



PLANNING DEPARTMENT
6101 SE Johnson Creek Blvd
Milwaukie OR 97206

PHONE: 503-786-7630
FAX: 503-774-8236
E-MAIL: planning@milwaukieoregon.gov

Application for Land Use Action

Master File #: _____

Review type*: I II III IV V

CHOOSE APPLICATION TYPE(S):

...

...

...

...

...

...

Use separate application forms for:

- Annexation and/or Boundary Change
- Compensation for Reduction in Property Value (Measure 37)
- Daily Display Sign
- Appeal

RESPONSIBLE PARTIES:

APPLICANT (owner or other eligible applicant—see reverse): I&E Construction, Inc.

Mailing address: 9550 SE Clackamas Rd Zip: 97015

Phone(s): _____ E-mail: _____

APPLICANT'S REPRESENTATIVE (if different than above): Jeff Bolton

Mailing address: 1155 SE 13th St., Salem, OR Zip: 97302

Phone(s): 503-363-9227 E-mail: jbolton@mtengineering.net

SITE INFORMATION:

Address: Railroad Ave. Map & Tax Lot(s): 12E3100/3000

Comprehensive Plan Designation: ... L0 Zoning: ... R-7 Size of property: 1.83 Acres ...

(proposed R-5)

PROPOSAL (describe briefly):

SUBDIVISION OF 7 Lots and 1 TRACT of UND. SITE
WILL HAVE PUBLIC STREETS and Public Infrastructure.

SIGNATURE:

ATTEST: I am the property owner or I am eligible to initiate this application per Milwaukie Municipal Code (MMC) Subsection 19.1001.6.A. If required, I have attached written authorization to submit this application. To the best of my knowledge, the information provided within this application package is complete and accurate.

Submitted by: _____

Date: MARCH 13, 2018

IMPORTANT INFORMATION ON REVERSE SIDE

RESET

*For multiple applications, this is based on the highest required review type. See MMC Subsection 19.1001.6.B.1.

APPLICATION PREPARATION REQUIREMENTS:

- Five hard copies of all application materials are required at the time of submittal (unless submitted electronically). Staff will determine how many additional hard copies are required, if any, once the application has been reviewed for completeness.
- All hard copy application materials larger than 8½ x 11 in. must be folded and be able to fit into a 10- x 13-in. or 12- x 16-in. mailing envelope.
- All hard copy application materials must be collated, including large format plans or graphics.

ADDITIONAL INFORMATION:

- Neighborhood District Associations (NDAs) and their associated Land Use Committees (LUCs) are important parts of Milwaukie's land use process. The City will provide a review copy of your application to the LUC for the subject property. They may contact you or you may wish to contact them. Applicants are strongly encouraged to present their proposal to all applicable NDAs prior to the submittal of a land use application and, where presented, to submit minutes from all such meetings. NDA information: www.milwaukieoregon.gov/citymanager/what-neighborhood-district-association.
- Submittal of a full or partial electronic copy of all application materials is strongly encouraged.

As the authorized applicant I, _____, attest that all required application materials have been submitted in accordance with City of Milwaukie requirements. I understand that any omission of required items or lack of sufficient detail may constitute grounds for a determination that the application is incomplete per MMC Subsection 19.1003.3 and Oregon Revised Statutes 227.178. I understand that review of the application may be delayed if it is deemed incomplete.

Furthermore, I understand that, if the application triggers the City's sign-posting requirements, I will be required to post signs on the site for a specified period of time. I also understand that I will be required to provide the City with an affidavit of posting prior to issuance of any decision on this application.

Applicant Signature: _____

Date: _____

Official Use Only

Date Received (date stamp below):

RESET



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For all Land Use Applications
(except Annexations and Development Review)

Submittal Requirements

All land use applications must be accompanied by a signed copy of this form (see reverse for signature block) and the information listed below. The information submitted must be sufficiently detailed and specific to the proposal to allow for adequate review. Failure to submit this information may result in the application being deemed incomplete per the Milwaukie Municipal Code (MMC) and Oregon Revised Statutes.

Contact Milwaukie Planning staff at 503-786-7630 or planning@milwaukieoregon.gov for assistance with Milwaukie's land use application requirements.

1. **All required land use application forms and fees**, including any deposits.

Applications without the required application forms and fees will not be accepted.

2. **Proof of ownership or eligibility to initiate application** per MMC Subsection 19.1001.6.A.

Where written authorization is required, applications without written authorization will not be accepted.

3. **Detailed and comprehensive description** of all existing and proposed uses and structures, including a summary of all information contained in any site plans.

Depending upon the development being proposed, the description may need to include both a written and graphic component such as elevation drawings, 3-D models, photo simulations, etc. Where subjective aspects of the height and mass of the proposed development will be evaluated at a public hearing, temporary on-site "story pole" installations, and photographic representations thereof, may be required at the time of application submittal or prior to the public hearing.

4. **Detailed statement** that demonstrates how the proposal meets the following:

A. All applicable development standards (listed below):

1. **Base zone standards** in Chapter 19.300.
2. **Overlay zone standards** in Chapter 19.400.
3. **Supplementary development regulations** in Chapter 19.500.
4. **Off-street parking and loading standards and requirements** in Chapter 19.600.
5. **Public facility standards and requirements**, including any required street improvements, in Chapter 19.700.

B. All applicable application-specific approval criteria (check with staff).

These standards can be found in the MMC, here: www.qcode.us/codes/milwaukie/

5. **Site plan(s), preliminary plat, or final plat** as appropriate.

See Site Plan, Preliminary Plat, and Final Plat Requirements for guidance.

6. **Copy of valid preapplication conference report**, when a conference was required.

WHO IS ELIGIBLE TO SUBMIT A LAND USE APPLICATION (excerpted from MMC Subsection 19.1001.6.A):

Type I, II, III, and IV applications may be initiated by the property owner or contract purchaser of the subject property, any person authorized in writing to represent the property owner or contract purchaser, and any agency that has statutory rights of eminent domain for projects they have the authority to construct.

Type V applications may be initiated by any individual.

PREAPPLICATION CONFERENCE:

A preapplication conference may be required or desirable prior to submitting this application. Please discuss with Planning staff.

REVIEW TYPES:

This application will be processed per the assigned review type, as described in the following sections of the Milwaukee Municipal Code:

- Type I: Section 19.1004
- Type II: Section 19.1005
- Type III: Section 19.1006
- Type IV: Section 19.1007
- Type V: Section 19.1008

THIS SECTION FOR OFFICE USE ONLY:

FILE TYPE	FILE NUMBER	FEE AMOUNT*	PERCENT DISCOUNT	DISCOUNT TYPE	DEPOSIT AMOUNT	DATE STAMP
Master file		\$			\$	
Concurrent application files		\$			\$	
		\$			\$	
		\$			\$	
		\$			\$	
SUBTOTALS		\$			\$	
TOTAL AMOUNT RECEIVED: \$			RECEIPT #:		RCD BY:	
Associated application file #s (appeals, modifications, previous approvals, etc.):						
Neighborhood District Association(s):						
Notes:						

*After discount (if any)

TRANSMITTAL



DATE: March 23, 2018

JOB #: 6423

TO: City of Milwaukie
6101 SE Johnson Creek Blvd
Milwaukie, Oregon 97206

PROJECT: Milwaukie Subdivision

FROM: Brandie Dalton, Land-Use Planner

RE: *RAILROAD AVENUE SUB APPLICATION*

- | | | | |
|---|--|---|---|
| <input type="checkbox"/> ENCLOSED | <input type="checkbox"/> PLANS | <input type="checkbox"/> FOR APPROVAL | <input type="checkbox"/> FOR VERIFICATION |
| <input type="checkbox"/> CHECKS INCLUDED | <input type="checkbox"/> DOCUMENTS | <input type="checkbox"/> FOR YOUR USE | <input type="checkbox"/> REVISE & RETURN |
| <input type="checkbox"/> PER YOUR REQUEST | <input type="checkbox"/> FOR SIGNATURE | <input type="checkbox"/> FOR FINAL DISTRIBUTION | <input type="checkbox"/> OTHER |

COPIES	No.	DESCRIPTION
1		

ENCLOSED IS A SUBDIVISION APPLICATION FOR PROPERTY LOCATED ON RAILROAD AVENUE AND IDENTIFIED AS 1 2E 31DD/TAX LOT 3000.

IF YOU HAVE ANY QUESTIONS OR NEED ADDITIONAL INFORMATION, PLEASE LET ME KNOW ASAP.

THANK YOU,

BRANDIE DALTON, LAND-USE PLANNER

SUBDIVISION

BACKGROUND/PROPOSAL

The subject properties are located on SE Stanley Avenue and Railroad Avenue. There are 3 tax lots included in this application, 1 2E 31DD/Tax Lots 2900, 3000, and 3100. The properties are zoned R-7, with a Low Density Comprehensive Plan designation.

On February 16, 2017, the City held a pre-application conference with the applicant and the applicant's engineering representative, Multi/Tech Engineering, Inc., for the purpose of discussing code requirements for developing the site as multi-family.

A Neighborhood Meeting is scheduled with the Linwood Neighborhood on April 12, 2018 @ 7pm. The meeting will be held at the Linwood Elementary School.

Proposal: The subject properties total 1.72 acres in size and is zoned R-5 (the applicant has requested a CPC/ZC to R-5). The applicant is proposing to subdivide the subject property into 7 lots, two Tracts (Tract A and B that will be dedicated for wetlands and buffer area).

Vicinity Information:

The subject properties are located on the west side of Stanley Street and the north side of Railroad Avenue. The surrounding land uses within the vicinity are zoned and used as follows and as shown.

North: R-7 zoned; existing single-family dwellings

East: R-7PD zoned (Across Stanley Road); existing single-family dwellings

South: BI zoned (Across Railroad Avenue); existing industrial uses

West: R-7 zoned; existing single-family dwellings



Housing Needs

The comp. plan designation for the property is Low Density Residential. The applicant is requesting to change the comp. plan designation to Moderate Density Residential to be consistent with the R-5 zone being requested.

The Department of Land Conservation and Development accurately reports that single-family housing falls within needed housing.

Milwaukie has a Housing and Residential Land Needs Assessment dated August 2016 that outlines housing needs within the City of Milwaukie. The results show a need for 1,150 new housing units by 2036. With a single family detached dwelling need of 527 dwellings. See page 39 of the Milwaukie Housing and Residential Land Needs Assessment dated August 2016.

The applicant's proposal helps the City re-designate land from a low-density zone to a moderate-density zone while helping meet the housing needs.

The existing neighborhood consists of single family housing and vacant land. In order to maintain the character of the neighborhood, the site will be developed in compliance with required Design Standards.

The City's adopted Comprehensive Plan, Residential, Transportation Goals and Policies and applicable adopted facilities plans implement the Statewide Housing Goal.

Section 17.12.040(A) Subdivision Criteria

The approval authority may approve, approve with conditions, or deny a preliminary plat based on the following approval criteria:

- 1. The proposed preliminary plat complies with Title 19 of this code and other applicable ordinances, regulations, and design standards.***

Applicant Findings: All lots meet minimum lot size of 5,000 and 50-foot lot width. The lots do not meet the 80-foot lot depth requirement. Therefore, a variance to lot depth has been request as part of this application.

The tentative plan notes the unfinished lot grades. The proposed lot layout and sizes are influenced by configuration of the subject property, the wetlands areas, the 50-foot buffer, and the need to accommodate through streets.

The lots are designed so that the side lot lines run at right angles to the streets as much as practical taking into consideration the curved portions of the streets which are based upon topography. Lot arrangement is such that there are no foreseeable difficulties, for reason of topography or other condition, in securing building permits to build on all lots in compliance with the requirements of this code.

Thus, the proposal complies with Title 19. Therefore, this criterion has been met.

- 2. The proposed division will allow reasonable development and will not create the need for a variance of any land division or zoning standard.***

Applicant Findings: Due to the location of the subject property and the required street extension through the subdivision, the required lot depth cannot be met. Therefore, a variance to lot depth has been requested.

3. ***The proposed subdivision plat name is not duplicative and the plat otherwise satisfies the provisions of ORS 92.090(1).***

Applicant Findings: At this time, the subdivision does not have an approved name. Prior to subdivision approval, the applicant will request subdivision name approval through the County. Therefore, this criteria will be met.

4. ***The streets and roads are laid out so as to conform to the plats of subdivisions already approved for adjoining property as to width, general direction, and in all other respects unless the City determines it is in the public interest to modify the street or road pattern.***

Applicant Findings: The subject properties to the north are fully developed and a stub street is located along the north property lien of the subject property. Therefore, 56th Avenue is required to extend through the proposed subdivision. This street connection will be in compliance with City standards and consistent with the already improved 56th Avenue. Therefore, this criteria has been met.

5. ***A detailed narrative description demonstrating how the proposal conforms to all applicable code sections and design standards.***

Applicant Findings: The narrative and the site plans provided demonstrate how all applicable code sections are being satisfied. All other applicable code sections will be reviewed at the time of building submittal. Therefore, this criteria has been or will be met.

Section 19.911.4(B)(1) Type III Variance Criteria

1. Discretionary Relief Criteria

- a. ***The applicant's alternatives analysis provides, at a minimum, an analysis of the impacts and benefits of the variance proposal as compared to the baseline code requirements.***

Applicant Findings: The applicant is requesting a variance to lot depth. All 7 lots have a lot depth of 70 to 72 feet, where 80 feet is required. The 8 to 10-foot reduction in lots depth will have no impact on the develop. There will still be an adequate building envelope provided on these lot and all setbacks will be met. Setbacks will be reviewed at the time of building permit submittal.

- b. ***The proposed variance is determined by the Planning Commission to be both reasonable and appropriate, and it meets one or more of the following criteria:***

- (1) ***The proposed variance avoids or minimizes impacts to surrounding properties.***
- (2) ***The proposed variance has desirable public benefits.***
- (3) ***The proposed variance responds to the existing built or natural environment in creative and sensitive manner.***

Applicant Findings: The applicant is requesting a variance to lot depth. Granting the variance to allow lot depths of less than 80 within the subdivision does not have any adverse effects to the appearance, function or safety of the use, or the surrounding properties.

Due to the wetlands on the site and the required 56th Avenue street extension, meeting the 80-foot lot width requirement is not feasible. The applicant has provided two Tracts (Tract A and B) of land within the subdivision. These Tracts are created to protect the wetlands area on the site. However,

due to these created Tract, meeting the 80-foot lot width is not feasible. The proposed variance is part due to the natural environment on the site.

c. Impacts from the proposed variance will be mitigated to the extent practicable.

Applicant Findings: The impacts from the lot depth variance have been mitigated by provided lots that exceed the 5,000-square foot lot size requirement. Furthermore, the impacts will be mitigated by providing adequate setbacks when the lots are developed. Setbacks will be reviewed at the time of building permit submittal.

2. Economic Hardship Criteria

a. Due to unusual site characteristics and/or other physical conditions on or near the site, the variance is necessary to allow reasonable economic use of the property comparable with other properties in the same area and zoning district.

b. The proposed variance is the minimum variance necessary to allow for reasonable economic use of the property.

c. Impacts from the proposed variance will be mitigated to the extent practicable.

Applicant Findings: The applicant is requesting a variance to lot depth. Granting the variance to allow lot depths of less than 80 within the subdivision does not have any adverse effects to the appearance, function or safety of the use, or the surrounding properties. Due to the wetlands on the site and the required 56th Avenue street extension, meeting the 80-foot lot width requirement is not feasible. The applicant has provided two Tracts (Tract A and B) of land within the subdivision. These Tracts are created to protect the wetlands area on the site.

The impacts from the lot depth variance have been mitigated by provided lots that exceed the 5,000-square foot lot size requirement. Furthermore, the impacts will be mitigated by providing adequate setbacks when the lots are developed. Setbacks will be reviewed at the time of building permit submittal.

CONCLUSION

We believe that requested Subdivision application is appropriate for the subject property for the reasons describe herein. The proposal is consistent and in compliance with the current Code requirements. As demonstrated herein, the R-5 zoning designation is currently being requested via a CPC/ZC application.

We believe that the materials submitted address all the relevant City criteria for a Subdivision and Variance. For these reasons, we believe that the proposal is warranted and that the Planning Commission has sufficient findings to grant the proposal as requested.

12 E 31DD
MILWAUKIE

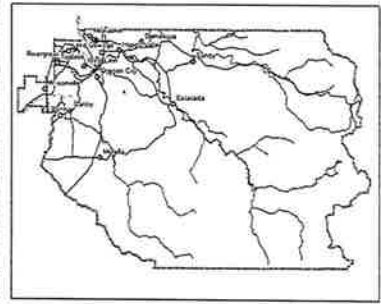
S.E.1/4 S.E.1/4 SEC.31 T.1S. R.2E. W.M.
CLACKAMAS COUNTY
1" = 100'

D. L. C.
JOHN D. GARRETT NO. 38

Cancelled Taxlots
2901



- Parcel Boundary
- - - Private Road ROW
- - - Historical Boundary
- Railroad Centerline
- TaxCodeLines
- Map Index
- WaterLines
- Land Use Zoning
- Plats
- Water
- ⊙ Corner
- ⊙ Section Corner
- 1/16th Line
- Govt Lot Line
- - - DLC Line
- - - Meander Line
- - - PLSS Section Line
- ⊙ Historic Corridor 40'
- ⊙ Historic Corridor 20'



THIS MAP IS FOR ASSESSMENT
PURPOSES ONLY



12 E 31DD
MILWAUKIE

11/16/2015

**NATURAL RESOURCE REPORT
ADDRESSING SECTION 19.402**

FOR

Tax lot 3000 on Railroad Ave

Prepared for:
I&E Construction Inc
9550 SE Clackamas Road
Clackamas, Oregon 97015

Prepared by:
Cari Cramer
Schott and Associates

August 2017
Project #: 2463

INTRODUCTION

As required by Section 19.402 Natural Resources of the City of Milwaukie Municipal Code, regulations apply to any properties that contain or are within 100 feet of a Water Quality Resource (WQR) and/or Habitat Conservation Areas (HCA) (including any locally significant Goal 5 wetlands or habitat areas identified by the City of Milwaukie) as shown on the Milwaukie Natural Resource Administrative Map (NR). As described in this report, this subject property is regulated by Section 19.402 Natural Resources.

Site Location

The approximately 1.72 acre subject property is located north of SE Railroad Avenue in Milwaukie, Clackamas County, Oregon (T1S, R2E, Sec. 31, TL 3000). The property is bound by SE Railroad Avenue to the south, and grass fields to the east and west. Residential housing borders the property to the north.

Site Description

Just inside the east property boundary is a ditched drainage that enters from the residential property to the north. The drainage follows the eastern property boundary and flows south across the property entering a road ditch which parallels SE Railroad Avenue. The site is very gently south sloping. The property mainly consists of an open grass field dominated by spike bentgrass (*Agrostis tenuis*). Foliage along the drainage consists of an overstory of Oregon ash (*Fraxinus latifolia*) and cottonwood (*Populus balsamifera*) with English hawthorn (*Crataegus monogyna*), Himalayan blackberry (*Rubus armeniacus*) and various grasses in the understory. Along the southern property boundary a scattered row of English hawthorn is present. Near the southern boundary is a lone oak. The southwestern property boundary consists of a laurel hedge. Near the northern property boundary was a loose soil stockpile.

Project Objectives

The applicant proposes Boundary verification prior to any development proposals. As shown on the 2011 City of Milwaukie Natural Resource (NR) Administrative Map, the site contains Protected Water Features and Habitat Conservation Areas. This report will outline the extent of these features and provide verification of these resources as follows:

Water Quality Resources (WQR) – Map Verification (Chapter 19.402.A.2.a)

Habitat Conservation Areas (HCA) – Detailed Verification Approach (Chapter 19.402.A.2.b)

METHODS

As described in this report the HCA mapping is inaccurate and the applicant is not proposing to undertake any development activity within any Water Quality Resource or HCA. At this time the report is entirely to establish WQR area and HCA area and the appropriate associated vegetated corridor size.

Schott and Associates conducted a wetland delineation and natural resource assessment onsite to comply with standards outlined in the City of Milwaukie Municipal Code to determine the actual extents of Natural Resources including the Water Quality Resource Areas which encompass protected water features, vegetated corridors and the Habitat Conservation Areas (HCA).

WQR AND HCA BOUNDARY VERIFICATION AND MAP ADMINISTRATION

Water Quality Resources— Water quality resources (WQRs) include protected water features and their associated vegetated corridors, as specified in Table 19.402.15. The vegetated corridor is a buffer around each protected water feature, established to prevent damage to the water feature. The width of the vegetated corridor varies depending on the type of protected water feature, upstream drainage area served, and slope adjacent to the protected water feature. The NR Administrative Map is a general indicator of protected water features and their associated vegetated corridors; the location of actual WQRs is determined according to the parameters established in Table 19.402.15 and the specific location of vegetated corridors shall be determined in the field in accordance with Table 19.402.15.

Habitat conservation areas (HCAs) include significant Goal 5 wetlands, riparian areas, and fish and wildlife habitat. HCAs are designated based on a combination of inventory of vegetative cover and analysis of habitat value and urban development value. HCA locations on the NR Administrative Map are assumed to be correct unless demonstrated otherwise; verifications and corrections shall be processed in accordance with the procedures established in Subsection 19.402.15.

19.402.15 Boundary Verification and Map Administration

The NR Administrative Map shows the locations of WQRs and HCAs. For WQRs, the NR Administrative Map is a general indicator of protected water features and their associated corridors; the location of actual WQRs is determined according to the parameters established in Table 19.402.15. With respect to HCA locations, the NR Administrative Map is assumed to be correct unless demonstrated otherwise.

Boundary Verification

To determine whether the standards of Section 19.402 apply to a proposed activity at any given location, the boundaries of any designated natural resource(s) on or near the site shall be verified.

An applicant may challenge the accuracy of the NR Administrative Map through either of the boundary verification processes outlined in Subsections 19.402.15.A.1 and 2

Boundary verifications that propose substantial corrections will be processed in accordance with Subsection 19.402.15A.2 and are subject to Type II review.

2. Type II Boundary Verification

Corrections to mapped WQRs and/or detailed verification of mapped HCAs may be proposed according to the following procedures, and are subject to Type II review per Section 19.1005.

- a) Corrections to WQRs*
 - (1) Submittal Requirements*

To propose a correction to a WQR shown on the NR Administrative Map, the applicant shall submit the following information, depending on the type of water feature in question:

- (a) Drainages*

In the case of drainages; including rivers, streams, springs, and natural lakes; the applicant shall submit a hydrology report, prepared by a professional engineer, demonstrating whether or not the drainage meets the definition of a protected water feature. If the drainage is demonstrated to be a protected water feature, the applicant shall provide a topographic map of the site, with contour intervals of 5 ft or less, that shows

the specific location of the drainage on the subject property.

(b) Wetlands

In the case of wetlands, the applicant shall submit a wetland delineation report, prepared by a professional wetland specialist in accordance with the 1996 Oregon Freshwater Wetland Assessment Methodology and following the wetlands delineation process established by DSL, demonstrating the location of any wetlands on the site. The delineation report will be accepted only after approval by DSL. If the wetland is demonstrated to be a primary protected water feature, the applicant shall provide a topographic map of the site, with contour intervals of 5 ft or less, that shows the specific location of the wetland on the subject property.

The Planning Director shall confer with DSL and Metro to confirm delineation and hydrology reports, as may be needed, prior to issuing a notice of decision on a requested map correction.

(2) Approval Criteria

The City shall update the NR Administrative Map if the wetland or hydrology report submitted demonstrates any of the following:

(a) That there was an error in the original mapping.

(b) That the boundaries of the WQR have changed since the most recent update to the NR Administrative Map.

(c) That a primary protected water feature no longer exists because the area has been legally filled, culverted, or developed prior to January 16, 2003, the effective date of Ordinance #1912.

Schott and Associates has determined that there is an error in original mapping as is demonstrated on the existing conditions map. The drainage was flagged, surveyed and mapped based on methods accepted by DSL and the Corps. The flagged surveyed drainage was found to be entirely onsite within the eastern property and not extending offsite to the east as shown on the NR Administrative map.

A delineation was conducted onsite, on September 16, 2016, as per 19.402.A.2.A(1.a.1.b) as described below. Two types of water features were observed onsite, a drainage that parallels the eastern property boundary and fringe wetland adjacent to the drainage at the northern end of the property. The property is nearly flat and gently south sloping as shown on the existing conditions map (Appendix B). Slopes are less than 25%. The results of that delineation were submitted to DSL and are currently under review. (Appendix E)

Wetlands

A wetland delineation and site assessment of the property was conducted by Schott and Associates in September 2016. Methods used are described in the 1987 US Army Corps of Engineers *Wetland Delineation Manual and Regional Supplement for Mountains and Valleys West*. Based on soil, vegetation and hydrology data taken in the field two fringe palustrine emergent (PEM) wetlands totaling 3,393sf were delineated onsite, surveyed and mapped. The property is nearly flat and slopes adjacent to the wetland are less than 25'. Per Table 19.402.15 Determination of WQR Locations, the wetland is a primary protected water feature and required vegetated corridor width applied to the outer boundary of the wetland is 50'.

Intermittent Stream

Just inside the east property boundary is a ditched drainage that enters from the residential property to the north. The drainage follows the eastern property boundary and flows south across the property entering a road ditch at the southern extent of the property which parallels Railroad Avenue. The drainage flows through a culvert approximate 1/3rd of the way down. There was a small amount of flowing water at the time of the summer site visit within the northern portion of the drainage prior to the culvert. The drainage was dry south of the culvert to the road ditch at SE Railroad Avenue. The ordinary high water (OHW) of the stream was based on the field survey and mapped by Multi/Tech Engineering, to include topography. As required by Section 2a. a drainage engineer at Multi/Tech Engineering calculated the stream draining 64 acres based upon the City of Milwaukie Stormwater Master Plan documentation. The drainage meets the definition of intermittent, a secondary protected water feature with a 15' vegetated corridor width applied to the outer boundaries of the water feature (both banks of a watercourse).

Per the NR Administrative map the drainage is shown onsite west of and parallel to the east property boundary of tax lot 3000 in the approximate northern 1/3 of the property. The drainage then shows angling east onto the adjacent tax lot to the east, then directing south within that tax lot to the southern property boundary. NR Mapping is erroneous, as the onsite surveyed delineation shows the drainage to be entirely within tax lot 3000 property boundaries. The drainage should be a protected water feature, but the location of the drainage should be corrected on the City of Milwaukie NR map (Appendix A).

All water resources were mapped and surveyed. Mapped boundaries have been provided to the Oregon Department of State Lands (DSL) for their review.

Vegetated Corridor

Procedures outlined in Section 19.402.A.2.A and Table 19.402.15 were followed to determine the extent of onsite vegetated corridors. Slopes adjacent to onsite wetlands were uniformly less than 25% and the wetland buffer extends 50 feet from the delineated wetland boundary.

Slopes adjacent to the drainage are less than 25% and the drainage is being considered intermittent and onsite buffers extend 15 feet from OHW (TOB).

Buffers as defined by these procedures and based on delineated Water Features are provided on a map (Appendix C).

b. Detailed Verification of HCAs

An applicant who believes that an HCA shown on the NR Administrative Map should be corrected for a reason other than those described in Subsections 19.402.15.A.1.a or b may propose a detailed verification.

(1) Submittal Requirements

The applicant shall submit a report prepared and signed by either a knowledgeable and qualified natural resource professional; such as a wildlife biologist, botanist, or hydrologist; or a civil or environmental engineer registered in Oregon to design public sanitary or storm systems, stormwater facilities, or other similar facilities. The report shall include:

(a) A description of the qualifications and experience of all persons that contributed to the report and, for each person that contributed, a description of the elements of the analysis to which the person contributed.

This report has been prepared by Schott and Associates, Inc., Ecologists and Wetland Specialists. The delineation and natural resource assessment was conducted by Cari Cramer, natural resource specialist. The reports were prepared by Cari Cramer and reviewed and edited by Juniper Tagliabue, senior natural resource specialist.

(b)The information described in Subsection 19.402.15.A.1.a.

Provided in attached delineation report (Appendix E)

(c)The information described in Subsection 19.402.15.A.1.b, if the applicant believes such information is relevant to the verification of habitat location on the subject lot or parcel.

N/A

(d)Additional aerial photographs, if the applicant believes they provide better information regarding the property, including documentation of the date and process used to take the photos and an expert's interpretation of the additional information they provide.

See aerial photos obtained from Google Earth (Appendix D).

(e) A map showing the topography of the property shown by 2-ft vertical contours in areas of slopes less than 15%, and at 5-ft vertical contours of slopes 15% or greater.

See existing conditions map and delineation report.

(f) Any additional information necessary to address each of the detailed verification criteria provided in Subsection 19.402.15.A.2.b(2); a description of where any HCAs are located on the property, based on the application of the detailed verification criteria and factual documentation to support the analysis.

Two fringe wetlands and one intermittent drainage have been delineated onsite based on methods accepted by DSL and the Corps and submitted to DSL September 2016. The drainage is mapped incorrectly on the NR Administrative Map. The drainage was surveyed based on OHW and should be mapped inside of the eastern property boundary with 15' buffers. The two fringe wetlands are located on each side of the delineated drainage at the north end of the property inside of the north and east property boundaries. The wetlands should be accurately mapped as wetlands with 50' buffers.

The remainder of the mapped HCA area should not be mapped as HCA. The area was assessed and can be described as follows; A narrow band of foliage along the drainage consisted of an overstory of Oregon ash and cottonwood mixed with English hawthorn. Himalayan blackberry and various non-native grasses are located in the understory. Along the southern property boundary a scattered row of English hawthorn are present. The remainder of the area is mainly open grass field consisting of non-native grasses such as bent grass and tall fescue. Besides the wetlands delineated on site, the remainder of the property delineated does not meet the definition of an HCA and is incorrectly mapped.

(2) Approval Criteria

A boundary verification request submitted under Subsection 19.402.15.A.2.b shall be evaluated according to the following three-step process:

(a) Verify Boundaries of Inventoried Riparian Habitat

Locating habitat and determining the riparian habitat class of the designated natural resource is a four-step process:

(i) Locate the water feature that is the basis for identifying riparian habitat.

- Locate the top of bank of all streams, rivers, and open water within 200 ft of the property.*
- Locate all flood areas within 100 ft of the property.*
- Locate all wetlands within 150 ft of the property, based on the NR Administrative Map. Identified wetlands shall be further delineated consistent with methods currently accepted by DSL and the Corps.*

On the NR map a drainage was mapped as partially on tax lot 3000. As described previously, a drainage and two fringe wetlands were located, delineated and surveyed on the subject property consistent with methods currently accepted by DSL and the Corps. The drainage was located onsite along the entire eastern property boundary of tax lot 300 (subject property). The two fringe wetlands were on each side of the drainage at the northern extent of the property. No additional wetlands or waters were identified within 150 or 200 feet of the property respectively.

No flood areas were found within 100ft of the property.

(ii) Identify the vegetative cover status of all areas on the property that are within 200 ft of the top of bank of streams, rivers, and open water; are wetlands or are within 150 ft of wetlands; and are flood areas and within 100 ft of flood areas.

- Vegetative cover status shall be as identified on the latest Metro Vegetative Cover Map (available from the City and/or the Metro Data Resource Center).*

The vegetative cover status of a property may be adjusted only if: (1) the property was legally developed prior to September 15, 2011, the effective date of Ordinance #2036 (see Subsection 19.402.15.A.1.b); or (2) an error was made at the time the vegetative cover status was determined. To assert the latter type of error, applicants shall submit an analysis of the vegetative cover on their property, using the aerial photographs on which the latest Metro Vegetative Cover Map is based and the definitions of the different vegetative cover types identified in Table 19.402.15.A.2.b(2)(a)(iv).

On the 2005 Metro Vegetative Cover Map, it appears the area west of the drainage is mapped as scrub/shrub. It is unclear how far the scrub/shrub area extends as the mapping is hard to read. It appears an error was made, mapping scrub/shrub. The attached 2005 Google Earth Aerial, upon which the Vegetative Cover status was based, clearly shows a majority of the site to be open field with narrow tree canopy along the eastern property boundary, some trees and a hedge line along the southern property boundary with a couple of lone trees at the northern end of the property.

Onsite assessment confirmed the site was predominantly an open grass field dominated by spike bentgrass. Foliage along the drainage consisted of an overstory of Oregon ash and cottonwood with English hawthorn, Himalayan blackberry and various grasses in the understory. Along the southern property boundary was a scattered row of English hawthorn. Near the southern boundary was a lone oak. The southwestern property boundary consisted of a laurel hedge.

According to Table 19.402.15.A.2.b(2)(a)(iv), all Surface Stream features are designated as Class I Riparian areas. The area, 0-50' from the drainage meets the definition of "Low Structure Vegetation or Open Soils". "*Low structure vegetation or open soils*" means areas that are part of a contiguous area 1 acre or larger of grass, meadow, croplands, or areas of open soils located within 300 ft of a surface stream. Low structure vegetation areas may include areas of shrub vegetation less than 1 acre in size; if they are contiguous with areas of grass, meadow, croplands, orchards, Christmas tree farms, holly farms, or areas of open soils located within 300 ft of a surface stream; and if those contiguous areas together form an area of 1 acre in size or larger.

The area is mainly open field with a few trees bordering the drainage. Beyond 50' on either side of the drainage is entirely open grass field. Per the table 50-100' from the wetland also meets the same definition, but is designated as Class II Riparian area.

(iii) Determine whether the degree that the land slopes upward from all streams, rivers, and open water within 200 ft of the property is greater than or less than 25%, using the methodology outlined in Table 19.402.15.

Topography is flat to gently south sloping as shown on the surveyed existing conditions map. Slopes adjacent to the wetlands and drainages are basically flat and less than 25%.

(iv) Identify the riparian habitat classes applicable to all areas on the property using Table 19.402.15.A.2.b(2)(a)(iv) and the data identified in Subsections 19.402.15.A.2.b(2)(a)(i) through (iii).

Habitat classes adjacent to the drainage are low level as addressed above.

The vegetation adjacent to the delineated wetland consists of the same low level nonnative grasses and forbs. The drainage is low structure vegetation consisting of a few native and nonnative trees adjacent with an understory of Himalayan blackberry. The area then opens into a grass field with low level nonnative grasses and forbs. The areas are without significant habitat functions and should not be mapped as HCA.

Conclusion

In Summary, the HCA mapping is inaccurate. At this time the report is entirely to establish WQR area and HCA area and the appropriate associated vegetated corridor size.

Schott and Associates conducted a wetland delineation and natural resource assessment onsite to comply with standards outlined in the City of Milwaukie Municipal Code to determine the actual extents of Natural Resources including the Water Quality Resource Areas which encompass protected water features, vegetated corridors and the Habitat Conservation Areas (HCA).

One intermittent drainage was delineated entirely onsite west of the eastern property boundary and should be protected with a 15' wide vegetated corridor boundary on both sides.

Two fringe wetlands were delineated on each side of the drainage at the northern extent of the property and should be protected with a 50' wide vegetated corridor boundary.

Based on 19.402.15 .A.2.a Boundary Verification and corrections to WQRs the drainage location was mapped erroneously and should be adjusted. Based on 19.402.15.A.2.b Detailed Verification of HCAs, the low quality HCA mapped beyond the delineated drainage, wetland and associated vegetated corridors should be removed from the map.

APPENDICES

- A. Milwaukie HCA Map
- B. Existing Conditions/Topographic Map
- C. Existing Conditions map with Vegetated Corridor
- D. Historical Aerial Photographs
- E. Delineation Report

2. If a subdivision cannot comply with the standards in Subsection 19.402.13.1.1, the application shall comply with the following standards:

a. All proposed lots shall have adequate buildable area outside of the WQR and HCA.

Findings: There are wetlands located throughout the site along with Habitat Conservation Areas. As shown on the site plans, all lots have adequate buildable area.

The buildable area on Lots 1, 2, and 3 will be located within the HCA as shown on the site plan, but outside the wetland's areas. In order to minimize any negative impacts on the HCA or wetlands, a Wetland Delineations report dated August 22, 2017 was done on the site. With these a mitigation plan has been provided and noted on the site plans. So, developing of this area will not have any negative impacts.

b. To the extent practicable, the lot and access configurations shall mitigate the potential future impacts to the WQR and HCA from access and development.

Findings: The buildable area on Lots 1, 2, and 3 will be located within the HCA as shown on the site plan, but outside the wetland's areas. In order to minimize any negative impacts on the HCA or wetlands, a Wetland Delineations report dated August 22, 2017 was done on the site. With these a mitigation plan has been provided and noted on the site plans. So, developing of this area will not have any negative impacts.

Proposed Mitigation:

- 1) Enhance proposed habitat conservation area (HCA) outside of proposed development with native trees and native vegetation. Species and layout of plantings to be approved by City of Milwaukie Planning Department.
- 2) Existing ditch in Tract A to be cleared of existing invasive species through entire site. This would include, Himalayan Blackberry, Ivy and other determined species. This includes existing trees located outside of determined wetland, but within HCA. An arborist required site visit and report prior to removal of species.
- 3) Construct foot bridge as shown on site plan.
- 4) Existing culvert to be removed. Ditch to be re-established with native plants.

A Natural Resource Report dated October 13, 2019, was provided by ESA. All recommendations within ESA's report are being complied with as shown on the plans.

c. An Impact Evaluation and Alternatives Analysis shall be prepared in accordance with the relevant portions of Subsection 19.402.12.A.

Findings: Prior to development on the site, an Impact Evaluation and Alternatives Analysis will be prepared and submitted to the City.

d. For properties where the HCA covers more than 85% of the total lot area, the Impact Evaluation and Alternatives Analysis shall address how the applicant's proposal retains the greatest practicable degree of contiguity of the HCA across the new lots.

Findings: The HCA covers 85% or more of Lots 1, 2, and 3. Therefore, prior to development on the site, an Impact Evaluation and Alternatives Analysis will be prepared and submitted to the City.



City of Milwaukie
Natural Resource (NR)
Administrative Map
 (Last updated August 16, 2011)

-  City Boundary
-  100-ft Compliance Line
-  Habitat Conservation Areas
- Water Quality Resources**
-  Rivers, Streams, and Ponds
-  Wetlands
-  Vegetated Corridor

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 503.678.6007



Appendix D1: Aerial Photo June 2005
Railroad Avenue
S&A 2463

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Appendix D2: Aerial Photo 2016
Railroad Avenue
S&A 2463

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Oregon

Kate Brown, Governor

August 22, 2017

I&E Construction, Inc.
Attn: Karl Ivanov
9550 SE Clackamas Road
Clackamas, OR 97015

Re: WD #2017-0205 Wetland Delineation Report for the
Proposed Railroad Estates Development
Clackamas County; T 1S R 2E S 31DD TL 3000

Dear Mr. Ivanov:

The Department of State Lands has reviewed the wetland delineation report prepared by Schott and Associates for the site referenced above. Based upon the information presented in the report and additional information submitted upon request, we concur with the wetland and waterway boundaries as mapped in Figure 6 of the report. Within the study area, two wetlands (totaling approximately 0.078 acres) and a tributary to Mt. Scott Creek were identified.

The wetlands and the tributary are subject to the permit requirements of the state Removal-Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands or below the ordinary high water line (OHWL) of a waterway (or the 2 year recurrence interval flood elevation if OHWL cannot be determined).

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon

Department of State Lands

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Salem, OR 97301-1279

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State Land Board

Kate Brown

Governor

Dennis Richardson

Secretary of State

Tobias Read

State Treasurer

request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. Please phone me at 503-986-5232 if you have any questions.

Sincerely,



Peter Ryan, PWS
Jurisdiction Coordinator

Approved by



Kathy Verble, CPSS
Aquatic Resource Specialist

Enclosures

cc: Cari Cramer, Schott and Associates
City of Milwaukie Planning Department
Dominic Yballe, Corps of Engineers
Anita Huffman, DSL

W02017-0205

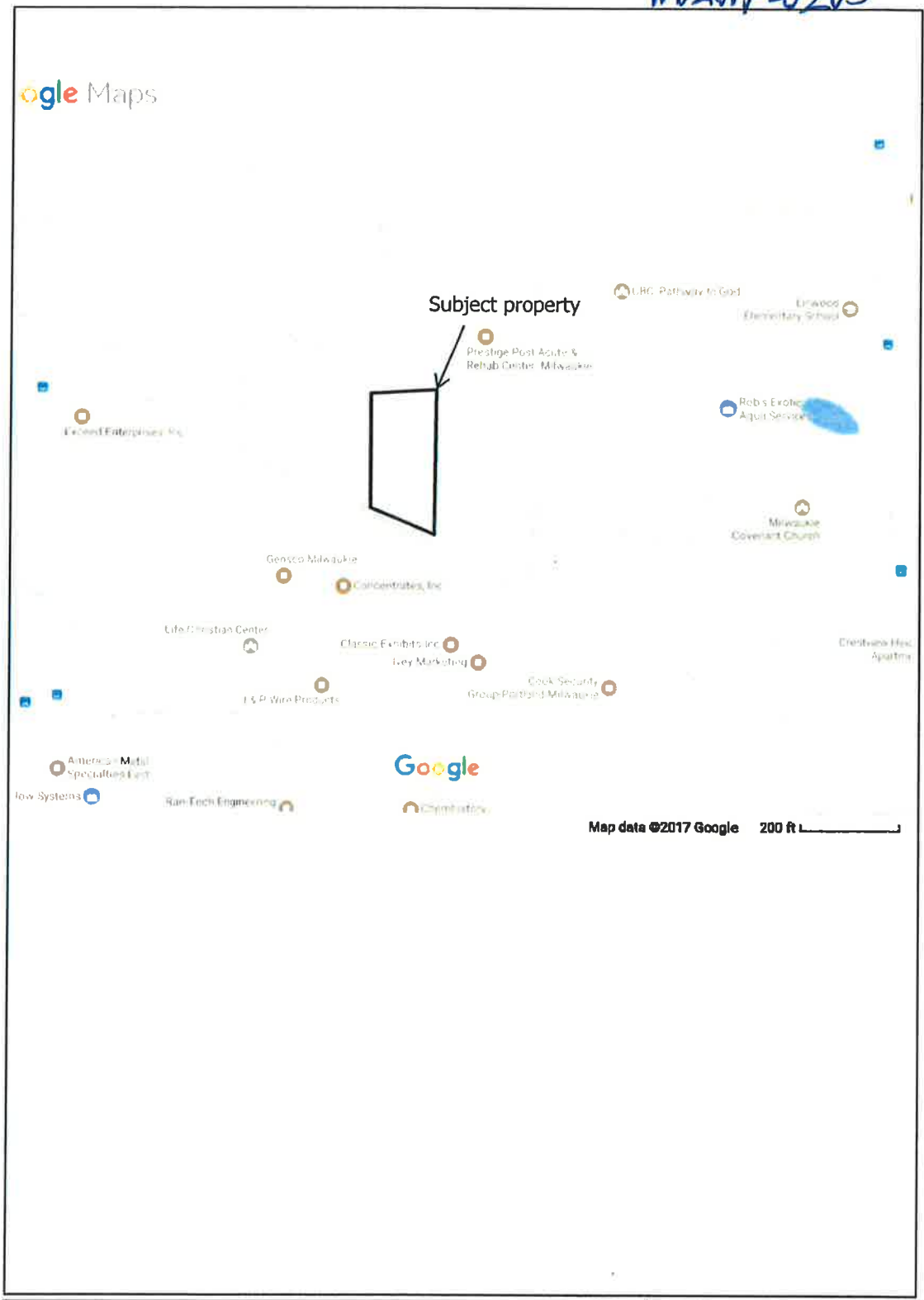


Figure 1: Location Map
Railroad Avenue Estates
S&A 2463

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Aurora, OR, 97002
503.678.6007

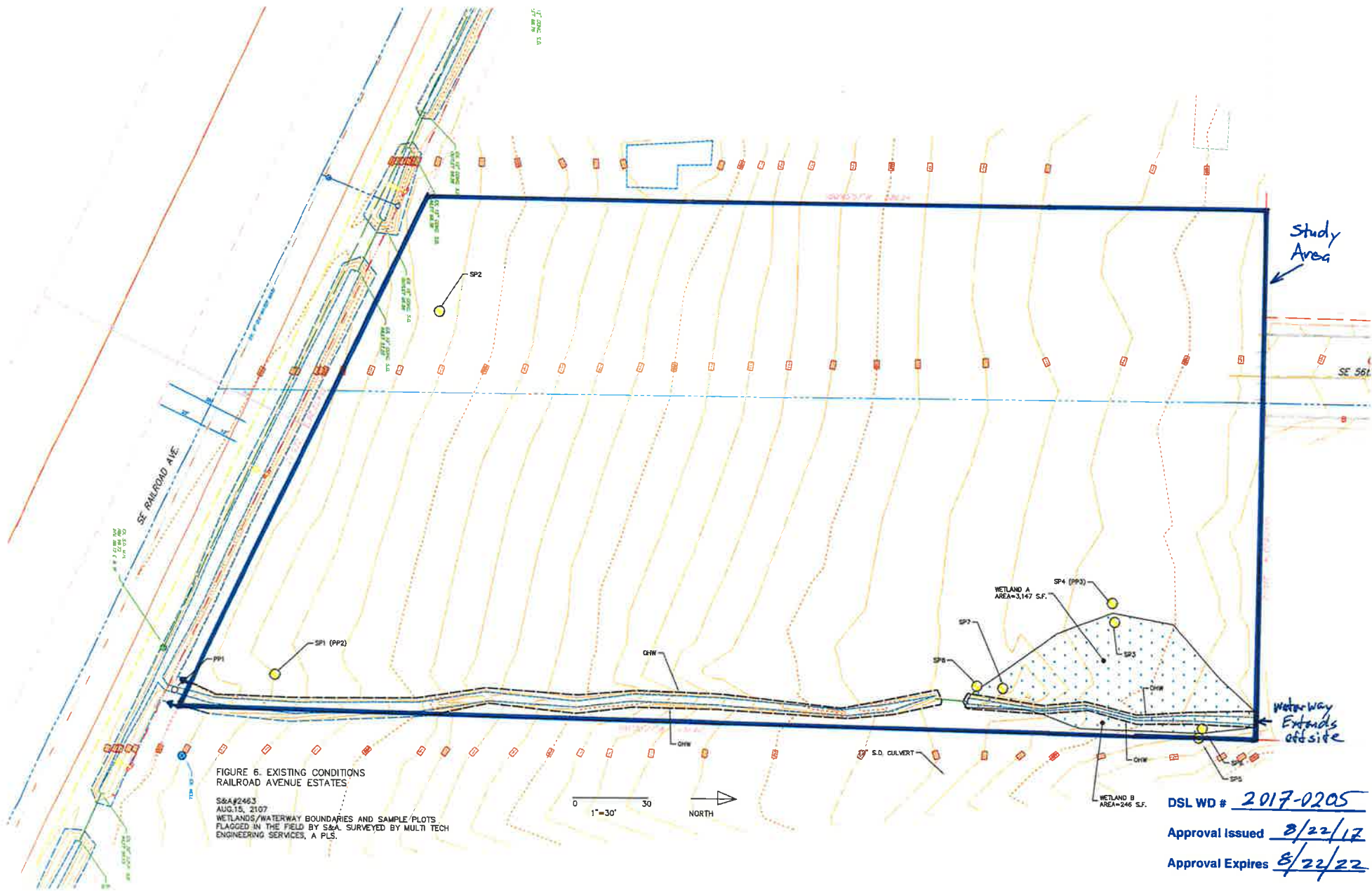


FIGURE 6. EXISTING CONDITIONS
RAILROAD AVENUE ESTATES.
S&A #2443
AUG 15, 2107
WETLANDS/WATERWAY BOUNDARIES AND SAMPLE PLOTS
FLAGGED IN THE FIELD BY S&A SURVEYED BY MULTI TECH
ENGINEERING SERVICES, A PLS.

DSL WD # 2017-0205
Approval Issued 8/22/17
Approval Expires 8/22/22

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

This form must be included with any wetland delineation report submitted to the Department of State Lands for review and approval. A wetland delineation report submittal is not "complete" unless the fully completed and signed report cover form and the required fee are submitted. Attach this form to the front of an unbound report or include a hard copy of the completed form with a CD/DVD that includes a single PDF file of the report cover form and report (minimum 300 dpi resolution) and submit to: **Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279**. A single PDF attachment of the completed cover form and report may be e-mailed to Wetland_Delineation@dsl.state.or.us. For submittal of PDF files larger than 10 MB, e-mail instructions on how to access the file from your ftp or other file sharing website. Fees can be paid by check or credit card. Make the check payable to the Oregon Department of State Lands. To pay the fee by credit card, call 503-986-5200.

<input checked="" type="checkbox"/> Applicant <input type="checkbox"/> Owner Name, Firm and Address: Karl Ivanov I&E Construction Inc 9550 SE Clackamas Road Clackamas, Oregon 97015	Business phone # 503.388.3620 Mobile phone # (optional) E-mail: karl@iecon.us
<input checked="" type="checkbox"/> Authorized Legal Agent, Name and Address: same	Business phone # Mobile phone # E-mail:
I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.	
Typed/Printed Name: <u>Karl Ivanov</u> Signature: _____ Date: <u>5/5/17</u> Special instructions regarding site access: _____	

Project and Site Information (using decimal degree format for lat/long, enter centroid of site or start & end points of linear project)		
Project Name: Railroad Avenue Estates	Latitude: 45.435356	Longitude: 122.604867
Proposed Use: Development	Tax Map # 1S 2E 31	
Project Street Address (or other descriptive location): Southern boundary on Railroad Way, nearest adjacent road to the east is Stanley Road one tax lot over	Township 1S Range 2E Section 31 QQ DD	
	Tax Lot(s) 3000	
City: Milwaukie County: Clackamas	Waterway: NWI Quad(s):	River Mile:

Wetland Delineation Information	
Wetland Consultant Name, Firm and Address: Schott and Associates/Cari Cramer PO Box 589 Aurora, OR 97002	Phone # 503.678.6007 Mobile phone # E-mail: caric@schottandassociates.com
The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.	
Consultant Signature: <u>Cari Cramer</u>	Date: <u>May 9, 2017</u>
Primary Contact for report review and site access is <input checked="" type="checkbox"/> Consultant <input type="checkbox"/> Applicant/Owner <input type="checkbox"/> Authorized Agent	
Wetland/Waters Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Study Area size: 1.72AC Total Wetland Acreage: 0.078AC	

Check Box Below if Applicable:		Fees: \$419.00
<input type="checkbox"/> R-F permit application submitted	<input checked="" type="checkbox"/> Fee payment submitted	
<input type="checkbox"/> Mitigation bank site	<input type="checkbox"/> Fee (\$100) for resubmittal of rejected report	
<input type="checkbox"/> Wetland restoration/enhancement project (not mitigation)	<input type="checkbox"/> No fee for request for reissuance of an expired report	
<input type="checkbox"/> Industrial Land Certification Program Site		
<input type="checkbox"/> Reissuance of a recently expired delineation		
Previous DSL # _____	Expiration date _____	
Other Information:		
Has previous delineation/application been made on parcel? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> If known, previous DSL # _____	
Does LWI, if any, show wetland or waters on parcel? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N		

For Office Use Only			
DSL Reviewer: _____	Fee Paid Date: ____/____/____	DSL WD # _____	
Date Delineation Received: ____/____/____	DSL Project # _____	DSL Site # _____	
Scanned: <input type="checkbox"/> Final Scan: <input type="checkbox"/>	DSL WN # _____	DSL App. # _____	

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S&A#:2463

(A) Landscape Setting and Land Use

The approximate 1.72 acre subject property is located north of SE Railroad Avenue in Milwaukie, Clackamas County, Oregon (T1S, R2E, Sec. 31, TL 3000). The property is bound by SE Railroad Avenue to the south, and grass fields to the east and west. Residential housing borders the property to the north.

Just inside the east property boundary is a ditched drainage that enters from the residential property to the north. The drainage follows the eastern property boundary and flows south across the property entering a road ditch which parallels SE Railroad Avenue. The site is very gently south sloping. The property mainly consists of an open grass field dominated by spike bentgrass (*Agrostis tenuis*). Foliage along the drainage consisted of an overstory of Oregon ash (*Fraxinus latifolia*) and cottonwood (*Populus balsamifera*) with English hawthorn (*Crataegus monogyna*), Himalayan blackberry (*Rubus armeniacus*) and various grasses in the understory. Along the southern property boundary a scattered row of English hawthorn were present. Near the southern boundary is a lone oak. The southwestern property boundary consists of a laurel hedge. Near the northern property boundary was a loose soil stockpile.

(B) Site Alterations

The site looks unchanged since at least 1994, with the exception of a few additional woody species.

(C) Precipitation Data and Analysis

The site was visited on September 15, 2016. Precipitation was recorded at 0.00 by the Milwaukie weather station on the day of the site visit (accuweather.com). Total precipitation recorded in the two weeks prior to the site visit was 0.62 inches. Precipitation for the month of June was 1.19 inches and below average but within normal range for the WETS table. Precipitation for July and August were within average range at 57% and 21% of average. Precipitation through the 15th of September 2016 was below compared against the Oregon City WETS average range for the entire month and was below this average. Between October 1st 2015 and September 15, 2016 a total of 47.76" of precipitation was recorded. This is 104% percent of the water year average through the month of September.

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S&A #: 2463

Table 1. Precipitation Summary and WETS Averages

Month	2015 Precipitation	WETS Average	WETS Range	Percent of Average
June	1.19	1.83	1.11-2.22	65
July	0.47	0.83	0.29-1.00	57
August	0.21	1.00	0.21-1.16	21
September*	0.62	1.93	0.86-2.41	32
Water Year**	47.76	46.05		104

*Recorded precipitation through September 15 (50% of the month) compared with average for the entire month.

**For water year Oct. 2015- Sept. 15, 2016 for accuweather precipitation.

(D) Site Specific Methods

Prior to visiting, site information was gathered, including recent and historical aerial photographs provided by Google Earth, the soil survey (NRCS web soil survey), the Local Wetland Inventory and National Wetland Inventory. The USGS topography map was also reviewed prior to site visits.

Schott and Associates initially walked the subject property to assess the presence or absence of onsite wetlands and waters. The *1987 Manual and Regional Supplement for Mountains and Valleys West Region* were used to determine presence or absence of State of Oregon wetland boundaries and the Federal jurisdictional wetlands.

Sample plots were placed where geomorphic location or vegetation indicated the possibility of wetlands. For each sample plot, data on vegetation, hydrology and soils was collected, recorded in the field and later transferred to data forms (Appendix B). Where a wetland was present paired plots were located in the adjacent upland to document the transition.

(E) Description of All Wetlands and Other Non-Wetland Waters

Just inside the east property boundary is a ditched drainage that enters from the residential property to the north. The drainage follows the eastern property boundary and flows south across the property entering a road ditch at the southern extent of the property which parallels Railroad Avenue. There was some flowing water at the time of the summer site visit within the northern portion of the drainage prior to the culvert. The drainage was dry south of the culvert to the road ditch at SE Railroad Avenue.

Based on soil, vegetation and hydrology data taken in the field two fringe PEM wetlands totaling 3,393sf were delineated onsite. A wetland was located on each side of the drainage at the north end of the drainage. Vegetation in the wetlands was dominated by reed canary grass (*Phalaris arundinacea*) (sp3,6,7) with some bentgrass (*Agrostis*) (sp7). Soils met the Redox Dark Surface (F6) hydric soil indicator. Saturation was observed by way of secondary indicators, Geomorphic Position and FAC Neutral Test. Best

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S&A#: 2463

Professional Judgment was used to determine presence of hydrology as the time of year was dry and both the soils and vegetation criteria were met. The adjacent upland contained the same vegetation as the wetland. No saturation was observed and soils criterion was not met.

(F) Deviation from LWI or NWI

The Local Wetland Inventory (LWI) for the City of Milwaukie, viewed on the DSL website, did not map any wetland or waterway onsite.

The NWI viewed on the DSL website did not show any waterways or wetlands mapped.

(G) Mapping Method

The sample plots and wetland boundary were flagged by Schott and Associates and surveyed by Multi Tech Engineering Services, Inc., a Professional Land Surveyor (PLS).

(H) Additional Information

none

(I) Results and Conclusions

Based on soil, vegetation and hydrology data taken in the field, one 3,147sf PEM wetland was delineated on the west side of a drainage and one 246sf PEM wetland was delineated on the east side of the drainage at the northeast corner of the site. A ditched drainage flowed south paralleling the eastern study area boundary.

The soil survey map for Clackamas County mapped Woodburn silt loam 3 to 8 percent slopes on a majority of the site. The Woodburn series is not listed as hydric, but may have hydric inclusions. A strip along the eastern property boundary is mapped Salem silt loam 0-7 percent slopes and is not considered a hydric soil.

The NWI and LWI did not map any wetlands or waterways on the site.

The topographic map showed a very slightly south sloping site.

(J) Disclaimer

This report documents the investigation, best professional judgment and the conclusions of the investigator. It is correct and complete to the best of my knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State lands in accordance with OAR 141-090-0005 through 141-090-005.

Appendix A: Maps

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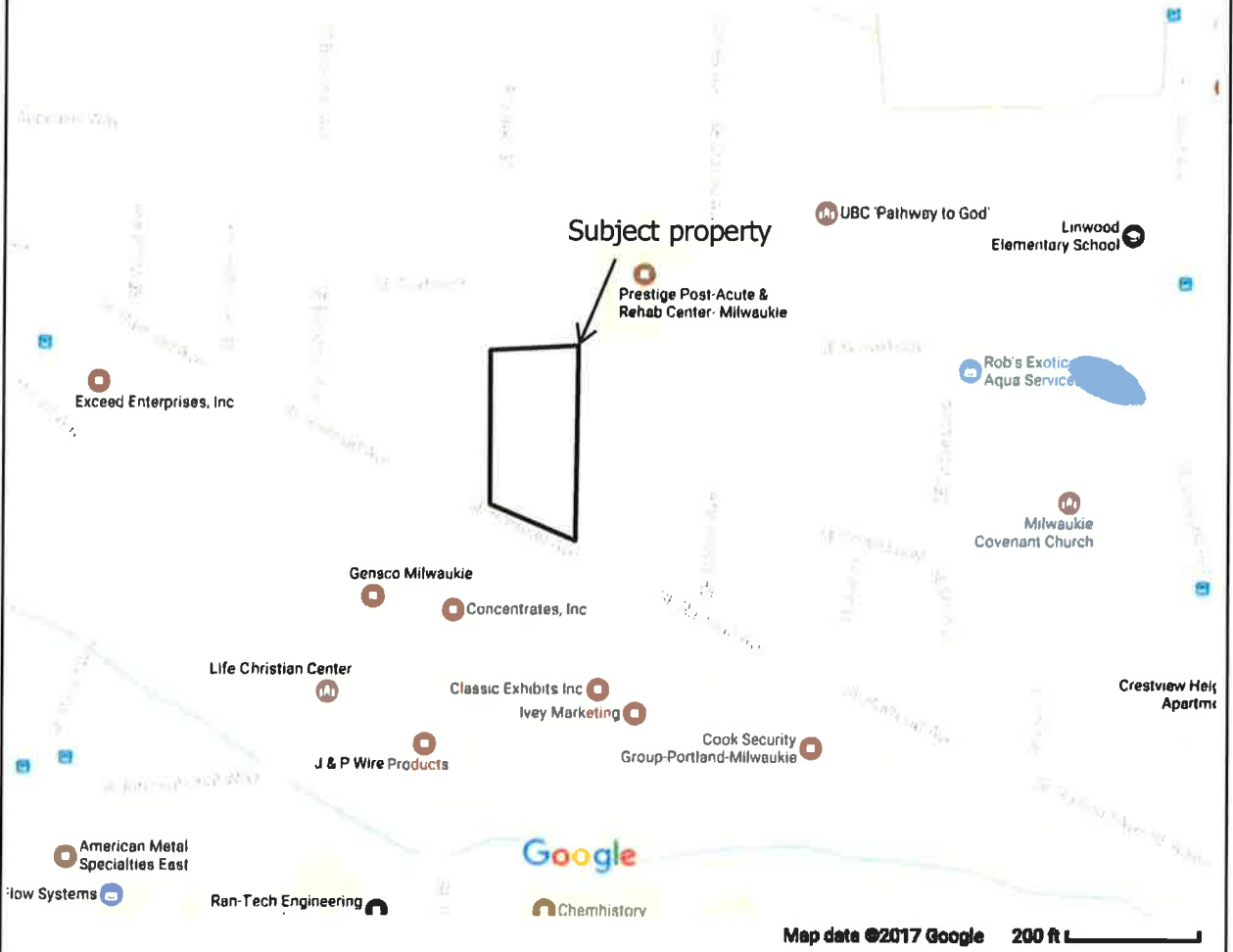


Figure 1: Location Map
Railroad Avenue Estates
S&A 2463

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NORTH URBAN AREA WETLAND INVENTORY AND ASSESSMENT

- Legend
- Sample site
 - R2 Wetland (unimpaired)
 - Wetland boundaries
 - Wetland depth
 - Drainage basin boundary
 - Wetland
 - Wetland (unimpaired)
 - Wetland (impaired)



WETLAND INVENTORY AND ASSESSMENT

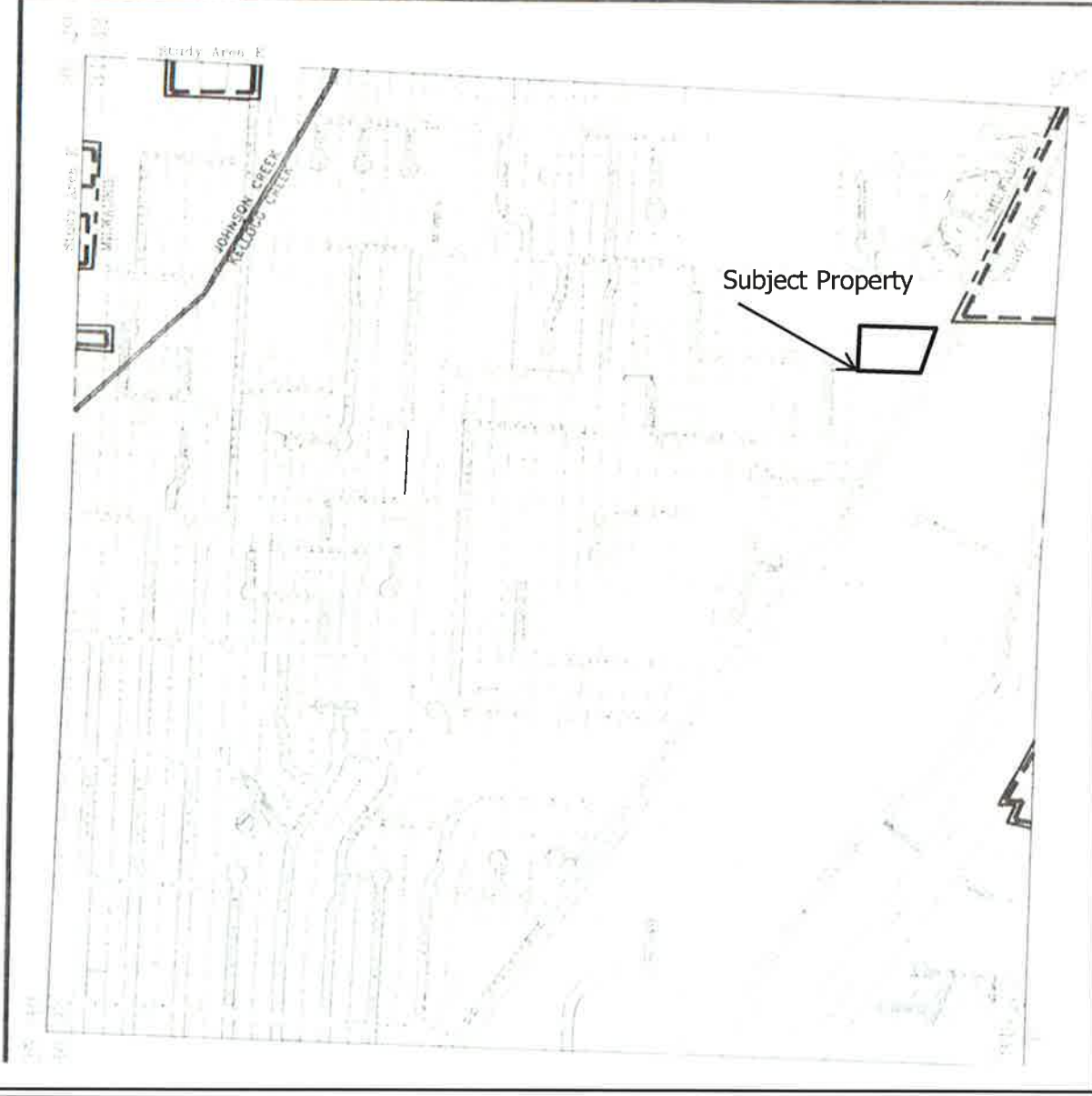
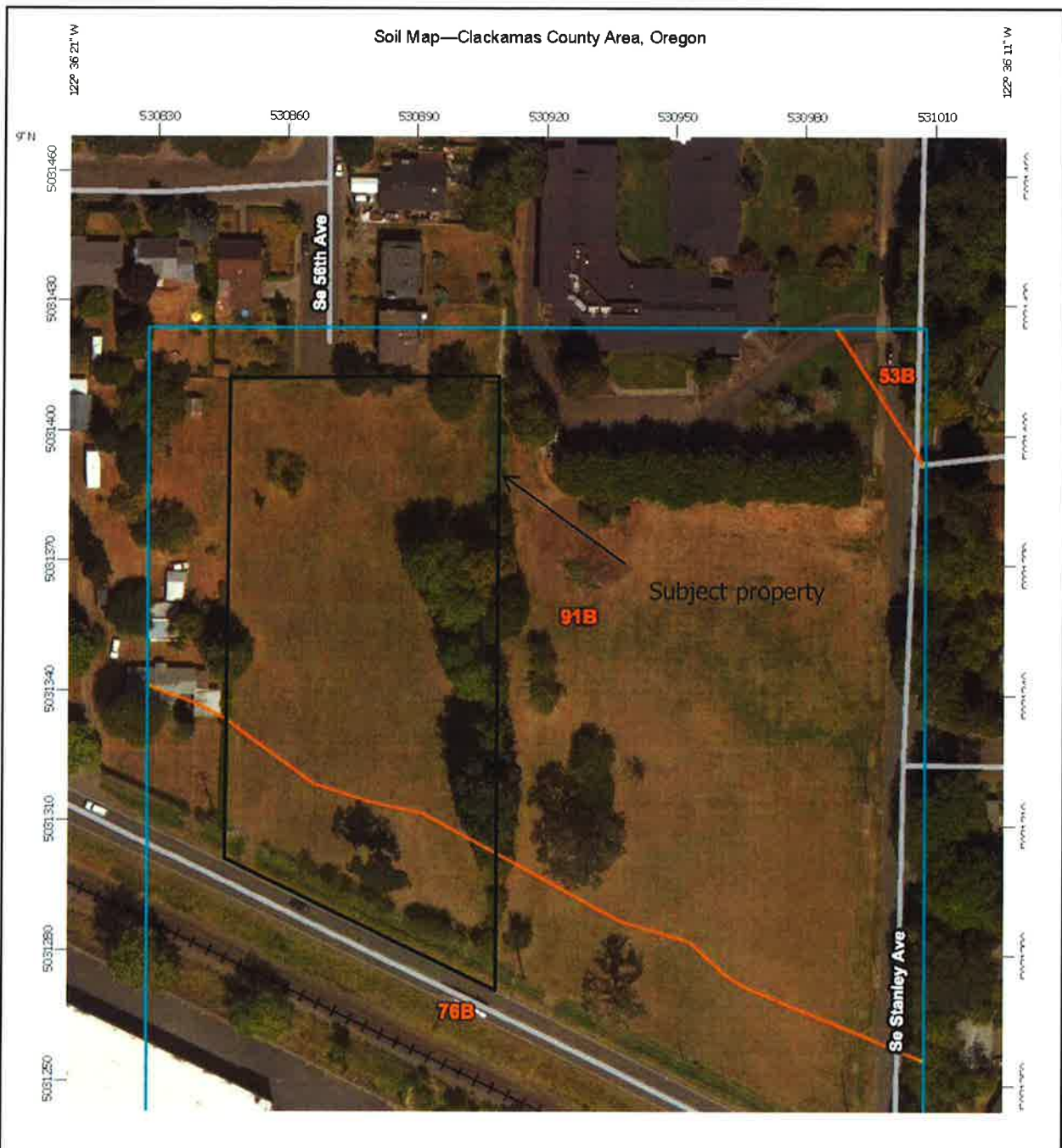


Figure 3: LWI Map
Railroad Avenue Estates
S&A2463

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Map Unit Legend

Clackamas County Area, Oregon (OR610)			
Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
53B	Latourell loam, 3 to 8 percent slopes	0.1	1.0%
76B	Salem silt loam, 0 to 7 percent slopes	3.2	35.8%
91B	Woodburn silt loam, 3 to 8 percent slopes	5.6	63.2%
Totals for Area of Interest		8.8	100.0%

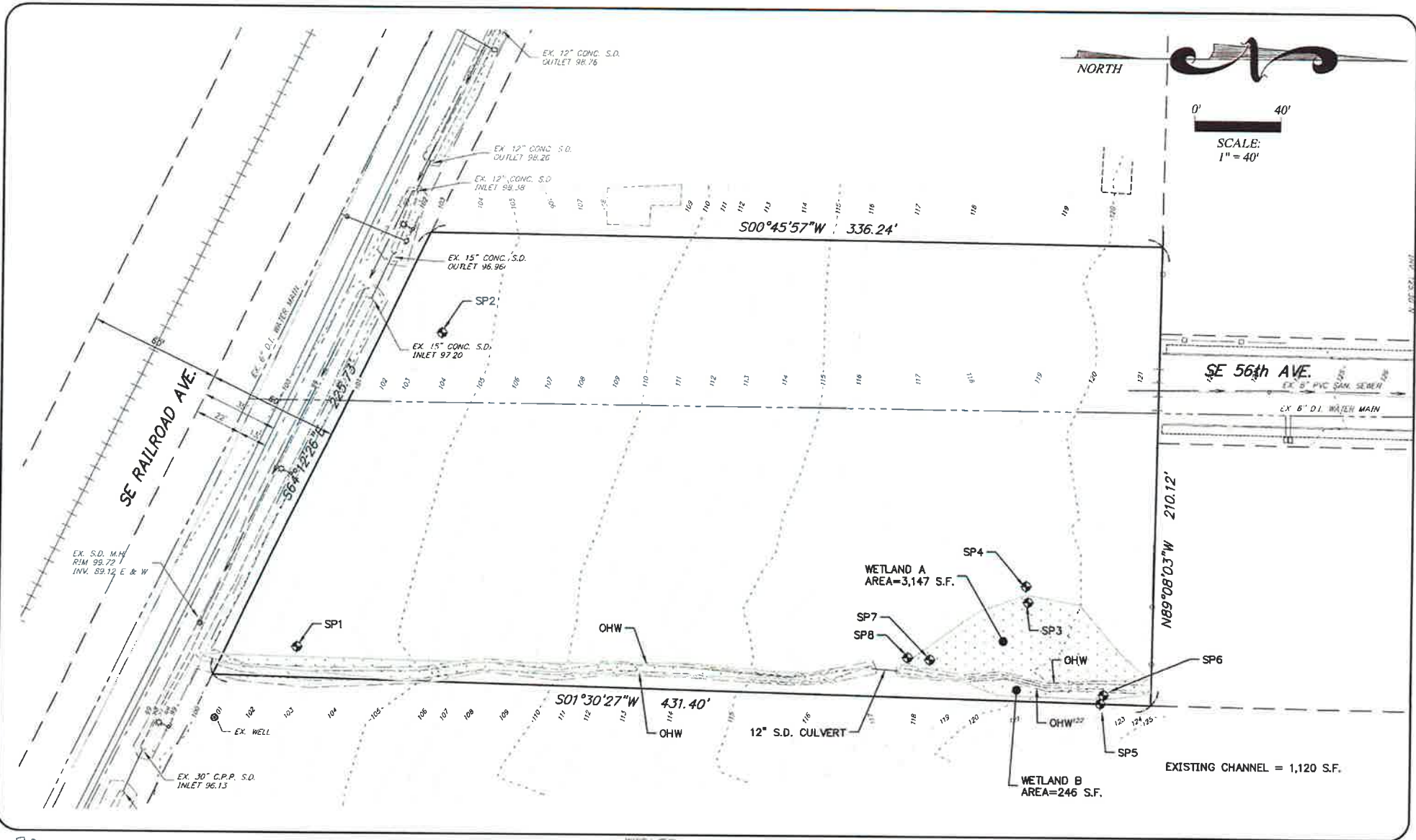
Figure 4: Clackamas County Soil Survey Map
 Railroad Avenue Estates
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Figure 5: Aerial Photograph-Google Earth 2016
Railroad Avenue Estates
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 WWW.MULTITECH-ENG.COM

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NOT FOR CONSTRUCTION UNLESS STAMPED APPROVED HERE

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 DIMENSIONS & NOTES TAKE PRECEDENCE OVER GRAPHICAL REPRESENTATION.

Design: M.D.G.
 Drawn: C.D.S.
 Checked: J.C.B.
 Date: APRIL 2017
 Scale: AS SHOWN
 AS-BUILT:

RAILROAD AVENUE ESTATES

EXISTING CONDITIONS PLAN

Drawing Number **6423**
 Sheet Number **1 of 1**

Appendix B: Data Forms

Schott & Associates

Ecologists and Wetland Specialists

PO Box 589, Aurora, OR, 97002 • (503) 678-6007 • Fax (503) 678-6011

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S&A#: 2463

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL3000 Railroad Way City/County: Milwaukie/Clackamas Sampling Date: September 15, 2016
 Applicant/Owner: Karl Ivanov/I&E Construction State: OR Sampling Point: 1
 Investigator(s): JT, CC Section, Township, Range: 31 1S 2E
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): convex Slope (%): 0-2
 Subregion (LRR): A Lat: 45.435356 Long: 122.604867 Datum: _____
 Soil Map Unit Name: Salem silt loam 0-7% slopes NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology Significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Remarks: <u>see corner of property</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)	1. <u>Agrostis tenuis</u>	<u>90</u>	<u>X</u> FAC	
2. <u>Schedonorus arundinaceus</u>	<u>5</u>		FAC	
3. <u>Trifolium repens</u>	<u>5</u>		FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	1. _____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
Remarks: _____				

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR3/3	100					SiL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (2 or more required)		
Primary Indicators (minimum of one required; check all that apply)					
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)					
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL3000 Railroad Way City/County: Milwaukie/Clackamas Sampling Date: September 15, 2016
 Applicant/Owner: Karl Ivanov/I&E Construction State: OR Sampling Point: 2
 Investigator(s): JT, CC Section, Township, Range: 31 1S 2E
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): convex Slope (%): 0-2
 Subregion (LRR): A Lat: 45.435356 Long: 122.604867 Datum: _____
 Soil Map Unit Name: Salem silt loam 0-7% slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation _____, Soil _____, or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: <u>sw corner of property</u>					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Agrostis tenuis</u>	<u>95</u>	<u>X</u>	<u>FAC</u>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Schedonorus arundinaceus</u>	<u>2</u>	_____	<u>FAC</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Trifolium repens</u>	<u>1</u>	_____	<u>FAC</u>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Dacus carota</u>	<u>2</u>	_____	<u>FACU</u>	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks: _____				

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14	10YR3/2	100					SiL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u> x </u>
--	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (2 or more required)		
Primary Indicators (minimum of one required; check all that apply)					
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)					
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					

Field Observations: Surface Water Present? Yes _____ No <u> x </u> Depth (inches): _____ Water Table Present? Yes _____ No <u> x </u> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <u> x </u> Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u> x </u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL3000 Railroad Way City/County: Milwaukie/Clackamas Sampling Date: September 15, 2016

Applicant/Owner: Karl Ivanov/I&E Construction State: OR Sampling Point: 3

Investigator(s): JT, CC Section, Township, Range: 31 1S 2E

Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): A Lat: 45.435356 Long: 122.604867 Datum: _____

Soil Map Unit Name: Woodburn silt loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil _____, or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No _____	

Remarks: _____

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)	_____	_____	_____	Hydrophytic Vegetation Indicators: ____ 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% ____ 3 - Prevalence Index is ≤3.0 ¹ ____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ____ 5 - Wetland Non-Vascular Plants ¹ ____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	_____	_____	_____	
1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>X</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover	<u>100</u>	_____	_____	
<u>Woody Vine Stratum</u> (Plot size: _____)	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	_____ = Total Cover
% Bare Ground in Herb Stratum <u>0</u>	_____	_____	_____	_____ = Total Cover

Remarks: _____

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR3/2	95	10YR 4/6	5	C	M	SiL	
6-20	10YR3/1	100					SiCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (2 or more required)		
Primary Indicators (minimum of one required; check all that apply)					
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)			
<input type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)					
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)					

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: BPJ,secondary indicators, dry season, other two criteria met

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL3000 Railroad Way City/County: Milwaukie/Clackamas Sampling Date: September 15, 2016
 Applicant/Owner: Karl Ivanov/I&E Construction State: OR Sampling Point: 4
 Investigator(s): JT, CC Section, Township, Range: 31 1S 2E
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): convex Slope (%): 0-1
 Subregion (LRR): A Lat: 45.435356 Long: 122.604867 Datum: _____
 Soil Map Unit Name: Woodburn silt loam NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum	(Plot size: _____)			
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum	(Plot size: <u>5'</u> _____)			
1. <u>Phalaris arundinacea</u>	100	X	FACW	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
100 = Total Cover				
Woody Vine Stratum	(Plot size: _____)			
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Hydrophytic Vegetation Indicators: _____ 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ 5 - Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				
Remarks:				

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20	10YR3/2	100					SiL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL3000 Railroad Way City/County: Milwaukie/Clackamas Sampling Date: September 15, 2016
 Applicant/Owner: Karl Ivanov/I&E Construction State: OR Sampling Point: 5
 Investigator(s): JT, CC Section, Township, Range: 31 1S 2E
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): convex Slope (%): 0-1
 Subregion (LRR): A Lat: 45.435356 Long: 122.604867 Datum: _____
 Soil Map Unit Name: Woodburn silt loam NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			

Remarks: east of drainage, north end of property

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)	
2. _____					
3. _____					
4. _____					
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____					
2. _____					
3. _____					
4. _____					
5. _____					
_____ = Total Cover					
Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>X</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: _____ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ 5 - Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
_____ = Total Cover					
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		
1. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>0</u>					

Remarks:

SOIL

Sampling Point:

5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	7.5YR3/2	100					SIL	
9-13	7.5YR3/2	65						
	2.5YR3/4	35					LC	mixed
13-18	7.5YR 3/1	40						
	7.5YR3/3	40						
	7.5YR3/4	20					LC	mixed

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):	Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Type: _____			
Depth (inches): _____			

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:		Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____			
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____			
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL3000 Railroad Way City/County: Milwaukie/Clackamas Sampling Date: September 15, 2016

Applicant/Owner: Karl Ivanov/I&E Construction State: OR Sampling Point: 6

Investigator(s): JT, CC Section, Township, Range: 31 1S 2E

Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): A Lat: 45.435356 Long: 122.604867 Datum: _____

Soil Map Unit Name: Woodburn silt loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes No

Are Vegetation _____, Soil _____, or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Remarks: east side of drainage at north end of property					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Phalaris arundinacea</u>	100	X	FACW	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
100 = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
Remarks:				

SOIL

Sampling Point:

6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10YR3/1	95	10YR 4/6	5	C	M	SiCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):	Hydric Soil Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Type: _____					
Depth (inches): _____					

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:		Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____					
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____					
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____					

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: BPJ, secondary indicators, dry season, other two criteria met

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL3000 Railroad Way City/County: Milwaukie/Clackamas Sampling Date: September 15, 2016

Applicant/Owner: Karl Ivanov/I&E Construction State: OR Sampling Point: 7

Investigator(s): JT, CC Section, Township, Range: 31 1S 2E

Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): A Lat: 45.435356 Long: 122.604867 Datum: _____

Soil Map Unit Name: Woodburn silt loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology Significantly disturbed? Are "Normal Circumstances" present? Yes No

Are Vegetation , Soil , or Hydrology Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			

Remarks: west side of drainage at north end of property

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species _____ x 2 = _____
4. _____	_____	_____	_____	FAC species _____ x 3 = _____
5. _____	_____	_____	_____	FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Phalaris arundinacea</u>	<u>50</u>	<u>X</u>	<u>FACW</u>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <u>Agrostis sp</u>	<u>45</u>	<u>X</u>	<u>FAC</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. <u>Schedonorus arundinaceus</u>	<u>5</u>		<u>FAC</u>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. _____	_____	_____	_____	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
6. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL3000 Railroad Way City/County: Milwaukie/Clackamas Sampling Date: September 15, 2016
 Applicant/Owner: Karl Ivanov/I&E Construction State: OR Sampling Point: 8
 Investigator(s): JT, CC Section, Township, Range: 31 1S 2E
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): convex Slope (%): 0-1
 Subregion (LRR): A Lat: 45.435356 Long: 122.604867 Datum: _____
 Soil Map Unit Name: Woodburn silt loam NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ Significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation _____, Soil _____, or Hydrology _____ Naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			

Remarks: west side of drainage, near culvert, at north end of property

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)	
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)	
4. _____					
_____ = Total Cover				Prevalence Index worksheet:	
Sapling/Shrub Stratum (Plot size: _____)				Total % Cover of: _____ Multiply by: _____	
1. _____				OBL species _____ x 1 = _____	
2. _____				FACW species _____ x 2 = _____	
3. _____				FAC species _____ x 3 = _____	
4. _____				FACU species _____ x 4 = _____	
5. _____				UPL species _____ x 5 = _____	
_____ = Total Cover				Column Totals: _____ (A) _____ (B)	
Herb Stratum (Plot size: <u>5'</u>)				Prevalence Index = B/A = _____	
1. <u>Phalaris arundinacea</u>	45	X	FACW	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Agrostis ps</u>	40	X	FAC		
3. <u>Schedonorus arundinaceus</u>	5		FAC		
4. <u>Lolium perenne</u>	5		FAC		
5. <u>Ranunculus repens</u>	5		FAC		
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
100 = Total Cover					
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
1. _____					
2. _____					
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>0</u>					

Remarks:

Appendix C: Ground Level Photographs

Schott & Associates

Ecologists and Wetland Specialists

PO Box 589, Aurora, OR, 97002 • (503) 678-6007 • Fax (503) 678-6011

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S&A#: 2463

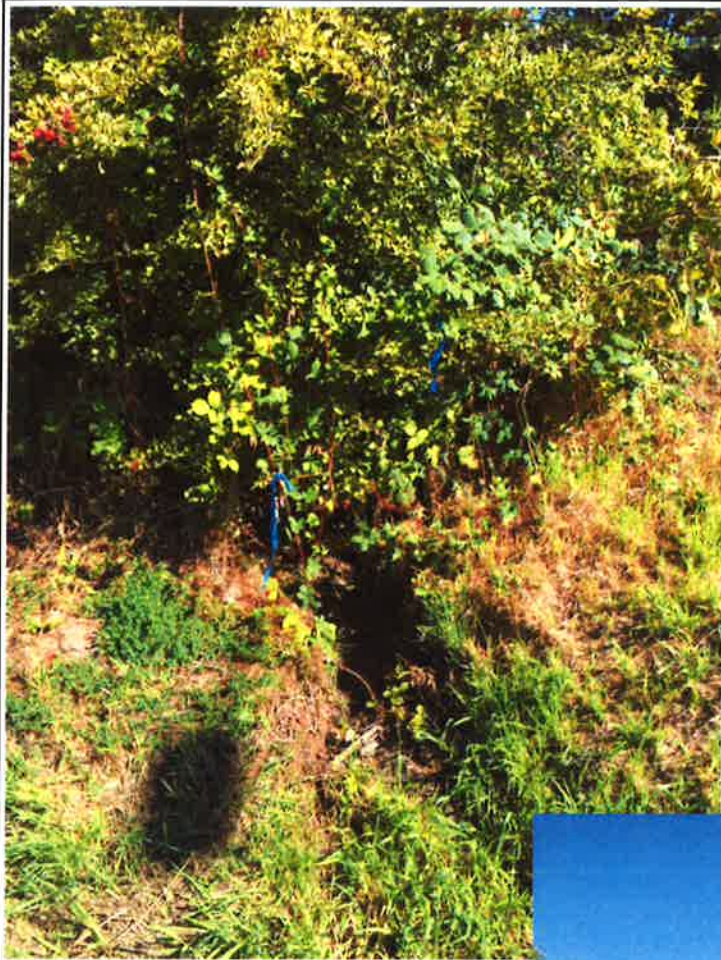


Photo Point 1 facing north to ditched drainage at Railroad Ave



Photo Point 1 facing west at road ditch parallel to Railroad Ave



Photo Point 2 at sp1
facing northwest

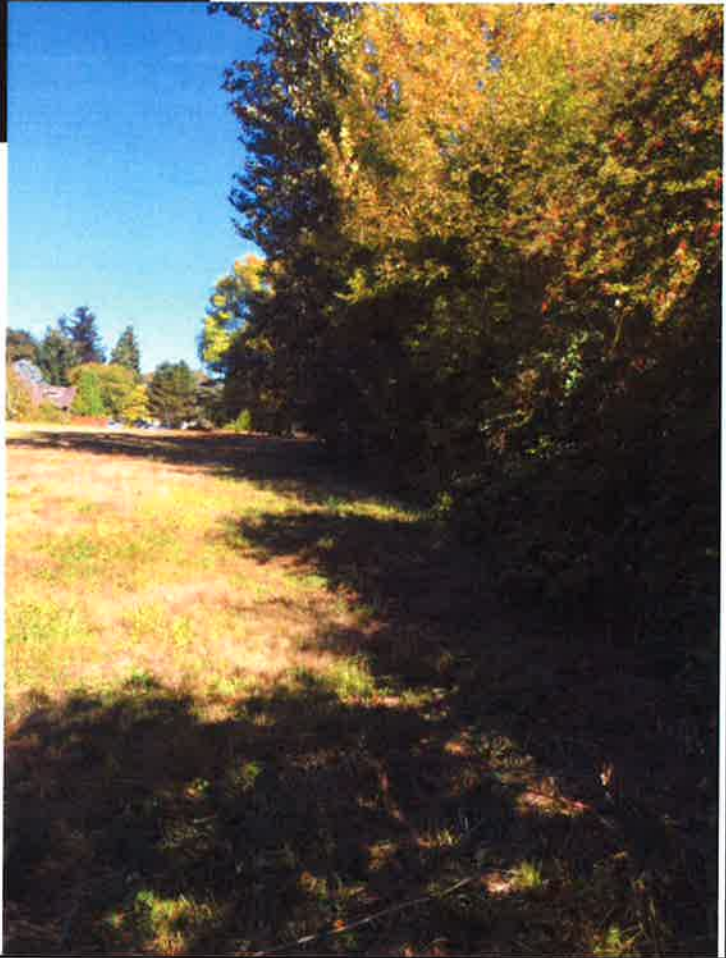


Photo Point 2 at sp1 facing north



Photo Point 3 at sp 4 facing northeast



Photo Point 3 at sp 4 facing southeast



Photo Point 3 at sp 4 facing west, northwest

Appendix D: References

- Environmental Laboratory, 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS.
- Environmental Laboratory, 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2.0)*, Wetlands Regulatory Assistance Program ERDC/EL TR-10-3 U.S. Army Engineer Research and Development Center. Vicksburg, MS.
- Federal Interagency Committee for Wetland Delineation, 1989. *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S.D.A. Soil Conservation Service, Washington, D.C. Cooperative technical publication. 138 pp.
- Federal Register, 1980. 40 CFR Part 230: Section 404(b)(1), *Guidelines for Specification of Disposal Sites of Dredged or Fill Material*, Vol. 45, No. 249, pp. 85352-85353, U.S. Govt. Printing Office, Washington, D.C.
- Federal Register, 1982. Title 33, *Navigation and Navigable Waters; Chapter II, Regulatory Programs of the Corps of Engineers*. Vol. 47, No. 138, p. 31810, U.S. Govt. Printing Office, Washington, D.C.
- Federal Register, 1986. 33 CFR Parts 320 through 330, *Regulatory Programs of the Corps of Engineers; Final Rule*, Vol. 51, No. 219 pp. 41206-41259, U.S. Govt. Printing Office, Washington, D.C.
- Kollmorgen Corporation, 1975. *Munsell Soil Color Charts*. Macbeth Division of Kollmorgen Corporation, Baltimore, MD.
- U.S. Army Corps of Engineers Research and Development Center. Cold Regions Research and Engineering Laboratory. 2016. *Western Mountains, Valleys & Coast 2016 Regional Wetland Plant List*
- U.S. Department of Agriculture, Web Soil Survey *Soil Survey of Clackamas County, Oregon*. U.S.D.A. Soil Conservation Service, Washington, D.C.,

Schott & Associates

Ecologists and Wetland Specialists

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S&A#: 2463

MAR 06 2017

Brandie
Jeff

March 3, 2017

Jeff Bolton
Multi/Tech Engineering
1155 SE 13th Ave
Salem OR 97302

Re: Preapplication Report

Dear Jeff:

Enclosed is the Preapplication Report Summary from your meeting with the City on February 16, 2017, concerning your proposal for action on property located at tax lot 3000 on SE Railroad Ave.

A preapplication conference is required prior to submittal of certain types of land use applications in the City of Milwaukie. Where a preapplication conference is required, please be advised of the following:

- Preapplication conferences are valid for a period of 2 years from the date of the conference. If a land use application or development permit has not been submitted within 2 years of the conference date, the Planning Director may require a new preapplication conference.
- If a development proposal is significantly modified after a preapplication conference occurs, the Planning Director may require a new preapplication conference.

If you have any questions concerning the content of this report, please contact the appropriate City staff.

Sincerely,

Alicia Martin
Administrative Specialist II

Enclosure

cc: Karl Ivanov
File

MAR 06 2017

Brandie
Jeff**CITY OF MILWAUKIE**

PreApp Project ID #: 17-003PA

PRE-APPLICATION CONFERENCE REPORT

This report is provided as a follow-up to a meeting that was held on 2/16/2017 at 10:00AM

Applicant Name: JEFF BOLTON
Company: MULTITECH
Applicant 'Role': REPRESENTATIVE
Address Line 1: 1155 SE 13TH ST.
Address Line 2:
City, State Zip: SALEM OR 97302

Project Name:**Description:****ProjectAddress:** RAILROAD AVE TAXLOT 3000 EAST OF 5525 SE RAILROAD**Zone:** R-7; Natural Resource Overlay**Occupancy Group:****ConstructionType:****Use:** Low Density (LD)**Occupant Load:****AppsPresent:** Jeff Bolton, Karl Ivanov**Staff Attendance:** Brett Kelper, Mary Heberling, Alex Roller**BUILDING ISSUES****ADA:****Structural:****Mechanical:****Plumbing:****Plumb Site Utilities:****Electrical:****Notes:** No comments.

Please note all drawings must be individually rolled. If the drawings are small enough to fold they must be individually folded.

FIRE MARSHAL ISSUES

Fire Sprinklers:

Fire Alarms:

Fire Hydrants:

Turn Arounds:

Addressing:

Fire Protection:

Fire Access:

Hazardous Mat.:

Fire Marshal Notes: No comments.

PUBLIC WORKS ISSUES

Water: A 6" ductile iron water main will be constructed to provide service to all properties within the subdivision. Milwaukie public works standards 4.0012 prohibits the construction of a permanent dead-end main greater than 250 feet in length. The 6" line will be connected to the main on Railroad Avenue and to the 6" main at the end of 56th Avenue to connect the two systems. 6" ductile iron water mains will also be constructed to any streets stubbed to the property line for adjacent property development. Fire hydrant requirements will be addressed by Clackamas County Fire.

The water System Development Charge (SDC) is based on the size of water meter serving the property. The corresponding water SDC will be assessed with installation of a water meter. Water SDC credit will be provided based on the size of any existing water meter serving the property removed from service. The water SDC will be assessed and collected at the time the building permits are issued.

Sewer: An 8" PVC sewer main will need to be extended to provide service to all newly constructed properties and to facilitate future development. Currently, the wastewater System Development Charge (SDC) is comprised of two components. The first component is the City's SDC charge of \$1,075 and the second component is the County's SDC for treatment of \$6,130 that the City collects and forwards to the County. Both SDC charges are per single family property. The wastewater SDC is assessed using a plumbing fixture count from Table 7-3 of the Uniform Plumbing Code. The wastewater SDC connection units are calculated by dividing the fixture count of new plumbing fixtures by sixteen. The wastewater SDC will be assessed and collected at the time the building permits are issued.

Storm: Submission of a storm water management plan by a qualified professional engineer is required as part of the proposed development. The plan shall conform to Section 2 - Stormwater Design Standards of the City of Milwaukie Public Works Standards. The storm water management plan shall demonstrate that the post-development runoff does not exceed the pre-development, including any existing storm water management facilities serving the development property. Also, the plan shall demonstrate compliance with water quality standards. The

City of Milwaukie has adopted the City of Portland 2008 Stormwater Management Manual for design of water quality facilities.

All new impervious surfaces, including replacement of impervious surface with new impervious surfaces, are subject to the water quality standards. See City of Milwaukie Public Works Standards for design and construction standards and detailed drawings. Applicant may treat stormwater in the ditch between the walking path and Railroad Avenue, with approved planting and infiltration design.

The storm SDC is based on the amount of new impervious surface constructed at the site. One storm SDC unit is the equivalent of 2,706 square feet of impervious surface. The storm SDC is currently \$845 per unit. The storm SDC will be assessed and collected at the time the building permits are issued.

Street:

The proposed development fronts the north side of SE Railroad Avenue, a collector route. The portion of SE Railroad Avenue fronting the proposed development has a right-of-way width of 60 feet and a paved width of 24 feet with undeveloped shoulders.

Frontage:

Chapter 19.700 of the Milwaukie Municipal Code, hereafter referred to as "Code", applies to partitions, subdivisions, and new construction.

Transportation Facility Requirements, Code Section 19.708, states that all rights-of-way, streets, sidewalks, necessary public improvements, and other public transportation facilities located in the public right-of-way and abutting the development site shall be adequate at the time of development or shall be made adequate in a timely manner.

Railroad Avenue

The Railroad Avenue cross-section includes the following:

- Two 10-foot travel lanes
- 4' shoulder
- Storm ditch separating the road from the walking path
- 12-foot asphalt path set 6" from north edge of right-of-way

Applicant will only be required to construct the walking path, and size the ditch to contain the water that it will carry. Railroad Avenue was recently paved; so additional resurfacing requirements will be required. All cuts to the street will require a 20' minimum length 2" grind and inlay according to Public Works Standards drawing 516. This replacement is only required in the lane that was cut into (shoulder, travel, etc).

New Interior Roads

According to Code Table 19.708.2 and the Transportation Design Manual, the minimum local street cross-section is a 50' right-of-way which includes the following:

- Two 9' travel lanes
- Two 6' parking lanes
- Two 4' landscape strips
- 5' setback sidewalk on both sides of the road

Applicant must provide justification to remove any components from this cross-section and/or reduce the right-of-way width according to MMC 19.708.2.B.

Right of Way:

The existing right-of-way on Railroad Avenue fronting the proposed development is of adequate width and no right-of-way dedication is required.

Driveways: Code Section 12.16.040.A states that access to private property shall be permitted with the use of driveway curb cuts and driveways shall meet all applicable guidelines of the Americans with Disabilities Act (ADA). Driveway approaches shall be improved to meet the requirements of Milwaukie's Public Works Standards.

Erosion Control: Per Code Section 16.28.020(C), an erosion control permit is required prior to placement of fill, site clearing, or land disturbances, including but not limited to grubbing, clearing or removal of ground vegetation, grading, excavation, or other activities, any of which results in the disturbance or exposure of soils exceeding five hundred square feet.

Code Section 16.28.020(E) states that an erosion control permit is required prior to issuance of building permits or approval of construction plans. Also, Section 16.28.020(B) states that an erosion control plan that meets the requirements of Section 16.28.030 is required prior to any approval of an erosion control permit.

Traffic Impact Study: Code Section 19.704.1(A) states that the City will determine whether a transportation impact study (TIS) is required. In the event the proposed development will significantly increase the intensity of use, a transportation impact study will be required. The City of Milwaukie Engineering Director will make this determination based on proposed preliminary subdivision design and the number of lots created. Based on the pre-app discussion, a TIS will not be required as proposed. Any other site plan will be reanalyzed.

PW Notes: Proposed street layout precluded neighboring taxlot 2900 and 3100 from developing. Majority of meeting centered on a revised design that included a stubbed street to the east, and a narrow connection to the west at the north end of the site. Final road layout will have to be approved before application is approved.

TRANSPORTATION SDC

The Transportation SDC will be based on the increase in trips generated by the new use per the Trip Generation Handbook from the Institute of Transportation Engineers. The SDC for transportation is \$1,921 per trip generated. Credits will be given for any demolished structures, which shall be based upon the existing use of the structures.

PARKS & RECREATION SDC

The parks & recreation System Development Charge (SDC) is triggered when application for a building permit on a new dwelling is received. Currently, the parks and recreation SDC for each Single-Family Residence is \$3,985.00. Credit is applied to any demolished structures and is based upon the existing use of the structures. The parks and recreation SDC will be assessed and collected at the time the building permits are issued.

REQUIREMENTS AT FINAL PLAT

- Engineered plans for public improvements (street, sidewalk, and utility) are to be submitted and approved prior to start of construction. Full-engineered design is required along the frontage of the proposed development.

- The applicant shall pay an inspection fee of 5.5% of the cost of public improvements prior to start of construction.

- The applicant shall provide a payment and performance bond for 100% of the cost of the public improvements prior to the start of construction.

- The applicant shall provide a final approved set of Mylar "As Constructed" drawings to the City of Milwaukie prior to the final inspection.

- The applicant shall provide a maintenance bond for 100% of the cost of the public improvements prior to the final inspection

PLANNING ISSUES

Setbacks:

Per Milwaukie Municipal Code (MMC) 19.301.4, setbacks for the R-7 zone are 20 feet front and rear yard, and side yard setbacks of at least 5 feet on one side and 10 feet on the other. In the R-5 zone, minimum front and rear yards are 20 ft, side yards are 5 ft, and street-side yards are 15 ft (for corner lots).

Per MMC 19.501.2, setbacks for any yard bordering SE Railroad Avenue are measured 30 feet from the right-of-way (ROW) centerline (e.g., a rear yard on SE Railroad Avenue must be at least 50 feet from the right of way center line (30 foot ROW setback + 20 foot rear yard setback))

Landscape:

In the R-5 zone, a minimum of 25% of the site must be landscaped, including at least 40% vegetation in the front yard (measured from the front property line to the front face of the house). Vegetated areas may be planted in trees, grass, shrubs, or bark dust for planting beds, with no more than 20% of the landscaped area finished in bark dust (as per MMC Subsection 19.504.7). A maximum of 35% of any R-5 lot may be covered by structures, including decks or patios over 18 in above grade.

The minimum landscaped area for the R-7 zone is 30% of lot area.

Parking:

As per the off-street parking standards of MMC Chapter 19.600, properties that contain single-family dwellings must provide at least 1 off-street parking space per dwelling unit. As per MMC Subsection 19.607.1, required residential off-street parking spaces must be at least 9 ft wide and 18 ft deep. The required spaces cannot be located in a required front or street-side yard and must have a durable and dust-free hard surface.

Uncovered parking spaces and maneuvering areas cannot exceed 50% of the front yard area and 30% of the required street-side yard area. No more than 3 residential parking spaces are allowed within the required front yard. Parking areas and driveways on the property shall align with the approved driveway approach and shall not be wider than the approach within 10 ft of the right-of-way boundary. However, effective as of March 9, 2017, the driveway approach shall not be wider than the approach within 5 ft of the right-of-way boundary. Alternately, a gradual widening of the onsite driveway is allowed to the 10 point at a ratio of 1:1 (driveway width: distance onto property), starting 2ft behind the front property line.

Transportation Review: The proposed subdivision will trigger the requirements of MMC Chapter 19.700 Public Facility Improvements. Please see the Public Works notes for more information about the requirements of MMC 19.700 and the necessary right-of-way dedication and street frontage improvements.

Application Procedures: 1. Subdivision (Type III review)

The subject property is comprised of 1 large lot. The minimum size for new lots in the R-5 zone is 5,000 sq ft. The proposed development requires replatting the subject property using the subdivision process. Standards and requirements for land division can be found Title 17 of Milwaukie Municipal Code: <http://www.qcode.us/codes/milwaukie/view.php?topic=17&frames=off>.

Preliminary and Final Plat checklists and procedures can be found at:
<http://www.milwaukieoregon.gov/planning/plat-checklists>.

The current fee for subdivision applications (preliminary plat review) is \$4,400, plus \$100 for each lot over 4 lots.

2. Natural Resource Review – Boundary Verification (Type II review)

A boundary verification process is required for the designated Natural Resource areas on the lot and lot to the east (TL 2900). Corrections to mapped Water Quality Resources (WQRs) are subject to a Type II review. The applicant is advised to review this section carefully to be sure that all relevant steps are followed. The boundary verification application can be submitted with the application for natural resource review required for the subdivision (see Note 3, below). Review criteria can be found in MMC 19.402.15.A.2: http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_400-19_402-19_402_15

3. Natural Resource Review – Subdivision (Type III review)

If any lots from the proposed subdivision will be in a designated Natural Resource area, the application is subject to Type III Natural Resource review. Standards for subdivisions within Natural Resource areas can be found in MMC 19.402.13.I: http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_400-19_402-19_402_13

4. Zoning Map Amendment (Type III review)

The proposal includes rezoning the subject property from R-7 to R-5. The applicant is encouraged to include Tax Lots 02900, 03100, and 01300 in the zone change proposal as well, for a total of 4 lots to be re-zoned. Regardless, the City Attorney has determined that the process for the proposed zone change is quasi-judicial in nature and subject to Type III review. The process and approval criteria for a zone change (zoning map amendment) can be found in MMC 19.902.6: http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_900-19_902&frames=off.

5. Comprehensive Plan Map Amendment (Type IV review)

As part of the proposal to rezone the property to R-5, a concurrent amendment to the Comprehensive Plan Map 4 – Land Use is required (from Low Density to Moderate Density).

The approval criteria for a quasi-judicial map amendment can be found in MMC 19.902.3.B: http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_900-19_902&frames=off.

The application for the zone/comp plan change can be submitted concurrently with the subdivision/Natural resources application. The zone/comp plan change application could be the primary issue to be decided, then the subdivision.

The current fee for Type II review is \$1,000; the fee for Type III review is \$2,000. For Type III Natural Resource applications, a refundable deposit of \$2,750 is required at the time of submittal, to cover the actual costs of the City's review of the applicant's technical report for Natural Resource review.

The applicant should submit 5 complete copies of all application materials for the City's initial review. A determination of the application's completeness will be issued within 30 days. If deemed incomplete, additional information will be requested. If deemed complete, additional copies of the application may be required for referral to other departments, the associated Neighborhood District Association (NDA), and other relevant parties and agencies. City staff will inform the applicant of the total number of copies needed.

For Type III review, once the application is deemed complete, a public hearing with the Planning Commission will be scheduled. Staff will determine the earliest available date that allows time for preparation of a staff report (including a recommendation regarding approval) as well as provision of the required public notice to property owners and residents within 300 ft of the subject property, at least 20 days prior to the public hearing. A sign giving notice of the application must be posted on the subject property at least 14 days prior to the hearing.

Once the Planning Commission makes a decision on the application, notice of the decision will be issued, initiating a 15-day appeal period for the applicant and any party who has established standing by submitting comments or participating in the public hearing process.

Following the appeal period, the applicant may submit the necessary Final Plat application, which will require Type I review (current fee, \$200). The final plat is subject to Type I administrative review. The application requirements are found in MMC 17.16.070 and MMC 17.24. The approval criteria are found in MMC 17.12.050. Because the final plat must follow the approval of the preliminary subdivision plat, it is not eligible for concurrent review.

Prior to submitting the subdivision application, the applicant is encouraged to present the project at the regular meetings of the Linwood NDA (7:00 p.m. on the second Thursday of every month at Linwood Elementary library, 11909 SE Linwood Ave): <http://www.milwaukieoregon.gov/citymanager/linwood-nda> Linwood NDA Chair: Zac Perry, Linwoodzp@gmail.com .

Natural Resource Review: The site for the proposed subdivision does have Water Quality Resource (WQR) and Habitat Conservation (HCA) areas on the east boundary line of the site. Per MMC Subsection 19.402.12.A, an Impact Evaluation and Alternatives Analysis will need to be done. Specific information about this Analysis and the approval criteria can be found at: http://www.qcode.us/codes/milwaukie/view.php?topic=19-19_400-19_402-19_402_12

With the evaluation and alternatives analysis, there may be a need for the applicant to apply for a boundary verification and natural resources subdivision standards. More information about those land use reviews are listed in the Application Procedures section.

Lot Geography: The subject property is comprised of 1 lot, with a total area of approximately 1.72 acres. The property has frontage on SE Railroad Ave to the south.

Minimum standards:

R-7 Zone: 7,000 square feet area, 60-foot width, 80-foot depth, 35-foot street frontage

R-5 Zone: 5,000 square feet area, 50-foot width, 80-foot depth, 35-foot street frontage

Lots in the subdivision are subject to the requirements of MMC Chapter 17.28, Design Standards. Flag lots are not allowed in newly platted subdivisions (MMC 17.28.080). The following are also criteria for lot design (MMC 17.28.040): lots are required to be rectilinear where practical; the lateral change in direction for a compound lot line can not exceed 10% of the distance between opposing lot corners; and double frontage lots are generally not allowed.

The above lot design standards do not apply to areas for parks, tracts, or other areas that will not be developed.

Planning Notes: The Planning Department strongly suggests conferring with the Linwood Neighborhood District Association (NDA) about the proposal. The NDA Chair is Zac Perry, who can be reached at Linwoodzp@gmail.com. The City of Milwaukie refers all applications to NDAs for comments, and the Planning Commission and City Council give serious consideration to the views of the NDAs when

making decisions.

Staff's general response to the zone change proposal is that it seems appropriate given the request to provide street connections to the surrounding properties for potential future development. The zone change would allow the applicant to be more flexible with their subdivision plan. The loss of R-7 zone area does not raise concern for Planning staff. The R-7 zone is also the largest zone in the city, comprising over 40% of the land area (including right of way). By comparison, R-5 comprises just over 10% of the land area.

As noted previously, staff encourages the applicant to contact the owners of Tax Lots 02900, 03100, and 01300 and attempt to include them in the zone change proposal. This would result in a more consistent zone pattern in this area.

The applicant is encouraged to review MMC Chapter 19.1200 Solar Access Protection, as its provisions must be addressed in the application narrative.

For reference, the density range allowed in the R-7 zone is 5.0 – 6.2 dwelling units per net acre, and 7.0-8.7 dwelling units per net acre for the R-5 zone.

The full zoning code can be found here:

<http://www.qcode.us/codes/milwaukie/view.php?topic=19&frames=off>.

The Comprehensive Plan can be found here:

http://www.qcode.us/codes/milwaukie/view.php?topic=comprehensive_plan&frames=off.

ADDITIONAL NOTES AND ISSUES

County Health Notes:

Other Notes:

This is only preliminary preapplication conference information based on the applicant's proposal and does not cover all possible development scenarios. Other requirements may be added after an applicant submits land use applications or building permits. City policies and code requirements are subject to change. If you have any questions, please contact the City staff that attended the conference (listed on Page 1). Contact numbers for these staff are City staff listed at the end of the report.

Sincerely,

City of Milwaukie Development Review Team

BUILDING DEPARTMENT

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Geoff Nettleton - Civil Engineer - 503-786-760
Rick Buen - Engineering Tech II - 503-786-7610
Alex Roller - Engineering Tech I - 503-786-7695

COMMUNITY DEVELOPMENT DEPARTMENT

Alma Flores - Comm. Dev. Director - 503-786-7652
Avery Pickard - Admin Specialist - 503-786-7656
Alicia Martin - Admin Specialist - 503-786-7600
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PLANNING DEPARTMENT

Dennis Egner - Planning Director - 503-786-7654
David Levitan - Senior Planner - 503-786-7627
Brett Kelter - Associate Planner - 503-786-7657
Vera Koliass - Associate Planner - 503-786-7653

CLACKAMAS FIRE DISTRICT

Mike Boumann - Lieutenant Deputy Fire Marshal - 503-742-2673
Matt Amos - Fire Inspector - 503-742-2661

