



Department of Land Conservation and Development 635 Capitol Street, Suite 150 Salem, OR 97301-2540 (503) 373-0050 Fax (503) 378-5518 www.lcd.state.or.us



NOTICE OF ADOPTED AMENDMENT

12/22/2011

TO: Subscribers to Notice of Adopted Plan or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: City of Happy Valley Plan Amendment DLCD File Number 006-11

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A Copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office. This amendment was submitted without a signed ordinance.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: Friday, January 06, 2012

This amendment was submitted to DLCD for review prior to adoption pursuant to ORS 197.830(2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

- *<u>NOTE:</u> The Acknowledgment or Appeal Deadline is based upon the date the decision was mailed by local government. A decision may have been mailed to you on a different date than it was mailed to DLCD. As a result, your appeal deadline may be earlier than the above date specified. <u>NO LUBA</u> Notification to the jurisdiction of an appeal by the deadline, this Plan Amendment is acknowledged.
- Cc: Justin Popilek, City of Happy Valley Angela Lazarean, DLCD Urban Planner Jennifer Donnelly, DLCD Regional Representative

Angela Lazarean, DLCD Urban Planner

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This Form 2 must be mailed to DLCD within <u>5-Working Da</u> <u>Ordinance is signed</u> by the public Official Designated by and all other requirements of ORS 197.615 and OAR	A mys after the Final M LAND CONSERVATION P AND DOCTOR VIEW ON THE STREET STREE
Jurisdiction: City of Happy Valley	Local file number: CPA-05-11 / LDC-06-11 Date Mailed: 12/16/2011
Date of Adoption: 12/13/2011 Was a Notice of Proposed Amendment (Form 1) m	
Comprehensive Plan Text Amendment	Comprehensive Plan Map Amendment
Land Use Regulation Amendment	Zoning Map Amendment
New Land Use Regulation	Other:
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DLCD file No.

Please list all affected State or Federal Agencies, Local Governments or Special Districts:

City of Happy Valley Clackamas County Metro

City: Happy Valley

Local Contact: Justin Popilek Associate Planner Address: 16000 SE Misty Drive Phone:(503)783-3810Extension:Fax Number:503-658-5174E-mail Address:justinp@ci.happy-valley.or.us

ADOPTION SUBMITTAL REQUIREMENTS

<u>This Form 2 must be received by DLCD no later than 5 working days after the ordinance has been signed by</u> <u>the public official designated by the jurisdiction to sign the approved ordinance(s)</u> per ORS <u>197.615</u> and <u>OAR Chapter 660, Division 18</u>

1. This Form 2 must be submitted by local jurisdictions only (not by applicant).

Zip: 97086-

- 2. When submitting the adopted amendment, please print a completed copy of Form 2 on light green paper if available.
- 3. <u>Send this Form 2 and one complete paper copy (documents and maps) of the adopted amendment to the address below.</u>
- 4. Submittal of this Notice of Adoption must include the final signed ordinance(s), all supporting finding(s), exhibit(s) and any other supplementary information (ORS 197.615).
- 5. Deadline to appeals to LUBA is calculated **twenty-one (21)** days from the receipt (postmark date) by DLCD of the adoption (ORS 197.830 to 197.845).
- 6. In addition to sending the Form 2 Notice of Adoption to DLCD, please also remember to notify persons who participated in the local hearing and requested notice of the final decision. (ORS 197.615).
- 7. Submit **one complete paper copy** via United States Postal Service, Common Carrier or Hand Carried to the DLCD Salem Office and stamped with the incoming date stamp.
- 8. Please mail the adopted amendment packet to:

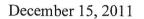
ATTENTION: PLAN AMENDMENT SPECIALIST DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT 635 CAPITOL STREET NE, SUITE 150 SALEM, OREGON 97301-2540

9. Need More Copies? Please print forms on 8½ -1/2x11 green paper only if available. If you have any questions or would like assistance, please contact your DLCD regional representative or contact the DLCD Salem Office at (503) 373-0050 x238 or e-mail plan.amendments@state.or.us.

http://www.oregon.gov/LCD/forms.shtml

Updated April 22, 2011

Mayor Honorable Lori DeRemer



City of Happy Valley

City Manager Jason Tuck

File No. CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11 (Valley View Evangelical Church)

NOTICE OF DECISION

This is official notice of action taken by the City of Happy Valley Planning Commission at a public hearing on December 13, 2011, with regard to an application by Valley View Evangelical Church for a Comprehensive Plan Map/Zoning Map and Clackamas Regional Center Area Design Plan Amendment, Three-Parcel Partition, and Environmental Review Permit (File No. CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11) on property located north of SE Sunnyside Road between SE 114th Court and SE 117th Avenue. The subject property is described as Clackamas County Assessor Map No. T1S, R2E, Section 34D: Tax Lot 1600.

At the public hearing, the Planning Commission voted to approve CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11 based upon submitted information, public testimony and deliberations of the Planning Commission. Copies of the original Staff Report for CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11 are available upon request.

This action of the Planning Commission is subject to an appeal to the City Council per the provisions of Section 16.61.040 of Title 16 (Land Development Code) of the City of Happy Valley Municipal Code. An appeal of this decision must be filed within 14 days of the mailing of this Notice of Decision. City Planning Division staff (503-783-3800) can provide information regarding forms, fees, and the appeal process. Issues which may provide the basis for an appeal to the City Council shall be submitted in writing, accompanied by a filing fee of \$1,000 plus attorney's fees (\$2,500 deposit required), prior to the expiration of the appeal period. Issues shall be raised with sufficient specificity to enable the Community Development Director or designee to respond to the issue. If no appeal is filed by **Monday, January 2, 2012, at 5:00 p.m.**, this decision shall be deemed final.

Kustin Popilek Associate Planner

Monty Hurley, AKS Engineering (via e-mail)
 Chris Goodell, AKS Engineering (via e-mail)
 Martha Waldemar, Sunnyside United Neighbors CPO (via e-mail)
 Interested Parties

16000 SE Misty Drive Happy Valley, Oregon 97086 Telephone: (503) 783-3800 Fax: (503) 658-5174 Website: www.ci.happy-valley.or.us

Preserving and enhancing the safety, livability and character of our community

Mayor Honorable Lori DeRemer



City Manager Jason A. Tuck

CITY OF HAPPY VALLEY

STAFF REPORT TO THE PLANNING COMMISSION

December 13, 2011

CLACKAMAS REGIONAL CENTER AREA DESIGN PLAN AMENDMENT AND COMPREHENSIVE PLAN MAP/ZONING MAP AMENDMENT APPLICATION (CPA-05-11/LDC-06-11); THREE-PARCEL PARTITION (LP-02-11); AND, ENVIRONMENTAL REVIEW PERMIT (ERP-01-11)

I. <u>GENERAL INFORMATION</u>

PROPOSAL:

The applicant, Valley View Evangelical Church, is proposing to amend the City's Comprehensive Plan Map/Zoning Map ("one-map" system) from "Low Density Residential" (R-10) to a combination of "Mixed Use Commercial" (MUC) and "Institutional and Public Use" (IPU). The proposed amendments result in the need for the City to consider amendments to the Clackamas Regional Center Area Design Plan (within the city limits) by implementing a change from "Low Density Residential" (LDR) to "High Density Residential" (HDR) and "Public and Community Use" (PCU) within the Design Plan.. The applicant has also proposed to process a Partition (three-parcels) and an Environmental Review Permit concurrent with the proposed amendments, which although a different review type (Type II versus Type III decisions), staff has opted to "bundle" and include within the greater application to illustrate the various proposals and resultant conditions associated with the subject site, as a single Type III decision. The subject site is an approximately 13.43-acre Lot of Record located north of SE Sunnyside Road, between SE 114th Court and SE 117th Avenue, and is further described as Clackamas County Assessor Map Numbers 12E34D: Tax Lot 1600.

APPLICANT AND PROPERTY OWNER:

Valley View Evangelical Church 11501 SE Sunnyside Road Happy Valley, OR 97086

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16000 SE Misty Drive Happy Valley, Oregon 97086 Telephone: (503) 783-3800 Fax: (503) 658-5174 Website: www.ci.happy-valley.or.us

Preserving and enhancing the safety, livability and character of our community

December 13, 2011

APPLICANT'S REPRESENTATIVE:

AKS Engineering and Forestry 13910 SW Galbreath Drive #100 Sherwood, OR 97140

EXHIBITS:

The applicant has submitted the following exhibits as part of the application package:

Exhibit 1 (dated September 2011) Applicant's Narrative

Exhibit 2 (dated August 28, 2011) Partition/Zone Change Plan Set

Exhibit 3 (dated August 26, 2011) Traffic Impact Analysis (includes an addendum dated December 2, 2011)

Exhibit 4 (dated July 2011)

Wetland Delineation Report

Staff has submitted the following exhibits as part of the Staff Report:

Staff Exhibit A Service Provider Comments and Conditions

- 1. City of Happy Valley Engineering Division
- 2. Clackamas County Water Environment Services (WES)/Service District #1 (CCSD#1)
- 3. Clackamas Fire District #1 (CFD#1)
- 4. Sunrise Water Authority (SWA)
- 5. DKS Associates
- 6. Clackamas County Service District #5 (CCSD#5)
- 7. Clackamas County Planning Division
- 8. Page D2 from the City's Steep Slopes and Natural Resource Overlay Map Book
- 9. Letter from Gordon and Barbara Hendrickson (dated November 9, 2011)
- 10. Clackamas Regional Center Area Design Plan Amendment

December 13, 2011

APPLICABLE CRITERIA:

Applicable Statewide Planning Goals; applicable sections of OAR Chapter 660, Division 12; applicable City of Happy Valley Comprehensive Plan Policies; applicable Clackamas Regional Center Area Design Plan Policies; and, applicable sections of the City of Happy Valley Municipal Code; Title 16-Land Development Code (LDC), including Chapters 16.23 (Commercial and Employment Districts); 16.24 (Institutional Districts); 16.34 (Natural Resource Overlay Zone); 16.41 (Access and Circulation); 16.42 (Landscaping, Street Trees, Fences, and Walls); 16.50 (Public Facilities); 16.61 (Types of Review Procedures); 16.63 (Land Divisions and Property Line Adjustments); and 16.67 (Comprehensive Plan Map, Specific Area Plans, Land Use District Map and Text Amendments).

SITE DESCRIPTION/ADJACENT LAND USE:

- The subject site is an approximately 13.43-acre Lot of Record that contains a church (Valley View Evangelical), parking lot, play field, garden area, and seasonal drainageway. As indicated on the City's Steep Slopes and Natural Resource Overlay Zone Map (Exhibit A-8), the subject site also contains a protected water feature in the form of a wetland, which is located along the southern site boundary, adjacent to SE Sunnyside Road. This wetland was created by Clackamas County as part of the mitigation requirements for environmental impacts resulting from the Sunnyside Road Capital Improvement Project. Due to the presence of this protected water feature, the City required the applicant to submit an Environmental Review Permit as part of this proposal.
- The subject site is bordered to the north and west (across SE 114th Court) by single-family residential lots that range in size from approximately 7,400 to 11,300 square feet. These lots are currently located within unincorporated Clackamas County and are zoned R-10. To the east of the subject site (across SE 117th Avenue) are several Lots of Record, also located in unincorporated Clackamas County, all of which are zoned R-15. In spite of obvious environmental constraints (located adjacent to Mt. Scott Creek and its associated buffer), these properties do have the potential for redevelopment. Approximately one-half of the subject site's southern boundary "fronts" on SE Sunnyside Road, a fully improved Major Arterial roadway under the jurisdiction of Clackamas County. The other one-half of the subject site's southern boundary is adjacent to several undeveloped commercial properties. Two of these undeveloped properties, Tax Lots 1601 and 1602, total approximately one-acre in size and are located adjacent to the southwestern corner of the subject site. These properties are located within the City Limits and have city Community Commercial Center (CCC) zoning. Adjacent to the southeast corner of the subject site are three undeveloped properties, Tax Lots 200, 201, and 202, all of which are located within unincorporated Clackamas County and zoned Retail Commercial (RTL).

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BACKGROUND:

• Valley View Evangelical Church filed a petition with the City in 2009 to annex the subject site from unincorporated Clackamas County to the City of Happy Valley. Based on the existing County zone of the subject site, per the city's "zoning conversion matrix" established in Section 16.67.070 of the LDC, the City applied a Happy Valley land use zone of R-10.

COMPRHENSIVE PLAN AMENDMENT (CLACKAMAS REGIONAL CENTER AREA DESIGN PLAN):

• In 2008, the City adopted the Clackamas Regional Center Area Design Plan ("Design Plan") and the Sunnyside Corridor Community Plan as an ancillary document within the City's Comprehensive Plan. As observed, the proposed Comprehensive Plan Map Amendment/Zone Change to a combination of MUC and IPU necessitates a change to the Design Plan – the subject site is not located within the Sunnyside Corridor Community Plan area. Based on the proposed Comprehensive Plan Map Amendment/Zone Change, Conceptual Development Plan and Traffic Impact analysis, as conditioned, staff recommends an amendment of the Design Plan from LDR to a combination of HDR and PCU (Exhibit A-10).

COMPREHENSIVE PLAN/ZONING MAP AMENDMENT:

• As observed, the applicant has proposed Comprehensive Plan/Zoning Map Amendments from R-10 to a combination of MUC and IPU – these amendment areas (as well as the Design Plan amendments) line up with proposed Parcels 1-3 (further detailed in the Partition section, below). Specifically, the applicant is proposing a change in the subject site's designation/zone that would apply IPU to proposed Parcel 1 and MUC to proposed Parcels 2 and 3. According to the applicant's narrative (Exhibit 1, Page 2), the applicant has requested the IPU zoning for proposed Parcel 1 to better reflect the current use of the property (existing church). The MUC zoning has been requested by the applicant for proposed Parcels 2 and 3 to allow for the future land uses that provide opportunities for job creation and additional housing options within the City (Exhibit 1, Page 2).

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• The applicant has submitted a conceptual development plan (Exhibit 2, Sheet D5) that indicates proposed Parcel 1 will remain "as is" (serving as the location for the church and its parking lot), with proposed Parcels 2 and 3 developing as a 118-unit multi-family retirement residence with a 3,600 square-foot commercial/office building and a 60-unit apartment complex, respectively. These potential uses would be allowed outright within the proposed IPU and MUC zones. To serve the future development of the subject site with vehicular access, the applicant's conceptual development plan envisions one access point from SE 114th Court to proposed Parcel 2 and one access point from SE 117th Avenue to proposed Parcel 3 (shown to be located approximately 150 feet north of the existing entrance to the church). To provide internal circulation, the conceptual development plan shows a series of private access drives connecting Parcels 1, 2, and 3.

ACCESS/TRAFFIC IMPACT ANALYSIS (TIA):

- It should be noted that although the City's MUC zone allows for a wide array of uses (commercial, residential, and institutional), the applicant's conceptual development plan indicates the undeveloped portion of the subject site will likely develop as multifamily and office. The applicant states within the Traffic Impact Analysis (TIA) (Exhibit 3) that was submitted as part of this application that the subject site is not "viable" for use as a retail site, due to its limited access and exposure to SE Sunnyside Road. City staff has proposed a condition of approval (Number 1) that will, in part, "hold" the applicant to their conceptual development plan and the uses that were analyzed within their TIA. Proposed Condition of Approval No. 1 requires proposed Parcel 2 to be developed as a multi-family retirement residence. The primary reason for the limitation on the future use of proposed Parcel 2 is that an application requesting Major Design Review of a 121-unit retirement residence has been submitted to the City for review, so the use is known at this time.
- Exhibit 3 provides an evaluation of items such as trip generation and distribution, intersection/roadway safety, and capacity. Within this report the applicant's Traffic Engineer provided a trip generation analysis (Exhibit 3, Page 8) that was based on the applicant's conceptual development plan for the subject site. This analysis indicated that if the subject site was to develop under the existing R-10 zone, the development would produce 21 AM peak hour and 28 PM peak hour trips. The analysis further indicates that if the subject site was to develop under the proposed MUC zone, that development would produce 53 AM peak hour and 61 PM peak hour trips. The TIA also reports that the proposed Comprehensive Plan Map/Zoning Map Amendment, if approved, would result in a net increase of 39 morning peak hour trips and 43 evening peak hour trips. The applicant's TIA did not identify any immediate safety concerns, but did state that "a detailed examination of access should be conducted as part of [the future] development of the site that includes access for vehicular use" (Exhibit 3, Page 14).

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It is required that a TIA submitted as part of an application for a Comprehensive Plan Map/Zoning Map Amendment provide an analysis that addresses Oregon Administrative Rule (OAR) 660-012-0060, commonly referred to as the "Transportation Planning Rule" (TPR). Within this analysis, an applicant is required to determine if a proposed Comprehensive Plan/Zoning Map Amendment would "significantly" impact an existing transportation facility, and if so, propose mitigating measures. As indicated in the TIA and associated addendum, the applicant's proposed amendments do comply with the TPR, meaning no significant impacts to adjacent roadways would result from the proposed Comprehensive Plan/Zoning Map Amendment. The net increase in trips resulting from the proposed application will not change the level of service on any of the neighboring transportation facilities. Therefore, no mitigating measures are proposed or required. The City's Traffic Engineer (DKS Associates) has reviewed and concurred with the applicant's findings within the TIA and associated addendum.

THREE-PARCEL PARTITION:

- The applicant has proposed to partition the subject site into three parcels. Parcel 1, shown on the applicant's preliminary partition plat (Exhibit 2, Sheet D2) to have street frontage along both SE Sunnyside Road and SE 117th Avenue, is proposed to be approximately 5.81 acres in size and would encompass the existing church and associated parking lot. Parcel 2 is proposed to be approximately 4.77 acres in size and would encompass mainly undeveloped land, the onsite play field and wetland area. As proposed, Parcel 2 would have street frontage along both SE Sunnyside Road and SE 114th Court and would be adjacent to existing single-family residential properties to its north and west. Parcel 3 is proposed to encompass approximately 2.83 acres of undeveloped land and would be located in the northeast corner of the subject site, with street frontage along SE 117th Avenue.
- The applicant is not proposing to construct any improvements on the subject site at this time, but rather partition and rezone the subject site to facilitate future development. As previously mentioned, proposed Parcel 1 would encompass the existing church and associated parking lot and proposed Parcels 2 and 3 would remain as vacant land, slated for future development. After evaluating the applicant's proposal as it relates to public street improvements, the City has determined that it would be appropriate for the applicant to construct "frontage" improvements along SE 117th Avenue prior to the final partition plat approval (see Condition of Approval No. 21), but not require improvements along SE 114th Court. This is primarily due to the fact that proposed Parcel 1 (fully developed) will retain approximately one-half of the subject site's "frontage" along SE 117th Avenue and will likely not be subject to future land use applications (presenting the City with an option to require these improvements at a future date). Proposed Parcel 3 is shown (Exhibit 2, Sheet D2) to be adjacent to the other one-half of the subject site's "frontage" along SE 117th Avenue.

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The applicant will also be required to improve this section of SE 117th Avenue as part of this project. It should be noted that the City will require any future development on proposed Parcel 2 to construct street frontage improvements to SE 114th Court, through a condition of approval for the future Design Review application.

ENVIRONMENTAL REVIEW PERMIT:

As indicated on Page D4 of the City's Steep Slopes and Natural Resource Overlay Map (Exhibit A-8) the subject site contains a "protected water feature", which is located on the southern portion of the subject property. Due to the presence of this water feature, the City required the applicant to submit an Environmental Review Permit as part of their proposal. Within this submittal, the applicant provided a wetland delineation (Exhibit 4), that states there are two wetland areas and one intermittent or seasonal drainageway present on the subject site. The applicant has shown on their preliminary partition plat (Exhibit 2, Sheet D2) that the two identified wetland areas and their associated 50-foot buffers will be encumbered by a conservation easement. However, the applicant has not indicated that the onsite drainageway will be protected within a conservation easement. Instead, the preliminary partition plat indicates a 15-foot stormwater drainage easement over the existing onsite drainageway. The Clackamas County Planning Division has reviewed and commented on the applicant's Environmental Review Permit and the findings within the applicant's wetland delineation. The County's Planning Division has stated in their comments (Exhibit A-7) that were submitted to the City that the onsite drainageway is a "jurisdictional" waterway and will require a 25-foot buffer along each of its sides. The County has also expressed concern over the accuracy of the wetland delineation as it relates to the southernmost wetland, labeled as Wetland "B" on the applicant's plan set. As a result, a condition of approval (Condition of Approval No. 42) has been incorporated into this report that will require the applicant to reach an agreement with the County relating to the above issues and protect all water features (wetlands, jurisdictional waterways, and buffer areas) within a conservation easement.

PUBLIC COMMENTS:

• City staff received comments from the owners of a property that is adjacent to the subject site. Gordon and Barbara Hendrickson (11408 SE Westgate Way) submitted a letter to the City dated November 9, 2011 in opposition of the proposed Comprehensive Plan/Zoning Map Amendment. The Hendrickson's state several reasons why they are in opposition of the proposal, their letter is included within this report as Exhibit A-9.

II. FINDINGS OF FACT

1. The following Statewide Planning Goals are applicable to the subject request:

"Goal 1 (Citizen Involvement)

To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.

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Staff Response:

The public notice and outreach requirements for both Type II administrative and Type III quasijudicial land use applications, such as those proposed by the applicant, have provided multiple opportunities for public involvement, including published notice for the land use hearing before the Planning Commission. Therefore, this criterion is satisfied by the request and the public process followed by the City of Happy Valley.

Goal 2 (Land Use Planning)

To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to ensure an adequate factual base for such decisions and actions.

Staff Response:

Statewide Planning Goal 2, Land Use Planning, requires that local jurisdictions establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions. The proposed Comprehensive Plan Map Amendment/Zone change was evaluated using criteria found within the City's LDC and policies found within the City's Comprehensive Plan. This evaluation is augmented by the inclusion of comments and concerns submitted by neighboring residents. Furthermore, the proposed amendments are subject to a public hearing before the Planning Commission. Therefore, a well established planning process and policy framework exists within the City. Therefore, this criterion is satisfied.

Goal 5 (Natural Resources, Scenic and Historic Areas, and Open Spaces) To provide natural resources and conserve scenic and historic areas and open spaces.

Staff Response:

The subject property has been and continues to be, located within the City of Happy Valley and as such, natural resources within the subject property (no historic resources exist) are protected by Chapter 16.34 (Natural Resources Overlay Zone) of the city's LDC. In fact, the applicant has submitted an Environmental Review Permit as part of their proposal, which will work to establish boundaries for the onsite environmentally sensitive areas. Once established, the City will require that the onsite natural resources be protected within a conservation easement. Per Condition of Approval No. 42, this criterion has been satisfied.

Goal 6 (Air, Water and Land Resources Quality)

To maintain and improve the quality of the air, water and land resources of the state.

Staff Response:

As stated above, the subject property is governed by the City's LDC and all applicable service district, state, and federal regulations. Therefore, this criterion is satisfied by the proposed amendment.

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Goal 9 (Economic Development)

To provide adequate opportunities throughout the state for a variety of economic activities liable to the health, welfare, and prosperity of Oregon's citizens.

Staff Response:

Statewide Planning Goal 9 calls for diversification and improvement of the economy. This Goal asks communities to inventory commercial and industrial lands, project future needs for such lands, and plan and zone enough land to meet those needs. The proposed amendments will provide additional commercially zoned land within the SE Sunnyside Road corridor and will provide the opportunity for future development that contributes to the state and local economy by providing for employment opportunities for residents of the City and nearby areas. Therefore, this criterion has been satisfied.

Goal #10 (Housing) To provide for the housing needs of the citizens of the State.

Staff Response:

The applicant has proposed to partition and change the existing designation/zone of the subject site in a manner that would create two undeveloped parcels, zoned MUC. Although the City's MUC zone allows for a wide array of uses (commercial, residential, and institutional), the applicant has submitted a conceptual development plan (Exhibit 2, Sheet D5) that indicates the subject site's future development will include a retirement residence and apartment complex. These uses will provide additional housing opportunities within the City. Therefore, this criterion has been satisfied.

Goal 11 (Public Facilities and Services)

To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

Staff Response:

As the City of Happy Valley is not a "full-service" municipality, providing all water, sewer, streets, etc., public facilities and services plans exist in the form of Master Plans; rules and regulations; implementing ordinances; and, Intergovernmental Agreements (IGA's) between the City and its service providers. Therefore, this criterion has been satisfied.

Goal 12 (Transportation)

To provide and encourage a safe, convenient and economic transportation system."

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Staff Response:

The intent of Goal 12 is "to provide and encourage a safe, convenient, and economic transportation system." Findings addressing the "Transportation Planning Rule" (TPR) are located within the Staff Responses to the City's own LDC section that addresses the TPR, below (see Section 5). Per those findings, this criterion has been satisfied.

2. The following Oregon Administrative Rules (OAR) are applicable to the subject request:

"OAR Chapter 660, Division 12 (Transportation Planning)

660-012-0060

Plan and Land Use Regulation Amendments

(1) Where an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation would significantly affect an existing or planned transportation facility, the local government shall put in place measures as provided in section (2) of this rule to assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume to capacity ratio, etc.) of the facility. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

(b) Change standards implementing a functional classification system; or

(c) As measured at the end of the planning period identified in the adopted transportation system plan:

(A) Allow land uses or levels of development that would result in types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or comprehensive plan; or

(C) Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan.

(2) Where a local government determines that there would be a significant effect, compliance with section (1) shall be accomplished through one or a combination of the following:

(a) Adopting measures that demonstrate allowed land uses are consistent with the planned function, capacity, and performance standards of the transportation facility.

(b) Amending the TSP or comprehensive plan to provide transportation facilities, improvements or services adequate to support the proposed land uses consistent with the requirements of this division; such amendments shall include a funding plan or mechanism consistent with section (4) or include an amendment to the transportation finance plan so that the facility, improvement, or service will be provided by the end of the planning period. (c) Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes.

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(d) Amending the TSP to modify the planned function, capacity or performance standards of the transportation facility.

(e) Providing other measures as a condition of development or through a development agreement or similar funding method, including transportation system management measures, demand management or minor transportation improvements. Local governments shall as part of the amendment specify when measures or improvements provided pursuant to this subsection will be provided.

(3) Notwithstanding sections (1) and (2) of this rule, a local government may approve an amendment that would significantly affect an existing transportation facility without assuring that the allowed land uses are consistent with the function, capacity and performance standards of the facility where:

(a) The facility is already performing below the minimum acceptable performance standard identified in the TSP or comprehensive plan on the date the amendment application is submitted;

(b) In the absence of the amendment, planned transportation facilities, improvements and services as set forth in section (4) of this rule would not be adequate to achieve consistency with the identified function, capacity or performance standard for that facility by the end of the planning period identified in the adopted TSP;

(c) Development resulting from the amendment will, at a minimum, mitigate the impacts of the amendment in a manner that avoids further degradation to the performance of the facility by the time of the development through one or a combination of transportation improvements or measures;

(d) The amendment does not involve property located in an interchange area as defined in paragraph (4)(d)(C); and

(e) For affected state highways, ODOT provides a written statement that the proposed funding and timing for the identified mitigation improvements or measures are, at a minimum, sufficient to avoid further degradation to the performance of the affected state highway. However, if a local government provides the appropriate ODOT regional office with written notice of a proposed amendment in a manner that provides ODOT reasonable opportunity to submit a written statement into the record of the local government proceeding, and ODOT does not provide a written statement, then the local government may proceed with applying subsections (a) through (d) of this section.

(4) Determinations under sections (1)-(3) of this rule shall be coordinated with affected transportation facility and service providers and other affected local governments.

(a) In determining whether an amendment has a significant effect on an existing or planned transportation facility under subsection (1)(c) of this rule, local governments shall rely on existing transportation facilities and services and on the planned transportation facilities, improvements and services set forth in subsections (b) and (c) below.

(b) Outside of interstate interchange areas, the following are considered planned facilities, improvements and services:

(A) Transportation facilities, improvements or services that are funded for construction or implementation in the Statewide Transportation Improvement Program or a locally or regionally adopted transportation improvement program or capital improvement plan or program of a transportation service provider.

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(B) Transportation facilities, improvements or services that are authorized in a local transportation system plan and for which a funding plan or mechanism is in place or approved. These include, but are not limited to, transportation facilities, improvements or services for which: transportation systems development charge revenues are being collected; a local improvement district or reimbursement district has been established or will be established prior to development; a development agreement has been adopted; or conditions of approval to fund the improvement have been adopted.

(C) Transportation facilities, improvements or services in a metropolitan planning organization (MPO) area that are part of the area's federally-approved, financially constrained regional transportation system plan.

(D) Improvements to state highways that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when ODOT provides a written statement that the improvements are reasonably likely to be provided by the end of the planning period.

(E) Improvements to regional and local roads, streets or other transportation facilities or services that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when the local government(s) or transportation service provider(s) responsible for the facility, improvement or service provides a written statement that the facility, improvement or service is reasonably likely to be provided by the end of the planning period.

(c) Within interstate interchange areas, the improvements included in (b)(A)-(C) are considered planned facilities, improvements and services, except where:

(A) ODOT provides a written statement that the proposed funding and timing of mitigation measures are sufficient to avoid a significant adverse impact on the Interstate Highway system, then local governments may also rely on the improvements identified in paragraphs (b)(D) and (E) of this section; or

(B) There is an adopted interchange area management plan, then local governments may also rely on the improvements identified in that plan and which are also identified in paragraphs (b)(D) and (E) of this section.

(d) As used in this section and section (3):

(A) Planned interchange means new interchanges and relocation of existing interchanges that are authorized in an adopted transportation system plan or comprehensive plan;

(B) Interstate highway means Interstates 5, 82, 84, 105, 205 and 405; and

(C) Interstate interchange area means:

(i) Property within one-half mile of an existing or planned interchange on an Interstate Highway as measured from the center point of the interchange; or

(ii) The interchange area as defined in the Interchange Area Management Plan adopted as an amendment to the Oregon Highway Plan.

(e) For purposes of this section, a written statement provided pursuant to paragraphs (b)(D), (b)(E) or (c)(A) provided by ODOT, a local government or transportation facility provider, as appropriate, shall be conclusive in determining whether a transportation facility, improvement or service is a planned transportation facility, improvement or service. In the absence of a written statement, a local government can only rely upon planned transportation facilities, improvements and services identified in paragraphs (b)(A)-(C) to determine whether there is a significant effect that requires application of the remedies in section (2).

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(5) The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028.

(6) In determining whether proposed land uses would affect or be consistent with planned transportation facilities as provided in 0060(1) and (2), local governments shall give full credit for potential reduction in vehicle trips for uses located in mixed-use, pedestrian-friendly centers, and neighborhoods as provided in (a)-(d) below;

(a) Absent adopted local standards or detailed information about the vehicle trip reduction benefits of mixed-use, pedestrian-friendly development, local governments shall assume that uses located within a mixed-use, pedestrian-friendly center, or neighborhood, will generate 10% fewer daily and peak hour trips than are specified in available published estimates, such as those provided by the Institute of Transportation Engineers (ITE) Trip Generation Manual that do not specifically account for the effects of mixed-use, pedestrianfriendly development. The 10% reduction allowed for by this section shall be available only if uses which rely solely on auto trips, such as gas stations, car washes, storage facilities, and motels are prohibited;

(b) Local governments shall use detailed or local information about the trip reduction benefits of mixed-use, pedestrian-friendly development where such information is available and presented to the local government. Local governments may, based on such information, allow reductions greater than the 10% reduction required in (a);

(c) Where a local government assumes or estimates lower vehicle trip generation as provided in (a) or (b) above, it shall assure through conditions of approval, site plans, or approval standards that subsequent development approvals support the development of a mixeduse, pedestrian-friendly center or neighborhood and provide for on-site bike and pedestrian connectivity and access to transit as provided for in 0045(3) and (4). The provision of on-site bike and pedestrian connectivity and access to transit may be accomplished through application of acknowledged ordinance provisions which comply with 0045(3) and (4) or through conditions of approval or findings adopted with the plan amendment that assure compliance with these rule requirements at the time of development approval; and

(d) The purpose of this section is to provide an incentive for the designation and implementation of pedestrian-friendly, mixed-use centers and neighborhoods by lowering the regulatory barriers to plan amendments which accomplish this type of development. The actual trip reduction benefits of mixed-use, pedestrian-friendly development will vary from case to case and may be somewhat higher or lower than presumed pursuant to (a) above. The Commission concludes that this assumption is warranted given general information about the expected effects of mixed-use, pedestrian-friendly development and its intent to encourage changes to plans and development patterns. Nothing in this section is intended to affect the application of provisions in local plans or ordinances which provide for the calculation or assessment of systems development charges or in preparing conformity determinations required under the federal Clean Air Act.

(7) Amendments to acknowledged comprehensive plans and land use regulations which meet all of the criteria listed in (a)-(c) below shall include an amendment to the comprehensive plan, transportation system plan the adoption of a local street plan, access management plan, future street plan or other binding local transportation plan to provide for on-site alignment of streets or accessways with existing and planned arterial, collector, and local streets surrounding the

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site as necessary to implement the requirements in Section 0020(2)(b) and Section 0045(3) of this division:

(a) The plan or land use regulation amendment results in designation of two or more acres of land for commercial use;

(b) The local government has not adopted a TSP or local street plan which complies with Section 0020(2)(b) or, in the Portland Metropolitan Area, has not complied with Metro's requirement for street connectivity as contained in Title 6, Section 3 of the Urban Growth Management Functional Plan; and

(c) The proposed amendment would significantly affect a transportation facility as provided in 0060(1)."

Staff Response:

Section 16.67.060 (Transportation planning rule compliance) of the City's LDC addresses the requirements of this administrative rule. Findings addressing the TPR are located within the Staff Responses to the City's own LDC section that addresses the TPR, below (see Section 5). Per those findings, this criterion has been satisfied.

3. The following Policies from the City of Happy Valley Comprehensive Plan are applicable to this request:

Comprehensive Plan Policies

"[...]

Policy 4:	To insure orderly development in the City of Happy Valley through formulation of growth management policies and guidelines which will determine that development can occur only when adequate levels of services and facilities are or will be available.
Policy 5:	To encourage controlled development while maintaining and enhancing the physical resources which make Happy Valley a desirable place to live.
[]	

Staff Response:

The City of Happy Valley ensures that "orderly and controlled development" occurs through the continuous and ongoing development of growth management policies and guidelines, primarily through implementation of the City's Comprehensive Plan Policies and Development Code regulations. The subject site is located in an "urbanized" area that is adequately served by public facilities, such as sanitary sewer, water, roadways, etc. Furthermore, the applicant has submitted an Environmental Review Permit as part of their proposal that has identified specific environmental resources that will be protected through the development process. Per Condition of Approval No. 42, these criteria have been satisfied.

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Policy 21:	Maintain relationship of open space to permitted development in order to preserve the character of the natural setting and to provide for recreation and visual relief from development.
[]	
Policy 28:	Conserve the area's unique natural resources through their inclusion in the Comprehensive Plan, and development approvals, in a manner which considers surrounding uses and provides a continuity of open space character and natural features, throughout the City.
[]	
Policy 30:	Land development applications, grading permits and building permits that affect natural resource and steep slopes areas are subject to separate environmental review procedures assessing the impact of the proposed land use action or development permit, subject to the City's Development Code.
[]	
Policy 35:	Maintain riparian vegetation and avoid degradation of natural features adjacent to drainage channels and conservation easements to minimize runoff and erosion affecting water quality.
ГТ	

[...]

Staff Response:

The subject property is located within the City of Happy Valley and as such, natural resources within the subject property are protected by Chapter 16.34 (Natural Resources Overlay Zone) of the city's LDC. The applicant has submitted an Environmental Review Permit as part of their proposal, which will work to establish boundaries for the onsite environmentally sensitive areas. Once established, the City will require that the onsite natural resources be protected within a conservation easement. Per Condition of Approval No. 42, these criteria have been satisfied.

Policy 42:	To increase the supply of housing to allow for population growth and to provide for the housing needs of a variety of citizens of Happy Valley.
Policy 43:	To develop housing in areas in areas that reinforce and facilitate orderly and compatible community development.
Policy 44:	To provide a variety of lot sizes, a diversity of housing types including single family attached (townhouses) duplexes, senior housing and multiple family and range of prices to attract a variety of household sizes and incomes to Happy Valley.
[] Rolieu 46	The City shall previde a name of housing that includes low down districts that
Policy 46:	The City shall provide a range of housing that includes land use districts that allow senior housing, assisted living and a range of multi-family housing products. This range improves housing choice for the elderly, young professionals, single households, families with children, and other household types.
[]	

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Staff Report:

The applicant has proposed to partition and change the existing designation/zone of the subject site in a manner that would create two undeveloped parcels, zoned MUC. Although the City's MUC zone allows for a wide array of uses (commercial, residential, and institutional), the applicant has submitted a conceptual development plan (Exhibit 2, Sheet D5) that indicates the subject site's future development will include a retirement residence and conceptualizes an apartment complex. These uses will provide additional housing opportunities within the City. Therefore, this criterion has been satisfied.

Policy 50: To locate land uses so as to take advantage of existing systems and physical features, to minimize development cost and to achieve compatibility and to avoid conflicts between adjoining uses.

[...]

Staff Response:

The MUC and IPU zoning districts, if applied to the project site, will take advantage of existing systems such as the transportation and public transit system provided by adjacent SE Sunnyside Road. Surrounding sites are already provided with urban services, including water and sewer. Adjoining existing uses include single-family detached housing with which limited-scale commercial and low density multi-family residential uses allowed in the MUC zone will be compatible. This is especially true due to the fact that the applicant has indicated on their conceptual development plan that the type of multi-family being proposed (retirement residence) has been shown to produce fewer vehicular trips than a standard multi-family development. Further, regulations in the MUC zone including maximum building footprints and residential densities, building height limits, minimum setbacks, and parking area landscaping and screening requirements will limit impacts of the project site on surrounding sites. Therefore, this criterion has been satisfied.

Commercial and Employment Element Policies

Policy 54: To encourage compatible residential, commercial and light industrial development in both the City of Happy Valley and nearby Clackamas County that will provide jobs. The City supports the development of commercial and employment uses in the Rock Creek Employment Area and in other areas, subject to design standards.

[...]

Staff Response:

By approving the Comprehensive Plan Map Amendment/Zone Change, the City will bring a more cohesive land use pattern into effect within geographic areas that are governed by the City's LDC, thus encouraging compatibility across land use types in both Happy Valley and adjacent unincorporated Clackamas County. Therefore, this criterion has been satisfied.

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Policy 64: To develop good transportation routes (vehicular, pedestrian, bicycle, etc.) between residential areas (and major activity centers both inside and outside the City) with street interconnectivity and neighborhood livability issues being the paramount consideration.

[...]

Staff Response:

The subject site is located adjacent to SE Sunnyside Road, a Major Arterial, which will provide excellent vehicular, pedestrian, and bicycle routes from the subject site to major activity centers such as "Clackamas Town Center" and "Happy Valley Town Center". The applicant has also shown on their conceptual development plan (Exhibit 2, Sheet D2) that an internal street system providing for both interconnectivity and neighborhood livability is possible. This criterion has been satisfied.

Policy 74:	To require new developments to provide Level 1 public facilities and services which are consistent with the Leveled Growth Management section of this Plan and are required by City Ordinances.
<i>Policy</i> 85:	To require new developments to limit storm drainage runoff outside project boundaries or provide a storm drainage and collection system within the project in compliance with the City's Storm Drainage Ordinance.
Policy 86:	Until the City's Facilities Plan is completed and the economic analysis and assessment policies are formulated by Clackamas County Service District #1, the City shall evaluate on a case by case basis those P.U.D's, subdivisions, land partitions or building permit applications which can be provided with sewer service from existing sewer lines adjacent to the City. Their approval during this interim period shall be based on the provisions of the City's Land Development Ordinance, Growth Management Policies, and agreements for the payment of anticipated public facilities assessments.

[...]

Staff Response:

Although the applicant's proposal does not request new development, approving the proposal will provide the opportunity for submitting land development applications for a wider variety and greater intensity of land uses in the future. All future applications will have to demonstrate that the proposed development can be provided with adequate public facilities. They will need to show how storm drainage runoff and sewer service will comply with City regulations, including the requirements of CCSD#1.

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Level 1 public facilities and services include water, sanitary sewer, storm drainage, fire protection, and streets. Water service will be provided by the Sunrise Water Authority; sanitary sewer and storm drainage service will be provided by CCSD#1; fire protection will be provided by CFD#1; and, the streets are public and owned and managed by Clackamas County.

All surrounding properties are provided, or could be provided, with Level 1 public facilities. Several of the Level 1 service providers have submitted comments regarding the provision of public services that were incorporated into this report. Other service providers that did not submit specific observations or conditions regarding the provision of Level 1 services as part of this application will have an opportunity to do so with future development applications for the subject site. Therefore, these criteria have been satisfied.

Policy 99: Any and all development within the city shall be subject to participation in the provision of Level 2 facilities and services which are essential to the development of the City as a whole, and shall include:

- schools
- police protection
- *parks and recreation*
- public transit
- vector control
- *city administrative services*

However, per the requirements of ORS 195.110(11) - notwithstanding any other provision of state or local law, school capacity shall not be the sole basis for the approval or denial of any residential development application, unless the application involves changes to the local government comprehensive plan or land use regulations.

[...]

Staff Response:

Although the applicant's proposal does not request new development, approving the proposal will provide the opportunity for submitting land development applications for a wider variety and greater intensity of land uses in the future. These development applications will be required to demonstrate that the proposed development can be adequately served with Level 2 facilities. Therefore, this criterion has been satisfied.

Policy 100: The funding of improvements, extension of construction Level 1 facilities and services within the incorporated limits of the city shall be the responsibility of those whose land use activities caused such improvement, extension or construction to become necessary. Funding sources may include but are not limited to creation of a local improvement district (LID); outside funding or grants in aid; direct source payment with or without agreement for future reimbursement by other property owners who may utilize the facility or service; other sources as may be identified.

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[...]

Staff Response:

Level 1 facilities and services exist either on the project site or surrounding the site and will be extended to the site by any development approved in the future. These improvements are required to be designed by a licensed engineer, constructed by a licensed contractor, and paid for by a developer. The improvements are required to be in substantial conformance with the information provided in future Design Review applications. Therefore, this criterion has been satisfied.

Policy 102: When, as the coordinator of land use activities and service provision to development areas, the City must make determinations regarding fulfillment of the Growth Management Policies and Procedures, the City shall consider recommendations provided by service providers and other affected agencies, including but not limited to the following:

- Clackamas County Service District No. 1 (CCSD#1)
- Sunrise Water Authority
- Clackamas Fire District No. 1 (CFD#1)
- Clackamas County, Department of Transportation and Development (DTD)
- North Clackamas School District No. 12 (NCSD#12)
- North Clackamas Parks & Recreation District (NCPRD)
- Tri-Met
- City of Portland
- City of Gresham
- City of Damascus

Any determination shall be within the parameters of the providers' or agency's own standards, criteria, requirements or plans. The service providers' decision shall be treated as a rebuttable presumption as to the ability of that provider to provide an acceptable level of service. However, the evidence that can rebut said decision must be compelling evidence based upon objective data and the agencies' standards-criteria-requirement or plans in order to controvert the determination of the service provided.

Staff Response:

The City of Happy Valley has contacted and coordinated with all the listed service providers. The City has augmented the list of service providers to include the Oregon Department of Land Conservation and Development (DLCD) and the regional government METRO, and the requirements of these service providers are incorporated within the record. As has been previously stated, future development applications will be required to demonstrate that the development can be served with adequate public facilities and services based on the findings of the service providers and the City. Therefore, this criterion has been satisfied.

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Policy 103: No development of any properties shall be permitted which will interfere or prevent the extension of any Level 1 facilities or services."

Staff Response:

Although the applicant's proposal does not request new development, approving the proposal will provide the opportunity for submitting land development applications for a wider variety and greater intensity of land uses in the future. These applications will be required to facilitate the extension of any Level 1 facilities, not in any way prevent them. Therefore, this criterion has been satisfied.

4. The following Policies from the Clackamas Regional Center Area Design Plan are applicable to this request:

"[...]

LAND USE POLICIES

I. LAND USE POLICIES GENERALLY

Map X-CRC-2 illustrates the Land Use Plan designations for the Clackamas Regional Center Design Plan Area. The following uses are allowed:

1.0 Mixed Use

Mixed uses shall be allowed in the Clackamas Regional Center Design Plan area in areas designated Clackamas County Commercial, High Density Residential and Regional Center High Density Residential. A mix of uses will be required to be master planned in Clackamas County Planned Mixed Use designated areas. However, if annexed within the city limits, such mixed use areas shall be converted to similar City mixed use plan designations/zoning districts.

[...]

3.0 Multifamily Residential

The following primarily multifamily residential designations shall be provided in the Clackamas Regional Center Design Plan area: Clackamas County Regional Center High Density Residential, High Density Residential, Medium High Density Residential, and Medium Density Residential. However, if annexed within the city limits, such multifamily areas shall be converted to similar City multifamily residential plan designations/zoning districts.

Multifamily areas within the Clackamas Regional Center Design Plan Area shall:

3.1 Establish minimum densities to help meet local and regional housing needs;

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- 3.2 Provide for multifamily residential uses within walking distance of public transportation, parks, schools, employment areas and local shopping areas;
- 3.3 Create walkable districts by providing improvements and urban design features that encourage and support pedestrian use;
- 3.4 Locate all buildings to maximize access by emergency vehicles; and,
- *3.5 Require design review for all development.*
- 4.0 Public and Community Use, Open Space

Clackamas County Public and Community use designations including open space shall be provided in the Clackamas Regional Center Design Plan Area. However, if annexed within the city limits, such public and community use areas shall be converted to similar City public use designations/zoning districts.

[...]

Staff Response:

The applicant has proposed a Comprehensive Plan/Zoning Map Amendment that would change the existing designation/zone from R-10 to a combination of MUC and IPU. The corresponding amendments to the Design Plan from LDR to HDR and PCU are supported by this application and findings of fact, including the proposed Conditions of Approval. The MUC and IPU zones allow for a variety of uses that will promote mixed use, multi-family, and community use development within the subject site. These criteria have been satisfied.

III. LAND USE POLICIES FOR SUNNYSIDE CORRIDOR DESIGN TYPE AREAS

- *1.0 Land uses in the Sunnyside Road Corridors shall be planned to:*
 - *1.1 Provide for both employment and housing, including mixed use;*
 - 1.2 Emphasize providing for a high level of bus usage, with land uses and transportation facilities to support bus use;
 - 1.3 Encourage and support pedestrian travel with supportive land uses, frequent street connections, and sidewalks and pedestrian-ways; and,
 - 1.4 Provide for vehicular traffic and auto-oriented uses, while expanding the share of trips via transit and other modes.
- 2.0 Sunnyside Road Corridor Land Use Designations

A range of land use designations may be applied within the Sunnyside Road Corridor as shown on Map X-CRC-2. The Sunnyside Road Corridor shall include within its area land use designations which provide primarily for employment and shopping, and land use designations that provide primarily for residences.

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- 2.1 Commercial designations that may be applied include: Clackamas County Corridor Commercial, Retail Commercial, Low Traffic Impact Commercial, and Office Commercial or applicable City of Happy Valley development districts. Any site designated for a commercial use shall be located adjacent to the Sunnyside Road Corridor; and,
- 2.2 Multifamily designations that may be applied include: Clackamas County High Density Residential and Medium High Density Residential or applicable City of Happy Valley residential development districts. Multifamily designations should generally be located so as to form a buffer between commercial uses adjacent to the Sunnyside Road Corridor and low density residential areas located outside the corridor.

[...]

Staff Response:

The applicant's proposed Comprehensive Plan/Zoning Map Amendment, if approved, would provide employment, housing, and mixed use opportunities while taking advantage of existing systems such as the transportation and public transit system provided by adjacent SE Sunnyside Road. The subject site is located adjacent to SE Sunnyside Road, a Major Arterial, which will provide excellent vehicular, pedestrian, and bicycle routes from the subject site to major activity centers such as "Clackamas Town Center" and "Happy Valley Town Center". Adjoining existing uses include single-family detached housing with which limited-scale commercial and low density multi-family residential uses, as allowed in the MUC zone, will be compatible. This is especially true due to the fact that the applicant has indicated on their conceptual development plan that the type of multi-family being proposed (retirement residence) has been shown to produce fewer vehicular trips than a standard multi-family development. These criteria have been satisfied.

IV. LAND USE POLICIES: LAND USE DESIGNATIONS THAT MAY APPLY THROUGHOUT THE CLACKAMAS REGIONAL CENTER DESIGN PLAN AREA [...]

2.0 High Density Residential

In the Clackamas County High Density Residential district or applicable City of Happy Valley high density residential development district, allow for a mix of land uses as a limited use.

[...]

Staff Response:

The applicant has proposed that the undeveloped portion of the subject site receive a City zone of MUC. The MUC zone allows for high density residential and, to a limited extent, mixed use development. As demonstrated by the Comprehensive Plan/Zoning Map Amendment, Conceptual Development Plan and TIA, a change to the Design Plan to HDR (for a portion of the subject site) is supported, and this criterion has been satisfied.

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TRANSPORTATION POLICIES

X. ROADS AND STREETS SYSTEM POLICIES

[...] 4.0 [...]

Congestion Performance Standards.

4.2 Congestion Performance Standards for portions of 82nd Avenue, Sunnyside Road and Johnson Creek Boulevard located within the Clackamas Regional Center Design Plan Area and outside the Regional Center boundary shall be as follows:

CONGESTION PERFORMANCE STANDARDS (Level of Service)

	Preferred	Acceptable	Exceeds
	Operating	Operating	Deficiency
	Standard	Standard	Threshold
Mid-Day one-hour	<i>C</i> or better	D	E or worse
Peak two-hour	E first hour	E first hour	F first hour
	D second hour	E second hour	E second hour

4.3 Congestion Performance Standards for City street sections located east of the Regional Center boundary, yet within the Clackamas Regional Center Design Plan Area shall be as follows:

CONGESTION PERFORMANCE STANDARDS (Level of Service)

	Preferred	Acceptable	Exceeds
	Operating	Operating	Deficiency
	Standard	Standard	Threshold
Mid-Day one-hour	C or better	D	E or worse
Peak –hour	D	E	F
	0.9 v/c ratio	0.95 v/c ratio	>0.95 v/c ratio

[...]

Staff Response:

The TIA that was submitted by the applicant (Exhibit 3) demonstrates that the applicant's proposal will not create future traffic conditions that will be below acceptable standards and do not utilize Congestion Performance Standards. Also, findings addressing the TPR are located within the Staff Responses to the City's own LDC section that addresses the TPR, below (see Section 5). These criteria have been satisfied.

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HOUSING

XVI. HOUSING POLICIES

The following policies apply to the Clackamas Regional Center Design Plan Area:

- 1.0 Provide for a range and variety of housing types (size and density) and variety of ownership and rental opportunities, in a range of prices.
- 2.0 Encourage housing opportunities for employees in the Clackamas Regional Center Design Plan Area by investigating partnerships to develop housing for workers in the area.
- 3.0 Replace housing capacity lost in the study area by future Comprehensive Plan Map/Zoning Map changes. Any application for a change to the City's Comprehensive Plan Map/Zoning Map within the Clackamas Regional Center Design Plan Area will be accompanied by a demonstration of how an equal amount of housing capacity is replaced on another site, or constructed on the site as part of a mixed use development, to be located within the Clackamas Regional Center Design Plan Area.
 - 3.1 The purpose of this policy is to maintain the potential for the amount of housing identified in the Clackamas Regional Center Area Plan;
 - 3.2 This policy would apply to plan or zone changes made subsequent to adoption of this Supplemental Plan;
 - 3.3 This policy would apply to quasi-judicial changes from residential to a non-residential use;
 - 3.4 Replacement housing capacity could be located anywhere within the Clackamas Regional Center Design Plan Area; and,
 - 3.5 Approval of a design review application and any other applicable land use permit for the required amount of replacement housing on a site in a commercial or office district, not including Clackamas County PMU or similarly zoned Happy Valley sites, will meet the requirements of Policy 3.0."

Staff Response:

The applicant has proposed to partition and change the existing designation/zone of the subject site in a manner that would create two undeveloped parcels, zoned MUC. Although the City's MUC zone allows for a wide array of uses (commercial, residential, and institutional), the applicant has submitted a conceptual development plan (Exhibit 2, Sheet D5) that indicates the subject site's future development will include a retirement residence and potential apartment complex. These uses will provide additional housing opportunities within the City. Therefore, this criterion has been satisfied.

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5. The following sections from Title 16 of the City's Municipal Code (Land Development Code) are applicable to this request:

"CHAPTER 16.23-COMMERCIAL AND EMPLOYMENT DISTRICTS

16.23.010 Mixed Use Commercial and Employment Districts. A. Purpose.

1. Mixed Use Commercial (MUC). Mixed use commercial will provide for convenience commercial needs of residential neighborhoods and office workers in locations adjacent to and mixed in with residential and office areas. The location of services and offices near residential units and major transportation networks should promote use of alternative modes of transportation such as bus ridership, bicycle and pedestrian activity. Retail uses should be primarily located on the ground floor to encourage an interesting and active streetscape. Buildings should be oriented toward the street or accessway with clearly marked entrances. Blank frontage walls at street level are discouraged. Development boundaries and patterns are not defined by type of use (i.e., retail and office); instead the district allows a variety of permitted uses to occur throughout the commercial district. The commercial uses are meant to provide a concentration of commercial and office uses to create an active area.

2. Mixed Use Employment (MUE). The mixed use employment district will provide for development of office, employment and low density multifamily residential uses. The MUE neighborhood commercial subdistrict provides for neighborhood scale retail needs.

3. MUE Neighborhood Commercial (MUE-NC) Subdistrict. In order to provide retail uses which serve the surrounding neighborhoods and employment areas of the MUE district, the neighborhood commercial subdistrict establishes uses and standards for the development of commercial and residential uses with good visibility from arterials, collectors and local streets within the MUE district.

B. Permitted Uses. Table 16.23.010-1 identifies the land uses that are allowed in the MUC, MUE and MUE-NC Districts.

Table 16.23.010-1 Mixed Use Districts (MUC, MUE, MUE-NC) Permitted Uses

P=Permitted; C=Conditional Use; X=Prohibited

Use	MUC	MUE	MUE—NC Subdistrict
Commercial—Retail Uses			
Art and craft supply stores, studios	P	P^{I}	P
Bakeries	Р	P^{I}	Р
Banks, savings and loan associations, loan companies, ATMs	P	P^{I}	P
Barber shops, beauty salons	Р	P^{I}	Р
Bed and breakfast inns	Р	P^{I}	Р
Bicycle sales, supplies, repair service	P	P^{I}	Р
Book stores	С	С	С
Camera stores	Р	P^{I}	P
Coffee shops, cafés, sandwich shops and delicatessens	P	P^{I}	Р
Drug stores	P	P^{I}	Р
Dry cleaners and tailors	P	P^{I}	P
Florists	P	P^{I}	Р
Hardware and garden supplies	P	P^{I}	Р

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Use	MUC	MUE	MUE—NC Subdistrict
Home furnishing stores	Р	P^{l}	P
Gift stores	P	P^{l}	P
Grocery, food, specialty foods, and produce stores	 P	P^{I}	P
Hotels	 P	P^{I}	P
Indoor health and recreation facilities, such as racquetball court,	P	P^{I}	P
gymnasiums, health and exercise spas, swimming pools, and similar uses and associated facilities	^		
Exercise and tanning studios	P	P^l	P
Interior decorating shops, sales and service	 	P^{l}	P P
Laundromats	$\frac{P}{P}$	P^{l}	P
Music shops, sales and service	$\frac{P}{P}$	$\frac{I}{P^{I}}$	P P
	<u>P</u>	$\frac{P}{P^{l}}$	P P
Optometry and optical goods, sales and service	<u> </u>	P P^{l}	P P P
Photo finishing, photography studios	<u>P</u>	P P^{l}	P P P
Rental stores, without outdoor storage	<u>P</u>	$\frac{P}{P^{I}}$	$\frac{P}{P}$
Restaurants full service			
Restaurants-Drive-through	P	$\frac{C}{P^{l}}$	C
Apparel and secondhand stores	P	_	P
Service stations	С	C	C
Shoe sales and repair stores	P	P^{l}	P
Sporting goods, sales and service	<u>P</u>	P^{l}	P
Stationery stores	Р	P^{I}	Р
Taverns, bars and cocktail lounges (prohibited 1,500 feet from school uses)	С	С	С
Theaters or assembly halls	С	С	С
Yogurt and ice cream stores	Р	P^{I}	Р
Vehicular service	Р	P^{I}	Р
Veterinarian services and pet supplies	Р	P^{I}	Р
Video rental stores	С	С	С
Retail and service commercial uses similar to those above but not listed elsewhere in this section upon administrative determination through the design review process	Р	P^{I}	Р
Commercial—Offices			
Professional and administrative offices	Р	Р	Р
Medical office buildings	P	P	P
Residential		-	
Low density ²	Р	Р	Р
Medium and high density ³ (Note: mixed-use buildings with residential and commercial are allowed in addition to single-use residential buildings)	Р	X	X
Senior housing	Р	Р	Р
Skilled nursing facility	P	P	P
Congregate housing	$\frac{1}{P}$	<u>P</u>	P
Home occupation (Section 16.69.020)	P	P	P
Industrial		•	*
Manufacturing and production	X	Р	Х
Industrial services	$\frac{X}{X}$	<u>P</u>	X
Flex-space	$\frac{X}{X}$	$\frac{P}{P}$	X
Wholesale sales	$\frac{X}{X}$	$\frac{P}{P}$	<u> </u>
Institutional	Л	1	Λ
	С	С	С
Churches, synagogues, temples or places of worship			
Public park, usable open space	С	С	С

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C P P	$\frac{C}{P^{l}}$	<u> </u>
Γ	Г	Р
P	P	
	1	Р
P	P	Р
P	Р	Р
r Ch. 14.020	Per Ch. 16.44.020	Per Ch. 16.44.020

² Low density multifamily residential shall be developed in accordance with the standards of the MUR-M1 District. ³ Medium density multifamily residential shall be developed in accordance with the standards of the MUR-M2 District and high density multifamily residential shall be developed in accordance with the standards of the MUR-M3 District.

Staff Response:

The applicant has submitted a conceptual development plan (Exhibit 2, Sheet D5) as part of their proposal that indicates future uses of propose Parcels 2 and 3 may include a 118-unit retirement residence, 60-unit apartment complex, and 3,600 square-foot office building. All these potential uses would be allowed under the MUC zoning district, which the applicant has proposed to apply to future Parcels 2 and 3. It should be noted that city staff has proposed that the applicant be "held to" the conceptual development plan regarding the use of proposed Parcel 2 as a retirement residence (Condition of Approval No. 1). The future use of proposed Parcel 3 will be evaluated against the above criteria at a future date, when a proposed use has been defined. Per Condition of Approval No. 1), these criteria have been satisfied.

C. Development Standards. The development standards in Table 16.23.010-2 apply to all uses, structures, buildings, and development in the MUC, MUE and MUE-NC Districts.

Table 16.23.010-2 Development Standards for MUC, MUE and MUE-NC Districts

Standard	MUC	MUE	MUE-NC
Residential density: ¹			
Low density (maximum)	24 du/net acre	24 du/net acre	NA
Low density (minimum)	15 du/net acre ²	$15 du/net acre^2$	NA
Medium density (maximum)	34 du/net acre	NA	NA
Medium density (minimum)	$25 du/net acre^2$	NA	NA
High density (maximum)	50 du/net acre	NA	NA
High density (minimum)	$35 du/net acre^2$	NA	NA
Lot size (minimum)	Variable ³	Variable ³	See 16.23.010(D)(3)
Lot width (minimum)	Variable ³	Variable ³	Variable ³
Lot depth (minimum)	Variable ³	Variable ³	Variable ³
Floor area ratio			See 16.23.010(D)(3)
Nonresidential FAR (minimum)	$0.25:1^4$	0.25:14	
Nonresidential FAR (maximum)	5:1	2:1	

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Standard	MUC	MUE	MUE-NC
FAR for mixed use building with	0.25:1	0.25:1	
residential uses (minimum)			
FAR for mixed use building with	5:1	3:1	
residential uses (maximum)			
Landscaping (minimum)	Variable ⁵	Variable ⁵	Variable⁵
Building setbacks (minimum):	Variable ³	Variable ³	Variable ³
Building height (maximum)	$65 feet^3$	$65 feet^3$	$65 feet^3$
NOTES:			
¹ Density calculations shall be made purs	suant to Section 16.63.0	020(F).	

² Minimum density of eighty (80) percent of each sub-area is required.

³ Building height is measured pursuant to Chapter 16.12, Definitions. Standards are flexible and shall be

determined through the master plan process or a design review. ⁴ *Must include a shadow plan to establish future development.*

⁵ Pursuant to Section 16.42.030, fifteen (15) percent of the net developable area must be usable open space.

[...]

Staff Response:

The applicant has proposed parcels that will meet the dimensional standards of the above section. Other applicable standards listed in this table will be reviewed for compliance during Design Review and subsequent building permit submittal. These criteria have been satisfied.

CHAPTER 16.24-INSTITUTIONAL DISTRICTS

16.24.010 Institutional and Public Use (IPU) District.

A. Purpose. The IPU District proposes to serve the need for the designation of areas for necessary institutional uses such as schools and churches, and public and semipublic uses such as parks, a local government center and other governmental and public service uses. This district may be located at any place throughout the City, based on a determination by the City that such areas are required. The Comprehensive Plan identifies the need for such uses throughout the City, with that need being fulfilled through this district.

B. Permitted Uses. Table 16.24.010-1 identifies the land uses that are allowed in the IPU District.

Table 16.24.010-1 Institutional and Public Use (IPU) Permitted Uses

P=Permitted; C=Conditional Use; X=Prohibited

Land Use	IPU
Commercial—Retail Uses	
Commercial daycare facilities	С
Institutional	
Cemeteries, mortuaries and funeral homes	С
Church, synagogue, temple or cathedral or other places of worship	Р
Schools, public or private	Р
Service district functions and operations, including but not limited to fire district facilities, water district facilities, radio and television station production facilities, sanitary sewer and stormwater management facilities and road building and maintenance facilities, not to include fuel or other liquid or non-solid combustible material storage	Р
Parks, public or private, but not including commercial recreation facilities	Р
Public buildings, functions or operations	P
Public utility substations or other functions	Р

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[...]

C. Development Standards. The development standards in Table 16.24.010-2 apply to all uses, structures, buildings, and development in the IPU District.

Standard	IPU	
Lot size (minimum)	None	
Lot width (minimum)	None	
Lot depth (minimum)	None	
Street frontage (minimum)	50 ft.	
Lot coverage (maximum)	None, provided that all setback and parking	
	requirements are met	
Landscaping (minimum)	None	
Building setbacks (minimum):		
Front	20 ft.	
Rear	20 ft.	
Interior side	10 ft.	
Street side (corner lot)	15 ft.	
Building height (maximum) ¹	50 ft.	
NOTES:		
¹ Building height is measured pursuant to Chap	ter 16.12, Definitions.	
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Staff Response:

As part of the proposed Comprehensive Plan/Zoning Map Amendment and partition application, the existing church and its associated parking lot would be located within an approximately 5.81-acre parcel, which would be zoned IPU, and sited in a manner that is compliant with the above standards. Churches are a permitted use in the City's IPU district. Therefore, these criteria have been satisfied.

CHAPTER 16.34-NATURAL RESOURCE OVERLAY ZONE

16.34.030 Exemptions.

The following uses and activities are exempt from the requirements of this chapter:

A. A use or activity that avoids any impact to a Water Quality Resources and/or HCA provided that the location of the Water Quality Resource and/or HCA have been verified by the City in accordance with Section 16.34.060 and a Construction Management Plan pursuant to Section 16.34.070(B) has been submitted that demonstrates that there will be no impacts to the Water Quality Resource and/or HCA during construction. Clackamas County Service District No. 1 approval is required for all development on properties within two hundred (200) feet of a protected water feature.

[...]

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16.34.060 Map verification to establish natural resource boundaries.

A. The preparation of the City of Happy Valley Steep Slopes and Natural Resources Overlay Zone Map did not include specific field observations of every individual property. The map is designed to be specific enough to determine whether further environmental review of a development proposal is necessary. If any portion of the development or alteration of the land (except those exempted by this Chapter) is located within the Natural Resources Overlay Zone boundary, then map verification is required before any development permit can be issued.

1. The map verification requirements described in this section shall be met at the time an applicant proposes a nonexempt use or activity or requests a building permit, grading permit, tree removal permit, land division approval, or some other land use decision. Where it can be clearly determined by the Planning Official that development is at least one hundred (100) feet from the NROZ and there is no impact to the Significant Resource, development may be permitted without map verification.

2. A property owner, or another person with the property owner's consent, may request to verify the location of Water Quality Resources and/or HCAs on a real property lot or parcel pursuant to this section, but said request for information shall be at the Planning Official or designee's sole discretion, based on staff availability, funding resources, and policy priorities and shall require the submittal of a public information request and resultant fee. If a person receives a verification separate from a simultaneous request for a building permit, grading permit, tree removal permit, land division approval, or some other land use decision, then the person may use the verification to satisfy the requirements of this section at any time up until five years after the date the verification was issued.

3. Map verification shall not be used to dispute whether identified resources provide the ecological functions that they are assumed to provide based on the ecological criteria used to identify them.

4. Notwithstanding any other provisions of Section 16.34.060, for utility projects undertaken by public utilities across property that is not owned by the utility, the utility shall not be required to map or provide any information about the property except for the area within three hundred (300) feet of the location of the proposed disturbance area of the utility's project. [...]

B. Water Quality Resources—Map Verification. Water Quality Resources include the Protected Water Features and the Vegetated Corridors as specified in Table 16.34.060-1, and include all land identified and protected under Metro's UGMFP Title 3 Water Quality Resource Areas.

1. Protected Water Features include creeks, rivers, streams, wetlands, natural lakes, and springs. The general location of identified Protected Water Features is indicated on the Happy Valley Steep Slopes and Natural Resources Overlay Zone Map; however, the text provisions of this section shall be used to determine the exact location of the Protected Water Feature.

2. The Vegetated Corridor (buffer) is a facility required to prevent damage to the Protected Water Feature caused by development impacts. The width of the Vegetated Corridor area varies depending on the type of Protected Water Feature; upstream drainage area served; and slope adjacent to the Protected Water Feature, as specified in Table 16.34.060-1. The Vegetated Corridor (buffer) is based on the horizontal distance measured perpendicular to the Protected Water Feature boundary, not the slope distance from it. To establish the size of Vegetated Corridor, the starting point for measurements from the Water Feature is the edge of

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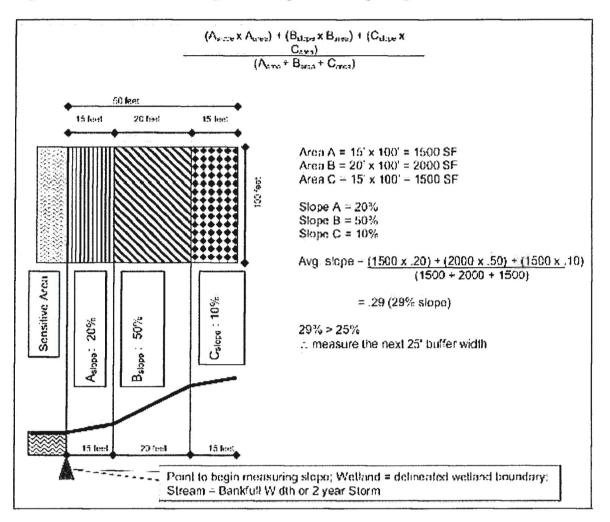
bankful flow or two-year storm level or the delineated edge of a wetland. At least three slope measurements along the water feature, at no more than one hundred (100) foot increments, shall be made for each property for which development is proposed. Depending on the width of the property, the width of the vegetated corridor will vary. The Vegetated Corridor (buffer) width is determined based on the slope of the land adjacent to the Protected Water Feature in twenty-five (25) or fifty (50) foot increments. Where the slope of the land varies within the measurement area, an Area Weighted Average slope shall be calculated. The calculation for the Area Weighted Average slope is shown in Figure 16.34.060-1; note that A, B, and C indicate different slope areas, measured horizontally.

Protected Water Feature	Upstream Drainage Area	Slope Adjacent to Sensitive Area	Width of Vegetated Corridor (Buffer)
Intermittent creeks, rivers, streams	Less than 50 acres	Any slope	25 feet
	50 to 100 acres	<25%	25 feet
	50 to 100 acres	≥25%	50 feet
	Greater than 100 acres	<25%	50 feet
	Greater than 100 acres	≥25%	100 to 200 feet depending on adjacent slope—see Figure 16.34.060-2
Perennial creeks, rivers, streams	Any upstream area	<25%	50 feet
	Any upstream area	≥25%	100 to 200 feet depending on adjacent slope—see Figure 16.34.060-2
Wetlands, lakes (natural), and springs.	Any drainage	<25%	50 feet
	Any drainage	≥25%	100 to 200 feet depending on adjacent slope—see Figure 16.34.060-3

Table 16.34.060-1 Water Quality Resources

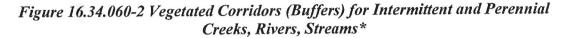
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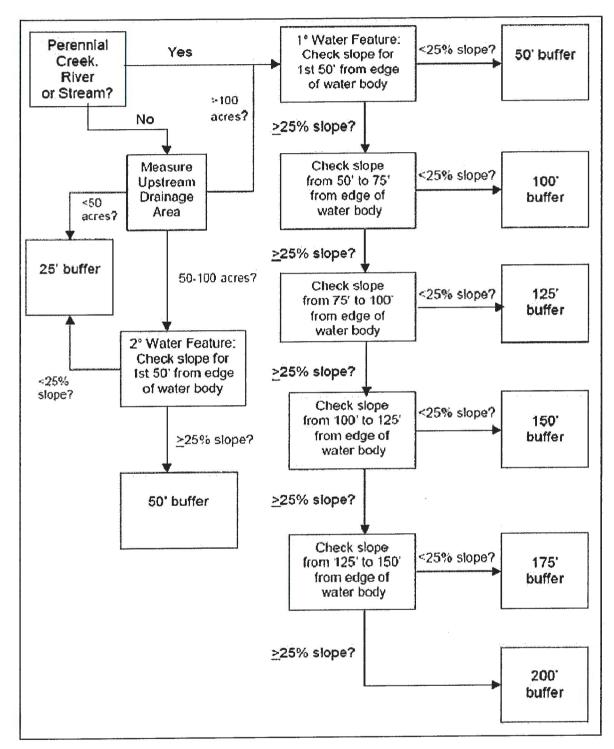
Figure 16.34.060-1 Calculating Area Weighted Average Slope



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3. Delineation of Water Quality Resources. Applicants shall delineate the boundaries of the protected water feature as follows:

a. Lakes, Springs, and Wetlands.

i. Delineate boundaries using the methods described in the 1987 US Army Corps of Engineers Wetland Delineation Manual.

ii. Survey and map all wetland boundaries on the site base map.

Intermittent and/or Perennial Streams.

i. Identify whether the stream is perennial or intermittent. Streams are considered perennial until proven intermittent with adequate field documentation (photos, field data) or determination by Oregon Division of State Lands.

ii. For all intermittent and/or perennial streams, delineate protected water feature boundaries by identifying the top of bank of the defined channel, or the surface elevation of a two-year, twenty-four (24) hour storm event. If determining the surface elevation of a two-year, twenty-four (24) hour storm event is not possible, then the outside edge of the stream feature is determined by identifying the aerial extent of:

(A) Water marks on fixed objects (vegetation, buildings, etc.);

(B) Drift lines (deposited waterborne twigs, litter, etc.); or

(C) Waterborne sediment deposits on the soil surface or fixed objects (vegetation, buildings, etc.);

(D) Use the indicator that provides the greatest aerial cover. Vegetated Corridors.

i. Follow procedures outlined in Section 16.34.060(B)(3) for determining vegetated corridor (buffer).

ii. Stake, survey, and map the boundaries of the sensitive areas and the vegetated corridor on the project site and adjacent properties within two hundred (200) feet of the property line on the base map (if access is possible) and flag them on the project site. [...]

Staff Response:

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C.

As indicated on Page D4 of the City's Steep Slopes and Natural Resource Overlay Map (Exhibit A-8) the subject site contains a "protected water feature", which is located on the southern portion of the subject property. The applicant has provided a wetland delineation (Exhibit 4) that states that there are two wetland areas and one intermittent or seasonal drainageway present on the subject site. The applicant has shown on their preliminary partition plat (Exhibit 2, Sheet D2) that the two identified wetland areas and their associated 50-foot buffers will be encumbered by a conservation easement. However, the applicant has not indicated that the onsite drainageway will be protected within a conservation easement. Instead, the preliminary partition plat indicates a 15-foot stormwater drainage easement over the existing onsite drainageway. The Clackamas County Planning Division has reviewed and commented on the Environmental Review Permit and the findings within the applicant's wetland delineation. The County's Planning Division has stated in their comments (Exhibit A-7) that were submitted to the City that the onsite drainageway is a "jurisdictional" waterway and will require a 25-foot buffer along each of its banks. The County has also expressed concerns over the accuracy of the wetland delineation as it relates to the southernmost wetland, labeled as Wetland "B" on the applicant's plan set. As a result, proposed Condition of Approval No. 42 has been incorporated into this report that will require the applicant to reach an agreement with the County and protect all water features (wetlands and jurisdictional waterways) within a conservation easement. Per Condition of Approval No. 42, these criteria have been satisfied.

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CHAPTER 16.41-ACCESS AND CIRCULATION

16.41.030 Vehicular access and circulation.

[...] A.

Access to Arterial and Collector Streets.

1. Location and design of all accesses to and/or from arterials and collectors (as designated in the transportation system plan) are subject to review and approval by the City Engineer. Where practical, access from a lower functional order street shall be required.

2. Accesses to arterials or collectors shall be located a minimum of one hundred fifty (150) feet from any other access or street intersection. Exceptions may be granted by the City Engineer. Evaluations of exceptions shall consider posted speed of the street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities.

3. No development site that abuts an arterial or collector street shall be allowed more than one access point to that street (as designated in the transportation system plan) except as approved by the City Engineer. Evaluations of exceptions shall consider posted speed of street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities.

4. When developed property is to be expanded or altered in a manner that significantly affects on-site parking or circulation, both existing and proposed accesses shall be reviewed under the standards in subsections (B)(1) and (B)(2) of this section. As a part of an expansion or alteration approval, the City may require relocation and/or reconstruction of existing accesses not meeting those standards.

5. When a partition, subdivision or a planned unit development abuts or contains an existing or proposed arterial street as defined within the Comprehensive Plan, the City Engineer or Planning Commission shall require reverse frontage lots, thereby precluding access to the parkway streets.

B. Driveways.

1. A driveway to an off-street parking area shall be improved from the public roadway to the parking area a minimum width of twenty (20) feet for a two-way drive or twelve (12) feet for a one-way drive but in either case not less than the full width of the standard approach for the first twenty (20) feet of the driveway.

2. Access to and from off-street parking areas shall not permit backing onto a public street, except for single-family dwellings.

3. *A driveway for a single-family dwelling shall have a minimum width of twelve (12) feet.*

4. A driveway for a two-family dwelling shall have a minimum width of twenty (20) feet. A driveway approach must be constructed in accordance with applicable City standards and the entire driveway must be paved with asphalt or concrete or an approved permeable or semi-permeable surface.

5. Driveways, aisles, turnaround areas and ramps shall have a minimum vertical clearance of twelve (12) feet for their entire length and width but such clearance may be reduced in parking structures.

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6. No driveway shall traverse a slope fifteen (15) percent or greater at any point along the driveway length.

7. The location and design of the driveway within the lot frontage shall provide for unobstructed sight pursuant to the vision clearance requirements. Requests for exceptions to these requirements will be evaluated by the public works director considering the physical limitations of the lot and safety impacts to vehicular, bicycle, and pedestrian traffic.

8. The number of driveway and private street intersections with public streets should be minimized by the use of shared driveways for adjoining lots where feasible. When necessary for traffic safety and access management purposes, or to access flag lots, the City Engineer may require joint access and/or shared driveways.

Staff Response:

Vehicular access to the existing church facilities (proposed Parcel 1) is provided by one driveway off SE Sunnyside Road and another driveway off SE 117th Avenue. Although these access points were established when the church was originally built, they meet the above standards. Future access to proposed Parcels 2 and 3 (vacant parcels) within the greater subject site will be reviewed as part of future Design Review applications for any proposed structures. These criteria have been satisfied.

16.41.040 Pedestrian access and circulation.

To ensure safe, direct and convenient pedestrian circulation, all developments, except singlefamily detached housing (i.e., on individual lots), shall provide a continuous pedestrian and/or multi-use pathway system as shown in the City's TSP, Happy Valley Parks Master Plan, or North Clackamas Parks District Master Plan. (Pathways only provide for pedestrian circulation; multi-use pathways accommodate pedestrians and bicycles.) The system of pathways shall be designed based on the standards in subsections A through E of this section.

A. Continuous Pathways. The pathway system shall extend throughout the development site, and connect to all future phases of development, adjacent trails, public parks and open space areas whenever possible. The developer may also be required to connect or stub pathways(s) to adjacent streets and private property.

B. Safe, Direct and Convenient Pathways. Pathways within developments shall provide safe, reasonably direct and convenient connections between primary building entrances and all adjacent streets. For purposes of this Code section, the "primary entrance" of commercial, industrial, mixed use, public and institutional buildings is the main public entrance to the building. In the case where no public entrance exists, street connections shall be provided to the main employee entrance. For residential buildings, the "primary entrance" is the front door (i.e., facing the street). For multifamily buildings in which each unit does not have its own exterior entrance, the "primary entrance" may be a lobby, courtyard or breezeway that serves as a common entrance for more than one dwelling. A determination of whether or not a bicycle or pedestrian route is safe, direct, and convenient will be based on the following criteria:

1. Planned bicycle and pedestrian routes do not deviate unnecessarily from a straight line and will not involve a significant amount of out-of-direction travel for likely users.

2. Bicycle and pedestrian routes are reasonably free from hazards and provide safe access to destinations.

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C. Connection within Development. For all developments subject to site design review, pathways shall connect to all building entrances to one another. In addition, pathways shall connect all parking areas, storage areas, recreational facilities and common areas (as applicable), and adjacent developments to the site, as applicable.

D. Connections to Transit.

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d.

1. New retail, office and institutional buildings at or near major transit stops shall provide for convenient pedestrian access to transit through the use of the continuous pathway system outlined in subsections A and B above.

2. In addition to other requirements in this section, sites that are located at a major transit stop shall provide the following:

a. Either locate buildings within twenty (20) feet of the transit stop, a transit street or an intersection street, or provide a pedestrian plaza at the transit stop or a street intersection;

b. A reasonably direct pedestrian connection between the transit stop and building entrances on the site;

A transit passenger landing pad accessible to disabled persons;

Lighting at the transit stop.

E. Design and Construction. Pathways shall be designed and built in accordance with City public works standards.

Staff Response:

The existing pedestrian circulation system within the subject site provides for safe, direct, convenient, and continuous pedestrian routes to areas within the subject site and to adjacent mass transit stops. If future pedestrian connections are required at the time of the development of proposed Parcels 2 and 3, they will be evaluated during Design Review. These criteria have been satisfied.

CHAPTER 16.42-LANDSCAPING, STREET TREES, FENCES, AND WALLS

16.42.040 Street trees and planter strips.

A. Applicability. All partitions, subdivisions, planned unit developments (PUDs), and any individual uses within any district, whether permitted by right or conditional approval, shall be required to provide street trees and, where applicable, planter strips on all public or private roadways or access drives within the project area, in accordance with the standards in subsection B below.

B. Standards.

1. All street trees and planter strips shall be installed or financially secured by the developer pursuant to the definition of a "planter strip" found within Section 16.12.030 (Definitions). Private streets or development areas that do not utilize curbside planter strips shall install street trees beyond the public sidewalk, within a public utility and street tree easement.

2. Street Tree Installation Methodology. The developer and/or builder shall submit a planter strip and street tree plan as part of the construction plan set, detailing to the greatest extent practicable the placement of street trees in conformance with all spacing requirements in regard to street intersections, street lights, driveways, fire hydrants, etc. Based on this street tree plan, the developer shall submit a street tree installation fee or liquid financial guarantee based on the methodology set forth in Section 16.50.080. [...]

Staff Response:

Street trees exist along of the subject site's street frontage with SE Sunnyside Road. However, no street trees exist along the subject site's frontages with SE 114th Court or SE 117th Avenue. The applicant will be required as part of this application to install street trees along SE 117th Avenue, as "frontage" improvements are being required in this area. Street trees along SE 114th Court will be required to be installed with a future Design Review application for development on proposed Parcel 2. Per Condition of Approval No. 21, these criteria have been satisfied.

16.42.070 Lighting.

Α. Purpose.

This section has been formulated to allow for the provision of street lighting for 1. reasons of safety, health, peace and general welfare of all users and the citizens of and visitors to Happy Valley. It is the intent of this section that such lighting shall be provided by and through annexation of the City to Clackamas County Service District No. 5 or its successor.

2. The rules and regulations set forth in this section are jointly established by the City, Clackamas County Service District No. 5, or its successor, and Portland General Electric *Co. (PGE) for all street lighting installation and service within the City.* В.

Street Light Design Requirements.

а.

Street lighting installations to be provided with light from dusk to dawn daily, 1. activated by photo-electrical control.

Whenever any installation of street lighting is made, the City, in cooperation with the District and PGE, or its successor, shall approve the design for such lighting. Street lighting design shall conform to the following requirements:

Street lighting shall be provided only on public rights-of-way;

Illumination levels shall be guided by the recommendations of the most Ь. current edition of the "American National Standard-Standard Practice for Roadway Lighting"; The luminaire spacing may be modified to meet existing conditions such С.

as utility poles, property lines, roadway geometry, trees, signs, buildings or any other obstacle within the right-of-way, at the discretion of the City. [...]

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Staff Response:

The applicant's proposal was reviewed by CCSD#5 to determine if additional street lighting would be necessary along the subject site's public street frontages. CCSD#5 provided written comments (Exhibit A-6) that were incorporated into this report. CCSD#5 determined that adequate street lighting currently exists along the subject site's street frontage with SE Sunnyside Road. However, it was determined that the applicant will be required as part of this application to install street lighting along the subject site's street frontage with SE 117th Avenue. It will be determined at the time of Design Review if any additional street lighting will be required along SE 114th Court. Per Condition of Approval No. 24, these criteria have been satisfied.

CHAPTER 16.50-PUBLIC FACILITIES

[...] 16.50.050 Sanitary sewer and water service improvements.

A. Sanitary Sewerage Disposal and Storm Drainage Requirements.

1. The sanitary sewerage disposal requirements for any development within the City shall be in accordance with standards established by the State of Oregon, Department of Environmental Quality (DEQ) as administered by Clackamas County. Any variances or waivers to these standards shall be granted only in accordance with established standards, criteria and procedures of DEQ.

2. All sanitary sewers shall be designed and constructed in accordance with the requirements of the Clackamas County Service District No.1 or its successor.

3. Storm drainage for any development within the City shall be in accordance with the City's Drainage Ordinance (Section 16.50.060).

Staff Response:

The applicant has proposed no stormwater management or sanitary sewer system improvements with this application, contending that any necessary improvements will be completed as part of future Design Review applications on proposed Parcels 2 and 3. The City finds the applicant's proposal for stormwater management acceptable, due to the necessary capacity of the stormwater system being unknown at this time. However, it is known at this time that any future development on proposed Parcels 2 and 3 will need to connect to public sanitary sewer. As a result, a condition of approval has been incorporated into this report requiring the applicant to install a sanitary sewer lateral from an existing line in SE 117th Avenue to proposed Parcel 3 as part of this application. There is an existing sanitary sewer lateral near proposed Parcel 2, installed as part of the Sunnyside Road Capital Improvement Project, that will serve future development on Parcel 2. Per Condition of Approval No. 37, these criteria have been satisfied.

B. Domestic Water and Fire Protection Service Requirements.

1. All subdivisions or planned unit developments shall be served by a community or public water supply as defined and governed by state regulations. All design and construction shall be in accordance with the requirements of Mt. Scott Water District or its successor.

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2. All subdivisions or planned unit developments shall have an adequate water supply for fire protection purposes as required by the fire district, and shall have fire hydrants located as required by the fire district.

3. Any proposed public or private road shall be reviewed by the appropriate fire district for compliance with all applicable and appropriate standards, and a statement of compliance shall accompany the application for any subdivision or PUD (See Section 16.50.030 and any other applicable sections).

[...]

Staff Response:

SWA has evaluated the applicant's proposal for the provision of domestic water to the proposed development and had no comments or proposed conditions of approval. CFD #1 has reviewed the applicant's proposal for site access and fire hydrant spacing and sent notice to the City that they had no comments or conditions of approval pertaining to this proposal. These criteria have been satisfied.

16.50.070 Utilities.

A. Purpose. The approval of any partition, subdivision of land or planned unit development within the City by the Planning Commission or appropriate and designated body or agent and the City Council shall be upon the express condition that all utility lines, including but not limited to those required for electric, communication, street lighting and cable television services and related facilities, shall be placed underground. Whether or not such underground facilities have supporting containers or are buried in the earth shall be determined by the utility involved in compliance with all applicable safety regulations. [...]

Staff Response:

The applicant has been conditioned to place all utilities within the development underground and to locate said utilities within a public utility easement. Per Condition of Approval No. 21, this criterion has been satisfied.

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CHAPTER 16.61-TYPES OF REVIEW PROCEDURES

[...]

16.61.030 Type II procedure (administrative).

[...]

D. Administrative Decision Requirements. The Planning Official or designee shall make a Type II written decision addressing all of the relevant approval criteria and standards. Based upon the criteria and standards, and the facts contained within the record, the Planning Official or designee shall approve, approve with conditions, or deny the requested permit or action. Alternatively, the Planning Official, and/or the applicant, may refer the application to the Planning Commission for review in a public hearing, in which case the review shall follow the Type III procedures in Section 16.61.040, including payment of all applicable fees.

Staff Response:

The Planning Official has opted to exercise the provisions of this section by referring the decision on the proposed Partition and Environmental Review Permit (typically Type II administrative decisions) to the Planning Commission for review in a public hearing. As discussed in later Staff Responses, the review of these applications will follow the Type III procedures. This criterion has been satisfied.

16.61.040 Type III procedure (quasi-judicial).

[...]

D. Notice of Hearing.

1. Mailed Notice. The City shall mail the notice of the Type III action. The records of the Clackamas County Assessor's Office are the official records for determining ownership. Notice of a Type III application hearing or Type II appeal hearing shall be given by the Planning Official or designee in the following manner:

a. At least twenty-one (21) days before the hearing date, notice shall be mailed to:

[...]

b. The Planning Official or designee shall have an affidavit of notice be prepared and made a part of the file. The affidavit shall state the date that the notice was mailed to the persons who must receive notice.

c. At least fourteen (14) business days before the hearing, notice of the hearing shall be printed in a newspaper of general circulation in the City. The newspaper's affidavit of publication of the notice shall be made part of the administrative record.

2. Posted Notice. In addition to any other notice, the applicant shall post the property subject to the application with at least one sign for every three hundred (300) feet of frontage. The sign shall be purchased from the City. Such sign shall remain continuously posted from at least fourteen (14) days prior to the end of the public written comment period or public hearing date, A notarized statement of posting shall be submitted to the City Recorder prior to the public hearing. Failure to post the sign may result in invalidating the final decision.

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3. Content of Notice. Notice of appeal of a Type II administrative decision or notice of a Type III hearing to be mailed and published pursuant to subsection (D)(1) above shall contain the following information: [...]

Staff Response:

The process and notices described within this section have been followed by the City, including the provision of a Measure 56 notice. The application was deemed complete on September 30, 2011. 45-Day Notice was sent to the Department of Land Conservation and Development on October 10, 2011, public notice was sent October 7, 2011, and newspaper notice was published on November 16, 2011. A public hearing was scheduled before the Planning Commission on December 13, 2011. Therefore, these criteria have been satisfied.

F. The Decision Process.

1. Basis for Decision. Approval or denial of an appeal of a Type II administrative decision or of a Type III application shall be based on standards and criteria in this Development Code. The standards and criteria shall relate approval or denial of a discretionary development permit application to the development regulations and, when appropriate, to the Comprehensive Plan for the area in which the development would occur and to the development regulations and Comprehensive Plan for the City as a whole;

2. Findings and Conclusions. Approval or denial shall be based upon the criteria and standards considered relevant to the decision. The written decision shall explain the relevant criteria and standards, state the facts relied upon in rendering the decision, and justify the decision according to the criteria, standards, and facts; [...]

Staff Response:

The entire application is being processed through the City's Type III quasi-judicial review procedure. The standards and criteria that have been used to evaluate the proposed application are found within the Statewide Planning Goals, OAR, Happy Valley Comprehensive Plan, LDC, and Clackamas Regional Center Area Design Plan. The findings of the City's evaluation of the applicant's proposal are provided within this report. These criteria have been satisfied.

CHAPTER 16.63-LAND DIVISIONS AND PROPERTY LINE ADJUSTMENTS

[...]

16.63.060 Approval criteria—Preliminary plat.

A. General Approval Criteria. The City may approve, approve with conditions or deny a preliminary plat based on the following approval criteria:

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1. The proposed preliminary plat complies with the applicable Development Code sections and all other applicable ordinances and regulations. At a minimum, the provisions of this article, and the applicable chapters and sections of Article 16.2 (Land Use Districts), Article 16.3 (Specific Area Plan Districts and Overlay Zones), and Article 16.4 (Community Design Standards) shall apply. Where a variance is necessary to receive preliminary plat approval, the application shall also comply with the relevant sections of Article 16.7;

Staff Response:

As demonstrated in this report, the applicant has met the requirements of all applicable sections of the LDC. This criterion has been satisfied.

2. The proposed plat name is not already recorded for another subdivision, and satisfies the provisions of ORS Chapter 92;

Staff Response:

The applicant will be required to submit a final plat to the Clackamas County Surveyor's Office, which will determine if the name on the plat is appropriate. Per Condition of Approval No. 3, this criterion has been satisfied.

3. The proposed streets, roads, sidewalks, bicycle lanes, pathways, utilities, and surface water management facilities are laid out so as to conform or transition to the plats of subdivisions and maps of major partitions already approved for adjoining property as to width, general direction and in all other respects. All proposed public improvements and dedications are identified on the preliminary plat;

Staff Response:

The applicant's proposal was determined to provide congruity with all adjoining developments, by all the means listed above, and all proposed public improvements and dedications are identified on the preliminary partition plat (Exhibit 2, Sheet D2). Therefore, this criterion has been satisfied.

4. All proposed private common areas and improvements (e.g., homeowner association property) are identified on the preliminary plat; and

Staff Response:

The applicant has not proposed any new private common areas. This criterion has been satisfied.

5. Evidence that any required State and Federal permits have been obtained, or shall be obtained before approval of the final plat;

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Staff Response:

The applicant has provided, or has been conditioned to provide, all necessary State and Federal permits to facilitate the proposed development. This criterion has been satisfied.

6. Evidence that improvements or conditions required by the City, road authority, Clackamas County, special districts, utilities, and/or other service providers, as applicable to the project, have been or can be met; and

Staff Response:

The City has reviewed the applicant's proposal and provided a list of conditions of approval that appear to be reasonable for the applicant to meet. This criterion has been satisfied.

7. If any part of the site is located within a specific area plan district, overlay zone, or previously approved master planned development, it shall conform to the applicable regulations and/or conditions.

Staff Response:

The proposed development is subject to the City's requirements for lands within the Natural Resource Overlay Zone. The applicant's proposal does not violate any regulations found within this section. This criterion has been satisfied.

B. Layout and Design of Streets, Blocks and Lots. All proposed blocks (i.e., one or more lots bound by public streets), lots and parcels conform to the specific requirements below:

1. All lots shall comply with the lot area, setback, and dimensional requirements of the applicable land use district (Article 16.2) and Section 16.50.030, Transportation standards, with the exception of lots created specifically for the purposes of fee acquisition in conjunction with either public or private utility projects, which may be any size.

2. Setbacks shall be as required by the applicable land use district (Article 16.2).

3. Each lot shall conform to the standards of Chapter 16.41, Access and Circulation.

4. Landscape or other screening may be required to maintain privacy for abutting uses. See Article 16.2, Land Use Districts, and Chapter 16.42, Landscaping.

5. In conformance with the Uniform Fire Code, a twenty (20) foot width fire apparatus access drive shall be provided to serve all portions of a building that are located more than one hundred fifty (150) feet from a public right-of-way or approved access drive. See Chapter 16.41, Access and Circulation.

6. Where a common drive is to be provided to serve more than one lot, a reciprocal easement which will ensure access and maintenance rights shall be recorded with the approved subdivision or partition plat.

[...]

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Staff Response:

The applicant's proposal has been reviewed for compliance with the above standards. Compliance with most of these standards is demonstrated within previous "Staff Responses" to the listed sections of the LDC. Requirements for access, landscaping, and building siting will be reviewed as part of future Design Review applications for proposed Parcels 2 and 3. These criteria have been satisfied.

E. County Surveyor's Requirements. The Clackamas County Surveyor shall require that all surveying and monumentation be pursuant to the appropriate State statutes.

Staff Response:

The applicant will be required to submit a final plat for the proposed partition to the Clackamas County Surveyor's Office to ensure compliance with all state statutes pertaining to surveying and monumentation. Per Condition of Approval No. 3, this criterion has been satisfied.

F. Conditions of Approval.

1. The City may attach such conditions as are necessary to carry out provisions of this Code, and other applicable ordinances and regulations, and may require reserve strips be granted to the City for the purpose of controlling access to adjoining undeveloped properties. See Chapter 16.50 (Public Facilities).

2. As a condition of any approval, a waiver of remonstrance against the formation of a local improvement district for the construction, improvement or extension of Level I and Level II services which benefit the property owner shall be required by the City.

3. In situations where this Code requires the dedication of real property to the City, the City shall either: (a) include in the written decision evidence that shows that the required property dedication is directly related to and roughly proportional to the projected impacts of the development on public facilities and services, or (b) delete the dedication as a condition of approval.

Staff Response

Staff has applied conditions of approval deemed necessary and appropriate based on internal review and the review of each service provider. These criteria have been satisfied.

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CHAPTER 16.67- COMPREHENSIVE PLAN MAP, SPECIFIC AREA PLANS, LAND USE DISTRICT MAP AND TEXT AMENDMENTS

[...] 16.67.030 Quasi-judicial amendments.

A. Applicability of Quasi-Judicial Amendments. Quasi-judicial amendments are those that involve the application of adopted policy to a specific development application or Code revision, and not the adoption of new policy (i.e., through legislative decisions). Quasi-judicial Comprehensive Plan map/district map amendments shall follow the Type III procedure, as governed by Section 16.61.040, using standards of approval in Section 16.67.030(C). The approval authority shall be as follows:

1. The Planning Commission shall be the review authority for Comprehensive Plan map/land use district map amendments paired with master plans under twenty (20) acres in size.

2. The Planning Commission shall make a recommendation to the City Council on an application for all other Comprehensive Plan map/land use district plan map amendments. The City Council shall decide such applications.

3. The City Council shall be the review authority for annexations that involve the legislative conversion of existing Clackamas County Comprehensive Plan designations/zoning districts to City Comprehensive Plan designation/zoning districts, per the provisions of Section 16.67.070.

Staff Response:

The applicant's proposed Comprehensive Plan/Zoning Map Amendment pertains to a single property that is less than 20 acres in size. As a result, the proposed amendment is being processed utilizing the City's Type III quasi-judicial procedure per the applicable requirements of Section 16.61.050 (see finding, above), which involves a hearing before the Planning Commission. This criterion has been satisfied.

B. Filing requirements.

1. In order to have a complete application for any proposed text amendment, the applicant shall submit the necessary application forms, and a narrative addressing applicable Comprehensive Plan objectives and policies, as well as the review criteria within Section 16.40.041.

2. In order to have a complete application for a proposed Comprehensive Plan map/zoning map or specific area map amendment, the applicant shall submit:

a. The necessary application forms, and a narrative addressing applicable Comprehensive Plan goals and policies, as well as the review criteria within Section 16.61.040;

b. A conceptual development plan illustrating a proposed street system, lot pattern, neighborhood circulation plan within a five hundred (500) foot radius of the subject site, and any natural resource or steep slopes areas;

c. A traffic study prepared by a professional, Oregon-licensed traffic engineer. If a master plan that requires a full traffic impact analysis is required for a Comprehensive Plan map amendment/land use district map, a subsequent master plan may satisfy this provision, as determined by the Planning Official.

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Staff Response:

The Comprehensive Plan/Zoning Map Amendment application that was submitted by Valley View Evangelical Church was reviewed and determined to contain the above items. City staff sent a notice to the applicant that their application was complete on September 30, 2011. These criteria have been satisfied.

C. Criteria for Quasi-Judicial Amendments. A recommendation or a decision to approve, approve with conditions or to deny an application for a quasi-judicial amendment shall be based on all of the following criteria:

1. Approval of the request is consistent with the Statewide Planning Goals;

2. Approval of the request is consistent with the applicable goals and policies of the City's Comprehensive Plan;

3. The property and affected area is presently provided with adequate public facilities, services and transportation networks to support the use, or such facilities, services and transportation networks are planned to be provided in the planning period; and

Staff Response:

As demonstrated within the findings of this report, the proposed amendments are consistent with the Statewide Planning Goals, the City's Comprehensive Plan and Clackamas Regional Center Area Design Plan. Also, the subject site is located in an area the is adequately served by all Level 1 services and is adjacent to a transportation network that has adequate capacity to support the uses allowed in the proposed zones. These criteria have been satisfied.

4. The change is in the public interest with regard to neighborhood or community conditions, or corrects a mistake or inconsistency in the Comprehensive Plan or land use district map regarding the property which is the subject of the application; and

Staff Response:

Economic development and housing goals found within the City's Comprehensive Plan support increasing the mixture of land uses in the City where compatible with surrounding development and increasing employment opportunities. The proposed Comprehensive Plan/Zoning Map Amendment and concurrent amendment to the Design Plan would still allow for housing but also provides employment opportunities on the project site where none are currently allowed. The proposed zoning also allows for an intensification of land uses adjacent to a major traffic corridor, which serves City objectives regarding efficient use of land and public facilities, while limiting the extent of the intensification so it can be compatible with surrounding residential uses. This criterion has been satisfied.

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5. When an application includes a proposed Comprehensive Plan map amendment/land use district map amendment, the proposal shall be reviewed to determine whether it conforms to Oregon Administrative Rule (OAR) 660-012-0060 (the Transportation Planning Rule – TPR). If a master plan that requires a full traffic impact analysis is required for a Comprehensive Plan map amendment/land use district map, a subsequent master plan may satisfy this provision, as determined by the Planning Official.

Staff Response:

Section 16.67.060 of the City's LDC requires compliance with the TPR, which is addressed within the findings of this report (see below finding). Therefore, this criterion has been satisfied.

16.67.040 Conditions of approval for quasi-judicial amendments.

A quasi-judicial decision may be for denial, approval, or approval with conditions; conditions shall be based on applicable regulations and factual evidence in the record. Legislative amendments may only be approved or denied.

[...]

Staff Response:

City staff has included within this report what it has deemed an appropriate list of conditions of approval for the subject applications. This criterion has been satisfied.

16.67.060 Transportation planning rule compliance.

A. Review of Applications for Effect on Transportation Facilities. When a development application includes a proposed Comprehensive Plan amendment or land use district change, the proposal shall be reviewed to determine whether it significantly affects a transportation facility, in accordance with Oregon Administrative Rule (OAR) 660-012-0060 (the Transportation Planning Rule – TPR) and the traffic impact study provisions of Section 16.61.090. "Significant" means the proposal would:

1. Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors). This would occur, for example, when a proposal causes future traffic to exceed the levels associated with a "collector" street classification, requiring a change in the classification to an "arterial" street, as identified by the City's Transportation System Plan ("TSP"); or

2. Change the standards implementing a functional classification system; or

3. As measured at the end of the planning period identified in the TSP, allow types or levels of land use that would result in levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility; or

4. Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP; or

5. Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP.

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Staff Response:

Per the TPR, it was required that a TIA be submitted as part of this application to determine if the proposed Comprehensive Plan/Zoning Map Amendment would "significantly" impact any existing transportation facility. As indicated in the TIA and associated addendum, the applicant's proposed amendments do comply with the TPR, meaning no significant (as defined above) impacts to adjacent roadways would result from the proposed Comprehensive Plan/Zoning Map Amendment. The net increase in trips resulting from the proposed application will not change the level of service on any of the neighboring transportation facilities. Therefore no mitigating measures are proposed or required. The City's Traffic Engineer (DKS Associates) has reviewed and concurred with the applicant's findings within the TIA and associated addendum. These criteria have been satisfied.

B. Amendments That Affect Transportation Facilities. Except as provided in subsection C, amendments to the Comprehensive Plan and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the function, capacity, and level of service of the facility (identified in the TSP). This shall be accomplished by one of the following:

1. Adopting measures that demonstrate that allowed land uses are consistent with the planned function of the transportation facility; or

2. Amending the TSP to provide transportation facilities, improvements, or services adequate to support the proposed land uses; such amendments shall include a funding plan to ensure the facility, improvement, or service will be provided by the end of the planning period; or

3. Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes of transportation; or

4. Amending the planned function, capacity or performance standards of the transportation facility; or

5. Providing other measures as a condition of development or through a development agreement or similar funding method, specifying when such measures will be provided.

C. Exceptions. Amendments to the Comprehensive Plan or land use regulations with a significant effect on a transportation facility, where the facility is already performing below the minimum acceptable performance standard identified in the TSP, may be approved when all of the following criteria are met:

1. The amendment does not include property located in an interchange area, as defined under applicable law;

2. The currently planned facilities, improvements or services are not adequate to achieve the standard;

3. Development resulting from the amendment will, at a minimum, mitigates the impacts of the amendment in a manner that avoids further degradation to the performance of the facility by the time of the development; and

4. The road authority provides a written statement that the proposed funding and timing for the proposed development mitigation are sufficient to avoid further degradation to the facility."

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Staff Response:

As discussed in the previous finding, the proposed Comprehensive Plan/Zoning Map Amendment is not anticipated to have any significant affect on any transportation facility. Therefore, these criteria have been satisfied.

III. <u>RECOMMENDATION:</u>

Staff has determined that the above findings demonstrate that the proposed Comprehensive Plan/Zoning Map Amendment and resultant change within the Design Plan; Partition; and, Environmental Review Permit satisfy the requirements of the Statewide Planning Goals, OAR, City of Happy Valley Comprehensive Plan and LDC, and Clackamas Regional Center Area Design Plan. Staff, therefore, recommends the Planning Commission approve application CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11, subject to the proposed conditions of approval.

Conditions of Approval for CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11

Administration

- 1. The City shall amend the Comprehensive Plan/Zoning Map for the subject site to reflect a combination of MUC and IPU designation/zoning to align with the final partition plat boundaries. The Comprehensive Plan/Zoning Map Amendment for the area described as Parcel 3 is conditioned upon that subject parcel developing as a retirement residence. Any deviation from the use within the Conceptual Development Plan as it relates to proposed Parcel 3 will require a major amendment to this approval, including revisions to the TIA.
- 2. The City shall amend the Design Plan for the subject site to reflect a combination of HDR and PCU to align with the final partition plat boundaries.
- 3. The property owner shall file a final plat pursuant to ORS 92.050 and shall conform to all provisions contained therein. The recorded plat shall be in substantial conformance with the approved preliminary plat and bear the signature of the City's Economic and Community Development Director. Two recorded copies of the Plat shall be submitted to the City as verification of recordation prior to the issuance of any building permit.
- 4. This approval will expire two years from the issuance of the Notice of Decision. The applicant may apply for a maximum of three, one year time extensions, pursuant to Section 16.63.040.D of the most current revision of the City's LDC.
- 5. Prior to final plat approval, area computations in square feet for all building lots must be prepared and submitted by an engineer or surveyor registered in the State of Oregon.

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Happy Valley Engineering Division

General Items

- 6. All submitted project construction plans shall conform to the City's "Engineering Design and Standard Details Manual" (Manual) for design and drafting requirements.
- 7. The project is subject to the City's latest "Public Improvement Guarantee" form which requires financial security of 125 percent of the engineer's estimate and a 25 percent two (2) year maintenance bond upon completion and acceptance of the improvements.
- 8. Construction plans shall show all adjacent subdivision names, lot lines and tax lot lines with the tax map and tax lot number noted on each.
- 9. Construction plan review is subject to these conditions of approval.
- 10. Full time inspection by the developer's engineer is required for all street and storm drainage construction.
- 11. A sign shall be posted conspicuously at the job site entrance prior to site construction, and shall be maintained throughout construction. Use two-inch high black letters on a 4'x8' sign with an orange background. The sign shall read as follows:

"SITE CONSTRUCTION SHALL BE LIMITED TO 7:00 AM TO 6:00 PM ON WEEKDAYS, AND 8:00 AM TO 5:00 PM ON SATURDAYS AND SUNDAYS. FRAMING SHALL BE ENTIRELY PROHIBITED ON SUNDAYS.

HOWEVER, SITE CLEARING, EARTH MOVING, INSTALLAION OR CONSTRUCTION OF UNDERGROUND UTILITIES, PAVING OF STREETS AND SIDEWALKS, FOUNDATION FRAMING AND POURING, AND STRUCTURAL FRAMING SHALL BE ENTIRELY PROHIBITED ON SUNDAYS.

TO REPORT VIOLATIONS CALL 503-783-3800."

The City Manager shall have the authority to waive these requirements in the event of emergency or in the City Manager's opinion, justifiable cause.

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Grading and Erosion Sediment Control

- 12. The developer's engineer is required to provide a site specific drainage plan to temporarily collect, route, and treat surface water and ground water during each construction phase. The construction plans shall specifically identify how the storm drainage system and erosion sediment control (ESC) measures will be phased during construction, such that at any time during construction the approved plans shall be capable of providing full erosion and sediment control collection, routing, and treatment of storm water runoff and ground water. No site construction will be allowed to take place if the storm drainage system and ESC measures are not installed per plan and functioning properly.
- 13. If the total disturbed area for this project exceeds one-acre, an NPDES 1200-C permit from Oregon Department of Environmental Quality (DEQ) will be required. The applicant shall follow the latest requirements from DEQ for NPDES 1200-C permit submittals. A copy of the approved and signed permit shall be provided to the City prior to holding a preconstruction meeting or commencing any construction activity.
- 14. Vegetative cover shall be maintained on slopes or established through new plantings for stability and erosion control purposes. Vegetation shall not be stripped from any steeply sloped area except for construction of streets, utilities, parking areas, pedestrian facilities, and retaining walls.
- 15. The Erosion Sediment Control Plan shall include a plan to implement and maintain wet weather measures within 14 days of the final grading and between the dates of October 1st and April 30th.
- 16. For retaining walls great than four (4) feet in height, a professional engineer or geotechnical engineer registered in the State of Oregon shall provide stamped design calculations and detail drawings required for the retaining wall construction. The retaining wall detail drawings shall include at a minimum; wall profile, wall cross section at highest point of wall, wall reinforcing geotextile requirements, wall drainage system, and wall backfill requirements.
- 17. All grading activity shall be per the current City of Happy Valley Municipal Code. The developer shall submit a completed Site Development Permit to the City prior to beginning any grading work on site.
- 18. The grading limits shall be fenced using the standard four-foot orange plastic construction fencing in addition to the required erosion sediment control fences. All fencing, ESC measures and construction gravel entrances shall be installed and maintained by the developer and inspected by the City of Happy Valley prior to beginning work on the site.
- 19. All construction trucks shall perform transfer of trailers on-site. Surrounding public streets shall not be used as a staging area for dump trucks with transfer trailers.

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Street/Pedestrian System

- 20. Street design plans shall conform to the requirements delineated in the City's "Engineering Design and Standard Details Manual" (Manual) current revision, and the City's Transportation System Plan (TSP), current revision.
- 21. Frontage improvements shall be constructed on SE 117th Avenue and all utilities placed underground. SE 117th Avenue is classified as a neighborhood street in the City's TSP, and the improvements shall meet the neighborhood street standards. The new curb shall be located 34 feet from the curb on the east side of SE 117th Avenue, with a 4.5-foot planter strip and 5-foot sidewalk. The new right-of-way shall be located at the back of the sidewalk, and an 8-foot Public Utility Easement (PUE) shall be dedicated across the project frontage behind the right-of-way line. If possible, all "undergrounded" utilities shall be located within this PUE.
- 22. Frontage improvements to SE 114th Court shall be completed as part of any future Design Review application on proposed Parcel 2.
- 23. Catch basins on SE 117th Avenue shall be the curb inlet type per WES standard drawing SWM-0004.
- 24. Street lights will be required on the SE 117th Avenue frontage. The property owner shall submit a request in writing to CCSD#5 for the installation of streetlights and the formation of an assessment district to pay for the operation and maintenance of lighting, and shall provide a copy of the request to the City.
- 25. The applicant shall provide a signing and striping plan prepared by a registered engineer for all roadways to be approved by the City. The plan shall be submitted for approval as part of the construction plan set. The applicant is responsible for the installation of all signing and striping as indicated on the plans.
- 26. All current ADA requirements for streets and intersections shall be met.
- 27. All required public improvements shall be constructed, inspected, and accepted or financially guaranteed prior to final plat approval.
- 28. No building permits shall be submitted to the City for review until the plat has been recorded, the City, County, and Water District have accepted all improvements, individual 8 ½ x 11 "as-built" record drawings for each lot showing storm and sanitary lateral locations with two distance ties to their ends for future locations are received and approved by all applicable agencies, and the performance/maintenance bonds for each jurisdiction is in place, the City has accepted the project as complete and a Building Permit Release Letter has been issued.

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Miscellaneous

- 29. Dust shall be controlled within the development during construction and shall not be permitted to drift onto adjacent properties.
- 30. Noise shall be kept at the minimum level possible during construction. The developer shall agree to aggressively ensure that all vehicles working on the development shall have adequate and fully functioning sound suppression devices installed and maintained at all times.
- 31. All construction sites shall be maintained in a clean and sanitary condition at all times. Construction debris, including food and drink waste, shall be restricted from leaving the construction site through the use of proper disposal containers or construction fencing enclosures. Failure to comply with this condition may result in a "Stop Work" order until deficiencies have been corrected to the satisfaction of the City.
- 32. Submittal to the City of all required performance bonds, insurance certificates, engineer's agreements, set-aside account letters and/or sureties shall occur prior to establishing a pre-construction meeting date. Review and acceptance by the City Recorder of these instruments shall be required prior to establishing a pre-construction meeting date.
- 33. A \$1,500 construction plan deposit shall be paid with the first submittal of the construction plans. All engineering plan review and inspection fees, right-of-way permit fees (if any) and tree cutting permit fees (if any), shall be paid prior to or at the time of the pre-construction meeting.

Clackamas County Service District #1/Water Environment Services

Sanitary Sewer

- 34. The development is subject to the Rules & Regulations and Standard Specifications of CCSD#1 for sanitary sewer.
- 35. (SAN section 9.01.1) Cost of the sanitary sewer systems shall be borne entirely by the developer. The most current rate for System Development Charges (SDC) shall apply at the time of building permit approval or unless otherwise agreed upon by CCSD#1. SDC fees are required to be paid before issuing the building permit.
- 36. This development is subject to a minimum plan review fee of \$400 for sanitary sewer. Plan review fees are due with the first submittal for plan review.
- 37. The applicant shall provide a sanitary sewer lateral to each parcel. One appears to be necessary on Parcel 3. The applicant may submit a performance bond or some other measure to guarantee the construction of the sewer lateral.

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38. A tap in fee for the sanitary sewer lateral connection is required. The fee is dependent upon the size of the lateral. The applicant is required to schedule the tap 48 hours in advance.

Storm drainage

- 39. The development is subject to the Surface Water Management and Standard Specifications of CCSD#1 for storm drainage and erosion control.
- 40. Cost of the Surface Water facilities shall be borne entirely by the developer. Each parcel is subject to a SDC which will be applied with the building permits.
- 41. Subject to a surface water SDC of \$205 per Equivalent Service Unit (ESU). The SDC will be applied with the building permit.
- 42. The applicant is required to submit information that illustrates concurrence by CCSD#1 on the location and jurisdictional status of any creek, drainageway, or wetland and its associated buffer. Any impacts to jurisdictional bodies of water shall be mitigated and required buffers shall be protected in a conservation easement (submitted to the City of Happy Valley). Any proposed work within jurisdictional waters also requires a permit from the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers (COE) and copies of the permit shall be submitted to the CCSD#1 prior to construction plan approval
- 43. The approval of the land use application does not include any conclusions by CCSD#1 regarding acceptability by the DSL or COE of the wetland delineation. This decision should not be construed to or represented to authorize any activity that will conflict with or violate the DSL or COE requirements. It is the applicant's responsibility to coordinate with the DSL or COE and (if necessary) other responsible agencies to ensure that the development activities are designed, constructed, operated and maintained in a manner that complies with the DSL or COE approval.
- 44. The applicant shall submit a Sensitive Area Certification Form to the District available on our website.
- 45. This development is subject to a minimum plan review fee of \$400 Surface Water plan review (or 4 percent of the cost of the storm construction, whichever is greater). Plan review fees are due with the first submittal for plan review.
- 46. If the required improvements associated with this project create more than 5,000 square feet of impervious area, than stormwater detention, water quality, and infiltration will be required.
- 47. The applicant is required to provide maintenance of the existing Church stormwater facilities. The existing facilities shall be inspected and cleaned prior to approving the plat. Copies of any prior year maintenance records may be acceptable, if available. Defects in the existing system shall be noted and corrected prior to approving the plat. The existing system shall be inspected by an Oregon State licensed civil engineer

December 13, 2011

- 48. The developer's engineer must provide supporting data to WES/CCSD#1 that the downstream conveyance system has adequate capacity to accommodate the Surface Water flows and not cause flooding. An Upstream and Downstream Stormwater Drainage analysis is required.
- 49. The owner shall submit a written stormwater maintenance agreement to the CCSD#1 (form is available). The agreement shall indicate that the owner will have the on-site storm sewer facilities inspected at least once per year (August or September), and clean or repair the facilities as needed. All sediment and debris removed shall be disposed of to an approved site. This agreement shall be signed by the owner and notarized, and the original copy sent to WES.
- 50. CCSD#1 shall review and approve the final plat for the sanitary and storm sewer systems prior to recording.



A LAND USE APPLICATION FOR THE: VALLEY VIEW CHURCH

COMPREHENSIVE PLAN MAP AMENDMENT AND ZONE CHANGE / THREE-PARCEL PARTITION WITH NATURAL RESOURCE OVERLAY ZONE REVIEW

SUBMITTED TO:	City of Happy Valley Planning Department 16000 SE Misty Drive Happy Valley, OR 97086
Owner / Applicant:	Valley View Church (Cindy Larvick and Pastor Steve Straus) 11501 SE Sunnyside Road Clackamas, OR 97015
Land Use Planning, Land Surveying, and Civil Engineering:	AKS Engineering & Forestry, LLC (Monty Hurley, PE, PLS / Chris Goodell) 13910 SW Galbreath Drive, Suite 100 Sherwood, OR 97140 Phone: (503) 925-8799
TRAFFIC ENGINEER:	Lancaster Engineering, Inc. (Todd Mobley) 321 SW 4 th Avenue, Suite 400 Portland, OR 97204
Environmental Consultant:	Ecological Land Solutions, Inc. (Stephanie Taylor) 1157 3 rd Avenue, Suite 220 Longview, WA 98632
SITE ADDRESS:	11501 SE Sunnyside Road Clackamas, OR 97015
SITE SIZE:	+/- 13.5 Acres
Assessor's INFORMATION:	Clackamas County Assessor's Map 12E 34D Tax Lot 1600
CURRENT COMPREHENSIVE PLAN / ZONING DESIGNATION:	Low Density Residential (R-10)

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY a series of the series in the series in the series of the

SEPTEMBER 2011

EXHIBIT # ____

I. EXECUTIVE SUMMARY

The Valley View Church was established at its current location in 1984 and is developed with a church, landscaping, parking area, ball fields, garden area, and other associated improvements. Prior to annexation to the City in 2009, the property was designated Clackamas County R-10, which is a low density residential zoning district. Upon annexation, the property was provided with the corresponding (most similar) City Comprehensive Plan and Zoning designation of R-10 in accordance with City practice.

At this time, the church is seeking to provide the property with different City Plan and Zone designations [Mixed Use Commercial (MUC) and Institutional Public Use (IPU]. The MUC District provides for a wide variety of land uses, including those which provide for job creation as well as additional housing opportunities for the City of Happy Valley. The IPU designation has been selected (for the developed portion of the property) to recognize and reflect the long standing use of the site as a church. Additionally, the church is requesting City approval to partition the +/-13.5 acre property into three separate parcels that would allow for potential future land uses / development that would complement the church that will remain. Because a small portion of the property adjacent to SE Sunnyside Road has a Natural Resource Overlay due to an isolated wetland, Natural Resource Review (Environmental Permit) is also included in the application.

II. SITE DESCRIPTION / SETTING

The Valley View Church property is located on the north side of SE Sunnyside Road, east of SE 117th Avenue, and west of SE 114th Court as depicted in the aerial photograph below:

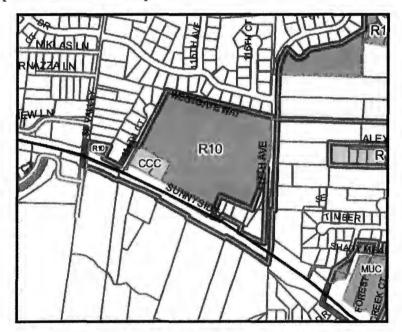


VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 2 OF 62 The property consists of one parcel totaling approximately 13.5 acres in area. The property is varied topographically and bisected by an existing drainage channel that is fed by the uphill subdivision developed to the north. As described above, the property includes the church buildings, parking areas and drive aisles, pedestrian ways, a ball field, landscaping, and other similar improvements and amenities typically associated with this type of institutional campus.

Existing City and County arterial, neighborhood, and local roads are located on three sides of the church property. Multi-family residential development exists directly to the south across SE Sunnyside Road, while single family homes are located across SE 117th Avenue to the east and across SE 114th Court to the west as well as to the north. Undeveloped commercially designated properties abut the site to the southeast and southwest. Across SE Sunnyside Road lies existing multi-family land uses.

SURROUNDING LAND USE / ZONING DESIGNATIONS

The Valley View Church property is currently designated R-10 by the City of Happy Valley Land Use / Zoning Map (portion thereof) shown below. At this time, the majority of surrounding properties are still unincorporated.



North. Existing single family residential development is located on properties to the north. These properties have a Clackamas County land use designation [Urban Low Density Residential (R-10).

South: Existing multi-family residential development is located on properties across SE Sunnyside Road to the South. These properties have Clackamas County land use designation [Medium High Residential District (MR-2)].

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Southeast. Several undeveloped parcels of land abut the subject site to the southeast. These properties have a Clackamas County commercial land use designation [Retail Commercial District (RTL)].

Southwest: Two undeveloped parcels of land abut the subject site to the southwest. These properties have a City of Happy Valley land use designation [Community Commercial Center (CCC)].

East. Existing single family residences are located across SE 117th Avenue on larger properties to the east. These properties have a Clackamas County land use designation [Urban Low Density Residential R-15].

West. Existing single family residential development is located across SE 114th Court to the west. These properties have a Clackamas County land use designation [Urban Low Density Residential R-10].

III. APPLICABLE REVIEW CRITERIA

CITY OF HAPPY VALLEY COMPREHENSIVE PLAN

Although these are not considered to be individual approval criteria, the following responses are provided to show consistency with the Plan Polices in support of the application.

Policy 1: The Citizen's Advisory Committee shall be an ongoing part of the City government and operations in matters of land planning and other aspects of community development, including review and, if necessary, revision of the Comprehensive Plan every two years.

<u>RESPONSE</u>: As stated above, the Citizen's Advisory Committee is involved in legislative revisions to the Comprehensive Plan. The proposed application involves a quasi-judicial Plan Map Amendment rather than a legislative plan amendment. Therefore, this plan policy is not applicable to the proposed application.

Policy 2: The plan and all of its elements and implementing documents shall be opened for amendments that consider compliance with the Goals, Objectives and Plans of the Metropolitan Service District. This procedure shall occur every two years and may be so amended or revised annually if deemed necessary by the City Council. Amendment and revision for compliance with regional goals, objectives and plans should be consistent with a schedule for reopening of local plans which has been approved by the Land Conservation and Development Commission (LCDC).

<u>RESPONSE</u>: The proposed application involves a quasi-judicial Plan Map Amendment rather than a legislative Plan Amendment intended to maintain Plan and Code consistency with Metro requirements. Therefore, this plan policy is not applicable to the proposed application.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 4 OF 62 Goal #14 -- To provide for an orderly and efficient transition from rural to urban land use.

Policy 4: To insure orderly development in the City of Happy Valley through formulation of growth management policies and guidelines which will determine that development can occur only when adequate levels of services and facilities are or will be available.

<u>RESPONSE</u>: The proposed application involves a quasi-judicial Plan Map Amendment from one urban land use designation to another. All Level 1 services, including sanitary sewer, storm sewer, potable water, fire protection services, access, etc, is available to serve the subject site. Therefore, the proposed Plan Map Amendment is consistent with this Plan Policy.

Policy 5: To encourage controlled development while maintaining and enhancing the physical resources which make Happy Valley a desirable place to live.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and Partition, which do not involve physical development of the site. The City of Happy Valley Land Development Code (LDC) provides the standards and regulations which guide, control, and permit the physical development of property. Findings demonstrating compliance with the applicable portions of the LDC (relevant to this plan policy) are provided in this written document and within other documentation included in the application package. Therefore, the proposed Plan Map Amendment is consistent with this Plan Policy.

Policy 6: To assure that the development of properties is commensurate with the character and physical limitations of the land in the Happy Valley area as determined by the available base information and the Composite Development Suitability analysis.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve physical development of the site. The City of Happy Valley Land Development Code (LDC) provides the standards and regulations which guide, control, and permit the physical development of property. Findings demonstrating compliance with the applicable portions of the LDC (relevant to this plan policy) are provided in this written document and within other documentation included in the application package. As required by the LDC, a TPR analysis is included in the application materials. Therefore, the proposed Plan Map Amendment is consistent with this Plan Policy.

Policy 7: To coordinate with the Metropolitan Service District (Metro) on any proposed changes or adjustments of the Urban Growth Boundary in the immediate vicinity of the City.

<u>RESPONSE</u>: This application does not involve a change or adjustment to the urban growth boundary. Therefore, this plan policy is not relevant to this application.

Policy 8: To assume proportionate responsibility for development within the City of Happy Valley consistent with projected population for the City.

<u>RESPONSE</u>: The proposal involves a Comprehensive Plan Map Amendment and Partition, which do not involve physical development of the site. However, future development of the property, as with development of all property within the incorporated limits of the City of Happy

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY Valley, would be subject to review by City staff and appointed / elected officials. Therefore, this plan policy is not relevant to this application.

Goal 7 – To protect life and property from natural disasters and hazards.

Policy 9: Recognize the potential liability of the City if land with known hazards which endangers life or property is allowed to be developed.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve physical development of the site. The property does have an existing drainage on the site. The source of the drainage is a storm drain outfall from the uphill development to the north. This feature has been heavily manipulated and piped in sections, but a small portion adjacent to SE Sunnyside Road has been utilized as wetland mitigation for the SE Sunnyside Road project. Development will not occur in this area, and as a part of the partition application, sensitive portions of the drainage will be placed in easements, as is required by the LDC. Therefore, the proposal is consistent with this plan policy.

Policy 10: Limit development in identified natural drainage-ways, floodplains, wetlands, steep slopes and landslide hazard areas. Housing development, and any other development intended for human occupancy, shall occur, to the greatest extent possible, on lands designated for development that are free from flood hazard, slope limitations, or other hazards.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which by themselves do not involve physical development of the site. The property does have an existing drainage on the site. The source of the drainage is a storm drain outfall from the uphill development to the north. This feature has been heavily manipulated and piped in sections, but a small portion adjacent to SE Sunnyside Road has been utilized as wetland mitigation for the SE Sunnyside Road project. Development will not occur in this area, and as a part of the partition application, sensitive portions of the drainage will be placed in easements, as is required by the LDC. Therefore, the proposal is consistent with this plan policy.

Policy 11: Dedication of lands to the City within natural drainage channels and floodplains may be required as a condition for development near the channel, or to meet the needs for community recreation and open space.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which by themselves do not involve physical development of the site. The property does have an existing drainage on the site. The source of the drainage is a storm drain outfall from the uphill development to the north. This feature has been heavily manipulated and piped in sections, but a small portion adjacent to SE Sunnyside Road has been utilized as wetland mitigation for the SE Sunnyside Road project. Development will not occur in this area and as a function of the partition application, sensitive portions of the drainage will be placed in easements, as is required by the LDC. Therefore, the proposal is consistent with this plan policy.

Policy 12: Modifications to the natural drainage channels including clearing, filling, diking or the construction of dams or levees shall be done in accordance with the City's Land Development Code.

<u>RESPONSE</u>: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which by themselves do not involve physical development of the site. The property does have an

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 6 OF 62 existing drainage on the site. The source of the drainage is a storm drain outfall from the uphill development to the north. This feature has been heavily manipulated and piped in sections, but a small portion adjacent to SE Sunnyside Road has been utilized as wetland mitigation for the SE Sunnyside Road project. Development will not occur in this area, and as part of the partition application, sensitive portions of the drainage will be placed in easements, as is required by the LDC. Therefore, the proposal is consistent with this plan policy.

Policy 13: Development which increases runoff and erosion, or which has the potential for undermining downhill development through significant increases in runoff will be restricted.

RESPONSE: Based on City requirements, a conceptual site plan is included in the application materials. However, the current proposal involves a Comprehensive Plan Map Amendment and a Partition, which by themselves do not involve physical development of the site. Therefore, increased erosion and runoff will not occur. Future development of the property will be subject to review by City staff and City officials. Therefore, this plan policy is not relevant to this application.

Policy 14: The allowed intensity of development will be correlated with the degree of natural hazard. When slopes are over 15% gradient, the intensity of development shall be regulated in compliance with the City's Land Development Code. The City will maintain the Happy Valley Steep Slopes and Natural Resource Overlay Zone Map to show the general location of steep slopes within the City.

RESPONSE: As shown on the existing preliminary plans, previous site work has resulted in the creation of a few small berms on the property. These areas are limited in size and extent. However, the current proposal involves a Comprehensive Plan Map Amendment and a Partition, which by themselves do not involve site development. Future development of the property will be subject to review by City staff and City officials. This would include review of review of on site topography and include slope analysis. Therefore, this plan policy is not relevant to this application.

Policy 15: Require engineering studies by private developers, the City and other government agencies for sites proposed for development within areas of suspected or known hazards to include compliance with appropriate chapters of the adopted Uniform Building Code, the City's Engineering and Design Standards Manual, and applicable sections of the Happy Valley Land Development Code. In addition, these studies should define risks of development by using Federal Emergency Management Agency maps showing flood plains and floodways. The City will restrict buildings in the flood plains and prohibit buildings in the floodway.

<u>RESPONSE</u>: The church property does not contain any areas of suspected or known hazards, flood plains, or floodways. Therefore, this plan policy is not relevant to this application.

Goal 5 – To conserve and protect natural and scenic resources.

Policy 16: Manage wooded areas within the City through the annexation and land division process and through the City's tree removal requirements. The City shall encourage tree retention prior to development by requiring that lands annexed within the city limits, but which have not filed for land division or site design review, are not eligible to receive tree removal permits except for the removal of hazard trees or the harvest of commercial trees, including nursery stock, Christmas trees, etc., but exclusive of generally forested lands. An exception exists for land currently zoned Exclusive Farm Use (EFU) within Clackamas County, which is currently in a state or county tax deferral

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program for timber production. Said lands, subsequently annexed into the city, shall be treated as a "tree farm" for purposes of this section for so long as the deferrals remain in effect.

In order to further protect natural and scenic resources, the City of Happy Valley shall coordinate with the regional government (Metro) and various state and federal agencies to ensure that current natural resource regulations and requirements are codified within the City's Development Code. In addition, for lands previously located within unincorporated Clackamas County that have annexed to the City of Happy Valley – mass tree removal on said lands prior to annexation shall result in an assessment of, and mitigation for removed trees in conjunction with the land division or site design review process.

<u>RESPONSE</u>: This application does involve a land division (partition) but does not propose removal of trees or impacts of any sort to any natural resource. Therefore, the proposal is consistent with this plan policy.

Policy 17: Wetlands and streams located within the City of Happy Valley are governed by the City's Development Code, state and federal regulations. Approximate locations and classifications of wetlands and stream reaches are located within the City's Local Wetland Inventory.

<u>RESPONSE</u>: A wetland delineation / natural resource area report is included in the application materials. This application does not involve impacts of any sort to any natural resources. Therefore, the proposal is consistent with this plan policy.

Policy 18: Existing road standards maybe revised to reflect narrower width in resource areas and on steep slopes.

<u>RESPONSE</u>: This application does not involve a proposal to modify road standards due to resource areas or steep slopes. Therefore, this plan policy is not relevant to this application.

Policy 19: Minimize the number and width of utility rights-of-way through resource areas. Establish utility alignments sympathetic to the natural form of the resource and topographic contours.

<u>RESPONSE</u>: This application does not involve placing utilities in any resource areas. Therefore, the proposal is consistent with this plan policy.

Policy 20: Inventory the location, quality and quantity of open space, scenic areas and historic sites to be managed in the development process.

<u>RESPONSE</u>: A wetland delineation / natural resource area report is included in the application materials. Therefore, the proposal is consistent with this plan policy.

Policy 21: Maintain relationship of open space to permitted development in order to preserve the character of the natural setting and to provide for recreation and visual relief from development.

RESPONSE: A wetland delineation / natural resource area report is included in the application materials. Wetland areas and required buffers are not proposed to be developed or impacted in any way by the proposed application. Therefore, the proposal is consistent with this plan policy.

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Policy 22: Encourage multiple use of open space, provided the uses are compatible. Enhance the value to the public of abutting or neighboring parks, forest, wildlife preserves or other permanent open space.

<u>RESPONSE</u>: A wetland delineation / natural resource area report is included in the application materials. Wetland areas and required buffers are not proposed to be utilized other than as passive open space. Therefore, the proposal is consistent with this plan policy.

Policy 23: Protect any identified significant historic resources from inappropriate development.

<u>RESPONSE</u>: There are no identified significant historic resources present on the Valley View Church property. Therefore, this plan policy is not applicable to the property or application.

Policy 24: Avoid disposition of publicly owned land and rights-of-way before an evaluation of their merit as public open space.

<u>RESPONSE</u>: This application does not involve vacation of public right-of-way. Therefore, this plan policy is not applicable to the property or application.

Policy 25: Maintain public views of Happy Valley from such higher elevation locations as road rights-of-way and public parks.

<u>RESPONSE</u>: This application does not involve physical development of property that changes the physical appearance of the property. Therefore, the proposal is consistent with this plan policy.

Policy 26: Require provision of open space in all new planned unit developments (P.U.D.'s) and subdivisions over a size which is established by a revised development ordinance.

<u>RESPONSE</u>: This application does not involve a new planned unit development or subdivision. Therefore, this plan policy is not applicable to the property or application.

Policy 27: Discourage artificial and unnatural features including but not limited to signs and billboards.

<u>RESPONSE</u>: This application does not involve the creation of artificial or unnatural features such as signs or billboards. Therefore, this plan policy is not applicable to the property or application.

Policy 28: Conserve the area's unique natural resources through their inclusion in the Comprehensive Plan, and development approvals, in a manner which considers surrounding uses and provides a continuity of open space character and natural features, throughout the City.

RESPONSE: A small, isolated portion of the church property adjacent to SE Sunnyside Road is identified as a protected water feature on the City of Happy Valley Natural Resource Overlay Map Book. A wetland delineation and natural resource assessment has been performed and a copy is included in the application materials. Wetlands and their buffers are identified and shown on the preliminary plans and are not proposed to be disturbed or altered in this application. Therefore, the proposal is consistent with this plan policy.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 9 OF 62 Policy 30: Land development applications, grading permits and building permits that affect natural resource and steep slopes areas are subject to separate environmental review procedures assessing the impact of the proposed land use action or development permit, subject to the City's Development Code.

<u>RESPONSE</u>: The proposed application includes a Natural Resource Overlay Permit. As established in this application, no impacts are proposed to the natural resource discussed above. Therefore, the proposal is consistent with this plan policy.

Policy 30A: Special regulations protecting steep slopes are required because such areas:

- Are generally more difficult and expensive to serve with urban infrastructure as compared to less steep lands;
- Provide wildlife habitat, tree canopy, and other environmental benefits;
- Are located at the headwaters of watersheds that provide clean drinking water to downstream users, including Happy Valley residents;
- Contribute to the scenic landscape of Happy Valley which is a strong part of the City's identity and livability; and,
- Are often adjacent to regulated natural resource areas and/or public green spaces.

<u>RESPONSE</u>: As shown on the existing preliminary plans, previous site work on the church property has resulted in the creation of a few small berms on the property. These areas are actively utilized by the church as a ball field and a gardening area and do not contain trees with extensive canopies and thus are not indicative of high quality wildlife habitat. The site is also not located at the headwaters of any watershed that provides clean drinking water to downstream users. Finally, the current proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve site development. Future development of the property will be subject to review by City staff and City officials. This would include review of review of on site topography and slopes. Therefore, this plan policy is not relevant to this application.

Policy 30B: Slope constrained lands are regulated by the steep slopes development overlay (SSDO). The purpose of the SSDO is to:

Policy 30B.1: Contribute to compliance with Statewide Planning Goals 5 (Natural and Scenic Resources) and 7 (Areas Subject to Natural Disasters and Hazards). For Goal 7, the SSDO specifically minimizes seismic and landslide hazards and soil erosion associated with development on steep or unstable slopes;

RESPONSE: As shown on the existing preliminary plans, previous site work on the church property has resulted in the creation of a few small berms on the property. These areas are actively utilized by the church as a ball field and a gardening area. These areas are not subject to landslide hazards and are not characterized as steep or unstable slopes. Therefore, this plan policy is not relevant to this application.

Policy 30B.2: Regulate development and provide special protection on lands within "conservation slope areas" and "transition slope areas" as follows:

a) Within conservation slope areas, development is generally prohibited. Conservation slope areas include:

- Slopes 25 percent and greater.
- Potentially Hazardous Analysis Areas (lands within 25 feet of the top or toe of slopes 25 percent and greater).
- Areas containing potentially rapidly moving landslide hazard areas mapped by the Oregon Department of Geology and Mineral Industries (DOGAMI).

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 10 OF 62 **RESPONSE:** As shown on the existing preliminary plans, previous site work on the church property has resulted in the creation of a few small berms on the property. These areas are actively utilized by the church as a ball field and a gardening area. The current proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve site development. Future development of the property will be subject to review by City staff and City officials. This would include review of review of on site topography and slopes, which in this case does not generally involve slopes 25 percent and greater or any potential hazardous analysis areas / areas mapped by DOGAMI. Therefore, this plan policy is not relevant to this application.

b) Within transition slope areas, conservation and development are balanced. Transition slope areas include:
Slopes 15 to 24.99 percent.

Policy 30B.3: Regulate the potential residential density and facilitate transfer of development away from slope constrained lands.

RESPONSE: As shown on the existing preliminary plans, previous site work on the church property has resulted in the creation of a few small berms on the property. These areas are actively utilized by the church as a ball field and a gardening area. The current proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve site development. Future development of the property will be subject to review by City staff and City officials. This would include review of on site topography and slopes, which in this case does not generally involve slopes between 15 percent and 24.99 percent. Therefore, this plan policy is not relevant to this application.

Goal 6 – To maintain and improve the quality of the air, water and land resources in Happy Valley.

Policy 31: Maintain mandatory air and water quality standards of Federal and State Statutes, and comply with applicable portions of the State Water Quality management Plan OAR 340, Division 41.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and Partition, which do not involve physical development of the site. The City of Happy Valley Land Development Code (LDC) provides the standards and regulations which guide, control, and permit the physical development of property, including water quality standards. Findings demonstrating compliance with the applicable portions of the LDC (relevant to this plan policy) are provided this written document and within other documentation included in the application package. Therefore, the proposed application is consistent with this Plan Policy.

Policy 33: Approve sewage disposal or sewer system hook-ups by appropriate agency and/or comply with subsurface Sewage Disposal Rules OAR 340, division 71, 74 and 75, ORS 468.020, 468.035 and ORS 454.615 et. Seq. for replacement septic systems on existing lots of record.

<u>RESPONSE</u>: The Valley View Church is connected to public sanitary sewer. Any future development of the site will include connection to public sewer. Therefore, the proposed application is consistent with this Plan Policy.

Policy 34: Comply with plan review requirements of the Oregon Department of Environmental Quality for extension of sewer systems. (ORS 468.742).

<u>RESPONSE</u>: The Valley View Church is connected to public sanitary sewer. Any future development of the site will include connection to public sewer. Therefore, the proposed application is consistent with this Plan Policy.

Policy 35: Maintain riparian vegetation and avoid degradation of natural features adjacent to drainage channels and conservation easements to minimize runoff and erosion affecting water quality.

RESPONSE: A small, isolated portion of the church property is identified as a protected water feature on the City of Happy Valley Natural Resource Overlay Map Book. A wetland delineation and natural resource assessment has been performed, and a copy is included in the application materials. Wetlands and their buffers are identified and shown on the preliminary plans and are not proposed to be disturbed or altered in this application. Therefore, the proposal is consistent with this plan policy.

Policy 35A: The City shall adopt regulations and standards to protect streamside vegetative buffers and other natural resource areas that contribute to water quality consistent with Statewide Planning Goal 6, Clackamas County Water Environment Services, and Metro Title 3 requirements.

RESPONSE: A small, isolated portion of the church property is identified as a protected water feature on the City of Happy Valley Natural Resource Overlay Map Book. A wetland delineation and natural resource assessment has been performed and a copy is included in the application materials. The wetland delineation and natural resource report included buffer recommendation for the identified wetlands consistent with WES and Metro requirements. Wetlands and their buffers are identified and shown on the preliminary plans and are not proposed to be disturbed or altered in this application. Buffers are not required along portions of an on-site drainage that are not classified as wetlands (and also not mapped on the City of Happy Valley Natural Resource Overlay Map Book) because it is seasonal (runs intermittently), its source is a storm pipe outfall fed by uphill development, it appears to have been manipulated over time (realigned, regarded, etc), and the drainage basin feeding the drainage is very small. Therefore, the proposal is consistent with this plan policy.

Policy 35B: Where appropriate, the City shall encourage nature-friendly development practices to minimize the impact on fish and wildlife habitat and water quality functions, and to provide mitigation standards for the replacement of ecological functions and values lost through development in natural resource areas.

<u>RESPONSE</u>: The proposal involves a Comprehensive Plan Map Amendment and Partition, which do not involve physical development of the site. The City of Happy Valley Land Development Code (LDC) provides the standards and regulations which guide, control, and permit the physical development of property, including those that encourage nature friendly development practices. Future applications involving physical site development will be evaluated by City staff and officials for compliance with all City requirements prior to site development. Therefore, the proposed application is consistent with this Plan Policy.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY Policy 35C: The general location of water features that must be protected shall be indicated on the Happy Valley Steep Slopes and Natural Resources Overlay Zone Map; however, regulatory definitions and provisions in the Development Code shall be used to determine exact locations.

<u>RESPONSE</u>: A small, isolated portion of the church property is identified as a protected water feature on the City of Happy Valley Natural Resource Overlay Map Book. A wetland delineation and natural resource assessment has been performed and a copy is included in the application materials as is required by the Land Development Code. Therefore, the proposal is consistent with this plan policy.

Policy 36: Require review by the City of Happy Valley of plans prepared by State and county agencies which could affect the air, water and land resources of the City.

<u>RESPONSE</u>: The proposed application does not involve review of State and County plans that could affect the air, water, and land resources of the City. Therefore, this plan policy is not relevant to this application.

Policy 37: Comply with policies relevant to this goal outlined under LCDC Goals 5, 7 and 11.

<u>RESPONSE</u>: This written narrative describes how the proposed application is consistent with each of the City Plan Policies relevant to this goal outlined under LCDC Goals 5, 7, and 11.

Policy 38: Comply with noise control standards contained in State Statues ORS 467.010 and OAR 340-35-005 through 35-100.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and Partition, which do not involve physical development of the site, including uses that generate noise. Therefore, this plan policy is not relevant to this application. However, the City of Happy Valley Land Development Code (LDC) provides the standards and regulations which guide, control, and permit the physical development of property, including those that create noise. Future applications involving physical site development will be evaluated by City staff and officials for compliance with all applicable City, County, and State requirements prior to site development. Therefore, this plan policy is not relevant to this application.

Policy 39: Require paving or oiling of roads where dust levels are deemed to represent an unacceptable increase in the degradation of air quality within the designated Air Quality Maintenance Area.

<u>RESPONSE</u>: All surrounding roadways are paved, and no new roadways are proposed. Therefore, this plan policy is not relevant to this application.

Policy 40: Maintain acceptable noise exposure levels as identified by the Department of Environmental Quality on properties adjacent to heavily traveled arterials and steep streets, through development of specific ordinance requirements.

<u>RESPONSE</u>: The proposal does not involve new ordinances to maintain acceptable noise exposure levels on properties adjacent to heavily traveled arterials and steep streets. Therefore, this plan policy is not relevant to this application. However, this application does involve a Comprehensive Plan Map Amendment from a low density residential zone to a mixed use

commercial zone on a property that is adjacent to an arterial roadway (SE Sunnyside Road). Given that, it is likely that future uses of the site will not be noise sensitive.

Policy 41: Areas of the City which have exhibited a documented predominance of failing septic systems should be connected to the nearest feasible existing sanitary sewer at the soonest possible time. The balance of the City will be serviced in accordance with the City's Facilities Plan and Capital Improvements Plan.

<u>RESPONSE</u>: The Valley View Church is connected to public sanitary sewer. Any future development of the site will include connection to public sewer. Therefore, the proposed application is consistent with this Plan Policy.

Goal #10 – To provide for the housing needs of the citizens of the State.

Policy 42: To increase the supply of housing to allow for population growth and to provide for the housing needs of a variety of citizens of Happy Valley.

<u>RESPONSE</u>: Although this application does not include a proposal for any specific housing type, it does involve a Comprehensive Plan Map Amendment to a District that allows a variety of housing types. This supports the supply of housing to allow for population growth and provides for the housing needs for a variety of citizens in Happy Valley. Therefore, the proposed application is consistent with this Plan Policy.

Policy 43: To develop housing in areas in areas that reinforces and facilitates orderly and compatible community development.

RESPONSE: Although this application does not include a proposal for any specific housing type at this time, it does involve a Comprehensive Plan Map Amendment to a District that allows for housing types that are consistent with the SE Sunnyside Road Corridor. Therefore, the proposed application is consistent with this Plan Policy.

Policy 44: To provide a variety of lot sizes, a diversity of housing types including single family attached (townhouses) duplexes, senior housing and multiple family and range of prices to attract a variety of household sizes and incomes to Happy Valley.

RESPONSE: Although this application does not include a proposal for any specific housing type, it does involve a Comprehensive Plan Map Amendment to a District that allows a variety of housing types including those mentioned above. Therefore, the proposed application is consistent with this Plan Policy.

Amendments to Housing and Land Use Policies

RESPONSE: The proposal does not involve an amendment to housing and land use policies for the City of Happy Valley. Therefore, these standards are generally not applicable to the proposed application. However, responses are provided, as appropriate to show that the proposal is consistent with all City goals and policies.

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Housing Element Policies

Policy 45: The City shall encourage the availability of adequate numbers of needed housing units at price ranges and rent levels that are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type and density.

<u>RESPONSE</u>: Although this application does not include a proposal for any specific housing type, it does involve a Comprehensive Plan Map Amendment to a District that allows a variety of housing types at price ranges and rent levels that are commensurate with the financial capabilities of Oregon households and allow for flexible housing location, type, and density. Therefore, the proposed application is consistent with this Plan Policy.

Policy 46: The City shall provide a range of housing that includes land use districts that allow senior housing, assisted living and a range of multi-family housing products. This range improves housing choice for the elderly, young professionals, single households, families with children, and other household types.

RESPONSE: Although this application does not include a proposal for any specific housing type, it does involve a Comprehensive Plan Map Amendment to a District that allows a variety of housing types including senior housing, assisted living, and a range of multi-family housing products. Therefore, the proposed application is consistent with this Plan Policy.

Policy 48: The Land Development Code will be revised to comply with the Comprehensive Plan to allow for changes over time as the City goals and policies change

<u>RESPONSE</u>: This plan policy is satisfied by the City's periodic updates to the Land Development Code.

Land Use Element Policies

Goal #2 - To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.

Policy 49: To ensure orderly development in the City of Happy Valley.

RESPONSE: The proposed application includes a Comprehensive Plan Map Amendment for the Valley View Church from an urban residential land use district (R-7) to a mixed use land use district (MUC) and a partition application to divide the +/- 13.5 acre property into three parcels. The City of Happy Valley Land Development Code provides the basis for all decisions related to the use of land. Compliance with the requirements of the Land Development Code assures an adequate factual basis for such decisions and actions. As demonstrated in this written statement and accompanying application materials, the proposal complies with all applicable requirements found in the Land Development Code. Therefore, the proposed application is consistent with this Plan Policy.

Policy 50: To locate land uses so as to take advantage of existing systems and physical features, to minimize development cost and to achieve compatibility and to avoid conflicts between adjoining uses.

<u>RESPONSE</u>: The Valley View Church property is located at the intersection of an arterial roadway (SE Sunnyside Road) and a collector street (SE 117th Avenue). The proposed

Comprehensive Plan Map Amendment takes advantage the full range of urban services available at this location and is supportive of all modes of transportation including mass transit, pedestrian and bicycle, pedestrian, and motor vehicles. Although this application does not involve physical development at this time, the proposal minimizes future costs to the City (in terms of maintenance of public infrastructure) as well as initial development costs. The Mixed Use Commercial Zone is appropriate in this location and proper site planning and City review will help achieve compatibility and avoid conflicts between adjoining uses. Therefore, the proposed application is consistent with this Plan Policy.

Policy 51: Residential Districts The following residential land use districts are established in order to accommodate a range of housing need in Happy Valley:

Very Low Density Residential – R-40, R-20, R-15 Low Density Residential – R-10, R-8.5, R-7 Medium Density Single Family Residential – R-5, MUR-S High Density Residential Attached – SFA, MUR-A, VTH, MUR-M and MUR-X

Policy 51A: Very Low Density Residential Districts (R-40, R-20, R-15). These districts provide for compatibility with existing large lot residential patterns in the City. They are also intended to help balance the conservation of resources (e.g. steep slopes, habitat, tree canopy) with low impact development. Clustering and other hillside protection measures may be required to minimize the impact of development.

These districts may be located where steep slopes (generally greater than 15%) or other resources are present, and where clustering, transfer and/or limited access require a low base density.

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as a Very Low Density Residential District. Therefore, this plan policy is not relevant to this application.

Policy 51B: Low Density Residential Districts (R-10, R-8.5, R-7) – These districts provide for a variety of single family lot sizes and building types in neighborhood settings. They also allow attached housing as part of Planned Unit Developments. They provide transition between Low Density Residential Districts and High Density Districts.

These districts are applied throughout the City generally on slopes less than 15%. They should be located to promote compatibility and transition from higher to lower density within neighborhoods.

RESPONSE: The Valley View Church was designated R-10 upon annexation to the City to match Clackamas County's land use designation of R-10. This application includes a proposed Comprehensive Plan Map Amendment from R-10 to MUC in order to make efficient use of land and public services, accommodate a range of housing needs, provide for compatible design at neighborhood scale, reduce reliance on the automobile for neighborhood travel, provide for walking, bicycling and transit use, and provide direct and convenient access to schools, parks, and neighborhood services. The portion of the property developed with the church is proposed to be designated IPU to recognize and reflect the long standing use of the site as a church. Therefore, the proposal is consistent with this plan policy.

Policy 51C: Medium Density Single Family Residential Districts (R-5, MUR-S). These districts provide for smaller lot and attached housing choices in Happy Valley. The smaller lots, duplexes and triplexes permitted are intended to help broaden the variety of housing choices in the City, promote compact form in appropriate areas, and assist in

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 16 OF 62 meeting Metro requirements. The MUR-S district permits mixed use in limited situations in order to provide goods, services, and jobs close to residential areas.

These districts may be located in transitional areas between High Density Residential Attached and lower density single family districts. They may also be part of master planned developments, where greater flexibility in their location may be considered.

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as a Medium Density Residential District. Therefore, this plan policy is not relevant to this application.

Policy 51D: High Density Residential Attached (SFA, MUR-A, VTH, MUR-M and X). These districts provide for a variety of attached housing and neighborhood commercial uses. They are intended to make efficient use of land and public services, accommodate a range of housing needs, provide for compatible design at neighborhood scale, reduce reliance on the automobile for neighborhood travel, provide for walking, bicycling and transit use, and provide direct and convenient access to schools, parks and neighborhood services.

These districts may be applied near (generally within ¼ mile) of mixed use centers and districts, along collector and arterial streets, and within a block of streets planned for transit. They may also be part of master planned developments, where greater flexibility in their location may be considered.

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as a High Density Residential District. Therefore, this plan policy is not relevant to this application.

Policy 51E: Residential land uses will be organized to form complete neighborhoods. Complete neighborhoods include a variety of housing types, park and open space, a definable center (e.g. a park or school) and edge (e.g. transportation or open space corridor), a mix of uses, and a well-connected network of streets and pedestrian ways. The degree to which each of these characteristics is provided will vary with the location and context of the neighborhood.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment from a low density residential district (R-10) to Mixed Use Commercial District (MUC) in order to make efficient use of land and public services, accommodate a range of housing needs, provide for compatible design at neighborhood scale, reduce reliance on the automobile for neighborhood travel, provide for walking, bicycling and transit use, and provide direct and convenient access to schools, parks and neighborhood services. The portion of the property developed with the church is proposed to be designated Institutional and Public Use District (IPU) to recognize and reflect the long standing use of the site as a church. Therefore, this plan policy is not relevant to this application.

Commercial and Employment Element Policies

Policy 54: To encourage compatible residential, commercial and light industrial development in both the City of Happy Valley and nearby Clackamas County that will provide jobs. The City supports the development of commercial and employment uses in the Rock Creek Employment Area and in other areas, subject to design standards.

<u>RESPONSE</u>: The proposal involves a Comprehensive Plan Map Amendment from a low density residential district (R-10) to Mixed Use Commercial District (MUC) in order to make

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 17 OF 62 efficient use of land and public services, accommodate a range of housing needs, provide for compatible design at neighborhood scale, reduce reliance on the automobile for neighborhood travel, provide for walking, bicycling and transit use, and provide direct and convenient access to schools, parks and neighborhood services. Therefore, this application is consistent with this plan policy. This is consistent with the MUC designated site located approximately 900 feet to the east, opposite SE 119th Drive, on the north side of SE Sunnyside Road. Therefore, consistent with this plan policy, the Comprehensive Plan Map Amendment is permitted.

Policy 54A: To reduce vehicle miles traveled and street congestion, and to provide local employment opportunities, Happy Valley will encourage home based businesses that show no outward signs of business activity and fully retain the residential character of existing neighborhoods.

<u>RESPONSE</u>: The proposal involves a Comprehensive Plan Map Amendment and a Partition Application. Home based businesses are not proposed at this time. Therefore, this plan policy is not relevant to this application.

Policy 54B: To comply with Statewide Planning Goal 9 (Economy of the State) and to meet long-term neighborhood-oriented commercial and office needs for existing and future City residents in the Rock Creek Area, Happy Valley has annexed existing and planned commercial and office sites served by Sunnyside Road in the Rock Creek Area. In addition, to meet the long term needs of Happy Valley residents for local services and employment land, the City has created a broad range of commercial, employment and light industrial districts.

RESPONSE: The proposed application involves a request for a Comprehensive Plan Map Amendment from R-10 to MUC and IPU for the Valley View Church as shown on the preliminary conceptual plans. The MUC District is a neighborhood oriented district that allows for mixed use type projects including a variety of uses such as residential, senior housing and care facilities, and office commercial type uses. The Institutional and Public Use District (IPU) is also proposed to recognize and reflect the long standing use of the site as a church. Both of these districts meet the long term needs of Happy Valley Residents for local services and employment land. Therefore, the proposed application is consistent with this plan policy.

Policy 54C: Happy Valley shall ensure that all commercial and office centers are accessible by transit, bicyclist and pedestrians, generally as shown within the City's current Transportation System Plan.

<u>RESPONSE</u>: The proposed Comprehensive Plan Map Amendment is consistent with this plan policy because the Valley View Church site is readily accessible by transit (TriMet Route 155), bicyclist (bicycle lanes along SE Sunnyside Road), and pedestrians (public sidewalks along SE Sunnyside Road and SE 117th Avenue). Therefore, the proposed application to amend the Comprehensive Plan Map designation to Mixed Use Commercial is consistent with this plan policy.

Policy 55: To improve the economy of Happy Valley by providing a range of land use types including a variety of commercial and employment districts. The following commercial and employment districts are applicable for any location in the City:

<u>RESPONSE</u>: The proposed Comprehensive Plan Map Amendment is consistent with this policy because the Mixed Use Commercial District is a neighborhood oriented district that

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 18 OF 62 allows for mixed use type projects including a variety of uses such as residential, senior housing and care facilities, and office commercial type uses.

Policy 55A: Mixed Commercial Center (MCC). The Mixed Commercial Center district is intended to establish locations for the development of general commercial centers providing a broad range of shopping and service requirements to meet city-wide needs. The Mixed Commercial Center district, as applied in East Happy Valley, corresponds to the Damascus/Boring Concept Plan's designation of Neighborhood Centers. These mixed use centers in East Happy Valley accommodate retail services with a focus on meeting resident's daily shopping needs. They are planned to be well served by transit and be integrated with mixed use and higher density housing – thus supporting less auto-dependent life styles. These centers are also appropriate locations for civic uses such as post offices and branch libraries. Their design is intended to be highly pedestrian-oriented.

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as Mixed Commercial Center. Therefore, this plan policy is not relevant to this application.

Policy 55B: Community Commercial Center (CCC). Community Commercial Center is intended to provide locations or "nodes" for a range of small businesses and services adjacent to residential areas as a convenience to nearby residents. The Community Commercial Center district, as applied in East Happy Valley, corresponds to the Damascus/Boring Concept Plan's designation of Corner Store centers. These mixed use centers in East Happy Valley accommodate small scale retail and services that meet the convenience needs of neighborhood residents. Mixed use is allowed and encouraged. Access to these centers is provided by well-connected local streets and safe bicycle and pedestrian routes. Their design is intended to be highly pedestrian-oriented.

<u>RESPONSE</u>: Adjacent properties to the southwest are designated Community Commercial Center; however, the Valley View Church is not currently designated or proposed to be designated as CCC. Therefore, this plan policy is not relevant to this application.

Policy 55C: Location and compatibility of commercial districts. MCC and CCC districts are limited to areas of Happy Valley annexed after the end of 2004. Neighborhood Commercial uses associated with the Rock Creek Mixed-Use Employment, R-5 and SFA districts may be allowed throughout Happy Valley subject to special standards. The location and compatibility criteria in sub-policies 55B.1-55B.3 apply:

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as MCC or CCC. Therefore, this plan policy is not relevant to this application.

Policy 55C.1: Mixed Commercial Center location and compatibility. New MCC districts shall be limited to an area of up to 15 acres of contiguous land. Building footprint size on any given site is limited to 60,000 sq. ft. per structure. Appropriate locations for MCC districts are generally at the intersection of the following types of streets as designated in the City's TSP:

a) Major or minor arterial street and major or minor arterial street
b) Major or minor arterial street and collector street

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as Mixed Commercial Center. Therefore, this plan policy is not relevant to this application.

All MCC developments involving five acres or more of land are subject to master plan review and design review. In the East Happy Valley Comprehensive Plan Area, a master plan approval is required for the entire lot or parcel proposed for development together with any contiguous lot or parcels owned by the same owner, within the MCC district prior to new development.

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as Mixed Commercial Center. Therefore, this plan policy is not relevant to this application.

In the East Happy Valley Comprehensive Plan Area, one Mixed Commercial Center may exceed the 15-acre limit described above, but may not exceed 20 acres of contiguous property. In this center, the maximum building footprint size is limited to 150,000 square feet per structure, provided the entire contiguous 20-acre area is master planned prior to new development. If the entire contiguous area of this center is not master planned together, the maximum building footprint size is limited to 60,000 square feet per structure. A lot, parcel or other area is not considered contiguous if it is separated from an adjacent MCC district by a public right-of-way. Further, as part of demonstrating compliance with master plan requirements, design review to the Happy Valley Style, and other code criteria, applicants shall demonstrate how: (1) the visual impact of larger scale development has been mitigated; (2) the streetscape is pedestrian-oriented and varied to create visual interest, (3) public amenities are provided and scaled appropriately; (4) transitions to adjacent areas and future development are provided; (5) adequate infrastructure is provided; and, (6) overall design excellence justifies the larger than normal scale of the project.

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as Mixed Commercial Center. Therefore, this plan policy is not relevant to this application.

Policy 55C.2: Community Commercial Center location and compatibility. New CCC districts are limited in size to not more than five acres of contiguous land. Building footprint size on any given site is limited to 30,000 sq. ft. per structure. Appropriate locations for CCC districts are generally at the intersection of the following types of streets as designated in the City's TSP:

- a) Major or minor arterial street and major or minor arterial street
- b) Major or minor arterial street and collector street

c) Collector street and collector street

<u>RESPONSE</u>: Adjacent properties to the southwest are designated Community Commercial Center; however, the Valley View Church is not currently designated or proposed to be designated as CCC. Therefore, this plan policy is not relevant to this application.

Policy 55C.3: Neighborhood Commercial location and compatibility. Neighborhood commercial uses within certain residential districts are appropriately located on lots at the intersection of the types of streets listed below, as designated in the City's Transportation System Plan. There is a corresponding maximum building area for each Neighborhood Commercial development:

a) Major or minor arterial street and collector street: 7,000 square feet per building.

- b) Collector street and collector street: 5,000 square feet per building.
- c) Collector street and local street: 3,000 square feet per building.

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as Neighborhood Commercial. Therefore, this plan policy is not relevant to this application.

Policy 55C.4: Master plan the neighborhood centers along 172nd Avenue (Borges extension and Sunnyside areas) to ensure excellent, pedestrian-oriented design. The City's master plan, design review and Happy Valley style procedures and requirements shall be used to plan the neighborhood centers.

<u>RESPONSE</u>: The Valley View Church is not located along 172nd Avenue. Therefore, this plan policy is not relevant to this application.

Policy 55D: Employment Center. The Employment Center designation is intended to provide for a mix of employment opportunities, located where they are accessible by a variety of transportation modes, including transit service and safe and convenient pedestrian connections. These areas:

1) Provide transition between mixed use centers and residential areas;

2) Provide sites suitable for industrial, office, tech/flex, creative arts, high schools and technical schools (that meet code criteria for compatibility in employment areas), and other businesses in multi-tenant and (in some cases) multi-story buildings. The walkable character of the surrounding urban environment is a defining element.
3) Support limited retail and services serving their locales;

4) Allow housing as part of mixed use buildings and sites.

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as Employment Center. Therefore, this plan policy is not relevant to this application.

Policy 55E: Industrial Campus. The Industrial Campus designation is intended to provide employment opportunities consistent with Metro's Title 4 requirements. The district is Happy Valley's zone for implementing Metro's requirements for Regionally Significant Industrial Areas. IC districts are intended to:

Protect sites for larger scale industrial users, with exceptions for pre-existing parcels and committed areas.
 Provide industrial land near appropriate transportation facilities, specifically Highway 212/224.
 Retain land for industrial use, in part by limiting the size and location of new buildings for retail commercial uses (such as stores and restaurants) and retail and professional services that cater to daily customers (such as financial, insurance, real estate, legal, medical and dental offices) to ensure they serve primarily the needs of workers in the area. Non-industrial uses will not exceed 3,000 square feet in a single outlet, or 20,000 square feet in a multi-tenant building. Compatible public facilities will be permitted.
 Provide for public facilities, parks, education and related uses that are compatible with industrial areas.

<u>RESPONSE</u>: The Valley View Church is not currently designated or proposed to be designated as Industrial Campus. Therefore, this plan policy is not relevant to this application.

Policy 56: Due to rapid growth and staffing constraints, the City of Happy Valley has found it necessary to adopt a number of separate, geographically specific, "comprehensive plans" in the overall land use planning for the city. These include the Rock Creek Comprehensive Plan, the Aldridge Road Comprehensive Plan; the Rock Creek Mixed Employment Comprehensive Plan; and, the East Happy Valley Comprehensive Plan. The following policy sections and sub-sections detail specific policies associated with these "mini comprehensive plans" that have been added to the City's greater Comprehensive Plan policies:

<u>RESPONSE</u>: The Valley View Church is not located within these specific "mini comprehensive plans". Therefore, Plan Policy 56 is not relevant to this application.

Goal #8 – To satisfy the recreational needs of the citizens of the state and visitors.

Policy 57: To satisfy the recreational needs of the citizens of the state and visitors, and to provide additional park and outdoor recreational facilities in order to meet recreational needs of residents.

<u>RESPONSE</u>: The Valley View Church is not identified as a park or recreational facility by any element of the Comprehensive Plan, including the City Parks Master Plan. A small portion of the property adjacent to SE Sunnyside Road is designated as wetlands and this area will not be developed and will be retained as open space. However, due to its size, location, topography, resource designation, etc. this area does not make for a suitable park site. Therefore, this application is consistent with this plan policy.

Policy 58: To enhance and encourage the use of the area's recreational facilities and opportunities.

<u>RESPONSE</u>: The Valley View Church is not identified as a park or recreational facility by any element of the Comprehensive Plan, including the City Parks Master Plan. A small portion of the property adjacent to SE Sunnyside Road is designated as wetlands, and this area will not be developed and will be retained as open space. However, due to its size, location, topography, resource designation, etc. this area does not make for a suitable park site. Therefore, this application is consistent with this plan policy.

Policy 59: To encourage county development of additional recreation areas.

<u>RESPONSE</u>: The property owner is supportive of City efforts to encourage Clackamas County's development of additional recreational areas. However, this is outside of the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 60: To encourage creation of a green-belt recreation area in conjunction with the natural areas for open space, bikeways and trails.

<u>RESPONSE</u>: The Valley View Church is not identified as a park or recreational facility by any element of the Comprehensive Plan, including the City Parks Master Plan. A small portion of the property adjacent to SE Sunnyside Road is designated as wetlands and this area will not be developed and will be retained as open space. However, due to its size, location, topography, resource designation, etc. this area does not make for a suitable green belt recreation area. Therefore, this application is consistent with this plan policy.

Policy 61: To continue the current park improvement program.

<u>RESPONSE</u>: The property owner is supportive of the City's park improvement program. However, this is outside of the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 62: To encourage multiple use of schools and school facilities for public and recreational uses.

<u>RESPONSE</u>: This application does not involve school sites or school facilities for public recreational areas. Therefore, this plan policy is not relevant to this application.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 22 OF 62 Goal #12 - To provide and encourage a safe, convenient and economic transportation system for the planned growth and ultimately for full urban development of the City.

Policy 63: Happy Valley will coordinate with Clackamas County in the adoption of "concurrency" standards for development served by Clackamas County roadways and Oregon Department of Transportation (ODOT) state highways.

<u>RESPONSE</u>: The City's coordination with Clackamas County in the adoption of concurrency standards is outside of the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 64: To develop good transportation routes (vehicular, pedestrian, bicycle, etc.) between residential areas (and major activity centers both inside and outside the City) with street interconnectivity and neighborhood livability issues being the paramount consideration.

RESPONSE: This application involves a Comprehensive Plan Map Amendment and a Partition. It does not involve amending the City's Transportation System Plan, creating street alignments, or road building. A conceptual circulation plan is included in the application materials to provide an idea (conceptually) of how site connectivity could occur. When a future application for Development Review is submitted, street interconnectivity with respect to neighborhood livability may be applicable and will be reviewed by City staff and officials. However, this plan policy is not relevant at this time.

Policy 65: To classify all roadways within the City and adopt the vehicular circulation system set forth in the City's current Transportation System Plan or as amended by additional studies and information.

<u>RESPONSE</u>: This application involves a Comprehensive Plan Map Amendment and a Partition for the Valley View Church, a privately owned property. It does not involve amending the City's Transportation System Plan. A traffic study has been prepared which demonstrates that the proposal is consistent with road classifications adopted in the City TSP. Therefore, this application is consistent with this plan policy.

Policy 66: To review and revise traffic patterns and traffic volumes by employing the city Traffic Safety and Speed Control Standards. Review and revise traffic patterns and traffic safety standards and traffic control devices as traffic volumes change in order to provide a safe transportation and livable system and to improve the vehiclepedestrian relationship and to improve overall neighborhood connectivity and livability.

<u>RESPONSE</u>: This application involves a Comprehensive Plan Map Amendment and a Partition and does not involve revising traffic patterns, traffic control devices, etc. A conceptual site plan and traffic study has been prepared which demonstrates that the existing transportation system functions with the proposed plan map amendment. Therefore, this application is consistent with this plan policy.

Policy 66A: Existing streets which are upgraded and new streets which are constructed in response to new development in the city should be planned and designed to limit noise impacts, spread anticipated traffic volumes throughout available routes, maintain, preserve or improve aesthetics, and proved maximum potential for safety.

<u>RESPONSE</u>: This application involves a Comprehensive Plan Map Amendment and a Partition and does not involve the construction of new streets. A traffic study has been prepared which

demonstrates that the proposal is consistent with road classifications adopted in the City TSP. At such time as site development occurs, street improvements will be made. Street improvements will likely be limited to improvement of existing abutting street frontages and will be reviewed by City staff and officials through the Design Review process, as is customary and appropriate. Therefore, this application is consistent with this plan policy.

Policy 66B: Streets with high volume traffic should not bisect neighborhoods.

RESPONSE: This application involves a Comprehensive Plan Map Amendment and a Partition and does not involve the creating of new road alignments or construction of new streets with high traffic volumes. Therefore, this application is consistent with this plan policy.

Policy 66C: Collector streets should be designed to keep traffic under 25 mph and minimize traffic impact.

<u>RESPONSE</u>: This application involves a Comprehensive Plan Map Amendment and a Partition and does not involve the setting of speed limits for collector streets. Therefore, this plan policy is not relevant to this application.

Policy 66D: The main goal for a neighborhood street is to provide a safe, inter-connected transportation system while protecting the neighborhood and ensuring livability by controlling noise, traffic, speed, and number of vehicles.

RESPONSE: This application involves a Comprehensive Plan Map Amendment and a Partition and does not involve creating new neighborhood streets. Therefore, this plan policy is not relevant to this application.

Policy 66E: Neighborhood streets should reflect the concept that the street is an extension of the homeowner's yard.

RESPONSE: This application involves a Comprehensive Plan Map Amendment and a Partition and does not involve creating new neighborhood streets. Therefore, this plan policy is not relevant to this application.

Policy 66F: Employing street trees on both sides of the roadway and clustering/grouping will give the illusion of mini-parks.

<u>RESPONSE</u>: This application involves a Comprehensive Plan Map Amendment and a Partition and does not involve planting street trees. However, street trees are located on the property's frontage of SE Sunnyside Road. In addition, street trees will be planted on the property's other frontage streets in the future when site development occurs. Therefore, this application is consistent with this plan policy.

Policy 66G: Traffic noise and speed can be minimized by employing tight radius curves, circles, and planters within the roadway and speed humps.

RESPONSE: This application involves a Comprehensive Plan Map Amendment and a Partition and does not involve street design. However, a traffic study has been prepared which demonstrates that the proposal is consistent with road classifications adopted in the City TSP. At such time as site development occurs, street improvements will be made but will likely be

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limited to improvement of existing abutting street frontages. This will be reviewed by City staff and officials through the Design Review process, as is customary and appropriate. Therefore, this application is consistent with this plan policy.

Policy 67: To discourage high-volume, high-speed transportation routes near schools, parks and recreation facilities through the City.

<u>RESPONSE</u>: This application involves a Comprehensive Plan Map Amendment and a Partition and does not involve the creating of new road alignments or construction of new streets with high traffic volumes or high speeds. Therefore, this application is consistent with this plan policy.

Policy 68: To encourage and support the development and increased use of public mass transit and the increased availability of bus transportation routes serving the City and its environs.

<u>RESPONSE</u>: The Valley View Church property is located at the intersection of an arterial roadway (SE Sunnyside Road) and a collector street (SE 117th Avenue). The proposed Comprehensive Plan Map Amendment from a suburban residential district to a mixed use district is consistent with this plan policy because of all modes of transportation serve this property including mass transit (TriMet Route 155), bicyclist (bicycle lanes along SE Sunnyside Road), and pedestrians (public sidewalks along SE Sunnyside Road and SE 117th Avenue).

Policy 69: When a conflict exists between the objective to protect neighborhoods and the objective to maintain an efficient transportation system can be in conflict with one another, however, priority should be given to the livability and protection of the neighborhoods.

<u>RESPONSE</u>: This application does not propose to amend the City of Happy Valley TSP to upgrade any existing road classifications. Therefore, no conflicts exist between the above stated objectives, and the proposal is consistent with this plan policy.

Policy 70: To encourage the development of bike paths and pedestrian walkways throughout the city in accordance with OAR and the implementation of the County bikeway route through the City.

RESPONSE: This application involves a change in Comprehensive Plan Map designations for the Valley View Church property and not Design Review. Although a conceptual plan is included in the application materials, the proposal does not include Design Review or site development, where bike paths and pedestrian walkways alignments are typically established. When a future application for site development is submitted to the City, these issues will be covered. In this case, it is known that the property's public street frontages will provide the primary paths and walkways for the project site. Therefore, this plan policy does not apply to this application.

Goal #11 - To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for the planned growth and ultimately for full urban development of the City.

Policy 71: To complete a Public Facilities Plan as required by OAR 660, Division 11 and provide public facilities in a timely, orderly and efficient manner to the City.

<u>RESPONSE</u>: The City of Happy Valley has an adopted Public Facilities Plan. However, this is outside of the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 72: When local or other sources of public funding are available for the installation and/or improvement of facilities and services, existing areas of the City which are experiencing on-going problems will receive priority funding and scheduling for necessary work.

<u>RESPONSE</u>: Establishing priorities for capital improvement projects is outside of the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 73: The City will continue to seek federal funding for sewer projects and will attempt to maintain its standing on the EOC priority list.

<u>RESPONSE</u>: Seeking federal funding for sanitary sewer capital improvement projects is outside of the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 74: To require new developments to provide Level 1 public facilities and services which are consistent with the Leveled Growth Management section of this Plan and are required by City Ordinances.

<u>RESPONSE</u>: A complete range of urban public facilities and services is available to serve the subject site. Therefore, this application is consistent with this plan policy.

Policy 75: To provide public water and sewer to all areas within the city limits in accord with the appropriate facilities plans adopted by Sunrise Water Authority and Clackamas County Service District #1 respectively.

<u>RESPONSE</u>: Public water and sewer service is available to serve the subject site. Therefore, this application is consistent with this plan policy.

Policy 77: New individual onsite subsurface sewage disposal systems may be installed at any time to replace an existing but failing system within an existing lot of record, but may not be utilized to serve parcels or lots created by any land division, or to serve any new non-residential development. However, if public sanitary sewer service is available within 500 feet of any property line of an existing lot of record containing an existing failing system, and capable of serving the site of the failing system with a regular or gravity hookup, sanitary sewer service shall be extended to the subject site in lieu of utilization of a new replacement individual onsite subsurface sewage disposal systems.

<u>RESPONSE</u>: The Valley View Church property is connected to public sanitary sewer. Therefore, this application is consistent with this plan policy.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 26 OF 62 Policy 79: To continue to support the collection of solid waste through private operators.

<u>RESPONSE</u>: The Valley View church currently contracts with a private solid waste operator (Sunset Garbage Collection). Future land uses will also be responsible to contract with the appropriate solid waste operator upon development. Therefore, this application is consistent with this plan policy.

Policy 80: To monitor the adequacy of solid waste collection service and to communicate with private operators when problems arise.

RESPONSE: The Valley View church currently contracts with a private solid waste operator (Sunset Garbage Collection). Future land uses will also be responsible to contract with the appropriate solid waste operator upon development. There are no known problems. Therefore, this application is consistent with this plan policy.

Policy 81: Solid waste disposal is a regional concern requiring regional solutions. The City of Happy Valley recognizes Metro's responsibility and authority to prepare and implement a solid waste management plan, supports the Metro "Procedures for Siting Sanitary Landfill" and will participate in these procedures as appropriate.

<u>RESPONSE</u>: This application does not involve the siting of a regional landfill facility. Therefore, this plan policy is not relevant to this application.

Policy 82: To promote the construction of a storm drainage system, with highest priority given to the drainage areas suffering the most sever problems.

<u>RESPONSE</u>: There is an existing public storm drainage system in SE Sunnyside Road. This application involves a Comprehensive Plan Map Amendment and a Partition that typically do not involve physical site development. All future site development will include connections to the storm drainage system. Therefore, this application is consistent with this plan policy.

Policy 83: No facilities and services under the City's jurisdiction will be extended beyond the city limits without due justification until all areas within the City are provided with service. The Facilities Plan requires however, that the planning boundary will be the drainage basin boundary.

<u>RESPONSE</u>: The Valley View Church property is located within the incorporated City limits and is already served by a full range of urban public services. Therefore, this plan policy is not relevant to this application.

Policy 84: To promote the maintenance and improvement of the natural storm drainageways, and the construction of new systems when required.

RESPONSE: There is an existing public storm drainage system in SE Sunnyside Road. Additionally, there is a drainage that exists on the property. This application involves a Comprehensive Plan Map Amendment and a Partition that typically do not involve physical site development. All future site development will include connections at appropriate locations. Any potential improvement of the drainageway is will be evaluated through future Design Review applications, as is appropriate. Therefore, this application is consistent with this plan policy.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 27 OF 62 Policy 85: To require new developments to limit storm drainage runoff outside project boundaries or provide a storm drainage and collection system within the project in compliance with the City's Storm Drainage Ordinance.

<u>RESPONSE</u>: There is an existing public storm drainage system in SE Sunnyside Road. Additionally, there is a drainage that exists on the property. This application involves a Comprehensive Plan Map Amendment and a Partition that typically do not involve physical site development. All future site development will include connections to the storm drainage system. An on-site storm drainage and collection system will be designed and evaluated through future Design Review applications, as is appropriate. Therefore, this application is consistent with this plan policy.

Policy 86: Until the City's Facilities Plan is completed and the economic analysis and assessment policies are formulated by Clackamas County Service District #1, the City shall evaluate on a case by case basis those P.U.D's, subdivisions, land partitions or building permit applications which can be provided with sewer service from existing sewer lines adjacent to the City. Their approval during this interim period shall be based on the provisions of the City's Land Development Ordinance, Growth Management Policies, and agreements for the payment of anticipated public facilities assessments.

<u>RESPONSE</u>: The City of Happy Valley has an adopted Public Facilities Plan. Therefore, this plan policy is not relevant.

Policy 87: To develop a Capital Improvement Program for facilities and services that will meet the planned urban level of demand. Funding for public facilities and services at a level sufficient to meet demand will be obtained from federal, state and local grant sources, formation of local improvement districts, serial levies, bonded indebtedness, and other sources as may be feasible and appropriate.

<u>RESPONSE</u>: The City of Happy Valley has developed a Capital Improvement Program. Locating funding sources for capital improvement projects, however, is outside of the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 88: Ensure continued maintenance of city streets.

<u>RESPONSE</u>: Maintaining City streets is outside the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 89: To encourage or maintain provisions for adequate and/or expanded dog control, litter and nuisance enforcement.

<u>RESPONSE</u>: Dog control and litter / nuisance enforcement is outside the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 90: The City of Happy Valley will cooperate with agencies involved in providing and coordinating public services, and consider the pooling of City resources with various public agencies to provide needed facilities and services within the community.

<u>RESPONSE</u>: A full range of urban services is available to the Valley View Church property. This includes public water (Sunrise Water Authority), public sanitary and storm sewer (Clackamas County Service District No. 1), fire protection (Clackamas Fire District # 1), in

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 28 OF 62 addition to schools (Clackamas County School District No. 12), and mass transit (TriMet). Therefore, this application is consistent with this plan policy.

Policy 91: The City of Happy Valley recognizes and assumes its portion of the responsibility for participation in the operation, planning and regulation of waste water systems and designated in METRO's Waste Treatment Management Component. In addition, Happy Valley supports METRO's role in the overall responsibility for all waste treatment management.

<u>RESPONSE</u>: Regional wastewater treatment is outside the scope of this application. Therefore, this plan policy is not relevant to this application.

Goal #13 - To conserve energy; land and uses developed on the land, shall be managed and controlled so as to maximize the conservation of all forms of energy based upon sound economic principles.

Policy 92: To encourage and promote the recycling of older structures.

<u>RESPONSE</u>: The Valley View Church buildings are proposed to remain on site as part of this application. Therefore, this application is consistent with this plan policy.

Policy 93: To revise the Land Development Ordinance to protect sun rights and encourage utilization of solar energy, natural vegetation and new landscaping to reduce summer cooling needs.

<u>RESPONSE</u>: Revising the Land Development Code to protect sun rights and encourage solar energy, etc. is beyond the scope of this application. Therefore, this plan policy is not relevant to this application.

Policy 94: To encourage new residential site design, which allows the orientation of structures to take maximum advantage of solar energy potential. Access to sunlight will be safeguarded.

<u>RESPONSE</u>: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve residential site design or permit physical improvements where solar energy improvements can be employed. Therefore, this plan policy is not relevant to this application.

Policy 95: To encourage the innovative use of alternative energy sources such as solar, wind, etc., on all existing and new residential developments.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve residential site design or permit physical site improvements where solar or wind energy improvements can be employed. Therefore, this plan policy is not relevant to this application.

Policy 97: The City shall permit development on vacant buildable lands at its base density levels or less, or at density levels which exceed base density levels as permitted by Title 16 of the City's Municipal Code. Level 1 facilities and services shall be defined as those which are absolutely critical to site development proposals, and are as follows:

- sanitary sewer
- water supply
- storm drainage
- fire protection

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streets and roads

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve physical site development. However, a full range of urban services is available to the Valley View Church property. This includes public water (Sunrise Water Authority), public sanitary and storm sewer (Clackamas County Service District No. 1), fire protection (Clackamas Fire District # 1), and streets and roads (Clackamas County DTD and the City of Happy Valley). Therefore, this application is consistent with this plan policy.

Policy 98: In any area of the City where Level 1 services are programmed but are not scheduled for installation and availability for more than one (1) year, a project of phased development may be proposed which will include future bonuses. However, any and all bonuses may be planned for, but shall be taken only when Level 1 services are available to the site. Initial phase (s) of the project may not exceed density limitations established by the Base Comprehensive Plan. All planning for the project must be in accordance with appropriate sections of the current Land Development Ordinance.

<u>RESPONSE</u>: As stated above, all Level 1 services are available to the site. Therefore, this plan policy is not relevant to the application.

Policy 99: Any and all development within the city shall be subject to participation in the provision of Level 2 facilities and services which are essential to the development of the City as a whole, and shall include:

- schools
- police protection
- parks and recreation
- public transit
- vector control
- *city administrative services*

However, per the requirements of ORS 195.110(11) - notwithstanding any other provision of state or local law, school capacity shall not be the sole basis for the approval or denial of any residential development application, unless the application involves changes to the local government comprehensive plan or land use regulations.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve physical site development. However, all Level 2 services are available to the site. This includes schools (Clackamas County School District No. 12), police protection (City of Happy Valley), parks and recreation (City of Happy Valley), public transit (TriMet), survey control (Clackamas County Surveyor), and City administrative services (City of Happy Valley). Therefore, this application is consistent with this plan policy.

Policy 100: The funding of improvements, extension of construction Level 1 facilities and services within the incorporated limits of the city shall be the responsibility of those whose land use activities caused such improvement, extension or construction to become necessary. Funding sources may include but are not limited to creation of a local improvement district (LID); outside funding or grants in aid; direct source payment with or without agreement for future reimbursement by other property owners who may utilize the facility or service; other sources as may be identified.

<u>RESPONSE</u>: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve physical site development. Should improvements be required through

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY

SEPTEMBER 2011 PAGE 30 OF 62 future applications for development (i.e. Design Review) these will be addressed in the manner described in this plan policy. Therefore, this plan policy is not relevant to the application.

Policy 101: Waivers of remonstrance for all future improvements of Level 1 facilities and services shall be required for all approved minor partitions, major partitions, subdivisions and P.U.D.'s. The City shall retain these waivers for use when necessary.

<u>RESPONSE</u>: Should waivers of remonstrance for future improvements of Level 1 facilities be required by the City, they will be provided. Therefore, this application is consistent with this plan policy.

Policy 102: When, as the coordinator of land use activities and service provision to development areas, the City must make determinations regarding fulfillment of the Growth Management Policies and Procedures, the City shall consider recommendations provided by service providers and other affected agencies, including but not limited to the following:

- Clackamas County Service District No. 1 (CCSD#1)
- Sunrise Water Authority
- Clackamas Fire District No. 1 (CFD#1)
- Clackamas County, Department of Transportation and Development (DTD)
- North Clackamas School District No. 12 (NCSD#12)
- North Clackamas Parks & Recreation District (NCPRD)
- Tri-Met
- City of Portland
- City of Gresham
- City of Damascus

Any determination shall be within the parameters of the providers' or agency's own standards, criteria, requirements or plans. The service providers' decision shall be treated as a rebuttable presumption as to the ability of that provider to provide an acceptable level of service. However, the evidence that can rebut said decision must be compelling evidence based upon objective data and the agencies' standards-criteria-requirement or plans in order to controvert the determination of the service provided.

<u>RESPONSE</u>: The City will solicit input from the above listed agencies as a part of the public notice process. The applicant will address any relevant comment received by the City. Therefore, this application is consistent with this plan policy.

Policy 103: No development of any properties shall be permitted which will interfere or prevent the extension of any Level 1 facilities or services.

<u>RESPONSE</u>: The proposed project in no way interferes with or prevents the extension of any Level 1 facilities or services. Therefore, this application is consistent with this plan policy.

CITY OF HAPPY VALLEY LAND DEVELOPMENT CODE

The following Sections of the City of Happy Valley Land Development Code are applicable to the proposed application for a Comprehensive Plan Map Amendments / Zone Change and Partition with Natural Resource Overlay Review:

Chapter 16.23 Commercial and Employment Districts

16.23.010 Mixed Use Commercial and Employment Districts A. Purpose

1. Mixed use commercial (MUC). Mixed use commercial will provide for convenience commercial needs of residential neighborhoods and office workers in locations adjacent to and mixed in with residential and office areas. The location of services and offices near residential units and major transportation networks should promote use of alternative modes of transportation such as bus ridership, bicycle and pedestrian activity. Retail uses should be primarily located on the ground floor to encourage an interesting and active streetscape. Buildings should be oriented towards the street or accessway with clearly marked entrances. Blank frontage walls at street level are discouraged. Development boundaries and patterns are not defined by type of use (i.e., retail and office); instead the district allows a variety of permitted uses to occur throughout the commercial district. The commercial uses are meant to provide a concentration of commercial and office uses to create an active area.

RESPONSE: The Valley View Church is requesting that the City of Happy Valley amend the official Plan and Zoning Map from R-10 to Mixed Use Commercial (MUC) and Institutional and Public Use (IPU). As stated above, the MUC District provides for a wide variety of land uses, including those which provide for job creation as well as additional housing opportunities for the City of Happy Valley. The site is well suited for these Zones and these types of uses because of all modes of transportation can conveniently access this property, including mass transit (TriMet Route 155), bicyclist (bicycle lanes along SE Sunnyside Road), and pedestrians (public sidewalks along SE Sunnyside Road and SE 117th Avenue).

B. Permitted Uses. Table 16.23.010-1 identifies the land uses that are allowed in the MUC, MUE and MUE-NC Districts.

<u>RESPONSE</u>: No specific land use is proposed for the portion of the site proposed to be designated as MUC. However, future applications for Development Review would demonstrate compliance with this Section.

C. Development Standards. The development standards in Table 16.23.010-2 apply to all uses, structures, buildings, and development in the MUC, MUE and MUE-NC Districts.

Standard	MUC	MUE	MUE-NC
Lot size (minimum)	Variable ³	Variable ³	See 16.23.010(D)(3)
Lot width (minimum)	Variable ³	Variable ³	Variable ³
Lot depth (minimum)	Variable ³	Variable ³	Variable ³
Landscaping (minimum)	Variable ⁴	Variable ⁴	Variable ⁴
Building setbacks (minimum)	Variable ³	Variable ³	Variable ³
Building height (maximum)	65 feet ³	$65 feet^3$	65 feet ³
NOTES:	· · · ·		
³ Building height is measured pursue	ant to Chapter 16.12, Defi	nitions. Standards are flexi	ble and shall be
determined through the master plan	process or a design review	<i>N</i> .	

Table 16.23.010-2 Development Standards for MUC, MUE and MUE-NC Districts

<u>RESPONSE</u>: As shown on the preliminary plans for the partition, the proposed partition satisfies all relevant development standards for the MUC District, including lot size, dimensions, and setbacks. No changes to this portion of the property are proposed. This standard is met.

16.24.010 Institutional and Public Use (IPU) District.

A. Purpose. The IPU District proposes to serve the need for the designation of areas for necessary institutional uses such as schools and churches, and public and semipublic uses such as parks, a local government center and other governmental and public service uses. This district may be located at any place throughout the City, based on a determination by the City that such areas are required. The Comprehensive Plan identifies the need for such uses throughout the City, with that need being fulfilled through this district

B. Permitted Uses. Table 16.24.010-1 identifies the land uses that are allowed in the IPU District.

 Table 16.24.010-1 Institutional and Public Use (IPU) Permitted Uses

 P=Permitted; C=Conditional Use; X=Prohibited

Land Use	IPU
Institutional	
Church, synagogue, temple or cathedral or other places of worship	Р

<u>RESPONSE</u>: At the request of City staff, the property owner is proposing the IPU designation for the developed portion of the church property to recognize and reflect the long standing use of the site as a church.

C. Development Standards. The development standards in Table 16.24.010-2 apply to all uses, structures, buildings, and development in the IPU District.

Table 16.24.010-2 Development Standards for IPU Dist	rict
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Standard	IPU	
Lot size (minimum)	None	
Lot width (minimum)	None	
Lot depth (minimum)	None	
Street frontage (minimum)	50 ft.	
Lot coverage (maximum)	None, provided that all setback and parking	
	requirements are met	
Landscaping (minimum)	None	
Building setbacks (minimum):		
Front	20 ft.	
Rear	20 ft.	
Interior side	10 ft.	
Street side (corner lot)	15 ft.	
Building height (maximum) ¹	50 ft.	
NOTES:		
¹ Building height is measured pursuant to Cha	apter 16.12, Definitions.	

<u>RESPONSE</u>: As shown on the preliminary plans, the proposed partition satisfies all relevant development standards for the IPU District, including lot size, dimensions, and setbacks. No changes to this portion of the property are proposed. This standard is met.

Chapter 16.34 Natural Resources Overlay Zone

16.34.020 Applicability and Administration.

A. The regulations of this Natural Resources Overlay Zone shall apply to any parcel which is within 200 feet of a Protected Water Feature (creeks, rivers, streams, wetlands, natural lakes, and springs) or which contains land identified and protected under Metro's UGMFP Title 13 Habitat Conservation Areas, as currently configured, or other significant wetlands, riparian corridors, wildlife habitat, that is inventoried and mapped on the Happy Valley Steep Slopes and Natural Resources Overlay Zone Map.

RESPONSE: A small portion of the Valley View Church property adjacent to SE Sunnyside Road has a protected water feature designation. The protected water feature is illustrated below by the light blue line taken from Map D4 of the City's Natural Overlay Zone Map Book. The dark blue line represents a 200 foot distance from the protected water feature. The intent of this map is to show a potential water feature in a very rough manner. A detailed field investigation is required (and has been performed) by a qualified professional in order to properly delineate the boundaries of the actual NROZ.



City of Happy Valley Natural Resource Overlay Map

B. Unless otherwise exempted by these regulations, any development on parcels subject to this Chapter must comply with the regulation contained herein. Activities subject to the review process shall include all development on properties, including:

1. Partitioning and subdividing of land;

<u>RESPONSE</u>: Because this application involves a partition, the standards contained in this section of the Land Development Code apply.

C. The Natural Resources Overlay Zone is generally described by boundary lines shown on the City of Happy Valley Steep Slopes and Natural Resources Overlay Zone Map. Where a development application proposes development entirely outside of the NROZ, but within 100 feet of the NROZ, applicants must verify the natural resource boundaries via the procedures outlined in Section 16.34.060.

<u>RESPONSE</u>: Because this City map is general in nature, it includes a disclaimer that it is "for advisory purposes only". Based on the above requirement, a detailed field investigation has been

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 34 OF 62 performed by a qualified professional in order to properly delineate the boundaries of the actual NROZ. This includes a wetland delineation and vegetated corridor analysis, prepared by Ecological Land Services, which is included in the application materials. This report verifies the precise location of the natural resource boundaries on-site and demonstrates that development is not proposed within the NROZ. Verifying the boundary involved an on-site field investigation by a professional biologist, whose field markings were verified, surveyed, and mapped by a professional land surveyor. This information is included in ELS' report and shown on the preliminary existing conditions plan.

D. On the City of Happy Valley Steep Slopes and Natural Resources Overlay Zone Map land within the NROZ are designated as follows:

1. Water Quality Resource -

a. Protected Water Feature - The general location of Protected Water Features is indicated on the Happy Valley Steep Slopes and Natural Resources Overlay Zone Map; however, the text provisions of Section 16.34.060.B shall be used to determine the exact location.

b. Vegetated Corridor – Maximum Extent. The Vegetated Corridor (buffer) is a facility required to prevent damage to the Protected Water Feature caused by development impacts. The boundary of the NROZ is defined by the maximum potential extent of a Vegetated Corridor, which is 200 feet from a Protected Water Feature. However, the actual width of the Vegetated Corridor area varies depending on the type of protected water feature; upstream drainage area served; and, slope adjacent to the Protected Water Feature.

RESPONSE: Because this City map is general in nature, it includes a disclaimer that it is "for advisory purposes only". Based on the above requirement, a detailed field investigation has been performed by a qualified professional in order to properly delineate the boundaries of the actual NROZ. This includes a wetland delineation and vegetated corridor analysis, prepared by Ecological Land Services, which is included in the application materials. This report verifies the precise location of the natural resource boundaries (including the vegetated corridor) on-site and demonstrates that development is not proposed within the NROZ. Verifying the boundary involved an on-site field investigation by a professional biologist, whose field markings were verified, surveyed, and mapped by a professional land surveyor. This information is included in ELS' report and shown on the preliminary existing conditions plan.

16.34.030 Exemptions.

The following uses and activities are exempt from the requirements of this Chapter.

A. A use or activity that avoids any impact to a Water Quality Resources and/or HCA provided that the location of the Water Quality Resource and/or HCA have been verified by the City in accordance with Section 16.34.060 and a Construction Management Plan pursuant to Section 16.34.070.B has been submitted that demonstrates that there will be no impacts to the Water Quality Resource and/or HCA during construction. Clackamas County Service District #1 approval is required for all development on properties within 200 feet of a protected water feature.

<u>RESPONSE</u>: The application includes a Comprehensive Plan Map Amendment and a Partition. These involve no physical construction that in any way affects the delineated protected water feature and buffer. These areas will be left in their existing state and a conservation easement will be placed on the final partition plat to ensure their future protection. Therefore, the application should be considered exempt from the requirements of this chapter.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 35 OF 62 16.34.060 Map Verification to Establish Natural Resource Boundaries.

B. Water Quality Resources - Map Verification. Water Quality Resources include the Protected Water Features and the Vegetated Corridors as specified in Table 16.34.060-1, and include all land identified and protected under Metro's UGMFP Title 3 Water Quality Resource Areas.

RESPONSE: The protected water feature and vegetated corridor (as specified in Table 16.34.060-1) have been delineated by a qualified professional biologist. This includes all land identified under Metro's UGMFP Title 3 Water Quality Resource Areas. These are defined in Title 10 of the UGMFP as follows:

(uu) "Protected Water Features"

- Primary Protected Water Features shall include:
- Title 3 wetlands; and
- Rivers, streams, and drainages downstream from the point at which 100 acres or more are drained to that water feature (regardless of whether it carries year-round flow); and
- Streams carrying year-round flow; and
- Springs which feed streams and wetlands and have year-round flow; and
 - Natural lakes.

Based upon the above definition, the protected water features on the Valley View Church site are the delineated wetlands. The site drainage was analyzed in the Ecological Land Solutions (ELS) report and found not to be included for a number of reasons, chiefly because portions of the drainage were not associated with wetlands, the drainage basin is less than 100 acres and that it is seasonal (intermittent) in nature. ELS applied vegetated corridors (buffers) to the protected water features.

1. Protected Water Features include creeks, rivers, streams, wetlands, natural lakes, and springs. The general location of identified Protected Water Features is indicated on the Happy Valley Steep Slopes and Natural Resources Overlay Zone Map; however, the text provisions of this section shall be used to determine the exact location of the Protected Water Feature.

<u>RESPONSE</u>: Based upon this definition and that of Metro (provided above), the protected water features on the Valley View Church site are the delineated wetland areas. These areas generally coincide with the area mapped on the Happy Valley Steep Slopes and Natural Resources Overlay Zone Map.

2. The Vegetated Corridor (buffer) is a facility required to prevent damage to the Protected Water Feature caused by development impacts. The width of the Vegetated Corridor area varies depending on the type of Protected Water Feature; upstream drainage area served; and, slope adjacent to the Protected Water Feature, as specified in Table 16.34.060-1. The Vegetated Corridor (buffer) is based on the horizontal distance measured perpendicular to the Protected Water Feature boundary, not the slope distance from it. To establish the size of Vegetated Corridor, the starting point for measurements from the Water Feature is the edge of bankful flow or 2-year storm level or the delineated edge of a wetland. At least three slope measurements along the water feature, at no more than one hundred (100)-foot increments, shall be made for each property for which development is proposed. Depending on the width of the property, the width of the vegetated corridor will vary. The Vegetated Corridor (buffer) width is determined based on the slope of the land adjacent to the Protected Water Feature in 25 or 50 foot increments. Where the slope of the land varies within the measurement area, an Area Weighted Average slope shall be

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 36 OF 62 calculated. The calculation for the Area Weighted Average slope is shown in Figure 16.34.060-1; note that A, B, and C indicate different slope areas, measured horizontally.

RESPONSE: A vegetated corridor (buffer) has been properly placed around the delineated wetlands as described in the ELS wetland delineation and as shown on the existing conditions plan. The vegetated corridor is measured 50 feet from the edge of the delineated wetlands as described above. Due to the location of the existing improved (paved, curbed, striped) church parking lot, which is located directly adjacent (to the east) to portions of the delineated wetlands, portions of site that would otherwise be considered to be within the vegetated corridor (as measured above) have become functionally isolated. The parking lot was built long before the NROZ standards were developed and therefore is shown as not being located in the vegetated corridor because it is being and has been used for the circulation and parking of vehicles. Therefore, it is not included in the vegetated corridor. This standard is met.

3. Delineation of Water Quality Resources. Applicants shall delineate the boundaries of the Protected Water Feature as follow:

a. Lakes, Springs, and Wetlands:

i. Delineate boundaries using the methods described in the 1987 US Army Corps of Engineers Wetland Delineation Manual.

<u>RESPONSE</u>: On-site wetlands have been delineated using the methods described in the 1987 US Army Corps of Engineers Wetland Delineation Manual by a qualified professional biologist. Please refer to the ELS Wetland Delineation included in the application materials.

ii. Survey and map all wetland boundaries on the site base map.

<u>RESPONSE</u>: ELS' field delineation was professionally surveyed and mapped. Please see the existing conditions map provided in the application materials.

b. Intermittent and/or perennial streams:

<u>RESPONSE</u>: ELS' field delineation shows the location of the on-site intermittent stream. Please see the existing conditions map provided in the application materials.

i. Identify whether the stream is perennial or intermittent. Streams are considered perennial until proven intermittent with adequate field documentation (photos, field data), or determination by Oregon Division of State Lands.

<u>RESPONSE</u>: The drainage is not included within the City's mapped NROZ overlay and the professional biologist's analysis and determination, based on field data is that the on site drainage is intermittent.

ii. For all intermittent and/or perennial streams, delineate Protected Water Feature boundaries by identifying the top of bank of the defined channel, or the surface elevation of a 2-year, 24-hour storm event. If determining the surface elevation of a 2-year, 24-hour storm event is not possible, then the outside edge of the stream feature is determined by identifying the aerial extent of:

(A) Water marks on fixed objects (vegetation, buildings, etc.);

- (B) Drift lines (deposited waterborne twigs, litter, etc.); or
- (C) Waterborne sediment deposits on the soil surface or fixed objects (vegetation, buildings, etc.)

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 37 OF 62 (D) Use the indicator that provides the greatest aerial cover.

<u>RESPONSE</u>: The above features, as applicable, have been delineated. Please see the Wetland Delineation provided by ELS, included in the application materials.

c. Vegetated Corridors:

i. Follow procedures outlined in Section 16.34.060.B.3 for determining Vegetated Corridor (buffer). *ii.* Stake, survey, and map the boundaries of the sensitive areas and the Vegetated Corridor on the project site and adjacent properties within 200 feet of the property line on the base map (if access is possible) and flag them on the project site.

RESPONSE: The wetland areas were flagged, surveyed, and mapped and a vegetated corridor (buffer) has been properly established around the delineated wetlands as described previously. The vegetated corridor is proposed to be located within a conservation easement as shown on the preliminary partition plat. This standard is met.

16.34.070 Development standards.

For nonexempt uses and activities proposed within verified natural resources, there are three types of development standards outlined in this chapter: nondiscretionary, special use, and discretionary. As summarized below, the special use standards outlined in Section 16.34.070(D) apply to specific types of recreational, public facility and utility facilities. Individuals proposing other nonexempt uses and activities within HCAs (that are not also Water Quality Resource Areas) may use either the nondiscretionary development standards in Section 16.34.070(B) or the discretionary standards in 16.34.075. Except for the Special Uses identified in Section 16.34.070(D), individuals proposing development within a Water Quality Resource must use the discretionary review standards in Section 16.34.075.

<u>RESPONSE</u>: There are no HCA's on the Valley View Church property. The applicable standards for sites containing Water Quality Resource Areas are addressed below. This standard is met.

A. Permit Requirements. Individuals proposing nonexempt development within Natural Resources (Water Quality Resources or HCAs) must provide a development plan and accompanying narrative explanation that includes the following information. All of the application requirements must be met prior to permit approval.

RESPONSE: The location of the Water Quality Resource and/or HCA have been verified in accordance with Section 16.34.060. The proposed partition does not involve non-exempt development within Natural Resources. The application is exempt pursuant to Section 16.34.030 because it involves a use or activity that avoids any impact to a Water Quality Resources and/or HCA. Pursuant to Section 16.34.070.B.2, a construction management plan is not required because simultaneous development of the property is not proposed.

1. Applicants must verify the boundaries of any Water Quality Resource or HCA on their property as described in Section 16.34.060.

RESPONSE: The wetland areas were flagged, surveyed, and mapped and a vegetated corridor (buffer) has been properly established around the delineated wetlands as described previously. The vegetated corridor is proposed to be located within a conservation easement as shown on the preliminary partition plat. This standard is met.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 38 OF 62 2. For the entire subject property (including non-resource areas), applicants must submit a scale map of the property that includes:

a. Location of any wetlands or water bodies on the property, including a delineation of the Water Quality Resource Area;

b. Location of all high, moderate, and low HCAs on the property;

c. Outline of any existing disturbance area, including the location of existing adjacent streets and paved areas, utilities, culverts, stormwater management facilities, or bridges;

d. Location of 100-year floodplain and floodway boundary as defined by the Federal Emergency Management Agency (FEMA) and the area of the 1996 flood inundation; and

e. Topography shown by two-foot vertical contours in areas of slopes less than fifteen (15) percent, and at fivefoot vertical contours of slopes fifteen (15) percent or greater. On properties that are two acres or larger, such a contour map is required only for the portion of the property to be developed.

<u>RESPONSE</u>: A topographic survey of the Valley View Church property has been performed. The application materials include an existing conditions plan that includes the above listed information, as applicable. This standard is met.

3. Detailed site plan of proposed development outlining total disturbance area, including proposed building footprints, site property improvements, utilities and landscaping. The types, sizes and intensities of lights must be placed so that they do not shine directly into the NROZ.

RESPONSE: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve physical development of the site. The application materials include a set of drawings that include a conceptual plan showing how the site could potentially be developed in the future. However, this is not proposed as development and approval of the application does not authorize development of the site as shown on the concept plan. To summarize, no development is propose that will disturb any portion of the water quality resource area. This includes buildings, utilities, landscaping, and or lighting. This standard is met.

4. The following additional information shall be provided about the HCA:

<u>RESPONSE</u>: The Valley View Church property does not include any designated HCA's. Therefore, these standards and other standards regarding HCA's are not applicable to this site or this application.

5. If grading will occur within a Water Quality Resource or HCA, a grading plan showing the proposed alteration of the ground at two-foot vertical contours in areas of slopes less than fifteen (15) percent, and at five-foot vertical contours of slopes fifteen (15) percent or greater.

<u>RESPONSE</u>: Site development, including grading is not proposed on site or within a water quality resource area through this application. Therefore, this standard does not apply.

6. When a property containing any Water Quality Resource is subdivided, this Code requires that new subdivision plats delineate and show the Water Quality Resource as a separate unbuildable tract. The division of properties containing HCAs are subject to Section 16.34.070(C)(5).

<u>RESPONSE</u>: This application includes a Comprehensive Plan Map Amendment and a Partition. Therefore, this standard does not apply. However, as discussed with City and County

staff at the pre-application conference, a conservation easement is included for the water quality resource area as shown on the proposed preliminary partition plat. As required by Chapter 16.50, a stormwater drainage easement is being provided over the existing drainage way where it is not designated / delineated as a protected water feature. This is also shown on the preliminary partition plat. The Valley View Church property does not include any designated HCA's. Therefore, Section 16.34.070(C)(5) is also not applicable to this application.

B. Construction Management Plans.

2. Applicants who are partitioning or subdividing, but are not simultaneously developing their property, do not need to provide a Construction Management Plan.

<u>RESPONSE</u>: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve simultaneous development of the church property. Therefore, a construction management plan is not required as stated above.

C. Nondiscretionary Development Standards within HCAs. The following development standards apply to all nonexempt development that occurs within the HCA except for development that occurs pursuant to the standards established by the discretionary development standards in Section 16.34.075 or the special use standards in Section 16.34.070(D).

<u>RESPONSE</u>: The Valley View Church property does not contain any mapped HCA's; therefore, the requirements of this Section do not apply.

Chapter 16.41 Access and Circulation

16.41.030 Vehicular Access and Circulation A. Access to Arterial and Collector Streets.

1. Location and design of all accesses to and/or from arterials and collectors (as designated in the transportation system plan) are subject to review and approval by the City Engineer. Where practical, access from a lower functional order street shall be required.

RESPONSE: The Valley View Church property fronts on 3 public streets: SE Sunnyside Road (an arterial street), SE 117th Avenue (A neighborhood collector street), and SE 114th Court (a local street). The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. This application involves a Comprehensive Plan Map Amendment and a Partition that does not affect these accesses in any way. As shown on the preliminary partition plat, each parcel will retain public street frontage, and no parcel is proposed that relies solely upon SE Sunnyside Road for existing or future street access.

2. Accesses to arterials or collectors shall be located a minimum of one hundred fifty (150) feet from any other access or street intersection. Exceptions may be granted by the City Engineer. Evaluations of exceptions shall consider posted speed of the street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities.

<u>RESPONSE</u>: The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. No additional accesses or changes to the

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 40 OF 62 existing accesses, or development that directly increases trip generation is proposed. Therefore, this standard is met.

3. No development site that abuts an arterial or collector street shall be allowed more than one access point to that street (as designated in the transportation system plan) except as approved by the City Engineer. Evaluations of exceptions shall consider posted speed of street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities.

RESPONSE: The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. No additional accesses (including additional access on either of these streets) or changes to the existing accesses or development that directly increases trip generation is proposed. Therefore, this standard is met.

4. When developed property is to be expanded or altered in a manner that significantly affects on-site parking or circulation, both existing and proposed accesses shall be reviewed under the standards in subsections (B)(1) and (B)(2) of this section. As a part of an expansion or alteration approval, the City may require relocation and/or reconstruction of existing accesses not meeting those standards.

<u>RESPONSE</u>: The Valley View Church property fronts on 3 public streets: SE Sunnyside Road (an arterial street), SE 117th Avenue (A neighborhood collector street), and SE 114th Court (a local street). The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. This application involves a Comprehensive Plan Map Amendment and a Partition that does not affect site trip generation or the existing accesses in any way. Therefore, this standard is met.

5. When a partition, subdivision or a planned unit development abuts or contains an existing or proposed arterial street as defined within the Comprehensive Plan, the City Engineer or Planning Commission shall require reverse frontage lots, thereby precluding access to the parkway streets.

<u>RESPONSE</u>: The Valley View Church property fronts on 3 public streets: SE Sunnyside Road (an arterial street), SE 117th Avenue (A neighborhood collector street), and SE 114th Court (a local street). The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. This application involves a Comprehensive Plan Map Amendment and a Partition that does not affect these accesses in any way. As shown on the preliminary partition plat, each parcel will retain public street frontage and no parcel is proposed that relies solely upon SE Sunnyside Road for existing or future street access.

B. Driveways.

1. A driveway to an off-street parking area shall be improved from the public roadway to the parking area a minimum width of twenty (20) feet for a two-way drive or twelve (12) feet for a one-way drive but in either case not less than the full width of the standard approach for the first twenty (20) feet of the driveway.

RESPONSE: The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. This application includes a Comprehensive Plan Map Amendment and a Partition and does not involve changes to the existing accesses, increase site trip generation, and/or affect on or off-site circulation. Therefore, this standard does not apply to this project. Even though this standard is not applicable to this application, the existing driveway accesses comply with this dimensional standard, as shown on the existing conditions plan.

2. Access to and from off-street parking areas shall not permit backing onto a public street, except for single-family dwellings.

RESPONSE: The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. This application includes a Comprehensive Plan Map Amendment and a Partition and does not involve changes to the existing accesses, increase site trip generation, and/or affect on or off-site circulation. Therefore, this standard does not apply to this project. Even though this standard is not applicable to this application, the existing driveway accesses comply with this standard because they are not designed so as to encourage or require backing onto a public street, as shown on the existing conditions plan.

5. Driveways, aisles, turnaround areas and ramps shall have a minimum vertical clearance of twelve (12) feet for their entire length and width but such clearance may be reduced in parking structures.

RESPONSE: The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. This application includes a Comprehensive Plan Map Amendment and a Partition and does not involve changes to the existing accesses, increase site trip generation, and/or affect on or off-site circulation. Therefore, this standard does not apply to this project. Even though this standard is not applicable to this application, the existing driveway accesses comply with this standard because they have a minimum vertical clearance of 12 feet for their entire length and width.

6. No driveway shall traverse a slope fifteen (15) percent or greater at any point along the driveway length.

RESPONSE: The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. This application includes a Comprehensive Plan Map Amendment and a Partition and does not involve changes to the existing accesses, increase site trip generation, and/or affect on or off-site circulation in any way. Therefore, this standard does not apply to this project. Even though this standard is not applicable to this application, the existing driveway accesses comply with this standard because they do not traverse a slope greater than 15 percent at any point along the driveway.

7. The location and design of the driveway within the lot frontage shall provide for unobstructed sight pursuant to the vision clearance requirements. Requests for exceptions to these requirements will be evaluated by the public works director considering the physical limitations of the lot and safety impacts to vehicular, bicycle, and pedestrian traffic.

<u>RESPONSE</u>: The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. These accesses have unobstructed sight pursuant to the vision clearance requirements. This application includes a Comprehensive Plan Map Amendment and a Partition and does not involve changes to the existing accesses (including areas that are necessary for unobstructed sight / vision clearance), increase site trip generation, and/or affect on or off-site circulation in any way. Therefore, this standard does not apply to this project. Even though this standard is not applicable to this application, the existing driveway accesses comply with this standard because sight vision clearance requirements are met.

8. The number of driveway and private street intersections with public streets should be minimized by the use of shared driveways for adjoining lots where feasible. When necessary for traffic safety and access management purposes, or to access flag lots, the City Engineer may require joint access and/or shared driveways.

RESPONSE: The Valley View Church property fronts on 3 public streets: SE Sunnyside Road (an arterial street), SE 117th Avenue (A neighborhood collector street), and SE 114th Court (a local street). The church currently utilizes existing driveway approaches on SE Sunnyside Road and SE 117th Avenue for access to the property. This application includes a Comprehensive Plan Map Amendment and a Partition and does not involve changes to the existing accesses, increase site trip generation, and/or affect on or off-site circulation in any way. Therefore, this standard does not apply to this project. Even though this standard is not applicable to this application, the proposal complies with this standard because each parcel will retain public street frontage and no parcel is proposed that relies solely upon SE Sunnyside Road for existing or future street access.

16.41.040 Pedestrian Access and Circulation

To ensure safe, direct and convenient pedestrian circulation, all developments, except single-family detached housing (i.e. on individual lots), shall provide a continuous pedestrian and/or multi-use pathway system as shown in the City's TSP, Happy Valley Parks Master Plan, or North Clackamas Parks District Master Plan. (Pathways only provide for pedestrian circulation. Multi-use pathways accommodate pedestrians and bicycles). The system of pathways shall be designed based on the standards in Subsections A. through E. of this section:

<u>RESPONSE</u>: This application includes a Comprehensive Plan Map Amendment and a Partition and does not involve Site Design Review, changes to the existing buildings, changes to existing parking areas, changes to existing pedestrian/bicycle circulation patterns, increase any form of site trip generation, and/or affect on or off-site circulation in any way. Therefore, this standard does not apply to this application.

Chapter 16.42 – Landscaping, Street Trees, Fences and Walls

16.42.020 Applicability.

This chapter shall apply to all land divisions and developments subject to site design review.

RESPONSE: The subject property is developed as the Valley View Church. The developed portion of the property (occupied by the church) supports mature site and parking lot landscaping as shown on the preliminary plans (aerial photograph). No changes are proposed to any area of landscaping as a part of this application. This application includes a partition, which is a land division. Therefore, this chapter is applicable to the proposed application. However, the only landscaping standards that apply to land divisions are street trees. Therefore, responses to the street tree standards are addressed below.

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16.42.040 Street trees and planter strips.

A. Applicability. All partitions, subdivisions, planned unit developments (PUDs), and any individual uses within any district, whether permitted by right or conditional approval, shall be required to provide street trees and, where applicable, planter strips on all public or private roadways or access drives within the project area, in accordance with the standards in subsection B below.

<u>RESPONSE</u>: This application includes a partition, which is a land division. Therefore, these standards are applicable to the proposed application.

B. Standards.

1. All street trees and planter strips shall be installed or financially secured by the developer pursuant to the definition of a "planter strip" found within Section 16.12.030 (Definitions). Private streets or development areas that do not utilize curbside planter strips shall install street trees beyond the public sidewalk, within a public utility and street tree easement.

<u>RESPONSE</u>: As shown on the preliminary plans (aerial photograph) street trees exist along a portion of the properties frontage on SE Sunnyside Road and SE 114th Court. As development occurs with frontage improvements, street trees will be installed as is required.

2. Street Tree Installation Methodology. The developer and/or builder shall submit a planter strip and street tree plan as part of the construction plan set, detailing to the greatest extent practicable the placement of street trees in conformance with all spacing requirements in regard to street intersections, street lights, driveways, fire hydrants, etc. Based on this street tree plan, the developer shall submit a street tree installation fee or liquid financial guarantee based on the methodology set forth in Section 16.50.080.

<u>RESPONSE</u>: As required above, a planter strip and street tree plan will be provided as part of the construction plan set as development occurs with frontage improvements.

3. Planting/Removal. Any person desiring for any purpose to plant, remove, destroy, top or treat any tree in or upon any street right-of-way, shall first submit a tree cutting/planting application to the City describing the purpose and scope of work. All work done under such permit must be performed in strict accordance with the terms and provisions of this chapter. The Public Works Director shall base approval of such permit on the health, safety and welfare of both the affected tree(s) and community residents. If any permit required by this section is denied, the applicant may appeal in writing to the City Council within ten (10) days of denial. The council shall proceed and determine the appeal, calling upon the Public Works Director to defend his or her decision.

<u>RESPONSE</u>: As required above, a planter strip and street tree plan will be provided as part of the construction plan set as development occurs with frontage improvements.

4. Modified Existing Streets. All proposed changes to existing public street right-of-way widths or any proposed existing street improvement shall, where feasible, include allowances for parking and median strips in accordance with the City's public facilities plan and its new street system final development standards.

<u>RESPONSE</u>: A center medial is located within SE Sunnyside Road. No changes to existing public street right-of-way widths or future street improvements are proposed or will otherwise occur that allow for additional median planter strips.

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5. Clearance Design.

a. Curb and Sidewalk. Parking strip street trees shall be planted midway between curb and sidewalk in parking strips.

b. Center Medians. Center median street trees shall be laterally centered in the medians and an offset placement pattern relative to parking strip street trees is required.

c. Utilities. All digging, including tree planting, must be preceded by underground location of utilities, water lines, sewer lines and transmission lines conducted by the planter.

d. Corners, Driveways, Fire Hydrants and Street Lights. No street trees shall be planted closer than thirty-five (35) feet from any street corner, measured back from the point of intersecting curbs or curb lines. No street tree shall be planted closer than five feet to any drive-way, (10) feet to any fire hydrant, or fifteen (15) feet to any street light measured from its base. Vision clearance shall be provided pursuant to standards in Section 16.50.030(B) and consistent with Figure 16.42.040-1.

e. Street Tree Spacing. Street trees in parking strips shall be placed at a maximum of thirty (30) feet on-center and located in accordance with the requirements contained in this chapter. Street trees in center medians shall be placed at a maximum of fifteen (15) feet on center. Trees planted in the center medians shall be staggered with the trees planted in the parking strips. Special plantings shall be allowed with prior approval by the City Manager.

f. Visual Clearance. In order to keep visual zones clear and to protect traffic, pedestrians and bicyclists from running into low limbs, trees within or overhanging the public right-of-way and/or visual clearance zone must be trimmed to at least seven feet above the sidewalk area, eleven (11) feet above streets or alleys, and fourteen (14) feet above neighborhood collector level two and higher level roads (see Figure 16.42.040-1).

g. Median Trees. Center median street trees shall be planted and maintained in a manner that eliminates conflict between vehicle traffic and trees. Pruning of median street trees shall reflect a limb standard sufficient to ensure a fourteen (14) foot clearance above streets.

<u>RESPONSE</u>: When street trees are planted in the future, they will be installed in accordance with the above clearance design standards, as applicable.

16.42.060 Fencing, Walls and Screening.

A. While fencing, walls or screening is not uniformly mandatory for all residential development, perimeter street fences, walls and earthen berms along arterial or collector streets in residential districts have significant visual impacts, particularly with respect to traffic safety, site visibility and design aesthetics affecting major transportation corridors. Therefore, perimeter street fences, walls, berms and required landscaping (between a new fence required by Table 16.42.060-1 and the public right-of-way) shall be installed by the developer prior to the issuance of structural building permits according to the standards listed in Table 16.42.060-1:

<u>RESPONSE</u>: This application involves a partition that involves large parcels where Design Review will be required prior to development occurring on site. It is more appropriate to consider the application of fencing and screening as part of that process when it can be considered with the future use of the land and overall site design as opposed to this partition application that does not involve any physical site development.

B. Criteria. When reviewing all proposals for partitions, subdivision of land or planned unit development, or multifamily projects, the approval authority shall determine the need and desirability of fencing or screening within the development site area. The review body, may at its discretion, condition the fencing/screening along collector or arterial street frontage per one of the three design options listed in Table 16.42.060-1. In its consideration, the approval authority shall use the following criteria:

1. The intended use for the area;

2. Surrounding uses and existing fence, wall or berm sections, their design, materials and appearance;

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 45 OF 62 4. The need for fencing or screening to reduce the amount of use conflicts, noise, wind, dust, vision and other forms of pollution and conflicts;

5. The need and desirability for the replacement of trees removed from the site as a result of the proposed development.

RESPONSE: This application involves a partition that involves large parcels where Design Review will be required prior to development occurring on site. It is more appropriate to consider the application of fencing and screening as part of that process when it can be considered with the future use of the land and overall site design as opposed to this partition application that does not involve any physical site development.

C. All fencing, walls or screening shall be subject to the following standards and requirements:

<u>RESPONSE</u>: Since fencing, walls, and screening is not included or applicable to this application for a Comprehensive Plan Map Amendment, these standards and requirements are not applicable or addressed.

D. For any development of a structure, yard or any facility requiring the utilization of retaining walls, retaining walls over four feet in height require the approval of a building permit and engineering of the retaining wall, including provisions for stormwater management. Within any zoning district, on property immediately abutting existing residences or residential districts, the maximum single-face retaining wall height within an individual existing lot of record, parcel or lot (as created after any retaining walls necessary for public or private infrastructure such as streets, stormwater detention facilities, etc.) shall have a maximum height of eight (8) feet, as measured from the downslope face of the retaining wall. Retaining walls may be terraced up the slopes of existing lots of record, parcels or lots, but shall have a minimum distance between walls of the height of the downslope retaining wall; as measured from the upslope side of the lower retaining wall to the downslope side of the upper retaining wall. All retaining walls abutting other single-family residences or zoning districts shall provide solid vegetative screening along the entire linear face of the lowest retaining wall. Fences or decorative walls may exist atop retaining walls, and are measured in height independent of the retaining wall. Said facilities may exist to the maximum height allowed in the front, interior side, exterior side (corner lot) or rear setback area. E. Pools. For the purpose of safety, any property which contains any size in-ground swimming pool or an aboveground swimming pool any part of which is less than forty-eight (48) inches in height above grade shall be fenced with an artificial fence of continuous construction of not less than four feet in height. Additionally, the gate

F. Screening of Service Facilities. Site-obscuring shrubbery or a bern, wall or fence shall be placed along a property line between residential and commercial and industrial zones and around unsightly areas such as trash and recycling areas, gas meters, ground level air-conditioning units, disc antennas exceeding thirty-six (36) inches in diameter and equipment storage or an industrial or commercial use with outside storage of equipment or materials.

G. Outdoor Storage. All outdoor storage areas for commercial, industrial, public and semi-public uses are to be entirely screened by a sight obscuring fence, vegetative materials, or other alternative deemed appropriate by the Planning Official or his/her designee. Exceptions to the preceding requirements include: new or used cars, cycles and trucks (but not including car parts or damaged vehicles); new or used boat sales; recreational vehicle sales; new or used large equipment sales or rentals; manufactured home sales, florists and plants nurseries.

<u>RESPONSE</u>: This application does not involve the development of any structure requiring the utilization of retaining walls, a pool, a screening or service facility, and/or outdoor storage. Therefore, these standards do not apply.

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entrances to the pool area should be lockable.

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^{3.} The impact of the intended use upon surrounding uses and vice versa;

Chapter 16.43 Parking and Loading

16.43.010 Purpose. The intent of these regulations is to provide adequate capacity and appropriate location and design of on-site parking and loading areas as well as adequate access to such areas. The parking requirements are intended to provide sufficient parking in close proximity for residents, customers, and/or employees of various land uses. These regulations apply to both motorized vehicles (hereinafter referred to as vehicles) and bicycles.

16.43.020 Applicability.

All developments involving land division or subject to site design review, including development of parking facilities, shall comply with the standards in this chapter.

RESPONSE: The subject property is developed as the Valley View Church. The developed portion of the property (occupied by the church) has a large parking lot, which includes an asphalt surface, painted striping, perimeter and interior landscaping, lighting, and pedestrian accesses. On site bicycle parking is also provided. This is generally as shown on the preliminary plans (aerial photograph). This application does not propose additional parking spaces, the elimination of parking spaces alter any portion of the existing parking area, affect on or off-site circulation, and/or increase site trip generation. Therefore, these standards are not relevant to this project. However, a conceptual site plan is included in the application submittal materials. Although, these features are not proposed, the plan illustrates conceptually how future individual uses and parking could occur. Details concerning the location and configuration of any future parking areas, as well as the quantity and dimensions of individual parking spaces are required to be included with future Design Review applications, as is customary, appropriate, and required.

Chapter 16.45 Signs

16.45.010 Purpose.

This section regulates the erection, placement and maintenance of signs to protect and enhance public health, safety, welfare and property, more specifically to:

RESPONSE: This application does not include a proposal to construct a new sign or to alter or replace an existing sign. Therefore, these standards are not relevant to this project.

Chapter 16.46 - Happy Valley Style Design Standards

C. Applicability. The Happy Valley Style design standards apply to all mixed-use commercial, retail commercial, office and institutional buildings that are three stories in height or less except as exempted below.

RESPONSE: This application does not include a proposal to construct a new building, alter or replace an existing building, and/or alter the site in any manner. Therefore, these standards are not relevant to this project rather they are relevant to any future applications for Design Review that may occur.

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Chapter 16.50 – Public Facilities

16. 50.020 General Public Facilities Standards

RESPONSE: A future street and utility improvement plan is included in the application materials. As illustrated on the plan, access to all necessary public services is available to each of the three new parcels. The future construction of services will be in accordance with the City of Happy Valley, Sunrise Water Authority, and /or Clackamas County WES, as applicable.

16.50.030 Transportation Standards

RESPONSE: New streets are not proposed or necessary for the proposed Comprehensive Plan Map Amendment or Partition application. The TSP does not depict or describe a scenario where public access is necessary through this property. Existing public streets adjacent to the site provide access to the property and will continue to provide access to the property. Any future work necessary in the public right-of-way will be performed in accordance with City and/or County standards, and adequate sight-distance and corner vision will be maintained at the access locations.

16.50.040 Public Use Areas

<u>RESPONSE</u>: There are no proposed parks or other public use areas proposed at this time. If in the future, such an area is proposed, appropriate easements will be provided.

16.50.050 Sanitary Sewer and Water Service Improvements

<u>RESPONSE</u>: A future street and utility improvement plan is included in the application materials. As illustrated on the plan, access to all public sanitary and storm drainage facilities is available and provided. The majority of on-site sanitary sewer and storm drainage facilities will be privately owned. Construction of all on-site services will be in accordance with the City of Happy Valley, Sunrise Water Authority, and/or Clackamas County WES, as applicable, and all appropriate easements will be provided or referenced on the final partition plat.

16.50.070 Utilities

<u>RESPONSE</u>: New utilities will be provided below ground, as required by this section. Appropriate easements will be provided by or referenced on the final partition plat.

Chapter 16.51 Surface Water Management

16.51.020 Submission of a drainage plan.

A. Any property owner or authorized agent applying for any of the following permits or approvals shall be required to submit with the application a drainage plan which has been prepared by a registered professional engineer or with the assistance of the City Engineer at the applicant's expense for review and approval by the City or its designated representative:

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5. Minor partition;

<u>RESPONSE</u>: The future street improvement and utility plan includes a drainage plan. This standard is met.

B. Any drainage plan submitted may be supplemented with additional information at the request of the City or its designated representative. Also, the same drainage plan may be resubmitted with future applications which are related to the original application with which the drainage plan was first submitted.

C. Submission of a drainage plan may be waived by the City or its designated representative when the applicant is able to show proof that the runoff/drainage:

1. Will not seriously and adversely impact the water quality conditions of any affected receiving bodies of water; and/or

2. Will not alter the drainage patterns, increase peak discharge and cause any other adverse effects in the drainage area.

<u>RESPONSE</u>: As described above, a drainage plan is included in the application materials. This standard is met.

D. Contents of a Drainage Plan.

1. All drainage plans required and submitted for surface water flows entering, flowing within or leaving the subject property shall contain information and follow procedures as delineated in the current Happy Valley drainage study. Background information and proposed improvements for handling future runoff should be provided in as much detail as is possible or required to make the drainage plan understandable, usable and viable.

2. At the minimum, the following background information will be required:

a. Depiction of the drainage area on a topographical map, with acreage indicated;

b. Indication of the peak discharge and amount of surface water currently entering and leaving the subject property;

c. Indication of the peak discharge and amount of runoff which will be generated within the subject property if development is allowed to proceed;

d. Determination of the peak discharge and amount of water that will be generated by design storm frequencies at various points on the subject property.

E. Computation of Stormwater Runoff. The computation of stormwater runoff from any property shall be determined by methods specified in the current Happy Valley drainage study depending on the drainage and property areas.

RESPONSE: The proposed Comprehensive Plan Map Amendment and Partition does not include physical site development and/or site alterations. Therefore, additional runoff will not occur. Calculations for discharge "post development" will be the same as those for "pre-development", and detention or other stormwater facilities are not required.

16.51.030 Development in identified flood, drainage and/or erosion areas.

Development which would increase the volume of discharge from the subject property shall not be permitted in areas where existing flooding, drainage and/or erosion conditions present an imminent likelihood of harm to the welfare and safety of the surrounding community, until such a time as the community hazard is alleviated. Where applications of the provisions of this section will deny all reasonable uses of the property, the restriction on development contained in this section may be waived for the subject property, provided that the resulting development shall be subject to all of the remaining terms and conditions of this section.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 49 OF 62 **<u>RESPONSE</u>**: The Valley View Church property is not located in an area where existing flooding, drainage, and/or erosion conditions are present. The proposed Comprehensive Plan Map Amendment and Partition does not include physical site development and/or site alterations. Therefore, the volume of discharge will not increase, and erosion will not occur. This standard is met.

16.51.040 Detention facilities.

A. Necessary and required detention facilities shall be designed and constructed where it has been determined that maximum runoff during the design storm will exceed the computed peak discharge from the subject property. Using the following methods of storage computation, requirements for every development shall be determined, regardless of the size of the property:

RESPONSE: The proposed Comprehensive Plan Map Amendment and Partition does not include physical site development and/or site alterations. Therefore, additional runoff will not occur. Calculations for discharge "post development" will be the same as those for "pre-development" and detention or other stormwater facilities are not required.

F. To implement the City's goals and policies for minimizing stormwater runoff, drainage plans submitted for subject sites within the Steep Slopes Development Overlay Zone, Natural Resources Overlay Zone, or Flood Management Zone must reference and be consistent with the requirements of Chapter 16.32, Chapter 16.34, and Chapter 16.35 respectively.

<u>RESPONSE</u>: A small portion of the church property, adjacent to SE Sunnyside Road, is located within the Natural Resource Overlay Zone. The property is not located in the Flood Management Zone. Please refer to findings provided in Chapter 16.34 for further information regarding compliance with the requirements of the NROZ.

G. Mandatory Requirements for all Drainage Plans and Improvements.

1. Surface water entering the subject property shall be received at the naturally occurring location and surface water exiting the subject property shall be discharged at the natural location with adequate energy dissipators to minimize downstream damage and with no diversion at any of these points.

<u>RESPONSE</u>: The proposed Comprehensive Plan Map Amendment and Partition does not include physical site development and/or site alteration including those that would affect surface water entering or leaving the subject property. This standard is met.

2. The peak discharge from the subject property may not be increased due to the proposed development.

<u>RESPONSE</u>: The proposed Comprehensive Plan Map Amendment and Partition does not include physical site development and/or site alterations. Therefore, increased runoff will not occur because "post development" discharge will be the same as "pre-development" discharge.

3. Detention facilities must be provided in order to handle all surface water in excess of the peak discharge.

<u>RESPONSE</u>: The proposed Comprehensive Plan Map Amendment and Partition does not include physical site development and/or site alterations. Detention facilities are therefore not

required because "post development" discharge will be the same as "pre-development" discharge.

Chapter 16.61 Types of Review Procedures

16.61.040 Type III procedure (quasi-judicial).

RESPONSE: This application is subject to City review through a Type III procedure, as described in this section. The applicant understands and is complying with all of the requirements for a Type III procedure. This includes meeting submittal requirements, posting the required notice on the site, and attending and participating in required hearings.

Chapter 16.63 Land Divisions and Property Line Adjustments

16.63.020 General Requirements

A. Subdivision and Partition Approval Through Two-step Process. Applications for subdivision or partition approval shall be processed by means of a preliminary plat evaluation and a final plat evaluation, according to the following two steps:

1. The preliminary plat must be approved before the final plat can be submitted for approval consideration; and 2. The final plat must include all conditions of approval of the preliminary plat.

<u>RESPONSE</u>: Review of this application (preliminary plat) represents the first step in the process. Upon approval of the preliminary plat, a final plat will be submitted for recordation, which represents the second step in the process. This standard will be met.

B. The following conditions, regulations and restrictions shall apply to all methods of development: 1. No person shall dispose of, transfer, sell or agree, offer or negotiate to sell any lot in any subdivision until the final plat of the subdivision has been acknowledged and recorded with the Clackamas County clerk's office; 2. No person shall dispose of, transfer, sell or agree, offer or negotiate to sell any lot in any subdivision by reference to or exhibition or other use of a plat of such subdivision before the final plat for such subdivision has been so recorded;

3. A person may offer or negotiate to sell any parcel in a partition prior to approval of the tentative plan for the partition, but no person may dispose of, transfer, sell, or agree to sell any parcel in a partition prior to such approval;

<u>RESPONSE</u>: None of the parcels in the proposed partition will be sold prior to recordation of the final partition plat. These standards will be met.

4. All planned unit developments (PUDs), subdivisions, master plans and partitions which are developed pursuant to this development code must also be in conformance with the Happy Valley comprehensive plan and this title;

<u>RESPONSE</u>: This written document, together with all of the other required submittal materials, which are included in the application package, demonstrate compliance with the Happy Valley Land Development Code, and the Comprehensive Plan. This standard is met.

5. Building permits that are requested for lots which are not in conformance to this title shall not be issued unless the lot is a pre-existing lot of record prior to the enactment of this title;

<u>RESPONSE</u>: The subject site is a lot of record and eligible for permits regardless of the status of this proposed partition. Therefore, this standard does not apply.

6. All subdivisions, master plans and partitions using subsurface sewerage disposal methods shall be developed pursuant to the appropriate state, county and city regulations;

<u>RESPONSE</u>: The subject site and each of the proposed parcels have access to public sanitary sewer services as detailed in the preliminary plans. Subsurface disposal methods are not proposed. Therefore, this standard does not apply.

7. Any parcel or tract to be developed using the facilities of a community sewerage agency shall be developed pursuant to the appropriate city and agency regulations;

RESPONSE: The subject site and each of the proposed parcels have access to public sanitary sewer services as detailed in the preliminary plans. All applicable City and Clackamas County WES standards are being met. Therefore, this standard does not apply.

C. Compliance With ORS Chapter 92. All subdivision and partition proposals shall conform to state regulations in Oregon Revised Statute (ORS) Chapter 92, Subdivisions and Partitions.

<u>RESPONSE</u>: The proposed final plat will be prepared in accordance with ORS Chapter 92. This standard will be met.

D. Future Re-division Plan. When subdividing or partitioning tracts into large lots (i.e., greater than two times or 200 percent the minimum lot size allowed by the underlying land use district), the City shall require that the lots be of such size, shape, and orientation as to facilitate future re-division in accordance with the requirements of the land use district and this Code. A re-division plan shall be submitted for large lots identifying:

<u>RESPONSE</u>: Future re-division of the subject site is not anticipated or necessary. Therefore, a future re-division plan is not relevant for this proposed partition application. This standard does not apply. That said, a conceptual site plan is provided showing how site redevelopment could occur, as is required for the Comprehensive Plan Map Amendment / Zone Change application.

E. Lot Size Averaging. Single family residential lot size may be averaged to allow lots less than the minimum lot size in Residential districts, as provided by Section 16.63.030, Flexible Lot Size, or through approval of a Master Planned Development under Chapter 16.65.

<u>RESPONSE</u>: Lot size averaging is not proposed or relevant to the proposed commercial subdivision. Therefore, this standard does not apply.

F. Density Calculations. Density calculation is the means by which density for any parcel may be determined and ultimately developed within that parcel in a more efficient and land conscious manner. This portion of the Land Development Code provides the method for calculating the overall density for any given parcel of land which may contain both constrained land, partially constrained land and unconstrained land. The minimum and maximum number of dwelling units permitted on a parcel of land is limited by both the number of units allowed by the applicable zoning district(s) and the amount of buildable land. The need to provide infrastructure and the presence of easements for major utilities corridor also impacts the number of units permitted on a parcel of land.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 52 OF 62 **<u>RESPONSE</u>**: Residential density calculation is not relevant to the proposed division of this property because residential dwelling units are not proposed. Therefore, this standard does not apply.

2. Density transfer limitation.

<u>RESPONSE</u>: Density transfer is not proposed or relevant to the proposed partition application. Therefore, this standard does not apply.

G. Temporary Sales Office. A temporary sales office in conjunction with a subdivision may be approved as set forth in Section 16.69.010, *Temporary Use Permits.*

<u>RESPONSE</u>: Temporary sales offices are not proposed or relevant to the proposed partition. Therefore, this standard does not apply.

H. Minimize Flood Damage. All subdivisions and partitions shall be designed based on the need to minimize the risk of flood damage.

<u>RESPONSE</u>: The project site is not located within or nearby a floodplain or floodway. Therefore, this standard is not relevant.

I. Determination of Base Flood Elevation. Where a development site consists of five (5) or more acres or 50 or more lots, and is located in or near areas prone to inundation for which the base flood elevation has not been mapped, the applicant shall have the base flood elevation it shall be prepared by a qualified professional as part of the land division application.

<u>RESPONSE</u>: The project site is not located within or nearby a floodplain or floodway. Therefore, this standard is not relevant.

J. Need for Adequate Utilities. All lots created through land division shall have adequate public utilities and facilities such as sewer, gas, electrical, and water systems. These systems shall be located and constructed to prevent or minimize flood damage, and to avoid impairment of the system and contamination from them during flooding.

<u>RESPONSE</u>: As detailed on the future street and utility improvement plan, each parcel has access to a full range of necessary urban services and utilities. This standard is met.

K. Need for Adequate Drainage. All subdivision and partition proposals shall have adequate surface water drainage facilities that reduce exposure to flood damage and improve water quality. Water quality or quantity control improvements may be required.

<u>RESPONSE</u>: A future street and utility improvement plan is included in the application materials. As illustrated on the plan, access to storm drainage facilities is available and provided. This standard is met.

L. Floodplain, Park, and Open Space Dedications. Where land filling and/or development is allowed within or adjacent to regulatory flood plain and the Comprehensive Plan designates the subject flood plain for park, open space, or trail use, the City may require the dedication of sufficient open land area for a greenway and/or trail

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 53 OF 62 adjoining or within the flood plain for transportation, storm drainage/water quality, or park purposes in the public interest. When practicable, this area shall include portions at a suitable elevation for the construction of a multi-use pathway in accordance with the City's adopted trails plan or pedestrian and bikeway plans, as applicable. The City shall evaluate individual development proposals and determine whether the dedication of land is justified based on the development's impact to the park and/or trail system, or stormwater management requirements, consistent with Sections 16.50.030 and 16.50.060, and assist in obtaining any floodplain permit that may be required.

<u>RESPONSE</u>: The project site is not located within or nearby a floodplain or floodway or is designated on the comprehensive plan or trails master plan as having any special significance. Therefore, this standard is not relevant.

M. Lands Subject to Hazardous Conditions. Any land area within the city which has been determined to be unbuildable pursuant to the city's comprehensive plan and revised build-able land survey, shall be developed for building purposes only in conjunction with the appropriate RSD-1 overlay district when adequate methods for mitigating the hazards are submitted, reviewed and approved by all appropriate agencies. The appropriate agencies, including the city engineer, shall use as their review and approval criteria the pertinent sections of the applicable codes, ordinances, laws, statutes, administrative policies and rules, and other applicable documents. Land areas determined not to be buildable may be utilized to help complete or fulfill a requirement for the provision of open space, if a maintenance agreement is provided by the property owner and approved by the city attorney.

RESPONSE: The project site is not mapped as being subject to any hazardous conditions and is not located within the RSD-1 overlay district (now defunct). Therefore, this standard is not relevant.

16.63.030 Flexible Lot Size; Flag Lots; Lots Accessed by Mid-Block Lanes

<u>RESPONSE</u>: Flexible lot sizes, flag lots, and/or lots accessed by mid-block lanes are not proposed or relevant to the proposed partition. Therefore, this standard is not relevant.

16.63.040 Preliminary Plat Approval Process

<u>RESPONSE</u>: This application for a subdivision is being processed as through a Type III procedure in accordance with the requirements of this Chapter. This standard is being met.

16.63.050 Preliminary Plat Submission Requirements. A. General Submission Requirements.

<u>RESPONSE</u>: This application for a subdivision includes all of the relevant submittal materials required by this section. This includes required preliminary plans, a preliminary plat, etc.

16.63.060 Approval Criteria: Preliminary Plat.

A. General Approval Criteria. The City may approve, approve with conditions or deny a preliminary plat based on the following approval criteria:

1. The proposed preliminary plat complies with the applicable Development Code sections and all other applicable ordinances and regulations. At a minimum, the provisions of this article, and the applicable chapters and sections of Article 16.2 (Land Use Districts), Article 16.3 (Specific Area Plan Districts and Overlay Zones), and Article 16.4 (Community Design Standards) shall apply. Where a variance is necessary to receive preliminary plat approval, the application shall also comply with the relevant sections of Article 16.7;

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY **<u>RESPONSE</u>**: This written narrative statement and accompanying application materials demonstrate compliance with all applicable approval criteria. This includes evidence of compliance with Article 16.2, Article 16.3, and Article 16.4, or information describing why those particular standards are not applicable to the proposed subdivision. No variances are proposed as part of this application. This standard is met.

2. The proposed plat name is not already recorded for another subdivision, and satisfies the provisions of ORS Chapter 92;

<u>RESPONSE</u>: Partition Plats are not named. Therefore, this standard does not apply to this application.

3. The proposed streets, roads, sidewalks, bicycle lanes, pathways, utilities, and surface water management facilities are laid out so as to conform or transition to the plats of subdivisions and maps of major partitions already approved for adjoining property as to width, general direction and in all other respects. All proposed public improvements and dedications are identified on the preliminary plat;

<u>RESPONSE</u>: The preliminary plans included with this application show that all future facilities are consistent with existing surrounding development. This standard is met.

4. All proposed private common areas and improvements (e.g., homeowner association property) are identified on the preliminary plat; and

<u>RESPONSE</u>: There are no common areas and improvements proposed in this partition application. Therefore, this standard does not apply.

5. Evidence that any required State and federal permits have been obtained, or shall be obtained before approval of the final plat;

<u>RESPONSE</u>: It is not anticipated that any State or federal permits are necessary to complete the partition plat. However, should they be necessary, they will be obtained. This standard will be met.

6. Evidence that improvements or conditions required by the City, road authority, Clackamas County, special districts, utilities, and/or other service providers, as applicable to the project, have been or can be met; and

<u>RESPONSE</u>: Partitioning of the property, as shown on the preliminary plat, does not permit site development, impact any public facility in any imaginable way, and/or or in any way alter the physical appearance or function of the property. The applicant requests that any improvements be deferred until after the Design Review stage, when future land uses and site layouts are defined, and impacts can be considered and appropriate improvements determined. All improvements or conditions required by the City, Clackamas County, and/or other service providers will be met.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 55 OF 62 7. If any part of the site is located within a Specific Area Plan District, Overlay Zone, or previously approved Master Planned Development, it shall conform to the applicable regulations and/or conditions.

<u>RESPONSE</u>: As previously mentioned, a small portion of the property adjacent to SE Sunnyside Road is identified on the City's NROZ map as a protected water feature. Please see findings provided in response to Chapter 16.34 for information regarding compliance with NROZ standards. This standard is met.

B. Layout and Design of Streets, Blocks and Lots. All proposed blocks (i.e., one or more lots bound by public streets), lots and parcels conform to the specific requirements below:

1. All lots shall comply with the lot area, setback, and dimensional requirements of the applicable land use district (Article 16.2) and Section 16.50.030 Transportation Standards, with the exception of lots created specifically for the purposes of fee acquisition in conjunction with either public or private utility projects, which may be any size.

RESPONSE: Table 16.23.010-2 does not contain specific minimum required lot sizes, lot widths, lot depths, and/or setbacks but states that the standards are flexible. The application materials include a preliminary partition plat which details the proposed parcel sizes and dimensions for the property. This standard is met.

2. Setbacks shall be as required by the applicable land use district (Article 16.2).

RESPONSE: Table 16.23.010-2 does not contain specific minimum setbacks but states that the standards are flexible. The application materials include a preliminary conceptual site plan, which shows conceptual setbacks. As stated in Table 16.23, appropriate setbacks are to be determined through the Design Review process. This standard will be met.

3. Each lot shall conform to the standards of Chapter 16.41 Access and Circulation.

<u>RESPONSE</u>: Please refer to the findings provided in response to these standards in this written statement.

4. Landscape or other screening may be required to maintain privacy for abutting uses. See Article 16.2 - Land Use Districts, and Chapter 16.42 Landscaping.

<u>RESPONSE</u>: Please refer to the findings provided in response to these standards in this written statement.

5. In conformance with the Uniform Fire Code, a 20-foot width fire apparatus access drive shall be provided to serve all portions of a building that are located more than 150 feet from a public right-of-way or approved access drive. See Chapter 16.41 Access and Circulation.

RESPONSE: This application includes a Comprehensive Plan Map Amendment and a Partition. No physical site development, including new buildings, alterations to existing structures, and/or changes to the existing site circulation system are proposed. Future applications for Design Review will include review of standards related to fire apparatus access and to consider this detail at this point, prior to any physical site development, is premature and not warranted. Therefore, this standard does not apply at this time.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 56 OF 62 6. Where a common drive is to be provided to serve more than one lot, a reciprocal easement which will ensure access and maintenance rights shall be recorded with the approved subdivision or partition plat.

<u>RESPONSE</u>: Common drives are not proposed or necessary for this partition application. Each of the three proposed parcels will have frontage on public streets. This standard is not applicable.

7. All applicable engineering design standards for streets, utilities, surface water management, and easements shall be met.

<u>RESPONSE</u>: Street, utility, or surface water management improvements are not proposed or necessary for the partition as no development will result. The appropriate time for these types of improvements should be at the Design Review stage, when future land uses are determined, site design defined, and impacts have been determined. All improvements or conditions required by the City, Clackamas County, and/or other service providers will be met.

8. All cuts and fills shall comply with the standards and provisions in Section 16.50.100.

<u>RESPONSE</u>: This application includes a Comprehensive Plan Map Amendment and a Partition. No physical site development, including earthwork / grading such as cuts and fills are proposed. Future applications for Design Review will include review of standards related to site grading, and to consider this detail at this point, prior to any physical site development, is premature and not warranted. Therefore, this standard does not apply at this time.

C. Easement Provisions. The following shall govern the location, improvement and layout of easements: 1. Utilities. Easements for utilities shall be provided on side and rear lot lines where deemed necessary by the appropriate service providers. Insofar as possible, easements shall be continuous, aligned from block to block within the development and compatible with adjoining existing developments. All easements shall not be less than five feet in width;

<u>RESPONSE</u>: All necessary easements for utility providers will be provided on the final partition plat.

2. Unusual Facilities. Easements for unusual facilities such as high voltage electric transmission lines, drainage canals or pondage areas shall be of such width as is determined adequate by the responsible agency, including any necessary maintenance roads. These shall be fully designated upon the final plat or map, as to their use, purpose and ownership;

<u>RESPONSE</u>: There are no unusual facilities located on the subject site or proposed in this application. Therefore, this standard does not apply to the proposal.

3. Watercourses. Where a development is traversed or bounded by a watercourse, drainageway; wasteway, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially to the line of such watercourse, drainageway, channel or stream and of such width for construction, maintenance and control as will be adequate for the purpose as required by the responsible agency. For those developments which are bounded by a stream, stream bank easements shall be required for pedestrian paths. The width of watercourse easements shall be determined by the city and the developer using Chapter 16.50 and the Happy Valley drainage study as guides to the establishment of such easements;

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 57 OF 62 **RESPONSE:** All necessary easements are shown on the preliminary plat and will be provided on the final partition plat. This includes a 15' wide drainage easement for the on-site drainageway. This is consistent with Happy Valley requirements for storm drainage easements. No pedestrian paths are proposed or necessary for this application. This standard will be met.

4. Conservation. There shall be provided within any subdivision or planned unit development which borders or has within its boundaries a lake, pond, wetland or perennial stream, a conservation easement of thirty (30) feet in width along both sides of the lake or stream within which building construction shall not be allowed. The dimension shall be measured from the known or documented high water mark. The conservation easement shall be held by the homeowner's association, if any, or dedicated to the city. Necessary maintenance shall be provided by the grantor of the easement.

RESPONSE: The proposed application does not include a subdivision or a planned unit development. Therefore, this standard does not apply. The church property does have wetland areas, which are subject to the requirements of the Natural Resource Overlay Zone, which supersede this standard. Please refer to the findings provided to Chapter 16.34 for further information.

D. Minimum improvement standards. All new public street improvements shall conform with the adopted minimum installation, material and construction standards for all public street improvements pursuant to Chapter 16.50, the Happy Valley Transportation System Plan, and the City's Engineering Design Standards Details Manual.

RESPONSE: New streets and street improvements are not proposed or necessary for the partition as no development will result. The appropriate time for these types of improvements should be at the Design Review stage, when future land uses are determined, site design defined, and impacts have been determined. All improvements or conditions required by the City, Clackamas County, and/or other service providers will be met.

2. All city streets within all proposed partitions, subdivisions and planned unit developments shall be a continuation of a county road or city street. A private street may serve a partition if the extension of a public street is not possible, but may provide access for no more than five total dwelling units and must meet the private street standards as described in Subsection D.1.c of this section, above. All new city streets shall be compatible with and in accordance with the city's existing street development pattern and the adopted transportation plan.

<u>RESPONSE</u>: New streets and/or continuation of existing streets are not proposed or necessary to partition the church property. Therefore, this standard does not apply.

E. County Surveyor's Requirements. The Clackamas County surveyor shall require that all surveying and monumentation be pursuant to the appropriate state statutes.

<u>RESPONSE</u>: All surveying and monumentation will be in accordance with the County Surveyor's Requirements and State statutes.

16.63.080 Final Plat Submission Requirements and Approval Criteria. A. Submission Requirements.

<u>RESPONSE</u>: Prior to recordation, a final partition plat will be prepared and submitted to the City of Happy Valley for review, as is required by this section.

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Chapter 16.67 Comprehensive Plan Map, Specific Area Plans, Land Use District Map and Text Amendments

16.67.010 Purpose.

The purpose of this chapter is to provide standards and procedures for legislative and quasi-judicial amendments to the City's Comprehensive Plan and ancillary documents, specific area plans, the land use district map and this title (Land Development Code). These will be referred to as "map and text amendments." Amendments may be necessary from time to time to reflect changing community conditions, needs and desires, to correct mistakes, or to address changes in the law. (Ord. 389 § 1(Exh. A), 2009)

<u>RESPONSE</u>: This application involves a request to amend the comprehensive plan map designation for the Valley View Church property. This is referred to as a "map amendment" as addressed above.

16.67.015 Initiation of a plan amendment.

A. Any change in the text, map or implementing ordinances of adopted Happy Valley land use regulations may be initiated by the City, any resident of the City, property owners or authorized agent. A change in the text may be initiated by as few as one person desiring a revision in the wording, scope, direction or organization of the plan. A change in the map which involves properties and/or district boundaries must be initiated by at least seventy-five (75) percent of the property owners or authorized agents who own or represent at least seventy-five (75) percent of the land area involved in the petition of change. The City may, for the purposes of revising or updating plans to comply with statewide goals, legal guidelines or other necessary criteria, initiate a change in the map or text of any plan and this Land Development Code at any time.

<u>RESPONSE</u>: This application for a Comprehensive Plan Map Amendment is being initiated by the Valley View Church, the property owner. One hundred percent of the property owners involved have initiated this application. This requirement is met.

16.67.030 Quasi-judicial amendments.

A. Applicability of Quasi-Judicial Amendments. Quasi-judicial amendments are those that involve the application of adopted policy to a specific development application or Code revision, and not the adoption of new policy (i.e., through legislative decisions). Quasi-judicial Comprehensive Plan map/district map amendments shall follow the Type III procedure, as governed by Section 16.61.040, using standards of approval in Section 16.67.030(C). The approval authority shall be as follows:

1. The Planning Commission shall be the review authority for Comprehensive Plan map/land use district map amendments paired with master plans under twenty (20) acres in size.

2. The Planning Commission shall make a recommendation to the City Council on an application for all other Comprehensive Plan map/land use district plan map amendments. The City Council shall decide such applications.

3. The City Council shall be the review authority for annexations that involve the legislative conversion of existing Clackamas County Comprehensive Plan designations/zoning districts to City Comprehensive Plan designation/zoning districts, per the provisions of Section 16.67.070.

<u>RESPONSE</u>: This application represents a quasi-judicial amendment for a property less than 20 acres in size. Based upon the parameters for review established above, the City Planning Commission is the approving authority.

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B. Filing requirements.

1. In order to have a complete application for any proposed text amendment, the applicant shall submit the necessary application forms, and a narrative addressing applicable Comprehensive Plan objectives and policies, as well as the review criteria within Section 16.40.041.

<u>RESPONSE</u>: This application involves a map amendment, not a text amendment. Therefore, this requirement does not apply.

2. In order to have a complete application for a proposed Comprehensive Plan map/zoning map or specific area map amendment, the applicant shall submit:

a. The necessary application forms, and a narrative addressing applicable Comprehensive Plan goals and policies, as well as the review criteria within Section 16.61.040;

<u>RESPONSE</u>: All necessary forms and a narrative addressing the Comprehensive Plan goals and policies, as well as the review criteria within Section 16.61.040 are included in this application package. This requirement is met.

b. A conceptual development plan illustrating a proposed street system, lot pattern, neighborhood circulation plan within a five hundred (500) foot radius of the subject site, and any natural resource or steep slopes areas;

<u>RESPONSE</u>: A conceptual development plan, as described above, is included in the application submittal materials. This requirement is met.

c. A traffic study prepared by a professional, Oregon-licensed traffic engineer. If a master plan that requires a full traffic impact analysis is required for a Comprehensive Plan map amendment/land use district map, a subsequent master plan may satisfy this provision, as determined by the Planning Official.

<u>RESPONSE</u>: A traffic study, as described above, is included in the application submittal materials. This requirement is met.

C. Criteria for Quasi-Judicial Amendments. A recommendation or a decision to approve, approve with conditions or to deny an application for a quasi-judicial amendment shall be based on all of the following criteria:

1. Approval of the request is consistent with the Statewide Planning Goals;

<u>RESPONSE</u>: The City of Happy Valley Comprehensive Plan is acknowledged by DLCD in accordance with OAR 660-0030010 as being in compliance with all applicable Statewide Planning Goals. This written narrative and accompanying documentation within the application submittal package demonstrates that the application is consistent with all of the goals and policies of the comprehensive plan, thereby also satisfying the applicable Statewide Planning Goals. This requirement is met.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 60 OF 62 2. Approval of the request is consistent with the applicable goals and policies of the City's Comprehensive Plan;

<u>RESPONSE</u>: This written narrative and accompanying documentation demonstrates that the application is consistent with all of the goals and policies of the City Comprehensive Plan. This requirement is met.

3. The property and affected area is presently provided with adequate public facilities, services and transportation networks to support the use, or such facilities, services and transportation networks are planned to be provided in the planning period; and

<u>RESPONSE</u>: The proposal involves a Comprehensive Plan Map Amendment and a Partition, which do not involve physical site development. However, a full range of urban services is available to the Valley View Church property. This includes public water (Sunrise Water Authority), public sanitary and storm sewer (Clackamas County Service District No. 1), fire protection (Clackamas Fire District # 1), and streets and roads (Clackamas County DTD and the City of Happy Valley). This criteria is met.

4. The change is in the public interest with regard to neighborhood or community conditions, or corrects a mistake or inconsistency in the Comprehensive Plan or land use district map regarding the property which is the subject of the application; and

RESPONSE: The Valley View Church is seeking to provide the property with different City Plan and Zone designations [Mixed Use Commercial (MUC) and Institutional Public Use (IPU]. The MUC District provides for a wide variety of land uses, including those which provide for job creation as well as additional housing opportunities for the City of Happy Valley. The IPU designation has been selected (for the developed portion of the property) to recognize and reflect the long standing use of the site as a church.

The church property is located at a key intersection on SE Sunnyside Road. Over the past several years, a considerable investment has been made by the community towards improving SE Sunnyside Road (a regional arterial roadway). This investment was made with an eye towards future development and aimed towards those future uses that will utilize it to its full potential, such as those that require excellent road, mass transit, bicycle, and pedestrian access to succeed. This investment was also made with the understanding that these types of uses will ultimately provide the funds necessary to fund those initial expenditures.

The land uses permitted by the proposed map amendment will efficiently utilize the existing infrastructure that has been built in the area so as to maximize the infrastructure investment discussed above. Therefore, the change to provide for mixed use commercial land is in the public interest with regard to community conditions due to the above and also because it provides the opportunity to increase the job base within the community and provide for a wider range of housing types within the community. This criteria is met.

5. When an application includes a proposed Comprehensive Plan map amendment/land use district map amendment, the proposal shall be reviewed to determine whether it conforms to Oregon Administrative Rule (OAR) 660-012-0060 (the Transportation Planning Rule – TPR). If a master plan that requires a full traffic impact analysis is required for a Comprehensive Plan map amendment/land use district map, a subsequent master plan may satisfy this provision, as determined by the Planning Official.

<u>RESPONSE</u>: A Traffic Study (Transportation Planning Rule Analysis), prepared by a registered professional traffic engineer is included in the submittal materials. According to the analysis, findings, and conclusions contained within the study, future development of the subject properties with uses and densities that would be permitted in the MUC District will not cause future traffic to exceed the capacity of any existing or planned transportation facility. Please refer to the Traffic Study for further documentation.

16.67.060 Transportation planning rule compliance.

A. Review of Applications for Effect on Transportation Facilities. When a development application includes a proposed Comprehensive Plan amendment or land use district change, the proposal shall be reviewed to determine whether it significantly affects a transportation facility, in accordance with Oregon Administrative Rule (OAR) 660-012-0060 (the Transportation Planning Rule – TPR) and the traffic impact study provisions of Section 16.61.090. "Significant" means the proposal would:

RESPONSE: A Traffic Study (Transportation Planning Rule Analysis), prepared by a registered professional traffic engineer is included in the submittal materials. According to the analysis, findings, and conclusions contained within the study, future development of the subject properties with uses and densities that would be permitted in the MUC District will not cause future traffic to exceed the capacity of any existing or planned transportation facility. Please refer to the Traffic Study for findings demonstrating that the proposal complies with the requirements of OAR 660-012-0060 and City requirements.

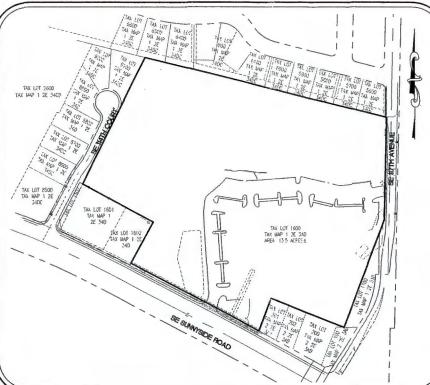
IV. CONCLUSION

The above listed findings and accompanying documentation demonstrate that the proposal is consistent with the applicable provisions of the City of Happy Valley Comprehensive Plan and the City of Happy Valley Development Code. Therefore, the applicant respectfully requests approval for the proposed Comprehensive Plan Map / Zone Change for the Valley View Church Property from Low Density Residential (R-10) to Mixed Use Commercial (MUC) and Institutional and Public Use (IPU) and the proposed three parcel partition with Environmental Review.

VALLEY VIEW CHURCH CITY OF HAPPY VALLEY SEPTEMBER 2011 PAGE 62 OF 62

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VALLEY VIEW CHURCH LAND USE APPLICATION PLANS



SITE MAP

OWNER/APPLICANT

VALLEY VIEW EVANGELICAL CHURCH 11501 SE SUNNYSIDE ROAD HAPPY VALLEY, OR 97015

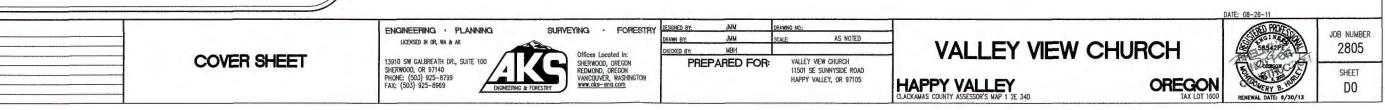
PROPERTY DESCRIPTION:

TAX LOT 1600, CLACKMAS COUNTY ASSESSOR'S MAP NUMBER 1 2E 34D, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 34, TOWNSHIP 1 SOUTH, RANGE 2 EAST, WILLAMETTE MERIDIAN, CITY OF HAPPY VALLEY, CLACKAMAS COUNTY, OREGON

PROJECT LOCATION:	NORTHWEST
EXISTING ZONING:	R-10 (RE
PROPOSED ZONING	MUC (MIXI IPU (INSTI
GROSS AREA:	13.5 ACRES
EXISTING LAND USE:	CHURCH
PROJECT PURPOSE:	COMPREHE
VERTICAL DATUM:	ELEVATIONS 34 TOWNS SURVEY N

	SHEET INDEX
DO	COVER SHEET
D1	EXISTING CONDITIONS PLAN
D2	PRELIMINARY PARTITION PLAT
D3	PRELIMINARY FUTURE STREET I
D4	CONCEPTUAL NEIGHBORHOOD (
D5	CONCEPTUAL SITE PLAN
D6	ADJACENT PROPERTY ZONE MA

D7 AERIAL PHOTOGRAPH PLAN



PLANNING / ENGINEERING / SURVEYING FIRM

AKS ENGINEERING & FORESTRY, LLC. CONTACT: MONTY HURLEY 13910 SW GALBREATH DRIVE, SUITE 100 SHERWOOD, OR 97140 PH: 503-925-8799 FAX: 503-925-8969

ST OF THE INTERSECTION OF SE SUNNYSIDE RD AND SE 117TH AVE.

RESIDENTIAL)

XED USE COMMERCIAL) TITUTIONAL AND PUBLIC USE)

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ENSIVE PLAN MAP AMENDMENT/ZONE CHANGE AND PARTITION INTO 3 PARCELS

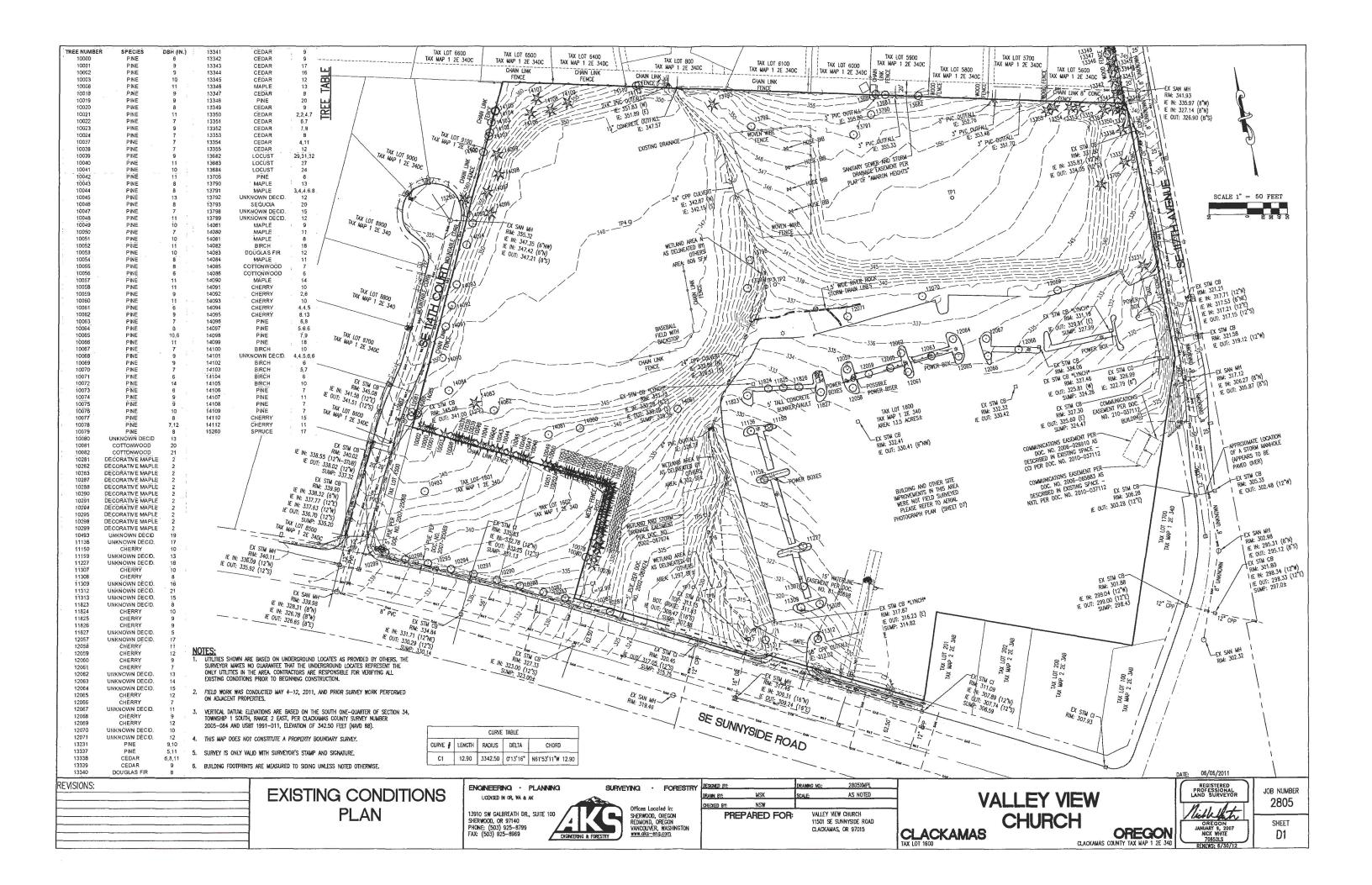
ELEVATIONS ARE BASED ON THE SOUTH ONE-QUARTER OF SECTION 34 TOWNSHIP 1 SOUTH, RANGE 2 EAST, PER CLACKAMAS COUNTY SURVEY NUMBER 2005-084 AND USBT 1991-011, ELEVATION OF 32.50 FEET (NAVD 88).

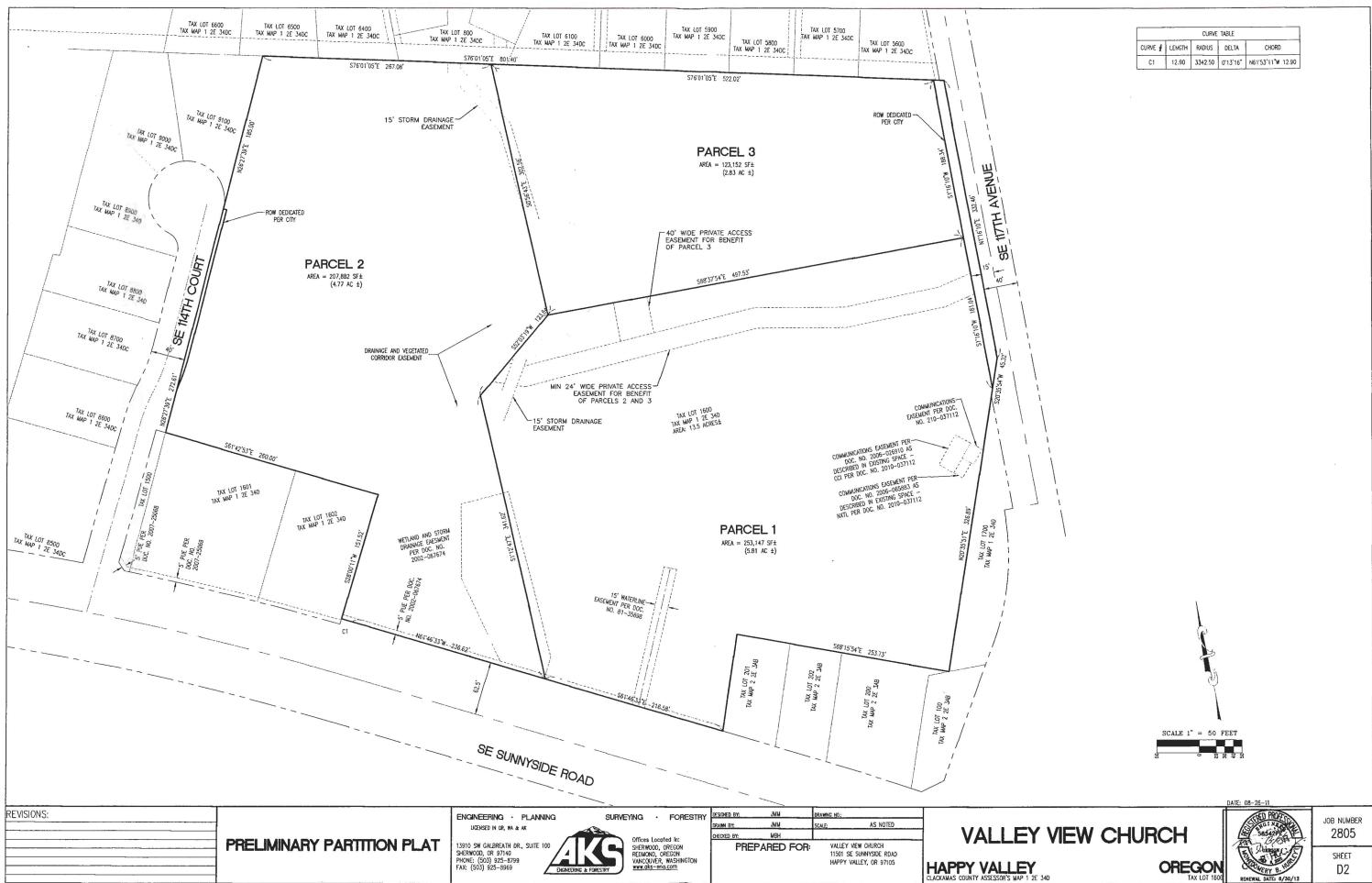


FRONTAGE AND UTILITY IMPROVEMENTS PLAN CIRCULATION PLAN

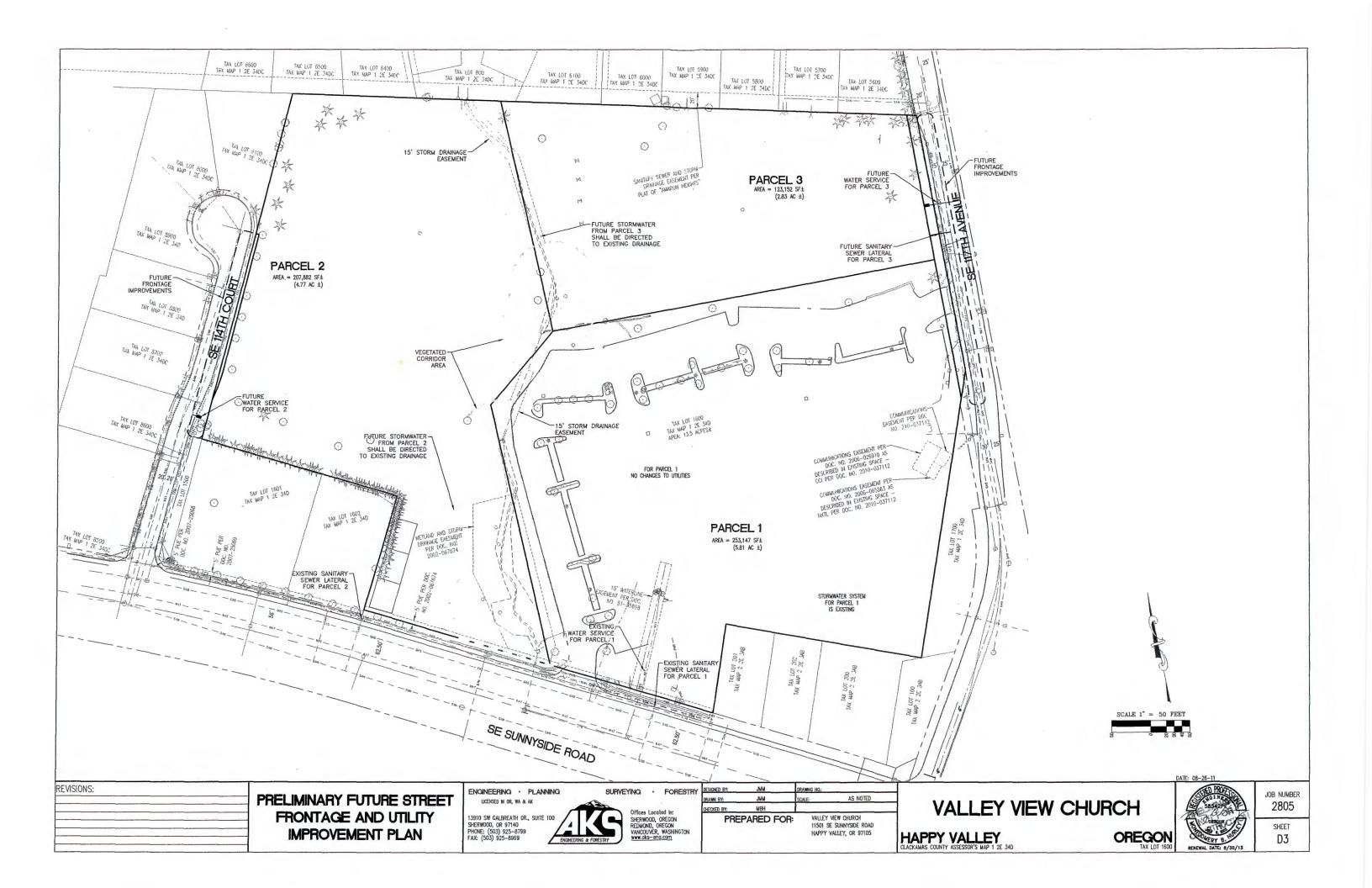
EXHIBIT #___

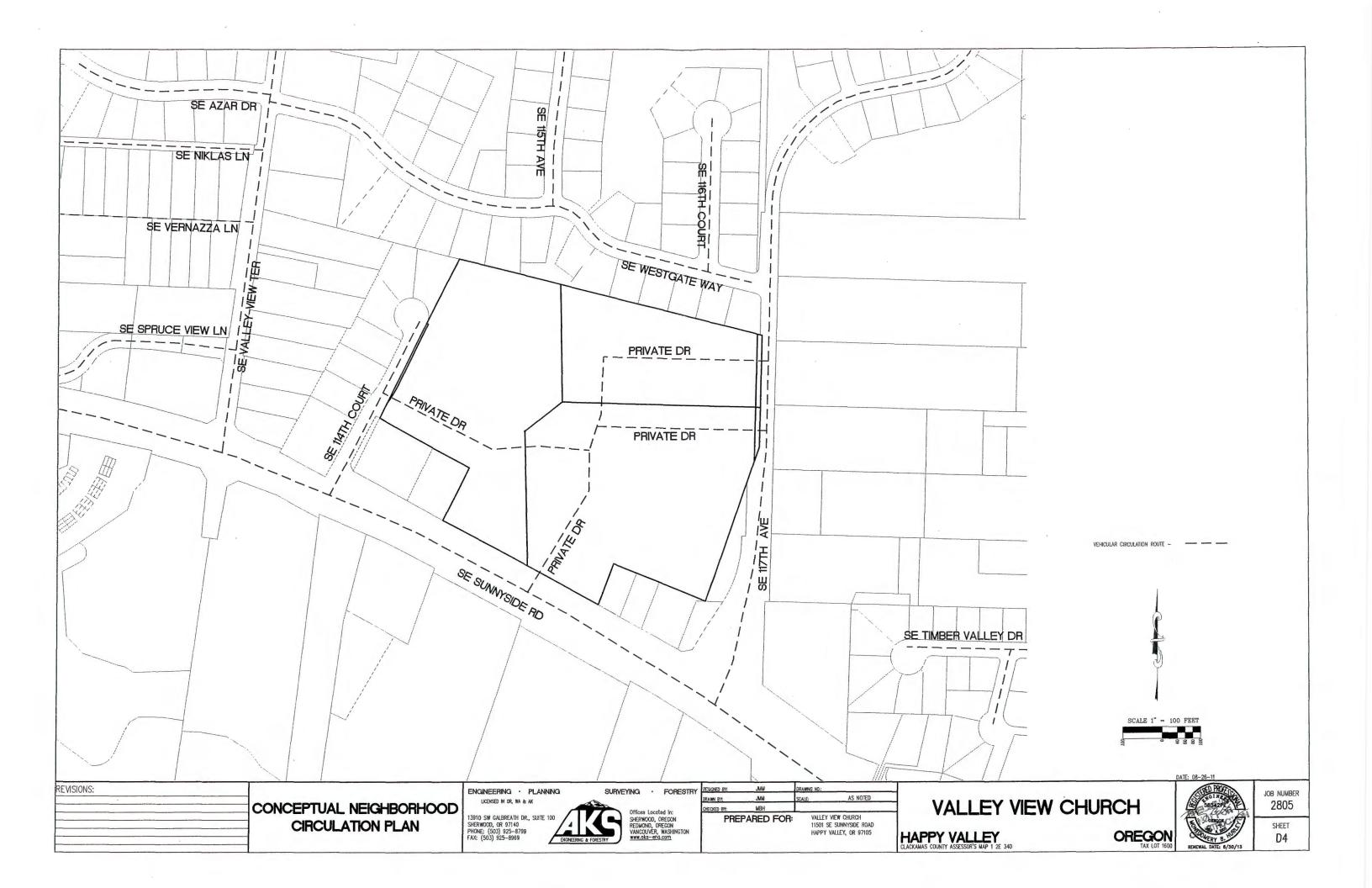
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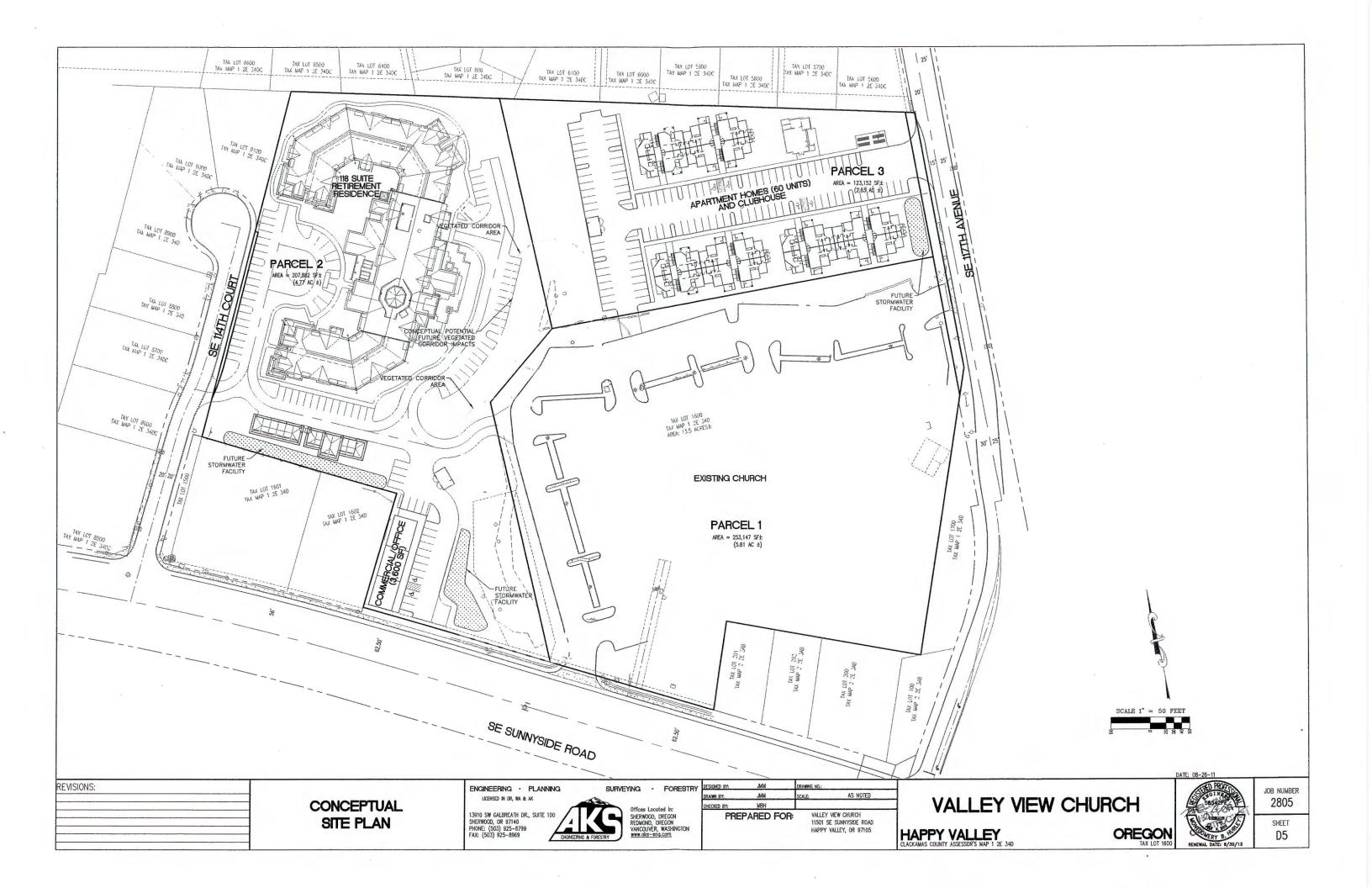


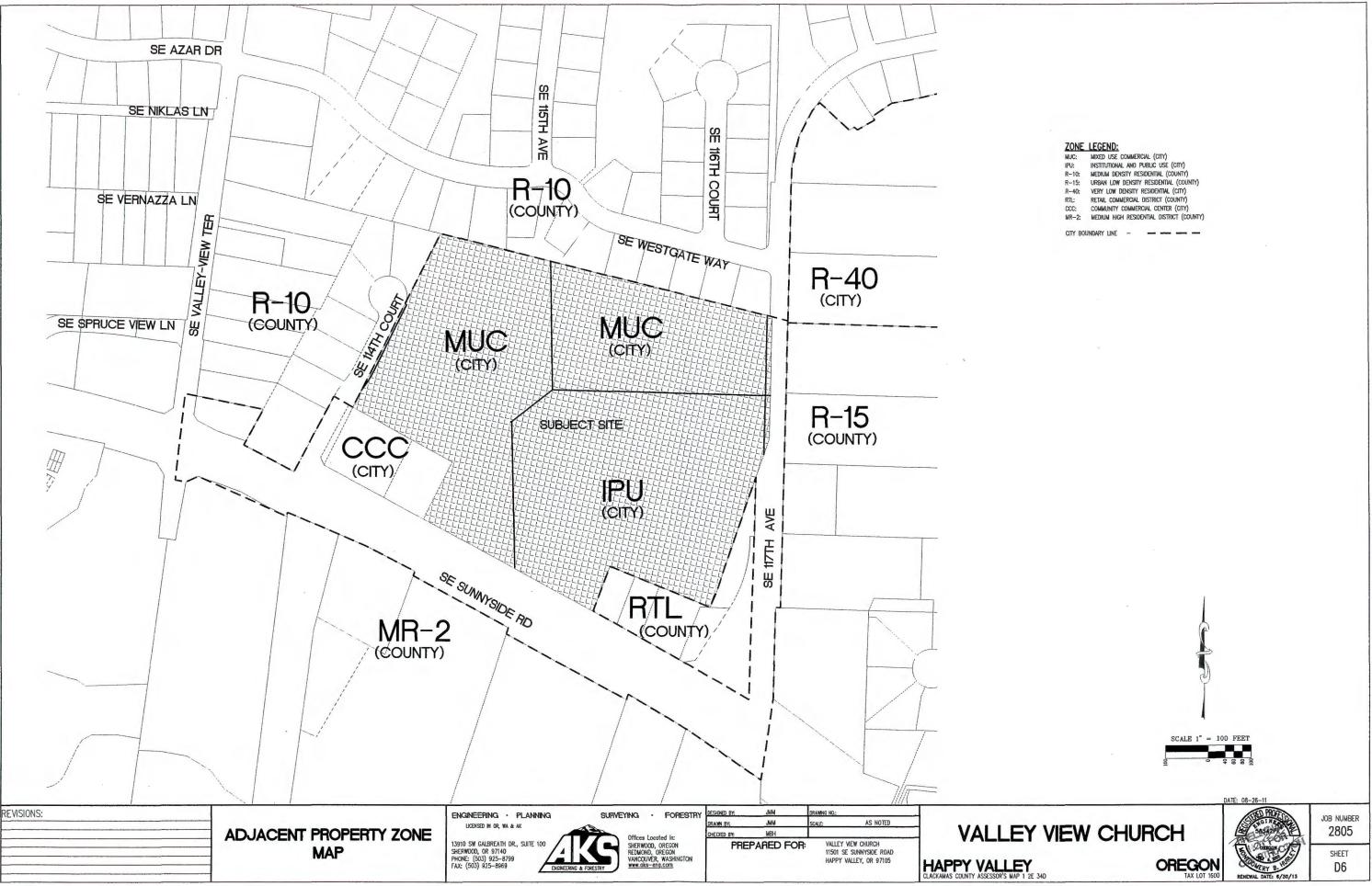


		CURVE	TABLE			
CURVE 🛔	LENGTH	RADIUS	DELTA	CHORD		
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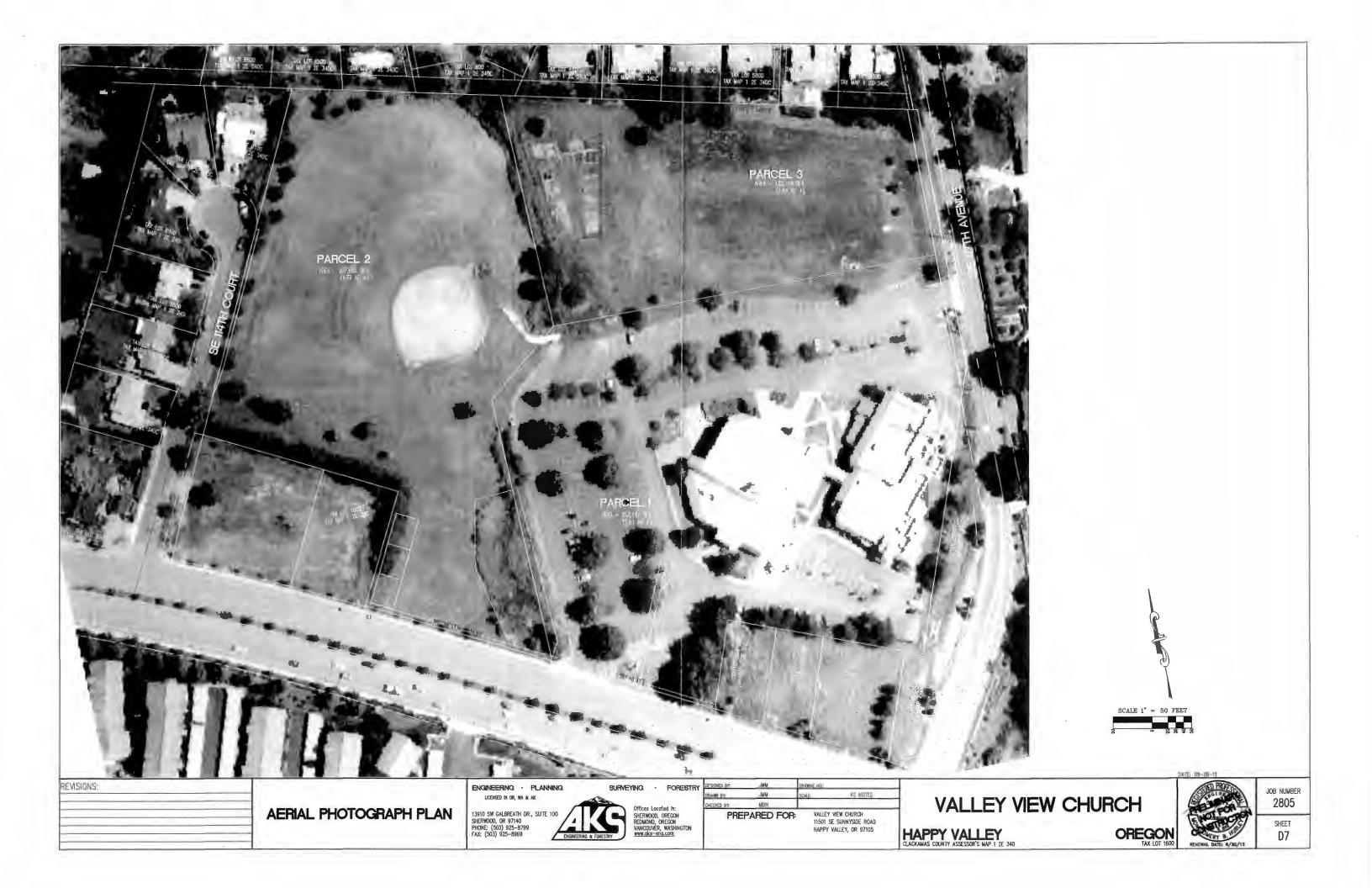








ZONE	LEGEND:
MUC:	MIXED USE COMMERCIAL (CITY)
IPU:	INSTITUTIONAL AND PUBLIC USE (CITY)
R-10:	MEDIUM DENSITY RESIDENTIAL (COUNTY)
R-15:	URBAN LOW DENSITY RESIDENTIAL (COUNTY)
R-40:	VERY LOW DENSITY RESIDENTIAL (CITY)
RTL:	RETAIL COMMERCIAL DISTRICT (COUNTY)
CCC:	COMMUNITY COMMERCIAL CENTER (CITY)
MR-2:	MEDIUM HIGH RESIDENTIAL DISTRICT (COUNTY)



VALLEY VIEW CHURCH ZONE CHANGE TRAFFIC IMPACT STUDY

HAPPY VALLEY, OREGON

DATE: August 26, 2011

PREPARED FOR: Valley View Evangelical Church

PREPARED BY: Catriona Sumrain Todd E. Mobley, PE, PTOE



EXPIRES: 12 31 2012

LANCASTER

321 SW 4th Ave, Suite 400 | Portland, OR 97204 | 503.248.0313 [Jancasterengineering.com

EXHIBIT # 3



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Executive Summary	3
Project Description	4
Trip Generation & Distribution	8
Safety Analysis 1	13
Operational Analysis I	15
Appendix 2	20

Valley View Church - Traffic Impact Study



EXECUTIVE SUMMARY

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- The Valley View Evangelical Church site on the north side of SE Sunnyside Road between SE 114th Court and SE 117th Avenue is proposed for a change in zoning for the undeveloped portion of the site. The portion of the site occupied by the church is proposed, at the City's request, for rezoning to conform to the long-standing historic use of the site as a church. The zoning is R-10 (Residential) currently and is proposed to be designated MUC (Mixed-Use Commercial) and IPU (Institutional and Public Use) for the church.
- 2. The net increase in site trips generated by the proposed zone change is expected to be 39 net new trips during the morning peak hour, 43 net new trips during the evening peak hour, and 690 net new trips during an average weekday.
- 3. The crash analysis showed that crash rate at the study intersection of SE Sunnyside Road at SE 117th Avenue was very low with no crashes that indicated any safety issues at the intersection. There were also no safety issues identified for the segment of SE Sunnyside Road along the site frontage. No recommendations are made for safety.
- 4. There are no sidewalks along the portions of the site proposed for the zone change and the site could be developed with residential or commercial land uses under the proposed zoning. It is recommended that sidewalks be installed when development that adds site traffic occurs on the property.
- 5. The level of service at the intersection of SE Sunnyside Road at SE 117th Avenue is currently A during both the morning and evening peak hours and will become D during the morning peak hour and C during the evening peak hour by the year planning horizon year of 2025 with or without the zone change. The level of service remains D or better with the proposed zone change, therefore no mitigation is recommend.

Valley View Church - Traffic Impact Study

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PROJECT DESCRIPTION

INTRODUCTION

A portion of the Valley View Evangelical Church property located in the northwest quadrant of SE Sunnyside Road and SE 117th Avenue is proposed to be changed in zoning from the existing R-10 Residential designation to a MUC (Mixed-Use Commercial) designation. The area occupied by the church is also zoned R-10 and is proposed to be rezoned to IPU (Institutional and Public Use). The church will remain. The change to IPU was at the request of City staff.

The purpose of this study is to assess the traffic impact of the proposed zone change on the nearby street system and to recommend any required mitigative measures. The analysis will include level of service calculations, safety analysis, and a discussion of conditions.

Detailed information on traffic counts, trip generation calculations, crash data, and level of service calculations is included in the appendix to this report.

LOCATION DESCRIPTION

The subject site is located on the north side of SE Sunnyside Road and west of SE 117th Avenue. The portion of the site proposed for MUC zoning is approximately 13.60 acres in size, although there is a drainage roughly bisecting the tax lot.

Access to the site would likely be via SE 114th Court or SE 117th Avenue. It is unlikely that additional accesses would be proposed to SE Sunnyside Road.

The site is surrounded by existing residential uses on all sides. To the south is medium-high density residential while the remainder of the surrounding development (north, east, and west) is low-density residential.

The intersection of SE Sunnyside Road and SE 117th Avenue was examined in this report.

SE Sunnyside Road is under the jurisdiction of and maintained by Clackamas County. It is designatcd by the County as a Major Arterial. It is further designated a Primary Bus Route, a Bikeway, and part of the Essential Pedestrian Network. The City of Happy Valley also classifies the roadway as a Major Arterial in their 2006 Transportation System Plan (TSP). It has a seven-lane cross-section in the vicinity of the site, with six travel lanes and a lcft-turn lane at major intersections. The center lane has a raised median barrier between intersections. The facility has been improved with curbs, sidewalks, and bike lanes on both sides of the roadway in the vicinity of the site. The posted speed is 40 mph.

SE 117th Avenue is under the jurisdiction of and maintained by the City of Happy Valley. It is classified by the City of Happy Valley as a Neighborhood Street and by the County as a Connector. It is

Valley View Church – Traffic Impact Study



generally a two-lane facility near the site, although it widens to three lanes at its intersection with SE Sunnyside Road. There are generally curbs on both sides of the roadway, but no sidewalks or bike lanes. The posted speed is 25 mph.

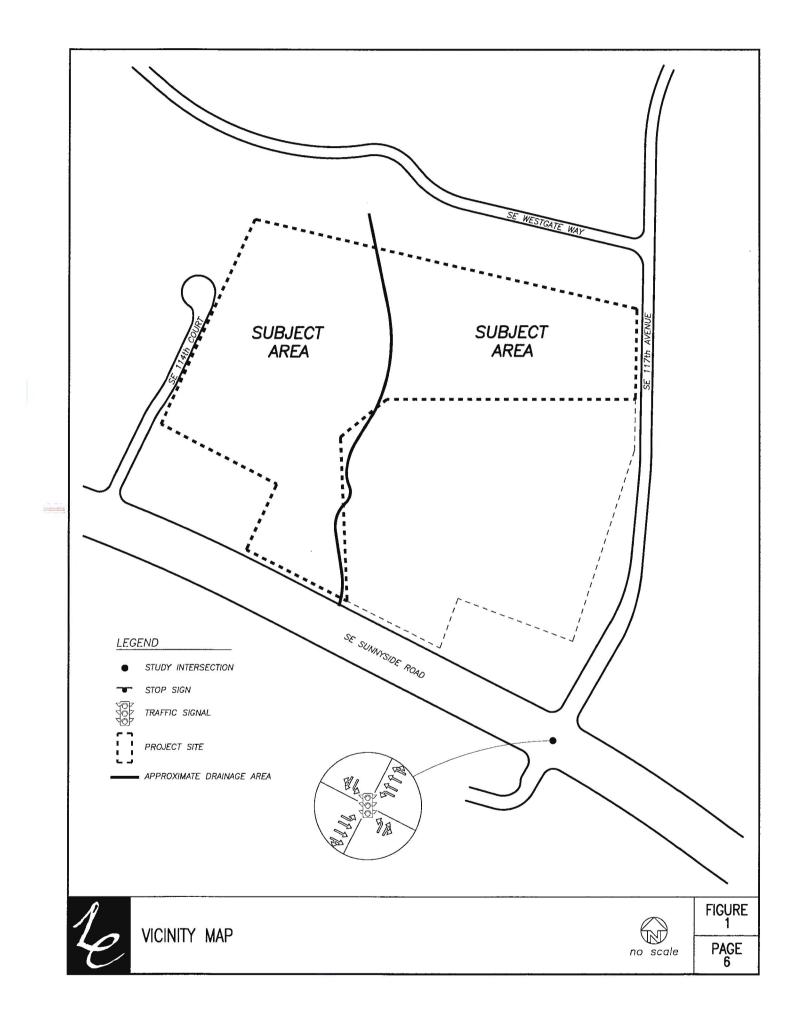
The intersection of SE Sunnyside Road and SE 117th Avenue is a standard four-legged intersection that is controlled by a five-phase traffic signal. There is protected left-turn phasing for the eastbound and westbound left turns and permitted left-turn phasing for the northbound and southbound left turns. U-turns are permitted for eastbound and westbound traffic. The eastbound and westbound approaches have a left-turn lane, two through lanes and a shared through/right-turn lane. The northbound and southbound approaches have a left-turn lane and shared through/right-turn lane.

There is transit service near the site. Tri-Met Route 55, *Sunnyside*, travels between Clackamas Town Center and 157th Avenue with stops at the intersection of SE 117th Avenue and SE Sunnyside Road. Weekday service is from about 5:30 a.m. to about 10:30 p.m. with 40-minute bus headways. Weekend service is from about 7:30 a.m. to about 10:30 p.m. with 45-minute headways.

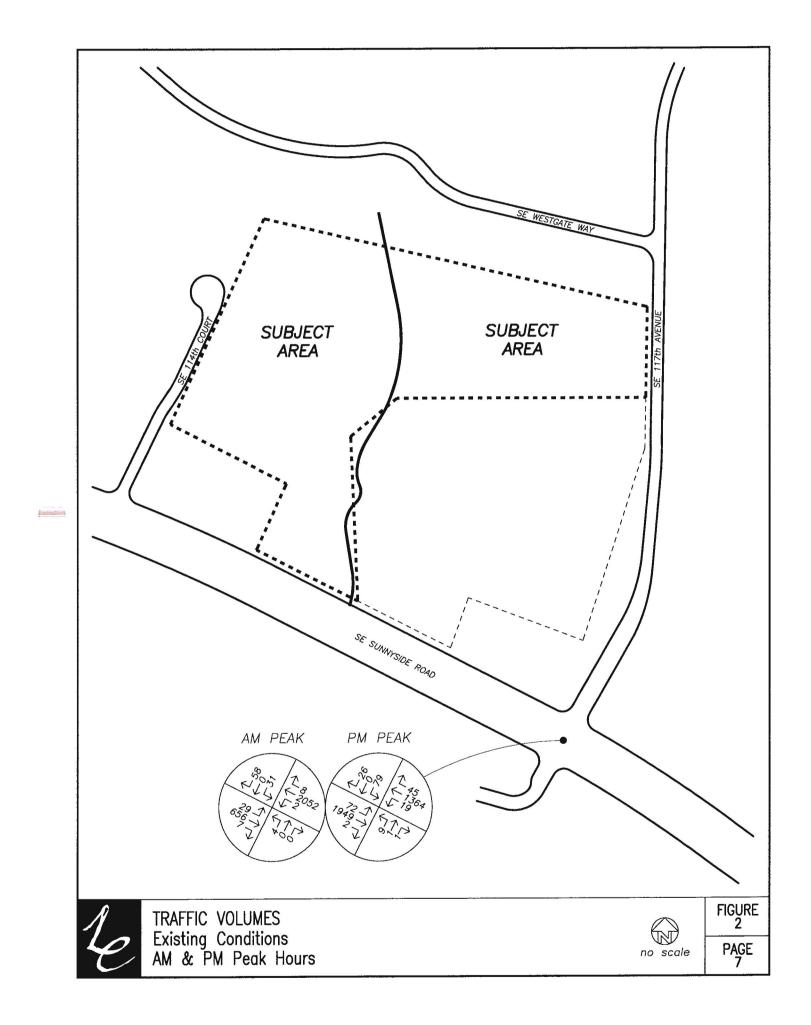
Manual turning movement counts were made at the study intersections during May 2011 from 7:00 to 9:00 a.m. and from 4:00 to 6:00 p.m. The peak hours occurred from 7:00 to 8:00 a.m. and from 5:00 to 6:00 p.m. Detailed traffic count data is included in the appendix to this report.

Figure 1 on page six is the vicinity map showing the project study area and the location of the site. Figure 2 on page seven shows the existing traffic volumes at the study area intersection.

Valley View Church - Traffic Impact Study



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TRIP GENERATION & DISTRIBUTION

TRIP GENERATION

When a comprehensive plan map amendment and zone change is proposed, a reasonable worst-case development from a trip generation standpoint under the current zoning is compared to a reasonable worst-case development under the proposed zoning. The current comprehensive plan map predicts transportation needs based on current designations. It is assumed that the sites are allowed to develop under the current designation to a worst-case development. Therefore, the analysis is made only for the change in trips associated with the comprehensive plan map amendment and zone change.

To estimate the increase in trips that could potentially be generated by the proposed comprehensive plan map amendment and zone change, trip rates from the manual *TRIP GENERATION*, Eighth Edition, published by the Institute of Transportation Engineers (ITE), were used. Under the existing zoning designation, up to 28 single-family homes could be developed. Land-use code 210, *Single-Family Detached Housing*, was used.

Because the large majority and developable area of the MUC zone-changed portion of the site does not front onto SE Sunnyside Road, the site is unlikely to be developed with any retail uses. A reasonable worst-case scenario was prepared to be a 121-unit retirement community and 3,600-square-foot office on the western portion of the site and a 60-unit apartment complex on the eastern portion.

The results of the trip generation showed that the proposed zone change would result in a net increase of 39 trips during the morning peak hour. Of these, I3 are entering the site and 26 are exiting the site. During the evening peak hour, a net increase of 43 trips is expected. Of these, 25 are entering and 18 are exiting the site. During the weekday, a net increase of 690 trips is expected, with half entering and half exiting the site.

		Т	RIP G	ENERAT	ION SU	JMMAI	RY			
Existing Zoning	3									
LAND USE SIZE VAR		AM PEAK HOUR		PM	PM PEAK HOUR		WEEKDAY			
		In	Out	Total	In	Out	Total	In	Out	Total
SFD	28 d.u.	5	16	21	18	10	28	134	134	268
Proposed Zonii	ng									
LAND USE	SIZE VAR	AM PEAK HOUR		PM PEAK HOUR		WEEKDAY				
		In	Out	Total	In	Out	Total	In	Out	Total
Senior Housing	121 d.u.	6	10	16	11	8	19	211	211	422
General Office	3.6 ksf	5	1	6	1	4	5	20	20	40
Apartment	60 d.u.	6	25	31	24	13	37	200	200	400
Subtotal		17	36	53	36	25	61	431	431	862
GRAND TOTAL										
		AM PEAK HOUR		PM PEAK HOUR		WEEKDAY				
		In	Out	Total	In	Out	Total	In	Out	Total
	_	12	20	32	18	15	33	297	297	594

Valley View Church – Traffic Impact Study

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Although there is transit service near the site, for a worst-case analysis, no reduction was made for transit use.

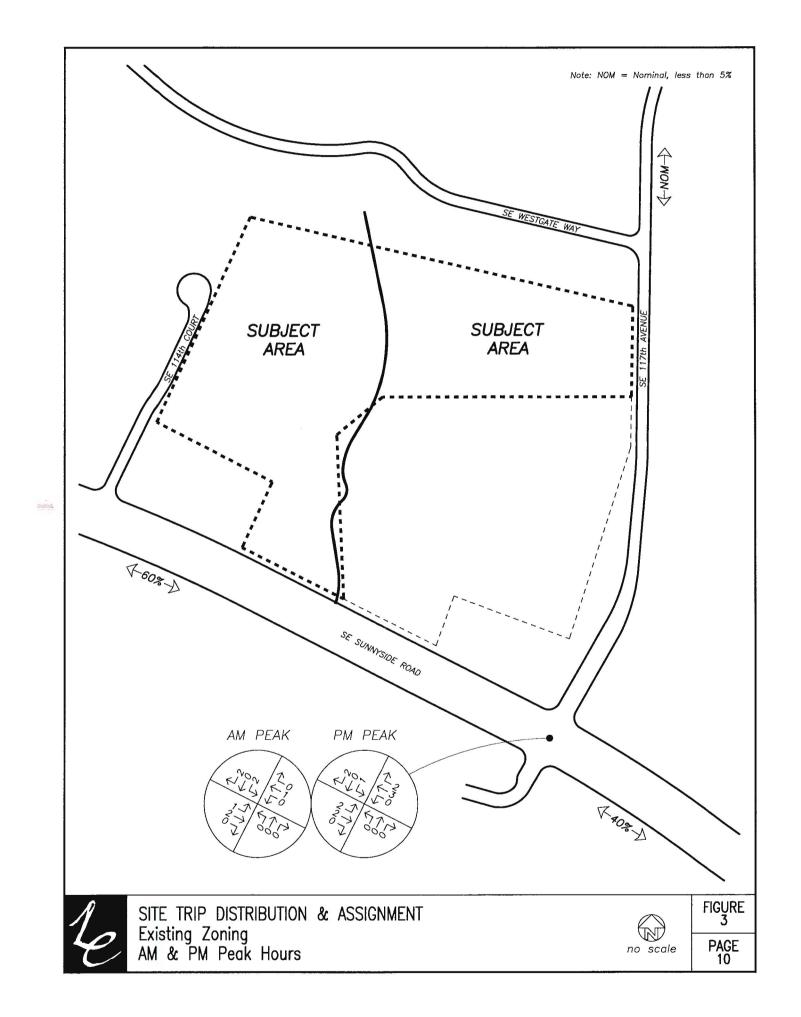
Since the site is likely to be developed with residential uses under either zoning, which is an origin or destination for trips, no reduction was taken for pass-by trips.

TRIP DISTRIBUTION

Because the majority of the traffic on SE 117th Avenue represents residential trips and both the existing and proposed zoning scenarios include predominantly residential uses, the directional distribution of the site trips was based on the existing turning movements at the intersection of SE 117th Avenue and SE Sunnyside Road.

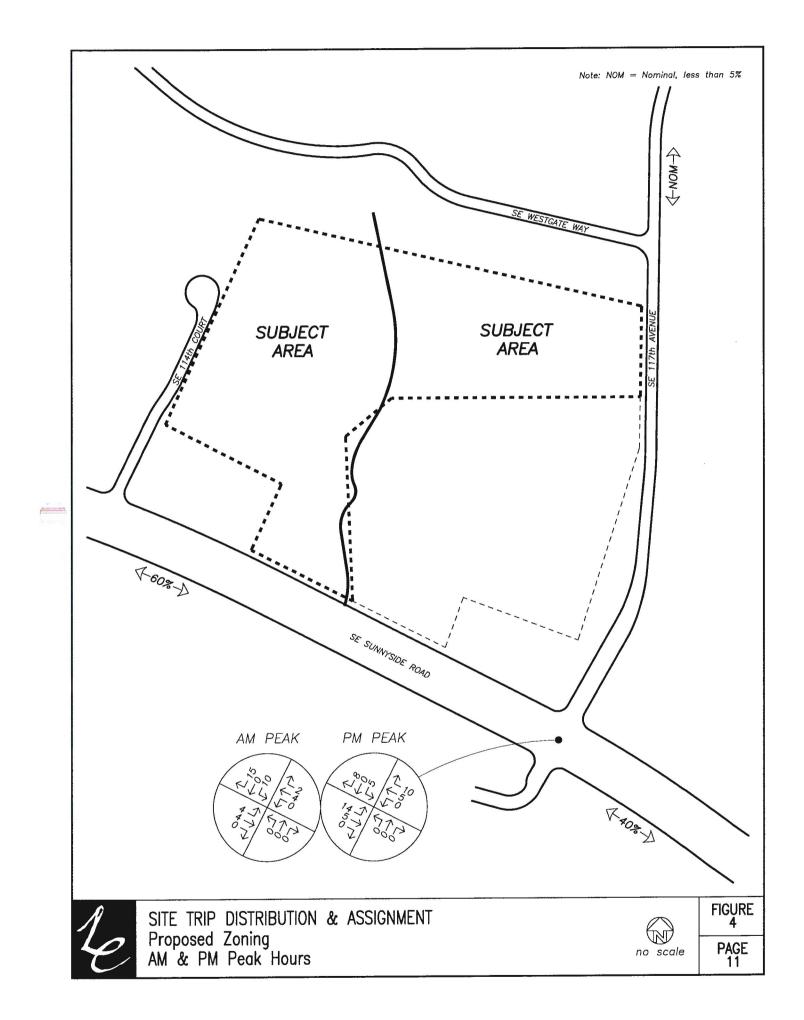
Figure 3 on page 10, shows the trips generated under the existing zoning designation. Figure 4 on page 11 shows the trips generated under the proposed zoning designation. Figure 5 on page 12 shows the net increase in site trips resulting from the proposed zone change.

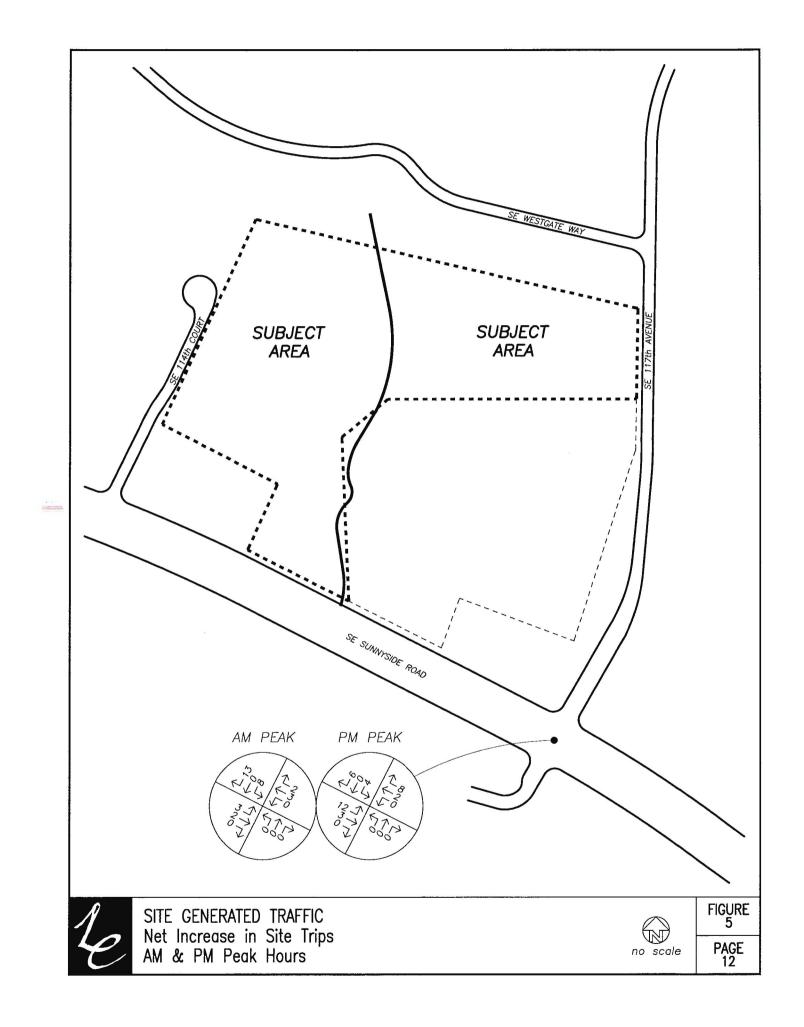
Valley View Church - Traffic Impact Study



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SAFETY ANALYSIS

CRASH ANALYSIS

A five-year history of crashes at the intersections of SE Sunnyside Road at SE 117th Avenue, the segment of SE Sunnyside Road between SE 114th Court and SE 117th Avenue, and the segment of SE 117th Avenue along the site frontage was obtained from the Crash Analysis Unit of the Oregon Department of Transportation. The data includes crash data for the five-year period from January 1, 2005 to December 31, 2009.

There were a total of four crashes on SE Sunnyside Road between SE 114th Avenue and SE 117th Avenue with one crash at the intersection of SE Sunnyside Road and SE 117th Avenue.

The crash at the study intersection of SE Sunnyside Road and SE 117th Avenue was an angle crash that involved a southbound vehicle and westbound vehicle.

The crashes along the segment of SE Sunnyside Road included a side-swipe crash involving two southbound vehicles that likely occurred at the intersection of SE 114th Court and SE Sunnyside Road, a rear-end crash involving two westbound vehicles, one of which was parallel parking, a fixed-object crash, and a side-swipe crash involving two eastbound vehicles that occurred near the study intersection.

There were no crashes reported on the segment of SE 117th Avenue along the site frontage.

Crash data is typically evaluated at intersections based on the crash rate, rather than just the number of crashes. This gives a better measure of the intersection safety by including the amount of traffic passing through the intersection, in addition to the number of crashes. This crash rate is calculated and reported based on the number of crashes per million entering vehicles.

The existing evening peak hour traffic volumes were used to calculate the crash rates at the two study area intersections. It was assumed that the average daily traffic volumes (ADT) are ten times the evening peak hour volume. This was then used to calculate the total number of entering vehicles over the five-year period.

Most jurisdictions consider an intersection to be operating safely if the intersection crash rate is less than one or two crashes per million entering vehicles. The crash rate was found to be 0.02 crashes per million entering vehicles at SE Sunnyside Road and SE 117th Avenue. There were no crashes on SE Sunnyside Road that warranted a detailed examination or indicated any safety deficiency. The crash rate and history is well within acceptable levels and no recommendations are made.

Valley View Church - Traffic Impact Study

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PEDESTRIAN, BICYCLE, AND TRANSIT FACILITIES

The site could be developed with either residential or retail uses or a mixture of both, both of which could result in pedestrian trips. There are no sidewalks along much of the site frontage on SE 117th Avenue or SE 114th Court, although SE Sunnyside Road docs have a continuous sidewalk along the site frontage. It is recommended that sidewalks be installed at the time of development, provided that use creates a demand for pedestrian usage.

There are striped bike lanes on SE Sunnyside Road. While there are no bike lanes on either SE 114th Court or SE 117th Avenue, both streets are low-volume, low-speed residential facilities. Bicycles can share the roadway with cars safely. No recommendations are made.

There is transit service within one-quarter of a mile of the site. The transit service should be sufficient for any transit trips generated by the proposed zone change. No recommendations are made.

SITE ACCESS

The site fronts on both SE 117th Avenue and 114th Court. Both locations are acceptable for access to the site. A detailed examination of access should be conducted as part of development of the site that includes access for vehicular use.

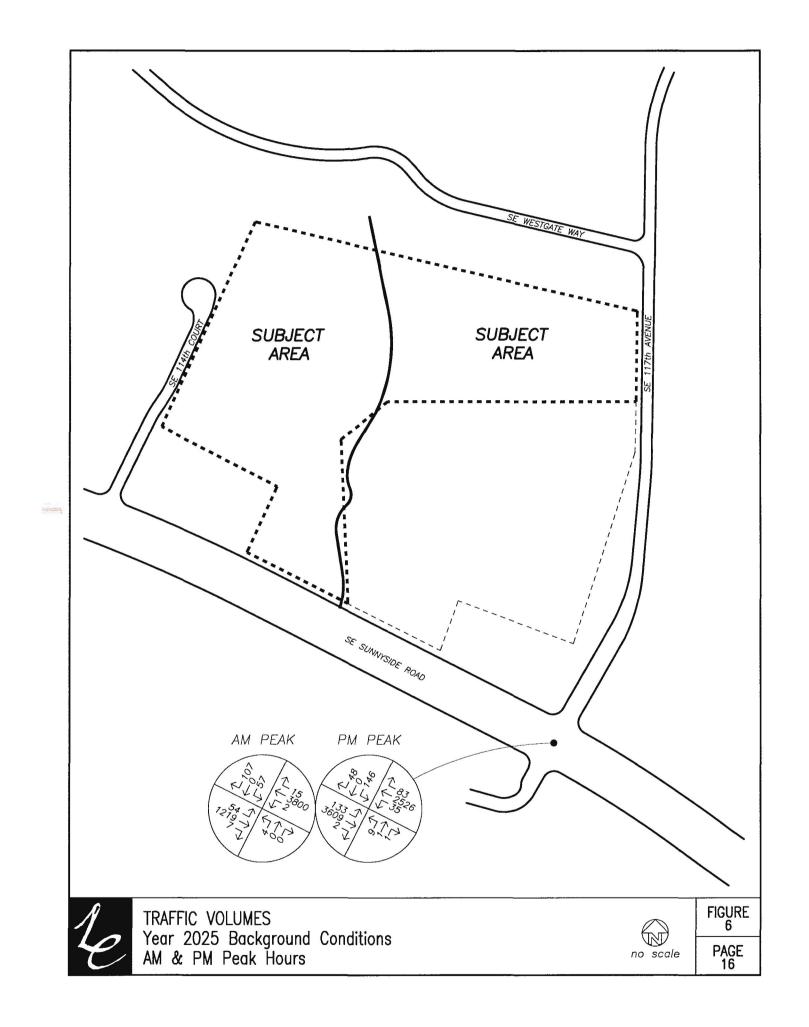
OPERATIONAL ANALYSIS

BACKGROUND TRAFFIC

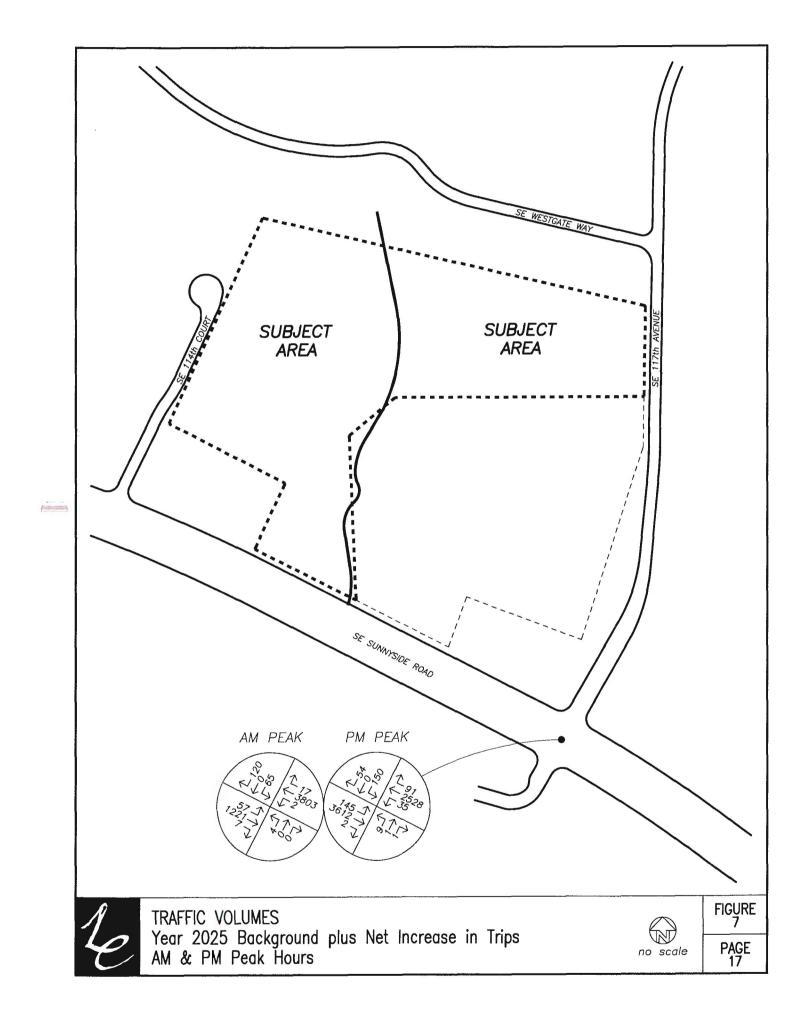
The City of Happy Valley's Transportation System Plan identifies an increase in vehicle trips over the 20-year planning horizon. This results in a 1.9-percent cumulative growth rate. As many of these projected trips are expected to use SE Sunnyside Road, the growth rate was applied to the volume at the study intersection over a period of 14 years to derive year 2025 background traffic conditions.

No other specific zone change projects have been identified near the site that will contribute to the traffic volumes at the study area intersection.

Figure 6 on page 16 shows the background traffic for the year 2025 and Figure 7 on page 17 shows the year 2025 background traffic with the net increase in site trips.



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CAPACITY ANALYSIS

To determine the level of service at the study intersections, a capacity analysis was conducted. The analysis was conducted according to the signalized intersection analysis methodology in the 2000 *HIGHWAY CAPACITY MANUAL* (HCM) published by the Transportation Research Board. Level of service can range from A, which indicates little or no delay, to F, which indicates a significant amount of congestion and delay. City of Happy Valley operational standards require level of service D or better at signalized intersections. Detailed level of service descriptions are included in the appendix to this report.

The signalized intersection of SE Sunnyside Road and SE 117th Avenue is currently operating at level of service A during both the morning and evening peak hours. By the year 2025, the level of service becomes D during the morning peak hour and C during the evening peak hour. The level of service does not change with the proposed zone change.

The results of the capacity analysis, along with the Levels of Service (LOS) and delay are shown in the following table. Detailed capacity analysis results are included in the appendix to this report.

LEVEL OF SERVICE SUMMARY						
AM Peak Hour PM Peak Hour						
	LOS	Delay	LOS	Delay		
SE Sunnyside Road/SE 117th Av	епие					
Existing Conditions	А	10	А	8		
Background Conditions	D	48	С	24		
Back + Net Increase	D	52	С	24		
LOS = Level of Service Delay = Average Delay per Veh						

As shown in the table above, all study intersections currently operate acceptably during the morning peak hour and will continue to operate acceptably with the proposed zone change. No mitigations at the intersection are necessary or recommended.

CONCLUSIONS

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A portion of a site is proposed for a change in zoning from the existing R-10 (Residential) to MUC (Mixed-Use Commercial). The site is located on the north side of SE Sunnyside Road between SE 114th Court and SE 117th Avenue. It is the currently undeveloped portion of the site that is proposed for the zone change to MUC. The existing church will remain in the portion of the site proposed for IPU.

A safety analysis was conducted for the study area, including the study intersection of SE Sunnyside Road at SE 117th Avenue and the segments of SE Sunnyside Road and SE 117th Avenue that front along the site. The crash rate at the study intersection is very low and the single reported crash that occurred there in the most recent five years of data showed no indication of safety issues at the intersection. There were also no crashes on SE Sunnyside Road along the site frontage that indicated any safety issues. There were no reported crashes on SE 117th Avenue along the site frontage.

The portion of the site that is not presently developed as a church and is proposed for the zone change to MUC lacks sidewalks along the frontage of SE 114th and SE 117th Avenues. There is sidewalk in place along Sunnyside Road. With an MUC zoning designation, the site could be developed with either residential or commercial uses or a mixture of the two. Both uses could generate pedestrian trips. While sidewalks should not be conditioned on the zone change, sidewalks should be installed along the site frontage as development occurs on the site that adds vehicle and pedestrian trips.

The intersection of SE Sunnyside Road at SE 117th Avenue is operating with very low delays currently. By the year 2025, the level of service is projected to be D or better during the peak hours, which is still acceptable by City standards. The net increase in trips resulting from the proposed zone change will not change the level of service.

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APPENDIX

Valley View Church -- Traffic Impact Study

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LEVEL OF SERVICE

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

Level of service A: Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

Level of service B: Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

Level of service C: Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

Level of service D: Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

Level of service E: Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

Level of service F: Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.





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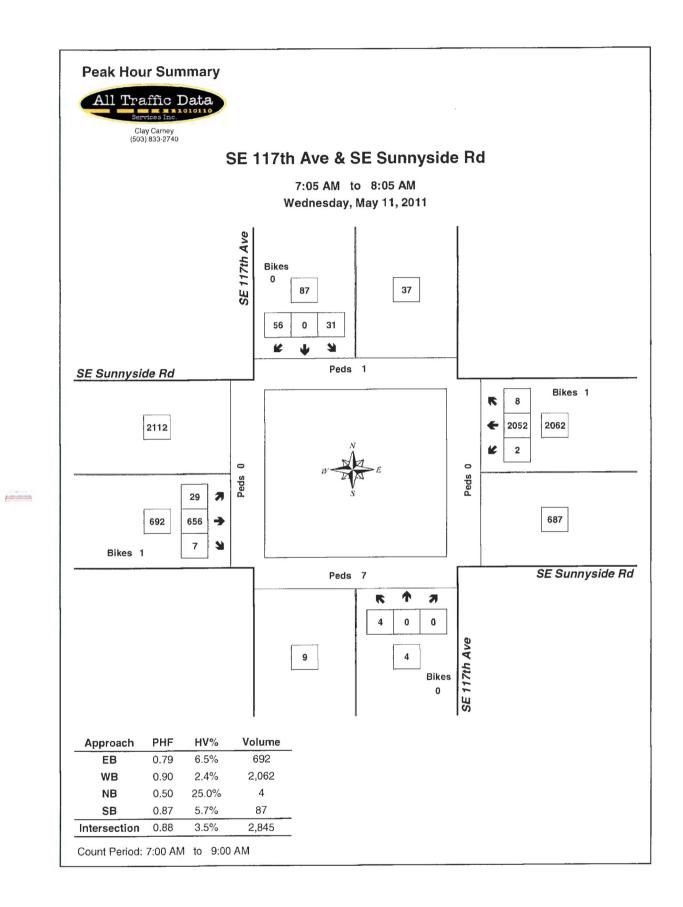
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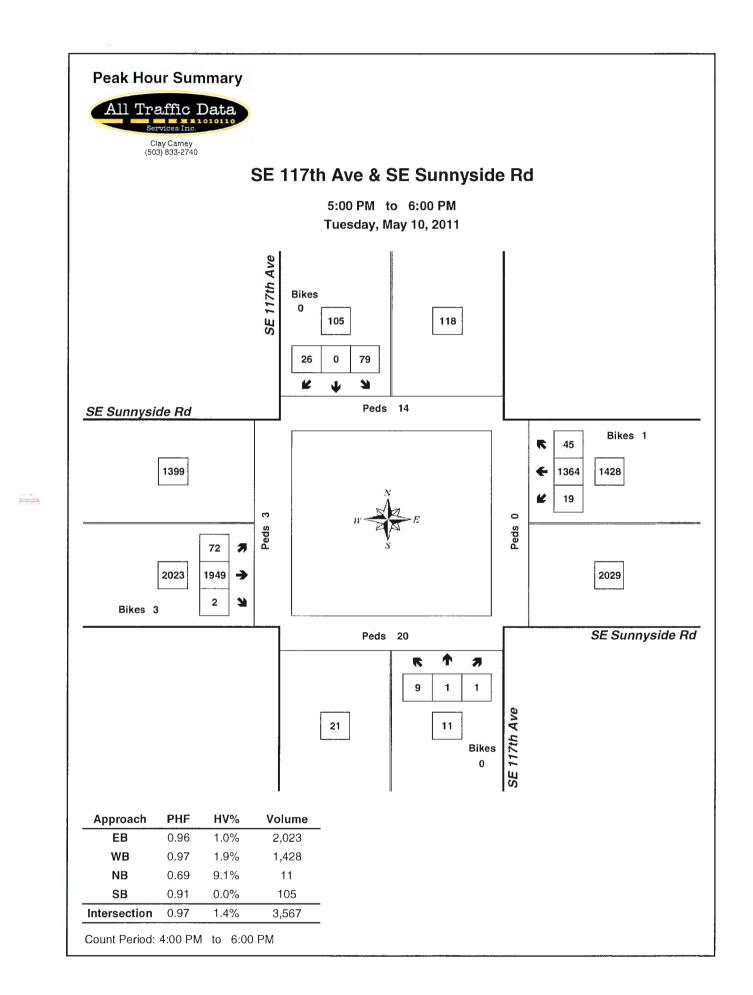
LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

LEVEL	CONTROL DELAY
OF	PER VEHICLE
SERVICE	(Seconds)
А	<10
В	10-20
С	20-35
D	35-55
Е	55-80
F	> 80

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

LEVEL	CONTROL DELAY
OF	PER VEHICLE
SERVICE	(Seconds)
А	< 10
В	10-15
С	15-25
D	25-35
Е	35-50
F	>50





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TRIP GENERATION CALCULATIONS

Land Use: Single-Family Detached Housing Land Use Code: 210 Variable: Dwelling Units Variable Value: 28

AM PEAK HOUR

Trip Rate: 0.75

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	5	16	21

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	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	18	10	28

PM PEAK HOUR

Trip Rate: 1.01

WEEKDAY

Trip Rate: 9.57

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	134	134	268

SATURDAY

Trip Rate: 10.08

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	141	141	282

Source: TRIP GENERATION, Eighth Edition

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TRIP GENERATION CALCULATIONS

Land Use: Senior Adult Housing - Attached Land Use Code: 252 Variable: Occupied Dwelling Units Variable Value: 121

AM PEAK HOUR

Trip Rate: 0.13

	Enter	Exit	Total
Directional Distribution	36%	64%	
Trip Ends	6	10	16

	Enter	Exit	Total
Directional Distribution	60%	40%	
Trip Ends	11	8	19

PM PEAK HOUR

Trip Rate: 0.16

WEEKDAY

Trip Rate: 3.48

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	211	211	422

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TRIP GENERATION CALCULATIONS

Land Use: General Office Building Land Use Code: 710 Variable: 1000 Sq Ft Gross Floor Area Variable Value: 3.6

AM PEAK HOUR

Trip Rate: 1.55

	Enter	Exit	Total
Directional Distribution	88%	12%	
Trip Ends	5	1	6

WEEKDAY

Trip Rate: 11.01

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	20	20	40

Source: TRIP GENERATION, Eighth Edition

PM PEAK HOUR

Trip Rate: 1.49

	Enter	Exit	Total
Directional Distribution	17%	83%	
Trip Ends	1	4	5

SATURDAY

Trip Rate: 2.37

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	4	4	8

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TRIP GENERATION CALCULATIONS

Land Use: Apartment Land Use Code: 220 Variable: Occupied Dwelling Units Variable Value: 60

AM PEAK HOUR

Trip Rate: 0.51

	Enter	Exit	Total
Directional Distribution	20%	80%	
Trip Ends	6	25	31

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PM PEAK HOUR	PM	PEAK	HOUR
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Trip Rate: 0.62

	Enter	Exit	Total
Directional Distribution	65%	35%	
Trip Ends	24	13	37

WEEKDAY

Trip Rate: 6.65

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	200	200	400

SATURDAY

Trip Rate: 6.39

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	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	192	192	384

Source: TRIP GENERATION, Eighth Edition

CD5380 5/25/2011				ION DATA	SECTION	- CRAS	ANSPORTATION H ANALYSIS H LISTING			N					PAGE: 1
CLACKAMAS COUNTY			Ja				E 117th Aver December 31,	9							
SER# ELGHR DAY	HLEPNT COUNTY ROADS HEF FROM FIRST STREET INTERSECT SECOND STREET	RD CHAR DIRECT	INT-TYP MEDIAN) LEGS #LANES)	INT-REL TRAF- CONTL	OFF-RD RNOBT DRVWY	SURF	CRASH TYP COLL TYP SVRTY		FROM	PRTC P# TYPE		A S G E LICNS E X RES	PED LOC ERRCR	ACTN EVENT	CAUSE
03835 N N N 9/14/2006 COUNTY Thu 1P	1.75 12154	INTER CN 03		N TRF SIGN	AL N	CLR DRY DAY	O-ITURN TURN INJ		STRGHT E W	01 DRVR	INJC	64 F OR-Y OR<25	020	000	04 00 04
									STRGHT N S	01 DRVR	INJC	45 M OR-Y OR<25	000	000 000	00 00

CD5380 5/25/2011

CLACKAMAS COUNTY

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION TRANSPORTATION DATA SECTION - CBASH ANALYSIS AND REFORTING UNIT COUNTY ROAD CHASH LISTING SE Sunnyside Road from SK 114th Court to SE 117th Avenue (includes intersection at SE 117th Ave) January 1, 2005 through December 31, 2009

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												02 NONE 0 PRVTE PSNGR CAR	N S	01 2	DRVR	NONE	24 F	OR-Y OR<25	000		000	00 00
02565 NONE	NNN	6/23/2006 Fri 5P	1.73	12154		STRGHT UN 03	(NONE) (02)	N UNKNOWN	N N N	CLR DRY DAY	S-1STOP REAR PDO	PSNGR CAR	E W	01 E	DRVR	NONE	32 F	OR-Y OR<25	026		000	07 00 07
												02 NONE 0 PRVTE PSNGR CAR	E W								008	00
04183 COUNTY	YNN	9/26/2007 Wed 6A	1.74	12154		STRGHT UN 01	(NONE) (02)	n Unknown	Y N N		FIX OBJ FIX PDO	01 NONE 0 PRVTE PSNGR CAR	E W	01 2	DRVR			OR-Y OR<25	047		040,072 007 040,072 017	01 00 01
02002 NONE	NNN	5/16/2008 Fri 4P	1.74	12154		STRGHT UN 03	(NONE)	n Unknown	N	CLR DRY DAY	S-STRGHT SS-O PDO	01 NONE 0 PRVTE PSNGR CAR	WE	01 E	DRVR	NONE	00 F	UNK N-RES	045		000	13 00 13
												02 NONE 0 PRVTE PSNGR CAR	W E	01 ī	ORVR	NONE	51 F	OR-Y OR<25	000		000	00
03835 COUNTY	N N N	9/11/2006 Thu 1P	1.75	12154		INTER CN 03	CROSS 0	N TRF SIGNA	L N	CLR DRY DAY	O-ITURN TURN INJ	01 NONE 0 PRVTE PSNGR CAR	E W	01 0	ORVR	INJC	64 F	OR-Y OR<25	020		000	04 00 04
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PAGE: 1

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General In	formation								nforma							14.7
	CS Co. Lancaster rmed 6/6/2011 d AM Peak							Interse Area Jurisd Analys Projec	Гуре iction sis Yea	All o Clai ar Exis	othe ckar sting ey \	ide/117t r areas mas r (2011) /iew Chi		-		
Volume ar	nd Timing Input										000					
rolanie al	ia mining input		1	EB				WB				NB		1	SB	
			LT	TH		LT	-	TH	R	r L	Г	TH	RT	LT	TH	RT
Number of	Lanes, N1		1	3	0	1		3	0	1		1	0	1	1	0
Lane Grou			L	TR		L		TR		L		TR		L	TR	
Volume, V			29	65			_	2052				0	0	31	0	58
and the second se	ehicles, %HV		7	7	7	2		2	2	25		2	2	6	6	6
and the second se	Factor, PHF	\	0.88	0.88			3	0.88	0.88		8	0.88	0.88	0.88	0.88	0.88
Start-up Lo	P) or Actuated (A st Time It)	A 2.0	A 2.0	A	A 2.0	_	A 2.0	A	A 2.0)	A 2.0	A	A 2.0	A 2.0	A
	of Effective Gree	1 0	2.0	2.0		2.0		2.0	_	2.0		2.0		2.0	2.0	
Arrival Typ		, 0	3	3		3		3		3		3		3	3	
Unit Extens	No. of Concession, Name of		3.0	3.0		3.0		3.0	-	3.0)	3.0	1	3.0	3.0	
Filtering/Me			1.000		0	1.00	_	1.000)	1.0		1.000		1.000	1.000	
Initial Unmo	arking / Grade / Parking arking Maneuvers, Nm		0.0	0.0		0.0		0.0		0.0)	0.0		0.0	0.0	
			7	1	0	1		1	0	0		0	0	0	0	0
Lane Width			12.0	12.0		12.0)	12.0		12.		12.0		12.0	12.0	
	arking / Grade / Parking arking Maneuvers, Nm		N	0	N	N		0	N	N		0	N	N	0	N
the second s	Parking Maneuvers, Nm Buses Stopping, NB		-	_			_		_							
the second se	uses Stopping, NB in. Time for Pedestrians, C		0	1		0		1		0		0		0	0	
				3.2				3.2			1	3.2		07	3.2	
Phasing	G = 6.0	G =	Only		u & RT = 44.0	G =	04		NSP G = 6		G	06	G =	07	G =	8
Timing	Y = 4	Y =			44.0	Y =			Y = 4		Y:		Y =		Y=	
Duration of	Analysis, $T = 0.2$			_	1.0	1						cle Leng				
the second se	p Capacity, Cor	Street of Lot of	Delay,	and LO	S Dete	rminatio	on								1 .	
				EB			1	WB				NB			SB	
			LT	TH	RT	LT		TH	RT	LT		TH	RT	LT	TH	RT
Adjusted FI		33	753		2	23	341		5		0		35	66		
Lane Group	o Capacity, c	12	265	3100		152	3	183		103		160		103	131	
v/c Ratio, X	(0.24	1	0.01		74		0.05	0	0.00		0.34	0.50	1
Total Green	n Ratio, g/C	0.	16	0.64		0.09	0.	63		0.09	C	0.09		0.09	0.09	
Uniform De	lay, d ₁	2	5.4	5.3		29.3	9.	.0		29.4	2	29.3		30.1	30.6	
Progression	n Factor, PF	1.	000	1.000		1.000	1.0	000		1.000	1	1.000		1.000	1.000	
Delay Calib	pration, k	0.	11	0.11		0.11	0.2	29		0.11	0	0.11		0.11	0.11	
Incrementa	l Delay, d ₂	0	0.2	0.0		0.0	0	0.9		0.2		0.0		2.0	3.1	
	e Delay, d ₃	0	.0	0.0		0.0	0.	.0		0.0	-	0.0	_	0.0	0.0	
Control Del		2	5.6	5.3		29.3	9	9.9		29.6	-	29.3		32.1	33.7	
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voiume un	a mining input		1		EB	-		1	WB		1		NB			· · · ·	SB		
			LT		TH	RT	LT		TH	RT	L	.т	TH	F	RT	LT	TH	R	
Number of I	Lanes, N1		1		3	0	1		3	0	1	1	1	0)	1	1	0	
Lane Group			L		TR				TR		L		TR			L	TR		
Volume, V (72		1949	2	19		1364	45		9	1		1	79	0	26	
	ehicles, %HV		1		1	1	2		2	2	9		9	9		2	2	2	
	Factor, PHF		0.97		0.97	0.97			0.97	0.97			0.97	0.5		0.97	0.97	0.97	
and the second s) or Actuated (A)		A		A	A	A		A	A	4		A	1	1	A	A	A	
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Unit Extens	مسجو فرابية داوي فود		3.0		3.0		3.0		3.0	-	3.		3.0	-		3.0	3.0		
Filtering/Me			1.00		1.000		1.00		.000			000	1.000			1.000	1.000		
	t Demand, Qb		0.0		0.0		0.0		0.0		0.	_	0.0		-	0.0	0.0		
Ped / Bike /	RTOR Volumes		20		13	0	14		1	0	0		0	0)	3	0	0	
Lane Width			12.0		12.0		12.0	1.	2.0		12	.0	12.0			12.0	12.0		
Parking / Gr	rade / Parking		Ν		0	N	N		0	N	Λ	1	0	Λ	J	N	0	N	
Parking Mai	neuvers, Nm																		
Buses Stop			0		1		0		1			0	0			0	0		
in. Time for Pedestrians, Gp					3.3				3.3				3.2				3.2		
Phasing	Excl. Left					& RT)4		NS Pe			06			07	0	8	
Timing	G = 5.0	G =			G = 6		G = Y =		G = 6.0			_	=		G =		G =		
-	Y = 4		= 0		Y = 4.5					Y=4.	5	Y			Y =				
	Analysis, $T = 0.2$		Deless		41.00	Dete						10	ycle Leng	gtn,	C =	90.0		_	
Lane Grou	p Capacity, Con	Troi L	Jelay,		B	Detel	minatic	W	/P	- 19	T		NB			1	SB		
			LT	T		RT	LT			RT	LT		TH	R	Т	LT	TH	R	
Adjusted Flo	ow Rate, v		74	20			20	145			9		2		-	81	27		
				-								_		-					
	Capacity, c		199	-	52		98	363			85		107			94	104	-	
v/c Ratio, X		0.	37	0.5	4		0.20	0.40	0		0.11		0.02			0.86	0.26		
Total Green	Ratio, g/C	0.	11	0.7	3		0.06	0.72	2		0.07		0.07			0.07	0.07		
Uniform Del	ay, d ₁	37	7.1	5.3	3		40.6	4.9	,		39.5		39.2			41.6	39.9		
Progression			000	1.0			1.000	1.00			1.00		1.000		-	1.000	1.000		
Delay Calibi			11	0.1			0.11	0.11			0.11		0.11			0.39	0.11		
Incremental			1.2		2		1.0	0.1			0.6		0.1			51.3	1.3	1	
Initial Queue			.0	0.0			0.0	0.0		1	0.0		0.0			0.0	0.0	-	
Control Dela			8.3	5.			41.6	5.0			40.0		39.3			92.9	41.2		
Lane Group			D.0	A			D	A			D		D			F	D		
Approach D			6.]			5.4				39.					B0.0		
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			8.				1	0.54	1				tion LOS	_			A		
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CS Lancaster d 6/6/2011 AM Peak Fiming Input eles, N1 eles, %HV ctor, PHF r Actuated (A) fime, I1 ffective Green, e T , UE ing, I	L1 1 1 54 7 0.88 A 2.0 2.0	t	EB TH 3 TR 1219 7	RT 0	1	I J F	Inters Area Jurisc	liction sis Yea ot ID	ar L	Sunn All oti Clack Back		030)				
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n) cles, %HV ctor, PHF r Actuated (A) ime, I1 ffective Green, e T , UE ing, I	1 L 54 7 0.88 A 2.0	t	TH 3 TR 1219	0	1		-								-	
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n) cles, %HV ctor, PHF r Actuated (A) ïme, I1 ffective Green, e T , UE ing, I	54 7 0.88 A 2.0		TR 1219				3	0		1	1	0	1	1	0	
cles, %HV ctor, PHF r Actuated (A) ïme, I1 ffective Green, e T , UE ing, I	7 0.88 A 2.0				L		TR			L	TR		L	TR		
cles, %HV ctor, PHF r Actuated (A) ïme, I1 ffective Green, e T , UE ing, I	0.88 A 2.0	3	7	7	2		3800) 15	5	4	0	0	57	0	107	
ctor, PHF r Actuated (A) ime, I1 ffective Green, e T , UE ng, I	A 2.0	3		7	2		2	2		25	2	2	6	6	6	
r Actuated (A) ime, Iı ffective Green, e T , UE ing, I	2.0		0.88	0.88	0.88		0.88	0.80	3	0.88	0.88	0.88	0.88	0.88	0.88	
ffective Green, e T , UE ing, I			A	A	A		A	A		A	A	A	A	A	A	
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ing, I	3		3		3		3			3	3		3	3		
	3.0		3.0		3.0		3.0			3.0	3.0		3.0	3.0		
emand, Qb	1.00		1.000		1.00	0	1.000	>		1.00			1.000	1.000		
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apacity, c	141	38	361		74	40	009		6	50	93		60	76		
a a ta ta an	0.43	0.3	36		0.03	1.0	08		0.0	08	0.00		1.08	1.38		
atio, g/C	0.08	0.8	30		0.04	0.7	79		0.0	05	0.05		0.05	0.05		
d ₁	52.3	3.	4		55.2	12	2.5		54	.4	54.2		57.0	57.0		
ctor, PF	1.000	1.0	000		1.000	1.0	000		1.0	000	1.000		1.000	1.000		
on, k	0.11	0.1	11		0.11	0.5	50		0.1	11	0.11		0.50	0.50		
lay, d ₂	2.1	0	.1		0.1	41	1.8		0	.6	0.0		141.1	234.5		
elay, d ₃	0.0	0.	0	*****	0.0	0.	0		0.	0	0.0		0.0	0.0		
·····	54.4	3	.4		55.3	54	4.3		55	5.0	54.2		198.1	291.5		
S	D	A			E	D)	<u> </u>	D)	D		F	F		
y	5.	6			54	4.3]			55	5.0			55.8	<u> </u>	
			_						-					F		
							1		-							
gency or Co. Lancaster ate Performed $6/6/2011$ me Period AM Peak olume and Timing Input umber of Lanes, N1 ane Group olume, V (vph) Heavy Vehicles, %HV eak-Hour Factor, PHF retimed (P) or Actuated (A) eart-up Lost Time, I1 stension of Effective Green rival Type, AT nit Extension, UE Itering/Metering, I itial Unmet Demand, Qb ed / Bike / RTOR Volumes ane Width arking / Grade / Parking arking Maneuvers, Nm uses Stopping, NB in. Time for Pedestrians, G hasing Excl. Left G = 5.0 Y = 4 uration of Analysis, T = 0.2	$= 5.0$ $= 4$ Y ysis, T = 0.25 pacity, Control ate, v acity, c y, d_2 ay, d ₃ Y	= 5.0 $G = 1.0$ = 4 $Y = 0$ ysis, T = 0.25 $Delay$ pacity, Control Delay LT ate, v 61 acity, c 141 0.43 0.43 o, g/C 0.08 1 52.3 tor, PF 1.000 n, k 0.11 uy, d ₂ 2.1 ay, d ₃ 0.0 54.4 D y 48	= 5.0 G = 1.0 = 4 Y = 0 ysis, T = 0.25 Image: Control Delay, and the second	= 5.0 G = 1.0 G = 1.0 G = 1.0 G = 1.0 = 4 Y = 0 Y = 0 Y = 4 ysis, T = 0.25 7 7 pacity, Control Delay, and LOS EB LT TH ate, v 61 1393 acity, c 141 3861 0.43 0.36 0.36 o, g/C 0.08 0.80 1 52.3 3.4 tor, PF 1.000 1.000 n, k 0.11 0.11 ay, d ₂ 2.1 0.1 ay, d ₃ 0.0 0.0 54.4 3.4 D A 5.6 A	= 5.0 $G = 1.0$ $G = 95.0$ = 4 $Y = 0$ $Y = 4.5$ ysis, T = 0.25 $Y = 4.5$ pacity, Control Delay, and LOS Deter EB LT TH ate, v 61 1393 acity, c 141 3861 0.43 0.36 0.36 o, g/C 0.08 0.80 1 52.3 3.4 tor, PF 1.000 1.000 n, k 0.11 0.11 ay, d ₂ 2.1 0.1 ay, d ₃ 0.0 0.0 54.4 3.4 5.6 A 5.6 A	= 5.0 G = 1.0 G = 95.0 G = = 4 Y = 0 Y = 4.5 Y = ysis, T = 0.25 Y Y Y pacity, Control Delay, and LOS Determination EB Y LT TH RT LT ate, v 61 1393 2 acity, c 141 3861 74 0.43 0.36 0.03 o, g/C 0.08 0.80 0.04 1 52.3 3.4 55.2 tor, PF 1.000 1.000 1.000 n, k 0.11 0.11 0.11 ay, d ₃ 0.0 0.0 0.0 54.4 3.4 55.3 D A E 5.6 54	= 5.0 $G = 1.0$ $G = 95.0$ $G =$ = 4 $Y = 0$ $Y = 4.5$ $Y =$ ysis, T = 0.25 ysis, T = 0.25 ysis, T = 0.25 Dacity, Control Delay, and LOS Determination EB LT TH RT LT T ate, v 61 1393 2 43 acity, c 141 3861 74 40 0.43 0.36 0.03 $1.$ $0, g/C$ 0.08 0.80 0.04 $0.$ 1 52.3 3.4 55.2 12 tor, PF 1.000 1.000 1.000 1.000 1.000 $0, k$ 0.11 0.11 0.11 0.14 43 ay, d_3 0.0 0.0 0.0 0.0 0.0 0 A E E E E $acity, c$ 2.1 0.1 0.1 4.5 5.3 5.6 ay, d_3 0.0 0.0 0.0 0.0 </td <td>= 5.0 $G = 1.0$ $G = 95.0$ $G =$ = 4 $Y = 0$ $Y = 4.5$ $Y =$ ysis, $T = 0.25$ $Y = 4.5$ $Y =$ pacity, Control Delay, and LOS Determination EB WB LT TH RT LT TH ate, v 61 1393 2 4335 acity, c 141 3861 74 4009 0.43 0.36 0.03 1.08 o, g/C 0.08 0.80 0.04 0.79 1 52.3 3.4 55.2 12.5 tor, PF 1.000 1.000 1.000 1.000 n, k 0.11 0.11 0.11 0.50 y, d_2 2.1 0.1 0.0 0.0 0.0 y, d_3 0.0 0.0 0.0 0.0 0.0 y, d_3 0.0 0.0 0.0 0.0 0.0 y, d_3 0.0 0.0 0.0 0.0 0.0</td> <td>= 5.0 $G = 1.0$ $G = 95.0$ $G =$ $G = 6$ = 4 $Y = 0$ $Y = 4.5$ $Y =$ $Y = 4$ ysis, T = 0.25 </td> <td>= 5.0 G = 1.0 G = 95.0 G = G = 6.0 = 4 Y = 0 Y = 4.5 Y = Y = 4.5 ysis, T = 0.25 y = 4.5 Y = Y = 4.5 Dacity, Control Delay, and LOS Determination EB WB WB LT TH RT LT TH RT L ate, v 61 1393 2 4335 acity, c 141 3861 74 4009 6 0.43 0.36 0.03 1.08 0.0 0.0 o, g/C 0.08 0.80 0.04 0.79 0.0 1 52.3 3.4 55.2 12.5 54 tor, PF 1.000 1.000 1.000 1.000 1.0 nk 0.11 0.11 0.1 41.8 0 ay, d_3 0.0 0.0 0.0 0.0 0.0 ay, d_3 0.0 0.0 0.0 0.0 0.0 0.0 5.6</td> <td>= 5.0 $G = 1.0$ $G = 95.0$ $G =$ $G = 6.0$ O = 4 $Y = 0$ $Y = 4.5$ $Y =$ $Y = 4.5$ $Y =$ $Y = 4.5$ Y pacity, Control Delay, and LOS Determination WB LT TH RT LT TH RT LT ate, v 61 1393 2 4335 5 acity, c 141 3861 74 4009 60 0.43 0.36 0.03 1.08 0.08 o, g/C 0.08 0.80 0.04 0.79 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Y = 4.5 Y = Y = 4.5 ysis, T = 0.25 y = 4.5 Y = Y = 4.5 Dacity, Control Delay, and LOS Determination EB WB WB LT TH RT LT TH RT L ate, v 61 1393 2 4335 acity, c 141 3861 74 4009 6 0.43 0.36 0.03 1.08 0.0 0.0 o, g/C 0.08 0.80 0.04 0.79 0.0 1 52.3 3.4 55.2 12.5 54 tor, PF 1.000 1.000 1.000 1.000 1.0 nk 0.11 0.11 0.1 41.8 0 ay, d_3 0.0 0.0 0.0 0.0 0.0 ay, d_3 0.0 0.0 0.0 0.0 0.0 0.0 5.6	= 5.0 $G = 1.0$ $G = 95.0$ $G =$ $G = 6.0$ O = 4 $Y = 0$ $Y = 4.5$ $Y =$ $Y = 4.5$ $Y =$ $Y = 4.5$ Y pacity, Control Delay, and LOS Determination WB LT TH RT LT TH RT LT ate, v 61 1393 2 4335 5 acity, c 141 3861 74 4009 60 0.43 0.36 0.03 1.08 0.08 o, g/C 0.08 0.80 0.04 0.79 0.05 1 52.3 3.4 55.2 12.5 54.4 tor, PF 1.000 1.000 1.000 1.000 1.000 n, k 0.11 0.11 0.11 0.50 0.11 ay, d_3 0.0 0.0 0.0 0.0 0.0 5.6 54.3 55.0 54.3 55.0 A D D D D 0.0	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ 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Area Type Jurisdiction Analysis Year Project ID WB TH RT 3 0 TR 2526 83 2 2.0 0.97 A A 2.0 1.000 3.0 1.000 1.000 0.12.0 0 N 1 0 12.0 1 0 N 1 1	All oth Clacka Backg Valley #1103 LT 1 L 9 9 0.97 A 2.0 2.0 3 3.0 1.000 0.0 0 12.0 N	er areas amas round (20 View Chu 5 NB TH 1 1 7 9 0.97 A 2.0 2.0 3 3.0 0 1.000 0.0 0 12.0 0 0 12.0 0	030) Jirch ZC RT 0 1 9 0.97 A - - 0 0 0	LT 1 1 146 2 0.97 A 2.0 2.0 3 3.0 1.000 0.0 3 12.0	TH 1 TR 0 2 0.97 A 2.0 3.0 1.000 0.0 1.2.0	0 48 2 0.97 A
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2.0 2.0 3 3.0 1.000 0.0 1 0 12.0 0 N 1 1 0 N	2.0 2.0 3 3.0 1.000 0.0 0 12.0 N	2.0 2.0 3 3.0 0 1.000 0.0 0 12.0 0	0	2.0 2.0 3 3.0 1.000 0.0 3 12.0	2.0 2.0 3 3.0 1.000 0.0 0 12.0	0
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0 N 1	N	0	N		-	N
1						
	. 0	0	1		1	
0.0				0	0	
3.3		3.2	_		3.2	-
NS Per	rm	06		07	0	8
G = 8.0		<u>;</u> =	G	=	G =	
Y = 4.5	5	′ =	Y =	-	Y =	
		Cycle Leng	gth, C =	100.0		
Du i i						
WB		NB			SB	1
TH RT	LT	TH	RT	LT	TH	RT
690	9	2		151	49	
678	100	129		113	125	
	0.09	0.02		1.34	0.39	
	0.08	0.08		0.08	0.08	
.8	42.6	42.4		46.0	43.7	
000	1.000	1.000		1.000	1.000	
29	0.11	0.11		0.50	0.11	
0.8	0.4	0.0		199.4	2.0	
.0	0.0	0.0		0.0	0.0	
3.6	43.0	42.4		245.4	45.7	
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۹	42			1	96.5	-]
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General Inf	ormation	-				1			Site I			on		-		-		1	N.E.A.
Analyst Agency or C	CS Co. Lancaster med 6/6/2011								Inters Area Jurisc Analy Project	ection Type liction sis Y	n	Sun All o Clac Baci	ther kan k + l sy V	de/117a areas nas Net Incr liew Ch	ease		30)		
Volumo an	d Timing Innut											#110	135						
Volume and	d Timing Input		1		EB				WB			1		NB			-	SB	
			LT		TH	RT	Ľ	т	TH		RT	LI	Г	TH	R		LT	TH	R
Number of L	anes. N1		1	_	3	0	1	·	3		0	1		1	0		1	1	0
Lane Group			L	_	TR		L		TR		-	L		TR	-		L	TR	1
Volume, V (and a state of the		57	,	1221	7	2	2	3803	3	17	4		0	0		65	0	12
	hicles, %HV		7		7	7	2		2		2	25		2	2		6	6	6
Peak-Hour I			0.88	1	0.88	0.88	0.8	8	0.88	0.	88	0.88	3	0.88	0.88	3	0.88	0.88	0.88
Pretimed (P) or Actuated (A)	A		A	A	A		A	,	4	A		A	A		A	A	A
Start-up Los			2.0		2.0		2.0)	2.0		2.			2.0			2.0	2.0	
the second s	f Effective Gree	n, e	2.0		2.0		2.0)	2.0			2.0		2.0			2.0	2.0	
Arrival Type			3		3		3		3			3		3			3	3	
Unit Extensi	And all and and all and al		3.0		3.0		3.0		3.0			3.0	-	3.0			3.0	3.0	
Filtering/Met			1.00	0	1.000		1.0		1.00)	_	1.00		1.000			1.000	1.000	
	t Demand, Qb		0.0		0.0		0.0)	0.0			0.0		0.0			0.0	0.0	
	RTOR Volumes	5	7		1	0	1		1	1	0	0		0	0		0	0	15
Lane Width			12.0		12.0		12.0		12.0			12.0)	12.0			12.0	12.0	
	ade / Parking		N		0	N	N		0	/	V	N		0	N		N	0	N
Parking Mar						_													
Buses Stopp			0		1		0		1			0		0			0	0	
	r Pedestrians, (3.3				3.2					3.2				3.2	
Phasing	Excl. Left		Only			& RT		04			Per			06			7		8
Timing	G = 5.0	G =		_	G =		G =			G =			G =		_	<u>=</u>		G =	
	Y = 4	Y =	0		Y =	4.5	Y =			Y =	4.5		Y =			(=	10-	Y =	
And the second se	Analysis, $T = 0.1$	- Internet and the second s						_					Cyc	cle Leng	gth, C	; =	120.0		- 11
Lane Group	Capacity, Col	ntrol L	Jelay,		and the second se	5 Deter	minati	on	1A/D			1.3		NID				00	
			LT		EB H	RT	LT	Т	WB TH	RT	-	LT		NB TH	RT		LT	SB TH	RI
Adjusted El-	W Pate V			1		ni				RI					-MI				RI
Adjusted Flo			65	13	96		2	4	1341			5		0			74	119	
Lane Group	Capacity, c	1	141	38	61		74	4	4009			60		93			60	76	
v/c Ratio, X		0	46	0.3	36		0.03	1	.08		1	0.08				1	1.23	1.57	
Total Green	Ratio, g/C		08	0.8			0.04	_	.79			0.05		05			0.05	0.05	
Uniform Dela	ay, d ₁		2.4	3.			55.2	_	2.5			54.4		4.2			57.0	57.0	
Progression	Factor, PF	1.	000	1.0	000		1.000	1	.000		1	.000	1.	000		1	1.000	1.000	
Delay Calibr	ation, k	0.	11	0.1	1		0.11	0	.50		C	0.11	0.	11		C	0.50	0.50	
ncremental	Delay, d ₂	2	2.4	0.	.1		0.1	4	42.4			0.6	(0.0		1	191.8	308.7	
	Delay, d ₃	0	.0	0.1	0		0.0	0	0.0		(0.0	0	.0			0.0	0.0	
		5	4.8	3.	.4		55.3	5	54.9			55.0	5	4.2		2	248.8	365.7	
			D	A			E		D			D	1	D			F	F	
Control Dela	LOS	pproach Delay		5.7			54.9					55.0					320.9		
Control Dela Lane Group			5.	7			5	94.9	/			0	0.0					20.0	_
Control Dela Lane Group	elay		5.: A				5	D					D					F	

				H	.S+	D	ETAIL							_	_			
General Info Analyst Agency or Co Jate Perform Time Period	CS . Lancaster							Ini Ar Ju Ar	itersec rea Ty urisdic	vpe stion s Year	Suni All o Clac Bacl	thei kan (+ i ey V	Net Incre /iew Chu	əase				
Volume and	Timing Input	-													-	7		
				EB					WB				NB				SB	
			LT	TH	R	Г	LT		TH	RT	LT	-	TH	R	Т	LT	TH	RT
Number of La	nes, N1		1	3	0		1		3	0	1		1	0		1	1	0
Lane Group			L	TR		-	L		TR		L	_	TR			L	TR	
Volume, V (vp	and the second state of th		145	3612	2		35	2	2528	91	9		1	1		150	0	54
% Heavy Veh		-	1	1	1	7	2		2	2	9	7	9	9	7	2	2	2
Peak-Hour Fa	or Actuated (A)		0.97 A	0.97 A	0.9) A		0.97 A		0.97 A	0.97 A	0.97 A		0.97 A	0.9 A		0.97 A	0.97 A	0.97 A
Start-up Lost			2.0	2.0		-	2.0		A 2.0	17	2.0		2.0	A		2.0	2.0	1
	Effective Greer	1, e	2.0	2.0			2.0		2.0	1	2.0		2.0		_	2.0	2.0	
Arrival Type,			3	3			3		3	1	3		3			3	3	
Unit Extension			3.0	3.0			3.0		3.0		3.0		3.0			3.0	3.0	
Filtering/Mete			1.000	1.000			1.000) 1	.000		1.00	00	1.000			1.000	1.000	
Initial Unmet I			0.0	0.0			0.0	0	0.0		0.0		0.0			0.0	0.0	-
	TOR Volumes		20	13	0		14		1	0	0		0	0		3	0	0
Lane Width			12.0	12.0			12.0	1	2.0		12.0)	12.0			12.0	12.0	
Parking / Grade / Parking			N	0	N		N		0	N	N		0	N		N	0	N
Parking Maneuvers, Nm																		
Buses Stoppin			0	1		_	0		1		0		0			0	0	
	Pedestrians, G			3.4					3.3			_	3.2	1			3.2	
Phasing	Excl. Left		Only		& RT		0.	4		NS Pe		0	06	_		07		8
Timing	G = 5.0 Y = 4	G = Y =		Y =	73.0		G = Y =			G = 8. $Y = 4.3$		G :			G = Y =		G =	_
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	Capacity, Con		Delay,	andLO	S Dete	rm	inatio	n				Cy	olo Long	<u>, , , , , , , , , , , , , , , , , , , </u>		100.0		
Lune aroup	capacity, con		ciuy,	EB	Dele		matro	W	/B			-	NB	-		1	SB	
			LT	TH	RT		LT	TH		RT	LT		TH	RT		LT	TH	RT
Adjusted Flow	v Rate, v	1	49	3726			36	270	00		9		2			155	56	
Lane Group C	Capacity, c	1	79	3787			89	367	76		99		129	-	-	113	125	1
						+						-		-				
v/c Ratio, X Total Green F	Potio a/C			0.98			0.40	0.73			0.09		0.02		_	1.37	0.45	
Uniform Delay				0.74			0.05	0.73		-	0.08		0.08		_	0.08	0.08	
Progression F				12.4			6.1	7.9			42.6		42.4		-	46.0	43.9	-
				1.000			.000				1.000		1.000		-	1.000	1.000	
Delay Calibra				0.49			0.11	0.29			0.11	0	0.11			0.50	0.11	
Incremental D	2			11.2			3.0	0.8			0.4	-	0.0		_	213.3	2.5	
Initial Queue I Control Delay				0.0		-	0.0	0.0			0.0	-	0.0	_	-	0.0	0.0	
				23.6		_	49.0	8.6	0		43.0		42.4		-	259.3	46.4	
Lane Group L				С			D	A			D		D	_		F	D	
approach Llol			25.4				9.					12.9	9			2	02.8	
Approach Del	pproach LOS C			A					D					F				
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TECHNICAL MEMORANDUM

To: Michael Walter, City of Happy Valley *FROM:* Todd E. Mobley, PE, PTOE *DATE:* December 2, 2011 *SUBJECT:* Valley View Church Zone Change CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11 Traffic Impact Study Addendum



321 SW 4th Ave., Suite 400 Portland, OR 97204 phone: 503.248.0313 fax: 503.248.9251 lancasterengineering.com

INTRODUCTION

This memorandum is written in response to comments raised by the City of Happy Valley and DKS Associates, the City's consulting traffic engineer. The comments are generally regarding the scope of work and intersections examined in the study, the assignment of site trips at the study area intersections, and details regarding the capacity and level of service analysis. The sections below address revisions and updates that have been made in each of these areas.

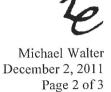
SCOPE OF WORK

At the time the scope of work for the traffic impact study was discussed with the City of Happy Valley and DKS Associates, it was expected that access to the site would be solely from SE 117th Avenue. As a result, the original traffic impact study included only the intersection of SE 117th Avenue at Sunnyside Road. Since that time, the conceptual site plan and expected development patterns have changed to include access to SE 114th Avenue.

Comments from DKS Associates indicate that the intersections of SE 114th Avenue at Sunnyside Road and SE Valley View Terrace at Sunnyside Road should also be included in the analysis. However, the comments also state the following:

The City of Happy Valley Transportation Impact Study Guidelines indicate that all project access points and intersections of regional significance where the traffic generated by the proposed project exceeds 10 percent of the total entering volume for the existing a.m. or p.m. peak hour shall be included as a study intersections.

The existing traffic counts on Sunnyside Road show 2,850 vehicles per hour in the morning peak hour and 3,570 vehicles per hour in the evening peak hour. To meet the 10-percent threshold and warrant analysis of *any* intersections on Sunnyside Road, the site would need to generate a net increase of 285 trips during the morning peak hour or 357 trips during the evening peak hour. Clearly, trip generation is nowhere near these levels. A strict reading of the City's requirements would indicate that analysis is needed only at the site driveways. Still, since site trips are added to both SE 114th and SE 117th Avenues, these intersections with Sunnyside Road are addressed in this adden-



dum. The intersection of Valley View Terrace at Sunnyside Road is not warranted for analysis and it is therefore not included.

REVISED TRIP ASSIGNMENT

In the original traffic impact study, the intersection of SE 114th Avenue was not included, and as such, traffic assigned to that intersection was not identified separately. In the attached Technical Appendix are updated figures that show a complete trip assignment for the existing zoning scenario, the proposed zoning scenario, and the net increase in trips due to the change in zoning.

In addition, existing and year 2025 traffic volumes are shown for the intersection of SE 114th Avenue at Sunnyside Road. Traffic counts conducted in 2008 were used at this intersection. Since SE 114th Avenue is a short, local street and conditions along the street have not changed since 2008, traffic volumes to and from SE 114th Avenue are expected to still be valid. Through traffic on Sunnyside Road was derived using the newer counts at SE 117th Avenue. Raw traffic counts from the 2008 data are included in the attached Technical Appendix. Similar to existing conditions, year 2025 traffic volumes on Sunnyside Road were derived from the estimates at SE 117th Avenue.

INTERSECTION CAPACITY & LEVEL OF SERVICE

To examine the operation at the intersection of SE 114th Avenue and Sunnyside Road and also to revise the analysis at SE 117th Avenue in accordance with comments raised by DKS Associates, the capacity analysis was updated. For all year 2025 scenarios, a signal cycle length of 120 seconds was used to be consistent with the Transportation System Plan. As shown in the table, both intersections operate acceptably for all scnearios.

Capacity & Level of Service Summary

A	M Peak Ho	ur	PI	M Peak Ho	ur
LOS	Delay	v/c	LOS	Delay	v/c
В	11	0.60	A	9	0.54
С	24	0.94	С	21	0.93
С	25	0.96	С	23	0.94
в	14	0.01	В	11	0.01
D	26	0.02	С	16	0.01
D	27	0.06	С	16	0.02
	LOS B C C B D	LOS Delay B 11 C 24 C 25 B 14 D 26	B 11 0.60 C 24 0.94 C 25 0.96 B 14 0.01 D 26 0.02	LOS Delay v/c LOS B 11 0.60 A C 24 0.94 C C 25 0.96 C B 14 0.01 B D 26 0.02 C	LOS Delay v/c LOS Delay B 11 0.60 A 9 C 24 0.94 C 21 C 25 0.96 C 23 B 14 0.01 B 11 D 26 0.02 C 16

LOS = Level of service

Delay = Average delay per vehicle in seconds

v/c = volume-to-capacity ratio

City of Happy Valley performance standards state that all movements at signalized intersections should operate at level of service E or better with a v/c ratio that does not exceed 1.0. As

Michael Walter December 2, 2011

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shown in the capacity analysis output in the attached appendix, the southbound left turn stays within capacity (with a v/c ratio less than 1.0) but experiences delays that result in level of service F operation. This occurs in 2025 even without the zone change and only during the morning peak hour. The proposed zone change results in a net increase of only three trips to the southbound left-turning movement.

While the City's performance standard is noted, it should also be understood that at a congested arterial intersection, it is not uncommon, nor is it considered "failing" operation, for minor movements to experience longer delays and have a poor level of service. Minor movements do not get priority in allocation of green time, since they are generally lower in volume.

For example, if a southbound driver were to arrive in the queue for the southbound left turn shortly after it turned red, wait for the signal to cycle, then proceed when the light turned green again, they would experience delays equivalent to level of service F operation. At the same time, the driver would not perceive the intersection to be "failing", and in fact, it would not be. The driver will be served by a single traffic signal cycle, but experience longer delays being the minor movement waiting to be served.

In terms of the Transportation Planning Rule (TPR), the zone change meets the criteria. Oregon Administrative Rule 660-012-060(1)(c)(C) allows that there is no significant affect if the a proposal does not worsen the performance of a transportation facility that is otherwise projected to perform below the minimum acceptable performance standard. The intersection as a whole meets the performance standard, only the southbound left turn does not meet the standard, and only during the morning peak hour, which is not examined in the TSP. The proposed zone change adds only three trips to this movement during the morning peak hour and does not cause the left turns to exceed capacity.

SUMMARY & CONCLUSIONS

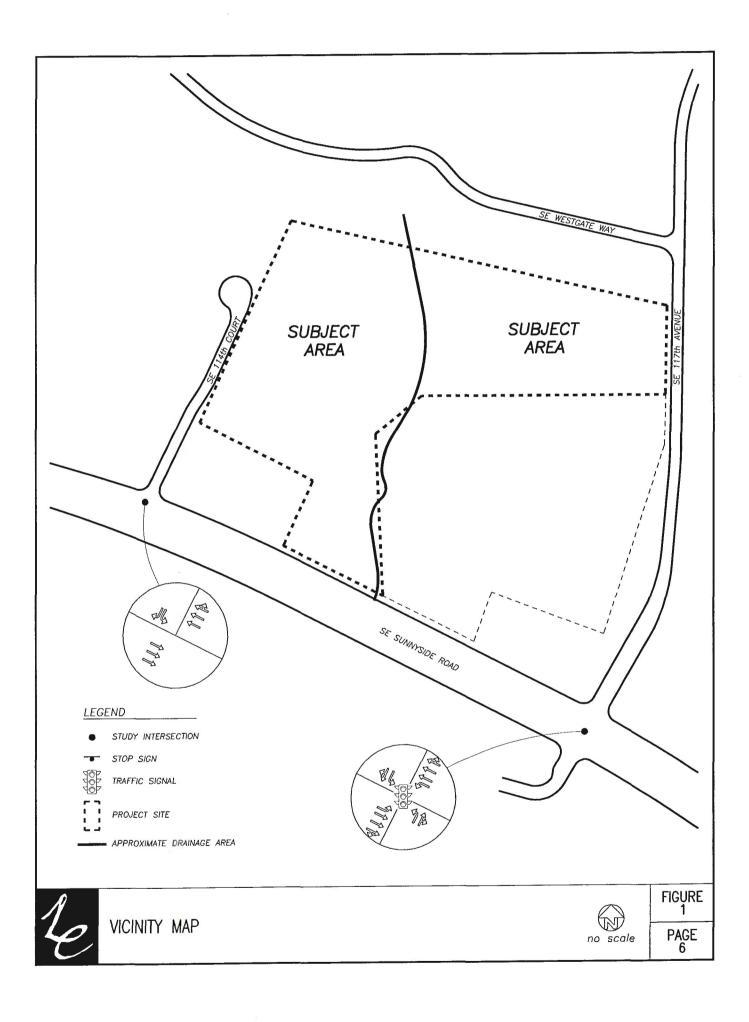
This addendum adds additional data and analysis as requested by the City of Happy Valley and also updates the original study, also as requested. The findings of the original TIS are unchanged. The existing transportation system can adequately accommodate the potential increase in trips from the proposed zone change and no mitigations are recommended.

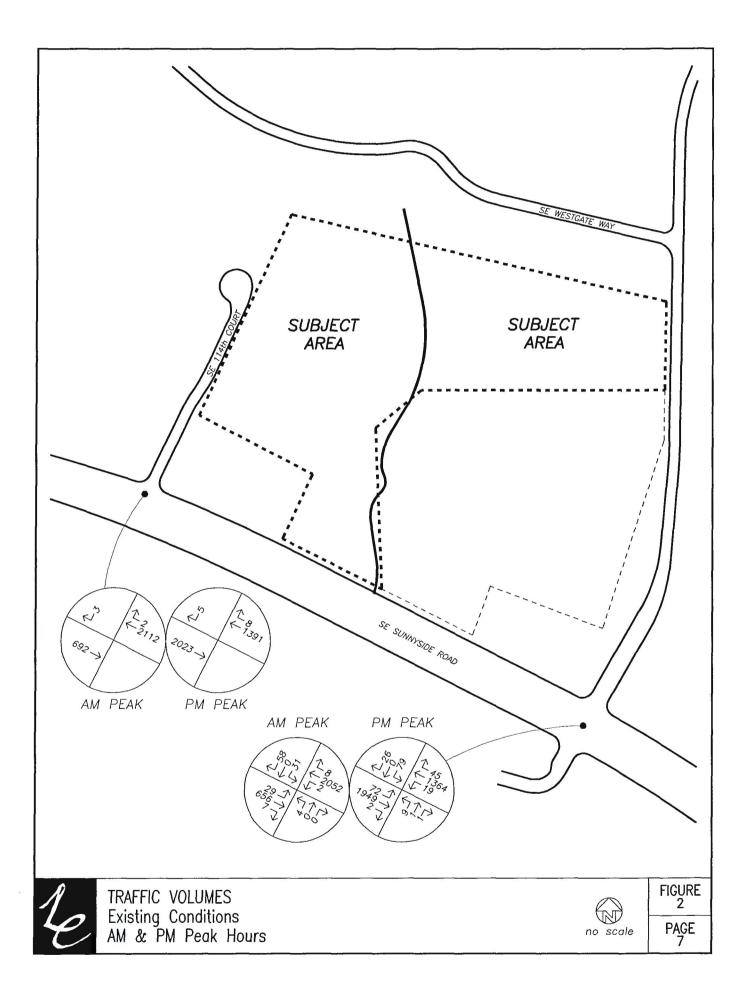


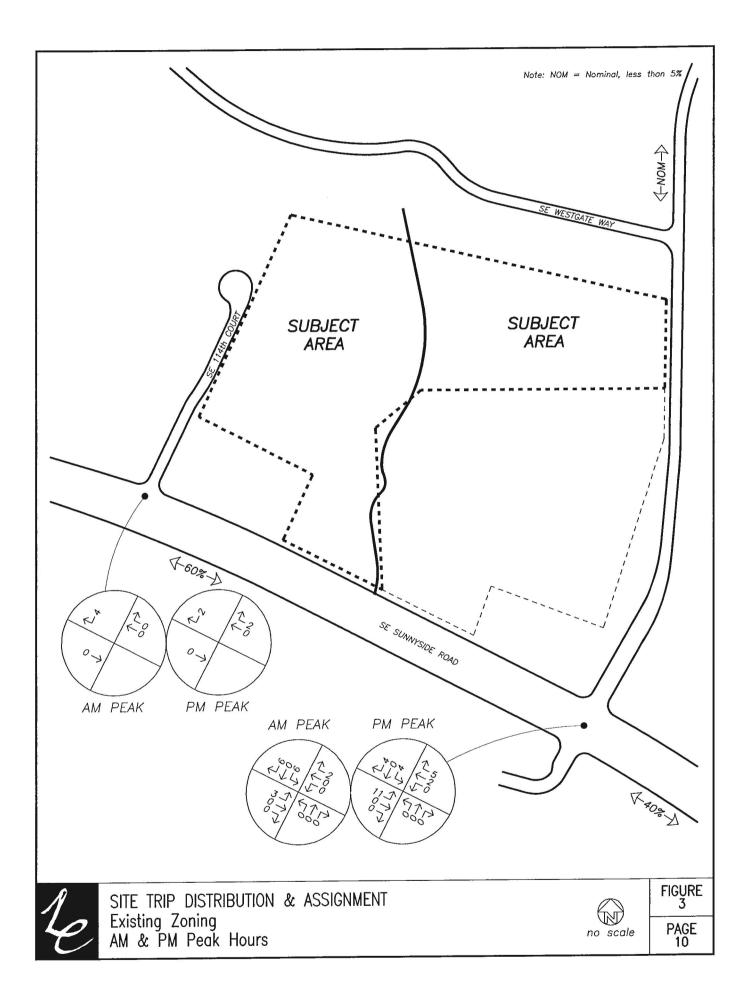
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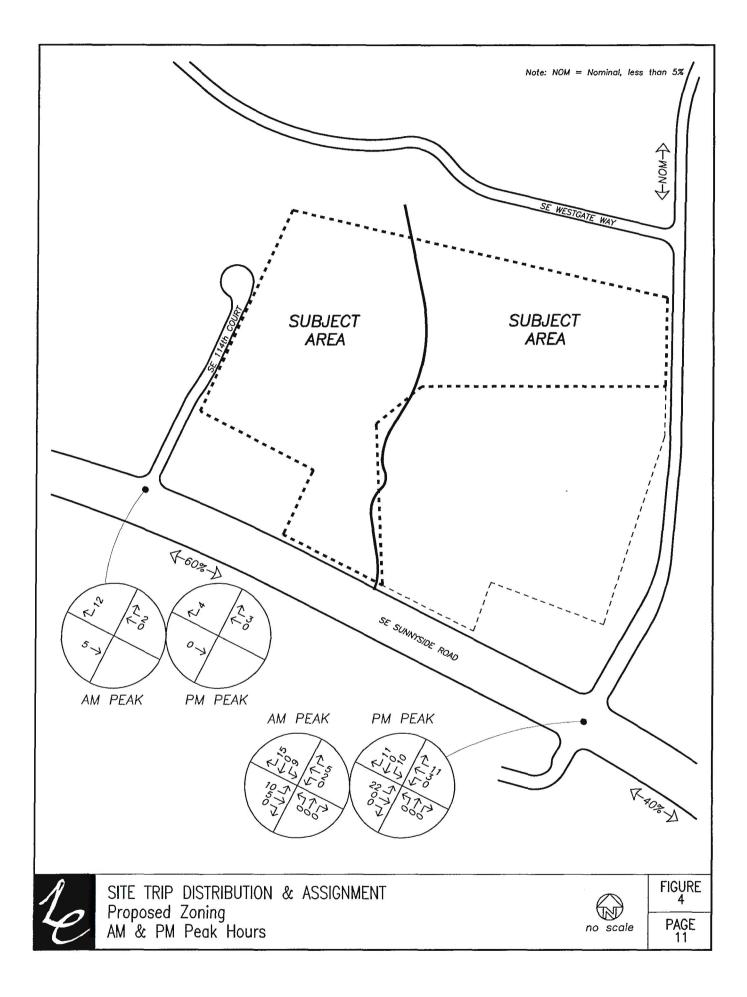
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TECHNICAL APPENDIX

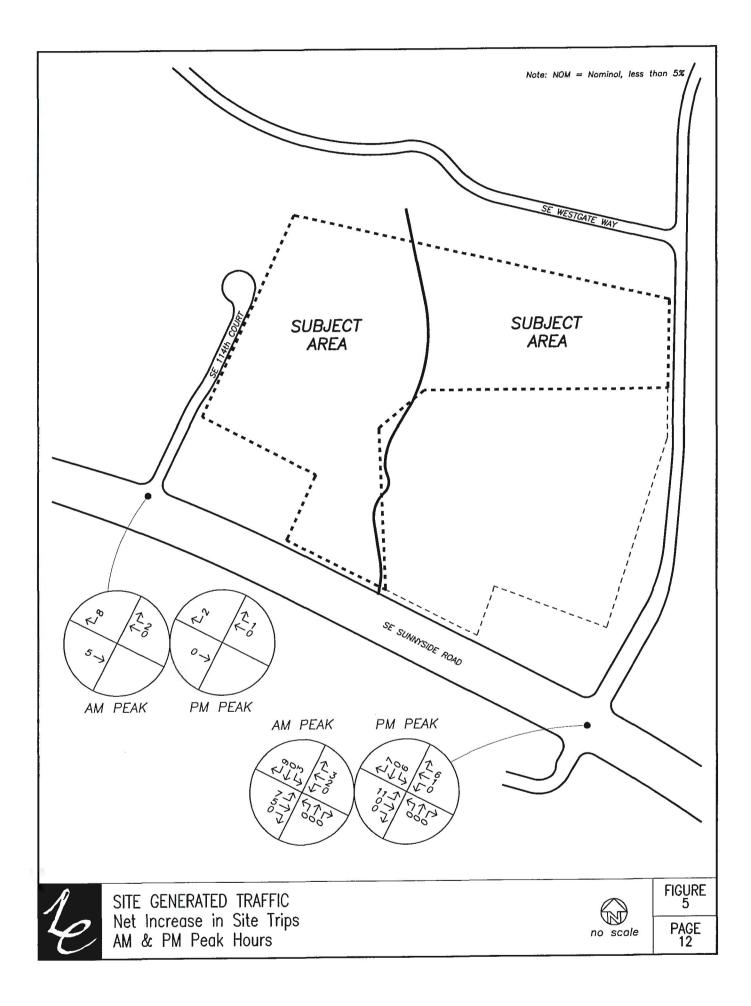


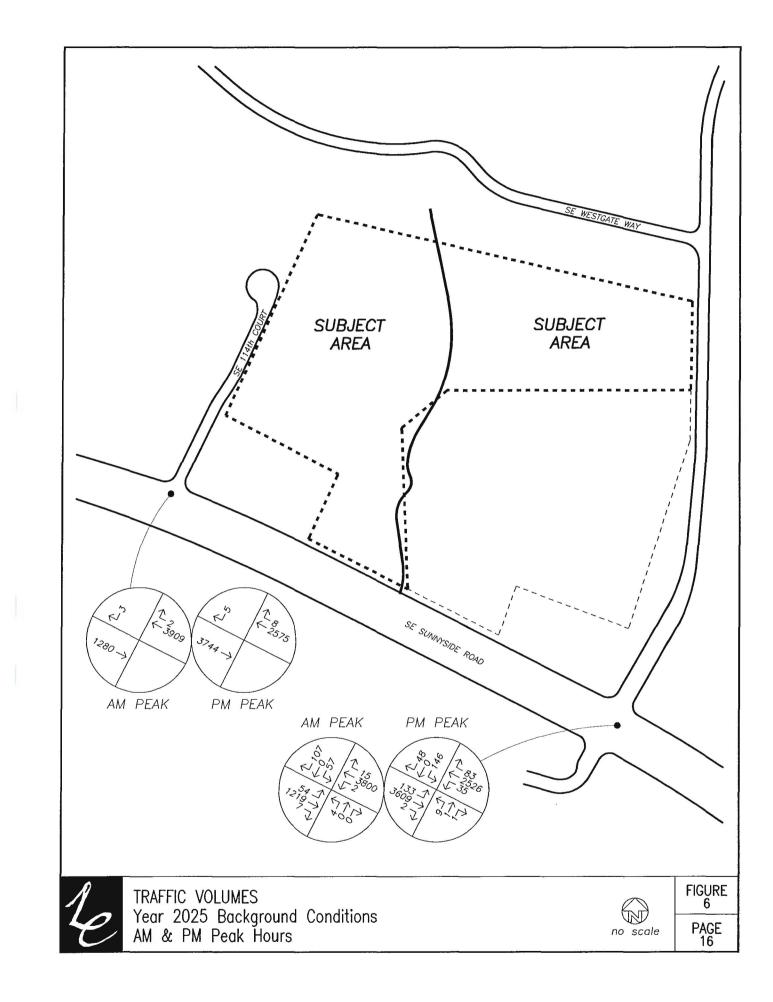


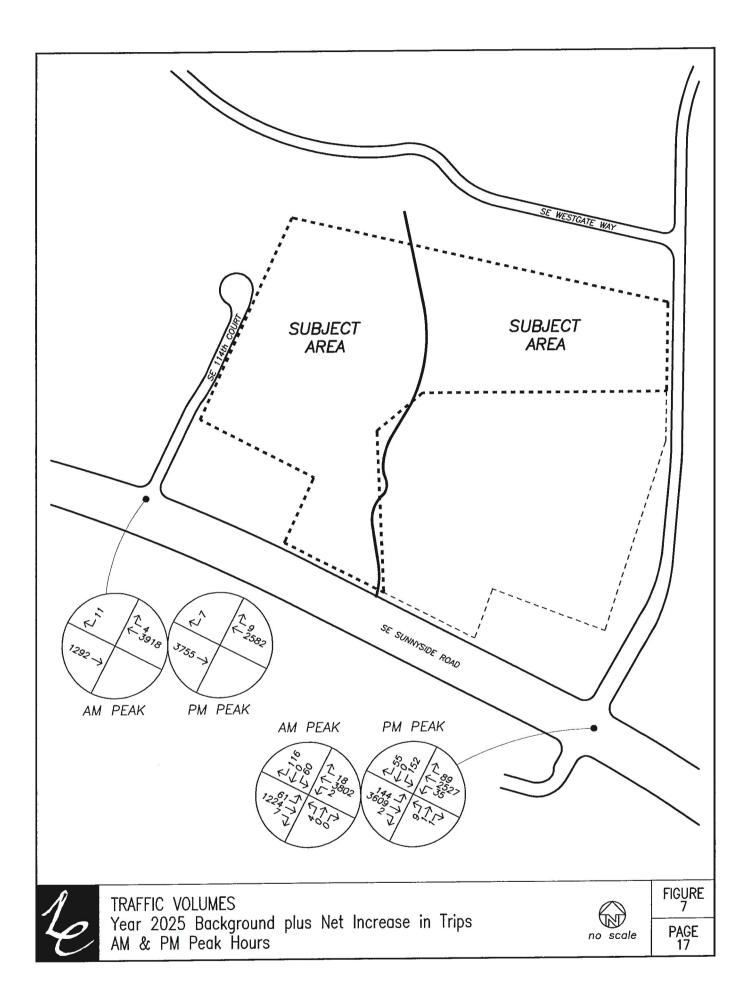




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Intersection Turning Movement Summary Report

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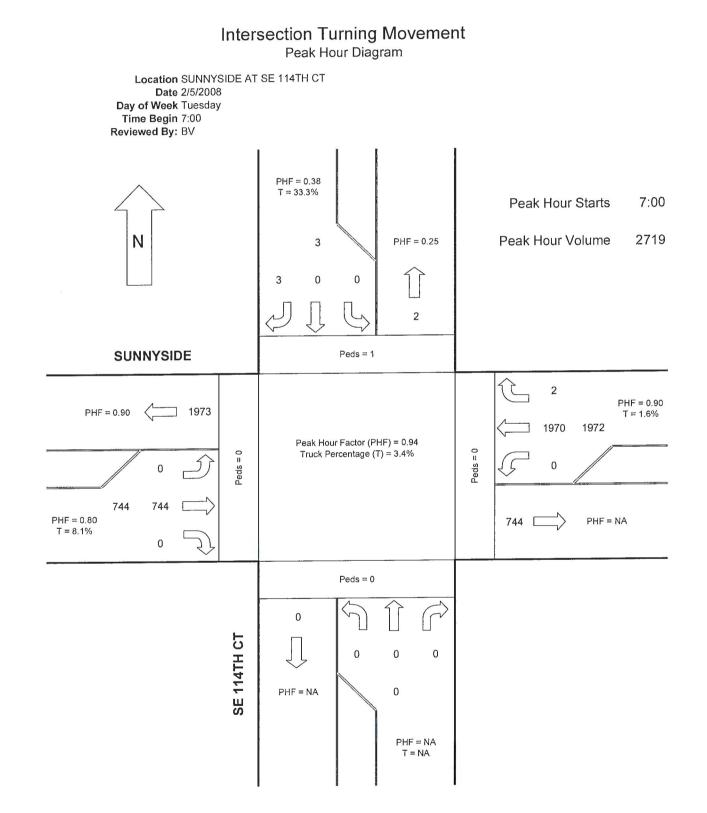
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Location SUNNYSIDE AT SE 114TH CT Date 2/5/2008 Day of Week Tuesday Time Begin 7:00 Reviewed By: BV

J	Ea	astbound	1	We	stbound	J	Nor	thbound	1	SOL	thbound	J	
Time Period	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
7:00 - 7:15	0	177	0	0	458	0	0	0	0	0	0	0	635
7:15 - 7:30	0	161	0	2	488	0	0	0	0	1	0	0	652
7:30 - 7:45	0	173	0	0	545	0	0	0	0	2	0	0	720
7:45 - 8:00	0	233	0	0	479	0	0	0	0	0	0	0	712
8:00 - 8:15	0	181	0	0	419	0	0	0	0	1	0	0	601
8:15 - 8:30	0	227	0	0	373	0	0	0	0	0	0	0	600
8:30 - 8:45	0	177 179	0	0	414	0	0	0	0	0	0	0	591
8:45 - 9:00 Movement Totals	0	1508	0	1	423	0	0	0	0	2	0	0	605 5116
Enter Totals	0	1508			3602		0[0		0	6		5116
Exit Totals		1508			3605			3			0		
		1506			3005			3			0		
Two-Hour Totals													
Light Trucks	0	100	0	1	63	0	0	0	0	1	0	0	165
Medium Trucks	0	11	0	0	10	0	0	0	0	0	0	0	21
Heavy Trucks	0	11	0	0	8	0	0	0	0	0	0	0	19
% Trucks	NA	8.1%	NA	33.3%	2.3%	NA	NA	NA	NA	16.7%	NA	NA	4.0%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0
		-											
D		South			West			East			North		
Pedestrians		0			0			0			2		2
				Б	ook Hou	r Infor	notion						
				P	eak Hou	r Infori	nation						
Peak Hour	7:00	8:00		P	eak Hou	r Infori	nation						
Peak Hour	7:00	8:00		Ρ	eak Hou	r Infori	nation						
Peak Hour		8:00 Istbound	I		eak Hou stbound	r Infori		thbound	I	Sou	thbound	I	
Peak Hour			Left			r Infori Left		thbound Thru	Left	Sou Right	thbound Thru	Left	Totals
Peak Hour	Ea	stbound	Left 0	We	stbound		Nor	1	Left 0	Right 3	Thru 0	Left 0	
	Ea Right	stbound Thru		We	stbound Thru	Left	Nor Right	Thru 0	0	Right	Thru 0	0	Totals 2719 0.94
Movement Total Peak Hour Factor	Ea Right	Thru 744 0.80 NA		We Right 2 0.25	stbound Thru 1970 0.90 NA	Left 0	Nor Right	Thru 0 A NA	0	Right 3	Thru 0 A NA	0	2719
Movement Total Peak Hour Factor Enter Totals	Ea Right	Thru 744 0.80 NA		We Right 2 0.25	stbound Thru 1970 0.90 NA 1972	Left 0	Nor Right	Thru 0 A NA	0	Right 3	Thru 0 A NA	0	2719
Movement Total Peak Hour Factor	Ea Right	Thru 744 0.80 NA		We Right 2 0.25	stbound Thru 1970 0.90 NA	Left 0	Nor Right	Thru 0 A NA	0	Right 3	Thru 0 A NA	0	2719
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor	Ea Right	Thru 744 0.80 NA 744 0.80		We Right 2 0.25	stbound Thru 1970 0.90 NA 1972 0.90	Left 0	Nor Right	Thru 0 A NA 0 NA	0	Right 3	Thru 0 A NA 3 0.38	0	2719
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals	Ea Right	Stbound Thru 744 0.80 NA 744 0.80 744		We Right 2 0.25	stbound Thru 1970 0.90 NA 1972 0.90	Left 0	Norf Right 0 A N/	Thru 0 A NA 0 NA 2	0	Right 3	Thru 0 0 NA 3 0.38 0 0	0	2719
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor	Ea Right	Thru 744 0.80 NA 744 0.80		We Right 2 0.25	stbound Thru 1970 0.90 NA 1972 0.90	Left 0	Norf Right 0 A N/	Thru 0 A NA 0 NA	0	Right 3	Thru 0 A NA 3 0.38	0	2719
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals Peak Hour Factor	Ea Right 0 NA	stbound Thru 744 0.80 744 0.80 744 0.80 744 0.80	0	We Right 2 0.25	stbound Thru 1970 0.90 NA 1972 0.90 1973 0.90	Left 0 N	Norf Right 0 A N/	Thru 0 0 NA 0 NA 2 0.25	0	Right 3 0.38 N/	Thru 0 A NA 3 0.38 0 NA	0	2719 0.94
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals Peak Hour Factor Light Trucks	Ea Right NA	stbound Thru 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80	0	We Right 2 0.25	stbound Thru 1970 0.90 NA 1972 0.90 1973 0.90 25	Left 0 N	Norf Right 0 A N/	Thru 0 0 NA 0 NA 2 0.25 0 0	0	Right 3 0.38 N/	Thru 0 A NA 3 0.38 0 NA 0 0 0 0	0	2719 0.94 76
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals Peak Hour Factor Light Trucks Medium Trucks	Ea Right 0 NA	stbound Thru 744 0.80 744 0.80 744 0.80 744 0.80	0	We Right 2 0.25	stbound Thru 1970 0.90 NA 1972 0.90 1973 0.90	Left 0 N	Norf Right 0 A N/	Thru 0 0 NA 0 NA 2 0.25	0	Right 3 0.38 N/	Thru 0 A NA 3 0.38 0 NA	0	2719 0.94 76 8
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals Peak Hour Factor Light Trucks Medium Trucks Heavy Trucks	Ea Right 0 NA 0 0 0 0 0	Stbound Thru 744 0.80 744 0.80 744 0.80 744 0.80 49 4 7		We Right 2 0.25 	stbound Thru 1970 0.90 NA 1972 0.90 1973 0.90 25 4 1	Left 0 N 0	Norf Right 0 A N/ 	Thru 0 0 NA 0 NA 2 0 0.25 0 0 0	0	Right 3 0.38 N/ 0.38 N/ 0.38 N/ 0.38 N/	Thru 0 0 NA 3 0.38 0 NA 0 0 0 0 0 0 0 0		2719 0.94 76 8 8
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals Peak Hour Factor Light Trucks Medium Trucks Heavy Trucks % Trucks	Ea Right 0 NA 0 0 0 0 0 0 NA	Stbound Thru 744 0.80 744 0.80 744 0.80 744 0.80 49 4		We: Right 2 0.25 	stbound Thru 1970 0.90 NA 1972 0.90 1973 0.90 25 4	Left 0 N	Norf Right 0 A N/ 	Thru 0 0 NA 0 NA 2 0 0.25 0 0 0	0 	Right 3 0.38 N/ 	Thru 0 0 NA 3 0.38 0 NA 0 0 0 0 0 0	0	2719 0.94 76 8
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals Peak Hour Factor Light Trucks Medium Trucks Heavy Trucks	Ea Right 0 NA 0 0 0 0 0	Stbound Thru 744 0.80 744 0.80 744 0.80 744 0.80 49 4 7 8.1%	0 0 0 0 0 0 NA	We Right 2 0.25 	stbound Thru 1970 0.90 NA 1972 0.90 1973 0.90 25 4 1.5%	Left 0 N 0	Norf Right 0 A N/ 	Thru 0 0 NA 0 NA 2 0 0.25 0 0 NA	0	Right 3 0.38 N/ 	Thru 0 0 NA 3 0.38 0 NA 0 0 NA 0 0 0 NA 0 0 0 0 0 0 0	0 	2719 0.94 76 8 3.4%
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals Peak Hour Factor Light Trucks Medium Trucks Heavy Trucks % Trucks Stopped Buses	Ea Right 0 NA 0 0 0 0 0 0 0 0 0 0 0 0 0	astbound Thru 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 49 4 7 8.1% 0	0 0 0 0 0 0 NA 0	We Right 2 0.25 	stbound Thru 1970 0.90 NA 1972 0.90 1973 0.90 25 4 1 1.5% 0	Left 0 N 0 0 0 0 0 0 0 0 NA 0	Norf Right 0 A N/ 	Thru 0 0 NA 0 NA 2 0 0.25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 NA 0	Right 3 0.38 N/ 	Thru 0 0 NA 3 0.38 0 NA 0 0 NA 0 0 0 NA 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 	2719 0.94 76 8 3.4% 0
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals Peak Hour Factor Light Trucks Medium Trucks Heavy Trucks % Trucks Stopped Buses Bicycles	Ea Right 0 NA 0 0 0 0 0 0 0 0 0 0 0 0 0	astbound Thru 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 49 4 7 8.1% 0 0 0 0 0 0	0 0 0 0 0 0 NA 0	We Right 2 0.25 	stbound Thru 1970 0.90 NA 1972 0.90 1973 0.90 25 4 1 1.5% 0 0 0 0 West	Left 0 N 0 0 0 0 0 0 0 0 NA 0	Norf Right 0 A N/ 	Thru 0 0 NA 0	0 0 0 0 0 0 0 NA 0	Right 3 0.38 N/ 0.38 N/ 1 0 0 33.3% 0 0 0	Thru 0 0 NA 0 NA 0 0 NA 0 0 0	0 	2719 0.94 76 8 8 3.4% 0 0
Movement Total Peak Hour Factor Enter Totals Peak Hour Factor Exit Totals Peak Hour Factor Light Trucks Medium Trucks Heavy Trucks % Trucks Stopped Buses	Ea Right 0 NA 0 0 0 0 0 0 0 0 0 0 0 0 0	astbound Thru 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 744 0.80 49 4 7 8.1% 0 0	0 0 0 0 0 0 NA 0	We Right 2 0.25 	stbound Thru 1970 0.90 NA 1972 0.90 1973 0.90 25 4 1 1.5% 0 0 0	Left 0 N 0 0 0 0 0 0 0 0 NA 0	Norf Right 0 A N/ 	Thru 0 0 NA 0 NA 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 NA 0	Right 3 0.38 N/ 0.38 N/ 1 0 0 33.3% 0 0 0	Thru 0 0 NA 0 NA 0 0 NA 0 0 0 NA 0 0 0 0 0 0 0 0 0 0 0 0 0	0 	2719 0.94 76 8 3.4% 0

TRAF STATS PO Box 1369 Salem, OR 97309 Salem, OR 97309 Fact (503) 526-6028 EUL D





Intersection Turning Movement Summary Report

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Location SUNNYSIDE AT SE 114TH CT Date 2/5/2008 Day of Week Tuesday Time Begin 16:00 Reviewed By: BV

I	Ea	stbound	I	w	estbound	1	No	thbound	- I	Sc	uthbound	T	
Time Period	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
16:00 - 16:15	0	460	0	2	396	0	0	0	0	0	0	0	858
16:15 - 16:30	0	496	0	1	360	0	0	0	0	1	0	0	858
<u> 16:30 - 16:45</u>	0	498	0	1	316	0	0	0	0	0	0	0	815
16:45 - 17:00	0]	500	0	1	312	0	0	0	0	0	0	0	813
17:00 - 17:15	0	593	0	3	299	0	0	0	0	2	0	0	897
17:15 - 17:30	0	577	0	1	356	0	0	0	0	1	0	0	935
17:30 - 17:45	0	594	0	2	289	0	0	0	0	1	0	0	886
17:45 - 18:00	0	579	0	2	319	0	0	0	0	1	0	0	901
Movement Totals	0	4297	0	13	2647	0	0	0	0	6	0	0	6963
Enter Totals		4297			2660			0			6		
Exit Totals		4297			2653			13			0		
Two-Hour Totals													
Light Trucks	0	23	0	0	52	0	0	0	0	0	0	0	75
Medium Trucks	0	0	0	0	1	0	0	0	0	0	0	0	1
Heavy Trucks	0	0	0	0	2	0	0	0	0	0	0	0	2
% Trucks	NA	0.5%	NA	0.0%	2.1%	NA	NA	NA	NA	0.0%	NA	NA	1.1%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	C
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0
		Couth			Mont			East			Morth		

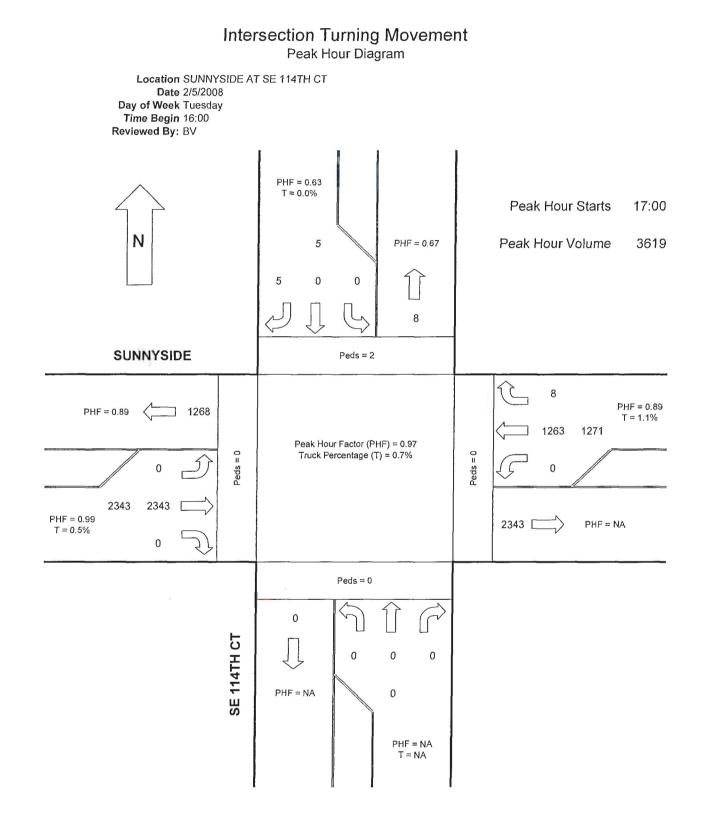
	South	West	East	North	
Pedestrians	0	0	0	4	

Peak Hour Information

Peak Hour 17:00 18:00

	E	astbound	(Ņ	estbound		No	orthbound		So	uthbour	nd	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Totals
Movement Total	0	2343	0	8	1263	0	0	0	0	5	0	0	3619
Peak Hour Factor	NA	0.99	NA	0.67	0.89 N	IA	NA	NA N	IA	0.63	NA	NA	0.97
Enter Totals		2242	r		1071						5	1	
		2343		_	1271			0					
Peak Hour Factor		0.99			0.89			NA			0.63		
Exit Totals		2343			1268			8			0		
Peak Hour Factor		0.99			0.89			0.67			NA		
Light Trucks		11	0	0	14	0	0	0	0	0	0	0	25
Medium Trucks		0	0	0	0	0	0	0	0	0	0	0	0
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	NA	0.5%	NA	0.0%	1.1%	NA	NA	NA	NA	0.0%	NA	NA	0.7%
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians		South 0			West 0			East 0			North 2		2
Pedesinans		0			U			U			2		2





General Info					HCS	S+™ I	DET	AILE	DRE	_							
	ormation								Site I								
Analyst Agency or Co Date Perform	CS to. Lancaster med 6/6/2011								Inters Area Jurisc	Гуре iction		All oth Clack		h			
Time Period	AM Peak								Analy Projec		ear		ng (2011) / View Chu 35	ırch ZC) -		
Volume and	Timing Input			-													
					EB				WB				NB			SB	
			LT		TH	RT		LT	TH		RT	LT	TH	RT	LT	TH	RT
Number of La	anes, N1		1		3	0		1	3	0)	1	1	0	1	1	0
Lane Group	1.5		L	-	TR	-		L	TR			L	TR		L	TR	50
Volume, V (v			29		656	7		2	2052		8	4	0	0	31	0	58
% Heavy Vel Peak-Hour F			7 0.88		7 0.88	7		2 88	2	0.8		25 0.88	2	2	6 0.88	6 0.88	6 0.88
and the second se	or Actuated (A)		0.88 A		A.	0.88 A		88 A	0.88 A	0.8 A		0.88 A	0.88 A	0.88 A	0.88 A	0.80 A	0.88 A
Start-up Lost			2.0	-+	2.0	A		.0	2.0	A		2.0	2.0	1	2.0	2.0	A
	Effective Green	e	2.0		2.0			.0	2.0			2.0	2.0	-	2.0	2.0	
Arrival Type,			3	+	3			3	3	-		3	3		3	3	1
Unit Extensio			3.0		3.0			.0	3.0			3.0	3.0		3.0	3.0	
Filtering/Mete			1.00		1.000			000	1.000)		1.000			1.000	1.000	
Initial Unmet	Demand, Qb		0.0		0.0		0	.0	0.0			0.0	0.0		0.0	0.0	
Ped / Bike / F	RTOR Volumes		7		1	0		1	1	0)	0	0	0	0	0	0
Lane Width			12.0		12.0		1:	2.0	12.0			12.0	12.0		12.0	12.0	
Parking / Gra	ade / Parking		N		0	N		V	0	A	1	N	0	N	N	0	N
Parking Man	euvers, Nm					-											
Buses Stoppi	ing, Nв		0		1			0	1			0	0		0	0	
Min. Time for	r Pedestrians, G	р			3.2				3.2				3.2			3.2	
Phasing	Excl. Left	EB	Only		Thru &			04		NS	Perr	n	06		07	0	8
Timing	G = 6.0	G =			G = 5		G			G =			G =	G		G =	
	Y = 4	Y =	0		Y = 4	.5	Y	=		Y =	4.5		Y =	Y		Y =	
	nalysis, $T = 0.2$	_				-1 -10-0000						1	Cycle Leng	gth, C =	= 80.0		
Lane Group	Capacity, Cont	rol D	elay,			Deter	mina		14/5				NID		-		-2-1
		-	T		B	эт	LT		WB	DT		LT	NB TH	RT	LT	SB TH	RT
Adjusted Flow	W Pato W			-		RT			TH	RT	-			RI			RI
		-	33	75			2		341	_		5	0		35	66	
	Capacity, c						133	1 3	165			136	233		90	191	
Lane Group (2	32	30	74			10	105			-					1
		0.1		30: 0.2			0.02		.74		0	0.04	0.00		0.39	0.35	
v/c Ratio, X Total Green F			14	0.2 0.6	4			0				0.04 0.13	0.13		0.39 0.13	0.13	
Lane Group (v/c Ratio, X Total Green F Uniform Dela		0.1	14 14	0.2	4		0.02	0	.74		C						
v/c Ratio, X Total Green F Uniform Dela	iy, d ₁	0.1 0.1 30	14 14	0.2 0.6	4		0.02 0.08	0 0 1	.74 .63		3	0.13	0.13		0.13	0.13	
v/c Ratio, X Total Green F Uniform Dela Progression F	iy, d ₁ Factor, PF	0.1 0.1 30	14 14 .3 000	0.2 0.6 6.2	4		0.02 0.08 34.3	0 0 1 0 1	.74 .63 0.5		0 3 1	0.13 80.8	0.13 30.6		0.13 32.2	0.13 32.0	
v/c Ratio, X Total Green F Uniform Dela Progression F Delay Calibra Incremental D	Factor, PF ation, k Delay, d ₂	0.1 0.1 30 1.0	14 14 .3 000	0.24 0.64 6.2 1.0	4 4 2 00 1		0.02 0.08 34.3 1.00	0 0 1 0 1 0	.74 .63 0.5 .000		0 3 1 0	0.13 80.8 1.000	0.13 30.6 1.000		0.13 32.2 1.000	0.13 32.0 1.000	
v/c Ratio, X Total Green F Uniform Dela Progression F Delay Calibra Incremental D	Factor, PF ation, k Delay, d ₂	0.1 0.1 30 1.0	14 14 .3 000 11	0.2 0.6 6.2 1.0 0.1	4 4 000 1 00		0.02 0.08 34.3 1.00 0.11	0 0 1 0 1 0	.74 .63 0.5 .000 .30		0 3 1 0	0.13 80.8 1.000 0.11	0.13 30.6 1.000 0.11		0.13 32.2 1.000 0.11	0.13 32.0 1.000 0.11	
v/c Ratio, X Total Green F Uniform Dela Progression F Delay Calibra Incremental D Initial Queue	y, d ₁ Factor, PF ation, k Delay, d ₂ Delay, d ₃	0.1 0.1 30 1.0 0.1 0 0.1	14 14 .3 000 11	0.2 0.6 6.2 1.0 0.1	4 4 000 1 00		0.02 0.08 34.3 1.00 0.11 0.0	0 0 1 0 1 0 0	.74 .63 0.5 .000 .30 1.0		0 3 1 0	0.13 80.8 7.000 0.11 0.1	0.13 30.6 1.000 0.11 0.0		0.13 32.2 1.000 0.11 2.8	0.13 32.0 1.000 0.11 1.1	
v/c Ratio, X Total Green F Uniform Dela Progression F Delay Calibra Incremental D Initial Queue Control Delay	y, d ₁ Factor, PF ation, k Delay, d ₂ Delay, d ₃	0.1 0.1 30 1.0 0.1 0 0.1	14 14 .3 000 11 .3 0 0.6	0.24 0.64 6.2 1.04 0.1 0.1	4 4 000 1 00		0.02 0.08 34.3 1.00 0.11 0.0 0.0	0 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.74 .63 .000 .30 1.0 0.0			0.13 00.8 0.000 0.11 0.1 0.0	0.13 30.6 1.000 0.11 0.0 0.0		0.13 32.2 1.000 0.11 2.8 0.0	0.13 32.0 1.000 0.11 1.1 0.0	
v/c Ratio, X Total Green F	py, d_1 Factor, PF ation, k Delay, d_2 Delay, d_3 / _OS	0.1 30 1.0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.0 0 0 0.0 0 0 0.0 0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 14 .3 000 11 .3 0 0.6	0.24 0.6 6.2 1.0 0.1 0.1 0.0 6.4	4 4 000 1 00		0.02 0.08 34.3 1.00 0.11 0.0 0.0 34.3	0 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.74 .63 0.5 .000 .30 1.0 0.0 1.4 B			0.13 00.8 0.000 0.11 0.1 0.0 30.9 C	0.13 30.6 1.000 0.11 0.0 0.0 30.6		0.13 32.2 1.000 0.11 2.8 0.0 35.0 C	0.13 32.0 1.000 0.11 1.1 0.0 33.1	
v/c Ratio, X Total Green F Uniform Dela Progression F Delay Calibra Incremental D Initial Queue Control Delay Lane Group L	y, d ₁ Factor, PF ation, k Delay, d ₂ Delay, d ₃ / _OS	0.1 30 1.0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.1 0 0 0.0 0 0 0.0 0 0 0.0 0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 14 2000 11 2.3 0 2.6	0.24 0.64 6.2 1.00 0.1 0.0 6.4 A	4 4 000 1 00		0.02 0.08 34.3 1.00 0.11 0.0 0.0 34.3	0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.74 .63 0.5 .000 .30 1.0 0.0 1.4 B			0.13 80.8 .000 0.11 0.1 0.0 30.9 C 30.9	0.13 30.6 1.000 0.11 0.0 0.0 30.6 C		0.13 32.2 1.000 0.11 2.8 0.0 35.0 C	0.13 32.0 1.000 0.11 1.1 0.0 33.1 C	

HCS+TM Version 5.3

Generated: 12/2/2011 11:36 AM

					HC	S+™	DETA	ILE			_							
General Info Analyst Agency or Co Date Perform Time Period	CS o. Lancaster ned 6/6/2011								Site Inters Area Juriso Analy Proje	Type dictic	on e on rear	Suni All o Clac Exis	ther kan ting ey V	de/117t areas nas (2011) ïew Chu		-		
Volume and	Timing Input				and the second			1				The second						
					EB				WB					NB			SB	
			LT		TH	R		T	TH	-	RT	LI	-	TH	RT	LT	TH	R
Number of La	anes, N1		1		3	0		1	3	-+-	0	1		1	0	1	1	0
Lane Group	us la l		L		TR	-			TR	-	AE	L		TR	1	L 70	TR	06
Volume, V (v			72	+	1949 1	2	- 2	19	136-	+	45 2	9	-	1 9	1	79 2	2	26
% Heavy Ver Peak-Hour F			0.97		0.97	0.97			0.97		2.97	0.97	7	0.97	0.97	0.97	0.97	0.97
the second se	or Actuated (A)		0.97 A	-	A	0.97 A	- 0.3 - A		A		A	0.97 A		0.97 A	0.97 A	0.97 A	0.97 A	0.97 A
Start-up Lost			2.0	-	2.0	A	2.		2.0	-	A	2.0	-	2.0	1	2.0	2.0	A
	Effective Green	e	2.0		2.0	1-	2.		2.0	-		2.0		2.0		2.0	2.0	1
Arrival Type,	the second secon	, 0	3	-+	3	-	3		3	+		3		3		3	3	
Unit Extensio			3.0	-	3.0	1	3.		3.0	-		3.0		3.0		3.0	3.0	
Filtering/Mete			1.00		1.000	-		000	1.00	0		1.00	00	1.000		1.000	1.000	-
Initial Unmet			0.0		0.0	1	0.		0.0			0.0		0.0		0.0	0.0	
	RTOR Volumes	-	20		13	0	1.	_	1		0	0		0	0	3	0	0
Lane Width			12.0		12.0		12		12.0	1		12.0)	12.0		12.0	12.0	
Parking / Gra	de / Parking		N		0	N	Λ	1	0		N	N		0	N	N	0	N
Parking Mane									1							1		
Buses Stoppi			0		1		0	,	1		_	0		0		0	0	
	Pedestrians, G	p		-	3.3	1			3.3					3.2			3.2	
Phasing	Excl. Left		Only	1	Thru &	RT		04		NS	S Per	m		06		07	0	8
	G = 5.0	G =			G = 6	-	G=	=			= 10.		G=		G=		G =	
Timing	Y = 4	Y =	0		Y = 4	.5	Y =	:		Y =	4.5	;	Y =		Y =		Y =	
Duration of A	nalysis, $T = 0.23$	5											Cyc	le Leng	th, C =	90.0		
Lane Group	C. pacity, Cont	trol D	elay,	and	LOS	Deter	minati		N. Sector		4.12		New York					and the second
			_	E					WB					NB			SB	
			T	Th		RT	LT		TH	R	Г	LT	_	TH	RT	LT	TH	RT
Adjusted Flov	v Rate, v	7	74	201	11		20	1	452			9		2		81	27	
Lane Group C	Capacity. c	1	99	352	25		98	3	415			142	1	179		157	175	
v/c Ratio, X										-			-					
	2.11. 12	0.3		0.57			0.20	-	43			0.06	-	01		0.52	0.15	-
Total Green F		0.1		0.69			0.06		68		-	0.11		11		0.11	0.11	
Uniform Delay		37		7.2			40.6	-	.6		-	35.8	-	5.6		37.7	36.2	
Progression F			000	1.00			1.000		000			1.000		000		1.000	1.000	
Delay Calibra		0.1		0.16			0.11	-	11		-	0.11	-	11		0.12	0.11	
ncremental D	2		.2	0.2			1.0		0.1		_	0.2		0.0		3.0	0.4	
nitial Queue		0.		0.0			0.0	0	.0			0.0	0	.0		0.0	0.0	
Control Delay		38	3.3	7.4	1		41.6	e	5.6			36.0	3	5.6		40.7	36.6	
	.0S	D)	A			D	A	4			D	1			D	D	
ane Group L			8.5	5				7.1				3	5.9			3	39.6	
ane Group L								-										
			A					Α					D				D	

0			Carles al	HILL BEATHIN	100	COLOR B	COLUMN THE REAL		DRE	or state many set local of		all the special of	1000	and the second of			And the second second	The second second
General Info Analyst Agency or Co Date Perform Time Period	CS 5. Lancaster								Site II Inters Area Jurisd Analys	ection Type iction		Suni All o Clac Back	ther kam kgro	und (20	25)			
									Projec	t ID		Valle #110		iew Chu	irch ZC	-		
Volume and	Timing Input			a long in	New P							STOP!					The second	
				E			_		WB					NB			SB	T
Number of Le	Non Ni		LT	T	1	RT		.T	TH					TH 1	RT	LT	TH	RT
Number of La Lane Group	ines, N1		1 L	3 TR		0	1		3 TR	0		1 L		TR	0	1 L	1 TR	0
Volume, V (v	ob)		54	12		7		2	3802	1	5	4		0	0	57	0	107
% Heavy Ver			7	7	3	7	2	_	2	2		25		2	2	6	6	6
Peak-Hour Fa			1.00		2 1	1.00	1.0		1.00	1.0		1.00)	1.00	1.00	1.00	1.00	1.00
	or Actuated (A)	A	A		A	A		A	A	_	A		A	A	A	A	A
Start-up Lost		<u>-</u>	2.0	2.0			2.0		2.0			2.0		2.0		2.0	2.0	1
	Effective Green	n, e	2.0	2.0			2.0		2.0			2.0	-	2.0		2.0	2.0	1
Arrival Type,	AT		3	3			3		3			3		3		3	3	
Unit Extensio			3.0	3.0			3.0		3.0			3.0		3.0		3.0	3.0	
Filtering/Mete			1.00					000	1.000)		1.00		1.000		1.000	1.000	
Initial Unmet			0.0	0.0			0.0		0.0			0.0		0.0		0.0	0.0	
	TOR Volumes		7	1		0	1		1	0		0		0	0	0	0	15
Lane Width			12.0	12.0	2		12.	-	12.0			12.0)	12.0		12.0	12.0	
Parking / Gra			N	0		N	N		0	N		N		0	N	N	0	N
Parking Mane	and the second s											-			ļ			ļ
Buses Stoppi			0	1			0		1			0		0	1	0	0	
	Pedestrians, C			3.					3.2			<u> </u>		3.2		<u> </u>	3.2	
Phasing	Excl. Left		Only		ru & I			04		NS F				06		07		8
Timing	G = 4.0 Y = 4	G =			= 91. = 4.5		G =			G = 4			G = Y =		G =		G = Y =	
Duration of A	nalysis, T = 0.2		0	Y -	- 4.5)	1 - 1			1 = 2	4.5			le Lenc			1 =	
	Capacity, Con		olav	andI		otor	minati	on			1	Research	Cyt	Je Leng	<u>, , , , , , , , , , , , , , , , , , , </u>	120.0		
Lane Group	capacity, con		eray,	EB	500	elen	linau		WB		T	A BALLAN	10.14.68	NB			SB	5-21-31-35-39
		L	.т	TH	R	Т	LT		TH	RT		LT		TH	RT	LT	TH	RT
Adjusted Flow	/ Rate, v		54	1226			2		817			4		0		57	92	
_ane Group C			27	3700	-		59		840		+	85	-	171		60	140	
v/c Ratio, X		0.4		0.33	1		0.03		99		0	0.05		.00		0.95	0.66	
Total Green F	Ratio, g/C	0.0		0.77	-		0.03	_	76			0.09		09		0.09	0.09	
Jniform Delay		53.		4.4			56.1		4.2			9.7		9.5		54.2	52.7	
Progression F	actor, PF	1.0	000	1.000			1.000	1.	000		1	.000		000		1.000	1.000	
Delay Calibrat	tion, k	0.1	1	0.11	<u> </u>		0.11	0.	50		C	0.11	0.	11		0.46	0.23	
ncremental D	elay, d ₂	2	.3	0.1			0.2	1.	3.1			0.2	1	0.0		98.1	10.7	
nitial Queue I	Delay, d ₃	0.0	0	0.0			0.0	0.	.0		(0.0	C	0.0		0.0	0.0	
Control Delay		55	5.3	4.4			56.4	2	7.4		4	49.9	4	9.5		152.3	63.4	
Lane Group L	OS	E		Α			Е	(0			D		D		F	E	
Approach Del	ay		6.6	5				27.4				4	9.9			9	97.4	
Approach LOS	S		A					С					D]	F	
ntersection D	elay		24.	3			X	= 0.9	94		Ī	nterse	ectio	n LOS			С	
	niversity of Florida,	All Right					°C			CS+TM				1200		Generated:		11:43

HCS+TM Version 5.3

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and the second se					HC	S+™	DE	TAIL						_						
General Info Analyst Agency or Co Date Perform Time Period	CS o. Lancaster									Site I Inters Area Jurisc Analy Projec	ecti Typ licti sis	ion be on Year	Sur All d Cla Bad	othe cka kgr ley	side/117ti er areas mas ound (20 View Chu 5	25)		-		-
Volume and	Timing Input					6					227									-
					EB					WB					NB	_			SB	
			LT		TH	R	-	LT		TH	_	RT	L		TH	-	RT	LT	TH	R
Number of La	anes, N1		1	_	3	0		1	_	3		0	1		1	1	0	1	1	0
Lane Group			L	-	TR	-		L		TR					TR	-	-	L	TR	1
Volume, V (v % Heavy Vel			13:	5	3609	2		35	-	2526	2	83	6	_	9	-	1	146	0	48
Peak-Hour F			1.00		1 1.00	1.00		2	-	2		2	9		1.00	_	00	2	2	1.00
and the second se	or Actuated (A)	A		A	A		A	-	7.00 A	-	A	1.0 A	_	A	-	4	A	A	A
Start-up Lost		/	2.0		2.0	1		2.0		2.0	-		2.0	_	2.0	ť		2.0	2.0	1
the second se	Effective Green	n, e	2.0		2.0	1		2.0	-	2.0	1		2.0	_	2.0	1		2.0	2.0	1
Arrival Type,	the second se	1-	3		3		-	3		3	-		3		3	1		3	3	
Unit Extensio			3.0	Í	3.0			3.0		3.0			3.0		3.0			3.0	3.0	
Filtering/Mete	ering, I		1.00	0	1.000			1.000	0	1.000)		1.0	00	1.000			1.000	1.000	
Initial Unmet	Demand, Qb		0.0		0.0			0.0		0.0			0.0)	0.0			0.0	0.0	
Ped / Bike / F	RTOR Volumes	-	20		13	0		14		1		0	0		0	0)	3	0	0
Lane Width			12.0		12.0			12.0	_	12.0	_		12.	0	12.0			12.0	12.0	-
Parking / Gra	CONTRACT CONTRACTOR		N	_	0	N		N		0		N	N		0	Λ	V	N	0	N
Parking Mane							-							_						
Buses Stoppi			0		1			0		1			0)	0			0	0	
The second s	Pedestrians, C	Contract of Contra			3.4		_			3.3		_			3.2			1	3.2	
Phasing	Excl. Left		Only		Thru &			0.	4			S Pe			06			07		8
Timing	G = 4.0	G =		_	G = 8		_	G =				= 15		G			G =		G =	
	Y = 4	Y =	0		Y = 4	.5		Y =			Y :	= 4.5	i	Y			Y =		Y =	
the second s	nalysis, $T = 0.2$	A REAL PROPERTY AND A REAL	and the second second			andreas an entre				the second states			1-11 - 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Cy	cle Leng	th,	C =	120.0	-410 6.0 4.0	provine claime
Lane Group	Capacity, Con	trol D	elay,			Deter	mir	nation		A/D	-				NID			1	00	-
			Т	T	B	RT	+	LT		WB H	R	T	LT	Т	NB TH	R	т	LT	SB TH	RT
Adjusted Flov	v Rate v	_	33	36		<u>.</u>		35	-	09	IN		9	-	2	N	1	146	48	
							-							-				-		
Lane Group C	Capacity, c	1	64	37	52		E	59	35	69			157		202			176	197	
v/c Ratio, X		0.0	81	0.9	6		0.5	59	0.7	73			0.06	0	0.01			0.83	0.24	
Total Green F	Ratio, g/C	0.0	09	0.7					0.7				0.13	0	0.13			0.13	0.13	
Jniform Delay	y, d ₁	53	.5	14.	5		57	.2	10.	6			46.3	4	46.0			51.3	47.4	
Progression F			000	1.0						000			1.000	-+-	1.000	_		1.000	1.000	
Delay Calibra		0.3		0.4					0.2				0.11		0.11			0.37	0.11	
ncremental D			5.5	7.			-	5.0	0.				0.2	+	0.0			27.0	0.6	
nitial Queue I	2	0.		0.0			0.		0.0			-	0.0	-	0.0			0.0	0.0	
Control Delay			9.0	22			-	2.2	11		_		46.4	-	46.0			78.3	48.0	
		E		C			E		B		-		D	+	D			E	D	
							-					\rightarrow		46.3					0.8	
ane Group L	av		24	4				12	1				4							
ane Group L		_	24.				-	12. B		_										
ane Group L Approach Del Approach LOS ntersection D	S		24. C 20.					$\frac{12}{B}$ $X{c} = 0$	}	2				D	on LOS				E C	

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0		A STATE OF CO	CONTRACTOR AND	Н	-3+	DE	ETAILE	-		-		Contractor	C. T. Transmitter	11111	Defection	C. C		
Date Perform	CS 5. Lancaster ned 6/6/2011							Site I Inters Area Juriso Analy	ectio Type lictior	n n	Sun All o Clac	the kar	ide/117th r areas nas Net Incre		e (20)25)		
Time Period	AM Peak							Proje		Cui		∋y \	liew Chu					
Volume and	Timing Input		1972.03								(fore)e							New Mark
				EB				WB			-		NB				SB	
Number	N.				R	Γ	LT	TH		RT		Γ	TH	-	<u> </u>	LT	TH	RT
Number of La Lane Group	anes, N1		1 L	3 <i>TR</i>	0		1 L	3 TR		0	1 L		1 TR)	1 L	 	0
Volume, V (v			61	1219	7		2	3802	<u>, </u>	18	4		0	-	0	60	0	116
% Heavy Ver			7	7	7	-	2	2		2	25		2	2	-	6	6	6
Peak-Hour Fa			1.00	1.00	1.00	2	1.00	1.00	_	.00	1.00		1.00	1.0		1.00	1.00	1.00
	or Actuated (A)		A	A	A		A	A		A	A		A	1		A	A	A
Start-up Lost			2.0	2.0			2.0	2.0			2.0	1	2.0	1		2.0	2.0	1
	Effective Green	i, e	2.0	2.0			2.0	2.0			2.0		2.0	1		2.0	2.0	
Arrival Type,			3	3			3	3			3		3			3	3	
Unit Extensio			3.0	3.0			3.0	3.0			3.0		3.0			3.0	3.0	
Filtering/Mete			1.000	-)		1.000	1.000	2		1.00	_	1.000			1.000	1.000	
Initial Unmet			0.0	0.0			0.0	0.0			0.0		0.0			0.0	0.0	
	TOR Volumes	-	7	1	0		1	1		0	0		0	0)	0	0	15
Lane Width			12.0	12.0			12.0	12.0			12.0	2	12.0	<u> </u>		12.0	12.0	
Parking / Gra			N	0	N		N	0	/	V	N		0	Λ	J	N	0	N
Parking Mane														<u> </u>				
Buses Stoppi			0	1			0	1			0		0	l		0	0	1
	Pedestrians, G	1		3.3]	3.2					3.2				3.2	
Phasing	Excl. Left		Only		1 & RT		04			Per		0	06			07		8
Timing	G = 3.0 Y = 4	G = Y =		Y =	91.0	_	G = Y =			12.		G Y:			G = Y =		G =	
Duration of A	nalysis, $T = 0.2$		0	1-	4.0		1 -		1 -	4.0		-	cle Leng	th		120.0	1	<u>.</u>
	Capacity, Con		elav a	andLOS		mi	nation				26. 254 34	<u></u>	CIC LONG			120.0		
	cupucity, com		ciuj,	EB	Deter	T	nation	WB			CAMP CONTRACT	1.	NB				SB	
		I	T	TH	RT		LT	TH	RT		LT		TH	R	T.	LT	TH	RT
Adjusted Flow	v Rate, v	6	51	1226		T	2 3	3820		T	4	T	0			60	101	
Lane Group C	Capacity, c	1	12	3700			44 3	3839		-+	88	-	186			60	152	
v/c Ratio, X										-								
Total Green F	Ratio, g/C	0.8		0.33 0.77		+		0.76			0.05 0.10	-	0.00 0.10			1.00 0.10	0.66 0.10	
Uniform Delay	-	54		4.4				4.3			48.8		48.6			54.0	52.1	
Progression F		-		1.000		_		.000			1.000		1.000			1.000	1.000	
Delay Calibrat	tion, k	0.1		0.11				0.50			0.11	C	0.11			0.50	0.24	
Incremental D	oelay, d ₂	5	.4	0.1		1	0.4	13.4			0.2		0.0			116.2	10.5	
Initial Queue I	-	0.	0	0.0		0	0.0 (0.0			0.0		0.0			0.0	0.0	
Control Delay		59	9.7	4.4		5	57.5	27.6			49.0		48.6			170.2	62.5	
Lane Group L	OS	E	-	A			E	С			D		D			F	Е	
	01/		7.0				27.7	7			4	19.0)			1	02.6	
Approach Del	ay					_												
			A				С					D					F	

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General Info Analyst Agency or Co Date Perform	CS 5. Lancaster								il A J	Site i nters Area Iuriso	ecti Typ licti	ion ie on	Sul All Cla	oth ick	/side/117t ber areas amas					
Time Period	PM Peak									Analy Projec				lley	+ Net Incr View Chu 35					
Volume and	Timing Input							and and the set		Sec. 19			Store P					El altra la	的新闻和高利用	Section of
			L		EB	1				WB				_	NB				SB	
Number	N.		LT	_	TH	R	_	LT	_	TH	-	RT		T	TH		NT	LT	TH	RT
Number of La	ines, N1		1 L		3 TR	0		1		3 TR		0	1	_	$\frac{1}{TR}$	0		1	1 TR	0
Lane Group Volume, V (vr			144		3612	2		L 35		2527	-	89	L	9	1	+	1	L 152	0	55
% Heavy Veh			1	* +	1	1		2	-+	2	+	2	9	-		9		2	2	2
Peak-Hour Fa			1.00	, ,	1.00	1.00)	1.00	-	1.00	- 1	1.00	1.0		1.00	1.0		1.00	1.00	1.00
	or Actuated (A)	A		A	A		A	-+	A		A	- 1.C		A	A		A	A	A
Start-up Lost		/	2.0	\neg	2.0			2.0	-	2.0	-+		2.		2.0	1		2.0	2.0	1
	Effective Gree	n, e	2.0		2.0	<u> </u>		2.0	_	2.0			2.		2.0	1		2.0	2.0	1
Arrival Type,			3		3			3		3			3		3	1		3	3	
Unit Extension			3.0		3.0	1		3.0		3.0			3.		3.0	1		3.0	3.0	
Filtering/Mete			1.00		1.000			1.000	_	1.000	,		1.0					1.000	1.000	
Initial Unmet I			0.0		0.0			0.0	-	0.0			0.		0.0			0.0	0.0	
	TOR Volumes		20		13	0		14		1	1	0	0		0	0		3	0	0
Lane Width			12.0		12.0			12.0	1	12.0			12	0	12.0			12.0	12.0	
Parking / Grad	de / Parking		N		0	N		N		0		N	Λ		0	N		N	0	N
Parking Mane	uvers, Nm																			
Buses Stoppin	ng, Nв		0		1			0		1			(2	0			0	0	
Min. Time for	Pedestrians, C	Эp			3.4					3.3				_	3.2				3.2	
Phasing	Excl. Left	EB	Only		Thru 8	RT		04	4		N	S Pe	rm		06			07	0	8
Timing	G = 4.0	G =	4.0		G = 8			G =			G	= 16	.0	0	3 =		G =		G =	
	Y = 4	Y =	0		Y = 4	5		Y =			Y =	= 4.5	5	Y	-		Y =		Y =	
Duration of Ar	halysis, $T = 0.2$	25				-								C	Cycle Leng	th, (C =	120.0		
Lane Group	Capacity, Con	trol D	elay,	and	LOSE	Deter	miı	nation			(TAL)					- Maria			V. S. C. LAN	
				-	B		\vdash		W						NB				SB	
			<u>_T</u>	TH		<u> </u>	+	LT	TH		R	<u> </u>	LT		TH	RT		LT	TH	RT
Adjusted Flow	Rate, v	1	44	36	14			35	261	16			9		2			152	55	
_ane Group C	apacity, c	1	79	37	10			59	348	83			167		215			188	210	
//c Ratio, X		0.	80	0.97	7		0.	59	0.75	5			0.05		0.01			0.81	0.26	
Fotal Green R	atio, g/C	0.	10	0.7:	3		0.	03	0.69	9			0.13		0.13			0.13	0.13	
Jniform Delay	, d ₁	52	.9	15.4	4		57	7.2	11.9	9			45.4		45.1			50.5	46.7	
Progression F	actor, PF	1.0	000	1.00	00		1.	000	1.00	00			1.000		1.000			1.000	1.000	
Delay Calibrat	ion, k	0.3	35	0.48	3		0.	18 (0.31	1			0.11		0.11			0.35	0.11	
ncremental D	elay, d ₂	2	2.8	9.6	5		1:	5.0	0.9	9			0.1		0.0			22.5	0.7	
nitial Queue D	Delay, d ₃	0.	0	0.0			0.	0	0.0)			0.0		0.0			0.0	0.0	
Control Delay		7	5.7	25.	1		7	2.2	12.	8			45.5		45.1			73.0	47.4	
ane Group L	OS	E		С			E	Ĩ	В				D		D			E	D	
pproach Dela	ay		27.	0				13.	6					45.	5			6	6.2	
Approach LOS	3		С					В						D					E	
ntersection De	elay		22.	9				$X_{c} = 0$.94				Inters	ec	tion LOS	· · ·			С	
			ts Rese	_			1	U					reion E					enerated'		

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0					and the second		
General Information				ormation		And States	
Analyst	JEC		Intersecti		Sunnysic		
Agency/Co.		r Engineering	Jurisdictio		Clackam	as	
Date Performed	12/1/201		Analysis	Year	2011		
Analysis Time Period	AM Peak			,			
Project Description Va East/West Street: SE S	Illey View Chur	ch Zone Change	North/Co.	th Street: SE 1	1 Ath Court		
Intersection Orientation:				find (hrs): 0.25	14th Coun		
Setting and the setting of the setti	C. A BORNET CONTRACTOR DESCRIPTION			100 (1113). 0.23	and the second second second		
Vehicle Volumes ar	nd Adjustme		and a final answer of the) A /a atla at	(1997) - Bina	1.426.94
Major Street	1	Eastbound	3		Westbou		6
Novement		2 T	R	4	5 T		R
Volume (veh/h)	L	464	, <u> </u>	<u>L</u>	1415		2
Peak-Hour Factor, PHF	1.00	0.94	1.00	1.00	0.94		0.94
Hourly Flow Rate, HFR (veh/h)	0	493	0	0	1505		2
Percent Heavy Vehicles	0			0			
Median Type			Ra	ised curb		· · · · · · · ·	
RT Channelized			0				0
Lanes	0	2	0	0	2		0
Configuration		T			T		TR
Upstream Signal		0			0		
Minor Street		Northbound			Southbou	und	
Movement	7	8	9	10	11		12
	L	Т	R	L	T		R
Volume (veh/h)							3
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00		0.94
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0		3
Percent Heavy Vehicles	0	0	0	0	0		0
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0				0
Lanes	0	0	0	0	0		1
Configuration							R
Delay, Queue Length, a	nd Level of Se	rvice		and the second			
Approach	Eastbound	Westbound	Nor	thbound	S	outhbound	d
Novement	1	4	7	8 9	10	11	12
ane Configuration					-		R
/ (veh/h)	ł			ł			3
C (m) (veh/h)		·		ł			412
						· · · ·	0.01
//C							
95% queue length							0.02
Control Delay (s/veh)							13.8
OS							B
Approach Delay (s/veh)				- <u></u>		13.8	
Approach LOS						В	

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	TM	O-WAY STOP	CONTROLS	SUMMARY			
General Informatio	n	and a stand of the	Site Infor	mation	Non and a support of the		Phone - Se Serve Serve
Analyst Agency/Co. Date Performed Analysis Time Period	JEC Lancaste 12/1/201 PM Peal		Intersection Jurisdiction Analysis Ye		Sunnyside Clackamas 2011		
Project Description Va							
East/West Street: SE S		d		Street: SE 11	4th Court		
Intersection Orientation:			Istudy Period	(hrs): 0.25		1. Margin 4. (1. 1	
Vehicle Volumes a	nd Adjustm		19 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -	1			
Major Street		Eastbound			Westboun	<u>d</u>	
Movement	1 L	2 T	3 R	4 L	5 T		6 R
Volume (veh/h)		1355	K		932		8
Peak-Hour Factor, PHF	1.00	0.97	1.00	1.00	0.97		0.97
Hourly Flow Rate, HFR (veh/h)	0	1396	0	0	960		8
Percent Heavy Vehicles	0			0			
Median Type			Raise	d curb			
RT Channelized			. 0				0
Lanes	0	2	0	0	2		0
Configuration		T			Т		TR
Upstream Signal		0	1		0		
Minor Street		Northbound			Southboun	d	
Movement	7	8	9	10	11	_	12
	L	Т	R	L	Т		R
Volume (veh/h)							5
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00		0.97
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0		5
Percent Heavy Vehicles	0	0	0	0	0		0
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0				0
Lanes	0	0	0	0	0		1
Configuration							R
Delay, Queue Length, a							
Approach	Eastbound	Westbound	Northb		Sou	thbound	
Movement	1	4	7 8	9	10	11	12
Lane Configuration							R
v (veh/h)		[[[5
C (m) (veh/h)							587
//c							0.01
95% queue length							0.03
Control Delay (s/veh)	·····						11.2
OS							B
Approach Delay (s/veh)						11.2	
Approach LOS						B	
	vrida All Pighte Res		LICS. TM		L	D ad: 12/2/20	

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		0-WAT 0101	CONTROL S			the second second second second
General Information	n		Site Infor	nation	The last scale	
Analyst	JEC		Intersection		Sunnyside/1	14th
Agency/Co.		r Engineering	Jurisdiction		Clackamas	
Date Performed	12/1/201		Analysis Ye	ar	2025	
Analysis Time Period	AM Peak					
Project Description Va	lley View Chur	ch Zone Change				
East/West Street: SE S				Street: SE 11	4th Court	······
Intersection Orientation:	East-West		Study Period	l (hrs): 0.25		
Vehicle Volumes ar	nd Adjustme					States and States
Major Street		Eastbound	1		Westbound	
Movement	1	2	3	4	5 T	6
Valuma (uch/h)	L	T	R	L		R 2
Volume (veh/h) Peak-Hour Factor, PHF	1.00	858 0.94	1.00	1.00	2619 0.94	0.94
Hourly Flow Rate, HFR						
(veh/h)	0	912	0	0	2786	2
Percent Heavy Vehicles	0			0		
Median Type			Raise	d curb		
RT Channelized	3 33 5 55		0			0
Lanes	0	2	0	0	2	0
Configuration		Т			Т	TR
Upstream Signal		0			0	
Minor Street		Northbound			Southbound	
Movement	7	8	9	10	11	12
	L	Т	R	L	Т	R
Volume (veh/h)						3
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	0.94
Hourly Flow Rate, HFR	0	0	0	0	0	3
(veh/h) Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)			0	0	0	0
		0				
Flared Approach		<u>N</u>			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	1
Configuration						<i>R</i>
Delay, Queue Length, a						L. Mitter Mitter
Approach	Eastbound	Westbound	Northb			hbound
Vlovement	1	4	7 8	9	10	11 12
ane Configuration						R
/ (veh/h)		ĺ	[3
C (m) (veh/h)	P	ł	l l			175
//c						0.02
95% queue length						0.05
Control Delay (s/veh)						25.9
-OS					+	D
Approach Delay (s/veh)					2	25.9
Approach LOS			-			D

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	TWO	-WAY STOP	CONTROL S	UMMARY		
General Information			Site Infor	mation	the second second	
Analyst Agency/Co. Date Performed Analysis Time Period	JEC Lancaster I 12/1/2011 PM Peak H	Engineering Iour	Intersection Jurisdiction Analysis Ye		Sunnyside/1 Clackamas 2025	14th
Project Description Valle		Zone Change				
East/West Street: SE Sur				Street: SE 11	4th Court	
Intersection Orientation:			Study Period	(hrs): 0.25		
Vehicle Volumes and	Acjustme					A. B. Barris
Major Street	4	Eastbound	1 0		Westbound	1
Movement	1	2 T	3 R	4 L	5 T	6 R
Volume (veh/h)	L	2508	<u> </u>		1725	8
Peak-Hour Factor, PHF	1.00	0.97	1.00	1.00	0.97	0.97
Hourly Flow Rate, HFR (veh/h)	0	2585	0	0	1778	8
Percent Heavy Vehicles	0			0		
Median Type			Raise	d curb		
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration		Т			Т	TR
Upstream Signal		0			0	
Minor Street		Northbound			Southbound	
Movement	7	8	9	10	11	12
	L	Т	R	L	Т	R
Volume (veh/h)						5
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	0.97
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0	5
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	1
Configuration						R
Delay, Queue Length, and						
	astbound	Westbound	Northb			bound
Novement	1	4	7 8	9	10	11 12
ane Configuration						R
/ (veh/h)						5
C (m) (veh/h)						343
//c						0.01
95% queue length						0.04
Control Delay (s/veh)					1	15.7
OS						C
Approach Delay (s/veh)					15	
Approach LOS					15	
					L	,

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			CONTROLS		terreter and the second	
General Information			Site Infor	mation		Setting dealers
Analyst	JEC		Intersection		Sunnyside/11	4th
Agency/Co.		Engineering	Jurisdiction		Clackamas	
Date Performed	12/1/2011		Analysis Ye	ar	2025 BG+ST	
Analysis Time Period	AM Peak I					
Project Description Val.		h Zone Change				
East/West Street: SE Su				Street: SE 11	4th Court	
Intersection Orientation:			Study Period	d (hrs): 0.25		
Vehicle Volumes an	d Adjustme				States and the second	
Major Street		Eastbound			Westbound	
Movement	1	2	3	4	5	6
Volume (veh/h)	L	T	R	L	T 2625	R 4
Peak-Hour Factor, PHF	1.00	0.94	1.00	1.00	0.94	0.94
Hourly Flow Rate, HFR						
(veh/h)	0	921	0	0	2792	4
Percent Heavy Vehicles	0			0		
Median Type			Raise	ed curb		
RT Channelized			0		1	0
Lanes	0	2	0	0	2	0
Configuration					T	TR
Upstream Signal		0			0	
Minor Street	<u> </u>	Northbound			Southbound	
Movement	7	8	9	10	11	12
	L	Т	R	L	Т	R
Volume (veh/h)						11
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	0.94
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0	11
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N N			N	Γ
Storage	1	0			0	
RT Channelized		0	0			0
Lanes	0	0	0	0	0	1
Configuration	0	0	0	0		/
			lean and a state of the state o			
Delay, Queue Length, an Approach	Eastbound	Vice Westbound	Northk	ound	Couth	bound
Movement	1	4	7 8	3 9	10	11 12
Lane Configuration	1	ļ	ļ	ł		R
v (veh/h)		ļ	ļ			11
C (m) (veh/h)						174
//c						0.06
95% queue length						0.20
Control Delay (s/veh)						27.1
LOS					-	D
Approach Delay (s/veh)			1		27	· · · · · · · · · · · · · · · · · · ·
Approach LOS			····			
			<u> </u>	·····	L	·

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Conoval Information		O-WAY STOP					- etab. Ner 1858 - 1 - 1
General Informatio	and the second s		Site Infor	and the second s			
Analyst	JEC	e	Intersection		Sunnyside/		
Agency/Co.		er Engineering	Jurisdiction		Clackamas		
Date Performed	12/1/201		Analysis Ye	∋ar	2025 BG+S	51	
Analysis Time Period	PM Pea						
Project Description V				01			
East/West Street: SE 3 Intersection Orientation:		d		Street: SE 11	4th Court		<u></u>
			IStudy Perio	d (hrs): 0.25			
Vehicle Volumes a	nd Adjustm						-
Major Street		Eastbound			Westbound	<u> </u>	0
Movement	1	2 T	3	4	5	_	6
	L		R	L	T		R
Volume (veh/h)	1.00	2516	1.00	1.00	1730		9
Peak-Hour Factor, PHF Hourly Flow Rate, HFR	1.00	0.97	1.00	1.00	0.97		0.97
(veh/h)	0	2593	0	0	1783		9
Percent Heavy Vehicles	0			0			
Median Type			Rais	ed curb			
RT Channelized			0				0
Lanes	0	2	0	0	2		0
Configuration		T			T		TR
Upstream Signal		0			0		
Minor Street		Northbound			Southbound	1	
Movement	7	8	9	10	11		12
	L	Т	R	L	Т		R
Volume (veh/h)							7
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00		0.97
Hourly Flow Rate, HFR	0	0	0	0	0		7
(veh/h)							
Percent Heavy Vehicles	0	0	0	0	0		0
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0				0
_anes	0	0	0	0	0		1
Configuration							R
Delay, Queue Length, a	and Level of Se	ervice					
Approach	Eastbound	Westbound	Northk	bound	Sou	thbound	
Novement	1	4	7 8	3 9	10	11	12
ane Configuration							R
/ (veh/h)							7
C (m) (veh/h)			l.	İ			342
/c							0.02
95% queue length	- <u> </u>						0.02
The second secon						_	
Control Delay (s/veh)							15.7
.OS					+		С
pproach Delay (s/veh)					1	5.7	
Approach LOS						С	

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Wetland Delineation Report

for the

Valley View Evangelical Church Happy Valley, Oregon

Natural Resource Consulting and Land Planning

1157 - 3rd Avenue, Suite 220 • Longview, WA 98632 Telephone: (360) 578-1371

.

EXHIBIT # 4 .

SIGNATURE PAGE

The information and data in this report were compiled and prepared under the supervision and direction of the undersigned.

MA7

Steffanie Taylor Biologist

Valley View Evangelical Church Wetland Delineation Report

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Valley View Evangelical Church Wetland Delineation Report

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Introduction

Ecological Land Services, Inc. (ELS) completed a wetland delineation on property surrounding the Valley View Evangelical Church within Tax Lot 1600 (Tax Map 1s2e34d) in Happy Valley, Oregon (Figures 1 and 2). The project site is located in Section 34, Township 1 South, Range 2 East, of the Willamette Meridian. Field work was conducted April 21, 2011, to determine the presence and extent of wetlands onsite. The study area coincides with property boundaries, which total 13.69 acres. The applicant is taking an inventory of wetlands and other jurisdictional waters for future sale of the undeveloped portion of the property. This report summarizes our findings in accordance with Oregon Administrative Rules 141-090-0005 through 141-090-0055 and City of Happy Valley Development Code Amendments Chapter 16.34 Natural Resources Overlay Zone (May 2009).

A) Landscape Setting and Land Use

The project site is located at 11501 SE Sunnyside Road, Happy Valley, Oregon. High and medium density residential areas surround the study area. The project site is currently zoned R-10 (1 unit per 10,000 square feet).

The site is on a hillside and has been extensively graded. A church with associated parking is located in the southeast portion of the site, a graded terrace is located in the northeast portion, a baseball field is located in the northwest portion, and a grassy slope is located in the southwest portion. The terrace and baseball field are separated by a drainage channel in a shallow ravine. The drainage is intermittent and daylights from beneath the housing development to the north from a French drain. It is unclear where the drainage originates. The drainage likely flows into a tributary, which empties into the Willamette River approximately 5 miles to the southwest. The project site is located within hydrologic unit code 17090012-01.

Vegetation

The wetlands within the study area are dominated by Nootka rose (Rosa nutkana, FAC), slough sedge (Carex obnupta, OBL), softrush (Juncus effusus, FACW), creeping buttercup (Ranunculus repens, FACW), and cattail (Typhus latifolia, OBL). The uplands are dominated by maintained lawn grasses and Himalayan blackberry (Rubus armeniacus, FACU), which is growing along the northern portion of the drainage.

Soils

Soils on the site are mapped as Cascade silt loam by the U.S. Department of Agriculture, Natural Resources Conservation Service Website (Figure 3; 2011). This soil type is not listed on the *Hydric Soils for Oregon* list (USDA 2011). Cascade silt loam soils are described as deep, somewhat poorly drained soil on rolling uplands with a clay hardpan at a depth of 20 to 30 inches. The site has been graded extensively to create terraces. Grading activities may have exposed subsoils normally found lower in the profile or exposed the clay hardpan.

Valley View Evangelical Church Wetland Delineation Report

B) Site Alterations

The study area is located on a hillside that has been extensively graded to create two terraces and also contains a church with associated parking. Both terraces have been planted with lawn grasses. The eastern terrace contains a baseball field and the western terrace contains a fenced, raised-bed garden area (Photoplates 1 and 2). A seasonal drainage in a shallow ravine bisects the terraces. The drainage daylights from beneath the housing development to the north from a French drain. Silt fence-like matting was encountered at 8 inches below ground surface in the test pit next to the drainage channel (TP-3) indicating the channel itself has been modified. The drainage continues flowing south into a 150-foot long culvert that conveys it under the northwestern corner of the church parking lot. The southern portion of the drainage is part of a mitigation creation and enhancement area for a Clackamas County Department of Transportation road widening project along Sunnyside Road and has been enhanced with riparian plantings and large woody debris.

C) Precipitation Data & Analysis

Precipitation data was gathered from the National Weather Service, Portland Office website and is summarized in the table below.

Table	1.	Precipitation	Summary.
-------	----	---------------	----------

Field Visit Date (2011)	Precipitation Amount on Field Visit Date	Percentage of Monthly Rainfall Received on	Norm 3 m	Monthly Percent Normal Precipitation 3 months prior to September field visit		Precipitation Total 2 Weeks Prior to Field
	Field Visit Date	Field Visit Date	Jan	Feb	March	Visit Date
April 21	0.10 in	69%	93%	102%	173%	2.43 in

D) Methods

Field work was conducted on April 21, 2011. Consecutively numbered pink "WETLAND DELINEATION" flagging was used to delineate the ordinary high water mark (OHWM) and/or the associated wetlands along the drainage. Test plot locations were marked with consecutively numbered orange pin flags. Vegetation, hydrology, and soils information were gathered from eight test plots.

Local and national wetlands inventory maps, the *City of Happy Valley Steep Slopes and Natural Resource Overlay Zone Map*, and recent aerial photos were reviewed along with site exploration to assist in determining the location and connectivity of waters of the state.

Valley View Evangelical Church Wetland Delineation Report

E) Description of All Wetlands & Other Non-Wetland Waters

Two wetlands areas, Wetlands A and B, were delineated in the central portion of the study area. Both wetlands are associated with a drainage channel or flowed into the drainage (Figure 6). The wetlands are separated by a 150-foot long, 24-inch diameter culvert. Wetland A is a riverine wetland within the OHWM of the drainage, while Wetland B is a riverine/slope wetland. Wetland hydrology stems from precipitation, runoff from the hillsides and development to the north, and overflow from the drainage. The main function of Wetland A and Wetland B is water quality improvement. Wetland B was created as a mitigation project for a Clackamas County Department of Transportation (CCDOT) road widening project along Sunnyside Road in 2002.

The drainage is intermittent and is located within an existing draw. The surrounding landscape has been highly altered and developed. Grading activities and the housing development to the north direct water to this area. The drainage daylights through a French drain under the housing development at the north end of the site. The drainage channel also appears to be modified. A silt fence-like mat was encountered at 8 inches depth in the test hole taken next to the channel, and the rock within the channel appears to be imported due to the irregularity of sizes and lack of gravel within the test hole. Approximately 1 to 2 inches of flowing water was observed in the drainage during the site visit and the channel is generally 1 to 2 feet wide. The upstream drainage area is highly modified, and is less than 10 acres. Drainage into the channel appears to be limited to intermittent runoff from the housing development to the north and the study areas itself.

A Wetland and Storm Drainage Easement (2002-067674) exists on the southern portion of the drainage and a portion of Wetland B near where it daylights from the culvert under the church parking lot. This is part of the mitigation conditions for a Clackamas County Department of Transportation road widening project along Sunnyside Road.

Wetland Name	Size Onsite	HGM Class	Cowardin Class	Local Designation	Buffer
A	0.01 ac.	Riverine	Emergent	None	50 ft.
В	0.13 ac.	Slope/Riverine	Scrub- shrub/emergent	Protected Water Feature	50 ft.
Total	0.14 acres				

Table 2. Wetland Summary

F) Deviation from LWI

The study area is outside the limits of the local wetland inventory (LWI). The national wetland inventory map (Figure 4) does not indicate wetlands onsite. However, ELS delineated one small wetland area within the OHWM of the drainage just north of the culvert as well as a wetland area south of the culvert (Wetlands A and B).

The City of Happy Valley Steep Slopes and Natural Resource Overlay Zone Map (NROZ) depicts the southern portion of the drainage as being a Protected Water Feature because it is mitigation area (Figure 5). The drainage continues upslope to the northern property boundary and a portion is culverted under the church parking lot. The NROZ Protected Water Feature designation ends at the southern end of the culvert. ELS agrees with the NROZ mapping because the drainage north of the culvert is not part of a mitigation area, appears to be man-made or highly modified, and is intermittent.

G) Mapping Method

Wetland boundaries and test plot locations were professionally surveyed by AKS Engineering and Forestry and have a +/- 1-foot accuracy.

H) Additional Information

Additional Precipitation data information is located in Appendix D.

I) Results & Conclusions

The study area is located on a hillside that has been extensively graded to create two terraces. Both terraces have been planted with lawn grasses. The eastern terrace contains a baseball field and the western terrace contains a fenced, raised-bed garden area. An intermittent drainage in a shallow ravine bisects the terraces. The drainage daylights from beneath the housing development to the north through a French drain and flows south into a 150-foot long culvert beneath the church parking lot. The portion of the drainage south of the culvert is part of mitigation area for the Clackamas County Department of Transportation and contains a Wetland and Storm Drainage Easement (2002-067674). There are no mapped habitat conservation areas associated with the drainage (NROZ 2009; Figure 5).

ELS also delineated two wetland areas onsite that total 0.14 acres and are associated with the drainage or flow into the drainage (see Table 2). Wetland A is an emergent, riverine wetland 0.01 acres in size, and Wetland B is a scrub-shrub and emergent, riverine/slope wetland totaling 0.13 acres.

The wetlands and drainage are regulated under *City of Happy Valley Development Code Amendments Chapter 16.34 Natural Resources Overlay Zone* (May 2009). According to *Table 16.34.060-1: Water Quality Resources*, buffers for wetlands with any size upstream drainage area on a slope less than 25 percent are 50 feet. The slope surrounding both wetlands is less than 25 percent; therefore the wetland buffer is 50 feet. Portions of the buffers on both wetlands are less than 50 feet because of existing pavement and are therefore considered functionally isolated.

Valley View Evangelical Church Wetland Delineation Report

The drainage has been highly modified, is intermittent with an upstream drainage basin of less than 10 acres, and is on a slope that is less than 25 percent; therefore the portion of the drainage north of the culvert does not require a buffer. The drainage south of the culvert is part of mitigation area and is designated as a Protected Water Feature by the *City of Happy Valley NROZ map.* The southern portion of the drainage is encompassed by Wetland B and its associated 50-foot buffer, which adequately functions as a vegetated corridor for the Protected Water Feature.

J) Disclaimer

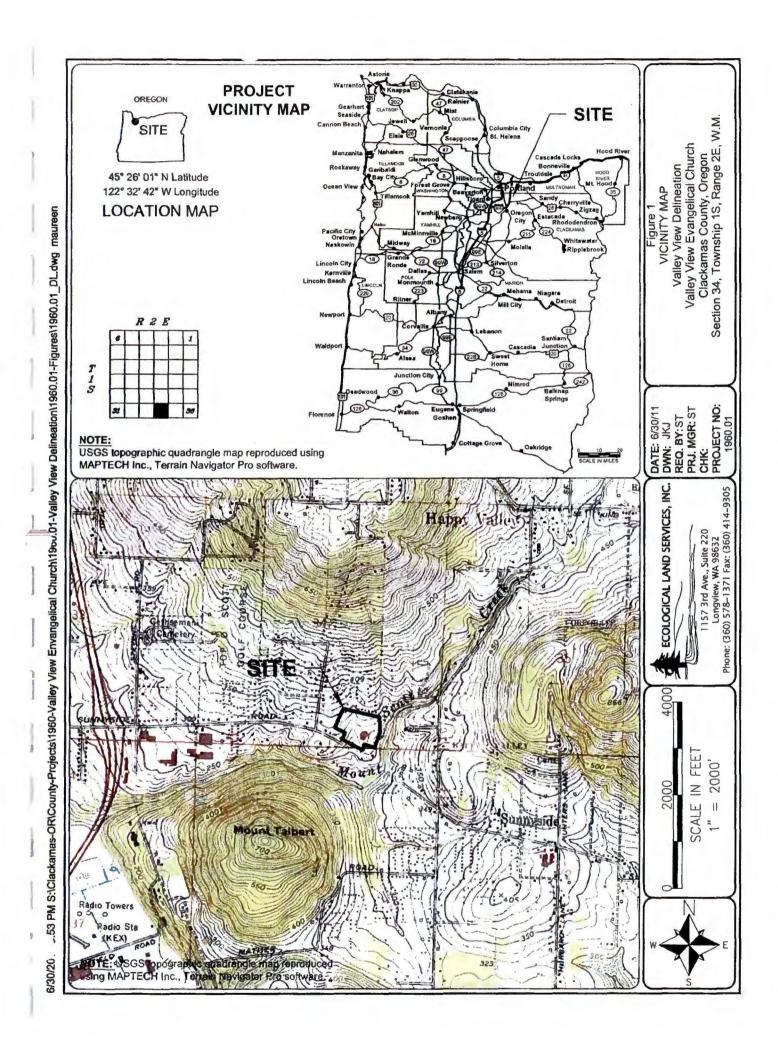
This report documents the investigation, best professional judgment, and conclusions of Ecological Land Services, Inc. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters, and used at your own risk until it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055.

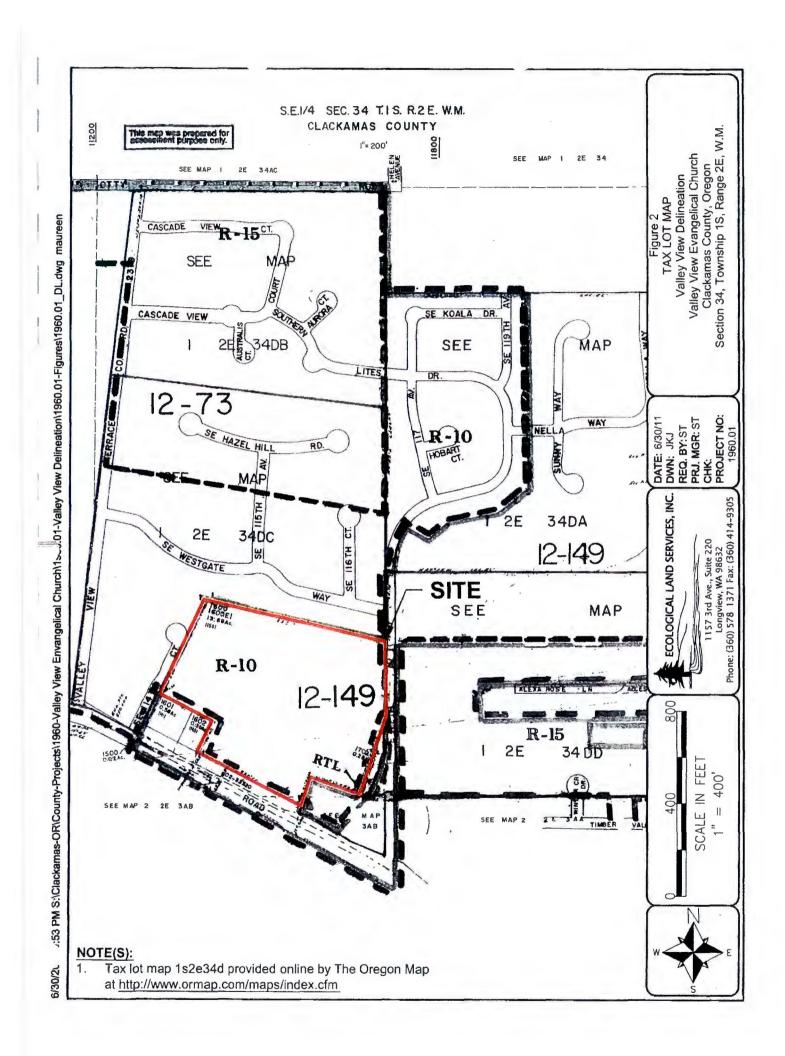
Valley View Evangelical Church Wetland Delineation Report

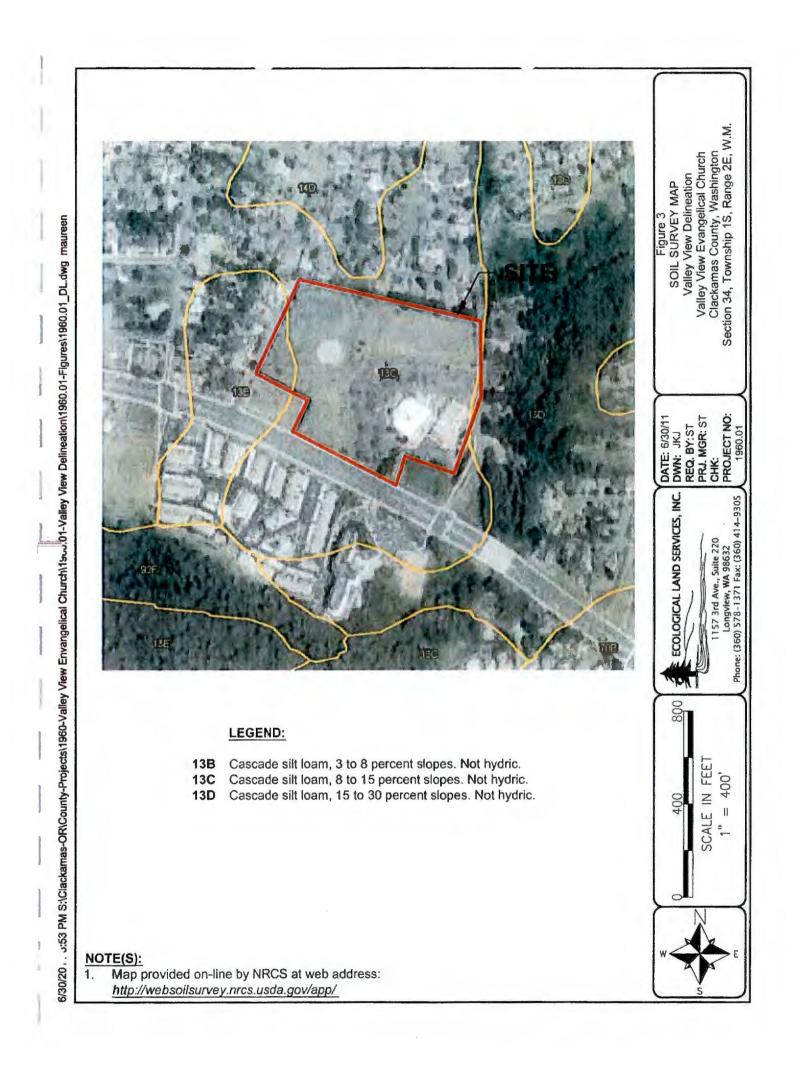
- 5 -

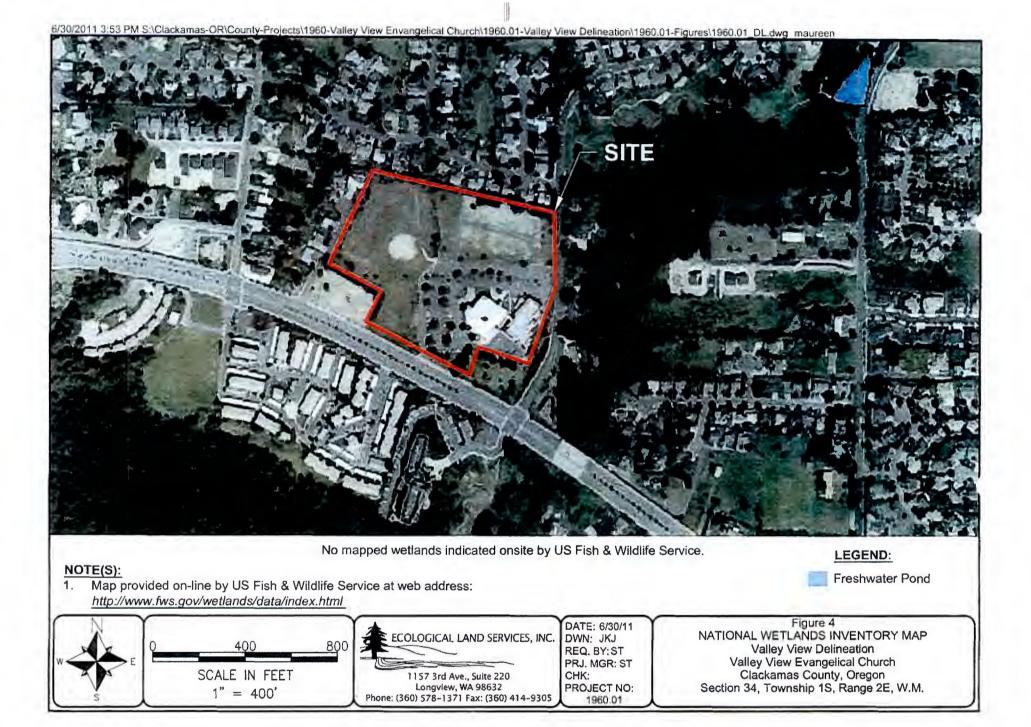
Appendix A: Maps

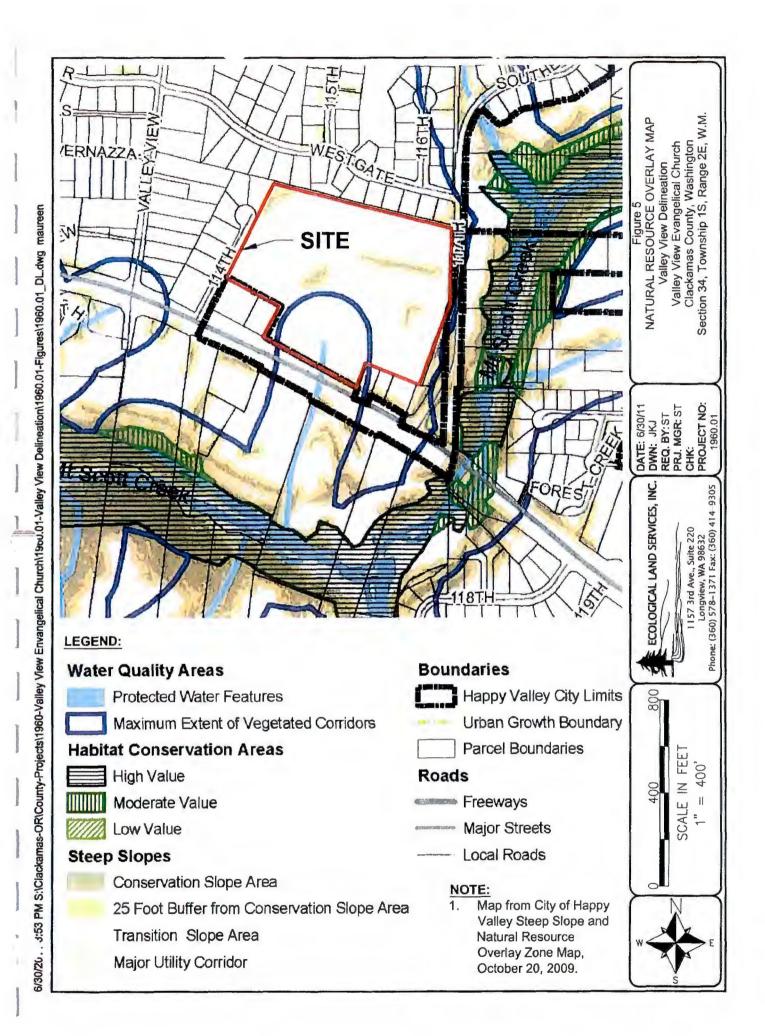
Valley View Evangelical Church Wetland Delineation Report

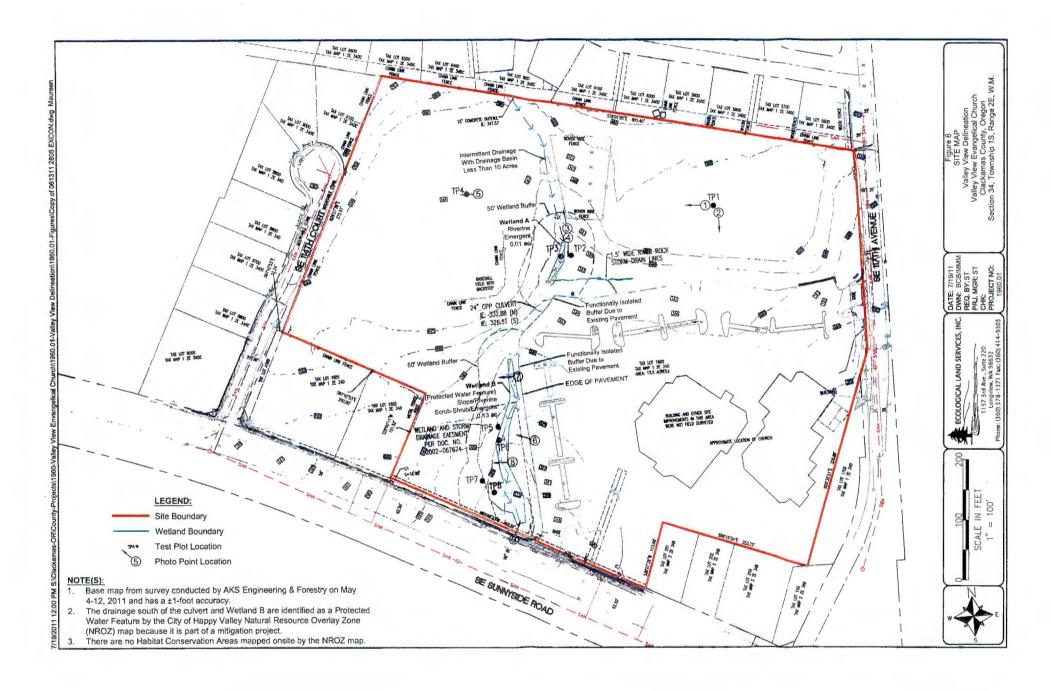












Appendix B: Data Forms

Valley View Evangelical Church Wetland Delineation Report Ecological Land Services, Inc. July 2011

WETLAND DETERM ... ATION DATA FORM -- Western Mountains, valleys and Coast Region

roject/Site: Valley View Evangelical Church pplicant/Owner: Valley View Evangelical Church		City/Co	unty: <u>Clackar</u> State: Of	mas/Clackamas Sampling Date: 4/21/11 R Sampling Point: TP-1
vestigator(s): S. Taylor		Sectio		, Range: Section 34, Township 1S, Range 2E, W.M.
dform (hillslope, terrace, etc.): Terrace		Local relief:	None	Slope (%):<1%
pregion (LRR):A	Lat: 45 26'	01" N	Long: 122 3	32' 42" W Datum:
oil Map Unit Name: 13C Cascade silt loam 8-15% slo	pes		N	WI classification: None
re climatic / hydrologic conditions on the site typical for				
re Vegetation⊠, Soil⊠, or Hydrology⊡ significantly	disturbed?			Circumstances" present? Yes 🗌 No 🖾
re Vegetation , Soil , or Hydrology naturally pr	oblematic?	(If need	led, explain a	any answers in Remarks.)
UMMARY OF FINDINGS – Attach site map	showing s	ampling po	int locatio	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes D No]	1- 11- 0-		
Hydric Soils Present? Yes 🗌 No 🕅	3	within a	mpled Area	Yes⊡ No⊠
Wetland Hydrology Present? Yes X No]			
Remarks: Test plot area has been graded flat and see ased on lack of hydric soils. High water table is due to			st plot located	d in northeastern portion of site. Area determined uplane
EGETATION (Use scientific names)				
	Absolute	Dominant	Indicator	Dominance Test Worksheet
Tree Stratum (Plot size: ft radius)	% Cover	Species?	Status	
1.	%			Number of Dominant Species (A)
2.	%			That Are OBL, FACW, or FAC:
3	%			Total Number of Dominant
4.	%			Species Across All Strata:
Total Cover:	%			
				Percent of Dominant Species(A/B
Sapling/Shrub Stratum (Plot size: ft. radius)				That Are OBL, FACW, or FAC
1	%			Prevalence Index worksheet
2	%			Total % Cover of: Multiply by:
	%			OBL species x 1=
	%	L.L		FACW species x 2=
Total Cover:	%			FAC species x 3= FACU species x 4=
Herb Stratum (Plot size: 5 ft radius)	/0			UPL species x 5=
1		yes		Column Totals: (A) (I
¹ Unidentifiable lawn grasses	95%	,		
2. Hypochaeris radicata	5%	no	FACU	Prevalence Index = B/A=
3.	%			Hydrophytic Vegetation Indicators:
4.	%			1 – Rapid Test for Hydrophytic Vegetation
				2 – Dominance Test is >50%
5.	%			3 - Prevalence Index is ≤3.0 ¹
5.	%			4 - Morphological Adaptations ¹ (Provide
8-8-1				supporting
7,	%			data In Remarks or on a separate sheet)
3.	%	hukana etterationen etteratione		Wetland Non-Vascular Plants ¹
Total Cover:				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: ft radius)				
	%			¹ Indicators of hydric soil and wetland hydrology
2.	%			Must be present, unless disturbed or problematic.
Total Cover:	%			
				Hydrophytic Vegetation Present?
% Bare Ground in Herb Stratum				Yes No
Remarks:				

US Army Corps of Engineers

Western Mountains, Valleys and Coast - FINAL Version 2

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SOIL							Sampling Point:
Profile Description: (Des	scribe to the d	epth needed to	document the in	dicator or o	onfirm th	e absence of indicators.)	
		-,				,	
Depth Mat			Redox Fea			_	
(inches) Color (moist)		Color (moist		Type ¹	Loc ²	Texture	Remarks
0-11 10YR 3/3 11-13 10YR 3/2	<u> </u>	10YR 4/6	20%	С	M	Sandy loam	
11-13 IUTR 3/2	%	10YR 5/2		D	M	Sandy clay loam	
13-16 10YR 4/1	20%	10YR 5/8	1%		M	Silty clay with gravel	See Remarks Below
10YR 4/6	80%		%			Only oldy with graver	
	%		%			-	
	%		%			***	
	%		%				
					Sand Gra	ins. ² Location: PL=Pore L	
Hydric Soil Indicators: (Applicable to			l.)		Indicators for Problema	atic Hydric Soils
Histosal (A1)		Sandy Rec				2 cm Muck (A10)	
Histic Epipedon (A2)		Stripped M	latrix (S6)			Red Parent Material (T	F2)
Ripple Histin (A2)			alu Maaral (E1) (woont MI		Very Shallow Dark Sur	
Black Histic (A3)			cky Mineral (F1) (except ML	(A 1)	Other (Explain in Rema	arks)
Hydrogen Sulfide (A4)			eyed Matrix (F2)				
Depleted Below Dark		Depleted N					
Thick Dark Surface (A	,		rk Surface (F6)			0	
Sandy Mucky Minerals	A		Dark Surface (F7)			³ Indicators of hydrophytic	vegetation and
Sandy Gleyed Matrix (
		L] Redox Dep	pressions (F8)		Ну	Wetland hydrology mu dric Soil Present?	
Restrictive Layer (if pres Type: Depth (inches): Remarks: Soils disturbed	sent):	LJ Redox Dep	pressions (F8)		Ну		
Type: Depth (inches):	sent):	LJ Redox Dep	pressions (F8)		Ну		
Type: Depth (inches): Remarks: Soils disturbed	sent):	LJ Redox Dep	pressions (F8)		Ну		
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY	sent): from grading	LJ Redox Dep	pressions (F8)		Ну	dric Soil Present?	Yes 🗌
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India	sent): from grading cators:				Ну	dric Soil Present?	Yes 🗌
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India	sent): from grading cators:	check all that ap	ъріу)	excent MI		dric Soil Present? Secondary Indicator (2 or more required)	Yes□ 75
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India Primary Indicators (min. o	sent): from grading cators:	check all that ap		except ML		dric Soil Present? Secondary Indicator (2 or more required) A, & U Water Stained Le	Yes TS beaves (B9)
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India Primary Indicators (min. o	sent): from grading cators: f one required;	check all that ap	oply) ined Leaves (B9) (except ML		dric Soil Present? Secondary Indicator (2 or more required) A, & Uwater Stained Le (MLRA 1, 2, 4A,	Yes TS beaves (B9) and 4B)
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India Primary Indicators (min. o Surface Water (A1) X High Water Table (A2)	sent): from grading cators: f one required;	check all that ap	oply) ined Leaves (B9) ((B11)	except ML		dric Soil Present? Secondary Indicator (2 or more required) A, & U Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern	Yes []
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India Primary Indicators (min. o Surface Water (A1) Surface Water Table (A2) Saturation (A3)	sent): from grading cators: f one required;	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv	oply) ined Leaves (B9) ((B11) vertebrates (B13)	except ML		dric Soil Present? Secondary Indicator (2 or more required) A, & Uter Stained Lo (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat	Yes TS Deaves (B9) and 4B) INS (B10) er Table (C2)
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India Primary Indicators (min. o Surface Water (A1) Surface Water Table (A2) Saturation (A3) Water Marks (B1)	sent): from grading cators: f one required;	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Hydrogen	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1)		RA 1, 2, 4	dric Soil Present? Secondary Indicator (2 or more required) A, & Uter Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wate Saturation Visible	Yes rs eaves (B9) and 4B) is (B10) er Table (C2) e on Aerial Imagery
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India Primary Indicators (min. o Surface Water (A1) Surface Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	sent): from grading cators: f one required;	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Hydrogen Oxidized R	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along	J Living Roo	RA 1, 2, 4	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visible Geomorphic Pos	Yes Yes Yes S Yes (B1) and 4B) and 4B) a
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India Primary Indicators (min. o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	sent): from grading cators: if one required;	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C	g Living Roo 24)	RA 1, 2, 4	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visible Geomorphic Pos Shallow Aquitard	Yes Yes Yes Yes Yes Yes Yes Yes
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology Indie Primary Indicators (min. o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4)	sent): from grading cators: if one required;	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C n Reducetion in Till	g Living Roo (4) ed Soils (Cé	RA 1, 2, 4	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Tes	Yes Yes rs and 4B) and 4B) and 4B) and (C2) e on Aerial Imagery ition (D2) I (D3) at (D5)
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology Indic Primary Indicators (min. o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5)	sent): from grading cators: f one required;	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iroo Stunted or	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C n Reduced Iron (C n Reducetion in Till Stressed Plants (g Living Roo (4) ed Soils (Cé	RA 1, 2, 4	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Tes Raised Ant Mour	Yes rs and 4B) and 4B) and 4B) and (C2) e on Aerial Imagery ition (D2) I (D3) at (D5) nds (D6) (LRR A)
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India Primary Indicators (min. o Surface Water (A1) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B	sent): from grading cators: if one required; 2)	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Oxidized R Presence of Recent Iroo Stunted or Other (Expl	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C n Reducetion in Till	g Living Roo (4) ed Soils (Cé	RA 1, 2, 4	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Tes	Yes rs and 4B) and 4B) and 4B) and (C2) e on Aerial Imagery ition (D2) I (D3) at (D5) nds (D6) (LRR A)
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology India Primary Indicators (min. o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B Inundation Visible on A	sent): from grading cators: if one required; 2)	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iroo Stunted or	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C n Reduced Iron (C n Reducetion in Till Stressed Plants (g Living Roo (4) ed Soils (Cé	RA 1, 2, 4	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Tes Raised Ant Mour	Yes rs and 4B) and 4B) and 4B) and (C2) e on Aerial Imagery ition (D2) I (D3) at (D5) nds (D6) (LRR A)
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology Indic Primary Indicators (min. o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B Inundation Visible on A (B7)	sent): from grading cators: if one required; 2)	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Oxidized R Presence of Recent Iroo Stunted or Other (Expl	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C n Reduced Iron (C n Reducetion in Till Stressed Plants (g Living Roo (4) ed Soils (Cé	RA 1, 2, 4	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Tes Raised Ant Mour	Yes rs and 4B) and 4B) and 4B) and (C2) e on Aerial Imagery ition (D2) I (D3) at (D5) nds (D6) (LRR A)
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology Indic Primary Indicators (min. o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B Inundation Visible on A (B7) Field Observations:	sent): from grading cators: if one required; 2)	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iroo Stunted or Other (Expl	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C n Reduced Iron (C n Reducetion in Till Stressed Plants (lain in Remarks)	g Living Roo (4) ed Soils (Cé	RA 1, 2, 4	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Tes Raised Ant Mour	Yes rs and 4B) and 4B) ns (B10) er Table (C2) e on Aerial Imagery ition (D2) I (D3) it (D5) nds (D6) (LRR A)
Type: Depth (inches):	sent): from grading cators: if one required; 2) 2) Aerial Imagery	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iroo Stunted or Other (Expl	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C n Reduced Iron (C n Reducetion in Till Stressed Plants (g Living Roo 24) ed Soils (C6 D1) (LRR A	RA 1, 2, 4 ots (C3)	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Patterm Dry-Season Wat Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Tes Raised Ant Mour Frost-Heave Hun	Yes 1 rs eaves (B9) and 4B) ns (B10) er Table (C2) e on Aerial Imagery ition (D2) I (D3) it (D5) nds (D6) (LRR A) nmocks (D4
Type: Depth (inches): Remarks: Soils disturbed HYDROLOGY Wetland Hydrology Indic Primary Indicators (min. o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Drift Deposits (B5) Surface Soil Cracks (B Inundation Visible on A (B7) Field Observations: Surface Water Present?	sent): from grading cators: f one required; 2) 36) Aerial Imagery Yes []	check all that ap Water-Stai 4B) Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iroo Stunted or Other (Expl	oply) ined Leaves (B9) ((B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C n Reduced Iron	g Living Roo 24) 24 Soils (Cé 21) (LRR A	RA 1, 2, 4 ots (C3)	dric Soil Present? Secondary Indicator (2 or more required) A, & Water Stained Le (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Tes Raised Ant Mour	Yes rs and 4B) and 4B) and 4B) and (C2) e on Aerial Imagery ition (D2) I (D3) at (D5) and (D6) (LRR A) nmocks (D4

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Remarks: High wate	r table is due to rece.	.eavy rains.
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WETLAND DETERN ATION DATA FORM - Western Mountains, Valleys and Coast Region

ear? Yes Ar (If need mpling po Is the Sa within a	Convex Long: 122 3 NoX (If rea "Normal ded, explain a Dint locatio mpled Area Wetland?	p, Range: Section 34, Township 1S, Range 2E, W.M. Slope (%): 5% 32' 42" W Datum: NWI classification:None no, explain Remarks.) Circumstances" present? Yes No⊠ any answers in Remarks.) ons, transects, important features, etc.
ves	Convex Long: 122 3 NoX (If rea "Normal of ded, explain a pint locatic mpled Area Wetland? lot located in	Slope (%): 5% 32' 42" W Datum: NWI classification:None ino, explain Remarks.) Circumstances" present? Yes No any answers in Remarks.) ons, transects, important features, etc. a Yes No n center of site near bottom of slope containing a seasor n center of site near bottom of slope containing a seasor Number of Dominant Species 2 Total Number of Dominant Species 2 Total Number of Dominant Species 3 Species Across All Strata: 67 Percent of Dominant Species 67 That Are OBL, FACW, or FAC 67 Percent of Dominant Species 67 That Are OBL, FACW, or FAC 7 Percent of Dominant Species 67 OBL species x 1=
Ves	Long: <u>122</u> 3 No (If rea "Normal of ded, explain a bint locatio mpled Area Wetland? lot located in Indicator Status	32' 42" W Datum: NWI classification:None ino, explain Remarks.) Circumstances" present? Yes[] No[2] any answers in Remarks.) ons, transects, important features, etc. a Yes[] No[2] n center of site near bottom of slope containing a season n center of site near bottom of slope containing a season Number of Dominant Species 2 (A That Are OBL, FACW, or FAC: Total Number of Dominant 3 (B Species Across All Strata: 67 (AN Percent of Dominant Species 67 (AN That Are OBL, FACW, or FAC 67 (AN Percent of Dominant Species 67 (AN Total Number of Dominant Species 7 (AN OBL species x 1=
ear? Yes Ar (If need mpling pc Is the Sa within a sees. Test pl bsees?	No⊠ (If rea "Normal ded, explain a pint locatio mpled Area Wetland? lot located in lot located in Status	NWI classification: None ino, explain Remarks.) Circumstances" present? Yes any answers in Remarks.) ons, transects, important features, etc. a Yes No an center of site near bottom of slope containing a seaso Dominance Test Worksheet Number of Dominant Species 2 That Are OBL, FACW, or FAC: Total Number of Dominant 3 Species Across All Strata: 67 Percent of Dominant Species 67 That Are OBL, FACW, or FAC 67 Percent of Dominant Species 7 Total Number of Dominant Species 67 OBL species x 1=
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Ar (If need mpling po Is the Sa within a sees. Test pi b Dominant Species?	Indicator	Circumstances" present? Yes□ No⊠ any answers in Remarks.) ons, transects, important features, etc. a Yes□ No⊠ n center of site near bottom of slope containing a seaso Dominance Test Worksheet Number of Dominant Species 2 That Are OBL, FACW, or FAC: Total Number of Dominant 3 Species Across All Strata: 67 Percent of Dominant Species 67 That Are OBL, FACW, or FAC 67 Percent of Dominant Species 67 Total Number of Dominant Species 7 OBL species x 1=
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pling por ls the Sa within a vises. Test pl borninant Species?	int location mpled Area Wetland? lot located in Indicator Status	ons, transects, important features, etc. a Yes No a Yes n center of site near bottom of slope containing a seaso b n center of site near bottom of slope containing a seaso Dominance Test Worksheet Number of Dominant Species 2 That Are OBL, FACW, or FAC: Total Number of Dominant 3 Species Across All Strata: 67 Percent of Dominant Species 67 That Are OBL, FACW, or FAC 67 Prevalence Index worksheet Total % Cover of: Multiply by: OBL species
Is the Sa within a sees. Test pl Dominant Species?	Indicator	Yes No In center of site near bottom of slope containing a seaso Dominance Test Worksheet Number of Dominant Species 2 That Are OBL, FACW, or FAC: Total Number of Dominant 3 Species Across All Strata: 67 Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: Multiply by: OBL species x 1=
Is the Sa within a sees. Test pl Dominant Species?	Indicator	Yes No In center of site near bottom of slope containing a seaso Dominance Test Worksheet Number of Dominant Species 2 That Are OBL, FACW, or FAC: Total Number of Dominant 3 Species Across All Strata: 67 Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: Multiply by: OBL species x 1=
vithin a vises. Test pi	Wetland? lot located in Indicator Status	Yes No In center of site near bottom of slope containing a seaso Dominance Test Worksheet Number of Dominant Species 2 That Are OBL, FACW, or FAC: Total Number of Dominant 3 Species Across All Strata: 67 Percent of Dominant Species 67 That Are OBL, FACW, or FAC 67 Percent of Dominant Species 7 That Are OBL, FACW, or FAC 7 Percent of Dominant Species 67 Multiply by: 7 OBL species x 1=
Dominant Species?	Indicator	Dominance Test Worksheet Number of Dominant Species 2 That Are OBL, FACW, or FAC: Total Number of Dominant 3 Species Across All Strata: 67 Percent of Dominant Species 67 That Are OBL, FACW, or FAC: 67 OBL, FACW, or FAC: 7 OBL species 67 Multiply by: 08L species OBL species x 1=
Dominant Species? yes	Indicator Status	Dominance Test Worksheet Number of Dominant Species 2 (A That Are OBL, FACW, or FAC: Total Number of Dominant 3 (E Species Across All Strata: 67 (A Percent of Dominant Species 67 (A That Are OBL, FACW, or FAC 67 (A Percent of Dominant Species 67 (A That Are OBL, FACW, or FAC 9 67 (A Prevalence Index worksheet 5 1 1 1 1 OBL species x 1= 1
Dominant Species? yes	Indicator Status	Dominance Test Worksheet Number of Dominant Species 2 (A That Are OBL, FACW, or FAC: Total Number of Dominant 3 (E Species Across All Strata: 67 (A) Percent of Dominant Species 67 (A) That Are OBL, FACW, or FAC 67 (A) Percent of Dominant Species 67 (A) That Are OBL, FACW, or FAC 9 9 Prevalence Index worksheet Total % Cover of: Multiply by: OBL species x 1= 1
Species?		Number of Dominant Species 2 (A That Are OBL, FACW, or FAC: 3 (E Total Number of Dominant 3 (E Species Across All Strata: 67 (A) Percent of Dominant Species 67 (A) That Are OBL, FACW, or FAC 67 (A) Prevalence Index worksheet 50 08L species OBL species x 1= 50
Species?		Number of Dominant Species 2 (A That Are OBL, FACW, or FAC: 3 (E Total Number of Dominant 3 (E Species Across All Strata: 67 (A) Percent of Dominant Species 67 (A) That Are OBL, FACW, or FAC Prevalence Index worksheet 57 Total % Cover of: Multiply by: X 1=
yes		That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: Multiply by: OBL species
	FAC	That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: Multiply by: OBL species
	FAC	Total Number of Dominant 3 (1) Species Across All Strata: 67 (A) Percent of Dominant Species 67 (A) That Are OBL, FACW, or FAC 9 67 (A) Prevalence Index worksheet 1<
	FAC	Species Across All Strata:
	FAC	Species Across All Strata:
	FAC	Percent of Dominant Species 67 (A That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: Multiply by: OBL species x 1=
	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: Multiply by: OBL species x 1=
	FAC	That Are OBL, FACW, or FAC Prevalence Index worksheet Total % Cover of: Multiply by: OBL species x 1=
	FAC	Prevalence Index worksheet Total % Cover of: Multiply by: OBL species x 1=
		Total % Cover of: Multiply by: OBL species x 1=
yes		OBL species x 1=
yes	,	
yes		FACW species x 2= FAC species x 3= FACU species x 4=
yes		FACU species x 3=
yes		FACU Species X4=
yes		
yes		
		Column Totals: (A)
14000	FAC	Dravelance Index - D/An
yes	FAC	Prevalence Index = B/A=
		Hydrophytic Vegetation Indicators:
		1 – Rapid Test for Hydrophytic Vegetation
		2 – Dominance Test is >50%
		3 - Prevalence Index is ≤3.0 ¹
		4 - Morphological Adaptations' (Provide
		supporting
		data In Remarks or on a separa
	Anna 1997	sheet)
	· ·····	Wetland Non-Vascular Plants ¹
		Problematic Hydrophytic Vegetation ¹ (Explain
		It distants of builds and and the day of
	·······	¹ Indicators of hydric soil and wetland hydrology
		Must be present, unless disturbed or problematic.
		Hydrophytic Vegetation Present?
		Yes No
vegetation	meets hydro	ophytic wetland vegetation criteria.
	vegetation	vegetation meets hydro

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OIL		P.0 8					
	noribo to the d	anth needed	to depument the inc	liantes es con	Euro the		Sampling Point: TP-
Tome Description. (De	iscribe to the u	epin needed	to document the inc	licator or con	inn tie	absence of indicators.)	
	trix		Redox Feat				
nches) Color (moist		Color (mo			Loc ²	Texture	Remarks
0-16 10YR 3/3 10YR 4/2	<u>45%</u> 50%	10YR 4/	<u>6 5%</u> %	<u> </u>	M	Sandy loam	
	%		%			**************************************	·····
	%		%				
	%		%				
	%	· · · · · · · · · · · · · · · · · · ·	<u>%</u>				
	<u> </u>		<u>%</u>				
Type: C=Concentratio		RM=Reduced		t or Coated Sa	nd Grain	s. ² Location: PL=Pore Lin	ing M=Matrix
ydric Soil Indicators:						Indicators for Problemati	
Histosal (A1)		Sandy F				2 cm Muck (A10)	
Histic Epipedon (A2)		Stripped	l Matrix (S6)			Red Parent Material (TF2	
Black Histic (A3)			Mucky Mineral (F1) (avcont MI PA		Very Shallow Dark Surfa	
] Hydrogen Sulfide (A4)	-	Gleyed Matrix (F2)	except MLKA	•) L		(5)
Depleted Below Dark	,		d Matrix (F3)				
Thick Dark Surface (A			Dark Surface (F6)				
Sandy Mucky Mineral			d Dark Surface (F7)		3	Indicators of hydrophytic ve	egetation and
Sandy Gleyed Matrix	(S4)	Redox D	Depressions (F8)			Wetland hydrology must	-
Restrictive Layer (if pre	sent):						
						in Coll Brosent?	
уре:							
					Hydr	ric Soil Present?	Yes No.
Depth (inches):					Hydr	ic Son Present?	Yes No
Depth (inches): Remarks: Soils disturbed	I from grading				Hydr	ic Soli Present?	Yes No
	I from grading				Hydr		Yes⊡ No[
	I from grading	анаа — анаа			Hydr		Yes No
	I from grading				Hydr		Yes 🗌 No
	I from grading				Hydr		Yes No
Remarks: Soils disturbed					Hydr	Secondary Indicators	Yes No
Remarks: Soils disturbed	icators:	check all that	apply)		Hydr		Yes No
emarks: Soils disturbed	icators:			excent MI RA		Secondary Indicators (2 or more required)	
Remarks: Soils disturbed IYDROLOGY Vetland Hydrology indi rimary Indicators (min. o	icators:		apply) tained Leaves (B9) (except MLRA		Secondary Indicators (2 or more required)	ves (B9)
Remarks: Soils disturbed IYDROLOGY Vetland Hydrology indi rimary Indicators (min. o Surface Water (A1)	icators: of one required;	U Water-S	itained Leaves (B9) (except MLRA		Secondary Indicators (2 or more required)	ves (B9) nd 4 B)
Remarks: Soils disturbed IYDROLOGY Vetland Hydrology Indi rimary Indicators (min. o Surface Water (A1) High Water Table (A2	icators: of one required;	☐ Water-S 4B) ☐ Salt Cru ☐ Aquatic	itained Leaves (B9) (ist (B11) Invertebrates (B13)	except MLRA		Secondary Indicators (2 or more required) & UWater Stained Lea (MLRA 1, 2, 4A, at	ves (B9) nd 4B) (B10)
Remarks: Soils disturbed IYDROLOGY Vetland Hydrology indi rimary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	icators: of one required;	☐ Water-S 4B) ☐ Salt Cru ☐ Aquatic ☐ Hydroge	itained Leaves (B9) (ist (B11) Invertebrates (B13) en Sulfide Odor (C1)		1, 2, 4A,	Secondary Indicators (2 or more required) Water Stained Lea (MLRA 1, 2, 4A, an Drainage Patterns	ves (B9) nd 4B) (B10) • Table (C2)
Remarks: Soils disturbed IYDROLOGY Vetland Hydrology Indi Irimary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	icators: of one required;	☐ Water-S 4B) ☐ Salt Cru ☐ Aquatic ☐ Hydroge ☐ Oxidized	itained Leaves (B9) (ist (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along	g Living Roots	1, 2, 4A,	Secondary Indicators (2 or more required) & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible (Geomorphic Positi	ves (B9) nd 4B) (B10) · Table (C2) on Aerial Imagery (CS on (D2)
Remarks: Soils disturbed IYDROLOGY Vetland Hydrology Indi Irimary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	icators: of one required;)	☐ Water-S 4B) ☐ Salt Cru ☐ Aquatic ☐ Hydroge ☐ Oxidized ☐ Presend	itained Leaves (B9) (ist (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along te of Reduced Iron (C	g Living Roots C4)	1, 2, 4A,	Secondary Indicators (2 or more required) & Water Stained Lea (MLRA 1, 2, 4A, an Drainage Patterns Dry-Season Water Saturation Visible (Geomorphic Positi Shallow Aquitard (ves (B9) nd 4B) (B10) • Table (C2) on Aerial Imagery (CS on (D2) D3)
Remarks: Soils disturbed AYDROLOGY Vetland Hydrology indi Primary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Algal Mat or crust (B4	icators: of one required;)	Water-S 4B) Salt Cru Aquatic Hydroge Oxidized Recent	itained Leaves (B9) (Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along e of Reduced Iron (C Iron Reduction in Till	g Living Roots C4) ed Soils (C6)	1, 2, 4A,	Secondary Indicators (2 or more required) & Water Stained Lea (MLRA 1, 2, 4A, an Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (FAC-Neutral Test	ves (B9) nd 4B) (B10) • Table (C2) on Aerial Imagery (CS on (D2) D3) (D5)
Remarks: Soils disturbed IYDROLOGY Vetland Hydrology Indi Primary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or crust (B4 Iron Deposits (B5)	icators: of one required;) :2)	Water-S 4B) Salt Cru Aquatic Hydroge Oxidized Presend Recent Stunted	itained Leaves (B9) (Invertebrates (B13) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along the of Reduced Iron (C Iron Reduction in Till or Stressed Plants (g Living Roots C4) ed Soils (C6)	1, 2, 4A,	Secondary Indicators (2 or more required) & Water Stained Lea (MLRA 1, 2, 4A, and Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positi Shallow Aquitard (FAC-Neutral Test of Raised Ant Mound	ves (B9) nd 4B) (B10) Table (C2) on Aerial Imagery (C9 on (D2) D3) (D5) s (D6) (LRR A)
Remarks: Soils disturbed YDROLOGY Vetland Hydrology indi Primary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or crust (B4 Iron Deposits (B5) Surface Soil Cracks (B	icators: of one required;) 22)) 36)	Water-S 4B) Salt Cru Aquatic Hydroge Oxidized Presend Recent Stunted Other (E	itained Leaves (B9) (Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along e of Reduced Iron (C Iron Reduction in Till	g Living Roots C4) ed Soils (C6)	1, 2, 4A,	Secondary Indicators (2 or more required) & Water Stained Lea (MLRA 1, 2, 4A, an Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (FAC-Neutral Test	ves (B9) nd 4B) (B10) Table (C2) on Aerial Imagery (C9 on (D2) D3) (D5) s (D6) (LRR A)
Remarks: Soils disturbed IYDROLOGY Vetland Hydrology indi Primary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (E Inundation Visible on	icators: of one required;) 22)) 36)	Water-S 4B) Salt Cru Aquatic Hydroge Oxidized Presend Recent Stunted	itained Leaves (B9) (Invertebrates (B13) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along the of Reduced Iron (C Iron Reduction in Till or Stressed Plants (g Living Roots C4) ed Soils (C6)	1, 2, 4A,	Secondary Indicators (2 or more required) & Water Stained Lea (MLRA 1, 2, 4A, and Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positi Shallow Aquitard (FAC-Neutral Test of Raised Ant Mound	ves (B9) nd 4B) (B10) Table (C2) on Aerial Imagery (C9 on (D2) D3) (D5) s (D6) (LRR A)
Remarks: Soils disturbed IYDROLOGY Vetland Hydrology indi Primary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or crust (B4 Iron Deposits (B5) Surface Soil Cracks (B	icators: of one required;) 22)) 36)	Water-S 4B) Salt Cru Aquatic Hydroge Oxidized Presend Recent Stunted Other (E	itained Leaves (B9) (Invertebrates (B13) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along the of Reduced Iron (C Iron Reduction in Till or Stressed Plants (g Living Roots C4) ed Soils (C6)	1, 2, 4A,	Secondary Indicators (2 or more required) & Water Stained Lea (MLRA 1, 2, 4A, and Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positi Shallow Aquitard (FAC-Neutral Test of Raised Ant Mound	ves (B9) nd 4B) (B10) Table (C2) on Aerial Imagery (C9 on (D2) D3) (D5) s (D6) (LRR A)
Remarks: Soils disturbed Yetland Hydrology Indi Primary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (E Inundation Visible on 137) ield Observations: Surface Water Present?	icators: of one required;) 22) 36) Aerial Imagery Yes []	 Water-S 4B) Salt Cru Aquatic Hydroge Oxidized Presend Recent Stunted Other (E No ⊠ 	tained Leaves (B9) (Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along te of Reduced Iron (C Iron Reduction in Till or Stressed Plants (xplain in Remarks) Depth (Inches):	g Living Roots C4) ed Soils (C6)	1, 2, 4A, (C3)	Secondary Indicators (2 or more required) & Water Stained Lea (MLRA 1, 2, 4A, an Drainage Patterns Dry-Season Water Saturation Visible Geomorphic Positi Shallow Aquitard (FAC-Neutral Test Raised Ant Mound Frost-Heave Humr	ves (B9) nd 4B) (B10) Table (C2) on Aerial Imagery (C9 on (D2) D3) (D5) s (D6) (LRR A)
Remarks: Soils disturbed YDROLOGY Vetland Hydrology indi Primary Indicators (min. of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (E Inundation Visible on (B7)	icators: of one required;) 22)) 36) Aerial Imagery	 Water-S 4B) Salt Cru Aquatic Hydroge Oxidized Presend Recent Stunted Other (E 	itained Leaves (B9) (Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres along te of Reduced Iron (C Iron Reduction in Till or Stressed Plants (xplain in Remarks)	g Living Roots C4) ed Soils (C6) D1) (L RR A)	1, 2, 4A, (C3)	Secondary Indicators (2 or more required) & Water Stained Lea (MLRA 1, 2, 4A, and Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positi Shallow Aquitard (FAC-Neutral Test of Raised Ant Mound	ves (B9) nd 4B) (B10) Table (C2) on Aerial Imagery (C9 on (D2) D3) (D5) s (D6) (LRR A)

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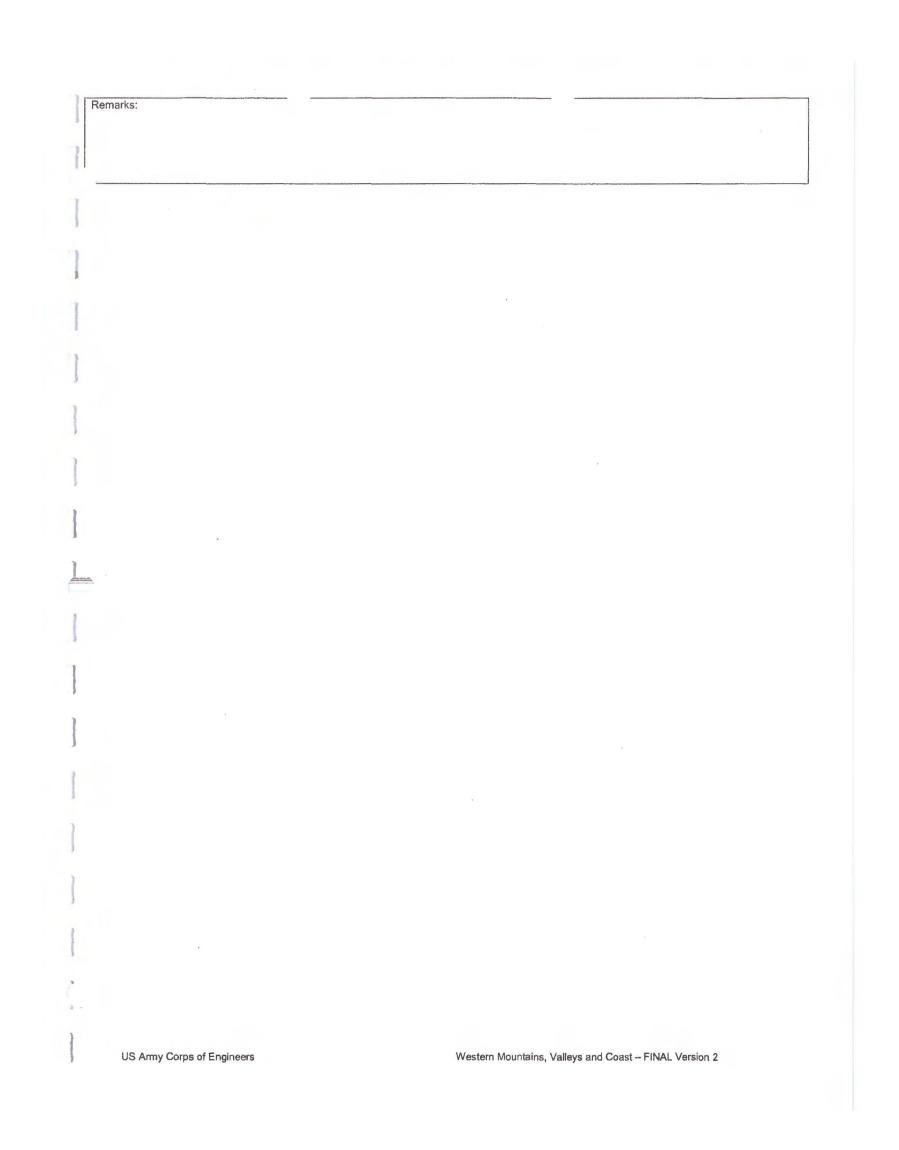
Western Mountains, Valleys and Coast – FINAL Version 2

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

Project/Site: Valley View Evangelical Church Applicant/Owner: Valley View Evangelical Chu	irch	City/Co	unty: <u>Clackar</u> State: OF	nas/Clackamas Sampling Date: 4/21/ R Sampling Point:	
ivestigator(s): S. Taylor		Sectio		Range: Section 34, Township 1S, Ra	
ndform (hillslope, terrace, etc.): Terrace	· · · · · · · · · · · · · · · · · · ·	Local relief:	Concave		Slope (%): 2%
	Lat: 45 26' (Long: 122 3		
ubregion (LRR): <u>A</u> bil Map Unit Name: 13C Cascade silt loam 8	Lat. 45 20 0			WI classification: None	
bil Map Unit Name: 130 Cascade silt loam 8	-15% slopes				
e climatic / hydrologic conditions on the site					
re Vegetation 🛛, Soil 🖾, or Hydrology 🗌 sig				Circumstances" present? Yes No	
re Vegetation], Soil], or Hydrology na	aturally problematic?	(If need	ed, explain a	iny answers in Remarks.)	
UMMARY OF FINDINGS – Attach si	te map showing s	ampling po	int locatio	ns, transects, important feature	es, etc.
Hydrophytic Vegetation Present? Yes					
Hydric Soils Present? Yes			mpled Area		
		within a \	Netland?	Yes No	
Remarks: Test plot area appears to be along		anced stream	channel as e	videnced from silt fence-like matting en	countered in the
oil pit.					
EGETATION (Use scientific names)					
	Absolute	Dominant	Indicator	Dominance Test Worksheet	
Tree Stratum (Plot size: ft radius)	% Cover	Species?	Status		
l	%			Number of Dominant Species	(A
2.	%			That Are OBL, FACW, or FAC:	
3.	0/				
l,	%			Total Number of Dominant	3 (B
Tota	Cover: %			Species Across All Strata:	
	av				67 (A/
				Percent of Dominant Species	····· ·
	adius)			That Are OBL, FACW, or FAC	
	%			Prevalence Index worksheet	
2.				Total % Cover of:	Multiply by:
3.	%			OBL species x 1=	
•	%			FACW species x 2=	
5.	%			FAC species x 3=	
Tota	Cover: %			FACU species x 4=	
Herb Stratum (Plot size: 5 ft radius)				UPL species x 5=	
1		yes	FAC	Column Totals: (A)	
Holcus lanatus	60%	,		()	
2. Typhus latifolia	25%	yes	OBL	Prevalence index = B/A=	
3. unidentifiable lawn grasses	15%	no		Hydrophytic Vegetation Indicators	•
4.				1 – Rapid Test for Hydrophytic	
. .	%			\boxtimes 2 – Dominance Test is >50%	vegetation
	%		·	\square 3 - Prevalence Index is $\leq 3.0^{1}$	
5	70				(Decented of
5.	%			4 - Morphological Adaptations ¹	(Flovide
				supporting	
7	%			data In Remarks	or on a separat
				sheet)	
3.	%			Wetland Non-Vascular Plants ¹	
	Cover: 100%			Problematic Hydrophytic Veget	ation' (Explain)
Woody Vine Stratum (Plot size: ft rad	dius)				
	%			¹ Indicators of hydric soil and wetland	
2.	%			Must be present, unless disturbed or	problematic.
	Cover: %				
1014				Hydrophytic Vegetation Present?	
/ Pere Oround in Liesh Otastum				a substant a seguration riesent?	Veek Net
% Bare Ground in Herb Stratum % Remarks: Even if lawn grass mix is determin	+		an a star bend		Yes⊠ No
	, , , , , , , , , , , , , , , , ,				

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SOIL						Samp	ing Point: TI
Profile Description: (Describe to the d	epth needed to docu	ument the indicator or	confirm t	he abs	ence of indicators.		ing toma in
Depth Matrix		Redox Features					
(inches) Color (moist) %	Color (moist)	% Type ¹	Loc ²		Texture	F	lemarks
0-8 10YR 2/1 100%		%			Muck		
		<u>%</u>					
<u>%</u>		%					
		%					
%		%			····		
<u>%</u>		%					
¹ Type: C=Concentration, D=Depletion,	PM-Reduced Matrix		Sand Gr	aine 2	eastion: PI =Poro	Liping M-M	Antrix
Hydric Soil Indicators: (Applicable to a			Sanu Gr		cators for Problem		
Histosal (A1)	Sandy Redox (S5)		20	cm Muck (A10)		
Histic Epipedon (A2)	Stripped Matrix	(S6)			ed Parent Material (
Black Histic (A3)	C Loamy Mucky M	Mineral (F1) (except ML	24 1)		ry Shallow Dark Su her (Explain in Rem		()
Hydrogen Sulfide (A4)	Loamy Gleyed					lantoj	
Depleted Below Dark Surface (A11)	Depleted Matrix						
Thick Dark Surface (A12)	Redox Dark Su						
Sandy Mucky Minerals (S1)	Depleted Dark						
				³ Indic	ators of hydrophytic	vegetation	and
Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor	Redox Depress		Hy	W	ators of hydrophytic (etland hydrology m oil Present?	-	
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8			Ну	W	etland hydrology m	-	ent
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor			Hy	W	etland hydrology m	-	ent
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8			Ну	W	etland hydrology m	ust be pres	ent
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor	Redox Depress		Ну	W	etland hydrology m	ust be pres	ent
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required;	Check all that apply)			W ydric S	oil Present? Secondary Indicato (2 or more required	ust be pres	Yes⊠ No
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1)	Check all that apply)	sions (F8) Leaves (B9) (except ML		W ydric S	oil Present? Secondary Indicato (2 or more required □ Water Stained L (MLRA 1, 2, 4A,	ust be pres	Yes⊠ No
Restrictive Layer (if present): _Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1) X High Water Table (A2)	Check all that apply) U Water-Stained I 4B) Sait Crust (B11)	sions (F8) Leaves (B9) (except ML)		W ydric S	Secondary Indicato (2 or more required Water Stained L (MLRA 1, 2, 4A, Drainage Patter	ust be pres ors i) , and 4B) ns (B10)	Yes⊠ No
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1) X High Water Table (A2) X Saturation (A3)	Check all that apply) Check all that apply) Check all that apply Check	Leaves (B9) (except ML) brates (B13)		W ydric S	Secondary Indicato (2 or more required Water Stained L (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wa	ust be pres ors i) , and 4B) ns (B10) ter Table ((Yes⊠ No
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1) Migh Water Table (A2) Saturation (A3) Water Marks (B1)	Check all that apply) Check all that apply) Water-Stained I 4B) Check all that apply Hugtic Inverted Hydrogen Sulfic	Leaves (B9) (except ML) brates (B13) de Odor (C1)	RA 1, 2, 4	W ydric S	Secondary Indicato (2 or more required Water Stained L (MLRA 1, 2, 4A, Drainage Patteri Dry-Season Wa Saturation Visibl	ust be pres ors () eaves (B9) , and 4B) ns (B10) ter Table ((le on Aerial	Yes⊠ No
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1) X High Water Table (A2) X Saturation (A3)	Check all that apply) Check all that apply) Water-Stained I 4B) Check all that apply Hugtic Inverted Hydrogen Sulfic	Leaves (B9) (except ML) brates (B13) de Odor (C1) spheres along Living Roc	RA 1, 2, 4	W ydric S	Secondary Indicato (2 or more required Water Stained L (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wa	eaves (B9) , and 4B) ns (B10) ter Table (C le on Aerial sition (D2)	Yes⊠ No
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1) Migh Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4)	Redox Depress check all that apply) Water-Stained I 4B) Sait Crust (B11 Aquatic Invertee Hydrogen Sulfic Oxidized Rhizos Presence of Re Recent Iron Red	Leaves (B9) (except ML) brates (B13) de Odor (C1) spheres along Living Rou educed Iron (C4) duction in Tilled Soils (Cd	RA 1, 2, 4 ots (C3)	ydric S	detland hydrology mi oil Present? oil Present? Secondary Indicato (2 or more required) Water Stained L (MLRA 1, 2, 4A, Drainage Patter) Dry-Season Wa Saturation Visible Geomorphic Pos	ust be pres ors () and 4B) ns (B10) ter Table (C le on Aerial sition (D2) d (D3)	Yes⊠ No
Restrictive Layer (if present): _Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1) Migh Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5)	Redox Depress check all that apply) Water-Stained I 4B) Salt Crust (B11 Aquatic Invertet Hydrogen Sulfic Oxidized Rhizos Presence of Re Recent Iron Rec Stunted or Stress	Leaves (B9) (except ML) brates (B13) de Odor (C1) spheres along Living Rou duced Iron (C4) duction in Tilled Soils (C4 ssed Plants (D1) (LRR A	RA 1, 2, 4 ots (C3)	ydric S	detland hydrology mi oil Present? oil Present? Secondary Indicato (2 or more required) Water Stained L (MLRA 1, 2, 4A, Drainage Pattern) Dry-Season Wa Saturation Visible Geomorphic Pos Shallow Aquitare FAC-Neutral Test Raised Ant Mou	ust be pres ors i) .eaves (B9) , and 4B) ns (B10) ter Table (C le on Aerial sition (D2) d (D3) st (D5) inds (D6) (L	Yes⊠ No Yes⊠ No C2) Imagery (C
Restrictive Layer (if present): _Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1) \Ketart High Water Table (A2) \Saturation (A3) \Water Marks (B1) Sediment Deposits (B2) \Diff Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	Redox Depress check all that apply) Water-Stained I 4B) Sait Crust (B11 Aquatic Invertee Hydrogen Sulfic Oxidized Rhizos Presence of Re Recent Iron Red	Leaves (B9) (except ML) brates (B13) de Odor (C1) spheres along Living Rou duced Iron (C4) duction in Tilled Soils (C4 ssed Plants (D1) (LRR A	RA 1, 2, 4 ots (C3)	ydric S	detland hydrology mi oil Present? oil Present? Secondary Indicato (2 or more required) Water Stained L (MLRA 1, 2, 4A, Drainage Patter) Dry-Season Wa Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Test	ust be pres ors i) .eaves (B9) , and 4B) ns (B10) ter Table (C le on Aerial sition (D2) d (D3) st (D5) inds (D6) (L	Yes⊠ No Yes⊠ No C2) Imagery (C
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Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1) Mathematication (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Redox Depress check all that apply) Water-Stained I 4B) Salt Crust (B11 Aquatic Invertet Hydrogen Sulfic Oxidized Rhizos Presence of Re Recent Iron Rec Stunted or Stress	Leaves (B9) (except ML) brates (B13) de Odor (C1) spheres along Living Rou duced Iron (C4) duction in Tilled Soils (C4 ssed Plants (D1) (LRR A	RA 1, 2, 4 ots (C3)	ydric S	detland hydrology mi oil Present? oil Present? Secondary Indicato (2 or more required) Water Stained L (MLRA 1, 2, 4A, Drainage Pattern) Dry-Season Wa Saturation Visible Geomorphic Pos Shallow Aquitare FAC-Neutral Test Raised Ant Mou	ust be pres ors i) .eaves (B9) , and 4B) ns (B10) ter Table (C le on Aerial sition (D2) d (D3) st (D5) inds (D6) (L	Yes⊠ No Yes⊠ No C2) Imagery (C
Restrictive Layer (if present): Type: Silt fence-like matting encoutered Depth (inches):8 Remarks: Strong hydrogen sulfide odor HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (min. of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Field Observations: Surface Water Present?	Check all that apply) Check all that apply) Water-Stained I 4B) Salt Crust (B11 Aquatic Inverted Hydrogen Sulfic Oxidized Rhizos Presence of Re Recent Iron Rec Stunted or Stres Other (Explain in No Dept	Leaves (B9) (except ML) brates (B13) de Odor (C1) spheres along Living Rou educed Iron (C4) duction in Tilled Soils (C4 ssed Plants (D1) (LRR A n Remarks) th (Inches):	RA 1, 2, 4 ots (C3)	ydric S	detland hydrology mi oil Present? oil Present? Secondary Indicato (2 or more required) Water Stained L (MLRA 1, 2, 4A, Drainage Pattern Dry-Season Wa Drinage Pattern Dry-Season Wa Saturation Visible Geomorphic Pos Shallow Aquitard FAC-Neutral Test Raised Ant Mou Frost-Heave Hui	ust be pres ors () .eaves (B9) , and 4B) ns (B10) ter Table (C le on Aerial sition (D2) d (D3) st (D5) inds (D6) (L mmocks (D	Yes⊠ No Yes⊠ No C2) Imagery (C
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WETLAND DETERM ATION DATA FORM - Western Mountains, Valleys and Coast Region

45 26' 0 time of y rbed? natic? wing sa	ocal relief: 1" N Ard (If need mpling po Is the Sar within a V	None Long: 122 3 No⊠ (If r ea "Normal (ed, explain a int locatio mpled Area Wetland?	o, Range: Section 34, Township 1S, Range 2E, W.M. Slope (%): Slope (%): 32' 42" W Datum: WI classification: None no, explain Remarks.) Circumstances" present? Yes No Any answers in Remarks.) No Ons, transects, important features, etc. Yes No
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lawn graa	within a V	Wetland?	Yes No
lawn graa	within a V	Wetland?	Yes No
lawn gras			
lawn gras	sses, and it b	eing used as	
			s a baseball field. Test plot located approximtely near
olute	Dominant	Indicator	Dominance Test Worksheet
over	Species?	Status	Number of Dominant Species (A
			Number of Dominant Species (A That Are OBL, FACW, or FAC:
			That Are OBL, FAOW, OF FAO.
			Total Number of Dominant
			Species Across All Strata:
%			
			Percent of Dominant Species (A/
			That Are OBL, FACW, or FAC
%			Prevalence Index worksheet
%			Total % Cover of: Multiply by:
%			OBL species x 1=
%			FACW species x 2=
%			FAC species x 3=
%			FAC species x 3= FACU species x 4=
			UPL species x 5=
00/	yes		Column Totals: (A)
%			Prevalence Index = B/A=
%			Hydrophytic Vegetation Indicators:
0/			1 – Rapid Test for Hydrophytic Vegetation
70			2 – Dominance Test is >50%
%			☐ 3 - Prevalence index is ≤3.0 ¹
0/			4 - Morphological Adaptations ¹ (Provide
70			□ supporting
0/			data In Remarks or on a separat
			sheet)
			Wetland Non-Vascular Plants ¹
0%			Problematic Hydrophytic Vegetation ¹ (Explain)
			1
			¹ Indicators of hydric soil and wetland hydrology
			Must be present, unless disturbed or problematic.
%			
			Hydrophytic Vegetation Present?
			Yes No
	% - % - % - % - % - % - % - % - % - % - % - % - % - % - % - % - % - % - % - % -	%	%

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DIL.					5			Sampling Point: TP
rofile Description: (Desc	cribe to the de	epth needed t	o document th	e indicator or	confir	m the ab	sence of indicators.)	
Danih Matri			Dedau	Feeturee				
Depth <u>Matri</u> nches) Color (moist)	×	Color (moi		Features Type ¹	10	DC^2	Texture	Remarks
0-14 10YR 3/3	98%	10YR 4/6		<u></u> C		M	Sandy loam	
14-16 10YR 4/2	28%	10YR4/6	- Berthalt - P'A All Party - P'A	С	1	M	Silty clay	
	%	10YR 5/8		С	1	М		
	%			6				
	<u>%</u>		<u>9</u> 9					······
	%							· · · · · · · · · · · · · · · · · · ·
	%			transferra to the second secon		- 1 ²		· · · · · · · · · · · · · · · · · · ·
Type: C=Concentration,	D=Depletion.	RM=Reduced	Matrix, CS=Cov	ered or Coate	ed Sanc	d Grains.	² Location: PL=Pore I	Lining, M=Matrix
ydric Soil Indicators: (A							dicators for Problema	
] Histosal (A1)		Sandy R					2 cm Muck (A10)	
] Histic Epipedon (A2)		Stripped	Matrix (S6)				Red Parent Material (T	(F2)
Black Histic (A3)			ucky Mineral (F	1) (avaant M			Very Shallow Dark Sur Other (Explain in Rem	
] Hydrogen Sulfide (A4)			leyed Matrix (F				other (Explain in Rem	arks)
] Depleted Below Dark S	urface (A11)	Depleted		-)				
•		C Redox D		5				
Thick Dark Surface (A1	2)		ark Surface (F6			³ lnc	dicators of hydrophytic	vegetation and
] Thick Dark Surface (A1.] Sandy Mucky Minerals	2) (S1)	Depleted	ark Surface (F6 Dark Surface (dicators of hydrophytic	
] Thick Dark Surface (A1] Sandy Mucky Minerals] Sandy Gleyed Matrix (S	2) (S1) (4)	Depleted	ark Surface (F6		T		dicators of hydrophytic Wetland hydrology mi	
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Western Mountains, Valleys and $\mbox{Coast}-\mbox{FINAL}$ Version 2

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ALL ROUTE	US Army Corps of Engineers		Western Mountains, Valle	eys and Coast – FINAL Vers	ion 2

roject/Site: Valley View Evangelical Chur	rch		City/Co		mas/Clackamas Sampling Date: 4/21/11
oplicant/Owner: Valley View Evangelical	Church			State: OF	
vestigator(s): S. Taylor					, Range: Section 34, Township 1S, Range 2E, W.M.
ndform (hillslope, terrace, etc.): Terrace	9		Local relief:	Convex	Slope (%): <u>5%</u>
ubregion (LRR): <u>A</u> bil Map Unit Name: 13C Cascade silt loa	m 9 15% clo	Lat: 45 26'	01" N		2' 42" W Datum; WI classification: None
re climatic / hydrologic conditions on the	site typical fr	pes or this time of	vear? Yes		
re Vegetation⊠, Soil⊠, or Hydrology⊡ re Vegetation⊡, Soil□, or Hydrology⊡	significantly naturally pr	y disturbed? oblematic?	Ar (If need	ea "Normal C led, explain a	Circumstances" present? Yes⊟ No⊠ any answers in Remarks.) ons, transects, important features, etc.
Hydrophytic Vegetation Present? Ye Hydric Soils Present? Ye	es No No Res Res No		Is the Sa	mpled Area Wetland?	Yes⊡ No⊠
Remarks: Test plot area has been grade	d and appea	rs to be near	the outer edge	of a planted	mitigation buffer in southwest portion of site.
EGETATION (Use scientific names)					
Tree Stratum (Plot size: ft radius)		Absolute	Dominant Species?	Indicator	Dominance Test Worksheet
Tree Stratum (Plot size: ft radius)		% Cover %	Species?	Status	Number of Dominant Species 4 (A
		%			That Are OBL, FACW, or FAC:
		%			1
ŀ		%			Total Number of Dominant4 (E
Т	Total Cover:	%			Species Across All Strata:
					Percent of Dominant Species(A/
Sapling/Shrub Stratum (Plot size:	ft. radius)				That Are OBL, FACW, or FAC
. Alnus rubra		10%	yes	FAC	Prevalence Index worksheet
2		%			Total % Cover of: Multiply by:
3		%			OBL species x 1=
4		%			FACW species x 2= FAC species x 3=
·7	Total Cover:	10%			FAC species x 3= FACU species x 4=
Herb Stratum (Plot size: 5 ft radius)	Iotal Cover.	1070			UPL species x 5=
		2004	yes	FAC	Column Totals: (A)
Lotus corniculatus		30%			
2. Schedonorus phoenix		30%	yes	FAC	Prevalence Index = B/A=
3. Cardamine oligosperma		20%	yes	FAC	Hydrophytic Vegetation Indicators:
^{1.} Holcus lanatus		10%	no	FAC	 ☐ 1 – Rapid Test for Hydrophytic Vegetation ⊠ 2 – Dominance Test is >50%
5. Carex obunpta		5%	ПО	OBL	\square 3 - Prevalence Index is $\leq 3.0^{1}$
			no		4 - Morphological Adaptations ¹ (Provide
Unidentifiable lawn grass		5%	Market and an and a second		supporting
7.		%			data In Remarks or on a separat
		%			sheet)
3	Fotal Cover:	100%			 Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain)
	ft radius)	100%			Frobenatic Hydrophytic vegetation (Explain)
	(rualdo)	%			¹ Indicators of hydric soil and wetland hydrology
		%			Must be present, unless disturbed or problematic.
Artight was seen on the state of the state o	Total Cover	%			
					Hydrophytic Vegetation Present?
% Bare Ground in Herb Stratum %					Yes⊠ No
Remarks:					
1. 2. 7 % Bare Ground in Herb Stratum % Remarks:	Total Cover:				Hydrophytic Vegetation Present?

Depth Matr	ix		Redox Fea	itures			
(inches) Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8 10YR 3/3	98%	10YR 4/2	2%	D	M	Sandy clay loam	
8-12 10YR 5/1	48%	10YR 5/8	2%	С	M	Sandy clay loam	
10YR 3/3	20%	10YR 4/6	30%	С	M		
	%		%				
	%		%				
	%		%				
	%		%				
17 0.0	%		%		-	2	
					Sand Gra	ains. ² Location: PL=Pore Lin	
Hydric Soil Indicators: (A	applicable to			a.)		Indicators for Problemati	c Hydric Solls
Histic Epipedon (A2)		Sandy Redox				2 cm Muck (A10) Red Parent Material (TF2	2)
I HISTIC Epipedoli (Az)			12 (30)			Very Shallow Dark Surfa	
Black Histic (A3)		Loamy Mucky	(Mineral (E1) (excent MLR	A 1)	Other (Explain in Remark	
Hydrogen Sulfide (A4)		Loamy Gleye		except milli			(3)
Depleted Below Dark S	ufeee (A11)						
		Depleted Mat					
Thick Dark Surface (A1		Redox Dark S				3	
Sandy Mucky Minerals		Depleted Dar				³ Indicators of hydrophytic ve	+
Sandy Gleyed Matrix (S		Redox Depre	ssions (F8)			Wetland hydrology must	be present
Restrictive Layer (if pres	ent):						
Type: hardpan					L.	dric Soil Present?	
. ype. <u>marupan</u>					n)	and our Present f	Yes
Depth (inches):12							
YYDROLOGY						Secondary Indicators	
Wetland Hydrology Indic						Secondary Indicators (2 or more required)	
						(2 or more required)	
Wetland Hydrology Indic Primary Indicators (min. of		Water-Staine		(except MLF	RA 1, 2, 4	(2 or more required)	
Wetland Hydrology Indic Primary Indicators (min. of		Water-Stainer 4B)	d Leaves (B9) ((except MLF	RA 1, 2, 4	(2 or more required) A, & U Water Stained Lea (MLRA 1, 2, 4A, ar	nd 4B)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2)		Water-Staine	d Leaves (B9) ((except MLF	RA 1, 2, 4	(2 or more required) A, & UWater Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns	nd 4B) (B10)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Stainer 4B)	d Leaves (B9) (11)	(except MLF	RA 1, 2, 4	(2 or more required) A, & U Water Stained Lea (MLRA 1, 2, 4A, ar	nd 4B) (B10)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2)		☐ Water-Stainer 4B) ☐ Salt Crust (B1	d Leaves (B9) (11) tebrates (B13)		RA 1, 2, 4	(2 or more required) A, & UWater Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns	nd 4B) (B10) Table (C2)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3)	one required;	☐ Water-Stainer 4B) ☐ Salt Crust (B1 ☐ Aquatic Invert	d Leaves (B9) (11) tebrates (B13) fide Odor (C1)			(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of	n d 4B) (B10) Table (C2) on Aerial Imagery
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	one required;	☐ Water-Stainer 4B) ☐ Salt Crust (B1 ☐ Aquatic Invert ☐ Hydrogen Sul	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along	g Living Roo		(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio	n d 4B) (B10) Table (C2) on Aerial Imagery on (D2)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	one required;	Water-Stainer B Water-Stainer B Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C	g Living Roo C4)	ts (C3)	(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	one required;	Water-Stainer Water-Stainer Balt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres alon Reduced Iron (C Reducetion in Till	g Living Roo C4) ed Soils (C6	ts (C3))	(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5)	one required;	Water-Stainer Water-Stainer AB) Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Stunted or Stri	d Leaves (B9) (11) lebrates (B13) fide Odor (C1) cospheres alon Reduced Iron (C Reduction in Till ressed Plants (g Living Roo C4) ed Soils (C6	ts (C3))	(2 or more required) (2 or more required) (A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	one required;	Water-Stainer Water-Stainer Balt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Stunted or Str Other (Explain	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres alon Reduced Iron (C Reduction in Till ressed Plants (g Living Roo C4) ed Soils (C6	ts (C3))	(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6	one required;	Water-Stainer Water-Stainer AB) Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Stunted or Stri	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres alon Reduced Iron (C Reduction in Till ressed Plants (g Living Roo C4) ed Soils (C6	ts (C3))	(2 or more required) (2 or more required) (A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6 Inundation Visible on Ad (B7)	one required;	Water-Stainer Water-Stainer Balt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Stunted or Str Other (Explain	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres alon Reduced Iron (C Reduction in Till ressed Plants (g Living Roo C4) ed Soils (C6	ts (C3))	(2 or more required) (2 or more required) (A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 (B7) Field Observations:	one required;	Water-Stainer Water-Stainer Balt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Stunted or Str Other (Explain	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres alon Reduced Iron (C Reduction in Till ressed Plants (g Living Roo C4) ed Soils (C6	ts (C3))	(2 or more required) (2 or more required) (A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ad (B7) Field Observations: Surface Water Present?	one required;) erial Imagery	Water-Stainer Water-Stainer AB) Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Stunted or Str Other (Explain No Ø De	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C Reduction in Till ressed Plants (n in Remarks)	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3))	(2 or more required) (2 or more required) (A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	one required;	Water-Stainer 4B) Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron R Stunted or Str Other (Explain) No ⊠ De No ⊠ De	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C Reduced Iron (C Reduction in Till ressed Plants (in Remarks) epth (Inches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3))	(2 or more required) (2 or more required) (A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Humm	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A)
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on A6 (B7) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (Includes Capillary fringe)	one required;	□ Water-Stainer 4B) □ Salt Crust (B1 □ Aquatic Invert □ Hydrogen Sul □ Oxidized Rhiz □ Presence of F □ Recent Iron R □ Stunted or Str □ Other (Explain) □ No ⊠ De No ⊠ De No ⊠ De No ⊠ De	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C Reduced Iron (C Reduction in Till ressed Plants (in Remarks) epth (Inches): epth (Inches): epth (Inches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3))) Wet	(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Hummer tland Hydrology Present?	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A) nocks (D4
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on A6 (B7) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (Includes Capillary fringe)	one required;	□ Water-Stainer 4B) □ Salt Crust (B1 □ Aquatic Invert □ Hydrogen Sul □ Oxidized Rhiz □ Presence of F □ Recent Iron R □ Stunted or Str □ Other (Explain) □ No ⊠ De No ⊠ De No ⊠ De No ⊠ De	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C Reduced Iron (C Reduction in Till ressed Plants (in Remarks) epth (Inches): epth (Inches): epth (Inches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3))) Wet	(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Hummer tland Hydrology Present?	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A) nocks (D4
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Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Ad (B7) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (Includes Capillary fringe) Describe Recorded Data (Saturation State)	one required;	□ Water-Stainer 4B) □ Salt Crust (B1 □ Aquatic Invert □ Hydrogen Sul □ Oxidized Rhiz □ Presence of F □ Recent Iron R □ Stunted or Str □ Other (Explain) □ No ⊠ De No ⊠ De No ⊠ De No ⊠ De	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C Reduced Iron (C Reduction in Till ressed Plants (in Remarks) epth (Inches): epth (Inches): epth (Inches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3))) Wet	(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Hummer tland Hydrology Present?	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A) nocks (D4
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ad (B7) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (Includes Capillary fringe) Describe Recorded Data (Saturation State)	one required;	□ Water-Stainer 4B) □ Salt Crust (B1 □ Aquatic Invert □ Hydrogen Sul □ Oxidized Rhiz □ Presence of F □ Recent Iron R □ Stunted or Str □ Other (Explain) □ No ⊠ De No ⊠ De No ⊠ De No ⊠ De	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C Reduced Iron (C Reduction in Till ressed Plants (in Remarks) epth (Inches): epth (Inches): epth (Inches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3))) Wet	(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Hummer tland Hydrology Present?	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A) nocks (D4
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ad (B7) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (Includes Capillary fringe) Describe Recorded Data (Saturation State)	one required;	□ Water-Stainer 4B) □ Salt Crust (B1 □ Aquatic Invert □ Hydrogen Sul □ Oxidized Rhiz □ Presence of F □ Recent Iron R □ Stunted or Str □ Other (Explain) □ No ⊠ De No ⊠ De No ⊠ De No ⊠ De	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C Reduced Iron (C Reduction in Till ressed Plants (in Remarks) epth (Inches): epth (Inches): epth (Inches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3))) Wet	(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Hummer tland Hydrology Present?	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A) nocks (D4
Wetland Hydrology Indic Primary Indicators (min. of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 (B7) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (Includes Capillary fringe)	one required;	□ Water-Stainer 4B) □ Salt Crust (B1 □ Aquatic Invert □ Hydrogen Sul □ Oxidized Rhiz □ Presence of F □ Recent Iron R □ Stunted or Str □ Other (Explain) □ No ⊠ De No ⊠ De No ⊠ De No ⊠ De	d Leaves (B9) (11) tebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C Reduced Iron (C Reduction in Till ressed Plants (in Remarks) epth (Inches): epth (Inches): epth (Inches):	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3))) Wet	(2 or more required) A, & Water Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Hummer tland Hydrology Present?	nd 4B) (B10) Table (C2) on Aerial Imagery on (D2) D3) (D5) s (D6) (LRR A) nocks (D4

oject/Site: Valley View Evangelical Church		City/Co		nas/Clackamas Sampling Date: 4/21/11
oplicant/Owner: Valley View Evangelical Church			State: OF	
vestigator(s): S. Taylor		Sectio	on, Township,	Range: Section 34, Township 1S, Range 2E, W.M.
ndform (hillslope, terrace, etc.): Terrace	Lat: 45 26'	Local relief:	Concave	2' 42" W Datum:
ubregion (LRR):A bil Map Unit Name: 13C Cascade silt loam 8-15% slo	Lat: 45 20		Long: 122 3	VI classification: None
e climatic / hydrologic conditions on the site typical for	or this time of	vear? Yes	No (If r	no. explain Remarks.)
e Vegetation , Soil , or Hydrology significantly	disturbed?	Ar	ea "Normal C	Circumstances" present? Yes No
e Vegetation⊠, Soil⊠, or Hydrology⊡ significantly e Vegetation⊡, Soil⊡, or Hydrology⊡ naturally pr	oblematic?	(If need	led, explain a	ny answers in Remarks.)
UMMARY OF FINDINGS – Attach site map	showing s	ampling po	int locatio	ns, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No]	is the Sa	mpled Area	
Hydric Soils Present? Yes X No			Wetland?	Yes No
Wetland Hydrology Present? Yes X No Remarks: Test plot area appears to be within a create				
EGETATION (Use scientific names)	albilde fakeljent i film lalbor soverlege i dente med elsen film film	()		
Tree Stratum (Plot eizer ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet
<u>Tree Stratum</u> (Plot size:ft radius)	0/	opecies /	Status	Number of Dominant Species 2 (A
			and the second	That Are OBL, FACW, or FAC:
· · · · · · · · · · · · · · · · · · ·	%		4	
· · · · · · · · · · · · · · · · · · ·	%		Autor 10 10 10 10 10 10 10 10 10 10 10 10 10	Total Number of Dominant 2 (B
Total Cover:	%			Species Across All Strata:
				Percent of Dominant Species 100 (A/
Sapling/Shrub Stratum (Plot size: ft. radius)				That Are OBL, FACW, or FAC
	%			Prevalence index worksheet
	%			Total % Cover of: Multiply by:
3	%			OBL species x 1= FACW species x 2=
·.	%			FAC species X 3=
Total Cover:	%			FACU species x 4=
Herb Stratum (Plot size: 5 ft radius)				UPL species x 5=
Carex obnupta	75%	yes	OBL	Column Totals: (A)
2. Lotus corniculatus	20%	yes	FAC	Prevalence Index = B/A=
3. Cardamine oligosperma	5%	no	FACW	Hydrophytic Vegetation Indicators:
l.	0,0			1 – Rapid Test for Hydrophytic Vegetation
	%			2 – Dominance Test is >50%
5.	%			☐ 3 - Prevalence Index is ≤3.0 ¹
3.	%			4 - Morphological Adaptations ¹ (Provide
		a ana alam a ta ang ang		data in Remarks or on a separat
7.	%			sheet)
3.	%		<u>e.,</u>	Wetland Non-Vascular Plants ¹
Total Cover:	100%		Antes	Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: ft radius)				
	%		P	¹ Indicators of hydric soil and wetland hydrology
2.	%		·····	Must be present, unless disturbed or problematic.
Total Cover:	70			Under to March 11 Barrier
				Hydrophytic Vegetation Present?
6 Bare Ground in Herb Stratum %	·····	an a		Yes⊠ No
lenars.				
	- 2011.01.01			

Western Mountains, Valleys and Coast – FINAL Version 2

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S-REAL

1

Depth	Matrix			Redox Fe	eatures			
(inches)	Color (moist)	%	Color (mois	st) %	Type ¹	Loc	2 Texture	Remarks
0-12	10YR 4/2	95%	10YR 5/8		С	M	Sandy clay loam	
12-16	10YR 5/1	48%	10YR 5/8		С	M	Silty clay	
	10YR 3/3	20%	10YR 4/6	30%	С	M		
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				
						Sand G	Grains. ² Location: PL=Pore Lin	
	oil Indicators: (Ap	plicable to a			ed.)		Indicators for Problematic	c Hydric Soils
Histos			Sandy Re				2 cm Muck (A10)	
Histic	Epipedon (A2)		Stripped	Matrix (S6)			Red Parent Material (TF2	
	(1) (1.0)						Very Shallow Dark Surface	
	Histic (A3)			ucky Mineral (F1)		RA 1)	Other (Explain in Remark	(S)
	gen Sulfide (A4)			leyed Matrix (F2)				
	ted Below Dark Sur		Depleted					
	Dark Surface (A12)			ark Surface (F6)				
Sandy	Mucky Minerals (S	51)		Dark Surface (F7	7)		³ Indicators of hydrophytic ve	getation and
Sandy	y Gleyed Matrix (S4)	Redox De	epressions (F8)			Wetland hydrology must	-
	ve Layer (if preser					1		
Type:						1	Hydric Soil Present?	
-								Yes⊠ N
Depth (in	: Bottom 4 inches o							
HYDRO	DLOGY							
1		ors:			uning the second se		Secondary Indicators (2 or more required)	
Wetland	DLOGY Hydrology Indicat		check all that a	apply)			Secondary Indicators (2 or more required)	
Wetland	Hydrology Indicat) (except ML	RA 1, 2	(2 or more required)	ves (B9)
Wetland Primary I	Hydrology Indicat Indicators (min. of o			apply) ained Leaves (B9) (except ML	RA 1, 2,	(2 or more required)	
Wetland Primary I	Hydrology Indicat Indicators (min. of o ce Water (A1)		U Water-Sta 4B)	ained Leaves (B9) (except ML	RA 1, 2,	(2 or more required)	nd 4B)
Wetland Primary I	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2)		☐ Water-Sta 4B) ☐ Salt Crus	ained Leaves (B9 tt (B11)		RA 1, 2,	(2 or more required) , 4A, & UWater Stained Lea (MLRA 1, 2, 4A, ar Drainage Patterns	nd 4B) (B10)
Wetland Primary I Surface High V Satura	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3)		☐ Water-Sta 4B) ☐ Salt Crus ☐ Aquatic In	ained Leaves (B9 t (B11) nvertebrates (B13	3)	RA 1, 2	(2 or more required) , 4A, & UWater Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water	nd 4B) (B10) Table (C2)
Wetland Primary I Surfac High V Satura Water	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) Marks (B1)		☐ Water-St 4B) ☐ Salt Crus ☐ Aquatic In ☐ Hydroger	ained Leaves (B9 t (B11) nvertebrates (B13 n Sulfide Odor (C	3) 1)		(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of	n d 4B) (B10) Table (C2) on Aerial Imagery (
Wetland Primary I Surfac High V Satura Water Sedim	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) Marks (B1) nent Deposits (B2)		☐ Water-St 4B) ☐ Salt Crus ☐ Aquatic In ☐ Hydroger ⊠ Oxidized	ained Leaves (B9 t (B11) nvertebrates (B13 n Sulfide Odor (C Rhizospheres ald	3) 1) ong Living Roo		(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2)
Wetland Primary I Surfac High V Satura Water Sedim Drift D	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) Marks (B1) nent Deposits (B2) Deposits (B3)		☐ Water-St 4B) ☐ Salt Crus ☐ Aquatic In ☐ Hydroger ⊠ Oxidized ☐ Presence	ained Leaves (B9 t (B11) nvertebrates (B13 n Sulfide Odor (C Rhizospheres alc o f Reduced Iron	3) 1) ong Living Roo (C4)	ots (C3)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3)
Wetland Primary I Surfact High V Satura Vater Sedim Drift D Algal	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) Marks (B1) nent Deposits (B2) Deposits (B3) Mat or crust (B4)		 □ Water-Sta 4B) □ Salt Crus □ Aquatic In □ Hydroger ○ Oxidized □ Presence □ Recent In 	ained Leaves (B9 tt (B11) nvertebrates (B13 n Sulfide Odor (C Rhizospheres ald o f Reduced Iron on Reduction in T	3) 1) ong Living Rod (C4) Filled Soils (C6	ots (C3) 6)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5)
Wetland Primary I G Surfact High V Satura Vater Sedirr Drift D Algal I Iron D	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) r Marks (B1) nent Deposits (B2) Deposits (B3) Mat or crust (B4) Deposits (B5)		 □ Water-Sta 4B) □ Salt Crus □ Aquatic Ia □ Hydroger ○ Oxidized □ Presence □ Recent In □ Stunted co 	ained Leaves (B9 at (B11) nvertebrates (B13 o Sulfide Odor (C Rhizospheres ald e of Reduced Iron on Reduction in T or Stressed Plants	3) 1) ong Living Rod (C4) Filled Soils (C0 s (D1) (LRR A	ots (C3) 6)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A)
Wetland Primary I Surfact High V Satura Vater Sedim Drift D Algal I Iron D Surfact	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) Marks (B1) nent Deposits (B2) Deposits (B3) Mat or crust (B4) Deposits (B5) ce Soil Cracks (B6)	ne required;	 Water-St. 4B) Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted co Other (Ex) 	ained Leaves (B9 tt (B11) nvertebrates (B13 n Sulfide Odor (C Rhizospheres ald o f Reduced Iron on Reduction in T	3) 1) ong Living Rod (C4) Filled Soils (C0 s (D1) (LRR A	ots (C3) 6)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A)
Wetland Primary I Surfac High V Satura Vater Sedirr Drift D I Drift D Surfac Surfac	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) r Marks (B1) nent Deposits (B2) Deposits (B3) Mat or crust (B4) Deposits (B5)	ne required;	 □ Water-Sta 4B) □ Salt Crus □ Aquatic Ia □ Hydroger ○ Oxidized □ Presence □ Recent In □ Stunted co 	ained Leaves (B9 at (B11) nvertebrates (B13 o Sulfide Odor (C Rhizospheres ald e of Reduced Iron on Reduction in T or Stressed Plants	3) 1) ong Living Rod (C4) Filled Soils (C0 s (D1) (LRR A	ots (C3) 6)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A)
Wetland Primary I Surfact High V Satura Vater Sedirr Drift D Algal Iron D Surfact Surfact Inunda (B7)	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) Marks (B1) Deposits (B3) Mat or crust (B4) Deposits (B5) ce Soil Cracks (B6) ation Visible on Aer	ne required;	 Water-St. 4B) Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted co Other (Ex) 	ained Leaves (B9 at (B11) nvertebrates (B13 o Sulfide Odor (C Rhizospheres ald e of Reduced Iron on Reduction in T or Stressed Plants	3) 1) ong Living Rod (C4) Filled Soils (C0 s (D1) (LRR A	ots (C3) 6)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A)
Wetland Primary I Surfact High V Satura Vater Sedim Drift D Algal Iron D Surfact Surfact Inunda (B7)	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) Marks (B1) Deposits (B3) Mat or crust (B4) Deposits (B5) ce Soil Cracks (B6) ation Visible on Aer servations:	ne required; ial Imagery	 Water-St. 4B) Salt Crus Aquatic In Hydroger Oxidized Presence Recent Ir Stunted co Other (Ex) 	ained Leaves (B9 at (B11) nvertebrates (B13 o Sulfide Odor (C Rhizospheres ald e of Reduced Iron on Reduction in T or Stressed Plants plain in Remarks)	3) 1) ong Living Rod (C4) Filled Soils (C4 s (D1) (LRR A)	ots (C3) 6)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A)
Wetland Primary I Surfact High V Satura Vater Sedim Drift D Algal Iron D Surfact (B7) Field Ob Surface V	Hydrology Indicat Indicators (min. of o ce Water (A1) Water Table (A2) ation (A3) Marks (B1) Deposits (B3) Mat or crust (B4) Deposits (B5) ce Soil Cracks (B6) ation Visible on Aer servations: Water Present?	ne required; ial Imagery Yes 🗌	Water-St 4B) Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted c Other (Ex No 🛛	ained Leaves (B9 tt (B11) nvertebrates (B13 n Sulfide Odor (C Rhizospheres ald e of Reduced Iron on Reduction in T or Stressed Plants plain in Remarks) Depth (Inches):	3) 1) ong Living Rod (C4) Filled Soils (C4 s (D1) (LRR A)	ots (C3) 6) V)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Humn	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A)
Wetland Primary I Surfac High V Satura Vater Sedim Drift D Algal Iron D Surfac (B7) Field Ob Surface V Water Ta	Hydrology Indicat Indicators (min. of o Ce Water (A1) Water Table (A2) ation (A3) Marks (B1) Deposits (B3) Mat or crust (B4) Deposits (B5) Ce Soil Cracks (B6) ation Visible on Aer servations: Water Present?	ial Imagery Yes □ Yes ⊠	Water-St 4B) Salt Crus Aquatic In Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex No M No M	ained Leaves (B9 at (B11) nvertebrates (B13 o Sulfide Odor (C Rhizospheres ald e of Reduced Iron on Reduction in T or Stressed Plants plain in Remarks) Depth (Inches): Depth (Inches):	3) 1) ong Living Rod (C4) Filled Soils (C6 s (D1) (LRR A) : : see remarks	ots (C3) 6) V)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A) nocks (D4
Wetland Primary I Surfac High V Satura Vater Sedim Drift D Algal Iron D Surfac (B7) Field Ob Surface V Water Ta Saturatio	Hydrology Indicat Indicators (min. of o Ce Water (A1) Water Table (A2) ation (A3) Marks (B1) Deposits (B3) Mat or crust (B4) Deposits (B5) Ce Soil Cracks (B6) ation Visible on Aer servations: Water Present? n Present?	ne required; ial Imagery Yes 🗌	Water-St 4B) Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted c Other (Ex No 🛛	ained Leaves (B9 tt (B11) nvertebrates (B13 n Sulfide Odor (C Rhizospheres ald e of Reduced Iron on Reduction in T or Stressed Plants plain in Remarks) Depth (Inches):	3) 1) ong Living Rod (C4) Filled Soils (C6 s (D1) (LRR A) : : see remarks	ots (C3) 6) V)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Humn	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A)
Wetland Primary I Surfac High V Satura Vater Sedim Drift D Algal Iron D Surfac (B7) Field Ob Surface V Water Ta Saturatio (Includes	Hydrology Indicat Indicators (min. of o Ce Water (A1) Water Table (A2) ation (A3) Marks (B1) Deposits (B2) Deposits (B3) Mat or crust (B4) Deposits (B5) Ce Soil Cracks (B6) ation Visible on Aer servations: Water Present? Deposent? n Present? Capillary fringe)	ial Imagery Yes □ Yes ⊠ Yes ⊠	Water-St 4B) Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted c Other (Ex No M No M	ained Leaves (B9 at (B11) nvertebrates (B13 o Sulfide Odor (C Rhizospheres ald e of Reduced Iron on Reduction in T or Stressed Plants plain in Remarks) Depth (Inches): Depth (Inches):	3) 1) ong Living Rod (C4) Filled Soils (C6 s (D1) (LRR A) s see remarks s <u>Surface</u>	ots (C3) 6) N)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Humm	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A) nocks (D4
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Wetland Primary I Surfac High V Satura Vater Sedim Drift D Algal Iron D Surfac (B7) Field Ob Surface V Water Ta Saturatio (Includes Describe	Hydrology Indicat Indicators (min. of o Ce Water (A1) Water Table (A2) ation (A3) Marks (B1) Deposits (B2) Deposits (B3) Mat or crust (B4) Deposits (B5) Ce Soil Cracks (B6) ation Visible on Aer servations: Water Present? Deposent? n Present? Capillary fringe) Recorded Data (Street	ne required; ial Imagery Yes □ Yes ⊠ Yes ⊠ ream gauge,	Water-St 4B) Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex) No No No monitoring we	ained Leaves (B9 at (B11) nvertebrates (B13 o Sulfide Odor (C Rhizospheres ald e of Reduced Iron on Reduction in T or Stressed Plants plain in Remarks) Depth (Inches): Depth (Inches): Depth (Inches):	3) 1) ong Living Rod (C4) Filled Soils (C6 s (D1) (LRR A) : : : : : : : : : : : : :	ots (C3) 6) V)	(2 or more required) , 4A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Position Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Humm	nd 4B) (B10) Table (C2) on Aerial Imagery (on (D2) D3) (D5) s (D6) (LRR A) nocks (D4

oject/Site: Valley View Evangelical Church		City/Co	unty: Clackar	nas/Clackamas Sampling Date: 4/21/11
plicant/Owner: Valley View Evangelical Church			State: OF	
vestigator(s): S. Taylor				Range: Section 34, Township 1S, Range 2E, W.M.
ndform (hillslope, terrace, etc.): <u>Terrace</u>	Lat: 45 26' 0	_ocal relief:	Convex	2' 42" W Datum:
il Map Unit Name: 13C Cascade silt Ioam 8-15% slo	Lat. 45 20 C			WI classification:None
e climatic / hydrologic conditions on the site typical for		vear? Yes		
e Vegetation⊠, Soil⊠, or Hydrology⊡ significantly				Circumstances" present? Yes No
e Vegetation , Soil , or Hydrology naturally pr				iny answers in Remarks.)
JMMARY OF FINDINGS – Attach site map	showing sa	ampling po	int locatio	ns, transects, important features, etc.
Hydrophytic Vegetation Present? Yes D No		is the Sa	mpled Area	
Hydric Soils Present? Yes X No		within a \		Yes⊡ No⊠
Wetland Hydrology Present? Yes No 2		d mitigation w	otland/stream	n buffer in south portion of site. Test plot determined
land based on lack of hydrology.	o or enhanced	u magadon w	ellanu/streat	in burier in south portion of site. Test plot determined
			······	
EGETATION (Use scientific names)				
	Absolute	Dominant	Indicator	Dominance Test Worksheet
Tree Stratum (Plot size: ft radius)	% Cover	Species?	Status	Number of Dominant Spacies
·	%	······································		Number of Dominant Species (A That Are OBL, FACW, or FAC:
· · · · · · · · · · · · · · · · · · ·	%			Total Number of Dominant (B
Total Cover:	%			Species Across All Strata:
				Percent of Dominant Species (A/
Sapling/Shrub Stratum (Plot size: ft. radius)				That Are OBL, FACW, or FAC
· · · · · · · · · · · · · · · · · · ·	%			Prevalence Index worksheet
	%		April and an and a second	Total % Cover of: Multiply by:
	%			OBL species x 1=
•	%			FACW species x 2=
	%			FAC species x 3= FACU species x 4=
Total Cover: Herb Stratum (Plot size: <u>5</u> ft radius)	%			FACU species x 4= UPL species x 5=
		yes	FAC	Column Totals: (A)
' Holcus lanatus	45%	,		
. Unidentifiable grass	30%	yes		Prevalence Index = B/A=
. Lotus corniculatus	10%	no	FAC	Hydrophytic Vegetation Indicators:
Shenodorus phoenix	10%	no	FAC	1 – Rapid Test for Hydrophytic Vegetation
			EACH	2 – Dominance Test is >50%
. Hypochaeris radicata	5%	no	FACU	 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide
	%			
· · · · · · · · · · · · · · · · · · ·	%			data In Remarks or on a separat
			B. D. September & Marganetic Street, and a state	sheet)
	%	paramaphase labor flaterin de une marie a service de la para		Wetland Non-Vascular Plants
Total Cover:	100%			Problematic Hydrophytic Vegetation ¹ (Explain)
Noody Vine Stratum (Plot size: ft radius)	%			¹ Indicators of hydric soil and wetland hydrology
•	%			Must be present, unless disturbed or problematic.
Total Cover:	0/			
iotai Cover.				Hydrophytic Vegetation Present?
6 Bare Ground in Herb Stratum %				Yes No
Remarks:				
				-

Western Mountains, Valleys and Coast – FINAL Version 2 $\,$

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SOIL							Sampling Point: TI
Profile Description: (Descr	ibe to the de	epth needed	to document the in	dicator or	confirm th	ne absence of indicators.)	
Depth Matrix	%	Color/m	Redox Fea		Loc ²	Toutura	Remarks
(inches) Color (moist) 0-8 10YR 4/2	100%	Color (mo	oist) %	Type ¹	LUC	Texture Sandy loam	Remarks
8-16 10YR 5/2	80%	10YR 4		C	M	Sandy clay loam	
	%		%				
	%		%			······································	
	%		%				
	%		%				
	%		%				
¹ Type: C=Concentration, D)=Depletion.	RM=Reduced		d or Coated	Sand Gra	ains. ² Location: PL=Pore Lin	ing, M=Matrix
Hydric Soil Indicators: (App		II LRRs, unl	ess otherwise note			Indicators for Problematic	
Histosal (A1)		Sandy I				2 cm Muck (A10)	
Histic Epipedon (A2)		Stripped	d Matrix (S6)			Red Parent Material (TF2 Very Shallow Dark Surface	(TE12)
Black Histic (A3)			Mucky Mineral (F1) (excent ML	(1 45	Other (Explain in Remark	
Hydrogen Sulfide (A4)			Gleyed Matrix (F2)	except mL			
Depleted Below Dark Sur	face (A11)		d Matrix (F3)				
Thick Dark Surface (A12)			Dark Surface (F6)				
Sandy Mucky Minerals (S			d Dark Surface (F7)			³ Indicators of hydrophytic ve	detation and
Sandy Gleyed Matrix (S4)						and a stand a stand and a stand and a stand a stan	
			Depressions (F8)			Wetland hydrology must	be present
Restrictive Layer (if presen			Depressions (F8)			Wetland hydrology must	be present
Restrictive Layer (if presen			Depressions (F8)				be present
Restrictive Layer (if presen			Depressions (F8)		Ну	Wetland hydrology must	
. Туре:			Jepressions (F8)		Ну		be present Yes⊠ No
Type: Depth (inches):	nt):				Ну		
. Туре:	nt):				Ну		
Type: Depth (inches):	nt):				Ну		
Type: Depth (inches):	nt):				Ну		
Type: Depth (inches): Remarks: Soils disturbed from	nt):				Ну		
Type: Depth (inches):	nt):				Ну	dric Soil Present?	
Type: Depth (inches): Remarks: Soils disturbed from	nt): m grading ar				Ну		
Type: Depth (inches): Remarks: Soils disturbed from	nt): m grading ar ors:	nd may be ex	posed subsoils.		Ну	dric Soil Present?	
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or	nt): m grading ar ors:	nd may be ex check all that	posed subsoils.	(except ML		dric Soil Present? Secondary Indicators (2 or more required) A, & U Water Stained Leav	Yes⊠ No
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1)	nt): m grading ar ors:	check all that	apply) Stained Leaves (B9)	(except ML		dric Soil Present? Secondary Indicators (2 or more required) A, & UWater Stained Leav (MLRA 1, 2, 4A, ar	Yes⊠ No /es (B9) nd 4B)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2)	nt): m grading ar ors:	check all that	apply) Stained Leaves (B9) ust (B11)			dric Soil Present? Secondary Indicators (2 or more required) A, & UWater Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns	Yes⊠ No ves (B9) ad 4B) (B10)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3)	nt): m grading ar ors:	check all that	apply) Stained Leaves (B9) Invertebrates (B13)			dric Soil Present? Secondary Indicators (2 or more required) A, & Uwater Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Drainage Patterns	Yes⊠ No ves (B9) ad 4B) (B10) Table (C2)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	nt): m grading ar ors:	check all that Water-S 4B) Salt Cru Aquatic	apply) Stained Leaves (B9) Ist (B11) Invertebrates (B13) en Sulfide Odor (C1)		RA 1, 2, 4	dric Soil Present? Secondary Indicators (2 or more required) A, & Water Stained Leav (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of	Yes⊠ No ves (B9) td 4B) (B10) Table (C2) m Aerial Imagery (CS
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	nt): m grading ar ors:	check all that Water-S 4B) Salt Cru Aquatic Hydrogo Oxidize	apply) Stained Leaves (B9) Ist (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon	g Living Roo	RA 1, 2, 4	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible o Geomorphic Positio	Yes⊠ No ves (B9) od 4B) (B10) Table (C2) nn Aerial Imagery (CS on (D2)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	nt): m grading ar ors:	check all that Water-S 4B) Salt Cru Aquatic Hydrogo Oxidize	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (f	g Living Roo C4)	RA 1, 2, 4	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible c Geomorphic Positic Shallow Aquitard (D	Yes⊠ No ves (B9) od 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) 03)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4)	nt): m grading ar ors:	check all that Water-S 4B) Salt Cru Aquatic Hydroge Oxidize Recent	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (Iron Reduction in Til	g Living Roo C4) Ied Soils (C6	RA 1, 2, 4, ots (C3)	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Yes⊠ No ves (B9) od 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) D3) D5)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5)	nt): m grading ar ors: ne required; (check all that Water-S 4B) Salt Cru Aquatic Hydrogu Oxidize Presenc Recent Stunted	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (Iron Reduction in Til or Stressed Plants (g Living Roo C4) Ied Soils (C6	RA 1, 2, 4, ots (C3)	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	Yes⊠ No ves (B9) id 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) 03) D5) 5 (D6) (LRR A)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	nt): m grading ar ors: ne required;	check all that Water-S 4B) Salt Cru Aquatic Hydroge Oxidize Recent Stunted Other (E	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (Iron Reduction in Til	g Living Roo C4) Ied Soils (C6	RA 1, 2, 4, ots (C3)	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Yes⊠ No ves (B9) id 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) 03) D5) 5 (D6) (LRR A)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeri	nt): m grading ar ors: ne required;	check all that Water-S 4B) Salt Cru Aquatic Hydrogu Oxidize Presenc Recent Stunted	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (Iron Reduction in Til or Stressed Plants (g Living Roo C4) Ied Soils (C6	RA 1, 2, 4, ots (C3)	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	Yes⊠ No ves (B9) id 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) 03) D5) 5 (D6) (LRR A)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeri (B7)	nt): m grading ar ors: ne required;	check all that Water-S 4B) Salt Cru Aquatic Hydroge Oxidize Recent Stunted Other (E	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (Iron Reduction in Til or Stressed Plants (g Living Roo C4) Ied Soils (C6	RA 1, 2, 4, ots (C3)	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	Yes⊠ No ves (B9) id 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) 03) D5) 5 (D6) (LRR A)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeri (B7) Field Observations:	nt): m grading ar ors: ne required;	check all that Water-S B) Salt Cru Aquatic Hydroge Oxidize Present Stunted Other (E No X	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (Iron Reduction in Til or Stressed Plants (Explain in Remarks) Depth (Inches):	g Living Roo C4) Ied Soils (C6 D1) (LRR A	RA 1, 2, 4, ots (C3)	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	Yes⊠ No ves (B9) id 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) 03) D5) 5 (D6) (LRR A)
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeri (B7) Field Observations: Surface Water Present? Water Table Present?	nt): m grading ar ors: ne required; i ial Imagery Yes Yes Yes	check all that Water-S B) Salt Cru Aquatic Hydroge Oxidize Present Stunted Other (E No X No X	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (Iron Reduction in Til or Stressed Plants (ixplain in Remarks) Depth (Inches): Depth (Inches):	g Living Roo C4) Ied Soils (Ci D1) (LRR A	RA 1, 2, 4, ots (C3)	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds	Yes⊠ No ves (B9) id 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) 03) D5) 5 (D6) (LRR A) hocks (D4
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeri (B7) Field Observations: Surface Water Present? Water Table Present? Saturation Present?	nt): m grading ar ors: ne required; i ial Imagery Yes []	check all that Water-S B) Salt Cru Aquatic Hydroge Oxidize Present Stunted Other (E No X	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (Iron Reduction in Til or Stressed Plants (Explain in Remarks) Depth (Inches):	g Living Roo C4) Ied Soils (Ci D1) (LRR A	RA 1, 2, 4, ots (C3)	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Humm	Yes⊠ No ves (B9) id 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) 03) D5) 5 (D6) (LRR A) hocks (D4
Type: Depth (inches): Remarks: Soils disturbed from HYDROLOGY Wetland Hydrology Indicate Primary Indicators (min. of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeri (B7) Field Observations: Surface Water Present? Water Table Present?	nt): m grading ar ors: ne required; res Yes Yes Yes Yes Yes Yes	check all that Water-S 4B) Salt Cru Aquatic Hydroge Oxidize Presend Recent Stunted Other (E No X No X No X	apply) Stained Leaves (B9) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (Iron Reduction in Til or Stressed Plants (Explain in Remarks) Depth (Inches): Depth (Inches): Depth (Inches):	g Living Roo C4) led Soils (C6 D1) (LRR A	RA 1, 2, 4, ots (C3)	dric Soll Present? Secondary Indicators (2 or more required) A, & Water Stained Lear (MLRA 1, 2, 4A, ar Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positio Shallow Aquitard (I FAC-Neutral Test (Raised Ant Mounds Frost-Heave Humm Iand Hydrology Present?	Yes⊠ No ves (B9) id 4B) (B10) Table (C2) on Aerial Imagery (CS on (D2) 03) D5) 5 (D6) (LRR A)

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WETLAND DETERM ... ATION DATA FORM - Western Mountains, valleys and Coast Region

oject/Site: Valley View Evangelical Church		City/Co	unty: Clackar State: Ol	mas/Clackamas Sampling Date: 4/ R Sampling P	
vestigator(s): S. Taylor		Sectio	n, Township	, Range: Section 34, Township 1S	
dform (hillslope, terrace, etc.): Terrace		Local relief:	Concave		Slope (%): 2%
Loregion (LRR): A	Lat: 45 26'	D1" N	Long: 122 3	32' 42" W Datum:	
bil Map Unit Name: <u>13C</u> Cascade silt loam 8-15% sld e climatic / hydrologic conditions on the site typical f e Vegetation , Soil , or Hydrology significant e Vegetation , Soil , or Hydrology naturally p JMMARY OF FINDINGS – Attach site map	or this time of y disturbed? roblematic? showing s	Ar (If need	No (If ea "Normal (led, explain a	Circumstances" present? Yes No any answers in Remarks.)	
Hydrophytic Vegetation Present? Yes ⊠ No Hydric Soils Present? Yes □ No Wetland Hydrology Present? Yes ⊠ No		within a \	mpled Area Wetland?	Yes No	
Remarks: Test plot area appears to be within a creat vegetation and hydrology indicators.	ed or enhance	d mitigation w	etland/stream	m in south portion of site. Area deter	mined wetland ba
EGETATION (Use scientific names)	Aborbits	Developed	//	Device Testilization (
Tree Stratum (Plot size: ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet	
ree Stratum (Plot size: It radius)	% Cover	opecies (Status	Number of Dominant Species	2 (/
	%			That Are OBL, FACW, or FAC:	<u> </u>
	%				
	%			Total Number of Dominant	2 (
Total Cover:	%			Species Across All Strata:	
apling/Shrub Stratum (Plot size: ft. radius)	70			Percent of Dominant Species That Are OBL, FACW, or FAC	(A
Rosa nutkana	25%	yes	FAC	Prevalence Index worksheet	
	%			Total % Cover of:	Multiply by:
	%			OBL species	x 1=
	%				x 2=
	%				x 3=
· Total Cover:	25%			FACU species	x 3= x 4=
lerb Stratum (Plot size: 5 ft radius)				UPL species	x 5=
Carex obnupta	85%	yes	OBL		(A)
	10%	no	FAC	Prevalence Index = B/	
Cardamine oligosperma	5%	no	FACW	Hydrophytic Vegetation Indicate	
	%			1 – Rapid Test for Hydrophy	
	0/			☑ 2 – Dominance Test is >50% ☑ 3 - Prevalence Index is <3.0	
	%			4 - Morphological Adaptation	
<u></u>	%			supporting	rks or on a separa
	%			sheet)	no or on a separa
	%			Wetland Non-Vascular Plan	ts ¹
Total Cover:	100%			Problematic Hydrophytic Ve	
Voody Vine Stratum (Plot size: ft radius)					
	%			¹ Indicators of hydric soil and wetla	
	%			Must be present, unless disturbed	or problematic.
Total Cover:	%				
				Hydrophytic Vegetation Present	Yes⊠ No
Bare Ground in Herb Stratum %					

US Army Corps of Engineers

SOIL								Sampling Point: TP-8
Profile De	scription: (Descri	be to the de	pth needed to doc	ument the inc	licator or o	confirm the a	bsence of indicators.)	
Depth	Matrix			Redox Feat	lires			
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16	10YR 5/1	48%	10YR 4/6	30%	C		Silty clay	
	10YR 3/3	20%	10YR 5/8	2%	С	M		
		%		%				
		%		%				
		%		%				
		%		%				
		%		%				
		%		%		0	21	
			I LRRs, unless of				. ² Location: PL=Pore Lir indicators for Problemati	
] Histosa		incapie to a	Sandy Redox)		2 cm Muck (A10)	ic Hydric Solis
	Epipedon (A2)		Stripped Matrix				Red Parent Material (TF	2)
				. (0-)			Very Shallow Dark Surfa	
] Black F	Histic (A3)		Loamy Mucky	Mineral (F1) (except ML	RA 1) 🗌	Other (Explain in Remar	ks)
] Hydrog	en Sulfide (A4)		Loamy Gleyed	Matrix (F2)				
Deplete	ed Below Dark Surf	ace (A11)	Depleted Matri	ix (F3)				
] Thick [Dark Surface (A12)		Redox Dark S	urface (F6)				
] Sandy	Mucky Minerals (S	1)	Depleted Dark	Surface (F7)		³ In	dicators of hydrophytic ve	egetation and
Sandy	Gleyed Matrix (S4)		Redox Depres	sions (F8)			Wetland hydrology mus	•
Restrictiv	e Layer (if presen	t):						
_								
Type:						Hydri	c Soil Present?	Yes No
Depth (inc	thes).							IES I NOV
open (mo		exposed sub	soils from grading	activities and c	lid not mee	t any of the al	nove indicators	'A
emarks.	oon appears to be	exposed suc	sons norri grading i	activities and e	na not mee	tany of the a	50VC IIIGIO2013.	
lemarks:								
lemarks:								
Remarks:								
					• 10° - 17 - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10° - 10°			
	_OGY							
HYDROL							Secondary Indicators	
HYDROL Wetland H	lydrology Indicate						Secondary Indicators (2 or more required)	
HYDROL Wetland H	lydrology Indicate		heck all that apply			DA 4 2 (A	(2 or more required)	
YDROL Vetland F Primary In	Hydrology Indicator dicators (min. of on		Water-Stained		except ML	RA 1, 2, 4A,	(2 or more required)	aves (B9)
HYDROL Vetland H Primary In	Hydrology Indicato dicators (min. of on e Water (A1)		Water-Stained 4B)	Leaves (B9) (except ML	RA 1, 2, 4A,	(2 or more required) Water Stained Lea (MLRA 1, 2, 4A, a	aves (B9) nd 4B)
HYDROL Primary In	Hydrology Indicator dicators (min. of on e Water (A1) /ater Table (A2)		☐ Water-Stained 4B) ☐ Salt Crust (B1	Leaves (B9) (1)	except ML	RA 1, 2, 4A,	(2 or more required) Water Stained Lea (MLRA 1, 2, 4A, a Drainage Patterns	aves (B9) I nd 4B) I (B10)
Image: Primary Ingenerating Surface Image: Surface Image: Surface Image: Surface Image: Surface	Hydrology Indicator dicators (min. of on e Water (A1) /ater Table (A2) tion (A3)		Water-Stained 4B) Salt Crust (B1	Leaves (B9) (1) ebrates (B13)		RA 1, 2, 4A,	(2 or more required) Water Stained Lea (MLRA 1, 2, 4A, a Drainage Patterns Dry-Season Wate	aves (B9) I nd 4B) (B10) r Table (C2)
HYDROL Primary In Surface High W Saturat Water N	Hydrology Indicator dicators (min. of on e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		Water-Stained 4B) Salt Crust (B1 Aquatic Inverte Hydrogen Sulf	Leaves (B9) (1) ebrates (B13) ide Odor (C1)			 (2 or more required) Water Stained Lea (MLRA 1, 2, 4A, a) Drainage Patterns Dry-Season Wate Saturation Visible 	aves (B9) I nd 4B) I (B10) Ir Table (C2) on Aerial Imagery (C9
HYDROL Netland H Primary In Surface High W Saturat Water N Sedime	Hydrology Indicator dicators (min. of on e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)		Water-Stained 4B) Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize	Leaves (B9) (1) ebrates (B13) ide Odor (C1) ospheres alon	g Living Ro		 (2 or more required) Water Stained Lea (MLRA 1, 2, 4A, a) Drainage Patterns Dry-Season Wate Saturation Visible Geomorphic Positi 	aves (B9) In d 4B) I (B10) Ir Table (C2) In Aerial Imagery (C9 Ion (D2)
HYDROL Wetland F Primary In Surface High W Saturat Water N Sedime Drift De	Hydrology Indicator dicators (min. of on e Water (A1) /ater Table (A2) tion (A3) Marks (B1)		Water-Stained 4B) Salt Crust (B1 Aquatic Inverte Hydrogen Sulf	Leaves (B9) (1) ebrates (B13) ide Odor (C1) ospheres alon educed Iron (C	g Living Ro C4)	ots (C3)	 (2 or more required) Water Stained Lea (MLRA 1, 2, 4A, a) Drainage Patterns Dry-Season Wate Saturation Visible 	aves (B9) ind 4B) i (B10) r Table (C2) on Aerial Imagery (C9 ion (D2) (D3)

 Recent Iron Reduction in Tilled Soils (C6)
 Stunted or Stressed Plants (D1) (LRR A)
 Other (Explain in Remarks) FAC-Neutral Test (D5)
 Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D4 Inundation Visible on Aerial Imagery Depth (Inches): Depth (Inches): see remarks Yes □ Yes ⊠ Wetland Hydrology Present? Yes 🖾 No 🗌 Depth (Inches): surface

(Includes Capillary fringe) Describe Recorded Data (Stream gauge, monitoring well, aerial photos, previous inspections), if available:

US Army Corps of Engineers

Surface Soil Cracks (B6)

Field Observations:

Surface Water Present?

Water Table Present? Saturation Present?

(B7)

Western Mountains, Valleys and Coast – FINAL Version 2 $\,$

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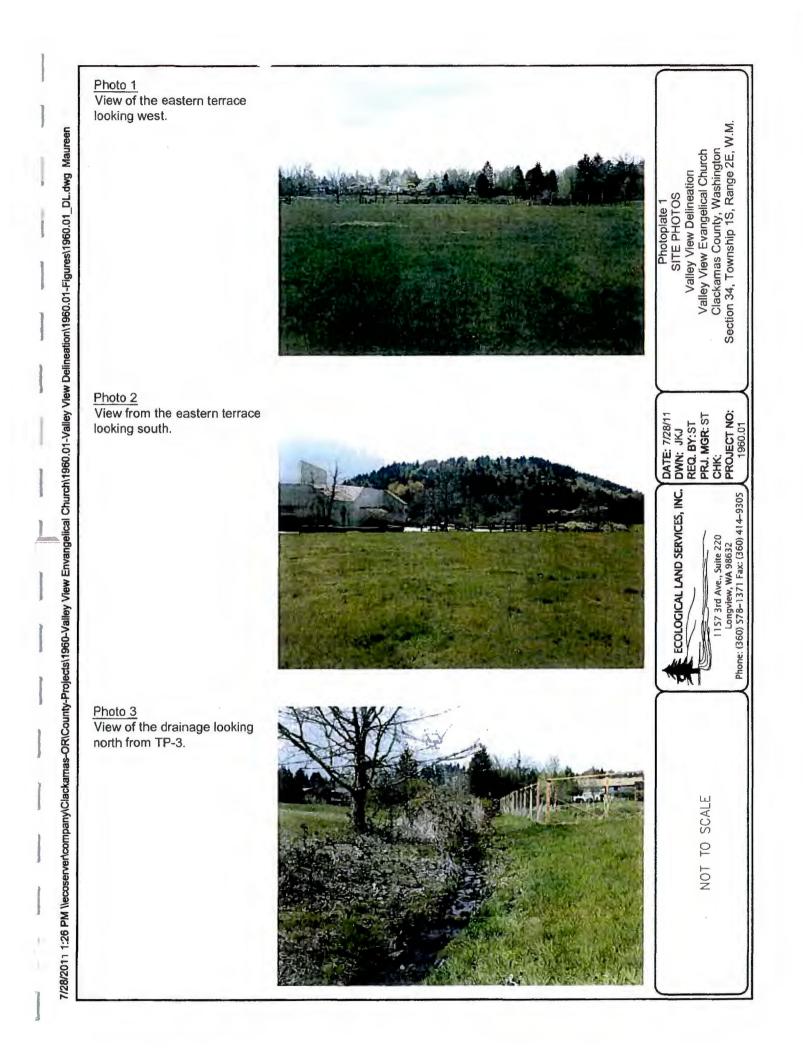
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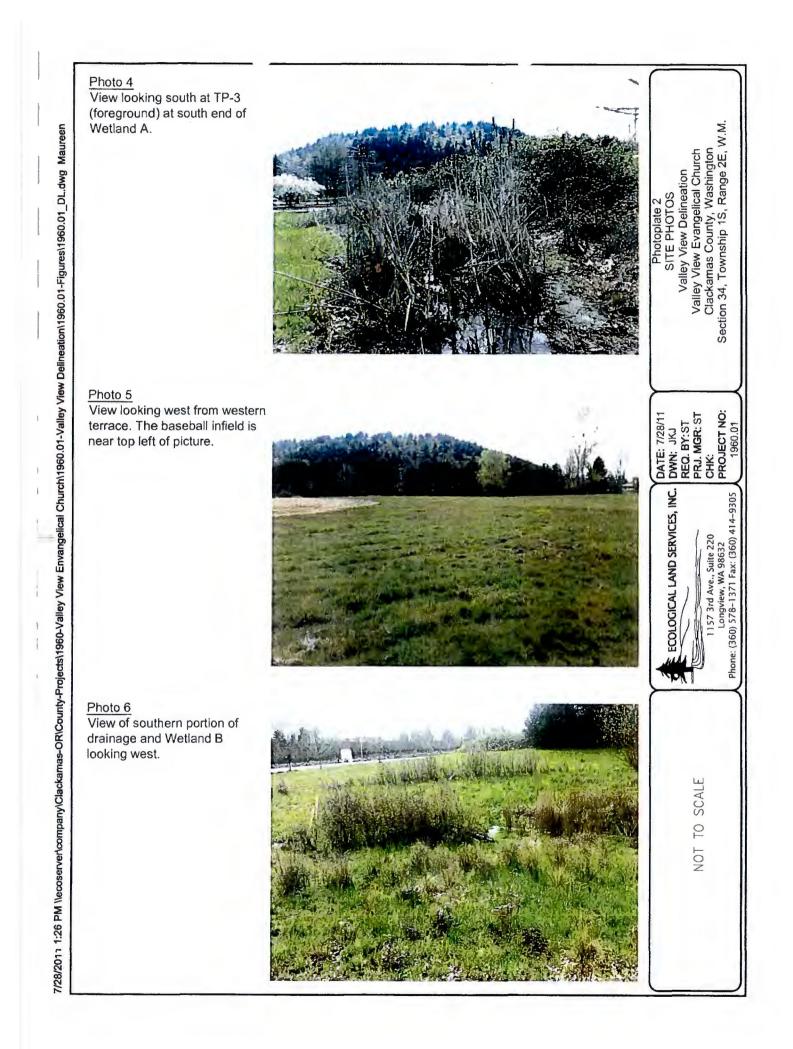
Yes 🛛 No 🗌

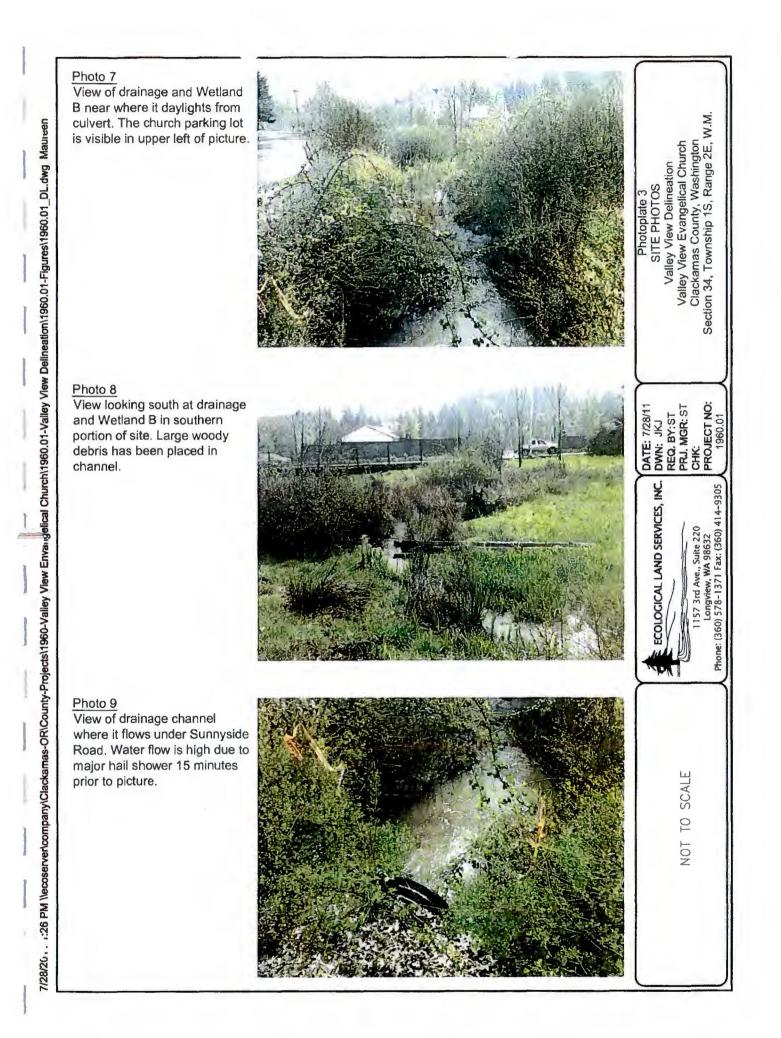
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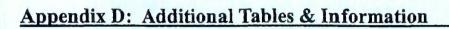
Appendix C: Site Photographs

Valley View Evangelical Church Wetland Delineation Report Ecological Land Services, Inc. July 2011









Valley View Evangelical Church Wetland Delineation Report

Ecological Land Services, Inc. July 2011 Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <u>http://www.ncdc.noaa.gov</u>.

STATION: PORTLAND OR

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011230 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

										MONI YEAF LATI LONG	H: TUD	Е:	PORTI 2011 45 1 122 1	35 N	<u>JR</u>		
נ 	CEMPI	ERATU	JRE :	IN F			PCPN:		SNOW:	WIN				SHINE			: PK WND
1	2	3	4	5	6A	6B	7	8	9 12Z	10 AVG	11	12	13	14	15	16	17 18
					HDD		WTR							PSBL			SPD DR
1	68	44	56	7	9	0	0.23	М	0	5 0	21	240	М	м	9	1	24 250
2	52	41	47	-2	18		0.12	M	0	10.5		300	M	M		ì	33 310
2	52	38	45	-4	20		0.01	M	0	2.9			M	M	10	Т	12 290
4	51	44	48	-1	17		0.55	M	0			190	M	M	9	1	21 180
5	53	41	47	-3	18		0.02	M	0	11.1			M	M	8	-	30 210
6	47	38	43	-7	22		0.26	М	0			210	М	M		135	22 180
7	52	37	45	-5	20		0.00	М	0			340	М	M	7		22 340
8	61	31	46	-4	19	0	0.00	M	0	4.4	16	320	М	М	5	12	22 320
9	57	42	50	0	15	0	Т	М	0			190	М	М	10		18 160
10	57	45	51	1	14	0	0.23	М	0	10.2	22	200	М	Μ	10	1	29 210
11	54	39	47	-3	18	0	0.08	М	0	5.9	18	240	М	Μ	7	15	23 210
12	57	35	46	-5	19	0	0.00	0.0	0	4.0	14	210	М	Μ	7	12	18 200
13	52	43	48	-3	17	0	0.13	М	0	8.8	33	230	М	Μ	9	13	39 230
14	52	42	47	-4	18	0	0.88	М	0	9.2	22	180	М	M	10	1	29 210
15	53	43	48	-3	17		0.80	М	0			110	М	Μ	10	1	17 110
16	55	41	48	-3	17		0.02	Μ	0			310	Μ	M	9	1	18 310
17	54	33	44	-7	21		0.00	M	0			280	М	M	б		16 280
18	54	34	44	-7	21		0.00	М	0			280	М	М	4		22 290
19	57	36	47	-5	18		0.00	М	0			350	Μ	М	4		17 330
20	58	40	49	- 3	16		0.03	М	0			220	Μ	M	9		20 320
21	52	38	45	-7	20		0.10	Μ	0		21		Μ	М	7	18	25 300
22	64	33	49	-3	16		0.00	M	0		. 16	60	M	М	2	1	20 60
23	71	37	54	2	11		0.01	M	0				M	M	3	-	18 310
24	57	46	52	-1	13		0.26	M	0			220	M	M	9	1	22 220
25	57	46	52	-1	13		0.66	M	0	13.1			M	M	9	15	33 240
26 27	57 56	44 43	51 50	-2 -3	14 15		0.21 0.10	M M	0	9.1		190 240	M M	M	8		28 180 35 240
28	52	43	50 46	-3 -7	19		0.10	M	0			240	M	M M	9 9	18	35 240 31 210
20 29	52	40	49	-5	16	0	0.34 T	M	0			320	M	M	8	TO	21 300
30	60	41	51	-3	14		0.00	M	0			280	M	M	6		18 290
U U	00	71	21	5	7.4	0	0.00	7.7	0	9.7	11	200	1.1	1.1	0		10 200

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SM 1680 1195 505 0 5.04 0.0 202.7 M 227 6.8 FASTST M M 8 MAX(MPH) AV 56.0 39.8 MISC ----> # 33 230 # 39 230 1 NOTES: # LAST OF SEVERAL OCCURRENCES COLUMN 17 PEAK WIND IN M.P.H. PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2 STATION: PORTLAND OR MONTH: APRIL YEAR: 2011 LATITUDE: 45 35 N LONGITUDE: 122 36 W [TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16 TOTAL FOR MONTH:5.041 = FOG OR MISTDPTR FM NORMAL:2.402 = FOG REDUCING VISIBILITY AVERAGE MONTHLY: 47.9 DPTR FM NORMAL: -3.3 HIGHEST: 71 ON 23 GRTST 24HR 1.07 ON 14-15 TO 1/4 MILE OR LESS 31 ON 8 LOWEST: 3 = THUNDERSNOW, ICE PELLETS, HAIL 4 = ICE PELLETS TOTAL MONTH: 0.0 INCH 5 = HAILGRTST 24HR 0.0 6 = FREEZING RAIN OR DRIZZLE GRTST DEPTH: 0 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE [WEATHER - DAYS WITH] [NO. OF DAYS WITH] 9 = BLOWING SNOW X = TORNADOMAX 32 OR BELOW: 0 0.01 INCH OR MORE: 20 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 14 MIN 32 OR BELOW: 1 0.50 INCH OR MORE: 4 MIN O OR BELOW: O 1.00 INCH OR MORE: 0 [HDD (BASE 65)] TOTAL THIS MO. 505 DPTR FM NORMAL 105 CLEAR (SCALE 0-3) 1 PTCLDY (SCALE 4-7) 13 TOTAL FM JUL 1 4176 CLOUDY (SCALE 8-10) 16 DPTR FM NORMAL 115 [CDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL -1 [PRESSURE DATA] TOTAL FM JAN 1 0 HIGHEST SLP 30.53 ON 30 DPTR FM NORMAL -1 LOWEST SLP 29.55 ON 25 [REMARKS] #FINAL-04-11#

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Explanation of the Preliminary Monthly Climate Data (F6) Product

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STATION:

PORTLAND OR

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011230 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

										MONT	Н:]	MARCH					
										LATI			45. 3					
													122 3					
Т	EMP	ERATI	JRE 1	IN F	:	:	PCPN:	5	SNOW:	WIN	D		:SUNS	SHINE	: SK	Y	:PK V	WND
1	2	3	4	5	6A	6B	7	8	9 12Z	10 AVG	11 MX	12 2MIN	13	14	15	16	17	18
-					HDD		WTR							PSBL			SPD	
		*===			= == == =		======			====	===	====						
				~	0.0	0	0 60		0	c D		1 - 0			0		1.0	100
1	43	34	39	-6	26		0.62	M	0			110	M	M		1		120
2	49 50	38 38	44	-1	21 21		0.20 0.14	M M	0	10.8 6.9			M	M	10	1		220 250
3 4	50 47	38	44 40	-1 -6	21 25		0.14	M		10.4			M M	M M		12		110
5	54	39	47	-0	18		0.06	M	0			100	M	M		12		100
6	47	36	42	- 4	23		0.00	0.0	Ő			280	M	M		1		280
7	50	31	41	-5	24		0.01	М	0			200	M	М		12		200
8	58	39	49	3	16		0.20	Μ	0			110	M	M		1		200
9	57	46	52	6	13	0	0.46	М	0	12.1	25	190	М	M	10	18	40	220
10	53	41	47	1	18	0	0.68	М	0	13.5	31	230	М	М	7	18	41	200
11	57	39	48	1	17		0.01	М	0			200	М	М	8			160
12	53	42	48	1	17		0.26	Μ		11.1			М	Μ		1		200
13	51	46	49	2	16		0.43	Μ		16.8			М	М	10	1		250
14	57	44	51	4	14		0.10	М		12.7			M	М	9			210
15	53	43	48	1	17		0.77	Μ		13.0			Μ	М		13		230
16	44	41	43	-4	22		0.38	M	0	8.3			M	М	10			200
17	50	38 39	44	-3	21		0.11	М	0			200	M	Μ		18		200
18 19	48 52	39 34	44 43	-4 -5	21 22		0.21 0.01	M M	0	10.7		160	M M	M M		1 12		120 130
20	52	34	43	-5	22		0.01	M		12.1		80	M	M	10			90
21	53	41	47	-1	18		0.02	M	0			190	M	M	9	Т		190
22	52	38	45	-3	20		0.01	M	Ő			180	M	M	7			150
23	59	33	46	-2	19		0.14	M	0			100	M	M		1		110
24	54	37	46	-2	19		0.25	М	0			180	M	M		1		190
25	52	38	45	-3	20		0.04	М	0			170	M	М		18		1.60
26	52	42	47	-1	18		0.30	M	0			180	M	M		1		180
27	50	43	47	-2	18		0.14	М	0	10.2			М	М		1		200
28	54	41	48	-1	17	0	0.14	М	0			200	М	М	9			200
29	53	46	50	1	15	0	0.33	М		10.7			Μ	М	10			200
30	59	52	56	7	9	0	Т	0.0	0	10.3	23	220	M	M	0	1	20	220

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31 63 46 55 6 10 0 T M 0 8,4 21 200 M M 8 26 210 SM 1626 1232 577 0 6.43 0.0 281.8 М 273 AV 52.5 39.7 9.1 FASTST M M 9 MAX(MPH) MISC ----> # 40 240 # 55 250 NOTES: # LAST OF SEVERAL OCCURRENCES COLUMN 17 PEAK WIND IN M.P.H. PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2 STATION: PORTLAND OR MONTH: MARCH 2011 YEAR: LATITUDE: 45 35 N LONGITUDE: 122 36 W [PRECIPITATION DATA] [TEMPERATURE DATA] SYMBOLS USED IN COLUMN 16 AVERAGE MONTHLY:46.1TOTAL FOR MONTH:6.431 = FOG OR MISTDPTR FM NORMAL:-1.1DPTR FM NORMAL:2.722 = FOG REDUCING 2 = FOG REDUCING VISIBILITY HIGHEST: 63 ON 31 GRTST 24HR 0.77 ON 15-15 TO 1/4 MILE OR LESS 31 ON 7 LOWEST: 3 = THUNDERSNOW, ICE PELLETS, HAIL 4 = ICE PELLETSTOTAL MONTH:0.0INCH5 = HAILGRTST 24HR0.06 = FREEZGRTST DEPTH:07 = DUSTS 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 =SMOKE OR HAZE [WEATHER - DAYS WITH] 9 = BLOWING SNOW [NO. OF DAYS WITH] X = TORNADOMAX 32 OR BELOW: 0 0.01 INCH OR MORE: 28 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 20 MIN 32 OR BELOW: 1 0.50 INCH OR MORE: 3 1.00 INCH OR MORE: MIN O OR BELOW: O 0 [HDD (BASE 65)] TOTAL THIS MO. 577 DPTR FM NORMAL 41 CLEAR (SCALE 0-3) 0 PTCLDY (SCALE 4-7) 8 TOTAL FM JUL 1 3671 CLOUDY (SCALE 8-10) 23 DPTR FM NORMAL 10 [CDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL0[PRESSURE DATA]TOTAL FM JAN 10HIGHEST SLP 30.31 ON 30DPTR FM NORMAL0LOWEST SLP 29.38 ON 24 [REMARKS] #FINAL-03-11#

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Explanation of the Preliminary Monthly Climate Data (F6) Product

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STATION:

PORTLAND OR

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 302225 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

										MONI YEAR LATI LONG	H: TUD	E :	FEBRU 2011 45	35 N				
				IN F			PCPN:		SNOW:	WIN				SHINE			: PK	
1	2	3	4	5	6A	6B	7	8	9		11	12		14	15	16	17	18
					HDD		WTR		DPTH	SPD	SPD	DIR		PSBL				DR
1	42	31	37	-4	28		0.00	М		19.5		90	М	М	2			100
2	44	29	37	-4	28		0.00	М	0			120	М	M		8		140
3	50	33	42	0	23		0.00 T	0.0	0			110	M	М		-		13
4 5	50 50	38 43	44 47	2 5	21 18	-	т 0.06	M M				110 100	M M	M M	10 10			14(10(
5	55	44	50	8	15		0.08	M				200	M	M		12		190
7	49	42	46	4	19		0.15	M				270	M	M		1		270
8	50	34	42	0	23		0.02	M	0			250	M	M		1		26
9	45	31	38	4			0.00	0.0	0			280	M	M		1		280
10	45	29	37	-5	28		0.00	0.0	0			320	М	М		128		310
11	51	34	43	0	22	0	0.00	0.0	0			110	М	M	10			120
12	57	41	49	6	16	0	0.47	Μ	0	11.5	33	190	М	М	10	1	46	190
13	50	39	45	2	20	0	0.11	M	0	4.8	14	120	М	М	8	1	17	120
14	55	42	49	6	16		0.31	M		11.6			М	М	10			18
15	46	38	42	-1	23		0.55	M		10.1			M	М		1		190
16	45	33	39	- 4	26		0.25	М		6.6			М	М		1		200
17	48	36	42	-1	23		0.01	М				180	M	М		1		200
18	44	34	39	-5			0.09	М				190	М	M		1		190
19	50	33 29	42 38	-2			0.00	M	0			310	M	М		1		31
20 21	46 47	29 35	38 41	-6 -3			Т 0.05	M M				230 250	M	M	7			23
22	46	35	41	-3			0.03	M				290	M M	M M	8	18		25 29
23	42	32	37	-7			0.15	M	0			290	M	M		18		29
24	39	29		-10	31		0.08	M				100	M	M		1		100
25	34	25		-15	35		0.00	0.0		16.2			M	M	1	4		80
26	33	18		-19	39		T	M				110	M	M	7			11
27	46	33	40	-5	25			М		15.4			M	M	10	1		19
28	43	36	40	-5	25	0	1.66	Μ	0	11.4	29	230	М	М	10	1	40	200
	1302			**===	683		4.28	=====	0.0 2			- 14 = 2+ 1	=≈=≈= M	=====	212			===

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AV 46.5 34.1	MISC		3 1 9	0				# 4	16	190
NOTES: # LAST OF SEVERAL OCCUI COLUMN 17 PEAK WIND IN	RRENCES					= = =	= = =			
PRELIMINARY LOCAL CLIM	ATOLOGICAL DATA (WS	FORM:	F-6)	,	PAGE	2				
		STATIO <u>MONTH:</u> YEAR: LATITU LONGIT	DE:	FEE 201 4	RUARY 1 5 35	N				
[TEMPERATURE DATA]	[PRECIPITATION DA	FA]	S	YME	OLS U	SED	IN	COL	JMN	16
AVERAGE MONTHLY: 40.3 DPTR FM NORMAL: -2.8 HIGHEST: 57 ON 12 LOWEST: 18 ON 26		0.10 ON 27-2 , HAIL 0 INCH	2 8 4 5 6 7		FOG R TO 1/ THUND ICE P HAIL FREEZ DUSTS VSBY	EDUC 4 MI ER ELLE ING TORM 1/2	ING LE TS RAI OR MIL	OR I N OI SAI E OI	LES R E NDS	SS DRIZZLE STORM:
[NO. OF DAYS WITH]	[WEATHER - DAYS W	ITH]	9	=	SMOKE BLOWI TORNA	NG S				
MAX 32 OR BELOW: 0 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 9 MIN 0 OR BELOW: 0	0.10 INCH OR MORE 0.50 INCH OR MORE	: 9 : 2	Λ							
[HDD (BASE 65)] TOTAL THIS MO. 683 DPTR FM NORMAL 78 TOTAL FM JUL 1 3094 DPTR FM NORMAL -31) 12								
[CDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL 0 TOTAL FM JAN 1 0 DPTR FM NORMAL 0	(PRESSURE DATA) HIGHEST SLP 30.64 LOWEST SLP 29.51									
[REMARKS] #FINAL-02-11#										

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Explanation of the Preliminary Monthly Climate Data (F6) Product

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STATION:

MONTH:

PORTLAND OR

JANUARY

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011230 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

										YEAR LATI LONG	TUD	E :	2011 45 122	35 N				
	TEMPI	ERATI	JRE :				PCPN:		SNOW:					SHINE			: PK	WND
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
	MAX						WTR				SPD	DIR		PSBL			SPD	
1		28	32	-7	33		0.00	М	0	12.4			М	М	5		30	100
2		24	31	-8	34		0.00	0.0	0			120	М	М	3		38	90
3		23	30	-9			0.00	М	0			140	М	M	1			140
4		26	31	-8	34		0.00	0.0	0			120	М	M	7			110
5		31	36	-3	29		0.37	М	0			110	M	M		18		110
6		37	42	3	23	0	T	Μ	0	2.4		280	M	M	10	1		280
7		33	40	1	25		0.10	M	0			210	M	M		1		200
8		29	36	-3		0	Т	М	0			230	M	M		12		230
9		35	39	0	26		0.04	M	0			200	M	M		1		200
10		32	37	-2	28		0.00	M		15.0 19.7		90	M	M	6	10		100
11	36	31	34	-6 2	31		0.05	M		12.3			M	M		16 16	35	90 190
12 13		31 43	42 50		23 15		0.76	M M		10.3			M	M M		10		190
14		43	55	10 15	10	0	0.52 T	M		10.9		200 M	M		M	T		220
15	59	50	54	14	11	-	0.86	M	M	8.9		M	M	M M	M			200
16		55	57	17	8		0.68	M		10.9		M	M	M	M			200
17	56	44	50	10	15	0	0.00 T	M	M			220	M	M	M			210
18	45	38	42	2	23		0.58	M	0			330	M	M	10	1		320
19	44	35	40	0	25		0.00	0.0	0	2.9		320	M	M	8	-		310
20	41	33	37	-3	28	0	Т	M	0	2.9		80	M	M	10	18	9	90
21	48	40	44	4	21	-	0.73	М	0	3.3		140	M	M	10			110
22	50	35	43	3	22		0.00	М	_			290	M	M		12		290
23	46	35	41	1	24		0.01	М	0			100	M	M		12		100
24	52	40	46	6	19	0	Т	М	0			110	M	M		12		110
25	52	37	45	4	20	0	T	М	0	1.2		130	M	M		12		130
26	53	35	44	3	21	0	0.00	·0.0	0			130	M	M		128		210
27	55	35	45	4	20		0.00	0.0	0	2.4	10	110	М	M	8	128		100
28	54	37	46	5	19	0	0.00	0.0	0	10.2			М	M	8		26	180
29	54	40	47	6	18	0	0.00	0.0	0	4.6	18	190	M	М	9	12	22	200
30	50	39	45	4	20	0	0.03	М	0	0 7		110	M	M	10	10	3.0	200

http://www.weather.gov/climate/getclimate.php?wfo=pqr

6/13/2011

31 44 36 40 -1 25 0 0.00 0.0 0 11.6 24 110 M M 10 29 100 SM 1467 1118 714 0 4.73 0.0 200.5 M 216
 6.5 FASTST
 M
 8
 MAX(MPH)

 MISC ---->
 # 29 100
 # 38 90
 AV 47.3 36.1 MISC ----> # 29 100 NOTES: # LAST OF SEVERAL OCCURRENCES COLUMN 17 PEAK WIND IN M.P.H. PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2 STATION: PORTLAND OR MONTH: JANUARY YEAR: 2011 LATITUDE: 45 35 N LONGITUDE: 122 36 W [TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16 AVERAGE MONTHLY: 41.7TOTAL FOR MONTH: 4.731 = FOG OR MISTDPTR FM NORMAL:1.8DPTR FM NORMAL: -0.342 = FOG REDUCING VISIBILITY HIGHEST: 59 ON 14 GRTST 24HR 1.06 ON 12-13 TO 1/4 MILE OR LESS 23 ON 3 3 = THUNDERLOWEST: SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS5 = HAILTOTAL MONTH: 0.0 INCH GRTST 24HR 0.0 6 = FREEZING RAIN OR DRIZZLE GRTST DEPTH: 0 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 =SMOKE OR HAZE [WEATHER - DAYS WITH] 9 = BLOWING SNOW [NO. OF DAYS WITH] X = TORNADOMAX 32 OR BELOW: 0 0.01 INCH OR MORE: 12 0.10 INCH OR MORE: 8 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 9 MIN 0 OR BELOW: 0 0.50 INCH OR MORE: 6 1.00 INCH OR MORE: 0 [HDD (BASE 65)] TOTAL THIS MO. 714 CLEAR (SCALE 0-3) 2 DPTR FM NORMAL -51 PTCLDY (SCALE 4-7) 9 TOTAL FM JUL 1 2411 CLOUDY (SCALE 8-10) 16 DPTR FM NORMAL -109 [CDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL 0 [PRESSURE DATA] 0 HIGHEST SLP 30.33 C. 0 LOWEST SLP 29.90 ON 16 TOTAL FM JAN 1 DPTR FM NORMAL [REMARKS] #FINAL-01-11#

http://www.weather.gov/climate/getclimate.php?wfo=pqr

6/13/2011

The wetland delineation followed the Routine Determination Method according to the U.S. Army Corps of Engineers, Wetland Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (U.S. Army Engineer Research and Development Center May 2010). The Routine Determination Method examines three parameters - vegetation, hydrology, and soils - to determine if wetlands exist in a given area. The presence of hydrology is critical when delineating a wetland area. However, because hydrologic conditions can change periodically (hourly, daily, or seasonally), it is necessary to determine if hydrophytic vegetation and hydric soils exist, indicating that water is present long enough to support a wetland plant community. By definition, wetlands are areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are regulated as "Waters of the United States" by the U.S. Army Corps of Engineers, as "Waters of State" by the Oregon Department of State Lands, and locally by the City of Happy Valley, Oregon.

Valley View Evangelical Church Wetland Delineation Report

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Appendix E: Literature Citations

Valley View Evangelical Church Wetland Delineation Report

Ecological Land Services, Inc. July 2011

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- City of Happy Valley (2009) Development Code Amendments Article 16, Chapter 16.34 Natural Resources Overlay Zone.
- Cowardin, L.M., C. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. FWS/OBS-78/31. U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services, Washington D.C.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Waterways Experiment Station, Vicksburg, Mississippi.
- National Weather Service, Portland Office. 2011. Preliminary Local Climatological Data. Online document < <u>http://www.weather.gov/climate/index.php?wfo=pqr</u>>. Accessed June 2011.
- U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-13. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Department of Agriculture, Natural Resources Conservation Service. 2011. Hydric Soils for Oregon.
- U.S. Department of Agriculture, Natural Resources Conservation Service Website. www.or.nrcs.gov/pnw_soil/wa_reports.html. Accessed April 2011.

Valley View Evangelical Church Wetland Delineation Report **Mayor** Honorable Lori DeRemer



City Manager Jason A. Tuck

November 8, 2011

Engineering Department Review Comments and Conditions of Approval

Request: Site Address:	Valley View Church 3-Lot Partition Located north of SE Sunnyside Road between SE 114 th Court and SE 117 th Avenue
File No:	LP 02-11
Reviewer:	Carol Earle, Engineering Manager

Observations:

The Valley View Church property is located on the north side of SE Sunnyside Road, east of SE 114th Court and west of SE 117th Avenue. The parcel is approximately 13.5 acres, and is bisected by an existing drainage channel that is fed by the uphill subdivision developed to the north. The property is developed with an existing church and parking areas in the southeast corner. The property generally slopes from the north to the south and SE Sunnyside Road. The owner proposes to partition the lot into three separate parcels, with the church facilities being on its own parcel.

General Items

- 1. All submitted project construction plans shall conform to the City's "Engineering Design and Standard Details Manual" (Manual) for design and drafting requirements.
- 2. The project is subject to the City's latest "Public Improvement Guarantee" form which requires financial security of 125% of the engineer's estimate and a 25% two (2) year maintenance bond upon completion and acceptance of the improvements.
- 3. Construction plans shall show all adjacent subdivision names, lot lines and tax lot lines with the tax map and tax lot number noted on each.
- 4. Construction plan review is subject to these conditions of approval.
- 5. Full time inspection by the developer's engineer is required for all street and storm drainage construction.
- 6. A sign shall be posted conspicuously at the job site entrance prior to site construction, and shall be maintained throughout construction. Use 2-inch high black letters on a 4'x8' sign with an orange background. The sign shall read as follows:

16000 SE Misty Drive Happy Valley, Oregon 97086 Telephone: (503) 783-3800 Fax: (503) 658-5174 Website: www.ci.happy-valley.or.us

Preserving and enhancing the safety, livability and character of our community

EXHIBIT # A-1_

"SITE CONSTRUCTION SHALL BE LIMITED TO 7:00 AM TO 6:00 PM ON WEEKDAYS, AND 8:00 AM TO 5:00 PM ON SATURDAYS AND SUNDAYS. FRAMING SHALL BE ENTIRELY PROHIBITED ON SUNDAYS.

HOWEVER, SITE CLEARING, EARTH MOVING, INSTALLAION OR CONSTRUCTION OF UNDERGROUND UTILITIES, PAVING OF STREETS AND SIDEWALKS, FOUNDATION FRAMING AND POURING, AND STRUCTURAL FRAMING SHALL BE ENTIRELY PROHIBITED ON SUNDAYS.

TO REPORT VIOLATIONS CALL 503-783-3800."

The City Manager shall have the authority to waive these requirements in the event of emergency or in the City Manager's opinion, justifiable cause.

Grading and Erosion Sediment Control

- 7. The developer's engineer is required to provide a site specific drainage plan to temporarily collect, route, and treat surface water and ground water during each construction phase. The construction plans shall specifically identify how the storm drainage system and erosion sediment control (ESC) measures will be phased during construction, such that at any time during construction the approved plans shall be capable of providing full erosion and sediment control collection, routing, and treatment of storm water runoff and ground water. No site construction will be allowed to take place if the storm drainage system and ESC measures are not installed per plan and functioning properly.
- 8. If the total disturbed area for this project exceeds 1 acre, an NPDES 1200-C permit from DEQ will be required. The applicant shall follow the latest requirements from DEQ for NPDES 1200-C permit submittals. A copy of the approved and signed permit shall be provided to the City prior to holding a pre-construction meeting or commencing any construction activity.
- Vegetative cover shall be maintained on slopes or established through new plantings for stability and erosion control purposes. Vegetation shall not be stripped from any steeply sloped area except for construction of streets, utilities, parking areas, pedestrian facilities, and retaining walls.
- 10. The Erosion Sediment Control Plan shall include a plan to implement and maintain wet weather measures within 14 days of the final grading and between the dates of October 1st and April 30th.
- 11. For retaining walls great than four (4) feet in height, a professional engineer or geotechnical engineer registered in the State of Oregon shall provide stamped design calculations and detail drawings required for the retaining wall construction. The retaining wall detail drawings shall include at a minimum; wall profile, wall cross section at highest point of wall, wall reinforcing geotextile requirements, wall drainage system, and wall backfill requirements.
- 12. All grading activity shall be per the current City of Happy Valley Municipal Code. The developer shall submit a completed Site Development Permit to the City prior to beginning any grading work on site.

- 13. The grading limits shall be fenced using the standard 4' orange plastic construction fencing in addition to the required erosion sediment control fences. All fencing, ESC measures and construction gravel entrances shall be installed and maintained by the developer and inspected by the City of Happy Valley prior to beginning work on the site.
- 14. All construction trucks shall perform transfer of trailers on-site. Surrounding public streets shall not be used as a staging area for dump trucks with transfer trailers.

Street/Pedestrian System

- 15. Street design plans shall conform to the requirements delineated in the City's "Engineering Design and Standard Details Manual" (Manual) current revision, and the City's Transportation System Plan (TSP), current revision.
- 16. Frontage improvements shall be constructed on SE 117th Avenue. SE 117th Avenue is classified as a neighborhood street in the City's TSP, and the improvements shall meet the neighborhood street standards. The new curb shall be located 34 feet from the curb on the east side of SE 117th Avenue, with a 4.5 foot planter strip and 5 foot sidewalk. The new right-of-way shall be located at the back of the sidewalk, and an 8' PUE shall be dedicated across the project frontage behind the right-of-way line.
- 17. Catch basins on SE 117th Avenue shall be the curb inlet type per WES standard drawing SWM-0004.
- 18. Street lights will be required on the SE 117th Avenue frontage. The property owner shall submit a request in writing to Clackamas County Service District No. 5 for the installation of streetlights and the formation of an assessment district to pay for the operation and maintenance of lighting, and shall provide a copy of the request to the City.
- 19. The applicant shall provide a signing and striping plan prepared by a registered engineer for all roadways to be approved by the City. The plan shall be submitted for approval as part of the construction plan set. The applicant is responsible for the installation of all signing and striping as indicated on the plans.
- 20. All current ADA requirements for streets and intersections shall be met.
- 21. All required public improvements shall be constructed, inspected, and accepted or financially guaranteed prior to final plat approval.
- 22. No building permits shall be submitted to the City for review until the plat has been recorded, the City, County, and Water District have accepted all improvements, individual 8 ½ x 11 "asbuilt" record drawings for each lot showing storm and sanitary lateral locations with two distance ties to their ends for future locations are received and approved by all applicable agencies, and the performance/maintenance bonds for each jurisdiction is in place, the City has accepted the project as complete and a Building Permit Release Letter has been issued.

3

Miscellaneous

- 23. Dust shall be controlled within the development during construction and shall not be permitted to drift onto adjacent properties.
- 24. Noise shall be kept at the minimum level possible during construction. The developer shall agree to aggressively ensure that all vehicles working on the development shall have adequate and fully functioning sound suppression devices installed and maintained at all times.
- 25. All construction sites shall be maintained in a clean and sanitary condition at all times. Construction debris, including food and drink waste, shall be restricted from leaving the construction site through the use of proper disposal containers or construction fencing enclosures. Failure to comply with this condition may result in a "Stop Work" order until deficiencies have been corrected to the satisfaction of the City.
- 26. Submittal to the City of all required performance bonds, insurance certificates, engineer's agreements, set-aside account letters and/or sureties shall occur prior to establishing a preconstruction meeting date. Review and acceptance by the City Recorder of these instruments shall be required prior to establishing a pre-construction meeting date.
- 27. A \$1,500.00 construction plan deposit shall be paid with the first submittal of the construction plans. All engineering plan review and inspection fees, right-of-way permit fees (if any) and tree cutting permit fees (if any), shall be paid prior to or at the time of the pre-construction meeting.

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MEMORANDUM

TO:	Michael Walter & Justin Popilek / City of Happy Valley
FROM:	Tim Finley / Water Environment Services
DATE:	November 17, 2011
SUBJECT:	VALLEY VIEW EVANGELICAL PARTITION –LP-02-11 Tax lot 12E34D 01600 11501 SE SUNNYSIDE Road WES File # 78-11

Water Environment Services (WES), a Department of Clackamas County, has reviewed the application for the above development. WES manages and operates Clackamas County Service District #1 (CCSD#1). CCSD#1 provides sanitary sewer collection and treatment for the urbanized areas of north Clackamas County including Boring and Hoodland.

The proposed development is inside CCSD#1 boundaries and is subject to the Rules & Regulations and Standard Specifications. Therefore, the developer is required to submit plans for review and approval through Water Environment Services. The current Rules and Regulations for Surface Water Management and Sanitary apply. The current rates and charges for CCSD#1 storm and sanitary apply.

Sanitary

This application appears to be timely for sanitary sewer connections. Sanitary sewer is available by sanitary sewer main HV1 (Sunnyside), HV1.3 (114th) and HV1.2 (117th). The applicant shows preliminary locations Parcel 2 (existing) and Parcel 3 (to be installed). A sanitary sewer tap will be necessary for Parcel 3. The applicant is required to install the sewer lateral with public improvement plans; however, if the public improvement plans are postponed, then the applicant may submit a performance bond or some other measure to guarantee the construction of the sewer lateral.

Since, public sewer is available then a Public Sanitary Sewer System extension <u>is not required</u> to serve the development. Sanitary System Development Charges do apply and will be due prior to issuing a building permit. A collection sewer charge does not apply.

A \$125.00 tap in fee is required for a 4-inch lateral and \$150 tap in fee for 6-inch lateral. If one is needed, then the applicant is required to schedule the tap 48 hours in advance.

Surface Water

The Surface Water Management Rules & Regulations (February 1, 2005) have requirements for detention, water quality and infiltration. This partition separates one parcel into three parcels and does not propose to add impervious surface. Unless the plans change and/or the City requires

A-2_ EXHIBIT # WES Comments

additional improvements with greater than 5,000 square feet of impervious area, a surface water plan or report is not required.

The developer's engineer must provide supporting data TO WES/CCSD#1 that the downstream conveyance system has adequate capacity to accommodate the Surface Water flows and not cause flooding. An Upstream and Downstream Stormwater Drainage analysis is required.

The development of Parcels 2 and 3 are required to address detention, water quality and infiltration when those sites apply for development.

Wetland areas and Natural Resource

This site is subject to the buffer requirements of the SWM Rules and Regulations. WES has a variable width buffer to jurisdictional waters.

A Wetland Determination and Habitat Assessment were submitted with the application. A minimum 50-foot buffer is required from the creek and/or wetland. A Buffer assessment and conservation easement is required. Preliminary information was submitted with the application. The applicant shall submit a Sensitive Area Certification Form to the District available on our website. <u>http://web12.clackamas.us/alfresco/download/direct/workspace/SpacesStore/92f98e31-736d-11dc-8c0c-a31c1adff&cc/adminpro.pdf</u>

The applicant has submitted a plan that shows the buffer area remaining on site and enclosed in an easement. The buffer is required to be enclosed in a Conservation easement (OR A TRACT) and granted to the City of Happy Valley. This area is required to be protected by a fence, as approved by the City of Happy Valley. Any disturbance to the conservation easement area requires approval from the City of Happy and CCSD#1 and is required to be mitigated.

The Conservation easement (tract) is required to be shown on the construction plans and on the plat.

Our Rules and Regulations are all available at the Department Web site at http://www.clackamas.us/wes/

Recommended conditions of approval are as follows:

Sanitary Sewers:

General conditions

- 1. The development is subject to the Rules & Regulations and Standard Specifications of Clackamas County Service District No. 1 (CCSD#1) sanitary sewer.
- 2. (SAN section 9.01.1) Cost of the sanitary sewer systems shall be borne entirely by the developer. The most current rate for SDC's shall apply at the time of <u>building plan approval</u>

WES Comments

(permit) or unless otherwise agreed upon by CCSD#1. SDC fees are required to be paid before issuing the building permit.

Specific Conditions

- A. This development is subject to a minimum plan review fee of \$400.00 for sanitary sewer. Plan review fees are due with the first submittal for plan review.
- B. The applicant shall provide a sanitary sewer lateral to each parcel. One appears to be necessary on Parcel 3. The applicant may submit a performance bond or some other measure to guarantee the construction of the sewer lateral.
- C. A tap in fee for the sanitary sewer lateral connection is required. The fee is dependent upon the size of the lateral. The applicant is required to schedule the tap 48 hours in advance.

Surface Water Management:

General conditions

- 1. The development is subject to the Surface Water Management and Standard Specifications of Clackamas County Service District No. 1 (CCSD#1) for storm drainage and erosion control.
- 2. Cost of the Surface Water facilities shall be borne entirely by the developer. Each lot is subject to a System Development Charge (SDC) which will be applied with the building permits.
- 3. Subject to a surface water System Development Charge (SDC) of \$205 per ESU (Equivalent Service Unit). The SDC will be applied with the building permit.
- 4. Any impacts to jurisdictional bodies of water shall be mitigated and required buffers shall be protected in a conservation easement. CCSD#1 requires a <u>minimum</u> 50-foot wide buffer to wetlands and creeks. Any proposed work within jurisdictional waters also requires a permit from the Oregon DSL and COE and copies of the permit shall be submitted to the CCSD#1 prior to construction plan approval
- 5. Since a wetland is present, then a conservation easement is required to be submitted to the City of Happy Valley for the buffer area.
- 6. The approval of the land use application does not include any conclusions by the CCSD#1 regarding acceptability by the DSL or COE of the wetland delineation. This decision should not be construed to or represented to authorize any activity that will conflict with or violate the DSL or COE requirements. It is the applicant's responsibility to coordinate with the DSL or COE and (if necessary) other responsible agencies to ensure that the development activities are designed, constructed, operated and maintained in a manner that complies with the DSL or COE approval.

Specific Conditions

WES Comments

- A. This development is subject to a minimum plan review fee of \$400.00 Surface Water plan review (or 4% of the cost of the storm construction, whichever is greater). Plan review fees are due with the first submittal for plan review.
- B. Detention, water quality and infiltration requirements are <u>not</u> required (unless the applicant adds more than 5,000 square feet of impervious area), but shall be required with future building permits. Each future parcel shall be responsible for their onsite storm water facilities.
- C. The applicant is required to provide maintenance of the existing Church storm water facilities. The existing facilities shall be inspected and cleaned prior to approving the plat. Copies of any prior year maintenance records may be acceptable, if available. Defects in the existing system shall be noted and corrected prior to approving the plat. The existing system shall be inspected by an Oregon State licensed civil engineer
- D. Water quality and infiltration is not required (unless the applicant adds more than 5,000 square feet of impervious area). But will be required with future building permits.
- E. The developer's engineer must provide supporting data TO WES/CCSD#1 that the downstream conveyance system has adequate capacity to accommodate the Surface Water flows and not cause flooding. An Upstream and Downstream Stormwater Drainage analysis is required.
- F. The applicant shall submit a Sensitive Area Certification Form to the District available on our website.
- G. CCSD#1 requires a <u>minimum</u> 50-foot wide buffer to wetlands and creeks. The applicant is required to submit information that shows the actual location of the creek and the location of a potential 50-foot buffer. If the buffer is established on the subject property, a conservation easement may be required.
- H. The owner shall submit a written storm water maintenance agreement to the District (form is available). The agreement shall indicate that the owner will have the on-site storm sewer facilities inspected at least once per year (August or September), and clean or repair the facilities as needed. All sediment and debris removed shall be disposed of to an approved site. This agreement shall be signed by the owner and notarized, and the original copy sent to Water Environment Services.
- I. CCSD#1 shall review and approve the final plat for the sanitary and storm sewer systems prior to recording.

Clackamas Fire District #1 Fire Prevention Office



E-mail Memorandum

To: Justin Popilek, Associate Planner From: Mike Boumann, Deputy Fire Marshal, Clackamas Fire District #1 Date: 12/01/2011

Valley View Church Zone Change/Partition, File #CPA-05-11/LDC-06-11/LP-02-Re: 11/ERP-01-11

This review is based upon documents submitted by the applicant. The comments we provide are intended as an advisory to the City and the applicant until final design document are submitted for formal review. While the scope of this review is typically limited to fire apparatus access and water supply, the applicant must comply with all applicable Fire Code requirements. The following items should be addressed by the applicant:

COMMENTS:

The fire department has no comments on this proposal.

Page 1 of 1 - CFD#1 Comments

2930 S.E. Oak Grove Blvd. • Milwaukie, OR 97267 • 503-742-2660



10602 S.E. 129тн Avenue Нарру Valley, OR • 97086 Рноле: (503) 761-0220 Fax: (503) 761-7406

City of Happy Valley 16000 SE Misty Drive Happy Valley, OR 97086

MEMORANDUM

To: Planning Department

From: Tim Jannsen, Senior Engineer Frim Januar Date: November 14, 2011

Re: Valley View Church

File No.:	CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11
Description:	Three-parcel partition, Environmental Review Permit and
	Comprehensive Plan map amendment/zone change to
	Mixed Use Commercial (MUC) and Institutional and
	Public Use (IPU)
Map No.:	12E34D Tax Lot 1600
Location:	North side of Sunnyside Rd, east of SE 114 th Ave and
	west of SE 117 th Ave

The Sunrise Water Authority has adequate potable water supplies available in sufficient quantities to provide normal domestic and fire protection needs for this proposal, as required by the Oregon Health Division. Exact improvements to the water system will be determined during design review by the Water Authority.

This recommendation is the result of Staff review; responsibility for such action has been delegated to Staff by the Water Authority's Board of Commissioners.

If you have any questions with this recommendation, please contact the above-signed.

EXHIBIT # A-4



TRANSPORTATION SOLUTIONS

November 16, 2011

Michael Walter City of Happy Valley 16000 SE Misty Drive Portland, OR 97236-6298

Subject: Valley View Church Zone Change CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11

Dear Justin:

DKS Associates has reviewed the site plan¹ and traffic impact study² for the Valley View Church Zone Change. The proposed project site is located on the north side of SE Sunnyside Road, west of SE 117th Avenue and east of SE 114th Avenue. The general comments in this letter are based on a review of the transportation impact analysis and site plan.

REZONE ANALYSIS

The trip generation potential of the project site was evaluated under both the existing and proposed zoning. The project site is approximately 13.5 acres in size, zoned R-10 (low density residential) and is currently occupied by the Valley View Church. The church is requesting that the parcel be divided into three parcels and rezoned as follows:

- Parcel 1: 5.81 acres, Zoned IPU (Institutional Public Use) Existing Church
- Parcel 2: 4.77 acres, Zoned MUC (Mixed Use Commercial) Proposed Retirement Residence and Office/Commercial Building
- Parcel 3: 2.83 acres, Zoned MUC (Mixed Use Commercial) Proposed Apartment Homes and Clubhouse

It was assumed by the applicant that a reasonable worst case development scenario under the current zoning would include 28 households. Based on ITE trip generation rates, this zoning would be expected to generate approximately 28 trips (18 in/10 out) during the PM peak hour.

The proposed zoning for a portion of the site is Mixed Use Commercial (MUC). This zoning would allow a mix of retail and office land uses and larger commercial development pads (as compared to the existing zoning). The applicant analyzed a reasonable worst case development scenario under the proposed zoning that included the following assumptions:

- 121 Senior Housing dwelling units
- 3,600 square feet of General Office
- 60 Apartment dwelling units

¹ 11501 SE Sunnyside Road Valley View Church Comp Plan/Zone Change Site Plan, AKS Engineering & Forestry, August 26, 2011.

EXCHIBIT # A-5

² Valley View Church Zone Change Traffic Impact Study, Lancaster Engineering, August 26, 2011.

November 16, 2011 Valley View Church Zone Change Transportation Review Page 2

Based on the ITE trip generation rates, the applicant suggests that the proposed zone change would generate approximately 33 (18 in/15 out) additional vehicle trips during the PM peak hour to the adjacent roadway system.

In reviewing the City of Happy Valley land development code, DKS determined that a reasonable worst case development scenario for the proposed MUC zoning would normally have included a commercial use of greater intensity than an office, such as a bank, a restaurant or a drive-through coffee stand. DKS contacted the City of Happy Valley regarding this discrepancy and was informed that the allowable commercial uses for this particular site under the MUC zoning would be limited to general office.³ With the usage restriction, the reasonable worse case for the site was adequately analyzed by the applicant.

STUDY INTERSECTIONS

Despite having frontages on SE 114th Court and SE 117th Avenue, the only intersection analyzed was the signalized intersection of SE Sunnyside/SE 117th Avenue. The City of Happy Valley *Transportation Impact Study Guidelines* indicate that all project access points and intersections of regional significance where the traffic generated by the proposed project exceeds 10 percent of the total entering volume for the existing a.m. or p.m. peak hour shall be included as study intersections.⁴

Given the layout of the site and the proposed division of the parcel it is reasonable to expect drivers to access the site from both SE 114th Court and SE 117th Avenue. Since the intersection of SE 114th Court/Sunnyside Road is restricted to right-in-right-out movements, all vehicles leaving from the site access on this street would be required to drive through the intersection of SE Sunnyside Road/SE Valley View Terrace. This is also true for eastbound vehicles, which would be required to make a U-turn at this location. Therefore, the following two intersections should be reviewed as part of this TIA:

- SE Sunnyside Road/SE Valley View Terrace
- SE Sunnyside Road/SE 114th Court

INTERSECTION OPERATIONS

The City's performance standards for signalized intersections in the study area require a Level of Service (LOS) D and a v/c ratio of 0.90 during the peak hours of analysis. Additionally, individual movements at each intersection must meet LOS E and a v/c ratio of 1.0. Unsignalized intersections must meet LOS E for the minor street approach. The operational analysis for the intersection of SE Sunnyside Road/SE 117th Avenue reported on the intersection delay but failed to report on the v/c ratio. An update to this transportation analysis should report the v/c ratio for the intersection and the LOS and v/c ratio for any movement not meeting the City standard identified above.

Clackamas County's performance standards for signalized intersections are LOS D for signalized intersections. However, for intersections within the Clackamas Regional Center Design Plan Area, congestion performance standards allow an intersection LOS E for the first and second hour.⁵

The HCM report contained in the August traffic impact study incorporated the use of a 100 second cycle length for the operations analysis of the SE Sunnyside Road/SE 117th Avenue intersection.⁶ To be consistent with the traffic analysis conducted for the Happy Valley Transportation System Plan, a 120 second cycle length should be utilized.

The proposed zone change would degrade the performance of the southbound movement at the SE Sunnyside Road/SE 117th Avenue intersection based on the 2025 operational analysis and no improvements are

³ Phone conversation, Justin Popileck, City of Happy Valley, October 28, 2011.

⁴ City of Happy Valley, Transportation Impact Study Guidelines, October 2004.

⁵ Clackamas County, Comprehensive Plan, Chapter 10, Community Plans and Design Plans, amended 3/7/11

⁶ Valley View Church Zone Change Traffic Impact Study, Lancaster Engineering, August 26, 2011.

November 16, 2011 Valley View Church Zone Change Transportation Review Page 3

identified in the Happy Valley TSP Motor Vehicle Master Plan or Clackamas County CIP. As required by the Transportation Planning Rule, the performance of intersections over capacity (or over the adopted level of service standard) must at least be mitigated back to pre-zone change conditions.

As the property site fronts both SE Sunnyside Road and SE 114th Court and SE Sunnyside Road is an arterial roadway, direct pedestrian access to any future development on this property should be provided from Sunnyside Road.

ADDITIONAL INFORMATION NEEDED BEFORE CONDITIONS OF APPROVAL

Proposed conditions of approval for the development are provided below:

- Update traffic analysis to:
 - Include documentation for the calculation of the 1.9% background traffic growth rate and it's consistency with the City of Happy Valley's TSP
 - Evaluate intersection operations at an additional two intersections
 - SE Sunnyside Road/SE Valley View Terrace
 - SE Sunnyside Road/SE 114th Court
 - Document the v/c ratio for all study intersections
 - Document the intersections movements (if any) with a v/c ratio greater than 1.0 or a LOS E or higher.
 - Update future p.m. peak hour signal timing at the SE Sunnyside Road/SE 117th Avenue intersection to a 120 second cycle length to be consistent with the Happy Valley TSP and the adjacent intersection of SE Sunnyside Road/SE Valley View Terrace
 - Document the City's requirement to limit development to non-commercial or retail types of development
 - Include mitigation recommendations in compliance with Oregon TPR requirements at locations which do not meet operational standards for the intersection or individual movement
 - Mitigation options may include full mitigation or payment of the proportional share of the trips through an intersection where a mitigation would be required in compliance with Oregon TPR requirements

Please contact me if you have any questions.

Sincerely,

DKS Associates A Corporation

Michael Tomasini, P.E., PTOE Transportation Engineer

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DKS Associates

TRANSPORTATION SOLUTIONS

December 5, 2011

Justin Popilek City of Happy Valley 16000 SE Misty Drive Portland, OR 97236-6298

Subject: Valley View Church Zone Change CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11

Dear Justin:

We have reviewed the response to comments from Lancaster Engineering (memorandum dated 12-2-11). Lancaster Engineering updated their analysis to include:

- The intersection of SE Sunnyside Road/SE 114th Court
- Evidence that the increased level of traffic at the intersection of SE Sunnyside Road/SE Valley View Terrace would not meet the City's threshold for inclusion in the analysis
- Updated 2025 peak hour factors (a.m. and p.m.) and updated p.m. peak hour signal timing for the intersection of SE Sunnyside Road/SE 117th Avenue.
- An operations table with v/c ratios, Level of Service, and delay for the two study intersections

Comments that were not addressed included:

- Include documentation for the calculation of the 1.9% background traffic growth rate and it's consistency with the City of Happy Valley's TSP
- Document the City's requirement to limit development to non-commercial or retail types of development

The analysis with the revised signal timing and peak hour factor indicate that the intersections operate at LOS D (or better) conditions with the rezone of the proposed project and does not require mitigation. Based on the analysis and response to our comments, we have no additional requests of Lancaster Engineering for their Traffic Impact Study.

Please contact me if you have any questions.

Sincerely,

DKS Associates A Corporation

Michael Tomasini, P.E., PTOE Transportation Engineer

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October 24, 2011

To: Justin Popilek, Planning

From: Wendi Coryell, CCSD #5

Re: File#: CPA-05-11 – Valley View Church - 12E34D 01600

Street lighting is required by ZDO section 1006.02 G for all development within the Urban Growth Boundary.

- Street lighting exists on the Sunnyside Rd. frontage of this property and should be adequate. Street lighting does not exist on the SE 117th Ave. frontage, thus new street lights will be required on SE 117th Ave. on either newly installed poles or existing wood utility poles. The property owner should contact me with any questions they have regarding the on-site lighting so I can assist them with their lighting plan.
- The property owner shall submit a request in writing for the formation of an assessment area, which will include any new tax lots created by this partition, to help pay for the operation and maintenance of lighting. The current rate of assessment for street lighting in this area is \$1.19 per frontage foot per tax lot per year.

Please contact Wendi Coryell at 503-742-4657 with any questions.

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MIKE MCCALLISTER PLANNING AND ZONING MANAGER

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING 150 Beavercreek Road | Oregon City, OR 97045

To:City of Happy Valley, Justin PopilekFrom:Linda Preisz, Clackamas County Planning/CCSD #1, 503-742-4528Date:11-17-11File No.:CPA-05-11/LDC-06-11/LP-02-11/ERP-01-11

Chapter 1634 Natural Resources Overlay Zone-Water Quality Resource

The applicant has submitted a Wetland Delineation/Natural Resource Assessment. Two wetlands were studied. Wetland B in the southern portion of the parcel is encompassed in a previously preserved wetland buffer and accompanying Conservation Easement. Wetland A shall apply for natural Resource Protection with CCSD#1, Clackamas County. The intermittent drainage channel associated with Wetland A shall be included.

Enclosed you will find the application packet. The buffer plan and/or buffer variance and mitigation plan shall be submitted to Clackamas County, Planning Division. The submitted report finds that Wetland A requires a 50 foot buffer. Staff concurs. The submitted report also finds that the upland drainage does not require a buffer. CCSD#1 rules and regulations require a 25 foot buffer. After the buffer plan is approved the buffers shall be placed into conservation easements to be granted to the City of Happy Valley. Contact the City for samples of their recording documents. Conservation easement shall also be fenced and signed in accordance with the City of Happy Valley.

P. 503.742.4500 | F. 503.742.4550 | WWW.CLACKAMAS.US

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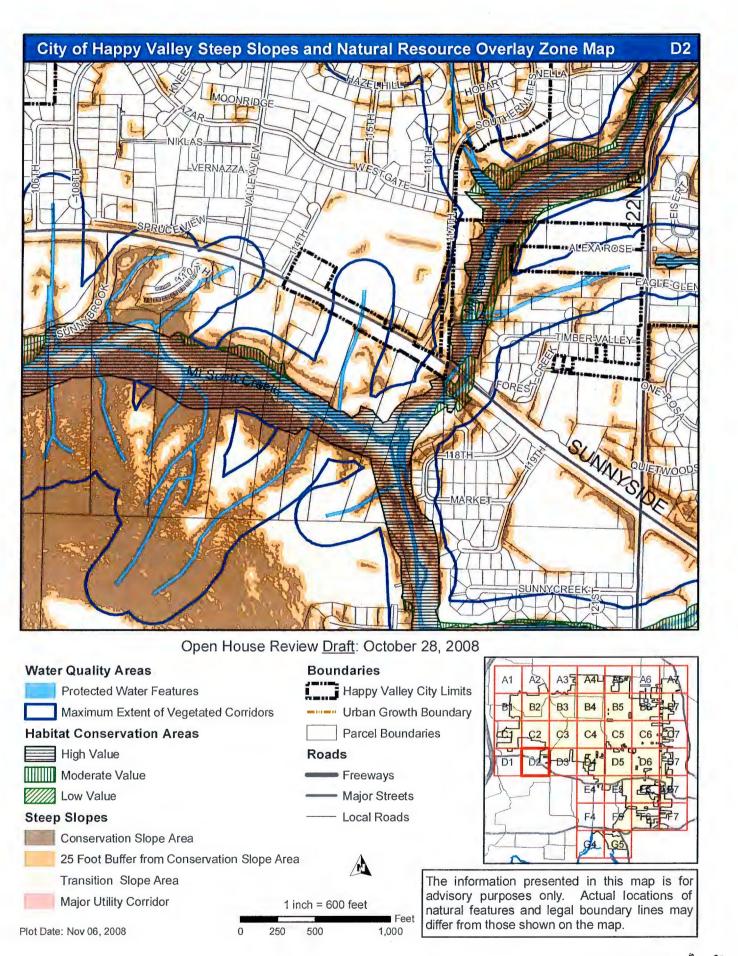


EXHIBIT # <u>A-8</u>

Michael Walter Economic & Community Development Director Planning Division City of Happy Valley 16000 S.E.Misty Drive Happy Valley, Oregon 97086

November 9, 2011

Dear Sir:

We are not in favor of the Comprehensive Plan Map Amendment/Zone Change (File No. LP-02-11) proposed by the Valley View Evangelical Church. We have reviewed the land use application plans submitted by the church and developed by AKS (engineering, planning, surveying, etc. We are requesting that the zone change be denied.

See Title 16.11.010, City of Happy Valley, Oregon Land Development Code, Ord. 389 Exha 2009

16.22.030 Low density standards in this district are strictly enforced, urban oriented and are designed to develop and perpetuate urban trends and patterns. Maximum density shall be one primary dwelling unit per ten thousand (10,000) square feet of lot area. Multifamily dwellings not approved as a P.U.D.

The Comprehensive Plan for this residential area been established through standard planning procedures which determined that the best possible use for said property is to develop as single family homes, designated zone R-10, with ample greenways (areas dedicated to the public for safety and recreational use). The residential areas that lie adjacent to the church are all zoned R-10 residential. The church property has been zoned R-10 and should be developed as single family residential to be in accord with the County of Clackamas Planning Department determination of the R-10 residential zone and more recently adhered to by the City of Happy Valley Planning Department. The development of the church property should be to preserve and protect the quality of life in this residential area, i.e., single family residential neighborhoods. The adjacent lands to the west, north and east of the church property have all been developed by adherence to the Comprehensive Plan of the area-R10. The existing adjacent residential neighborhoods have been designed to afford a quality way of life for the residents-large lots with ample greenways open to the residents. The R-10 lot sizes afford quality residential housing to develop within the Comprehensive Plan developed for the general overall region. This quality of life is enjoyed by the total neighborhood. The school systems have been designed to afford quality schooling for the children of the area. The greenways, as required by the existing Comprehensive Plan, have afforded quality recreational experiences for the residents.

All of these qualities have been implemented by correct planning that has been in place for years, designed to enrich the total area, including the church property. The Comprehensive Plan has been

EXHIBIT # A - 9

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November 9, 2011

a long range, well thought out plan and the area has been developed and preserved for future generations to enjoy and afford a good life.

The Comprehensive Plan developed for this area has been well thought out by professional planning as mandated by the Land Conservation and Development Commission (LCDC), State of Oregon, which has been highly instrumental in making correct decisions for proper land usage. The planning departments of the cities and counties of the State of Oregon, adhering to the Rules and Regulations, and good guidance from the LCDC, State of Oregon, have enabled land use planning to make Oregon a viable place to live.

16.34.10 Purpose: Natural Resources Overlay Zone to be in compliance with Statewide Planning Goal 5.

16.32.070 Minimum building size 10,000 square feet, Ord.389

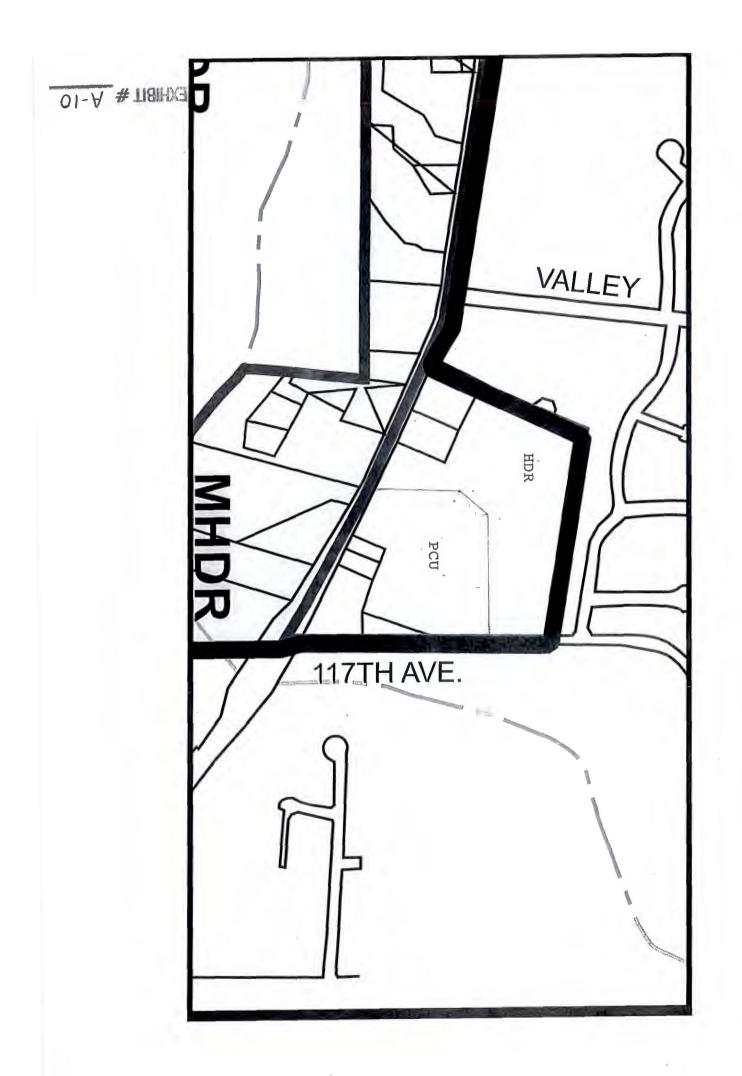
16.23.010 Mixed Use Commercial (MUC) should not be allowed in this pristine R10 residential general area.

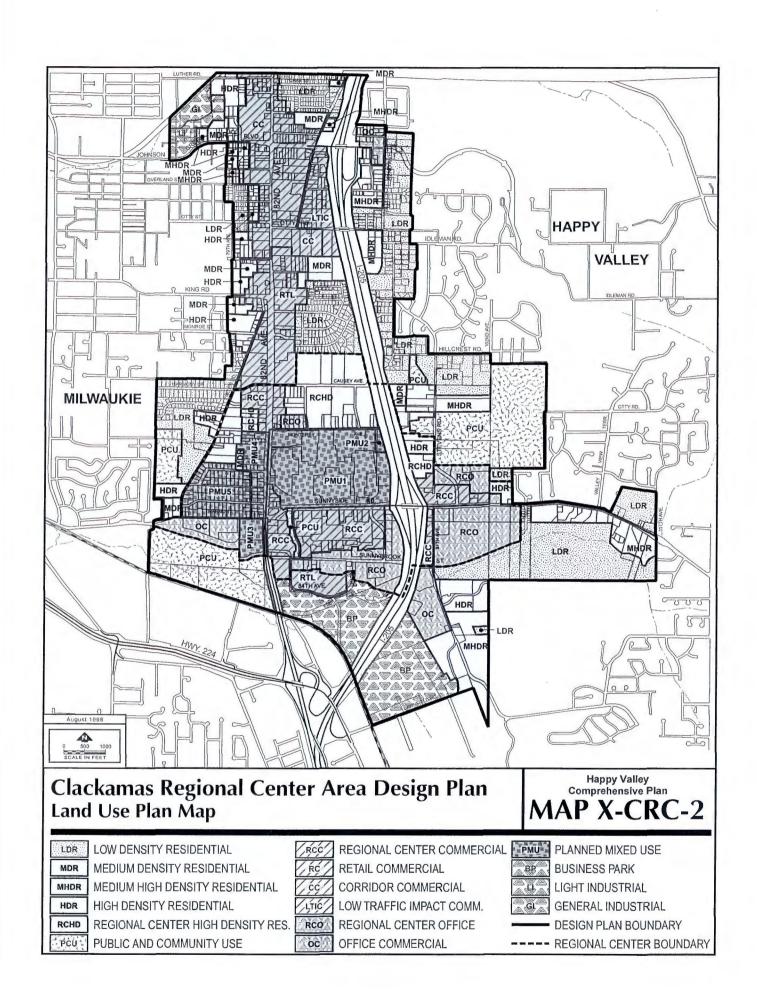
Again, we are not in favor of the proposed Comprehensive Plan Map Amendment/Zone change. It changes the character of the entire neighborhood and the stated purpose of the Land Conservation and Development Commission of the State of Oregon.

Yours truly,

Gordon H. Henrickson <u>General Chellen</u> Professional Land Surveyor No, 689 (Retired) Barbara D. Henrickson <u>Bubby</u>, <u>Klenyickson</u>

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IAPPY VALLEY Misty Drive alley, OR 97086



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LAND CONSERVATION AND DEVELOPMENT

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