



City of Tualatin

www.tualatinoregon.gov

"NECESSARY PARTIES"
MARKED BELOW

NOTICE OF APPLICATION SUBMITTAL

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

CASE/FILE: AR15-0026 (Community Development Dept.: Planning Division)

PROPOSAL	To build a parking lot and install associated landscaping at an existing business. The project is proposed to fulfill conditions of approval attached to CUP-13-02. You may view the application materials through this City web page: www.tualatinoregon.gov/projects
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PROPERTY	Name of Application	TUALATIN ANIMAL CLINIC PARKING				
	<input type="checkbox"/> n/a	Street Address	8700 SW Cherokee St.			
		Tax Map and Lot No(s).	2S1 23AA 01 000			
		Planning District	Central Commercial (CC)	Overlays <input checked="" type="checkbox"/>	NRPO <input type="checkbox"/>	Flood Plain <input type="checkbox"/>
		Previous Applications	CUP-13-02	Additional Applications:	CIO	

DATES	Receipt of application	10/16/2015	Deemed Complete	11/19/2015	CONTACT	Name: Rob Dehnert
	Notice of application submittal			3/11/2015		Title: Associate Planner
	Project Status / Development Review meeting					E-mail: rdehnert@ci.tualatin.or.us
	Comments due for staff report			3/28/2015		Phone: 503-691-3024
	Public meeting: <input type="checkbox"/> ARB <input type="checkbox"/> TPC <input checked="" type="checkbox"/> n/a					Notes: Some conditions on site legally non-conforming. Site is within the Central Urban Renewal Area and District.
	City Council (CC)			<input checked="" type="checkbox"/> n/a		

*Paper Copies

City Staff

- City Manager
- Building Official
- Chief of Police
- City Attorney
- City Engineer
- Community Dev. Director
- Community Services Director
- Economic Dev. liaison
- Engineering Associate*
- Finance Director
- GIS technician(s)
- IS Manager
- Operations Director*
- Parks and Recreation Coordinator
- Planning Manager
- Street/Sewer Supervisor
- Water Supervisor

Neighboring Cities

- Durham
- King City Planning Commission
- Lake Oswego
- Rivergrove PC
- Sherwood Planning Dept.
- Tigard Community Dev. Dept.
- Wilsonville Planning Div.

Counties

- Clackamas County Dept. of Transportation and Dev.
- Washington County Dept. of Land Use and Transportation (AR's)
- Washington County LRP (Annexations)

Regional Government

- Metro

School Districts

- Lake Oswego School Dist. 7J
- Sherwood SD 88J
- Tigard-Tualatin SD 23J (TTSD)
- West Linn-Wilsonville SD 3J

State Agencies

- Oregon Dept. of Aviation
- Oregon Dept. of Land Conservation and Development (DLCD) (via proprietary notice)
- Oregon Dept. of State Lands: Wetlands Program
- Oregon Dept. of Transportation (ODOT) Region 1
- ODOT Maintenance Dist. 2A
- ODOT Rail Div.
- OR Dept. of Revenue

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)
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- 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

www.tualatinoregon.gov

APPLICATION FOR ARCHITECTURAL REVIEW

Direct Communication to:			
Name:	EDWARD RADULESCU	Title:	REPRESENTATIVE
Company Name:	EPR DESIGN, LLC		
Current address:	919 NE 19th AVE SUITE 155		
City:	PORTLAND	State:	OR
Phone:	503.265.8461	Fax:	
Email:	pddie@epdesign.com		
Applicant			
Name:	EDWARD RADULESCU	Company Name:	
Address:			
City:		State:	
Phone:		Fax:	
Email:			
Applicant's Signature:			Date:
Property Owner			
Name:	TUALATIN ANIMAL CLINIC		
Address:	8700 SW CHEROKEE ST.		
City:	TUALATIN	State:	OR
Phone:	503 929 1305	Fax:	
Email:	humblerhans6413@gmail.com		
Property Owner's Signature:	<i>[Signature]</i>		Date
(Note: Letter of authorization is required if not signed by owner)			
Architect			
Name:			
Address:			
City:		State:	
Phone:		Fax:	
Email:			
Landscape Architect			
Name:			
Address:			
City:		State:	
Phone:		Fax:	
Email:			
Engineer			
Name:	DAVID POPESCU / NW CIVIL DESIGN		
Address:	9715 NE 100th WAY		david@nwcivildesign.com
City:	VANCOUVER	State:	WA
Phone:	360 607 0654	Fax:	
Email:	humblerhans0413@gmail.com		
Project			
Project Title:	TUALATIN ANIMAL CLINIC		
Address:	8700 SW CHEROKEE ST.		
City:	TUALATIN	State:	OR
Phone:		Fax:	
Email:			
Brief Project Description:	PARKING LOT UPGRADES PER RESOLUTION NO. 5138-13		
Proposed Use:	VETERINARY CLINIC OFF-STREET PARKING		

Value of Improvements: \$30,000

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

Applicant's Signature: 

Date: 9/18/15

Office Use

Case No:	Date Received:	Received by:
Fee: Complete Review :	Receipt No:	
Application Complete as of:	ARB hearing date (if applicable):	
Posting Verification:	6 copies of drawings (folded)	
1 reproducible 8 1/2" X 11" vicinity map	1 reproducible 8 1/2" X 11" site, grading, LS, Public Facilities plan	
Neighborhood/Developer meeting materials		

GENERAL INFORMATION	
Site Address:	8700 SW CHEROKEE ST.
Assessor's Map and Tax Lot #:	25123AA-01000
Planning District:	CC (CENTRAL COMMERCIAL)
Parcel Size:	15918 SF
Property Owner:	TUALATIN ANIMAL CLINIC
Applicant:	EPR DESIGN / EDWARD RADULESCU
Proposed Use:	VETERINARY CLINIC (EXISTING)

ARCHITECTURAL REVIEW DETAILS	
Residential	<input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial
Number of parking spaces:	10
Square footage of building(s):	2,688 SF & 1,387 SF (ALL EXISTING)
Square footage of landscaping:	3,817 SF
Square footage of paving:	
Proposed density (for residential):	

For City Personnel to complete:
Staff contact person:

CITY OF TUALATIN FACT SHEET

General

Proposed use: VETERINARY CLINIC, EXISTING	
Site area: 15,598 SF 15,598 SF acres	Building footprint: 4,075 SF EXISTING sq. ft.
Development area: 4500 SF OF acres APPROX. NEW PAVING Sq. ft.	Paved area: APPROX 4500 SF sq. ft.
	Development area coverage: 30 %

Parking

Spaces required (see TDC 73.400) (example: warehouse @ 0.3/1000 GFA) CLINIC @ 3.9 /1000 GFA = 10 _____ @ _____ /1000 GFA = _____ _____ @ _____ /1000 GFA = _____ Total parking required: MIN 10 spaces Handicapped accessible = 1 Van pool = 0 Compact = (max. 35% allowed) = 4 (3.5) Loading berths = 0	Spaces provided: Total parking provided: 10 spaces Standard = 6 Handicapped accessible = 1 Van pool = 0 Compact = 4 Loading berths = 0
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Bicycles

Covered spaces required:	Covered spaces provided: 0
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Landscaping

Landscaping required: 15 % of dvpt. area 2,310 Square feet	Landscaping provided: 24 % of dvpt. area 3,817 Square feet
Landscaped parking island area required: _____ %	Landscaped parking island area provided: _____ %

Trash and recycling facility

Minimum standard method: _____ square feet
Other method: _____ square feet

For commercial/industrial projects only

Total building area: 2,688 sq. ft.	2 nd floor: _____ sq. ft.
Main floor: _____ sq. ft.	3 rd floor: _____ sq. ft.
Mezzanine: _____ sq. ft.	4 th floor: _____ sq. ft.

For residential projects only

Number of buildings: _____	Total sq. ft. of buildings: _____ sq. ft.
Building stories: _____	

SITE DETAILS:

SITE ADDRESS: 8700 SW CHEROKEE ST.
TUALATIN, OR. 97062
WASHINGTON COUNTY
TAX LOT: 2S123AA01000

EXISTING USE: TUALATIN ANIMAL CLINIC (VETERINARY CLINIC)

SITE ZONING: CC (CENTRAL COMMERCIAL)

LAND USE PROCESSES: APPROVED CONDITIONAL USE - CUP-13-02, RESOLUTION NO. 5138-13
PROPOSED ARCHITECTURAL REVIEW

SITE AREA: 15,598 S.F.

EXISTING BUILDING COVERAGE: 4,075 (26%) NO CHANGE

REQUIRED VEHICLE PARKING: MINIMUM: 3.90 PER 1,000 S.F. OF GROSS FLOOR AREA = 10
MAXIMUM: 4.90 PER 1,000 S.F. OF GROSS FLOOR AREA = 13
(1) HANDICAP VAN ACCESSIBLE PARKING SPACE
(0) LOADING BERTHS < 5,000 S.F. OF GROSS FLOOR AREA

PROPOSED VEHICLE PARKING: 1 HANDICAP VAN ACCESSIBLE SPACE W/ LOADING AREA
4 COMPACT SPACES
5 STANDARD SPACES
10 SPACES TOTAL

TOTAL EXISTING PAVEMENT REMOVED: 415 S.F. (REPLACE W/ LANDSCAPING)

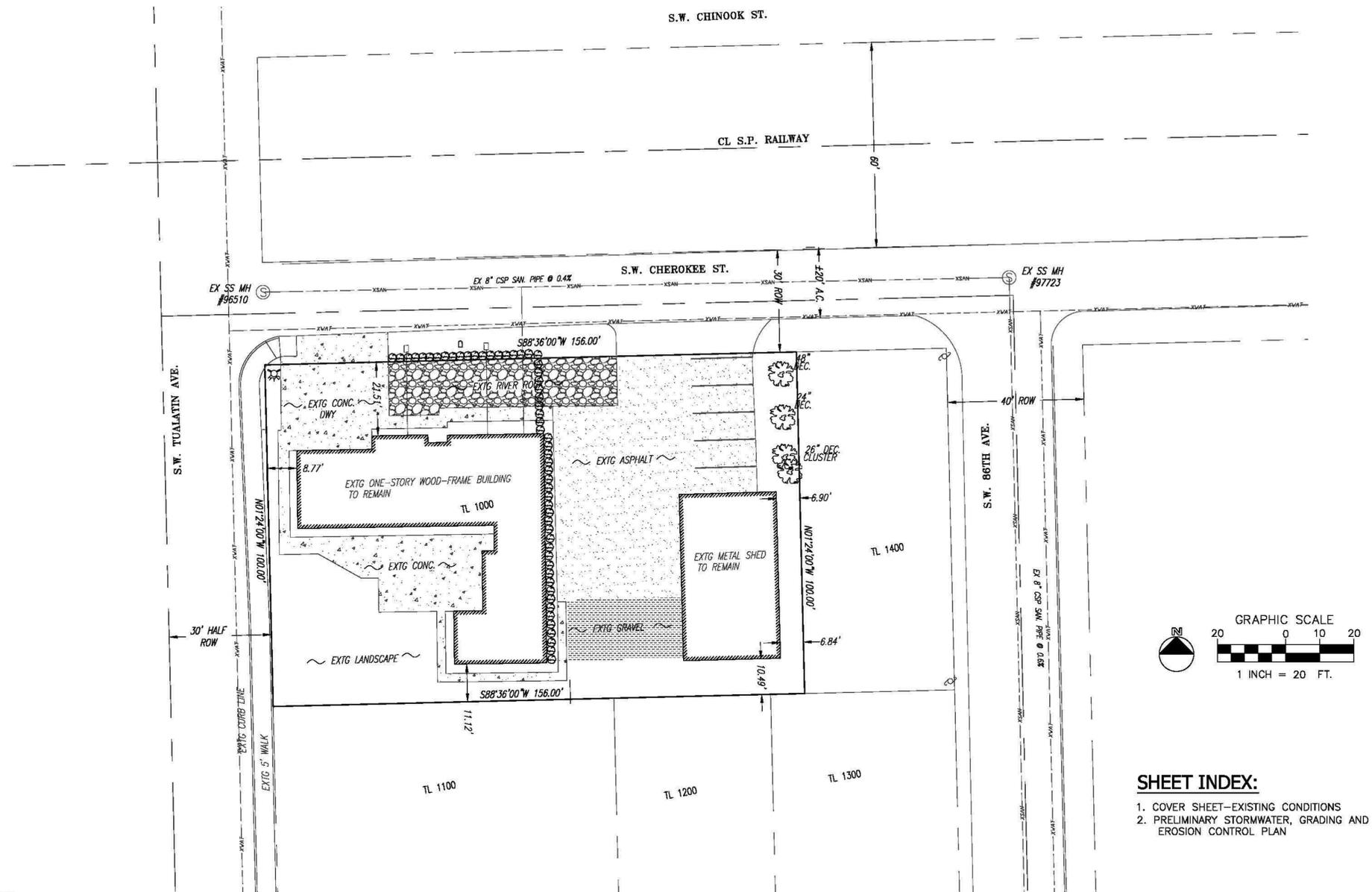
REQUIRED PARKING LOT LANDSCAPE: 25 S.F. PER STALL = 250 S.F.
PROPOSED PARKING LOT LANDSCAPE: 680 S.F.

TOTAL REQUIRED LANDSCAPE: 15% OF SITE AREA (2,340 S.F.)
TOTAL NEW + EXISTING LANDSCAPE: APPROX. 3,817 S.F.

TUALATIN ANIMAL CLINIC / PROPOSED IMPROVEMENTS

8700 SW CHEROKEE ST., TUALATIN, OR 97062

TAX LOT # 2S123AA01000



GENERAL SITE PLAN NOTES:

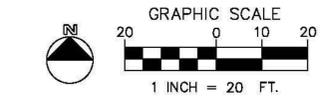
FENCES, WALLS, HEDGES, OVER 42" HIGH SHALL NOT BE LOCATED IN FRONT OF THE FRONT FACADE OR WITHIN 40' OF THE PUBLIC RIGHT OF WAY, WHICHEVER IS LESS. ALL OTHER FENCES SHALL NOT EXCEED MORE THAN 6' HIGH. ELECTRICAL FENCES PROHIBITED.

ONSITE PEDESTRIAN WALKWAYS SHALL BE HARD SURFACED & @ LEAST 6' WIDE. SURFACE MATERIAL SHALL CONTRAST VISUALLY TO ADJOINING SURFACES. WALKWAYS THAT CROSS DRIVE ISLES OR OTHER VEHICLE CIRCULATION AREAS SHALL UTILIZE A CHANGE IN TEXTURAL MATERIAL OR HEIGHT TO ALERT THE DRIVER OF THE PEDESTRIAN CROSSING AREA.

VAN ACCESSIBLE PARKING STALL DIMENSIONS TO BE 9' WIDE BY 18' DEEP W/ AN 8' WIDE BY 18' CLEAR LOADING SPACE. HANDICAP VAN ACCESSIBLE PARKING SPACE & CLEAR LOADING AREA TO BE CLEARLY MARKED PER DETAIL ON THIS SHEET.

STANDARD PARKING STALLS TO HAVE A CLR. DIMENSION OF 9' WIDE BY 18' DEEP.

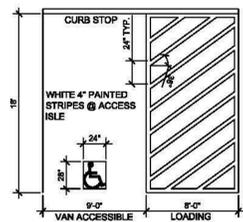
COMPACT PARKING STALLS TO HAVE A CLR. DIMENSION OF 7.7' WIDE BY 15' DEEP.



SHEET INDEX:

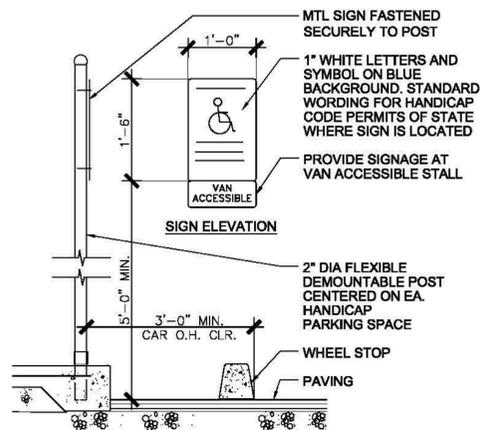
- COVER SHEET-EXISTING CONDITIONS
- PRELIMINARY STORMWATER, GRADING AND EROSION CONTROL PLAN

ADA SIGNAGE
SEE DETAIL "P2" FOR
MOUNTING DETAILS



VAN-ACCESSIBLE SIGN-OR 7-8

VAN ACCESSIBLE PARKING STALL W/ LOADING AREA
N.T.S.



ACCESSIBILITY SIGNAGE
N.T.S.

LEGEND		
PROPOSED	DESCRIPTION	EXISTING
---	CENTER LINE	---
---	WATER LINE	-XWAT-
---	SAN. SEWER LINE	-XSAN-
---	RIGHT-OF-WAY LINE	---
---	OVERHEAD LINE	-XOH-
---	GAS LINE	-XGAS-
---	EDGE OF PAVEMENT	-XEOP-
---	CURB LINE	---
---	SAN. SEWER MANHOLE	(S)
---	UTILITY POLE WITH LIGHT	(P)
---	CONCRETE WALK & DRIVEWAY	---

ABBREVIATIONS			
ROW	RIGHT-OF-WAY	PROP.	PROPOSED
HW	HALF WIDTH	DI	DUCTILE IRON
EX	EXISTING	SD	STORM DRAIN
EXTG	EXISTING	G	GUTTER
DWY	DRIVEWAY	AC	ASPHALT CONCRETE
PL	PROPERTY LINE	EOP	EDGE OF PAVEMENT
CL	CENTER LINE	WM	WATER METER
CONC	CONCRETE	MH	MANHOLE
SS	SANITARY SEWER	SW	SIDEWALK
CO	CLEAN OUT	WL	WATER LINE
IE	INVERT ELEVATION		



PROPERTY OWNER:
TUALATIN ANIMAL CLINIC
8700 SW CHEROKEE ST.
TUALATIN, OR 97062

PROJECT NAME: TUALATIN ANIMAL CLINIC
EXISTING CONDITIONS PLAN

REVISION/DATE	DESCRIPTION	DRAFT BY:	DESIGN BY:	CHECK BY/DCP

NW CIVIL DESIGN, LLC
CIVIL ENGINEERING / CONSTRUCTION MANAGEMENT
9715 NE 100TH WAY, VANCOUVER, WA 98662
PH: 360.607.0654, FAX: 360.885.8366
E-MAIL: NWCIVILDESIGN@COMCAST.NET

SHEET 1 OF 2

BASE.DWG

TRANSPORTATION GRADING NOTES

ALL CONSTRUCTION WITHIN CITY OF TUALATIN OR WASHINGTON COUNTY RIGHT-OF-WAY SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN AND RIGHT-OF-WAY PERMIT PRIOR TO ANY ON-SITE CONSTRUCTION ACTIVITY.

THE APPLICANT MAY BE REQUIRED TO PROVIDE FLAGGING, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES FOR SAFE TRUCK ACCESS ONTO PUBLIC STREETS. ALL SUCH DEVICES SHALL CONFORM TO THE STANDARDS ESTABLISHED IN THE LATEST ADOPTED EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION AND THE MODIFICATIONS TO THE MUTCD FOR STREETS AND HIGHWAYS FOR THE STATE OF WASHINGTON. IN ORDER TO ENHANCE TRAFFIC AND SAFETY ELEMENTS, THE APPLICANT SHALL MAINTAIN ADEQUATE SIGHT DISTANCE AT THE SITE ACCESS POINTS AND INTERSECTIONS. DRIVEWAY EXITS SHALL MEET THE SIGHT DISTANCE REQUIREMENTS PER VMC 11.90.060, CITY STANDARD PLAN T04-03 AND T04-04. ANY OBSTRUCTIONS BY LANDSCAPING, SIGNING, PARKING, BUILDINGS, OR OTHER OBJECTS ARE UNSAFE. THE APPLICANT SHALL INSURE THAT NONE OF THESE INTERFERE WITH VISION CLEARANCE REQUIREMENTS.

TWO-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES ON THE ADJACENT PUBLIC STREETS.

SHOULD ANY ITEM OF ARCHAEOLOGICAL INTEREST (VMC 20.710.090) BE FOUND DURING DEVELOPMENT, YOU ARE REQUIRED TO STOP WORK AND NOTIFY THE PLANNING CASE MANAGER IN DEVELOPMENT REVIEW SERVICES AT (360) 487-7800, AND THE WASHINGTON STATE OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION AT (360) 753-4011 IMMEDIATELY. FAILURE TO DO SO COULD RESULT IN A FELONY CONVICTION.

ANY PUBLIC, OR PRIVATE, CURB, GUTTER, SIDEWALK, OR ASPHALT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED TO CITY OF VANCOUVER STANDARDS.

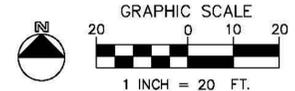
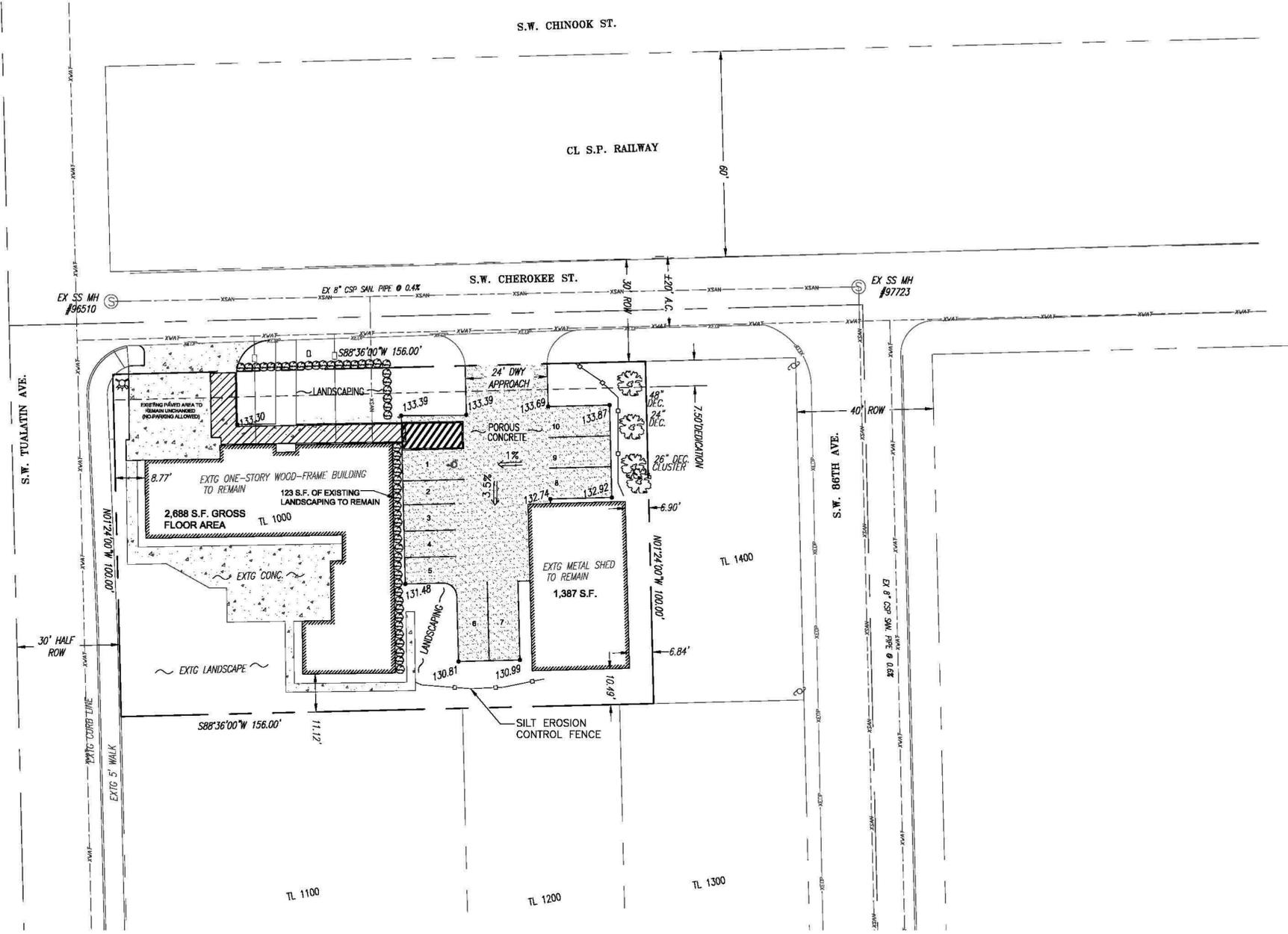
IF ANY FILL IS PROPOSED WITHIN CURRENT, OR FUTURE, RIGHT-OF-WAY THE CONTRACTOR SHALL PLACE SUCH FILL IN ACCORDANCE WITH 2006 WSDOT STANDARD SPECIFICATIONS SECTION 2-03.3(14)C METHOD B.

EROSION CONTROL NOTES

- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO ANY DISTURBANCE CAUSED BY CLEARING OR GRADING AND SHALL CONFORM TO THE REQUIREMENTS OF THE PUGET SOUND MANUAL, VOLUME II - EROSION AND SEDIMENT CONTROL AND TO THE CITY OF VANCOUVER STANDARD DETAILS. NEWLY CONSTRUCTED OR MODIFIED INLETS AND CATCH BASINS ARE TO BE PROTECTED IMMEDIATELY UPON INSTALLATION. TEMPORARY SEEDING AND MULCHING OF FILL SLOPES AND DIVERSION DIKES SHALL BE COMPLETED WITHIN ONE WEEK AFTER ROUGH GRADING. ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BMP. DURING THE PERIOD FROM OCTOBER 1 TO APRIL 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN TWO (2) DAYS. FROM MAY 1 TO SEPTEMBER 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN SEVEN (7) DAYS.
- PROTECTION
 - PRIOR TO ANY SITE EXCAVATION, ALL STORM DRAINAGE INLETS SHALL BE PROTECTED AS SHOWN IN THIS PLAN TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. CLEAN THE FILTER AS NECESSARY TO MAINTAIN DRAINAGE. PROVIDE APPROVED TRAFFIC CONTROL DEVICES AS NECESSARY. REMOVE FILTER AND CLEAN CATCH BASINS FOLLOWING COMPLETION OF SITEWORK.
 - INSTALL SILT FENCE PRIOR TO EXCAVATION AS SHOWN IN THIS PLAN AND STANDARD DETAIL E-1.4 TO PREVENT SILT INTRUSION UPON ADJACENT LAND. FOR MAINTENANCE AND REMOVAL OF SILT FENCE, SEE STANDARD DETAIL E-2.33.
 - PRIOR TO HOUSE CONSTRUCTION, INSTALL SILT FENCE, PRIOR TO EXCAVATION, ALONG THE DOWNHILL LOT LINE, IN ACCORDANCE WITH THIS PLAN TO PREVENT SILT INTRUSION UPON ADJACENT LOTS. IF HOUSE CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS AND THE LOTS HAVE THE SAME OWNER DURING CONSTRUCTION, THEN THE SILT FENCE ALONG THE COMMON LOT LINE CAN BE ELIMINATED.
- PROTECTION OF ADJACENT ROADS AND STREETS
 - AT ALL ACCESS POINTS ONTO THE SITE THAT ARE UTILIZED BY CONSTRUCTION EQUIPMENT AND TRUCKS, PROVIDE A 12 INCH DEEP PAD OF CRUSHED ROCK FOR A DISTANCE OF 100 FEET INTO THE SITE. THE WIDTH OF THE PAD SHALL BE 20 FEET MINIMUM. ALL TRUCKS LEAVING THE PAD SHALL EGRESS ACROSS THE PAD. ACCUMULATED SOIL SHALL BE PERIODICALLY REMOVED, OR ADDITIONAL ROCK SHALL BE PLACED UPON THE PAD SURFACE. ROCK SHALL BE CLEAN 4" TO 8" QUARRY SPALLS. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
 - AT SITES WITH LESS THAN 1 ACRE OF EXPOSED SOIL, PAD LENGTH MAY BE REDUCED TO 50 FEET. SINGLE FAMILY LOT ENTRANCES MAY REDUCE THE PAD LENGTH TO 20 FEET. IF HOUSE CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS AND THE SAME OWNER DURING CONSTRUCTION, THEN ONE LOT ENTRANCE CAN BE USED FOR ADJACENT LOTS.
- MAINTENANCE OF EROSION CONTROL FACILITIES
 - MAINTAIN AND REMOVE ALL EROSION CONTROLS AS SPECIFIED IN THE CITY OF VANCOUVER STANDARD DETAILS. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE CATCH BASINS, DRYWELLS, UTILITY TRENCHES AND STORM PIPES PRIOR TO ACCEPTANCE BY THE OWNER.
 - INSPECTION OF EROSION CONTROL MEASURES SHALL BE AFTER EACH RAINFALL EVENT THAT PRODUCES RUNOFF AND AT LEAST ONE TIME PER MONTH. A MAINTENANCE LOG SHALL BE KEPT AND SHALL BE MADE AVAILABLE TO WATER QUALITY STAFF. SHOULD SPECIFIED EROSION AND SEDIMENT CONTROL BMP'S FAIL OR PROVE TO BE INADEQUATE, THE WATER QUALITY MANAGER SHALL REQUIRE ADDITIONAL BMP'S BE INSTALLED.
 - ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMP'S ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.
- IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST, WHERE ON-SITE OR OFF-SITE DAMAGE IS LIKELY TO OCCUR, ONE OR MORE OF THE FOLLOWING PREVENTATIVE MEASURES SHALL BE TAKEN FOR DUST CONTROL:
 - MINIMIZE THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES.
 - THE SITE IS SPRINKLED WITH WATER UNTIL SURFACE IS WET. REPEAT AS NEEDED TO PREVENT THE CARRY OUT OF MUD ONTO STREET. REFER TO STABILIZED CONSTRUCTION ENTRANCE DETAILS.
 - SPRAY EXPOSED SOIL AREAS WITH A DUST PALLIATIVE. NOTE: USED OIL IS PROHIBITED AS A PALLIATIVE.
- TEMPORARY SEEDING SHALL BE PLACED ON EXPOSED SURFACES THAT WILL NOT BE BROUGHT TO FINAL GRADING OR PERMANENT COVER TREATMENT OR VEGETATION WITHIN 30 DAYS OF THE EXPOSURE TO REDUCE EROSION SEDIMENTATION BY STABILIZING EXPOSED SOILS. SEEDING AREAS SHALL BE CHECKED REGULARLY TO ASSURE A GOOD STAND OF GRASS IS BEING MAINTAINED. AREAS THAT FAIL TO ESTABLISH VEGETATION COVER ADEQUATE TO PREVENT HILL EROSION WILL BE RESEED AS SOON AS SUCH AREAS ARE IDENTIFIED.
- APPLY THE FOLLOWING TEMPORARY SEEDING MIXTURE TO THE PREPARED SEED BED AT A RATE OF 120 LBS/ACRE:

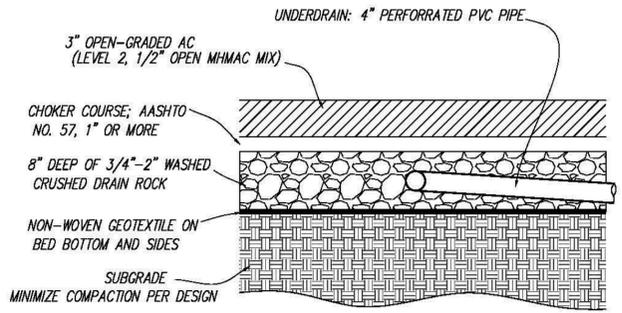
EARTHWORK VOLUMES

AREA	STRUCTURAL		NONSTRUCTURAL	
	CUT	FILL	CUT	FILL
SITE	53 CY	80 CY	27 CY	---
TRENCH SPOILS	---	---	---	---
PIPE BEDDING	---	---	---	---
TOTAL	53 CY	80 CY	27 CY	---



LEGEND

- EXIST. GROUND CONTOURS: --- 306 ---
- SPOT ELEVATION: • 133.39
- DRAINAGE FLOW & SLOPE: → 2%



PERVIOUS ASPHALT SECTION (NTS)



PROPERTY OWNER: TUALATIN ANIMAL CLINIC
8700 SW CHEROKEE ST. TUALATIN, OR 97062

PROJECT NAME: TUALATIN ANIMAL CLINIC
PRELIMINARY STORMWATER, GRADING AND EROSION CONTROL PLAN

REVISION/DATE	DESCRIPTION	DRAWN BY:	DESIGN BY:	CHECK BY/DCP

NW CIVIL DESIGN, LLC
CIVIL ENGINEERING / CONSTRUCTION MANAGEMENT
9715 NE 100TH WAY, VANCOUVER, WA 98662
PH: 360.607.0654, FAX: 360.685.8266
E-MAIL: NWCIVILDESIGN@COMCAST.NET

5-6-15

SHEET **2** OF **2**

BASE.DWG



Clean Water Services File Number

15-003175

Sensitive Area Pre-Screening Site Assessment

1. Jurisdiction: Tualatin

2. Property Information (example 1S234AB01400)

Tax lot ID(s): 2S123AA01000
8650 SW CHEROKEE STREET
Site Address: 8700 SW CHEROKEE ST.
City, State, Zip: TUALATIN, OR. 97062
Nearest Cross Street: SW 86TH AVE

3. Owner Information

Name: EDWARD RADULESCU
Company: EPR DESIGN
Address: 919 NE 19TH AVE SUITE 155
City, State, Zip: PORTLAND, OR. 97232
Phone/Fax: 5036792493
E-Mail: eddie@eprdesign.com

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 Parking Lot Upgrade

5. Applicant Information

Name: EDWARD RADULESCU
Company: EPR DESIGN
Address: 919 NE 19TH AVE SUITE 155
City, State, Zip: PORTLAND, OR. 97232
Phone/Fax: 5036792493
E-Mail: eddie@eprdesign.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 _____

Tualatin is requiring a Clean Water Services Service Provider Letter for our parking lot upgrade.

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 EDWARD RADULESCU

Print/Type Title REPRESENTATIVE

ONLINE SUBMITTAL

Date 9/30/2015

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.

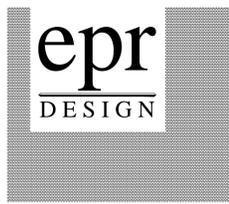
Based on review of the submitted materials and best available information the above referenced project will not significantly impact the existing or potentially sensitive area(s) found near the site. This Sensitive Area Pre-Screening Site Assessment does NOT eliminate the need to evaluate and protect 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 Chuck Mitchell

Date 10/1/15



919 N.E. 19th Ave. Suite 155
 Portland, Oregon 97232
 503-265-8461 PH.
 503-265-8462 FX.
 www.eprdesign.com

**Tualatin Animal Clinic
 Architectural Review**
 Site Improvements Per. CUP-13-02 / Res. No. 5138-13
 8700 SW Cherokee St. Tualatin, Oregon

These plans and the designs herein are
 copyrighted under Federal Law by:
 EPR DESIGN, LLC.

SITE PLAN

REV. NO. DATE:

DATE: 4/30/15

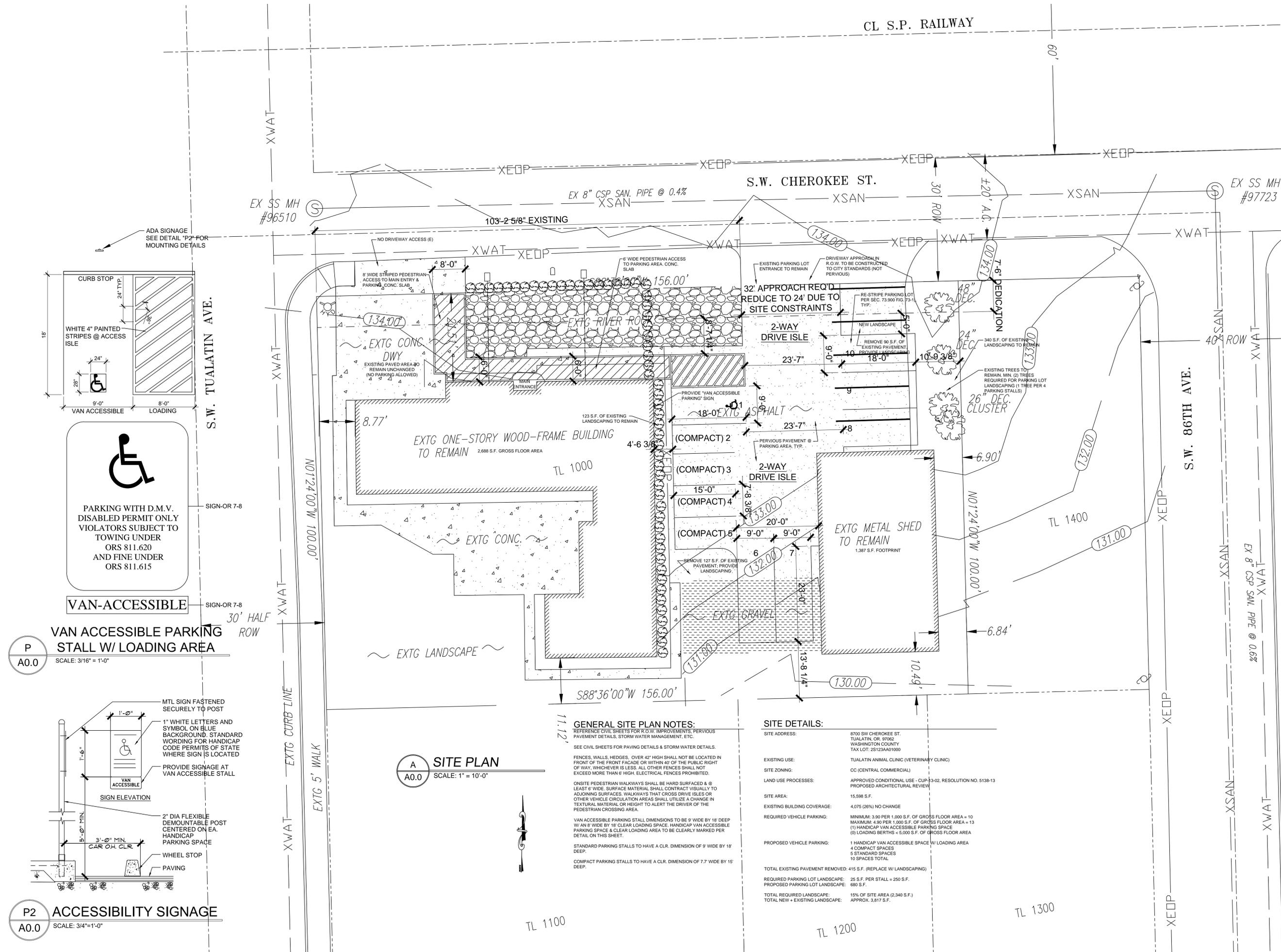
DRAWN BY:

REVIEWED BY:

SHEET:

A0.0

CL S.P. RAILWAY



GENERAL SITE PLAN NOTES:

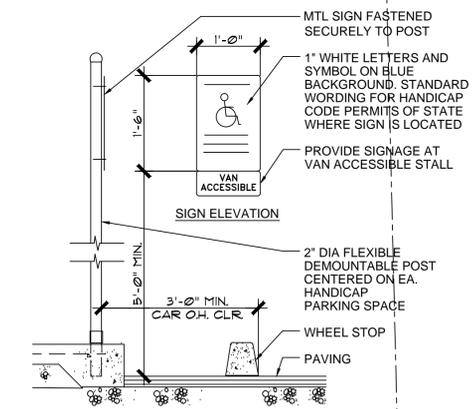
REFERENCE CIVIL SHEETS FOR R.O.W. IMPROVEMENTS, PAVEMENT DETAILS, STORM WATER MANAGEMENT, ETC.
 SEE CIVIL SHEETS FOR PAVING DETAILS & STORM WATER DETAILS.
 FENCES, WALLS, HEDGES, OVER 42" HIGH SHALL NOT BE LOCATED IN FRONT OF THE FRONT FACADE OR WITHIN 40' OF THE PUBLIC RIGHT OF WAY, WHICHEVER IS LESS. ALL OTHER FENCES SHALL NOT EXCEED MORE THAN 6' HIGH. ELECTRICAL FENCES PROHIBITED.
 ON-SITE PEDESTRIAN WALKWAYS SHALL BE HARD SURFACED & @ LEAST 6' WIDE. SURFACE MATERIAL SHALL CONTRAST VISUALLY TO ADJOINING SURFACES. WALKWAYS THAT CROSS DRIVE ISLES OR OTHER VEHICLE CIRCULATION AREAS SHALL UTILIZE A CHANGE IN TEXTURAL MATERIAL OR HEIGHT TO ALERT THE DRIVER OF THE PEDESTRIAN CROSSING AREA.
 VAN ACCESSIBLE PARKING STALL DIMENSIONS TO BE 9' WIDE BY 18' DEEP W/ AN 8' WIDE BY 16' CLEAR LOADING SPACE. HANDICAP VAN ACCESSIBLE PARKING SPACE & CLEAR LOADING AREA TO BE CLEARLY MARKED PER DETAIL ON THIS SHEET.
 STANDARD PARKING STALLS TO HAVE A CLR. DIMENSION OF 9' WIDE BY 18' DEEP.
 COMPACT PARKING STALLS TO HAVE A CLR. DIMENSION OF 7.7' WIDE BY 15' DEEP.

SITE DETAILS:

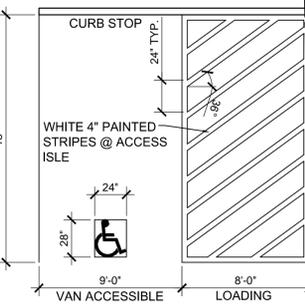
SITE ADDRESS: 8700 SW CHEROKEE ST. TUALATIN, OR. 97062 WASHINGTON COUNTY TAX LOT: 25123AA01000
 EXISTING USE: TUALATIN ANIMAL CLINIC (VETERINARY CLINIC)
 SITE ZONING: CC (CENTRAL COMMERCIAL)
 LAND USE PROCESSES: APPROVED CONDITIONAL USE - CUP-13-02, RESOLUTION NO. 5138-13 PROPOSED ARCHITECTURAL REVIEW
 SITE AREA: 15,598 S.F.
 EXISTING BUILDING COVERAGE: 4,075 (26%) NO CHANGE
 REQUIRED VEHICLE PARKING: MINIMUM: 3.90 PER 1,000 S.F. OF GROSS FLOOR AREA = 10 MAXIMUM: 4.90 PER 1,000 S.F. OF GROSS FLOOR AREA = 13 (1) HANDICAP VAN ACCESSIBLE PARKING SPACE (0) LOADING BERTHS = 5,000 S.F. OF GROSS FLOOR AREA
 PROPOSED VEHICLE PARKING: 1 HANDICAP VAN ACCESSIBLE SPACE W/ LOADING AREA 4 COMPACT SPACES 5 STANDARD SPACES 10 SPACES TOTAL
 TOTAL EXISTING PAVEMENT REMOVED: 415 S.F. (REPLACE W/ LANDSCAPING)
 REQUIRED PARKING LOT LANDSCAPE: 25 S.F. PER STALL = 250 S.F.
 PROPOSED PARKING LOT LANDSCAPE: 880 S.F.
 TOTAL REQUIRED LANDSCAPE: 15% OF SITE AREA (2,340 S.F.)
 TOTAL NEW + EXISTING LANDSCAPE: APPROX. 3,817 S.F.

A SITE PLAN
 A0.0 SCALE: 1" = 10'-0"

P VAN ACCESSIBLE PARKING STALL W/ LOADING AREA
 A0.0 SCALE: 3/16" = 1'-0"



P2 ACCESSIBILITY SIGNAGE
 A0.0 SCALE: 3/4" = 1'-0"



P A0.0

P2 A0.0



919 NE 19th Ave.
Suite 155
Portland, OR. 97232
503.265.8461 office
503.265.8462 fax
eddie@eprdesign.com

www.eprdesign.com

July 1, 2015

Edward Radulescu
EPR Design, LLC.
919 NE 19th Ave. Suite 155
Portland, Oregon 97232

**RE: Tualatin Animal Clinic, Architectural Review for Parking Lot Upgrades,
8700 SW Cherokee St. Tualatin, Oregon 97062**

Dear Property Owner,

You are cordially invited to attend a meeting on July 22, 2015 at 5:00PM at Tualatin Public Library, 18878 SW Martinazzi Ave. Tualatin, Oregon 97062. This meeting shall be held to discuss a proposed project located at 8700 SW Cherokee St. Tualatin, Oregon 97062. The proposal is to reconstruct the existing off-street parking area for the Tualatin Animal Clinic to meet current city standards under Tualatin Development Code 73. An Architectural Review is required prior to constructing any improvements and is a conditional of approval under resolution no. 5138-13.

The purpose of this meeting is to provide a means for the applicant and surrounding property owners to meet and discuss this proposal and identify any issues regarding this proposal.

Regards,

Edward Radulescu
EPR Design, LLC.
503-679-2493
eddie@eprdesign.com

**NEIGHBORHOOD/DEVELOPER MEETING
AFFIDAVIT OF MAILING**

STATE OF OREGON)
) SS
COUNTY OF WASHINGTON)

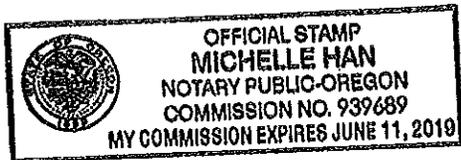
I, EDWARD RADULESCU, being first duly sworn, depose and say:

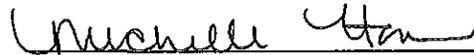
That on the 13th day of JULY, 2015, I served upon the persons shown on Exhibit "A," attached hereto and by this reference incorporated herein, a copy of the Notice of Neighborhood/Developer meeting marked Exhibit "B," attached hereto and by this reference incorporated herein, by mailing to them a true 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.



Signature

SUBSCRIBED AND SWORN to before me this 13th day of July, 2015.





Notary Public for Oregon
My commission expires: 6-11-19

RE: _____

**NEIGHBORHOOD / DEVELOPER MEETING
CERTIFICATION OF SIGN POSTING**

NOTICE
NEIGHBORHOOD / DEVELOPER MEETING
___/___/2010 ___:___m.
SW _____
503-___-___

18"

24"

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 for the

TUALATIN ANIMAL CLINIC project, I

hereby certify that on this day, JULY 13, 2015 sign(s) was/were posted on the subject property in accordance with the requirements of the Tualatin Development Code and the Community Development Department - Planning Division.

Applicant's Name: EDWARD RAQUESCU
(PLEASE PRINT)

Applicant's Signature: 

Date: 7/14/15



919 NE 19th Ave.
Suite 155
Portland, OR. 97232
503.265.8461 office
503.265.8462 fax
eddie@eprdesign.com

www.eprdesign.com

7.27.2015, 6:00-7:00 PM

TUALATIN ANIMAL CLINIC NEIGHBORHOOD MEETING SIGN IN SHEET

PRINT NAME: _____ EMAIL: _____ ADDRESS: _____ SIGNATURE: _____

EDWARD RAQUIL ESCUE 919 NE 19th AVE STE 155
eddie@eprdesign.com PORTLAND, OR. 

Colin Cortes CoT

Mike Han humblehan0413@gmail.com 16912 SW 136th
Portland, OR 97062 



919 NE 19th Ave.
Suite 155
Portland, OR. 97232
503.265.8461 office
503.265.8462 fax
eddie@eprdesign.com

www.eprdesign.com

TUALATIN ANIMAL CLINIC, NEIGHBORHOOD MEETING MINUTES

JULY 27, 2015, 6:00PM-7:00PM

- Doors opened at 6:00PM for neighborhood meeting.
- Attendance at 6:00PM: Mike Han of Tualatin Animal Clinic, Edward Radulescu of EPR DESIGN.
- Colin Cortes, City Planner with City of Tualatin arrived at 6:15PM
- Colin Cortes noted having a note / hatch on the plan that indicated where the required 250 s.f. of landscaping will be incorporated for the 10 parking space. He also noted that deciduous trees should be planted around the parking area. (3) would be required with at least a 1.5" caliper diameter. Any deciduous tree species would suffice.
- Colin Cortes mentions dimensioning the parking area and stalls.
- Mike Han asked Colin Cortes if the clinic can remove the existing unusable (2) car parking area that belonged to the existing house and convert that space into a walkway with new landscaping.
- Note on site plan that the existing (2) car parking area that belonged to the existing house will potentially be removed and landscaped with a pebble walkway and new landscaping.
- Mike Han asked Colin Cortes if a dog wash area can be added to the site grounds in the existing "shed" building. Colin Cortes indicated that if the dog wash area did not have a new office or retail area then it could be considered as not fully occupied space on a consistent basis and would just be a use that was part of the existing building and site without any additional process being required.
- Colin Cortes indicated that a set of mailing labels will be required upon submittal of the final application that will be used for the neighborhood notice post cards.
- Colin Cortes left the meeting at approx. 6:43PM.
- At 6:45PM there were no additional attendees other than Edward Radulescu and Mike Han.
- 7:00PM meeting ended.

PRELIMINARY STORMWATER REPORT

Tualatin Animal Clinic

8700 SW Cherokee St,
Tualatin, OR 97062

April 6, 2015

Prepared for:

EPR Design
919 N.E. 19th Ave
Suite 155
Portland, Or. 97232
PH: 503-265-8461
FX: 503-265-8462
CL: 503-679-2493

Prepared by:

NW Civil Design, llc
9715 NE 100th Way
Vancouver, WA 98662
Tel 360-607-0654
Fax 360-885-8366



EXPIRES: 12-31-2016

REVISION	REVIEW NO.	DATE	BY	COMMENTS

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3. Water Quality design	5
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Technical Appendices

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1. Project Overview

The site is a 0.34 acres parcel of land, described as Tax Lot 2S1 23AA 01000 within the Central Commercial (CC) Planning District. "Veterinary clinic with practice limited to small animals" is a conditional use within the CC Planning District.

Existing Conditions

The characteristics of the site are suitable for the proposed use, considering size, shape, location, topography, existence of improvements and natural features.

The site was developed with a single-family house, which has had tenant improvements for prior commercial use. There is also a large metal shed at the southeast corner of the site.

The site is a rectangular lot with access from SW Cherokee Street and frontage along both SW Cherokee Street and SW Tualatin Road.

The general topography slopes from Northwest to Southeast, with gradients from 1% to 3%. There are three mature evergreen trees along the northerly portion of the east yard that will be saved.

Connections to City sanitary sewer and water systems currently exist. There is no connection to the City storm water system. The roof runoffs from the house and shed infiltrate into the ground. No apparent wetlands are visible on the site.

Soil Characteristics. The Soil Conservation Service has made classifications of the soils within the basin area. Soils are categorized into Hydrologic Soil Groups, based on an estimate of the amount of runoff resulting from precipitation. These groupings assume that the soils are saturated and receive precipitation from long-duration storms. This rainfall to runoff is complex and includes the Drainage and Permeability characteristics of the soil.

The soil type encountered on site is 37A-Quatama Loam, 0 to 3 percent slope, with the drainage class characterized as "moderately well drained", hydrological soil group "C". The water table is at least 20 feet below surface per well logs found in the nearby area.

Refer to Appendix E for soil map and description.

Hydrologic Grouping of Soils		
Soil Symbol		Hydrologic Soil Group
37A	Quatama Loam, 0 to 3% slopes	C

Proposed Conditions

The applicant proposes to improve the parking lot to City standards.

2. Quantity Control Analysis and Design

Hydrologic Analysis

(a) Design Criteria

The storm water plan has been designed in accordance with the *Clean Water Services Design and Construction Standards Manual*.

A hydrologic analysis was performed for the area contributing runoff to the project in order to size the stormwater facilities.

The drainage basins boundaries are based on contour maps, field investigations and proposed improvement plans. The drainage boundaries were used to generate flow rates to size the stormwater facilities.

(b) Detailed Hydrologic Analysis

Stormwater runoff rates and volumes were computed using Santa Barbara Urban Hydrograph (SBUH) program. These flow rates were determined for the 2-year, 10-year, 25-year, and 100-year storm events.

NRCS Type 1A Rainfall Distribution:

Recurrence Interval (years)	Total Precipitation Depth (in)
2	2.50
5	3.10
10	3.45
25	3.90
50	4.20
100	4.50

The runoff curve number's (RCN's) were determined for the pervious and impervious areas in each basin based on the hydrologic soil group and the groundcover. For developed conditions, a RCN of 90 was used for pervious surfaces and 98 for all impervious surfaces since the soils in the project area are in Hydrologic Soil Group C. A minimum time of concentration of five minutes was used for each basin.

Hydrologic Analysis Summary Table – Existing Conditions

24-hour storm event	BASIN	LAND USE	PERV. AREA (Ac)	CN	IMPERV. AREA (Ac)	CN	Tc (min)	PEAK FLOW (cfs)	VOL (cf)
2-YR	1	R-5	0	90	0.1	98	5	0.06	824
10-YR	1	R-5	0	90	0.1	98	5	0.08	1025
25-YR	1	R-5	0	90	0.1	98	5	0.09	1167
100-YR	1	R-5	0	90	0.1	98	5	0.12	1547

Refer to Appendix C for all references.

Analysis of Stormwater Facilities

The design proposes pervious asphalt through entire parking lot.

Pervious asphalt consists of coarse stone aggregate and asphalt binder, with very little fine aggregate. Water percolates through the small voids left in the finished asphalt. Pervious pavement reduces stormwater runoff flow rate and volume, recharges groundwater and maintains stream base flows. The subgrade also filters pollutants.

Sizing: Pervious pavement replaces impervious area at a 1:1 ratio. The pavement section is designed to directly infiltrate all stormwater runoff from the pavement surface into a crushed rock storage layer which contains enough void space to store the 100-year, 24-hour storm event and infiltrate it into the subgrade in less than 30 hours.

A porous pavement modeling software has been used to determine the depth of storage rock. Results are as follows:

Basin 1: The 100-year volume is 749 cf. The pervious pavement area is 2810 sf, the rock void ratio is 40%, results the rock depth of 8 inches.

Basin 2: The 100-year volume is 379 cf. The pervious pavement area is 1423 sf, the rock void ratio is 40%, results the rock depth of 8 inches.

Refer to Appendix D for calculations.

3. Water Quality Design

(a) Initial Conditions

The site is currently undeveloped and there is no stormwater system available on or near the site.

(b) Water Quality System Analysis

The pervious pavement is considered a treatment BMP and will provide treatment through infiltration.

4. Conveyance Systems Analysis and Design

There will be no ponding on this project this project due to the way the site is graded and the stormwater runoff is addressed.

5. Soils Evaluation

The soils encountered on this site are type Quantama Loam with 0-3% slopes. The soils are suitable for infiltration of stormwater. The design infiltration rate was limited to 0.5 inch/hr.

See Appendix E for soils maps and soil description.

6. Downstream Analysis

No downstream analysis was done for this project since the stormwater runoff will be infiltrated.

7. Maintenance and Operations Manual

All on-site stormwater facilities will be private and maintained by the owner which will be the funding source for the maintenance activities and will be responsible for scheduling stormwater facility maintenance.

See Appendix F for the Stormwater Facility Maintenance Provisions.

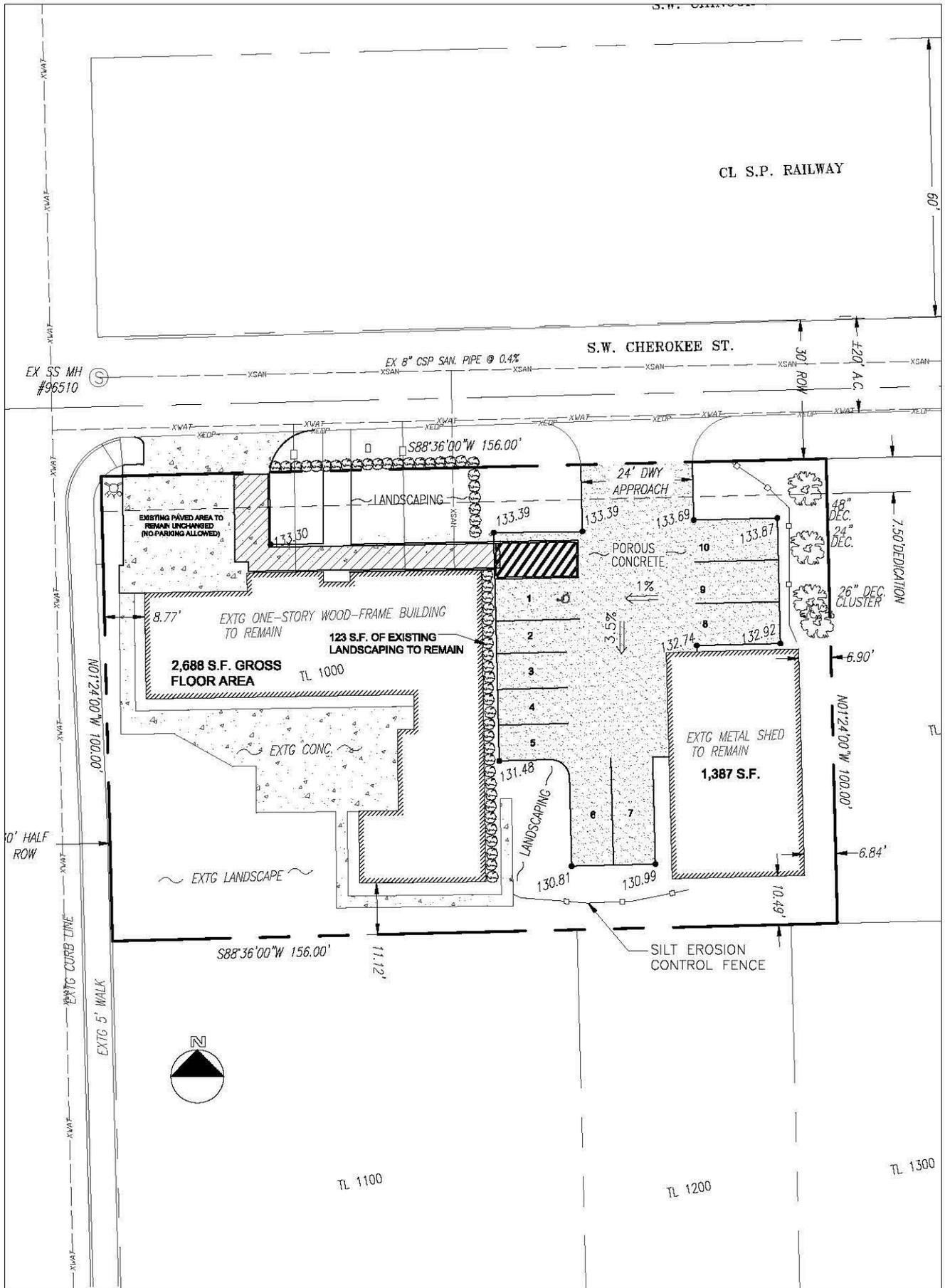
SITE LOCATION MAP



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7

APPENDIX B



BASIN/DEVELOPMENT PLAN N.T.S.

EXISTING CONDITIONS

KING COUNTY DEPARTMENT OF PUBLIC WORKS
Surface Water Management Division

HYDROGRAPH PROGRAMS
Version 4.21B

- 1 - INFO ON THIS PROGRAM
- 2 - SBUHYD
- 3 - MODIFIED SBUHYD
- 4 - ROUTE
- 5 - ROUTE2
- 6 - ADDHYD
- 7 - BASEFLOW
- 8 - PLOTHYD
- 9 - DATA
- 10 - RDFAC
- 11 - RETURN TO DOS

ENTER OPTION:
2

SBUH/SCS METHOD FOR COMPUTING RUNOFF HYDROGRAPH

STORM OPTIONS:

- 1 - S.C.S. TYPE-1A
- 2 - 7-DAY DESIGN STORM
- 3 - STORM DATA FILE

SPECIFY STORM OPTION:
1

S.C.S. TYPE-1A RAINFALL DISTRIBUTION

ENTER: FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)
2,24,2.5

***** S.C.S. TYPE-1A DISTRIBUTION *****

***** 2-YEAR 24-HOUR STORM **** 2.50" TOTAL PRECIP. *****

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1
0,90,0.1,98,5

DATA PRINT-OUT:

AREA (ACRES)	PERVIOUS		IMPERVIOUS		TC (MINUTES)
	A	CN	A	CN	
.1	.0	90.0	.1	98.0	5.0
PEAK-Q (CFS)	T-PEAK (HRS)		VOL (CU-FT)		
.06	7.67		824		

ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
15002-2ex

STORM OPTIONS:

- 1 - S.C.S. TYPE-1A
- 2 - 7-DAY DESIGN STORM
- 3 - STORM DATA FILE

SPECIFY STORM OPTION:

1

S.C.S. TYPE-1A RAINFALL DISTRIBUTION

ENTER: FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)

10,24,3.45

***** S.C.S. TYPE-1A DISTRIBUTION *****
***** 10-YEAR 24-HOUR STORM **** 3.45" TOTAL PRECIP. *****

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1

0,90,0.1,98,5

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
.1	.0	90.0	.1	98.0	5.0

PEAK-Q(CFS)	T-PEAK(HRS)	VOL(CU-FT)
.08	7.67	1025

ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:
15002-10ex

STORM OPTIONS:

- 1 - S.C.S. TYPE-1A
- 2 - 7-DAY DESIGN STORM
- 3 - STORM DATA FILE

SPECIFY STORM OPTION:

1

S.C.S. TYPE-1A RAINFALL DISTRIBUTION

ENTER: FREQ(YEAR), DURATION(HOUR), PRECIP(INCHES)

25,24,3.9

***** S.C.S. TYPE-1A DISTRIBUTION *****
***** 25-YEAR 24-HOUR STORM **** 3.90" TOTAL PRECIP. *****

ENTER: A(PERV), CN(PERV), A(IMPERV), CN(IMPERV), TC FOR BASIN NO. 1

0,90,0.1,90,5

DATA PRINT-OUT:

AREA(ACRES)	PERVIOUS		IMPERVIOUS		TC(MINUTES)
	A	CN	A	CN	
.1	.0	90.0	.1	90.0	5.0
PEAK-Q(CFS)	T-PEAK(HRS)		VOL(CU-FT)		
.09	7.67		1067		

ENTER [d:][path]filename[.ext] FOR STORAGE OF COMPUTED HYDROGRAPH:

15002-25EX

SPECIFY: C - CONTINUE, N - NEWSTORM, P - PRINT, S - STOP

N

Clean Water Services LIDA Sizing Form

Project Title:	TUALATIN ANIMAL CLINIC
Project Location:	8700 SW CHEROKEE ST., TUALATIN, OR 97062
Contact Name/Title/Company:	DAVID POPESCU, PE / NW CIVIL DESIGN, LLC
Phone/e-mail:	360-607-0654 / david@mwcivildesign.com

STEP 1: Determine Impervious Area Requiring Treatment

Total Site Area (acres):	<input type="text" value="0.36"/>
Total Existing Impervious Area (sq.ft.):	<input type="text" value="9483"/>
Proposed New Impervious Area (sq.ft.):	<input type="text" value="∅"/>
Impervious Area Requiring Treatment (sq.ft.) <small>(Refer to Design & Construction Standards Chapter 4 for instructions to calculate this area, which will be less than or equal to the new plus existing site impervious area.)</small>	<input type="text" value="4,233"/>

STEP 2: Deduct Impervious Area LIDA Credits

Porous Pavement (sq. ft.):	<input type="text" value="4,233"/>
Green Roof (sq. ft.):	<input type="text" value="-"/>
Other Credits as approved (sq. ft.):	<input type="text" value="-"/>
Total Credits (sq. ft.):	<input type="text" value="4,233"/>
Remaining Impervious area (sq. ft.) <small>(Total from Step 1 – Total Credits):</small>	<input type="text" value="∅"/>

STEP 3: Size LIDA Facilities for Remaining Impervious Area

	IA: Impervious area treated (sq.ft.)	SF, Sizing Factor	LIDA facility size (sq.ft.) (IA x SF)
Infiltration Planters/Rain Garden		0.06	
Flow-through Planter		0.06	
LIDA Swale		0.06	
Vegetated Filter Strip		0.06	

Total Impervious Area treated (sq.ft.) (*Must equal total from Step 2 or additional LIDA facilities or Water Quality Facilities must be added.)

BASIN 1

BASIN 1 - POROUS PAVEMENT MODELING TO DETERMINE DEPTH OF STORAGE ROCK 24 Hour Storm, SBUH Type 1A Rainfall Distribution, Peak Flows Generated Every 10 Minutes by Rational Method (Q=CIA)

USER INPUTS

Post-developed 24-Hour Rainfall Depth =	4.5	in	Enter desired storm depth to infiltrate.
Contribution Area =	2810	sf	Enter. For hydraulically isolated areas (ie pavements managing only their own rainfall and not runoff from other areas), this equals the pavement area.
Storage Rock Area =	2810	sf	In most cases this equals the pavement area but may be modified if, for some reason, the base rock/infiltration area differs from the pavement area.
Drainage Area Runoff Coefficient =	0.95		There's no runoff from porous pavement usually, but for modeling, we assume that an area of impervious pavement is draining to the same size area of native soil underlying it, so we enter 0.9 - 0.98 for imp surface (the C in Q=CIA)
Native Soil Infiltration Rate =	0.5	in/hr	Enter the infiltration rate.
Depth of Storage Rock =	8	inches	This is an iterative process. Guess a depth of storage rock (equivalent to the base rock) and check the calculated values. 12" is a good first guess, but you could also enter the depth of rock needed for structural stability for your traffic loads on your wet uncompacted native soils if you've gotten a geotechnical report already that includes base rock.
Void Ratio of Storage Rock =	40%		Typically 40% for uniformly graded rock, but get this from your rock supplier's specifications.
Outflow Elevation Above Bottom of Storage Rock =	8	inches	Enter the depth of water allowed to pond by whatever overflow control structure you employ. If there is not a large storm overflow control structure, this value equals the depth of the storage rock. This will be the maximum value possible for "Maximum Ponding Depth in Storage Rock During Storm" below.
Is Outflow Elevation Above Bottom of Storage Rock <= Depth of Storage Rock?	TRUE		This checks that you entered numbers above that don't cause the impossible situation where the overflow elevation is higher than possible ponding depth. This should always be TRUE. Is this FALSE, increase Depth of Storage Rock or decrease Outflow Elevation Above Bottom of Storage Rock.

CALCULATED VALUES - PONDING

Maximum Ponding Depth in Storage Rock During Storm =	0.60	in	Calculated from distribution but cannot exceed Outflow Elevation
Depth of Water Left in Storage Trench After 30 Hours =	0.00	in	Calculated from distribution
Size of Following Storm That Could be Stored in Remaining Rock =	3.20	in	Calculated from Void Ratio of Storage Rock, Outflow Elevation Above Bottom of Storage Rock, & Depth of Water Left in Storage Rock After 30 Hours
Is the Storage Trench Empty in 30 Hours?	TRUE		Depending on the jurisdiction's goals, this may not need to be TRUE
Is the Storage Trench empty in 72 Hours?	TRUE		This should ALWAYS be TRUE. If not, modify your design.

OTHER CALCULATED VALUES

Peak Rainfall Intensity =	1.46	in/hr	Calculated from distribution
Peak Inflow Rate =	0.09	cfs	Calculated from distribution. Is the flow into facility's storage rock.
Peak Outflow Rate from Infiltration =	0.03	cfs	Calculated from infiltration rate & storage rock area.
Peak Outflow Rate from Control Structure =	0.00	cfs	Calculated from distribution. Is the peak rate leaving the site.
Ratio of Storage Rock to Contribution Area =	1.000		Calculated (aka Sizing Factor)
Storage Capacity of Rock =	749.33	cf	Calculated

SBUH HYDROGRAPH

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Time (min)	SBUH Rainfall Depth (in)	Rainfall Intensity (in/hr)	Inflow Rate (cfs)	Inflow Volume (cf)	Runoff Depth (in)	Facility Infiltration Rate (cfs)	Inflow Rate - Facility Infiltration Rate (cfs)	Inflow Volume - Infiltration Volume (cf)	Cumulative Inflow Volume to be Stored (cf)	Storage Rock Ponding without Control Structure (in)
0	0.0000	0.00	0.00	0	0	0.03252315				0.00
10	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
20	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
30	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
40	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
50	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
60	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
70	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
80	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
90	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
100	0.0180	0.11	0.01	4.00425	0.0171	0.03252315	-0.02585	-15.5096	0.00	0.00
110	0.0225	0.14	0.01	5.00531	0.02138	0.03252315	-0.02418	-14.5086	0.00	0.00
120	0.0225	0.14	0.01	5.00531	0.02138	0.03252315	-0.02418	-14.5086	0.00	0.00
130	0.0225	0.14	0.01	5.00531	0.02138	0.03252315	-0.02418	-14.5086	0.00	0.00
140	0.0225	0.14	0.01	5.00531	0.02138	0.03252315	-0.02418	-14.5086	0.00	0.00
150	0.0225	0.14	0.01	5.00531	0.02138	0.03252315	-0.02418	-14.5086	0.00	0.00
160	0.0225	0.14	0.01	5.00531	0.02138	0.03252315	-0.02418	-14.5086	0.00	0.00
170	0.0270	0.16	0.01	6.00638	0.02565	0.03252315	-0.02251	-13.5075	0.00	0.00
180	0.0270	0.16	0.01	6.00638	0.02565	0.03252315	-0.02251	-13.5075	0.00	0.00
190	0.0270	0.16	0.01	6.00638	0.02565	0.03252315	-0.02251	-13.5075	0.00	0.00
200	0.0270	0.16	0.01	6.00638	0.02565	0.03252315	-0.02251	-13.5075	0.00	0.00
210	0.0270	0.16	0.01	6.00638	0.02565	0.03252315	-0.02251	-13.5075	0.00	0.00

BASIN 2

BASIN 2 - POROUS PAVEMENT MODELING TO DETERMINE DEPTH OF STORAGE ROCK 24 Hour Storm, SBUH Type 1A Rainfall Distribution, Peak Flows Generated Every 10 Minutes by Rational Method (Q=CIA)

USER INPUTS

Post-developed 24-Hour Rainfall Depth =	4.5	in	Enter desired storm depth to infiltrate.
Contribution Area =	1423	sf	Enter. For hydraulically isolated areas (ie pavements managing only their own rainfall and not runoff from other areas), this equals the pavement area.
Storage Rock Area =	1423	sf	In most cases this equals the pavement area but may be modified if, for some reason, the base rock/infiltration area differs from the pavement area.
Drainage Area Runoff Coefficient =	0.95		There's no runoff from porous pavement usually, but for modeling, we assume that an area of impervious pavement is draining to the same size area of native soil underlying it, so we enter 0.9 - 0.98 for imp surface (the C in Q=CIA)
Native Soil Infiltration Rate =	0.5	in/hr	Enter the infiltration rate.
Depth of Storage Rock =	8	inches	This is an interactive process. Guess a depth of storage rock (equivalent to the base rock) and check the calculated values. 12" is a good first guess, but you could also enter the depth of rock needed for structural stability for your traffic loads on your wet uncompacted native soils if you've gotten a geotechnical report already that includes base rock.
Void Ratio of Storage Rock =	40%		Typically 40% for uniformly graded rock, but get this from your rock supplier's specifications.
Outflow Elevation Above Bottom of Storage Rock =	8	inches	Enter the depth of water allowed to pond by whatever overflow control structure you employ. If there is not a large storm overflow control structure, this value equals the depth of the storage rock. This will be the maximum value possible for "Maximum Ponding Depth in Storage Rock During Storm" below.
Is Outflow Elevation Above Bottom of Storage Rock <= Depth of Storage Rock?	TRUE		This checks that you entered numbers above that don't cause the impossible situation where the overflow elevation is higher than possible ponding depth. This should always be TRUE. Is this FALSE, increase Depth of Storage Rock or decrease Outflow Elevation Above Bottom of Storage Rock.

CALCULATED VALUES - PONDING

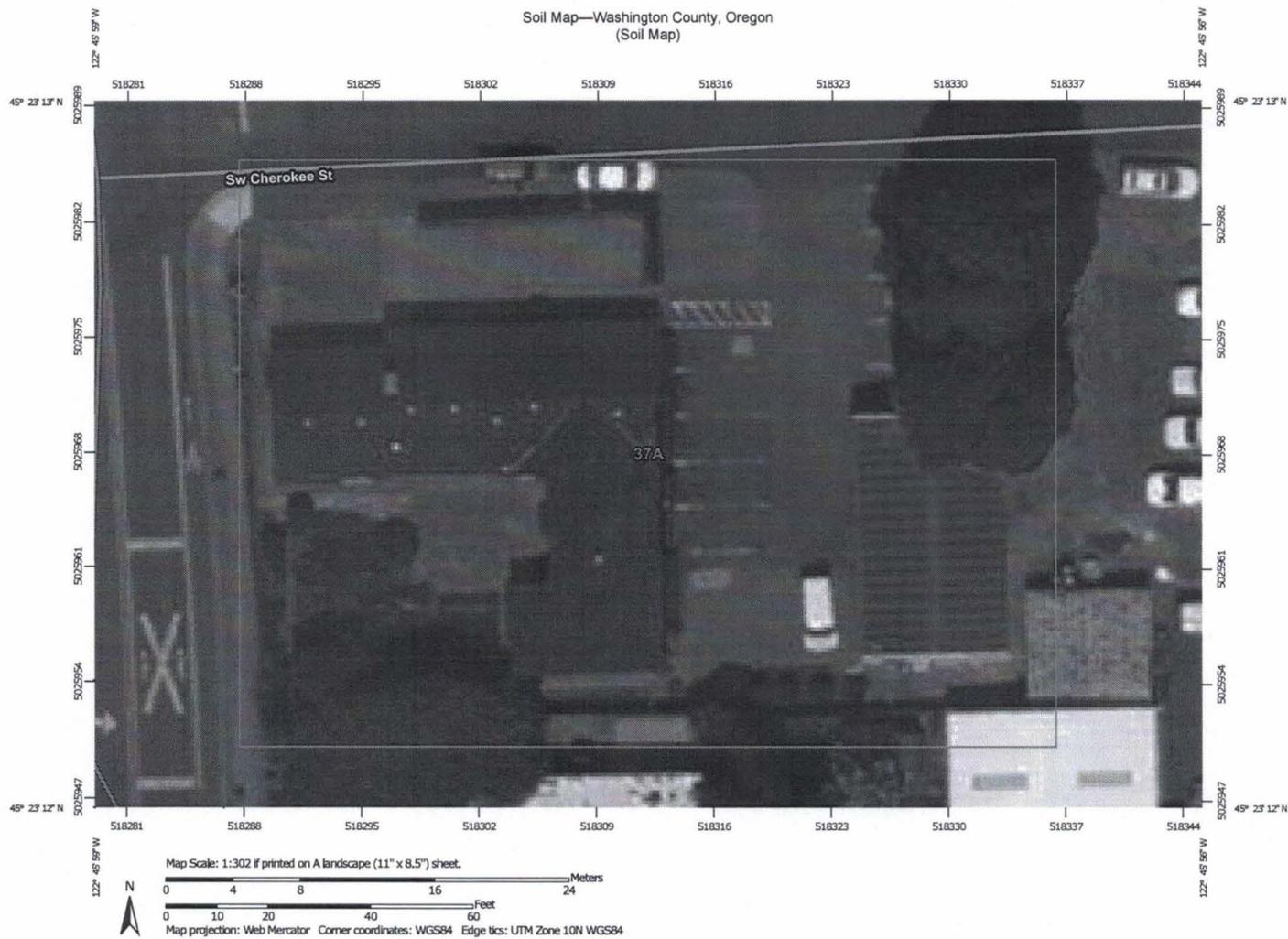
Maximum Ponding Depth in Storage Rock During Storm =	0.60	in	Calculated from distribution but cannot exceed Outflow Elevation
Depth of Water Left in Storage Trench After 30 Hours =	0.00	in	Calculated from distribution
Size of Following Storm That Could be Stored in Remaining Rock =	3.20	in	Calculated from Void Ratio of Storage Rock, Outflow Elevation Above Bottom of Storage Rock, & Depth of Water Left in Storage Rock After 30 Hours
Is the Storage Trench Empty in 30 Hours?	TRUE		Depending on the jurisdiction's goals, this may not need to be TRUE
Is the Storage Trench empty in 72 Hours?	TRUE		This should ALWAYS be TRUE. If not, modify your design.

OTHER CALCULATED VALUES

Peak Rainfall Intensity =	1.46	in/hr	Calculated from distribution
Peak Inflow Rate =	0.05	cfs	Calculated from distribution. Is the flow into facility's storage rock.
Peak Outflow Rate from Infiltration =	0.02	cfs	Calculated from infiltration rate & storage rock area.
Peak Outflow Rate from Control Structure =	0.00	cfs	Calculated from distribution. Is the peak rate leaving the site.
Ratio of Storage Rock to Contribution Area =	1.000		Calculated (aka Sizing Factor)
Storage Capacity of Rock =	379.47	cf	Calculated

SBUH HYDROGRAPH

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Time (min)	SBUH Rainfall Depth (in)	Rainfall Intensity (in/hr)	Inflow Rate (cfs)	Inflow Volume (cf)	Runoff Depth (in)	Facility Infiltration Rate (cfs)	Inflow Rate - Facility Infiltration (cfs)	Inflow Volume - Infiltration (cf)	Cumulative Inflow Volume to be Stored (cf)	Storage Rock Ponding without Control Structure (in)
0	0.0000	0.00	0.00	0	0	0.01646991				0.00
10	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
20	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
30	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
40	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
50	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
60	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
70	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
80	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
90	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
100	0.0180	0.11	0.00	2.02778	0.0171	0.01646991	-0.01309	-7.8542	0.00	0.00
110	0.0225	0.14	0.00	2.53472	0.02138	0.01646991	-0.01225	-7.3472	0.00	0.00
120	0.0225	0.14	0.00	2.53472	0.02138	0.01646991	-0.01225	-7.3472	0.00	0.00
130	0.0225	0.14	0.00	2.53472	0.02138	0.01646991	-0.01225	-7.3472	0.00	0.00
140	0.0225	0.14	0.00	2.53472	0.02138	0.01646991	-0.01225	-7.3472	0.00	0.00
150	0.0225	0.14	0.00	2.53472	0.02138	0.01646991	-0.01225	-7.3472	0.00	0.00
160	0.0225	0.14	0.00	2.53472	0.02138	0.01646991	-0.01225	-7.3472	0.00	0.00
170	0.0270	0.16	0.01	3.04166	0.02565	0.01646991	-0.01140	-6.8403	0.00	0.00
180	0.0270	0.16	0.01	3.04166	0.02565	0.01646991	-0.01140	-6.8403	0.00	0.00
190	0.0270	0.16	0.01	3.04166	0.02565	0.01646991	-0.01140	-6.8403	0.00	0.00
200	0.0270	0.16	0.01	3.04166	0.02565	0.01646991	-0.01140	-6.8403	0.00	0.00
210	0.0270	0.16	0.01	3.04166	0.02565	0.01646991	-0.01140	-6.8403	0.00	0.00



 **Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

2/13/2015
Page 1 of 3

Soil Map—Washington County, Oregon
(Soil Map)

MAP LEGEND

Area of Interest (AOI)	 Area of Interest (AOI)	 Spoil Area
Soils	 Soil Map Unit Polygons	 Stony Spot
	 Soil Map Unit Lines	 Very Stony Spot
	 Soil Map Unit Points	 Wet Spot
Special Point Features	 Blowout	 Other
	 Borrow Pit	 Special Line Features
	 Clay Spot	Water Features
	 Closed Depression	 Streams and Canals
	 Gravel Pit	Transportation
	 Gravelly Spot	 Rails
	 Landfill	 Interstate Highways
	 Lava Flow	 US Routes
	 Marsh or swamp	 Major Roads
	 Mine or Quarry	 Local Roads
	 Miscellaneous Water	Background
	 Perennial Water	 Aerial Photography
	 Rock Outcrop	
	 Saline Spot	
	 Sandy Spot	
	 Severely Eroded Spot	
	 Sinkhole	
	 Slide or Slip	
	 Sodic Spot	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Washington County, Oregon
Survey Area Data: Version 12, Sep 19, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 3, 2014—Aug 23, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Washington County, Oregon (OR067)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
37A	Quatama loam, 0 to 3 percent slopes	0.4	100.0%
Totals for Area of Interest		0.4	100.0%

Washington County, Oregon

37A—Quatama loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 21z1
Elevation: 140 to 250 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Quatama and similar soils: 85 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Quatama

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

H1 - 0 to 15 inches: loam
H2 - 15 to 30 inches: clay loam
H3 - 30 to 62 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat):
 Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Other vegetative classification: Moderately Well Drained < 15% Slopes (G002XY004OR)

Minor Components

Huberly

Percent of map unit: 4 percent

Landform: Terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: Poorly Drained (G002XY006OR)

Data Source Information

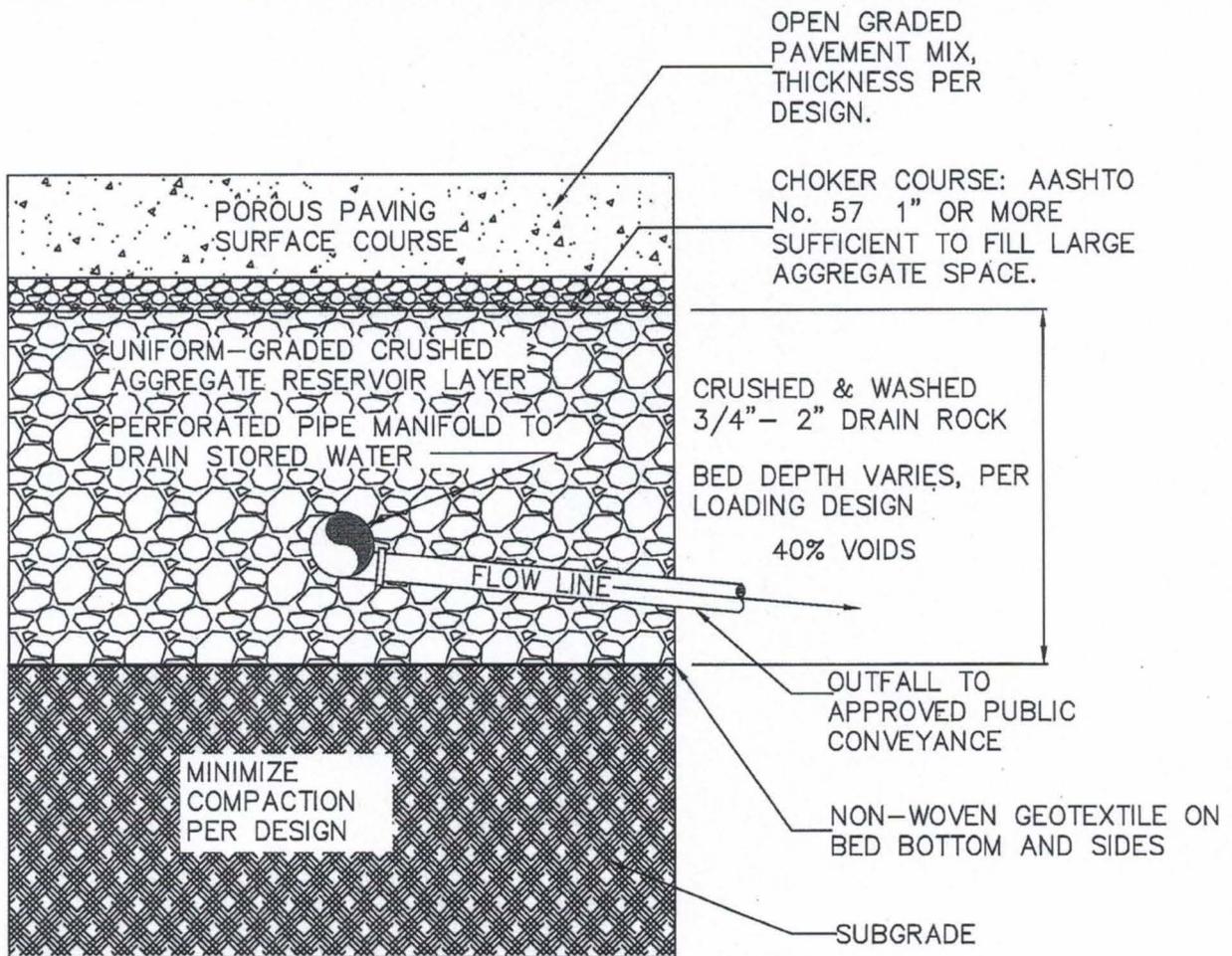
Soil Survey Area: Washington County, Oregon

Survey Area Data: Version 12, Sep 19, 2014

Porous Pavement Checklist

Annual inspections are required. This checklist describes inspection activities, and notes additional recommended inspections. Contact the design engineer, Clean Water Services or City representative for more information.

CHECK ✓	Recommended, in addition to required annual inspection	System Feature	Problem	Conditions to Check for	Preferred Conditions and Maintenance Practices
	Annually Required	Structural components	Water infiltrates unevenly across surface or ponds in low areas	Clogged surface	Water infiltrates evenly across surface; recommend vacuum sweep at least twice per year and power wash annually or as needed; do not use surfactants
	Annually Required	Structural components	Cracked or moving edge constraints; cracked or settled pavement	Cracked or moving edge constraints, or cracked or settled pavement that affects overall performance	Repair all cracks, settlement or other defects that affect performance per manufacturers' specifications
	Annually during the Fall Required	Vegetation	Leaf litter deposition on surface	Leaf litter that could affect stormwater infiltration through pavement	Sweep leaf litter and sediment to prevent surface clogging and ponding
	Annually during the growing season Required	Vegetation	Weeds	Weeds that cover 10% of the surface area	Remove weeds by hand, or use an herbicide approved for use around sensitive areas; Refer to Clean Water Services integrated pest management guidance documents.
	Annually Required	Filter medium between pavers	Aggregate loss in pavers from settling and power washing	Settling of pavers or lack of aggregate around pavers	Reset pavers and replace pore space with aggregate from original design



NOTES:

1. PRIVATE WATER QUANTITY CONTROL SYSTEM, NOT FOR PUBLIC RIGHT OF WAY
2. PAVEMENT SURFACE WITH SIGNIFICANT PERMEABILITY (> 8" PER HR)
3. UNIFORM-GRADED DRAIN ROCK BED WITH MINIMUM 40% VOID SPACE
4. PROVIDE PERFORATED PIPE MANIFOLD IN RESERVOIR LAYER FOR CONVEYANCE, IF NATIVE SOIL INFILTRATION RATES LESS THAN 2"/HOUR. SEE PERFORATED PIPE DETAIL.
5. NOT RECOMMENDED FOR TRAFFIC SURFACES WITH SLOPE > 5%.
6. DO NOT PLACE DRAIN ROCK BED ON COMPACTED FILL.
7. SUBGRADE SLOPED TO MANIFOLD FOR DRAINAGE.
8. HIGHEST SEASONAL WATER TABLE MUST BE AT LEAST 10' BELOW RESERVOIR LAYER. STRUCTURE MUST BE 100' AWAY FROM DRINKING WATER WELL. MINIMUM OF 100' AWAY UP SLOPE & 10' AWAY DOWN SLOPE FROM STRUCTURE FOUNDATIONS.
9. SIGNAGE IDENTIFYING POROUS PAVEMENT REQUIRED.
10. WATER QUALITY TREATMENT REQUIRED FOR FLOWS FROM OTHER IMPERVIOUS AREAS THAT DRAIN TO POROUS PAVEMENT.
11. NON-WOVEN GEOTEXTILE CONFORMING TO ODOT TYPE II VARIATION OR APPROVED EQUAL.

RESOLUTION NO. 5138-13

A RESOLUTION GRANTING A CONDITIONAL USE PERMIT TO TUALATIN ANIMAL CLINIC TO ALLOW A VETERINARY CLINIC WITH PRACTICE LIMITED TO SMALL ANIMALS IN THE CENTRAL COMMERCIAL (CC) PLANNING DISTRICT AT 8700 SW CHEROKEE STREET (TAX MAP 2S1 23AA, TAX LOT 01000) (CUP 13-02).

WHEREAS, a quasi-judicial public hearing was held before the City Council of the City of Tualatin on May 13, 2013 upon the application of the Tualatin Animal Clinic; and

WHEREAS, notice of public hearing was given as required by the Tualatin Development Code; and

WHEREAS, the Council heard and considered the testimony and evidence presented on behalf of the applicant, the City staff, and those appearing at the public hearing; and

WHEREAS, after the conclusion of the public hearing the Council vote resulted in unanimous approval of the application with conditions; and

WHEREAS, the Council finds that the applicant has provided sufficient evidence to demonstrate that all of the requirements of the Tualatin Development Code relative to a conditional use have been satisfied and that granting the conditional use permit is in the best interests of the residents and inhabitants of the City, the applicant, and the public generally.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, OREGON, that:

Section 1. Findings. The Council hereby adopts the following findings:

- A. The use is listed as a conditional use in the underlying planning district. The subject property, Tax Lot 2S1 23AA 01000, is within the Central Commercial (CC) Planning District. "Veterinary clinic with practice limited to small animals" is a conditional use within the CC Planning District pursuant to TDC 53.050(10).
- B. The characteristics of the site are suitable for the proposed use, considering size, shape, location, topography, existence of improvements and natural features. The minimum lot size within the CC Planning District is 10,000 square feet (s.f.), approximately 0.23 acres. The site is approximately 0.34 acres and was developed with a single-family house, which has had tenant improvements for prior commercial use. There is also an outbuilding, a large shed, at the southeast corner of the site. The tax lot exceeds the minimum lot size requirement. The site is a rectangular lot with access from SW Cherokee

Street and frontage along both SW Cherokee Street and SW Tualatin Road. The proposed use is located within the CC Planning District with access from SW Cherokee Street. The site is within first Tualatin town plat, dating from 1887. Tax Map 2S1 23AA shows the nearest named subdivision to the east, "Town of Tualatin". The site is also located within the boundaries of the Tualatin Town Center and Central Urban Renewal District (CURD) Block 23. The developed site has negligible slope. The site generally slopes downward northwest to southeast. The topography would not interfere with the proposed use. The site was developed with a single-family house, which has had tenant improvements for prior commercial use. There is also an outbuilding, a large shed, at the southeast corner of the site. The applicant proposes a veterinary clinic with practice limited to small animals. SW Tualatin Road is to City standards, while SW Cherokee Street is improved below City standards, retaining rural character by having 20-ft wide pavement and no curbing, formally aligned street trees, or sidewalks. Connections to City sanitary sewer and water systems currently exist. There is no connection to the City stormwater system or on-site private stormwater treatment. The issues of public improvements and stormwater management could be resolved through Architectural Review (AR) and a Public Works Permit (PWP). There are three mature evergreen trees along the northerly portion of the east yard, north of an on-site shed, that are the chief natural features and would not necessarily be displaced by the proposed use.

- C. The proposed development is timely, considering the adequacy of transportation systems, public facilities and services existing or planned for the area affected by the use. SW Cherokee Street is a City of Tualatin facility and designated as a Local Street with a right-of-way width of 46 to 50 feet. Typical full construction of a Local Street would include: 32 feet of pavement and gutters which includes two 16-foot travel lanes 4-foot planter strips with trees, curbs, and streetlights 5-foot sidewalks. SW Cherokee Street's existing right-of-way width is 30 feet. The cross-section is improved with 20 feet of pavement. The intersection with SW Tualatin Road includes: 20 feet of pavement An 8-foot sidewalk perpendicular to SW Cherokee Street on the north side A 6-foot curb tight sidewalk on the south side. Southern Pacific Railroad is adjacent on north side which removes requirements for a sidewalk and planter strip on the north side. This results in a cross-section with 37.5 feet of right-of-way, therefore a future need for 7.5 feet of right of way from the south side. With future development, dedication and construction of SW Cherokee Street adjacent to this lot would include: 7.5 feet of dedication of right-of-way on the south side 32 feet of pavement and gutters which includes two 16-foot travel lanes A 0.5-foot curb on the north side A 4-foot planter strip with trees, curbs, and streetlights on the south side A 5-foot sidewalk on the south side. Public infrastructure changes will be determined in the future Architectural Review and will require a Public Works Permit. SW Tualatin Road is a City of Tualatin facility and designated as a Major Collector with a right-of-way width of 54 to 74 feet. Typical full construction of a Major Collector would include: 50 feet of pavement and gutters which includes two 12-foot travel lanes, one 14-foot center turn lane or landscaped median, and

two 6-foot bike lanes 6-foot planter strips with trees, curbs, and streetlights 6-foot sidewalks. SW Tualatin Road's existing right-of-way width is 60 feet. The cross-section is improved with: Approximately 40 to 48 feet of pavement including two to three travel lanes and 6-foot bike lanes A curb-tight sidewalk on the east adjacent to this lot A planter strip on the west side. SW Tualatin Road was constructed through a City capital project. No additional improvements are expected.

- D. There are two existing accesses to SW Cherokee Street serving this commercial development building which used to be a house: Approximately five feet from the stop bar near SW Tualatin Road a 20-foot wide access to two parking spaces in front of a former residential garage Approximately 100 feet from the stop bar near SW Tualatin Road and 10 feet from the east property line a 32-foot driveway serves an onsite parking lot. SW Tualatin Road is a Major Collector requiring the nearest access to be at least 150 feet from the stop bar at the intersection with SW Cherokee Street. Both accesses are less than 150 feet from the intersection. As determined in a future Architectural Review, the access nearest SW Tualatin Road may need to be removed. The access 100-feet from SW Tualatin Road is acceptably far from the intersection and close to the opposing property line. With future development the east access will be allowed to remain in this location, but may need to become right-in/right-out restricted. Public infrastructure changes will require a Public Works Permit. Traffic counts visiting the existing 1,300 square foot building are less than a number of current allowed uses in this than the reasonable worst case traffic generation. As this is less than the reasonable worst case traffic generation used in the Transportation System Plan (TSP), intersection Level-Of-Service would not be increased beyond expectations of the TSP by allowing this conditional use in this planning district. Connections to City sanitary sewer and water systems currently exist. There is no connection to the City stormwater system or on-site private stormwater treatment. As determined in a future Architectural Review, modification to the existing or creating new impervious area may require stormwater treatment and detention for up to all remaining impervious area. Requirements will be based on code at the time of the proposing the change to impervious area. Conveyance calculations and the direction of connection to the public stormwater system will determine detention requirements. Required public stormwater will need to be treated in a public stormwater pond or swale in a public tract. Public stormwater lines exist near the intersection of SW 86th Avenue & SW Sweek Drive. If no connection to a public stormwater line is proposed, 100-year retention will be needed. Public infrastructure changes will require a Public Works Permit. Required on-site stormwater will need to be privately treated prior to directly entering the public stormwater system. All Clean Water Services treatment and detention facilities can be approved for on-site private treatment. Private treatment and detention will require a Water Quality Permit. With a future development, downstream sizing for all public utilities will need to be evaluated by the developer for the change from permitted uses to the proposed development. Any upsizing will be a requirement for the development.

- E. The proposed use will not alter the character of the surrounding area in any manner that substantially limits, impairs, or precludes the use of surrounding properties for the primary uses listed in the underlying planning district. The subject property is in the RML Planning District. Surrounding land uses by and planning district include: CC SW Cherokee Street and east-west rail line; CC Partially paved yet otherwise undeveloped; CC East to west: multi-tenant commercial building with Ecowater Northwest and Northwest Core Balance; building with unknown occupant, possibly a house in continued use as a residence; and In Color Salon; and RH/HR SW Tualatin Road and three-story V-plan Tualatin Greens Condominium. The proposed use is compatible with surrounding urban neighborhood uses including residences and small businesses. Because of this and based on the applicant's submitted information and staff review, the proposed use would not alter the character of the surrounding area in any manner which substantially limits, impairs or precludes the surrounding properties for the primary uses listed in the underlying planning districts.
- F. The proposal is consistent with plan policies. The applicable Tualatin Community Plan policies and TDC regulations that apply to the proposed conditional use in the CC Planning District include TDC: Chapter 6 "Commercial Planning Districts", Section 6.030 Objectives; Chapter 32 "Conditional Uses", Section 32.030 Conditional Uses – Siting Criteria; and Chapter 53 "Central Commercial Planning District (CC)", Section 53.010 Purpose. TDC 6.030 states that "the following are general objectives used to guide the development of this Plan: (1) Encourage commercial development. ... (3) Provide shopping opportunities for surrounding communities. (4) Locate and design commercial areas to minimize traffic congestion and maximize access." The proposal would relocate an existing business, a veterinary clinic. Within the application materials, Section 1 of the narrative states in the last paragraph that about 20% of clinic customers are within walking distance (p. 4). The presence of Tualatin Greens Condominium west across SW Tualatin Road, Twelve Fairway Lane Condominium north across SW Cherokee Street and the east-west rail line, and existing single-family houses east and south of the subject property lend credibility to the statement. The proposal would maintain a level of commercial activity – the clinic already exists and is presently located a block east at 8575 SW Tualatin Road – and continue to provide a business service for the surrounding neighborhood. The subject property has access from SW Cherokee Street, a local street, and customers who drive can arrive from SW Tualatin Road to the west or SW 86th Avenue to the east. TDC 53.010 states that "the purpose of this district is to provide areas of the City that are suitable for a full range of retail, professional and service uses of the kind usually found in downtown areas patronized by pedestrians. The district also provides areas suitable for civic, social and cultural functions serving the general community." The proposal is for the relocation of a veterinary clinic, an existing service use. The subject property is located within the boundaries of the Tualatin Town Center and Central Urban Renewal District (CURD) Block 23 as TDC Map 9-3 illustrates in Attachment G. (Staff confirmed that TDC 53.035 Central Urban Renewal Area

- Prohibited Uses does not prohibit a veterinary clinic.) As described above, the narrative states that about 20% of clinic customers are within walking distance, and the proposal would maintain a level of commercial activity and continue to provide a business service for the surrounding neighborhood. The proposal satisfies those objectives and policies of the TDC that are applicable to the proposed use. The proposal is consistent with plan policies.

- G. The staff report dated, May 13, 2013 is incorporated by reference.
- H. Based on the application, testimony and evidence submitted, Tualatin Animal Clinic (CUP-13-02) meets the criteria of TDC 32.030.

Section 2. The Conditional Use Permit (CUP-13-02) for Tualatin Animal Clinic is approved with the following conditions:

- A. The applicant shall submit for Architectural Review (AR) prior to constructing off-street parking facilities.
- B. The applicant shall bring all off-street parking into conformance with the off-street parking standards in Tualatin Development Code (TDC) 73 within 30 months of the date of this Resolution.
- C. The applicant shall operate the use consistent with all application materials submitted to the City on March 28, 2013.
- D. The applicant shall comply with all applicable TDC policies and regulations.

Section 3. This Resolution is effective upon adoption.

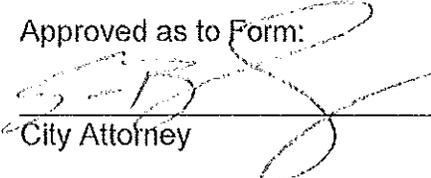
INTRODUCED AND ADOPTED this 28th day of May, 2013.

CITY OF TUALATIN, Oregon

By: 

Mayor

Approved as to Form:



City Attorney

ATTEST:



City Recorder