be provided per ODOT standards.

Chapter 34 - Special Regulations

Section 34.210 Application for Architectural Review, Sub-division or Partition Review, or Tree Removal Permit.

(1) Architectural Review, Subdivision, or Partition. When a property owner wishes to remove trees, other than the exemptions permitted under TDC 34.200(3), to develop property, and the development is subject to Architectural Review, Subdivision Review, or Partition Review approval, the property owner shall apply for approval to remove trees as part of the Architectural Review, Subdivision Review, or Partition Review application process.

(a) The application for tree removal shall include:

(i) A Tree Preservation Site Plan, drawn to a legible scale, showing the following information: a north arrow; existing and proposed property lines; existing and proposed topographical contour lines; existing and proposed structures, impervious surfaces, wells, septic systems, and stormwater retention/detention facilities; existing and proposed utility and access locations/easements; illustration of vision clearance areas; and illustration of all trees on-site that are eight inches or more in diameter (including size, species, and tag i.d. number). All trees proposed for removal and all trees proposed for preservation shall be indicated on the site plan as such by identifying symbols, except as follows:

(A) Where Clean Water Services (CWS) has issued a Service Provider Letter that addresses the proposed development currently under consideration, and

(B) Where CWS has approved delineation of a "sensitive area" or "vegetated corridor" on the subject property, and

(C) Where CWS has required dedication of an easement that prohibits encroachment into the delineated area, then

(D) All trees located within the CWS-required easement need not be individually identified on the Tree Preservation Site Plan if the CWS-required easement boundary is clearly illustrated and identified on the Tree Preservation Site Plan.

(ii) A tree assessment prepared by a qualified arborist, including the following information: an analysis as to whether trees proposed for preservation can in fact be preserved in light of the development proposed, are healthy specimens, and do not pose an imminent hazard to persons or property if preserved; an analysis as to whether any trees proposed for removal could be reasonably preserved in light of the development proposed and health of the tree; a statement addressing the approval criteria set forth in TDC 34.230; and arborist's signature and contact information. The tree assessment report shall have been prepared and dated no more than one calendar year proceeding the date the development application is deemed complete by the City. Where TDC 34.210(1)(a)(i)(A) through (D) are applicable, trees located within the CWS-required easement need not be included in the tree assessment report.

(iii) All trees on-site shall be physically identified and numbered in the field with an arborist-approved tagging system. The tag i.d. numbers shall correspond with the tag i.d. numbers illustrated on the site plan. Where TDC 34.210(1)(a)(i)(A) through (D) are applicable, trees located in the CWS-required easement need not be tagged.

(b) The application for tree removal shall be approved or denied based on the criteria in TDC 34.230.

(c) The approval or denial of an application to remove trees shall be a part of the Architectural Review, Subdivision Review, or Partition Review decision.

RESPONSE: A preliminary tree preservation and removal plan has been prepared by a certified arborist and includes the information mentioned in this standard. This standard is met.

Section 34.270 Tree Protection During Construction.

(1) Any tree required to be retained either through Architectural Review, Subdivision or Partition Review, or permit process that will be impacted by nearby construction activities must be protected in accordance with the TDC 73.250(2).

RESPONSE: Tree protection has been indicated on the Tree Preservation plan submitting with this application. Therefore, this standard has been satisfied.

IV. Conclusion

The required findings have been made and the written narrative and accompanying documentation demonstrate that the application is consistent with the applicable provisions of the City of Tualatin Development Code. The evidence in the record is substantial and supports approval of the application. Therefore, the applicant respectfully requests approval of this application for Architectural Review for the River Ridge Apartment project.

Letter from Franchise Hauler

P★R★I★D★E
DISPOSAL COMPANY
P.O. Box 820 Sherwood, OR 97140
Phone: (503) 625-6177 Fax: (503) 625-6179

June 2, 2014

Marcus Jones
Hill Architects
1914 Willamette Falls Dr #280
West Linn, OR 97068

Re: River Ridge project

We have reviewed the site plan for the enclosure on this project.

SK-045 shows we will have straight on access and at least 75' of unobstructed clearance in front of the enclosure.

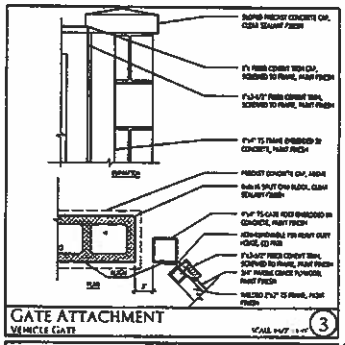
SK-046 shows the detail of the enclosure with inside dimensions of approximately 24' width and 22' depth. This enclosure size will give us adequate space to access the compactor, the recycling container, and the glass totes. As indicated in the drawing, the posts need to be hinged in front of, not inside the walls, and allow for the full 120 degree opening angle required. The gates will also have cane bolts and holes to hold the doors in the open and closed positions. There should be no center post at the access point.

Please note that the compactor must be built to be compatible with our trucks. When purchasing the compactor you need to make sure your manufacturer works with us to ensure compatibility.

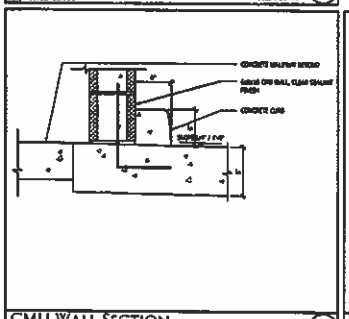
If you have any questions, feel free to contact me.

Sincerely,

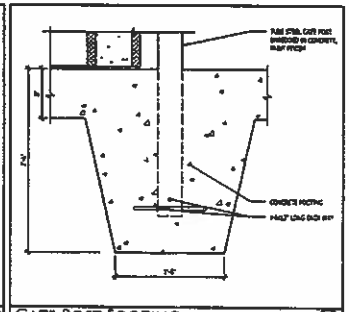
Kristin Leichner
Pride Disposal Co.
(503) 625-6177
kristinl@pridedisposal.com



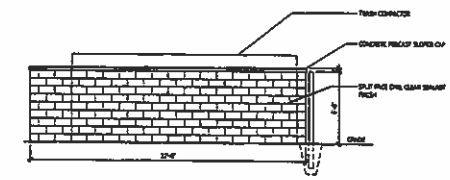
GATE ATTACHMENT
VEHICLE GATE
3



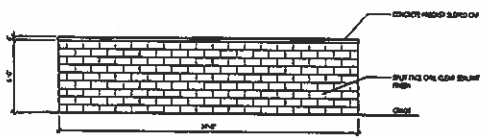
CMU WALL SECTION
2



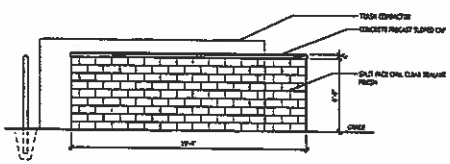
GATE POST FOOTING
VEHICLE GATE
1



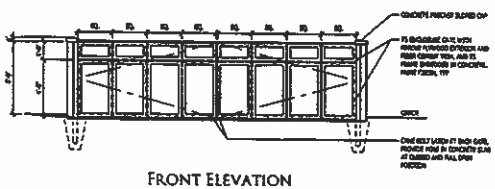
SIDE ELEVATION



REAR ELEVATION

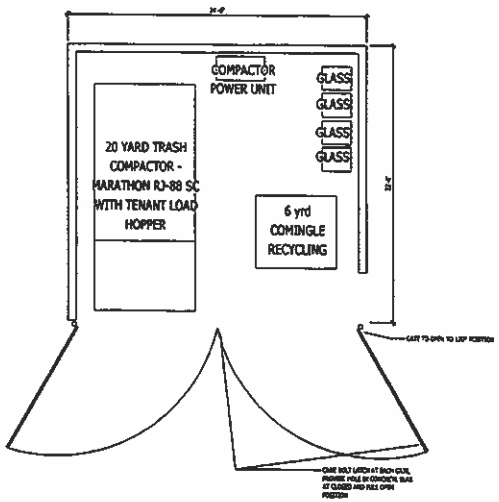


SIDE ELEVATION



FRONT ELEVATION

EXTERIOR ELEVATIONS - COMPACTOR ENCLOSURE
9



TRASH ENCLOSURES
1

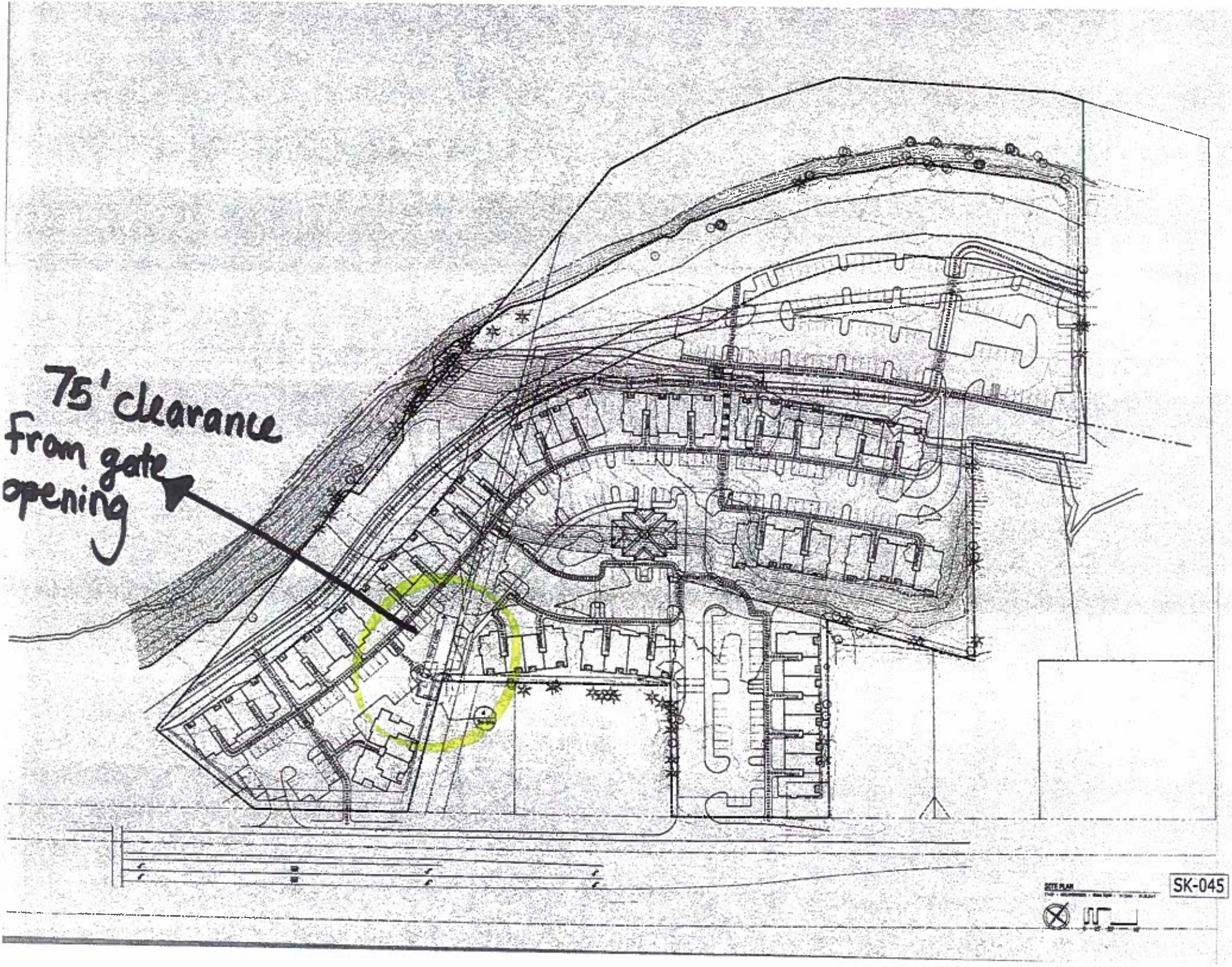
HILL
ARCHITECTS

REGISTERED ARCHITECT
Preliminary
NOT FOR CONSTRUCTION
STATE OF OREGON

RIVER RIDGE

TRASH ENCLOSURE

SK-046


75' clearance
from gate
opening
SITE PLAN
SK-045

Vicinity Map

SCALE: 1" = 1000'

DATE: 6/11/2014

RIVER RIDGE APARTMENTS

DRAWN BY: JMW	CHECKED BY: RCW	DWG: 3812 VICINITY MAP	JOB: 3812

AKS ENGINEERING & FORESTRY SALEM, LLC
528 COTTAGE ST NE SUITE 160
SALEM, OR 97301 www.aks-eng.com
PHONE: 503.400.6028 FAX: 503.400.7722

AKS

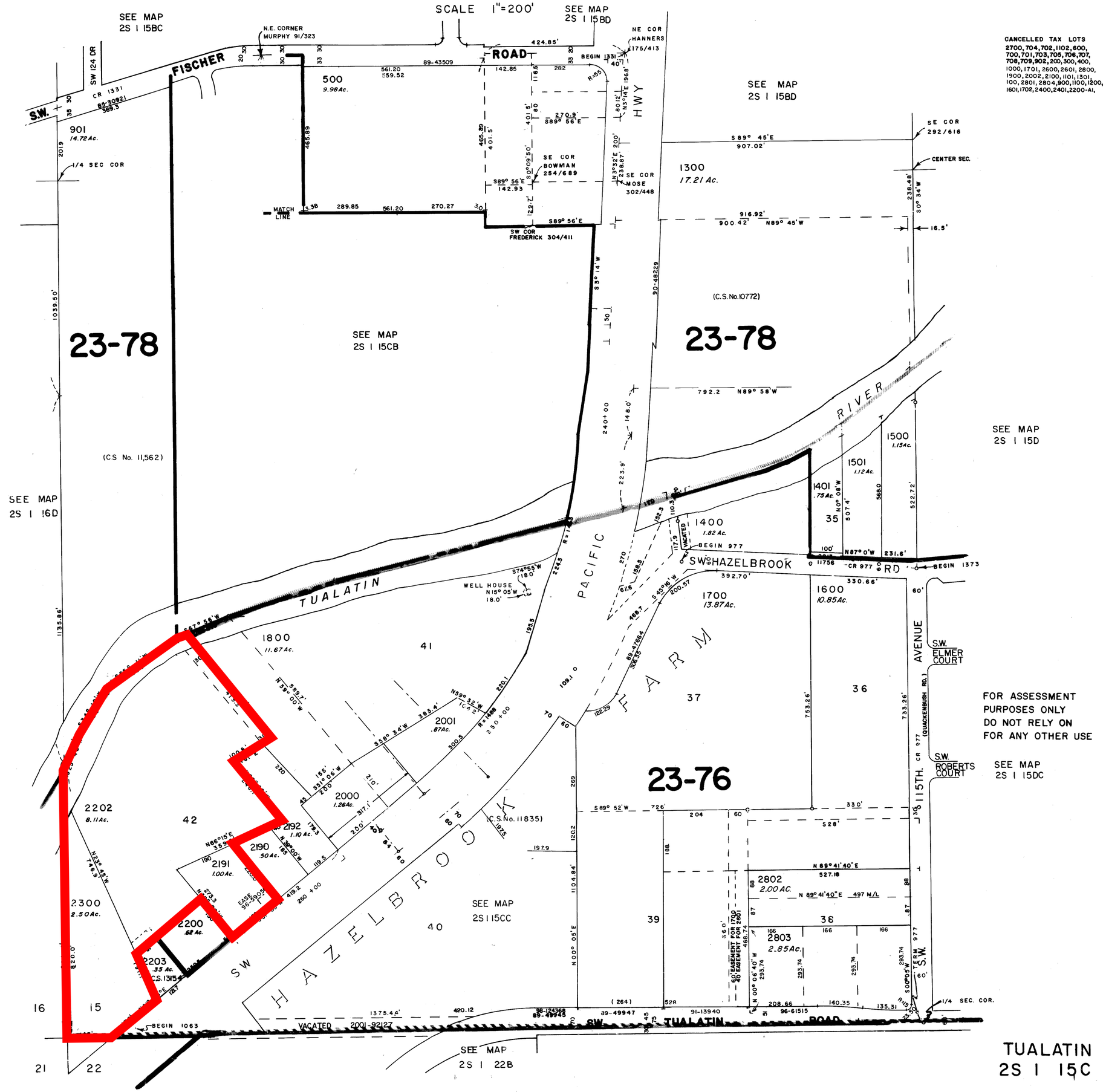
Washington County Tax Assessors Maps

SW1/4 SECTION 15 T2S R1W W.M.

WASHINGTON COUNTY OREGON

2S 1 15C
TUALATIN

SCALE 1"=200'



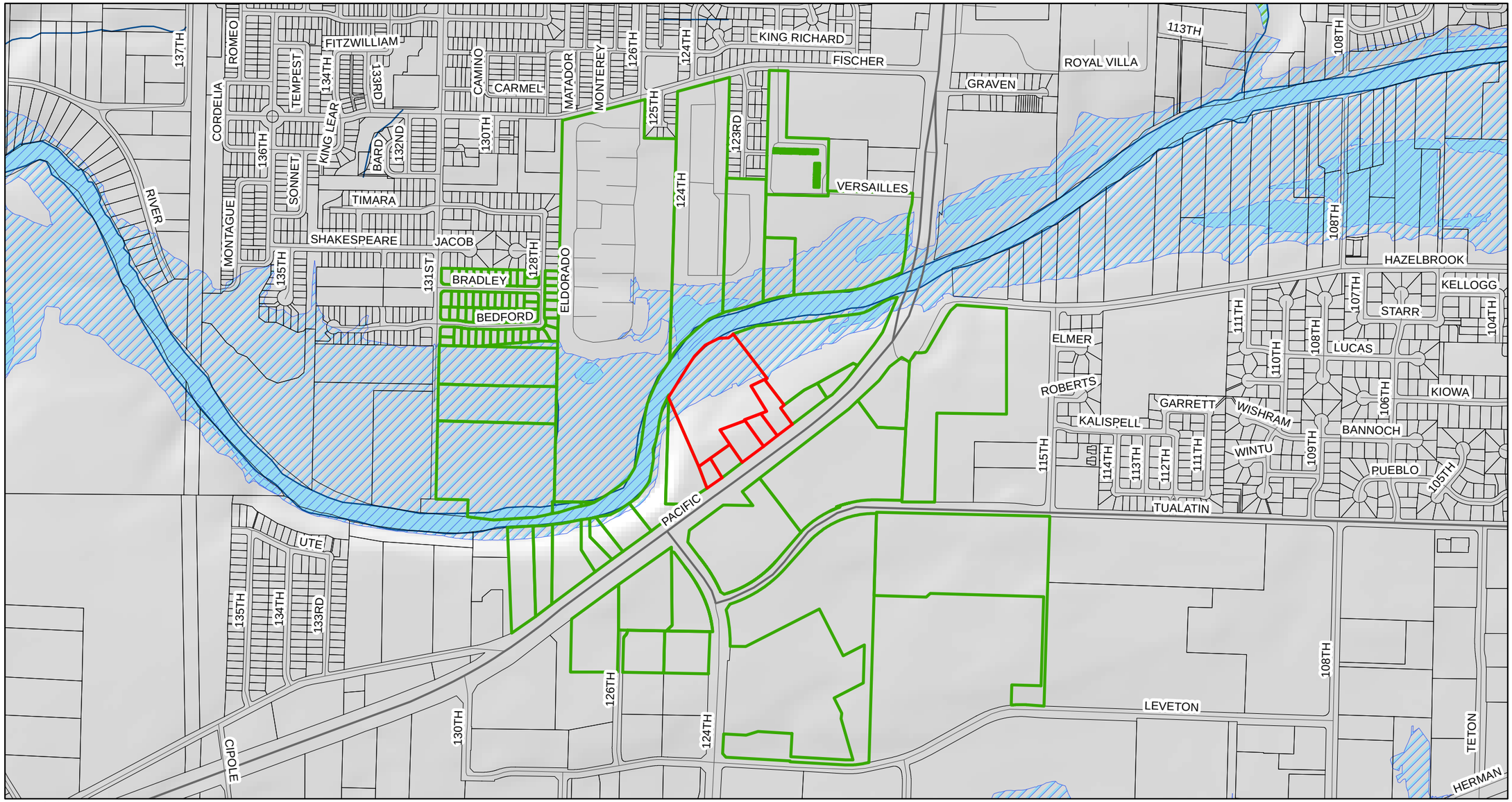
CANCELLED TAX LOTS
2700, 704, 702, 1102, 600, 700, 701, 703, 705, 706, 707, 708, 709, 902, 200, 300, 400, 1000, 1701, 2600, 2601, 2800, 1900, 2002, 2100, 1101, 1301, 100, 2801, 2804, 900, 1100, 1200, 1601, 1702, 2400, 2401, 2200-A1,

TUALATIN
2S 1 15C

List of Property Owners

Tualatin Apartments (Espedal Property)

Subject Properties
Tax Lots selection
Streams
Flood Plain
Wetlands



0 250 500 1,000 1,500 2,000 Feet

WFG National Title Insurance Company
a Williston Financial Group company

Customer Service Department
12909 SW 68th Parkway, Suite 350
Portland, OR 97223
(503) 603-1700 cs@wfgnationaltitle.com

N

AR-14-10

To lessen the bulk of the notice of application and to address privacy concerns, this sheet substitutes for the photocopy of the mailing labels. A copy is available upon request.

Neighborhood/Developer Meeting Information

February 24, 2014

First Last
Address
Address

Re: Notice of Neighborhood/Developer Meeting for the property located at 17985 SW Pacific Hwy, Tualatin, OR.

Dear ,

You are cordially invited to attend a meeting on Tuesday March 11, 2014 at 5:30 pm at the East Dining Room of the Juanita Pohl Center, located at 8513 SW Tualatin Road. This meeting shall be held to discuss a proposed project located at 17985 SW Pacific Hwy, Tax Map 2S115C Tax Lots 2191, 2202 and 2300. The meeting will discuss the Architectural Review application that addresses the site plan, building exterior elements such as landscaping and parking, and potential variances to building heights and setbacks.

The purpose of this meeting is to provide a means for the applicant and surrounding property owners to meet and discuss this proposal and identify any issues regarding this proposal.

Regards,

Brian Moore
Mountain West Investment
(503) 581-4654

Letterhead (if available)

(Date)

(Name)
(Address)
(City, State Zip)

RE: (Project name, description, location)

Dear Property Owner:

You are cordially invited to attend a meeting on (this date) at (this time) and at (this location). This meeting shall be held to discuss a proposed project located at (address of property, cross streets). The proposal is to (describe proposal here).

The purpose of this meeting is to provide a means for the applicant and surrounding property owners to meet and discuss this proposal and identify any issues regarding this proposal.

Regards,

(Your name)
(Company name)
(Contact phone number and email)

As the applicant for the 17865 & 17985 SW pacific Hwy (2S 115C tax lot 2191, 2202, 2300) project, I hereby certify that on this day, February 25, 2014 notice of the Neighborhood / Developer meeting was mailed in accordance with the requirements of the Tualatin Development Code and the Community Development Department - Planning Division.

Applicant's Name: Brian Moore
(PLEASE PRINT)

Applicant's Signature: Brian Moore

Date: 2·25·14

NEIGHBORHOOD/DEVELOPER MEETING
AFFIDAVIT OF MAILING

STATE OF OREGON)
) SS
COUNTY OF WASHINGTON)

I, Brian Moore, being first duly sworn, depose and say:

That on the 25 day of February, 2014, I served upon the persons shown on Exhibit "A," attached hereto and by this reference incorporated herein, a copy of the Notice of Neighborhood/Developer meeting marked Exhibit "B," attached hereto and by this reference incorporated herein, by mailing to them a true and correct copy of the original hereof. I further certify that the addresses shown on said Exhibit "A" are their regular addresses as determined from the books and records of the Washington County and/or Clackamas County Departments of Assessment and Taxation Tax Rolls, and that said envelopes were placed in the United States Mail with postage fully prepared thereon.

Brian Moore
Signature

SUBSCRIBED AND SWORN to before me this 25 day of February, 2014.

OFFICIAL SEAL
HILLARY ROSE BANKS
NOTARY PUBLIC - OREGON
COMMISSION NO. 458239
MY COMMISSION EXPIRES MAY 04, 2015

Hillary Banks
Notary Public for Oregon
My commission expires:

RE: 17865 & 17985 SW Pacific Hwy (2S 1 15C tax lot 2191, 2202, 2300)

Neighborhood Meeting
Affidavit of Posting Notice

STATE OF OREGON)
County of Washington)SS

I, Rochelle Wasula, being duly sworn, state that I represent the party initiating interest in a proposed Land Use Application affecting the land located at 17865 and 17985 SW Pacific Hwy and that I personally posted a notice on this 25 day of February, 2014 indicating that the site may be proposed for a land use application and notice of meeting to be held regarding such action.

The sign was posted at 17865 SW Pacific Hwy
(state location on property)

R Wasula
Signature

Constance E Hansen

Subscribed and sworn to or affirmed, before me this 25th day of February, 2014

Notary Public for the State of Oregon

County of Washington

My Commission expires: July 14, 2017

OFFICIAL SEAL
CONSTANCE E HANSEN
NOTARY PUBLIC-OREGON
COMMISSION NO. 478699
MY COMMISSION EXPIRES JULY 14, 2017

SHERWOOD · VANCOUVER · SALEM
13910 SW GALBREATH DR., SUITE 100 · SHERWOOD, OR 97140
AKS ENGINEERING & FORESTRY
WWW.AKS-ENG.COM
P: (503) 925-8799 F: (503) 925-8969

Re: 17985 SW Pacific Hwy ***03/11/2014*** ***5:30 PM***	***Juanita Pohl Center*** ***8513 SW Tualatin Road***

NAME
STREET ADDRESS
PHONE/EMAIL

PLEASE PRINT CLEARLY

1. DOUG WATSON
[redacted]

2. Clare Fuchs - COT
[redacted]
503

3. Michael Poissant - AKS
[redacted]
503

4. CHRIS GOODELL - AKS
[redacted]

5. Christine Hermann
[redacted]

6. Kenny Espedal
[redacted]

7. Joyce Poppert
[redacted]

8.

9.

10.

11.

12.

13.

14.

SHERWOOD · VANCOUVER · SALEM
AKS ENGINEERING & FORESTRY
WWW.AKS-ENG.COM
13910 SW GALBREATH DR., SUITE 100 · SHERWOOD, OR 97140
P: (503) 925-8799 F: (503) 925-8969

March 11, 2014 – 5:30 PM
Juanita Pohl Center
8513 SW Tualatin Road
Tualatin, OR 97062

RE: Neighborhood Meeting – "Espedal Property" (17985 SW Pacific Highway)

Dear Neighbors:

Thank you for attending our neighborhood meeting for the project located on the "Espedal Property" located at 17985 SW Pacific Highway. The purpose of tonight's meeting is to introduce the project team, briefly discuss the site, the project, and City of Tualatin process. Please recognize that tonight's meeting is preliminary in nature and is the first step in the City land use process. We hope that the conversation tonight is informative and helpful to understanding the project and process.

Meeting Agenda:

I. Introduction
II. Site Information
III. Project and Application Details
IV. Questions and Answers

Thank you again for your attendance and participation in tonight's meeting.

Sincerely,
AKS Engineering & Forestry, LLC

Chris Goodell, AICP, LEED[AP]
Associate

SHERWOOD · VANCOUVER · SALEM
AKS ENGINEERING & FORESTRY
WWW.AKS-ENG.COM
13910 SW GALBREATH DR., SUITE 100 · SHERWOOD, OR 97140
P: (503) 925-8799 F: (503) 925-8969

Neighborhood Meeting Summary: Espedal Property (17985 SW Pacific Highway)

Date: March 11, 2014
Time: 5:30 PM
Location: Juanita Pohl Center, 8513 SW Tualatin Road, Tualatin, Oregon 97062

The following serves as a summary of the primary subjects covered at the Neighborhood Meeting. Business cards with contact information were provided. Representatives from Hill Architects, Mountain West and the City of Tualatin were in attendance. A brief presentation was made by Hill Architects, followed by a time for questions and answers. In addition, an attendance sheet was also made available for attendees to sign.

General discussion of proposed project:

- ODOT access from Hwy 99, U-turns and traffic flow in and out of site
- Property values of the proposed rentals and the area market
- Property amenities for residence and their children
- Access to public transportation
- Sidewalk additions or improvements
- Status of the zone change
- Interest in fencing styles at property boundaries
- Status of the project design
- Views of the project from adjacent properties
- Discussion of building heights and appearances from the river and across the river
- Desire for tree preservation near river

Chris Goodell
AKS ENGINEERING & FORESTRY, LLC

Arborist Tree Assessment

TUALATIN · VANCOUVER · SALEM
12965 SW HERMAN RD., SUITE 100 · TUALATIN, OR 97062
AKS ENGINEERING & FORESTRY
WWW.AKS-ENG.COM
P: (503) 563-6151 F: (503) 563-6152

June 11, 2014

Brian Moore
Mountain West Investment Corporation
201 Ferry Street SE, #400
Salem, OR 97301

RE: River Ridge Apartments – Arborist Tree Assessment

Mr. Moore:

Trees associated with this development have been evaluated and assessed. A detailed tree inventory and tree preservation and removal plan are included in the plan set titled "River Ridge Apartments Architectural Review Set" dated June 11, 2014. Trees shown to be preserved should reasonably be able to be preserved in light of the development proposed, appear healthy, and do not appear to pose an imminent hazard to persons or property. Trees proposed for removal cannot be reasonably preserved in light of the development proposed and/or health/condition of the tree. Proposed tree removal is in accordance with TDC 34.230.

Sincerely,
AKS ENGINEERING & FORESTRY, LLC

Keith Jehnke, PE, PLS, Principal
ISA Certified Arborist #PN1908
ISA Qualified Tree Risk Assessor

Arborist Disclosure Statement

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the health of trees, and attempt to reduce the risk of living near trees. The Client and/or Jurisdiction may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like medicine, cannot be guaranteed.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.