

22500 Salamo Road West Linn, OR 97068

STAFF REPORT FOR THE PLANNING COMMISSION

FILE NUMBER:

SUB-13-02/VAR-13-05/VAR-13-06

HEARING DATE:

October 2, 2013

REQUEST:

11-lot subdivision with Class II Variance for two lots with depth

more than 2.5 times their width

APPROVAL

CRITERIA:

Community Development Code (CDC) Chapter 12, Single-Family

Residential Detached and Attached, R-7; Chapter 75, Variance;

and Chapter 85 Land Division General Provisions.

STAFF REPORT

PREPARED BY:

Tom Soppe, Associate Planner

Planning Director's Initials

Development Review Engineer's Initials KQL

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GENERAL INFORMATION

OWNER: John and Rachel Omlor, 23150 Bland Circle, West Linn, OR 97068

A PPLICANT: JT Smith Companies, 5285 Meadows Rd., Ste. 171, Lake Oswego,

OR 97035

CONSULTANT: Andrew Tull, 3J Consulting, Inc., 10445 SW Canyon Rd., Ste. 245,

Beaverton, OR 97005

SITE LOCATION: 23150 Bland Circle

LEGAL

DESCRIPTION: Clackamas County Assessor's Map 2-1E-35A, Tax Lot 1300

SITE SIZE: Approximately 2.8 acres

ZONING: R-7, Single-Family Residential Detached and Attached

COMP PLAN

DESIGNATION: Low-Density Residential

120-DAY PERIOD: This application became complete on July 24, 2013. The 120-day

maximum application-processing period ends on November 21, 2013. A subsequent two week extension of the 120-day rule

extends the date to December 5, 2013.

PUBLIC NOTICE: Public notice was mailed to the Savanna Oaks and Willamette

neighborhood associations and affected property owners on September 12, 2013. The property was posted with a sign on September 19, 2013. In addition, the application has been posted on the City's website and was published in the West Linn Tidings on September 19, 2013. The notice requirements have been met.

BACKGROUND

The site has an existing residence but is large enough to be subdivided under the applicable R-7 zoning district.

Site Conditions: The parcel is located to the northeast of the Bland Circle intersection with Tannler Drive. Approximately 80% of the site is a grassy field that slopes steadily upward at 10-25% from Bland Circle. The rear or uppermost area of the site has a backdrop to the north of conifer trees and a graded area occupied by a house, yard, parking and work areas. A steep gravel driveway along the east edge of the site connects Bland Circle to the house. Most of the trees on site are in the upper part of the site near the house and its immediate yard. A

significant cluster of oak trees occupy the northwest corner of the site in the vicinity of the Crestview Drive stubout. There is a 19-inch and a 24-inch oak among them. Other trees along the northwest edge of the property include mature conifers. A significant conifer tree occupies a position at the southwest corner of the property near Bland Circle.

Stubs of Crestview Drive on both the west and east sides of this property make the intent of a future link or connection clear. Similarly, the Sunbreak Lane stubout to the east which terminates with a barrier also makes clear the intent of a connection to the west. On the adjacent property to the southwest there is a driveway from Bland Circle which accesses both a house on that property from and a City water reservoir on the lot behind or to the north of it. This driveway connects with the Bland Circle and Tannler Drive intersection making it an ideal point of connection to those streets for the Sunbreak Lane extension.

Site Aerial View





The existing house at the north end of the site.



The site seen from the driveway on the east edge, looking west towards the reservoir site (right) and unincorporated residential site along Bland (left).



The site slopes from the house down to Bland Circle, which is at the right in the far background. The houses of the existing subdivision to the east, along the stub streets, are at the top left and top center.

Project Description: The applicant proposes an 11-lot subdivision. Crestview Drive will extend across the site to connect the existing Crestview Drive stubs on the east and west sides of the site, and Sunbreak Lane will extend west through the site from its existing stub on the east side. Bland Circle would be improved along the south edge of the site with eight feet of right-of-way dedication. A half street right-of-way is proposed to be dedicated on the west edge of the site to provide for connection of Bland Circle and Sunbreak Lane. A sidewalk will be built within this section of right-of-way as part of the project, but no street. This right-of-way will be further developed once the property to the west is eventually annexed and redeveloped. The stormwater facility for the entire subdivision is proposed along Bland Circle in its own tract. All residential lots will front on and take access from Sunbreak Lane or Crestview Drive. The applicant proposes a trail and associated easement from Sunbreak north to the edge of the subdivision where it will stub to the next property, which is not within the City limits. The existing house is proposed to be demolished.

Sunbreak Lane is proposed to have a 52-foot wide right-of-way with 28 feet of paved width. The proposed planter strip and sidewalk will match existing conditions to the east. Crestview Drive is proposed to have a 56-foot right-of-way through the site with 32 feet of paved street. The proposed sidewalk and planter strip will also match existing conditions to the east and west. The applicant proposes eight feet of right-of-way along Bland Circle. A 6-foot sidewalk and 6-foot planter strip would be constructed along Bland.

Subsection 85.200(B) (3) states in part, "...the buildable depth (of lots) should not exceed two and one-half times the average width." The applicant originally proposed a Class II Variance

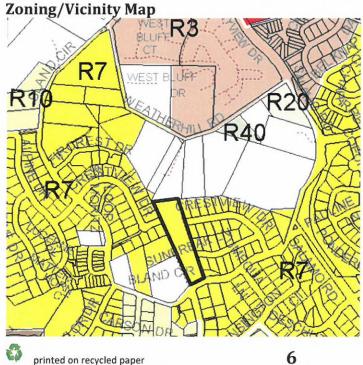
for five of the 11 lots: 3, 4, 8, 10, and 11 for failing to meet the "two and a half times rule" due to the narrowness of the site and the alignment of Crestview Drive and Sunbreak Lane stub streets that need to pass and connect through the site. Subsequently, the applicant was able to reduce the number of requested variances down to two by the creation of tract B at the rear of lot 8 and a tract C at the rear of lots 10 and 11. By establishing the tracts, the depth of those lots was reduced and they came into compliance with the "two and a half times" rule. Consequently, variances are being requested only for lots 3 and 4.

Surrounding Land Use and Zoning: The site is situated in the Savanna Oaks Neighborhood: a mainly residential area of the City. In this area there are also properties, particularly to the southwest and north that are underdeveloped relative to their current zoning or unincorporated.

Table 1 Surrounding Land Use and Zoning

DIRECTION FROM SITE	LAND USE	ZONING
North	Single-family detached residential, multi-family, assisted living facility	R-3, R-7, R-20, R-40, Unincorporated County
East	Single-family residential detached	R-7, R-20, Unincorporated County
South	Single-family residential detached	R-7, R-10
West	Single-family residential detached, water pump station, townhouses	R-7, R-10, Unincorporated County

Source: West Linn GIS, 2013



Approval Criteria

As previously noted, the applicant requests approval for an 11-lot subdivision in an R-7-zoned property, with a Class II Variance requested for lot depth for two of the 11 proposed lots. The variance is related to the requirement from both Section 12.070(D) and Subsection 85.200(B) (3) which requires lot depth to be not more than 2.5 times average lot width.

Therefore the applicable approval criteria include:

- Chapter 12, Single-Family Residential Detached and Attached zoning district;
- Chapter 85, Land Division General Provisions, criteria in Section 85.200;
- Chapter 75, Variances, criteria in Section 75.060.

Analysis

The applicant requests a variance to the lot depth to width ratio called for by CDC 12.070(D) for proposed lots 3 and 4. The stated purpose of CDC Chapter 75 is to provide for variance when "literal interpretation of the provisions of the applicable zone would create a burden upon a property owner with no corresponding public benefit." Section 75.060(A) requires that a requested variance be necessary due to an exceptional and extraordinary circumstance that does not generally apply to other properties in the same zone or vicinity. In this case, staff found that the requested variance was related to the exceptional circumstance of the property being long and narrow and the need to connect Crestview Drive and Sunbreak Lane stubouts to each other and/or to the driveway to the southwest. All of the proposed lots are affected by varying degrees by the distance between the two street alignments.

Subsection 75.060(B) requires that a requested variance be necessary for the property owner to use a property right that is otherwise usable without a variance by other properties in the same zone or vicinity. Staff found that this requested variance is necessary to develop in a manner consistent with other nearby properties.

Section 75.060(C) requires that a variance be compatible with the goals and policies of the Comprehensive Plan and neighborhood plans, the purposes and standards of the CDC, and other City regulations. Specifically, the variance is compatible with Comprehensive Plan language of Goal 10: Housing, Policy 5, which encourages flexibility in lot design. Approval of the variance will allow a lot pattern that is compatible with lot widths in abutting subdivisions.

Section 75.060(D) requires that any requested variance be the minimum variance necessary to overcome the exceptional circumstance. Staff agrees that the shape and dimensions of the site combined with the alignment of the stub street connections provides the applicant with only one viable solution to achieve reasonable lots consistent with lot dimensions in nearby subdivisions and the underlying R-7 zoning. The applicant's submittal expands on that with a finding that the reconfiguration of lots and the creation of tracts has made possible the reduction from five variances down to two variances and that represents the "minimum variance necessary" to overcome the exceptional circumstance.



Staff also determined that the requested variance meets the remaining two variance criteria, 75.060(D) and (E), which respectively require that a variance request not stem from a violation of the code and that a variance not interfere with the ability of surrounding properties to be developed. This proposal has not yet been constructed or platted so it does not stem from a violation, and the dimensions of lots on site will not affect the ability to develop or use surrounding properties.

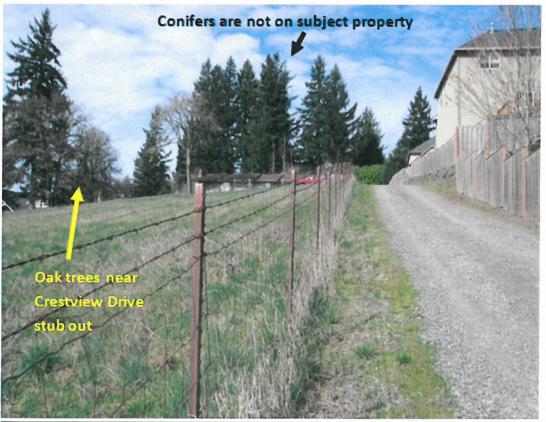
The applicant proposes a trail and utility easement to the north between lots 9 and 10. To best increase the chance of extension to properties with a greater likelihood of development in the near future and to best reduce conflicts with existing houses, the applicant is providing a tract at the rear of lots 10 and 11 extending to the north east corner of the site. The proposed dimensions (7-18 feet wide) of this tract do not meet the dimensional standards for pedestrian corridors per 85.200(C) (2) or provide adequate space for a sanitary sewer line. A condition of approval (2) is required to address that.

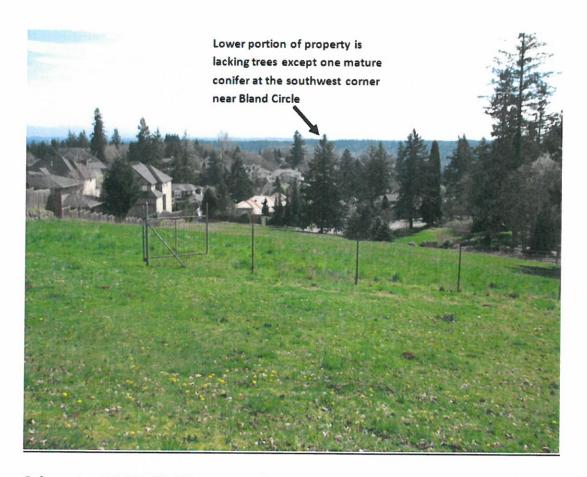
Proposed Condition of Approval 2B requires a five-foot wide utility easement along the east edge of Lot 11 between the created tract and Crestview Drive. This would fulfill Subsection 85.200(G) (7) which requires that provisions for sanitary sewer be stubbed to the next developable property. It would also fulfill Section 85.200(I) which requires that utility easements be installed as needed to accommodate the needs of service providers.

Subsection 85.200(J) (9) requires that tree protection and removal be compatible with Subsection 55.100(B) (2). Subsection 55.100(B)(2)(f) requires that if significant trees are proposed for removal due to being located where street grading is necessary, the trees be mitigated for on an inch-per-inch basis. Recommended Condition of Approval 3A requires that the three significant trees to be removed to enable Crestview Drive to be extended and improve Bland Circle be mitigated for on an inch-per-inch basis. The proposed retaining wall adjacent to the proposed stormwater pond would be up to 13 feet tall. To mitigate the visual impact from Bland Circle, the applicant should provide a series of terraced retaining walls that break up the 13 foot transition. If the applicant demonstrates that a terraced designed is not feasible, evergreen trees or equivalent vegetation should be planted along the wall face. For the remaining significant trees on lots 8 and 9 the applicant proposes tree conservation easements. Recommended Condition of Approval 3B requires that the City's standard language for tree conservation easements be used.



Oak trees at the west edge of the site next to Crestview Drive





Subsection 85.200(C) (3) requires the provision of a three-to four-foot-high matte black chain link fence or acceptable alternative along the edge of the trail corridor. As this is not shown on the applicant's plans, recommended Condition of Approval 4 requires it.

Sunbreak Lane is proposed to be extended south along dedicated right-of -way to Bland Circle when the property to the west is divided, so in terms of access it will remain a stub street until such time that the property to the southwest is developed.



View from the end of Sunbreak Lane in Fernando's Hideaway subdivision looking across applicant's property to the house on tax lot 500



For stubbed street pavement to be extended as part of subdivision development, subsection 85.200(A) (8) requires that temporary turnarounds be provided for a dead end stub that is over 100 feet long. This is the case with Sunbreak Lane, so temporary turnarounds or an alternative that fulfills Tualatin Valley Fire and Rescue's (TVFR) requirements is needed at the west end. Temporary turnarounds are not provided for fire service purposes, but the applicant has proposed bollards at the end of Sunbreak Lane so TVFR could access the City water reservoir driveway on the adjoining property and return down the hill to Bland Circle. TVFR prefers gates over bollarded accesses, and the easement across the neighboring

property that includes the reservoir driveway has an easement document written to allow access to the reservoir site but not to access the subject site for emergency purposes. TVFR has indicated that fire sprinklers are an alternative that is acceptable to them. Therefore, proposed Condition of Approval 5 requires either fire sprinklers for all new houses on Sunbreak Lane or a modification of the easement to allow emergency access to Sunbreak in conjunction with a gate at the terminus of Sunbreak Lane. This proposed condition also requires TVFR's other recommendations be met (see letter on Page 47-48 of Exhibit PC-3) regarding Sunbreak Lane.

Subsection 85.200(F) (3) requires that adequate looping of water lines be provided. For this reason recommended Condition of Approval 6 requires that the applicant loop the Sunbreak and Crestview proposed water mains to each other through the proposed utility easement in the west central area of the site.

Subsection 85.200(J) (4) refers to sodium light bulbs, but LED fixtures are preferred due to their greater energy efficiency. Condition of Approval 7 requires this.

Subsection 85.200(J)(5) provides for dedications and exactions proportionate to the development; related to this, proposed Condition of Approval 8 requires a fee-in-lieu for the eventual half-street pavement in the half-street right of way the applicant proposes to dedicate between the west end of Sunbreak Lane and Bland Circle. This section will only be paved when the full street is developed in conjunction with dedication resulting from eventual development of the property to the west. Related to this same subsection, the sections of the path north of Crestview Drive should be addressed at this time with a fee-in-lieu instead of the proposed pavement, because this is a stub trail with no current connection to the north and because future utility installation may destroy any pavement installed at this time anyway. For these reasons recommended Condition of Approval 8 also requires a fee-in-lieu for this section of trail.

Subsection 85.200(A) (16) provides for sidewalk installation. As future installation of the sidewalk, as shown on Sheet C2.7, interferes with the location of existing utility boxes, recommended Condition of Approval 9 requires that these boxes and any future utility boxes be relocated to an area outside the right-of-way and proposed sidewalk and ramp areas.

Subsection 85.200(E) (4) requires that grading be the minimum necessary. Staff is concerned that the proposed 13-foot retaining wall in Tract A and Lot 1 may not meet the requirement for the minimum necessary grading. To address this concern, the applicant could transition the grade with the use of a series of smaller retaining walls. If the applicant provides evidence that that is infeasible, the visual effect of the wall can be broken up by planting a screen of conifers or alternative vegetation. This is reflected in proposed Condition of Approval 10.

Staff has determined that with the modifications to the approval as discussed above, the application meets the criteria of chapters 12, 75, and 85.

Public comments:

E-mails have been received from Ed Schwarz, Savanna Oaks N.A. president. In a May 8, 2013 email the concerns included preserving trees, particularly at the southwest corner of the site,



stating support for the north-south trail, concern about construction noise and activity, concern about opening up Crestview and Sunbreak Lane, utilities, the two and half times rule and other issues. A September 16, 2013 e-mail inquired about the "two and half times" rule.

RECOMMENDATION

Staff recommends approval of application SUB-13-02/VAR-13-05 subject to the following proposed conditions:

- 1. <u>Site Plan</u>. With the exception of modifications required by these conditions, the project shall conform to the Subdivision Plat, Sheet C2.0, dated September 11, 2013
- 2. Trail and Pedestrian/Utility Easement /Tract.
 - A) The applicant shall provide a 15-foot-wide trail and public utility easement between lots 9 and 10 and a 15-foot wide easement along the northern end of Tract C at the rear of lots 10 and 11.
 - B) The applicant shall provide a five-foot-wide utility easement along the eastern boundary of Lot 11.

3. Trees.

- A) The three significant trees to be removed for street construction shall be mitigated for on an inch-to-inch basis. Therefore 78 inches of new trees total shall be planted on site (in addition to proposed street trees). This shall include the planting of evergreen trees beside the retaining wall adjacent to the stormwater pond where possible and planting of appropriate trees elsewhere in or beside Tract A. If all of the trees cannot be appropriately accommodated of site given their size at maturity, they may be planted on City-owned land as approved by the Parks and Recreation Department. Any trees planted on lots 1 or 2 to screen the wall on Tract A shall be placed in a conservation easement using the tree conservation easement referred to in Condition of Approval 3B. If trees are planted that fulfill the 78-inch mitigation requirements and these do not fully screen the wall, additional trees shall be planted so the wall is fully screened.
- B) The applicant shall use the City's standard tree conservation easement language, available from the Planning Department, for the proposed and conditioned tree conservation easements.
- 4. <u>Fence Along Trail</u>. The applicant shall install a three- to four-foot high black matte chain link fence (or an alternative that is acceptable to the Parks and Recreation Department) along all trail corridors, including Tract C, except in areas where other fences are proposed such as along the backyards of lots.

5. Fire Access.

A) All houses along Sunbreak Lane in the subdivision shall have NFPA 13D fire sprinklers installed, or alternately the easement document for the reservoir driveway

to the west of the site could be amended to allow emergency access to Sunbreak Lane and a gate built to TVFR standards located at the western end of Sunbreak Lane.

- B) Post no parking signs along one side of the new segment of Sunbreak Lane.
- C) Provide evidence of a current fire flow test of the nearest fire hydrant demonstrating fire flow capabilities to the satisfaction of TVFR.
- 6. <u>Water Line Looping</u>. The applicant shall loop water lines between Sunbreak and Crestview.
- 7. <u>Street Lighting</u>. Street light fixtures shall be LED fixtures.
- 8. Street and Trail Improvements.
 - A) The applicant shall install sidewalk, curb, and ADA ramps for pedestrian connection between Sunbreak Lane and Bland Circle as shown on sheet C2.7.
 - B) Fee-in-Lieu for Pavement Improvement. The applicant shall pay a fee-in-lieu for the eventual pavement improvement of the dedicated street right of way between Sunbreak Lane and Bland Circle at the west edge of the site as shown on Sheet C2.7.
 - C) The applicant shall pay a fee in-lieu for the eventual trail in the proposed and/or required trail segments between lots 9 and 10 and at the rear of lots 10 and 11.
- 9. <u>Utility Vaults</u>. Relocate and place existing and new utility vaults outside of roadway and ramp. If in the sidewalk, both existing and new vaults must be set at appropriate grade for ADA compliances.
- 10. <u>Retaining Wall in Tract A</u>. To break up the vertical dimension of the retaining wall at the detention pond in Tract A, the applicant shall either construct a step down wall system which shall include landscaping or shall use the initial wall design and add trees of sufficient height to screen the wall and effectively diminish its visual impact.
- 11. <u>Public Utility Improvement.</u> Utilities such as storm drainage, sanitary sewer, and water must be designed to accommodate the future street connection and current condition between Sunbreak Lane and Bland Circle. Final design of the improvement shall be reviewed and approved by City Engineer.
- 12. <u>Tracts.</u> Tracts B and C can be eliminated if consistent with all applicable CDC standards.

Notes to Applicant:

• Expiration of Approval. This approval shall expire three years from the effective date of this decision.



- <u>Building Department.</u> Check with the Building Division to see if a Geotechnical study is required, if not already required by above conditions.
- Additional Permits Required. Your project may require the following additional permits:
 - o Final Plat.
 - Building permit, the final permit after others are completed and conditions of approval are fulfilled. Contact the Building Division at (503) 656-4211, jnomie@westlinnoregon.gov.
- Final inspection: Call the Building Division's Inspection Line at (503) 722-5509.

Sheet C2.0 revised 9-11-13:



ADDENDUM

PLANNING COMMISSION STAFF REPORT October 2, 2013

STAFF EVALUATION OF THE PROPOSAL'S COMPLIANCE WITH APPLICABLE CODE CRITERIA

I. CHAPTER 12, SINGLE-FAMILY RESIDENTIAL DETACHED AND ATTACHED, R-7

12.030 PERMITTED USES

The following uses are permitted outright in this zone.

1. Single-family detached residential unit.

(...)

Staff Response 1: The only use proposed on site is single-family detached residential units. Staff determines the criterion is met.

12.070 DIMENSIONAL REQUIREMENTS, USES PERMITTED OUTRIGHT AND USES PERMITTED UNDER PRESCRIBED CONDITIONS

Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:

- A. The minimum lot size shall be:
 - 1. For a single-family detached unit, 7,000 square feet.

(...)

Staff Response 2: As shown on the Tentative Subdivision Plat, Sheet C2.0 (revised 9-11-13), on Page 61 of Exhibit PC-5, all proposed lots are at least 7,000 square feet in size. Staff finds that the criterion is met.

B. The minimum front lot line length or the minimum lot width at the front lot line shall be 35 feet.

Staff Response 3: As shown on the Tentative Subdivision Plat, Sheet C2.0(revised 9-11-13), on Page 61 of Exhibit PC-5, all proposed lots have a front lot line that is greater than 35 feet in length. Staff finds that the criterion is met.

C. The average minimum lot width shall be 50 feet.



Staff Response 4: As shown on the Tentative Subdivision Plat, Sheet C2.0 (revised 9-11-13), on Page 61 of Exhibit PC-5, all proposed lots have a minimum average width of at least 50 feet. Staff finds that the criterion is met.

D. The lot depth comprising non-Type I and II lands shall be less than two and one-half times the width and more than an average depth of 90 feet. (See diagram below.)

(...)

Staff Response 5: Nine of the 11 proposed lots meet this standard. Two do not. These are lots 3 and 4. The applicant has applied for a Class II Variance for these two lots. The Variance criteria are reviewed below under staff responses 6-12.

II. CHAPTER 75, VARIANCE REQUESTED TO SECTION 12.070(D) FOR TWO LOTS

75.060 APPROVAL CRITERIA

The appropriate approval authority shall approve a variance request if all the following criteria are met and corresponding findings of fact prepared. The approval authority may impose appropriate conditions to ensure compliance with the criteria. The approval authority shall deny the variance if any of the criteria are not met.

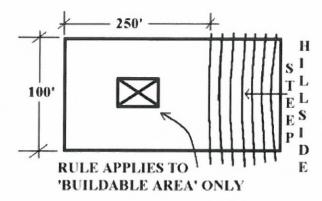
A. Exceptional or extraordinary circumstances apply to the property which do not apply generally to other properties in the same zone or vicinity, and result from lot size or shape, legally existing prior to the date of this code, topography, or other circumstances over which the applicant has no control.

Staff Response 6: The applicant requests a variance to the lot depth to width ratio called for by CDC 12.070(D) for proposed lots 3 and 4. The subject property is long and narrow as measured north-to-south. Two streets in adjacent subdivisions stub out to this site. One of these streets, Crestview Drive, is obliged to connect between existing stubs on the east and west sides of the property. This produces an angled alignment. Sunbreak Lane starts from a stub out on the east side of the site but cannot parallel Crestview Drive's angled alignment as that would stub into a water reservoir site to the west. Instead, Sunbreak Lane is obliged to extend in a more westerly direction to connect with the potential development of the property to the southwest. The consequence of these alignments is that the lots between Crestview Drive and Sunbreak Lane are elongated and fail to meet CDC 12.070(D), otherwise known as the "2.5 times" rule. Indeed the north to south dimension increases the further west you get. Although the applicant ultimately has control over how the property is divided into lots, and therefore, the length to width ratio, the applicant does not have control over the location of the pre-existing streets and the location of the proposed streets, which are necessary to meet connectivity requirements. This combination of circumstances is unusual for developable sites within the City of West Linn.

This rule is explained in CDC 12.070(D):



"D. The lot depth comprising non-Type I and II lands shall be less than two and one-half times the width and more than an average depth of 90 feet. (See diagram below.) "



Staff determines that the need for the variance stems from the exceptional and extraordinary circumstance of the narrowness of the property combined with the distance between the required street extension alignments. Staff determines that this criterion is met.

B. The variance is necessary for the preservation of a property right of the applicant, which is substantially the same as a right possessed by owners of other property in the same zone or vicinity.

Staff Response 7: Staff finds that the applicant 's property right and reasonable expectation is to develop residential lots at a density consistent with comprehensive plan and the underlying R-7 zoning designation which allows 7,000 square foot lots. Development at this density is consistent with the pattern of development and lot sizes in adjacent subdivisions to the east and west. In terms of lot dimension, lots nearest this site in the subdivision to the east (Fernando's Hideaway) average 65 feet wide. That average lot width is substantially the same as lots in the proposed Sunbreak subdivision (e.g. lot 6 is 62 feet wide, lot 1 is 62 feet wide, lot 11 is 68 feet wide). The square footage of lots is also relatively the same between this subdivision and neighboring ones.

C. The authorization of the variance will not be materially detrimental to the purposes and standards of this code, will not be inconsistent with all other regulatory requirements, and will not conflict with the goals and policies of the West Linn Comprehensive Plan.

Staff Response 8: Excerpted from the Comprehensive Plan:

Goal 10 Housing, Policy 5: Allow for flexibility in lot design, size, and building placement to promote housing variety and protection of natural resources.

The requested variance is for flexibility in lot depth, and is therefore compatible with this policy which also encourages flexibility in lot size. Staff finds no other policies or goals in the Comprehensive Plan that are applicable. Therefore, the criterion of Section (C) is met with regards to the Comprehensive Plan.

Meanwhile, the Tanner Basin Neighborhood Plan (Savanna Oaks was formerly named Tanner Basin) offers the following:

Goal 2 Planned Growth, Policy 2.1: Encourage adequate infrastructure, including roads, is in place concurrent with development.

Goal 2 Planned Growth, Policy 2.4: Ensure that new residential development is compatible with existing neighborhoods consistent with the Vision Statement.

Staff Response 9: The construction of Sunbreak Lane and Crestview Drive completes the planned provision of connecting roads in this area per policy 2.1 while the variance for lots 3 and 4 will allow them to have slightly deeper lot dimensions, but it will not cause the houses on those lots to be different from surrounding architecture in existing subdivisions. Indeed for someone driving down Sunbreak Lane at build out, the pattern and rhythm of houses from Fernando's Hideaway subdivision to Sunbreak subdivision will be the same since all lots will average about the same width and the homes are expected to be similar in terms of mass, height and valuation. Staff determines that the proposal is not materially detrimental to the purposes and standards of this code, the comprehensive plan and the Tanner Basin Neighborhood Plan and not inconsistent with other regulatory requirements. Staff determines the criterion is met.

D. The variance request is the minimum variance which would alleviate the exceptional and extraordinary circumstance.

Staff Response 10: The lot shapes are dictated by the alignment of Crestview Drive and Sunbreak Lane. Specifically, the lot shapes have to fit within these two streets. Staff agrees that the shape and dimensions of the site combined with the alignment of the stub street connections requires a pattern of long deep lots. Staff also agrees that the proposed lot widths are consistent with lot dimensions in nearby subdivisions and the underlying R-7 zoning.

The applicant's submittal expands on that with a finding that they have reconfigured lots and created additional tracts for utilities and pedestrian access resulting in a reduction from the originally proposed five variances down to two. It is the applicant's contention that by redesigning the plat they have demonstrated that this is the "minimum variance necessary" to overcome the exceptional circumstance. The variance requested is the minimum variance necessary to bring lots 3 and 4 into compliance with the 2.5 times rule. The lot configurations only exceeds the 2.5 times rule by a few feet , and the length of the lot cannot be shortened to eliminate or decrease the need for the variance because the lot would not be a minimum of 7,000 square feet.

E. The exceptional and extraordinary circumstance does not arise from the violation of this code.

Staff Response 11: The circumstances leading to the application for the variance do not arise from a violation of this code. The property is not yet developed as a subdivision. Staff determines the criterion is met.



F. The variance will not impose physical limitations on other properties or uses in the area, and will not impose physical limitations on future use of neighboring vacant or underdeveloped properties as authorized by the underlying zoning classification.

Staff Response 12: The proposed variances will not impose physical limitations on surrounding sites. The proposed lot dimensions and pattern of residential development is wholly consistent with nearby residential development. Staff determines the criterion is met.

III. CHAPTER 85, GENERAL PROVISIONS

85.200 APPROVAL CRITERIA

No tentative subdivision or partition plan shall be approved unless adequate public facilities will be available to provide service to the partition or subdivision area prior to final plat approval and the Planning Commission or Planning Director, as applicable, finds that the following standards have been satisfied, or can be satisfied by condition of approval.

A. Streets.

1. <u>General</u>. The location, width and grade of streets shall be considered in their relation to existing and planned streets, to the generalized or reasonable layout of streets on adjacent undeveloped parcels, to topographical conditions, to public convenience and safety, to accommodate various types of transportation (automobile, bus, pedestrian, bicycle), and to the proposed use of land to be served by the streets. The functional class of a street aids in defining the primary function and associated design standards for the facility. The hierarchy of the facilities within the network in regard to the type of traffic served (through or local trips), balance of function (providing access and/or capacity), and the level of use (generally measured in vehicles per day) are generally dictated by the functional class. The street system shall assure an adequate traffic or circulation system with intersection angles, grades, tangents, and curves appropriate for the traffic to be carried. Streets should provide for the continuation, or the appropriate projection, of existing principal streets in surrounding areas and should not impede or adversely affect development of adjoining lands or access thereto.

To accomplish this, the emphasis should be upon a connected continuous pattern of local, collector, and arterial streets rather than discontinuous curvilinear streets and cul-de-sacs. Deviation from this pattern of connected streets should only be permitted in cases of extreme topographical challenges including excessive slopes (35 percent-plus), hazard areas, steep drainageways, wetlands, etc. In such cases, deviations may be allowed but the connected continuous pattern must be reestablished once the topographic challenge is passed. Streets should be oriented with consideration of the sun, as site conditions allow, so that over 50 percent of the front building lines of homes are oriented within 30 degrees of an east-west axis.

Internal streets are the responsibility of the developer. All streets bordering the development site are to be developed by the developer with, typically, half-street improvements or to City standards prescribed by the City Engineer. Additional travel lanes



may be required to be consistent with adjacent road widths or to be consistent with the adopted Transportation System Plan and any adopted updated plans.

An applicant may submit a written request for a waiver of abutting street improvements if the Transportation System Plan (TSP) prohibits the street improvement for which the waiver is requested. Those areas with numerous (particularly contiguous) under-developed or undeveloped tracts will be required to install street improvements. When an applicant requests a waiver of street improvements and the waiver is granted, the applicant shall pay an in-lieu fee equal to the estimated cost, accepted by the City Engineer, of the otherwise required street improvements. As a basis for this determination, the City Engineer shall consider the cost of similar improvements in recent development projects and may require up to three estimates from the applicant. The amount of the fee shall be established prior to the Planning Commission's decision on the associated application. The in-lieu fee shall be used for in kind or related improvements. Streets shall also be laid out to avoid and protect tree clusters and significant trees, but not to the extent that it would compromise connectivity requirements per this subsection (A) (1), or bring the density below 70 percent of the maximum density for the developable net area. The developable net area is calculated by taking the total site acreage and deducting Type I and II lands; then up to 20 percent of the remaining land may be excluded as necessary for the purpose of protecting significant tree clusters or stands as defined in CDC 55.100(B)(2).

Staff Response 13: The proposed extension of Crestview Drive matches existing conditions to the east and west, and the extension of Sunbreak Lane matches existing conditions to the east. The dedication of right-of-way and the proposed improvements on Bland Circle match existing conditions to the east. It is noted that the subdivision to the east did not provide a sidewalk on Bland Circle. This applicant will provide a sidewalk. The proposed right-of-way connecting Sunbreak Lane with the Bland Circle/Tannler Drive intersection will align with that intersection, allowing for the intersection to remain functional when this right-of-way is developed with pavement in the future. Staff finds that the criterion is met.

2. <u>Right-of-way and roadway widths</u>. In order to accommodate larger tree-lined boulevards and sidewalks, particularly in residential areas, the standard right-of-way widths for the different street classifications shall be within the range listed below. But instead of filling in the right-of-way with pavement, they shall accommodate the amenities (e.g., boulevards, street trees, sidewalks). The exact width of the right-of-way shall be determined by the City Engineer or the approval authority. The following ranges will apply:

Street Classification	<u>Right-of-Way</u>
Collector	60 - 80
Local street	40 - 60

Additional rights-of-way for slopes may be required. Sidewalks shall not be located outside of the right-of-way unless to accommodate significant natural features or trees.

Staff Response 14: The applicant proposes Sunbreak Lane to have a 52-foot wide right-of-way and Crestview Drive to have a 58-foot wide right of way, fitting into the accepted range for local streets. The applicant proposes 24 feet for the section of right-of-way that will contain part of the segment of street to be developed between Sunbreak and Bland/Tannler in



the future. The amount of right-of-way needed to meet City standards can come from the property to the west when it develops; the subject property would be providing more than half of the minimum required 40 feet. The applicant proposes eight feet of right-of-way dedication on Bland Circle, increasing the right of way from 50 feet to 58 feet in width. This is below 60 feet, and the other side of the street is already subdivided and cannot be expected to ever dedicate two more feet. However, the Regional Transportation Functional Plan (RTFP) for the Portland Metro area allows for and encourages more narrow right of ways for collector streets. The RTFP standards supersede individual City codes when the two contradict each other. Therefore the proposed right-of -way is acceptable. Staff finds that the criterion is met.



Tannler Drive and Bland Circle intersection. The subject property is behind or to the left of large tree.

3. <u>Street widths</u>. Street widths shall depend upon which classification of street is proposed. The classifications and required cross sections are established in Chapter 8 of the adopted TSP. Streets are classified as follows.

(...)

Collector streets provide both access and circulation within and between residential and commercial/industrial areas. Collectors differ from arterials in that they provide more of a City-wide circulation function and do not require as extensive control of access and that they penetrate residential neighborhoods, distributing trips from the neighborhood and local street system. Collectors are typically greater than one-half to one mile in length.

(...)

Local streets have the sole function of providing access to immediately adjacent land. Service to through traffic movement on local streets is deliberately discouraged by design.

The following table identifies appropriate street width (curb to curb) in feet for various street classifications. The desirable width shall be required unless the applicant or his engineer can demonstrate that site conditions, topography, or site design require the reduced minimum width.

City of West Linn Roadway Cross-Section Standards

Street Element	Characteristic	Width/Options
Vehicle Lane Widths (minimum widths)	Arterial Collector Neighborhood Local Turn Lane	11 feet 10 feet 10 feet 12 feet 10-14 feet
On-Street Parking	Arterials Collectors Neighborhood Local	Limited (in commercial areas) Some (unstriped) Some (8 feet) Some (unstriped)
Bicycle Lanes (minimum widths)	New Construction Reconstruction	5 to 6 feet 5 to 6 feet
Sidewalks (minimum width) (See note below)	Arterial Collector Neighborhood/Local	6 feet 6 feet 6 feet
Landscape Strips	Can be included in all streets	6 feet
Medians	5-Lane 3-Lane 2-Lane	Optional Optional Consider if appropriate
Neighborhood Traffic Management	Arterials Collectors Neighborhood Local	Not recommended Under special conditions Should consider if appropriate Should consider if appropriate
Transit	Arterial/Collectors Neighborhood Route Local	Appropriate Only in special circumstances Not recommended

(...)

Sidewalk Location	Sidewalk Width
Residential Development	6 feet (+ 6-foot planter strip)



- 4. The decision-making body shall consider the City Engineer's recommendations on the desired right-of-way width, pavement width and street geometry of the various street types within the subdivision after consideration by the City Engineer of the following criteria:
 - a. The type of road as set forth in the Transportation Master Plan.
 - b. The anticipated traffic generation.
 - c. On-street parking requirements.
 - d. Sidewalk and bikeway requirements.
 - e. Requirements for placement of utilities.
 - f. Street lighting.
 - g. Drainage and slope impacts.
 - h. Street trees.
 - i. Planting and landscape areas.
 - j. Existing and future driveway grades.
 - k. Street geometry.
 - l. Street furniture needs, hydrants.
- 5. Additionally, when determining appropriate street width, the decision-making body shall consider the following criteria:
 - a. When a local street is the only street serving a residential area and is expected to carry more than the normal local street traffic load, the designs with two travel and one parking lane are appropriate.

(...)

Staff Response 15: The applicant proposes 16-foot vehicle lane widths (32 feet curb to curb) on Crestview Drive and 14-foot lane widths (28 feet curb to curb) on Sunbreak Lane. The applicant proposes improvements to Bland Circle resulting in a 15.5-foot vehicle lane width on one side and a 16-foot width on the other side. Sidewalks and planter strips are proposed to be six feet wide. Staff determines that the criteria are met.

8. <u>Future extension of streets</u>. Where necessary to give access to or permit a satisfactory future subdivision of adjoining land, streets shall be extended to the boundary of the subdivision and the resulting dead-end streets may be approved without turnarounds. (Temporary turnarounds built to Fire Department standards are required when the dead-end street is over 100 feet long.)

Staff Response 16: The proposal connects two existing sections of Crestview Drive. Bland Circle is along one edge of the property and already extends in both directions from the property. Sunbreak Lane is being extended onto the property from the east, and is proposed to have its right-of -way turn south along the west edge of the property and terminate at the Bland/Tannler intersection. The only extension required in the future would be through tax lot 500 to the southwest of the site with the expectation that a road will connect with Bland Circle. To facilitate the connection the applicant will provide a 24foot wide ROW dedication along the west edge of lot 2 and tract "A" Until such time that Sunbreak Lane is completed to Bland Circle, it will remain a cul de sac over 100 feet long. Tualatin Valley Fire and Rescue (TVFR) have responded to this application, and their response is included on pages 44-49 of

Exhibit PC-3. As can be seen in their response, the turnaround proposed is not accepted by TVFR as the applicant proposes bollards (see applicant's comment regarding bollards on Page 55 of Exhibit PC-5 and TVFR response on Page 45 of Exhibit PC-3). Also, the document for the easement across the neighboring property (see Page 50-52 of Exhibit PC-4) is written to allow access to the water reservoir but not to neighboring subdivisions for emergency purposes.

However, TVFR's response on Page 44 of Exhibit PC-3 states that fire sprinklers are an acceptable solution. TVFR's response on Page 45 of Exhibit PC-3 also states that a locked gate at the end of Sunbreak would be acceptable (this would involve modification of the easement for the reservoir driveway to be allowed for emergency access to Sunbreak Lane). Therefore, recommended Condition of Approval 5 requires fire sprinklers for the houses on Sunbreak Lane, or the solution involving the gate and the modification of the access easement to the west. This condition also requires TVFR's other recommendations from their letter on Page 48-49 of Exhibit PC-3 regarding Sunbreak Lane, ensuring that all provisions recommended are made to fulfill TVFR's concerns and thereby substitute for a temporary turnaround. These include a fire flow test and limiting parking along the one side of the new segment of Sunbreak Lane. Staff determines that the criterion is met upon the inclusion of Condition of Approval 5.

9. <u>Intersection angles</u>. Streets shall be laid out to intersect angles as near to right angles as practical, except where topography requires lesser angles, but in no case less than 60 degrees unless a special intersection design is approved. Intersections which are not at right angles shall have minimum corner radii of 15 feet along right-of-way lines which form acute angles. Right-of-way lines at intersections with arterial streets shall have minimum curb radii of not less than 35 feet. Other street intersections shall have curb radii of not less than 25 feet. All radii shall maintain a uniform width between the roadway and the right-of-way lines. The intersection of more than two streets at any one point will not be allowed unless no alternative design exists.

Staff Response 17: The only new intersection proposed is where the Sunbreak right-of -way is proposed to intersect with Bland Circle at the southwest corner of the site. The right-of -way dedication for this is proposed at a right angle to Bland Circle along the site. A curb and street pavement for this section of Sunbreak are not proposed yet since the street cannot be built until the other half of the potential right of way becomes available in the future if/when the property to the west develops. Therefore the parts of this section related to curb radii cannot apply. When the pavement is developed in the future, all City standards will be met by the Public Works Department. Staff determines the criterion is met.

10. <u>Additional right-of-way for existing streets</u>. Wherever existing street rights-of-way adjacent to or within a tract are of inadequate widths based upon the standards of this chapter, additional right-of-way shall be provided at the time of subdivision or partition.

(...)

Staff Response 18: See Staff Response 14 above regarding the dedication to widen the existing section of Bland Circle right of way along the site. Staff determines the criterion is met.



13. <u>Grades and curves</u>. Grades shall not exceed 8 percent on major or secondary arterials, 10 percent on collector streets, or 15 percent on any other street unless by variance. Willamette Drive/Highway 43 shall be designed to a minimum horizontal and vertical design speed of 45 miles per hour, subject to Oregon Department of Transportation (ODOT) approval. Arterials shall be designed to a minimum horizontal and vertical design speed of 35 miles per hour. Collectors shall be designed to a minimum horizontal and vertical design speed of 30 miles per hour. All other streets shall be designed to have a minimum centerline radii of 50 feet. Super elevations (i.e., banking) shall not exceed four percent. The centerline profiles of all streets may be provided where terrain constraints (e.g., over 20 percent slopes) may result in considerable deviation from the originally proposed alignment.

(...)

Staff Response 19: The two proposed local street sections will be under 15% grade. This section of collector street Bland Circle will have just under 10% grade. Staff determines the criterion is met.

16. <u>Sidewalks</u>. Sidewalks shall be installed per CDC <u>92.010(H)</u>, Sidewalks. The residential sidewalk width is six feet plus planter strip as specified below. Sidewalks in commercial zones shall be constructed per subsection (A) (3) of this section. See also subsection C of this section. Sidewalk width may be reduced with City Engineer approval to the minimum amount (e.g., four feet wide) necessary to respond to site constraints such as grades, mature trees, rock outcroppings, etc., or to match existing sidewalks or right-of-way limitations.

17. <u>Planter strip</u>. The planter strip is between the curb and sidewalk providing space for a grassed or landscaped area and street trees. The planter strip shall be at least 6 feet wide to accommodate a fully matured tree without the boughs interfering with pedestrians on the sidewalk or vehicles along the curbline. Planter strip width may be reduced or eliminated, with City Engineer approval, when it cannot be corrected by site plan, to the minimum amount necessary to respond to site constraints such as grades, mature trees, rock outcroppings, etc., or in response to right-of-way limitations.

Staff Response 20: Crestview, Sunbreak, and Bland are proposed to have a six-foot planter strip and six-foot sidewalk. A six-foot sidewalk is proposed on the right-of-way connecting Sunbreak with Bland Circle. Street trees are proposed in all planter strips, including along the sidewalk in the right-of-way between Sunbreak and Bland, although this street pavement is not proposed to be completed at this time. The planter strip will remain when this street is completed in the future when the property to the west develops. Sheet C2.7 Bland Circle Plan, (Exhibit PC-5), shows the future sidewalk on Bland Circle being developed over the current location of existing utility boxes. Recommended Condition of Approval 9 requires that these and any future installed utility boxes be out of the right of way and out of proposed sidewalk and ramp areas. Staff determines that the criteria are met upon the inclusion of Condition of Approval 9.

18. Streets and roads shall be dedicated without any reservations or restrictions.



Staff Response 21: The dedications are proposed without any reservations or restrictions. Staff determines the criterion is met.

19. All lots in a subdivision shall have access to a public street. Lots created by partition may have access to a public street via an access easement pursuant to the standards and limitations set forth for such accessways in Chapter 48 CDC.

(...)

Staff Response 22: All lots will front directly onto a public street. Staff determines the criterion is met.

B. Blocks and lots.

- 1. <u>General</u>. The length, width, and shape of blocks shall be designed with due regard for the provision of adequate building sites for the use contemplated; consideration of the need for traffic safety, convenience, access, circulation, and control; and recognition of limitations and opportunities of topography and solar access.
- 2. <u>Sizes</u>. The recommended block size is 400 feet in length to encourage greater connectivity within the subdivision. Blocks shall not exceed 800 feet in length between street lines, except for blocks adjacent to arterial streets or unless topographical conditions or the layout of adjacent streets justifies a variation. Designs of proposed intersections shall demonstrate adequate sight distances to the City Engineer's specifications. Block sizes and proposed accesses must be consistent with the adopted TSP.

Staff Response 23: The entire site is on a south-facing slope, making solar access viable. All houses will face north or south, so they will have southern solar access to either the front or rear on the south facing slope. The two existing segments of Crestview Drive will connect with each other through the property. Due to grades, no north-south street is proposed to connect the two local streets within the site or to connect to potential future subdivisions to the north. This results in a long block of Crestview between the existing intersection with Sunbreak to the east and the intersection with Bland Circle at the far west end of Crestview. The block would be approximately 1900 feet long, but this is acceptable per Subsection (2) above due to the topographic conditions. To make up for the length of this block and the inability to construct a street to the north, the applicant proposes a 15-foot-wide pedestrian access easement containing a trail, which stubs to the north between lots 9 and 10. Tract C at the rear of lots 10 and 11 will allow for an eventual connection to the north when other properties annex and develop. This way the above criterion can be fulfilled for pedestrian connections even if topography prevents it from being fulfilled for vehicle connections. Since the large house to the north of this site is likely to remain during future development and because the property east of that has already had a pre-application conference for annexation and subdivision, the most viable and likely trail connection is actually to the northeast. This would go through a smaller portion of the property to the north, further from the existing house there, facilitating and easier connection to the property to the northeast. Therefore, Condition of Approval 2 requires that the trail and access easement go between lots 9 and 10

then traverse easterly via a tract conveyed to the City at the rear of lots 10 and 11 to stub to the northeast corner of the subject site.

Sunbreak Lane is proposed to connect with a right-of-way south to the Tannler/Bland intersection. This can be developed as a street when the property to the west develops. This design results in a block of less than 800 feet east to west from the Sunbreak/Crestview intersection to the right-of-way proposed to connect to the south. Staff finds that the criteria are met upon the inclusion of Condition of Approval 2A.

3. Lot size and shape. Lot size, width, shape, and orientation shall be appropriate for the location of the subdivision, for the type of use contemplated, for potential utilization of solar access, and for the protection of drainageways, trees, and other natural features. No lot shall be dimensioned to contain part of an existing or proposed street. All lots shall be buildable, and the buildable depth should not exceed two and one-half times the average width. "Buildable" describes lots that are free of constraints such as wetlands, drainageways, etc., that would make home construction impossible. Lot sizes shall not be less than the size required by the zoning code unless as allowed by planned unit development (PUD).

(...)

Staff Response 24: All lots are oriented north-to-south on the south side of a hill, providing for solar access and following the pattern of lots in adjacent subdivisions. The lot placement or orientation does not adversely impact the few onsite trees. There are no drainageways on site either. Staff finds that all lots are buildable. The applicant proposes two of the 11 lots to have a buildable depth more than 2.5 times the width, and has applied for Class II variances for this. See staff responses 6-12 regarding the variance request.

4. <u>Access</u>. Access to subdivisions, partitions, and lots shall conform to the provisions of Chapter <u>48</u> CDC, Access, Egress and Circulation.

(...)

Staff Response 25: No flag lots are proposed. All lots front directly onto either Crestview or Sunbreak. Each lot will be able to have its own individual driveway that easily meets the driveway length and width provisions of Chapter 48. Staff determines the criterion is met.

6. <u>Lot and parcel side lines</u>. The lines of lots and parcels, as far as is practicable, should run at right angles to the street upon which they face, except that on curved streets they should be radial to the curve.

(...)

Staff Response 26: On Sunbreak Lane the lot lines are proposed at right angles to the street. Crestview Drive has to run at a slight angle through this site to connect the two existing sections of Crestview on each side of this site. Since the angle of Crestview on site is slightly different than the otherwise rectangularly aligned edges of the site, the lots are parallel to the east and west edges of the site rather than perpendicular to Crestview. This is necessary due



to the required Crestview connection, but it does not create a severe angle where the lot lines intersect with Crestview. Staff determines that the lines are proposed at right angles to the streets as far as is practicable and that therefore the criterion is met.

C. Pedestrian and bicycle trails.

- 1. Trails or multi-use pathways shall be installed, consistent and compatible with federal ADA requirements and with the Oregon Transportation Planning Rule, between subdivisions, cul-de-sacs, and streets that would otherwise not be connected by streets due to excessive grades, significant tree(s), and other constraints natural or manmade. Trails shall also accommodate bicycle or pedestrian traffic between neighborhoods and activity areas such as schools, libraries, parks, or commercial districts. Trails shall also be required where designated by the Parks Master Plan.
- 2. The all-weather surface (asphalt, etc.) trail should be eight feet wide at minimum for bicycle use and six feet wide at minimum for pedestrian use. Trails within 10 feet of a wetland or natural drainageway shall not have an all-weather surface, but shall have a soft surface as approved by the Parks Director. These trails shall be contained within a corridor dedicated to the City that is wide enough to provide trail users with a sense of defensible space. Corridors that are too narrow, confined, or with vegetative cover may be threatening and discourage use. Consequently, the minimum corridor width shall be 20 feet. Sharp curves, twists, and blind corners on the trail are to be avoided as much as possible to enhance defensible space. Deviations from the corridor and trail width are permitted only where topographic and ownership constraints require it.
- 3. Defensible space shall also be enhanced by the provision of a three- to four-foot-high matte black chain link fence or acceptable alternative along the edge of the corridor. The fence shall help delineate the public and private spaces.

(...)

6. The trail grade shall not exceed 12 percent except in areas of unavoidable topography, where the trail may be up to a 15 percent grade for short sections no longer than 50 feet. In any location where topography requires steeper trail grades than permitted by this section, the trail shall incorporate a short stair section to traverse the area of steep grades.

(...)

Staff Response 27: The applicant proposes a trail from Crestview to Sunbreak as the steep grades won't allow for a connecting street. For similar topographic reasons, no street is proposed to the developable properties to the north which will access from Weatherhill Road when developed. However, the trail is proposed to extend north from Crestview Drive to the north property line between lots 9 and 10 and then via a tract at the rear of lots 10 and 11 to the northeast corner of the subdivision. This alignment will allow the Sunbreak's trail to connect to trails from properties to the north and/or northeast. The trail alignment avoids the row of fir trees just across the property line on the property to the north (see Sheet C1.2 Tree Plan on Page 59 of Exhibit PC-5). The trail is proposed to be asphalt and to not exceed 12%

except in the 15% grade areas where there will be short sets of stairs every 50 feet. While the trail cannot be built to ADA standards due to topography, it is allowed to have these grades per Subsection (6) above. The trail corridor is proposed to be 7-18 feet wide, not 20 feet per 85.200(C) (2). Condition of approval will correct the width to 15 feet wide which is allowed if the topography dictates it as is the case here. The trail is at least six feet wide in all areas. Condition of Approval 4 requires the black matte chain link fence (or an alternative acceptable to the Parks Department) required by Subsection (3) above. While the applicant proposes to pave all of the proposed path, the segment north of Crestview would be best handled at this point as a fee-in-lieu for future development, being that a) it is now proposed as a stub as there is no connection yet to the north, and b) utilities are likely to be installed under it in the future, causing any trail installed now to be destroyed and rebuilt. Recommended Condition of Approval 8 requires a fee-in-lieu to be provided instead of pavement for the sections of the path north of Crestview Drive. Staff determines the trails criteria are met upon the inclusion of conditions of approval 2, 4, and 8.

- E. <u>Lot grading</u>. Grading of building sites shall conform to the following standards unless physical conditions demonstrate the propriety of other standards:
 - 1. All cuts and fills shall comply with the excavation and grading provisions of the Uniform Building Code and the following:
 - a. Cut slopes shall not exceed one and one-half feet horizontally to one foot vertically (i.e., 67 percent grade).
 - b. Fill slopes shall not exceed two feet horizontally to one foot vertically (i.e., 50 percent grade). Please see the following illustration.
 - 2. The character of soil for fill and the characteristics of lot and parcels made usable by fill shall be suitable for the purpose intended.
 - 3. If areas are to be graded (more than any four-foot cut or fill), compliance with CDC 85.170(C) is required.
 - 4. The proposed grading shall be the minimum grading necessary to meet roadway standards, and to create appropriate building sites, considering maximum allowed driveway grades.

Staff Response 28: Cut slopes do not exceed 67% and fill slopes do not exceed 50%. The grading proposed is the minimum necessary for this relatively sloped site where street stubs are to be extended and houses are to be built. There is a proposed retaining wall of up to six feet in height on Lot 8. This is proposed to protect the significant tree easement from surrounding grading. The northern segment of this wall will be screened by the significant trees within the easement, and the southern segment will face the proposed lots and not a public right of way. The proposed retaining wall adjacent to the stormwater pond would be up to 13 feet in height. The applicant should provide plans for a terraced version of a wall or if that is not feasible from an engineering standpoint, the wall shall be mitigated by the installation of a row of conifers or comparable vegetation. Staff determines that the criteria are met upon the inclusion of Condition of Approval 3A.



5. Where landslides have actually occurred, where the area is identified as a hazard site in the West Linn Comprehensive Plan Report, or where field investigation by the City Engineer confirms the existence of a severe landslide hazard, development shall be prohibited unless satisfactory evidence is additionally submitted by a registered geotechnical engineer which certifies that methods of rendering a known hazard site safe for construction are feasible for a given site. The City Engineer's field investigation shall include, but need not be limited to, the following elements:

Staff Response 29: No development is proposed in landslide hazard areas. Staff determines the criterion is met.

6. All cuts and fills shall conform to the Uniform Building Code.

Staff Response 30: Cuts and fills will be required through the process to conform to the Uniform Building Code. Staff determines that the criterion is met.

- 7. On land with slopes in excess of 12 percent, cuts and fills shall be regulated as follows:
 - a. Toes of cuts and fills shall be set back from the boundaries of separate private ownerships at least three feet, plus one-fifth of the vertical height of the cut or fill. Where an exception is required from that requirement, slope easements shall be provided.
 - b. Cuts shall not remove the toe of any slope where a severe landslide or erosion hazard exists (as described in subsection (G) (5) of this section).
 - c. Any structural fill shall be designed by a registered engineer in a manner consistent with the intent of this code and standard engineering practices, and certified by that engineer that the fill was constructed as designed.
 - d. Retaining walls shall be constructed pursuant to Section 2308(b) of the Oregon State Structural Specialty Code.
 - e. Roads shall be the minimum width necessary to provide safe vehicle access, minimize cut and fill, and provide positive drainage control.

Staff Response 31: Toes of cuts and fills are set back at least three feet. No proposed cuts will remove the toe of any slope where a landslide or erosion hazard exists. The applicant has responded that fill and walls will be designed and constructed as required above. Roads are designed to be the minimum width necessary to serve as residential streets connecting and/or extending the existing local streets. Staff determines that the criteria are met.

8. Land over 50 percent slope shall be developed only where density transfer is not feasible. The development will provide that:



Staff Response 32: While this is a consistently sloped site, there are no slopes over 50% except for some small sections in the Bland and Crestview ROW that will be graded per code and a small berm, presumably graded by the previous home owner, in the vicinity of lot 11.Staff determines the criterion is met.

F. Water.

- 1. A plan for domestic water supply lines or related water service facilities shall be prepared consistent with the adopted Comprehensive Water System Plan, plan update, March 1987, and subsequent superseding revisions or updates.
- 2. Adequate location and sizing of the water lines.
- 3. Adequate looping system of water lines to enhance water quality.

(...)

5. A written statement, signed by the City Engineer, that water service can be made available to the site by the construction of on-site and off-site improvements and that such water service has sufficient volume and pressure to serve the proposed development's domestic, commercial, industrial, and fire flows.

Staff Response 33: The applicant proposes water lines in the new segments of Crestview and Sunbreak. Looping is provided in that water lines connect the water lines in the two existing segments of Crestview, which both loop back to the line in Bland Circle. Per the Engineering Department, the water system would be best served by looping the lines through the proposed utility easement between the two local streets within the subdivision as well. This would be via the proposed pedestrian access and utility easement west along lots 3, 4, 7, and 8. Condition of Approval 6 requires this. The Development Review Engineer's sign off on this staff report for the Engineering Division fulfills Subsection (5) above. Staff determines that the criteria are met upon the inclusion of Condition of Approval 6.

G. Sewer.

- 1. A plan prepared by a licensed engineer shall show how the proposal is consistent with the Sanitary Sewer Master Plan (July 1989). Agreement with that plan must demonstrate how the sanitary sewer proposal will be accomplished and how it is gravity-efficient. The sewer system must be in the correct basin and should allow for full gravity service.
- 2. Sanitary sewer information will include plan view of the sanitary sewer lines, including manhole locations and depth or invert elevations.
- 3. Sanitary sewer lines shall be located in the public right-of-way, particularly the street, unless the applicant can demonstrate why the alternative location is necessary and meets accepted engineering standards.



- 4. Sanitary sewer line should be at a depth that can facilitate connection with downsystem properties in an efficient manner.
- 5. The sanitary sewer line should be designed to minimize the amount of lineal feet in the system.
- 6. The sanitary sewer line shall avoid disturbance of wetland and drainageways. In those cases where that is unavoidable, disturbance shall be mitigated pursuant to Chapter 32 CDC, Water Resource Area Protection, all trees replaced, and proper permits obtained. Dual sewer lines may be required so the drainageway is not disturbed.
- 7. Sanitary sewer shall be extended or stubbed out to the next developable subdivision or a point in the street that allows for reasonable connection with adjacent or nearby properties.
- 8. The sanitary sewer system shall be built pursuant to DEQ, City, and Tri-City Service District sewer standards. The design of the sewer system should be prepared by a licensed engineer, and the applicant must be able to demonstrate the ability to satisfy these submittal requirements or standards at the pre-construction phase.
- 9. A written statement, signed by the City Engineer, that sanitary sewers with sufficient capacity to serve the proposed development and that adequate sewage treatment plant capacity is available to the City to serve the proposed development.

Staff Response 34: The applicant proposes a sanitary sewer line under Crestview Drive that will connect to the existing line under the existing section of Crestview to the west, which heads downhill. The applicant proposes a sanitary sewer line under Sunbreak Lane which will head downhill under the proposed right-of-way that connects to the Bland/Tannler intersection. The sanitary sewer line will connect to an existing line there. The Development Review Engineer's sign off on this staff report for the Engineering Division fulfills Subsection (9) above. Subsection (7) above requires that connection be provided to the next developable property. The properties to the north are not annexed at this time but are within the Urban Growth Boundary. These properties slope towards the south. The potential lack of other possible feasible connections for sanitary sewer in this part of the city may affect the developability of these properties. Therefore, Condition of Approval 2A requires that the proposed trail easement between lots 9 and 10, the tract C north of lots 10 and 11 and the easement on the east edge of lot 11 be available for utilities. Staff determines that the criteria are met upon the inclusion of Condition of Approval 2.

H. Storm.

- 1. A stormwater quality and detention plan shall be submitted which complies with the submittal criteria and approval standards contained within Chapter 33 CDC. It shall include profiles of proposed drainageways with reference to the adopted Storm Drainage Master Plan.
- 2. Storm treatment and detention facilities shall be sized to accommodate a 25-year storm incident. A registered civil engineer shall prepare a plan and statement which shall



be supported by factual data that clearly shows that there will be no adverse off-site impacts from increased intensity of runoff downstream or constriction causing ponding upstream. The plan and statement shall identify all on- or off-site impacts and measures to mitigate those impacts. The plan and statement shall, at a minimum, determine the off-site impacts from a 25-year storm.

- 3. Plans shall demonstrate how storm drainage will be collected from all impervious surfaces including roof drains. Storm drainage connections shall be provided to each dwelling unit/lot. The location, size, and type of material selected for the system shall correlate with the 25-year storm incident.
- 4. Treatment of storm runoff shall meet municipal code standards.

Staff Response 35: The applicant proposes a stormwater pond in Tract A, the lowest point on the site. The lots on Crestview will drain to a stormwater pipe in a proposed easement, which will connect to the proposed stormwater line under Sunbreak Lane and the adjacent proposed right of way. This then would drain to the pond on the east side of the proposed right of way connection to Tannler/Bland. The stormwater report on pages 161-217 of Exhibit PC-5 shows how this meets all City standards. Staff determines that the criteria are met.

I. <u>Utility easements</u>. Subdivisions and partitions shall establish utility easements to accommodate the required service providers as determined by the City Engineer. The developer of the subdivision shall make accommodation for cable television wire in all utility trenches and easements so that cable can fully serve the subdivision.

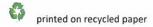
Staff Response 36: The applicant proposes eight-foot-wide public utility easements along all right of ways. There are possible future utility needs related to properties to the north that might annex and develop which may need to utilize connections through this property, including but not limited to sanitary sewer for these uphill properties. For this reason, the proposed pedestrian access easement/tract to the north shall also be a utility easement/tract 15 feet in width, and there should be a utility easement/tract five feet in width along the eastern boundary of Lot 11. The five-foot utility easement along the east side of Lot 11 would be adjacent to an existing five-foot utility easement along the west edge of the property to the east at 2474 Crestview Drive, for a combined easement of 10 feet in width. Condition of Approval 2 requires these easements at these sizes. Staff determines the criterion is met upon the inclusion of Condition of Approval 2.

J. Supplemental provisions.

(...)

3. <u>Street trees</u>. Street trees are required as identified in the appropriate section of the municipal code and Chapter <u>54</u> CDC.

Staff Response 37: Street trees are proposed on all three streets. The criterion is met.



4. <u>Lighting</u>. To reduce ambient light and glare, high or low pressure sodium light bulbs shall be required for all subdivision street or alley lights. The light shall be shielded so that the light is directed downwards rather than omni-directional.

Staff Response 38: Street lighting is proposed for the new street sections and for the area to be improved along Bland Circle. The applicant proposes to use the types of bulbs required by this criterion. Like the existing streetlights nearby, the lights will be of the shoe box style, which are directed downwards and shielded. Public Works prefers LED fixtures to sodium to preserve energy. Recommended Condition of Approval 7 requires this. Staff determines the criterion is met upon the inclusion of Condition of Approval 7.

5. <u>Dedications and exactions</u>. The City may require an applicant to dedicate land and/or construct a public improvement that provides a benefit to property or persons outside the property that is the subject of the application when the exaction is roughly proportional. No exaction shall be imposed unless supported by a determination that the exaction is roughly proportional to the impact of development.

Staff Response 39: The applicant proposes dedication to extend Crestview and Sunbreak through the site. The applicant proposes eight feet of dedication on Bland Circle. The applicant is also proposing a 7 to 18 foot wide tract at the rear of lots 10 and 11 to facilitate trail access and any necessary utilities. Staff finds that trails require a paved width of six feet within a 20 foot wide corridor per 85.200(C). Meanwhile sanitary sewer connections as required by 85.200(G) (7) typically require a 15-20 foot wide corridor. Therefore the tract north of lots 10 and 11 needs to be widened to 15 feet per Condition of Approval 2. Also, sections of the proposed trail north of Crestview Drive, including its extension to the east behind lots 10 and 11 as required by Condition of Approval 2A, do not need to be built at this time as this would be a dead end trail. There is no connection to the north at this time, so the trail would be a stub if paved now. Also, if it is paved now, the likely future installation of utilities in the future would result in the trail being destroyed and having to be rebuilt again. Therefore a fee-in-lieu instead of pavement is best for this segment of trail. Recommended Condition of Approval 8 requires this as well. Staff determines that the criterion is met upon the inclusion of Condition of Approval 8.

The applicant proposes new right of way for a half street between the west end of Sunbreak and Bland Circle, which can be made a whole street right of way and developed as a whole street in the future when the property to the west develops. For the applicant's property's proportional share of the eventual development of this street pavement, the applicant should pay a fee-in-lieu coinciding with the fulfillment of this application. (The applicant proposes the sidewalk to connect at this time, but not the half-street pavement.) Recommended Condition of Approval 8 requires this.

6. <u>Underground utilities</u>. All utilities, such as electrical, telephone, and television cable, that may at times be above ground or overhead shall be buried underground in the case of new development. The exception would be in those cases where the area is substantially built out and adjacent properties have above-ground utilities and where the development site's frontage is less than 200 feet and the site is less than one acre. High voltage transmission lines, as classified by Portland General Electric or electric service provider, would also be exempted. Where adjacent future development is expected or

imminent, conduits may be required at the direction of the City Engineer. All services shall be underground with the exception of standard above-grade equipment such as some meters, etc.

Staff Response 40: The applicant proposes to underground all utilities. Staff determines the criterion is met.

7. <u>Density requirement</u>. Density shall occur at 70 percent or more of the maximum density allowed by the underlying zoning. These provisions would not apply when density is transferred from Type I and II lands as defined in CDC <u>02.030</u>. Development of Type I or II lands are exempt from these provisions. Land divisions of three lots or less would also be exempt.

(...)

Staff Response 41: After proposed right-of-way dedication the site net size will be approximately 2.26 acres. This allows for a maximum of 14.06 lots under the R-7 zoning. 11 lots are proposed. This is over 78% of 14.06 (or of 14.00 depending on what is used as the "maximum"). Since this number is greater than 70% staff determines the criterion is met.

9. <u>Heritage trees/significant tree and tree cluster protection</u>. All heritage trees, as defined in the Municipal Code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction. All non-heritage trees and clusters of trees (three or more trees with overlapping dripline; however, native oaks need not have an overlapping dripline) that are considered significant by virtue of their size, type, location, health, or numbers shall be saved pursuant to CDC $\underline{55.100}(B)(2)$. Trees are defined per the municipal code as having a trunk six inches in diameter or 19 inches in circumference at a point five feet above the mean ground level at the base of the trunk.

(...)

Staff Response 42: There are no heritage trees on site. The City Arborist agrees with the applicant's Tree Plan, Sheet 1.2, on Page 59 of Exhibit PC-5 as to which trees are significant. All significant trees on site will either be preserved or will be removed due to the necessary trajectory of Crestview Drive to connect the two existing stubs. Removing of significant trees due to necessary street construction is permitted with mitigation per 55.100(B) (2). Three significant trees are proposed to be removed for street installation: two 24-inch oaks and a 30-inch fir. This is a total of 78 inches. Recommended Condition of Approval 3A requires one-to-one mitigation for the 78 inches of significant trees to be removed. Recommended Condition of Approval 3B also requires that for the tree conservation easements proposed on lots 8 and 9 (and an addition conservation easement for new trees referred to in Condition of Approval 3A), the applicant use the City's standard language for such easements. Staff determines that the criterion is met upon the inclusion of Condition of Approval 3.

EXHIBITS PC-1 THROUGH PC-4 AFFIDAVIT AND NOTICE MAILING PACKET, COMPLETENESS LETTER, TVFR COMMENTS, EASEMENT DOCUMENT FOR ADJACENT RESERVOIR DRIVEWAY

FILE NUMBER:

SUB-13-02/VAR-13-05/VAR-13-06

REQUEST:

11-LOT SUBDIVISION WITH CLASS II VARIANCE FOR

DEPTH OF TWO LOTS TO EXCEED 2.5 TIMES LOT

WIDTH

AFFIDAVIT OF NOTICE

We, the undersigned do hereby certify that, in the interest of the party (parties) initiating a proposed land use, the following took place on the dates indicated below:

GENE File No Develo Schedu	PRAL DVB-13-02 Applicant's Name 775 pment Name Sun break Subdivision Date 10-2-13	Mith Co
	<u>CE</u> : Notices were sent at least 20 days prior to the schedof the Community Development Code. (check below)	aled hearing, meeting, or decision date per Section
TYPE	A	
A.	The applicant (date) $9-12-13$	(signed) Survey
B.	Affected property owners (date) 9-12-13	(signed) S. Sheryer
C.	School District/Board (date)	(signed)
D.	Other affected gov't. agencies (date)	(signed)
E.	Affected neighborhood assns. (date) 9-12-13 (A	(signed) S. Sheryer
F.	All parties to an appeal or review (date)	(signed)
	t 10 days prior to the scheduled hearing or meeting, notice $9 - 19 - 13$,
City's v	(published date) $9-19-13$ vebsite (posted date) $9-12-13$	(signed) 5.5 kroyer
SIGN	u ,	
	t 10 days prior to the scheduled hearing, meeting or deci	sion date, a sign was posted on the property per
Section	99.080 of the Community Development Code. 9-19-13 (signed)	
(date) _	(signed)	
	<u>CE</u> : Notices were sent at least 14 days prior to the schedu of the Community Development Code. (check below)	tled hearing, meeting, or decision date per Section
TYPE I	В	
A.	The applicant (date)	(signed)
B.	Affected property owners (date)	(signed)
C.	School District/Board (date)	(signed)
D.	Other affected gov't. agencies (date)	(signed)
E.	Affected neighborhood assns. (date)	(signed)
	was posted on the City's website at least 10 days prior to the	e scheduled hearing or meeting. (signed)
prior to	REPORT mailed to applicant, City Council/Planning Cothe scheduled hearing.	
(date)_	9-20-13 (signed) 5.5 knoyer	
	<u>DECISION</u> notice mailed to applicant, all other partie or's office.	s with standing, and, if zone change, the County
(date)_	(signed)	
p:\devr	vw\forms\affidvt of notice-land use (9/09)	

CITY OF WEST LINN PLANNING COMMISSION PUBLIC HEARING NOTICE FILE NO. SUB-13-02/VAR-13-05/VAR-13-06/

VAR-13-07/VAR-13-08/VAR-13-09

The West Linn Planning Commission is scheduled to hold a public hearing, on Wednesday, October 2, 2013, **starting at 7:00 p.m.** in the Council Chambers of City Hall, 22500 Salamo Road, West Linn, to consider a request for an 11-lot Subdivision, with five Class II Variances for lot depth in relation to lot width for five of the lots. The site is located at 23150 Bland Circle (Tax Lot 1300 of Clackamas County Assessor's Map 2-1E-35A).

Criteria for subdivisions are found in Chapter 85 of the Community Development Code (CDC). Criteria for variances are found in Chapter 75 of the CDC. Approval or disapproval of the request by the Planning Commission will be based upon these criteria and these criteria only. At the hearing, it is important that comments relate specifically to the applicable criteria listed.

You have been notified of this proposal because County records indicate that you own property within 500 feet of the affected site on Tax Lot 1300 of Clackamas County Assessor's Map 2-1E-35A and/or as required by Chapter 99 of the CDC.

The complete application in the above noted file is available for inspection at no cost at City Hall or via the web site at http://westlinnoregon.gov/planning/23150-bland-circle-11-lot-subdivision-5-variances, or copies can be obtained for a minimal charge per page. At least ten days prior to the hearing, a copy of the staff report will be available for inspection. For further information, please contact Associate Planner Tom Soppe at tsoppe@westlinnoregon.gov or 503-742-8660 or Associate Planner Peter Spir, or pspir@westlinnoregon.gov or 503-723-2539. Alternately, visit City Hall, 22500 Salamo Road, West Linn, OR 97068.

The hearing will be conducted in accordance with the rules of Section 99.170 of the CDC. Anyone wishing to present written testimony on this proposed action may do so in writing prior to, or at the public hearing. Oral testimony may be presented at the public hearing. At the public hearing, the Planning Commission will receive a staff presentation, and invite both oral and written testimony. The Planning Commission may continue the public hearing to another meeting to obtain additional information, leave the record open for additional evidence, arguments, or testimony, or close the public hearing and take action on the application as provided by state law. Failure to raise an issue in person or by letter at some point prior to the close of the hearing, or failure to provide sufficient specificity to afford the decision maker an opportunity to respond to the issue, precludes an appeal to the Land Use Board of Appeals (LUBA) based on that issue.

SHAUNA SHROYER Planning Administrative Assistant

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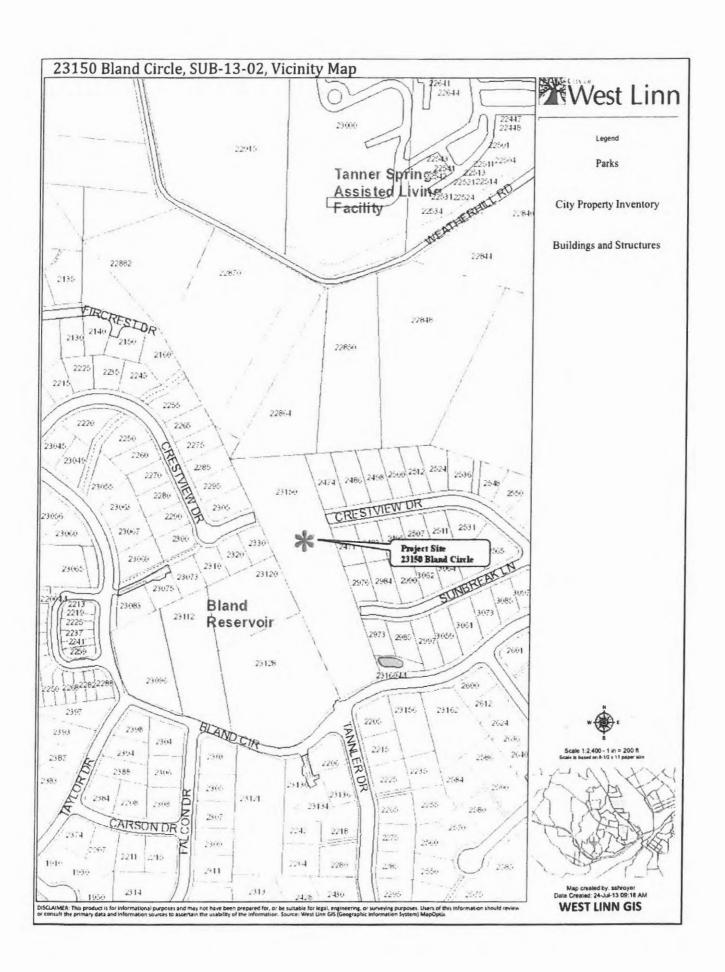
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SHAUNA SHROYER
Planning Administrative Assistant

Publish: West Linn Tidings, September 19, 2013



ALMODOVAR DAVID R & JULIE A ARNONE JOSEPH & LISA M BARBER HEIDI S 2220 CRESTVIEW DR 2990 SUNBREAK LN 3085 SUNBREAK LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 BARNETT JEFFREY C & TRACEY B BELL BRIAN N **BIALAS FAMILY TRUST** 3064 SUNBREAK LN 2290 CRESTVIEW DR 3059 SUNBREAK LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 BIERMAN ROBERT M & KERRY M **BOSSAERT PIERRE G BOYD MARK S & CAROLYN E** 2613 UMPQUALN 145 SONATA LN 34250 NE COLORADO DR WEST LINN, OR 97068 APTOS, CA 95003 CORVALLIS, OR 97333 BRIGGS C C & C J VAUGHN-BRIGGS **BROSSMAN ROBERT K & BEVERLY J BROWNE MICHAEL E** 2474 CRESTVIEW DR 2997 SUNBREAK LN 23130 BLAND CIR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 **BRUUN LORENTZ S & ALISON F BUTLER JAMES** CALLAHAN JOHN T CO-TRUSTEE 23069 BLAND CIR 2295 CRESTVIEW DR 2612 UMPQUA LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 CANARY BONNI C CARR JOHN T & HEIDI A CHAN JOHN H TRUSTEE 286 SW FOREST COVE RD 3086 SUNBREAK LN 2250 CRESTVIEW DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 CHAN JOSEPH L CITY OF WEST LINN **CONLIN ROBERT S & CINDY S** 23156 BLAND CIR 22500 SALAMO RD #600 2498 CRESTVIEW DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 COONEY KENNETH F & LISA R COPPEDGE JOHNNY N & LAURIE A CRADDOCK ROBERT A & NOELLE A 2562 CRESTVIEW DR 23128 BLAND CIR 2590 KENSINGTON CT WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 CRAWFORD STEVE P & ANN E DEAN DAVID E & DIANA E **DEVAULT MARILYN** 2483 CRESTVIEW DR 22870 S WEATHERHILL RD 23121 BLAND CIR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 **DEVRIES JOHN C TRUSTEE** DRAKE TODD **DRIGGERS SEAN & STACEY** 22850 S WEATHERHILL RD 2550 CRESTVIEW DR 2310 CRESTVIEW DR

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EGLAND ERIC G FELTMAN DAVID W & VALERIE A FEWELL JASON M & JULIE K 2976 SUNBREAK LN 2565 CRESTVIEW DR 2985 SUNBREAK LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 FINCH ERIC A FLAD SUSAN & RIAN J GABEL DONALD W & KRISTI L 2584 KENSINGTON CT 2285 TANNLER DR 2225 CRESTVIEW DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 **GEYER JAMES C & JENNIFER T GHOLI HASSAN & LISA TREIBER GHORBANI-ELIZEH EDISON &** 2303 FALCON DR 2580 KENSINGTON CT TAMARA J WEST LINN, OR 97068 WEST LINN, OR 97068 2280 CRESTVIEW DR WEST LINN, OR 97068 GLATT RICHARD M & JEANNE L **GOEHRING BRADLEY P & APRIL S** GRIFFITH TERRY L & SANDRA J 12492 SE 155TH AVE 2309 FALCON DR 23083 BLAND CIR HAPPY VALLEY, OR 97086 WEST LINN, OR 97068 WEST LINN, OR 97068 **GUNN JOHN L** HADDAD DANIEL R & ANUPAMA A HALICKI MICHAEL R & KATHLEEN C 2264 SW TANNLER DR **GANDHI** 2307 FALCON DR WEST LINN, OR 97068 3097 SUNBREAK LN WEST LINN, OR 97068 WEST LINN, OR 97068 HAWK CHRISTOPHER E & KARIN S **HEMMADY JAY S & JANICE E POTTS** HILL KURT J & JENNIFER L 2512 CRESTVIEW DR 23060 BLAND CIR 2973 SUNBREAK LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 HILLSON ANN M HONG LE **HUDSON JEFFREY R & DAWN A** 23073 BLAND CIR 2160 FIRCREST DR 2235 TANNLER DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 HUOT CORY L & JODI L **1 & N CONSTRUCTION INC** JACKSON RONALD A & L M 23055 BLAND CIR 15137 SE 126TH AVE DONOHUE WEST LINN, OR 97068 CLACKAMAS, OR 97015 3073 SUNBREAK LN WEST LINN, OR 97068 JENSEN THERON K KARR DARREN & LESLIE KAYKEL INVESTMENTS LLC 2215 CRESTVIEW DR 2265 CRESTVIEW DR 15375 NW WEST UNION RD WEST LINN, OR 97068 WEST LINN, OR 97068 PORTLAND, OR 97229 KELLY SUSAN M KLING DANIEL & JENNIFER A LANDAU DAVID & NICOLLE R 2550 KENSINGTON CT 23056 BLAND CIR 23065 BLAND CIR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068

LEE ROBERT & DORA M LI MING & GUOLING ZHANG MATHEWS CHARLES W III & ROBERTA 2586 KENSINGTON CT 23136 BLAND CIR WEST LINN, OR 97068 WEST LINN, OR 97068 2305 CRESTVIEW DR WEST LINN, OR 97068 MEAGHER JAMES P & JENNIFER L MOE RANDY MONAHAN JOSEPH M 23063 BLAND CIR 23162 BLAND CIR 19363 WILLAMETTE DR #203 WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 MOONEY RICHARD E & KELLY M MOORE MICHAEL L & JESSICA MORALES VINCENT P 2305 FALCON DR 2531 CRESTVIEW DR 2205 TANNLER DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 MREEN RICHARD NANCE DANIEL J & HEATHYR **NEWTON AVIAN CHARLES** 23049 BLAND CIR 2495 CRESTVIEW DR 2245 CRESTVIEW DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 NOACK GARY K NOEL MICHAELS & LISA M OLH 14 LLC 2218 TANNLER DR 2265 SW TANNLER DR 5285 MEADOWS RD STE 171 WEST LINN, OR 97068 WEST LINN, OR 97068 LAKE OSWEGO, OR 97035 OMLOR JOHN J & RACHEL PAKULA JENNIFER L & SCOT GELFAND PARKER CHARLES H & THERESA A 23150 BLAND CIR 2500 CRESTVIEW DR 2486 CRESTVIEW DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 PATELZICK DANA L & ROSALEE PENDERGRAFT TROY ALLEN & ERIN K PENE STEVE J & MISTY M 23096 BLAND CIR 23073 BLAND CIR 2625 UMPQUA LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 PETTERSON BRUCE & ANN POSEY MICHAEL E TRUSTEE **OIAN ZIFEN & LI DAI** MCWHORTER 71 VIEW ST 2811 BEACON HILL DR 2306 FALCON DR LOS ALTOS, CA 94022 WEST LINN, OR 97068 WEST LINN, OR 97068 QUESNEL DAVID A & SANDRA R RADCLIFFE WADE & MARAYA DELINE REAMS RONALD JOSEPH CO-TRUSTEE 2275 CRESTVIEW DR 2300 CRESTVIEW DR 2600 UMPQUA LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 REMINGTON TAD W RICKETT KEVIN E & JULIE K **RIEHM BRIAN & CHRISTY** 2140 FIRCREST DR 2637 UMPQUA LN 2984 SUNBREAK LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068

ROWER JEREMY A RITTER DAVID & KARI **ROETHE DAVID & SUSAN** 23045 BLAND CIR 2507 CRESTVIEW DR 2255 CRESTVIEW DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 SHEPARD LISA K SALEH MOHAMMAD Y TRUSTEE SCHWARZ EDWARD W JR 2206 TANNLER DR 2280 TANNLER DR 2242 TANNLER DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 SLOOP DAVID & DRUCILLA A SMITH DAVID P & JILLIAN N SOBOTTA THOMAS J 2285 CRESTVIEW DR 2270 CRESTVIEW DR 23190 BLAND CIR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 SPELLMAN KEVIN M & JULIA R STEINBERG JEFFREY S SWANSON W ERIK 2511 CRESTVIEW DR 2570 KENSINGTON CT 3062 SUNBREAK LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 **TOFTE TAMARA A** TALAGA JENNIFER J & RONALD F JR THOMSON JOHN JOSEPH 2548 CRESTVIEW DR 3061 SUNBREAK LN 2605 UMPQUA LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 TRANK PATRICK F & JENNIFER L **UDELL JON & BARBARA** VAN HORN REBECCA M TRUSTEE 2255 TANNLER DR 2225 TANNLER DR 2636 UMPQUA LN WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 WALLACE DAVID L & LAURIE A **VERSOZA FLORENTINO B & COLLETTE** VIRGIN KENNETH A & MARY J 2560 KENSINGTON CT 2304 FALCON DR R WEST LINN, OR 97068 2215 TANNLER DR WEST LINN, OR 97068 WEST LINN, OR 97068 WILLIAMS DONALD W & JANET D WARREN JOSHUA W & STEPHANIE A WEILI & LILI 22864 S WEATHERHILL RD 2601 UMPQUA LN 2536 CRESTVIEW DR WEST LINN, OR 97068 WEST LINN, OR 97068 WEST LINN, OR 97068 WOODWORTH KENDALL & KELLI XAVIER ANTONIO L WINSLOW RONALD D & THERESA E 2260 CRESTVIEW DR PO BOX 1339 2524 CRESTVIEW DR WEST LINN, OR 97068 CLACKAMAS, OR 97015 WEST LINN, OR 97068 YU JIANG JOHN WYLAND ANDREW TULL 2150 FIRCREST DR J T SMITH COMPANIES 3J CONSULTING, INC WEST LINN, OR 97068 5285 MEADOWS RD., STE 171 10445 SW CANYON RD, STE 245 LAKE OSWEGO, OR 97035 BEAVERTON, OR 97005

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STEVE GARNER BHT NA PRESIDENT 3525 RIVERKNOLL WAY WEST LINN OR 97068

JEF TREECE MARYLHURST NA PRESIDENT 1880 HILLCREST DR WEST LINN OR 97068

KEN PRYOR SAVANNA OAKS NA VICE PRES 2119 GREENE ST WEST LINN, OR 97068

TROY BOWERS SUNSET NA PRESIDENT 2790 LANCASTER ST WEST LINN OR 97068

SUSAN VAN DE WATER HIDDEN SPRINGS NA DESIGNEE 6433 PALOMINO WAY WEST LINN OR 97068

WEST LINN CHAMBER OF COMMERCE 1745 WILLAMETTE FALLS DR WEST LINN OR 97068 SALLY MCLARTY BOLTON NA PRESIDENT 19575 RIVER RD # 64 GLADSTONE OR 97027

BILL RELYEA
PARKER CREST NA PRESIDENT
3016 SABO LN
WEST LINN OR 97068

ED SCHWARZ SAVANNA OAKS NA PRESIDENT 2206 TANNLER DR WEST LINN OR 97068

JULIA SIMPSON WILLAMETTE NA PRESIDENT 1671 KILLARNEY DR WEST LINN OR 97068

KEVIN BRYCK ROBINWOOD NA DESIGNEE 18840 NIXON AVE WEST LINN OR 97068

MIKE ROBINSON

ALEX KACHIRISKY HIDDEN SPRINGS NA PRESIDENT 6469 PALOMINO WAY WEST LINN OR 97068

ANTHONY BRACCO ROBINWOOD NA PRESIDENT 2716 ROBINWOOD WAY WEST LINN OR 97068

TRACY GILDAY
SKYLINE RIDGE NA PRESIDENT
1341 STONEHAVEN DR
WEST LINN OR 97068

ALMA COSTON BOLTON NA DESIGNEE PO BOX 387 WEST LINN OR 97068

DOREEN VOKES SUNSET NA SEC/TREAS 4972 PROSPECT ST WEST LINN OR 97068







telephone: (503) 657 0331

fax: (503) 650 9041

West Linn

July 30, 2013

John Wyland JT Smith Companies 5285 Meadows Rd. Ste. 171 Lake Oswego, OR 97035

SUBJECT: SUB-13-02/VAR-13-05/VAR-13-06/VAR-13-07/VAR-13-08/VAR-13-09 application for 11 lot subdivision with lot dimension variances at 23150 Bland Circle

Dear Mr. Wyland:

You submitted this application on June 21, 2013. As requested your application has been declared **complete** as of the July 24 resubmittal. The City now has 120 days (until November 21, 2013) to exhaust all local review per state statute. The application will shortly be scheduled for a Planning Commission hearing. At least 20 days before the hearing you will be sent a copy of the hearing notice.

Please contact me at 503-742-8660, or by email at <u>tsoppe@westlinnoregon.gov</u> if you have any questions or comments.

Sincerely,

Tom Soppe Associate Planner

- c: John and Rachel Omlor, 23150 Bland Circle, West Linn, OR 97068
- c: Andrew Tull, 3J Consulting, Inc., 10445 SW Canyon Rd., Ste. 245, Beaverton, OR 97005
- c: Ed Schwarz, Tanner Basin NA, 2206 Tannler Dr., West Linn, OR 97068
- c: Julia Simpson, Willamette NA, 1671 Killarney Dr., West Linn, OR 97068

p:/devrvw/projects folder/projects 2013/SUB-13-02/compl-SUB-13-02

CITY OF TREES, HILLS AND RIVERS

W E S T L I N N O R E G O N . G O V

Soppe, Tom

From:

Soppe, Tom

Sent:

Thursday, August 08, 2013 9:03 AM

To:

Subject:

'DeBois, Drew S.' RE: File SUB-13-02



This helps a lot. Thanks for getting back to me. You're welcome on checking; always good to have your input early in the process.

Tom

From: DeBois, Drew S. [mailto:Drew.DeBois@tvfr.com]

Sent: Thursday, August 08, 2013 9:02 AM

To: Soppe, Tom

Subject: RE: File SUB-13-02

If the developer was willing to install NFPA 13D fire sprinklers in each of the new homes on this street, we would waive the need for a turn-around or pull-thru. Hope this helps and thanks for checking.

Drew

From: Soppe, Tom [mailto:tsoppe@westlinnoregon.gov]

Sent: Tuesday, July 30, 2013 10:41 AM

To: DeBois, Drew S.

Subject: RE: File SUB-13-02

Drew,

Re-reading this email, I wanted to clarify whether you are saying that fire sprinklers would eliminate the need for any turnaround or any access to the adjoining driveway in the easement. Is that the case? That might wind up being the easiest solution if so, as the easement document isn't currently phrased to allow emergency vehicles for other properties.

Thanks Tom



Tom Soppe tsoppe@westlinnoregon.gov Associate Planner 22500 Salamo Rd West Linn, OR 97068 P: (503) 742-8660 F: (503) 656-4106 Web: westlinnoregon.gov

West Linn Sustainability Please consider the impact on the environment before printing a paper copy of this email. Public Records Law Disclosure This e-mail is subject to the State Retention Schedule and may be made available to the public.

Soppe, Tom

From:

DeBois, Drew S. < Drew.DeBois@tvfr.com>

Sent:

Thursday, July 25, 2013 7:15 AM

To: Subject: Soppe, Tom

RE: File SUB-13-02



Hi Tom,

The basic concept of pulling thru to the adjoining street works for us however we normally do not endorse bollards. A gate on the other hand that is signed on both sides and provided with a Knox padlock is acceptable and per your previous e-mail, fire sprinklers are an option as well. Thanks for checking and please let me know if you need further.

Drew

From: Soppe, Tom [mailto:tsoppe@westlinnoregon.gov]

Sent: Wednesday, July 24, 2013 4:55 PM

To: DeBois, Drew S. Subject: File SUB-13-02

Drew,

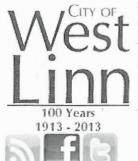
The applicant actually plans to put removable bollards at the end of Sunbreak that an emergency vehicle could go through to access between Sunbreak and a driveway to the west used by the City to access a water reservoir. This driveway is 14 feet or more wide and is within a 20-foot easement.

It is the driveway shown to the left of the vacant parcel on the attached pdf. It connects to the Tannler/Bland intersection to the south, which is where the undeveloped right of way dedicated for Sunbreak continuation also connects on the subject site.

Would this work as a substitute for a turnaround?

Thanks for letting me know.

Tom



Tom Soppe

tsoppe@westlinnoregon.gov

Associate Planner

22500 Salamo Rd

West Linn, OR 97068

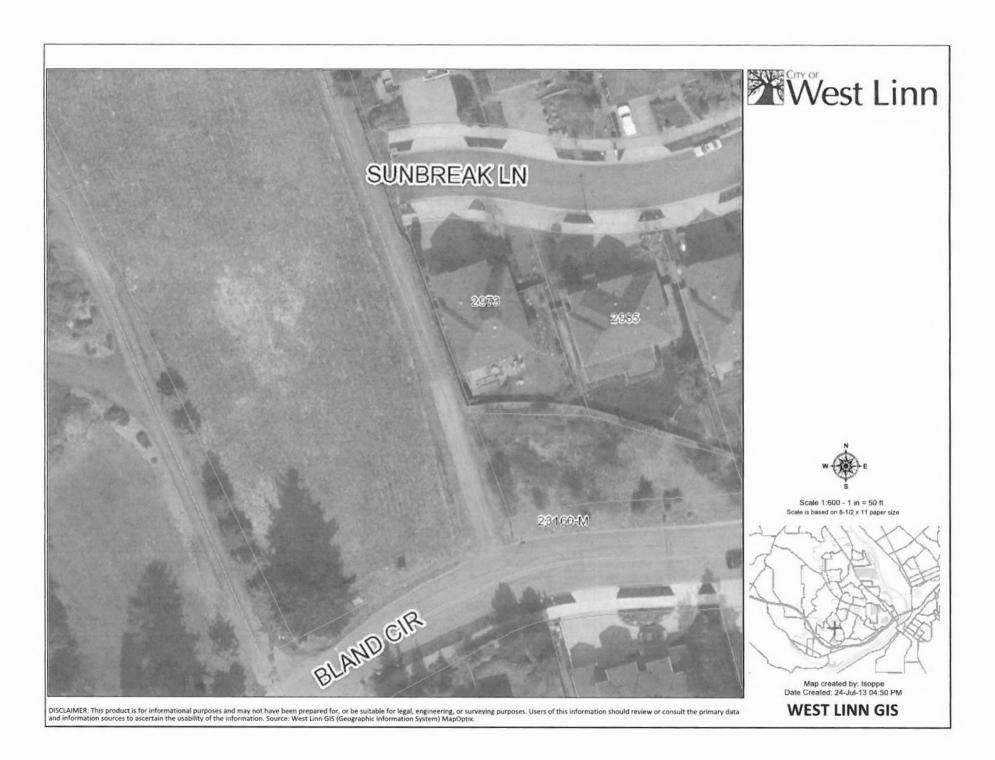
P: (503) 742-8660

F: (503) 656-4106

Web: westlinnoregon.gov

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<u>Public Records Law Disclosure</u> This e-mail is subject to the State Retention Schedule and may be made available to the public.



Soppe, Tom

From:

Soppe, Tom

Sent:

Wednesday, July 24, 2013 9:47 AM

To:

'DeBois, Drew S.'

Cc:

Le. Khoi

Subject:

RE: Case File PA-13-06, Sunbreak Subdivision

Attachments:

Plan Review Template IFC 2010 without check boxes with logo.doc

Drew,

Thank you for the comments. If they paved the proposed dedication for the eventual extension of Sunbreak south to the Bland/Tannler intersection, would there be a need for a turnaround? If they could avoid a turnaround this way, how wide would pavement have to be at minimum along that stretch? Would sprinklers ever substitute for a turnaround in this case?

Tom

From: DeBois, Drew S. [mailto:Drew.DeBois@tvfr.com]

Sent: Tuesday, July 23, 2013 4:13 PM

To: Soppe, Tom

Subject: Case File PA-13-06, Sunbreak Subdivision

Tom,

Thanks for the opportunity to weigh in.

Sincerely,

Drew DeBois
Deputy Fire Marshal/CFI
Tualatin Valley Fire & Rescue
8445 SW Elligsen Road
Wilsonville, Oregon
97070
(503) 259-1404





July 23, 2013

Tom Soppe Associate Planner City of West Linn 22500 Salamo Road West Linn, Oregon 97070



Re: Case File PA-13-06, Sunbreak Subdivision

Dear Mr. Soppe,

Thank you for the opportunity to review the proposed site plan surrounding the above named development project. Tualatin Valley Fire & Rescue endorses this proposal predicated on the following criteria and conditions of approval:

- fire APPARATUS ACCESS ROAD DISTANCE FROM BUILDING AND TURNAROUNDS: Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building. An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet. (OFC 503.1.1)
- 2) <u>DEAD END ROADS</u>: Dead end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround. (OFC 503.2.5) *Please provide a turnaround near the terminus of Sunbreak Lane*.
- 3) NO PARKING SIGNS: Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Roads 26 feet wide or less shall be posted on both sides as a fire lane. Roads more than 26 feet wide to 32 feet wide shall be posted on one side as a fire lane. Signs shall read "NO PARKING FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. (OFC D103.6) Post and restrict parking along one side of Sunbreak Lane.
- 4) SURFACE AND LOAD CAPACITIES: Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 60,000 pounds live load (gross vehicle weight). You may need to provide documentation from a registered engineer that the design will be capable of supporting such loading. (OFC D102.1)
- 5) GRADE: Fire apparatus access roadway grades shall not exceed 10 percent. Intersections and turnarounds shall be level (maximum 5%) with the exception of crowning for water run-off. When fire sprinklers are installed, a maximum grade of 15% may be allowed. The approval of fire sprinklers as an alternate shall be accomplished in accordance with the provisions of ORS 455.610(5). (OFC 503.2.7 & D103.2) Grade is shown at 10% or less.
- 6) SINGLE FAMILY DWELLINGS REQUIRED FIRE FLOW: The minimum available fire flow for single family dwellings and duplexes served by a municipal water supply shall be 1,000 gallons per minute. If the structure(s) is (are) 3,600 square feet or larger, the required fire flow shall be determined according to IFC Appendix B. (OFC B105.2) Prior to issuance of a building permit, provide evidence of a current fire flow test of the nearest fire hydrant demonstrating available flow at 20 PSI residual pressure.
- 7) FIRE HYDRANTS ONE- AND TWO-FAMILY DWELLINGS & ACCESSORY STRUCTURES: Where a portion of a structure is more than 600 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the structure(s), on-site fire hydrants and mains shall be provided.

- (OFC 507.5.1) Please clarify the locations of the fire hydrants serving the new homes on Sunbreak Lane and Crestview Drive
- 8) FIRE HYDRANT DISTANCE FROM AN ACCESS ROAD: Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway. (OFC C102.1)
- 9) <u>REFLECTIVE HYDRANT MARKERS</u>: Fire hydrant locations shall be identified by the installation of reflective markers. The markers shall be blue. They shall be located adjacent and to the side of the centerline of the access road way that the fire hydrant is located on. In case that there is no center line, then assume a centerline, and place the reflectors accordingly. (OFC 510.1)
- 10) <u>DURING CONSTRUCTION</u>: Approved fire apparatus access roadways and fire fighting water supplies shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. (OFC 1410.1 & 1412.1)
- 11) PREMISES IDENTIFICATION: Buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet numbers. Numbers shall be a minimum of 4 inches high with a ½ inch stroke. (OFC 505.1)

If you have questions or need further clarification, please feel free to contact me at 503-259-1404.

Sincerely,

Drew S. De Bois

Drew DeBois Deputy Fire Marshal II/CFI

Copy: File

21E35B 00500 615 100504 2142 Bland Reservoir

EASEMENT

The undersigned, MARCELLA M. JOY, Grantors, for the consideration of Ten (\$10.) Dollars and no/100 Dollars to Grantors paid, the receipt of which is hereby acknownowledged, do hereby grant unto the CITY of WEST LINN, a municipal corporation, its successors and assigns, referred to herein as CITY, a permanent right-of-way and easement for ingress, egress and roadway purposes and to construct, reconstruct, operate and maintain utilities and all necessary related facilities under and along the following described premises: The same being a non-exclusive Easement over:

A portion of Lot 30 BLAND ACRES in the Northwest One-quarter of Section 35 T.2 S. R. 1 East, W.M., Clackamas County Oregon, being more particularly described as follows:

Beginning at the intersection of the Lot Line between Lots 28 and 30 of Bland Acres with the North right of way line of the dedicated roadway on said Plat; thence North 26°07'52" West along the intersection of the Lot Line between Lots 30 and 28 a distance of 275.99 feet to a point being the South east corner of Lot 1 of Joy Acres, thence South 63°55'27" West 20 feet to a point; thence South 26°07'52" East parallel to the boundary line of Lots 30 and 28 of Bland Acres to a dedicated roadway; thence 20 feet to the point of beginning.

The permanent right-of way and easement shall include the right, privilege and authority of CITY to construct and maintain a roadway for ingress and egress purposes and to excavate for, and to construct, install, lay, operate, maintain and remove underground pipelines and/or cables with all appurtenances incident thereto or necessary thereafter, for the purpose of supplying public utility service under and across the said premises, together with the right of CITY to place, install, maintain, inspect, add to the number of and relocate pipelines and/or axbles and necessary appurtenances and make excavations therefore from time to time, in, under and through the above described premises within said right-of-way, and to cut and remove from said right-of-way any trees and other obstructions which may endanger the rafety or interfere with the use of said pipelines and/or cables or appurtenances attached to or connected therewith, and the right of ingress and egress to and over said above described premises at any and all times for the purpose of ingress and egress to Lot 1 Joy Acres and for the purposes of patroling the pipelines and/or cables or repairing, renewing or adding to the number of pipelines and/or cables and appurtenances and for doing anything necessary, useful or convenient for the enjoyment of the easement hereby granted.

Dated thin 27 day of A 2c. 197 8.

* Manella M. Jon 49 20633 STATE OF OREGON of Clackamas Personally appeared the above named MARCELLA M. JOY ledged the foregoing instrument to be her voluntary Notary Public for Oregon My Commission Expires: 75 MAY 19

JOY ACRES

IN LOT 30 "BLAND ACRES" IN THE NWI/4, SECTION 35, T.2S., RIE. W.M. CLACKAMAS COUNTY, SCALE: I"= 100' OREGON OCTOBER, 1978 IN THE CITY OF WEST LINN

CLACK, CO. SURVEYOR RECEIVED JAN 28 1985

PS 20345

NARRATIVE

NARRATIVE

SEGAN FIELD WORK AUGUST 25,1978

WITH HARVEY BARBER LS. 679 AND DAVE MACY ON
THE FIELD CREW. FIELD EQUIPMENT INCLUDED

A ONE SECOND KERN THEODOLITE AND AN ELECTRONIC DISTANCE METER.

PURPOSE OF THIS SURVEY IS TO SPLIT I.OD ACRE PARCEL OFF THE NORTH
ERLY END. I HELD PS. #13049 FOR THE WEST, AND NORTH LIMES, HELD

AN IRON PIPE AT THE MOST SOUTHERLY CORNER OF LOT 30 AND A SQUARE

BOLT ON THE NORTH LINE OF LOT 29 TO CONTROL THE NORTHWEST CORNER

OF LOT 29. HELD THE IRONS ON THE SOUTHERLY SURE OF THAT STRIP

DEDICATED BY DEED RECORDED IN BOOK G34 PAGE T37 TO CONTROL SAME.

HELD IRON PIPES AT THE SOUTHEAST AND SOUTHWEST CORNER OF LOT 30

TO CONTROL THE SOUTH LINE OF LOT 30. RONS WERE SET FROM

AUGUST 25, 1978 TO JANUARY 15, 1985 A MAJOR PARTITION MYLAR AND

HARDBOARD WERE STORED, UNRECORDED, AT THE COUNTY SURVEYORS

OFFICE IN THE INTERIM. NO ATTEMPT WAS MODE TO RECOVER THE

IRONS THAT DEFINE THE ONE ACRE PARCEL AFTER OCT. 1978

REGISTERED PROFESSIONAL LAND SURVEYOR Waite Claswill

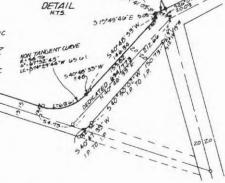
OREGON 737

LAYNE CASWELL

FD OLD 3/4- 1.P. 27 1.00 ACRES 20 COMMON ACCESS & UTILITY EASEMENT FEE 79-20638 FO I'ID W SIDE OF ROAD INITIAL POINT SET 2x36 INCH GIP FD. JAN. 15, 1985 2.116 ACRES 73-13628 74-27948 74-847 FD 14"1P 32 (753.5) 3/ FO BRIDGE SPIKE FD. 12-1.P.

NOTES:

- I O DENOTES MONUMENT FOUND AS NOTED
- Z. & DENOTES % BY 30 INCH IRON REBAR FOUND WITH PLASTIC YELLOW CAP INSCRIBED "CASWELL PLS 737"
- 3 REFERENCE SURVEYS: P.S. #13.04.9, B-26 & CR. #1637 4 BEARING BASIS: SOUTH LINE OF LOT 30 AS PER PLAT OF BLAND ACRES
- S. DENOTES % BY 30 INCH IRON REBAR SET WITH PLASTIC VELLOW CAP INSCRIBED "CASWELL PLS 73.7" UNLESS CHERWISE NOTED



PS 20345

PUBLIC COMMENTS

Spir, Peter

From:

Savanna Oaks Neighborhood Association

Sent:

Wednesday, May 08, 2013 11:22 AM

To:

Andrew Tull Spir, Peter

Cc: Subject:

Sunbreak Development (23150 Bland Circle)

Attachments:

SONA Meeting Attendance List.pdf

Andrew,

Thank you for attending last evening's meeting of the Savanna Oaks Neighborhood Association and presenting the plans for the Sunbreak Subdivision. I have attached a list of neighborhood residents who attended the meeting.

During the meeting, members of the Association raised a few concerns regarding the current plans for the subdivision. To summarize:

- 1. Concerns were raised about preserving the few remaining trees on the property. Of special concern is the large fir tree at the southwest corner of the property near where the storm water catch basin is to be located. The NA would appreciate your working with the city to see what can be done to maximize tree preservation.
- 2. Questions were asked regarding the trail / path which is planned for the west side of the property. Members of the NA expressed support for the trail and we hope that it will be included as part of the development.
- 3. Several residents raised concerns about the amount of construction traffic, construction noise, and the effect of the traffic on the already deteriorating streets of the NA. We appreciate anything that can be done to minimize construction traffic and lessen noise from construction, particularly by restricting construction hours to those stated by Mr. Smith in the meeting: 8 AM to 5 PM for the noisiest construction. Also, please work with the city to ensure that the construction traffic does not adversely affect the streets leading to the development (Salamo, Bland, and Tannler) so that their condition does not further deteriorate.
- 4 Residents also raised concerns about the opening up of Crestview Drive and Sunbreak Lane. Currently both of these streets are cul de sacs and have minimal traffic. Residents expressed concerns that once these streets are opened, the additional traffic will become a hazard to the children in the area who are used to the level of traffic which currently exists.

The NA appreciates your working with the city on these issues to produce the best outcome for the current residents as well as the development.

I would appreciate updates as your plans proceed, especially as related to the issues raised above.

Regards, Ed Schwarz, President Savanna Oaks Neighborhood Association



West Linn Sustainability Please consider the impact on the environment before printing a paper copy of this email.

Spir, Peter

From:

Savanna Oaks Neighborhood Association

Sent:

Sunday, May 19, 2013 4:46 PM

To:

Spir, Peter

Subject:

Question re: Undergrounding of utilities

Peter,

I have a question regarding both the 5 house Falcon Place and the 11 house Weatherhill development.

Both of these properties currently have above-ground utilities running on their side of the street in front of the properties. Will the city require that these utilities be undergrounded along the property street frontage when the development takes place?

Thanks.

Regards, Ed Schwarz, President Savanna Oaks Neighborhood Association



 $\underline{\textit{West Linn Sustainability}} \ \mathsf{Please} \ \mathsf{consider} \ \mathsf{the impact} \ \mathsf{on the environment} \ \mathsf{before printing a paper copy} \ \mathsf{of this email}.$

<u>Public Records Law Disclosure</u> This e-mail is subject to the State Retention Schedule and may be made available to the public.

From: Savanna Oaks Neighborhood Association **Sent:** Sunday, September 15, 2013 4:21 PM

To: Soppe, Tom

Subject: Regarding the Variances for 5 lots of SUB-13-02 (23150 Bland Circle)

Tom,

I note that the Planning Commission has an October 2 meeting scheduled to discuss the width vs. depth variances for 5 of the 11 lots in the subject application.

Please refresh my memory but I believe that the city's requirement without a variance is that the width vs. depth ratio not exceed 2.5. Correct?

Also, as currently proposed, what are the width vs. depth ratios for the 5 lots for which they are requesting variances?

Thanks.

Ed

Regards, Ed Schwarz, President Savanna Oaks Neighborhood Association

Spir, Peter

From:

Sonnen, John

Sent:

Monday, September 16, 2013 8:34 AM

To:

Savanna Oaks Neighborhood Association

Cc:

Spir, Peter

Subject:

RE: Regarding the Variances for 5 lots of SUB-13-02 (23150 Bland Circle)

Hi, the relevant code is:

20.070D: The lot depth comprising non-Type I and II lands shall be less than two and one-half times the width and more than an average depth of 90 feet

Staff met with the applicant last week and they are attempting to alter the lots to avoid or minimize the variance requests. The staff report will be out Friday.

John

John Sonnen, Planning Director Planning and Building, #1524

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From: Savanna Oaks Neighborhood Association **Sent:** Sunday, September 15, 2013 4:49 PM

To: Shroyer, Shauna

Cc: Soppe, Tom; Sonnen, John

Subject: FW: Regarding the Variances for 5 lots of SUB-13-02 (23150 Bland Circle)

Shauna,

Apparently, Tom Soppe is out of the office until September 24.

Could you please have someone in Planning review my email below and respond with the answers to my questions?

Thanks.

Regards, Ed Schwarz, President Savanna Oaks Neighborhood Association



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EXHIBIT PC-6

APPLICANT'S SUBMITTAL

FILE NUMBER:

SUB-13-02/VAR-13-05/VAR-13-06

REQUEST:

11-LOT SUBDIVISION WITH CLASS II VARIANCE FOR

DEPTH OF TWO LOTS TO EXCEED 2.5 TIMES LOT

WIDTH



September 17, 2013

City of West Linn Mr. Tom Soppe or Mr. Peter Spir 22500 Salamo Road West Linn, OR 97068

SUBJECT: SUB-13-02/VAR-13-05/VAR-13-06/VAR-13-07/VAR-13-08/VAR-13-09
11 LOT SUBDIVISION WITH LOT DIMENSION VARIANCES AT 23150 BLAND CIRCLE

Dear Tom and Peter.

I am writing on behalf of the applicant, JT Smith Companies, about the Sunbreak Subdivision Application (SUB-13-02). Following our meeting with City staff on September 11th, the applicant has proposed a revised tentative plat which minimizes the number of requested variances for lot depths from five lots to two (lots 3 and 4). The reduced number of variances has been achieved through the creation of two "tracts" around the area adjacent to the lots which exceed the City's "2.5 times rule" for lot depths (CDC 12.070(D).

The applicant appreciates the time that City staff has taken to meet and discuss the application. While the applicant would have preferred not to create the two (2) tracts, the revised tentative plan results in a good subdivision plan while requiring only two (2) variances. The discussion with staff resulted in a positive change to the tentative plan application.

In light of the submission of the alternative design, the following revised analysis has been provided to demonstrate compliance with the City's approval criteria for the two requested Class II variances:

75.060 APPROVAL CRITERIA

The appropriate approval authority shall approve a variance request if all the following criteria are met and corresponding findings of fact prepared. The approval authority may impose appropriate conditions to ensure compliance with the criteria. The approval authority shall deny the variance if any of the criteria are not met.

A. Exceptional or extraordinary circumstances apply to the property which do not apply generally to other properties in the same zone or vicinity, and result from lot size or shape, legally existing prior to the date of this code, topography, or other circumstances over which the applicant has no control.

Applicant's Finding:

This property is unusually long and narrow with a depth of 787 feet and a width of approximately 160 feet. Crestview Drive and Sunbreak Lane dead-end into the subject property and they limit the options for lot layout and lot depth. These are the exceptional and extraordinary circumstances that apply to this property which do not apply generally to other properties in the same zone or vicinity.

As a result of the required road connections and the shape of the existing property to be subdivided, there are very few options for a subdivision design. The proposed subdivision requires two (2) variances for lot depths because lots 3 and 4 exceed the City's "2.5 times rule" listed in section 12.070.D. While the two (2) lots are very similar in width to the other lots within the development and the other lots within the surrounding neighborhoods, the depth of these lots is constrained by the distance between the two (2) required street connections. The existing distance

3J Consulting, Inc. 10445 SW Canyon Road, Suite 245, Beaverton, OR 97005 Ph: 503-946-9365 www.3j-consulting.com Page 2 of 3 September 17, 2013 Sunbreak Subdivision

between the two (2) street extensions forms an unusually long bank of lots and is not within the applicant's control.

The requirements of this criterion have been satisfied.

B. The variance is necessary for the preservation of a property right of the applicant, which is substantially the same as a right possessed by owners of other property in the same zone or vicinity.

Applicant's Finding:

The lot depth variance is necessary for the applicant to subdivide the property in a logical and efficient manner, a right that all owners of property greater than 14,000 square feet in the R-7 zone possess.

The requirements of this criterion have been satisfied.

C. The authorization of the variance will not be materially detrimental to the purposes and standards of this code, will not be inconsistent with all other regulatory requirements, and will not conflict with the goals and policies of the West Linn Comprehensive Plan.

Applicant's Finding:

Authorization of the variance will result in residential development in the R-7 zone, not materially detrimental to the purposes and standards of the CDC. Development of this property with the two (2) lot depth variances is not inconsistent with all other regulatory requirements, and will not conflict with the goals and policies of the West Linn Comprehensive Plan.

The requirements of this criterion have been satisfied.

D. The variance request is the minimum variance which would alleviate the exceptional and extraordinary circumstance.

Applicant's Finding:

Due to the layout of the existing streets, Crestview Drive and Sunbreak Lane, the variances requested will alleviate the exceptional and extraordinary circumstance. The applicant's previous request for five lot depth variances have been minimized through the incorporation of tracts near the rear lot lines. The tracts eliminate the need for three (3) of the five (5) variances previously requested.

The requirements of this criterion have been satisfied.

E. The exceptional and extraordinary circumstance does not arise from the violation of this code.

Applicant's Finding:

The exceptional and extraordinary circumstance arises from the existing property size, shape, and street layout, not from a violation of the CDC. There are no code violations associated with this circumstance.

The requirements of this criterion have been satisfied.



Page 3 of 3 September 17, 2013 Sunbreak Subdivision

F. The variance will not impose physical limitations on other properties or uses in the area, and will not impose physical limitations on future use of neighboring vacant or underdeveloped properties as authorized by the underlying zoning classification. (Ord. 1442, 1999)

Applicant's Finding:

The two (2) lot depth variances will not impose physical limitations on other properties or uses in the area. Approval of the two (2) lot depth variances does not impose any physical limitations on future use of neighboring vacant or underdeveloped properties as authorized by the underlying zoning classification. In fact, development of this property with the two (2) lot depth variances will extend Sunbreak Lane to the west, fostering the ability of the neighboring property to develop in the future. All other adjacent properties are developed.

The requirements of this criterion have been satisfied.

We trust that these responses and materials will assist in the City's favorable evaluation of our proposed development plans. Please feel free to contact us with any questions that you may have. We will be ready to respond to any questions or requests for any further clarification.

Sincerely,

Andrew Tull Senior Planner 3J Consulting, Inc.

Attachments:

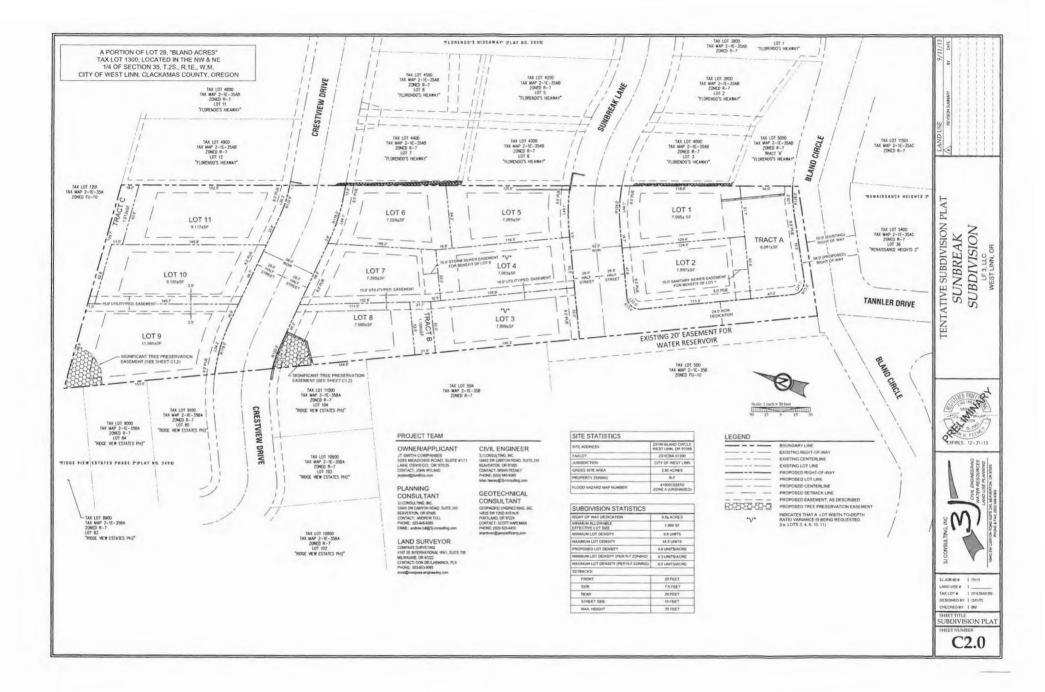
Revised Tentative Plat (Dated September 11, 2013)

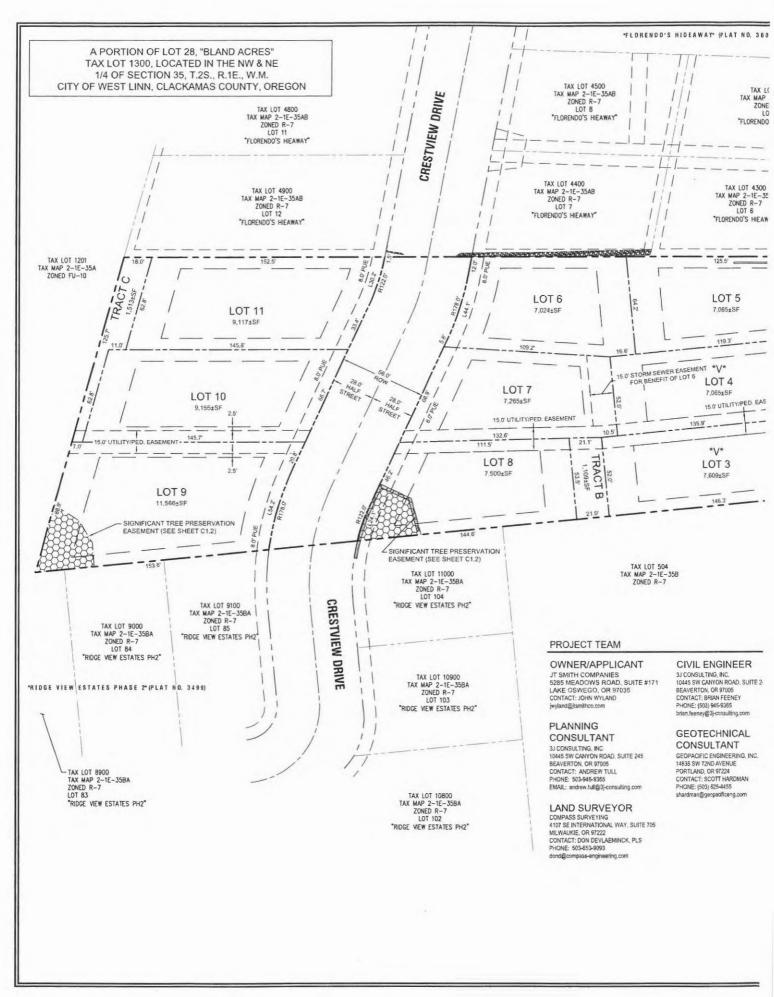
copy: Mr. John Wyland, JT Smith Companies

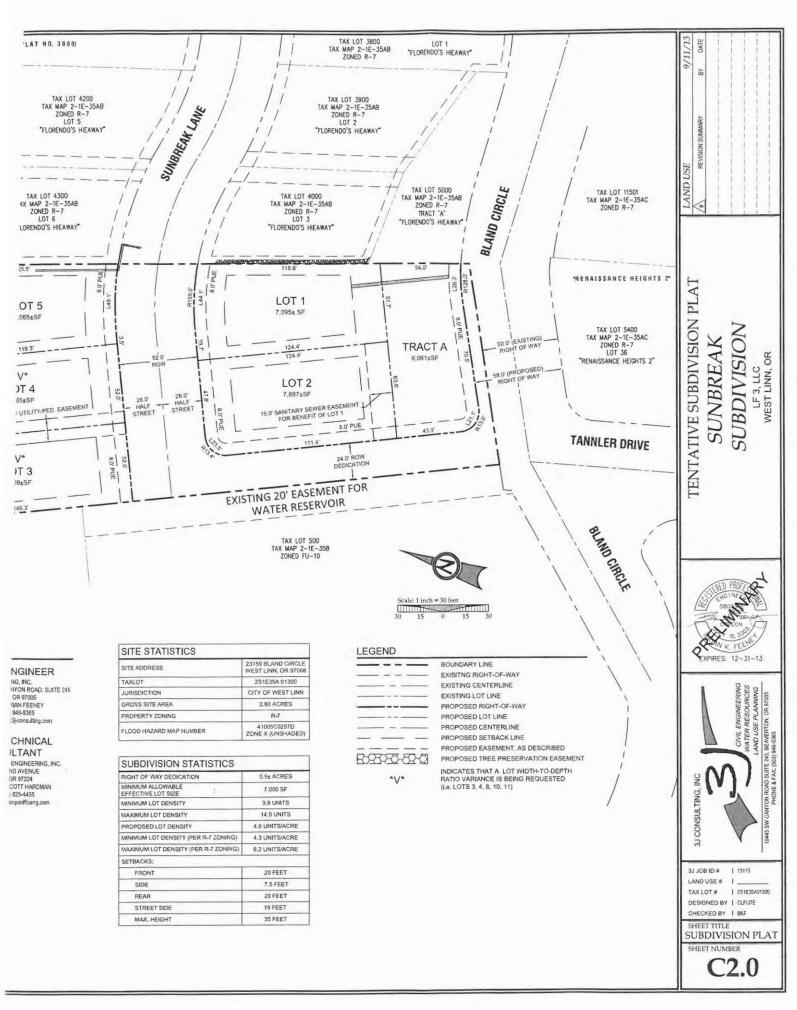
Mr. Mike Robinson, Perkins Coie Mr. Brian Feeney, 3J Consulting, Inc.

File











SUBJECT: SUB-13-02/VAR-13-05/VAR-13-06/VAR-13-07/VAR-13-08/VAR-13-09 application for 11 lot subdivision with lot dimension variances at 23150 Bland Circle

Dear Peter,

Please accept this letter as a record of our formal request to move the scheduled hearing for the Sunbreak Subdivision Application from September 18th to October 2nd. This letter also serves as our authorization to add two additional weeks to the City's 120 day review clock for the project.

Please feel free to give me a call or send an email if you have any questions or need any additional clarification.

Sincerely,

John Wyland

Operations Manager
JT Smith Companies



City of West Linn Mr. Tom Soppe Associate Planner 22500 Salamo Road West Linn, OR 97068



SUBJECT: SUB-13-02/VAR-13-05/VAR-13-06/VAR-13-07/VAR-13-08/VAR-13-09
11 LOT SUBDIVISION WITH LOT DIMENSION VARIANCES AT 23150 BLAND CIRCLE

Dear Tom,

I am writing on behalf of JT Smith Companies to request that the application for the Subdivision of the Sunbreak property (SUB-13-02) the accompanying variances be deemed complete upon receipt of this correspondence. We have prepared this correspondence as well as a revised preliminary development plan set (dated July 23, 2013) and we believe that the revised plans adequately address the comments provided by the City in the July 9, 2013 notification letter. We believe that all issues have been satisfactorily resolved within our resubmission to allow for the initiation of the City's formal project review.

The following has been provided to document our response to each of the requests listed within your July 9, 2013 incompleteness notification. Code Sections and Staff comments have been listed to the left, and the Applicant's responses have been provided to the right:

Planning Commer Code Section	Staff Comment	Applicant's Response
Section 85.160(A)	Provide City Wide Map	The Applicant has provided a perfectly adequate vicinity map on the cover page of the project plan set.
Section 85.160(B)	Provide stamp and signature of engineer on the tentative plat.	The Applicant's engineer will not stamp and sign a preliminary plan set as preliminary plans should never be confused for construction ready plans. Final construction plans will be stamped and signed. The Applicant has provided an engineer's stamp on the preliminary plans with a "preliminary" watermark over the stamp. The final approved drawings will be signed.
85.160(E)(1)	Show easements on and around the surrounding lots that boarder the subdivision.	The Applicant has added the location of all known easements on adjoining properties to the preliminary plat.
85.200(C)(1,3,6) Provide narrative responses that address whether the paths meet the ADA, grade, and defensible space criteria		85.200(C)(1) - No future or existing trails are shown on the project site. Streets which run parallel to one another within the development have been provided with a connective trail system. The trail system has not been

		constructed to ADA requirements as grades across the entire site are in excess of the maximum allowable ADA standards. This practice is consistent and commonplace on sites with excessive existing grades. 85.200(C)(3) - The Applicant will provide fencing upon the edges of the 10 foot pedestrian trail corridors. Fencing will likely consist of standard six foot wooden fencing. 85.200(C)(6) - The proposed trail has been designed to avoid 15 percent grades in stretches longer than 50 feet. Were possible, grades have been reduced to below 12 percent and stairs have been incorporated.
85.200(E)(7)(a)	Provide responses to this section documenting the satisfaction of the required criteria.	The Applicant's Plan contains limited areas of grading within three feet of the adjoining properties. Within these locations, a combination of temporary grading and the limited installation of retaining walls have been proposed to connect pre-existing streets and sidewalks. In any areas where grading along the property line has been proposed, a temporary construction grading permit will be obtained from the neighboring property owners. Emphasis is added that the proposed grading near to adjacent lots is the minimum necessary to facilitate the connection of the surrounding street networks. The street networks in place were previously evaluated and approved by the City.
75.070(B)(2)(b)	Show the lots subject to a variance on the tentative plat	The following symbol "*v*" has been added to lots 3,4,8,10, and 11 on the preliminary plat.
99.038(E)(2)	Provide the neighborhood meeting mailing list	A copy of the addresses which received our neighborhood invitation have been attached hereto.
99.038(E)(4)	Provide meeting minutes for the neighborhood meeting	A copy of the summary of the neighborhood meeting has been provided.



Engineering Comments				
I would recommend to have the Developer provided a concept plan showing full developed intersection at Tannler and Bland.	The Applicant has provided a preliminary intersection plan within the revised plan set.			
Developer needs to provide half street improvements with radius curb at this intersection including the street connecting to Sunbreak.	The developer has provided the City with the assurances that the roadway from Sunbreak to Bland Circle will not be constructed as part of this development. Instead of construction of the road, the Applicant dedicate 1/2 of the required 48 foot local street section along the City's preferred future alignment of the northbound extension of Tannler Drive. The Applicant will:			
	 Install break-away bollards at the terminus of Sunbreak to allow TVFRD access from the adjacent easement to Sunbreak. 			
	 Construct a sidewalk and planter strip and will pay a fee in lieu for the Applicant's half of the street pavement. 			
	 Construct a Drainage System along the anticipated extension of Tannler Drive. 			
	 Prepare a construction estimate for the City's Review to allow for the determination of the fee in lieu amount. 			
	This approach was discussed and agreed to with the City's Engineer and Planning Director during a special meeting held at the City's offices on July 17, 2013.			
No connection to water transmission line will be permitted.	The proposed connection to the Tannler Water transmission line has been removed from the plan. The revised plan now shows a blow-off			
Proposed utilities will need to be placed closer to the sidewalk.	The Applicant has revised the utility plan to move all utilities closer to the eastern edge of the proposed Tannler right-of-way.			



We trust that these responses and materials will assist in the City's favorable evaluation of our proposed development plans. Please feel free to contact us with any questions that you may have. We will be ready to respond to any questions or requests for any further clarification.

Sincerely,

Andrew Tull Senior Planner 3J Consulting, Inc.

Attachments:

Revised Preliminary Plans

Mailing Listing

Neighborhood Meeting Summary

copy: Mr. John Wyland, JT Smith Companies

Mr. Mike Robinson, Perkins Coie Mr. Brian Feeney, 3J Consulting, Inc.

File



Meeting Minutes - Sunbreak Subdivision

Date: Meeting No: May 7 & May 8, 2012 Neighborhood Meeting

Project:

Sunbreak Subdivision 13113

3J No.: 1

JUL 2 4 2013

PLANNING & BJILDING CITY OF WEST LINN

Presenters	Company
Jeff Smith	JT Smith Companies
Andrew Tull	3J
John Wyland	JT Smith Companies
Mike Robinson	Perkins Coie

In preparation for the submission of a land use application for the subdivision, the applicant conducted a two neighborhood meetings. The first was with the with the Savannah Oaks Neighborhood Association, the Second was with the Willamette neighborhood association.

Both meetings began with a presentations by Andrew Tull, Mike Robison, and Jeff Smith The project team started by explaining that the property would be subdivided in accordance with the City's development codes. A description of the development, the road access, and the proposed lots was provided. The general timeframe for the land use and construction process was described.

Following the introduction of the project, neighbors and attendees openly asked questions of the project team. The following is a record of the questions and the project teams' responses, from both meetings.

Item	Question	Response
1	Will the trees that were previously taken off the property counted for tree retention and preservation?	No, Trees on the property will be considered and of those, only the significant trees will be considered.
2	Will a pedestrian path be provided to the north?	Yes. A path will be provided
3	What will be the SF of the houses? Value?	Probably 3,000 sf to 3,500 sf. Homes will be valued at probably near \$700,000.
4	Construction Traffic will be routed onto Crestview or Bland?	A construction plan will be provided. Access will be as needed to construct the roads.
5	Are the widths of the lots consistent with the neighboring homes	The lots are somewhat narrow but deep but we've got home plans that will be consistent with the neighboring homes.
6	What are the timeframes before you start work	We will submit a land use application. Then the builder will start building. The intent is to start in the spring.
7	Will the tree along Bland be preserved?	The City has indicated that they would like frontage improvements. We're going to try to retain the tree along the frontage but it may not be possible.
8	The lower part of Tannler is starting to fail.	The developer will fix what they damage and

3J Consulting, Inc. 10445 SW Canyon Road, Suite 245 Beaverton, OR 97005 Ph: 503-946-9365 www.3j-consulting.com

	Do you have money budgeted to fix these streets.	they will improve the frontages along the project.
9	Will a light come in along Salamo as a result of the development?	The light would be triggered by traffic counts. We do not believe that the City will require a signal.
10	Will the property next door develop?	That property needs to annex and recieve zoning. We have no interest in that property at the moment.
11	What are the next steps?	We will submit to the City a formal application for Land Use Approvals.
12	How can we make a difference?	Relate your arguments and concerns to the applicable approval criteria. We are all measured by the same standards.



21E35A 01100 David & Drucilla Sloop 23190 Bland Cir West Linn, OR 97068

21E35A 01202 Virginia Devries 22850 Weatherhill Rd West Linn, OR 97068

21E35AB00300 Ronald Jackson 3073 Sunbreak Ln West Linn, OR 97068

21E35AB01000 Mark & Chandra Hatfield 2562 Crestview Dr West Linn, OR 97068

21E35AB01300 Joshua & Stephanie Warren 2536 Crestview Dr West Linn, OR 97068

21E35AB01600 Jennifer Pakula 2500 Crestview Dr West Linn, OR 97068

21E35AB01900 Michael & Jessica Moore 2531 Crestview Dr West Linn, OR 97068

21E35AB02200 Jeffrey & Tracey Barnett 3064 Sunbreak Ln West Linn, OR 97068

21E35AB02500 Donald & Janet Williams 2601 Umpqua Ln West Linn, OR 97068

21E35AB03800 Robert & Beverly Brossman 2997 Sunbreak Ln West Linn, OR 97068 21E35A 01200 Virginia Devries 22850 Weatherhill Rd West Linn, OR 97068

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21E35AB00400 Heidi Barber 3085 Sunbreak Ln West Linn, OR 97068

21E35AB01100 Todd Drake 2550 Crestview Dr West Linn, OR 97068

21E35AB01400 Kendall & Kelli Woodworth 2524 Crestview Dr West Linn, OR 97068

21E35AB01700 David & Susan Roethe 2507 Crestview Dr West Linn, OR 97068

21E35AB02000 David & Valerie Feltman 2565 Crestview Dr West Linn, OR 97068

21E35AB02300 Kevin & Julia Spellman 3062 Sunbreak Ln West Linn, OR 97068

21E35AB02600 John Joseph Thomson 2605 Umpqua Ln West Linn, OR 97068

21E35AB03900 Jason & Julie Fewell 2985 Sunbreak Ln West Linn, OR 97068 21E35A 01201 Li Wei 22864 Weatherhill Rd West Linn, OR 97068

21E35AB00200 Jennifer & Ronald Talaga Jr. 3061 Sunbreak Ln West Linn, OR 97068

21E35AB00500 Daniel Haddad 3097 Sunbreak Ln West Linn, OR 97068

21E35AB01200 Tamara Tofte 2548 Crestview Dr West Linn, OR 97068

21E35AB01500 Christopher & Karin Hawk 2512 Crestview Dr West Linn, OR 97068

21E35AB01800 W Erik Swanson 2511 Crestview Dr West Linn, OR 97068

21E35AB02100 John & Heidi Carr 3086 Sunbreak Ln West Linn, OR 97068

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21E35AB02700 Steven & Kathleen Kriesel 2607 Umpqua Ln West Linn, OR 97068

21E35AB04000 Kurt & Jennifer Hill 2973 Sunbreak Ln West Linn, OR 97068 21E35AB04100 Joseph & Lisa Arnone 2990 Sunbreak Ln West Linn, OR 97068

21E35AB04400 Pierre Bossaert 145 Sonata Ln Aptos, CA 95003

21E35AB04700 Robert & Cindy Conlin 2498 Crestview Dr West Linn, OR 97068

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21E35AC04000 Eric Finch 2584 Kensington Ct West Linn, OR 97068

21E35AC04300 Kenneth & Mary Virgin 2560 Kensington Ct West Linn, OR 97068

21E35AC04800 American Hm Mtg Inv 4875 Belfort Rd #130 Jacksonville, FL 32256

21E35AC05100 Jeffrey & Dawn Hudson 2235 Tannler Dr West Linn, OR 97068

21E35AC05400 Vincent Morales 2205 Tannler Dr West Linn, OR 97068

21E35AC10700 Robert & Kerry Bierman 2613 Umpqua Ln West Linn, OR 97068 21E35AB04200 Brian & Christy Riehm 2984 Sunbreak Ln West Linn, OR 97068

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21E35AB04800 Charles & Theresa Parker 2486 Crestview Dr West Linn, OR 97068

21E35AC03800 Robert & Noelle Craddock 2590 Kensington Ct West Linn, OR 97068

21E35AC04100 Hassan Gholi 2580 Kensington Ct West Linn, OR 97068

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21E35AC04900 Michael & Lisa Noel 2265 Tannler Dr West Linn, OR 97068

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21E35AC10900 John Co-E Callahan 2612 Umpqua Ln West Linn, OR 97068 21E35AC11000 Ronald & Theresa Winslow Po Box 1339 Clackamas, OR 97015

21E35AC11300 City Of West Linn 22500 Salamo Rd #600 West Linn, OR 97068

21E35B 00301 Joseph Monahan 19363 Willamette Dr #203 West Linn, OR 97068

21E35B 00403 Li Wei 22864 Weatherhill Rd West Linn, OR 97068

21E35B 00500 Johnny & Laurie Coppedge 23128 Bland Cir West Linn, OR 97068

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21E35BA04400 Daniel & Jennifer Kling 23056 Bland Cir West Linn, OR 97068

21E35BA07300 Genevieve Harris 2140 Fircrest Dr West Linn, OR 97068

21E35BA08300 Richard & Jeanne Glatt 12492 SE 155th Ave Happy Valley, OR 97086

21E35BA08600 Jessica Mehta 2255 Crestview Dr West Linn, OR 97068 21E35AC11100 Patrick & Jennifer Trank 2636 Umpqua Ln West Linn, OR 97068

21E35AC11500 Randy Moe 23162 Bland Cir West Linn, OR 97068

21E35B 00401 Li Wei 22864 Weatherhill Rd West Linn, OR 97068

21E35B 00405 David & Diana Dean 22870 Weatherhill Rd West Linn, OR 97068

21E35B 00501 Dana & Rosalee Patelzick 23096 Bland Cir West Linn, OR 97068

21E35BA00100 David & Nicolle Landau 23065 Bland Cir West Linn, OR 97068

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21E35BA08100 Theron Jensen 2215 Crestview Dr West Linn, OR 97068

21E35BA08400 Avian Charles Newton 2245 Crestview Dr West Linn, OR 97068

21E35BA08700 Darren & Leslie Karr 2265 Crestview Dr West Linn, OR 97068 21E35AC11200 Mark & Carolyn Boyd 34250 NE Colorado Dr Corvallis, OR 97333

21E35AC11501 Joseph Chan 23156 Bland Cir West Linn, OR 97068

21E35B 00402 Joseph Monahan 19363 Willamette Dr #203 West Linn, OR 97068

21E35B 00493 Li Wei 22864 Weatherhill Rd West Linn, OR 97068

21E35B 00502 Olh 14 LLC 5285 Meadows Rd #171 Lake Oswego, OR 97035

21E35BA00190 David & Nicolle Landau 23065 Bland Cir West Linn, OR 97068

21E35BA07200 Jiang Yu 2150 Fircrest Dr West Linn, OR 97068

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21E35BA08500 Le Hong 2160 Fircrest Dr West Linn, OR 97068

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21E35BA09200 Wade Radcliffe 2300 Crestview Dr West Linn, OR 97068

21E35BA09500 Heather Sobotta 2270 Crestview Dr West Linn, OR 97068

21E35BA09800 David & Julie Almodovar 2220 Crestview Dr West Linn, OR 97068

21E35BA10100 Cory & Jodi Huot 23055 Bland Cir West Linn, OR 97068

21E35BA10400 Lorentz & Alison Bruun 23069 Bland Cir West Linn, OR 97068

21E35BA10700 Troy Allen & Erin Pendergraft 23073 Bland Cir West Linn, OR 97068

21E35BA11000 Kaykel Investments LLC 15375 NW West Union Rd Portland, OR 97229

21E35BA11300 City Of West Linn 22500 Salamo Rd #600 West Linn, OR 97068

21E35BD07201 April Browne 23130 Bland Cir West Linn, OR 97068 21E35BA09000 Tamara Butler 2295 Crestview Dr West Linn, OR 97068

21E35BA09300 Brian Bell 2290 Crestview Dr West Linn, OR 97068

21E35BA09600 Maria Xavier 2260 Crestview Dr West Linn, OR 97068

21E35BA09900 David & Kari Ritter 23045 Bland Cir West Linn, OR 97068

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21E35BA10800 Sean & Stacey Driggers 2310 Crestview Dr West Linn, OR 97068

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21E35BA11400 Genevieve Harris 2140 Fircrest Dr West Linn, OR 97068

21E35BD07202 Edward Schwarz Jr. 2206 Tannler Dr West Linn, OR 97068 21E35BA09100 Charles & Roberta Mathews III 2305 Crestview Dr West Linn, OR 97068

21E35BA09400 Edison & Tamara Ghorbani-Elizeh 2280 Crestview Dr West Linn, OR 97068

21E35BA09700 John Chan 2250 Crestview Dr West Linn, OR 97068

21E35BA10000 Richard Mreen 23049 Bland Cir West Linn, OR 97068

21E35BA10300 Veena Bhatia 71 View St Los Altos, CA 94022

21E35BA10600 John Chaplen 23073 Bland Cir West Linn, OR 97068

21E35BA10900 Kaykel Investments LLC 15375 NW West Union Rd Portland, OR 97229

21E35BA11200 City Of West Linn 22500 Salamo Rd #600 West Linn, OR 97068

21E35BD07100 Marilyn Devault 23121 Bland Cir West Linn, OR 97068

21E35BD07203 Ming Li 23136 Bland Cir West Linn, OR 97068 21E35BD07204 Boncher LLC 286 SW Forest Cove Rd West Linn, OR 97068

21E35BD07302 Cynthia Clunes 2218 Tannler Dr West Linn, OR 97068

21E35BD07700 Michael & Kathleen Halicki 2307 Falcon Dr West Linn, OR 97068

21E35BD08000 David & Laurie Wallace 2304 Falcon Dr West Linn, OR 97068 21E35BD07300 John Gunn 2264 Tannler Dr West Linn, OR 97068

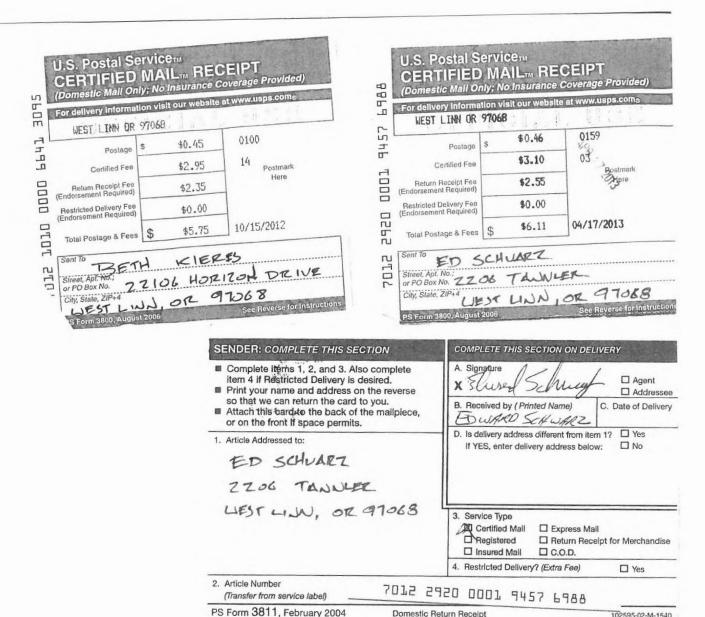
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21E35BD07600 Bradley & April Goehring 2309 Falcon Dr West Linn, OR 97068

21E35BD07900 James & Jennifer Geyer 2303 Falcon Dr West Linn, OR 97068



Domestic Return Receipt

102595-02-M-1540

	EC 4/200	
SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature X A A Addres B. Received by (Printed Name) C. Date of Deliver Addres C. Date of Deliver Addres A Company of the Company of	
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1852 4TH AVE		
UEST LINN, OR 97068	3. Service Type Certified Mail Registered Insured Mail C.O.D.	
	4. Restricted Delivery? (Extra Fee) Yes	
2. Article Number 7007 02	20 0001 7088 9515	
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(Transfer from service label)		
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Planning & Development • 22500 Salamo Rd #1000 • West Linn, Oregon 97068 Telephone 503.656.4211 • Fax 503.656.4106 • westlinnoregon.gov

	DEVELOPMENT RE	VIEW APPLICA	TION	3
STAFF CONTAGE FETER SPIR	PROJECT NO(5).	1-13-00/VA-1.	3-05/13-06/13-	17/13-08/18-0
NON-REFUNDABLE FEE(S) 200	REFUNDABLE DEPOSI		TOTAL 1510	0.00
Type of Review (Please check all the	hat apply):	C pc	12101	
Annexation (ANX) Appeal and Review (AP) * Conditional Use (CUP) Design Review (DR) Easement Vacation Extraterritorial Ext. of Utilities Final Plat or Plan (FP) Flood Management Area Hillside Protection & Erosion Control Home Occupation, Pre-Application different or additional application	Historic Review Legislative Plan or Change Lot Line Adjustment (LLA) Minor Partition (MIP) (Pre Non-Conforming Lots, Usa Planned Unit Developmer Pre-Application Conference Street Vacation ion, Sidewalk Use, Sign Review	e */**	Water Resource Area Pro Water Resource Area Pro Willamette & Tualatin Ri Zone Change ry Sign Permit application	tection/Wetland (WAP) iver Greenway (WRG)
Site Location/Address:		As	sessor's Map No.: 2:	1E35A
23150 BLAND CIRCLE, WEST	LINN		x Lot(s): 01300	8
		To	tal Land Area: 2.8 A	cres
	WS ROAD, SUITE 171		Phone: 503-209- Email: jwyland@j	
City State Zip: LAKE OSWEG				
Owner Name (required): JOHN AN (please print)			Phone:	
	LAND CIRCLE		Email:	
City State Zip: WEST LI				
Consultant Name: ANDREW TUI			Phone: 503-545-	1907
Address: 10445 SW CANYON ROAD, SUITE 245		5	Email: andrew.tull@	@3j-consulting.com
City State Zip: BEAVERTON, 1. All application fees are non-refunda 2. The owner/applicant or their repres 3. A denial or approval may be reverse 4. Three (3) complete hard-copy sets (One (1) complete set of digital appl If large sets of plans are required in No CD required / ** Only one hard	ble (excluding deposit). Any of entative should be present at d on appeal. No permit will b single sided) of application m ication materials must also be application please submit or	all public hearings. e in effect until the a naterials must be sub- e submitted on CD in	ppeal period has expired mitted with this applica	Assume I V III
The undersigned property owner(s) hereby comply with all code requirements applicate to the Community Development Code and the Approved applications and subsequent development.	authorizes the filing of this applicable to my application. Acceptance to other regulations adopted after	of this application does the application is appro	not infer a complete submit ved shall be enforced when	tal. Ali amendanents
Applicant's signature	Date	Ownerssignet Docusigned by:	ure (required)	Date
7F2403.DQ		Radul Omlor		6/18/2013 16:5



TRANSMITTAL

То:	City of West Linn	Date:	June 21, 2013
	22500 Salamo Road	Project:	Sunbreak Subdivision
	West Linn, OR		
		3J Project #:	13113
From	Andrew Tull	Case/File#:	
Attach At	nitting: ched arate Cover	Via: ☐ Mail ☑ Messenger - Same Day ☐ Fed Ex	Purpose: ☐ As Requested ☐ Land Use Application ☐
Copies	Description		
3	Land Use Application I	Binders	
3	11x17 Plan Sets		**************************************
3	Full Size Plan Sets		
1_	CD with Digital Applica	tion Materials	
1	Check for Subdivision	and Variance Applications	
	MENTS: ed hereto is the Sunbreak Su	bdivision Application.	
Best R	egards,		
	The state of the s		
igned:			

P:\13117-JTS - Benjamin Heights\Communication\Trans\13117-trans-Benjamin Heights Partition Application - 2013-05-30.docx

Mr. John Wyland, JT Smith Companies

Mr. Mike Robinson, Perkins Coie

Cc:





SUNBREAK SUBDIVISION

23150 BLAND CIRCLE | WEST LINN, OREGON

PROPOSAL FOR SUBDIVISION AND VARIANCES | JUNE 2013

Owner | Applicant: LF 3, LLC 5285 Meadows Road, Suite 171 Lake Oswego, Oregon 97035 Contact: John Wyland

PHONE: 503-209-7555

Applicant's Representative: 3J Consulting, Inc. 10445 SW Canyon Road, Suite 245 Beaverton, Oregon 97005 Contact: Andrew Tull Phone: 503-545-1907

GENERAL INFORMATION	3
SITE INFORMATION	3
INTRODUCTION	4
APPLICANT'S REQUEST	4
PROPOSED SITE IMPROVEMENTS	4
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GENERAL INFORMATION

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SITE INFORMATION

Tax Lot Number:

2S1E35A01300

Address:

23150 Bland Circle

Size:

2.80 Acres

Zoning Designation:

R-7 (City of West Linn)

Neighborhood:

Savanna Oaks

Comprehensive Plan:

Low Density Residential

Existing Use:

There is one single-family home on the site (residential)

Street Functional Classifications:

The site currently takes access from Bland Circle, a Collector. As proposed, the lots would take access from the extensions of Crestview Drive and Sunbreak Lane, local

streets.

Surrounding Zoning:

North and Southwest - FU-10

East, South and Northwest - R-7

INTRODUCTION

APPLICANT'S REQUEST

The Applicant seeks approval of an application for Subdivision Preliminary Plat for the development of 11 residential lots. The proposal includes a lot depth variance for lots 3, 4, 7, 10 and 11 with a depth greater than two-and-one-half times the lot width. This narrative describes the proposed subdivision of the site and lot depth variance and documents compliance with the relevant sections of the City of West Linn's Community Development Code ("CDC").

PROPOSED SITE IMPROVEMENTS

The project site consists of a total of 2.80 acres. The property is located on Bland Circle at the northern end of Tannler Drive. There is one single-family detached home and one garage at the north end of the property that will be demolished as part of this project.

The intent of this subdivision is to provide eleven buildable lots, each a minimum of 7,000 square feet in size, for development with single-family homes, a use permitted outright in the R-7 zone.

TRAFFIC AND PARKING

The preliminary plat shows that access to the eleven parcels will come from driveways on newly constructed sections of Crestview Drive and Sunbreak Lane, local streets. No additional access to Bland Circle is proposed. Additionally, each lot will have adequate off-street parking available.

APPLICABLE CRITERIA

The following sections of the CDC have been extracted as they have been deemed to be applicable to the proposal. Following each applicable criteria or design standard, the Applicant has provided a series of draft findings. The intent of providing code and detailed responses and findings is to document that the proposed development has satisfied the approval criteria for Subdivision Preliminary Plat and Class II Variance Approval.

DIVISION 8. LAND DIVISION

CHAPTER 85. GENERAL PROVISIONS

85.200 APPROVAL CRITERIA

No tentative subdivision or partition plan shall be approved unless adequate public facilities will be available to provide service to the partition or subdivision area prior to final plat approval and the Planning Commission or Planning Director, as applicable, finds that the following standards have been satisfied, or can be satisfied by condition of approval.

A. Streets.

1. General. The location, width and grade of streets shall be considered in their relation to existing and planned streets, to the generalized or reasonable layout of streets on adjacent undeveloped parcels, to topographical conditions, to public convenience and safety, to accommodate various types of transportation (automobile, bus, pedestrian, bicycle), and to the proposed use of land to be served by the streets. The functional class of a street aids in defining the primary function and associated design standards for the facility. The hierarchy of the facilities within the network in regard to the type of traffic served (through or local trips), balance of function (providing access and/or capacity), and the level of use (generally measured in vehicles per day) are generally dictated by the functional class. The street system shall assure an adequate traffic or circulation system with intersection angles, grades, tangents, and curves appropriate for the traffic to be carried. Streets should provide for the continuation, or the appropriate projection, of existing principal streets in surrounding areas and should not impede or adversely affect development of adjoining lands or access thereto. To accomplish this, the emphasis should be upon a connected continuous pattern of local, collector, and arterial streets rather than discontinuous curvilinear streets and cul-de-sacs. Deviation from this pattern of connected streets should only be permitted in cases of extreme topographical challenges including excessive slopes (35 percent-plus), hazard areas, steep drainageways, wetlands, etc. In such cases, deviations may be allowed but the connected continuous pattern must be reestablished once the topographic challenge is passed. Streets should be oriented with consideration of the sun, as site conditions allow, so that over 50 percent of the front building lines of homes are oriented within 30 degrees of an east-west axis.

Internal streets are the responsibility of the developer. All streets bordering the development site are to be developed by the developer with, typically, half-street improvements or to City standards prescribed by the City Engineer. Additional travel lanes may be required to be

consistent with adjacent road widths or to be consistent with the adopted Transportation System Plan and any adopted updated plans.

An applicant may submit a written request for a waiver of abutting street improvements if the Transportation System Plan prohibits the street improvement for which the waiver is requested. Those areas with numerous (particularly contiguous) under-developed or undeveloped tracts will be required to install street improvements. When an applicant requests a waiver of street improvements and the waiver is granted, the applicant shall propose a fee amount that will be reviewed by the City Manager or the Manager's designee. The City Manager or the Manager's designee will revise the proposed fee as necessary and establish the amount to be paid on a case-by-case basis. The applicant shall pay an in-lieu fee for improvements to the nearest street identified by the City Manager or Manager's designee as necessary and appropriate. The amount of the in-lieu fee shall be roughly proportional to the impact of the development on the street system as determined in subsection (A)(22) of this section.

Streets shall also be laid out to avoid and protect tree clusters and significant trees, but not to the extent that it would compromise connectivity requirements per this subsection (A)(1), or bring the density below 70 percent of the maximum density for the developable net area. The developable net area is calculated by taking the total site acreage and deducting Type I and II lands; then up to 20 percent of the remaining land may be excluded as necessary for the purpose of protecting significant tree clusters or stands as defined in CDC 55.100(B)(2).

Applicant's Finding:

This section requires the continuation of principal streets. The term principal street is not defined in the CDC but it must denote a street that has some importance. Since Sunbreak, Crestview and Tannler are all local streets, they are not principal streets, otherwise the CDC would require the extension of every street since none would have any particular level of importance. The use of the phrase principal street means that not every street will be extended and those that are must have some importance, like a collector or an arterial street.

The 11 lots will take access from Crestview Drive and Sunbreak Lane, existing Local Streets. The layouts of Crestview Drive and Sunbreak Lane from the east were determined with development of the Florendo's Hideaway subdivision and neither is a cul-de-sac. The layout of Crestview Drive from the west was determined with the development of Ridgeview Estates Phase II subdivision.

A 24-foot wide right-of-way dedication (one-half of a 48-foot right-of-way) is proposed along the western property line connecting Sunbreak Lane to Bland Circle. Installation of a 6-foot sidewalk along this dedicated area is proposed, with a fee-in-lieu proposed for the remaining roadway improvements (to be used by the City when the property to the west develops). The Applicant contacted the property owner to the west to see if the owner would be interested in dedicating land for the road or applying for development of the property concurrently. The property owner to the west was not interested in either scenario.

The Applicant then reviewed the existing easement on the neighboring property for

access to the City's water reservoir to determine if it provides for a public street and concluded that it does not. If the easement is insufficient, that is a pre-existing condition which Sunbreak Subdivision does not create or make worse. In other words, there is no "nexus" between the requirement to dedicate right-of-way and the need for the dedication that is caused by the application. The City may not require the dedication of real property without a nexus. Page 9 of the pre-application notes describes the connectivity analysis contained in the Florendo's Hideaway Subdivision, but this plan is neither binding on the proposed subdivision. Additionally, the applicant submitted a drawing to the City Engineering Department showing that proper alignment with Tannler Drive to the south is not possible from this property and must be completed on the adjacent property to the west. For all of these reasons, the applicant proposes a half-street right-of-way dedication and a fee-in-lieu for future construction when the property to the west develops.

The requirements of this section have been satisfied.

2. <u>Right-of-way and roadway widths</u>. In order to accommodate larger tree-lined boulevards and sidewalks, particularly in residential areas, the standard right-of-way widths for the different street classifications shall be within the range listed below. But instead of filling in the right-of-way with pavement, they shall accommodate the amenities (e.g., boulevards, street trees, sidewalks). The exact width of the right-of-way shall be determined by the City Engineer or the approval authority. The following ranges will apply:

Street Classification	Right-of-Way	
Collector	60 – 80	
Local street	40 - 60	

Additional rights-of-way for slopes may be required. Sidewalks shall not be located outside of the right-of-way unless to accommodate significant natural features or trees.

Applicant's Finding:

The proposed right-of-way width for Crestview Drive, a local street, is 56 feet and the width for Sunbreak Lane, a local street, is 52 feet (both within the 40-60 foot window). The proposed dedication along the north-south connection of between Sunbreak Lane and Bland Circle is 24 feet, one-half of a 48-foot right-of-way. The existing width of Bland Circle, a collector, is 50 feet. The applicant proposes dedication of an additional 8 feet of right-of-way along Bland Circle, a collector. The proposed dedication along Bland Circle will result in a right-of-way width of 58 feet, not within the 60-80 foot window. However, this width was indicated in the Engineering Notes section of the preapplication notes dated March 21, 2013 and is noted in the City's Transportation System Plan, Figure 8-3 Collector Street Cross Sections.

The requirements of this section have been satisfied.

Street widths. Street widths shall depend upon which classification of street is proposed.
 The classifications and required cross sections are established in Chapter 8 of the adopted TSP.

Applicant's Finding:

The applicant's proposal includes construction of Crestview Drive and Sunbreak Lane to local street standards and improvements to Bland Circle consistent with collector street standards. The proposed dedication of right-of-way for the new north-south local street connecting Sunbreak Lane and Bland Circle is 24 feet, half the width of a 48-foot local street right-of-way.

The requirements of this section have been satisfied.

- 4. The decision-making body shall consider the City Engineer's recommendations on the desired right-of-way width, pavement width and street geometry of the various street types within the subdivision after consideration by the City Engineer of the following criteria:
 - a. The type of road as set forth in the Transportation Master Plan.
 - b. The anticipated traffic generation.
 - c. On-street parking requirements.
 - d. Sidewalk and bikeway requirements.
 - e. Requirements for placement of utilities.
 - f. Street lighting.
 - g. Drainage and slope impacts.
 - h. Street trees.
 - i. Planting and landscape areas.
 - j. Existing and future driveway grades.
 - k. Street geometry.
 - I. Street furniture needs, hydrants.

Applicant's Finding:

The City Engineer has reviewed the proposal and made recommendations to the applicant, which are incorporated into the proposed configuration.

The requirements of this section have been satisfied.

- 5. Additionally, when determining appropriate street width, the decision-making body shall consider the following criteria:
 - a. When a local street is the only street serving a residential area and is expected to carry more than the normal local street traffic load, the designs with two travel and one parking lane are appropriate.
 - Streets intended to serve as signed but unstriped bike routes should have the travel lane widened by two feet.
 - c. Collectors should have two travel lanes and may accommodate some parking. Bike routes are appropriate.
 - d. Arterials should have two travel lanes. On-street parking is not allowed unless part of a Street Master Plan. Bike lanes are required as directed by the Parks Master Plan and Transportation Master Plan.

Applicant's

The proposed street extensions will serve the proposed lots and adjacent residential

Finding:

development, no more than a normal Local Street traffic load. The dedication of rightof-way and street improvements will result in two travel lanes on Bland Circle. No arterials are adjacent to this proposal.

The requirements of this section have been satisfied.

6. Reserve strips. Reserve strips or street plugs controlling the access to streets are not permitted unless owned by the City.

Applicant's Finding:

The applicant does not propose reserve strips or street plugs with this application.

The requirements of this section have been satisfied.

7. Alignment. All streets other than local streets or cul-de-sacs, as far as practical, shall be in alignment with existing streets by continuations of the centerlines thereof. The staggering of street alignments resulting in "T" intersections shall, wherever practical, leave a minimum distance of 200 feet between the centerlines of streets having approximately the same direction and otherwise shall not be less than 100 feet.

Applicant's Finding:

All proposed street alignments will include continuations of centerline.

The requirements of this section have been satisfied.

8. Future extension of streets. Where necessary to give access to or permit a satisfactory future subdivision of adjoining land, streets shall be extended to the boundary of the subdivision and the resulting dead-end streets may be approved without turnarounds. (Temporary turnarounds built to Fire Department standards are required when the dead-end street is over 100 feet long.)

Applicant's Finding:

Development of the properties to the east and west of this site resulted in extension of Crestview Drive and Sunbreak Lane to the boundary of this property. Development of this property will include completion of these public street sections. Crestview Drive connects both east and west of this property and will not result in a dead-end street. Sunbreak Lane connects only to the east but could be further extended to the west when the adjacent property develops. An unimproved half-street (24 feet) right-of-way dedication is proposed connecting Sunbreak Lane to Bland Circle. As part of the application, the applicant will install a sidewalk but will pay a fee in lieu rather than installing a curb or street section.

The requirements of this section have been satisfied.

9. Intersection angles. Streets shall be laid out to intersect angles as near to right angles as practical, except where topography requires lesser angles, but in no case less than 60 degrees unless a special intersection design is approved. Intersections which are not at right angles shall have minimum corner radii of 15 feet along right-of-way lines which form acute angles.

Right-of-way lines at intersections with arterial streets shall have minimum curb radii of not less than 35 feet. Other street intersections shall have curb radii of not less than 25 feet. All radii shall maintain a uniform width between the roadway and the right-of-way lines. The intersection of more than two streets at any one point will not be allowed unless no alternative design exists.

Applicant's

No street intersections are proposed.

Finding:

The requirements of this section have been satisfied.

10. Additional right-of-way for existing streets. Wherever existing street rights-of-way adjacent to or within a tract are of inadequate widths based upon the standards of this chapter, additional right-of-way shall be provided at the time of subdivision or partition.

Applicant's Finding:

In addition to the extensions of Crestview Drive and Sunbreak Lane, the applicant proposes right-of-way dedication along Bland Circle to the Collector Street standard.

The requirements of this section have been satisfied.

11. Cul-de-sacs. Cul-de-sacs are not allowed except as required by topography, slope, site limitations, and lot shapes. Cul-de-sacs shall have maximum lengths of 400 feet and serve no more than 12 dwelling units, unless by variance per Chapter 75 CDC. All cul-de-sacs shall terminate with a turnaround built to one of the following specifications (measurements are for the traveled way and do not include planter strips or sidewalks).***

Applicant's Finding:

No cul-de-sacs are proposed with this subdivision.

The requirements of this section have been satisfied.

12. Street names. No street names shall be used which will duplicate or be confused with the names of existing streets within the City. Street names that involve difficult or unusual spellings are discouraged. Street names shall be subject to the approval of the Planning Commission or Planning Director, as applicable. Continuations of existing streets shall have the name of the existing street. Streets, drives, avenues, ways, boulevards, and lanes shall describe through streets. Place and court shall describe cul-de-sacs. Crescent, terrace, and circle shall describe loop or arcing roads.

Applicant's Finding:

All streets are extensions of existing local streets and names will be maintained.

The requirements of this section have been satisfied.

13. Grades and curves. Grades shall not exceed 8 percent on major or secondary arterials, 10 percent on collector streets, or 15 percent on any other street unless by variance. Willamette Drive/Highway 43 shall be designed to a minimum horizontal and vertical design

speed of 45 miles per hour, subject to Oregon Department of Transportation (ODOT) approval. Arterials shall be designed to a minimum horizontal and vertical design speed of 35 miles per hour. Collectors shall be designed to a minimum horizontal and vertical design speed of 30 miles per hour. All other streets shall be designed to have a minimum centerline radii of 50 feet. Super elevations (i.e., banking) shall not exceed four percent. The centerline profiles of all streets may be provided where terrain constraints (e.g., over 20 percent slopes) may result in considerable deviation from the originally proposed alignment.

Applicant's Finding:

The grades and curves of the extension of the local public streets will not exceed 15 percent, per this standard.

The requirements of this section have been satisfied.

14. Access to local streets. Intersection of a local residential street with an arterial street may be prohibited by the decision-making authority if suitable alternatives exist for providing interconnection of proposed local residential streets with other local streets. Where a subdivision or partition abuts or contains an existing or proposed major arterial street, the decision-making authority may require marginal access streets, reverse-frontage lots with suitable depth, visual barriers, noise barriers, berms, no-access reservations along side and rear property lines, and/or other measures necessary for adequate protection of residential properties from incompatible land uses, and to ensure separation of through traffic and local traffic.

Applicant's Finding:

The subject property does not abut nor contain an existing or proposed Major Arterial Street, nor is an intersection of a Local Residential Street with an Arterial Street proposed.

The requirements of this section have been satisfied.

15. Alleys. Alleys shall be provided in commercial and industrial districts unless other permanent provisions for access to off-street parking and loading facilities are made as approved by the decision-making authority. While alley intersections and sharp changes in alignment should be avoided, the corners of necessary alley intersections shall have radii of not less than 10 feet. Alleys may be provided in residential subdivisions or multi-family projects. The decision to locate alleys shall consider the relationship and impact of the alley to adjacent land uses. ***

Applicant's Finding: No alleys are proposed with this subdivision.

The requirements of this section have been satisfied.

16. <u>Sidewalks</u>. Sidewalks shall be installed per CDC <u>92.010(H)</u>, Sidewalks. The residential sidewalk width is six feet plus planter strip as specified below. Sidewalks in commercial zones shall be constructed per subsection (A)(3) of this section. See also subsection C of this section.

Sidewalk width may be reduced with City Engineer approval to the minimum amount (e.g., four feet wide) necessary to respond to site constraints such as grades, mature trees, rock outcroppings, etc., or to match existing sidewalks or right-of-way limitations.

Applicant's

The applicant proposes to install a 6-foot sidewalk plus planter strip along the frontages

Finding:

of this property, per this standard.

The requirements of this section have been satisfied.

17. Planter strip. The planter strip is between the curb and sidewalk providing space for a grassed or landscaped area and street trees. The planter strip shall be at least 6 feet wide to accommodate a fully matured tree without the boughs interfering with pedestrians on the sidewalk or vehicles along the curbline. Planter strip width may be reduced or eliminated, with City Engineer approval, when it cannot be corrected by site plan, to the minimum amount necessary to respond to site constraints such as grades, mature trees, rock outcroppings, etc., or in response to right-of-way limitations.

Applicant's Finding: The applicant proposes to install a 6-foot planter strip between all proposed sidewalks

and paved streets.

The requirements of this section have been satisfied.

18. Streets and roads shall be dedicated without any reservations or restrictions.

Applicant's

No reservations or restrictions are proposed with the street dedication.

Finding:

The requirements of this section have been satisfied.

19. All lots in a subdivision shall have access to a public street. Lots created by partition may have access to a public street via an access easement pursuant to the standards and limitations set forth for such accessways in Chapter 48 CDC.

Applicant's

All 11 lots will have access to a public street.

Finding:

The requirements of this section have been satisfied.

20. <u>Gated streets</u>. Gated streets are prohibited in all residential areas on both public and private streets. A driveway to an individual home may be gated.

Applicant's

Gated streets are not proposed.

Finding:

The requirements of this section have been satisfied.

- 21. <u>Entryway treatments and street isle design</u>. When the applicant desires to construct certain walls, planters, and other architectural entryway treatments within a subdivision, the following standards shall apply:
 - a. All entryway treatments except islands shall be located on private property and not in the public right-of-way.
 - b. Planter islands may be allowed provided there is no structure (i.e., brick, signs, etc.) above the curbline, except for landscaping. Landscaped islands shall be set back a minimum of 24 feet from the curbline of the street to which they are perpendicular.
 - c. All islands shall be in public ownership. The minimum aisle width between the curb and center island curbs shall be 14 feet. Additional width may be required as determined by the City Engineer.
 - d. Brick or special material treatments are acceptable at intersections with the understanding that the City will not maintain these sections except with asphalt overlay, and that they must meet the Americans with Disabilities Act (ADA) standards. They shall be laid out to tie into existing sidewalks at intersections.
 - e. Maintenance for any common areas and entryway treatments (including islands) shall be guaranteed through homeowners association agreements, CC&Rs, etc.
 - f. Under Chapter <u>52</u> CDC, subdivision monument signs shall not exceed 32 square feet in area.

Applicant's Finding:

The applicant does not propose to construct entryway treatments to the subdivision at this time.

The requirements of this section have been satisfied.

22. Based upon the determination of the City Manager or the Manager's designee, the applicant shall construct or cause to be constructed, or contribute a proportionate share of the costs, for all necessary off-site improvements identified by the transportation analysis commissioned to address CDC 85.170(B)(2) that are required to mitigate impacts from the proposed subdivision. The proportionate share of the costs shall be determined by the City Manager or Manager's designee, who shall assume that the proposed subdivision provides improvements in rough proportion to identified impacts of the subdivision. Off-site transportation improvements will include bicycle and pedestrian improvements as identified in the adopted City of West Linn TSP.

Applicant's Finding:

Right-of-way dedication and street improvements are proposed with this application proportionate to the construction of eleven new lots. Off-site improvements are not necessary or proportionate to mitigate impacts from this 11-lot subdivision.

The requirements of this section have been satisfied.

B. Blocks and lots.

 General. The length, width, and shape of blocks shall be designed with due regard for the provision of adequate building sites for the use contemplated; consideration of the need for

traffic safety, convenience, access, circulation, and control; and recognition of limitations and opportunities of topography and solar access.

Applicant's Finding: The block pattern adjacent to this site is established. However, extension of Crestview Drive and Sunbreak Lane through the site will provide adequate building sites and considers the need for traffic safety, convenience, access, circulation and control.

The requirements of this section have been satisfied.

2. <u>Sizes</u>. The recommended block size is 400 feet in length to encourage greater connectivity within the subdivision. Blocks shall not exceed 800 feet in length between street lines, except for blocks adjacent to arterial streets or unless topographical conditions or the layout of adjacent streets justifies a variation. Designs of proposed intersections shall demonstrate adequate sight distances to the City Engineer's specifications. Block sizes and proposed accesses must be consistent with the adopted TSP.

Applicant's Finding: The extension of Crestview Drive through the property will result in a block length of approximately 600 feet. The extension of Sunbreak Lane through the property will result in a block length of approximately 500 feet. No blocks are proposed exceeding 800 feet in length.

The requirements of this section have been satisfied.

3. Lot size and shape. Lot size, width, shape, and orientation shall be appropriate for the location of the subdivision, for the type of use contemplated, for potential utilization of solar access, and for the protection of drainageways, trees, and other natural features. No lot shall be dimensioned to contain part of an existing or proposed street. All lots shall be buildable, and the buildable depth should not exceed two and one-half times the average width. "Buildable" describes lots that are free of constraints such as wetlands, drainageways, etc., that would make home construction impossible. Lot sizes shall not be less than the size required by the zoning code unless as allowed by planned unit development (PUD). Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street parking and service facilities required by the type of use proposed.

Chapter 12- Single-Family Residential Detached and Attached, R-7 standards are as follows:

Lot Size (Detached Dwelling Units) 7,000 square feet	
Lot Size (Attached Dwelling Units)	5,500 square feet
Front Lot Line Length/Minimum Lot Width at Front Lot Line	35 feet
Average Minimum Lot Width	50 feet
Lot Depth	Less than 2.5x Width and greater than Average Depth of 90 feet

Applicant's Finding: All proposed lots are a minimum of 7,000 square feet in size to accommodate single-family detached dwelling units. All 11 proposed lots exceed the minimum requirements for front lot line length, lot width and lot depth. Lots 3, 4, 7, 10 and 11 exceed the lot depth maximum of 2.5x width and are discussed further in Chapter 75 as a Class II Variance request.

The requirements of this section have been satisfied.

 Access. Access to subdivisions, partitions, and lots shall conform to the provisions of Chapter 48 CDC, Access, Egress and Circulation.

Applicant's Finding: The proposed access to the subdivision conforms to the provisions of CDC Chapter 48 because all parcels will take access from a Local Street that will then access the adjacent Collector. No shared access is proposed.

The requirements of this section have been satisfied.

5. Through lots and parcels. Through lots have frontage on a street at the front and rear of the lot. They are also called double-frontage lots. Through lots and parcels shall be avoided except where they are essential to provide separation of residential development from arterial streets or adjacent non-residential activities, or to overcome specific disadvantages of topography and orientation. A planting screen or impact mitigation easement at least 10 feet wide, and across which there shall be no right of access, may be required along the line of building sites abutting such a traffic artery or other incompatible use.

Applicant's Finding:

No through lots are proposed with this application.

The requirements of this section have been satisfied.

6. <u>Lot and parcel side lines</u>. The lines of lots and parcels, as far as is practicable, should run at right angles to the street upon which they face, except that on curved streets they should be radial to the curve.

Applicant's Finding:

All side lot lines run at right angles to the streets upon which they face as far as practicable. Due to the challenging geometry of the site and the surrounding neighborhood, some lot lines have been proposed at less than 90 degrees with no detrimental effects upon the proposed lots or neighboring properties.

The requirements of this section have been satisfied.

7. Flag lots. Flag lots can be created where it can be shown that no other reasonable street access is possible to achieve the requested land division. A single flag lot shall have a minimum street frontage of 15 feet for its accessway. Where two to four flag lots share a common accessway, the minimum street frontage and accessway shall be eight feet in width

per lot. Common accessways shall have mutual maintenance agreements and reciprocal access and utility easements. ***

- a. Setbacks applicable to the underlying zone shall apply to the flag lot.
- b. Front yard setbacks may be based on the rear property line of the parcel which substantially separates the flag lot from the street from which the flag lot gains access. Alternately, the house and its front yard may be oriented in other directions so long as some measure of privacy is ensured, or it is part of a pattern of development, or it better fits the topography of the site.
- c. The lot size shall be calculated exclusive of the accessway; the access strip may not be counted towards the area requirements.
- d. The lot depth requirement contained elsewhere in this code shall be measured from the rear property line of the parcel which substantially separates the flag lot from the street from which the flag lot gains access.
- e. As per CDC 48.030, the accessway shall have a minimum paved width of 12 feet.
- f. If the use of a flag lot stem to access a lot is infeasible because of a lack of adequate existing road frontage, or location of existing structures, the proposed lot(s) may be accessed from the public street by an access easement of a minimum 15-foot width across intervening property.

Applicant's Finding:

No flag lots are proposed with this subdivision application.

The requirements of this section have been satisfied.

8. Large lots. In dividing tracts into large lots or parcels which, at some future time, are likely to be redivided, the approval authority may require that the blocks be of such size and shape, and be so divided into building sites, and contain such easements and site restrictions as will provide for extension and opening of streets at intervals which will permit a subsequent division of any tract into lots or parcels of smaller size. Alternately, in order to prevent further partition of oversized lots, restrictions may be imposed on the subdivision or partition plat.

Applicant's Finding:

The lots of the proposed subdivision, ranging in size from 7,000 square feet to 11,566 square feet, are not large enough for future division in the R-7 zone.

The requirements of this section have been satisfied.

- C. Pedestrian and bicycle trails.
 - 1. Trails or multi-use pathways shall be installed, consistent and compatible with federal ADA requirements and with the Oregon Transportation Planning Rule, between subdivisions, cul-de-sacs, and streets that would otherwise not be connected by streets due to excessive grades, significant tree(s), and other constraints natural or manmade. Trails shall also accommodate bicycle or pedestrian traffic between neighborhoods and activity areas such as schools, libraries, parks, or commercial districts. Trails shall also be required where designated by the Parks Master Plan.

- 2. The all-weather surface (asphalt, etc.) trail should be eight feet wide at minimum for bicycle use and six feet wide at minimum for pedestrian use. Trails within 10 feet of a wetland or natural drainageway shall not have an all-weather surface, but shall have a soft surface as approved by the Parks Director. These trails shall be contained within a corridor dedicated to the City that is wide enough to provide trail users with a sense of defensible space. Corridors that are too narrow, confined, or with vegetative cover may be threatening and discourage use. Consequently, the minimum corridor width shall be 20 feet. Sharp curves, twists, and blind corners on the trail are to be avoided as much as possible to enhance defensible space. Deviations from the corridor and trail width are permitted only where topographic and ownership constraints require it.
- Defensible space shall also be enhanced by the provision of a three- to four-foot-high matte black chain link fence or acceptable alternative along the edge of the corridor. The fence shall help delineate the public and private spaces.
- 4. The bicycle or pedestrian trails that traverse multi-family and commercial sites should follow the same defensible space standards but do not need to be defined by a fence unless required by the decision-making authority.
- 5. Except for trails within 10 feet of a wetland or natural drainageway, soft surface or gravel trails may only be used in place of a paved, all-weather surface where it can be shown to the Planning Director that the principal users of the path will be recreational, non-destination-oriented foot traffic, and that alternate paved routes are nearby and accessible.
- 6. The trail grade shall not exceed 12 percent except in areas of unavoidable topography, where the trail may be up to a 15 percent grade for short sections no longer than 50 feet. In any location where topography requires steeper trail grades than permitted by this section, the trail shall incorporate a short stair section to traverse the area of steep grades.

Applicant's Finding: The applicant is proposing a 10 foot pedestrian access easement with asphalt path between lots 3 and 4 and lots 7 and 8 connecting Sunbreak to Crestview and between lots 9 and 10 connecting Crestview to the rear (north) of the property.

The requirements of this section have been satisfied.

D. Transit facilities.

- 1. The applicant shall consult with Tri-Met and the City Engineer to determine the appropriate location of transit stops, bus pullouts, future bus routes, etc., contiguous to or within the development site. If transit service is planned to be provided within the next two years, then facilities such as pullouts shall be constructed per Tri-Met standards at the time of development. More elaborate facilities, like shelters, need only be built when service is existing or imminent. Additional rights-of-way may be required of developers to accommodate buses.
- 2. The applicant shall make all transit-related improvements in the right-of-way or in easements abutting the development site as deemed appropriate by the City Engineer.
- 3. Transit stops shall be served by striped and signed pedestrian crossings of the street within 150 feet of the transit stop where feasible. Illumination of the transit stop and crossing is required to enhance defensible space and safety. ODOT approval may be required.

4. Transit stops should include a shelter structure bench plus eight feet of sidewalk to accommodate transit users, non-transit-related pedestrian use, and wheelchair users. Tri-Met must approve the final configuration.

Applicant's Finding:

Transit facilities have not been identified by Tri-Met or the City Engineer adjacent to this

property.

The requirements of this section have been satisfied.

- E. Lot grading. Grading of building sites shall conform to the following standards unless physical conditions demonstrate the propriety of other standards:
 - 1. All cuts and fills shall comply with the excavation and grading provisions of the Uniform Building Code and the following:
 - a. Cut slopes shall not exceed one and one-half feet horizontally to one foot vertically (i.e., 67 percent grade).
 - b. Fill slopes shall not exceed two feet horizontally to one foot vertically (i.e., 50 percent grade). Please see the following illustration.***
 - 2. The character of soil for fill and the characteristics of lot and parcels made usable by fill shall be suitable for the purpose intended.
 - 3. If areas are to be graded (more than any four-foot cut or fill), compliance with CDC 85.170(C) is required.
 - 4. The proposed grading shall be the minimum grading necessary to meet roadway standards, and to create appropriate building sites, considering maximum allowed driveway grades.
 - 5. Where landslides have actually occurred, where the area is identified as a hazard site in the West Linn Comprehensive Plan Report, or where field investigation by the City Engineer confirms the existence of a severe landslide hazard, development shall be prohibited unless satisfactory evidence is additionally submitted by a registered geotechnical engineer which certifies that methods of rendering a known hazard site safe for construction are feasible for a given site. The City Engineer's field investigation shall include, but need not be limited to, the following elements:
 - a. Occurrences of geotropism.
 - b. Visible indicators of slump areas.
 - c. Existence of known and verified hazards.
 - d. Existence of unusually erosive soils.
 - e. Occurrences of unseasonably saturated soils.

The City Engineer shall determine whether the proposed methods or designs are adequate to prevent landslide or slope failure. The City Engineer may impose conditions consistent with the purpose of these ordinances and with standard engineering practices including limits on type and intensity of land use, which have been determined necessary to assure landslide or slope failure does not occur.

- 6. All cuts and fills shall conform to the Uniform Building Code.
- 7. On land with slopes in excess of 12 percent, cuts and fills shall be regulated as follows:

- a. Toes of cuts and fills shall be set back from the boundaries of separate private ownerships at least three feet, plus one-fifth of the vertical height of the cut or fill. Where an exception is required from that requirement, slope easements shall be
- b. Cuts shall not remove the toe of any slope where a severe landslide or erosion hazard exists (as described in subsection (G)(5) of this section).
- c. Any structural fill shall be designed by a registered engineer in a manner consistent with the intent of this code and standard engineering practices, and certified by that engineer that the fill was constructed as designed.
- d. Retaining walls shall be constructed pursuant to Section 2308(b) of the Oregon State Structural Specialty Code.
- e. Roads shall be the minimum width necessary to provide safe vehicle access, minimize cut and fill, and provide positive drainage control.
- 8. Land over 50 percent slope shall be developed only where density transfer is not feasible. The development will provide that:
 - a. At least 70 percent of the site will remain free of structures or impervious surfaces.
 - b. Emergency access can be provided.
 - c. Design and construction of the project will not cause erosion or land slippage.
 - d. Grading, stripping of vegetation, and changes in terrain are the minimum necessary to construct the development in accordance with subsection J of this section.

Applicant's Finding:

All grading on site will be done in conformance with these standards.

The requirements of this section have been satisfied.

F. Water.

- 1. A plan for domestic water supply lines or related water service facilities shall be prepared consistent with the adopted Comprehensive Water System Plan, plan update, March 1987, and subsequent superseding revisions or updates.
- 2. Adequate location and sizing of the water lines.
- 3. Adequate looping system of water lines to enhance water quality.
- 4. For all non-single-family developments, there shall be a demonstration of adequate fire flow to serve the site.
- 5. A written statement, signed by the City Engineer, that water service can be made available to the site by the construction of on-site and off-site improvements and that such water service has sufficient volume and pressure to serve the proposed development's domestic, commercial, industrial, and fire flows.

Applicant's Finding:

The subject property is located in the Horton water pressure zone. The City Engineering Department's comments in the pre-application notes dated March 21, 2013 indicate that there is a surplus in supply capacity during normal conditions and that there is no storage volume deficit during normal conditions in the Horton pressure zone. The applicant will connect all lots to public water per the submitted public improvement plans. This plan is consistent with the adopted Comprehensive Water System Plan.

The requirements of this section have been satisfied.

G. Sewer.

- 1. A plan prepared by a licensed engineer shall show how the proposal is consistent with the Sanitary Sewer Master Plan (July 1989). Agreement with that plan must demonstrate how the sanitary sewer proposal will be accomplished and how it is gravity-efficient. The sewer system must be in the correct basin and should allow for full gravity service.
- 2. Sanitary sewer information will include plan view of the sanitary sewer lines, including manhole locations and depth or invert elevations.
- 3. Sanitary sewer lines shall be located in the public right-of-way, particularly the street, unless the applicant can demonstrate why the alternative location is necessary and meets accepted engineering standards.
- 4. Sanitary sewer line should be at a depth that can facilitate connection with down-system properties in an efficient manner.
- 5. The sanitary sewer line should be designed to minimize the amount of lineal feet in the system.
- 6. The sanitary sewer line shall avoid disturbance of wetland and drainageways. In those cases where that is unavoidable, disturbance shall be mitigated pursuant to Chapter 32 CDC. Water Resource Area Protection, all trees replaced, and proper permits obtained. Dual sewer lines may be required so the drainageway is not disturbed.
- 7. Sanitary sewer shall be extended or stubbed out to the next developable subdivision or a point in the street that allows for reasonable connection with adjacent or nearby properties.
- 8. The sanitary sewer system shall be built pursuant to DEQ, City, and Tri-City Service District sewer standards. The design of the sewer system should be prepared by a licensed engineer, and the applicant must be able to demonstrate the ability to satisfy these submittal requirements or standards at the pre-construction phase.
- 9. A written statement, signed by the City Engineer, that sanitary sewers with sufficient capacity to serve the proposed development and that adequate sewage treatment plant capacity is available to the City to serve the proposed development.

Applicant's Finding:

The applicant will connect all lots to public sanitary sewer per the submitted public improvement plans. The proposed sanitary sewer system is consistent with the Sanitary Sewer Master Plan, is in the correct basin and allows for full gravity service.

The requirements of this section have been satisfied.

H. Storm

- 1. A stormwater quality and detention plan shall be submitted which complies with the submittal criteria and approval standards contained within Chapter 33 CDC. It shall include profiles of proposed drainageways with reference to the adopted Storm Drainage Master Plan.
- 2. Storm treatment and detention facilities shall be sized to accommodate a 25-year storm incident. A registered civil engineer shall prepare a plan and statement which shall be

supported by factual data that clearly shows that there will be no adverse off-site impacts from increased intensity of runoff downstream or constriction causing ponding upstream. The plan and statement shall identify all on- or off-site impacts and measures to mitigate those impacts. The plan and statement shall, at a minimum, determine the off-site impacts from a 25-year storm.

- 3. Plans shall demonstrate how storm drainage will be collected from all impervious surfaces including roof drains. Storm drainage connections shall be provided to each dwelling unit/lot. The location, size, and type of material selected for the system shall correlate with the 25-year storm incident.
- 4. Treatment of storm runoff shall meet municipal code standards.

Applicant's Finding: The proposed stormwater treatment and detention is designed to meet city standards, as detailed in the submitted stormwater report.

The requirements of this section have been satisfied.

I. <u>Utility easements</u>. Subdivisions and partitions shall establish utility easements to accommodate the required service providers as determined by the City Engineer. The developer of the subdivision shall make accommodation for cable television wire in all utility trenches and easements so that cable can fully serve the subdivision.

Applicant's Finding: The applicant will establish utility easements as determined by the City Engineer and shown on the preliminary plat.

The requirements of this section have been satisfied.

J. Supplemental provisions.

 Wetland and natural drainageways. Wetlands and natural drainageways shall be protected as required by Chapter 32 CDC, Water Resource Area Protection. Utilities may be routed through the protected corridor as a last resort, but impact mitigation is required.

Applicant's Finding: The proposed subdivision does not impact any wetlands or natural drainageways.

The requirements of this section have been satisfied.

2. <u>Willamette and Tualatin Greenways</u>. The approval authority may require the dedication to the City or setting aside of greenways which will be open or accessible to the public. Except for trails or paths, such greenways will usually be left in a natural condition without improvements. Refer to Chapter <u>28</u> CDC for further information on the Willamette and Tualatin River Greenways.

Applicant's Finding: No greenways have been identified for dedication on this property. This property is not adjacent to the Willamette or Tualatin River and, therefore, a river greenway is not feasible on this site.

The requirements of this section have been satisfied.

3. <u>Street trees</u>. Street trees are required as identified in the appropriate section of the municipal code and Chapter <u>54</u> CDC.

Applicant's

Street trees will be installed as part of the public improvements with the development

Finding:

of this subdivision.

The requirements of this section have been satisfied.

4. <u>Lighting</u>. To reduce ambient light and glare, high or low pressure sodium light bulbs shall be required for all subdivision street or alley lights. The light shall be shielded so that the light is directed downwards rather than omni-directional.

Applicant's Finding: Any street light installation with the subdivision will utilize high or low pressure sodium

light bulbs.

The requirements of this section have been satisfied.

5. <u>Dedications and exactions</u>. The City may require an applicant to dedicate land and/or construct a public improvement that provides a benefit to property or persons outside the property that is the subject of the application when the exaction is roughly proportional. No exaction shall be imposed unless supported by a determination that the exaction is roughly proportional to the impact of development.

Applicant's Finding: The applicant is proposing right-of-way dedication and improvements that necessary to connect and complete two major gaps within the City's road network at Crestview and Sunbreak. Along the southwestern side of the property, the Applicant has proposed to dedicate a 24' section of Right-of-way. The adjacent property has development potential and their access will be limited to the alignment of the northbound extension of Tannler. This dedication is proportional to both the Applicant and the neighbor as both developments would benefit from the eventual construction of the roadway. Additional dedication and/or public improvements would exceed rough proportionality of this development.

The requirements of this section have been satisfied.

6. <u>Underground utilities</u>. All utilities, such as electrical, telephone, and television cable, that may at times be above ground or overhead shall be buried underground in the case of new development. The exception would be in those cases where the area is substantially built out and adjacent properties have above-ground utilities and where the development site's frontage is under 200 feet and the site is less than one acre. High voltage transmission lines, as classified by Portland General Electric or electric service provider, would also be exempted. Where adjacent future development is expected or imminent, conduits may be required at

the direction of the City Engineer. All services shall be underground with the exception of standard above-grade equipment such as some meters, etc.

Applicant's Finding: All utilities will be installed in compliance with this section.

The requirements of this section have been satisfied.

7. <u>Density requirement</u>. Density shall occur at 70 percent or more of the maximum density allowed by the underlying zoning. These provisions would not apply when density is transferred from Type I and II lands as defined in CDC <u>02.030</u>. Development of Type I or II lands are exempt from these provisions. Land divisions of three lots or less would also be exempt.

Applicant's Finding: The R-7 zone permits a maximum density of 6.2 dwelling units per net acre. Net acre is defined as "The total gross acres less the public right-of-way and other acreage deductions, as applicable". The net acreage of this site after removal of dedicated right-of way is 2.26 acres. At 6.2 dwelling units per net acre, the maximum number of dwelling units on this site is 14. The proposed 11 dwelling units would be 79 percent of the maximum density, exceeding the 70 percent minimum.

The requirements of this section have been satisfied.

8. <u>Mix requirement</u>. The "mix" rule means that developers shall have no more than 15 percent of the R-2.1 and R-3 development as single-family residential. The intent is that the majority of the site shall be developed as medium high density multi-family housing.

Applicant's Finding: This property is zoned R-7 and, therefore, the use of the parcel as an entirely residential development is permitted.

The requirements of this section have been satisfied.

9. Heritage trees/significant tree and tree cluster protection. All heritage trees, as defined in the Municipal Code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction. All non-heritage trees and clusters of trees (three or more trees with overlapping dripline; however, native oaks need not have an overlapping dripline) that are considered significant by virtue of their size, type, location, health, or numbers shall be saved pursuant to CDC 55.100(B)(2). Trees are defined per the municipal code as having a trunk six inches in diameter or 19 inches in circumference at a point five feet above the mean ground level at the base of the trunk.

Applicant's Finding: No heritage trees have been identified on this site.

The requirements of this section have been satisfied.

10. Annexation and street lights. Developer and/or homeowners association shall, as a condition of approval, pay for all expenses related to street light energy and maintenance costs until annexed into the City, and state that: "This approval is contingent on receipt of a final order by the Portland Boundary Commission, approving annexation of the subject property." This means, in effect, that any permits, public improvement agreements, final plats, and certificates of occupancy may not be issued until a final order is received. (Ord. 1377, 1995; Ord. 1382, 1995; Ord. 1401, 1997; Ord. 1403, 1997; Ord. 1408, 1998; Ord. 1425, 1998; Ord. 1442, 1999; Ord. 1463, 2000; Ord. 1526, 2005; Ord. 1544, 2007; Ord. 1584, 2008; Ord. 1590 § 1, 2009; Ord. 1604 § 64, 2011)

Applicant's

This property is within the City limits.

Finding:

The requirements of this section have been satisfied.

DIVISION 7. DISCRETIONARY PROVISIONS

CHAPTER 75. VARIANCE

75.020 CLASSIFICATION OF VARIANCES

B.2.C A Class II variance will involve a significant change from the zoning requirements and may create adverse impacts on adjacent property or occupants, and includes a variance to lot depth by more than 10 feet.

Applicant's Finding: Lots 3, 4, 7, 10 and 11 all have lot depths (the average horizontal distance between the front lot line and rear lot line) that exceed 2.5x lot width (the horizontal distance between side lot lines, measured at the building line) by more than 10 feet. Approval of these lots requires a Class II variance to the lot depth standard.

The requirements of this section have been satisfied.

75.060 APPROVAL CRITERIA

The appropriate approval authority shall approve a variance request if all the following criteria are met and corresponding findings of fact prepared. The approval authority may impose appropriate conditions to ensure compliance with the criteria. The approval authority shall deny the variance if any of the criteria are not met.

A. Exceptional or extraordinary circumstances apply to the property which do not apply generally to other properties in the same zone or vicinity, and result from lot size or shape, legally existing prior to the date of this code, topography, or other circumstances over which the applicant has no control.

Applicant's Finding:

This property is unusually long and thin with a depth of 787 feet and a width of 133 feet. This lot shape existed legally prior to the date of the development code. In addition, Crestview Drive and Sunbreak Lane dead-end into the subject property, limiting the options for lot layout and lot depth. These are both exceptional and extraordinary circumstances that apply to this property which do not apply generally to other properties

in the same zone or vicinity.

The requirements of this section have been satisfied.

B. The variance is necessary for the preservation of a property right of the applicant, which is substantially the same as a right possessed by owners of other property in the same zone or vicinity.

Applicant's Finding: The lot depth variance is necessary for the applicant to subdivide the property in a logical and efficient manner, a right all owners of property greater than 14,000 square feet in the R-7 zone possess.

The requirements of this section have been satisfied.

C. The authorization of the variance will not be materially detrimental to the purposes and standards of this code, will not be inconsistent with all other regulatory requirements, and will not conflict with the goals and policies of the West Linn Comprehensive Plan.

Applicant's Finding:

Authorization of the variance will result in residential development in the R-7 zone, not materially detrimental to the purposes and standards of the code. Development of this property with the lot depth variance is not inconsistent with all other regulatory requirements, and will not conflict with the goals and policies of the West Linn Comprehensive Plan.

The requirements of this section have been satisfied.

D. The variance request is the minimum variance which would alleviate the exceptional and extraordinary circumstance.

Applicant's Finding: Due to the layout of the existing streets, Crestview Drive and Sunbreak Lane, this variance request is the minimum variance which would alleviate the exceptional and extraordinary circumstance.

The requirements of this section have been satisfied.

E. The exceptional and extraordinary circumstance does not arise from the violation of this code.

Applicant's Finding: The exceptional and extraordinary circumstance arises from the existing lot size and street layout, not from a violation of this code. There are no code violations associated with this property.

The requirements of this section have been satisfied.

F. The variance will not impose physical limitations on other properties or uses in the area, and will not impose physical limitations on future use of neighboring vacant or underdeveloped properties as authorized by the underlying zoning classification. (Ord. 1442, 1999)

Applicant's Finding: The lot depth variance will not impose physical limitations on other properties or uses in the area. Approval of the lot depth variance does not impose any physical limitations on future use of neighboring vacant or underdeveloped properties as authorized by the underlying zoning classification. In fact, development of this property with the lot depth variance will extend Sunbreak Lane to the west, fostering the ability of the neighboring property to develop in the future. All other adjacent properties are developed.

The requirements of this section have been satisfied.

DIVISION 3 SUPPLEMENTAL PROVISIONS AND EXCEPTIONS

CHAPTER 33. STORMWATER QUALITY AND DETENTION

33.040 APPROVAL CRITERIA

The Planning Director and City Engineer shall make written findings with respect to the following criteria when approving, approving with conditions, or denying applications for stormwater detention permits and stormwater quality permits.

A. Stormwater quality facilities shall meet non-point source pollution control standards required by the Public Works Design Standards.

Applicant's Finding: The proposed stormwater design meets non-point source pollution control standards, as

shown in the stormwater report.

The requirements of this section have been satisfied.

B. Design of stormwater detention and pollution reduction facilities and related detention and water quality calculations shall meet Public Works Design Standards and shall be prepared by a professional engineer licensed to practice in the State of Oregon.

Applicant's Finding: The stormwater detention and pollution reduction facilities and related calculations were prepared by a professional engineer licensed to practice in the state of Oregon.

The requirements of this section have been satisfied.

C. Soil stabilization techniques, erosion control, and adequate improvements to accommodate the intended drainage through the drainage basin shall be used. Storm drainage shall not be diverted from its natural watercourse unless no feasible alternatives exist. Interbasin transfers of storm drainage will not be permitted.

Applicant's Finding: Soil stabilization techniques, erosion control and adequate improvements to accommodate drainage are detailed in the stormwater report and meet all standards.

The requirements of this section have been satisfied.

D. Stormwater detention and treatment facilities shall encroach no further than 25 feet into the outside boundary of a water quality resource area. The area of encroachment must be replaced by adding an equal area to the water quality resource area on the subject property.

Applicant's Finding: No stormwater detention or treatment facilities are proposed near or encroaching into

the boundary of a water quality resource area.

The requirements of this section have been satisfied.

E. Stormwater detention and treatment facilities shall be vegetated with plants from the Metro's Native Plant List as described in CDC 33.070.

Applicant's

All stormwater detention and treatment facilities will be vegetated with plants from

Finding:

Metro's Native Plant List.

The requirements of this section have been satisfied.

F. Projects must either stockpile existing topsoil for reuse on the site or import topsoil, rather than amend subsoils. Soil amendments are allowed only where the applicant can demonstrate they are the only practical alternative for enabling the soil to support healthy plantings, promoting better stormwater treatment, or improving soil infiltration capacity (where appropriate).

Applicant's

No soil amendments are proposed. Topsoil will be stockpiled and reused on site

Finding:

following bulk earthworks.

The requirements of this section have been satisfied.

G. Interim erosion control measures, such as mulching, shall be placed immediately upon completion of grading of the facilities. (Ord. 1463, 2000)

Applicant's

Interim erosion control measures will be used as necessary.

Finding:

The requirements of this section have been satisfied.

33.060 MAINTENANCE AND ACCESS REQUIREMENTS

Maintenance and access requirements shall meet Public Works Design Standards. (Ord. 1463, 2000)

Applicant's

The stormwater report includes maintenance and access pursuant to Public Works

Finding:

Design Standards.

The requirements of this section have been satisfied.

33.070 PLANT MATERIAL FOR WATER QUALITY FACILITIES

Metro's Native Plant List is incorporated by reference as a part of this chapter. The applicant shall submit a detailed planting plan using species from Metro's Native Plant List. The intent of this plan is to establish native vegetation to protect against erosion and sediment infiltration. A mix of low maintenance trees, shrubs, and groundcover is preferred with an even distribution.

A. The planting plan shall be prepared by a professional landscape architect if the development site contains more than 5,000 square feet of impervious area. The planting plan shall include a table listing the scientific names, size, and quantity of plants.

- B. The plan shall include plant location, species, size, and quantity for stormwater detention and treatment facilities. Evergreen trees shall have a minimum height of four feet and deciduous trees shall be at least one-inch caliper in size at the time of planting. Shrubs shall be a minimum of one gallon in size at the time of planting. Spaces shall be filled at mature growth but not so that overplanting occurs and overcrowding results. Temporary irrigation systems or other means of ensuring establishment of the plantings must be specified.
- C. Plantings shall be designed to minimize or eliminate the need for herbicides, fertilizers, pesticides, or soil amendments at any time before, during, or after construction, or on a long-term basis. Plantings shall be designed to minimize or eliminate the need for frequent mowing and irrigation.
- D. The applicant is responsible for implementing the planting plan during the next fall or spring planting season following permit approval. Prior to planting, noxious vegetation shall be removed. All soil areas must be covered with specified plants and mulch to prevent erosion.
- E. Plantings shall be incorporated into a public improvement guarantee agreement, which includes a maintenance bond as required by CDC 91.010(C). The maintenance bond is required for any project involving stormwater quality and detention facilities. (Ord. 1463, 2000)

Applicant's

The planting plan for the water quality tract is included within the stormwater report

Finding:

and meets the requirements of this section.

The requirements of this section have been satisfied.

CHAPTER 42. CLEAR VISION AREAS

42.020 CLEAR VISION AREAS REQUIRED, USES PROHIBITED

- A. A clear vision area shall be maintained on the corners of all property adjacent to an intersection as provided by CDC 42.040 and 42.050.
- B. A clear vision area shall contain no planting, fence, wall, structure or temporary or permanent obstruction (except for an occasional utility pole or tree) exceeding three feet in height, measured from the top of the curb, or, where no curb exists, from the street centerline grade, except that trees exceeding this height may be located in this area, provided all branches below eight feet are removed. (Ord. 1192, 1987)

42.030 EXCEPTIONS

The following described area in Willamette shall be exempt from the provisions of this chapter. The parcels of land zoned General Commercial which abut Willamette Falls Drive, located between 10th and 16th Streets. Beginning at the intersection of Willamette Falls Drive and 11th Street on 7th Avenue to 16th Street; on 16th Street to 9th Avenue; on 9th Avenue to 14th Street to the Tualatin River; following the Tualatin River and Willamette River to 12th Street; on 12th Street to 4th Avenue; on 4th Avenue to 11th Street; on 11th Street to Willamette Falls Drive. This described area does not include the northerly side of Willamette Falls Drive.

42.040 COMPUTATION; STREET AND ACCESSWAY 24 FEET OR MORE IN WIDTH

The clear vision area for all street intersections and street and accessway intersections (accessways having 24 feet or more in width) shall be that triangular area formed by the right-of-way or property

lines along such lots and a straight line joining the right-of-way or property line at points which are 30 feet distant from the intersection of the right-of-way line and measured along such lines.

42.050 COMPUTATION; ACCESSWAY LESS THAN 24 FEET IN WIDTH

The clear vision area for street and accessway intersections (accessways having less than 24 feet in width) shall be that triangular area whose base extends 30 feet along the street right-of-way line in both directions from the centerline of the accessway at the front setback line of a single-family and two-family residence, and 30 feet back from the property line on all other types of uses.

Applicant's Finding:

All clear vision areas at the intersections of public streets with driveways or other public streets on the subject site will be free of plantings, fences, walls, structures and obstructions, meeting the requirements for clear vision areas.

The requirements of this section have been satisfied.

CHAPTER 44. FENCES

44.020 SIGHT-OBSCURING FENCE; SETBACK AND HEIGHT LIMITATIONS

A. A sight- or non-sight-obscuring fence may be located on the property line or in a yard setback area subject to the following:

1. The fence is located within:

- A required front yard area, and it does not exceed three feet, except pillars and driveway entry features subject to the requirements of Chapter <u>42</u> CDC, Clear Vision Areas, and approval by the Planning Director;
- A required side yard which abuts a street and it is within that portion of the side yard which is also part of the front yard setback area and it does not exceed three feet;
- c. A required side yard which abuts a street and it is within that portion of the side yard which is not also a portion of the front yard setback area and it does not exceed six feet provided the provisions of Chapter <u>42</u> CDC are met;
- d. A required rear yard which abuts a street and it does not exceed six feet; or
- e. A required side yard area which does not abut a street or a rear yard and it does not exceed six feet.

Applicant's Finding: New fences are not indicated on the proposed plans because the exact locations have yet to be determined. All fences constructed as part of this subdivision will meet the requirements of these standards. The existing 4'wire fence will be removed as part of site construction.

The requirements of this section have been satisfied.

B. <u>Fence or wall on a retaining wall</u>. When a fence is built on a retaining wall or an artificial berm, the following standards shall apply:

- 1. When the retaining wall or artificial berm is 30 inches or less in height from finished grade, the maximum fence or wall height on top of the retaining wall shall be six feet.
- When the retaining wall or earth berm is greater than 30 inches in height, the combined height of the retaining wall and fence or wall from finished grade shall not exceed eight and one-half feet.
- 3. Fences or walls located on top of retaining walls or earth berms in excess of 30 inches above finished grade may exceed the total allowed combined height of eight and one-half feet; provided, that the fence or wall is located a minimum of two feet from the retaining wall and the fence or wall height shall not exceed six feet.

Applicant's

Any fences built on retaining walls will meet these standards.

Finding:

The requirements of this section have been satisfied.

44.030 SCREENING OF OUTDOOR STORAGE

- A. All service, repair, and storage activities carried on in connection with any commercial, business or industrial activity and not conducted within an enclosed building shall be screened from view of all adjacent properties and adjacent streets by a sight-obscuring fence.
- B. The sight-obscuring fence shall be in accordance with provisions of Chapter 42 CDC, Clear Vision Areas, and shall be subject to the provisions of Chapter 55 CDC, Design Review.

Applicant's

This site is residential and no service, repair or storage activities in connection with

Finding:

commercial, business or industry activities are proposed.

The requirements of this section have been satisfied.

44.040 LANDSCAPING

Landscaping which is located on the fence line and which impairs sight vision shall not be located within the clear vision area as provided in Chapter 42 CDC.

44.050 STANDARDS FOR CONSTRUCTION

- A. The structural side of the fence shall face the owner's property; and
- B. The sides of the fence abutting adjoining properties and the street shall be maintained. (Ord. 1291, 1990

Applicant's

Any fences built will meet these standards.

Finding:

The requirements of this section have been satisfied.

CHAPTER 54. LANDSCAPING

54.020 APPROVAL CRITERIA

A. Every development proposal requires inventorying existing site conditions which include trees and landscaping. In designing the new project, every reasonable attempt should be made to preserve and protect existing trees and to incorporate them into the new landscape plan. Similarly, significant

landscaping (e.g., bushes, shrubs) should be integrated. The rationale is that saving a 30-foot-tall mature tree helps maintain the continuity of the site, they are qualitatively superior to two or three two-inch caliper street trees, they provide immediate micro-climate benefits (e.g., shade), they soften views of the street, and they can increase the attractiveness, marketability, and value of the development.

- B. To encourage tree preservation, the parking requirement may be reduced by one space for every significant tree that is preserved in the parking lot area for a maximum reduction of 10 percent of the required parking. The City Parks Supervisor or Arborist shall determine the significance of the tree and/or landscaping to determine eligibility for these reductions.
- C. Developers must also comply with the municipal code chapter on tree protection.
- D. <u>Heritage trees</u>. Heritage trees are trees which, because of their age, type, notability, or historical association, are of special importance. Heritage trees are trees designated by the City Council following review of a nomination. A heritage tree may not be removed without a public hearing at least 30 days prior to the proposed date of removal. Development proposals involving land with heritage tree(s) shall be required to protect and save the tree(s). Further discussion of heritage trees is found in the municipal code.

Applicant's Finding: This site is largely open and grassy with very few trees. There are no heritage trees identified on this site. There are 2 oak trees, and 3 birch trees located in the alignment of the extension of Crestview Drive that will need to be removed. There are 4 spruce trees and 1 pine tree located in the alignment of the extension of Sunbreak Lane that will need to be removed. The largest tree on site, a 30"fir in the southwest corner of the site, will be considered for preservation but will only be possibly retained with a modification to sidewalk City's construction standards.

The requirements of this section have been satisfied.

F. Landscaping (trees) in new subdivision.

- 1. Street trees shall be planted by the City within the planting strips (minimum six-foot width) of any new subdivision in conformity with the street tree plan for the area, and in accordance with the planting specifications of the Parks and Recreation Department. All trees shall be planted during the first planting season after occupancy. In selecting types of trees, the City Arborist may determine the appropriateness of the trees to local conditions and whether that tree has been overplanted, and whether alternate species should be selected. Also see subsection (C) of this section.
- 2. The cost of street trees shall be paid by the developer of the subdivision.
- 3. The fee per street tree, as established by the City, shall be based upon the following:
 - a. The cost of the tree;
 - b. Labor and equipment for original placement;

- c. Regular maintenance necessary for tree establishment during the initial two-year period following the City schedule of maintenance; and
- d. A two-year replacement warranty based on the City's established failure rate. (Ord. 1408, 1998; Ord. 1463, 2000)

Applicant's Finding:

The applicant will pay for the installation of street trees by the City and maintain the trees for the two-year establishment period.

The requirements of this section have been satisfied.

54.030 PLANTING STRIPS FOR MODIFIED AND NEW STREETS

All proposed changes in width in a public street right-of-way or any proposed street improvement shall, where feasible, include allowances for planting strips. Plans and specifications for planting such areas shall be integrated into the general plan of street improvements. This chapter requires any multi-family, commercial, or public facility which causes change in public right-of-way or street improvement to comply with the street tree planting plan and standards.

Applicant's Finding: 6-foot-wide planting strips will be installed between the sidewalk and the asphalt within

all new street right-of-way and along Bland Circle.

The requirements of this section have been satisfied.

54.040 INSTALLATION

- A. All landscaping shall be installed according to accepted planting procedures.
- B. The soil and plant materials shall be of good quality.
- C. Landscaping shall be installed in accordance with the provisions of this code.
- D. Certificates of occupancy shall not be issued unless the landscaping requirements have been met or other arrangements have been made and approved by the City such as the posting of a bond.

Applicant's

All landscaping installation will meet the requirements of this section.

Finding:

The requirements of this section have been satisfied.

54.050 PROTECTION OF STREET TREES

Street trees may not be topped or trimmed unless approval is granted by the Parks Supervisor or, in emergency cases, when a tree imminently threatens power lines.

Applicant's

There are no existing street trees adjacent to this property.

Finding:

The requirements of this section have been satisfied.

54.060 MAINTENANCE

- A. The owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of all landscaping which shall be maintained in good condition so as to present a healthy, neat, and orderly appearance and shall be kept free from refuse and debris.
- B. All plant growth in interior landscaped areas shall be controlled by pruning, trimming, or otherwise so that:
 - 1. It will not interfere with the maintenance or repair of any public utility;
 - 2. It will not restrict pedestrian or vehicular access; and
 - 3. It will not constitute a traffic hazard because of reduced visibility.

Applicant's Finding:

The owners of this property, including future homeowners, will be responsible for maintenance of landscaping.

The requirements of this section have been satisfied.

54.070 SPECIFICATION SUMMARY

***25% of residential/multi-family site must be landscaped.

Applicant's

A minimum of 25% of this site will be landscaped as part of the yards of future homes.

Finding:

The requirements of this section have been satisfied.

DIVISION 4. DESIGN REVIEW

CHAPTER 55. DESIGN REVIEW

55.100 APPROVAL STANDARDS - CLASS II DESIGN REVIEW

- B. Relationship to the natural and physical environment.
- 1. The buildings and other site elements shall be designed and located so that all heritage trees, as defined in the municipal code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction.

Applicant's

No heritage trees were identified on this site.

Finding:

The requirements of this section have been satisfied.

2. All heritage trees, as defined in the municipal code, all trees and clusters of trees ("cluster" is defined as three or more trees with overlapping driplines; however, native oaks need not have an overlapping dripline) that are considered significant by the City Arborist, either individually or in

consultation with certified arborists or similarly qualified professionals, based on accepted arboricultural standards including consideration of their size, type, location, health, long term survivability, and/or numbers, shall be protected pursuant to the criteria of subsections (B)(2)(a) through (f) of this section. In cases where there is a difference of opinion on the significance of a tree or tree cluster, the City Arborist's findings shall prevail. It is important to acknowledge that all trees are not significant and, further, that this code section will not necessarily protect all trees deemed significant.

- a. Non-residential and residential projects on Type I and II lands shall protect all heritage trees and all significant trees and tree clusters by either the dedication of these areas or establishing tree conservation easements. Development of Type I and II lands shall require the careful layout of streets, driveways, building pads, lots, and utilities to avoid heritage trees and significant trees and tree clusters, and other natural resources pursuant to this code. The method for delineating the protected trees or tree clusters ("dripline + 10 feet") is explained in subsection (B)(2)(b) of this section. Exemptions of subsections (B)(2)(c), (e), and (f) of this section shall apply.
- b. Non-residential and residential projects on non-Type I and II lands shall set aside up to 20 percent of the area to protect trees and tree clusters that are determined to be significant, plus any heritage trees. Therefore, in the event that the City Arborist determines that a significant tree cluster exists at a development site, then up to 20 percent of the non-Type I and II lands shall be devoted to the protection of those trees, either by dedication or easement. The exact percentage is determined by establishing the driplines of the trees or tree clusters that are to be protected. In order to protect the roots which typically extend further, an additional 10-foot measurement beyond the dripline shall be added. The square footage of the area inside this "dripline plus 10 feet" measurement shall be the basis for calculating the percentage (see figure below). The City Arborist will identify which tree(s) are to be protected. Development of non-Type I and II lands shall also require the careful layout of streets, driveways, building pads, lots, and utilities to avoid significant trees, tree clusters, heritage trees, and other natural resources pursuant to this code. Exemptions of subsections (B)(2)(c), (e), and (f) of this section shall apply. Please note that in the event that more than 20 percent of the non-Type I and II lands comprise significant trees or tree clusters, the developer shall not be required to save the excess trees, but is encouraged to do so.
- c. Where stubouts of streets occur on abutting properties, and the extension of those streets will mean the loss of significant trees, tree clusters, or heritage trees, it is understood that tree loss may be inevitable. In these cases, the objective shall be to minimize tree loss. These provisions shall also apply in those cases where access, per construction code standards, to a parcel is blocked by a row or screen of significant trees or tree clusters.
- d. For both non-residential and residential development, the layout shall achieve at least 70 percent of maximum density for the developable net area. The developable net area excludes all Type I and II lands and up to 20 percent of the remainder of the site for the purpose of protection of stands or clusters of trees as defined in subsection (B)(2) of this section.
- e. For arterial and collector street projects, including Oregon Department of Transportation street improvements, the roads and graded areas shall avoid tree clusters where possible. Significant trees, tree clusters, and heritage tree loss may occur, however, but shall be minimized.
- f. If the protection of significant tree(s) or tree clusters is to occur in an area of grading that is necessary for the development of street grades, per City construction codes, which will result in an

adjustment in the grade of over or under two feet, which will then threaten the health of the tree(s), the applicant will submit evidence to the Planning Director that all reasonable alternative grading plans have been considered and cannot work. The applicant will then submit a mitigation plan to the City Arborist to compensate for the removal of the tree(s) on an "inch by inch" basis (e.g., a 48-inch Douglas fir could be replaced by 12 trees, each four-inch). The mix of tree sizes and types shall be approved by the City Arborist.

Applicant's Finding:

The vast majority of existing significant trees on the site fall within the areas which are intended to allow for the connections of Crestview and Sunbreak. As such, almost none of the existing trees on the property can be retained.

Due to the Applicant's engineering design, it has been determined that a cluster of oak trees in the northwest corner of the site, along the proposed connection of Crestview, may be able to be maintained through the installation of a retaining wall. The Applicant has proposed to install the retaining wall approximately 10 feet away from the trunk of the tree cluster. This retaining wall will be located within the dripline plus ten area of the tree however, this proposal is the maximum amount of space available to preserve the tree given the significant grading efforts necessary to connect the two sections of Crestview Drive. The Applicant has proposed to create a tree preservation easement for the tree cluster that will be retained however, rather than using the City's drip line plus ten methodology for the creation of the easement, the Applicant has proposed to use the retaining wall as the edge of the easement.

As the removal of the other significant trees on site is being completed to allow for road extensions, the applicant has proposed to mitigate through plantings. Three significant trees with caliper measurements totaling 78 inches are going to be removed from the site. To mitigate for this removal, the Applicant has proposed to plant a total of 39 trees with caliper sizes of at least two inches. The result will be an inch for inch mitigation.

The requirements of this section have been satisfied.

CHAPTER 92. REQUIRED IMPROVEMENTS

92.010 PUBLIC IMPROVEMENTS FOR ALL DEVELOPMENT

The following improvements shall be installed at the expense of the developer and meet all City codes and standards:

A. Streets within subdivisions.

- All streets within a subdivision, including alleys, shall be graded for the full right-of-way width and improved to the City's permanent improvement standards and specifications which include sidewalks and bicycle lanes, unless the decision-making authority makes the following findings:
 - a. The right-of-way cannot be reasonably improved in a manner consistent with City road standards or City standards for the protection of wetlands and natural drainageways.
 - b. The right-of-way does not provide a link in a continuous pattern of connected local streets, or, if it does provide such a link, that an alternative street link already exists or the applicant has proposed an alternative street which provides the necessary connectivity, or the applicant has proven that there is no feasible location on the property for an alternative street providing the link.

- 2. When the decision-making authority makes these findings, the decision-making authority may impose any of the following conditions of approval:
 - A condition that the applicant initiate vacation proceedings for all or part of the rightof-way.
 - b. A condition that the applicant build a trail, bicycle path, or other appropriate way.

If the applicant initiates vacation proceedings pursuant to subsection (A)(2)(a) of this section, and the right-of-way cannot be vacated because of opposition from adjacent property owners, the City Council shall consider and decide whether to process a City-initiated street vacation pursuant to Chapter 271 ORS.

Construction staging area shall be established and approved by the City Engineer. Clearing, grubbing, and grading for a development shall be confined to areas that have been granted approval in the land use approval process only. Clearing, grubbing, and grading outside of land use approved areas can only be approved through a land use approval modification and/or an approved Building Department grading permit for survey purposes. Catch basins shall be installed and connected to pipe lines leading to storm sewers or drainageways.

- B. <u>Extension of streets to subdivisions</u>. The extension of subdivision streets to the intercepting paving line of existing streets with which subdivision streets intersect shall be graded for the full right-of-way width and improved to a minimum street structural section and width of 24 feet.
- C. <u>Local and minor collector streets</u> within the rights-of-way abutting a subdivision shall be graded for the full right-of-way width and approved to the City's permanent improvement standards and specifications. The City Engineer shall review the need for street improvements and shall specify whether full street or partial street improvements shall be required. The City Engineer shall also specify the extent of storm drainage improvements required. The City Engineer shall be guided by the purpose of the City's systems development charge program in determining the extent of improvements which are the responsibility of the subdivider.
- D. <u>Monuments</u>. Upon completion of the first pavement lift of all street improvements, monuments shall be installed and/or reestablished at every street intersection and all points of curvature and points of tangency of street centerlines with an iron survey control rod. Elevation benchmarks shall be established at each street intersection monument with a cap (in a monument box) with elevations to a U.S. Geological Survey datum that exceeds a distance of 800 feet from an existing benchmark.
- E. <u>Surface drainage and storm sewer system</u>. A registered civil engineer shall prepare a plan and statement which shall be supported by factual data that clearly shows that there will be no adverse impacts from increased intensity of runoff off site of a 100-year storm, or the plan and statement shall identify all off-site impacts and measures to mitigate those impacts commensurate to the particular land use application. Mitigation measures shall maintain pre-existing levels and meet buildout volumes, and meet planning and engineering requirements.
- F. <u>Sanitary sewers</u>. Sanitary sewers shall be installed to City standards to serve the subdivision and to connect the subdivision to existing mains.
 - 1. If the area outside the subdivision to be directly served by the sewer line has reached a state of development to justify sewer installation at the time, the Planning Commission may

- 2. If the installation is not made as an assessment project, the City may reimburse the subdivider an amount estimated to be a proportionate share of the cost for each connection made to the sewer by property owners outside of the subdivision for a period of 10 years from the time of installation of the sewers. The actual amount shall be determined by the City Administrator considering current construction costs.
- G. Water system. Water lines with valves and fire hydrants providing service to each building site in the subdivision and connecting the subdivision to City mains shall be installed. Prior to starting building construction, the design shall take into account provisions for extension beyond the subdivision and to adequately grid the City system. Hydrant spacing is to be based on accessible area served according to the City Engineer's recommendations and City standards. If required water mains will directly serve property outside the subdivision, the City may reimburse the developer an amount estimated to be the proportionate share of the cost for each connection made to the water mains by property owners outside the subdivision for a period of 10 years from the time of installation of the mains. If oversizing of water mains is required to areas outside the subdivision as a general improvement, but to which no new connections can be identified, the City may reimburse the developer that proportionate share of the cost for oversizing. The actual amount and reimbursement method shall be as determined by the City Administrator considering current or actual construction costs.

H. Sidewalks.

1. Sidewalks shall be installed on both sides of a public street and in any special pedestrian way within the subdivision, except that in the case of primary or secondary arterials, or special type industrial districts, or special site conditions, the Planning Commission may approve a subdivision without sidewalks if alternate pedestrian routes are available.

In the case of the double-frontage lots, provision of sidewalks along the frontage not used for access shall be the responsibility of the developer. Providing front and side yard sidewalks shall be the responsibility of the land owner at the time a request for a building permit is received. Additionally, deed restrictions and CC&Rs shall reflect that sidewalks are to be installed prior to occupancy and it is the responsibility of the lot or homeowner to provide the sidewalk, except as required above for double-frontage lots.

- 2. On local streets serving only single-family dwellings, sidewalks may be constructed during home construction, but a letter of credit shall be required from the developer to ensure construction of all missing sidewalk segments within four years of final plat approval pursuant to CDC 91.010(A)(2).
- 3. The sidewalks shall measure at least six feet in width and be separated from the curb by a six-foot minimum width planter strip. Reductions in widths to preserve trees or other topographic features, inadequate right-of-way, or constraints, may be permitted if approved by the City Engineer in consultation with the Planning Director.
- Sidewalks should be buffered from the roadway on high volume arterials or collectors by landscape strip or berm of three and one-half-foot minimum width.
- 5. The City Engineer may allow the installation of sidewalks on one side of any street only if the City Engineer finds that the presence of any of the factors listed below justifies such waiver:

- a. The street has, or is projected to have, very low volume traffic density;
- b. The street is a dead-end street;
- c. The housing along the street is very low density; or
- d. The street contains exceptional topographic conditions such as steep slopes, unstable soils, or other similar conditions making the location of a sidewalk undesirable.
- I. <u>Bicycle routes</u>. If appropriate to the extension of a system of bicycle routes, existing or planned, the Planning Commission may require the installation of separate bicycle lanes within streets and separate bicycle paths.
- J. <u>Street name signs</u>. All street name signs and traffic control devices for the initial signing of the new development shall be installed by the City with sign and installation costs paid by the developer.
- K. <u>Dead-end street signs</u>. Signs indicating "future roadway" shall be installed at the end of all discontinued streets. Signs shall be installed by the City per City standards, with sign and installation costs paid by the developer.
- L. <u>Signs indicating future use</u> shall be installed on land dedicated for public facilities (e.g., parks, water reservoir, fire halls, etc.). Sign and installation costs shall be paid by the developer.
- M. Street lights. Street lights shall be installed and shall be served from an underground source of supply. The street lighting shall meet IES lighting standards. The street lights shall be the shoe-box style light (flat lens) with a 30-foot bronze pole in residential (non-intersection) areas. The street light shall be the cobra head style (drop lens) with an approximate 50-foot (sized for intersection width) bronze pole. The developer shall submit to the City Engineer for approval of any alternate residential, commercial, and industrial lighting, and alternate lighting fixture design. The developer and/or homeowners association is required to pay for all expenses related to street light energy and maintenance costs until annexed into the City.
- N. <u>Utilities</u>. The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting, and cable television, shall be placed underground.
- O. <u>Curb cuts and driveways</u>. Curb cuts and driveway installations are not required of the subdivider at the time of street construction, but, if installed, shall be according to City standards. Proper curb cuts and hard-surfaced driveways shall be required at the time buildings are constructed.
- P. <u>Street trees</u>. Street trees shall be provided by the City Parks and Recreation Department in accordance with standards as adopted by the City in the Municipal Code. The fee charged the subdivider for providing and maintaining these trees shall be set by resolution of the City Council.
- Q. <u>Joint mailbox facilities</u> shall be provided in all residential subdivisions, with each joint mailbox serving at least two, but no more than eight, dwelling units. Joint mailbox structures shall be placed in the street right-of-way adjacent to roadway curbs. Proposed locations of joint mailboxes shall be designated on a copy of the tentative plan of the subdivision, and shall be approved as part of the tentative plan approval. In addition, sketch plans for the joint mailbox structures to be used shall be submitted and approved by the City Engineer prior to final plat approval. (Ord. 1180, 1986; Ord. 1192,

1987; Ord. 1287, 1990; Ord. 1321, 1992; Ord. 1339, 1993; Ord. 1401, 1997; Ord. 1408, 1998; Ord. 1442, 1999)

Applicant's

All improvements will be installed per the submitted plans and in conformance with the

Finding:

requirements of this title.

The requirements of this section have been satisfied.

92.030 IMPROVEMENT PROCEDURES

In addition to other requirements, improvements installed by the developer, either as a requirement of these regulations or at the developer's own option, shall conform to the requirements of this title and permanent improvement standards and specifications adopted by the City and shall be installed in accordance with the following procedure:

- A. Improvement work shall not be commenced until plans have been checked for adequacy and approved by the City. To the extent necessary for evaluation of the proposal, the improvement plans may be required before approval of the tentative plan of a subdivision or partition. Plans shall be prepared in accordance with the requirements of the City.
- B. Improvement work shall not be commenced until the City has been notified in advance, and if work has been discontinued for any reason, it shall not be resumed until the City has been notified.
- C. Improvements shall be constructed under the Engineer. The City may require changes in typical sections and details in the public interest if unusual conditions arise during construction to warrant the change.
- D. All underground utilities, sanitary sewers, and storm drains installed in streets by the subdivider or by any utility company shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed to a length obviating the necessity for disturbing the street improvements when service connections are made.
- E. A digital and mylar map showing all public improvements as built shall be filed with the City Engineer upon completion of the improvements. (Ord. 1408, 1998)

Applicant's

All improvements will be installed in conformance with the requirements of this title.

Finding:

The requirements of this section have been satisfied.

CHAPTER 99 PROCEDURES FOR DECISION MAKING: QUASI-JUDICIAL

99.030 APPLICATION PROCESS: WHO MAY APPLY, PRE-APPLICATION CONFERENCE, REQUIREMENTS, REFUSAL OF APPLICATION, FEES

- Who may apply.
 - 1. Applications for approval required under this chapter may be initiated by:
 - The owner of the property that is the subject of the application or the owner's duly authorized representative;

- b. The purchaser of such property who submits a duly executed written contract or copy thereof, which has been recorded with the Clackamas Clerk;
- c. A lessee in possession of such property who submits written consent of the owner to make such application; or
- d. Motion by the Planning Commission or City Council.
- 2. Any person authorized by this chapter to submit an application for approval may be represented by an agent who is authorized in writing by such a person to make the application.

Applicant's

The owner of the property is initiating this application for approval.

Finding:

The requirements of this section have been satisfied.

B. Pre-application conferences.

1. Subject to subsection (B)(4) of this section, a pre-application conference is required for, but not limited to, ***j. land divisions.

Applicant's

A pre-application meeting was held March 21, 2013.

Finding:

The requirements of this section have been satisfied.

C. The requirements for making an application.

- The application shall be made on forms provided by the Director as provided by CDC 99.040(A)(1);
- 2. The application shall be complete and shall contain the information requested on the form, shall address the appropriate submittal requirements and approval criteria in sufficient detail for review and action, and shall be accompanied by the deposit or fee required by CDC 99.033. No application will be accepted if not accompanied by the required fee or deposit. In the event an additional deposit is required by CDC 99.033 and not provided within the time required, the application shall be rejected without further processing or deliberation and all application materials shall be returned to the applicant, notwithstanding any determination of completeness. (Ord. 1527, 2005; Ord. 1568, 2008; Ord. 1590 § 1, 2009; Ord. 1599 § 6, 2011)

Applicant's

This application has been made on forms provided by the City's Planning Department.

Finding:

The application contains the necessary information and the required fee.

The requirements of this section have been satisfied.

99.033 FEES

The Council shall adopt a schedule of fees reasonably calculated to defray the expenses of the administrative process. The Council may establish either a set fee or a deposit system in which the applicant pays a deposit and the City determines the total administrative cost at the end of the process and refunds any unused amount of the deposit to the applicant. No additional deposit shall

be required for additional costs that are incurred because the matter is referred to or called up by a higher decision-making authority. The Council shall charge no fees for City-initiated land use applications or appeals filed by a recognized neighborhood association pursuant to the provisions of CDC 99.240. (Ord. 1527, 2005; Ord. 1568, 2008; Ord. 1604 § 70, 2011)

Applicant's Finding: The required fee was submitted with the land use application.

The requirements of this section have been satisfied.

99.038 NEIGHBORHOOD CONTACT REQUIRED FOR CERTAIN APPLICATIONS

Prior to submittal of an application for any subdivision, conditional use permit, multi-family project, planned unit development, commercial, office, or industrial development of over 1,500 square feet, or a zone change that requires a Comprehensive Plan amendment, the applicant shall contact and discuss the proposed development with any affected neighborhood as provided in this section. Although not required for other or smaller projects, contact with neighbors is highly recommended. The Planning Director may require neighborhood contact pursuant to this section prior to the filing of an application for any other development permit if the Director deems neighborhood contact to be beneficial.

- A. <u>Purpose</u>. The purpose of neighborhood contact is to identify potential issues or conflicts regarding a proposed application so that they may be addressed prior to filing. This contact is intended to result in a better application and to expedite and lessen the expense of the review process by avoiding needless delays, appeals, remands, or denials. The City expects an applicant to take the reasonable concerns and recommendations of the neighborhood into consideration when preparing an application. The City expects the neighborhood association to work with the applicant to provide such input.
- B. The applicant shall contact by letter all recognized neighborhood associations whose boundaries contain all or part of the site of the proposed development and all property owners within 500 feet of the site.
- C. The letter shall be sent by certified mail, return receipt requested, to the president of the neighborhood association, and to one designee as submitted to the City by the neighborhood association, and shall be sent by regular mail to the other officers of the association and the property owners within 500 feet. If another neighborhood association boundary is located within the 500-foot notice radius, the letter shall be sent to that association's president, and to one designee as submitted to the City by the neighborhood association as well. The letter shall briefly describe the nature and location of the proposed development, and invite the association and interested persons to a meeting to discuss the proposal in more detail. The meeting shall be scheduled at the association's regularly scheduled monthly meeting, or at another time at the discretion of the association, and not less than 20 days from the date of mailing of the notice. If the meeting is scheduled as part of the association's regular monthly meeting, the letter shall explain that the proposal may not be the only topic of discussion on the meeting agenda. The letter shall encourage concerned citizens to contact their association president, or their association designee, with any questions that they may want to relay to the applicant.

Neighborhood contact shall be initiated by the applicant by mailing the association president, and to one designee as submitted to the City by the neighborhood association, a letter, return receipt requested, formally requesting, within 60 days, a date and location to have their required

neighborhood meeting. The 60 days shall be calculated from the date that the applicant mails this letter to the association. If the neighborhood association does not want to meet within the 60-day timeframe, or if there is no neighborhood association, the applicant may hold a public meeting during the evening after 6:00 p.m., or on the weekend no less than 20 days from the date of mailing of the notice. All meetings shall be held at a location open to the public within the boundaries of the association or at a public facility within the City of West Linn. If the meeting is held at a business, it shall be posted at the time of the meeting as the meeting place and shall note that the meeting is open to the public and all interested persons may attend.

- D. On the same date the letters described in subsections A through C of this section are mailed, the applicant shall provide and post notice on the property subject to the proposed application. The notice shall be posted at a location visible from the public right-of-way. If the site is not located adjacent to a through street, then an additional sign shall be posted on the nearest through street. The sign notice shall be at least 11 inches by 17 inches in size on durable material and in clear, legible writing. The notice shall state that the site may be subject to a proposed development (e.g., subdivision, variance, conditional use) and shall set forth the name of the applicant and a telephone number where the applicant can be reached for additional information. The site shall remain posted until the conclusion of the meeting.
- E. An application shall not be accepted as complete unless and until the applicant demonstrates compliance with this section by including with the application:
 - 1. A copy of the certified letter to the neighborhood association with a copy of return receipt;
 - A copy of the letter to officers of the association and to property owners within 500 feet, including an affidavit of mailing and a copy of the mailing list containing the names and addresses of such owners and residents;
 - 3. A copy of the required posted notice, along with an affidavit of posting;
 - 4. A copy of the minutes of the meetings, produced by the neighborhood association, which shall include a record of any verbal comments received, and copies of any written comments from property owners, residents, and neighborhood association members. If there are no minutes, the applicant may provide a summary of the meeting comments. The applicant shall also send a copy of the summary to the chair of the neighborhood association. The chair shall be allowed to supplement the summary with any additional comments regarding the content of the meeting, as long as such comments are filed before the record is closed;
 - 5. An audiotape of the meeting; and
 - 6. In the event that it is discovered by staff that the aforementioned procedures of this section were not followed, or that a review of the audio tape and meeting minutes show the applicant has made a material misrepresentation of the project at the neighborhood meeting, the application shall be deemed incomplete until the applicant demonstrates compliance with this section. (Ord. 1425, 1998; Ord. 1474, 2001; Ord. 1568, 2008; Ord. 1590 § 1, 2009)

Applicant's Finding: This section requires the applicant to contact and discuss the proposed development with any affected neighborhood as provided in this section.

A meeting was held with the Savanna Oaks neighborhood association on May 7, 2013.

42

The meeting was scheduled and noticed per the requirements of this section, and the required neighborhood meeting documentation is submitted with this application. The applicant provided renderings and information regarding the proposed subdivision and answered all questions asked by the members of the neighborhood association.

This section does not contain any requirements for the presentation or the materials used to make the presentation. The section describes when a neighborhood meeting is required, how notice of the meeting is to be accomplished and what the application must include from the neighborhood meeting. Some changes have occurred in the proposed plan since the neighborhood meeting; however, the basic information of the subdivision (location, general lot layout, street connections, etc.) was presented to and discussed with the neighborhood association members.

The requirements of this section have been satisfied.

SUMMARY AND CONCLUSION

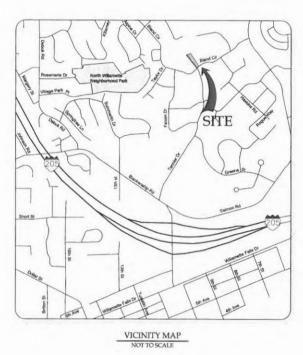
Based upon the materials submitted herein, the Applicant respectfully requests that the City's Planning Commission approve this Subdivision and Class II Variance application.

LAND USE DOCUMENTS

FOF

SUNBREAK SUBDIVISION

PREPARED FOR LF 3, LLC





A PORTION OF LOT 28, "BLAND ACRES"

LOCATED IN THE NW & NE 1/4 OF SECTION 35, T.2S., R.1E., W.M.

CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

PROJECT TEAM

OWNER/APPLICANT
JT SMITH COMPANIES
5285 MEADOWS ROAD, SUITE #171
LAKE OSWEGO, OR 97035
CONTACT, JOHN WYUND
JM/MCG(Barditon.com

CIVIL ENGINEER

GEOTECHNICAL

GEOPADIFIC ENGINEERING, INC. 14835 SW 72MD AVENUE PORTLAND, OR 97224 CONTACT: SCOTT HARDMAN PHONE: (503) 925-4455 shardman@geopacifloong.com

CONSULTANT

JUL 2 4 2013

PLANNING & BUILDING CITY OF WEST LINN TIME

CIVIL ENGINEER
3J CONSULTING, INC.
10445 SW CANYON ROAD, SUITE 245
BEAVERTON, OR 97006
CONTACT: BRIAN FEENEY
PHONE: (S03) 946-6905
brian Jeeney@Sj-consulting.com

PLANNING
CONSULTANT
3J CONSULTING, INC
1945 SW CANYON ROAD, SUITE 245
BEAVERTON, OR PROS
CONTACT: ANDREW TULL
PROME: 503-696-6965
EMAIL: marrow 1/4@3*consulting.com

LAND SURVEYOR
COMPASS SURVEYING
4107 SE INTERNATIONAL WAY, SUITE 705
MILWAUREL OR 97222
CONTACT, DON DEVLACIMINGE, PLS
PHONE: 503-463-4603
donoglycompass registering.com

SITE INFORMATION

SITE ADDRESS 23150 BLAND CROLE WEST LINN, OR 97068

TAX LOT(S) 251E35A 1300

FLOOD HAZARD MAP NUMBER 4100600257D ZONE X (UNSHADED)

JURISDICTION CITY OF WEST LINN

ZONING

0.00	COVER SHEET
0.10	EXISTING CONDITIONS PLAN
21.1	DEMOLITION PLAN
C1.2	TREE PROTECTION AND REMOVAL PLAN
C1.3	SLOPE ANALYSIS PLAN
C2.0	TENTATIVE SUBDIVISION PLAT
C2.1	SUNBREAK LANE PLAN & PROFILE
C2.2	CRESTVIEW DRIVE PLAN & PROFILE
C2.3	BLAND CIRCLE STREET IMPROVEMENT PLAN
C2.4	GRADING AND EROSION CONTROL PLAN
02.5	COMPOSITE UTILITY PLAN
2.5	STREET LIGHTING PLAN
02.7	TANNLER DRIVE FUTURE EXTENSION
L1.0	MITIGATION PLANTING PLAN

SUCKEUTING, INC

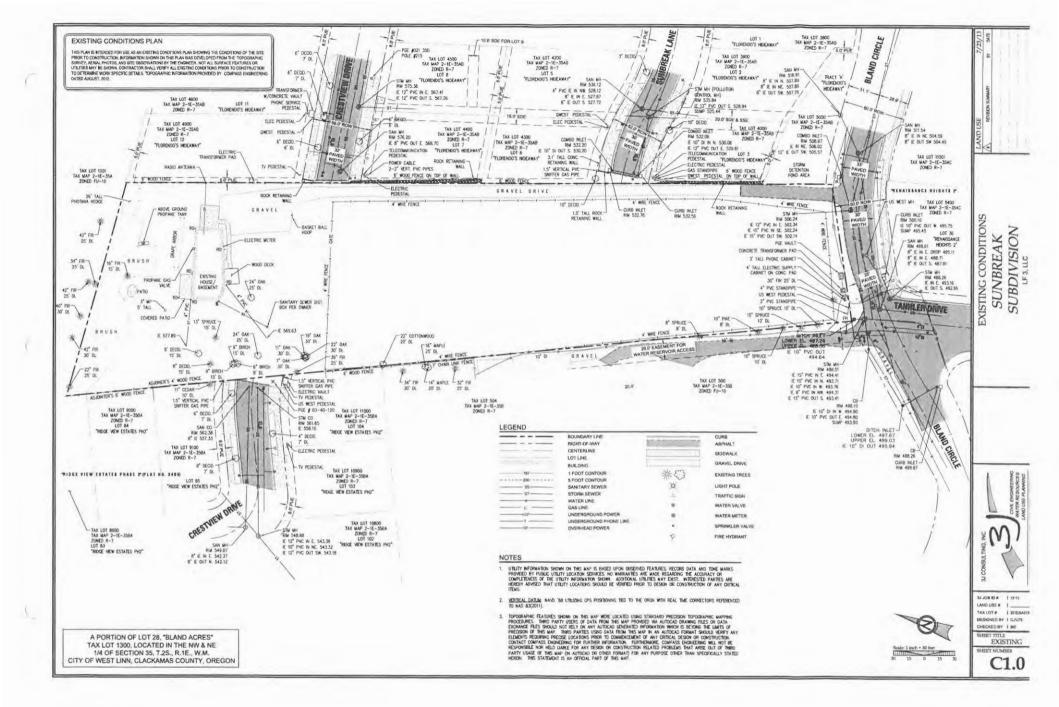
COVER SHEET
SUNBREAK
SUBDIVISION
LF3,LLC

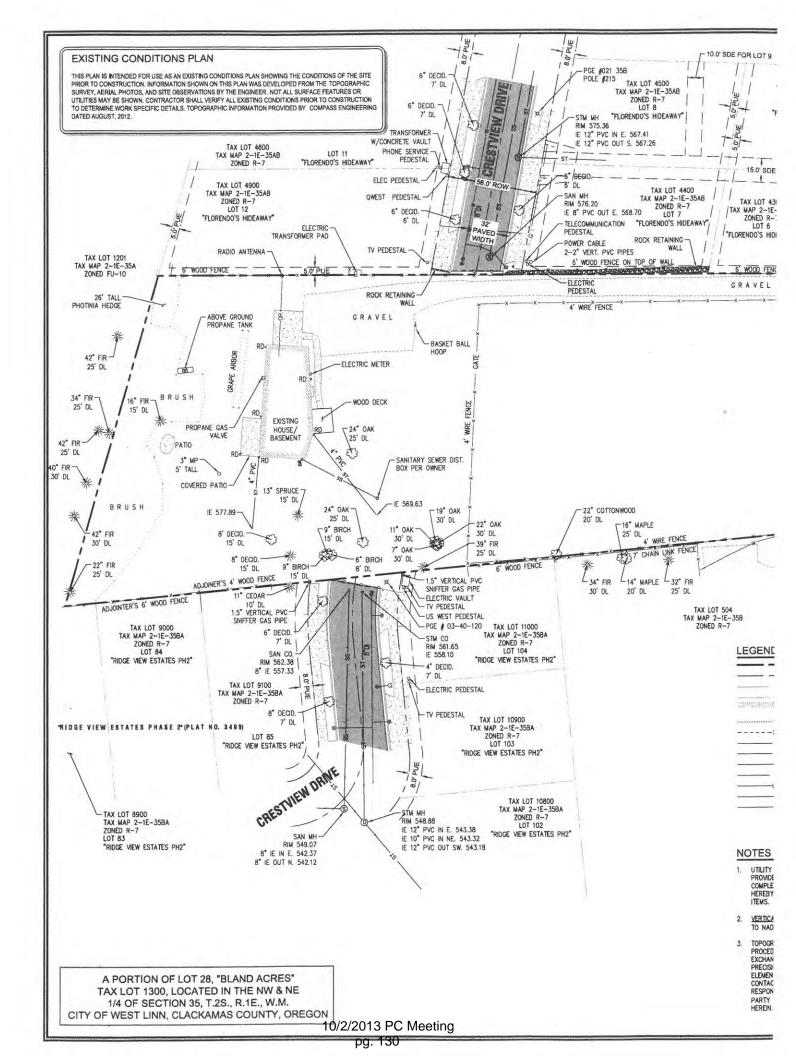
SJ JOB ID # | 13113 LAND USE # | TAX LDT # | 251635401300 DESIGNED BY | CJF4TE CHECKED BY | BVF

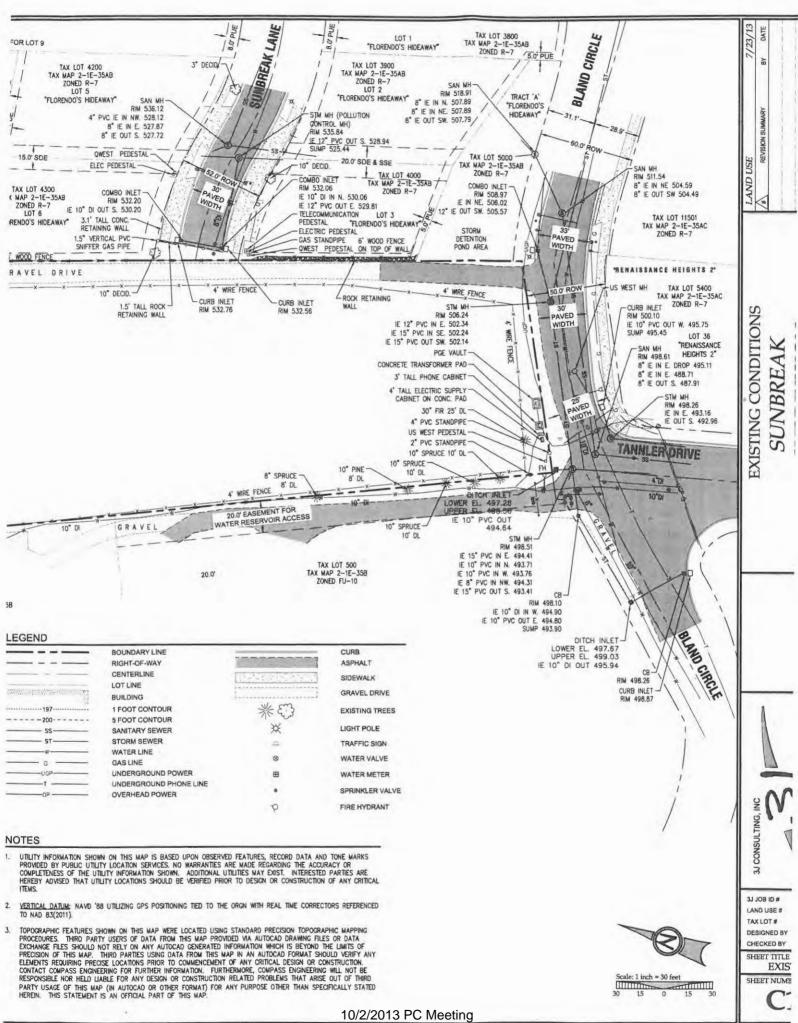
SHEET TITLE
COVER SHEET

CO.0

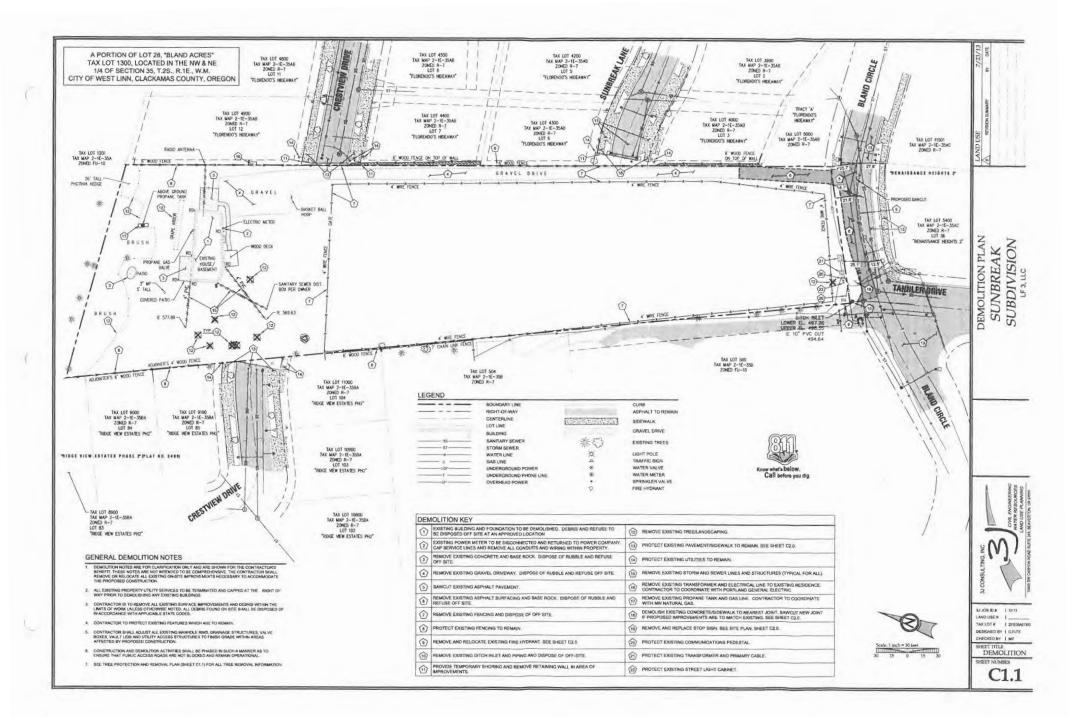
10/2/2013 PC Meeting pg. 128

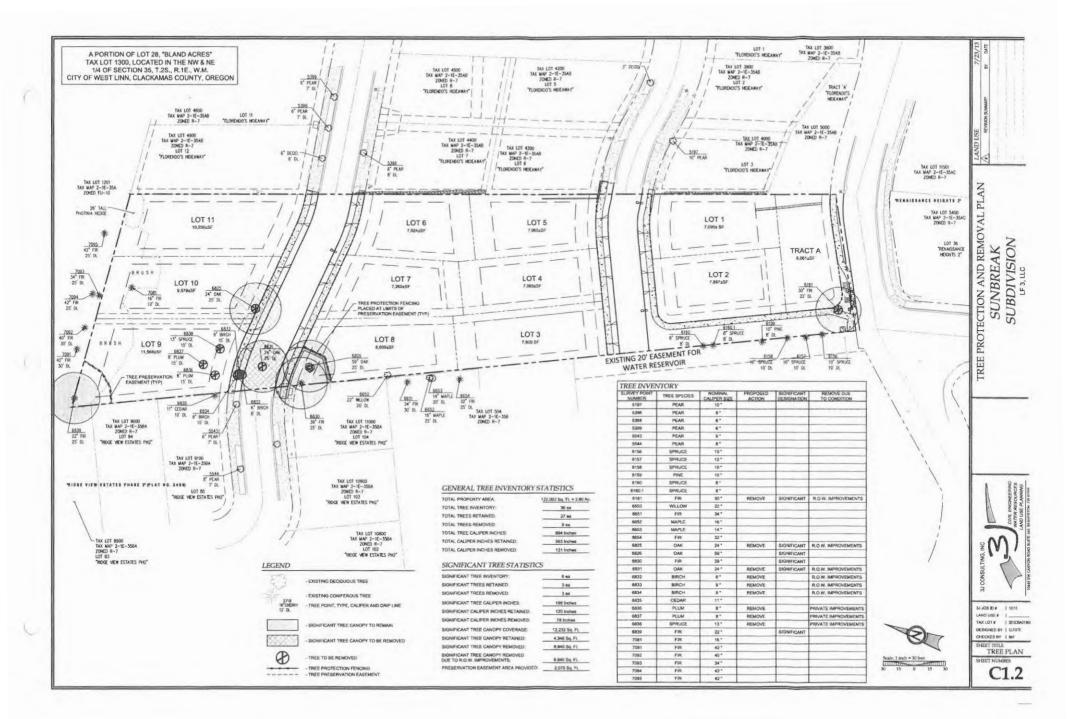


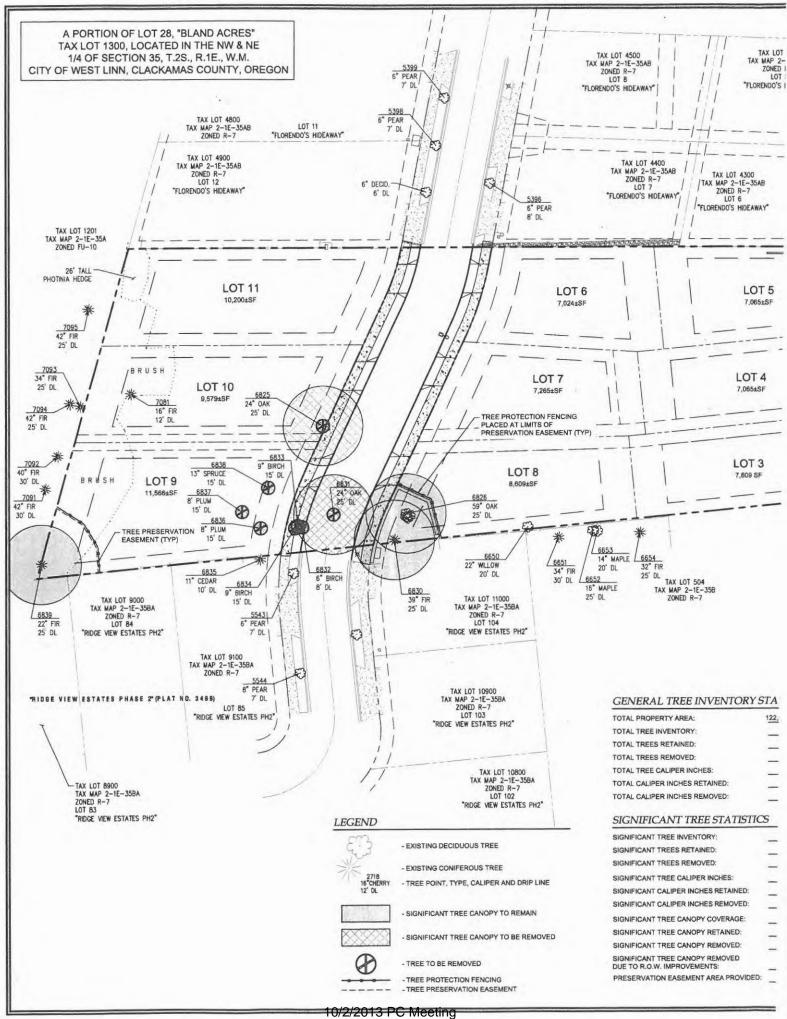




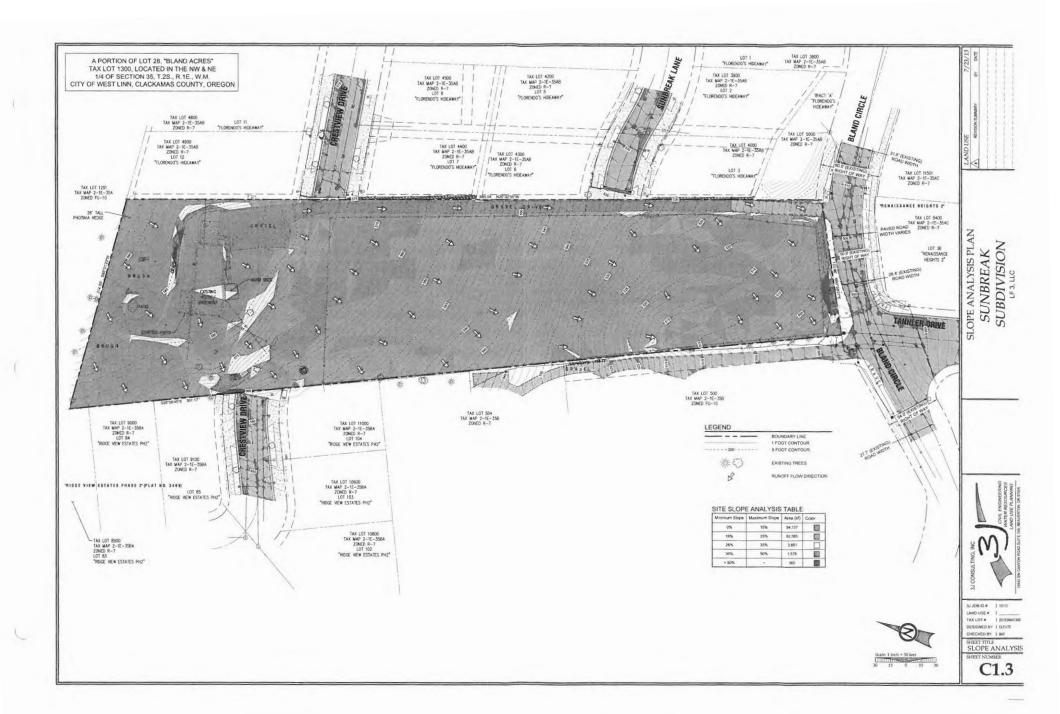
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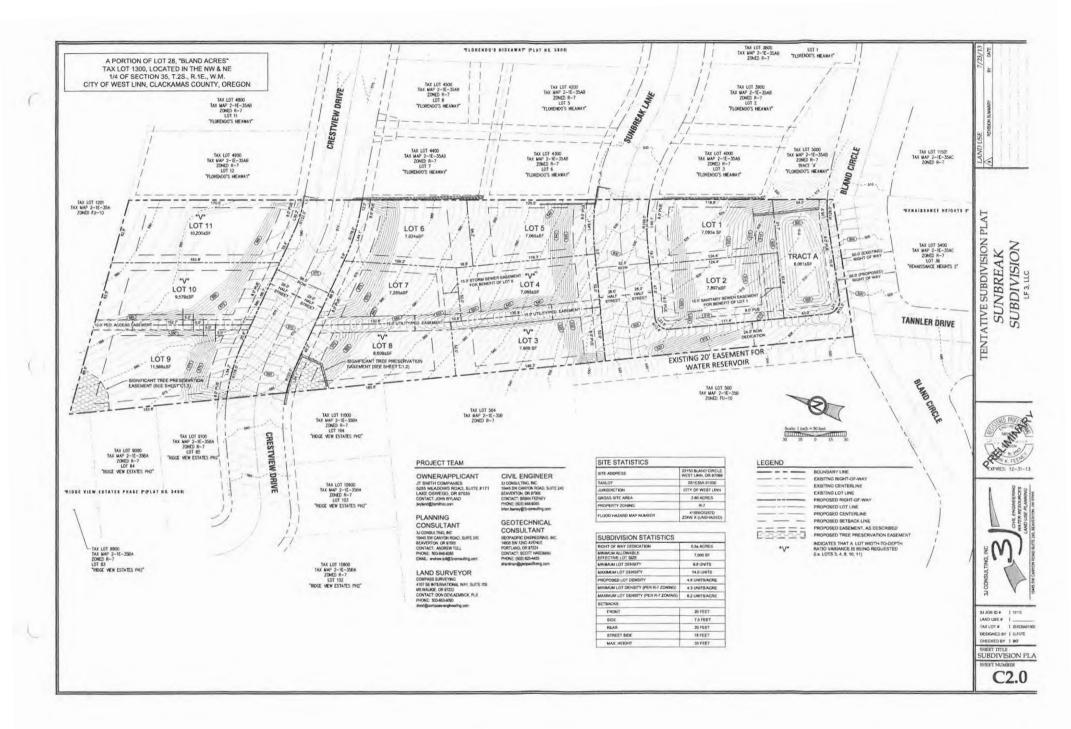




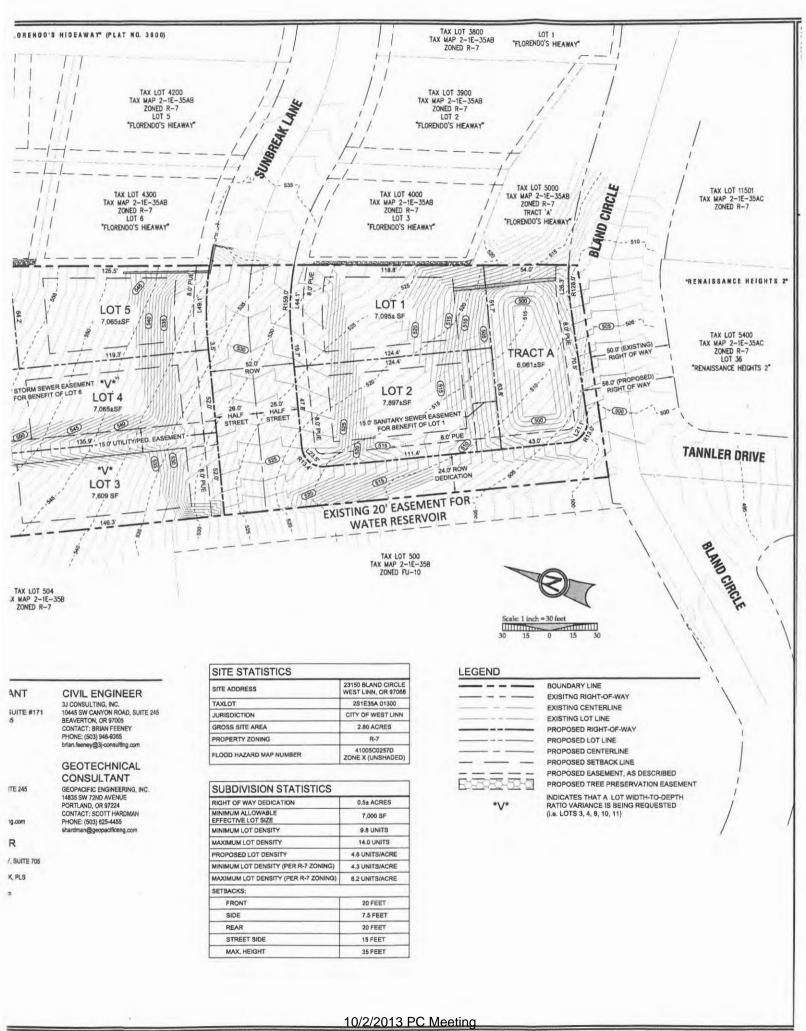




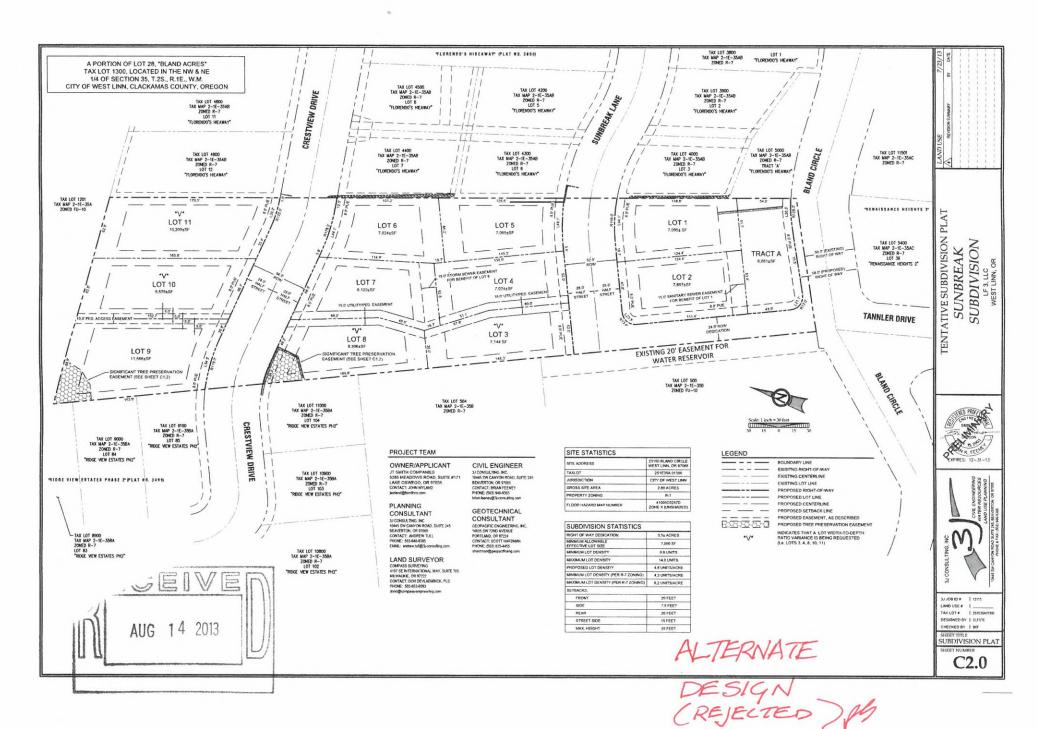


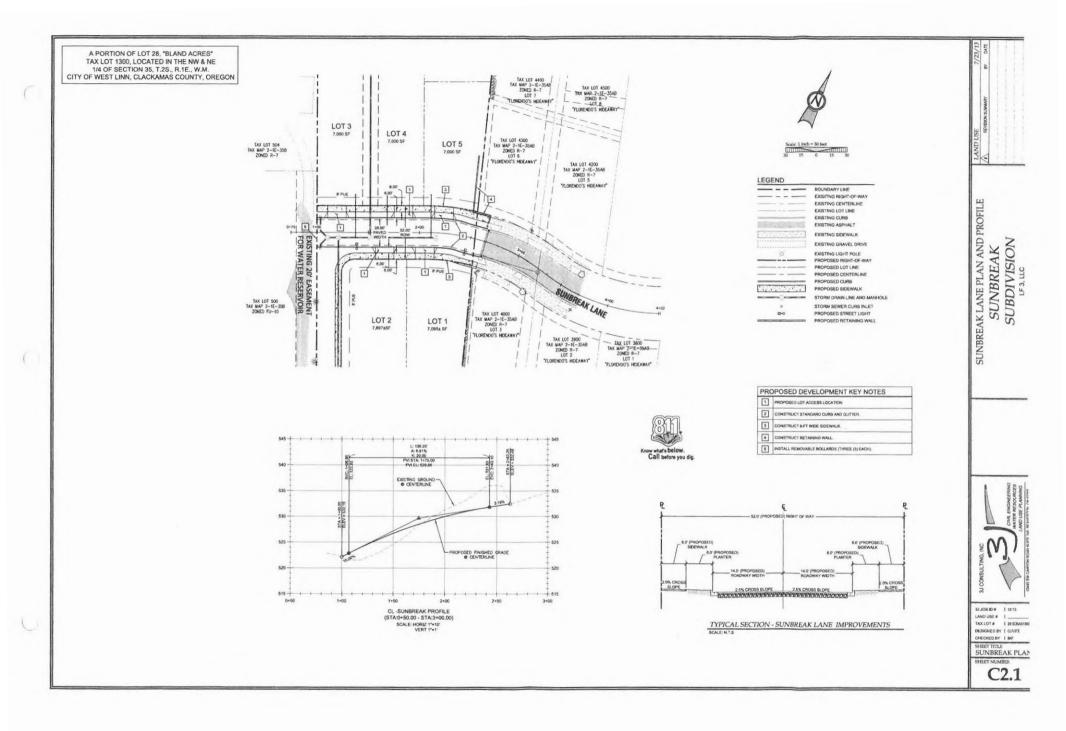


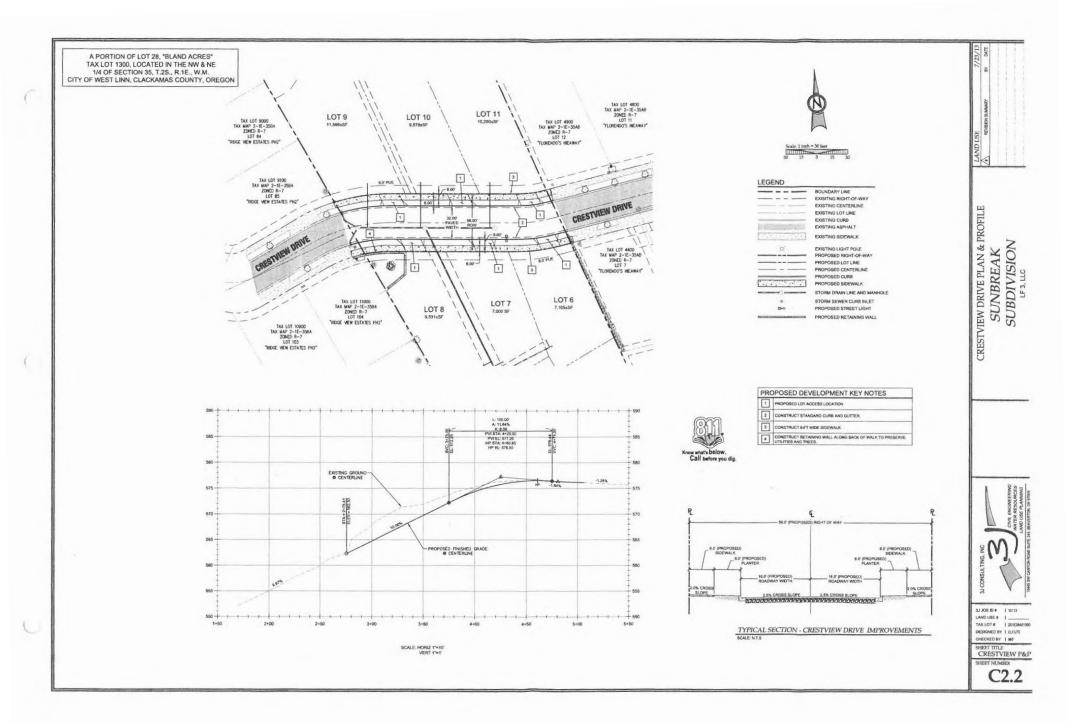


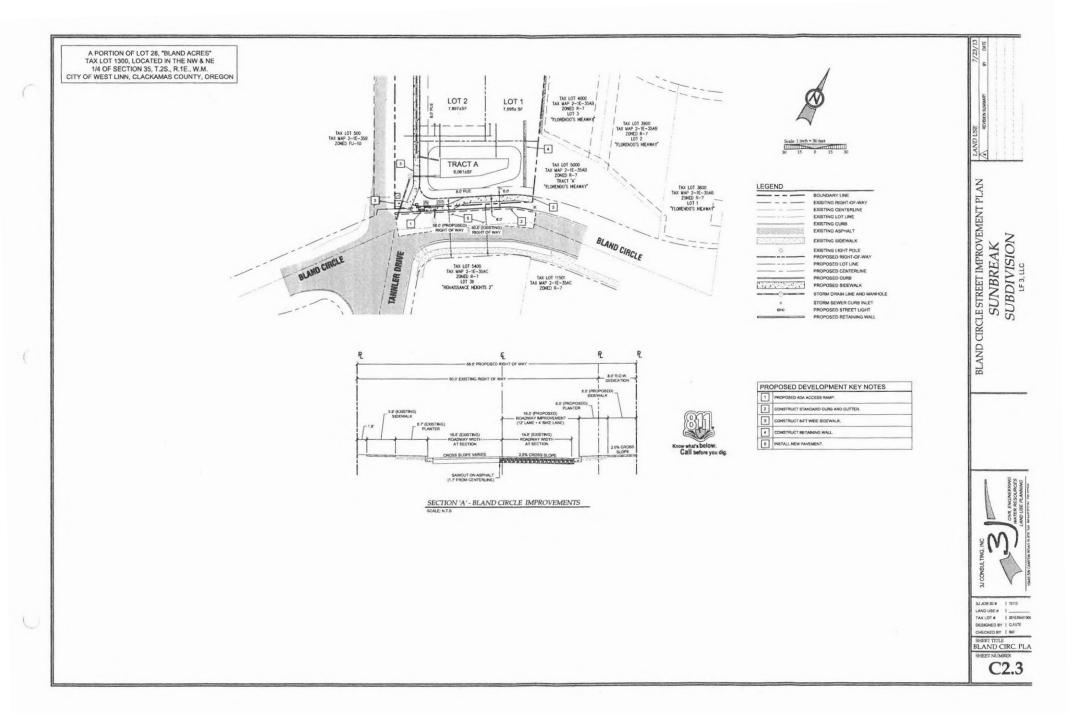


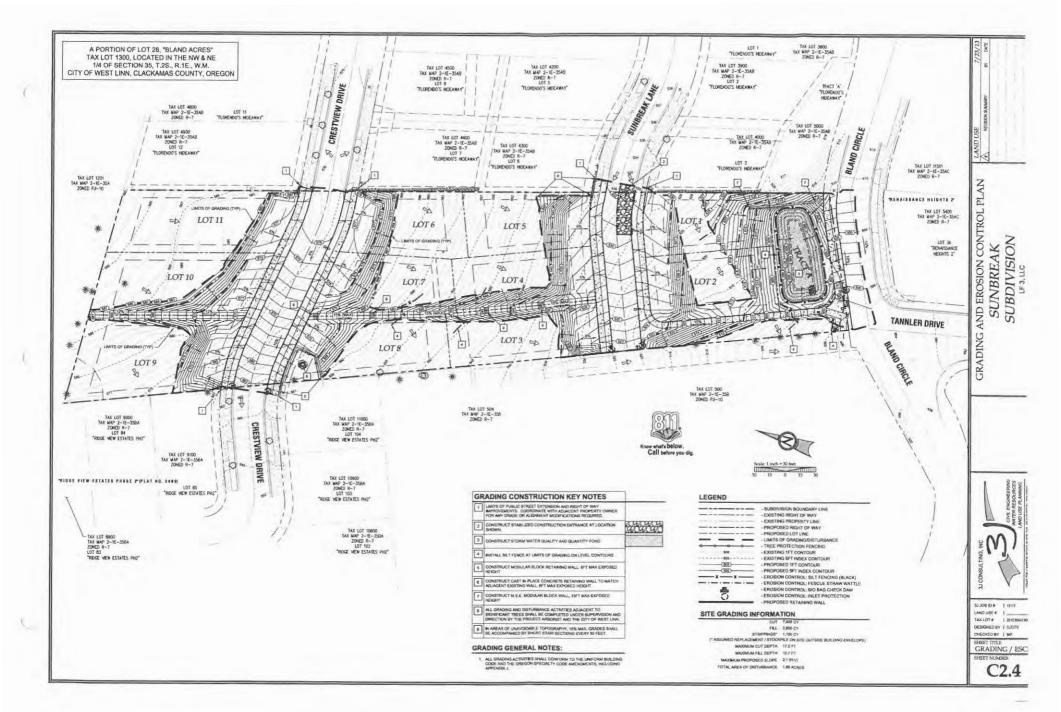
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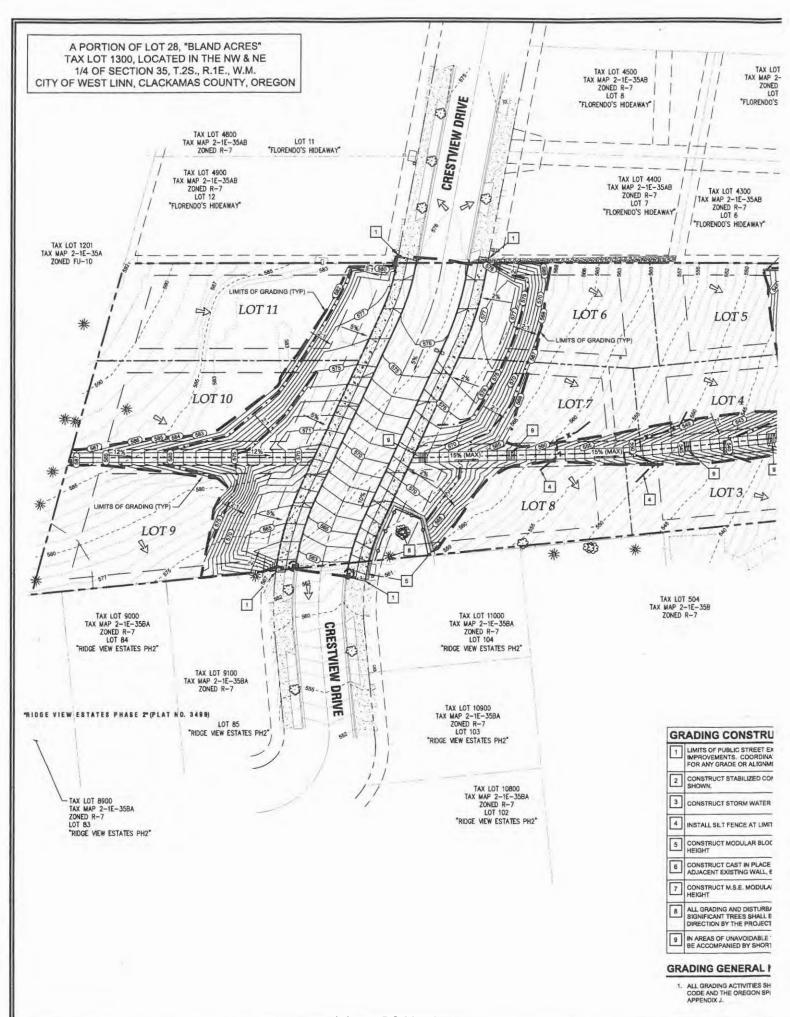






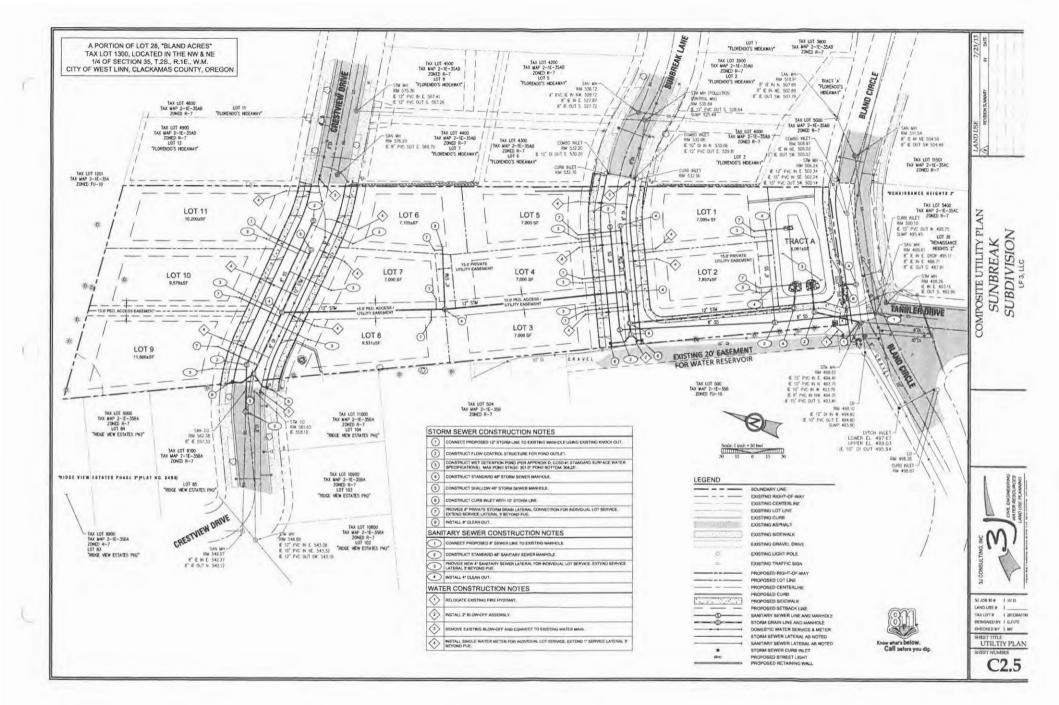


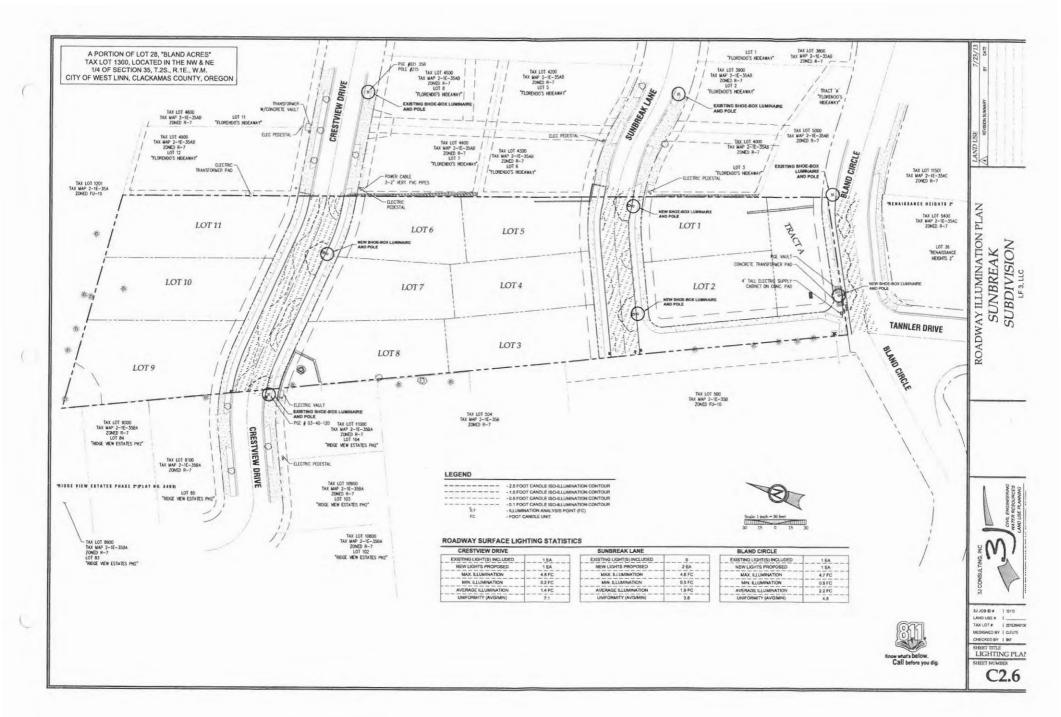


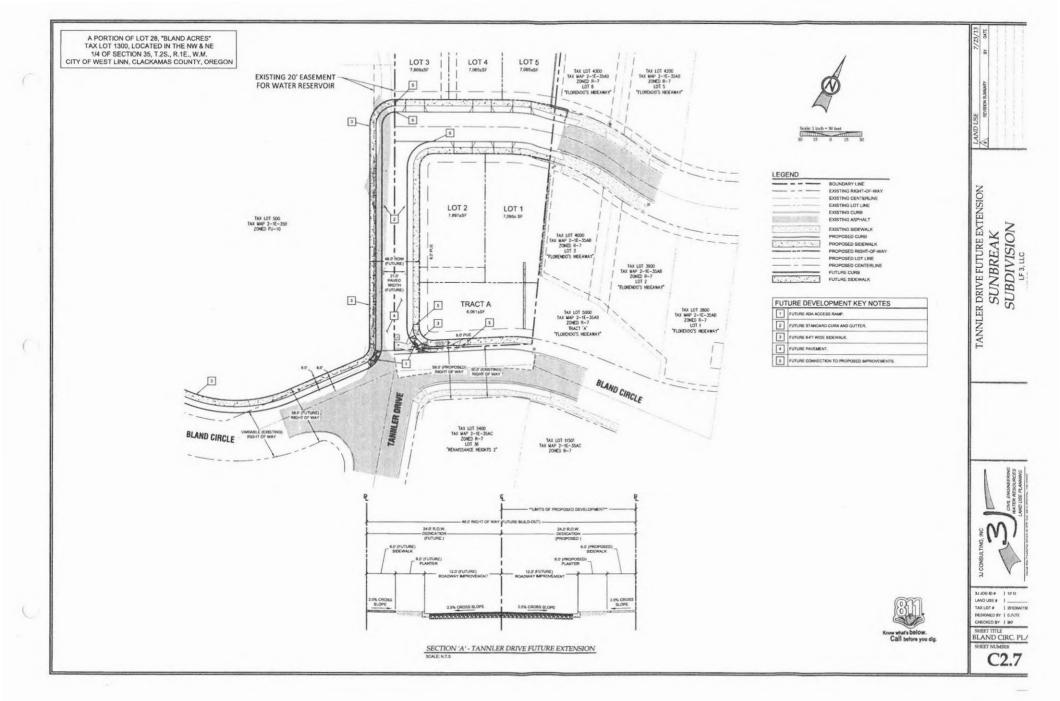


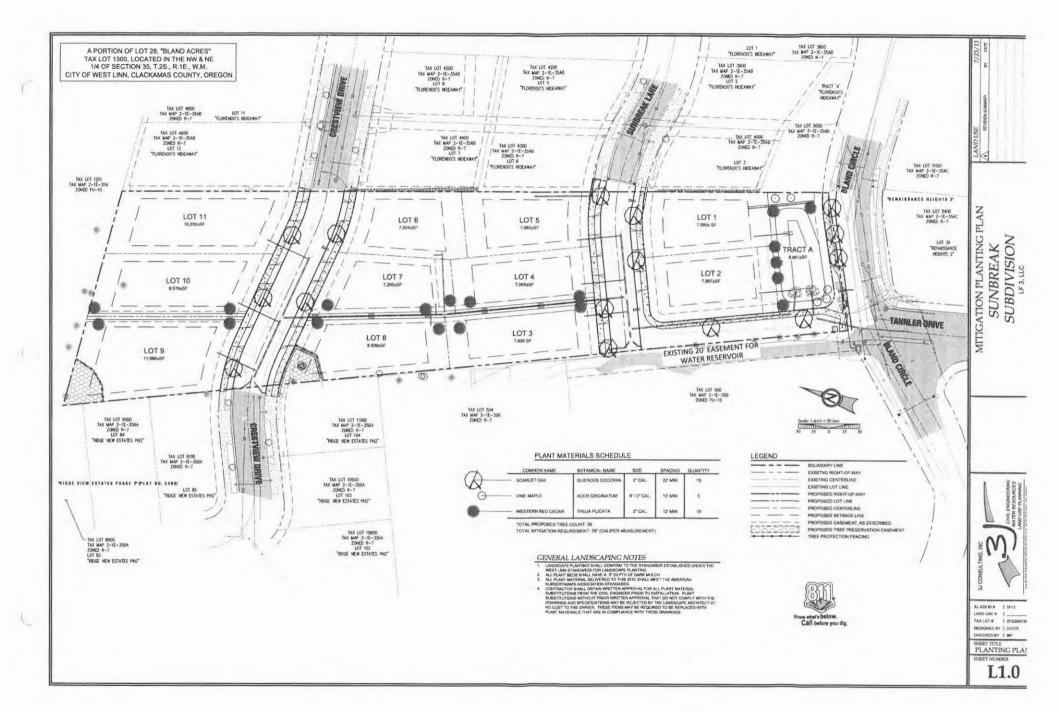
10/2/2013 PC Meeting













Property Information Department 121 SW Morrison Street Suite 300 - Portland, OR 97204 Phone: 503.219.TRIO (8746) Fax: 503.790.7872 Email: pid.portland@firstam.com Today's Date: 6/18/2013

OWNERSHIP INFORMATION

Owner

: Omlor John J & Rachel

Co Owner

Site Address : 23150 Bland Cir West Linn 97068

Taxpayer

Mail Address : 23150 Bland Cir West Linn Or 97068

: Omlor John J & Rachel

Ref Parcel Number: 21E35A 01300

Parcel Number : 00405145

T: 02S R: 01E S: 35 Q: NE QQ:

County

: Clackamas (OR) Telephone : 503-656-9502

PROPERTY DESCRIPTION

Map Page & Grid

: 686 H7

Census Tract

: 205.01

Improvement Type

Block: 2 : 142 Sgl Family,R1-4,1-Story (Basement)

Subdivision/Plat

: Bland Acres : West Linn Newer

Neighborhood Land Use

Legal

: 101 Res, Residential Land, Improved

: 304 BLAND AC PT LT 28

ASSESSMENT AND TAX INFORMATION

Mkt Land : \$355,686

Mkt Structure : \$205,860

Mkt Total : \$561,546

% Improved

: 37

12-13 Taxes : \$7,394.41

Exempt Amount

Exempt Type

: 003002

Levy Code Millage Rate

: 18.7110

M50AssdValue : \$401,115

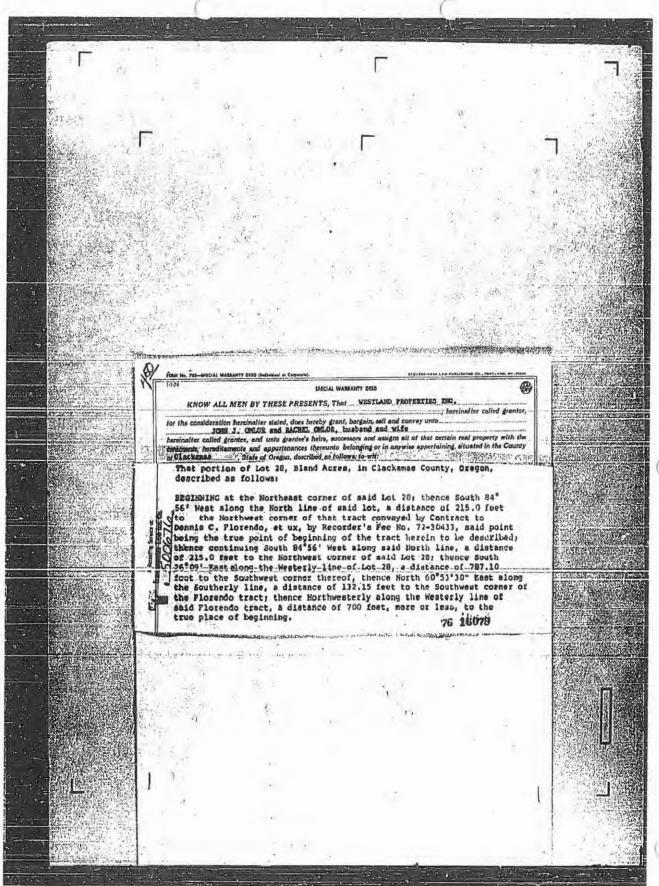
PROPERTY CHARACTERISTICS

Bedrooms	: 5	Building SF	: 3,000	BldgTotSqFt	: 2,250
Bathrooms	: 3.00	1st Floor SF	: 1,500	Lot Acres	: 2.82
Full Baths	:3	Upper Finished SF	: 532	Lot SqFt	: 122,996
Half Baths	1	Finished SF	: 2,250	Garage SF	: 540
Fireplace	: Stacked	Above Ground SF	: 1,500	Year Built	: 1976
Heat Type	: Forced Air-Gas	Upper Total SF	: 532	School Dist	: 003
Floor Cover	: Carpet	UnFinUpperStorySF	:	Foundation	: Concrete
Stories	: 1 Story-Bsmt	Basement Fin SF	: 750	Roof Type	: Clay Tile
Int Finish	: Drywall	Basement Unfin SF	: 750	Roof Shape	: Gable
Ext Finsh	: Stucco	Basement Total SF	: 1,500		

TRANSFER INFORMATION

Owner Name(s)	Sale Date	Doc#	Sale Price	Deed Type	Loan Amount	Loan Type	
:Omlor John J;Rachel	:		:	:	1	:	
:	:		:	:	:	:	
1-	:		:	:	:	:	
:	:		:	:	:	:	
:	:		;	:	:	:	
:	:		:	:	:	:	

This title information has been furnished, without charge, in conformance with the guidelines approved by the State of Oregon Insurance Commissioner. The Insurance Division cautions intermediaries that this service is designed to benefit the ultimate insureds. Indiscriminate use only benefiting intermediaries will not be permitted. Said services may be discontinued. No liability is assumed for any errors in this report.



Title Data, Inc. FA POR10350 CL 76016079.001

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	STATE OF OREGON: County of 19 Papping appeared the above named and acknowledged the Ioregoing instru- ment to be would be a wound and deed. Belove me: (OFFICIAL SEAL) Notary Public for Oregon My commission applies	STATE OF OREGON, County of Clackamas) as 1975 Personally appeared Burry L. Van Minkle and who, being duty every, each ise himself and not one lot the other, did say that the former is the predicted and that the interest is the survey W - LTASSURT WESTLAND PROPERTIES. INC. and that the sast allies to be forestelle instrument is the consortie had not interested and such all it said corporation by authority of its board of directors and such of them extensionabled call finitument to be its voluntary and and dead. The said finitument to be its voluntary and and dead. Notary Public lot Origin Notary Public lot Origin Ny scanningen expirate 5/12/78
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City of West Linn PRE-APPLICATION CONFERENCE MEETING Notes

March 21, 2013

SUBJECT:

Eleven lot "Sunbreak" subdivision at 23150 Bland Circle with

possible Class II Variances for lots that do not meet the

dimensional standards of the R-7 zone (the "two and a half times

rule") and blocks in excess of 800 feet.

ATTENDEES:

Applicants: Jeff Smith, John Wyland, Heather Austin, Andrew Tull

Staff: Peter Spir (Planning Department), Khoi Le (Engineering

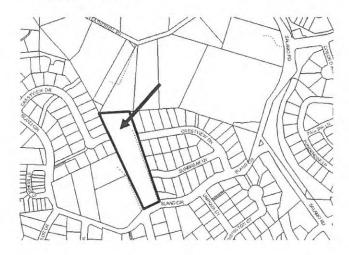
Division)

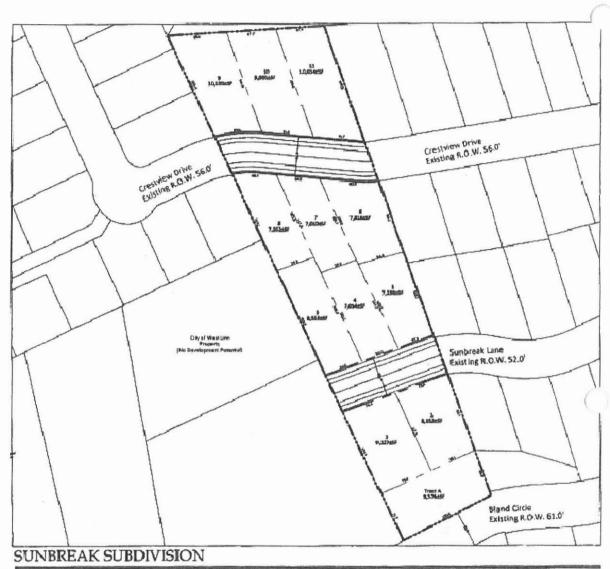
Neighborhood representative: Ed Schwarz, Savanna Oaks N.A.

The following is a summary of the meeting discussion provided to you from staff meeting notes. Additional information may be provided to address any "follow-up" items identified during the meeting. <u>These comments are PRELIMINARY in nature</u>. Please contact the Planning Department with any questions regarding approval criteria, submittal requirements, or any other planning-related items. Please note disclaimer statement below.

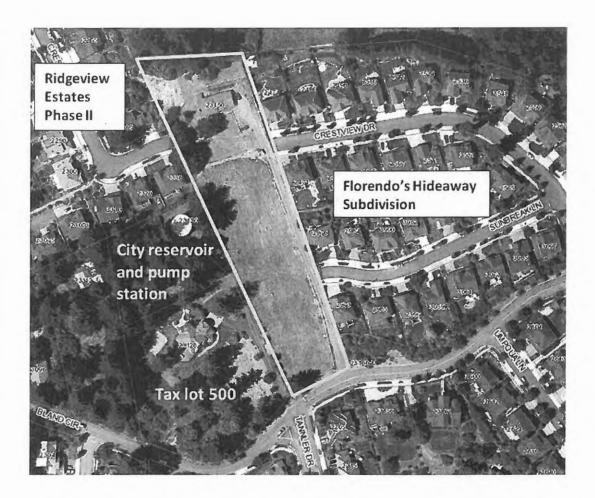
General Overview

The site address is 23150 Bland Circle in the Savanna Oaks neighborhood. It comprises 2.8-acres and is zoned R-7 (single family residential/ 7,000 square foot minimum lot size). The applicant is proposing 11 lots ranging from 7,010 to 10,190 square feet. The general form of the parcel is rectangular with a lot depth of over 787 feet and a width of 133 feet fronting Bland Circle. The notable physical characteristics of the site include a near constant uphill slope from Bland Circle and, with few exceptions, a lack of trees. Street stubouts from subdivisions to the east and northwest will facilitate and dictate most of the street alignments within this site. There is a house at the top of the property with a large parking pad.





A JT Smith Development



Specific Proposal

Eleven lots are proposed for Sunbreak subdivision. The lots are arranged on either side of Crestview Drive and Sunbreak Lane. These streets extend from, and will connect with, adjacent subdivisions however the west end of Sunbreak Drive will require some realignment to facilitate reasonable development on tax lot 500 and to connect with Bland Circle at Tannler Drive. Per the R-7 zoning, all lots are over 7,000 square feet in size. The proposed lot sizes range from 7,010 square feet up to 10,654 square feet. To accommodate a storm water treatment and detention pond, tract A is established at the low point adjacent to Bland Circle.

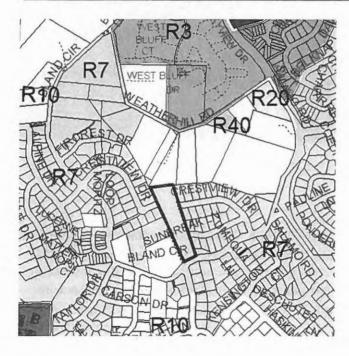
Surrounding Land Uses and Zoning

Along the east edge of the property is Florendo's Hideaway subdivision while Ridge View Estates Phase II subdivision occupies the land to the northwest of the property. Both subdivisions are occupied by single family homes consistent with the R-7 zoning. To the west is a City owned water reservoir and pump station while further down and also to

the west is a single family home on a large parcel that is unincorporated. To the south of the property are Bland Circle and the R-7 zoned Renaissance Heights II subdivision. To the north is an unincorporated property occupied by a single family home.

Table 1: Surrounding Land Use and Zoning

DIRECTION FROM SITE	LAND USE	ZONING
North	Single family residential	Unincorporated
East	Single family residential (Fernando's Hideaway Subdiv.)	R-7
South	Bland Circle with Single family residential further south	R-7
West (Three lots north to south)	Single family residential (Ridge View Estates Phase II) Bland Circle Pump Station and Reservoir Single family residential (Tax lot 500)	R-7 R-7 Unincorporated



Site Analysis

Slopes

The land rises 82 feet from Bland Circle's elevation of 505 feet to the north end of the property where the elevation is 587 feet. The slope of the hillside is fairly constant averaging 14 percent although the northernmost 150 feet, where the house and parking

are located, has a more modest slope of 0-5 percent. There are some small isolated slopes over 25 percent; most notably along the existing gravel driveway. However, these 25 percent sloped areas are not extensive enough to trigger a PUD. (It would require over 25 percent of the site to be sloped over 25 percent before a PUD is required.)

For most of the property there is a 10-12 foot drop in elevation from east to west yielding an average six percent cross slope.

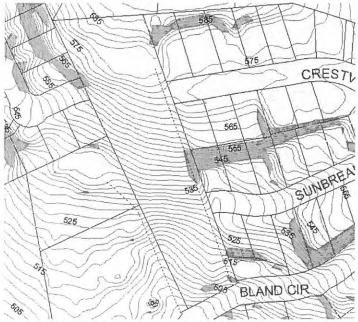


Figure 3: 25% slope indicated by grey areas above

Trees and Vegetation

The property is dominated by a large grass pasture. There is a large conifer at the southwest corner and a collection of various mature trees along the northwest edge of the site including at least two oaks trees which are located in the alignment of any connection to Crestview Drive. The backdrop to the property is a row of mature conifers behind the house. These trees are actually on the property to the north and are not part of this application.

Section 55.100(B)(2) provides for significant tree preservation and can require that up to 20 percent of the site be set aside for their protection. The code makes accommodation for the removal of trees in anticipated street alignments such as Crestview Drive (see 55.100(B)(2) exemptions) but the applicant should anticipate being required to mitigate for their loss on an inch by inch basis exclusive of normal street tree requirements. The mitigation can be on or off-site, or can be satisfied by a fee-in-lieu payment, if the Parks Department agrees to this.

The applicant's arborist should contact City Arborist Mike Perkins (503-723-2554 or $\frac{mperkins@westlinnoregon.gov}{mperkins@westlinnoregon.gov}) once the preliminary tree inventory is complete to verify which trees are significant.$

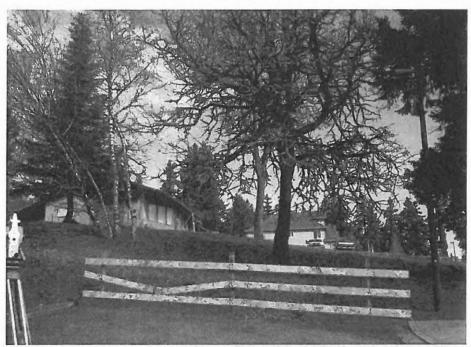


Figure 4: Oak trees near northwest corner of the property in line with the Crestview Drive stub out

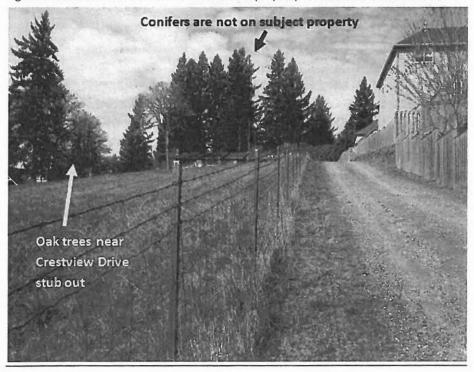


Figure 5: Trees near the top of the property

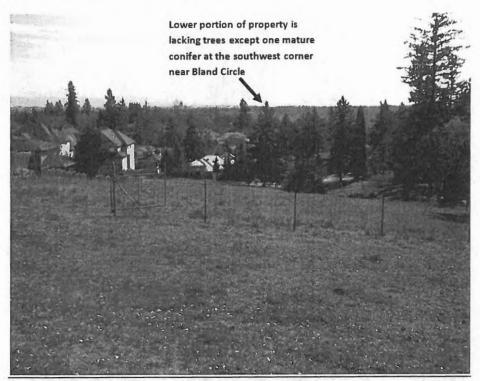


Figure 6: Looking downhill on property towards Bland Circle

Streams

There are no streams, wetlands or other Goal 5 protected resources on the property.

Expected Development Pattern/Street Connectivity

"Florendo's Hideaway" subdivision stubs Crestview Drive and Sunbreak Lane into the subject property. The expectation is that these streets will extend across this property and connect with the properties to the west. The connection of Crestview Drive is fairly obvious since that street's namesake is already built and stubbed out in Ridge View Estates Phase II to the west. Unfortunately, it is unlikely that two oak trees in the Crestview Drive alignment can be "designed around" since the grades in that area will need to be dropped significantly to connect with Ridge View Estates II.

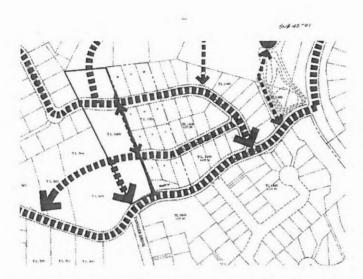
For Sunbreak Lane, the connection is challenging since the portion of the property that it would connect with (tax lot 500) is occupied by a large, attractive contemporary house. The applicant's initial proposed alignment would go right into that house. A more appropriate road alignment (and one that the applicant subsequently agreed to in principle) would angle southwards along the common lot line to connect Sunbreak Lane with Bland Circle at the Tannler Drive intersection. This alignment (See illustration of

street below) is consistent with the plan submitted when Florendo's Hideaway was applied for in 2002.



The applicant agreed to the concept of a shared street improvement to include ROW dedication, six foot wide sidewalk, six foot wide planter curb/gutter and 20 feet of street width with the expectation that the owner of tax lot 500 will complete the remaining street section when that property is developed. The use of a sidewalk easement on lot 2 would be supported by staff so as to minimize the impact on lot size. A hammerhead feature was also proposed to facilitate turn movements and provide access to lot 3.

The applicant also agreed to provide a curb, planter and sidewalk along Bland Circle frontage.



Proposed alignment submitted as part of Fernando's Hideaway 2002 application

Connecting Sunbreak Lane to Bland Circle also positively responds to the approval criteria of 85.200(A) (1):

"...Streets should provide for the continuation, or the appropriate projection, of existing principal streets in surrounding areas and should not impede or adversely affect development of adjoining lands or access thereto.

To accomplish this, the emphasis should be upon a connected continuous pattern of local, collector, and arterial streets rather than discontinuous curvilinear streets and cul-de-sacs."

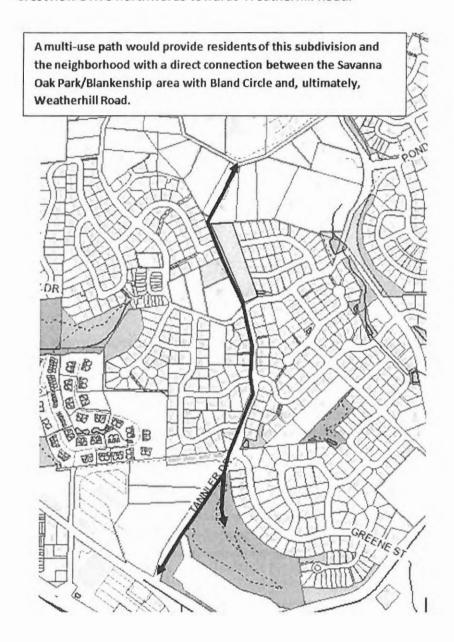
Sunbreak Lane, as originally proposed, would have violated 85.200(A) (11):

"11. <u>Cul-de-sacs</u>. Cul-de-sacs are not allowed except as required by topography, slope, site limitations, and lot shapes. Cul-de-sacs shall have maximum lengths of 400 feet and serve no more than 12 dwelling units, unless by variance per Chapter 75 CDC."

Staff discussed extending a multi-use path from the vicinity of lot 3 northwards through the City's reservoir/pump station property and along the west edge of lot 8 to Crestview Drive to facilitate pedestrian and bicycle to and from Tannler Drive and Savanna Oaks Park. Without that connection, the long east –west oriented blocks require a lengthy detour and discourage multi-modal use. The path would also provide a relatively safe

alternative to using Bland Circle which has many unimproved sections which lack sidewalks.

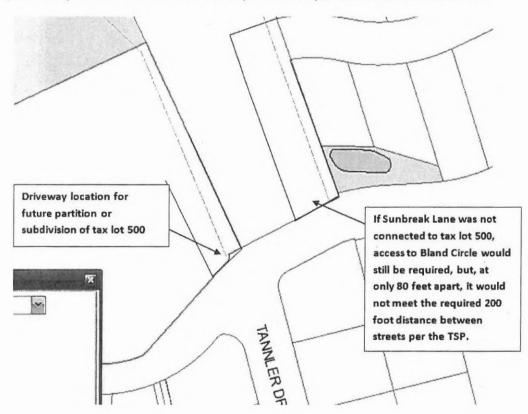
Extending that trail to the north property line via the west edge of lot 9 was not discussed, but such an alignment would provide for the long term connection with Weatherhill Road. The alternative to the trail would be the extension of the street from Crestview Drive northwards towards Weatherhill Road.

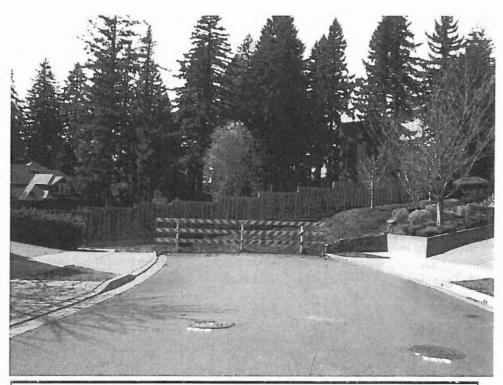


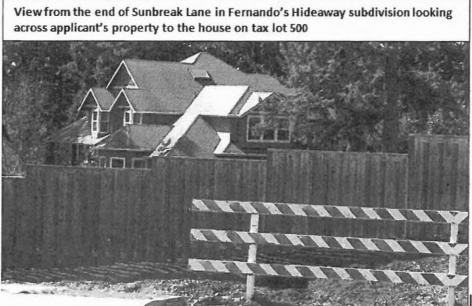
Regarding block length, staff notes that there is a maximum length of blocks of 800 feet in 85.200(B). Crestview Drive will be 1,849 feet in length. Sunbreak Lane will be 861 feet long. The applicant should be able to respond to the following code language:

85.200 (B) (2.) <u>Sizes</u>. The recommended block size is 400 feet in length to encourage greater connectivity within the subdivision. Blocks shall not exceed 800 feet in length between street lines, except for blocks adjacent to arterial streets or unless topographical conditions or the layout of adjacent streets justifies a variation. Designs of proposed intersections shall demonstrate adequate sight distances to the City Engineer's specifications. Block sizes and proposed accesses must be consistent with the adopted TSP.

It can be shown that Crestview Drive "justifies a variation" from 85.200(B) (2) given the layout of adjacent streets and the TSP separation requirements illustrated below.







Subsection 85.170(B) (2) (c) (1) lists the circumstances that require a traffic impact analysis (TIA).

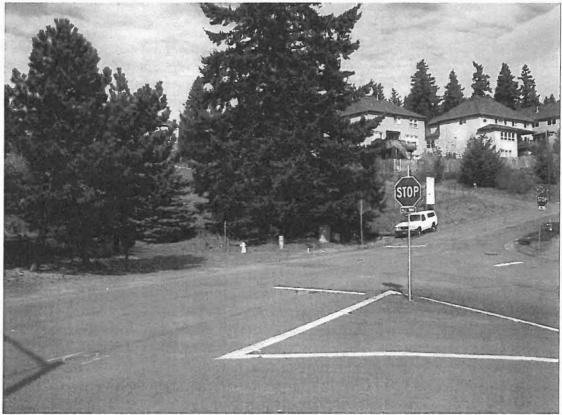
c. When required. A Traffic Impact Analysis may be required to be submitted to the City with a land use application, when the following conditions apply:

- 1) The development application involves one or more of the following actions:
 - (A) A change in zoning or a plan amendment designation; or
 - (B) Any proposed development or land use action that ODOT states may have operational or safety concerns along a State highway; and
 - (C) The development shall cause one or more of the following effects, which can be determined by field counts, site observation, traffic impact analysis or study, field measurements, crash history, Institute of Transportation Engineers Trip Generation manual; and information and studies provided by the local reviewing jurisdiction and/or ODOT:
 - (1) An increase in site traffic volume generation by 250 average daily trips (ADT) or more (or as required by the City Engineer); or
 - (2) An increase in use of adjacent streets by vehicles exceeding the 20,000-pound gross vehicle weights by 10 vehicles or more per day; or
 - (3) The location of the access driveway does not meet minimum intersection sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or such vehicles queue or hesitate on the State highway, creating a safety hazard; or
 - (4) The location of the access driveway does not meet the access spacing standard of the roadway on which the driveway is located; or
 - (5) A change in internal traffic patterns that may cause safety problems, such as backup onto the highway or traffic crashes in the approach area.

The proposal does not meet any of the criteria that trigger a TIA. (There will be no new or additional points of Bland Circle right of way. Sunbreak Lane will connect with Bland Circle using an existing driveway alignment and the existing gravel driveway to the applicant's property will be eliminated. No additional driveways are being created.) The applicant will be required to provide a study by a traffic engineer that addresses, at minimum, trip generation, a discussion of the Bland Circle and Tannler intersection including safety. (The specific study requirements will be determined by the City Engineer.)

Subsection 48.025(B) (6) requires access driveways to meet the standards in Chapter 8 of the Transportation System Plan (TSP). Specifically, it states, "The access spacing standards found in Chapter 8 of the adopted Transportation System Plan (TSP) shall be applicable to all *newly established* public street intersections, private drives, and non-traversable medians." (staff's emphasis) If a public street is proposed using the existing alignment of the driveway accessing tax lot 500 and the pump station (lining up with the Bland Circle and Tannler Drive intersection) it would not be a newly established private drive, and therefore the TSP Chapter 8 standards would not be applicable. From that intersection to the nearest access driveway (Falcon Place) on the north side of Bland Circle is 440 feet so the access separation standards of 150 feet for driveways are met. The nearest public intersection is 1200 feet away so the access separation and 200 feet for public intersections is also met.

If the applicant connected Sunbreak Lane to Bland Circle using the existing gravel driveway alignment on the east side of the property it would violate the 200 foot intersection spacing requirements of the TSP with only 80 feet to the Tannler intersection. (See illustration on page 11.)

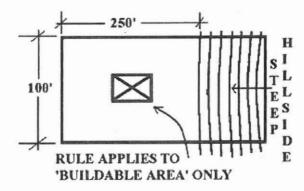


Tannler Drive and Bland Circle intersection

Subdivision of Property and Lot Layout

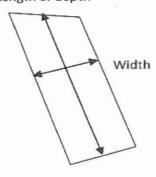
Predictably, the lots are shown on both sides of the two streets. Because this is a long and narrow property the lots reflect that to the extent that some violate the "two and a half times" rule. This rule is explained in CDC 12.070(D):

"D. The lot depth comprising non-Type I and II lands shall be less than two and one-half times the width and more than an average depth of 90 feet. (See diagram below.)"



Lots 3, 7, 8 and 11 are too long (staff measured the width at right angles to the side lot lines and lot depth at the midpoint (see diagram below)). These lots need to be re-designed per code or Class II variances need to be requested. Staff can support the variances given the location of the streets and the shape of the property.

Length or depth

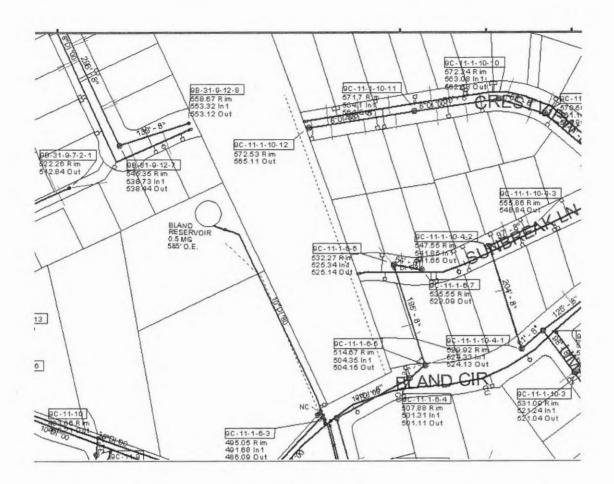


The applicant shall also provide the necessary calculations to demonstrate that the development is attaining at least 70 percent of the maximum allowable denisty of the R-7 zone.









For stormwater treatment, there was discussion of designing a shared storm water facility with the existing stormwater facility at the southwest corner of Fernando's Hideaway.

Engineering Notes

I. TRANSPORTATION

BLAND CIRCLE

	EXISTING CONDITIONS	POTENTIAL POST DEVELOPMENT CONDITIONS
Classification	Collector	Collector
Zone	R-7	R-7
Right of Way Width	51'	58'
Full Pavement Width	28'	36'
Curb and Gutter	On the opposite side	Curb and Gutter
Planter Strip	On the opposite side	5.5' Planter

Sidewalk	On the opposite side	6' Sidewalk
Street Light	None in front – Shoe Box Style	Yes
Street Tree	On the opposite side	Yes
ADA Ramps	At the intersection of Bland Cir. and Tannler Dr.	
Post Speed	25 MPH	25 MPH
Stripe	Yellow Line and Stop Bar	Provide appropriate striping after street improvement.

A. MINIMUM REQUIRED IMPROVEMENTS

- Provide at least 20' of dedication for a complete full build out right of way width of 60'.
- 2. Provide a minimum 17' pavement improvement with the following sections:
 - 12" of 1-1/2"-0 Crush Rock
 - 2" of 34" 0 Leveling Course
 - 5" of AC Pavement consisting of 2" Class "C" over 3" Class "B"
 - See Public Works Standards Section 5.0030 Pavement Design for design requirements.
- Provide curb and gutter. See WL-501 Detail for technical and construction specifications. See Public Works Standards Section 5.0040 Concrete Curb for design requirements.
- 4. Provide 6' wide concrete sidewalk with sidewalk ramp at each end to allow access for disability. See WL-508 for sidewalk technical and construction specifications. See WL-507A and WL-507B for ADA technical and construction specifications. See Public Works Standards Section 5.0050 Sidewalks and Section 5.0051 Sidewalk Ramps for design requirements.
- 5. Provide illumination analysis of the existing conditions. Install street lights as recommended in accordance to the followings:
 - Average Maintained Illumination: 0.6 foot-candles (Residential)
 - · Uniformity Average to Minimum: 4 to 1
 - Street Light should match with existing surrounding lights Shoe Box on Bronze Pole.
 - Bulb: Flat lens 100 watts maximum
- 6. Provide Street Tree. Coordinate with Parks Department for requirements.
- 7. Provide necessary striping.
- 8. All new and existing overhead utilities along the development must be placed underground.

CRESTVIEW DRIVE

	EXISTING CONDITIONS	POTENTIAL POST DEVELOPMENT CONDITIONS
Classification	Local	Local
Zone	R-7	R-7
Right of Way Width	56'	56'
Full Pavement Width	32' with parking	32' with parking
Curb and Gutter	None	Yes
Planter Strip	None	5.5' Planter
Sidewalk	None	6' Sidewalk
Street Light	None	Yes - Shoe Box Style
Street Tree	None	Yes
ADA Ramps	None	None
Post Speed	25 MPH	25 MPH
Stripe	None	None

B. MINIMUM REQUIRED IMPROVEMENTS

- 9. Provide at least 56' of dedication for a complete new street connection.
- 10. Provide a minimum 32' pavement improvement with the following sections:
 - 10" of 1-1/2"-0 Crush Rock
 - 2" of ¾" -0 Leveling Course
 - 4" of AC Pavement consisting of 2" Class "C" over 2" Class "B"
 - See Public Works Standards Section 5.0030 Pavement Design for design requirements.
- Provide curb and gutter. See WL-501 Detail for technical and construction specifications. See Public Works Standards Section 5.0040 Concrete Curb for design requirements.
- 12. Provide 6' wide concrete sidewalk with sidewalk ramp at each end to allow access for disability. See WL-508 for sidewalk technical and construction specifications. See WL-507A and WL-507B for ADA technical and construction specifications. See Public Works Standards Section 5.0050 Sidewalks and Section 5.0051 Sidewalk Ramps for design requirements.
- 13. Provide illumination analysis of the existing conditions. Install street lights as recommended in accordance to the followings:
 - Average Maintained Illumination: 0.6 foot-candles (Residential)
 - Uniformity Average to Minimum: 4 to 1
 - Street Light should match with existing surrounding lights Shoe Box on Bronze Pole.
 - · Bulb: Flat lens 100 watts maximum

- 14. Provide Street Tree. Coordinate with Parks Department for requirements.
- 15. All new and existing overhead utilities along the development must be placed underground.

SUNBREAK LANE

	EXISTING CONDITIONS	POTENTIAL POST DEVELOPMENT CONDITIONS
Classification	Local	Local
Zone	R-7	R-7
Right of Way Width	52'	52'
Full Pavement Width	26' with parking on one side	26'
Curb and Gutter	None	Yes
Planter Strip	None	5.5' Planter
Sidewalk	None	6' Sidewalk
Street Light	None	Yes – Shoe Box Style
Street Tree	None	Yes
ADA Ramps	None	None
Post Speed	25 MPH	25 MPH
Stripe	None	None

C. MINIMUM REQUIRED IMPROVEMENTS

- 16. Provide at least 52' of dedication for a complete new street.
- 17. Provide a minimum 32' pavement improvement with the following sections:
 - 10" of 1-1/2"-0 Crush Rock
 - 2" of 34" 0 Leveling Course
 - 4" of AC Pavement consisting of 2" Class "C" over 2" Class "B"
 - See Public Works Standards Section 5.0030 Pavement Design for design requirements.
- Provide curb and gutter. See WL-501 Detail for technical and construction specifications. See Public Works Standards Section 5.0040 Concrete Curb for design requirements.
- 19. Provide 6' wide concrete sidewalk with sidewalk ramp at each end to allow access for disability. See WL-508 for sidewalk technical and construction specifications. See WL-507A and WL-507B for ADA technical and construction specifications. See Public Works Standards Section 5.0050 Sidewalks and Section 5.0051 Sidewalk Ramps for design requirements.
- 20. Provide illumination analysis of the existing conditions. Install street lights as recommended in accordance to the followings:

- Average Maintained Illumination: 0.6 foot-candles (Residential)
- Uniformity Average to Minimum: 4 to 1
- Street Light should match with existing surrounding lights Shoe Box on Bronze Pole.
- Bulb: Flat lens 100 watts maximum
- 21. Provide Street Tree. Coordinate with Parks Department for requirements.
- 22. All new and existing overhead utilities along the development must be placed underground.
- 23. Construct Sunbreak Lane connecting with Tannler Drive per design shown on page 8.

D. CITY TRANSPORTATION MASTER PLAN PEDESTRIAN MASTER PLAN

Bland Circle is indicated in the City Pedestrian Master Plan as one of the roadways with sidewalk deficient. Sidewalk project along Bland Circle from the North Limit to Salamo Road is identified as project number 47 with medium level of priority on Pedestrian Master Plan Project list (See TSP page 5-7). This will conclude that sidewalk improvement shall be a "must" on any development along Bland Circle especially from the North Limit to Salamo Road.

BICYCLE MASTER PLAN

Bland Circle is not indicated in the City Bicycle Master Plan as one of the roadways with bicycle deficient. No bicycle lane improvement was listed on Bicycle Master Plan.

However being classified as a Collector, Bland Circle cross section must include 6' wide bicycle lane for any development along Bland Circle.

MOTOR VEHICLE MASTER PLAN

Existing Operations Conditions

Salamo Road and Bland Circle intersection was analyzed in TSP Existing Operation Conditions Section. The intersection has a LOS A/B. No collision occurs at this intersection. Truck Freight section indicated there were 24 trucks drove by this intersection when data was collected.

Future Operations Conditions

Salamo Road and Bland Circle intersect will have LOS A/D in 2030. This intersection will be operated at adequate level up to 2030. No further analysis was done beyond 2030.

E. STREET SDC AND BIKE/PEDESTRIAN EFFECTIVE JULY 1ST 2012

Type of Use	Trip per Use	Factor	Reimbursement	Improvement	Administrative	Total
Per Fact	or of 1	1.00	\$2,146	\$4,597	\$175	\$6,918
Single Family	Per House	1.01	\$2,115	\$4,643	\$177	\$6,987

Type of Use	Trip per Use	Factor	Reimbursement	Improvement	Administrative	Total
Per Fact	or of 1	1.00	\$0	\$1,503	\$39	\$1,542
Single Family	Per House	1.00	\$0	\$1,503	\$39	\$1,542

I. STORM DRAINAGE

A. MINIMUM REQUIRED IMPROVEMENTS

- 1. Provide treatment for new impervious of 500 square feet or more.
- 2. Provide detention for new impervious of 5000 square feet or more.
- 3. Storm Drainage Analysis Report is required.
- Existing public storm drainage system is available on Tannler Drive for connection. If a storm-water facility constructed, the City prefer it to be shallow without fence.
- 5. As-Built: Florendo's Hideaway and City GIS available per request.

B. SURFACE WATER SDC EFFECTIVE JULY 1ST 2012

Unit		Factor	Reimbursement	Improvement	Administrative	Total
Per Fact	or of 1	1.00	\$773	\$232	\$51	\$1,056
Single Family	Per House	1.00	\$773	\$232	\$51	\$1,056

II. SANITARY SEWER

A. MINIMUM REQUIRED IMPROVEMENTS

- 1. New sanitary sewer system installing to serve the development must be 8" main.
- Existing public sanitary sewer system is available on Crestview Drive and Sunbreak Lane for connection.
- 3. As-Built: Florendo's Hideaway and City GIS available per request.

B. SANITARY SEWER SDC EFFECTIVE JULY 1ST 2012

Unit	Meter Size	Factor	Reimbursement	Improvement	Administrative	Total
Per Facto	or of 1	1.00	\$597	\$2,325	\$108	\$3,030

Single	Per	1.00	\$597	\$2,325	\$108	\$3,030
Family	House					

Tri-City Service District Sewer SDC 1 EDU = \$2,020

III. WATER

A. PRESSURE ZONE

1. Zone: Horton

2. Overflow Elevation: 730

Upper Elevation: 620

Lower Elevation: 475

3. Sub pressure zone serves customer at ground elevation as low as 340.

B. RESERVOIR AND PUMP STATION

- Reservoir: Horton is located at the intersection of Horton Rd and Santa Anita Dr.
 The reservoir usable capacity is approximate 1.5 million gallon. The reservoir is filled by Bolton Pump Station. Horton Reservoir also supplies water to Rosemont Reservoir through Horton Pump Station.
- 2. Pump Station: Horton Pump Station consists of 4 pumps. Two can pump 900 gpm and two can pump 1,300 gpm with total capacity of 4,400 gpm and a nominal capacity of 3,100 gpm. There is an emergency standby diesel generator onsite in case power failure.

C. EXISTING POPULATION AND PROJECTED POPULATION AT SATURATION

1. Existing Population:

6,192

2. Projected Population at Saturation:

7,843

D. WATER DEMAND AT SATURATION

Average Day Demand (mgd)	Maximum Day Demand (mgd)	Peak Hour Demand (mgd)
1.1	2.3	12.6

E. RESERVOIR AND PUMP STATION CURRENT OPERATNG CONDITIONS

1. In accordance with Water System Plan, both the reservoir and pump station are listed in good conditions.

F. HORTON PRESSURE ZONE PEFORMANCE

Year	MDD (mg)	Fire Flow (mg)	Total Supply Need (mg)	Normal Supply Capacity (mg)	Emergency Supply Capacity (mg)	Normal Supply Deficit (mg)	Emergency Supply Deficit (mg)
Current	3.1	0.5	3.6	4.3	1.3	(0.7)	1.3
2015	3.2	0.5	3.7	4.3	1.3	(0.6)	1.4
2030	3.6	0.5	4.1	4.3	1.3	(0.2)	1.7
Saturation	3.8	0.5	4.3	4.3	1.3	0	1.8

 The table above indicates that there is a surplus in supply capacity during a normal condition.

G. HORTON PRESSURE ZONE SUPPLY AND STORAGE DEFICIT

	N	Jormal Condi	tions	Emergency Conditions			
Year	Supply Deficit (mgd)	Storage Volume (mg)	Overall Deficit (mgd)	Supply Deficit (mgd)	Storage Deficit (mgd)	Overall Deficit (mgd)	
Current	0	1.1	0	1.3	1.1	0.2	
2015	0	1.1	0	1.4	1.1	0.3	
2030	0	1.1	0	1.7	1.1	0.6	
Saturation	0	1.1	0	1.8	1.1	0.7	

1. The table above indicates that there is no storage volume deficit during a normal condition.

H. HORTON PRESSURE ZONE MASTER PROJECT LIST

Numbe r	Location	Ex. Diamete r (inches)	Propose d Diamete r (inches)	Priorit y	Lengt h (ft)	SDC Allocatio n	Unit Cos t (\$/If	Estimate d Project Cost (\$)
29	Weatherhi Il Rd. from Salamo Rd to S Bland Cir. and then South		8	4	2,312	100%	125	\$289,000
31	Sussex St. south of Sunset Ave.	4	8	5	248	0%	125	\$31,000
32	From River View Ave. to Falls View Dr.	4	8	5	213	0%	125	\$26,625
39	Clark St. south of Skyline	6	8	5	425	0%	125	\$53,125
42	North of Linn Ln.	6	8	5	369	0%	125	\$46,125
43	Parkview Ter. And Rosepark Dr.	6	8	5	765	0%	125	\$95,625
47	Apollo Rd. west of Athena Rd.	6	8	5	385	0%	125	\$48,125

48	Palomino Wy. from Saddle Ct.	6	8	4	246	100%	125	\$30,750
	to Palomino Cir.							

- The table above indicates that there is no improvement required along the proposed project frontage.
- I. MINIMUM REQUIRED IMPROVEMENTS
- 1. New water system installing to serve the development must be 8" main
- 2. Provide loop system on Crestview Drive.
- 3. Extend existing 8" DI on Sunbreak Lane is a possibility.
- 4. As-Built: Florendo's Hideaway and City GIS available per request.

J. WATER SDC EFFECTIVE JULY 1ST 2012

Unit Meter Factor Size		Reimbursement Improvement		Administrative	Total	
Per Factor of 1 1.00		1.00	\$571	\$6,793	\$191	\$7,555
5/8" Meter		1	\$571	\$6,793	\$191	\$7,555

Process

A subdivision approval is required. The applicant might also be required to pursue Class II Variances for lots that do not meet the "two and a half times" rule and blocks over 800 feet long. Subdivisions and Class II Variances are both Planning Commission decisions.

Follow 85.150-170 (and 75.050 if there is a variance) strictly and completely regarding submittal requirements (including plans, maps, etc.). Submittal requirements may be waived but the applicant must first identify the specific submittal requirement and request, in writing, that it be waived by the Planning Director and must identify the specific grounds for that waiver. The waiver may or may not be granted by the Planning Director. Waivers may also be subsequently overruled by the decision making body.

The approval criteria of 85.200 shall be responded to in a narrative. If the applicant applies for a Class II variance(s), the approval criteria of 75.060 must be responded to as well.

Submit the application to the Planning Department with a signed application form. The deposit for a Subdivision application is \$4,200, plus \$200 per lot, for a total initial

deposit of \$6,400 in this case. The final plat fee is \$2,000. There is also a \$500 fee for final site inspection. The deposit for Class II Variance is \$2,900. (Any additional Class II Variance beyond the first one has a deposit of \$1,450.) **PLEASE NOTE** that the deposits are initial deposits, and staff time is charged against the deposit account. It is common for there to be more staff time spent on development applications than deposits cover, and therefore additional billing may be likely to occur.

Once the submittal is deemed complete, the staff will schedule a hearing with the Planning Commission. Staff will send out public notice of the Planning Commission hearing at least 20 days before it occurs. The Planning Commission's decision may be appealed to City Council by the applicant or anyone with standing.

The CDC is online at http://westlinnoregon.gov/planning/community-development-code-cdc.

The applicant inquired in their submittal about whether an expedited land division application could be processed concurrently with a variance or variances. Section 99.060(E) provides for expedited land division applications. Per 99.060(E) (1), these can be processed concurrently with certain other applications, but a variance is not one of them. If the applicant applies for any variances, expedited land division is not an option.

A neighborhood meeting is required for a subdivision approval per 99.038. Follow the requirements of that code section explicitly. The site is within the Savanna Oaks neighborhood but is also within 500 feet of the Willamette neighborhood. Contact Ed Schwarz, President of the Savanna Oaks Neighborhood Association, at savannaoaksNA@westlinnoregon.gov and Beth Smolens, President of the Willamette Neighborhood Association at willametteNA@westlinnoregon.gov. The applicant is required to provide the neighborhood associations with conceptual plans and other material at least 10 days prior to the meeting. Because of the time and scheduling requirements of 99.038, the applicant should address this requirement as soon as possible.

Pre-application notes are void after 18 months and a new pre-application conference is required.

For annexation questions please contact City of West Linn Economic Development Cocoordinator Chris Kerr at 723-2538

Typical land use applications can take 6-10 months from beginning to end.

DISCLAIMER: This summary discussion covers issues identified to date. It does not imply that these are the only issues. The burden of proof is on the applicant to demonstrate that all approval criteria have been met. These notes do not constitute an endorsement of the proposed application. Staff responses are based on limited material presented at this pre-application meeting. New issues, requirements, etc. could emerge as the application is developed. Thus, there is no "shelf life" for pre-apps.

Pre-app2011/Pre-app 2012.08.02/Pre-app notes SUNBREAK subdivision



April 17, 2013

23150 Bland Circle and 22882 Weatherhill Road Proposed Residential Subdivisions

To Our Neighbors,

3J Consulling acts on behalf of JT Smith Companies regarding two subdivision projects which are located within the Savannah Oaks and Willamette Neighborhood Associations. The first proposed subdivision is a small property located off of Bland Circle and is identified as 23150 Bland Circle. The second proposed subdivision is located on a property which takes access off of Weatherhill Road and is listed as 22882 Weatherhill Road. The location of each property is shown on the attached maps. Both properties are located inside the City of West Linn's boundaries and both properties are zoned R-7 or Single Family Residential.

The Sunbreak Subdivision will create 11 new residential lots. The property currently contains one existing home which will be removed in order to allow for the proposed development. Each of the proposed lots will exceed 7,000 square feet which is the minimum lot size within the R-7 zoning district. The proposed site improvements will include a small extension of Tannier Street, north into the property and the completion of Sunbreak Street and Crestview Drive, which have long been anticipated by the City and the surrounding community. A series of small pedestrian trails may also be included within the development to provide pedestrian connectivity to the surrounding neighborhoods.

The Weatherhill Subdivision will create a total of 9 new residential lots. The property also currently contains one existing home which will be removed in order to allow for the proposed development. Each of the proposed lots within the development will exceed 7,000 square feet which is the minimum lot size within the R-7 zoning district. The proposed improvements will likely involve the installation of a new public road and potential pedestrian network.

Before finalizing and delivering the two subdivision applications to the City's Planning Department, we would like to take the opportunity to discuss this proposal with the members of the Savannah Oaks Neighborhood Association, members of the Willamette Neighborhood Association, and property owners residing within 500 feet of the property.

Two presentations to discuss this proposal have been scheduled to allow interested individuals to learn more about these projects. The presentations have been scheduled during the Savannah Oaks and Willamette Neighborhood Association's regularly scheduled meetings and those presentations will be made in addition to the agendas set by the associations. The meetings are to be held at the following dates and times:

Savannah Oaks Neighborhood Association Meeting May 7, 2013 at 7:00 pm Willamette Fire Station 59 1860 Willamette Falls Drive, West Linn, OR 97068

or

Willamette Neighborhood Association Meeting May 8, 2013 at 7:00 pm Pacific West Bank in Willamette Marketplace 2000 SW 8th Ave, West Linn, OR 97068

3J Consulling, Inc. 10445 SW Canyon Road Suite 245 Beaverton, OR 97005 Ph: 503-946-9365 andrew.lull@3j-consulling.com

Page 2 of 3 April 17, 2013 23150 Bland Circle & 22882 Weatherhill - Neighborhood Meeting Invitation

The purpose of these meetings is to provide a forum for surrounding property owners and residents to review both projects and to identify issues so they can be given proper consideration. These meetings will provide the opportunity to share with the project team any special information you know about the property involved. The project team will try to answer questions related to how the project meets the relevant development standards consistent with West Linn's land use regulations.

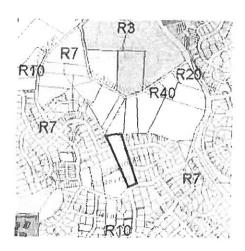
Please note that these will be informational meetings based upon preliminary development plans and that these plans may change slightly before the application is submitted to the City. Additional information may be available from each respective association's President and/or officers and any concerned citizens are encouraged to contact the relevant neighborhood association with any comments or concerns.

We look forward to discussing this proposal with you. Please feel free to contact us at 503-545-1907 or at andrew.tull@3j-consulting.com if you have any questions.

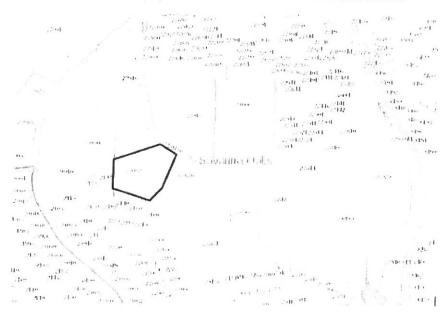
Sincerely,

Andrew Tull Principal Planner 3J Consulting, Inc.

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Site Location Map I | Sunbreak Subdivision - 23150 Bland Circle



Site Location Map II | WeatherhIII Subdivision - 22882 WeatherhIII Road



PUBLIC NOTICE OF TWO NEIGHBORHOOD MEETINGS

THIS SITE MAY BE SUBJECT TO A PROPOSED SUBDIVISION.

PLEASE CONTACT THE APPLICANT FOR MORE INFORMATION AT THE FOLLOWING NUMBER OR FEEL FREE TO ATTEND ONE OF THE TWO SCHEDULED NEIGHBORHOOD MEETINGS:

3J CONSULTING, INC. C/O ANDREW TULL

503-946-9365

NEIGHBORHOOD MEETING 1:
SAVANNAH OAKS NEIGHBORHOOD
ASSOCIATION MEETING
MAY 7, 2013 AT 7:00 PM
WILLAMETTE FIRE STATION 59
1860 WILLAMETTE FALLS DRIVE,
WEST LINN, OR 97068

NEIGHBORHOOD MEETING 2:
WILLAMETTE NEIGHBORHOOD
ASSOCIATION MEETING
MAY 8, 2013 AT 7:00 PM
PACIFIC WEST BANK IN
WILLAMETTE MARKETPLACE
2000 SW 8TH AVE,
WEST LINN, OR 97068

NEIGHBORHOOD MEETING

AFFIDAVIT OF POSTING NOTICE

STATE OF OREGON)

SS
County of Clackamas)
I, Andrew Tull, being duly sworn, state that I represent the party initiating interest in a proposed subdivision affecting the land located at 23150 Bland Circle in West Linn, Oregon and that pursuant to Community Development Code Section 99, did on the 17th day of April, 2013 personally post notice indicating that the site may be proposed for a subdivision application.
The sign was posted along the southern boundary of the property along Bland Circle.
This day of
Signature
Subscribed and sworn to, or affirmed, before me this/O day of, 2013.
OFFICIAL SEAL BRIAN D FAST NOTARY PUBLIC - OREGON COMMISSION NO. 446377 MY COMMISSION EXPIRES FEBRUARY 03, 2014 Notary Public for the State of

NEIGHBORHOOD MEETING

AFFIDAVIT OF MAILING

STATE OF OREGON

SS
County of Clackamas)
I, Andrew Tull, being duly sworn, state that on the 17th day of April, 2013 I caused to have malled, to each of the persons on the attached list, a notice of a meeting to discuss a proposed development at 23150 Bland Circle. A copy of the notice so mailed is attached hereto and made a part thereof.
I further state that said notices were enclosed in envelopes plainly address to said persons and were deposited on the date indicated above in the United States Post Office with postage prepaid thereon.
This
Signature
Subscribed and sworn to, or affirmed, before me this
OFFICIAL SEAL BRIAN D FAST NOTARY PUBLIC - OREGON COMMISSION NO. 446977 MY COMMISSION EXPIRES FEBRUARY 03, 2014 Notary Public for the State of Oregon County of WAS HIM GET OF MY Commission Expires: 2/3/14

STORMWATER REPORT

SUNBREAK SUBVISION WEST LINN, OR

June 19, 2013

Prepared For:

LF3, LLC West Linn, OR

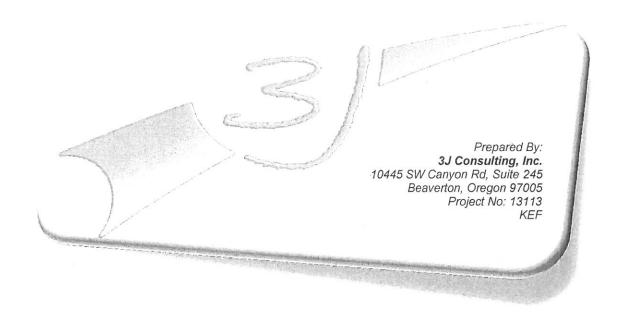


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Table 8 – Peak Release Rates	7



EXECUTIVE SUMMARY

The existing site is located on private property at 23150 Bland Circle in West Linn, Oregon (See Figure 2). The property is approximately 2.8 acres and currently contains a single family home, pasture and an asphalt driveway. The proposed development will consist of subdividing the property to create 11 lots with minimum area of 7,000 ft². Additionally, the existing Crestview Drive and Sunbreak Lane will connect through the proposed development. Half-street improvements along Bland Circle will be constructed as well. The purpose of this storm water report is to describe the design of the stormwater management systems following the City of West Linn requirements.

Stormwater runoff from the proposed development will be conveyed to a detention pond for water quality treatment and detention. The pond has been sized to comply with the following requirements:

- Treat stormwater runoff using the City of Portland's requirement of 0.83 inches of precipitation for a 24-hour storm event.
- Capture and detain the 2, 5, 10 and 25-year, 24-hour post developed runoff rate to release at the 2, 5, 10 and 25-year, 24-hour existing runoff rate.

A geotechnical investigation was completed in April 2013 showing that infiltration rates on the site are 1.7 and 1.0 in/hr at 2 and 3.5 feet below ground surface, respectively.

The purpose of this report is to describe the facilities being proposed and to show that the design follows the City of West Linn's Public Works Design Standards.



PROJECT DESCRIPTION

The existing site is located on private property at 23150 Bland Circle in West Linn, Oregon (See Figure 1 and 2).

The purpose of this report is to describe the facilities being proposed and show that the design follows the City of West Linn Public Works Design Standards in effect at the time of this report.

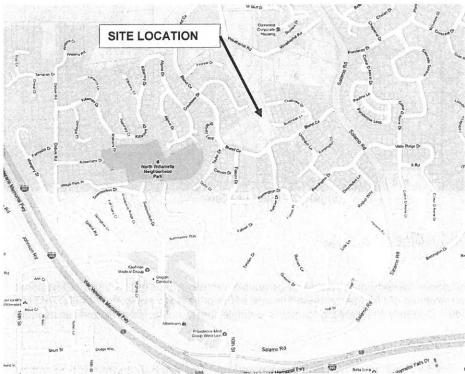


Figure 1 - Vicinity Map





Figure 2 - Site Location

EXISTING CONDITIONS

Site

The property slopes toward south-southeast at grades ranging from 10% to 25%. Elevations range from a maximum of 592 feet on the north side of the property to a minimum of 500 feet on the south side. Currently the property contains a single family home, pasture and an asphalt driveway.

Climate

The site is located in Clackamas County approximately 12 miles south of downtown Portland in the West Linn foothills. Average annual rainfall recorded in this area is 47 inches.

Flood Map

The flood plain map shows that the site resides in Zone X, where no base flood elevations have been determined (See Technical Appendix: Exhibits – FIRM Panel 257 of 1175).

Site Geology

The soil type as classified by the United States Department of Agriculture Soil Survey of Clackamas County is identified in Table 1 (See Technical Appendix: Exhibits - Hydrologic Soil Group for Clackamas County Area, Oregon).

Soil Type	Hydrologic Grou	
Nekia silty clay loam	С	
Saum silt loam	С	

Table 1 - Soil Characteristics



The soil on the proposed site consists of approximately 3% Nekia silty loam and 97% Saum silt loam. Both soil types are classified as hydrologic group C. Group C soils generally have slow infiltration rates.

A geotechnical investigation was completed in April 2013 showing that infiltration rates on the site are 1.7 and 1.0 in/hr at 2 and 3.5 feet below ground surface, respectively (See Technical Appendix: Geotechnical Report).

Existing Drainage

Existing Site

The existing site does not contain a stormwater management system. Stormwater runoff from the site sheet flows south and southwest towards adjacent property and Bland Circle and Tannler Drive.

Basin Areas

Table 2 shows the current impervious and pervious areas for the property (See Technical Appendix: Exhibits – Existing Site Conditions).

Existing Basin Area	sq. ft.	acres	
Impervious Area	10,716	0.25	
Pervious Area	111,296	2.56	
Total Existing Basin Area	122,012	2.80	

Table 2 - Existing Basin Areas

Curve Number

The major factors for determining the CN values are hydrologic soil group, cover type, treatment, hydrologic condition, and antecedent runoff condition. The curve number represents runoff potential from the ground. Tables 2-2a and 2-2c in the TR-55 manual were used to determine the appropriate curve numbers (See Technical Appendix: Exhibits – Table 2-2a and 2-2c Runoff Curve Numbers).

The existing site consists of meadow, trees, a house and driveway. The pervious area was considered to be meadow (CN=71) and the impervious surface has CN=98. The post-developed pervious area was considered to be open space in fair condition (grass cover 50%-75%) with a corresponding curve number of 79.

Time of Concentration

The time of concentration was calculated for the existing site using the TR-55 Method. The time of concentration of 16 minutes was calculated for the existing basin (See Technical Appendix: Calculations— Time of Concentration). The time of concentration for the post-developed conditions was assumed to be 5 minutes.

POST-DEVELOPED CONDITIONS

Post-Developed Site

Stormwater runoff from the site will be conveyed to a proposed detention pond in the southern portion of the site (Tract A) via catch basins and manholes. The pond will treat and detain the stormwater releasing it to the existing storm system in Bland Circle.



Basin Areas

Table 3 shows the post-developed impervious and pervious areas (See Technical Appendix: Exhibits – Post-Developed Site Conditions).

Existing Basin Area	sq. ft.	acres
Impervious Area	63,889	1.47
Pervious Area	57,970	1.33
Total Existing Basin Area	121,859	2.80

Table 3 - Post-Developed Basin Areas

HYDROLOGIC ANALYSIS DESIGN GUIDELINES

Design Guidelines

The site is located within the jurisdiction of the City of West Linn, which follows the City of Portland's Stormwater Management Manual for the design of stormwater facilities. Stormwater runoff from the proposed development will be conveyed to a wet detention pond for water quality treatment and detention. The pond has been sized to comply with the following requirements:

- Treat stormwater runoff for water quality storm event (0.83 inches);
- Capture and detain the 2, 5, 10 and 25-year, 24-hour post developed runoff rates to the existing 2, 5, 10 and 25-year, 24-hour existing runoff rates.

An infiltration rate of 1.0 in/hr with a factor of safety of 4 was used for the bottom surface area of the pond.

Hydrograph Method

Naturally occurring rainstorms dissipate over long periods of time. An effective way of estimating storm rainfall is by using the hydrograph method. The Santa Barbara Unit Hydrograph (SBUH) method was used to develop runoff rates. The computer software XPSTORM was used to compute runoff rates and volumes.

Design Storm

The rainfall distribution to be used for this area is the design storm of 24-hour duration based on the standard Type 1A rainfall distribution. Table 4 shows total precipitation depths for the various storm events, which were used as a multiplier for the Type 1A 24-hour rainfall distribution.

Recurrence Interval (years)	Total Precipitation Depth (in.)	
Water Quality	0.83	
2	2.50	
5	3.00	
10	3.40	
25	3.90	
100	4.50	

Table 4 - Design Storms



Basin Runoff

Table 5 shows the runoff rates for the existing and post-developed conditions (See Technical Appendix: Hydrographs – Hydrograph Report: Existing and Post-Developed).

Recurrence Interval (years)	Existing Runoff Rate (cfs)	Post-Developed Runoff Rate (cfs)	
WQ	N/A	0.24	
2	0.21	1.05	
5	0.37	1.35	
10	0.52	1.59	
25	0.73	1.91	
100	1.00	2.30	

Table 5 - Basin Runoff Rates

HYDRAULIC ANALYSIS AND DESIGN CHARACTERISTICS

The stormwater conveyance system and flow control structure will be sized in the final design phase of the project.

WATER QUALITY/QUANTITY

Water Quality Guidelines

The stormwater facility design follows West Linn's design standards and the City of Portland's Stormwater Management Manual guidelines. The stormwater facility will be designed for flow control and pollution reduction. The City of Portland's performance approach was used to size an extended wet pond. The pond will detain the water quality volume for a minimum of 24 hours. The water quality volume (based on preliminary analysis) for the post-developed condition is 3,483 ft³.

Water Quantity Guidelines

The pond has been designed to release flows at or below the required release rates (as described on the previous page) based on the Existing Runoff Rates shown in Table 5.

Wet detention Pond Volume

The pond will be approximately 41 feet wide by 90 feet long. It will be constructed with 3:1 side slopes. Table 6 shows the available storage capacity of the proposed pond.



Elevation (ft.)	Surface Area (ft²)	Average Surface Area (ft ²)	Sectional Volume (ft³)	Total Volume (ft³)
498.5	1,031			
		1,156	578	
499	1,281	4		578
		1,552	1,552	
500	1,823	6	i	2,130
		2,124	2,124	1
501	2,425		Ì	4,254
		2,755	2,755	i
502	3,086			7,010
		3,266	1,633	
502.5	3,446			8,643

Table 6 - Proposed Pond Volume

Post-Developed Peak Release Rates

The proposed pond will release less than required. Table 7 shows the release rate from the pond (See Technical Appendix – Hydrographs). These figures may change depending of the final design of the stormwater conveyance system.

Recurrence Interval (years)	Peak Release Rate from Pond (cfs)	
WQ	0.04	
2	0.21	
5	0.34	
10	0.50	
25	0.73	
100	1.61	

Table 7 - Post-developed Release Rates

Table 8 below shows the maximum depth and stage in the pond during all storm events analyzed. The flow control structure will be finalized and presented in the final Storm Water Report.

Recurrence Interval (years)	Maximum Stage in Pond (ft)	Maximum Depth in Pond (ft)	Maximum Freeboard in Pond (ft)
WQ	499.12	0.62	3.38
2	500.58	2.08	1.92
5	500.87	2.37	1.63
10	501.04	2.54	1.46
25	501.24	2.74	1.26
100	501.35	2.85	1.15

Table 8 - Peak Release Rates



SUMMARY

The stormwater design for the proposed Sunbreak Subdivision will meet or exceed the City of West Linn's requirements. All sizing of water quality/quantity facilities followed the City of Portland's Stormwater Management Manual.



TECHNICAL APPENDIXED

Exhibits

- FIRM Panel 260 of 1175
- Hydrologic Soil Group-Clackamas County Area, Oregon
- Table 2-2a and 2-2c Runoff Curve Numbers
- Existing Site Conditions
- Post-Developed Site Conditions

Drawings

- Sheet C1.0 "Existing Conditions Plan"
- Sheet C2.5 "Composite Utility Plan"

Hydrographs

- Existing Runoff Hydrograph
- Post Developed Runoff Hydrograph
- Peak Release Rate Hydrograph

Calculations

- Time of Concentration

Geotechnical Reports

- Geotechnical Engineering Report, GeoPacific Engineering, Inc, April 29, 2013

Operations and Maintenance

 Operations and Maintenance Plan for Stormwater Facilities - To be Completed with the Final Design

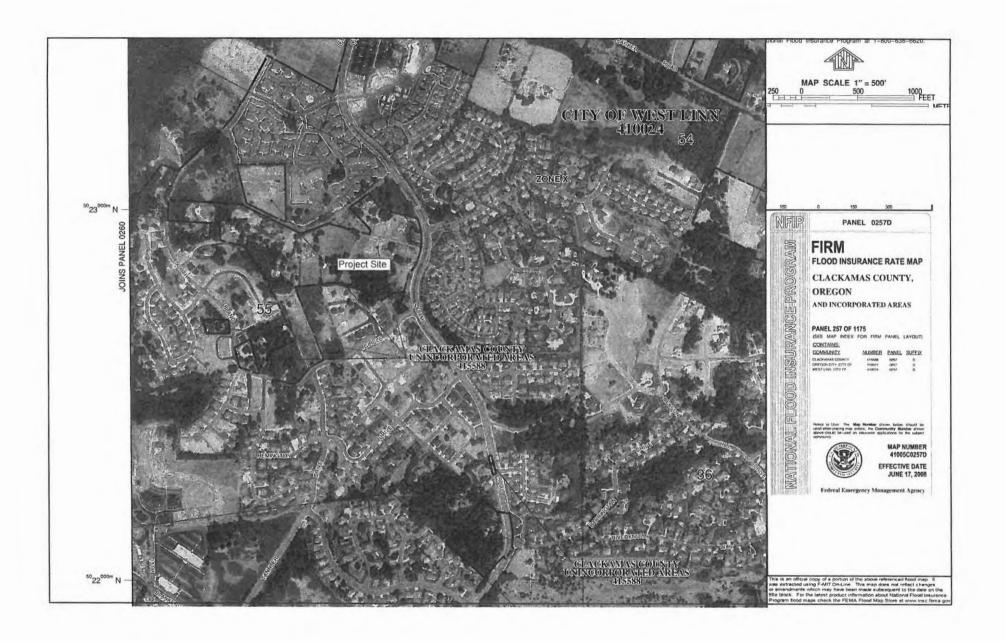
REFERENCES

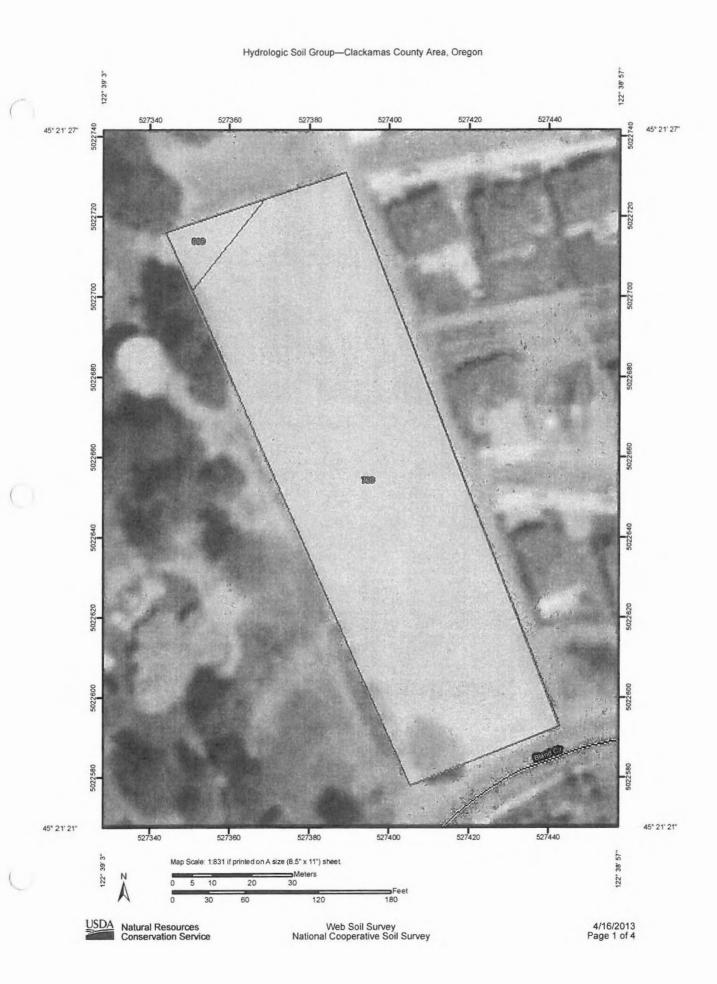
- City of West Linn's Public Works Design Standards Issued in 2010
- 2. <u>City of Portland's Stormwater Management Manual</u> Issued in August 2008
- 3. Soil Survey of Clackamas County Area. National Resource Conservation Service
- <u>Urban Hydrology for Small Watersheds TR-55</u> Issued in June 1986 U.S. Department of Agriculture, Natural Resources Conservation Service, Conservation Engineering Division
- 5. http://westlinnoregon.gov/publicworks/stormwater-fact-sheet



EXHIBITS







MAP LEGEND MAP INFORMATION Map Scale: 1:831 if printed on A size (8.5" × 11") sheet. Area of Interest (AOI) Area of Interest (AOI) The soil surveys that comprise your AOI were mapped at 1:20,000. Soils Warning: Soil Map may not be valid at this scale. Soil Map Units Enlargement of maps beyond the scale of mapping can cause Soil Ratings misunderstanding of the detail of mapping and accuracy of soil line **C**366 A placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale. A/D В Please rely on the bar scale on each map sheet for accurate map measurements. B/D C Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov C/D Coordinate System: UTM Zone 10N NAD83 This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Not rated or not available **Political Features** Soil Survey Area: Clackamas County Area, Oregon Survey Area Data: Version 7, Aug 20, 2012 Cities Date(s) aerial images were photographed: 8/3/2005 **Water Features** Streams and Canals The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background Transportation imagery displayed on these maps. As a result, some minor shifting Rails of map unit boundaries may be evident. Interstate Highways **US Routes** Major Roads Local Roads



Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
64C	Nekia silty clay loam, 8 to 15 percent slopes	С	0.1	3.1%
78C	Saum silt loam, 8 to 15 percent slopes	С	1.6	96.9%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition



Component Percent Cutoff: None Specified

Tie-break Rule: Higher



Table 2-2a Runoff curve numbers for urban areas 1/

Carren des coinsti au				umbers for		
Cover description			——hydrologic soil group ——			
	Average percent	A				
Cover type and hydrologic condition	impervious area 2/		В	С	D	
Fully developed urban areas (vegetation established)						
Open space (lawns, parks, golf courses, cemeteries, etc.) 3/:						
Poor condition (grass cover < 50%)		68	79	86	89	
Fair condition (grass cover 50% to 75%)		49	69	79 <	-84	
Good condition (grass cover > 75%)	Good condition (grass cover > 75%)		61	74	80	
Impervious areas:						
Paved parking lots, roofs, driveways, etc.						
(excluding right-of-way)		98	98	98 <	98	
Streets and roads:						
Paved; curbs and storm sewers (excluding						
right-of-way)		98	98	98	98	
Paved; open ditches (including right-of-way)		83	89	92	93	
Gravel (including right-of-way)		76	85	89	91	
Dirt (including right-of-way)	*******	72	82	87	89	
Western desert urban areas:						
Natural desert landscaping (pervious areas only) 4	******	63	77	85	88	
Artificial desert landscaping (impervious weed barrier,						
desert shrub with 1- to 2-inch sand or gravel mulch				1		
and basin borders)		96	96	96	96	
Urban districts:	45	72.5			12	
Commercial and business		89	92	94	95	
Industrial	72	81	88	91	93	
Residential districts by average lot size:		-	100	722		
1/8 acre or less (town houses)		77	85	90	92	
1/4 acre		61	75	83	87	
1/3 acre		57	72	81	86	
1/2 acre		54	70	80	85	
1 acre		51	68	79	84	
2 acres	12	46	65	77	82	
Developing urban areas						
Newly graded areas						
(pervious areas only, no vegetation) 5/		77	86	91	94	
Idle lands (CN's are determined using cover types						
similar to those in table 2-2c).						

¹ Average runoff condition, and $I_a = 0.2S$.

² The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.

³ CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

⁴ Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

⁵ Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

Table 2-2c Runoff curve numbers for other agricultural lands 1/

Cover description		Curve numbers for hydrologic soil group			
Cover type	Hydrologic condition	A	В	С	D
Pasture, grassland, or range—continuous	Poor	68	79	86	89
forage for grazing. 2/	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	-	30	58	71	
Brush—brush-weed-grass mixture with brush	Poor	48	67	77	83
the major element. 3⁄	Fair	35	56	70	77
	Good	30 4/	48	65	73
Woods—grass combination (orchard	Poor	57	73	82	86
or tree farm). 5/	Fair	43	65	76	82
	Good	32	58	72	79
Woods. 9/	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	30 4/	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	-	59	74	82	86

¹ Average runoff condition, and $I_a = 0.2S$.

Poor: <50%) ground cover or heavily grazed with no mulch.

Fair: 50 to 75% ground cover and not heavily grazed.

Good: > 75% ground cover and lightly or only occasionally grazed.

³ Poor: <50% ground cover.

Fair: 50 to 75% ground cover.

Good: >75% ground cover.

⁴ Actual curve number is less than 30; use CN = 30 for runoff computations.

⁵ CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

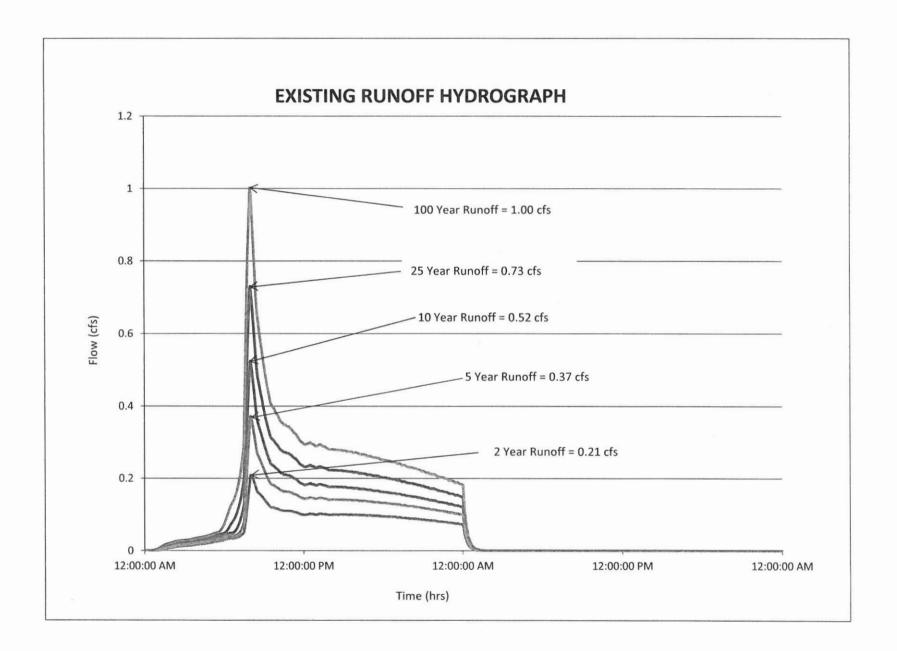
⁶ Poor: Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.

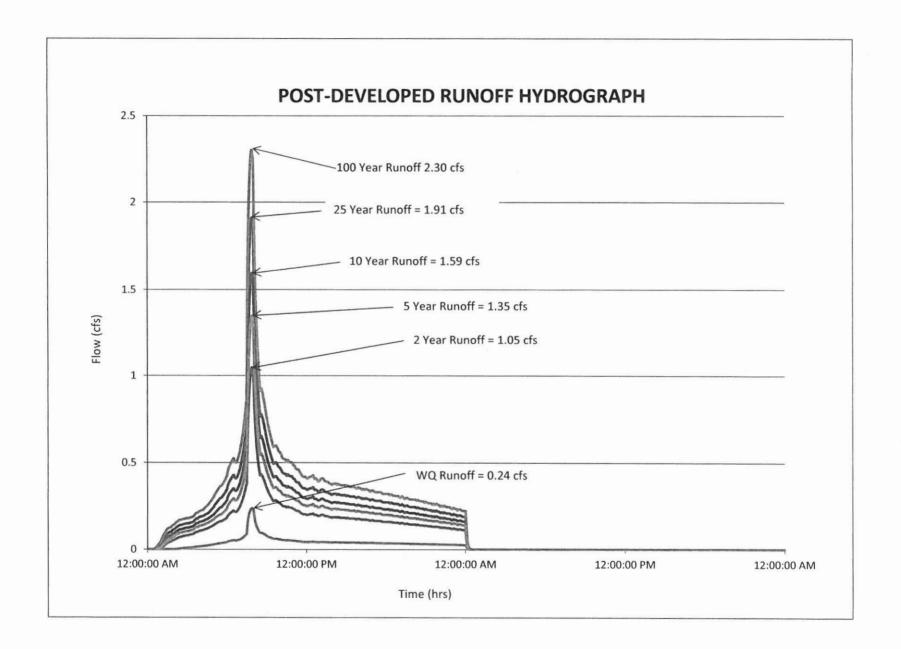
Fair: Woods are grazed but not burned, and some forest litter covers the soil.

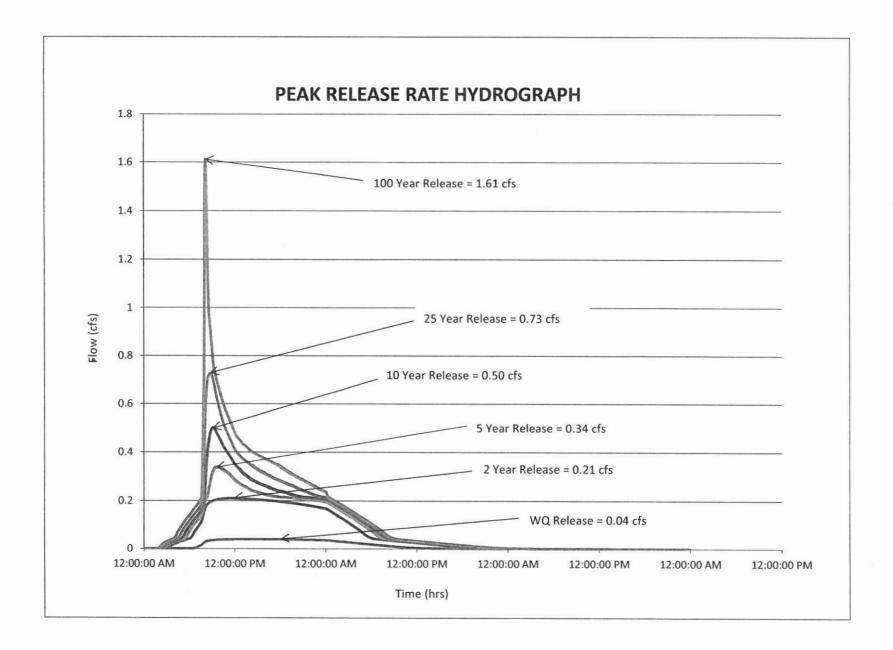
Good: Woods are protected from grazing, and litter and brush adequately cover the soil.

HYDROGRAPHS









CALCULATIONS



OUD IFOT.				
SUBJECT: Sunbreak Subdivision PROJECT NO. 13113			E 4/19/2013	
TROUEST NO.	DI KE	DAIL	4/10/2010	
	TC1			
	SHEET FLOW			
INPUT	VALUE	VALUE	VALUE	
Surface Description	Type 4 Cultivated (residue > 20%)	Type 10 Woods (Dense_underbrus	Type 10 Woods (Dense underbr	
Manning's "n"	0.17	0.8	0.8	
Flow Length, L (<300 ft)	300 ft	0 ft	9 ft	
2-Yr 24 Hour Rainfall, P ₂	2.5 in	2.5 m	2.5 m	
and Slope, s	0.1103 ft/ft	0.07965 h/A	0.0922 160	
OUTPUT	0.05 hr			
Travel Time	0.25 hr	0.00 hr	0.00 hr	
SHALLO	W CONCENTRATED	FLOW		
INPUT	VALUE	VALUE	VALUE	
Surface Description	Unpaved	Unpayed	Payed	
Flow Length, L	415 ft	0.11	ÐĦ	
Vatercourse Slope*, s	0.1448 ft/ft	0.01 t/m	SZOZZVATÚRY	
OUTPUT	0.11.57			
Average Velocity, V	6.14 ft/s	161 ft/s	3/34 ft/s	
ravel Time	0.019 hr	0.000 hr	0.000 hr	
	CHANNEL FLOW			
INPUT	VALUE	VALUE	VALUE	
Cross Sectional Flow Area, a	7.5 ft ²	7.5 10	15.05 ft ²	
Wetted Perimeter, P _w	11.28 ft	11.28 ft	7.69 ft	
Channel Slope, s	0.003 ft/ft	0.003 ft/ft	0.00 H/H	
Manning's "n"	0.24	0.24		
Flow Length, L	0 ft	0 ft	0 ft	
OUTPUT				
Average Velocity	0.26 ft/s	0/26/ft/s	0753 NAS	
lydraulic Radius, r = a / P _w	0.66 ft	0.66 ft	1.96 ft	
ravel Time	0.00 hr	0.00 br	0.00 hr	
Watershed or Subarea T _c =	0.27 hr	0.00 hr	0.00 hr	
Watershed or Subarea T _c =	16 minutes	0 minutes	0 minute	



GEOTECHNICAL REPORTS





Real-World Geotechnical Solutions Investigation • Design • Construction Support

April 29, 2013 GeoPacific Project No. 13-2967

John Wyland
J.T. Smith Companies
5282 Meadows Road, Suite 171
Lake Oswego, Oregon 97035

Copy: Brian Feeney (brian.feeney@3j-consulting.com)

Via e-mail with hard copies mailed

Subject: GEOTECHNICAL ENGINEERING REPORT

SUNBREAK SUBDIVISION 23150 BLAND CIRCLE WEST LINN, OREGON

This report presents the results of a geotechnical engineering study conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above referenced project. The purpose of this study was to evaluate subsurface conditions at the site and to provide geotechnical recommendations for site development. This geotechnical study was performed in accordance with GeoPacific proposal P-4458, dated April 3, 2013, and your subsequent authorization of our agreement and *General Conditions for Geotechnical Services*.

SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The site is located on the north side of Bland Circle in West Linn, Oregon (Figure 1). The area of the planned development totals approximately 2.8 acres and is roughly rectangular-shaped. A single family residence is present in the northern portion of the site. The area of the site with the existing house shows signs of previous grading activity. The central and southern portions of the site are undeveloped pasture. The topography on the site is sloping down to the south at grades of approximately 10 to 20 percent. Vegetation on the site consists primarily of grass, brush, and a few small trees in the vicinity of the existing residence.

It is our understanding that the proposed development includes grading the site to support lots for new single-family homes, approximately 350 feet of new public streets, and associated underground utilities. The current site plan (Figure 2) shows a total of 11 lots and one tract. The existing residence is to be demolished and removed from the site. We anticipate that the maximum depth of cut and height of fill will be about 5 feet or less.

REGIONAL GEOLOGIC SETTING

Regionally, the subject site lies within the Willamette Valley/Puget Sound lowland, a broad structural depression situated between the Coast Range on the west and the Cascade Range on the east. A series of discontinuous faults subdivide the Willamette Valley into a mosaic of fault-bounded, structural blocks (Yeats

14835 SW 72nd Avenue Portland, Oregon 97224 Tel (503) 598-8445 Fax (503) 941-9281 April 29, 2013 GeoPacific Project No. 13-2967

et al., 1996). Uplifted structural blocks form bedrock highlands, while down-warped structural blocks form sedimentary basins.

The site is underlain by the Columbia River Basalt Formation (Beeson et al., 1989). The Miocene aged (about 14.5 to 16.5 million years ago) Columbia River Basalts are a thick sequence of lava flows. The basalts are composed of dense, finely crystalline rock that is commonly fractured along blocky and columnar vertical joints. Individual basalt flow units typically range from 25 to 125 feet thick and interflow zones are typically vesicular, scoriaceous, brecciated, and sometimes include sedimentary rocks.

Underlying the Columbia River Basalt Formation is the Skamania Volcanics Formation. The Oligocene aged (about 37 to 26 million years ago) Skamania Volcanics extend to depth of several thousand feet and form the crystalline basement of the basin (Schlicker 1963).

At least three major source zones capable of generating damaging earthquakes are thought to exist in the vicinity of the subject site. These include the Gales Creek-Newberg-Mt. Angel Structural Zone, the Portland Hills Fault Zone, and the Cascadia Subduction Zone.

Gales Creek-Newberg-Mt. Angel Structural Zone

The Gales Creek-Newberg-Mt. Angel Structural Zone is a 50-mile-long zone of discontinuous, NW-trending faults that lies about 17.3 miles southwest of the subject site. These faults are recognized in the subsurface by vertical separation of the Columbia River Basalt and offset seismic reflectors in the overlying basin sediment (Yeats et al., 1996; Werner et al., 1992). A recent geologic reconnaissance and photogeologic analysis study conducted for the Scoggins Dam site in the Tualatin Basin revealed no evidence of deformed geomorphic surfaces along the structural zone (Unruh et al., 1994). No seismicity has been recorded on the Gales Creek or Newberg Faults (the faults closest to the subject site); however, these faults are considered to be potentially active because they may connect with the seismically active Mount Angel Fault and the rupture plane of the 1993 M5.6 Scotts Mills earthquake (Werner et al. 1992; Geomatrix Consultants, 1995).

Portland Hills Fault Zone

The Portland Hills Fault Zone is a series of NW-trending faults that include the central Portland Hills Fault, the western Oatfield Fault, and the eastern East Bank Fault. These faults occur in a northwest-trending zone that varies in width between 3.5 and 5.0 miles. The combined three faults vertically displace the Columbia River Basalt by 1,130 feet and appear to control thickness changes in late Pleistocene (approx. 780,000 years) sediment (Madin, 1990). The Portland Hills Fault occurs along the Willamette River at the base of the Portland Hills, and is about 3.6 miles northeast of the site. The Oatfield Fault occurs along the western side of the Portland Hills, and is about 2.4 miles northeast of the site. The accuracy of the fault mapping is stated to be within 500 meters (Wong, et al., 2000). No historical seismicity is correlated with the mapped portion of the Portland Hills Fault Zone, but in 1991 a M3.5 earthquake occurred on a NW-trending shear plane located 1.3 miles east of the fault (Yelin, 1992). Although there is no definitive evidence of recent activity, the Portland Hills Fault Zone is assumed to be potentially active (Geomatrix Consultants, 1995).

Cascadia Subduction Zone

The Cascadia Subduction Zone is a 680-mile-long zone of active tectonic convergence where oceanic crust of the Juan de Fuca Plate is subducting beneath the North American continent at a rate of 4 cm per year (Goldfinger et al., 1996). A growing body of geologic evidence suggests that prehistoric subduction zone earthquakes have occurred (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). This evidence includes: (1) buried tidal marshes recording episodic, sudden subsidence along the coast of northern California, Oregon, and Washington, (2) burial of subsided tidal marshes by tsunami wave

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deposits, (3) paleoliquefaction features, and (4) geodetic uplift patterns on the Oregon coast. Radiocarbon dates on buried tidal marshes indicate a recurrence interval for major subduction zone earthquakes of 250 to 650 years with the last event occurring 300 years ago (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). The inferred seismogenic portion of the plate interface lies roughly along the Oregon Coast at depths of 20 and 40 kilometers below the ocean surface.

FIELD EXPLORATION

Subsurface conditions were explored on April 12, 2013 by excavating 7 test pits to depths of 7 to 10 feet below the ground surface, using a John Deer 310E backhoe with a 2-foot-wide toothed bucket. The approximate test pit locations are shown on the attached site plan (Figure 2). It should be noted that exploration locations were determined in the field by pacing or taping distances from apparent property corners and other site features shown on the plans provided. As such, the locations of the explorations should be considered approximate.

During excavation of the test pits, a GeoPacific engineer observed and recorded soil information such as color, stratigraphy, strength, and soil moisture. Soils were classified in general accordance with the Unified Soil Classification System (USCS). Rock hardness was classified in accordance with Table 1, modified from the ODOT Rock Hardness Classification Chart.

Table 1. Rock Hardness Classification Chart

ODOT Rock Hardness Rating	Field Criteria	Unconfined Compressive Strength	Typical Equipment Needed For Excavation	
Extremely Soft (R0)	Indented by thumbnail	<100 psi	Small excavator	
Very Soft (R1)	Scratched by thumbnail, crumbled by rock hammer	100-1,000 psi	Small excavator	
Soft (R2)	Not scratched by thumbnail, indented by rock hammer	1,000-4,000 psi	Medium excavator (slow digging with small excavator)	
Medium Hard (R3)	Scratched or fractured by rock hammer	4,000-8,000 psi	Medium to large excavator (slow to ve slow digging), typically requires chippi with hydraulic hammer or mass excavation)	
Hard (R4)	Scratched or fractured w/ difficulty	8,000-16,000 psi	Slow chipping with hydraulic hamme and/or blasting	
Very Hard (R5)	Not scratched or fractured after many blows, hammer rebounds	>16,000 psi	Blasting	

At the completion of each test pit, the excavation was backfilled using the excavated soils, and tamped with the excavator bucket. This backfill should not be expected to behave as engineered fill and some settling and/or erosion of the ground surface may occur.

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SUBSURFACE CONDITIONS

Soil and Rock

The following report sections summarize subsurface conditions anticipated at the site, based on our exploration program. On-site soils consist of topsoil, undocumented fill, buried topsoil, residual soil, and Columbia River Basalt materials, as described below.

Topsoil: In all test pits, the ground surface was directly underlain by topsoil consisting of dark brown, moderately organic SILT (OL-ML) with fine roots throughout. Topsoil thickness in test pits ranged from about 4 to 16 inches. There is the potential for some tree roots or thicker topsoil zones in forested areas on site.

Undocumented Fill: Underlying the topsoil, test pits TP-1 and TP-2 encountered undocumented fill material. The fill generally consisted of medium stiff gravelly SILT (ML) to loose silty GRAVEL and COBBLES (GM), with occasional debris. The fill extended to a depth of 4 feet at test pit TP-1, and a depth of 2 feet at test pit TP-2.

Buried Topsoil: Underlying the undocumented fill material, test pits TP-1 and TP-2 encountered buried topsoil consisting of dark brown, moderately organic SILT (OL-ML) with fine roots throughout. The buried topsoil extended to a depth of 5 feet in test pit TP-1, and to a depth of 3.5 feet in test pit TP-2.

Residual Soil: Underlying the buried topsoil in test pit TP-1 and the topsoil in test pits TP-3 through TP-7, the test pits encountered stiff clayer silt to silty gravel and cobble residual soil derived from the in-place weathering of the underlying Columbia River Basalt Formation. Gravel and cobble size highly weathered basalt clasts were common within the residual soil. The residual soil transitioned to less weathered basalt bedrock as discussed below. Where encountered, the residual soil ranged from approximately 1 to 7 feet in thickness.

Columbia River Basalt: Underlying the residual soil, test pits encountered weathered basalt bedrock materials belonging to the Columbia River Basalt Formation. In test pit TP-2 the weathered basalt was encountered directly beneath the buried topsoil layer. The basalt encountered was typically highly weathered and ranged from extremely soft (R0) to medium hard (R3), with hardness generally increasing with depth. The explorations resulted in practical refusal on medium hard (R3) basalt in all test pits except test pit TP-2 at depths of 7 to 9.5 feet, using a John Deer 310E backhoe with 2-foot-wide toothed bucket. Soft (R2) basalt extended beyond the maximum depth of exploration in test pit TP-2, 10 feet.

Groundwater

On April 12, 2013, groundwater seepage was not encountered in the test pits. The groundwater conditions reported are for the specific date and locations indicated, and therefore may not necessarily be indicative of other times and/or locations. It is anticipated that groundwater conditions will vary depending on the time of year, rainfall, local subsurface conditions, changes in site utilization, and other factors. During periods of heavy and prolonged precipitation, shallow perched groundwater conditions often occur over fine-grained native deposits such as those beneath the site, particularly during the wet season.

INFILTRATION TESTING

On April 13, 2013, GeoPacific performed two open pit falling head infiltration tests at the approximate locations shown on Figure 2. The tests were conducted at the bottom of test pits in the native soil at approximate depths of 2 and 3.5 feet below the ground surface. The infiltration tests were performed at or

near the locations of test pits TP-4 and TP-7. The soil encountered at the depth of the infiltration tests consisted of reddish brown clayey SILT (ML) residual soil.

The test holes were pre-saturated for 4 hours prior to performing the tests. During the tests, water levels were measured over 30 minute intervals with approximate head pressures ranging between 3 and 8 inches until three successive measurements showing a consistent infiltration rate were achieved. Approximate test locations are shown in Figure 2. Table 2 presents a summary of our infiltration test measurement results.

Table 2. Results of Infiltration Testing

Location	Depth	Infiltration Rate		
TP-4	2 feet	1.7 in/hr		
TP-7	3.5 feet	1.0 in/hr		

CONCLUSIONS AND RECOMMENDATIONS

Results of this study indicate that the proposed development is geotechnically feasible, provided that the recommendations of this report are incorporated into the design and construction phases of the project. In our opinion, the greatest geotechnical constraints for project development are the presence of medium hard rock underlying much of the site. The proposed structures may be supported on shallow foundations bearing on competent undisturbed native soils, or engineered fill, designed and constructed as recommended in this report.

Recommendations are presented below for site preparation and undocumented fill removal, engineered fill, wet weather earthwork, seismic design, structural foundations, footing drains, storm water systems, permeable pavement systems, excavation conditions and utility trench backfill, erosion control considerations, and asphalt pavement sections. The recommendations of this report assume the single-family structures will have raised floors and crawlspaces.

Site Preparation and Undocumented Fill Removal

Within the areas to receive fill, proposed building footprints, or other settlement-sensitive areas, undocumented fill, buried topsoil, vegetation, and debris should be completely removed and replaced with engineered fill. Debris from clearing should be removed from the site. Undocumented fill and buried topsoil were encountered to a depth of about 5 feet in test pit TP-1, and to a depth of about 3.5 feet in test pit TP-2. Other areas of fill, and/or deeper fill deposits, may be encountered on site beyond the locations of the test pits performed for this study.

Organic-rich topsoil should be stripped to the relatively inorganic native soils. We anticipate that the depth of stripping will be an average of roughly 4 to 6 inches over most of the site. Deeper stripping will be needed in areas that have been tilled in the past, areas of localized fill deposits, etc. The final depth of stripping removal may vary depending on local subsurface conditions and the contractor's methods, and should be determined on the basis of a site inspection after the initial stripping has been performed.

Stripped organic soil should be stockpiled only in designated areas or removed from the site and stripping operations should be observed and documented by GeoPacific. Any existing subsurface structures (tile drains, old utility lines, septic leach fields, etc.) beneath structures and pavements should be removed and the excavations backfilled with engineered fill.

In construction areas, once stripping is approved, the area should be ripped or tilled to a depth of 12 inches, moisture conditioned, and compacted in-place prior to the placement of engineered fill or crushed aggregate base for pavement (dry weather conditions). Exposed subgrade soils should be evaluated by GeoPacific. For large areas, this evaluation is normally performed by proof-rolling the exposed subgrade with a fully loaded scraper or dump truck. For smaller areas where access is restricted, and during wet weather, the subgrade should be evaluated by probing the soil with a steel probe.

Soft/loose soils identified during subgrade preparation should be compacted to a firm and unyielding condition or over-excavated and replaced with engineered fill, as described below. The depth of overexcavation, if required, should be evaluated by GeoPacific at the time of construction.

Engineered Fill

In general, we anticipate that soils from planned cuts and utility trench excavations will be suitable for use as engineered fill during dry weather conditions, provided they are adequately moisture conditioned prior to compacting and are free of highly organic material and debris. Imported fill material should be reviewed by GeoPacific prior to being imported to the site. Oversize material greater than 6 inches in size should not be used within 3 feet of foundation footings, and material greater than 12 inches in diameter should not be used in engineered fill.

Engineered fill should be compacted in horizontal lifts not exceeding 8 inches using conventional compaction equipment. We recommend that engineered fill be compacted to at least 90 percent of the maximum dry density determined by ASTM D1557 (Modified Proctor) or equivalent. On-site soils may be wet or dry of optimum; therefore, we anticipate that moisture conditioning of native soil will be necessary for compaction operations.

Proper test frequency and earthwork documentation usually requires daily observation and testing during stripping, rough grading, and placement of engineered fill. Field density testing should generally conform to ASTM D2922 and D3017, or D1556. Engineered fill should be periodically observed and tested by the project geotechnical engineer or his representative. Typically, one density test is performed for at least every 2 vertical feet of fill placed or every 500 cubic yards, whichever requires more testing. Because testing is performed on an on-call basis, we recommend that the earthwork contractor be held contractually responsible for test scheduling and frequency.

Wet Weather Earthwork

The on-site soils are moisture sensitive and may be difficult to handle or traverse with construction equipment during periods of wet weather. Earthwork is typically most economical when performed under dry weather conditions. Earthwork performed during the wet-weather season will probably require expensive measures such as cement treatment or imported granular material to compact fill to the recommended engineering specifications. If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is difficult to control, the following recommendations should be incorporated into the contract specifications.

Earthwork should be performed in small areas to minimize exposure to wet weather. Excavation or
the removal of unsuitable soils should be followed promptly by the placement and compaction of
clean engineered fill. The size and type of construction equipment used may have to be limited to
prevent soil disturbance. Under some circumstances, it may be necessary to excavate soils with a
backhoe to minimize subgrade disturbance caused by equipment traffic;

- The ground surface within the construction area should be graded to promote run-off of surface water and to prevent the ponding of water;
- Material used as engineered fill should consist of clean, granular soil containing less than 5 percent fines. The fines should be non-plastic. Alternatively, cement treatment of on-site soils may be performed to facilitate wet weather placement;
- The ground surface within the construction area should be sealed by a smooth drum vibratory roller, or equivalent, and under no circumstances should be left uncompacted and exposed to moisture.
 Soils which become too wet for compaction should be removed and replaced with clean granular materials;
- Excavation and placement of fill should be observed by the geotechnical engineer to verify that all
 unsuitable materials are removed and suitable compaction and site drainage is achieved; and
- Bales of straw and/or geotextile silt fences should be strategically located to control erosion.

If cement or lime treatment is used to facilitate wet weather construction, GeoPacific should be contacted to provide additional recommendations and field monitoring.

Seismic Design

Structures should be designed to resist earthquake loading in accordance with the methodology described in the 2009 International Building Code (IBC) with applicable 2010 Oregon Structural Specialty Code (OSSC) revisions. We recommend Site Class D be used for design per the OSSC, Table 1613.5.2. Design values determined for the site using the USGS (United States Geological Survey) Earthquake Ground Motion Parameters utility are summarized below.

Table 3. Recommended Earthquake Ground Motion Parameters (2009 IBC / 2010 OSSC)

Mapped Spectral Acce (MCE, Site Cl Short Period, S_s 1.0 Sec Period, S_1 Soil Factors for Si F_a F_v $D_s = 2/3 \times F_a \times S_s$	Value
Location (Lat, Long), degrees	45.357, -122.650
Mapped Spectral Accel (MCE, Site Cla	
Short Period, S _s	0.912 g
1.0 Sec Period, S ₁	0.326 g
Soil Factors for Sit	e Class D:
Fa	1.135
	1.747
$SD_s = 2/3 \times F_a \times S_s$	0.690 g
$SD_1 = 2/3 \times F_v \times S_1$	0.380 g

Soil liquefaction is a phenomenon wherein saturated soil deposits temporarily lose strength and behave as a liquid in response to earthquake shaking. Soil liquefaction is generally limited to loose, granular soils located below the water table. Following development, on-site soils will consist predominantly of medium stiff to very stiff silt and engineered fill, which are not considered susceptible to liquefaction. Therefore, it is our opinion that special design or construction measures are not required to mitigate the effects of liquefaction.

Structural Foundations

Based on our understanding of the proposed project and the results of our exploration program, and assuming our recommendations for site preparation are followed, medium stiff to stiff native soil or engineered fill soils should be encountered at or near the foundation level of the proposed structures.

Shallow, conventional isolated or continuous spread footings may be used to support the proposed structures, provided they are founded on competent native soils. We recommend a maximum allowable bearing pressure of 2,000 pounds per square foot (psf) for designing footings on native soil near existing grade. The recommended maximum allowable bearing pressure may be increased by a factor of 1.33 for short term transient conditions such as wind and seismic loading. Exterior footings should be founded at least 18 inches below the lowest adjacent finished grade. Minimum footing widths should be determined by the project engineer/architect in accordance with applicable design codes.

Assuming construction is accomplished as recommended herein, and for the foundation loads anticipated, we estimate total settlement of spread foundations of less than about 1 inch and differential settlement between two adjacent load-bearing components supported on competent soil of less than about ½ inch. We anticipate that the majority of the estimated settlement will occur during construction, as loads are applied.

Wind, earthquakes, and unbalanced earth loads will subject the proposed structure to lateral forces. Lateral forces on a structure will be resisted by a combination of sliding resistance of its base or footing on the underlying soil and passive earth pressure against the buried portions of the structure. For use in design, a coefficient of friction of 0.5 may be assumed along the interface between the base of the footing and subgrade soils. Passive earth pressure for buried portions of structures may be calculated using an equivalent fluid weight of 390 pounds per cubic foot (pcf), assuming footings are cast against dense, natural soils or engineered fill. The recommended coefficient of friction and passive earth pressure values do not include a safety factor. The upper 12 inches of soil should be neglected in passive pressure computations unless it is protected by pavement or slabs on grade.

Footing excavations should be trimmed neat and the bottom of the excavation should be carefully prepared. Loose, wet or otherwise softened soil should be removed from the footing excavation prior to placing reinforcing steel bars. GeoPacific should observe foundation excavations prior to placing formwork and reinforcing steel, to verify that adequate bearing soils have been reached.

The above foundation recommendations are for dry weather conditions. Due to the high moisture sensitivity of on-site soils, construction during wet weather may require overexcavation of footings and backfill with compacted, crushed aggregate.

Footing and Roof Drains

To minimize the fluctuation of soil moisture content near structural foundations, we recommend that the structures be constructed with perimeter footing drains. Footing drains should consist of 4-inch minimum diameter perforated plastic pipe embedded in a minimum of 1 ft³ per lineal foot of clean, crushed drain rock or 1"- ¼" rounded drain rock. The drain pipe and surrounding drain rock should be wrapped in non-woven geotextile (Mirafi 140N, or approved equivalent) to minimize the potential for clogging and/or ground loss due to piping. Water collected from the footing drains should be directed into the local storm drain system or other suitable outlet. A minimum 0.5 percent fall should be maintained throughout the drain and non-perforated pipe outlet. The footing drains should include clean-outs to allow periodic maintenance and inspection.

Down spouts and roof drains should collect roof water in a system separate from the footing drains in order to reduce the potential for clogging. Roof drain water should be directed to an appropriate discharge point well away from structural foundations. Grades should be sloped downward and away from buildings to reduce the potential for ponded water near structures.

Storm Water Management

We understand that on-site storm water systems may include pervious pavement, shallow infiltration facilities, and/or deep infiltration facilities. Infiltration test results indicate that infiltration rates in the near surface residual soils are on the order of 1.7 inches per hour at depths of 2 to 3 feet, and 1 inch per hour at depths of 3 to 4 feet. The designer should select an appropriate infiltration value based on our test results and the location of the proposed infiltration facility. The infiltration rates do not incorporate a factor of safety. For the design infiltration rate, the system designer should incorporate an appropriate factor of safety against slowing of the rate over time due to biological and sediment clogging.

Infiltration test methods and procedures attempt to simulate the as-built conditions of the planned disposal system. However, due to natural variations in soil properties, actual infiltration rates may vary from the measured and/or recommended design rates. All systems should be constructed such that potential overflow is discharged in a controlled manner away from structures, and all systems should include an adequate factor of safety. Infiltration rates presented in this report should not be applied to inappropriate or complex hydrological models such as a closed basin without extensive further studies. Evaluating environmental implications of stormwater disposal at this site are beyond the scope of this study.

Permeable Pavement Design Recommendations

We understand that permeable pavements may be incorporated in project design. We recommend pervious Portland cement concrete (PCC), or manufactured permeable paver blocks such as Anchor Holland Permeable with integrated spacer gaps (or similar). Pervious asphalt pavement is not recommended due to its tendency for raveling and insufficient durability. A typical detail for permeable pavement sections is attached to this report.

For use in sizing calculations, we recommend an ultimate infiltration rate of 1.7 or 1 inch per hour be used for the near surface silt soils, depending on the depth of the planned pavement section. For the design infiltration rate, the system designer/builder should incorporate an appropriate factor of safety against slowing of the rate over time due to biological and sediment clogging. Stormwater exceeding soil infiltration and/or soil storage capacities will need to be directed to a suitable discharge location. We suggest the pervious pavement designer assume a void ratio of 30 percent for the crushed rock / reservoir course. The crushed rock / reservoir course material should consist of Open-Graded Aggregate per ODOT Standard Specifications Section 02630.11. Care should be taken to avoid overcompaction of the subgrade soils and reservoir course, which could limit the void ratio of these materials and reduce the functionality as a pervious pavement.

We do not recommend a density specification for the crushed rock / reservoir course material beneath pervious pavements, due to concerns about overcompaction as discussed above. During placement of the base rock / reservoir course material, visual observations should be made to verify the material has been compacted to a relatively firm and unyielding condition.

We assume that the private driveway will accommodate primarily passenger vehicles and light trucks. Consequently, our design was formulated using design methods prescribed by AASHTO for light-duty roads.

Table 4 presents our recommended minimum section for construction of a permeable paver private driveway section in dry-weather conditions. The driveway should be constructed on firm, unyielding subgrade soil. The edges of permeable pavement sections should be retained by concrete curbs extending to subgrade below the base of the section, or as specified by the project civil engineer.

Table 4. Recommended Permeable Paver Section for Dry-Weather Construction

Material Layer	Minimum Thickness (in.)		
Pervious PCC / Manufactured Paver Blocks	4 inches / 3.125 inches		
Open Graded Crushed Aggregate (washed) 1"- 1/10" ODOT Table 02630-2	1 inch		
Open Graded Crushed Aggregate (washed) (2" - ¾ " diameter)	11 inches (see Note)		
Non-woven Geotextile Filter Fabric (Mirafi 160N or Equivalent)	-		
Unyielding Native Subgrade Soil	-		

Note: Thickness of reservoir section may need to be increased by the storm water system designer, due to storm water detention or other requirements.

Subgrade strength be verified visually by GeoPacific prior to section placement; soft areas may need to be stabilized or overexcavated prior to pavement section construction. Overexcavations should be backfilled using additional crushed drain rock.

If pavement areas are to be constructed during wet weather, GeoPacific should review the subgrade and proposed construction methods immediately prior to the placement of base course so that specific recommendations can be provided. Wet-weather construction is likely to require additional crushed aggregate base course thickness.

Excavating Conditions and Utility Trench Backfill

Subsurface test pit exploration indicates that soft (R2) to medium hard (R3) basalt underlies the site at shallow depths. We expect utility trenches less than about 7 feet below existing grade can be excavated in the soft basalt using conventional large trackhoe equipment. However, practical refusal on medium hard (R3) basalt bedrock was reached in test pits TP-1 and TP-3 through TP-7 at depths of 7 to 9.5 feet, with the medium-sized backhoe used in our exploration. Medium hard Columbia River Basalt typically contains clay seams and fractures, and can be excavated employing a rock bucket and ripper tooth. Some use of pneumatic rock breaker attachments may be necessary, particularly in deeper utility trench excavations.

Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. Actual slope inclinations at the time of construction should be determined based on safety requirements and actual soil and groundwater conditions. All temporary cuts in excess of 4 feet in height should be sloped in accordance with U.S. Occupational Safety and Heath Administration (OSHA) regulations (29 CFR Part 1926), or be shored. The existing native soils classify as Type B Soil and temporary excavation side slope inclinations as steep as 1H:1V may be assumed for planning purposes. This cut slope inclination is applicable to excavations above the water table only.

Shallow, perched groundwater should be anticipated in excavations and utility trenches. The depth of groundwater will likely be less during the wet weather season and greater during the dry weather season. Vibrations created by traffic and construction equipment may cause some caving and raveling of excavation walls. In such an event, lateral support for the excavation walls should be provided by the contractor to prevent loss of ground support and possible distress to existing or previously constructed structural improvements.

PVC pipe should be installed in accordance with the procedures specified in ASTM D2321. We recommend that structural trench backfill be compacted to at least 90% of the maximum dry density obtained by Modified Proctor (ASTM D1557) or equivalent. Initial backfill lift thicknesses for a ¾"-0 crushed aggregate base may need to be as great as 4 feet to reduce the risk of flattening underlying flexible pipe. Subsequent lift thickness should not exceed 1 foot. If imported granular fill material is used, then the lifts for large vibrating plate-compaction equipment (e.g. hoe compactor attachments) may be up to 2 feet, provided that proper compaction is being achieved and each lift is tested. Use of large vibrating compaction equipment should be carefully monitored near existing structures and improvements due to the potential for vibration-induced damage.

Adequate density testing should be performed during construction to verify that the recommended relative compaction is achieved. Typically, at least one density test is taken for every 4 vertical feet of backfill on each 200-lineal-foot section of trench.

Asphalt Pavement Sections

Table 5 presents recommended minimum pavement sections for on-site public streets that are to be completed as part of the project, under dry weather construction conditions. For on-site streets, a subgrade soil R-value of 15 was assumed for design purposes. The recommended pavement sections were formulated using the Crushed Base Equivalent method and assuming a Traffic Index of 4 for on-site streets. The Traffic Index is generally appropriate for minor residential streets and cul-de-sacs. The project engineer or architect should review the assumed traffic indices to evaluate their suitability for this project. Changes in anticipated traffic levels will affect the corresponding pavement section.

Table 5. Recommended Minimum Dry Weather Pavement Section

Material Layer	Minimum Thickness (inches)	Compaction Standard		
Asphaltic Concrete (AC)	3	92% of Rice Density (top lift) 91% of Rice Density (lower lifts) AASHTO T-209		
Crushed Aggregate Base 3/4"-0 (leveling course)	2	95% of Modified Proctor ASTM D1557		
Crushed Aggregate Base 1½"-0	8	95% of Modified Proctor ASTM D1557		
Recommended Subgrade	12	90% of Modified Proctor or approved native		

In new pavement areas, native soil subgrade in pavement areas should be ripped or tilled to a minimum depth of 12 inches, moisture conditioned, and recompacted in-place to at least 90 percent of ASTM D1557 (Modified Proctor) or equivalent. In order to verify subgrade strength, we recommend proof-rolling directly on subgrade with a loaded dump truck during dry weather and on top of base course in wet weather. Soft areas that pump, rut, or weave should be stabilized prior to paving. If pavement areas are to be constructed during wet weather, GeoPacific should review subgrade at the time of construction so that condition specific recommendations can be provided. Wet weather pavement construction is likely to require soil amendment or geotextile fabric and an increase in base course thickness.

During placement of pavement section materials, density testing should be performed to verify compliance with project specifications. Generally, one subgrade, one base course, and one AC compaction test is performed for every 100 to 200 linear feet of paving.

Erosion Control Considerations

During our field exploration program, we did not observe soil types that would be considered highly susceptible to erosion. In our opinion, the primary concern regarding erosion potential will occur during construction, in areas that have been stripped of vegetation. Erosion at the site during construction can be minimized by implementing the project erosion control plan, which should include judicious use of straw bales and silt fences. If used, these erosion control devices should be in place and remain in place throughout site preparation and construction.

Erosion and sedimentation of exposed soils can also be minimized by quickly re-vegetating exposed areas of soil, and by staging construction such that large areas of the project site are not denuded and exposed at the same time. Areas of exposed soil requiring immediate and/or temporary protection against exposure should be covered with either mulch or erosion control netting/blankets. Areas of exposed soil requiring permanent stabilization should be seeded with an approved grass seed mixture, or hydroseeded with an approved seed-mulch-fertilizer mixture.

UNCERTAINTIES AND LIMITATIONS

We have prepared this report for the owner and their consultants for use in design of this project only. This report should be provided in its entirety to prospective contractors for bidding and estimating purposes; however, the conclusions and interpretations presented in this report should not be construed as a warranty of the subsurface conditions. Experience has shown that soil and groundwater conditions can vary significantly over small distances. Inconsistent conditions can occur between explorations that may not be detected by a geotechnical study. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, GeoPacific should be notified for review of the recommendations of this report, and revision of such if necessary.

Sufficient geotechnical monitoring, testing and consultation should be provided during construction to confirm that the conditions encountered are consistent with those indicated by explorations. Recommendations for design changes will be provided should conditions revealed during construction differ from those anticipated, and to verify that the geotechnical aspects of construction comply with the contract plans and specifications.

Within the limitations of scope, schedule and budget, GeoPacific executed these services in accordance with generally accepted professional principles and practices in the field of geotechnical engineering at the time the report was prepared. No warranty, expressed or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or groundwater at this site.

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We appreciate this opportunity to be of service.

Sincerely,

GEOPACIFIC ENGINEERING, INC.

Benjamin G. Anderson Staff Engineer

Attachments:

References

Figure 1 - Vicinity Map

Figure 2 – Site and Exploration Plan Pervious Pavement (SW-110) Typical Detail

Test Pit Logs (TP-1 through TP-7)

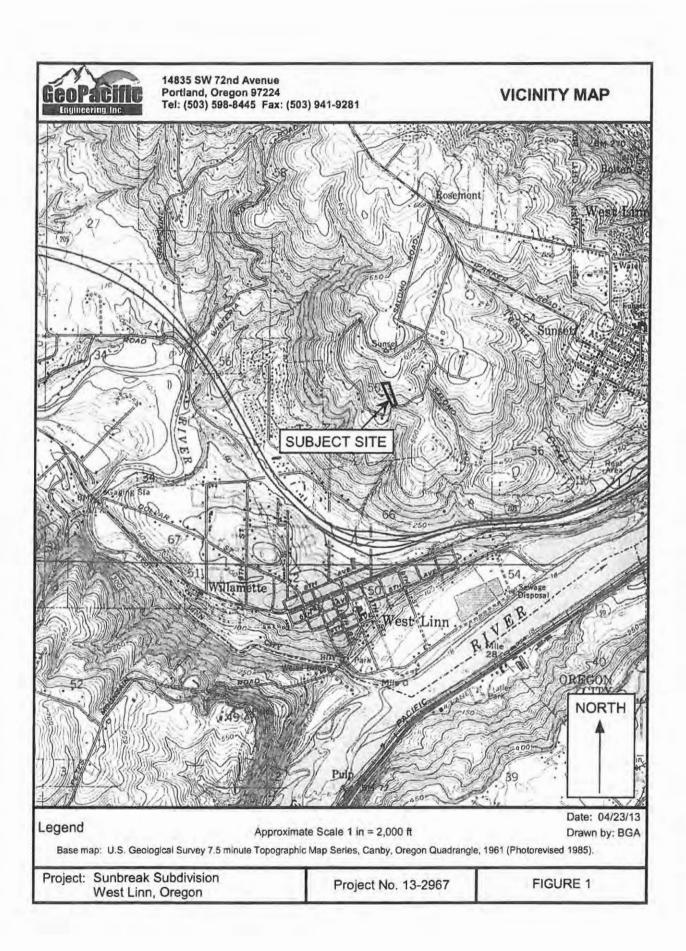
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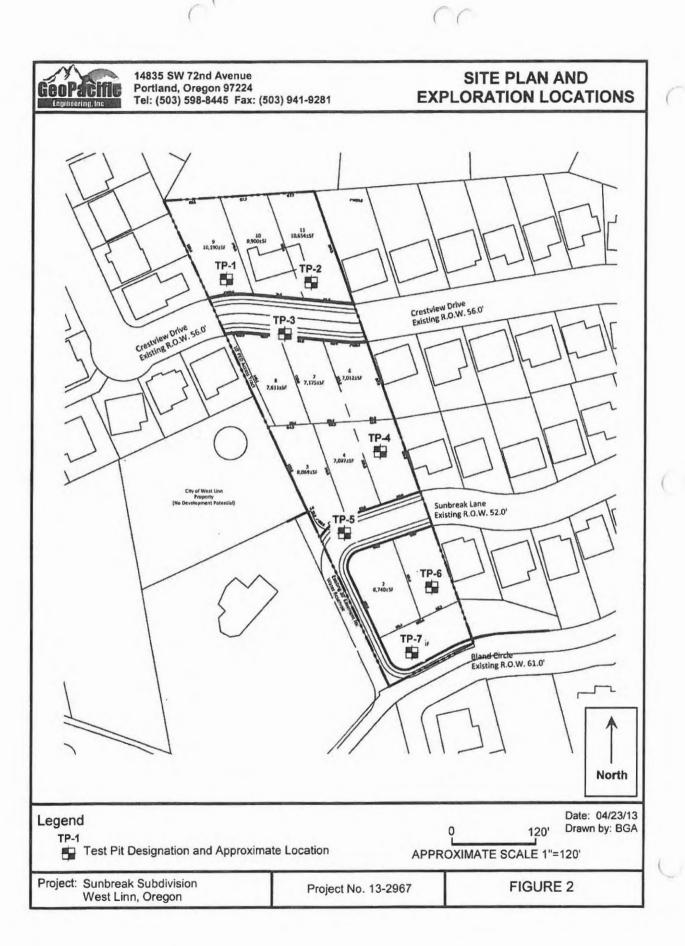
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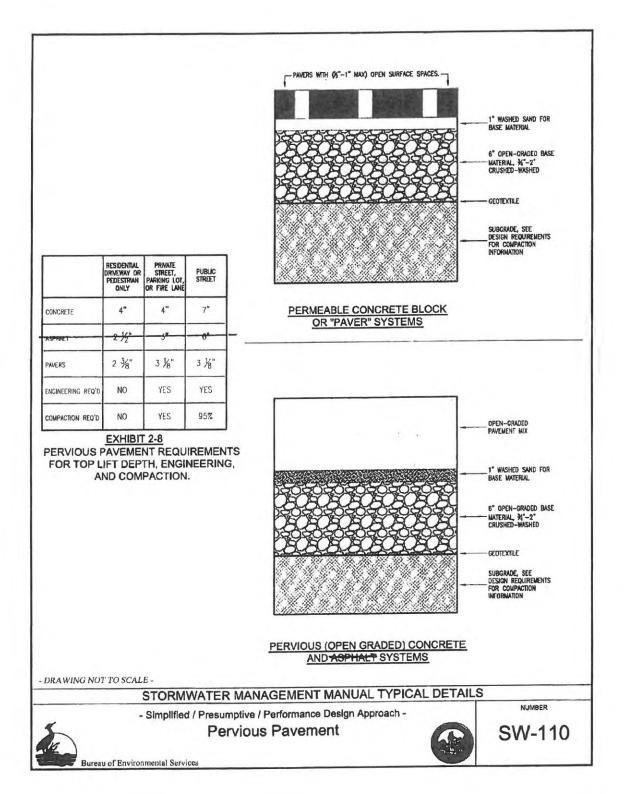
Scott L. Hardman, G.E., P.E. Principal Geotechnical Engineer

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14835 SW 72nd Avenue

Portland, Oregon 97224 Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Sunbreak Subdivision West Linn, Oregon

Project No. 13-2967

Test Pit No. **TP-1**

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Type	In-Situ Dry Density (Ib/ft³)	Moisture Content (%)	Water Bearing Zone	Material Description			
2- 3- 4- 5- 6- 7-	<u>a.</u>	0)			3	3" moderately organic SILT (OL-ML), brown, fine roots throughout, soft moist (Topsoil) Loose, silty GRAVEL and COBBLES (GM), brown, dry to moist (Undocumented Fill) Construction debris encountered at 3 ft Soft, moderately organic SILT (OL-ML), dark brown, fine roots throughout, r (Buried Topsoil) Stiff, gravelly SILT (ML), reddish brown, medium roots throughout, moist (Residual Soil) Very soft to soft (R1-R2), highly weathered BASALT, gray, moist (Columbia River Basalt)			
8— 9— 110— 111— 112— 113— 114— 115— 116— 117—						Test pit terminated at 7.5 feet due to practical refusal on medium hard to hard (R3-R4), moderately weathered BASALT, vesicular, gray and reddish brown, black staining, moist (Columbia River Basalt) Note: No seepage or groundwater encountered.			
1.	ND O0 to 000 g Sample		Sal. kel	Shelby	o Tube Sa	Date Excavated: 04/12/13 Logged By: BGA Surface Elevation:			



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TEST PIT LOG

Tel: (503) 598-8445 Fax: (503) 941-9281 Project: Sunbreak Subdivision Project No. 13-2967 Test Pit No. TP-2 West Linn, Oregon Water Bearing Zone Pocket
Penetrometer
(tons/ft²) In-Situ Dry Density (Ib/ft³) Moisture Content (%) Sample Type Depth (ft) **Material Description** 4" moderately organic SILT (OL-ML), dark brown, fine roots throughout, soft, moist (Topsoil) Medium stiff, gravelly SILT (ML), brown, moist (Undocumented Fill) Soft, moderately organic, gravelly SILT (OL-ML), dark brown, fine roots throughout, moist (Buried Topsoil) Extremely soft to very soft (R0-R1), highly weathered BASALT, gray, moist (Columbia River Basalt) 5-Grades to soft 8-9 Test pit terminated at 10 feet. 11-Note: No seepage or groundwater encountered. 12-13-14-15 16-17-LEGEND Date Excavated: 04/12/13 5 Gal. Bucket Logged By: BGA 100 to Surface Elevation: Seepage Water Bearing Zone Water Level at Abandonment Bag Sample **Bucket Sample** Shelby Tube Sample



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TEST PIT LOG

Project: Sunbreak Subdivision TP-3 Project No. 13-2967 Test Pit No. West Linn, Oregon Water Bearing Zone Pocket Penetrometer (tons/ft²) In-Situ Dry Density (Ib/ft³) Moisture Content (%) Sample Type **Material Description** 10" moderately organic SILT (OL-ML), dark brown, fine roots throughout, soft, moist (Topsoil) Dense, silty GRAVEL and COBBLES (GM), reddish brown, moist (Residual Soil) Extremely soft to very soft (R0-R1), highly weathered BASALT, gray, silty clay to clayey silt matrix, moist (Columbia River Basalt) Grades to soft (R2) 8-Test pit terminated at 7.5 feet due to practical refusal on medium hard to hard (R3-R4), moderately weathered BASALT, vesicular, gray and reddish brown, black staining, moist (Columbia River Basalt) 9-Note: No seepage or groundwater encountered. 10-11-12-13-14-15-16-17-LEGEND Date Excavated: 04/12/13 Logged By: BGA 100 to 1,000 g Surface Elevation: Water Level at Abandonment Bag Sample **Bucket Sample** Shelby Tube Sample Seepage Water Bearing Zone



GCOPACITIC Portland, Oregon 97224

TEST PIT LOG

Proje			eak Su Linn, C				Project No. 13-2967	Test Pit No. TP-4		
Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Type	Moisture Content (%) Water Bearing Zone Water Bearing Zone							
- 1- 2- - 3-	2.0 3.0 2.0 2.0					soft, moist (7	ropsoil) yey SILT (ML), reddish brown	k brown, fine roots throughout,		
4- 5-							moist (Columbia River Basa	athered BASALT, gray, silty clay to		
6— 7— 8—						[very hard digging	g below 6.5 feet]			
9						(R3-R4), modera black staining, m	ed at 8 feet due to practical rately weathered BASALT, vestoist (Columbia River Basalt) ge or groundwater encountere			
5— 6— 7—	ND	-			•			Date Excavated: 04/12/13		



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Portland, Oregon 97224 Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Sunbreak Subdivision West Linn, Oregon

Project No. 13-2967

Test Pit No. TP-5

Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Type	In-Situ Dry Density (Ib/ft³)	Moisture Content (%)	Water Bearing Zone	Material Description
1-						16" moderately organic SILT (OL-ML), dark brown, fine to medium roots throughout, soft, moist (Topsoil) Grades to without roots below 10 inches
2	2.0 2.5 2.0 2.0					Medium stiff, clayey SILT (ML), reddish brown, with occasional gravel size basa clasts (Residual Soil)
8— — 9—						Very soft to soft (R1-R2), highly weathered BASALT, gray, silty clay to clayey silt matrix, moist (Columbia River Basalt)
10- - 11- - 12- - 13- - 14- - 15- - 16- - 17-						Test pit terminated at 9.5 feet due to practical refusal on medium hard to hard (R3-R4), moderately weathered BASALT, vesicular, gray and reddish brown, black staining, moist (Columbia River Basalt) Note: No seepage or groundwater encountered.
1,0	ND 00 to 000 g	Buc	Sal. ckel	Shelby	Tube Sa	Date Excavated: 04/12/13 Logged By: BGA Surface Elevation:



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Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Sunbreak Subdivision Project No. 13-2967 Test Pit No. TP-6 West Linn, Oregon Pocket Penetrometer (tons/ft²) Water Bearing Zone Sample Type Moisture Content (%) In-Situ Dry Density (Ib/ft³) Depth (ft) **Material Description** 4" moderately organic SILT (OL-ML), dark brown, fine roots throughout, soft, moist (Topsoil) Dense, silty GRAVEL and COBBLES (GM), reddish brown, moist (Residual Soil) Extremely soft to very soft (R0-R1), highly weathered BASALT, gray, silty clay to clayey silt matrix, moist (Columbia River Basalt) Grades to soft (R2) 6-Test pit terminated at 7 feet due to practical refusal on medium hard to hard (R3-R4), moderately weathered BASALT, vesicular, gray and reddish brown, black staining, moist (Columbia River Basalt) 9 Note: No seepage or groundwater encountered. 10-12-13-14-15-16-17-LEGEND Date Excavated: 04/12/13 5 Gal. Logged By: BGA 100 to Surface Elevation: Water Level at Abandonmen Bag Sample **Bucket Sample** Shelby Tube Sample Water Bearing Zone



GEOPACITE 14835 SW 72nd Avenue Portland, Oregon 97224

TEST PIT LOG

lit.	ingineering	け川じ Linc				n 97224 45 Fax: (503) 941-92	81	IEST PIT LOG
Proj			eak Su Linn, C				Project No. 13-2967	Test Pit No. TP-7
Depth (ft)	Pocket Penetrometer (tons/ft²)	Sample Type	In-Situ Dry Density (Ib/ft³)	ription				
1-	3.0			Moisture Content (%)		8" moderately soft, moist (Top	organic SILT (OL-ML), da osoil)	rk brown, fine roots throughout,
2- 2- 3- 4-	3.0 3.5 3.0 3.5 3.0					Stiff, clayey SILT (M (Residual Soil)	1L), reddish brown, with o	ccasional gravel size basalt clasts
5- 5- 6- 7-							ry soft (R0-R1), highly we oist (Columbia River Basa	athered BASALT, gray, silty clay to
8- 9- 10- 11- 12- 13- 14- 15- 16- 17-						(R3-R4), moderatel black staining, mois	at 7.5 feet due to practica y weathered BASALT, ve st (Columbia River Basalt) or groundwater encounter	
1,0	ND 10 to 100 g	5 G Bucket S	ket	Shelby T	ube Sam	ple Seepage Water Bearing	g Zone Water Level at Abandonment	Date Excavated: 04/12/13 Logged By: BGA Surface Elevation:

OPERATIONS AND MAINTENANCE To be Completed with Final Design



Walter H. Knapp & Associates, LLC Consultants in Arboriculture, Silviculture, and Forest Ecology

May 9, 2013

Planning and Building City of West Linn 22500 Salamo Road #1000 West Linn, Oregon 97068

Re:

Arborist Report and Tree Preservation Plan for the Sunbreak Project

West Linn, Oregon

Project No.: 1326 Sunbreak

Please find enclosed the Arborist Report and Tree Preservation Plan for the Sunbreak project located at 23150 Bland Circle in West Linn, Oregon. Please contact us if you have questions or need any additional information.

Respectfully,

Morgan E. Holen

Morgan Holen & Associates, LLC ISA Certified Arborist, PN-6145A ISA Tree Risk Assessment Qualified

Forest Biologist

Walter H. Knapp & Associates, LLC Consultants in Arboriculture, Silviculture, and Forest Ecology

Arborist Report and Tree Preservation Plan

Sunbreak West Linn, Oregon

May 9, 2013

7615 SW Dunsmuir Lane, Beaverton, OR 97007 Phone: (503) 646-4349 Fax: (503) 747-4863

Walter H. Knapp & Associates, LLC Consultants in Arboriculture, Silviculture, and Forest Ecology

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7615 SW Dunsmuir Lane, Beaverton, OR 97007 Phone: (503) 646-4349 Fax: (503) 747-4863

Walter H. Knapp & Associates, LLC Consultants in Arboriculture, Silviculture, and Forest Ecology

May 8, 2013

SUNBREAK – WEST LINN, OREGON ARBORIST REPORT AND TREE PRESERVATION PLAN

1326

Purpose

This Arborist Report and Tree Preservation Plan for the Sunbreak project in West Linn, Oregon, is provided pursuant to City of West Linn Community Development Code, Chapter 55, Municipal Code Sections 8.500 and 8.600, and the West Linn Tree Technical Manual. This report describes the existing trees located on the project site, as well as recommendations for tree removal, retention and protection.

Site Description

The project site is located at 23150 Bland Circle in West Linn. The site is gently sloped and primarily an open field with trees scattered near property boundaries and around the existing residence. The site is planned to be subdivided for residential development and Crestview Drive and Sunbreak Lane will be extended through the site. A site visit was conducted on April 24, 2013 by ISA Certified Arborist Morgan Holen (PN-6145A) in order to evaluate the existing trees in terms of species, size, condition, significance, and suitability for preservation with development. The location of individual trees is shown on site plan drawings and tree numbers correspond with the enclosed inventory data.

Tree Inventory

In all, 36 existing trees were inventoried, including 16 trees located on adjacent properties that will be protected throughout construction. The remaining 20 trees are located on site and include seven different tree species, including three non-native and invasive European white birches (*Betula pendula*). Table 1 provides a summary of the number of on-site trees by species.

Table 1. Count of On Site Trees by Species and Location - Sunbreak Project.

Common Name	Species Name	Quantity	Percent
Douglas-fir	Pseudotsuga menziesii	4	20%
European white birch	Betula pendula	3	15%
Oregon white oak	Quercus garryana	3	15%
pine	Pinus spp.	1	5%
plum	Prunus spp.	2	10%
spruce	Picea spp.	6	30%
willow	Salix spp.	1	5%
Total		20	100%

7615 SW Dunsmuir Lane, Beaverton, OR 97007 Phone: (503) 646-4349 Fax: (503) 747-4863 Significant trees will be determined by the City Arborist. Based on our evaluation of the size, type, location, health, and long term survivability of the individual trees located on site, six (30%) on site trees was identified as potentially being classified as significant. This includes three Oregon white oaks (trees number 6825, 6826 and 6831) and three Douglas-firs (trees number 6161, 6830 and 6839). The enclosed tree inventory data provides a complete description of the individual trees.

Tree Plan Recommendations

We coordinated with the project team to discuss trees suitable for preservation in terms of proposed construction impacts. Of the 20 on site trees, 17 (85%) are planned for removal either for construction or because of poor or hazardous condition, and 3 (15%) are planned for retention including potentially significant trees number 6826, 6830 and 6839. Table 2 provides a summary of the number of non-significant and potentially significant trees by treatment recommendation.

Table 2. Number of On Site Trees by Treatment Recommendation and Significance.

Treatment	Remove	Retain	Total	Percent
Non-Significant Trees	14	0	14	70%
Potentially Significant	3	3	6	30%
Total	17	3		Tana
Percent	85%	15%	20	100%

The Tree Plan drawing illustrates the location of trees to be removed and preserved, and the approximate location of tree protection measures.

Tree Protection Standards

Trees to be protected will need special consideration to assure their protection during construction. Tree protection measures include:

Before Construction

- 1. Tree Protection Zone. The project arborist shall designate the Tree Protection Zone (TPZ) for each tree to be protected. Where feasible, the size of the TPZ shall be established at the dripline of the tree plus 10-feet. Alternatively, the TPZ shall be established at the dripline of protected trees. Where infrastructure (retaining walls, driveways, buildings, and utilities) must be installed closer to the tree(s), the TPZ may be established within the dripline area if the project arborist, in coordination with the City Arborist, determines that the tree(s) will not be unduly damaged. The location of TPZs shall be shown on construction drawings.
- 2. **Protection Fencing.** Protection fencing shall serve as the tree protection zone and shall be erected before demolition, grubbing, grading, or construction begins. All trees to be retained shall be protected by six-foot-high chain link fences installed at the edge of the TPZ. Protection fencing shall be secured to two-inch diameter

galvanized iron posts, driven to a depth of a least two feet, placed no further than 10-feet apart. If fencing is located on pavement, posts may be supported by an appropriate grade level concrete base. Protection fencing shall remain in place until final inspection of the project permit, or in consultation with the project arborist.

- 3. **Signage.** An 8.5x11 –inch sign stating, "WARNING: Tree Protection Zone," shall be displayed on each protection fence at all times.
- 4. Designation of Cut Trees. Trees to be removed shall be clearly marked with construction flagging, tree-marking paint, or other methods approved in advanced by the project arborist. Trees shall be carefully removed so as to avoid either above or below ground damage to those trees to be preserved. Roots of stumps that are adjacent to retained trees shall be carefully severed prior to stump extraction.
- 5. **Preconstruction Conference.** The project arborist shall be on site to discuss methods of tree removal and tree protection prior to any construction.
- Verification of Tree Protection Measures. Prior to commencement of
 construction, the project arborist will verify in writing to the City Arborist that tree
 protection fencing has been satisfactorily installed.

During Construction

- Tree Protection Zone Maintenance. The protection fencing shall not be moved, removed, or entered by equipment except under direction of the project arborist, in coordination with the City Arborist.
- 8. Storage of Material or Equipment. The contractor shall not store materials or equipment within the TPZ.
- 9. Excavation within the TPZ.
 - a. Excavation with the TPZ shall be avoided if alternatives are available.
 - b. If excavation within the TPZ is unavoidable, the project arborist shall evaluate the proposed excavation to determine methods to minimize impacts to trees. This can include tunneling, hand digging or other approaches.
 - All construction within the TPZ shall be under the on-site technical supervision of the project arborist, in coordination with the City Arborist.
- 10. Tree Protection Zone. The project arborist shall monitor construction activities and progress, and provide written reports to the developer and the City at regular intervals. Tree protection inspections will occur monthly or more frequently if needed.
- 11. **Quality Assurance.** The project arborist shall supervise proper execution of this plan during construction activities that could encroach on retained trees. Tree protection site inspection monitoring reports will be provided to the Client and City on a regular basis throughout construction.

Post Construction

12. **Final Report.** After the project has been completed, the project arborist shall provide a final report to the developer and the City. The final report shall include concerns about any trees negatively impacted during construction, and describe the measures needed to maintain and protect the remaining trees for a minimum of two years after project completion.

Summary

The enclosed tree inventory provides complete data for individual trees at the Sunbreak project site in West Linn. The location of inventoried trees and tree protection measures shall be shown on site plan drawings. Seventeen trees are recommended for removal because of condition or for the purposes of construction and three potentially significant on-site trees are planned for preservation with protection during construction. It is the Client's responsibility to implement this plan and to monitor the construction process. The project arborist will be available during construction to help with tree related issues.

Please contact us if you have questions or need any additional information.

Morgan E. Holen

Morgan Holen & Associates, LLC ISA Certified Arborist, PN-6145A ISA Tree Risk Assessment Qualified Forest Biologist

Enclosure: 1326 Sunbreak - Tree Data 4-24-13

1326 Sunbreak Tree Data 4-24-13

Page 1 of 1 Walter H. Knapp & Associates, LLC

No.	Common Name	Species Name	DBH*	C-Rad^	Defects and Comments	Sig?	Recommendation
5197	flowering pear	Pyrus calleryana	10		off-site street tree	n/a	protect adjacent tree
5396	flowering pear	Pyrus calleryana	6	8	off-site street tree	n/a	protect adjacent tree
5398	flowering pear	Pyrus calleryana	6	7	off-site street tree	n/a	protect adjacent tree
5399	flowering pear	Pyrus calleryana	6	7	off-site street tree	n/a	protect adjacent tree
5543	flowering pear	Pyrus calleryana	6	7	off-site street tree	n/a	protect adjacent tree
5544	flowering pear	Pyrus calleryana	8	7	off-site street tree	n/a	protect adjacent tree
6156	spruce	Picea spp.	10	10	on property line	no	remove
6157	spruce	Picea spp.	10	10	on property line	по	remove
6158	spruce	Picea spp.	10	10	on property line	no	remove
6159	pine	Pinus spp.	10	8	on property line	no	remove
6160	spruce	Picea spp.	8	8	on property line	no	remove
6160.1	spruce	Picea spp.	8	8	on property line	no	remove
6161	Douglas-fir	Pseudotsuga menziesii	30	22	no major defects; remove for street construction	YES	remove
6650	willow	Salix spp.	22	20	broken top, stem decay	no	remove
6651	Douglas-fir	Pseudotsuga menziesii	34		off-site, not evaluated	n/a	protect adjacent tree
6652	bigleaf maple	Acer macrophyllum	16	25	off-site, not evaluated	n/a	protect adjacent tree
6653	bigleaf maple	Acer macrophyllum	14	20	off-site, not evaluated	n/a	protect adjacent tree
6654	Douglas-fir	Pseudotsuga menziesii	32	25	off-site, not evaluated	n/a	protect adjacent tree
6825	Oregon white oak	Quercus garryana	24	25	moderate condition; remove for street construction four codom stems; safety	YES	remove
6826	Oregon white oak	Quercus garryana	59	25	prune if retained	YES	retain
	Douglas-fir	Pseudotsuga menziesii	39		retain with 6826	_	retain
	Oregon white oak	Quercus garryana	24	25	no major defects; remove for street construction		remove
	European white birch	Betula pendula	6	8	invasive species	no	remove
6833	European white birch	Betula pendula	9		invasive species	no	remove
6834	European white birch	Betula pendula	9	15	invasive species	no	remove
6835	Deodar cedar	Cedrus deodara	11	10	off-site, good condition	n/a	protect adjacent tree
6836	plum	Prunus spp.	8	15	poor structure, branch decay	no	remove
6837	plum	Prunus spp.	8	15	poor structure, stem and branch decay	no	remove
6838	spruce	Picea spp.	13		poor basal structure; sapsuckers	no	remove
6839	Douglas-fir	Pseudotsuga menziesii	22	25	no major defects	YES	retain
7081	Douglas-fir	Pseudotsuga menziesii	16	12	minor crown asymmetry	no	remove
7091	Douglas-fir	Pseudotsuga menziesii	42	30	off-site, not evaluated	n/a	protect adjacent tree
	Douglas-fir	Pseudotsuga menziesii	40	30	off-site, not evaluated	n/a	protect adjacent tree
	Douglas-fir	Pseudotsuga menziesii	34	25	off-site, not evaluated	n/a	protect adjacent tree
7094	Douglas-fir	Pseudotsuga menziesii	42	25	off-site, not evaluated	n/a	protect adjacent tree
7095	Douglas-fir	Pseudotsuga menziesii	42	25	off-site, not evaluated	n/a	protect adjacent tree

^{*}DBH is tree diameter measured at breast height, 4.5-feet above the ground level (inches)

[^]C-RAD is the average crown radius measured in feet

Sig? asks whether or not the tree is considered significant, either Yes (significant), No (non-significant), or N/A (non-applicable, off-site tree)



Planning & Development • 22500 Salamo Rd #1000 • West Linn, Oregon 97068 Telephone 503.656.4211 • Fax 503.656.4106 • westlinnoregon.gov

_Λ	DEVE	LOPMENT RE	VIEW APPLIC	CATION	
STAFF CONTACT		PROJECT No(s).	Use Only		
V PE	TER SPIR	Sil	1-1302/UA	-13-05/13-06/13-0	7/13-08/13-0
NON-REFUNDAB	LE FEE(S) 8 700	REFUNDABLE DEPOSI	(s) 6900	TOTAL 15/00	1.00
Type of Review (Please check all that apply	y):			1
Annexation (AN		oric Review		Subdivision (SUB) 67	00
Appeal and Rev		slative Plan or Change Line Adjustment (LLA)		Temporary Uses *	
Design Review		or Partition (MIP) (Pre			700
Easement Vaca		-Conforming Lots, Use		■ Water Resource Area Prote	ction/Single Lot (WAP)
Extraterritorial Final Plat or Pla		ned Unit Developmer Application Conference		Water Resource Area Prote Willamette & Tualatin Riv	
Flood Managem	nent Area Stre	et Vacation	,	Zone Change	
	on & Erosion Control	valle Llea Sign Bassions	Dosmit and Tomo	arna Cian Barmit application	roquire
different or	pation, Pre-Application, Sidew additional application forms,	available on the City	website or at City I	Hall.	require
Site Location/Address:				Assessor's Map No.: 21	E35A
23150 BLAND CIRCLE, WEST LINN				Tax Lot(s): 01300	
		•		Total Land Area: 2.8 Ac	res
Brief Description	n of Proposal: APPLIC	ANT PROPOSES	AN 11 LOT SU	BDIVISION	
Applicant Name: JT SMITH COMPANIES (please print)				Phone: 503-209-7	555
Address: 5285 MEADOWS ROAD, SUITE 171				Email: jwyland@jtsmithco.com	
City State Zip:	LAKE OSWEGO, OR 9	7035			•
Owner Name (red	quired): JOHN AND RACHEL OMLOR			Phone:	
Address:	23150 BLAND (Email:	
City State Zip:	WEST LINN				
Consultant Nam	e:ANDREW TULL, 3J C	ONSULTING, INC	3.	Phone: 503-545-1	907
Address:	10445 SW CANYON I	ROAD, SUITE 24	5	Email: andrew.tull@	3j-consulting.com
City State Zip:	BEAVERTON, OR 970	005			West II I Prome Ed
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No CD required /	** Only one hard-copy se	t needed .			NAMES AND ASSOCIATION OF THE PERSON OF THE P
to the Community De	perty owner(s) hereby authorizes requirements applicable to my a evelopment Code and to other re	pplication. Acceptance gulations adopted after	of this application do the application is ap	pes not infer a complete submitte proved shall be enforced where	M. Aliamendments
Approved application	s and subsequent development i	. / /	DocuSigned by:		6/18/2013 11:2
Applicant's sign	atura	G18/13	John Omlos	rature (required)	Date
Abhucant a sign	atul &	Date	DocuSigned by:	iature (requireu)	
777102			Rachel Oml	or	6/18/2013 16:
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