



City of Tualatin

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**"NECESSARY PARTIES"
MARKED BELOW**

NOTICE OF APPLICATION SUBMITTAL

- ANNEXATION CONDITIONAL USE PERMIT PLAN TEXT AMENDMENT
 ARCHITECTURAL REVIEW PLAN MAP AMENDMENT OTHER:

CASE/FILE: AR-16-0002 (Community Development Dept.: Planning Division)

PROPOSAL	To construct a new retail building for three tenants at Nyberg Rivers
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PROPERTY <input type="checkbox"/> n/a	Name of Application	SHOP J/ PAD J			
	Street Address	7445 SW Nyberg Street			
	Tax Map and Lot No(s).	2S1 24A 002508			
	Planning District	Central Commercial (CC), CURD	Overlays <input checked="" type="checkbox"/>	NRPO <input type="checkbox"/>	Flood Plain <input type="checkbox"/>
	Previous Applications	AR83-15, AR13-07	Additional Applications: MP13-01, CUP13-04, AR15-25 (next door)		CIO COMMERCIAL

DATES	Receipt of application	1/22/16	Deemed Complete	5/23/2016	CONTACT	Name: Erin Engman
	Notice of application submittal			5/23/16		Title: Assistant Planner
	Project Status / Development Review meeting			6/7/16		E-mail: eengman@ci.tualatin.or.us
	Comments due for staff report			6/6/16		Phone: 503-691-3024
	Public meeting: <input type="checkbox"/> ARB <input type="checkbox"/> TPC <input checked="" type="checkbox"/> n/a					Notes: Central Urban Renewal District Overlay, 73.040-056, 73.095, 73.100, 73.160, 73.220, 73.227, 73.240-290, 73.340, 73.360-410, 53.020, 53.080-150
	City Council (CC)			<input checked="" type="checkbox"/> 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.

*Paper Copies

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)
- 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



City of Tualatin

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APPLICATION FOR ARCHITECTURAL REVIEW

Direct Communication to:		
Name: Kevin Brady	Title: Senior Planner	
Company Name: Cardno		
Current address: 5414 SW Westgate Drive, Suite 100		
City: Portland	State: OR	ZIP Code: 97221
Phone: 503-419-2500	Fax: None	Email: kevinbradyman@yahoo.com
Applicant		
Name: David Gildersleeve	Company Name: Nyberg CenterCal II, LLC	
Address: 1600 East Franklin Avenue		
City: El Segundo	State: CA	ZIP Code: 90245
Phone: 206-454-9575	Fax: None	Email: Dgildersleeve@centercal.com
Applicant's Signature:		Date:
Property Owner		
Name:*	Nyberg Centercal II, LLC	
Address: 1600 East Franklin Avenue		
City: El Segundo	State: CA	ZIP Code: 90245
Phone: 310-563-6900	Fax: 310-563-6905	Email: dgildersleeve@centercal.com (owner rep.)
Property Owner's Signature: <i>[Signature]</i>		Date: 12.17.15
(Note: Letter of authorization is required if not signed by owner)		
Architect		
Name: Tony Brizendine, C2K Architecture Inc		
Address: 1645 NW Hoyt		
City: Portland	State: OR	ZIP Code: 97209
Phone: 503-444-2200	Fax: None	Email: tbrizendine@c2karch.com
Landscape Architect		
Name: Becky Strickler		
Address: 5414 SW Westgate Drive,		
City: Portland	State: OR	ZIP Code: 97221
Phone: 503-419-2500	Fax: None	Email: bstrickler@cardno.com
Engineer		
Name:	Dan Morrison	
Address: 5415 SW Westgate Drive,		
City: Portland	State: OR	ZIP Code: 97221
Phone: 503-419-2500	Fax: None	Email: dmorrison@cardno.com
Project		
Project Title: Pad J, Nyberg Center		
Address: 7415 SW Nyberg St,		
City: Tualatin	State: OR	ZIP Code:
Brief Project Description: New, <u>80,000</u> square-foot retail building at existing Nyberg Center. Tenants to be determined.		
Proposed Use: Retail in Central Commercial		

CITY OF TUALATIN FACT SHEET

General

Proposed use: <i>Retail</i>	
Site area (<i>overall</i>)	22.7 acres
Development area:	2.35 acres
	102,557 Sq. ft.
Building footprint:	8,000 sq. ft.
Paved area:	<i>existing</i> sq. ft.
Development area coverage:	100 %

Parking

Spaces required (see TDC 73.400) (example: warehouse @ 0.3/1000 GFA) _____ @ _____ /1000 GFA = _____ _____ @ _____ /1000 GFA = _____ _____ @ _____ /1000 GFA = _____ Total parking required: _____ spaces Handicapped accessible = _____ Van pool = _____ Compact = (max. 35% allowed) = _____ Loading berths = _____	Spaces provided: Total parking provided: Standard = _____ Handicapped accessible = _____ Van pool = _____ Compact = _____ Loading berths = _____ <i>All existing, no new proposed</i> (All Parking Part of Nyberg Rivers Development)
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Bicycles

Covered spaces required:	Covered spaces provided: 12
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Landscaping

Landscaping required: 15 % of dvpt. area Square feet	Landscaping provided: 17 % of dvpt. area 2,995 Square feet
Landscaped parking island area required: _____ %	Landscaped parking island area provided: N/A %

(Nyberg Rivers Development Meets 15% Landscape Required)

Trash and recycling facility

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

For commercial/industrial projects only

Total building area: 8,000	sq. ft.	2 nd floor: N/A	sq. ft.
Main floor: 8,000	sq. ft.	3 rd floor: N/A	sq. ft.
Mezzanine: N/A	sq. ft.	4 th floor: N/A	sq. ft.

For residential projects only

Number of buildings: N/A	Total sq. ft. of buildings: N/A	sq. ft.
Building stories: N/A		



First American Title Company of Oregon
National Commercial Services
200 SW Market Street Suite 250
Portland, OR 97201
(503)795-7600 - Fax (866)678-0591

Title Officer: **Steve Manome**
(503)219-8742
smanome@firstam.com
(866)678-0591

LOT BOOK SERVICE

First American Title
2892 Crescent Ave
Eugene , OR 97408

Order No.: NCS-780414-OR1

Attn: Tonya Silke
Phone No.: (541)484-2900 - Fax No.: (877)783-9167
Email: mlind@firstam.com

Re: Nyberg Rivers Center

Fee: \$500.00

We have searched our Tract Indices as to the following described property:

The land referred to in this report is described in Exhibit A attached hereto.

and as of February 24, 2016 at 8:00 a.m.

We find that the last deed of record runs to

D.R.M. 7445 Nyberg Road, LLC, an Oregon limited liability company

We also find the following apparent encumbrances prior to the effective date hereof:

1. Abutter's rights of ingress and egress to or from I-5 have been relinquished in the document recorded February 19, 1969 as [Book 733, page 719](#) of Official Records.
2. Easement, including terms and provisions contained therein:
Recording Information: May 2, 1973 in [Book 922, page 474](#)
In Favor of: Adjacent property owners
For: Ingress and egress

3. Easement, including terms and provisions contained therein:
Recording Information: December 19, 1974 in [Book 1005, page 41](#)
In Favor of: The City of Tualatin
For: Water service line and sanitary sewer
4. The terms and provisions contained in the document entitled "Irrevocable License Agreement" recorded November 27, 1985 as Recording No. [85047397](#) of Official Records.
5. **A Line of Credit** Deed of Trust to secure an original indebtedness of \$1,261,000.00 recorded October 31, 2007 as Recording No. [2007-115003](#) of Official Records.
Dated: October 30, 2007
Trustor: Dean R. MacBale and Rana MacBale
Trustee: UPF Services, LLC, a Washington corporation
Beneficiary: Riverview Community Bank

A document recorded February 25, 2008 as Recording No. [2008-016248](#), of Official Records provides that the Deed of Trust/Mortgage or the obligation secured thereby has been modified.

A document recorded April 8, 2008 as Recording No. [2008-031520](#) of Official Records provides that Brad L. Williams was substituted as trustee under the deed of trust.

The terms and provisions contained in the document entitled "Amended and Restated Deed of Trust" recorded February 28, 2014 as Recording No. [2014-011963](#) of Official Records.

A document entitled "Assignment of Rents" recorded February 28, 2014 as Recording No. [2014-011964](#) of Official Records, as additional security for the payment of the indebtedness secured by the deed of trust.

6. The terms and provisions contained in the document entitled "Easement Agreement" recorded March 10, 2014 as Recording No. [2014-013490](#) of Official Records.
7. Terms and provisions of an unrecorded lease dated July 2, 2014, by and between D.R.M. 7445 Nyberg Road, LLC, an Oregon limited liability company as lessor and Nyberg Centercal II, LLC, a Delaware limited liability company as lessee, as disclosed by a Memorandum of Lease recorded July 1, 2014 as Recording No. [2014-039868](#) of Official Records.

A document recorded July 1, 2014 as Recording No. [2014-039883](#) of Official Records provides that the above document was subordinated to the document recorded October 31, 2007 as Recording No. [2007-115003](#) of Official Records.
8. Terms and provisions of an unrecorded lease dated July 22, 2013, by and between D.R.M. 7445 Nyberg Road, LLC, an Oregon limited liability company as lessor and Cabela's Wholesale, Inc., a Nebraska corporation as lessee, as disclosed by a Memorandum of Lease recorded July 28, 2014 as Recording No. [2014-046103](#) of Official Records.

9. **A Line of Credit** Deed of Trust to secure an original indebtedness of \$28,000,000.00 recorded July 28, 2014 as Recording No. [2014-046153](#) of Official Records.
Dated: June 27, 2014
Trustor: Nyberg Centercal II, LLC, a Delaware limited liability company
Trustee: Chicago Title Company of Oregon
Beneficiary: Union Bank, N.A., as Administrative Agent

(Affects a leasehold interest and covers additional property)
10. The terms and provisions contained in the document entitled "Subordination, Nondisturbance and Attornment Agreement" recorded July 28, 2014 as Recording No. [2014-046154](#) of Official Records.
Tenant: Fitness International, LLC, a California limited liability company
11. The terms and provisions contained in the document entitled "Subordination, Nondisturbance and Attornment Agreement" recorded July 28, 2014 as Recording No. [2014-046155](#) of Official Records.
Tenant: Michaels Stores, Inc., a Delaware corporation
12. Unrecorded leases or periodic tenancies, if any.

We have also searched our General Index for Judgments and State and Federal Liens against the Grantee(s) named above and find:

NONE

We also find the following unpaid taxes and city liens:

1. City liens, if any, for the city of Tualatin.

Note: An inquiry has NOT been made concerning the actual status of such liens. A fee of \$25.00 will be charged per tax account each time an inquiry request is made.
2. These premises are within the boundaries of the Clean Water Services District and are subject to the levies and assessments thereof.

NOTE: Taxes for the year 2015-2016, paid in full.

Tax Amount:	\$21,242.21
Code No.:	023.76
Map & Tax Lot No.	2S124A-02508
Property ID/Key No.	R532953

THIS IS NOT a title report since no examination has been made of the title to the above described property. Our search for apparent encumbrances was limited to our Tract Indices, and therefore above listings do not include additional matters which might have been disclosed by an examination of the record title. We assume no liability in connection with this Lot Book Service and will not be responsible for errors or omissions therein. The charge for this service will not include supplemental reports, rechecks or other services.

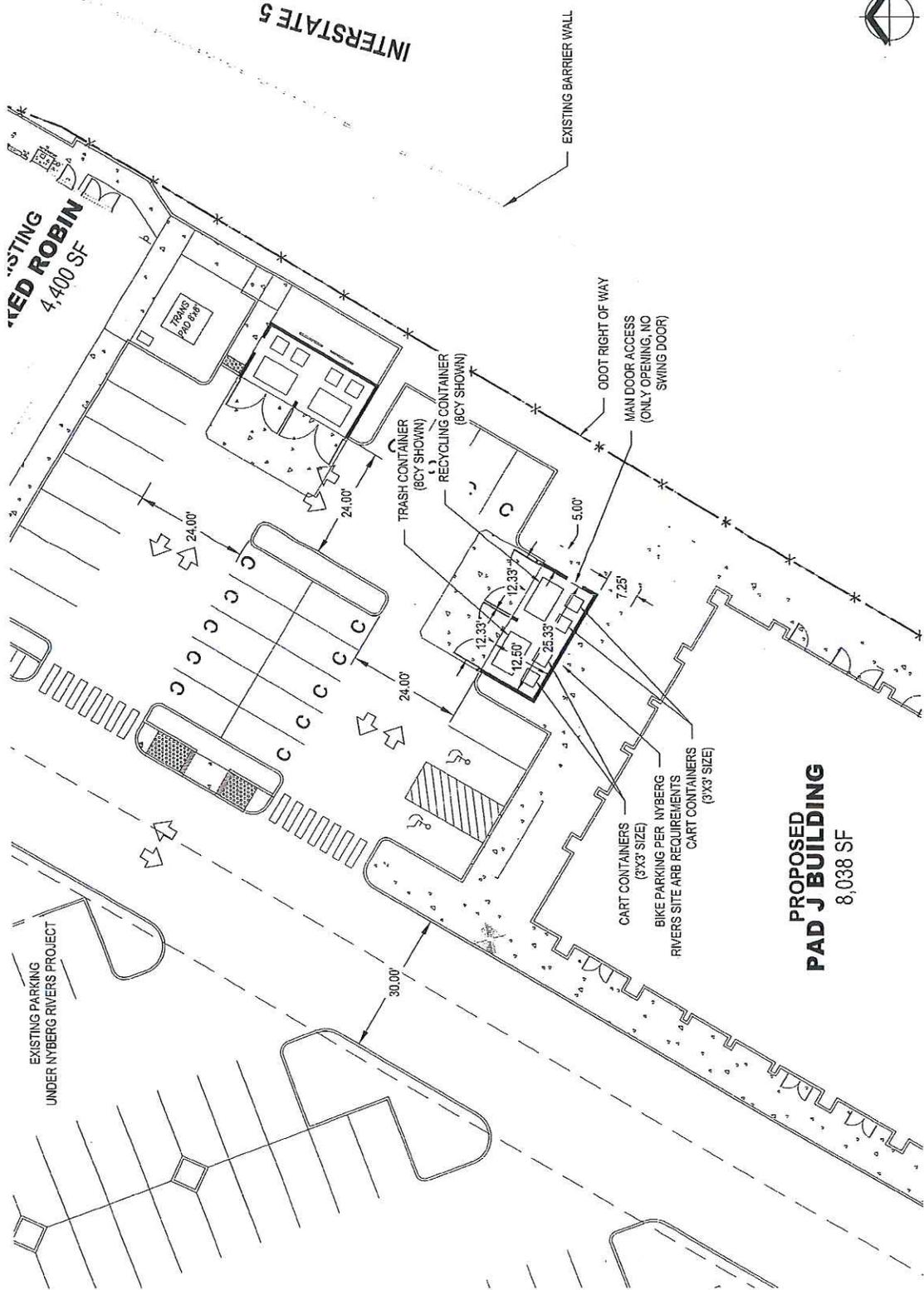
Exhibit "A "

Real property in the County of Washington , State of Oregon, described as follows:

That tract of land described in Deed Document No. [2004-135929](#), Washington County Deed Records, located in the Northeast quarter of Section 24, Township 2 South, Range 1 West o the Willamette Meridian, in the City of Tualatin, County of Washington and State of Oregon, being more particularly described as follows:

Beginning at the Southwest corner of said Deed Document No. [2004-135929](#); thence, along the Westerly line of said Deed Document, North 00°13'45" West 361.43 feet to the Northwest corner thereof; thence, along the Northerly line of said Deed Document, North 89°46'15" East 374.82 feet to a point on the Westerly right of way line of the Southbound lane of Interstate Highway No. 5, said point being 154.33 feet Westerly of the centerline thereof, when measured perpendicular thereto; thence, along said Westerly right of way line, South 21°33'44" West 113.08 feet; thence South 31°00'49" West 299.93 feet to the Northerly right of way line of SW Nyberg Road (County Road No. 2545) (variable width); thence, along said Northerly right of way line, South 89°46'15" West 177.28 feet to the point of beginning.

78 *Lowry*
11/9/16



**PROPOSED
PAD J BUILDING**
8,038 SF

NYBERG RIVERS PAD J TRASH ENCLOSURE
SCALE: 1"=20'
DATE: 1/4/2016

PAD J

Nyberg Rivers Tualatin, Oregon

An Application For:
Architectural Review

Submitted January 21, 2015

Applicant:
CenterCal
Nyberg CenterCal II, LLC
1600 East Franklin Avenue
El Segundo, CA 90245
Contact: David Gildersleeve

Prepared by:
Cardno
5415 SW Westgate Drive, Suite 100
Portland, Oregon 97221
Phone: (503) 419-2500
Contact: Kevin Brady

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EXHIBITS

Exhibit A	AR Application
Exhibit B	Narrative
Exhibit C	Tax Map/Title Report
Exhibit D	Pre-Application/Neighborhood Meeting Materials
Exhibit E	Geotechnical Report
Exhibit F	CWS SPL
Exhibit G	Franchise Hauler Plan/Letter
Exhibit H	AR Plan Set (Reduced)

INTRODUCTION

GENERAL INFORMATION

Applicant: **CenterCal**
Nyberg CenterCal II, LLC
1600 East Franklin Avenue
El Segundo, CA 90245
(206) 454-9575
Contact: David Gildersleeve

Property Owner: Tuala Northwest LLC
5638 Dogwood Drive
Lake Oswego, Oregon 97035

Applicant's Representative Cardno
5415 SW Westgate Drive; Suite 100
Portland, Oregon 97221
(503) 419-2500
Contact: Kevin Brady, Senior Planner
kevin.brady@cardno.com

Tax Lot Information: 2S124A002508

Location: 7425 SW Nyberg Street
Tualatin, Oregon 97062

Current Zoning: Central Commercial (CC)

PROJECT SUMMARY

PROPOSAL

The Applicant requests architectural review approval of an approximately 80,038 square foot (SF) retail building within the recently constructed Nyberg Rivers retail center. The proposed retail building pad is located within tax lot 2S124A002508 and will utilize the existing infrastructure and tie into the existing site parking, landscaping, drive aisles and pedestrian connections. The physical address for the restaurant is 7425 SW Nyberg Street. As shown on the Site Plan, Sheet C2.0 in Exhibit H, the existing site square footage is 102,557.25 SF, while the development area associated with this application is .40 acres, or 17,563.20 SF. Proposed total site landscaping is 2,996 square feet, or 17 percent of development area.

The building will be oriented with the front elevation facing northwest toward the large parking area and larger commercial retail buildings. As shown on the building elevations provided under Exhibit H, the north elevation shows the primary entrances along the entire north elevation. As shown on the Site Plan provided in Exhibit H, Sheet C2.0, sidewalks are shown along portions of all sides of the building and those sidewalks tie into the existing pathways and striped crosswalks located throughout Nyberg Rivers. There are no new parking stalls proposed for this development, as well required parking has already been constructed for this proposed building and the entire site. There are 2 ADA stalls located east of the main entrances of the building.

Proposed utility connections are shown in the Public Utility Facility Plan on Sheet C5.0 within Exhibit H. The plans include 2-inch domestic water at the southeast side of the building, along with a 6-inch fire water and FDC connection in the same location. Sanitary will also connect to the building along the southeast side, where there is a 6-inch line to serve the building. Aside from the overall Nyberg Rivers storm water system, there is one additional catch basin that will connect to the system. That catch basin is located in the trash enclosure portion of the proposed development area.

FIGURE 1: AERIAL WITH TAX LOTS



TDC CHAPTER 31: GENERAL PROVISIONS

Section 31.020 Classification of Planning District.

In order to carry out the objectives of the Tualatin Community Plan, land within the City is divided into planning districts. The established planning districts shall be designated on the Plan Map, and the planning district designations shall be as follows:

Planning District	Abbreviated Designation
Central Commercial	CC

Response: As shown on the zoning map provided in Figure 2 above, the proposed restaurant is within the CC Planning District. Therefore, this narrative will address all applicable code regulations pertaining to the CC Planning District.

Section 31.063 Neighborhood/ Developer Meetings.

- (1) This section applies to the following types of Land Use applications: Annexations; Architectural Reviews, except Level I (Clear and Objective) Single-family Architectural Review; Conditional Uses; Historic Landmark actions, including designation, removal of designation, demolition, relocation, or alteration or new construction; Industrial Master Plans; Partitions; Plan Map Amendments for a specific property; Plan Text Amendments for a specific property; Subdivisions; Tree Removal Permit; Transitional Use Permit; and Variances, except for variances to existing single family residences.

Response: A neighborhood meeting for this proposal was held on November 24, 2015 from 5:30 to 6:30 p.m. at the Juanita Pohl Center at 8513 SW Tualatin Road in Tualatin. Notice to adjacent property owners and the Community Involvement Organizations (CIOs) was sent out on November 9, 2015 and a notice sign was posted on-site to meet the 14 calendar day notice requirements. All neighborhood meeting materials and affidavits of mailing and postings are provided in Exhibit D.

Section 31.064 Land Use Applications.

This section applies to the following types of Land Use applications: Annexations; Architectural Reviews, except Level I (Clear and Objective) Single-family Architectural Review; Conditional Uses; Historic Landmark actions, including designation, removal of designation, demolition, relocation, or alteration or new construction; Industrial Master Plans; Partitions; Plan Map Amendments for a specific property; Plan Text Amendments for a specific property; Subdivisions; Tree Removal Permit; Transitional Use Permit; and Variances, except for variances to existing single family residences.

- (1) Mail: An applicant shall mail notice of a Neighborhood/Developer Meeting and the City shall mail notice of application submittal as follows:

Response: As this project involves an Architectural Review application, the requirements for mailing and sign posting for development applications apply. Notices to adjacent property owners and the CIOs were sent out on November 9, 2015 and a notice sign was posted on-site that same day to meet the 14 calendar day notice requirements. All neighborhood meeting material and affidavits of mailing and postings are provided in Exhibit D.

(2) Sign Posting: The applicant shall as follows both provide and post on the subject property a sign that conforms to the standard design established by the City for signs notifying the public of land use actions:

- (a) Minimum Design Requirements: The sign shall be waterproof, and the face size shall be eighteen (18) by twenty-four (24) inches (18 x 24) with text being at least two (2) inches tall.**
- (b) On-site Placement: Prior to land use application submittal, the applicant shall place a sign along the public street frontage of the subject property or, if there is no public street frontage, along the public right-of-way (ROW) of the street nearest the subject property. A subject property having more than one public street frontage shall have at least one posted sign per frontage with each frontage having one sign.**

For a subject property that has a single frontage that is along a dead-end street, the applicant shall post an additional sign along the public ROW of the nearest through street. The applicant shall not place the sign within public ROW pursuant to TDC 38.100(1); however, for a subject property that has no public street frontage or that has a single frontage that is along a dead-end street, the applicant may place the sign within public ROW of the nearest street.

- (c) Proof of Posting: The applicant shall submit as part of the land use application submittal an affidavit of posting to the Community Development Director or when applicable the City Engineer.**
- (d) Removal: If the sign disappears prior to the final decision date of the subject land use application, the applicant shall replace it within forty-eight (48) hours. The applicant shall remove the sign no later than fourteen (14) days after the City makes a final decision on the subject land use application.**

Response: As this project involves an Architectural Review application, the requirements for mailing and sign posting for development applications apply. Notices to adjacent property owners and the CIOs were sent out on November 9, 2015 and a notice sign was posted on-site that same day to meet the 14 calendar day notice requirements. All neighborhood meeting material and affidavits of mailing and postings are provided in Exhibit D, including photos of the posted signs.

TDC CHAPTER 53: CENTRAL COMMERCIAL PLANNING DISTRICT

Section 53.020 Permitted Uses.

No building, structure or land shall be used except for the following uses when conducted wholly within a completely enclosed building, except for utility facilities and wireless communication facilities, and provided retail uses on land designated Employment Area, Corridor or Industrial Area on Map 9-4 shall not be greater than 60,000 square feet of gross floor area per building or business.

(41) Retail

Response: According to TDC 53.020(41), Permitted Uses within the Central Commercial Planning District, retail uses are permitted outright. Therefore, the proposed retail uses are a permitted use.

Section 53.060 Lot Size.

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, the following requirements shall apply:

- (1) The minimum lot size shall be 10,000 square feet.
- (2) The minimum average lot width shall be 75 feet.
- (3) The minimum lot width at the street shall be 40 feet.
- (4) 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(8) to (12).
- (5) The minimum lot width at the street shall be 40 feet on a cul-de-sac street. [Ord. 866-92, §16, 4/27/92; Ord. 965-96, §54, 12/9/96]

Response: As shown on the Site Plan (Sheet C2.0 in Exhibit H), the proposed building will be located on an existing legal lot identified as Tax Lot 2S124A002508.

This lot encompasses a portion of Nyberg Rivers and is 102,557.25 SF or approximately 2.35 acres. All of the dimensions for lot size meet the minimum lot size requirements listed above to achieve the lot size requirements, and were approved under AR-13-07 for the Nyberg Rivers Shopping Center.

Section 53.070 Central Urban Renewal Area - Lot Sizes.

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 excepting any lot in the Core Area Parking District where TDC 53.070(1)-(5) apply, the minimum lot size in the Central Urban Renewal District shall conform to the lot sizes described on Map 9-3:

- (1) Except for mixed use developments, and common-wall dwellings on separate lots:
 - (a) The minimum lot area shall be 5,000 square feet.
 - (b) The minimum average lot width shall be 40 feet.
 - (c) The minimum lot width at the street shall be 40 feet.
 - (d) For flag lots, the minimum lot width at the street shall be sufficient to comply with at least the minimum access requirements in TDC 73.400(8) - (12).
 - (e) The minimum lot width at the street shall be 35 feet on a cul-de-sac street.
- (3) The minimum lot width at the street shall be 40 feet.
- (4) 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(8) to (12).
- (5) The minimum lot width at the street shall be 40 feet on a cul-de-sac street.

Response: As shown on the Site Plan (Sheet C2.0 in Exhibit H), the proposed building will be located on an existing legal lot identified as Tax Lot 2S124A002508. This lot encompasses a large portion of Nyberg Rivers and is approximately 2.35 acres. All of these dimensions meet the minimum lot size requirements listed above to achieve the Central Urban Renewal Area lot size requirements, and were approved under AR-13-07 for the Nyberg Rivers Shopping Center.

Section 53.080 Setback Requirements.

- (1) Front yard. Except as provided by TDC 53.090(2)(a), zero to 20 feet, as determined through the Architectural Review Process.
- (2) Side yard. Except as provided by TDC 53.090(2)(a), zero to 20 feet, as determined through the Architectural Review process.
- (3) Rear yard. Zero to 15 feet, as determined through the Architectural Review process.
- (5) Off-street parking and vehicular circulation areas shall be set back a minimum of five (5) feet from any public right-of-way or property line, except as approved through the Architectural Review process.
- (6) No fence shall be constructed within 5 feet of a public right-of-way, except that in residential and mixed use residential developments within the Central Design District the minimum fence setback shall be determined through Architectural Review, with no minimum requirement.

Response: As shown on the Site Plan in Exhibit H, the location of the building pad meets all setback requirements listed above. All off street parking and vehicular circulation areas are set back greater than 5 feet from the property lines.

Section 53.090 Structure Height.

- (1) Except for flagpoles displaying the flag of the United States of America, either alone or with the State of Oregon flag which shall not exceed 100 feet in height above grade, and except as provided in TDC 54.070(2), the maximum height of any structure is 45 feet.

Response: As shown on the building elevation included in Exhibit H, the proposed building height (including parapet) is approximately 14 feet.

Section 53.100 Access.

Except as provided below, no lot shall be created without provision for access to the public right-of-way in accordance with TDC 73.400 and TDC Chapter 75. Such access may be provided by lot frontage on a public street, or via permanent access easement over one or more adjoining properties, creating uninterrupted vehicle and pedestrian access between the subject lot and the public right-of-way. 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.

Response: As shown on the Site Plan in Exhibit H and Figure 1 above, the site abuts the Nyberg Road right-of-way (ROW) along the south and the public access easement located to the northwest of the building's main entrance. Access into the site is provided from the primary drive aisle with access from SW Nyberg Street, located to the south of the subject site.

TDC CHAPTER 73: COMMUNITY DESIGN STANDARDS

ARCHITECTURAL REVIEW APPROVAL

- (1) Except for an addition or alteration to an existing single-family dwelling when it results in less than a 35% expansion of the structure's existing footprint or less than a 35% alteration of an existing wall plane or only affects the wall plane of the side of the dwelling located in a side yard where the side yard of the dwelling abuts the side yard of an adjacent dwelling, as permitted by these standards, no new building, condominium, townhouse, single family dwelling, addition or alteration to an existing single-family dwelling when it results in a 35% or more expansion of the structure's existing footprint or a new second or higher story or a 35% or more alteration of an existing wall plane (except for the wall plane of a side of the dwelling located in a side yard where the side yard of the dwelling abuts the side yard of an adjacent dwelling), manufactured dwelling park, small-lot subdivision, landscape improvement (excluding greenways, parks and other Parks and Recreation Department road side improvements), parking lot improvement or expansion, above ground public utility facility (sewer or water pump stations, pressure reading stations and water reservoir), electrical substation, above ground natural gas pumping station, installation of decorative lighting (e.g. neon), exterior painting, awnings, murals, wireless communication facility, attached wireless communication facility or exterior major remodeling

shall occur until the architectural review plan required under TDC 31.071 has been reviewed and approved by the Community Development Director and City Engineer or their designees, or by the Architectural Review Board or City Council for conformity with applicable standards or criteria.

Response: This request is for a new retail building within the Nyberg Rivers commercial center. Therefore, the community design standards and architectural review approval criteria apply to the project. This narrative and the supporting plans and studies are submitted as evidence for Architectural Review approval.

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;**

Response: The proposed site development is in conformance with the standards defined within the Community Design Standards in Chapter 73, as well as all other development code regulations. This narrative is provided as supporting evidence to show that the proposed development meets the location, height, and appearance standards of the development code.

(b) **The proposed design of the development is compatible with the design of other developments in the general vicinity; and**

Response: The proposed retail design and architectural features of the building are consistent with the context of the site within the overall Nyberg Rivers commercial center and the varying aesthetic provided within the center. The primary stone veneer base and columns complement materials used through the remainder of the center. The extensive use of glazing also is consistent with other small retail buildings on the site. Also, it should be noted that all on-site landscaping was considered and selected to ensure consistency with the overall development.

(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 proposed retail materials and architectural features of the building are consistent with the context of the site within the overall Nyberg Rivers commercial center. The primary cultured stone veneer materials complement the design character of other buildings on-site, such as the New Seasons, Cabela's, Home Goods, LA Fitness, and other outlying buildings. These existing buildings also

apply similar architectural features, such as parapets, window awnings, stone finishes, columns, expanded sidewalk areas and plaza spaces.

- (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: The request complies with the City's development standards. Responses and findings are provided under each applicable standard in the following sections of this land use narrative. This project is subject to input received from the Community Development Director and the City Engineer.

COMMERCIAL DESIGN STANDARDS

Section 73.150 Objectives.

All commercial, industrial, public and semi-public projects 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. Site elements shall be placed and designed, to the maximum extent practicable, to:

- (1) **Provide convenient walkways and crosswalks which separate pedestrians from vehicles and link primary building entries to parking areas, other on-site buildings and the public right-of-way.**

Response: A pedestrian connection is proposed to connect the proposed building pad to the surrounding existing and planned developments. A raised 6-foot curbed pathway is proposed fronting the future main building entrances. The on-site walkways connect to the other commercial center walkways, with striped pedestrian crossings provided across vehicle circulation areas.

- (2) **Avoid barriers to disabled individuals.**

Response: Walkways are provided to connect the project's ADA parking stalls to the primary entrance to the retail building, and also provide a route to the sidewalk network that serves the Nyberg Rivers center.

- (3) **Locate and design drive-through facilities in a manner which does not conflict with pedestrian routes or other vehicular circulation and minimizes adverse impacts on adjacent properties.**

Response: No drive-through facility is proposed as part of this request.

- (4) Break up parking areas with landscaping (trees, shrubs and walkways) and buildings to lessen the overall impact of large paved areas.**

Response: There are no proposed impacts or changes to the existing parking areas. As shown on the Site Plan and Landscape Plan provided in Exhibit H, all existing parking areas are broken up with landscaping and walkways to lessen the overall impact of large paved areas. Parking lot landscape islands are installed at the end of each parking area and the parking stalls do not exceed more than 7 consecutive stalls before a landscape island is provided.

- (5) Utilize landscaping in parking areas to direct and control vehicular movement patterns, screen headlights from adjacent properties and streets, and lessen the visual dominance of pavement coverage.**

Response: As shown on the Site Plan and Landscape Plan provided in Exhibit H, all parking areas are broken up with landscaping and walkways to direct and control vehicular movement patterns, screen headlights from adjacent properties and the restaurant, and to lessen the visual dominance of large paved areas.

- (6) Provide vehicular connections to adjoining sites.**

Response: Because this retail pad is part of the larger Nyberg Rivers commercial center, vehicular access is designed to connect with adjoining buildings within the overall center. The building is oriented into the central portion of the site, where there is a large parking area with drive aisles to link adjoining buildings and access to the public street system.

- (7) Emphasize entry drives into commercial complexes and industrial park developments with special design features, such as landscaped medians, water features and sculptures.**

Response: While a primary entry drive is not associated with this scope of work, the Nyberg Rivers central entry drive from SW Nyberg Street features a landscaped median with signage and a primary pedestrian walkway. This central entry then connects to the interior drive aisles that link to the east and to the proposed retail site.

- (8) Locate, within parking lots, pedestrian amenities and/or landscaping in areas which are not used for vehicle maneuvering and parking.**

Response: Aside from parking stalls and vehicle maneuvering areas, the parking lot is comprised of pedestrian walkways and landscaping.

- (9) Encourage outdoor seating areas which provide shade during summer and sun during winter, trash receptacles and other features for pedestrian use. Plantings with a variety of textures and color are encouraged.**

Response: There are no outdoor seating areas proposed with this development. Therefore, this standard is not applicable.

(10) Create opportunities for, or areas of, visual and aesthetic interest for occupants and visitors to the site.

Response: The proposed building design and material types will create visual and aesthetic interest for visitors to the retail building. Landscape plantings will screen portions of the site and also break up the building massing to create visual interest for both the building and overall site. This project will also tie into the existing pedestrian network to create other viewpoints into the site.

(11) Conserve, protect and restore fish and wildlife habitat areas, and maintain or create visual and physical corridors to adjacent fish and wildlife habitat areas.

Response: The proposed retail building has no effect on fish and wildlife habitat areas. On-site stormwater treatment will limit surface water runoff which will improve fish habitat areas.

(12) Provide safe pathways for pedestrians to move from parking areas to building entrances.

Response: The primary restaurant entrance provides safe pedestrian pathways from the main parking areas to the entrance. There is also a secondary entrance located on the southwest side of the building with pedestrian access to the ADA compliant parking stalls.

(13) Design the location of buildings and the orientation of building entrances for commercial, public and semi-public uses such as churches, schools and hospitals to provide adequate pedestrian circulation between buildings and to provide preferential access for pedestrians to existing or planned transit stops and transit stations.

Response: As this site is part of the larger Nyberg Rivers commercial center, the proposed retail pad provides pedestrian connectivity to the overall pedestrian network which connects pedestrians to buildings, adjacent roadways, and the proposed regional Tualatin greenway trail.

(14) Provide accessways between commercial, public and semi-public development and publicly-owned land intended for general public use; arterial and collector streets where a transit stop and/or a bike lane is provided or designated; and abutting residential, commercial and semi-public property.

Response: As this site is part of the larger Nyberg Rivers commercial center, the proposed retail pad provides pedestrian connectivity to the overall pedestrian network which connects pedestrians to buildings, adjacent roadways, and the proposed regional Tualatin greenway trail.

- (15) Provide accessways between industrial development and abutting greenways where a bikeway or pedestrian path is provided or designated.**

Response: The proposed retail use is a commercial use; this criterion is not applicable to the project.

- (16) Accessways should be designed and located in a manner which does not restrict or inhibit opportunities for developers of adjacent properties to connect with an accessway, and provide continuity from property to property for pedestrians and bicyclists to use the accessway.**

Response: As this site is part of the larger Nyberg Rivers commercial center, the accessways proposed with the retail building provides pedestrian connectivity to the overall pedestrian network. The pedestrian paths connect pedestrians to adjacent buildings, roadways to the south and west, and the proposed Tualatin greenway trail.

- (17) Provide preferential parking for carpool and vanpools to encourage employees to participate in carpools and vanpools.**

Response: As this project does not impact existing parking areas, the current configuration of carpool and vanpool stalls will remain as-is.

- (18) Screen elements such as mechanical and electrical equipment, above ground sewer or water pump stations, pressure reading stations and water reservoirs from view.**

Response: The proposed mechanical equipment will be located on the retail building rooftop and will be screened by a parapet on all elevations. As indicated in the elevations in Exhibit H, none of the mechanical equipment is visible from any portion in the proposed development.

- (19) Parking structure exteriors and underground parking should be designed to be harmonious with surrounding buildings and architecturally compatible with the treatment of buildings they serve.**

Response: There is no parking structure or underground parking proposed with this request. Therefore, this provision is not applicable to this request.

- (20) When a fish and wildlife habitat area abuts or is on the subject property the applicant and decision authority for a development application should consider locating buildings farther away from the fish and wildlife habitat area.**

Response: No portion of the redevelopment site abuts or is located on a fish or wildlife habitat area. Therefore, this provision does not apply.

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:

- (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.

Response: As this site is part of the larger Nyberg Rivers commercial center, the proposed retail building ties into the overall pedestrian and bicycle circulation network. The on-site walkways connect to the existing circulation network to provide access between the main building entrance and the abutting Nyberg Road ROW. All proposed walkways are a minimum of 6-feet wide and constructed of concrete. Walkways through parking areas are striped to differentiate these areas from the adjacent paved vehicular areas.

- (vi) bikeways shall be provided which link building entrances and bike facilities on the site with the adjoining public right-of-way and accessways.

Response: As this site is part of the larger Nyberg Rivers commercial center, the proposed retail building ties into the overall pedestrian and bicycle circulation network. The on-site bikeways connect to the existing circulation network to provide access between the main building entrance and the abutting Nyberg Road ROW. All proposed bikeways are a minimum of 6-feet wide and constructed of concrete.

- (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.**

Response: The proposed retail building connects to the overall Nyberg Rivers commercial center pedestrian and bicycle network. The network connects to the proposed Tualatin River greenway trail located to the north of Nyberg Rivers.

- (c) **Curb ramps shall be provided wherever a walkway or accessway crosses a curb.**

Response: As shown on the Site Plan provided in Exhibit H, curb ramps are 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 access-ways 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 proposed walkways and pedestrian paths located on-site are 6-feet in width to meet the minimum sidewalk standard. Accessways are not provided for this project. There are accessways provided within Nyberg Rivers that do meet the minimum width and surface treatment requirements. The proposed 6-foot walkways and paths will connect to the existing pedestrian network featuring both sidewalks and accessways.

- (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 re-view and approval.**

Response: Accessways are not provided for this site.

- (g) **Accessways shall be constructed, owned and maintained by the property owner.**

Response: Accessways are not provided for this site.

(3) Safety and Security.

- (a) Locate windows and provide lighting in a manner which enables tenants, employees and police to watch over pedestrian, parking and loading areas.**

Response: As shown on the building elevations provided in Exhibit H, all windows are located to provide natural lighting which enables employees and patrons to watch over pedestrian and parking 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.**

Response: As shown on the building elevations provided in Exhibit H, all windows and lighting are located to enable surveillance of interior activity from the adjacent drive aisles and parking areas.

- (c) Locate, orient and select on-site lighting to facilitate surveillance of on-site activities from the public right-of-way without shining into public rights-of-way or fish and wildlife habitat areas.**

Response: As shown on the Site Plan provided in Exhibit H, all on-site lighting allows for surveillance of on-site activities from adjacent drive aisles and parking areas without shining lights into the adjacent SW Nyberg Street ROW.

- (d) Provide an identification system which clearly locates buildings and their entries for patrons and emergency services.**

Response: Signage will be provided to clearly mark the primary building access for both 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.**

Response: As shown on the Landscape Plan provided in Exhibit H, existing shrubs in parking areas do not exceed 30-inches in height and tree canopies do not extend below 8-feet measured from grade.

(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: As shown on the updated Landscape Plan provided under Exhibit H, Sheets L1.0 and L1.1, the location for the proposed at-grade mechanical equipment, specifically the transformer pad, is screened using a combination of shrubs and trees. Tall Oregon Grape Holly are proposed abutting the transformer pad the southwest corner of the building. Jaquemontii Birch Tree and Pacific Nine Bark evergreen shrub provides additional screening.

Section 73.210 Objectives.

All commercial, industrial, public and semi-public projects 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 case of conflicts between objectives, the proposal shall provide a desirable balance between the objectives. Buildings shall be designed, to the maximum extent practicable, to:

- (1) Minimize disruption of natural site features such as topography, trees and water features.**

Response: As this site is part of the Nyberg Rivers commercial center, previous site work, grading, and utility stubs were provided for a building pad. This proposal will not cause additional impacts to natural site features such as the topography, trees and water features.

- (2) Provide a composition of building elements which is cohesive and responds to use needs, site context, land form, a sense of place and identity, safety, accessibility and climatic factors.**

Utilize functional building elements such as arcades, awnings, entries, windows, doors, lighting, reveals, accent features and roof forms, whenever possible, to accomplish these objectives.

Response: As shown on the Site Plan and building elevations provided in Exhibit H, the proposed building materials and glazing, when combined with the proposed landscape materials, create an attractive and vibrant site that ties into the overall varied aesthetic promoted by Centercal and Nyberg Rivers. The building entrances and connections from the parking areas provide safe and accessible pathways into the site, while also connecting to the adjacent pathways and sidewalks within the overall Nyberg Rivers commercial center. As shown on the elevations in Exhibit H, the primary entrances feature a canopy entry, landscaping and expanded sidewalk areas to give the building depth and to draw attention to the entrances.

- (3) Where possible, locate loading and service areas so that impacts upon surrounding areas are minimized. In industrial development loading docks should be oriented inward to face other buildings or other loading docks. In commercial areas loading docks should face outward towards the public right-of-way or perimeter of the site or both.**

Response: There are no designated loading and unloading areas proposed. Deliveries to the future building will be coordinated during off-peak, non-business hours and loading will occur along the northwestern side of the proposed building pad. The delivery trucks will be primarily WB-55, with deliveries made 1-2 times each week. Retail delivery will be in the early afternoon, each with an approximate duration of 3 hours. The loading area is further screened from the Nyberg Road public right-of-way through existing and additional landscaping, as indicated in the Landscape Plan in Exhibit H.

- (4) **Enhance energy efficiency in commercial and industrial development through the use of landscape and architectural elements such as arcades, sunscreens, lattice, trellises, roof overhangs and window orientation.**

Response: Site landscaping around the building pad will screen areas around the future building from the sun. In addition, window and door canopies are also proposed. Other energy efficient methods will be proposed with the building under a separate permit application. All of these measures will work to enhance energy efficiency.

- (5) **Locate and design entries and loading/service areas in consideration of climatic conditions such as prevailing winds, sun and driving rains.**

Response: The primary building entrances are located at various sides of the building, with entrances under canopy to protect from wind, sun and driving rain.

- (6) **Give consideration to organization, design and placement of windows as viewed on each elevation having windows. Surveillance over parking areas from the inside, as well as visual surveillance from the outside in, should be considered in window placement.**

Response: As shown on the building elevations in Exhibit H, the south elevation shows some windows. However, the south elevation is designated for access and delivery and mostly is a reflection of those functions. The west, north and east elevations will face into the interior of the Nyberg Rivers center, with windows provided along most of the facade for patrons to look out to the shopping center and for passers-by to view the retail areas. When combined with site lighting, the site provides a safe, secure, and efficient layout.

- (7) **Select building materials which contribute to the project's identity, form and function, as well as to the surrounding environment.**

Response: The proposed building materials, with the exception of the significant amount of glazing, are primarily earth tone colors and of texture that would blend in well with the landscape and the surrounding buildings found in Nyberg Rivers. The primary materials are a stone veneer to give the impression of a stone or rock treatment, with both a warm stone and tan color. Secondary materials include aluminum frames for the glazing (windows) that create a clean and orderly style. All of these elements work to create a defined style to separate this retail building from other retail buildings.

- (8) Select colors in consideration of lighting conditions and the context under which the structure is viewed, the ability of the material to absorb, reflect or transmit light and the color's functional role (e.g., to identify and attract business, aesthetic reasons, image-building).**

Response: The building materials were selected for an earth tone color palette, as well as features that would blend in well with the landscape and the natural vernacular surrounding buildings found in Nyberg Rivers. The color schemes are not too bright or dark and will limit sun reflection to the window glazing and aluminum framing.

- (9) Where possible, locate windows and provide lighting in a manner which enables tenants, employees and police to watch over pedestrian, parking and loading areas.**

Response: As shown on the building elevations in Exhibit H, there are multiple windows provided on the front and sides of the building, including areas where the building abuts parking areas and pedestrian paths. These windows are located to provide visual lines of sight from both the outside into the building, as well as visual lines for patrons looking out over the parking areas, pedestrian paths and plaza area. When combined with site lighting, the site provides a safe, secure, and efficient layout.

- (10) Where practicable locate windows and provide lighting in a manner which enables surveillance of interior activity from the public right-of-way or other public areas. [Ord. 904-93, §51, 9/13/93; Ord. 1097-02, 2/11/02]**

Response: As shown on the building elevations in Exhibit H, there are several windows provided on the front and sides of the building, where the building abuts parking areas and pedestrian paths. These windows are located to provide visual surveillance from both the outside in and from patrons looking out over the parking areas and pedestrian paths. When combined with site lighting, the site provides a safe, secure, and efficient layout.

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. [Ord. 904-93, §52, 9/13/93; Ord. 20-94, §18, 4/11/94; Ord. 1224-06 §24, 11/13/06]

Response: The existing on-site lighting at Nyberg Rivers and the proposed lighting for this retail building will combine to provide adequate candling for safe and visible access by both vehicles and pedestrians. The lighting will be focused internally to the site, limiting off-site impacts to the frontages along Nyberg Road. The proposed signage and lighting will provide an identification system for the primary entrances, while shrubs will be installed to not exceed 30-inches in height and trees will not extend below 8-feet measured from grade.

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 73.226 Objectives.

All new or expanded multi-family, including townhouses, commercial, industrial, public and semi-public projects 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. Mixed solid waste and source separated recyclable storage areas shall be designed to the maximum extent practicable, to:

- (1) Screen elements such as garbage and recycling containers from view.
- (2) Ensure storage areas are centrally located and easy to use.
- (3) Meet dimensional and access requirements for haulers.
- (4) Designed to mitigate the visual impacts of storage areas.
- (5) Provide adequate storage for mixed solid waste and source separated recyclables.
- (6) Improve the efficiency of collection of mixed solid waste and source separated recyclables. [Ord. 898-93, §7, 6/14/93. Ord. 1025-99, §40, 7/26/99; Ord. 1097-02, 2/11/02]

Response: As shown on the Site Plan (Exhibit H, Sheet C2.0) and Trash Enclosure Details (Exhibit H, Sheets D-1 and D-2), the proposed trash enclosure area will be designed to accommodate mixed solid waste and source separated recyclable storage areas. The trash enclosure was submitted to Republic Services and a letter of authorization is provided in Exhibit G to verify that the enclosure meets the dimensional and access requirements for the hauler.

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.**
- (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. This method is most appropriate when specific use of a new or expanded development is not known. It provides specific dimensional standards for the minimum size of storage areas by general use category.**
 - (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.**
 - (iii) The specific requirements are based on an assumed storage area height of 4 feet for mixed solid waste and source separated recyclables. Vertical storage higher than 4 feet, but no higher than 7 feet may be used to accommodate the same volume of storage in a reduced floor space (potential reduction of 43 percent of specific requirements). Where vertical or stacked storage is proposed, submitted plans shall include drawings to illustrate the layout of the storage area and dimensions for containers.**
 - (v) Commercial, industrial, public and semi-public developments shall provide a minimum storage area of 10 square feet plus: Office - 4 square feet/1000 square feet gross leasable area (GLA); Retail - 10 square feet/1000 square feet GLA; Wholesale/ Warehouse/ Manufacturing - 6 square feet/1000 square feet GLA; Educational and institutional - 4 square feet/1000 square feet GLA; and other - 4 square feet/1000 square feet GLA.**

Response: Based on the retail commercial requirements for storage areas, the minimum requirement is 112 square feet of storage area. As shown on the Site Plan (Exhibit H, Sheet C2.0) and Trash Enclosure Details (Exhibit H, Sheets D-1 and D-2), the proposed trash enclosure area will be designed to accommodate mixed solid waste and source separated recyclable storage areas. The proposed area is approximately 300 square feet. The trash enclosure plans was submitted to Republic Services and a letter of authorization is provided in Exhibit G to verify that the enclosure meets the dimensional and access requirements for the hauler.

(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 trash enclosure is located to the northeast of the building pad in an area separated from the adjacent parking stalls, and outside any required setback or yard. The storage area is appropriately screened according to TDC 73.227(6)(b)(iii) and two sets of access doors are provided on the side of the enclosure. In addition, the enclosure area will be covered with a metal roof that will also serve to cover hanging bike racks at the rear of the enclosure. The base of the enclosure is designed with a stone fascia to improve overall aesthetic quality of the structure.

(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: As shown on the Site Plan and building elevations in Exhibit H, the proposed trash enclosure area is dimensioned at approximately 25-feet wide by 12-feet deep, with walls 10-feet tall and double doors 8-feet tall. The enclosure is constructed with 8" split-face CMU walls and the doors are provided with locking mechanisms in the form of drop rods. The base of the enclosure is designed with a stone fascia to improve overall aesthetic quality of the structure. The structure is also covered with a roof with wood trim. Access to the enclosure is provided by a separate access door and an adjacent pedestrian walkway. The trash enclosure plan was submitted to Republic Services and a letter of authorization is provided in Exhibit G to verify that the enclosure meets the dimensional and access requirements for the hauler, including signature on the proposed plan for the trash enclosure.

(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: Access to the enclosure is provided by an existing parking lot, as well as an adjacent pedestrian walkway connecting the enclosure with the restaurant. The front of the trash enclosure is 12'6" high, while the rear is 10 feet high. The front is accessed with two sets of doors, each set at approximately 12 feet wide. The interior of the enclosure is lighted. The trash enclosure plan was submitted to Republic Services and a letter of authorization is provided in Exhibit G to verify that the enclosure meets the dimensional and access requirements for the hauler, including signature on the proposed plan for the trash enclosure.

LANDSCAPING

Section 73.240 Landscaping General Provisions.

- (1) **The following standards are minimum requirements.**
- (3) **The minimum area requirement for landscaping for uses in CO, CR, CC, CG, ML and MG Planning Districts shall be fifteen (15) percent of the total land area to be developed, except within the Core Area Parking District, where the minimum area requirement for landscaping shall be 10 percent. 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 may be reduced by 2.5 percent from the minimum area requirement as determined through the AR process.**

Response: As shown on the Landscape Planting Plan (Sheet L1.0, Exhibit H), the overall landscape percentage provided for the proposed developed area is 17 percent of the total development area, 17,563 SF. However, under AR-13-07, the Nyberg Rivers Master Plan was approved to include the minimum landscape area for the subject site. Under the Nyberg Rivers Master Plan and AR-13-07, and similar to the minimum parking standards, the minimum landscape areas for the subject site have already been reviewed and approved.

- (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 yard adjacent to the Interstate 5 and Nyberg Road right-of-way (ROW) is planted to be lawn and live groundcover and trees and shrubs to create a park-like character. This area will also be planted with additional landscaping to

provide additional screening between the trash enclosure area and areas to the southeast of the site.

- (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 proposed landscape areas are designed and will be constructed and installed so that all ground will be covered by living grass and/or plant material within three years of installation. No bark chips, rock or stone are proposed as groundcover. This includes all landscaping proposed for meeting the requirements of Condition S.

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: There are twenty trees within the ODOT right-of-way that are identified and marked for preservation on the tree preservation plan.

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: The Landscape Plan provided in Exhibit H, Sheet L1.0 includes a legend that specifies the species size and caliper of all the proposed new plant material.

- (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: The proposed Landscape Plan has been prepared, reviewed and signed by a registered landscape architect. The design and plant species have been chosen to reflect the site characteristics.

Section 73.280 Irrigation System Required.

Except for townhouse lots, landscaped areas shall be irrigated with an automatic underground or drip irrigation system.

Response: All landscape areas shown on the Landscape Plan in Exhibit H, Sheet L1.0 will be irrigated with an automatic drip irrigation system.

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.**

Response: As shown on the Site Plan and Landscape Plan, there are proposed landscaped areas located along the south, north, west, and east portions of the building which are viewable from Nyberg Road or the interior parking lot(s) at Nyberg Rivers.

- (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.**

Response: Although some pedestrian amenities are provided on-site, none of these areas are included in 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: All areas within the limit of work that are not occupied by buildings, parking spaces, drive aisles, pedestrian area or undisturbed natural areas are planned to be landscaped with new plantings. The landscape plan includes both deciduous and coniferous trees, shrubs and groundcover to occupy all remaining areas not summarized above.

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.

Response: As shown on the Existing Conditions Plan, Site Plan and Landscape Plan in Exhibit H, no new parking is proposed for this project. All parking and associated landscape areas are already constructed and are intended to provide landscaped parking areas for the site, as approved through AR-13-07.

Section 73.370 Off-Street Parking and Loading.

- (1) General Provisions.**
- (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.**

- (b) At the time of enlargement of an existing multi-family residential, commercial, institutional or industrial structure or use, TDC 73.370 shall apply to the existing and enlarged structure or use.
- (c) Except where otherwise specified, the floor area measured shall be the gross floor area of the building primary to the function of the particular use of the property other than space devoted to off-street parking or loading.
- (d) Where employees are specified, the term shall apply to all persons, including proprietors, working on the premises during the peak shift.
- (e) Calculations to determine the number of required parking spaces and loading berths shall be rounded to the nearest whole number.
- (f) If the use of a property changes, thereby increasing off-street parking or loading requirements, the increased parking/loading area shall be provided prior to commencement of the new use.
- (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.
- (h) When several uses occupy a single structure, the total requirements for off-street parking may be the sum of the requirements of the several uses computed separately or be computed in accordance with TDC 73.370(1)(m), Joint Use Parking.
- (i) Off-street parking spaces for dwellings shall be located on the same lot with the dwelling. Other required parking spaces may be located on a separate parcel, provided the parcel is not greater than five hundred (500) feet from the entrance to the building to be served, measured along the shortest pedestrian route to the building. The applicant must prove that the parking located on another parcel is functionally located and that there is safe vehicular and pedestrian access to and from the site. The parcel upon which parking facilities are located shall be in the same ownership as the structure.
- (j) Required parking spaces shall be available for the parking of operable passenger automobiles of residents, customers, patrons and employees and shall not be used for storage of vehicles or materials or for the parking of trucks used in conducting the business.
- (k) Institution of on-street parking, where none is previously provided, shall not be done solely for the purpose of relieving crowded parking lots in commercial or industrial planning districts.
- (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 proposed retail development meets the threshold requirements defined under 73.370(1)(a), triggering the off-street parking, loading, and bicycle parking requirements. However, all of these standards were reviewed and approved under AR-13-07. The parking requirements are calculated based on the square footage of a Shopping Center use and calculations are rounded to the nearest whole number. All required parking for vehicles is already existing and is located off-street within the Nyberg Rivers site. Additional bicycle parking is provided within this development and is located on the back side of trash enclosure area as covered parking.

(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 MOTOR VEHICLE PARKING REQUIREMENT	BICYCLE PARKING REQUIREMENT	PERCENTAGE OF BICYCLE PARKING TO BE COVERED
iii) Shopping center (over 100,000 sq. ft. of gross floor area)	4.1 spaces per 1,000 sq. ft. of gross floor area	Zone A: 5.1 spaces per 1,000 sq. ft. gross floor area Zone B: 6.2 spaces per 1,000 sq. ft. gross floor area	0.50 space per 1,000 sq. ft. of gross floor area	50

Response: The overall Nyberg Rivers commercial center parking requirements were determined based on a shopping center use under AR-13-07. All required parking for the proposed use has already been reviewed, approved and constructed. In addition, 4 new covered bicycle racks are provided at the rear of the trash enclosure.

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: All existing standard parking stalls associated with this development are dimensioned at 9' wide by 19' long to meet the dimensional standards set forth in Figure 73-1.

- (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: All existing compact parking stalls associated with this development are dimensioned at 7.7' wide by 16' long to meet the compact parking dimensional standards.

- (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 Site Plan in Exhibit H, no section of parking stalls exceed eight continuous stalls in a row without a landscape separation. The stalls located to the southwest of the building pad show seven continuous stalls before a landscape curb is provided.

- (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 lot drive aisles are constructed of asphalt.

- (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: All existing and proposed lighting will deflect to the interior of the site to limit shine or glare into adjacent properties and street ROWs.

- (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 parking areas associated with this development will be served by an existing drive aisle located on the west side of the building and parking areas. This drive aisle was constructed as a part of the Nyberg Rivers commercial center.

- (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: All parking adjacent to landscaped areas and pedestrian walkways feature curbs to prevent cars from encroaching into the landscaping and pedestrian pathways.

- (10) **Disability parking spaces and accessibility shall be provided in accordance with applicable federal and state requirements.**

Response: ADA compliant parking spaces are provided at the north side of the building. There are two (2) Revised based on final plan ADA compliant parking spaces shown on the Site Plan provided in Exhibit B.

- (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: The on-site drive aisle located west of the building and parking area does not have associated parking spaces and is 30-feet wide to meet the minimum requirement.

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: Ingress and egress from private property to the public streets were addressed and designed as a part of the Nyberg Rivers commercial center. This proposed development connects to the existing internal drive aisles that then connect to the ingress/egress at SW Nyberg Street, a public street.

(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.
Over 250	As required by City Engineer	As required by City Engineer	As required by City Engineer

Response: Ingress and egress from private property to the public streets were addressed and designed as a part of the Nyberg Rivers commercial center and approved under AR-13-07. This proposed development connects to the existing internal drive aisles that then connect to the ingress/egress at SW Nyberg Road, a public street. The internal drive aisles are 30-feet to meet the ingress/egress width requirement. For truck loading, the delivery trucks will be primarily WB-55, with 1-2 retail deliveries made each week. Retail delivery will be in the early afternoon with an approximate duration of 3 hours.

CONCLUSION

The request for an Architectural Review approval for the proposed retail building meets all applicable code provisions as addressed in this project narrative and in the attached application submittal materials. Therefore, the applicant respectfully requests approval of the proposed retail building and associated site development.



Clean Water Services File Number

15-003703

Sensitive Area Pre-Screening Site Assessment

1. Jurisdiction: Tualatin

2. Property Information (example 1S234AB01400)

Tax lot ID(s): 2S124A002508
Site Address: _____
City, State, Zip: Tualatin, OR 97062
Nearest Cross Street: SW Nyberg St

3. Owner Information

Name: DRM 7445 NYBERG ROAD LLC, ATTN: Dean MacBale
Company: DRM 7445 NYBERG ROAD LLC
Address: 10860 SW BEAV-HLSDL HWY
City, State, Zip: BEAVERTON, OR 97005
Phone/Fax: _____
E-Mail: _____

4. Development Activity (check all that apply)

- Addition to Single Family Residence (rooms, deck, garage)
- Lot Line Adjustment Minor Land Partition
- Residential Condominium Commercial Condominium
- Residential Subdivision Commercial Subdivision
- Single Lot Commercial Multi Lot Commercial
- Other _____

5. Applicant Information

Name: Shivon Van Allen
Company: Cardno
Address: 5415 SW Westgate Drive, Suite 100
City, State, Zip: Portland, OR 97212
Phone/Fax: 503-419-2500 / 503-419-2600
E-Mail: Shivon.VanAllen@cardno.com

6. Will the project involve any off-site work? Yes No Unknown

Location and description of off-site work _____

7. Additional comments or information that may be needed to understand your project _____

This application does NOT replace Grading and Erosion Control Permits, Connection Permits, Building Permits, Site Development Permits, DEQ 1200-C Permit or other permits as issued by the Department of Environmental Quality, Department of State Lands and/or Department of the Army COE. All required permits and approvals must be obtained and completed under applicable local, state, and federal law.

By signing this form, the Owner or Owner's authorized agent or representative, acknowledges and agrees that employees of Clean Water Services have authority to enter the project site at all reasonable times for the purpose of inspecting project site conditions and gathering information related to the project site. I certify that I am familiar with the information contained in this document, and to the best of my knowledge and belief, this information is true, complete, and accurate.

Print/Type Name Shivon Van Allen Print/Type Title Planning Technician

ONLINE SUBMITTAL

Date 11/12/2015

FOR DISTRICT USE ONLY

- Sensitive areas potentially exist on site or within 200' of the site. **THE APPLICANT MUST PERFORM A SITE ASSESSMENT PRIOR TO ISSUANCE OF A SERVICE PROVIDER LETTER.** If Sensitive Areas exist on the site or within 200 feet on adjacent properties, a Natural Resources Assessment Report may also be required.
- Based on review of the submitted materials and best available information Sensitive areas do not appear to exist on site or within 200' of the site. This Sensitive Area Pre-Screening Site Assessment does NOT eliminate the need to evaluate and protect water quality sensitive areas if they are subsequently discovered. This document will serve as your Service Provider letter as required by Resolution and Order 07-20, Section 3.02.1. All required permits and approvals must be obtained and completed under applicable local, State, and federal law.
- Based on review of the submitted materials and best available information the above referenced project will not significantly impact the existing or potentially sensitive area(s) found near the site. This Sensitive Area Pre-Screening Site Assessment does NOT eliminate the need to evaluate and protect additional water quality sensitive areas if they are subsequently discovered. This document will serve as your Service Provider letter as required by Resolution and Order 07-20, Section 3.02.1. All required permits and approvals must be obtained and completed under applicable local, state and federal law.
- This Service Provider Letter is not valid unless _____ CWS approved site plan(s) are attached.
- The proposed activity does not meet the definition of development or the lot was platted after 9/9/95 ORS 92.040(2). NO SITE ASSESSMENT OR SERVICE PROVIDER LETTER IS REQUIRED.

Reviewed by Lauree Harris Date 11/13/15



10295 SW Riorder Road, Wilsonville, OR 97070
O: 503.570.0626 F: 503.982.9307 republicservices.com

January 9, 2016

Dan Morrison
Senior Civil Project Designer, LEED A.P.
Cardno
5415 SW Westgate Drive
Suite 100
Portland OR 97221

Re: Pad J Building
Waste & Recycling Enclosure

Dear Dan;

Thank you, for sending me the site plans for this enclosure in Tualatin.

My Company: Republic Services of Clackamas & Washington Counties has the franchise agreement to service this area with the City of Tualatin. We will provide complete commercial waste removal and recycling services as needed on a weekly basis for this location.

My drivers should be able to safely service the enclosure as designed. The dimensions work well for our containers. Truck access also looks good. As we discussed please have the gates able to be secured in the open position about 180 degrees.

Thanks Dan for your help and concerns for our services prior to this project being developed.

Sincerely,

A handwritten signature in blue ink that reads "Frank J. Lonergan".

Frank J. Lonergan
Operations Manager
Republic Services Inc.



REPORT OF GEOTECHNICAL ENGINEERING SERVICES

Nyberg Woods II
Tualatin, Oregon

For
CenterCal Properties, LLC
December 20, 2011

GeoDesign Project: CenterCal-15-01



December 20, 2011

CenterCal Properties, LLC
7455 SW Bridgeport Road, Suite 205
Tigard, OR 97224

Attention: Mr. Jean Paul Wardy

Report of Geotechnical Engineering Services
Nyberg Woods II
Tualatin, Oregon
GeoDesign Project: CenterCal-15-01

GeoDesign, Inc. is pleased to submit our geotechnical engineering report for the proposed Nyberg Woods II development in Tualatin, Oregon. Our services for this project were conducted in accordance with the Professional Services Agreement between CenterCal Properties, LLC and GeoDesign, Inc. dated November 2, 2011. The results of our study are presented in this report.

We appreciate the opportunity to be of continued service to CenterCal Properties, LLC and to provide geotechnical engineering services for this project. Please contact us if you have questions regarding this report.

Sincerely,

GeoDesign, Inc.

A handwritten signature in black ink, appearing to read "Brett A. Shipton", is written over a faint, illegible printed name.

Brett A. Shipton, P.E., G., E.
Principal Engineer

cc: Mr. Hank Murphy, CenterCal Properties, LLC (via email only)

EMH:BAS:kt

Attachments

Two copies submitted

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EXECUTIVE SUMMARY

GeoDesign, Inc. completed our geotechnical engineering services and report in general accordance with the Professional Services Agreement between CenterCal Properties, LLC and GeoDesign, Inc. dated November 2, 2011 for the site located at the northwest corner of the intersection of SW Nyberg Street and Interstate 5 intersection in Tualatin, Oregon.

Based on the results of our subsurface explorations and analyses, it is our opinion that the site can be developed as proposed provided the site is prepared as recommended in this report. The recommendations in this report should be incorporated into design and construction, as well as incorporated into project specifications. The following summarizes general considerations for the planned construction project:

- We encountered fine-grained soils overlying weathered bedrock across the site. We anticipate that excavation will be possible using conventional earthmoving equipment.
- Demolition and removal of some of the existing structures is planned prior to site development. Demolition will include removal of pavements and buried elements such as foundations and existing or abandoned utilities. Public utilities or large utility lines (existing or proposed) should not be located beneath the proposed structures.
- Sensitive construction methods and specialized erosion control measures will be required to prevent wind-blown erosion and water-transported erosion during water runoff or heavy rains along the margins of the site.
- The on-site soils are generally suitable for use as structural fill provided they are properly moisture conditioned and large particles are removed in accordance with the recommendations in this report.
- Fill imported to modify site grades should be approved by the project geotechnical engineer and should be in conformance with structural fill as described in this report. Imported fill should be compacted as recommended to 95 percent of maximum dry density, as determined by ASTM D 1557 (modified proctor).
- Sufficient density testing or inspection should be conducted and documented by qualified personnel to confirm that fill placement and compaction meets project requirements.
- Groundwater was measured at a depth of approximately 5 feet BGS. Therefore, it is possible that dewatering will be required for deeper excavations. The contractor should be responsible for selecting the appropriate dewatering system based on their approach to construction.
- The proposed structures can be satisfactorily supported on conventional shallow foundations bearing on firm native soils or on structural fill underlain by native soils. We recommend that conventional wall and column foundations founded on undisturbed native sands and gravels or on imported structural fill overlying undisturbed sand and gravel be proportioned using a maximum allowable bearing pressure of 3,000 psf.
- Building floor slabs should be underlain by a minimum of 6 inches of compacted crushed rock if the site is prepared as recommended. The native soils are considered non-expansive. Satisfactory subgrade support for building floor slabs supporting loads of up to up to 125 psf can be obtained provided the subgrade is prepared in accordance with the recommendations in this report.

- For walls not restrained from rotation, an equivalent fluid pressure of 35 pcf should be used for design. An equivalent fluid pressure of 55 pcf should be used for design of walls restrained from rotation. For the embedded building walls, a superimposed seismic lateral force should be calculated based on a dynamic force of $6H^2$ pounds per lineal foot of wall (where H is the height of the wall in feet). The force should be applied as a distributed pressure with the resultant located at a distance of 0.6H from the base of the wall. Our retaining wall design recommendations are based on the following assumptions: (1) the walls is a conventional, cantilevered retaining walls or embedded building wall, (2) the walls are less than 10 feet in height, and (3) the backfill is level, drained, and consists of imported granular material. Re-evaluation of our recommendations will be required if the retaining wall design criteria for the project vary from these assumptions.
- Based on subsurface explorations and laboratory analyses, the native soils are not liquefiable during a design seismic event.

Our Professional Services Agreement allows for additional test pits to be completed if necessary. Additional test pits were not completed to obtain additional subsurface information at this stage of work.

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ACRONYMS

1.0 INTRODUCTION

This report presents the results of GeoDesign's geotechnical engineering evaluation for the proposed Nyberg Woods II development located in Tualatin, Oregon. The site encompasses a 96,799-square-foot Kmart store and 58,044 square feet of retail space occupied by a Michaels, Wendy's, Banner Bank, and other retail shops. Development of the vacant western portion of the property as well as redevelopment and enhancement of the current Kmart and Michaels portion of the site is planned. Figure 2 shows the preliminary site layout. For your reference, definitions of all acronyms used in this report are attached at the end of this document.

2.0 PURPOSE AND SCOPE

The purpose of our services was to explore the subsurface soil and groundwater conditions at the site to provide the basis for geotechnical design recommendations for site development. The specific scope of our services is summarized as follows:

- Drilled a total of two exploratory borings to depths ranging between 30 and 31.5 feet BGS and one boring to a depth of 48 feet BGS using hollow-stem and mud rotary drilling techniques. Rock coring was used at one location where medium hard to hard basalt was encountered.
- Obtained samples using SPT methods at minimum 5-foot intervals in soils, and maintained a log of encountered soil, rock, and groundwater conditions in the exploratory borings.
- Completed a laboratory testing program on the samples collected to further refine the classifications obtained in the field. Specifically, we have completed the following:
 - Twenty-four moisture content tests in general accordance with ASTM D 2216
 - Five gradation tests in general accordance with ASTM C 136
 - Seven Atterberg limits determinations in general accordance with ASTM D 4318
 - Four in situ soil resistivity tests in general accordance with ASTM G 57
 - One saturated soil resistivity test in general accordance with ASTM G 57
 - One CBR test in general accordance with ASTM D 1883
- Measured groundwater levels during drilling and one day following drilling.
- Cored existing pavement and advanced borings to a depth of 4 feet BGS at six locations.
- Provided recommendations for demolition, site preparation, grading and drainage, stripping depths, fill type for imported materials, compaction criteria, cut and fill slope criteria, procedures for use of on-site soils, and wet weather earthwork procedures.
- Provided design recommendations for shallow foundations. Our analysis includes the following:
 - Settlement estimates of shallow foundations
 - Allowable bearing pressures
 - Minimum footing widths
 - Depth of interior and exterior foundation
 - Minimum frost depth anticipated
 - Modulus of subgrade reaction of mat foundations
- Provided recommendations for preparation of floor slab subgrade.
- Recommended design criteria for permanent retaining walls (including lateral earth pressures, backfill, compaction, and drainage).

- Provided recommendations for rehabilitation of existing pavements.
- Provided recommendations for subsurface drainage of foundations, slabs, and pavements.
- Provided seismic parameters as required by the IBC.
- Provided this report summarizing our explorations, laboratory testing, analyses, and recommendations.

3.0 SITE CONDITIONS

3.1 SURFACE CONDITIONS

The property is located on the north side of Nyberg Road and west of Interstate 5. The site extends north from Nyberg Road to the Tualatin River and east from Interstate 5 to SW Martinazzi Avenue. The southern portion of the property is currently developed and the northern portion of the property is undeveloped and predominantly vegetated. The concrete pad from a demolished structure is present within the northern portion of the site. Existing site improvements include a Kmart, Michaels, Wendy's, Banner Bank, and several other retail shops and associated parking. The site gently slopes to the north toward the Tualatin River. Along the Tualatin River, the slopes are approximately 1H:1V.

3.2 SUBSURFACE CONDITIONS

We explored site subsurface conditions by drilling one boring (B-2) to a depth of 48 feet BGS and two borings (B-1 and B-3) to depths ranging between 31.5 and 30.0 feet BGS, respectively. We also cored the existing pavement at six locations (PC-1 through PC-6) to depths of 4.0 feet BGS. Explorations were completed in two separate mobilizations. Figure 2 shows the approximate location of explorations relative to existing site features and the proposed development. Site subsurface conditions generally consist of clay, silt, sand, gravel, and cobbles underlain by basalt bedrock. Bedrock was encountered in borings B-2 and B-3 during our exploration. Bedrock encountered in B-2 is medium hard to hard. We cored 5 feet into the bedrock at this location. Bedrock encountered at boring B-3 is extremely soft to medium hard. We were able to drill the soft bedrock encountered at B-3 a distance of 16 feet. The boring was completed at the target depth of 30.0 BGS feet without coring. The following sections provide a more detailed description of the subsurface conditions encountered. Boring logs are presented in the Appendix.

3.2.1 Concrete, AC, and Aggregate Base

Six pavement cores were completed within the existing parking areas across the site. The thickness of the concrete, AC, and aggregate base observed at the pavement core locations is summarized in Table 1.

Table 1. Concrete, AC, and Aggregate Base Thicknesses

Boring	Surface Material	Surface Material Thickness (inches)	Aggregate Base Thickness (inches)
C-1	AC	4.3	3.8
C-2	AC	5.8	5.3
C-3	AC	4.5	5.5
C-4	AC	6.0	5.0
C-5	AC	4.8	7.3
C-6	AC	4.5	7.5

3.2.2 Fill

Undocumented fill material was encountered at pavement core C-4. Fill at this location consists of stiff clay with sand. Laboratory testing indicates that the moisture content of the fill is 23 percent.

3.2.3 Silt, Clay, and Root Zone

An approximately 1- to 5-inch-thick root zone was encountered in the borings (B-1 through B-3). Silt and clay soils were generally encountered underlying the root zone in the borings and beneath the fill where the pavement was cored. Borings encountered silt or clay material to depths ranging between 5.3 and 9.5 feet BGS. The surficial silt and clay ranges in consistency from soft to stiff and contains varying amounts of sand. Laboratory testing indicates that the moisture contents of the native silts and clays range from 15 to 30 percent. Based on laboratory testing, the plasticity index of the upper fine-grained material ranges from 10 to 22.

3.2.4 Sand, Gravel, and Cobbles

Granular material consisting of sand and gravel with varying amounts of silt was encountered beneath the upper silt material in borings B-1 and B-2. A 2.5-foot-thick zone of cobbles was encountered in boring B-2 at a depth of 6.0 feet BGS. Laboratory testing indicates that moisture content of the native sand and gravel varied from 6 to 28 percent at the time of our exploration. Based on the laboratory testing, the fines content ranges from 13 to 28 percent.

3.2.5 Lower Silt and Clay

Alternating layers of silt and clay were observed beneath the granular material in borings B-1 and B-2 at depths of 19.0 and 12.0 feet BGS, respectively. The lower silt and clay materials range in consistency from medium stiff to stiff. Silt material generally exhibits low plasticity and contains varying amounts of sand and gravel. Clay generally exhibits medium to high plasticity. Laboratory testing indicates that the moisture contents of the native lower silts and clays range from 27 to 37 percent. Based on laboratory testing, the plasticity index of the lower fine-grained material ranges from 7 to 47.

3.2.6 Decomposed Basalt

Decomposed basalt was encountered in all of the borings (B-1 through B-3) at depths ranging between 5.3 and 27.5 feet BGS. Decomposed basalt was not encountered in the pavement core locations. The decomposed basalt soils generally consist of sand and gravel with varying

amounts of silt. The sands and gravels are typically medium dense to very dense. Laboratory testing indicates that moisture contents of the decomposed basalt varied from 10 to 43 percent at the time of our exploration. Based on the laboratory testing, the fines are approximately 35 percent.

3.2.7 Basalt

Basalt bedrock was encountered in borings B-2 and B-3 at depths of 43.0 and 14.0 feet BGS, respectively. Basalt encountered in boring B-2 ranged from medium hard to hard and was moderately to slightly weathered. Basalt encountered in B-3 ranged from extremely soft to soft and decomposed to moderately weathered.

3.2.8 Groundwater

Groundwater was measured in boring B-2 only. Drilling mud was used the drill the holes; therefore, we could not measure the depth to groundwater in borings B-1 and B-3. The hole was flushed with water and left open overnight. Groundwater was measured at a depth of 5.3 feet BGS on November 8, 2011 in boring B-2. The depth to groundwater is expected to fluctuate in response to seasonal changes, changes in surface topography, discharge from the adjacent site, and other factors not observed in the site vicinity.

3.3 CORROSIVITY/CHEMICAL ACTIVITY

One soil sample was collected for resistivity. In addition, four resistivity tests were completed near the four walls of the proposed development in the locations shown on Figure 2. Resistivity tests were completed in general accordance with ASTM G 57. A spacing of 10 feet between electrodes was used for field testing. The results of the resistivity testing are presented in Table 2.

Table 2. Results of Resistivity Testing

Location	Resistivity (\square *cm)
R-1	5,075
R-2	14,976
R-3	6,702
R-4	7,756
Laboratory (B-2 at 2.5 feet)	11,870

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our subsurface explorations and analyses, it is our opinion that the site can be developed as proposed provided the site is prepared as recommended in this report. The recommendations in this report should be incorporated into design and construction, as well as incorporated into project specifications. The following summarizes general considerations for the planned construction project:

- Demolition and removal of some of the existing structures is planned prior to site development. Demolition will include removal of pavements and buried elements such as foundations and existing or abandoned utilities. Public utilities or large utility lines (existing or proposed) should not be located beneath the proposed structures.
- The proposed structures can be satisfactorily supported on conventional shallow foundations bearing on firm native soils or on structural fill underlain by native soils.
- Sensitive construction methods and specialized erosion control measures will be required to prevent wind-blown erosion and water-transported erosion during water runoff or heavy rains along the margins of the site.
- The on-site soils are generally suitable for use as structural fill provided they are properly moisture conditioned and large particles are removed in accordance with the recommendations in this report.
- Fill imported to modify site grades should be approved by the project geotechnical engineer and should be in conformance with structural fill as described in this report. Imported fill should be compacted as recommended to 95 percent of maximum dry density, as determined by ASTM D 1557 (modified proctor).
- Sufficient density testing or inspection should be conducted and documented by qualified personnel to confirm that fill placement and compaction meets project requirements.
- Building floor slabs should be underlain by a minimum of 6 inches of compacted crushed rock if the site is prepared as recommended. The native soils are considered non-expansive.
- Based on subsurface explorations and laboratory analyses, the native soils are not liquefiable during a design seismic event.

The following sections present specific geotechnical recommendations for design and construction of the proposed development.

5.0 SITE DEVELOPMENT RECOMMENDATIONS

5.1 SITE PREPARATION

5.1.1 Demolition

Existing improvements are present in areas of proposed new development. Demolition of these improvements will require complete removal of the structure within areas to receive new pavements, buildings, or engineered fills. Removal will include buried foundations associated with buildings and pavements in the surrounding areas. Our explorations indicate that pavement sections consist of approximately 4.3 to 6.0 inches of AC. Existing asphalt, structural elements, hardscapes, and the existing topsoil zone should be stripped and removed from all proposed structural fill, pavement, and improvement areas and for a 5-foot margin around such areas. Underground utility lines or hidden, buried tanks encountered in areas of new improvements should also be completely removed. Depending on the trench backfill, it may be possible to grout full if left in place. Materials generated during demolition should be transported off site for disposal or stockpiled in areas designated by the owner. In general, these materials will not be suitable for re-use as engineered fill.

Voids resulting from removal of improvements or loose soil in utility lines should be backfilled with compacted structural fill, as discussed in the "Structural Fill" section of this report. The

bottom of such excavations should be excavated to expose a firm subgrade before filling and their sides sloped at a minimum of 1H:1V to allow for more uniform compaction at the edges of the excavations.

5.1.2 Wet Weather/Wet Soil Grading

The fine-grained, silty soils encountered near the surface at the site are moderately disturbed during wet weather and when they are above the optimum moisture content. If construction occurs in areas of wet, silty soils, site preparation activities may need to be accomplished using track-mounted excavating equipment that loads removed material into trucks supported on granular haul roads. The thickness of the granular material for haul roads and staging areas will depend on the amount and type of construction traffic. Generally, a 12-inch-thick mat of granular material is sufficient for light staging areas and the basic building pad but is generally not expected to be adequate to support heavy equipment or truck traffic. The granular mat for haul roads and areas with repeated heavy construction traffic typically needs to be increased to between 18 inches. These thicknesses can be reduced in areas of clean sand.

The above values are only guidelines; the actual thickness of haul roads and staging areas should be selected by the contractor based on their approach to site development, the actual subgrade soil, and the amount and type of construction traffic. The granular material should be placed in one lift over the prepared, undisturbed subgrade and compacted using a smooth-drum, non-vibratory roller. The imported granular material should meet the specifications for stabilization material in the "Structural Fill" section of this report. A geotextile fabric can be placed as a barrier between the subgrade and imported granular material in areas of repeated construction traffic for additional support. The geotextile should have a minimum Mullen burst strength of 250 psi for puncture resistance and an AOS between U.S. Standard No. 70 and No. 100 Sieves.

Alternatively, construction can be staged such that the existing pavements can be used as haul roads.

5.2 SUBGRADE EVALUATION

With the exception of the northern portion of the site, the areas surrounding the site are heavily developed, and undocumented fill materials may be present on site that were not encountered during our exploration. Proper subgrade evaluation by qualified geotechnical personnel is critical to determine if unsuitable soils exist after demolition and stripping.

After preparation activities are complete for the existing subgrade, the subgrade should be proofrolled with a fully loaded dump truck or similarly heavy, rubber-tire construction equipment to identify any remaining soft, loose, or unsuitable areas. The proofroll should be conducted prior to placing additional fill. The proofrolling should be observed by a qualified geotechnical engineer who should evaluate the suitability of the subgrade and identify any areas of yielding that are indicative of soft or loose soil. If soft or loose zones are identified during proofrolling, these areas should be excavated to the extent indicated by the engineer and replaced with structural fill. Subgrade preparation and evaluation by proofrolling should not be conducted during freezing weather.

Wet soil that has been disturbed during site preparation activities, or soft or loose zones identified during subgrade evaluation, should be removed and replaced with compacted structural fill or improved in place as recommended.

5.3 EXCAVATION

Conventional, heavy earthmoving equipment in proper working condition should be capable of making necessary general excavations of the on-site soils and excavations for utilities and footings. We do not anticipate that excavations will penetrate bedrock. The gravelly soils will be prone to caving, which may result in widening of excavations. We recommend loose material at the base of footing and trench excavations be smoothed and compacted prior to footing or fill placement. Heavy excavation equipment and hard excavation methods may be required to excavate the dense material.

Excavation sidewalls should stand vertical to a depth of approximately 4 feet provided excessively dry or wet conditions do not affect the sidewalls. However, moderate caving is possible in the native granular soils when dry and even shallow excavations may need to be laid back to control caving. Excavations deeper than 4 feet BGS should be shored or laid back at an inclination of 1H:1V or flatter if workers are required to enter. The contractor should be responsible for selecting the appropriate shoring system.

Shoring for trenches less than 6 feet deep should be possible with a conventional box system. Moderate sloughing should be expected outside the box, particularly in conditions that are exceptionally dry. All shoring should be approved by a registered engineer before use.

Excavations should be made in accordance with applicable OSHA and state regulations. While this report describes certain approaches to excavation and shoring, the contract documents should specify that the contractor is responsible for providing adequate excavation equipment, selecting and designing the specific methods, observing excavations for safety, and providing shoring as required to protect personnel and adjacent structural elements.

Groundwater was measured at a depth of approximately 5 feet BGS. Therefore, it is possible that dewatering will be required for deeper excavations. The contractor should be responsible for selecting the appropriate dewatering system based on their approach to construction.

5.4 STRUCTURAL FILL

Structural fill includes fill beneath foundations, slabs, pavements, any other areas intended to support structures, or within the influence zones of structures. Structural fill should be free of organic matter and other deleterious materials and, in general, should consist of particles no larger than 6 inches in diameter. Smaller maximum particle sizes will be necessary for some applications.

The workability of material for use as structural fill will depend on the gradation and moisture content of the soil. As the amount of fines (material passing the U.S. Standard No. 200 Sieve) increases, soil becomes increasingly sensitive to small changes in moisture content and adequate compaction becomes more difficult, if not impossible, to achieve. As the amount of coarse gravel

increases, fill material tends to segregate as it is being fine graded with coarser material being pushed out the leading edge of the fill being placed, which results in an unsatisfactory material gradation. Recommendations for suitable fill materials are provided in the following sections. Compaction recommendations are provided in Tables 3 and 4 (see "Fill Placement and Compaction" section of this report).

5.4.1 Native Soil

The on-site gravel soils are generally suitable for use as structural fill provided they are properly moisture conditioned by adding water or drying back, as necessary. The silt content varies but is generally less than 11 percent. As the silt content increases, the success of compaction becomes more sensitive to increased moisture content. Soils are most successfully compacted when the moisture content is within a few percentage points of optimum and adequately sized excavation, grading, and compaction equipment is used. The moisture content will vary depending on the time of year and recent weather. The moisture and silt content should be evaluated at the time of fill placement.

Soil used as structural fill should be free of organic matter or other deleterious material and generally free of rock particles larger than 6 inches in maximum dimension. Cobbles up to 10 inches may be acceptable provided they are dispersed in the fill, do not create voids in the fill matrix, and compaction can be achieved by sufficiently large equipment. Oversized cobbles and boulders greater than 10 inches in diameter should not be used as structural fill.

Fine grading of gravelly soils may result in segregating cobbles or coarse gravels from the sandy/fine gravel matrix, which results in unsatisfactory (poorly graded or "boney") fill. Fill material should be maintained as well graded with gravelly and sandy material for proper compaction during fill placement and mass grading.

5.4.2 Imported Fill

Imported material to be used as structural fill should be as described in the following subsections, unless approved by the project geotechnical engineer for specific fill applications or general site grading. In general, imported material should be granular material for use during periods of wet weather or when weather does not permit drying back of silty material. Granular fill, crushed rock, or gravel as described below consists of durable, processed, angular rock with at least two fractured faces. If silty material is used for imported fill, the material should be moisture conditioned to within 3 points of optimum and compacted as recommended for structural fill.

5.4.3 Select Granular Fill

Granular material for use as structural fill should be pit- or quarry-run rock, crushed rock, or crushed gravel and sand that is fairly well graded between coarse and fine, has less than 5 percent by dry weight passing the U.S. Standard No. 200 Sieve, and has a maximum particle size of 3 inches. Granular fill used during periods of prolonged dry weather may have up to 10 percent by dry weight passing the U.S. Standard No. 200 Sieve provided it is properly moisture conditioned for compaction.

5.4.4 Pipe Bedding

Utility trench backfill for bedding and in the pipe zone should consist of well-graded granular material with a maximum particle size of ¾ inch and less than 5 percent by dry weight passing the U.S. Standard No. 200 Sieve or as required by the pipe manufacturer.

5.4.5 Crushed Rock or Crushed Concrete

Crushed rock or crushed concrete fill should consist of hard, durable, angular crushed rock or concrete that has a maximum particle size of 1½ inches, is well graded between coarse and fine sizes, has a minimum of two mechanically fractured faces, and has less than 5 percent by dry weight smaller than the U.S. Standard No. 200 Sieve. Smaller or larger maximum particle sizes may be required for some applications and should be approved by the engineer. Rounded gravel materials should be crushed to have at least two fractured faces on particles larger than 1 inch. Crushed rock or concrete should not contain organic material, clay balls, shale, or other deleterious materials.

5.4.6 Aggregate Bases

Aggregate base materials under foundations and floor slabs should consist of crushed rock that is placed on a prepared subgrade that consists of firm, inorganic, native soils or compacted fill. Aggregate base material should be placed in uniform horizontal lifts and compacted to the recommended minimum density provided in Table 3.

5.4.7 Trench Backfill

Trench backfill in structural areas should consist of select granular fill or crushed rock as described in the "Structural Fill" section of this report and be compacted to the minimum density provided in Table 3. Pipe bedding and fill in the pipe zone should be compacted to the minimum density presented in Table 3 or as recommended by the pipe manufacturer.

5.5 FILL PLACEMENT AND COMPACTION

Fill soils should be compacted at a moisture content that is within 3 percent of optimum. The maximum allowable moisture content varies with the soil gradation and should be evaluated during construction. Clayey and other fine, granular soils may be difficult or impossible to compact during persistent wet conditions.

Fill and backfill material should be placed in uniform, horizontal lifts and densified with appropriate compaction equipment. The maximum lift thickness will vary, depending on the material and compaction equipment used, but should generally not exceed the loose thicknesses provided in Table 3. Fill material should be compacted in accordance with the compaction criteria provided in Table 4.

Table 3. Recommended Uncompacted Lift Thickness

Compaction Equipment	Recommended Uncompacted Lift Thickness (inches)		
	Native Soils	Granular and Crushed Rock Maximum Particle Size $\leq 1\frac{1}{2}$ inches	Crushed Rock Maximum Particle Size $> 1\frac{1}{2}$ inches
Hand Tools: Plate Compactors and Jumping Jacks	4 to 8	4 to 8	Not Recommended
Rubber-Tire Equipment	6 to 8	8 to 10	8 to 10
Light Roller	8 to 10	8 to 10	8 to 10
Heavy Roller	10 to 12	10 to 12	10 to 12
Hoe-Pack Equipment	12 to 14	10 to 12	10 to 12

Note: The above table is based on our experience and is intended to serve only as a guideline. The information provided in this table may be superseded by the project specifications.

Table 4. Compaction Criteria

Fill Type	Compaction Requirements in Structural Zones		
	Percent Maximum Dry Density Determined by ASTM D 1557		
	0 to 2 Feet Below Subgrade (percent)	> 2 Feet Below Subgrade (percent)	Pipe Zone (percent)
Area Fill:			
Granular	95	95	----
Fine Grained	92	92	----
Aggregate Bases	95	95	----
Trench Backfill ^{1,2}	95	92	90 ²
Retaining Wall Backfill	95 ³	92 ³	----

1. Trench backfill above the pipe zone in non-structural areas should be compacted to 90 percent.
2. Or as recommended by the pipe manufacturer.
3. Should be reduced to 90 percent within a horizontal distance of 3 feet from the retaining wall.

For larger-graded material, performance-based evaluation may be required if conventional density testing is impractical for evaluating compaction. Performance-based evaluation includes direct observation by qualified personnel of material placement and compaction. Material should be compacted with large equipment using dynamic vibration until the material is unyielding under compactive load and physical distress of the upper material can be observed. Also, proofrolling with a fully loaded dump truck or similar heavy, rubber-tire construction equipment to identify any loose or unsuitable areas should be conducted in conjunction with performance-based observations. A proofroll should be conducted at a minimum of every 1 to 2 feet of fill as it is placed to raise site grades. The proofrolling should be observed by a qualified geotechnical

professional, who should evaluate the suitability of the subgrade and identify any areas of yielding that are indicative of soft or loose soil. If soft or loose zones are identified during proofrolling, these areas should be excavated to the extent indicated and replaced with compacted structural fill.

5.6 CUT AND FILL SLOPES

Permanent cut and fill slopes in the site soils should not be inclined steeper than 2H:1V. Buildings, access roads, and pavements should be set back a minimum of 5 feet from the crest of any such slopes.

5.7 SITE DRAINAGE

We recommend that roof drains, retaining wall back drains, and other subsurface drains be tightlined to the storm drain facilities. Access road, parking, and open space areas should be sloped such that surface water runoff is collected and routed to suitable discharge points. We recommend that ground surfaces within 10 feet of the building be sloped at least 2 percent away from the foundations.

5.8 EROSION CONTROL

The on-site soils are moderately susceptible to erosion. We recommend that slopes be covered with an appropriate erosion control product if construction occurs during periods of wet weather. We recommend that all slope surfaces be planted as soon as practical to minimize erosion. Surface water runoff should be collected and directed away from slopes to prevent water from running down the slope face. Erosion control measures (such as straw bales, sediment fences, and temporary detention and settling basins) should be used in accordance with state and local ordinances.

6.0 FOUNDATION DESIGN RECOMMENDATIONS

6.1 SHALLOW FOUNDATIONS

The proposed structures can be supported on continuous wall or isolated column footings provided the site is prepared as recommended in the previous sections of this report. We recommend footings be founded on firm native soils or on structural fill placed over competent native soils. We recommend that isolated column and continuous wall footings have minimum widths of 24 and 18 inches, respectively. The exterior footings should be established at least 18 inches below the lowest adjacent grade.

6.1.1 Bearing Capacity

We recommend that conventional wall and column foundations founded on undisturbed native sands and gravels or on imported structural fill overlying undisturbed sand and gravel be proportioned using a maximum allowable bearing pressure of 3,000 psf. The recommended bearing pressure applies to the total of dead and long-term live loads and may be increased by one-third when considering earthquake or wind loads. This is a net bearing pressure. The weight of the footing and overlying backfill can be ignored in calculating footing sizes.

The recommended allowable bearing pressure applies to the total of dead plus long-term live loads and may be increased by 50 percent for short-term loads such as those resulting from wind or seismic forces.

6.1.2 Total Foundation Settlement

Settlement magnitudes are proportional to the size, depth, and type of foundation used. Settlement potential at a given bearing pressure increases with the width of the footing and is usually greater for wall footings than column footings. Foundations designed and constructed as recommended in this report are expected to experience less than 1 inch of post-construction settlement. Post-construction differential settlements of less than ½ inch (one-half of the total settlement magnitude) can be expected between adjacent footings with similar loads.

6.1.3 Lateral Resistance

Lateral loads can be resisted by passive earth pressure on the sides of footings and by friction on the bearing surface. We recommend that passive earth pressures be calculated using an allowable equivalent unit weight of 350 pcf if footings are confined by undisturbed native soils or structural fill located above the level of groundwater. We recommend that a friction coefficient of 0.3 should be used for footings in contact with the native silts encountered at the site.

The passive earth pressure value is based on the assumptions that the adjacent grade is level and that static groundwater remains below the base of the footing throughout the year. The top 1 foot of soil should be neglected when calculating passive lateral earth pressures, unless the foundation area is covered with pavement or is inside the building.

6.1.4 Footing Subgrade Preparation

Shallow foundations should be founded on a prepared surface consisting of competent native soils or compacted structural fill overlying competent native soils. Loose or disturbed materials should be removed or compacted as described for structural fill before placing reinforcing steel and concrete. Foundation-bearing surfaces should not be exposed to standing water. Should water infiltrate and pool in the excavation, it should be removed before placing reinforcing steel or concrete.

In wet weather, we recommend placing a sufficient amount of crushed rock (typically 2 to 4 inches) to prevent disturbance to the foundation subgrades from foot traffic. The contractor is responsible for the construction sequencing and methodology for footing excavation and construction. Consequently, the actual amount of rock placed to protect foundation subgrades from disturbance in wet weather should be selected by the contractor. Rock used to protect the subgrades during wet weather should cover the foundation bearing surfaces and be compacted until "well keyed." Any foundation subgrade soils that are disturbed should be removed prior to the placement of crushed rock and/or pouring of the foundations.

We recommend that an experienced geotechnical engineer observe all foundation subgrade before placing reinforcing steel in order to confirm that adequate bearing surfaces have been achieved and that the soil conditions are as anticipated in our analyses.

6.2 FLOOR SLABS

Satisfactory subgrade support for building floor slabs supporting loads of up to up to 125 psf can be obtained provided the subgrade is prepared in accordance with the recommendations in this report. A minimum 6-inch-thick layer of imported granular material should be placed and compacted over the prepared subgrade to assist as a capillary break. The floor slab base rock should be crushed rock or crushed gravel and sand, meeting the requirements outlined in the "Structural Fill" section of this report. The imported granular material should be placed in one lift and compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D 1557. Floor slab base rock contaminated with excessive fines (greater than 5 percent by dry weight passing the U.S. Standard No. 200 Sieve) should be replaced. Settlement of floor slabs supporting the anticipated design loads and constructed as recommended is not expected to exceed approximately ½ inch.

Flooring manufacturers often require vapor barriers to protect flooring and flooring adhesives. Many flooring manufacturers will warrant their product only if a vapor barrier is installed according to their recommendations. Selection and design of an appropriate vapor barrier, if needed, should be based on discussions among members of the design team. We can provide additional information to assist you with your decision.

6.3 RETAINING STRUCTURES

Our retaining wall design recommendations are based on the following assumptions: (1) the walls is a conventional, cantilevered retaining walls or embedded building wall, (2) the walls are less than 10 feet in height, and (3) the backfill is level, drained, and consists of imported granular material. Re-evaluation of our recommendations will be required if the retaining wall design criteria for the project vary from these assumptions.

For walls not restrained from rotation, an equivalent fluid pressure of 35 pcf should be used for design. An equivalent fluid pressure of 55 pcf should be used for design of walls restrained from rotation. For the embedded building walls, a superimposed seismic lateral force should be calculated based on a dynamic force of $6H^2$ pounds per lineal foot of wall (where H is the height of the wall in feet). The force should be applied as a distributed pressure with the resultant located at a distance of 0.6H from the base of the wall. Footings for the retaining walls should be designed as recommended for shallow foundations, including bearing pressure and resistance to lateral loads.

Drains that consist of a perforated drainpipe wrapped in a non-woven geotextile filter should be installed behind retaining walls. The pipe should be embedded in a zone of free-draining material containing no more than 2 percent by dry weight passing the U.S. Standard No. 200 Sieve (washed analysis) and should be sloped to drain toward a suitable outfall. The drain rock should be separated from the backfill with a geotextile that has suitable drainage properties. Backfill material for retaining walls should consist of medium sand, sand and gravel, or well-graded sand or gravel, with not more than 8 percent by dry weight passing the U.S. Standard No. 200 Sieve. A suitable geotextile filter fabric should be placed between the granular material and the native soil to prevent movement of fines into the clean, granular material.

Backfill should be placed and compacted as recommended for structural fill, with the exception of backfill placed immediately adjacent to walls. Backfill adjacent to walls should be compacted to a lesser standard to reduce the potential for generating excessive earth pressures on the walls. Backfill located within a horizontal distance of 3 feet from the retaining walls should be compacted to approximately 90 percent of the maximum dry density, as determined by ASTM D 1557. Backfill placed within 3 feet of the wall should be compacted in lifts less than 6 inches thick using hand-operated tamping equipment (such as jumping jack or vibratory plate compactors). If flatwork (slabs, sidewalk, or pavement) will be placed adjacent to the wall, we recommend that the upper 2 feet of fill be compacted to 95 percent of the maximum dry density, as determined by ASTM D 1557. Settlement of up to 1 percent of the wall height commonly occurs immediately adjacent to the wall as the wall rotates and develops active lateral earth pressures. Consequently, we recommend that construction of flatwork adjacent to retaining walls be postponed at least four weeks after wall construction, unless survey data indicates that settlement is complete prior to that time.

6.4 SEISMIC DESIGN CRITERIA

6.4.1 IBC Design Parameters

Based on our investigation, the following design parameters can be applied if the building is designed using the applicable provisions of the 2009 IBC. The parameters in Table 5 should be used to compute seismic base shear forces.

Table 5. IBC Seismic Design Parameters

	0.2 Second	1 Second
Maximum Considered Earthquake Spectral Acceleration	$S_s = 0.92 \text{ g}$	$S_1 = 0.33 \text{ g}$
Site Class	D	
Site Coefficient	$F_a = 1.13$	$F_v = 1.74$
Adjusted Spectral Acceleration	$S_{MS} = 1.04 \text{ g}$	$S_{M1} = 0.58 \text{ g}$
Design Spectral Response Acceleration Parameters	0.69 g	0.38 g
Design Spectral Peak Ground Acceleration	0.28 g	

Subsurface conditions generally consist of silt overlying shallow weathered bedrock. Consequently, the risk of liquefaction is considered low under design levels of ground shaking.

7.0 PAVEMENT DESIGN RECOMMENDATIONS

7.1 GENERAL

We observed areas of minor to moderate raveling and fatigue cracking at the time of our pavement core explorations. Consequently, we have provided alternatives for rehabilitation of existing pavements. We have also provided recommended pavement section thicknesses for new pavements.

7.2 NEW PAVEMENTS

Our pavement recommendations assume that traffic will consist of ten 18-kip ESALs per day in areas designated as heavy duty and 5 ESALs per day in standard-duty areas. A design life of 20 years was assumed in our calculations. The recommended AC pavement section is based on an assumed in situ CBR of 4 for the underlying soils. Table 6 provides the computed minimum pavement sections.

Table 6. Minimum Recommended Pavement Section Thickness

Location	AC (inches)	Aggregate Base (inches)
Heavy Duty	3.0	8.0
Standard Duty	3.0	6.0
Automobile Parking	2.5	6.0

The aggregate base should conform to OSSC 02630 with the addition that the material contain no more than 5 percent passing the U.S. Standard No. 200 Sieve. Aggregate base should be placed in one lift and compacted to not less than 95 percent of the maximum dry density, as determined by ASTM D 1557. The AC should conform to OSSC 00745 and compacted to 91 percent of the maximum specific gravity of the mix.

The preceding recommended pavement sections assume that the subgrade is prepared in accordance with the recommendations provided in this report and construction will be completed during a period of extended dry weather. Wet weather construction is not recommended and would likely require an increased thickness of the granular base course and replacement of softened subgrade soils with structural fill.

The AC should be Level 2, 12.5-mm, dense HMA according to OSSC 00745 and compacted to 91 percent of the maximum specific gravity of the mix, as determined by ASTM D 2041. Minimum lift thickness for 12.5-mm HMA is 1.5 inches. Asphalt binder should be performance graded and conform to PG 64-22.

Construction traffic should be limited to non-building, unpaved portions of the site or haul roads. Construction traffic should not be allowed on new pavements. If construction traffic is to be allowed on newly constructed road sections, we recommend increasing the asphalt thickness by an additional ½ inch in construction traffic locations provided construction traffic does not exceed two trucks per day. In addition, our AC pavement design does not take staged construction into account. If staged construction (placing AC layers during and then after construction at a later date) is selected, we recommend that the project team discuss paving requirements and thicknesses with GeoDesign prior to construction.

7.3 PAVEMENT REHABILITATION

Minor to moderate raveling and fatigue cracking was observed in isolated locations within the pavement areas of the site. We recommend that at a minimum a 2-inch-thick pavement overlay

be placed across the existing pavement areas. Areas of distress should be identified in the field prior to paving and repaired using a minimum 12-inch thickness of aggregate base and a minimum 4 inch thickness of AC.

As an alternative to repairing selected areas of the existing pavement, the existing pavements may be tilled and compacted in place and a new layer of AC may be placed. Typically, tilling of pavement materials is conducted between depths of 10 and 16 inches BGS. Due to some thin pavement areas (combined AC and aggregate base) of 8 inches at C-1, we recommend a tilling depth of 10 inches to minimize contamination from subgrade materials. Following tilling, the combined aggregate base and AC pavement (hereafter referred to as the "base") should be compacted to a firm and unyielding state. We recommend that AC thicknesses correspond to those provided for new pavements in Table 6. If thinner pavement sections are required, cement may be added to the combined base. We should be notified if this option is selected.

Due to the non-homogeneous nature of the base, field compaction will need to be verified by proofrolling the base with a loaded dump truck or other heavy construction equipment. Proofrolls should be observed by a representative of GeoDesign. Areas that yield under proofroll will need to be either re-compacted or over-excavated. Over-excavation will be required in areas where the base and underlying subgrade are pumping under wheel loads. The over-excavation depth will vary depending on the severity of pumping, but in general, 12 inches of over-excavation should be sufficient. Over-excavated areas should be backfilled with aggregate base placed over a geotextile fabric. In addition, after field observation of compaction, we recommend AC thicknesses of 2.5 inches in parking areas and 3.0 inches in travel lanes and delivery areas.

8.0 OBSERVATION OF CONSTRUCTION

Satisfactory earthwork and foundation performance depends to a large degree on the quality of construction. Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed conditions often requires experience; therefore, qualified personnel should visit the site with sufficient frequency to detect whether subsurface conditions change significantly from those anticipated. In addition, sufficient observation of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications.

9.0 LIMITATIONS

We have prepared this report for use by CenterCal Properties, LLC and other members of the design and construction team for the proposed development. The data and report can be used for design purposes, but our report, conclusions, and interpretations should not be construed as a warranty of the subsurface conditions and are not applicable to other sites.

Soil explorations indicate soil conditions only at specific locations and only to the depths penetrated. They do not necessarily reflect soil strata or water level variations that may exist between exploration locations. If subsurface conditions differing from those described are noted

during the course of excavation and construction, re-evaluation will be necessary. Specifications include the data in this report for the convenience of the construction contractor and should not be considered as a warranty of the subsurface conditions.

The site development plans and design details were not finalized at the time this report was prepared. When the design has been finalized and if there are changes in the site grades or location, configuration, design loads, or type of construction for the buildings, the conclusions and recommendations presented may not be applicable. If design changes are made, we should be retained to review our conclusions and recommendations and to provide a written evaluation or modification.

The scope of our services does not include services related to construction safety precautions, and our recommendations are not intended to direct the contractor's methods, techniques, sequences, or procedures, except as specifically described in our report for consideration in design.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with the generally accepted practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

◆ ◆ ◆

We appreciate the opportunity to be of continued service to you. Please call if you have questions concerning this report or if we can provide additional services.

Sincerely,

GeoDesign, Inc.



Erica M. Hann, P.E.
Project Engineer

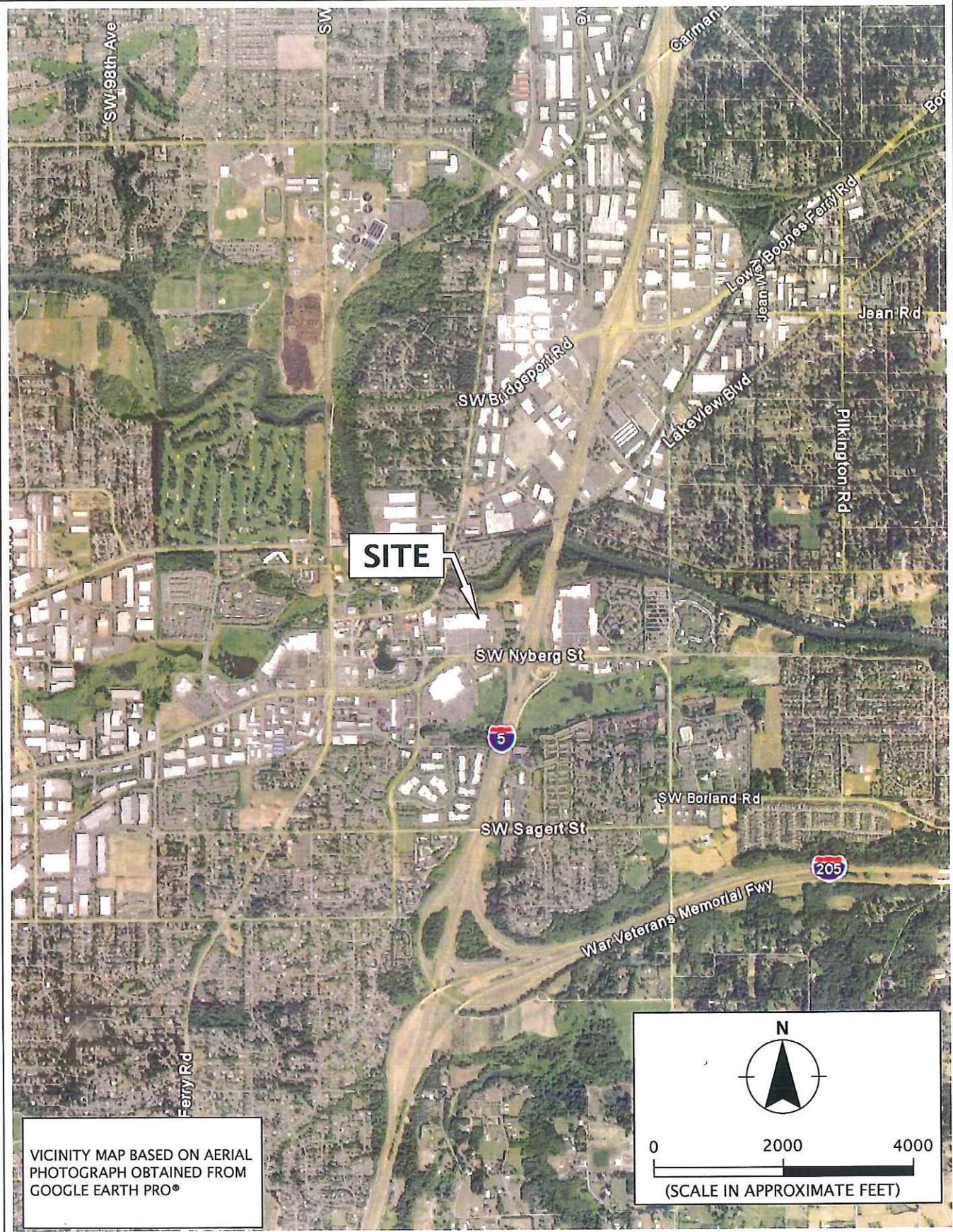


Brett A. Shipton, P.E., G.E.
Principal Engineer



FIGURES

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 File Name: J:\A-D\CenterCal-15\CenterCal-15-01\Figures\CAD\CenterCal-15-01-VM01.dwg | Layout: FIGURE 1



VICINITY MAP BASED ON AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO®

GEO DESIGN INC
 15575 Sequoia Parkway - Suite 100
 Portland OR 97224
 Off 503.968.8787 Fax 503.968.3068

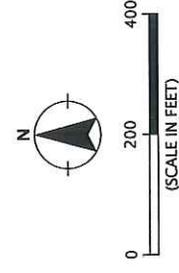
CENTERCAL-15-01
 DECEMBER 2011

VICINITY MAP
 NYBERG WOODS II
 TUALATIN, OR

FIGURE 1



- LEGEND:**
- B-1 ⊕ BORING
 - C-1 ⊕ PAVEMENT CORE
 - R-1 † RESISTIVITY
 - SITE BOUNDARY



SITE PLAN BASED ON AERIAL PHOTOGRAPH
OBTAINED FROM GOOGLE EARTH PRO®,
NOVEMBER 17, 2011

APPENDIX

APPENDIX

FIELD EXPLORATIONS

GENERAL

We explored subsurface conditions at the site by completing three borings (B-1 through B-3) within the proposed new building footprint to depths ranging between 30 and 48 feet BGS. Western States Soil Conservation, Inc. of Hubbard, Oregon, provided drilling services using a truck-mounted CME 75 drill rig between November 7 and 8, 2011.

In a second mobilization, we completed six pavement core borings (C-1 through C-6) in the existing paved areas to depths of 4.0 feet BGS. Dan J. Fischer Excavating, Inc. of Forest Grove, Oregon, provided coring services using coring and solid-stem auger drilling methods on November 10, 2011. Exploration logs are presented in this appendix.

We chose the locations of the explorations based on a site plan provided to our office by CenterCal Properties, LLC. We determined the location of the explorations in the field by measuring off of determined locations. The locations of the explorations shown on Figure 2 should be considered approximate. A qualified member of GeoDesign's staff observed and documented field activities.

SOIL SAMPLING

A member of our geotechnical staff observed the explorations. We obtained representative samples of the various soils encountered in the explorations for geotechnical laboratory testing. Samples were obtained from the borings using 1½-inch-inside diameter, split-spoon sampler (SPT sampler) in general accordance with ASTM D 1586. The split-barrel sampler was driven 18 inches into the soil with a 140-pound hammer free-falling 30 inches. The number of blows required to drive the sampler the final 12 inches is recorded on the exploration logs, unless otherwise noted. Samples were generally taken at 2.5- to 5-foot intervals throughout the depth of the borings.

SOIL CLASSIFICATION

The soil samples were classified in general accordance with ASTM D 2487 as shown on the "Exploration Key" (Table A-1) and "Soil Classification System" (Table A-2), which are included in this appendix. The exploration logs indicate the depths at which the soils or their characteristics change, although the change actually could be gradual. If the change occurred between sample locations, the depth was interpreted. Classifications and sampling intervals are presented on the exploration logs included in this appendix.

LABORATORY TESTING

CLASSIFICATION

The soil samples were classified in the laboratory to confirm field classifications. The laboratory classifications are presented on the exploration logs if those classifications differed from the field classifications.

MOISTURE CONTENT

We tested the natural moisture content of selected soil samples in general accordance with ASTM D 2216. The natural moisture content is a ratio of the weight of the water to soil in a test sample and is expressed as a percentage. The test results are presented on the exploration logs included in this appendix.

ATTERBERG LIMITS TESTING

Atterberg limits tests were performed on a selected sample in general accordance with ASTM D 4318. Atterberg limits include the liquid limit, plastic limit, and the plasticity index of soils. These index properties are used to classify soils and for correlation with other engineering properties of soils. The test results are presented on Figure A-7.

CBR AND PROCTOR

We are performed one CBR of laboratory-compacted soil to evaluate the potential strength of the subgrade within designated roadway areas. A moisture-density test (proctor) was conducted on the soil to determine the compaction characteristics of the on-site silt. The CBR was performed in general accordance with ASTM D 1883. The proctor was completed in general accordance with ASTM D 1557. The results of the CBR will be included in our final report. The results of the proctor are presented on Figure A-8.

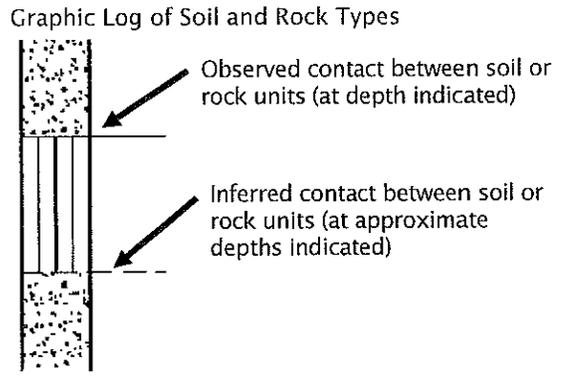
CORROSIVITY

One soil sample was tested for resistivity as a measure of corrosivity of the on-site soils. The laboratory testing was completed in general accordance with ASTM G 57. Laboratory testing for the laboratory sample indicated a resistivity of 11,870 Ω *cm.

GRAIN-SIZE TESTING

We completed grain-size testing on select soil samples in order to determine the grain-size distribution and percentage of fine soil particle size. Sieve tests were performed in general accordance with ASTM C 1136. The results of the testing are presented on Figure A-9.

SYMBOL	SAMPLING DESCRIPTION
	Location of sample obtained in general accordance with ASTM D 1586 Standard Penetration Test with recovery
	Location of sample obtained using thin-wall Shelby tube or Geoprobe® sampler in general accordance with ASTM D 1587 with recovery
	Location of sample obtained using Dames & Moore sampler and 300-pound hammer or pushed with recovery
	Location of sample obtained using Dames & Moore and 140-pound hammer or pushed with recovery
	Location of sample obtained using 3-inch-O.D. California split-spoon sampler and 140-pound hammer
	Location of grab sample
	Rock coring interval
	Water level during drilling
	Water level taken on date shown



GEOTECHNICAL TESTING EXPLANATIONS

ATT	Atterberg Limits	PP	Pocket Penetrometer
CBR	California Bearing Ratio	P200	Percent Passing U.S. Standard No. 200 Sieve
CON	Consolidation	RES	Resilient Modulus
DD	Dry Density	SIEV	Sieve Gradation
DS	Direct Shear	TOR	Torvane
HYD	Hydrometer Gradation	UC	Unconfined Compressive Strength
MC	Moisture Content	VS	Vane Shear
MD	Moisture-Density Relationship	kPa	Kilopascal
OC	Organic Content		
P	Pushed Sample		

ENVIRONMENTAL TESTING EXPLANATIONS

CA	Sample Submitted for Chemical Analysis	ND	Not Detected
P	Pushed Sample	NS	No Visible Sheen
PID	Photoionization Detector Headspace Analysis	SS	Slight Sheen
ppm	Parts per Million	MS	Moderate Sheen
		HS	Heavy Sheen

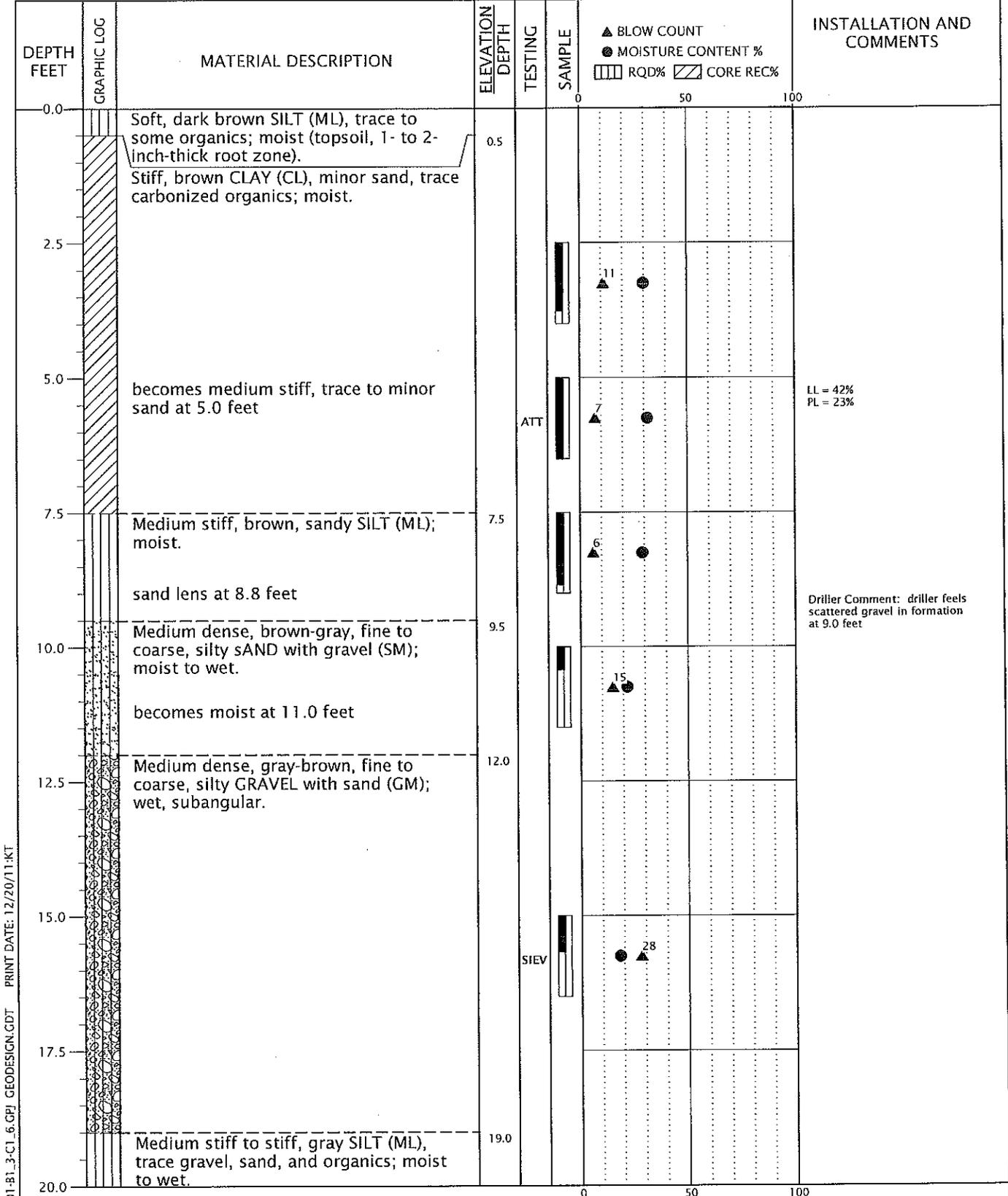
RELATIVE DENSITY - COARSE-GRAINED SOILS			
Relative Density	Standard Penetration Resistance	Dames & Moore Sampler (140-pound hammer)	Dames & Moore Sampler (300-pound hammer)
Very Loose	0 - 4	0 - 11	0 - 4
Loose	4 - 10	11 - 26	4 - 10
Medium Dense	10 - 30	26 - 74	10 - 30
Dense	30 - 50	74 - 120	30 - 47
Very Dense	More than 50	More than 120	More than 47

CONSISTENCY - FINE-GRAINED SOILS				
Consistency	Standard Penetration Resistance	Dames & Moore Sampler (140-pound hammer)	Dames & Moore Sampler (300-pound hammer)	Unconfined Compressive Strength (tsf)
Very Soft	Less than 2	Less than 3	Less than 2	Less than 0.25
Soft	2 - 4	3 - 6	2 - 5	0.25 - 0.50
Medium Stiff	4 - 8	6 - 12	5 - 9	0.50 - 1.0
Stiff	8 - 15	12 - 25	9 - 19	1.0 - 2.0
Very Stiff	15 - 30	25 - 65	19 - 31	2.0 - 4.0
Hard	More than 30	More than 65	More than 31	More than 4.0

PRIMARY SOIL DIVISIONS			GROUP SYMBOL	GROUP NAME
COARSE-GRAINED SOILS (more than 50% retained on No. 200 sieve)	GRAVEL (more than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVELS (< 5% fines)	GW or GP	GRAVEL
		GRAVEL WITH FINES (≥ 5% and ≤ 12% fines)	GW-GM or GP-GM	GRAVEL with silt
			GW-GC or GP-GC	GRAVEL with clay
		GRAVELS WITH FINES (> 12% fines)	GM	silty GRAVEL
			GC	clayey GRAVEL
			GC-GM	silty, clayey GRAVEL
	SAND (50% or more of coarse fraction passing No. 4 sieve)	CLEAN SANDS (<5% fines)	SW or SP	SAND
		SANDS WITH FINES (≥ 5% and ≤ 12% fines)	SW-SM or SP-SM	SAND with silt
			SW-SC or SP-SC	SAND with clay
		SANDS WITH FINES (> 12% fines)	SM	silty SAND
SC			clayey SAND	
SC-SM			silty, clayey SAND	
FINE-GRAINED SOILS (50% or more passing No. 200 sieve)	SILT AND CLAY	Liquid limit less than 50	ML	SILT
			CL	CLAY
			CL-ML	silty CLAY
			OL	ORGANIC SILT or ORGANIC CLAY
		Liquid limit 50 or greater	MH	SILT
			CH	CLAY
			OH	ORGANIC SILT or ORGANIC CLAY
			PT	PEAT

MOISTURE CLASSIFICATION		ADDITIONAL CONSTITUENTS					
Term	Field Test	Secondary granular components or other materials such as organics, man-made debris, etc.					
		Percent	Silt and Clay In:		Percent	Sand and Gravel In:	
Fine-Grained Soils	Coarse-Grained Soils		Fine-Grained Soils	Coarse-Grained Soils			
dry	very low moisture, dry to touch	< 5	trace	trace	< 5	trace	trace
moist	damp, without visible moisture	5 - 12	minor	with	5 - 15	minor	minor
wet	visible free water, usually saturated	> 12	some	silty/clayey	15 - 30	with	with
					> 30	sandy/gravelly	sandy/gravelly

HARDNESS	DESCRIPTION	
Extremely Soft (R0) Very Soft (R1) Soft (R2) Medium Hard (R3) Hard (R4) Very Hard (R5)	Indented by thumbnail Can be peeled by pocket knife or scratched with finger nail Can be peeled by a pocket knife with difficulty Can be scratched by knife or pick Can be scratched with knife or pick only with difficulty Cannot be scratched with knife or sharp pick	
WEATHERING	DESCRIPTION	
Decomposed Predominantly Decomposed Moderately Weathered Slightly Weathered Fresh	Rock mass is completely decomposed Rock mass is more than 50% decomposed Rock mass is decomposed locally Rock mass is generally fresh No discoloration in rock fabric	
JOINT SPACING	DESCRIPTION	
Very Close Close Moderate Close Wide Very Wide	Less than 2 inches 2 inches to 1 foot 1 foot to 3 feet 3 feet to 10 feet Greater than 10 feet	
FRACTURING	FRACTURE SPACING	
Very Intensely Fractured Intensely Fractured Moderately Fractured Slightly Fractured Very Slightly Fractured Unfractured	Chips and fragments with a few scattered short core lengths 0.1 foot to 0.3 foot with scattered fragments intervals 0.3 foot to 1 foot with most lengths 0.6 foot 1 foot to 3 feet Greater than 3 feet No fractures	
HEALING	DESCRIPTION	
Not Healed Partly Healed Moderately Healed Totally Healed	Discontinuity surface, fractured zone, sheared material or filling not re-cemented Less than 50% of fractured or sheared material Greater than 50% of fractured or sheared material All fragments bonded	
 15575 SW Sequoia Parkway - Suite 100 Portland OR 97224 Off 503.968.8787 Fax 503.968.3068	ROCK CLASSIFICATION SYSTEM	TABLE A-3



BORING LOG CENTERCAL-15-01-B1_3-C1_6.GPJ GEODESIGN.GDT PRINT DATE: 12/20/11:KT

DRILLED BY: Western States Soil Conservation, Inc. LOGGED BY: NAK COMPLETED: 11/07/11

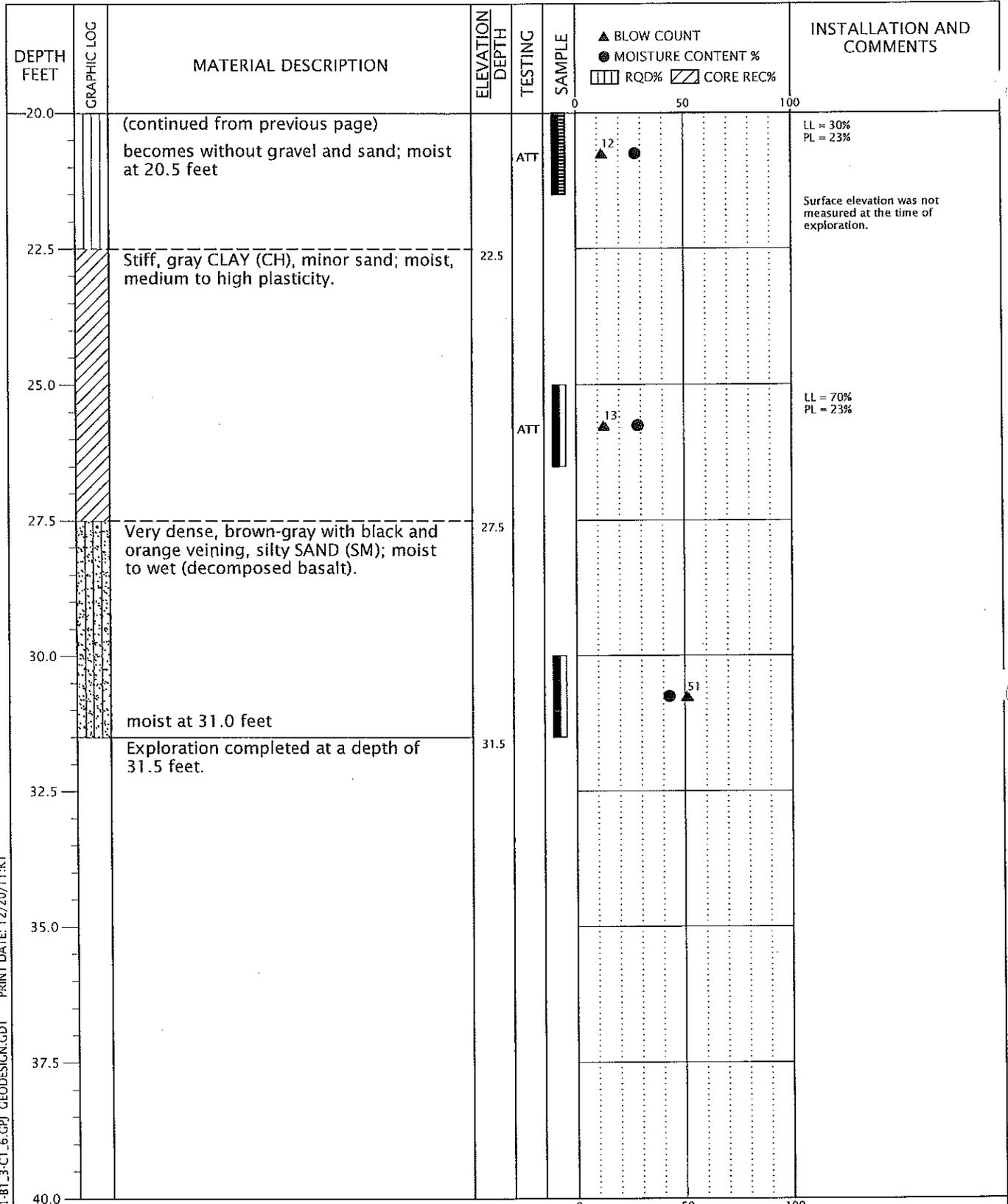
BORING METHOD: mud rotary (see report text) BORING BIT DIAMETER: 3 7/8-inch



CENTERCAL-15-01
DECEMBER 2011

BORING B-1
NYBERG WOODS II
TUALATIN, OR

FIGURE A-1



DRILLED BY: Western States Soil Conservation, Inc. LOGGED BY: NAK COMPLETED: 11/07/11

BORING METHOD: mud rotary (see report text) BORING BIT DIAMETER: 3 7/8-inch

BORING LOG: CENTRAL-15-01-B1_3-CL_6.GPJ GEODESIGN.GDT PRINT DATE: 12/20/11:KT

 15575 SW Sequoia Parkway - Suite 100 Portland OR 97224 Off 503.968.8787 Fax 503.968.3068	CENTRAL-15-01	BORING B-1 (continued)	
	DECEMBER 2011	NYBERG WOODS II TUALATIN, OR	FIGURE A-1

BORING LOG CENTERCAL-15-01-B1_3-CL_6.GPJ GEODESIGN.GDT PRINT DATE: 12/20/11-KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % ▨ RQD% ▩ CORE REC%	INSTALLATION AND COMMENTS
0.0		Soft to medium stiff, brown SILT (ML), minor sand, trace organics (rootlets); moist (topsoil, 4-inch-thick root zone).					
1.0		Stiff, brown CLAY (CL), trace sand and gravel (weathered rock fragments); moist.	1.0	Oth	▩		Oth = RES 11870 ohm/cm
2.5				ATT	▨	● 9	LL = 45% PL = 23%
5.0		Hard, brown-gray, sandy SILT (ML); moist.	5.0		▨	●	
6.0		Very dense, gray-brown COBBLES with gravel, sand, and silt; moist.	6.0		▨	▲ 7-50/4"	Hard drilling on cobbles at 6.0 feet Easy drilling from 6.5 to 7.5 feet
7.5			7.5		▨	●	
8.5		Loose, brown-orange and gray, fine to coarse, silty SAND (SM), minor gravel; moist.	8.5		▩	●	Hard drilling on cobbles at 7.5 feet Switch to mud rotary drilling at 8.0 feet
10.0					▨	●	
12.0		Stiff, brown-orange and gray, sandy SILT (ML); moist, interbeds of silty SAND (SM).	12.0		▨	▲ 25	Driller Comment: scattered gravel in formation at 12.0 feet
15.0		becomes wet at 15.5 feet moist at 16.2 feet		SIEV	▨	▲ 12	
17.5		Stiff, dark gray CLAY (CL), trace black carbonized organics; moist, low plasticity, slight organic odor.	17.5		▨		
20.0							

11/08/11 5.3 feet

DRILLED BY: Western States Soil Conservation, Inc.

LOGGED BY: NAK

COMPLETED: 11/07/11

BORING METHOD: hollow-stem auger and mud rotary (see report text)

BORING BIT DIAMETER: 4 1/4-inch/4 7/8-inch



15575 SW Sequoia Parkway - Suite 100
Portland OR 97224
Off 503.968.8787 Fax 503.968.3068

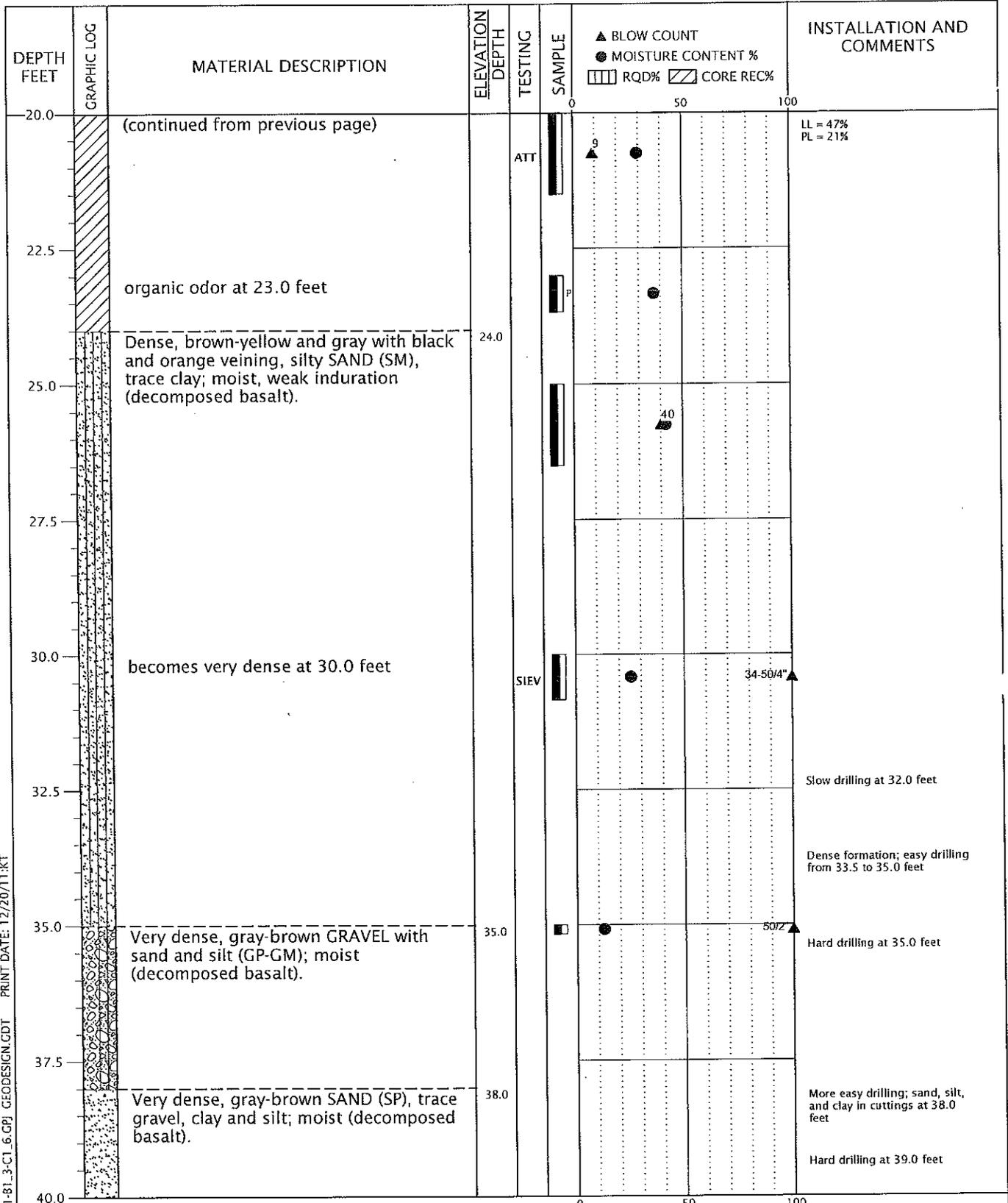
CENTERCAL-15-01

BORING B-2

DECEMBER 2011

NYBERG WOODS II
TUALATIN, OR

FIGURE A-2



DRILLED BY: Western States Soil Conservation, Inc.

LOGGED BY: NAK

COMPLETED: 11/07/11

BORING METHOD: hollow-stem auger and mud rotary (see report text)

BORING BIT DIAMETER: 4 1/4-inch/4 7/8-inch



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Off 503.968.8787 Fax 503.968.3068

CENTERCAL-15-01

DECEMBER 2011

BORING B-2
(continued)

NYBERG WOODS II
TUALATIN, OR

FIGURE A-2

BORING LOG CENTERCAL-15-01-81_3-C1_6.GPJ GEODESIGN.CDT PRINT DATE: 12/20/11:KT

BORING LOG CENTERCAL-15-01-B1_3-C1_6.GPJ GEODESIGN.CDT PRINT DATE: 12/20/11.KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % ▨ RQD% ▩ CORE REC%	INSTALLATION AND COMMENTS
40.0		(continued from previous page)				0 50 100	
42.5		Very dense, gray GRAVEL (GP); moist (decomposed basalt).	42.0				Gravel formation; very slow drilling and heavy chatter at 42.0 feet
45.0		Medium hard to hard (R3-R4), gray BASALT; moderately to slightly weathered, random fractures, intensely fractured, closely to moderately spaced, moderate to thick clay filling, not healed, joints oriented (0°, 20°, 60°, and 90°), moist.	43.0				
47.5							
48.0		Exploration completed at a depth of 48.0 feet.	48.0				Flushed hole with clean water, left open overnight. Surface elevation was not measured at the time of exploration.
50.0							
52.5							
55.0							
57.5							
60.0							

DRILLED BY: Western States Soil Conservation, Inc.

LOGGED BY: NAK

COMPLETED: 11/07/11

BORING METHOD: hollow-stem auger and mud rotary (see report text)

BORING BIT DIAMETER: 4 1/4-inch/4 7/8-inch



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Off 503.968.8787 Fax 503.968.3068

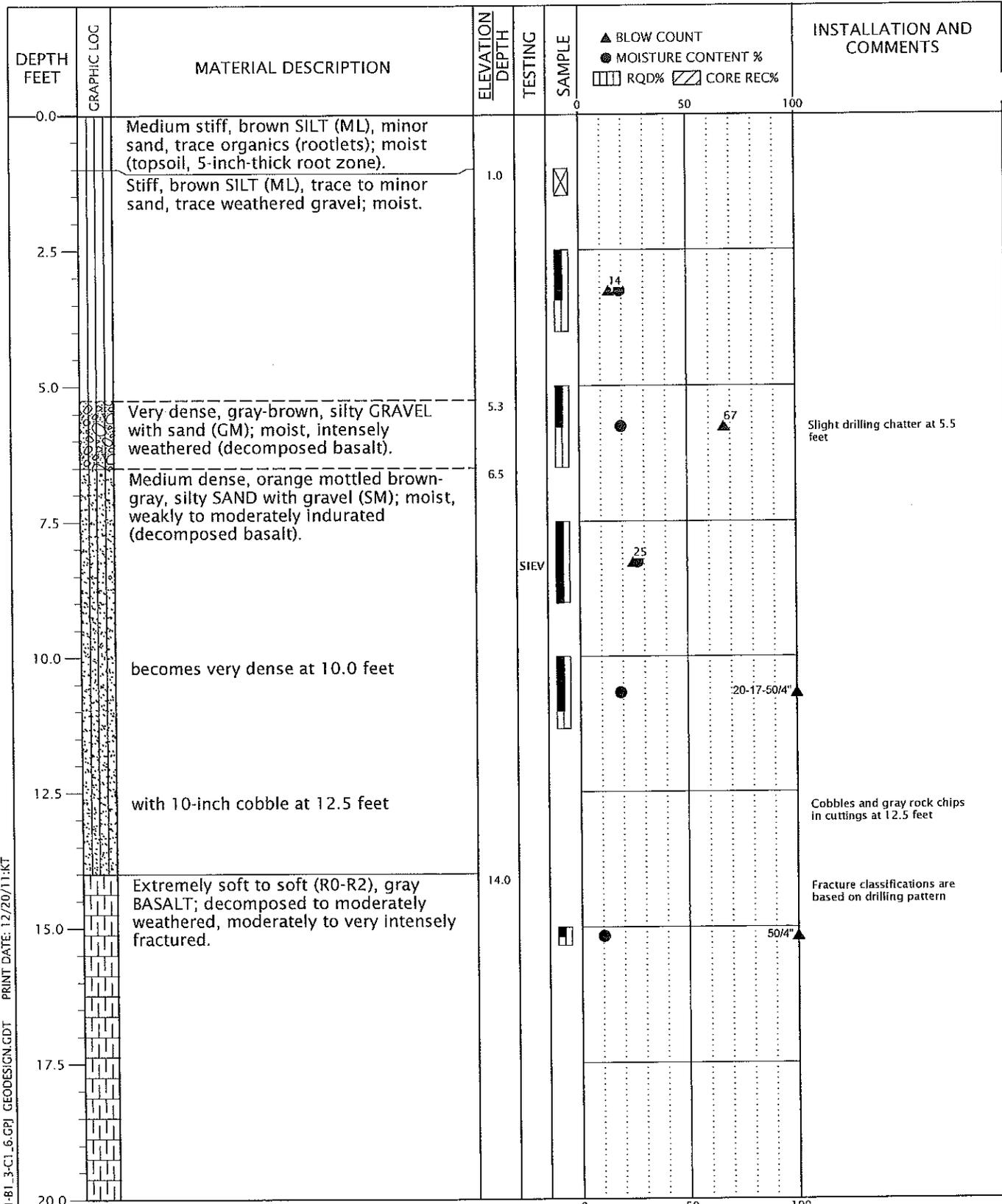
CENTERCAL-15-01

DECEMBER 2011

BORING B-2
(continued)

NYBERG WOODS II
TUALATIN, OR

FIGURE A-2



DRILLED BY: Western States Soil Conservation, Inc.

LOGGED BY: NAK

COMPLETED: 11/08/11

BORING METHOD: mud rotary (see report text)

BORING BIT DIAMETER: 3 7/8-inch



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CENTERCAL-15-01

BORING B-3

DECEMBER 2011

NYBERG WOODS II
TUALATIN, OR

FIGURE A-3

BORING LOG CENTERCAL-15-01-B1_3-C1_6.CPJ GEODESIGN.GDT PRINT DATE: 12/20/11:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	▲ BLOW COUNT ● MOISTURE CONTENT % ▨ RQD% ▩ CORE REC%	INSTALLATION AND COMMENTS
20.0		(continued from previous page)					
22.5							
25.0		grades to very soft to medium hard (R1-R3) at 25.0 feet					Based on rock chips, hardness in cuttings
27.5							
30.0		Exploration completed at a depth of 30.0 feet.	30.0				Surface elevation was not measured at the time of exploration.
32.5							
35.0							
37.5							
40.0							

BORING LOG CENTERCAL-15-01-B1_3-C1_6.GPJ GEODESIGN.GDT PRINT DATE: 12/20/11:KT

DRILLED BY: Western States Soil Conservation, Inc. LOGGED BY: NAK COMPLETED: 11/08/11

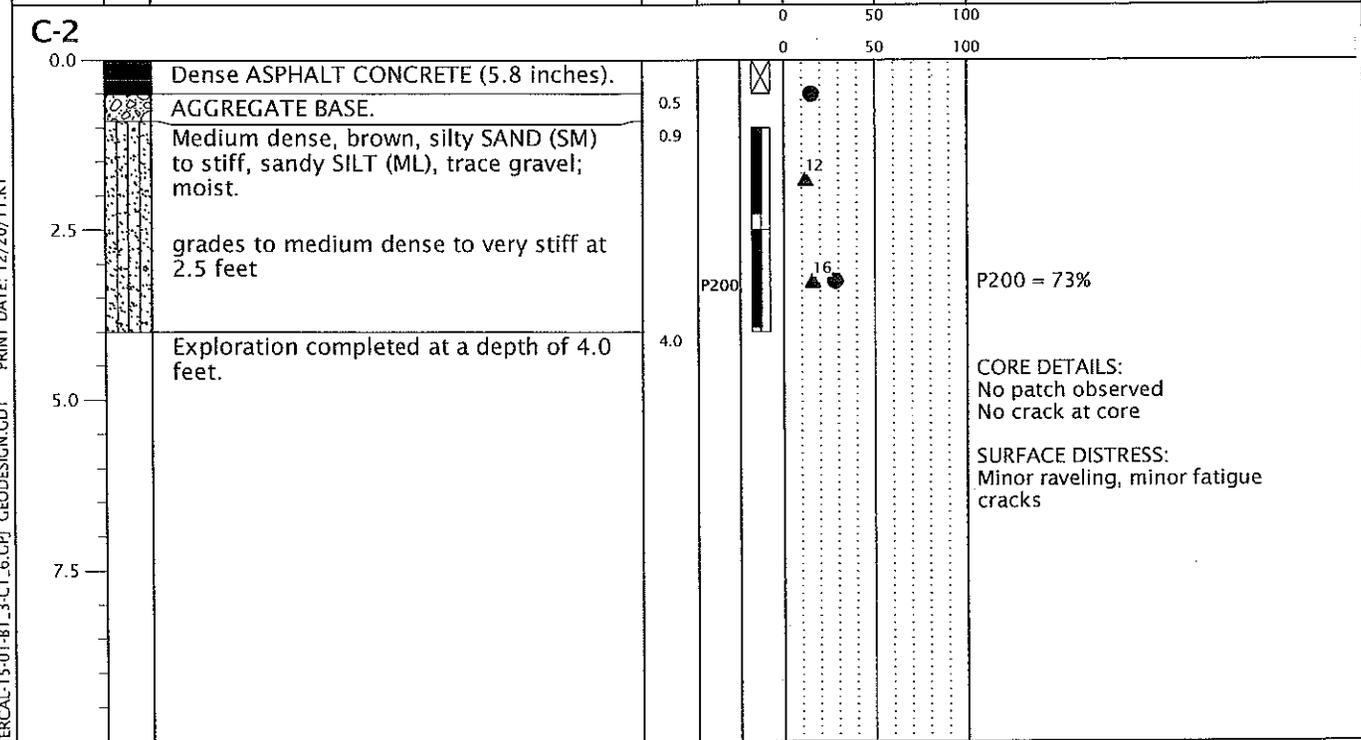
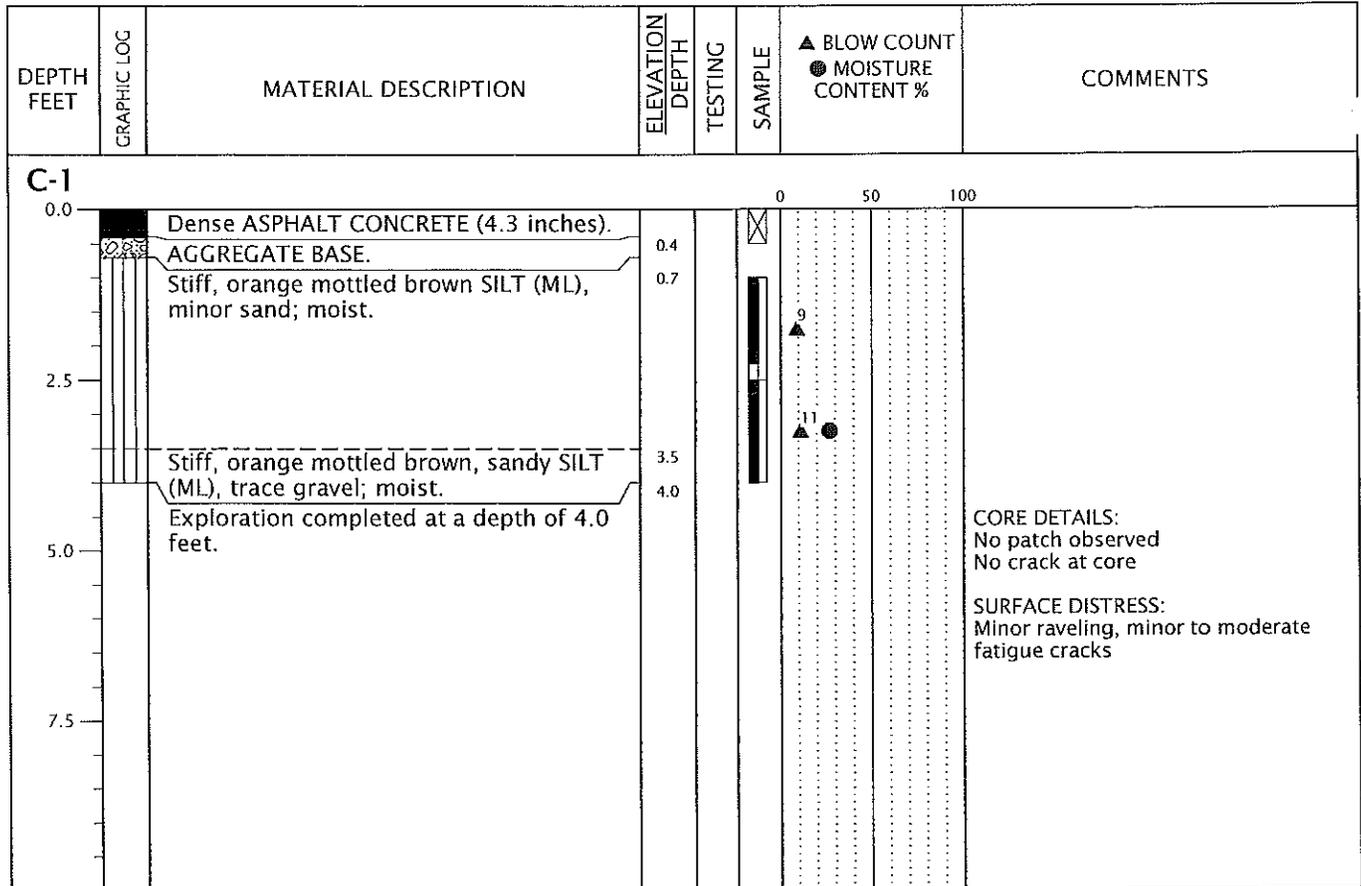
BORING METHOD: mud rotary (see report text) BORING BIT DIAMETER: 3 7/8-inch



CENTERCAL-15-01
DECEMBER 2011

BORING B-3
(continued)
NYBERG WOODS II
TUALATIN, OR

FIGURE A-3



DRILLED BY: Dan J. Fischer Excavating, Inc.

LOGGED BY: NAK

COMPLETED: 11/10/11

BORING METHOD: core drill/solid-stem auger (see report text)

BORING BIT DIAMETER: 5-inch/4-inch



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CENTERCAL-15-01

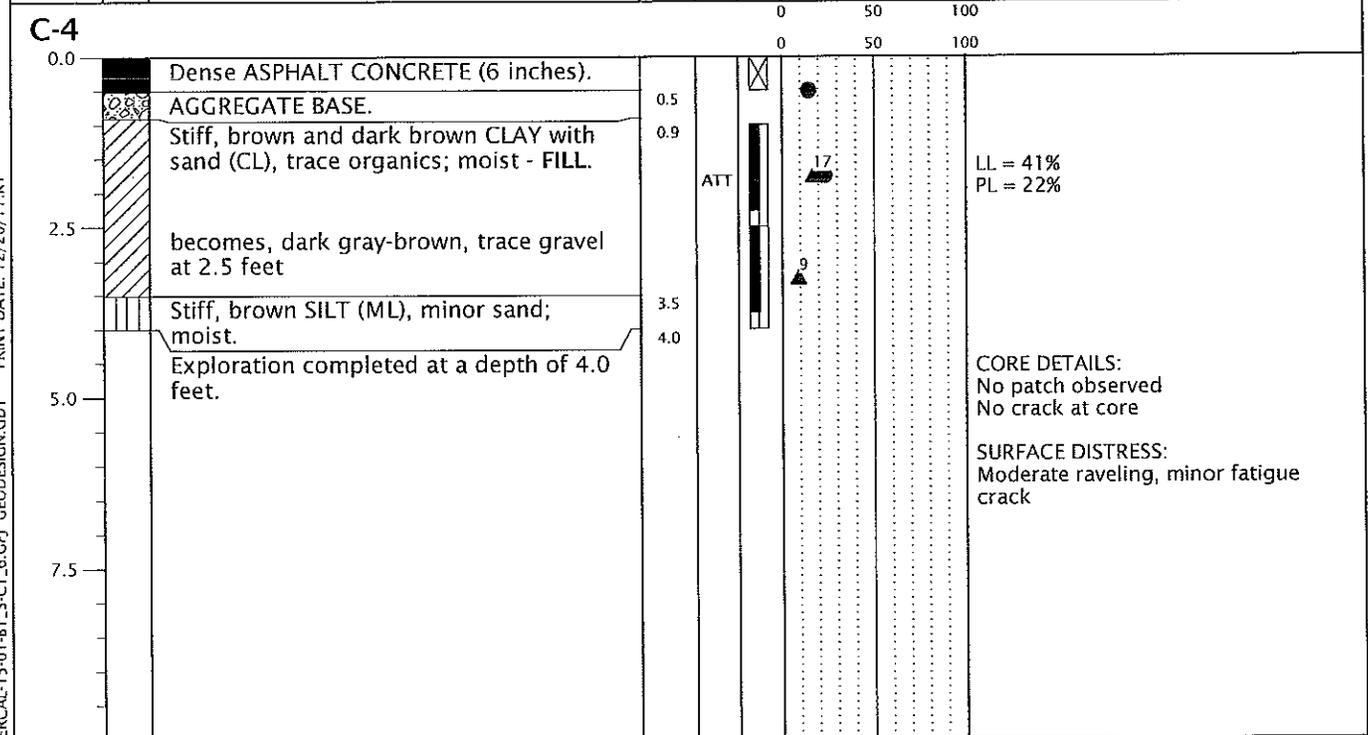
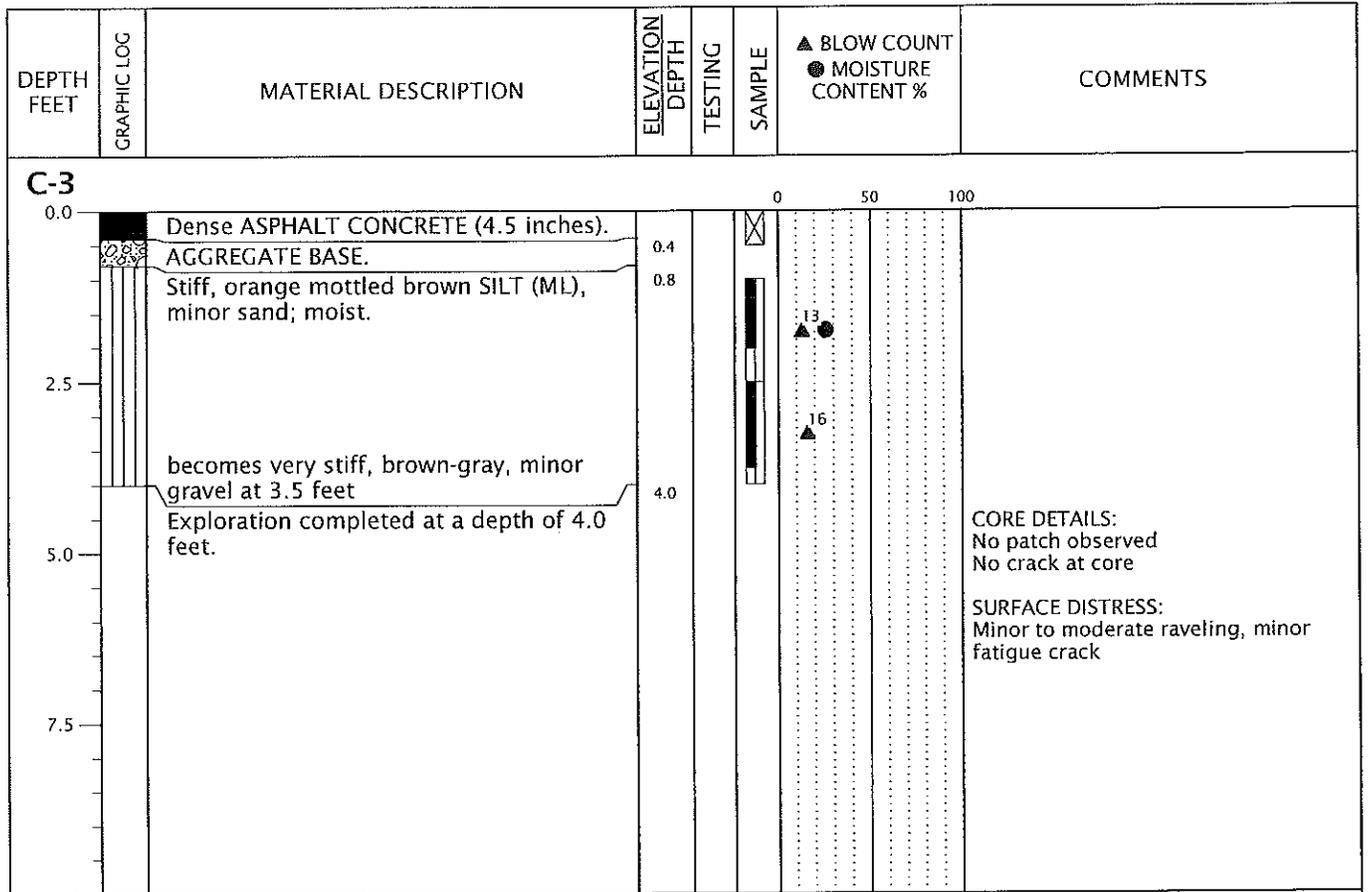
BORING

DECEMBER 2011

NYBERG WOODS II
TUALATIN, OR

FIGURE A-4

BORING LOG - 2 PER PAGE CENTERCAL-15-01-81-3-C1-6.GPJ GEODESIGN.CDT PRINT DATE: 12/20/11:KT



DRILLED BY: Dan J. Fischer Excavating, Inc.

LOGGED BY: NAK

COMPLETED: 11/10/11

BORING METHOD: core drill/solid-stem auger (see report text)

BORING BIT DIAMETER: 5-inch/4-inch



CENTRAL-15-01

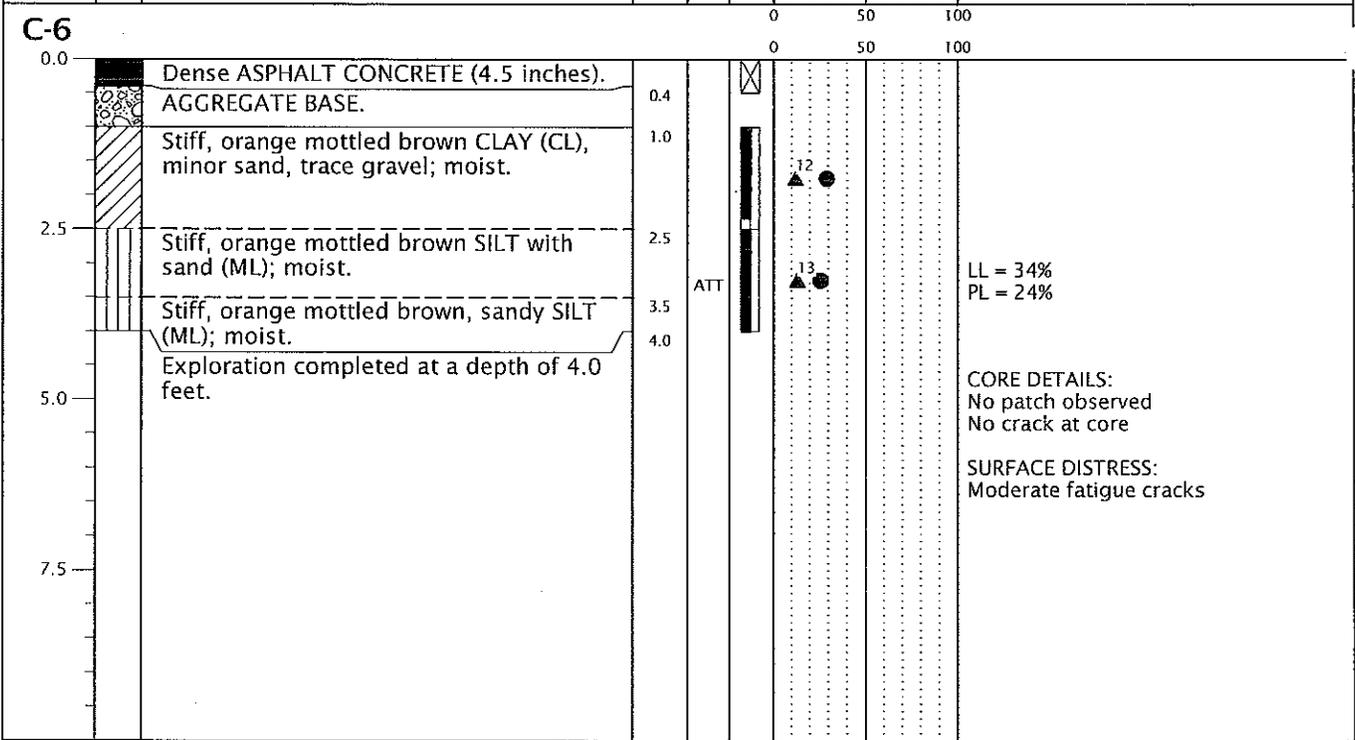
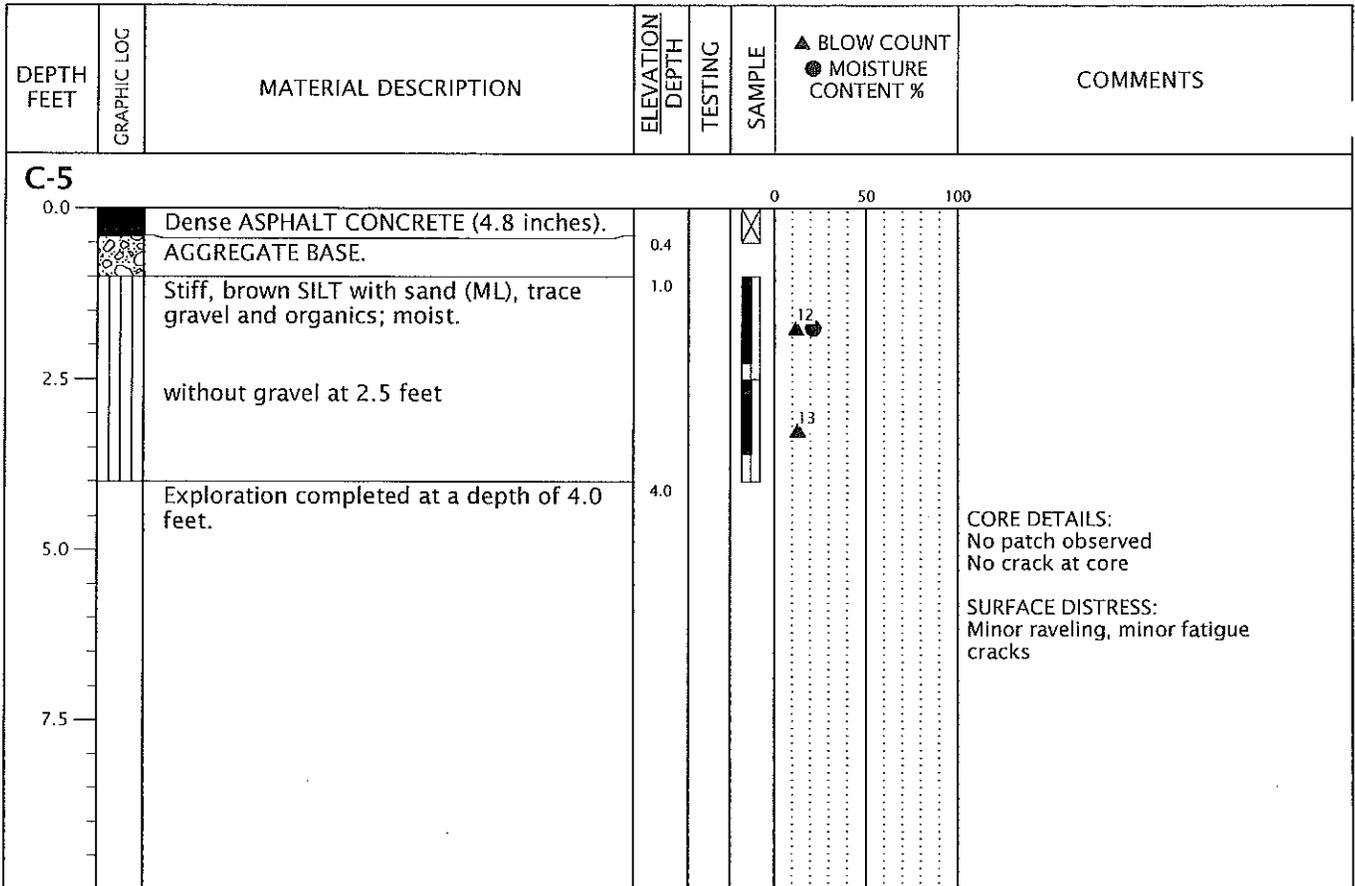
BORING
(continued)

DECEMBER 2011

NYBERG WOODS II
TUALATIN, OR

FIGURE A-5

BORING LOG - 2 PER PAGE CENTRAL-15-01-B1_3-C1_6-CPI GEODESIGN.GDT PRINT DATE: 12/20/11.KT



DRILLED BY: Dan J. Fischer Excavating, Inc.

LOGGED BY: NAK

COMPLETED: 11/10/11

BORING METHOD: core drill/solid-stem auger (see report text)

BORING BIT DIAMETER: 5-inch/4-inch

BORING LOG - 2 PER PAGE CENTERCAL-15-01-B1_3-C1_6.GPJ GRODESIGN.GDT PRINT DATE: 12/20/11.KT



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Off 503.968.8787 Fax 503.968.3068

CENTERCAL-15-01

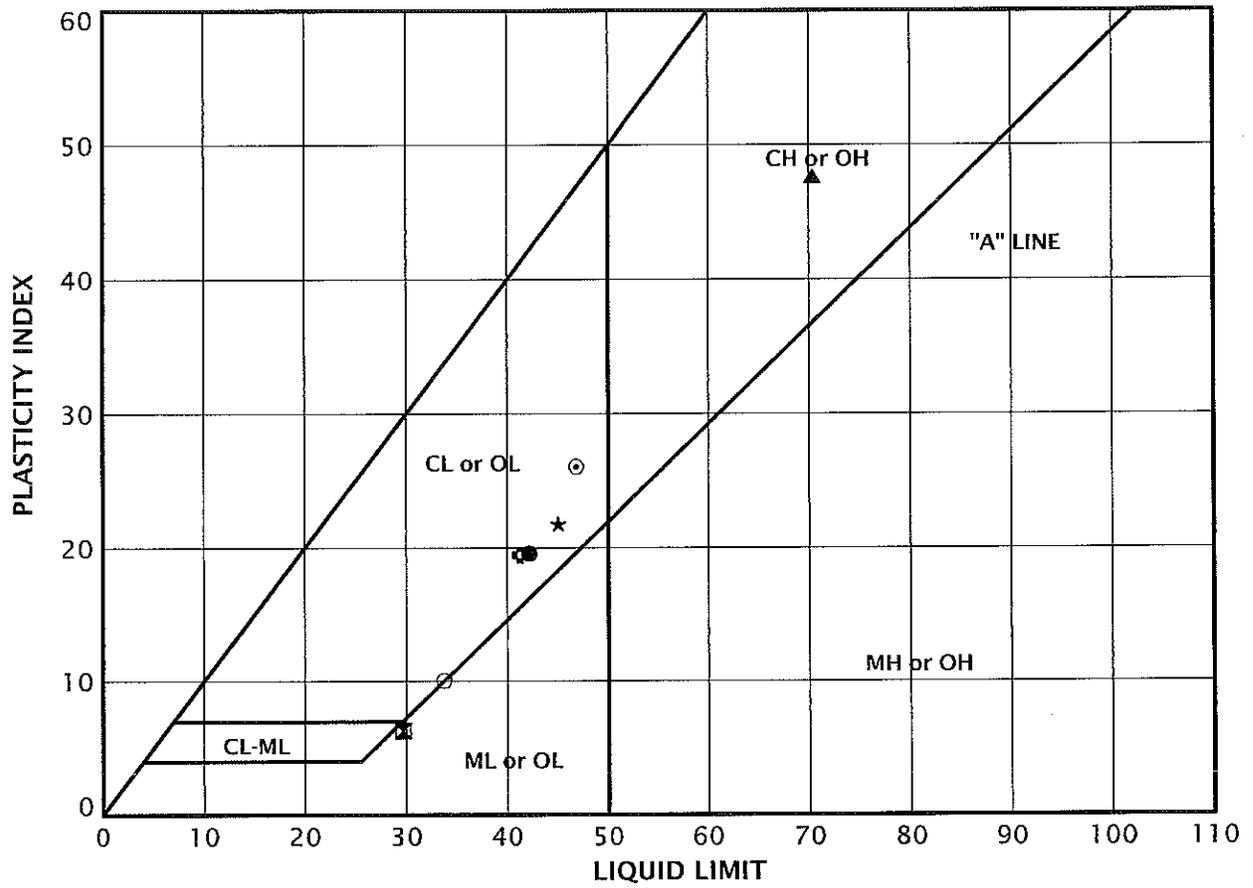
DECEMBER 2011

BORING
(continued)

NYBERG WOODS II
TUALATIN, OR

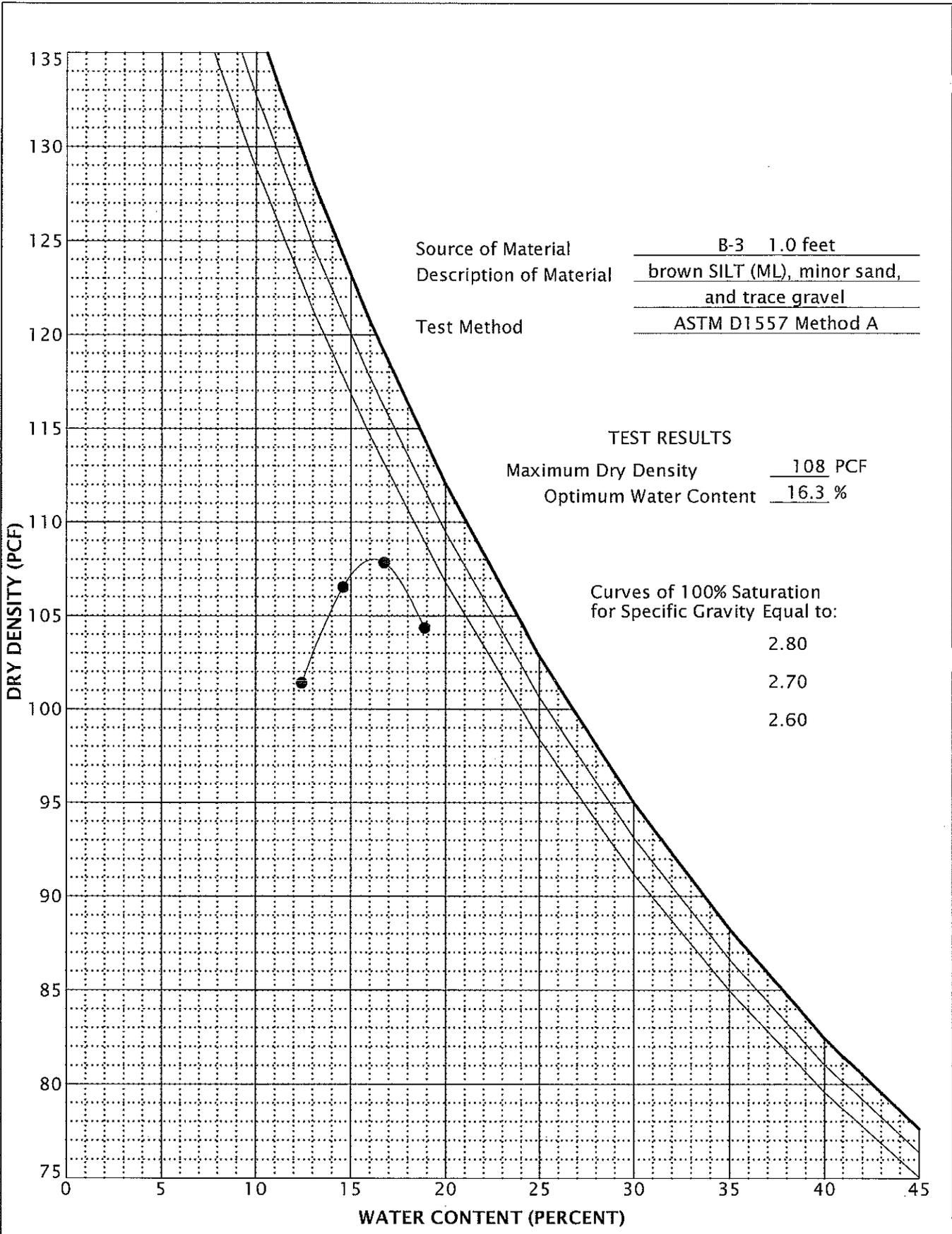
FIGURE A-6

ATTERBERG_LIMITS 7 CENTERCAL-15-01-B1_3-C1_6.GPJ GEODESIGN.GDT PRINT DATE: 12/20/11:KT



KEY	EXPLORATION NUMBER	SAMPLE DEPTH (FEET)	MOISTURE CONTENT (PERCENT)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX
●	B-1	5.0	31	42	23	19
⊠	B-1	20.0	28	30	23	7
▲	B-1	25.0	29	70	23	47
★	B-2	2.5	17	45	23	22
⊙	B-2	20.0	29	47	21	26
⊕	C-4	1.0	23	41	22	19
○	C-6	2.5	26	34	24	10

COMPACTION TEST: CENTERCAL-15-01-BT-3-C1_6.OPJ GEODESIGN.CDT PRINT DATE: 12/20/11:KT



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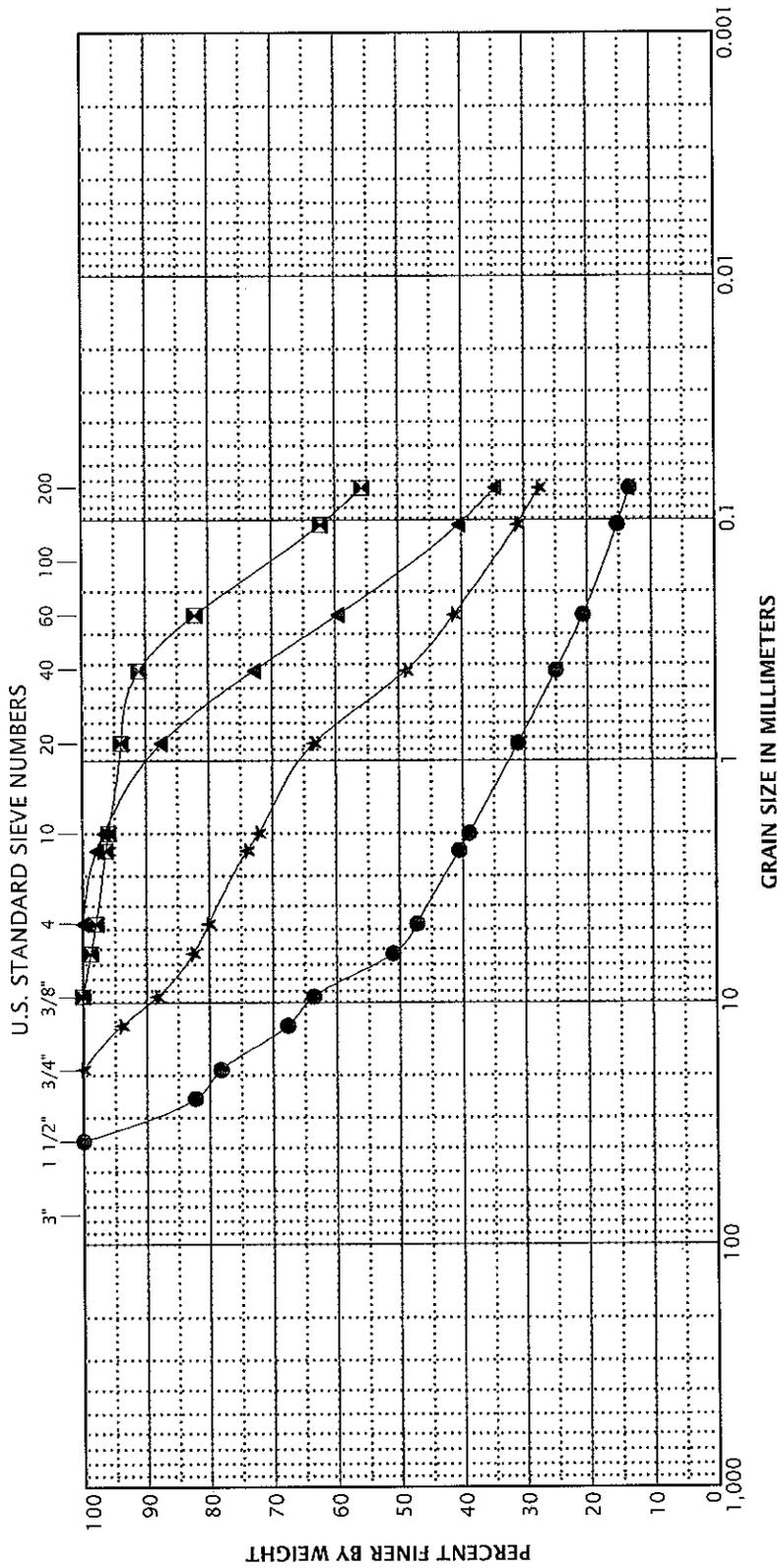
CENTERCAL-15-01

MOISTURE-DENSITY RELATIONSHIP

DECEMBER 2011

NYBERG WOODS II
 TUALATIN, OR

FIGURE A-8



BOULDERS		COBBLES		GRAVEL		SAND			FINES			
				COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY		

KEY	EXPLORATION NUMBER	SAMPLE DEPTH (FEET)	MOISTURE CONTENT (PERCENT)	D60	D50	D30	D10	D5	GRAVEL (PERCENT)	SAND (PERCENT)	SILT (PERCENT)	CLAY (PERCENT)
●	B-1	15.0	18	8.43	5.81	0.75			53	34	13	
▲	B-2	15.0	27	0.09					2	42	56	
▲	B-2	30.0	25	0.25	0.16				0	65	35	
★	B-3	7.5	27	0.72	0.45	0.10			20	52	28	

<p>15575 SW Sequoia Parkway - Suite 100 Medford, OR 97504 OFF 503.866.8727 Fax 503.866.3056</p>	CENTRAL-15-01		GRAIN-SIZE TEST RESULTS	
	DECEMBER 2011		NYBERG WOODS II TUALATIN, OR	

FIGURE A-9

SAMPLE INFORMATION			MOISTURE CONTENT (PERCENT)	DRY DENSITY (PCF)	SIEVE			ATTERBERG LIMITS		
EXPLORATION NUMBER	SAMPLE DEPTH (FEET)	ELEVATION (FEET)			GRAVEL (PERCENT)	SAND (PERCENT)	P200 (PERCENT)	LIQUID LIMIT (PERCENT)	PLASTIC LIMIT (PERCENT)	PLASTICITY INDEX (PERCENT)
B-1	2.5		30							
B-1	5.0		31				42	23	19	
B-1	7.5		29							
B-1	10.0		22							
B-1	15.0		18		53	34	13			
B-1	20.0		28				30	23	7	
B-1	25.0		29				70	23	47	
B-1	30.0		43							
B-2	2.5		17				45	23	22	
B-2	5.0		21							
B-2	7.5		6							
B-2	8.0		9							
B-2	10.0		19							
B-2	15.0		27		2	42	56			
B-2	20.0		29				47	21	26	
B-2	23.0		37							
B-2	25.0		42							
B-2	30.0		25		0	65	35			
B-2	35.0		12							
B-2	40.0		11							
B-3	2.5		19							
B-3	5.0		19							
B-3	7.5		27		20	52	28			
B-3	10.0		19							
B-3	15.0		10							
B-3	20.0		21							
C-1	2.5		27							

LAB SUMMARY: CENTRAL-15-01-B1_3-CL_6.GPJ GEODESIGN.GDT PRINT DATE: 12/20/11:KT

 15575 SW Sequoia Parkway - Suite 100 Portland OR 97224 Off 503.968.8787 Fax 503.968.3068	CENTRAL-15-01	SUMMARY OF LABORATORY DATA	
	DECEMBER 2011	NYBERG WOODS II TUALATIN, OR	FIGURE A-10

SAMPLE INFORMATION			MOISTURE CONTENT (PERCENT)	DRY DENSITY (PCF)	SIEVE			ATTERBERG LIMITS		
EXPLORATION NUMBER	SAMPLE DEPTH (FEET)	ELEVATION (FEET)			GRAVEL (PERCENT)	SAND (PERCENT)	P200 (PERCENT)	LIQUID LIMIT (PERCENT)	PLASTIC LIMIT (PERCENT)	PLASTICITY INDEX (PERCENT)
C-2	0.5		15							
C-2	2.5		28			73				
C-3	1.0		26							
C-4	0.5		15							
C-4	1.0		23				41	22	19	
C-5	1.0		21							
C-6	1.0		29							
C-6	2.5		26				34	24	10	

LAB SUMMARY CENTERCAL-15-01-B1_3-C1_6.CPJ GEODESIGN.GDT PRINT DATE: 12/20/11:KT

GEODESIGN INC
 15575 SW Sequoia Parkway - Suite 100
 Portland OR 97224
 Off 503.968.8787 Fax 503.968.3068

CENTERCAL-15-01

SUMMARY OF LABORATORY DATA
 (continued)

DECEMBER 2011

NYBERG WOODS II
 TUALATIN, OR

FIGURE A-10

ACRONYMS

ACRONYMS

AC	asphalt concrete
AOS	apparent opening size
ASTM	American Society for Testing and Materials
BGS	below ground surface
CBR	California bearing ratio
ESAL	equivalent single-axle load
g	gravitational acceleration (32.2 feet/second ²)
H:V	horizontal to vertical
HMAC	hot mixed asphalt concrete
IBC	International Building Code
mm	millimeters
OSHA	Occupational Safety and Health Administration
OSSC	Oregon Standard Specifications for Construction (2008)
pcf	pounds per cubic foot
psf	pounds per square foot
psi	pounds per square inch
SPT	standard penetration test





Pre-Application Meeting Request

City of Tualatin Community Development Department
18880 SW Martinazzi Avenue, Tualatin, Oregon 97062
www.tualatinoregon.gov (503) 691-3026

Welcome and thank you for choosing to locate your project in the City of Tualatin.

* Please note a Scoping Meeting is required prior to a Pre-App Meeting.

Please complete this form and send it no later than 2 weeks before your intended meeting date to:

Lynette Sanford, Office Coordinator, fax (503) 692-0147 or e-mail lsanford@ci.tualatin.or.us.

If you have questions, Ms. Sanford's phone number is (503) 691-3026.

The Pre-Application Meeting fee of \$220 is due in full before the meeting can be booked.

1. Name of Project: Nyberg Rivers Shop J

2. What type of development are you proposing? (Check all that apply)

Industrial Commercial Residential Institutional Mixed-use

Please provide a brief description of your project: (Attach additional sheets if needed.) Please include description of existing uses and structures in addition to what is proposed.

The project scope consists of an approximate 7,800 SF commercial retail building and associated site work to the Pad J site of the recently constructed Nyberg Rivers retail development.

2.35

3. Where is the development/project site? Please provide addresses of all involved properties.

Address: 7660 SW Nyberg Street, Tualatin, OR 97062

Planning District: CC Map #: 2S1W24A Tax Lot #: _____

Total Acreage 2.35

4. What is the applicant's affiliation with the project? (Check all that apply)

Broker Developer Property Owner Representative Other

If "Other", please explain:

5. What is the primary purpose of this pre-application meeting (What would you like to accomplish)? (Attach additional sheets if needed.)

To review the proposed building elevations and site plan in preparation for an Architectural Review submittal.

6. Are you familiar with the development process in Washington or Clackamas County or Tualatin? (Check one)

Yes No

If Yes, please identify an example project: Nyberg Rivers

7. Provide preliminary site plans, concept drawings and other details for staff review prior to the meeting:

Yes, such is attached or will be provided concurrently through the pre-app coordinator. These plans must be further revised from what was presented during the Scoping meeting. Plans must include dimensions, a north arrow, all existing buildings, setbacks from property lines, and as much detail about the proposed project as can be provided. The drawing must be clear, legible and reproducible. All drawings are due prior to being booked.

8. Who, beside the Applicant, will be attending this Pre-Application Meeting? (Please list individual names and company or affiliation below. Attach an additional sheet if needed.) Please provide all possible attendees so an adequate size room can be booked.

Name: <u>Tony Brizendine</u>	Company or Affiliation: <u>C2K Architecture</u>
Email: <u>tbrizendine@C2Karch.com</u>	Address: <u>1645 NW Hoyt, PDX</u> Phone: <u>503-444-2200</u>
Name: <u>Kevin Brady</u>	Company or Affiliation: <u>Cardno</u>
Email: <u>kevin.brady@cardno.com</u>	Address: <u>5415SW Westgate Dr, #100, PDX</u> Phone: <u>503-419.2500</u>
Name: _____	Company or Affiliation: _____
Email: _____	Address: _____ Phone: _____

TO BE COMPLETED BY COMMUNITY DEVELOPMENT STAFF:

Date Request Received: _____ Received by: _____

Project Name: _____

Case #: _____

Past Scoping Meeting Date: _____

Scheduled Pre-Application Meeting Date: _____

Lead Department: Planning Payment Received

Economic Development Amount: _____

Engineering & Building Check

Credit Card

Receipt #: _____

Tracking #: _____

Kevin B., Ryan H. (Cardno)
Tony B. (C2K) Clare F., Paul I.
(Tralatin)

pre-app. notes

- Green screen on NW elevation
(fruit)

- mitigation trees (Condition 5)

★ original Cond. 5 (+ others) -

review, propose new locations
for lot assoc w/ these conditions.

- Bike plng., trash encl. (same
req's as Cracker Barrel)

- Neigh. meeting req'd.

→ - 5' strip betw. bldg. + sidewalk,
can provide alternatives
(review code)

→ 13 trees req'd. for mitigation
of: Condition 5



Meeting Minutes

Date: Thursday, October 22, 2015
Time: 10-11AM
Location: 18880 SW Martinazzi Avenue, Tualatin, Oregon 97062
Attendees:

Project Team	City
Kevin Brady (Cardno)	Clare Fuchs (Planning)
Ryan Halvorson (Cardno)	
Tony Brizendine (C2K)	

MINUTES

1. Green screens on NW elevation (front)
 - 5' strip between building and sidewalk, can provide alternatives (review code)
2. Original Condition 5 (plus other conditions) – review, purpose new locations for lot associated with these conditions
 - 13 trees required for mitigation
3. Bike parking, trash enclosure (same requirements as Cracker Barrel)
4. Neighborhood meeting required

NEIGHBORHOOD/DEVELOPER MEETING
CERTIFICATION OF SIGN POSTING



In addition to the requirements of TDC 31.064(2) quoted earlier in the packet, the 18" x 24" sign that the applicant provides must display the meeting date, time, and address and a contact phone number. The block around the word "NOTICE" must remain **orange** composed of the **RGB color values Red 254, Green 127, and Blue 0**. Additionally, the potential applicant must provide a flier (or flyer) box on or near the sign and fill the box with brochures reiterating the meeting info and summarizing info about the potential project, including mention of anticipated land use application(s). Staff has a Microsoft PowerPoint 2007 template of this sign design available through the Planning Division homepage at < www.tualatinoregon.gov/planning/land-use-application-sign-templates >.

As the applicant's representative for the AR for Pad J at Nyberg Rivers project, I hereby certify that on this day, November 9, 2015, sign(s) were posted on the subject property in accordance with the requirements of the Tualatin Development Code and the Community Development Department - Planning Division.

Applicant Representative's Name: Shivon Van Allen
(PLEASE PRINT)

Applicant's Signature: *Shivon Van Allen*

Date: November 9, 2015

**NEIGHBORHOOD/DEVELOPER MEETING
AFFIDAVIT OF MAILING**

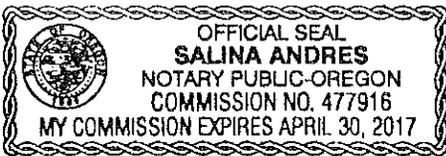
STATE OF OREGON)
) SS
COUNTY OF WASHINGTON)

I, Brittany Parriett, being first duly sworn, depose and say:

That on the 9th day of November, 2015, 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.

Brittany Parriett
Signature

SUBSCRIBED AND SWORN to before me this 9th day of November, 2015.

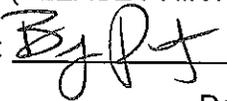


Salina Andres
Notary Public for Oregon
My commission expires: April 30, 2017

RE: AR for Paul J at Nyberg Eivers

As the applicant for the AR for Pad J at Nyberg Rivers project, I hereby certify that on this day, November 9, 2015 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: Brittany Parriett
(PLEASE PRINT)

Applicant's Signature: 

Date: November 10, 2015



November 9, 2015

5415 SW Westgate Drive
Suite 100
Portland, Oregon 97221
USA

Phone (503) 419-2500
Fax (503) 419-2600

www.cardno.com

Re: Architectural Review Application for proposed development at Nyberg Rivers

Dear Resident:

Cardno is representing the owner of Nyberg Rivers shopping center. The proposed development includes the construction of a multi-tenant retail space on the site (Tax Lot ID 2S124A002508). A map of the project limits is included with this letter. Prior to applying to the City of Tualatin for an architectural review application, we would like to discuss the proposal in more detail with the members of the Tualatin community, neighboring associations, and surrounding property owners and residents. Per the requirements of City of Tualatin Development Code Sections 31.063 and 31.064, you are invited to attend a meeting on:

Tuesday, November 24, 2015
Juanita Pohl Center in the West Dining Room
8513 SW Tualatin Rd, Tualatin, OR 97062
5:30-6:30PM

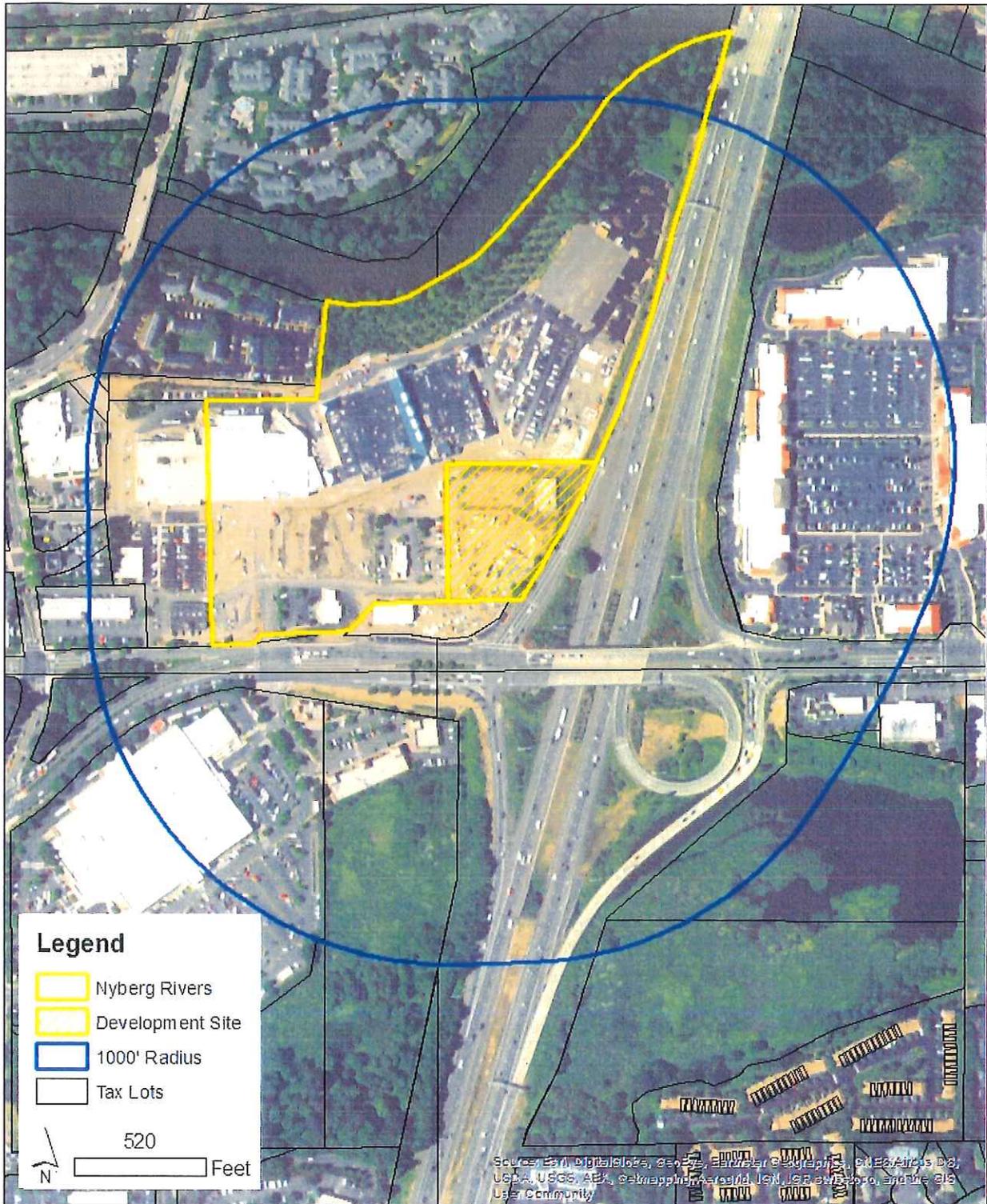
Please note that this will be an informational meeting on preliminary development plans and is not intended to take the place of a public hearing before the Planning Commission. You will have an opportunity to present testimony to the Planning Commission when an application is submitted to the City for review.

We look forward to more specifically discussing the proposal with you.

Sincerely,

Kevin Brady
Senior Planner, Cardno

Enclosures: Map of Project Limits
Site Plan
Elevations and Perspectives

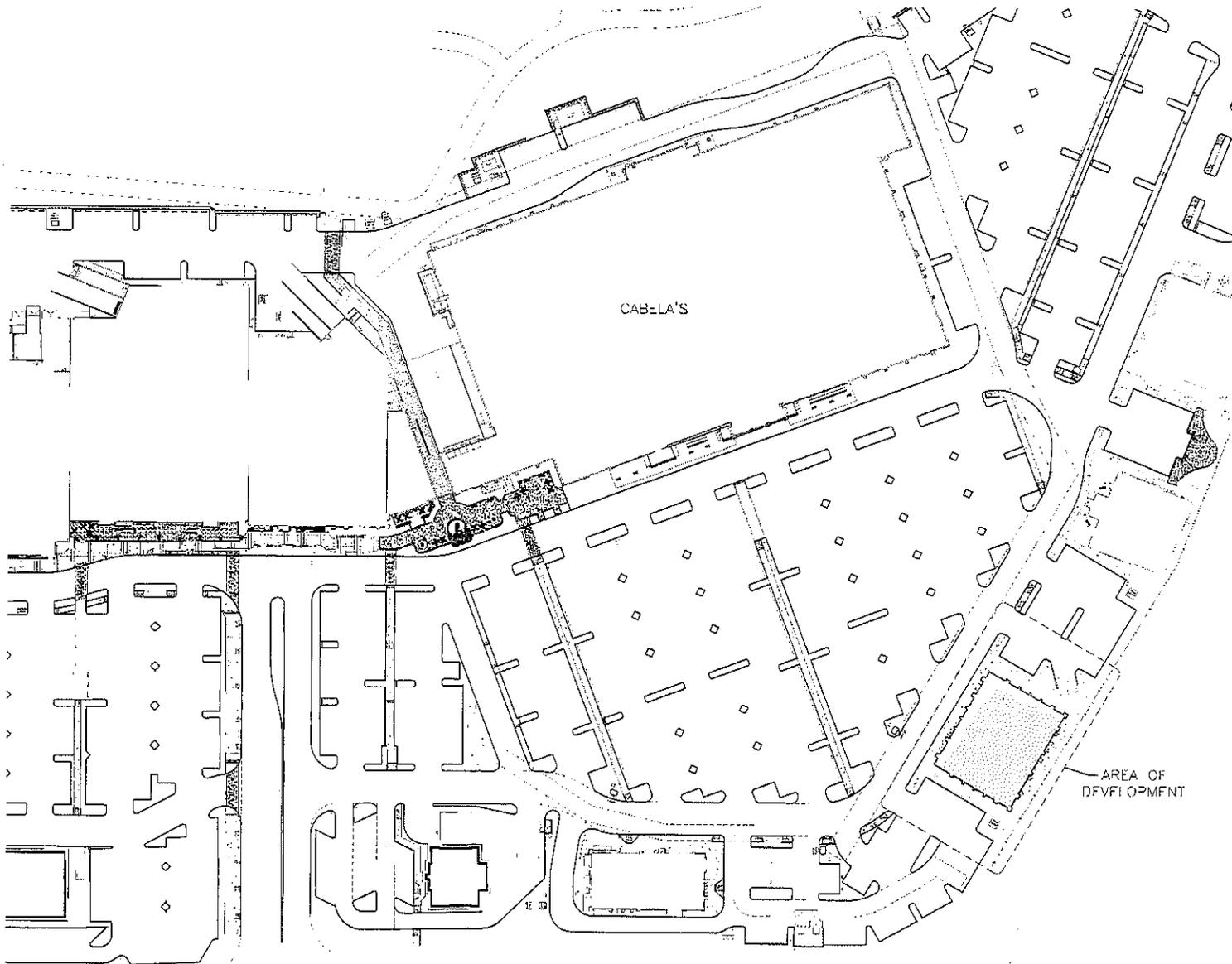


Nyberg Rivers - Pad J

Vicinity Map



Tualatin, Oregon



CABELA'S

AREA OF DEVELOPMENT

F1 SITE PLAN
1/28/2010



ARCHITECTURE INC
107 DE WASHINGTON ST
SUITE 100
PORTLAND OREGON 97214
TEL: 503.255.1200

NYBERG RIVERS
PAD J

TUALITIN, OREGON

PLOT NO. 15179
JOB NO.
DATE: 05/20/10
SCALE: 3/8"=1'-0"

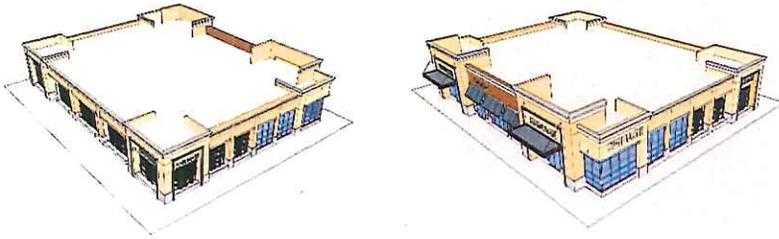
~~CONFIDENTIAL~~

DATE: 05/20/10
SITE PLAN
JOB NO. A101

NYBERG RIVERS SHOP J TUALATI, OR

CENTRAL PROPERTIES, LLC

BIRDS EYE VIEWS



1218 Main Street, Inc.
www.nyberg.com

1218 Main Street, Inc.
www.nyberg.com



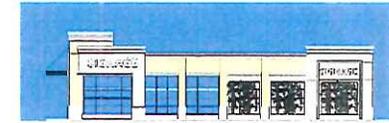
NYBERG RIVERS SHOP J TUALATI, OR

CENTRAL PROPERTIES, LLC

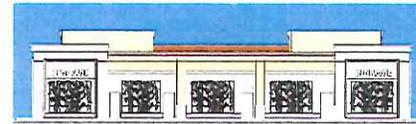
EXTERIOR ELEVATIONS



FRONT ELEVATION



SIDE ELEVATION



REAR ELEVATION



SIDE ELEVATION

1218 Main Street, Inc.
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NYBERG RIVERS SHOP J TUALATI, OR

CENTRAL PROPERTIES, LLC

PERSPECTIVES



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CENTRAL PROPERTIES, LLC

PERSPECTIVES



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PAD J, NYBERG CENTER

Meeting Date: Tuesday, November 24th, 2015
5:30-6:30 pm

Facilitator: Cardno

Place: Juanita Pohl Center – West Dining Room

Name	Address (optional)	Phone (optional)	E-Mail (optional)
Kevin Brady		(503) 469-2500	kevin.brady @cardno.com
Clare Fuchs	18880 SW Martinazzi Av. Tualatin, OR 97062	503-691- 3027	cfuchs@ci- tualatin.or.us

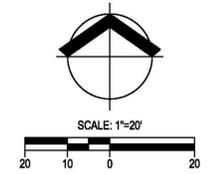
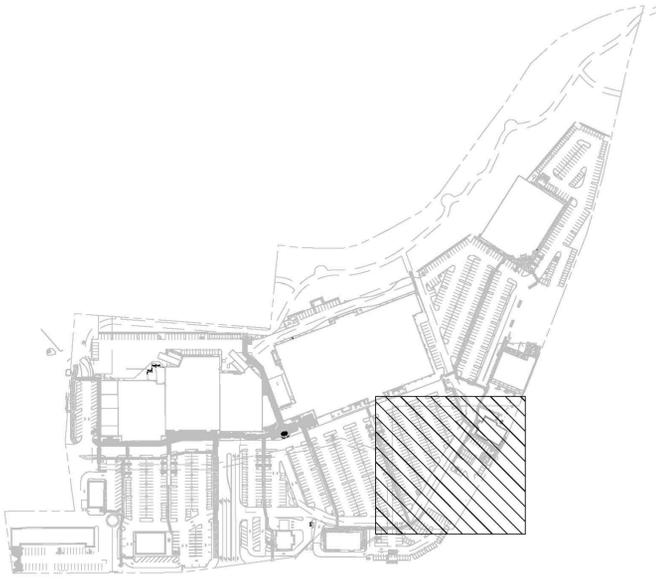


SHEET INDEX

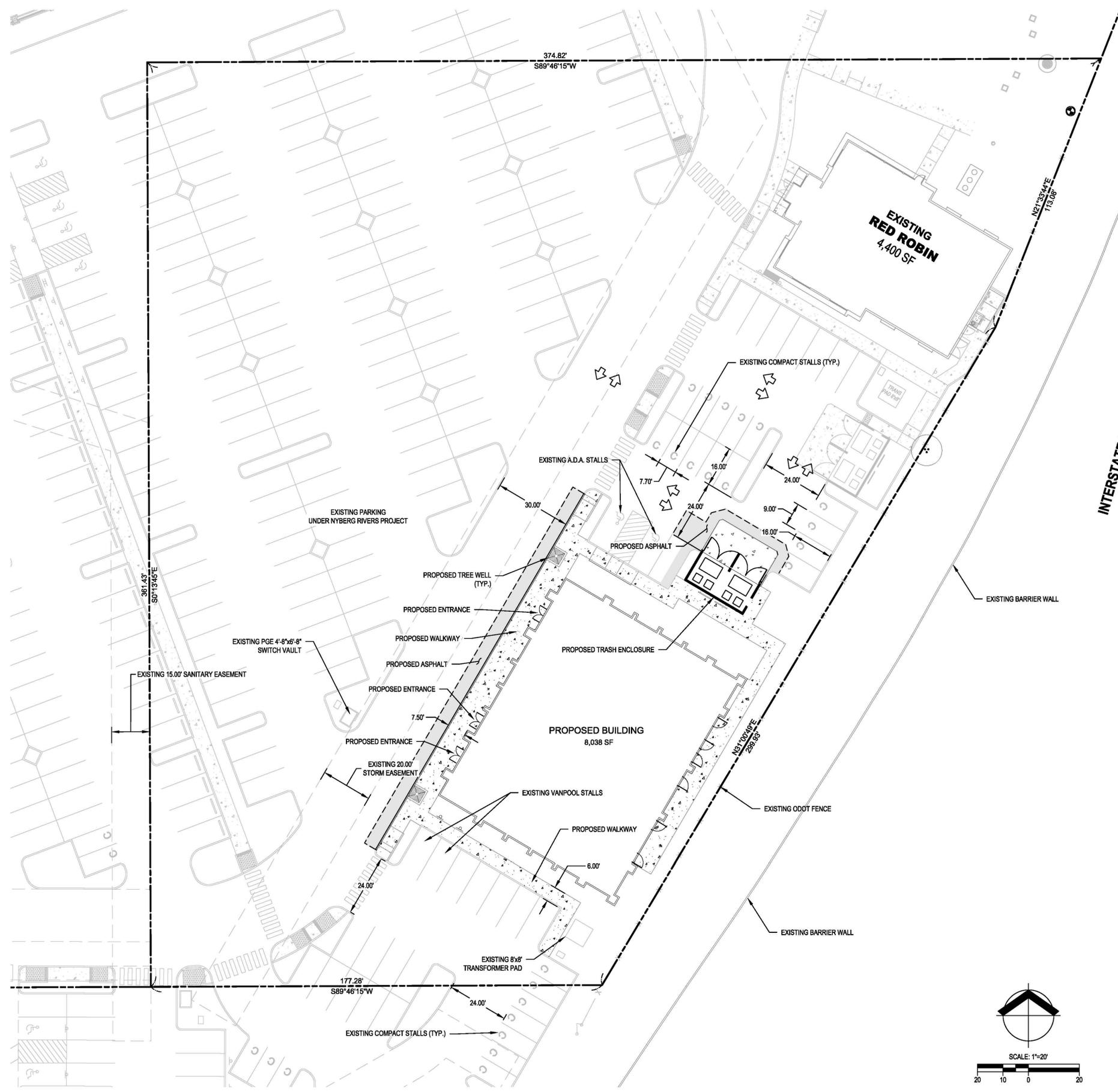
- C0.0 - EXISTING CONDITIONS
- C1.0 - SITE PLAN
- C2.0 - TREE PRESERVATION PLAN
- C2.1 - TREE TABLE
- C2.2 - TREE TABLE
- C3.0 - GRADING PLAN
- C4.0 - PUBLIC FACILITIES PLAN
- L1.0 - PLANTING PLAN

LEGEND

- - - - - PROPERTY LINE
- - - - - LOT LINE
- - - - - EXISTING EASEMENT
- SS - - - - - EXISTING SANITARY LINE
- --- EXISTING STORM LINE
- W - - - - - EXISTING WATER LINE
- DW - - - - - EXISTING DOMESTIC WATER LINE
- G - - - - - EXISTING GAS LINE
- X X - - - - - EXISTING FENCE LINE
- ⊙ - - - - - EXISTING SANITARY MANHOLE
- ⊙ - - - - - EXISTING SANITARY CLEANOUT
- ⊙ - - - - - EXISTING STORM MANHOLE
- ⊙ - - - - - EXISTING STORM CLEANOUT
- - - - - - EXISTING CONCRETE SURFACE
- ↔ - - - - - PARKING CIRCULATION DIRECTION
- ⊙ - - - - - EXISTING FIRE HYDRANT
- ⊙ - - - - - EXISTING FDC



PROJECT NO: 21510970
DATE: 01/20/2016
DESIGNED BY: DJM
DRAWN BY: CS
CHECKED BY: DJM

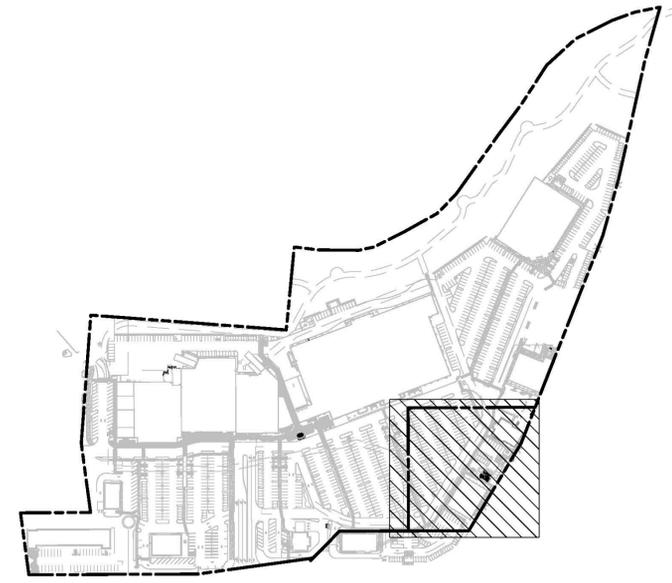
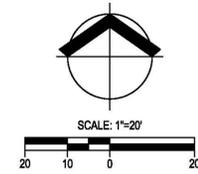


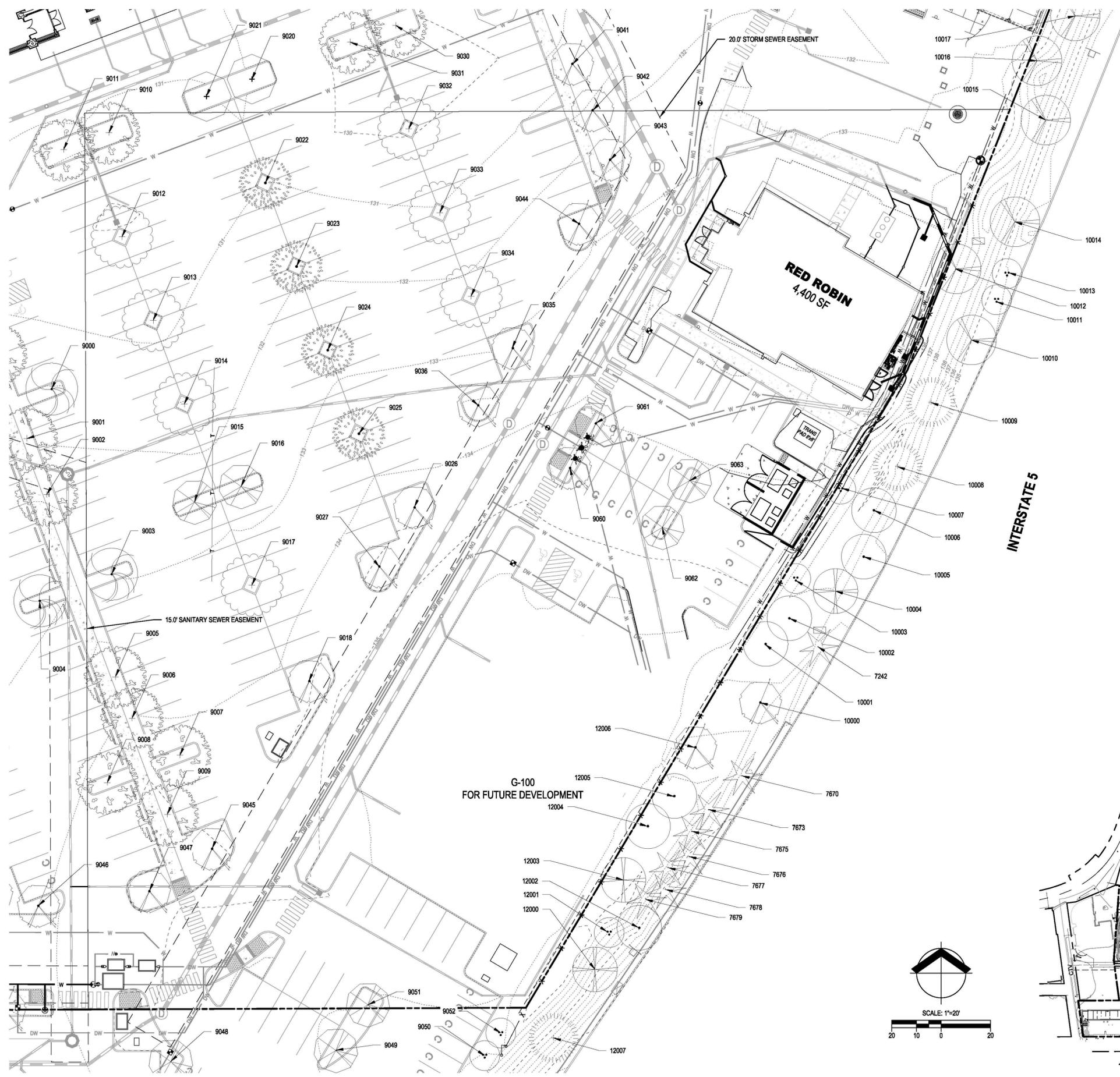
LEGEND

	- PROPERTY LINE
	- LOT LINE
	- EXISTING EASEMENT
	- PROPOSED GREASE INTERCEPTOR
	- PROPOSED CONCRETE
	- PARKING CIRCULATION DIRECTION

SITE DATA

PLANNING DISTRICT DESIGNATION:	CENTRAL COMMERCIAL (CC)
EXISTING SITE SQUARE FOOTAGE:	102,557.25 SF
PROPOSED SITE SQUARE FOOTAGE:	102,557.25 SF
DEVELOPMENT AREA SQUARE FOOTAGE:	17,583.20 SF
LANDSCAPING SQUARE FOOTAGE:	2,996 SF
PARKING LOT LANDSCAPING SQUARE FOOTAGE:	1,328 SF
ADA PARKING SPACES:	2 STALLS
COMPACT PARKING SPACES:	10 STALLS
STANDARD PARKING SPACES:	12 STALLS
BUILDING SQUARE FOOTAGE:	8,038 SF
EXISTING PARKING LOT SQUARE FOOTAGE:	3,909 SF
PROPOSED PARKING LOT SQUARE FOOTAGE:	3909 SF

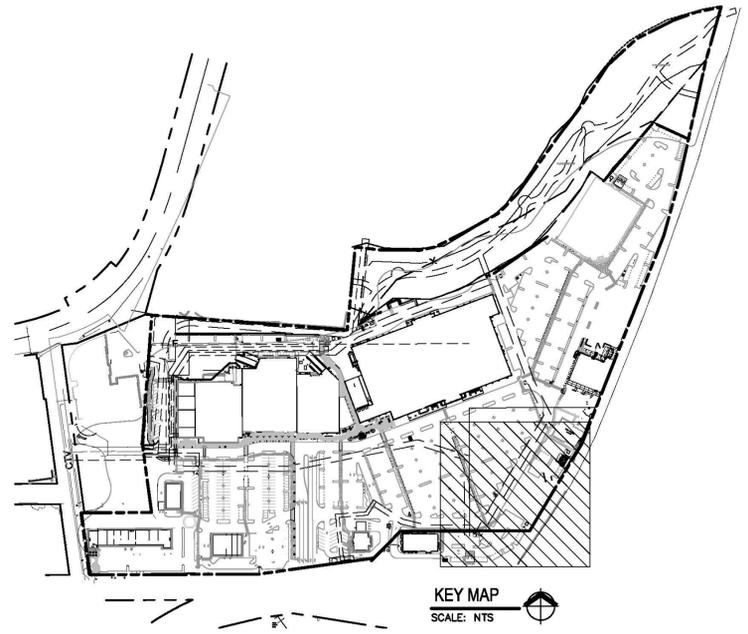
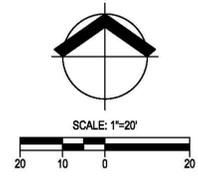




LEGEND

..... 132	- EXISTING MINOR CONTOUR
----- 130	- EXISTING MAJOR CONTOUR
..... 131	- PROPOSED MINOR CONTOUR
----- 130	- PROPOSED MAJOR CONTOUR
---	- PROPERTY LINE
---	- LOT LINE
---	- EXISTING STORM PUBLIC LINE
---	- EXISTING STORM LINE
---	- PROPOSED STORM PRIVATE LINE
○	- EXISTING STORM MANHOLE
■	- EXISTING STORM CATCH BASIN
○	- PROPOSED STORM MANHOLE
■	- PROPOSED STORM CATCH BASIN
○	- PROPOSED STORM CLEAN OUT
---	- EXISTING EASEMENT
SS	- EXISTING SANITARY LINE
SS	- PROPOSED SANITARY PRIVATE LINE
○	- EXISTING SANITARY MANHOLE
○	- PROPOSED PRIVATE MANHOLE
■	- PROPOSED SANITARY CATCH BASIN
○	- PROPOSED SANITARY CLEAN OUT
□	- PROPOSED GREASE INTERCEPTOR
W	- EXISTING FIRE WATER LINE
DW	- EXISTING DOMESTIC WATER LINE
○	- EXISTING FIRE HYDRANT
□	- EXISTING WATER METER
□	- EXISTING WATER VAULT
□	- EXISTING WATER VALVE
□	- EXISTING FIRE HYDRANT
□	- EXISTING FIRE DEPT. CONNECTION
□	- PROPOSED WATER/DUCT METER
□	- PROPOSED DOUBLE CHECK VALVE
○	- EXISTING TREE TO BE PROTECTED IN PLACE WITH FENCING AROUND THE DRIP LINE.

REFER TO SHEETS C2.1 & C2.2 FOR TREE TABLE WITH TREE NUMBER, COMMON NAME, SPECIES NAME, DBH, AND CONDITION INFORMATION



PROJECT NO.: 21510970
DATE: 01/20/2016
DESIGNED BY: DJM
DRAWN BY: CS
CHECKED BY: DJM

No.	Common Name	Species Name	DBH1	Condition	Comments	Exempt2	Prune	Remove	Criteria3
7670	Douglas Fir	<i>Pseudotsuga Menziesii</i>	6	fair		no		no	
7673	Douglas Fir	<i>Pseudotsuga Menziesii</i>	6	fair		no		no	
7675	Douglas Fir	<i>Pseudotsuga Menziesii</i>	6	fair		no		no	
7676	Douglas Fir	<i>Pseudotsuga Menziesii</i>	6	fair		no		no	
7677	Douglas Fir	<i>Pseudotsuga Menziesii</i>	5	fair		no		no	
7678	Douglas Fir	<i>Pseudotsuga Menziesii</i>	8	fair		no		no	
7679	Douglas Fir	<i>Pseudotsuga Menziesii</i>	4	fair		no		no	
9000	Royal Red Maple	<i>Acer Platanoides 'Royal Red'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9001	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9002	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9003	Royal Red Maple	<i>Acer Platanoides 'Royal Red'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9004	Royal Red Maple	<i>Acer Platanoides 'Royal Red'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9005	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9006	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9007	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9008	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9009	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9010	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9011	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9012	Patmore Green Ash	<i>Fraxinus Pennsylvanica 'Patmore'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9013	Patmore Green Ash	<i>Fraxinus Pennsylvanica 'Patmore'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9014	Patmore Green Ash	<i>Fraxinus Pennsylvanica 'Patmore'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9015	Columnar Hornbeam	<i>Carpinus Betula 'Fastigiata'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9016	Columnar Hornbeam	<i>Carpinus Betula 'Fastigiata'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9017	Patmore Green Ash	<i>Fraxinus Pennsylvanica 'Patmore'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9018	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9020	Flame Amur Maple	<i>Acer Ginnala 'Flame'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9021	Flame Amur Maple	<i>Acer Ginnala 'Flame'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9022	Urbanite Ash	<i>Fraxinus Pennsylvanica 'Urbanite'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9023	Urbanite Ash	<i>Fraxinus Pennsylvanica 'Urbanite'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9024	Urbanite Ash	<i>Fraxinus Pennsylvanica 'Urbanite'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9025	Urbanite Ash	<i>Fraxinus Pennsylvanica 'Urbanite'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9026	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9027	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9030	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9031	Bowhall Red Maple	<i>Acer Rubrum 'Bowhall'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9032	Patmore Green Ash	<i>Fraxinus Pennsylvanica 'Patmore'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9033	Patmore Green Ash	<i>Fraxinus Pennsylvanica 'Patmore'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9034	Patmore Green Ash	<i>Fraxinus Pennsylvanica 'Patmore'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9035	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9036	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9041	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9042	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9043	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9044	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9045	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9046	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9047	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9048	Columnar Hornbeam	<i>Carpinus Betula 'Fastigiata'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9049	Columnar Hornbeam	<i>Carpinus Betula 'Fastigiata'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9050	Columnar Hornbeam	<i>Carpinus Betula 'Fastigiata'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9051	Vine Maple	<i>Acer Cercinatum</i>		new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9052	Vine Maple	<i>Acer Cercinatum</i>		new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9060	Columnar Hornbeam	<i>Carpinus Betula 'Fastigiata'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9061	Columnar Hornbeam	<i>Carpinus Betula 'Fastigiata'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9062	Columnar Hornbeam	<i>Carpinus Betula 'Fastigiata'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	
9063	Columnar Hornbeam	<i>Carpinus Betula 'Fastigiata'</i>	2	new	Installed as part of Nyber Rivers Onsite Project	yes		no	

1DBH is tree diameter measured at 4.5-feet above the ground level, in inches.

2Exempt identifies trees measuring less than eight inches in diameter.

3Criteria provides justification for the proposed tree removal (per TDC 34.230):

D1: Diseased and the disease threatens the structural integrity of the tree;

D2: Diseased and the disease permanently and severely diminishes the aesthetic value of the tree; or

D3: Diseased and 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.

H: Hazardous.

C: Construction necessitates tree removal.



PROJECT NO.: 21510970
DATE: 01/20/2016
DESIGNED BY: DJM
DRAWN BY: CS
CHECKED BY: DJM

No.	Common Name	Species Name	DBH1	Condition	Comments	Exempt2	Prune	Remove	Criteria3
10000	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10001	Red Alder	<i>Alnus Rubra</i>	2	new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10002	Red Alder	<i>Alnus Rubra</i>	2	new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10003	Vine Maple	<i>Acer Cercinatum</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10004	Western Red Cedar	<i>Thuja Plicata</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10005	Red Alder	<i>Alnus Rubra</i>	2	new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10006	Red Alder	<i>Alnus Rubra</i>	2	new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10007	Vine Maple	<i>Acer Cercinatum</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10008	Western Hemlock	<i>Tsuga Heterophyllis</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10009	Western Hemlock	<i>Tsuga Heterophyllis</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10010	Douglas Fir	<i>Psedotsuga Menziesii</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10011	Vine Maple	<i>Acer Cercinatum</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10012	Douglas Fir	<i>Psedotsuga Menziesii</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10013	Vine Maple	<i>Acer Cercinatum</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10014	Douglas Fir	<i>Psedotsuga Menziesii</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10015	Douglas Fir	<i>Psedotsuga Menziesii</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10016	Douglas Fir	<i>Psedotsuga Menziesii</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
10017	Douglas Fir	<i>Psedotsuga Menziesii</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
12000	Western Red Cedar	<i>Thuja Plicata</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
12001	Vine Maple	<i>Acer Cercinatum</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
12002	Red Alder	<i>Alnus Rubra</i>	2	new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
12003	Western Red Cedar	<i>Thuja Plicata</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
12004	Red Alder	<i>Alnus Rubra</i>	2	new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
12005	Red Alder	<i>Alnus Rubra</i>	2	new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
12006	Jaquemontii Birch	<i>Betula Jaquemontii</i>	2	new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	
12007	Western Hemlock	<i>Tsuga Heterophyllis</i>		new	Installed as part of I-5 Southbound Off-Ramp @ Nyberg St.	yes		no	

1DBH is tree diameter measured at 4.5-feet above the ground level, in inches.

2Exempt identifies trees measuring less than eight inches in diameter.

3Criteria provides justification for the proposed tree removal (per TDC 34.230):

D1: Diseased and the disease threatens the structural integrity of the tree;

D2: Diseased and the disease permanently and severely diminishes the aesthetic value of the tree; or

D3: Diseased and 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.

H: Hazardous.

C: Construction necessitates tree removal.

TREE TABLE
SHOP/JPAD J
NYBERG RIVERS - ARCHITECTURAL REVIEW BOARD
TUALATIN, OREGON



EXPIRES: 12/31/2016

PROJECT NO.: 21510970
DATE: 01/20/2016
DESIGNED BY: DJM
DRAWN BY: CS
CHECKED BY: DJM

TREE TABLE

CABELA'S

**PARKING IMPROVEMENTS UNDER
NYBERG RIVERS PROJECT**

20.0' STORM SEWER EASEMENT

374.82'
S89°46'15"W

EXISTING
RED ROBIN
4,400 SF
FFE=134.00

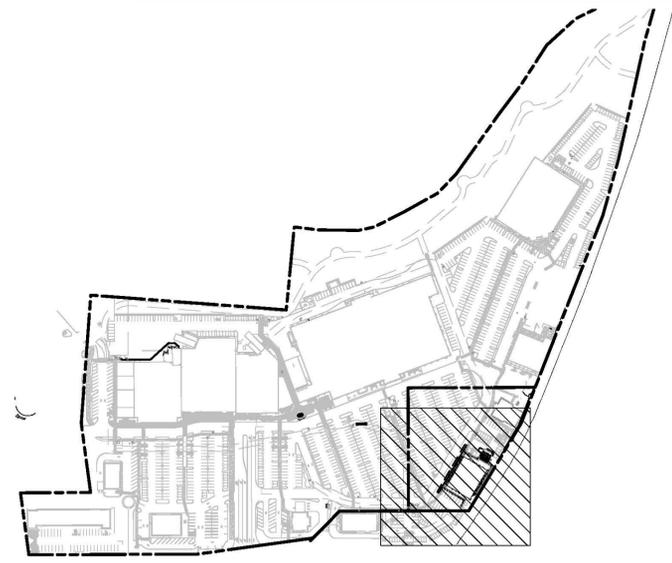
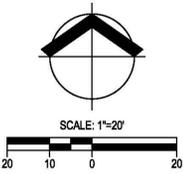
PROPOSED BUILDING
8,038 SF
FFE=136.30

INTERSTATE 5

LEGEND

- 132 - EXISTING MINOR CONTOUR
- 130 - EXISTING MAJOR CONTOUR
- 131 - PROPOSED MINOR CONTOUR
- 130 - PROPOSED MAJOR CONTOUR
- PROPERTY LINE
- LOT LINE
- EXISTING STORM MANHOLE
- EXISTING STORM CATCH BASIN
- PROPOSED STORM CATCH BASIN
- PROPOSED STORM CLEAN OUT
- EXISTING EASEMENT
- EXISTING SANITARY MANHOLE
- PROPOSED SANITARY CLEAN OUT
- PROPOSED GREASE INTERCEPTOR
- EXISTING FIRE HYDRANT
- EXISTING FIRE DEPT. CONNECTION
- EXISTING WATER VALVE IN METER BOX
- EXISTING TREE TO BE PROTECTED IN PLACE WITH FENCING AROUND THE DRIP LINE.
- (133.03) - EXISTING SPOT ELEVATION
- S133.05 - PROPOSED SPOT ELEVATION
- R134.00 - PROPOSED RIM ELEVATION
- (2.5%) - EXISTING SLOPE ARROW
- 2.2% - PROPOSED SLOPE ARROW

ALL TREES SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED. EXISTING TREES TO BE RETAINED SHALL BE FENCED AROUND THE DRIP LINE WITH CHAIN LINK OR OTHER STURDY FENCING DURING CONSTRUCTION REFER TO SHEET C2.0, C2.1, AND C2.2 FOR TREE PLAN AND TABLE WITH TREE NUMBER, COMMON NAME, SPECIES NAME, DBH, AND CONDITION INFORMATION



PROJECT NO: 21510970
DATE: 01/20/2016
DESIGNED BY: DJM
DRAWN BY: CS
CHECKED BY: DJM



LEGEND

	- PROPERTY LINE
	- LOT LINE
	- EXISTING STORM PUBLIC LINE
	- EXISTING STORM LINE
	- PROPOSED STORM PRIVATE LINE
	- EXISTING STORM MANHOLE
	- EXISTING STORM CATCH BASIN
	- PROPOSED STORM CATCH BASIN
	- PROPOSED STORM CLEAN OUT
	- EXISTING EASEMENT
	- EXISTING SANITARY LINE
	- PROPOSED SANITARY PRIVATE LINE
	- EXISTING SANITARY MANHOLE
	- PROPOSED SANITARY CLEAN OUT
	- PROPOSED GREASE INTERCEPTOR
	- EXISTING FIRE WATER LINE
	- EXISTING DOMESTIC WATER LINE
	- EXISTING FIRE HYDRANT
	- EXISTING FIRE DEPT. CONNECTION
	- PROPOSED FIRE WATER LINE
	- PROPOSED DOMESTIC WATER LINE

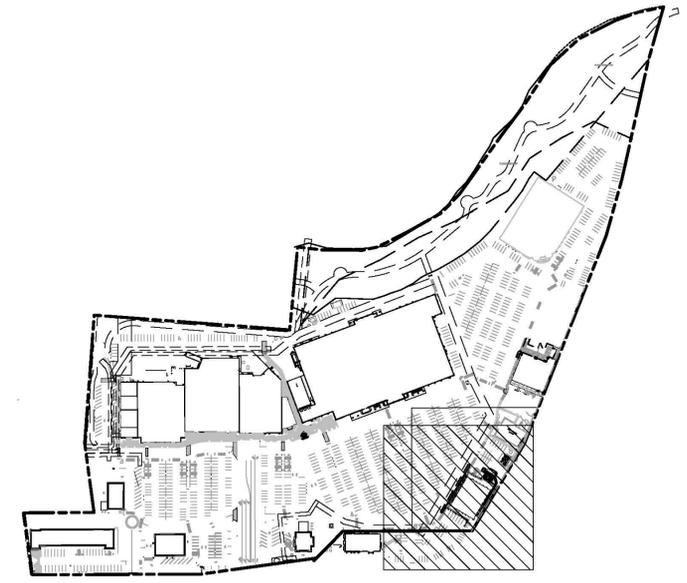
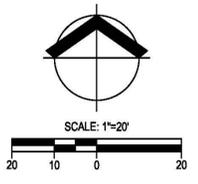
WATER NOTES

1. SITE DOMESTIC WATER LOOP METERED.
2. DOMESTIC WATER BACKFLOW TO BE PROVIDED INSIDE THE BUILDING.
3. FIRELINE BACKFLOW TO BE PROVIDED INSIDE THE BUILDING.

STORM STRUCTURE DATA

SDAD-1	RIM: 136.15
	IE OUT (8"W) = 132.15
SDAD-2	RIM: 135.02
	IE OUT (8"W) = 131.00
SSAD-1	RIM: 135.22
	IE OUT (8"W) = 131.22

INTERSTATE 5



PROJECT NO.: 21510970
DATE: 01/20/2016
DESIGNED BY: DJM
DRAWN BY: CS
CHECKED BY: DJM

EXISTING NYBERG RIVERS PLANTINGS
SHOWN FOR REFERENCE ONLY

PAD J

INTERSTATE-5 OFF-RAMP

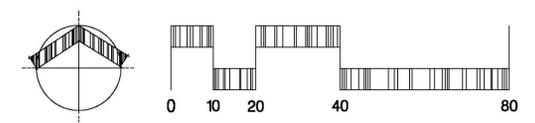
EXISTING NYBERG RIVERS PLANTINGS
SHOWN FOR REFERENCE ONLY

GENERAL NOTES: LANDSCAPE PLAN

- LANDSCAPE PLANTING SHALL CONFORM TO THE STANDARDS ESTABLISHED UNDER CITY OF TUALATIN PLANNING DEPT.
- ALL PLANT BEDS SHALL HAVE A 3" DEPTH OF BARK MULCH.
- LANDSCAPE AREAS SHALL HAVE A COMPLETE UNDERGROUND AUTOMATIC IRRIGATION SYSTEM WITH FULL HEAD TO HEAD COVERAGE.
- ALL PLANT MATERIAL DELIVERED TO THIS SITE SHALL MEET THE AMERICAN NURSERYMAN'S ASSOCIATION STANDARDS.
- CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ALL PLANT MATERIAL SUBSTITUTIONS FROM THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. PLANT SUBSTITUTIONS WITHOUT PRIOR WRITTEN APPROVAL THAT DO NOT COMPLY WITH THE DRAWINGS AND SPECIFICATIONS MAY BE REJECTED BY THE LANDSCAPE ARCHITECT AT NO COST TO THE OWNER. THESE ITEMS MAY BE REQUIRED TO BE REPLACED WITH PLANT MATERIALS THAT ARE IN COMPLIANCE WITH THE DRAWINGS.

LANDSCAPE PLANT MATERIALS - PAD J

SYMBOL	TREES ITEM	SIZE	QTY.
	ACER FREEMANII 'ARMSTRONG' ARMSTRONG MAPLE	3" CAL. / B&B AS SHOWN	6
	BETULA JAQUEMONTII JAQUEMONTII BIRCH	3" CAL. / B&B AS SHOWN	9
	EXISTING DECIDUOUS TREE TO REMAIN		
	EXISTING EVERGREEN TREE TO REMAIN		
SHRUBS & ACCENTS			
SYMBOL	ITEM	SIZE	QTY.
	MAHONIA AQUIFOLIUM TALL OREGON GRAPE HOLLY	3 GAL.	63
	SYMPHORICARPOS ALBA COMMON SNOWBERRY	3 GAL.	15
	ROSA WOODSII WOOD'S ROSE	1 GAL.	29
	COTONEASTER LACTEUS PARNEY COTONEASTER	3 GAL.	15
	PHYSOCARPUS PACIFIC NINEBARK	2 GAL.	12
	PENNISSETUM ALOPECURIODES 'HAMELN' HAMELN FOUNTAIN GRASS	1 GAL.	57
	CALAMAGROSIS ACUTIFLORA 'OVERDAM' OVERDAM FEATHER REED GRASS	1 GAL.	6
GROUNDCOVERS			
SYMBOL	ITEM	SIZE	QTY.
	JUNIPERUS H. 'BAR HARBOR' BAR HARBOR JUNIPER	1 GAL. @ 3'-0" O.C.	3,956 SF 508 PLANTS



LANDSCAPE PLANTING PLAN
NYBERG RIVERS - PAD J

Cardno
Shaping the Future
PORTLAND
5415 NW WESTGATE DR. STE. 100, PORTLAND, OR 97221
TEL: (503) 419-2800 FAX: (503) 419-2800
www.cardno.com

#	DATE	DESCRIPTION

REGISTERED
FOR REVIEW
LANDSCAPE ARCHITECT
BRUCE NYBERG
OREGON
EXPIRES 05/31/16

DATE | 12/08/2015
DRAWN | BFS
DESIGNED | BFS
CHECKED | MCL
PROJECT # | 21510970

SHEET TITLE
PLANTING PLAN
SHEET NUMBER

L1.0

NOT FOR CONSTRUCTION

SYMBOLS LIST	
⊕	DUPLEX RECEPTACLE [+ 18"]
⊕	DOUBLE DUPLEX RECEPTACLE
⊕	JUNCTION BOX
⊕	ELECTRICAL EQUIPMENT CONNECTION
⊕	SURFACE ELECTRICAL PANEL [MAX 6'-6" TO TOP]
⊕	SURFACE CONTROL PANEL
⊕	RECESSED DOWNLIGHT
⊕	RECESSED EMERGENCY DOWNLIGHT
⊕	SURFACE MOUNTED LIGHT FIXTURE
⊕	SURFACE MOUNTED EMERGENCY LIGHT FIXTURE
⊕	STRIP LIGHT FIXTURE
⊕	EMERGENCY STRIP LIGHT FIXTURE
⊕	WALL MOUNTED LIGHT FIXTURE
⊕	WALL MOUNTED EMERGENCY LIGHT FIXTURE
⊕	SINGLE-POLE SWITCH [+ 45"]
⊕	CONDUIT WITH GROUND CONDUCTOR
⊕	NEUTRAL CONDUCTOR
⊕	PHASE CONDUCTOR
⊕	HOMERUN ARROW
⊕	PLAN NOTE MARK
⊕	SHEET REFERENCE MARK
[+ xx"]	STANDARD MOUNTING HEIGHT UNLESS OTHERWISE NOTED ON DRAWINGS

NOTE: NOT ALL SYMBOLS MAY APPLY

ABBREVIATIONS	
A, AMP	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AIC	EQUIPMENT SHORT CIRCUIT INTERRUPT RATING
AL	ALUMINUM
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CKT	CIRCUIT
CT	CURRENT TRANSFORMER
CU	COPPER
DISC	DISCONNECT
DIA	DIAMETER
DIV	DIVISION
DWG	DRAWING
EF	EXHAUST FAN
FA	FIRE ALARM
FC	FOOT CANDLES
FLA	FULL LOAD AMPERES
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HP	HORSEPOWER
KCMIL	THOUSAND CIRCULAR MILS
KW	KILOWATTS
KVA	KILOVOLT-AMPERES
LTO	LIGHTING
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPERES
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MFG'S ASSOCIATION
NL	NIGHT LIGHT
NTS	NOT TO SCALE
PH, #	PHASE
PNL	PANEL
TYP	TYPICAL
V	VOLTS
VA	VOLT-AMPERES
W	WATT
WG	WIRE GUARD
WP	WEATHERPROOF
XFMR	TRANSFORMER

LIGHTING SCHEDULE	
TYPE	DESCRIPTION
A	8' TANDEM STRIP LIGHT WITH (2)-32W T8 FLUORESCENT LAMPS PER CROSS-SECTION, 120V ELECTRONIC BALLAST, AND WIREGUARD. (58 VA) LITHONIA Z-2-32-MVOLT-WG248 WILLIAMS, DAYBRITE, METALUX, OR APPROVED EQUAL
AE	SAME AS TYPE 'A' EXCEPT FIXTURE SHALL CONTAIN AN INTEGRAL BATTERY BALLAST WHICH IS CAPABLE OF PRODUCING A MINIMUM 1350 LUMENS DURING EMERGENCY MODE. (58 VA)
SA	WALL MOUNTED UP/DN. PAINTED ALUMINUM HOUSING, 10W LED LAMP SOURCE, 3000K COLOR, 21 DEGREE NARROW DISTRIBUTION. 277V, BLACK FINISH. (20 VA) LUMIERE 904-UD-10LED3021-BK
SB	TRAPEZOIDAL WALL MOUNTED FIXTURE WITH DIE CAST ALUMINUM HOUSING, TYPE III DISTRIBUTION, (1) 10 LED 3000K LIGHT ENGINE, 277V, INTEGRAL EMERGENCY BATTERY BACKUP, BLACK FINISH. (24 VA) LITHONIA WST LED-1-10A700/S0K-SR3-120-ELCW-DBLXD OR APPROVED EQUAL
SC	13" DIA. SURFACE DRUM WITH FLAT UV-STABILIZED HIGH IMPACT RESISTANT POLYCARBONATE PEARLESCENT LENS, 20W 3500K LED LAMPING, STANDARD CONSTANT CURRENT DRIVER, 277V, INTEGRAL EMERGENCY BATTERY BACKUP WITH SURFACE ADAPTER, BLACK FINISH. (14 VA) KENALL MR13FFL-PP-MB-20L35K-SCC-277-LEL(SA) OR APPROVED EQUAL
SD	4' WALL MOUNTED LIGHT FIXTURE WITH EXTRUDED ALUMINUM HOUSING, SATIN LENS SHIELDING, 3500K LED MODULE WITH NOMINAL 750 LUMENS PER FOOT, UNIVERSAL VOLTAGE ELECTRONIC DRIVER, INTEGRAL BATTERY PACK, WET LOCATION LISTED, BLACK FINISH. (33.2 VA) AXIS WBWLED-B3-MF-750-80-35-S-4-C-UNV-D-1-B277 OR APPROVED EQUAL

DRAWING INDEX	
DWG	DESCRIPTION
E201	ELECTRICAL FLOOR PLAN
E202	ELECTRICAL ONE-LINE DIAGRAM AND SCHEDULES

FIRE ALARM DESIGN BUILD NOTE

DESIGN, FURNISH, AND INSTALL MONITORING SYSTEM FOR FIRE SPRINKLER SYSTEM. INCLUDE FIRE ALARM PANEL, INITIATION DEVICES, FLOW/TAMPER SWITCHES, MONITORING DEVICES, ANNUNCIATION DEVICES, AND OTHER EQUIPMENT AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION (AHJ). REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

UTILITY COORDINATION DESIGN BUILD NOTE

UTILITY INFORMATION INDICATED ON THIS DRAWING HAS BEEN BASED ON INITIAL DISCUSSIONS WITH EACH SERVING UTILITY. PRIOR TO BEGINNING ANY WORK, THE CONTRACTOR SHALL CONTACT EACH SERVING UTILITY. THE CONTRACTOR IS RESPONSIBLE FOR FINALIZING THE DESIGN, FURNISHING, AND INSTALLATION OF ALL REQUIRED UTILITY SERVICES (CABLE TV, PHONE AND POWER). THIS SHALL INCLUDE BUT NOT BE LIMITED TO TRENCHING, CONDUITS, CONDUCTORS, TRANSFORMERS, PEDESTALS, PADS/VAULTS, ETC.

CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE AVAILABLE FAULT CURRENT WITH THE UTILITY COMPANY AND PROVIDING REVISED CALCULATIONS AS REQUIRED AT THE METER CENTERS AND FOR EVERY PANEL BOARD. METER CENTERS AND PANEL BOARDS SHALL BE FULLY RATED. SERIES RATINGS ARE NOT ACCEPTABLE.

UTILITY CONTACTS	
ESE:	BRIAN BUSWELL (503.672.5482)
FRONTIER:	JOHN COUSINEAU (503.643.0371)
COMCAST:	KEN PARIS (503.596.3811)

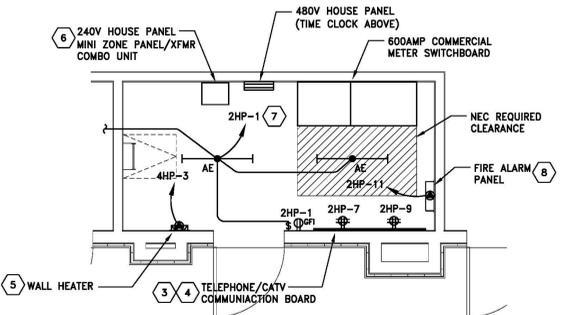
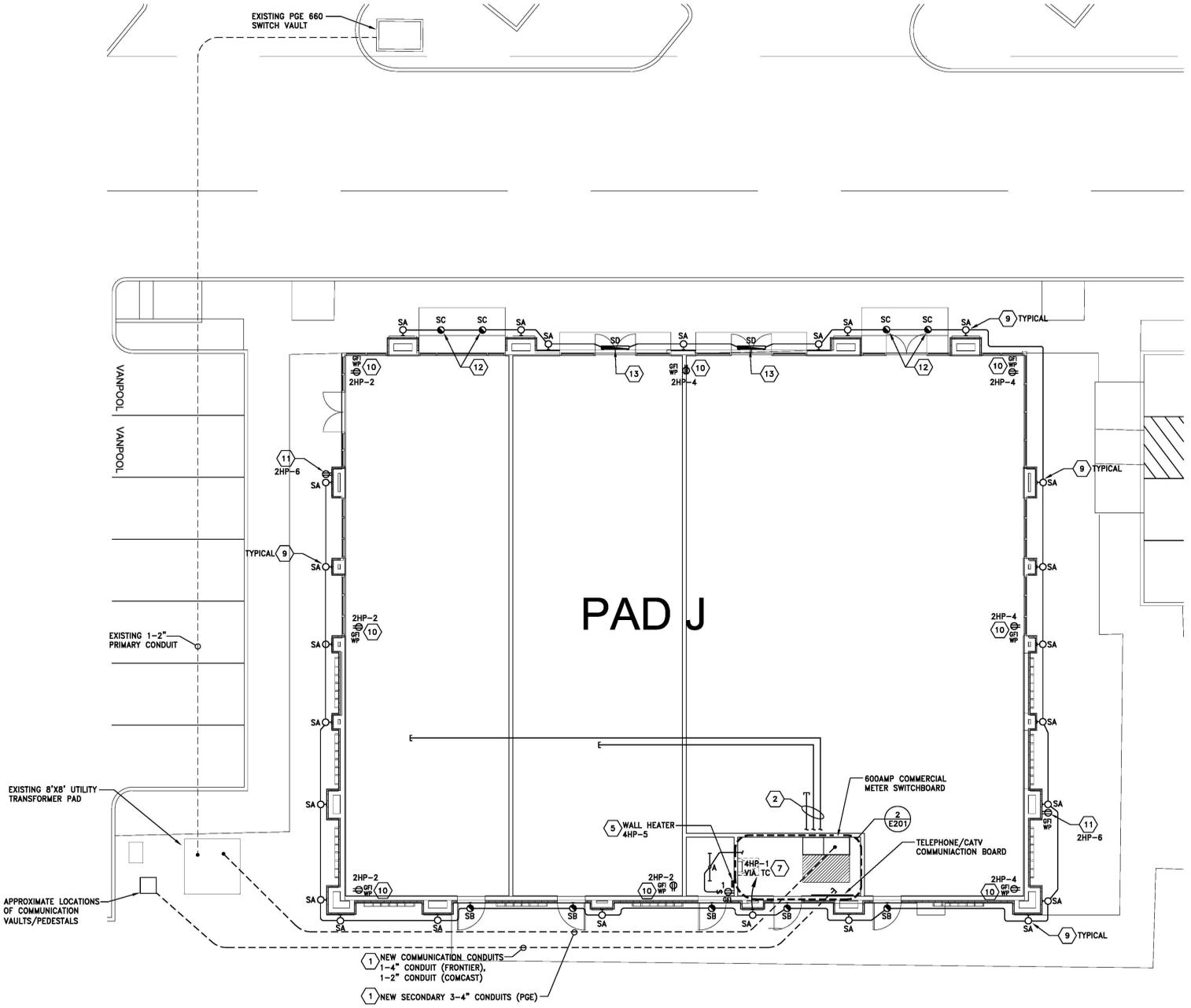
C2K
ARCHITECTURE inc
1645 HOYT STREET
PORTLAND OREGON 97212
503 444 2200

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION
EXPIRES 12-31-16

MKE
MARK BLESSIDOTTEN AND
JOHN COUSINEAU ENGINEERS
MECHANICAL AND ELECTRICAL SYSTEMS
6915 SW MACADAM AVE.
SUITE 200
PORTLAND, OREGON 97219
PHONE: 503.892.1188
FAX: 503.892.1190
CONTACT: TOBIN BATEEN
engineer@mke-inc.com

- GENERAL NOTES:**
- CONTRACTOR SHALL BECOME FAMILIAR WITH EACH UTILITIES CONSTRUCTION STANDARDS PRIOR TO BEGINNING CONSTRUCTION. ALL WORK SHALL BE PERFORMED TO MEET THESE STANDARDS.
 - ALL EXPOSED OVERHEAD RUNS SHALL BE CONDUIT ONLY.
 - FOR REASONS OF CLARITY, TICK MARKS (CONDUCTOR DESIGNATIONS) MAY NOT APPEAR ON THIS DRAWING. CONTRACTOR TO PROVIDE CONDUCTORS AS REQUIRED TO ACCOMPLISH THE INTENT OF THE DRAWINGS.

- KEYED NOTES:**
- ROUTE PGE CONDUITS IN COMMON TRENCH OF DEPTH AND WIDTH PER PGE REQUIREMENTS. MAINTAIN 12" MINIMUM DISTANCE BETWEEN PGE CONDUITS AND OTHER COMMUNICATION UTILITIES. JOINT TRENCH ROUTING AND REQUIREMENTS ARE TO BE COORDINATED WITH ALL LOCAL UTILITY COMPANIES PRIOR TO BEGINNING WORK.
 - PROVIDE (2) 2" EMT CONDUITS TO OUTLINED LOCATIONS FOR FUTURE TENANT TELEPHONE/CATV CABLES, (1) 1" EMT CONDUIT FOR FIRE ALARM AND (1) 2-1/2" EMT CONDUIT TO OUTLINE LOCATION FOR FUTURE TENANT POWER. INSTALL TIGHT TO STRUCTURE, RUN PERPENDICULAR AND PARALLEL TO STRUCTURE. TERMINATE TELEPHONE CONDUIT ABOVE TELEPHONE TELEPHONE D'MARK, CATV CONDUIT ABOVE CATV D'MARK AND POWER CONDUIT IN METER CENTER. (FOR CLARITY ONLY ONE CONDUIT RUN TO EACH TENANT SPACE IS SHOWN).
 - FURNISH AND INSTALL 8' HIGH FIRE RETARDANT PLYWOOD BACKBOARD FOR TELEPHONE/CATV. PROVIDE POWER AND GROUNDING PER EACH UTILITIES REQUIREMENTS.
 - FURNISH AND INSTALL GROUND BUS WITH #6 CU GROUND ON BACKBOARD ROUTED BACK TO MAIN SERVICE'S GROUNDING ELECTRODE SYSTEM.
 - FURNISH AND INSTALL 1KW, 277V ELECTRIC WALL HEATER WITH INTEGRAL T-STAT AND BUILT IN DISCONNECT. WHITE COLOR. KING PAW2720 SERIES OR APPROVED EQUAL.
 - PROVIDE 7.5KVA, 480V TO 120/240V, 1PH MINI POWER ZONE PANEL. 12 CIRCUIT, ALL COPPER, BOLT ON BREAKERS. EATON P48011507CUB OR EQUAL.
 - PROVIDE AN UNSWITCHED HOT AND SWITCHED HOT FOR ALL DOWNSTREAM EMERGENCY FIXTURES. WIRE PER MANUFACTURER'S INSTRUCTIONS.
 - DESIGN BUILD FIRE ALARM CONTRACTOR SHALL COORDINATE FINAL LOCATION WITH AHJ.
 - REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHTS.
 - PROVIDE DEDICATED, WEATHERPROOF, GFI RECEPTACLE AT ROOF. RECEPTACLE TO BE MOUNTED TO INSIDE FACE OF ROOF PARAPET. LOCATE 24" ABOVE ROOF DECK. RECEPTACLES TO BE FED FROM DESIGNATED CIRCUIT NUMBER AND CONTROLLED VIA THE BUILDING'S TIMECLOCK. REFER TO DETAIL 3/E202.
 - EXTERIOR RECEPTACLE TO BE LOCATED ADJACENT TO HOSE BIB. COORDINATE FINAL LOCATION WITH PLUMBING PRIOR TO BEGINNING CONSTRUCTION.
 - FIXTURES TO BE SURFACED MOUNTED TO UNDERSIDE OF CANOPY. ROUTE CONDUITS TO FIXTURES ON TOP OF CANOPY (PROVIDING SLEEPERS AS REQUIRED).
 - FIXTURE TO BE LOCATED BELOW PEAK OF AWNING TIGHT TO TOP OF STORE FRONT. COORDINATE FINAL LOCATION WITH AWNING SUPPLIER AS TO AVOID CONFLICT WITH AWNING STRUCTURE.



1 ELECTRICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"

2 ENLARGED ELECTRICAL ROOM PLAN
SCALE: 1/4" = 1'-0"

50% CD SET

SHEET TITLE:
ELECTRICAL FLOOR PLAN

SHEET NO.:
E201

2/8/2016 9:15:12 AM

CCP NYBERG RIVERS SHOP PAD J

CENTRAL PROPERTIES
1 Xxx Street
TUALATIN, OR

PROJECT NO.: 15170
DRAWN: Author
DATE: 12 FEBRUARY 2016
50% CD SET

REVISION: DESCRIPTION:

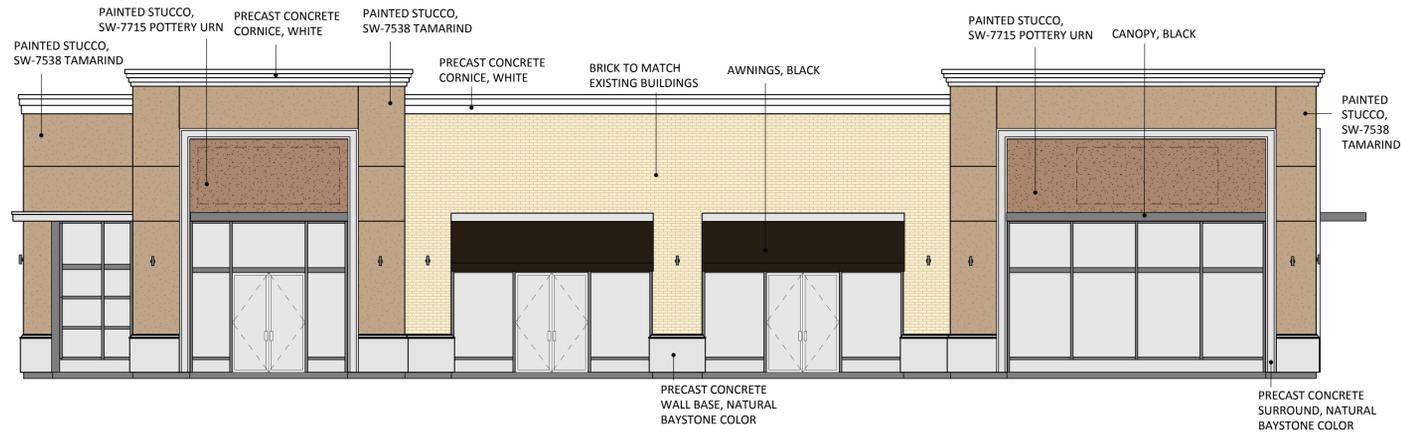
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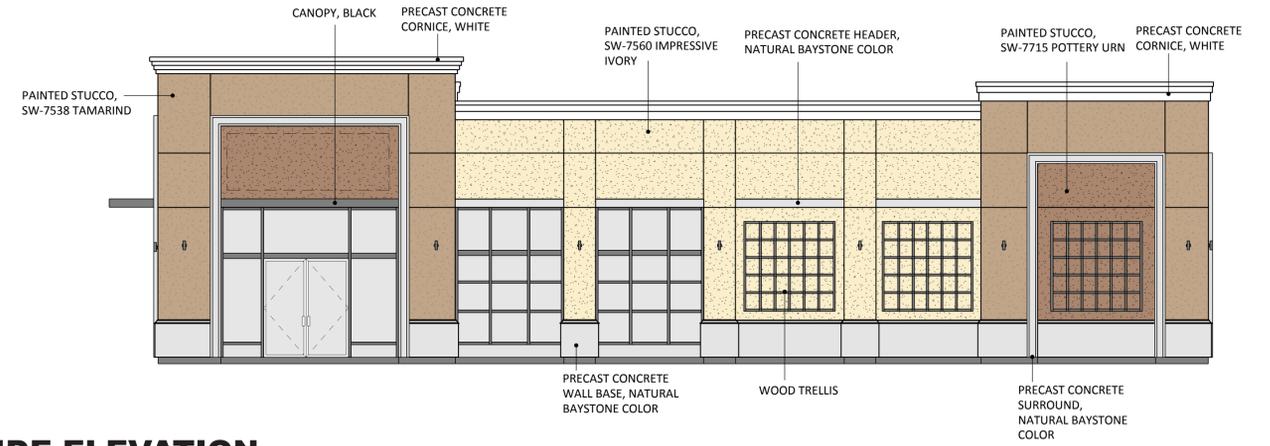
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03.16.2016

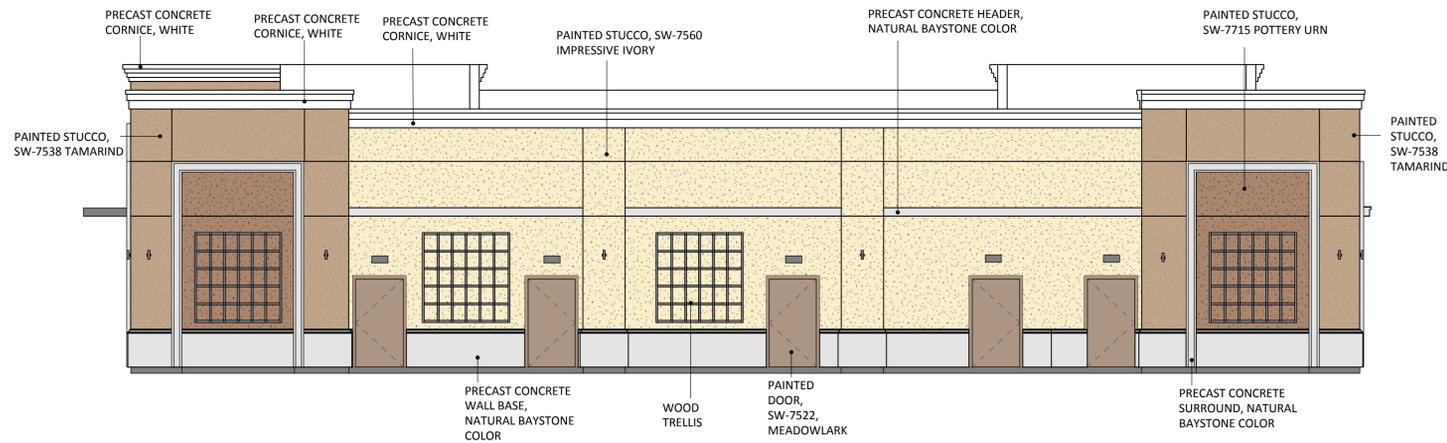
EXTERIOR ELEVATIONS



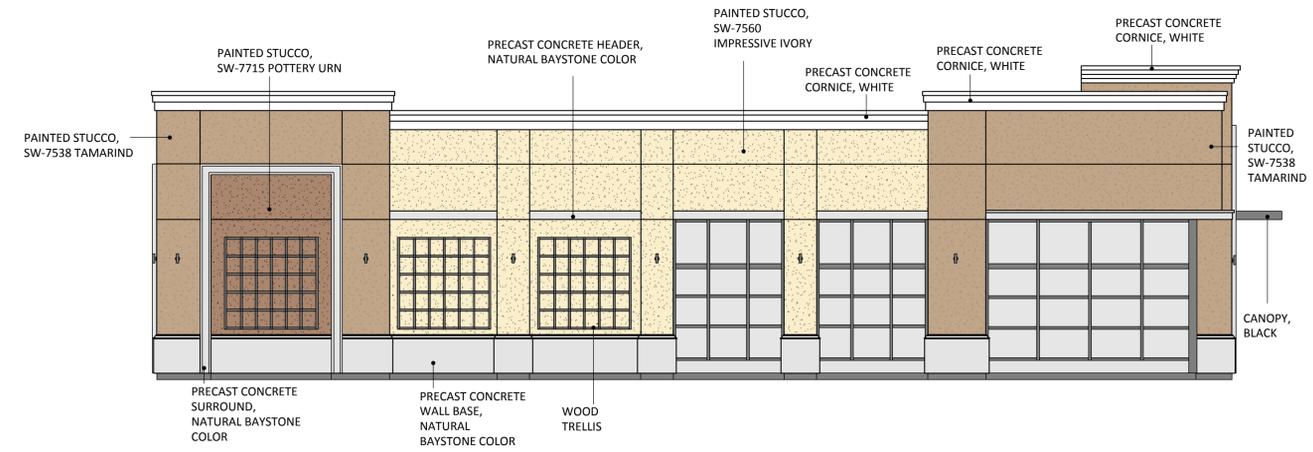
FRONT ELEVATION



SIDE ELEVATION



REAR ELEVATION



SIDE ELEVATION

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PERSPECTIVES



NYBERG RIVERS SHOP J TUALITIN, OR

PERSPECTIVES

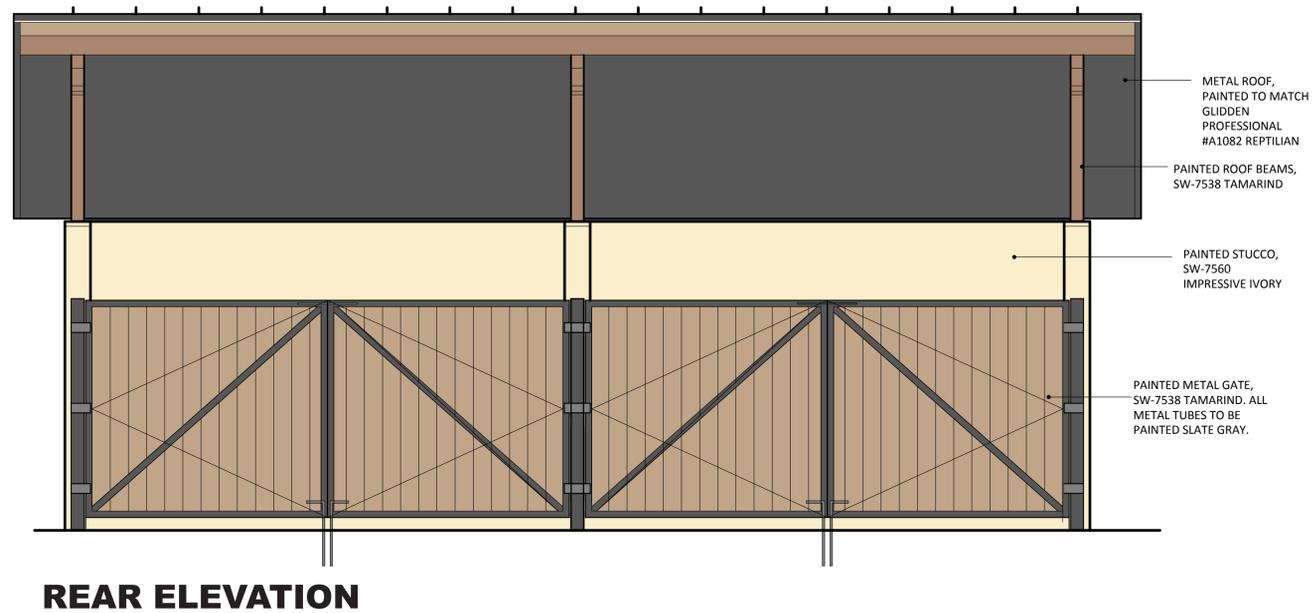
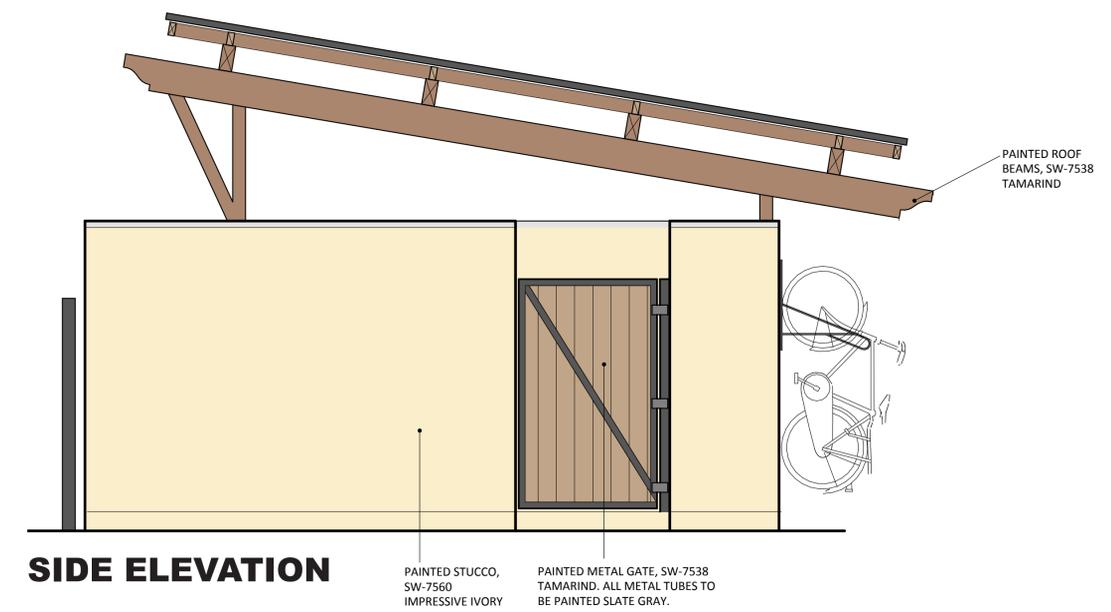
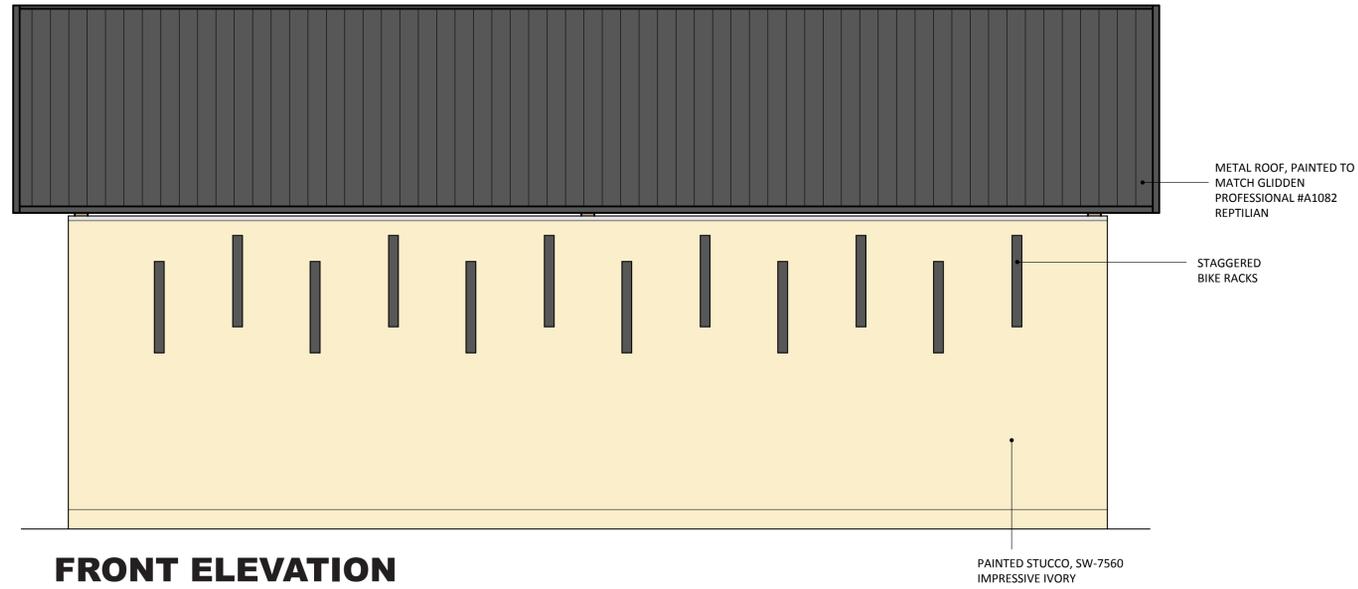
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03.16.2016



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03.16.2016

TRASH ENCLOSURE ELEVATIONS



AR16-0002

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