



CITY OF West Linn

PLANNING MANAGER DECISION

DATE: October 10, 2019

FILE NO.: WAP-19-01

REQUEST: Request for a Water Resource Area (WRA) hardship allowance to construct a single-family home at 4327 Kelly Street

PLANNER: Jennifer Arnold, Associate Planner

 Planning Manager

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GENERAL INFORMATION

APPLICANT: Paradise Homes
20659 NE Lakeside Drive
Fairview, OR 97024

OWNER: Ching Hay
4356 Riverview Ave
West Linn, OR 97068

SITE LOCATION: 4327 Kelly Street

SITE SIZE: 5,000 square feet (0.11 ac)

LEGAL DESCRIPTION: Assessor Map and Tax Lot: 21E36AA 01803

COMP PLAN DESIGNATION: Medium Density Residential

ZONING: R-4.5: Single-Family Residential Attached and Detached/Duplex

APPROVAL CRITERIA: Community Development Code (CDC) Chapters 14 (R-4.5) 32 (Water Resource Area Protection)

120-DAY RULE: The application was declared complete on July 12, 2019. The 120-day period ends on November 16, 2019.

PUBLIC NOTICE: Notice was mailed to property owners within 500 feet of the subject property, to all Neighborhood Associations, and posted on the City's website on September 11, 2019. A sign was placed on the property on September 20, 2019. Therefore, public notice requirements of CDC Chapter 99 have been met.

EXECUTIVE SUMMARY

The subject property is located at 4327 Kelly Street and currently vacant. The property is zoned R-4.5 and the applicant proposes the construction of a single-family home. The property has a slope of approximately 12 percent as it rises out of the drainage from Sunset Creek. The applicant is seeking hardship approval per Community Development Code Chapter 32.110 due to the Water Resource Area Protection (WRA) buffer encumbering the majority of the property. The applicant has submitted a stormwater management plan prepared by Aquarius Environmental. The allowable maximum disturbed area (MDA) of the WRA is 5,000 square feet. All temporary disturbed areas will be restored on-site.

Public comments:

Staff received no public comments.

DECISION

The Planning Manager (designee) approves this application (WAP-19-01), based on: 1) the findings submitted by the applicant, which are incorporated by this reference, 2) supplementary staff findings included in the Addendum below, and 3) the addition of conditions of approval below. With these findings, the applicable approval criteria are met. The conditions are as follows:

1. **Site Plan, Elevations, and Narrative.** With the exception of modifications required by these conditions, the project shall conform to the submitted plans, elevations, and narrative submitted in Exhibit PD-4.
2. **Engineering Standards.** All public improvements and facilities associated with public improvements including street improvements, utilities, grading, onsite stormwater design, street lighting, easements, and easement locations are submit to the City Engineer's review, modification and approval. Engineered plans and easement documents must be submitted with the Building Permit application. Improvements shall be constructed and completed prior to issuance of any occupancy permits. (See Staff Findings: 14 & 29)
3. **Stormwater Design.** At the time of building permit application, the applicant shall address stormwater pursuant to the Stormwater Management Report (SWMR) prepared by Aquarius Environmental dated May 2, 2019 (see Exhibit PD-4) and meet West Linn Public Works Design Standards. (See Staff Findings: 26)
4. **Access Easement.** The applicant shall record an access easement for the shared accessway prior to issuance of a building permit. (See Staff Findings: 10 & 29)

5. **Geotechnical Report.** Prior to issuance of a building permit a geotechnical report is required to be reviewed and approved by the City Engineer. (See Staff Findings: 28)

6. **Off-Site Mitigation Credits.** The applicant shall purchase off-site mitigation credits at a two-to-one ratio from the West Linn Parks Department at \$1.00 per square foot. Maximum Disturbed Area will be confirmed during building permit application per Staff Finding 36. The credits must be purchased prior to issuance of building permits. (See Staff Findings: 20 & 33-36)

The provisions of the Community Development Code Chapter 99 have been met.


Jennifer Arnold, Associate Planner

October 10, 2019
DATE

Appeals to this decision must be filed with the West Linn Planning Department within 14 days of the mailing date listed below. The cost of an appeal is \$400. The appeal must be filed by an individual who has established standing by submitting comments prior to the date identified in the public notice. Appeals will be heard by City Council.

Mailed this 10th day of October, 2019.

Therefore, the 14-day appeal period ends at 5 p.m., on October 24, 2019.

**ADDENDUM
APPROVAL CRITERIA AND FINDINGS
WAP-19-01**

CHAPTER 14: R-4.5 SINGLE-FAMILY RESIDENTIAL ATTACHED AND DETACHED/DUPLEX

14.030 Permitted Uses

The following are uses permitted outright in this zoning district:

- 1. Single-family detached residential unit.*

(...)

Staff Finding 1: The applicant proposes to construct a single-family home on the subject property. The criteria are met.

14.070 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, 4,500 square feet.*
- 2. For each attached single-family unit, 4,000 square feet.*
- 3. For a duplex, 8,000 square feet or 4,000 square feet for each unit.*

(...)

Staff Finding 2: The subject property is 5,000 square feet (50' x 100'). The front lot line is 50 linear feet. The criteria are met.

E. The minimum yard dimensions or minimum building setback areas from the lot line shall be:

- 1. For a front yard, 20 feet; except for steeply sloped lots where the provisions of CDC [41.010](#) shall apply.*
- 2. For an interior side yard, five feet.*
- 3. For a side yard abutting a street, 15 feet.*
- 4. For a rear yard, 20 feet.*

Staff Finding 3: The applicant has proposed to reduce the rear setback by 50% in an effort to locate the proposed home near the rear property line away from the Water Resource Protection Area (WRA). This reduction is allowed by CDC Chapter 32.110(F) in order to avoid construction within the WRA. The applicant proposes to maintain the required side and front setbacks as required by this chapter. These criteria are met.

F. The maximum building height shall be 35 feet except for steeply sloped lots in which case the provisions of Chapter [41](#) CDC shall apply.

G. The maximum lot coverage shall be 40 percent.

H. *The minimum width of an accessway to a lot which does not abut a street or a flag lot shall be 15 feet.*

Staff Finding 4: The applicant is not proposing to exceed the required lot coverage or building height. Lot coverage and maximum building height will be evaluated at the time the applicant submits a building permit. These criteria are met.

I. *The maximum floor area ratio shall be 0.45. Type I and II lands shall not be counted toward lot area when determining allowable floor area ratio, except that a minimum floor area ratio of 0.30 shall be allowed regardless of the classification of lands within the property. That 30 percent shall be based upon the entire property including Type I and II lands. Existing residences in excess of this standard may be replaced to their prior dimensions when damaged without the requirement that the homeowner obtain a non-conforming structures permit under Chapter [66](#) CDC.*

J. *The sidewall provisions of Chapter [43](#) CDC shall apply.*

Staff Finding 5: The floor area ratio and the sidewall provisions of this chapter will be evaluated at the time the applicant submits a building permit. These criteria are met.

CHAPTER 28: WILLAMETTE AND TUALATIN RIVER PROTECTION

28.040: EXEMPTIONS/USES PERMITTED OUTRIGHT

The following development activities do not require a permit under the provisions of this chapter. (...)

T. *The construction, remodeling or additions of home and accessory structures that take place completely within the “Habitat and Impact Areas Not Designated as HCAs” shall be exempt from a Willamette or Tualatin River Protection Area permit. Where the “Habitat and Impact Areas Not Designated as HCAs” goes to the edge of a clearly defined top of bank, the applicant’s home and accessory structures shall be set back at least 15 feet from top of bank. At-grade patios and deck areas within 30 inches of grade may extend to within five feet from top of bank. No overhang or cantilevering of structures is permitted over HCA or over setback area. If these terms are met then no permit will be required under this chapter.*

Staff Finding 6: The subject property is located in an area designated “Habitat and Impact Areas Not Designated as HCA’s” and the applicant has proposed a minimum setback of 15 feet from the top of bank of Sunset Creek for the building site of the proposed single-family home. These criteria are met.

28.110: APPROVAL CRITERIA

28.110.B: Single-family or attached residential

Development of single-family homes or attached housing shall be permitted on the following HCA designations and in the following order of preference with “a” being the most appropriate and “d” being the least appropriate:

- a *“Habitat and Impact Areas Not Designated as HCAs”*
- b *Low HCA*
- c *Moderate HCA*
- d *High HCA*

(...)

Staff Finding 7: The subject property is located in an area designated “Habitat and Impact Areas Not Designated as HCA’s” and the applicant has proposed to construct a single-family home. These criteria are met.

CHAPTER 32: WATER RESOURCE AREA PROTECTION

32.110 HARDSHIP PROVISIONS

The purpose of this section is to ensure that compliance with this chapter does not deprive an owner of reasonable use of land. To avoid such instances, the requirements of this chapter may be reduced. The decision-making authority may impose such conditions as are deemed necessary to limit any adverse impacts that may result from granting relief. The burden shall be on the applicant to demonstrate that the standards of this chapter, including Table 32-2, Required Width of WRA, will deny the applicant “reasonable use” of his/her property.

A. The right to obtain a hardship allowance is based on the existence of a lot of record recorded with the County Assessor’s Office on, or before, January 1, 2006. The lot of record may have been, subsequent to that date, modified from its original platted configuration but must meet the minimum lot size and dimensional standards of the base zone.

Staff Finding 8: The subject property, 4327 Kelly Street, is more than 50% encumbered by the required 65 foot water resource area (WRA) per page 4 of the applicant’s submittal. The WRA will deny the “reasonable use” of the property without hardship allowance. The proposal is for a new house in the water resource area as allowed by hardship in CDC Table 32-1. The subject property is eligible for hardship allowance as it was created as Lot 8 of the West Side Addition to Oregon City in 1889. The subject property meets minimum lot size and dimensional standards of the R-4.5 zone (see Staff Finding 2). This criteria is met.

B. For lots described in subsection A of this section that are located completely or partially inside the WRA, development is permitted, consistent with this section. The maximum disturbed area (MDA) of the WRA shall be determined on a per lot basis. The MDA shall be the greater of:

- 1. Five thousand square feet of the WRA; or*
- 2. Thirty percent of the total area of the WRA.*

Staff Finding 9: The subject property, 4327 Kelly Street, is more than 50% encumbered by the required 65 foot water resource area (WRA) per page 4 and 8 of the applicant’s submittal. The subject property is 5,000 square feet in area. Thirty percent of total WRA area is 1,500 square feet. The allowed MDA is 5,000 square feet as it is greater than the 30 percent. The applicant is proposing an MDA of 5,000 square feet. This criteria is met.

C. *The MDA shall be located as follows:*

1. *In areas where the development will result in the least square footage encroachment into the WRA.*
2. *The applicant shall demonstrate, through site and building design, that the proposed development is the maximum practical distance from the water resource based on the functional needs of the proposed use.*

Staff Finding 10: The applicant has indicated a house footprint on the subject property at the maximum distance away from the resources area while still meeting setback requirements (See sheet 2 of the applicant's submittal). These criteria are met.

3. *The minimum distance from a water resource shall be 15 feet.*

Staff Finding 11: The MDA remains a minimum distance of 15 feet from the stream (See applicant's sheets 2 and 3). This criteria is met.

4. *Access driveways shall be the minimum permitted width; select an alignment that is least impactful upon the WRA; and shall share use of the driveway, where possible.*

Staff Finding 12: The applicant has proposed a 15-foot wide shared private accessway. This accessway will be shared with the lots at 4325 and 4329 Kelly Street (both vacant lots at this time). Vehicle traffic from each home will back out onto the shared accessway and then onto Kelly Street. The applicant shall record an access easement for the accessway per condition of approval 4. Subject to conditions of approval, this criteria is met.

D. *The MDA shall include:*

1. *The footprints of all structures, including accessory structures, decks and paved water impermeable surfaces including sidewalks, driveways, parking pads, paths, patios and parking lots, etc. Only 75 percent of water permeable surfaces at grade shall be included in the MDA.*

Staff Finding 13: The proposed 5,000 square foot MDA includes the house/garage footprint, and driveway. The applicant is not proposing any patios or decks at this time. This criteria is met.

2. *All graded, disturbed or modified areas that are not subsequently restored to their original grade and replanted with native ground cover per an approved plan.*

Staff Finding 14: The applicant proposes to restore all Temporarily Disturbed Areas to pre-construction conditions and plant with native plants. This criteria is met.

E. *The MDA shall not include:*

1. *Temporarily disturbed areas (TDAs) adjacent to an approved structure or development area for the purpose of grading, material storage, construction activity, trenched or buried utilities and other temporary activities so long as these areas are subsequently restored to the original*

grades and soil permeability, and re-vegetated with native plants per CDC [32.100](#), such that they are at least equal in functional value to the area prior to the initiation of the permitted activity;

2. Bay windows and similar cantilevered elements (including decks, etc.) of the principal or secondary structure so long as they do not extend more than five feet towards the WRA from the vertical plane of the house, and have no vertical supports from grade;

3. PDAs that are not built upon as part of the development proposal will not count in the MDA (e.g., use of an existing access driveway). (Conversely, PDAs that are built upon as part of the development proposal will count in the MDA.);

Staff Finding 15: The applicant proposes to restore all Temporarily Disturbed Areas to pre-construction conditions and plant with native plants. These criteria are met.

4. The installation of public streets and public utilities that are specifically required to meet either the transportation system plan or a utility master plan so long as all trenched public utilities are subsequently restored to the original grades and soil permeability, and revegetated with native plants per CDC [32.100](#), such that they are at least equal in functional value to the area prior to the initiation of the permitted activity. All areas displaced by streets shall be mitigated for.

Staff Finding 16: Kelly Street is not improved to the subject property. The applicant has requested a fee in lieu of installing full street improvements. A completed fee in lieu application, signed by all property owners shall be submitted with the building permit application. Street improvements or a fee in lieu of improvements is required as part of the building permit application per condition of approval 2. Subject to the conditions of approval, this criteria is met.

F. Development allowed under subsection A of this section may use the following provisions:

1. Setbacks required by the underlying zoning district may be reduced up to 50 percent where necessary to avoid construction within the WRA, as long as the development would otherwise meet the standards of this chapter. However, front loading garages shall be set back a minimum of 18 feet, while side loading garages shall be set back a minimum of three feet.

Staff Finding 17: The subject property is located in the R-4.5 zone, requiring a 20 foot rear yard setback. The applicant proposes a reduced setback of 10 feet on the northern property line which is a 50 percent reduction. The applicant proposes a front loading garage set back from the front property line a minimum of 18 feet. This criteria is met.

2. Landscaping and parking requirements may be reduced for hardship properties but only if all or part of the WRA is dedicated pursuant to CDC [32.060\(C\)](#) or if a restrictive deed covenant is established. These reductions shall be permitted outright and, to the extent that the practices are inconsistent with other provisions or standards of the West Linn CDC, this section is given precedence so that no variance is required. The allowable reductions include:

a. Elimination of landscaping for the parking lot interior.

- b. Elimination of the overall landscape requirement (e.g., 20 percent for commercial uses).
- c. Elimination of landscaping between parking lots and perimeter non-residential properties.
- d. Landscaping between parking lots and the adjacent right-of-way may be reduced to eight feet. This eight-foot-wide landscaped strip may be used for vegetated storm water detention or treatment.
- e. A 25 percent reduction in total required parking is permitted to minimize or avoid intrusion into the WRA.
- f. Adjacent improved street frontage with curb and sidewalk may be counted towards the parking requirement at a rate of one parking space per 20 lineal feet of street frontage adjacent to the property, subject to City Engineer approval based on the street width and classification.
- g. The current compact and full sized parking mix may be modified to allow up to 100 percent compact spaces and no full sized spaces. However, any required ADA compliant spaces shall be provided.

Staff Finding 18: The applicant is not requesting a reduction in landscaping or parking requirements. These criteria are not applicable.

G. Where a property owner owns multiple platted lots of record where each lot could be built upon under the hardship provisions, the property owner may either use the MDA for each lot on an individual lot by lot basis or may transfer 100 percent of the cumulative MDA of all the lots to those lots that are further away from, or less impactful upon, the WRA. Lot line adjustments may also be used to facilitate the density transfer.

Staff Finding 19: The applicant owns one lot of record. This criteria is not applicable.

H. Mitigation and re-vegetation of disturbed WRAs shall be completed per CDC [32.090](#) and [32.100](#) respectively.

Staff Finding 20: Please see Staff Findings 36 to 38. This criteria is met.

I. Any further modification of the standards of this chapter or the underlying zone shall require approval of a variance pursuant to Chapter [75](#) CDC.

Staff Finding 21: The applicant is not requesting a variance. This criteria is not applicable.

32.060 APPROVAL CRITERIA (STANDARD PROCESS)

No application for development on property containing a WRA shall be approved unless the approval authority finds that the proposed development is consistent with the following approval criteria, or can satisfy the criteria by conditions of approval:

- A. WRA protection/minimizing impacts.
 1. Development shall be conducted in a manner that will avoid or, if avoidance is not possible, minimize adverse impact on WRAs.
 2. Mitigation and re-vegetation of disturbed WRAs shall be completed per CDC [32.090](#) and [32.100](#), respectively.

Staff Finding 22: The subject property is more than 50% encumbered by the WRA. The applicant is seeking hardship approval under CDC 32.110 (please see Staff Findings 8 to 21) and is allowed 5,000 square feet of MDA. The applicant is also proposing 5,000 square feet of MDA. Please see Staff Findings 36 to 38 for mitigation and re-vegetation compliance. The criteria are met.

B. Storm water and storm water facilities.

1. Proposed developments shall be designed to maintain the existing WRAs and utilize them as the primary method of storm water conveyance through the project site unless:

a. The surface water management plan calls for alternate configurations (culverts, piping, etc.); or

b. Under CDC [32.070](#), the applicant demonstrates that the relocation of the water resource will not adversely impact the function of the WRA including, but not limited to, circumstances where the WRA is poorly defined or not clearly channelized.

Re-vegetation, enhancement and/or mitigation of the re-aligned water resource shall be required as applicable.

Staff Finding 23: Staff adopts applicant findings found on page 7 of the applicant's submittal (See Exhibit PD-4). These criteria are met.

2. Public and private storm water detention, storm water treatment facilities and storm water outfall or energy dissipaters (e.g., rip rap) may encroach into the WRA if:

a. Accepted engineering practice requires it;

b. Encroachment on significant trees shall be avoided when possible, and any tree loss shall be consistent with the City's Tree Technical Manual and mitigated per CDC [32.090](#);

c. There shall be no direct outfall into the water resource, and any resulting outfall shall not have an erosive effect on the WRA or diminish the stability of slopes; and

d. There are no reasonable alternatives available.

A geotechnical report may be required to make the determination regarding slope stability.

Staff Finding 24: The subject property contains no significant trees. The applicant does not propose a direct outfall to the water resource. Staff adopts applicant findings found on page 7 of the applicant's submittal. These criteria are met.

3. Roadside storm water conveyance swales and ditches may be extended within rights-of-way located in a WRA. When possible, they shall be located along the side of the road furthest from the water resource. If the conveyance facility must be located along the side of the road closest to the water resource, it shall be located as close to the road/sidewalk as possible and include habitat friendly design features (treatment train, rain gardens, etc.).

Staff Finding 25: The application does not include any roadside stormwater conveyance ditches or swales. This criteria is not applicable.

4. Storm water detention and/or treatment facilities in the WRA shall be designed without permanent perimeter fencing and shall be landscaped with native vegetation.

Staff Finding 26: The applicant does not propose perimeter fencing for the rain garden, which will be planted with native vegetation per Exhibit PD-4. This criteria is met.

5. Access to public storm water detention and/or treatment facilities shall be provided for maintenance purposes. Maintenance driveways shall be constructed to minimum width and use water permeable paving materials. Significant trees, including roots, shall not be disturbed to the degree possible. The encroachment and any tree loss shall be mitigated per CDC [32.090](#). There shall also be no adverse impacts upon the hydrologic conditions of the site.

Staff Finding 27: The proposal does not include any public stormwater facilities. This criteria is not applicable.

6. Storm detention and treatment and geologic hazards. Per the submittals required by CDC [32.050\(F\)\(3\)](#) and [92.010\(E\)](#), all proposed storm detention and treatment facilities must comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards, there will be no adverse off-site impacts caused by the development (including impacts from increased intensity of runoff downstream or constrictions causing ponding upstream), and the applicant must provide sufficient factual data to support the conclusions of the submitted plan.

Staff Finding 28: Staff adopts applicant findings found in Exhibit PD-4. West Linn Engineering staff has reviewed the applicant's proposed storm detention and treatment design for compliance with standards. West Linn Engineering staff may require additional analysis or reports and final storm detention and treatment design will be approved by West Linn Engineering during the building permit process per condition of approval 4. All stormwater facilities shall be located outside of the sanitary sewer easement. Subject to the conditions of approval, this criteria is met.

D. WRA width. Except for the exemptions in CDC [32.040](#), applications that are using the alternate review process of CDC [32.070](#), or as authorized by the approval authority consistent with the provisions of this chapter, all development is prohibited in the WRA as established in Table 32-2 (...)

Staff Finding 29: Staff adopts applicant findings found in Appendix B of the Applicant's Submittal titled 4325 Kelly Street West Linn Wetland Determination dated December 17, 2018 (please see Exhibit PD-4). The subject property is more than 50% encumbered by the WRA and the applicant is seeking hardship approval which allows for a 15 foot setback to the resource. These criteria are met.

E. Per the submittals required by CDC [32.050\(F\)\(4\)](#), the applicant must demonstrate that the proposed methods of rendering known or potential hazard sites safe for development, including

proposed geotechnical remediation, are feasible and adequate to prevent landslides or other damage to property and safety. The review authority may impose conditions, including limits on type or intensity of land use, which it determines are necessary to mitigate known risks of landslides or property damage.

Staff Finding 30: Staff adopts the applicant's findings found on page 8 of the applicant's submittal (see Exhibit PD-4). Per condition of approval 5 a geotechnical report shall be submitted the building permit application. Subject to the conditions of approval, this criteria is met.

F. Roads, driveways and utilities.

1. New roads, driveways, or utilities shall avoid WRAs unless the applicant demonstrates that no other practical alternative exists. In that case, road design and construction techniques shall minimize impacts and disturbance to the WRA by the following methods:

a. New roads and utilities crossing riparian habitat areas or streams shall be aligned as close to perpendicular to the channel as possible.

b. Roads and driveways traversing WRAs shall be of the minimum width possible to comply with applicable road standards and protect public safety. The footprint of grading and site clearing to accommodate the road shall be minimized.

c. Road and utility crossings shall avoid, where possible:

- 1) Salmonid spawning or rearing areas;*
- 2) Stands of mature conifer trees in riparian areas;*
- 3) Highly erodible soils;*
- 4) Landslide prone areas;*
- 5) Damage to, and fragmentation of, habitat; and*
- 6) Wetlands identified on the WRA Map.*

2. Crossing of fish bearing streams and riparian corridors shall use bridges or arch-bottomless culverts or the equivalent that provides comparable fish protection, to allow passage of wildlife and fish and to retain the natural stream bed.

Staff Finding 31: The proposal does not require any new roads or public utilities. There is an existing sanitary sewer main crossing the property. The applicant shall dedicate a 15-foot wide easement, or portions thereof over the impacted property, centered over the existing main, to the City per conditions of approval 2 and 4. The access driveway has been designed to minimize impacts on the WRA (please see Staff Findings 12). Subject to the conditions of approval, these criteria are met.

3. New utilities spanning fish bearing stream sections, riparian corridors, and wetlands shall be located on existing roads/bridges, elevated walkways, conduit, or other existing structures or installed underground via tunneling or boring at a depth that avoids tree roots and does not alter the hydrology sustaining the water resource, unless the applicant demonstrates that it is not physically possible or it is cost prohibitive. Bore pits associated with the crossings shall be restored upon project completion. Dry, intermittent streams may be crossed with open cuts during a time period approved by the City and any agency with jurisdiction.

4. *No fill or excavation is allowed within the ordinary high water mark of a water resource, unless all necessary permits are obtained from the City, U.S. Army Corps of Engineers and Oregon Department of State Lands (DSL).*
5. *Crossings of fish bearing streams shall be aligned, whenever possible, to serve multiple properties and be designed to accommodate conduit for utility lines. The applicant shall, to the extent legally permissible, work with the City to provide for a street layout and crossing location that will minimize the need for additional stream crossings in the future to serve surrounding properties.*

Staff Finding 32: No road or utilities are proposed to cross any streams. No fill or excavation is proposed within the ordinary high water mark of the stream. These criteria are not applicable.

G. Passive recreation. Low impact or passive outdoor recreation facilities for public use including, but not limited to, multi-use paths and trails, not exempted per CDC [32.040\(B\)\(2\)](#), viewing platforms, historical or natural interpretive markers, and benches in the WRA, are subject to the following standards:

H. Daylighting Piped Streams.

Staff Finding 33: No passive recreation facilities are proposed. No daylighting of streams is proposed. These criteria are not applicable.

I. The following habitat friendly development practices shall be incorporated into the design of any improvements or projects in the WRA to the degree possible: (...)

Staff Finding 34: The applicant a rain garden to treat and detain impervious surface runoff, constructing a home with a smaller footprint to minimized WRA disturbance, and landscaping with native shrubs, trees and grasses. These criteria are met.

32.090 MITIGATION PLAN

A. A mitigation plan shall only be required if development is proposed within a WRA (including development of a PDA). (Exempted activities of CDC [32.040](#) do not require mitigation unless specifically stated. Temporarily disturbed areas, including TDAs associated with exempted activities, do not require mitigation, just grade and soil restoration and re-vegetation.) The mitigation plan shall satisfy all applicable provisions of CDC [32.100](#), Re-Vegetation Plan Requirements.

Staff Finding 35: The applicant proposes to disturb the entire lot (5,000 sq. ft.) but landscape with native vegetation. The majority of the property is encumbered by the WRA. Per condition of approval 6 the applicant will be required to purchase mitigation credits from the West Linn Parks Department on a two-to-one ratio. Subject to the conditions of approval, this criteria is met.

B. Mitigation shall take place in the following locations, according to the following priorities (subsections (B)(1) through (4) of this section):

- 1. On-site mitigation by restoring, creating or enhancing WRAs.*
- 2. Off-site mitigation in the same sub-watershed will be allowed, but only if the applicant has demonstrated that:*
 - a. It is not practicable to complete mitigation on-site, for example, there is not enough area on-site; and*
 - b. The mitigation will provide equal or superior ecological function and value.*
- 3. Off-site mitigation outside the sub-watershed will be allowed, but only if the applicant has demonstrated that:*
 - a. It is not practicable to complete mitigation on-site, for example, there is not enough area on-site; and*
 - b. The mitigation will provide equal or superior ecological function and value.*
- 4. Purchasing mitigation credits through DSL or other acceptable mitigation bank.*

Staff Finding 36: The majority of the subject property is encumbered by the WRA as indicated by the applicant on page 4 of the applicant's submittal (see Exhibit PD-4). There is no opportunity for on-site mitigation. Per condition of approval 6, the applicant will be required to purchase mitigation credits from the West Linn Parks Department on a two-to-one ratio. Subject to the conditions of approval, this criteria is met.

C. Amount of mitigation.

- 1. The amount of mitigation shall be based on the square footage of the permanent disturbance area by the application. For every one square foot of non-PDA disturbed area, on-site mitigation shall require one square foot of WRA to be created, enhanced or restored.*
- 2. For every one square foot of PDA that is disturbed, on-site mitigation shall require one half a square foot of WRA vegetation to be created, enhanced or restored.*
- 3. For any off-site mitigation, including the use of DSL mitigation credits, the requirement shall be for every one square foot of WRA that is disturbed, two square feet of WRA shall be created, enhanced or restored. The DSL mitigation credits program or mitigation bank shall require a legitimate bid on the cost of on-site mitigation multiplied by two to arrive at the appropriate dollar amount.*

Staff Finding 37: The applicant proposes to restore on-site TDAs with native vegetation. The majority of the subject property is encumbered by the WRA as indicated by the applicant on page 4 of the applicant's submittal (see Exhibit PD-4). There is no opportunity for on-site mitigation since the applicant has proposed to disturb up to 5,000 sq. ft. The proposed MDA is 5,000 square feet, thus requiring 10,000 square feet of off-site mitigation per the two-to-one requirement. Per condition of approval 6, the applicant will be required to purchase mitigation credits from the West Linn Parks Department at \$1.00 per square foot (per Ken Worcester, Parks Director). The applicant shall purchase the mitigation credits from the West Linn Parks Department at the time of building permit application per Condition of Approval 6. The maximum disturbed area shall be confirmed and mitigation credit paid to the West Linn

Parks Department at \$1.00 per square foot. Subject to completion and acceptance of appropriate fee, this criteria is met.

D. The Planning Director may limit or define the scope of the mitigation plan and submittal requirements commensurate with the scale of the disturbance relative to the resource and pursuant to the authority of Chapter [99](#) CDC. The Planning Director may determine that a consultant is required to complete all or a part of the mitigation plan requirements.

E. A mitigation plan shall contain the following information:

- 1. A list of all responsible parties including, but not limited to, the owner, applicant, contractor, or other persons responsible for work on the development site.*
- 2. A map showing where the specific adverse impacts will occur and where the mitigation activities will occur.*
- 3. A re-vegetation plan for the area(s) to be mitigated that meets the standards of CDC [32.100](#).*
- 4. An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, and reporting. All in-stream work in fish bearing streams shall be done in accordance with the Oregon Department of Fish and Wildlife.*
- 5. Assurances shall be established to rectify any mitigation actions that are not successful within the first three years. This may include bonding or other surety.*

Staff Finding 38: The majority of the subject property is encumbered by the WRA as indicated by the applicant on page 4 of the applicant's submittal (see Exhibit PD-4). There is no opportunity for on-site mitigation, thus no need for a mitigation plan. Per condition of approval 6, the applicant shall purchase the mitigation credits from the West Linn Parks Department at the time of building permit application. Subject to the conditions of approval, this criteria is met.

PD-1 AFFADAVIT AND NOTICE PACKET

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:

GENERAL

File No. WAP-19-01 Applicant's Name Paradise Homes/Ching Hay
Development Name _____
Scheduled Meeting/Decision Date Oct. 2, 2019

NOTICE: Notices were sent at least 20 days prior to the scheduled hearing, meeting, or decision date per Section 99.080 of the Community Development Code. (check below)

TYPE A X

- A. The applicant (date) 9/11/19 (signed) Jenit Aard
- B. Affected property owners (date) 9/11/19 (signed) Jenit Aard
- C. School District/Board (date) _____ (signed) _____
- D. Other affected gov't. agencies (date) 9/11/19 (signed) Jenit Aard
- E. Affected neighborhood assns. (date) All 9/11/19 (signed) Jenit Aard
- F. All parties to an appeal or review (date) _____ (signed) _____

At least 10 days prior to the scheduled hearing or meeting, notice was published/posted:

Tidings (published date) - N/A (signed) - Jenit Aard
City's website (posted date) 9/11/19 (signed) Jenit Aard

SIGN

At least 10 days prior to the scheduled hearing, meeting or decision date, a sign was posted on the property per Section 99.080 of the Community Development Code.

(date) 9/20/19 (signed) Jenit Aard

NOTICE: Notices were sent at least 14 days prior to the scheduled hearing, meeting, or decision date per Section 99.080 of the Community Development Code. (check below)

TYPE B _____

- 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) _____

Notice was posted on the City's website at least 10 days prior to the scheduled hearing or meeting.

Date: _____ (signed) _____

STAFF REPORT mailed to applicant, City Council/Planning Commission and any other applicable parties 10 days prior to the scheduled hearing.

(date) _____ (signed) _____

FINAL DECISION notice mailed to applicant, all other parties with standing, and, if zone change, the County surveyor's office.

(date) 10/16/19 (signed) Jenit Aard

**CITY OF WEST LINN
NOTICE OF UPCOMING
PLANNING MANAGER DECISION
FILE NO. WAP-19-01**

The West Linn Planning Manager is considering a request for a Water Resource Area permit to construct a new single-family home 4327 Kelly Street.

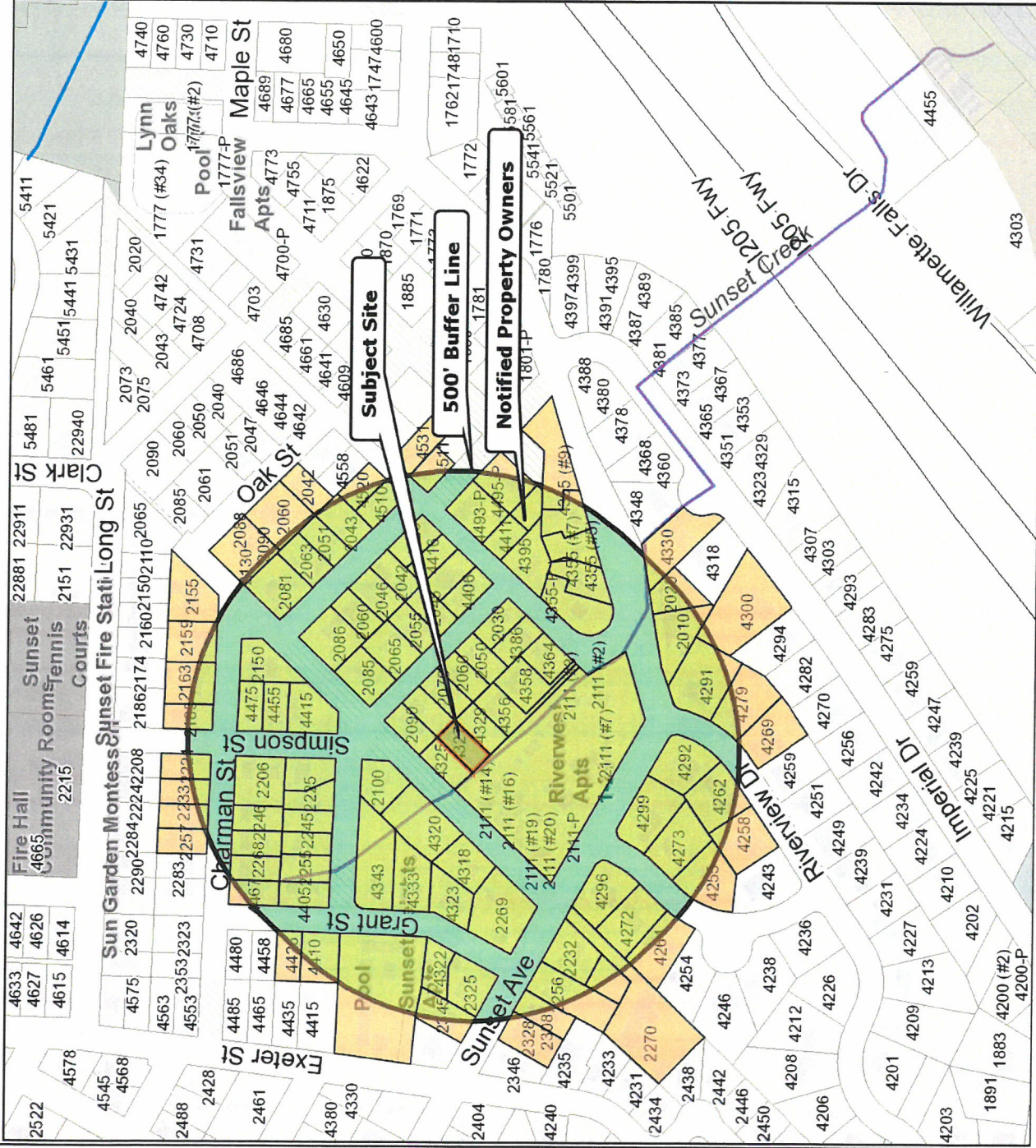
The decision will be based on the approval criteria in Chapters 14 and 32 of the Community Development Code (CDC). The approval criteria from the CDC are available for review at City Hall, the City Library, and

<https://www.codepublishing.com/OR/WestLinn/#!/WestLinnCDC/WestLinnCDC01.html>.

You have received this notice because County records indicate that you own property within 500 feet of this property (Tax Lot 1803 of Clackamas County Assessor's Map 21E 36AA) or as otherwise required by Chapter 99 of the CDC.

All relevant materials in the above noted file are available for inspection at no cost at City Hall, and on the city web site <https://westlinnoregon.gov/planning/4327-kelly-street-water-resource-area-protection-permit-hardship-provision> or copies may be obtained for a minimal charge per page. A public hearing will not be held on this decision. **Anyone wishing to present written testimony for consideration on this matter shall submit all material before 4:00 p.m. on October 1, 2019. Persons interested in party status should submit their letter along with any concerns related to the proposal by the comment deadline.** For further information, please contact Jennifer Arnold, Associate Planner, City Hall, 22500 Salamo Rd., West Linn, OR 97068, (503)742-6057, jarnold@westlinnoregon.gov.

Any appeals to this decision must be filed within 14 days of the final decision date with the Planning Department. Failure to raise an issue in person or by letter, or failure to provide sufficient specificity to afford the decision-maker an opportunity to respond to the issue, precludes the raising of the issue at a subsequent time on appeal or before the Land Use Board of Appeals.



DISCLAIMER: This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information. Map scale is approximate. Source: West Linn GIS (Geographic Information System) MapOptrix.

Map created by: JARNOLD
Date Created: 10-Sep-19 04:59 PM

WEST LINN GIS



**NOTICE OF UPCOMING
PLANNING MANAGER DECISION**

**PROJECT # WAP-19-01
MAIL: 9/11/2019 TIDINGS: N/A**

CITIZEN CONTACT INFORMATION

To lessen the bulk of agenda packets and land use application notice, and to address the concerns of some City residents about testimony contact information and online application packets containing their names and addresses as a reflection of the mailing notice area, this sheet substitutes for the photocopy of the testimony forms and/or mailing labels. A copy is available upon request.

PD-2 COMPLETENESS LETTER



CITY OF
West Linn

July 12, 2019

Paradise Homes
ATTN: Dennis Caudell
20659 NE Lakeside Drive
Fairview, OR 97024

SUBJECT: WAP-19-01 application for Water Resource Area Permit at 4327 Kelly Street

Dear Mr. Caudell:

You submitted this application on January 3, 2019 which was deemed incomplete January 31, 2019, March 28, 2019, and April 19, 2019. Information was subsequently provided on June 20, 2019 and the application has now been deemed **complete**. The city has 120 days to exhaust all local review; that period ends October 17, 2019.

Please be aware that a determination of a complete application does not guarantee a recommendation of approval from staff for your proposal as submitted – it signals that staff believes you have provided the necessary information for the Planning Director to render a decision on your proposal.

A 20-day public notice will be prepared and mailed. This notice will identify the earliest potential decision date by the Planning Director.

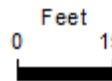
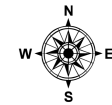
Please contact me at 503-742-6057, or by email at jarnold@westlinnoregon.gov if you have any questions or comments.

Sincerely,

A handwritten signature in blue ink that reads "Jennifer Arnold". The signature is written in a cursive style.

Jennifer Arnold
Associate Planner

PD-3 PROPERTY MAPS



Scale 1:360 - 1 in = 30 ft
Scale is based on 8-1/2 x 11 paper size





Map created by: JARNOLD
Date Created: 10-Oct-19 10:26 AM

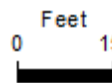
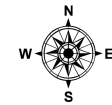
WEST LINN GIS

DISCLAIMER: This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information. Map scale is approximate. Source: West Linn GIS (Geographic Information System) MapOptix.

Legend

Metro Habitat Protection
Published October 2005

-  Habitat Conservation Area
-  Allow Development



Scale 1:360 - 1 in = 30 ft
Scale is based on 8-1/2 x 11 paper size



Map created by: JARNOLD
Date Created: 10-Oct-19 10:27 AM

WEST LINN GIS

PD-4 APPLICANT SUBMITTAL

DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STAFF CONTACT <i>Jennifer Arnold</i>	PROJECT NO(S). <i>WAP-19-01</i>	
NON-REFUNDABLE FEE(S) <i>2850</i>	REFUNDABLE DEPOSIT(S) <i>—</i>	TOTAL <i>2850</i>

Type of Review (Please check all that apply):

- | | | |
|--|---|---|
| <input type="checkbox"/> Annexation (ANX) | <input type="checkbox"/> Historic Review | <input type="checkbox"/> Subdivision (SUB) |
| <input type="checkbox"/> Appeal and Review (AP) * | <input type="checkbox"/> Legislative Plan or Change | <input type="checkbox"/> Temporary Uses * |
| <input type="checkbox"/> Conditional Use (CUP) | <input type="checkbox"/> Lot Line Adjustment (LLA) */** | <input type="checkbox"/> Time Extension * |
| <input type="checkbox"/> Design Review (DR) | <input type="checkbox"/> Minor Partition (MIP) (Preliminary Plat or Plan) | <input type="checkbox"/> Variance (VAR) |
| <input type="checkbox"/> Easement Vacation | <input type="checkbox"/> Non-Conforming Lots, Uses & Structures | <input checked="" type="checkbox"/> Water Resource Area Protection/Single Lot (WAP) |
| <input type="checkbox"/> Extraterritorial Ext. of Utilities | <input type="checkbox"/> Planned Unit Development (PUD) | <input type="checkbox"/> Water Resource Area Protection/Wetland (WAP) |
| <input type="checkbox"/> Final Plat or Plan (FP) | <input type="checkbox"/> Pre-Application Conference (PA) */** | <input type="checkbox"/> Willamette & Tualatin River Greenway (WRG) |
| <input type="checkbox"/> Flood Management Area | <input type="checkbox"/> Street Vacation | <input type="checkbox"/> Zone Change |
| <input type="checkbox"/> Hillside Protection & Erosion Control | | |

Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temporary Sign Permit applications require different or additional application forms, available on the City website or at City Hall.

Site Location/Address: <div style="text-align: center; font-size: 1.2em; color: blue;"><i>4327 Kelly St.</i></div>	Assessor's Map No.: <i>21E 36AA</i> Tax Lot(s): TL: 1803, Total Land Area: 5,000 sq ft; 0.11 Ac
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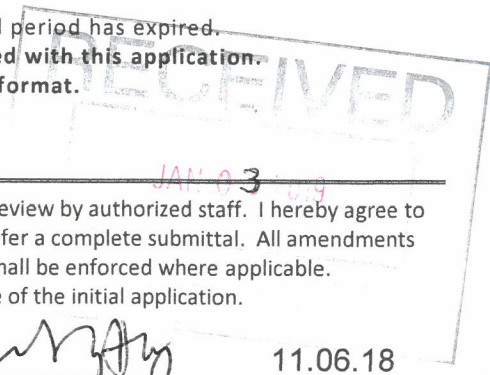
Brief Description of Proposal:
 NEW SFR(s) in WRA, with Hardship Provision

Applicant Name: (please print) Paradise Homes Address: 20659 NE Lakeside Drive Fairview, Oregon 97024 City State Zip:	Phone: 503.710.1227 Email: Paradise@frontier.com
Owner Name (required): (please print) Ching Hay Address: 4356 Riverview Ave West Linn, OR 97068 City State Zip:	Phone: 503.784.7102 Email: mhay8650@msn.com
Consultant Name: (please print) Aquarius Environmental Address: 2117 NE Oregon Street Portland, OR 97232 City State Zip:	Phone: 503.828.0265 Email: Daniels@aquariusenv.com

1. All application fees are non-refundable (excluding deposit). **Any overruns to deposit will result in additional billing.**
2. The owner/applicant or their representative should be present at all public hearings.
3. A denial or approval may be reversed on appeal. No permit will be in effect until the appeal period has expired.
4. **Three (3) complete hard-copy sets (single sided) of application materials must be submitted with this application.**
 One (1) complete set of digital application materials must also be submitted on CD in PDF format.
 If large sets of plans are required in application please submit only two sets.

* No CD required / ** Only one hard-copy set needed

The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by authorized staff. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer a complete submittal. All amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable. Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.



<i>[Signature]</i>	<i>Ching Hay</i>	<i>[Signature]</i>
Applicant's signature	Date	Owner's signature (required)
11.06.18	11.06.18	Date



Hay Properties- Project Narrative

New SFRs in WRA

12/28/2018

Address	4325 Kelly Street	4327 Kelly Street	4329 Kelly Street
State ID	2 1E 36AA 1802	2 1E 36AA 1803	2 1E 36AA 1804
Tax ID	01830095	01830102	01830111
Size	5,000 sq ft	5,000 sq ft	5,000 sq ft
Zone	R 4.5	R 4.5	R 4.5
Owner	Ching Hay 4356 Riverview Ave, West Linn, OR 97068 503.784.7102	Applicant	Paradise Homes Dennis Caudell Paradise@frontier.com 503.710.1227
Work Scope	New SFR	New SFR	New SFR
WRA Review	West Linn Development Code Chapter 32		
MDA Calculation (sq. ft.)	MDA: 5,000	MDA: 5,000	MDA: 5,000
Mitigation / Revegetation	West Linn Development Code Section 32.090, 32.100		

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Development Review Application

DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STAFF CONTACT	PROJECT NO(s).	
NON-REFUNDABLE FEE(s)	REFUNDABLE DEPOSIT(s)	TOTAL

Type of Review (Please check all that apply):

- | | | |
|--|---|---|
| <input type="checkbox"/> Annexation (ANN) | <input type="checkbox"/> Historic Review | <input type="checkbox"/> Subdivision (SUB) |
| <input type="checkbox"/> Appeal and Review (AP) * | <input type="checkbox"/> Legislative Plan or Change | <input type="checkbox"/> Temporary Uses * |
| <input type="checkbox"/> Conditional Use (CUP) | <input type="checkbox"/> Lot Line Adjustment (LLA) */** | <input type="checkbox"/> Time Extension * |
| <input type="checkbox"/> Design Review (DR) | <input type="checkbox"/> Minor Partition (MIP) (Preliminary Plat or Plan) | <input type="checkbox"/> Variance (VAR) |
| <input type="checkbox"/> Easement Vacation | <input type="checkbox"/> Non-Conforming Lots, Uses & Structures | <input checked="" type="checkbox"/> Water Resource Area Protection/Single Lot (WAP) |
| <input type="checkbox"/> Extraterritorial Ext. of Utilities | <input type="checkbox"/> Planned Unit Development (PUD) | <input type="checkbox"/> Water Resource Area Protection/Wetland (WAP) |
| <input type="checkbox"/> Final Plat or Plan (FP) | <input type="checkbox"/> Pre-Application Conference (PA) */** | <input type="checkbox"/> Willamette & Tualatin River Greenway (WRG) |
| <input type="checkbox"/> Flood Management Area | <input type="checkbox"/> Street Vacation | <input type="checkbox"/> Zone Change |
| <input type="checkbox"/> Hillside Protection & Erosion Control | | |

Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temporary Sign Permit applications require different or additional application forms, available on the City website or at City Hall.

Site Location/Address: 4325 Kelly Street 4327 Kelly Street 4329 Kelly Street	Assessor's Map No.: Tax Lot(s): TL 1802, 1803, 1804 Total Land Area: 15,000 sq ft, 0.34 Ac
--	---

Brief Description of Proposal:
 NEW SFR(s) in WRA, with Hardship Provision

Applicant Name: Paradise Homes <small>(please print)</small> Address: 20659 NE Lakeside Drive Fairview, Oregon 97024 City State Zip:	Phone: 503.710.1227 Email: Paradise@frontier.com
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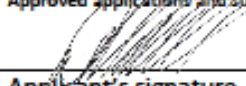
Owner Name (required): Ching Hay <small>(please print)</small> Address: 4356 Riverview Ave West Linn, OR 97068 City State Zip:	Phone: 503.784.7102 Email: mhay8650@msn.com
---	--

Consultant Name: Aquarius Environmental <small>(please print)</small> Address: 2117 NE Oregon Street Portland, OR 97232 City State Zip:	Phone: 503.828.0265 Email: Daniels@aquariusenv.com
--	---

1. All application fees are non-refundable (excluding deposit). Any overruns to deposit will result in additional billing.
2. The owner/applicant or their representative should be present at all public hearings.
3. A denial or approval may be reversed on appeal. No permit will be in effect until the appeal period has expired.
4. Three (3) complete hard-copy sets (single sided) of application materials must be submitted with this application.
 One (1) complete set of digital application materials must also be submitted on CD in PDF format.
 If large sets of plans are required in application please submit only two sets.

* No CD required / ** Only one hard-copy set needed

The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by authorized staff. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer a complete submittal. All amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable. Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.

 Applicant's signature	11.06.18 Date	Ching Hay Owner's signature (required)	11.06.18 Date
--	------------------	---	------------------

Proposal:

The proposed development consists of three previously developed lots; one with proposed driveway access from Kelly Street and the others with access via a future access easement granted by Lot 9 to the benefit of Lots 8 and 7. The lots have remained unimproved from the original development and are used as back yard space associated with the adjacent SFR at 4356 Riverview Ave.

For each of the three existing lots, development will include approximately 5,000 square feet or the maximum disturbance area permitted within the WRA. All proposed development will occur within the existing building envelope indicated in the underlying zone.

Site Description:

The site is comprised of three 5,000 square foot lots, for a total of 0.34 acres. It is bounded by single family residences to the North, East, an apartment complex to the South and unimproved Kelly Street to the West. An ephemeral portion of Sunset Creek lies just across the property line to the South.

The site contains 8,373 square feet of Water Resource Area (WRA) overlay classification. 6,627 square feet of the site is not classified as WRA. The site does not contain any floodplain.

There are no wetlands on the property or in the creek vicinity. Slopes greater than 10 percent only exist on Lot 8 (TL 1803). This includes areas of slopes no greater than 13 percent. The creek bed consists of a small ravine that is generally approximately 18" wide by 6" deep. Water, when present in the summer, flows about 1" deep.

General Application Submittal Requirements

- ✓ Completed application form;
- ✓ Pre-Application Conference;
- ~~✓ Geologic Report;~~
- ✓ Site Plan;
 - ✓ Storm Detention and Treatment Plan
 - ✓ MDA Calculations
- ✓ Construction Management Plan;
- ✓ Mitigation / Revegetation Plan;
- ✓ Narrative description
 - ✓ Professional- Water Resource Delineation
- ✓ Deposit or Fee

32.060 Approval Criteria for the Standard Process

A. WRA protection/minimizing impacts.

1. *Development shall be conducted in a manner that will avoid or, if avoidance is not possible, minimize adverse impact on WRAs.*

Under the hardship provisions per CDC 32.110, the minimum required distance from the creek to the house and associated improvements is 15 feet. New homes will be placed as close to the northern property line (opposite of the creek) as practical. To that end, front and side setbacks will be reduced up to 50 percent per Chapter 32.110(F).

2. *Mitigation and re-vegetation of disturbed WRAs shall be completed per CDC 32.090 and 32.100, respectively.*

1. All trees, shrubs and ground cover to be planted are to be native plants selected from the Portland Plant List;
2. Trees are to be at least one-half inch in caliper, and planted between eight and 12 feet on center, at a rate of five trees per every 500 square feet of disturbance area, and a minimum of 2 species.
3. Shrubs are to be in at least a one-gallon container or the equivalent, and planted between four and five feet on center, or clustered in single species groups of no more than four plants, with each cluster planted between eight and 10 feet on center at a rate of 25 plants every 500 square feet of disturbance area, and a minimum of 2 species.
4. Any invasive non-native or noxious vegetation is to be removed within the mitigation area prior to planting.
5. A minimum survival rate of 80 percent of the materials planted is expected after three years. Plants that die will be replaced in kind, and monitored by the owner;
6. Plants are to be mulched and watered and weeded for three years.
7. Planting will occur between Dec 1st and April 30th as appropriate for the respective stock, and will be protected as appropriate from wildlife damage.

B. Storm water and storm water facilities.

1. *Proposed developments shall be designed to maintain the existing WRAs and utilize them as the primary method of storm water conveyance through the project site unless:*

a. The surface water management plan calls for alternate configurations (culverts, piping, etc.); or

b. Under CDC 32.070, the applicant demonstrates that the relocation of the water resource will not adversely impact the function of the WRA including, but not limited to, circumstances where the WRA is poorly defined or not clearly channelized.

Re-vegetation, enhancement and/or mitigation of the re-aligned water resource shall be required as applicable.

SFR development will incorporate rain gardens to infiltrate/dissipate runoff from disturbed areas into the WRA and creek as appropriate.

The following criteria do not apply.

- 2. *Public and private storm water detention, storm water treatment facilities and storm water outfall or energy dissipaters (e.g., rip rap) may encroach into the WRA if:*
 - a. *Accepted engineering practice requires it;*
 - b. *Encroachment on significant trees shall be avoided when possible, and any tree loss shall be consistent with the City's Tree Technical Manual and mitigated per CDC 32.090;*
 - c. *There shall be no direct outfall into the water resource, and any resulting outfall shall not have an erosive effect on the WRA or diminish the stability of slopes; and*
 - d. *There are no reasonable alternatives available.*

The proposed access easement will incorporate rain garden(s) to infiltrate/dissipate runoff from disturbed areas into the WRA and creek as appropriate. Associated runoff will not encroach upon significant trees. There will not be any direct outfall into Sunset Creek.

- 3. *Roadside storm water conveyance swales and ditches may be extended within rights-of-way located in a WRA. When possible, they shall be located along the side of the road furthest from the water resource. If the conveyance facility must be located along the side of the road closest to the water resource, it shall be located as close to the road/sidewalk as possible and include habitat friendly design features (treatment train, rain gardens, etc.).*

Proposed SFR development within the WRA is not adjacent to or within right-of-way(s).

This section does not apply.

- 4. *Storm water detention and/or treatment facilities in the WRA shall be designed without permanent perimeter fencing and shall be landscaped with native vegetation.*

Rain Garden design will incorporate native plantings appropriate for stormwater infrastructure applications.

- 5. *Access to public storm water detention and/or treatment facilities shall be provided for maintenance purposes. Maintenance driveways shall be constructed to minimum width and use water permeable paving materials. Significant trees, including roots, shall not be disturbed to the degree possible. The encroachment and any tree loss shall be mitigated per CDC 32.090. There shall also be no adverse impacts upon the hydrologic conditions of the site.*

Proposed SFR development within the WRA is not adjacent to or within right-of-way(s) or public areas.

This section does not apply.

- 6. *Storm detention and treatment and geologic hazards: Per the submittals required by CDC 32.050(F)(3) and 92.010(E), all proposed storm detention and treatment facilities must comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards, there will be no adverse off-site impacts caused by the development (including impacts from increased intensity of runoff downstream or constrictions causing ponding upstream), and the applicant must provide sufficient factual data to support the conclusions of the submitted plan.*

Please see the engineered stormwater design attached as Exhibit 2

C. Repealed by Ord. 1647.

D. WRA width.

The WRA width for a Water Resource is 65' from the ordinary high water as indicated in Table 32-2. Under the hardship provisions per CDC 32.110, the minimum required distance from the creek to the house and associated improvements is 15 feet.

Please see the Wetland Determination attached as Exhibit 1.

E. Potential Hazards and Risk Mitigation

Per the submittals required by CDC 32.050(F)(4), the applicant must demonstrate that the proposed methods of rendering known or potential hazard sites safe for development, including proposed geotechnical remediation, are feasible and adequate to prevent landslides or other damage to property and safety. The review authority may impose conditions, including limits on type or intensity of land use, which it determines are necessary to mitigate known risks of landslides or property damage.

The site's WRA is a narrow ephemeral portion of Sunset Creek bound by a shallow "ravine" less than 12 inches in depth and 20 inches in width.

The applicant requests the Planning Director waive any applicable requirement for submittal of a topographical survey and for submittal of a geologic report, in order to help the applicant reduce costs associated with this development.

- Platted in 1889, this previously developed land has remained unimproved for use as back yard lawn.
- The areas are well established and stable, without any visible hazard, evidence of slope failure or potential for failure. The site does not present any development constraints due to slope, drainage or geologic hazards.
- DOGAMI Statewide Geohazards Database identifies this area as a moderate (Landslide Possible) landslide risk, like more than half of all the developed land within the City of West Linn. DOGAMI characterizes Landslide Risk as Low, Moderate, High and Very High.
- Contours on the City's GIS generally depict a 10% slope across the three lots. This meets the CDCs Chapter 2 definition for a Type III land at its very lowest criteria.
- The site topography is flat and landscaped with terracing at either end of the lots. This creates an effective topography of less than 10% slopes within the buildable envelope of the lots. This factor alone would meet the definition of a Type IV land.

F. Roads, driveways and utilities.

1. New roads, driveways, or utilities shall avoid WRAs unless the applicant demonstrates that no other practical alternative exists. In that case, road design and construction techniques shall minimize impacts and disturbance to the WRA by the following methods:

- a. New roads and utilities crossing riparian habitat areas or streams shall be aligned as close to perpendicular to the channel as possible.*

b. Roads and driveways traversing WRAs shall be of the minimum width possible to comply with applicable road standards and protect public safety. The footprint of grading and site clearing to accommodate the road shall be minimized.

c. Road and utility crossings shall avoid, where possible:

- 1) Salmonid spawning or rearing areas;*
- 2) Stands of mature conifer trees in riparian areas;*
- 3) Highly erodible soils;*
- 4) Landslide prone areas;*
- 5) Damage to, and fragmentation of, habitat; and*
- 6) Wetlands identified on the WRA Map.*

2. Crossing of fish bearing streams and riparian corridors shall use bridges or arch-bottomless culverts or the equivalent that provides comparable fish protection, to allow passage of wildlife and fish and to retain the natural stream bed.

3. New utilities spanning fish bearing stream sections, riparian corridors, and wetlands shall be located on existing roads/bridges, elevated walkways, conduit, or other existing structures or installed underground via tunneling or boring at a depth that avoids tree roots and does not alter the hydrology sustaining the water resource, unless the applicant demonstrates that it is not physically possible or it is cost prohibitive. Bore pits associated with the crossings shall be restored upon project completion. Dry, intermittent streams may be crossed with open cuts during a time period approved by the City and any agency with jurisdiction.

4. No fill or excavation is allowed within the ordinary high water mark of a water resource, unless all necessary permits are obtained from the City, U.S. Army Corps of Engineers and Oregon Department of State Lands (DSL).

5. Crossings of fish bearing streams shall be aligned, whenever possible, to serve multiple properties and be designed to accommodate conduit for utility lines. The applicant shall, to the extent legally permissible, work with the City to provide for a street layout and crossing location that will minimize the need for additional stream crossings in the future to serve surrounding properties.

This proposal does not include any roads, driveways, crossings or associated work within or over the WRA.

This section does not apply.

G. Passive Recreation.

This application does not propose any passive recreation as described in this section.

This section does not apply.

H. Daylighting Piped Streams.

This property does not contain any daylighted stream elements, and this proposal does not create any new daylighting.

This section does not apply

I. Habitat Friendly Development Practices

The following habitat friendly development practices shall be incorporated into the design of any improvements or projects in the WRA to the degree possible:

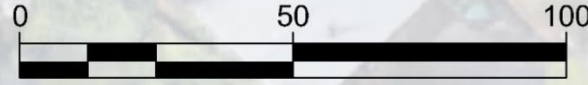
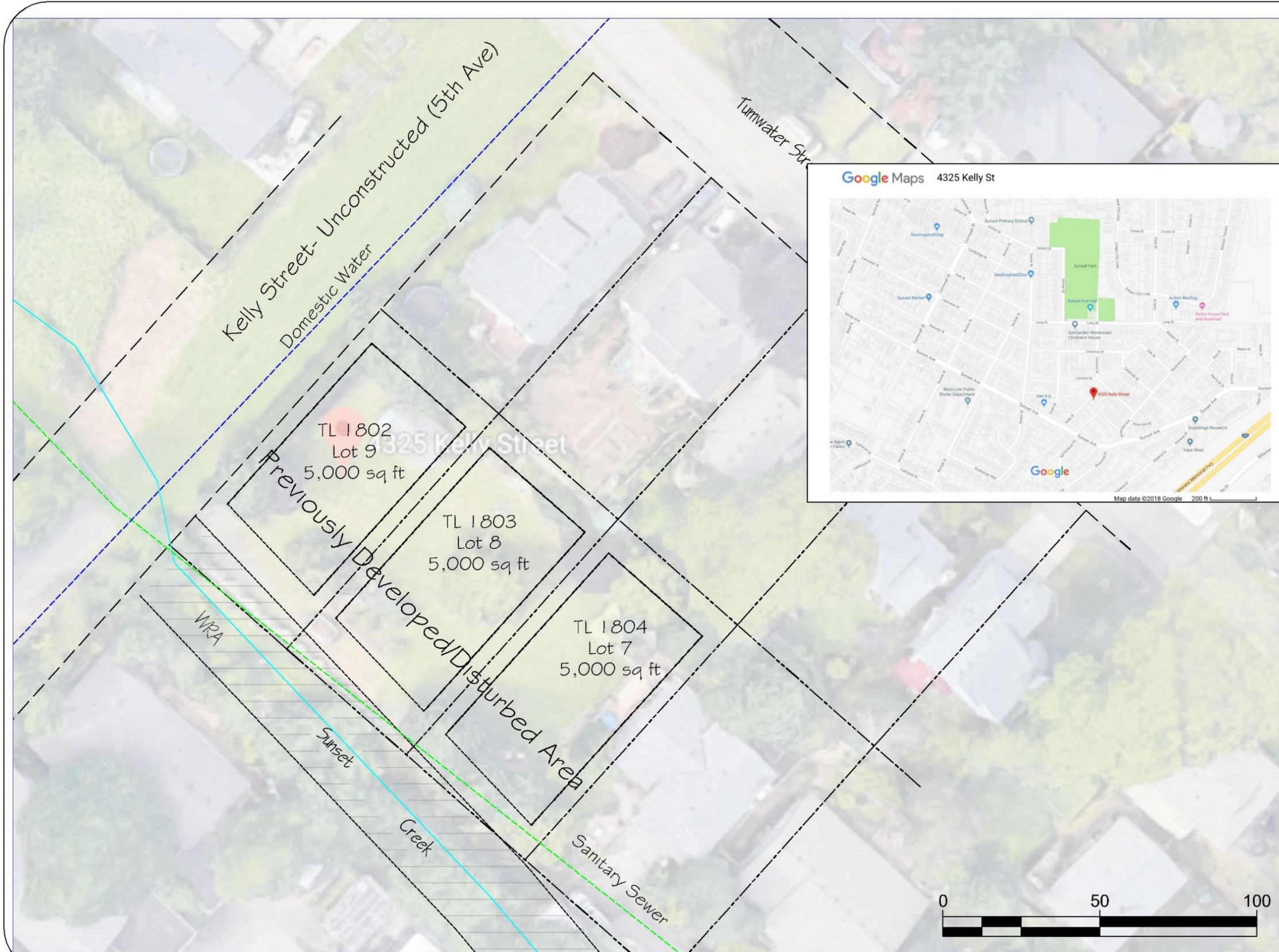
- 1. Restore disturbed soils to original or higher level of porosity to regain infiltration and storm water storage capacity.*
- 2. Apply a treatment train or series of storm water treatment measures to provide multiple opportunities for storm water treatment and reduce the possibility of system failure.*
- 3. Incorporate storm water management in road rights-of-way.*
- 4. Landscape with rain gardens to provide on-lot detention, filtering of rainwater, and groundwater recharge.*
- 5. Use multi-functional open drainage systems in lieu of conventional curb-and-gutter systems.*
- 6. Use green roofs for runoff reduction, energy savings, improved air quality, and enhanced aesthetics.*
- 7. Retain rooftop runoff in a rain barrel for later on-lot use in lawn and garden watering.*
- 8. Disconnect downspouts from roofs and direct the flow to vegetated infiltration/filtration areas such as rain gardens.*
- 9. Use pervious paving materials for driveways, parking lots, sidewalks, patios, and walkways.*
- 10. Reduce sidewalk width to a minimum four feet. Grade the sidewalk so it drains to the front yard of a residential lot or retention area instead of towards the street.*
- 11. Use shared driveways. 3 SFR lots will be using the same shared access driveway with shorter individual driveways to each house.*
- 12. Reduce width of residential streets and driveways, especially at WRA crossings.*
- 13. Reduce street length, primarily in residential areas, by encouraging clustering.*
- 14. Reduce cul-de-sac radii and use pervious and/or vegetated islands in center to minimize impervious surfaces.*
- 15. Use previously developed areas (PDAs) when given an option of developing PDA versus non-PDA land.*
- 16. Minimize the building, hardscape and disturbance footprint.*
- 17. Consider multi-story construction over a bigger footprint. (Ord. 1623 § 1, 2014; Ord. 1635 § 19, 2014; Ord. 1647 § 5, 2016; Ord. 1662 § 7, 2017).*

Some Habitat Friendly Development Practices to be utilized in this development are as follows:

- Revegetation will use native shrubs, trees and grasses;
- Driveways and access roadways will use rain garden(s) for runoff pretreatment;
- Rain Barrels will capture roof runoff for later use in landscaped areas;
- Pervious materials will be used in parking areas and access roadways;
- Sidewalks will shed runoff to landscaped areas;
- Shared access roadways;
- All proposed development is in Previously Developed Areas;
- Smaller footprint development;
- Efficient Home Design and Construction.

Figure 1

Site Plan



SCALE: AS NOTED		DATE: SEPTEMBER 2018	
FILE:		LEGAL:	
SECTION: 36		TWP: 2S	
RANGE: 1E		LEGAL:	
PROJECT NAME: HAY PROPERTY			
LOCATION: 4325 Kelly St West Linn			
SITE PLAN			

No.	Revision/Issue	Date

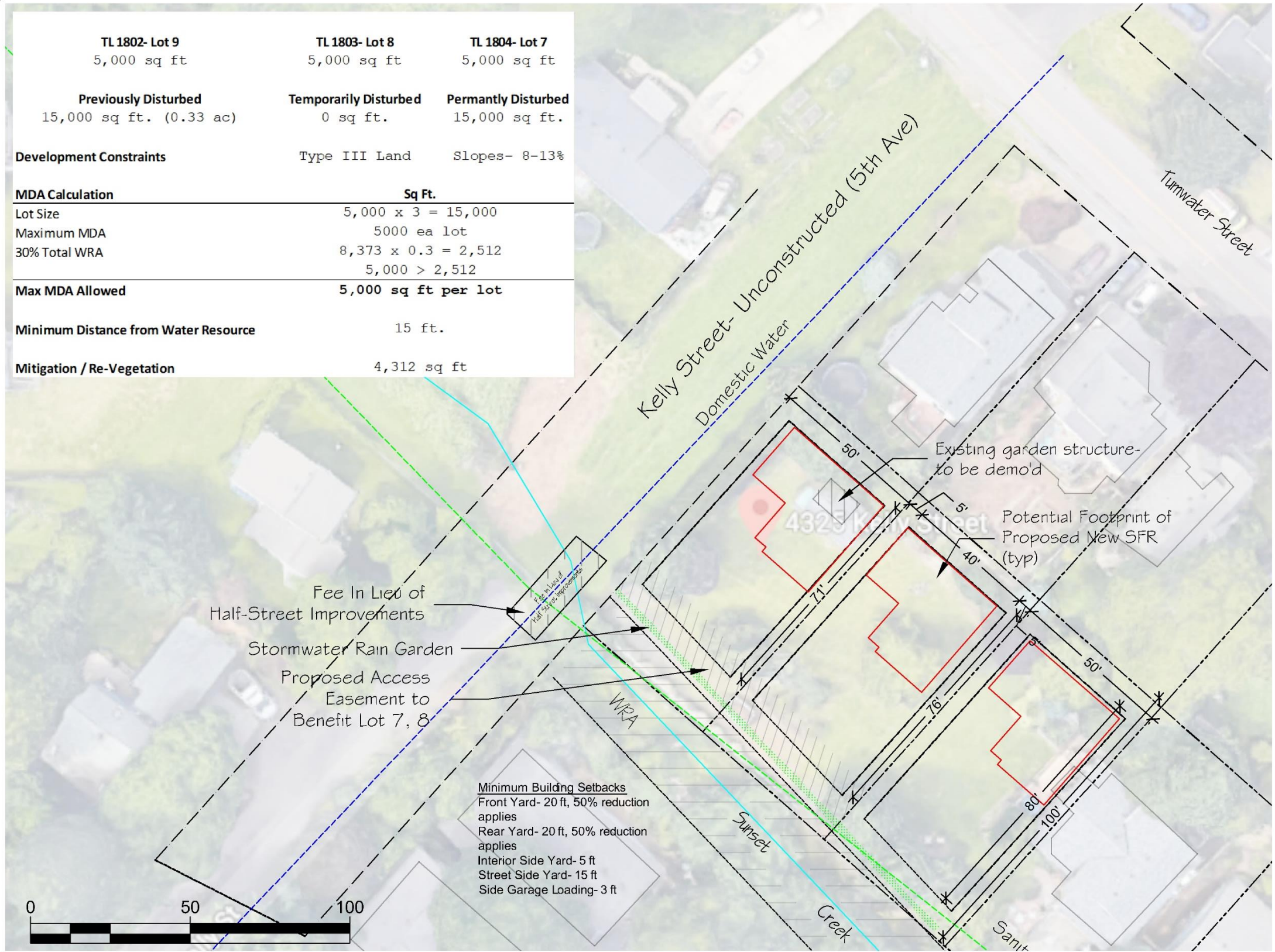

Paradise Homes
 503-710-1227 Paradise@frontier.com

Project Name and Address
 Hay Property
 4325 Kelly Street
 West Side Addition
 Block 5, Lot 8

Project	4325	Sheet	1
Date	9-4-18		
Scale	As Noted		

Figure 2

Lot Plan



TL 1802- Lot 9	TL 1803- Lot 8	TL 1804- Lot 7
5,000 sq ft	5,000 sq ft	5,000 sq ft
Previously Disturbed 15,000 sq ft. (0.33 ac)	Temporarily Disturbed 0 sq ft.	Permanently Disturbed 15,000 sq ft.
Development Constraints	Type III Land	Slopes- 8-13%
MDA Calculation	Sq Ft.	
Lot Size	5,000 x 3 = 15,000	
Maximum MDA	5000 ea lot	
30% Total WRA	8,373 x 0.3 = 2,512	
	5,000 > 2,512	
Max MDA Allowed	5,000 sq ft per lot	
Minimum Distance from Water Resource	15 ft.	
Mitigation / Re-Vegetation	4,312 sq ft	

General Notes

SCALE: AS SHOWN	NOTED
DATE: SEPTEMBER, 2018	
FILE:	LEGAL
SECTION: 36	TWP: 2S
	RANGE: 1E

PROJECT NAME: HAY PROPERTY
4325 Kelly St West Linn

LOCATION: LOT PLAN

No.	Revision/Issue	Date

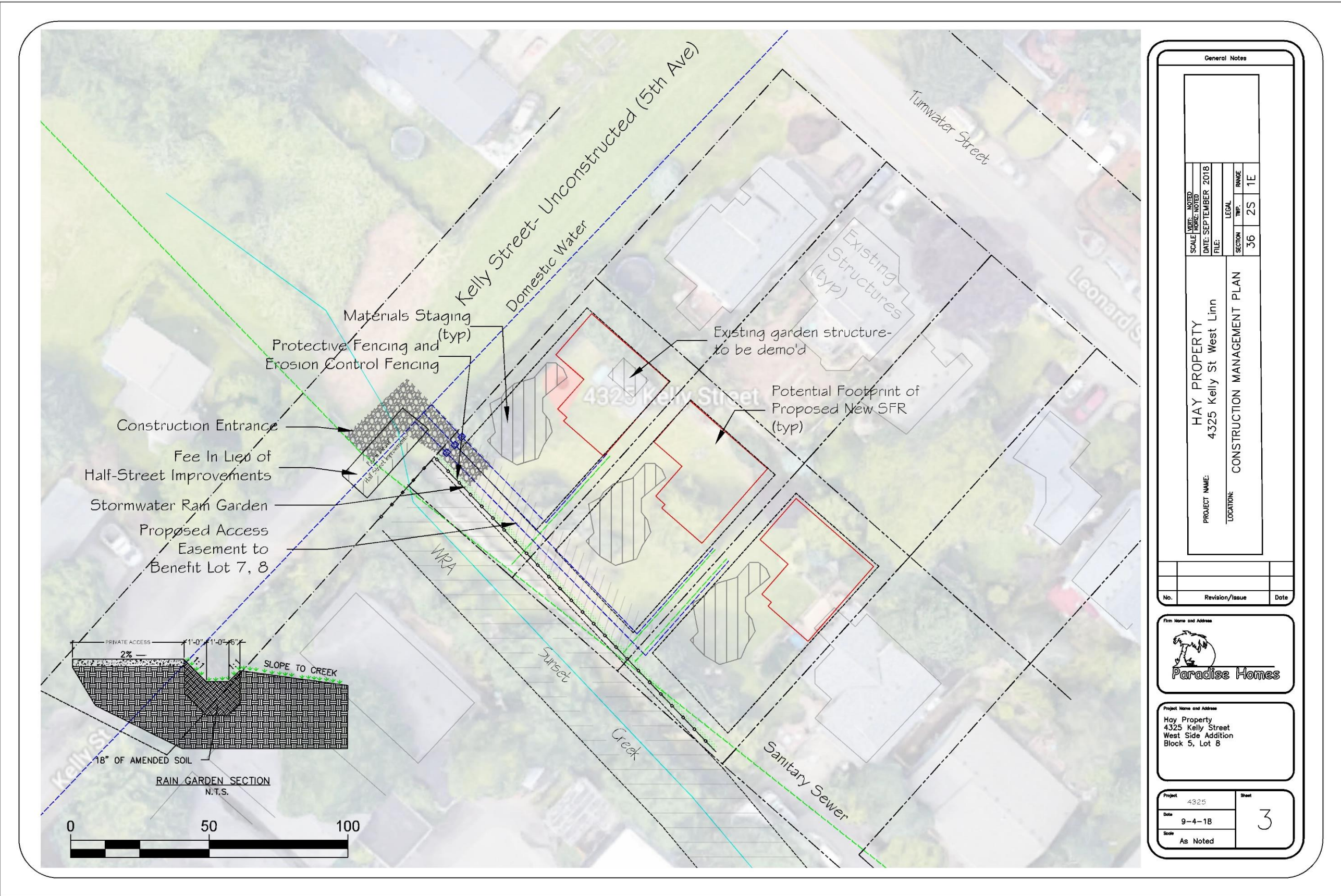
Firm Name and Address:
Paradise Homes

Project Name and Address:
Hay Property
4325 Kelly Street
West Side Addition
Block 5, Lot 8

Project: 4325	Sheet: 2
Date: 9-4-18	
Scale: As Noted	

Figure 3

Construction Management Plan




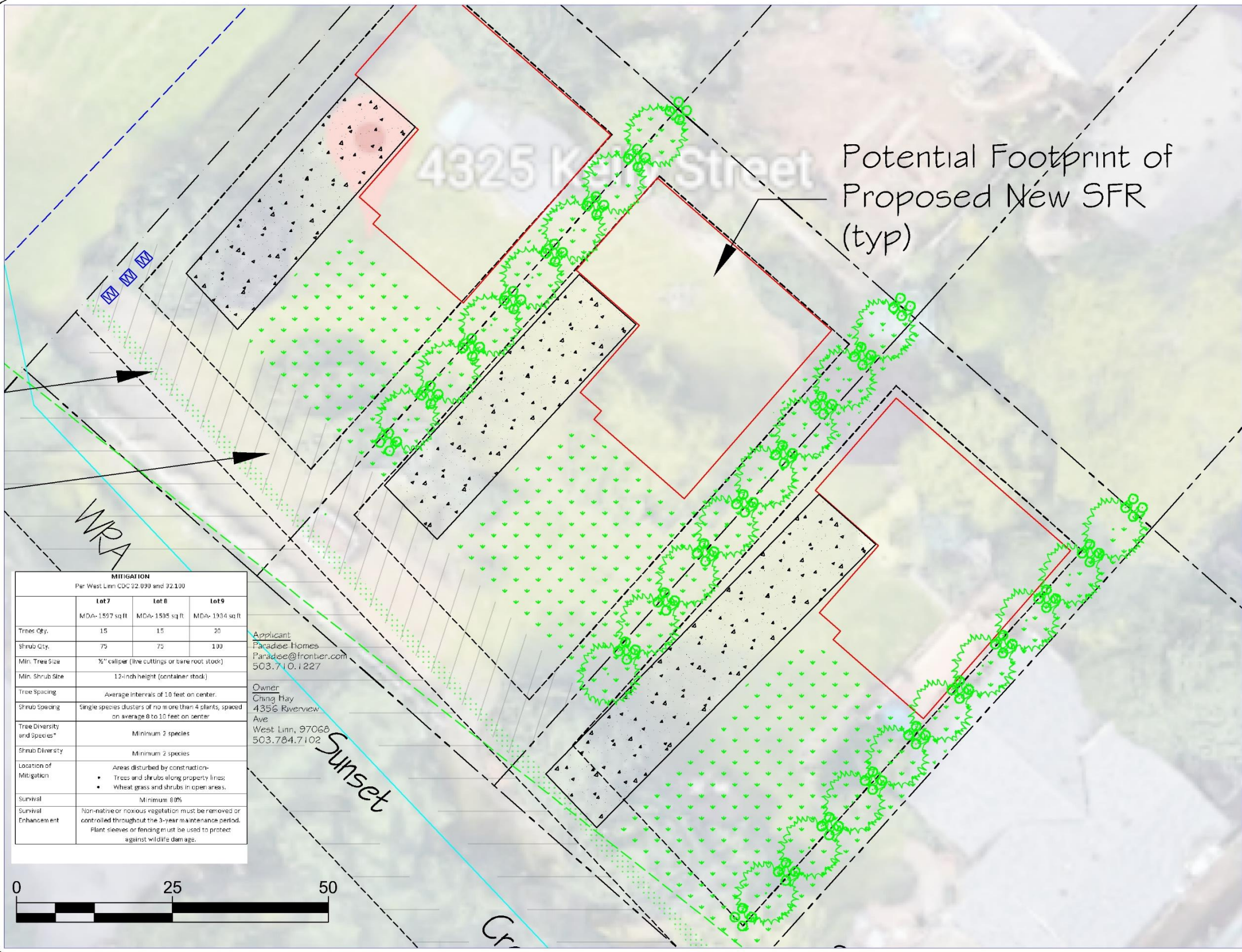
General Notes			
SCALE: AS NOTED	DATE: SEPTEMBER 2018	SECTION: 36	RANGE: 25 1E
DATE: SEPTEMBER 2018	FILE:	LEGAL:	
PROJECT NAME: HAY PROPERTY 4325 Kelly St West Linn LOCATION: CONSTRUCTION MANAGEMENT PLAN			
No.	Revision/Issue	Date	
Firm Name and Address  Paradise Homes			
Project Name and Address Hay Property 4325 Kelly Street West Side Addition Block 5, Lot 8			
Project	4325	Sheet	3
Date	9-4-18		
Scale	As Noted		

Figure 4

Mitigation Plan



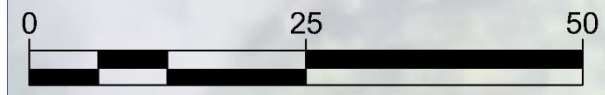
Potential Footprint of Proposed New SFR (typ)

MITIGATION
Per West Linn CDC 32.099 and 32.100

	Lot 7 MDA- 1597 sq ft	Lot 8 MDA- 1595 sq ft	Lot 9 MDA- 1934 sq ft
Trees Qty.	15	15	20
Shrub Qty.	75	75	100
Min. Tree Size	3/4" caliper (live cuttings or bare root stock)		
Min. Shrub Size	12-inch height (container stock)		
Tree Spacing	Average intervals of 10 feet on center.		
Shrub Spacing	Single species clusters of no more than 4 plants, spaced on average 8 to 10 feet on center.		
Tree Diversity and Species*	Minimum 2 species		
Shrub Diversity	Minimum 2 species		
Location of Mitigation	<ul style="list-style-type: none"> Areas disturbed by construction- Trees and shrubs along property lines; Wheat grass and shrubs in open areas. 		
Survival	Minimum 80%		
Survival Enhancement	Non-native or noxious vegetation must be removed or controlled throughout the 3-year maintenance period. Plant sleeves or fencing must be used to protect against wildlife damage.		

Applicant:
Paradise Homes
Paradise@frontier.com
503.710.1227

Owner:
Chng Hay
4356 Riverview Ave
West Linn, 97068
503.784.7102



General Notes

SCALE: AS NOTED	DATE: SEPTEMBER 2018	SECTION: 36	TWP: 2S	RANGE: 1E
PROJECT NAME: HAY PROPERTY 4325 Kelly St West Linn		LOCATION: MITIGATION PLAN		

No.	Revision/Issue	Date

Firm Name and Address

Project Name and Address

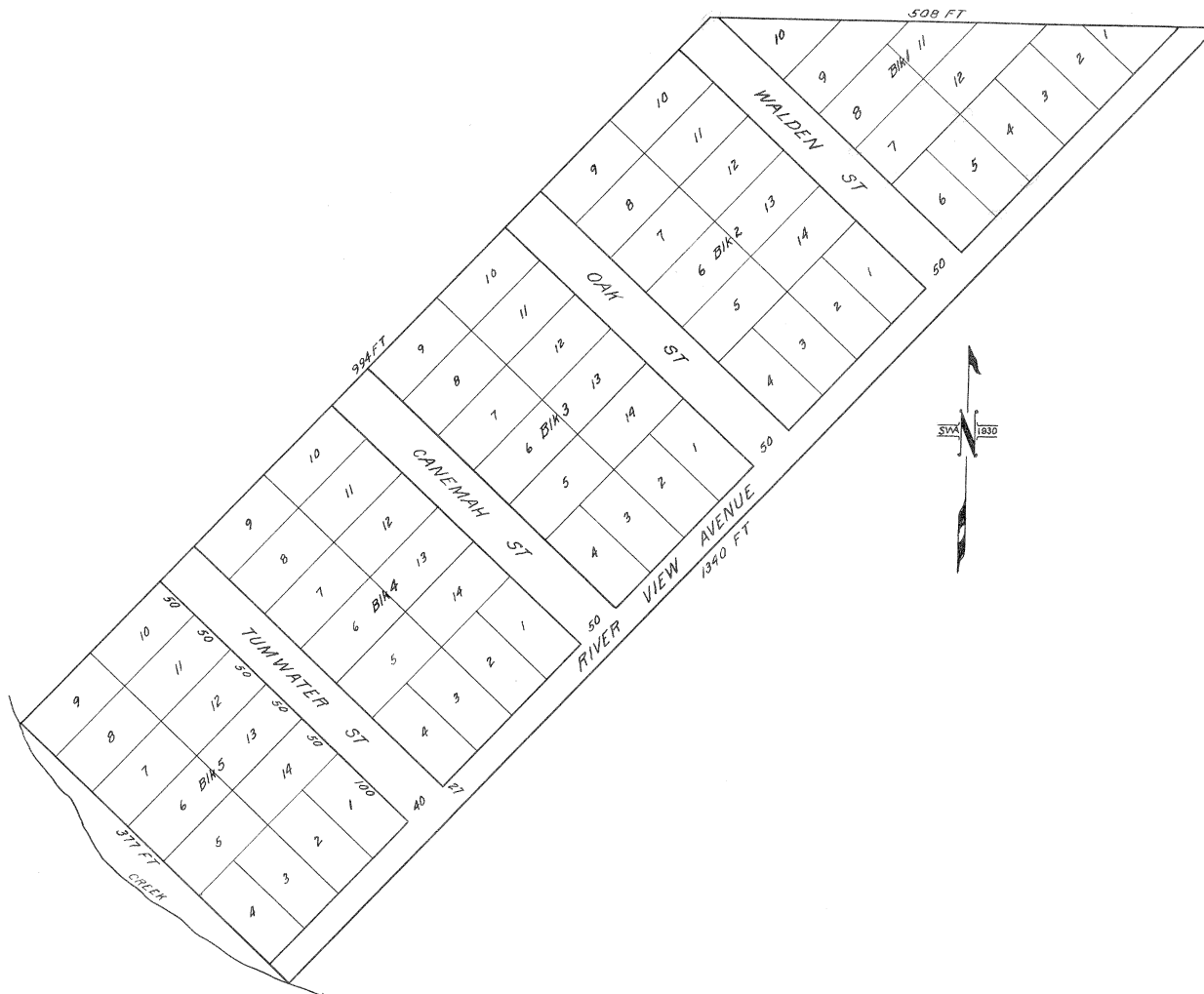
Hay Property
4325 Kelly Street
West Side Addition
Block 5, Lot 8

Project: 4325	Sheet: 4
Date: 9-4-18	
Scale: As Noted	

Figure 5

Plat- 036- P1

WEST SIDE ADDITION
TO
OREGON CITY
SCALE 1"=100'



KNOW ALL MEN BY THESE PRESENTS--THAT WE, JAMES P. SHAW AND EMILIE C. SHAW HIS WIFE, DO HEREBY MAKE, ESTABLISH AND DECLARE THIS PLAT TO BE A MAP OF WEST SIDE ADDITION TO OREGON CITY, AND THE LANDS THEREIN REPRESENTED BEING SITUATED IN SECTION 36 IN TOWNSHIP 2 SOUTH RANGE 1 EAST OF THE WILLAMETTE MERIDIAN, AND MORE FULLY DESCRIBED AS BEGINNING AT THE NORTH WEST CORNER OF ROBERT MOORE'S DONATION LAND CLAIM IN SAID SECTION 36 T. 2 S. R. 1 E., RUNNING THENCE SOUTH 89° 45' E. 508 FEET TO A STAKE, THENCE S. 42° WEST 1340 FEET TO A CREEK, THENCE WESTERLY BY THE MEANDERS OF SAID CREEK TO DONATION CLAIM LINE BETWEEN JULIA ANN LEWIS AND ROBERT MOORE, THENCE ALONG SAID LINE N 42° E. TO PLACE OF BEGINNING.

WE HEREBY DEDICATE TO THE PUBLIC FOREVER AS STREETS AND ROADS ALL SUCH PORTIONS OF LAND UPON SAID MAP AS THE SAME ARE THEREUPON LAID DOWN AND MAPPED.

IN WITNESS WHEREOF WE HAVE HEREUNTO SET OUR HANDS AND SEALS THIS 15TH DAY OF JUNE, 1889.

IN PRESENCE OF
H. E. CROSS
CHAS E. BURNS

JAMES P. SHAW SEAL
EMILIE C. SHAW SEAL

STATE OF OREGON }
COUNTY OF CLACKAMAS } SS

BE IT REMEMBERED THAT ON THIS 15TH DAY OF JUNE, 1889, BEFORE ME THE UNDERSIGNED NOTARY PUBLIC IN AND FOR OREGON PERSONALLY APPEARED THE ABOVE NAMED JAMES P. SHAW AND EMILIE C. SHAW, KNOWN TO ME TO BE THE PERSONS DESCRIBED IN AND WHO EXECUTED THE ABOVE DEDICATION AND TOWN PLAT, AND THE SAID JAMES P. SHAW AND EMILIE C. SHAW ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME FOR THE USES AND PURPOSES THEREIN MENTIONED.

IN WITNESS WHEREOF I HAVE HEREUNTO SET MY HAND AND SEAL.

SEAL
OF
NOTARY

HARVEY E. CROSS
NOTARY PUBLIC FOR OREGON

STATE OF OREGON }
COUNTY OF CLACKAMAS } SS

I, N. O. WALDEN, BEING FIRST DULY SWORN DEPOSE AND SAY--I SURVEYED THE LAND REPRESENTED ON THE ANNEXED PLAT. THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS THE LAND AS REPRESENTED ON SAID PLAT. THAT I PLANTED A STONE MONUMENT INDICATING THE INITIAL POINT OF SUCH SURVEY OF FOLLOWING DIMENSIONS 6 X 6 X 6 AT THE N. W. CORNER OF SAID TRACT.

N. O. WALDEN

SUBSCRIBED AND SWORN TO BEFORE ME THIS 15TH DAY OF JUNE, 1889.
SEAL OF H. E. CROSS NOTARY PUBLIC FOR OREGON

STATE OF OREGON }
COUNTY OF CLACKAMAS } SS

I HEREBY CERTIFY THAT THE WITHIN INSTRUMENT WAS FILED FOR RECORD JUNE 15TH, 1889, AT 3 O CLOCK AND--MIN. P. M. REQUEST OF SHAW AND RECORDED JUNE 15, 1889, IN BOOK OF PLATS.
H. H. JOHNSON, COUNTY CLERK

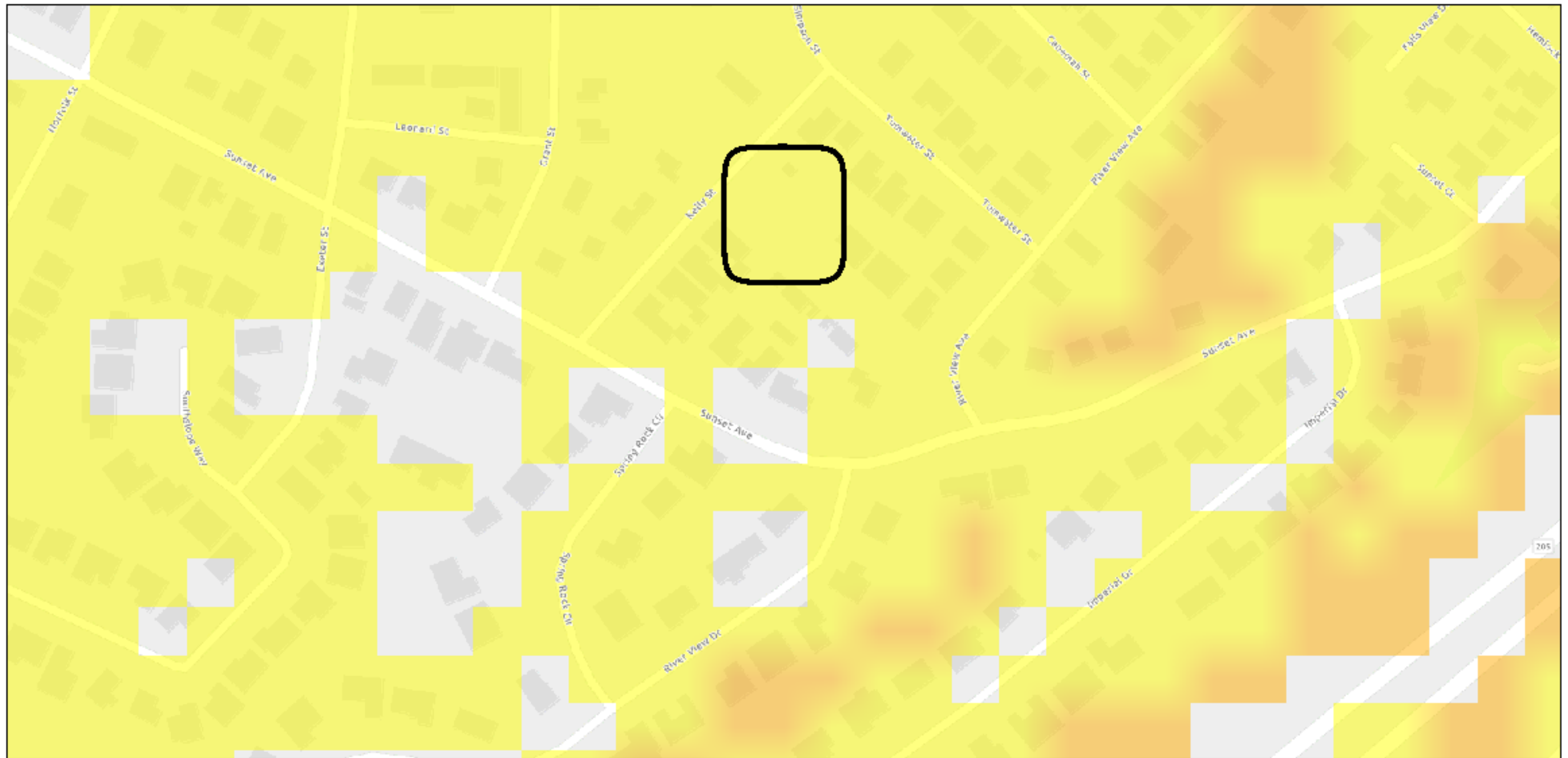
STATE OF OREGON }
COUNTY OF CLACKAMAS } SS

I, E. C. HACKETT, RECORDER OF SAID COUNTY, CERTIFY THE WITHIN AND FOREGOING TO BE A TRUE AND CORRECT COPY OF THE MAP NOW ON FILE IN MY OFFICE AND IN MY CARE AND CUSTODY. JUNE 25, 1930.
E. C. Hackett
COUNTY RECORDER

Figure 6

DOGAMI Landslide Hazard Map

4325 Kelly St- DOGAMI Landslide Hazard



October 19, 2018
Landslide Hazard
Red: Band_1
Green: Band_2
Blue: Band_3

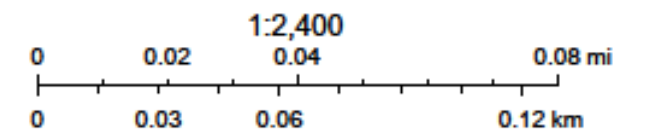
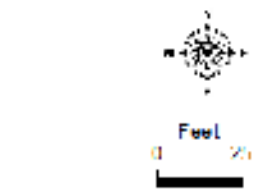
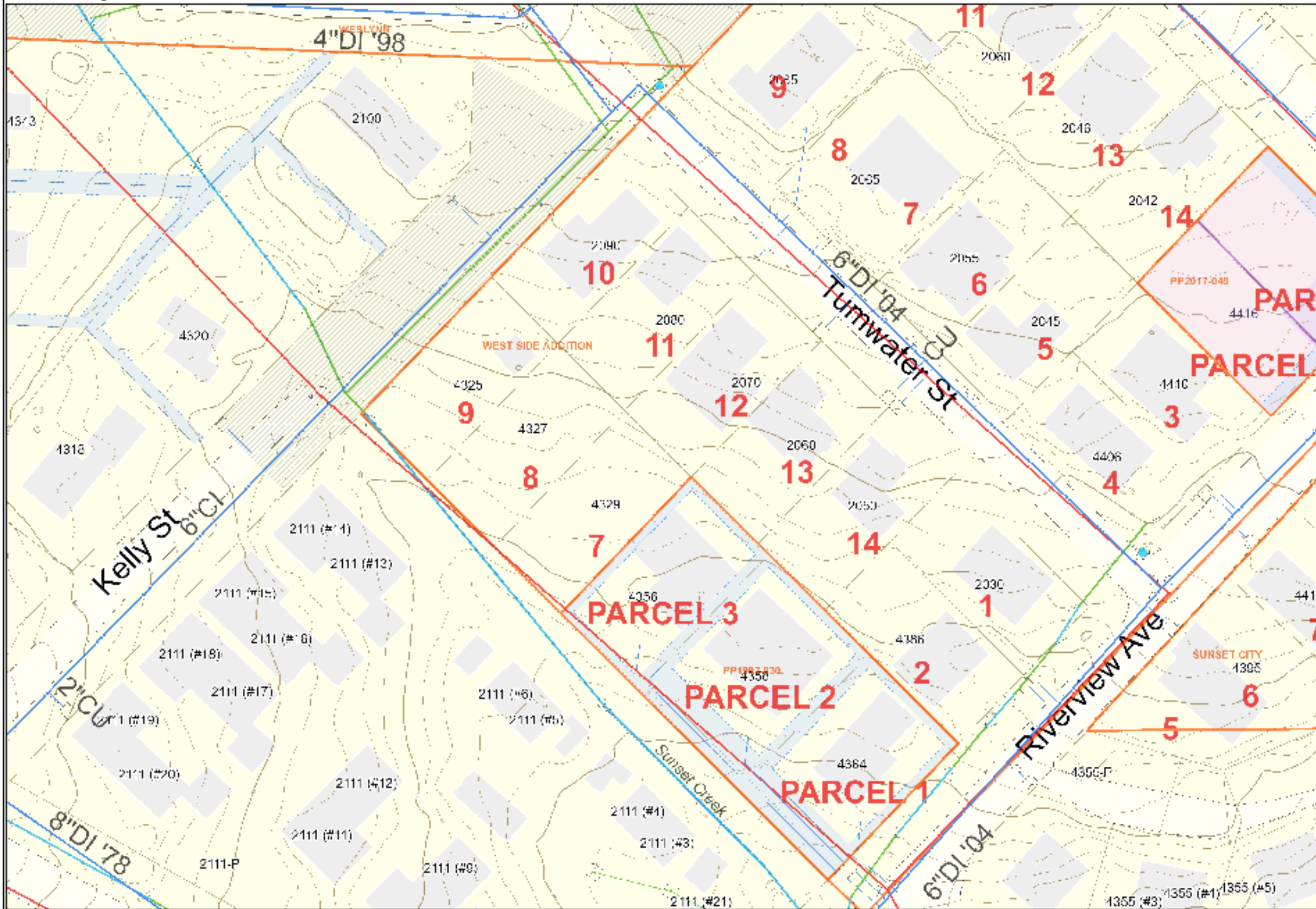


Figure 7

GIS Map with 2 ft Contours

4325 Kelly Street- Contours: 2 ft



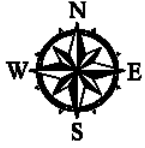
Map created by: public
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WEST LINN GIS

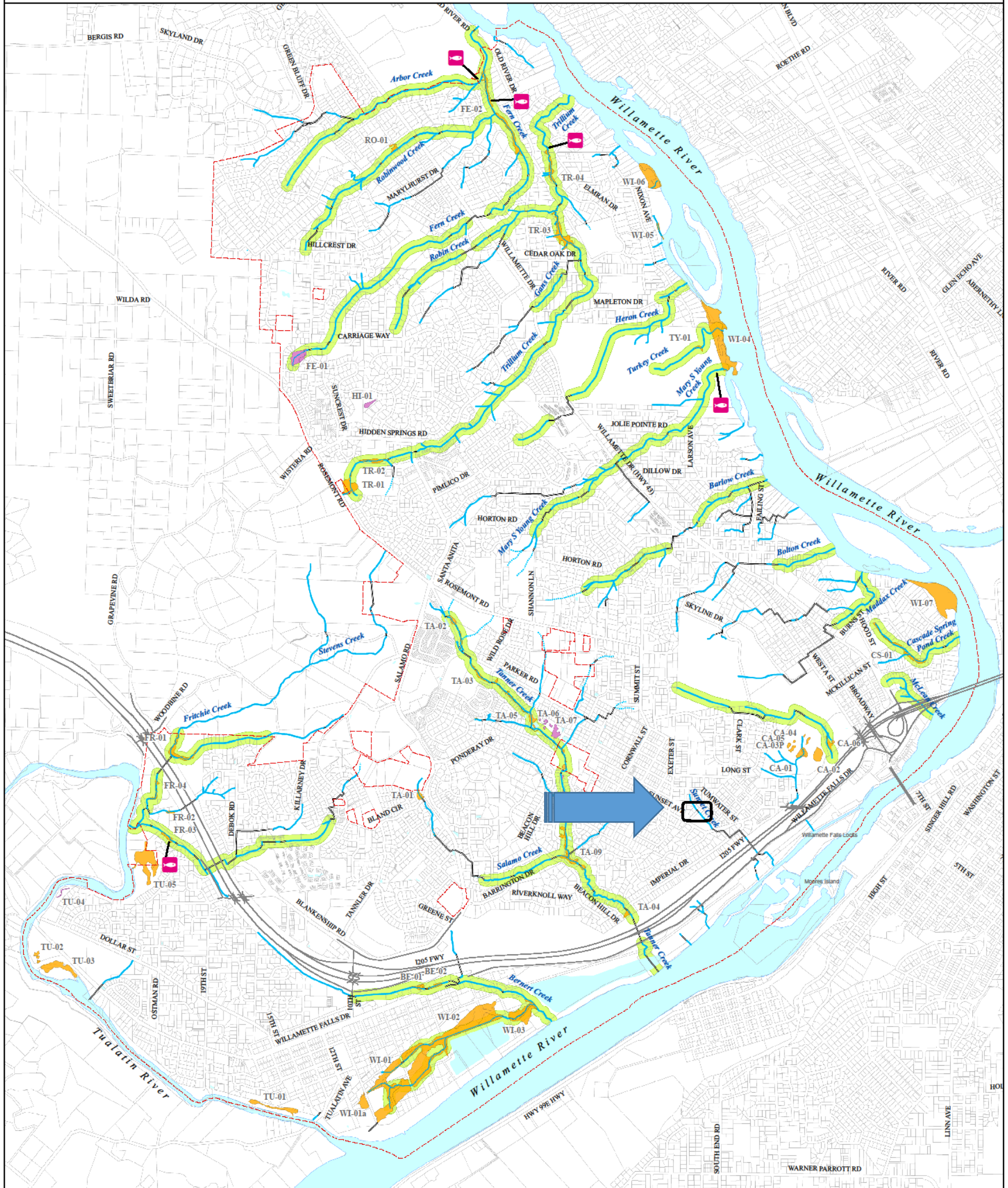
DISCLAIMER: This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information. Map scale is approximate. Source: West Linn GIS (Geographic Information System) MapOptix.

Figure 8

City of West Linn WRA Map



Water Resource Area (WRA) Map



Map Developed by West Linn Planning Department and GIS

MAP OVERLAYS:
 *Streams, Pipe Segments, Other Open Ditches, and Significant Riparian Corridors
 Map Source: "Significant Riparian Corridors West Linn Goal 5 Inventory, January 2007"
 Map publication date: 1/2/2007.
 Modified Streams and added Ephemeral Streams, April 2013, July 2013, September 2013

****Locally Significant Wetlands and Other Wetlands**
 Map Source: "Local Wetland Inventory, West Linn Goal 5 Inventory, January 2005"
 Map publication date: 6/5/2006.

*****Taxlot Base Map provided by Clackamas County GIS, 2013**

WETLANDS/GOAL 5 DISCLAIMER (DSL STANDARD):
 Information shown on this map is for planning purposes only and wetland information is subject to change. There may be unmapped wetlands subject to regulation and all wetland boundary mapping is approximate. In all cases, actual field conditions determine wetland boundaries. You are advised to contact the Oregon Division of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Goal 5 Significant Riparian Corridors*

- Significant Riparian Corridors
- Streams
- Ephemeral Stream
- Piped Segments
- Upper Stream Reach of Fish Inventory 2003/2004 Survey

Goal 5 Wetland Inventory**

- Locally Significant Wetlands, DSL 2005
- Other Wetlands, DSL 2005
- TA-05 Specific Wetland Identifier
- Rivers & Ponds
- Taxlot Base Map***

West Linn City Limits

0 0.25 0.5 1 Miles

Map Created: 6/6/2014

LOC: G:\PROJECTS\GIS\GOALS_2006\SIGRIPARIAN\SIGRIPARIAN_WETLANDS_201406V6_FINAL.MXD | KAHK
 VERSION 5 TO VERSION 6: REMOVED "PROPOSED" FROM MAP TITLE

West Linn
GIS
 GEOGRAPHIC INFORMATION SYSTEMS

Exhibit 1

Wetland Determination

4325 Kelly Street West Linn Wetland Determination

PREPARED FOR: Dennis Caudell, Paradise Homes
 PREPARED BY: Turnstone Environmental Consultants, Inc. (Turnstone)
 COPIES: Jeff Reams (Turnstone)
 DATE: December 17th, 2018

Introduction

Turnstone conducted a wetland and waterways determination for a 0.43-acre Study Area that includes the entirety of tax lots 1802, 1803, 1804 and a portion 800 (tax maps 21E36AA & 21E36AD) in West Linn, Clackamas County, Oregon. The Study Area also includes a small portion of public road right of way north of the existing terminus of Kelly Street. The purpose of this memorandum is to provide information that will help guide future land use planning for the parcel and ensure compliance with regulatory statutes related to protection of wetlands and other waters. The client wishes to develop tax lots 1802, 1803 and 1804 as single-family residences and has commissioned this report to convey the location and condition of aquatic resources that may be subject to city regulations. A portion of the Study Area adjacent to the channel of Sunset Creek is included in the City of West Linn’s Water Resource Area (WRA) map and subject to protection through development buffers (Appendix A-Figure 1).

Study Area Setting and Land Use

The legal description of the Study Area is SE 1/4 of NE 1/4, Section 36 in Township 2 South, Range 1 East. The centroid coordinates for the Study Area are 45.3570923°, -122.6249728°. The Study Area is situated on a southeast-facing slope and local topography is influenced by the drainage swale occupied by Sunset Creek.

Study Area (shaded) overview map



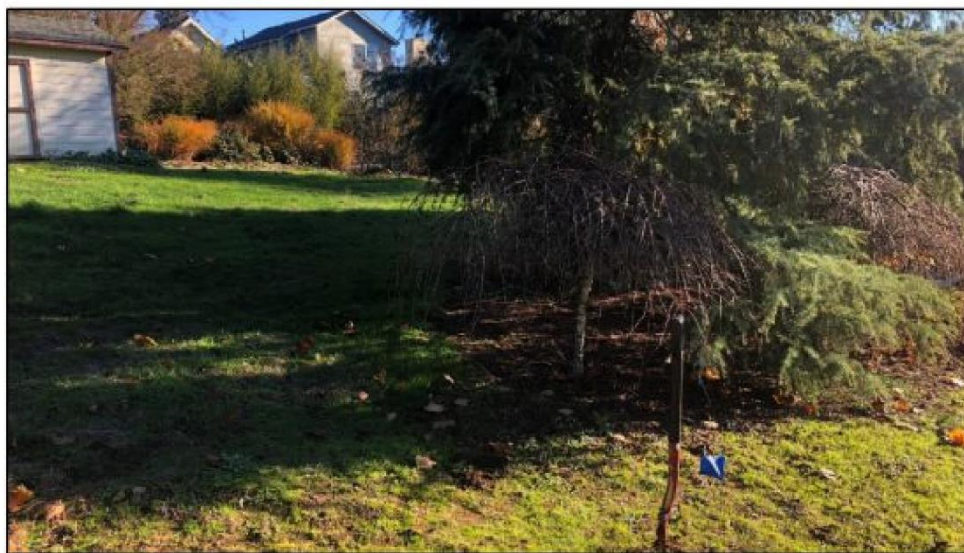
Source: West Linn GIS (Geographic Information System) MapOptix.

The portions of tax lots 1802, 1803 are currently maintained as a landscaped yard, with lawns and ornamental tree and shrub plantings. Mature Leyland cypress (*Cupressus x leylandii*), Deodar cedar (*Cedrus deodara*) and quaking aspen (*Populus tremuloides*) trees along with ornamental grasses (*Miscanthus sinensis*) and flowering cherry trees (*Prunus pendula*) are planted along the Study Area lot lines. The portion of tax lot 800 included in the Study Area contains the channel of Sunset Creek and is a combination of landscaped areas and riparian vegetation dominated by willows (*Salix cf. sitchensis*). Local land use is dominated by medium-density single-family homes. The Study Area is within the Abernethy Creek-Willamette River catchment area (HUC10: 1709000704). No wetlands included in the National Wetland Inventory (NWI) are located in the Study Area (USFWS 2018). The nearest NWI wetlands are located along Tanner Creek to the southwest, at Camassia Natural Area to the Northeast and along the Willamette River to the south. Beyond the channel of Sunset Creek, no wetlands or waters are identified in the West Linn local wetland inventory (Winterbrook 2003).

Methods

Field investigation of the Study Area was conducted on December 5th, 2018. The field investigation utilized the "Routine Onsite" method from the Corps Wetland Delineation Manual (USACE, 1987) as guidance. The Study Area was traversed by foot and a visual assessment was conducted for hydrophytic vegetation, suspect topographical features, and wetland hydrology indicators. Two sample plots were placed upslope of the Sunset Creek channel to document upland (non-wetland) conditions there. Sample plot soil pits were dug to a depth of 20". Absolute aerial cover of plant species was reported for tree, shrub and herb layers, utilizing 10-, 5-, 1-meter square plots respectively. Soil colors (wet) were determined using Munsell soil color charts (Gretag Macbeth 2000). Ordinary High-Water Lines (OHWLs) were determined by mapping the upland limit of the physical and biological characteristics outlined in Army Corps of Engineers Regulatory Guidance Letter 05-05 (USACE 2005). Considering that the timing of field investigation coincided with a dry period, wetland hydrology would be assumed for plots possessing both positive hydric soil and hydrophytic vegetation determinations, though in practice each sampling area resulted in upland soil and vegetation determinations.

Looking northeast towards SP_01



Results

No wetlands are present within the Study Area and each of the sample plots resulted in upland determinations. The location of Study Area sample plots is illustrated in Appendix B-Figures 1 & 2. Wetland delineation data forms and ground-level photographs are included in Appendix C. Soils in the Study Area are predominately dark brown (7.5YR 3/3) and silt loam in texture and do not have the redoximorphic features associated with persistent seasonally high ground water. A single soil map unit (major component) is present in the Study Area: "Saum silt loam, 8 to 15 percent slopes" (NRCS 2018). The map unit is non-hydric and described as well-drained. Soils observed during field investigation closely resemble the pedon descriptions of "Saum" soils. Study Area sample plots were dominated by ornamental trees and lawn grasses including perennial ryegrass (*Lolium perenne*) along with a mix of annual weeds including common groundsel (*Senecio vulgaris*), crabgrass (*Digitalis sanguinalis*), dovefoot geranium (*Geranium molle*), subterranean clover (*Trifolium subterraneum*) and annual bluegrass (*Poa annua*). Within the Study Area, channel of Sunset Creek is located primarily on tax lot 800 with a small portion on the adjacent public road right of way. Vegetation along the northern section of the creek is maintained as a backyard, with lawn grasses interspersed by raised beds and ornamental plantings. Vegetation along the lower, southern portion of the creek is more natural in character and hosts native riparian species including willows, western red-cedar (*Thuja plicata*) and ferns (*Athyrium filix-femina*). The channel is somewhat incised and the OHWL was determined by mapping the top of bank. The channel, along with the proposed 15' development buffer is illustrated in Appendix B-Figures 1 & 2.

Looking south toward SP_02



Mapping Method

Sample points and waterway lines were collected using an EOS™ Arrow Gold GPS receiver paired with a mobile computer equipped with ESRI™ Collector software. RTK positioning over a digital cellular network was utilized to correct GPS data and points are accurate to within 4 cm. To calculate areas and create associated figures, GPS data was collected in a WGS 84 geographic coordinate system and later transformed into a local coordinate system, NAD 1983 State Plane Oregon North FIPS3601 Feet. A CAD file has been provided to the client for incorporation into proposed site layout exhibits.

Looking at Sunset Creek on the north portion of tax lot 800.



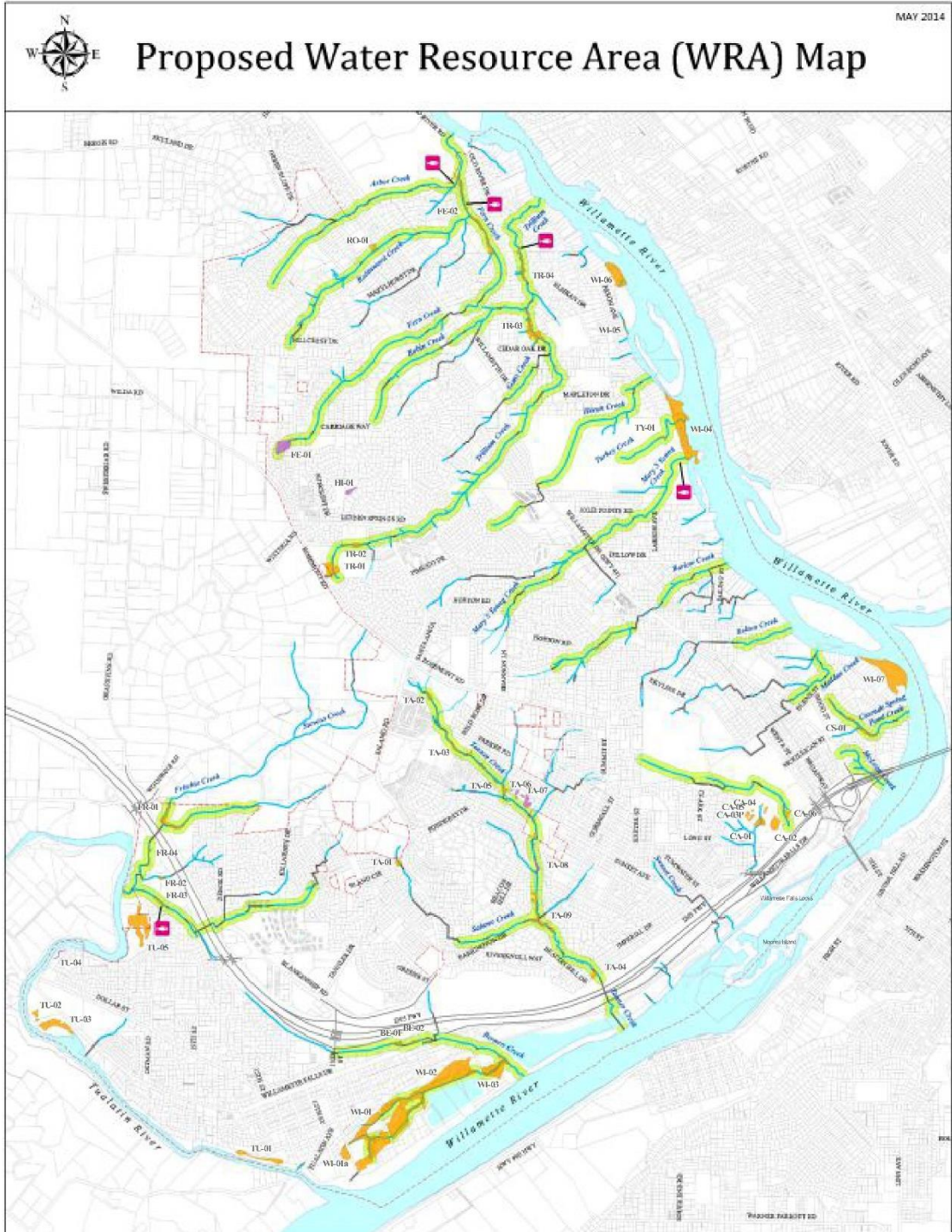
Looking northwest from the south-central portion of the Study Area





Appendix A:

West Linn WRA Map



Map Developed by West Linn Planning Department and GIS

MAP OVERLAYS:
 *Streams, Pipe Segments, Other Open Ditches, and Significant Riparian Corridors
 Map Source: "Significant Riparian Corridors West Linn Goal 5 Inventory, January 2007"
 Map Publication Date: 1/2/2007
 Modified Streams and added Ephemeral Streams, April 2013, July 2013, September 2013

**Locally Significant Wetlands and Other Wetlands
 Map Source: "Local Wetland Inventory, West Linn Goal 5 Inventory, January 2005"
 Map Publication Date: 6/2/2006

***Taxes Base Map provided by Clackamas County GIS, 2013

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Goal 5 Significant Riparian Corridors*

- Significant Riparian Corridors
- Streams
- Ephemeral Stream
- Piped Segments
- Upper Stream Reach of Fish Inventory 2003/2004 Survey

Map Created: 5/13/2014

LOC: G:\PROJECTS\GIS\GOLS_2007\GSRP\HMS\WORKAREA_WETLANDS_2013\GOLS_PROPPOSED.WRA.MXD

Goal 5 Wetland Inventory**

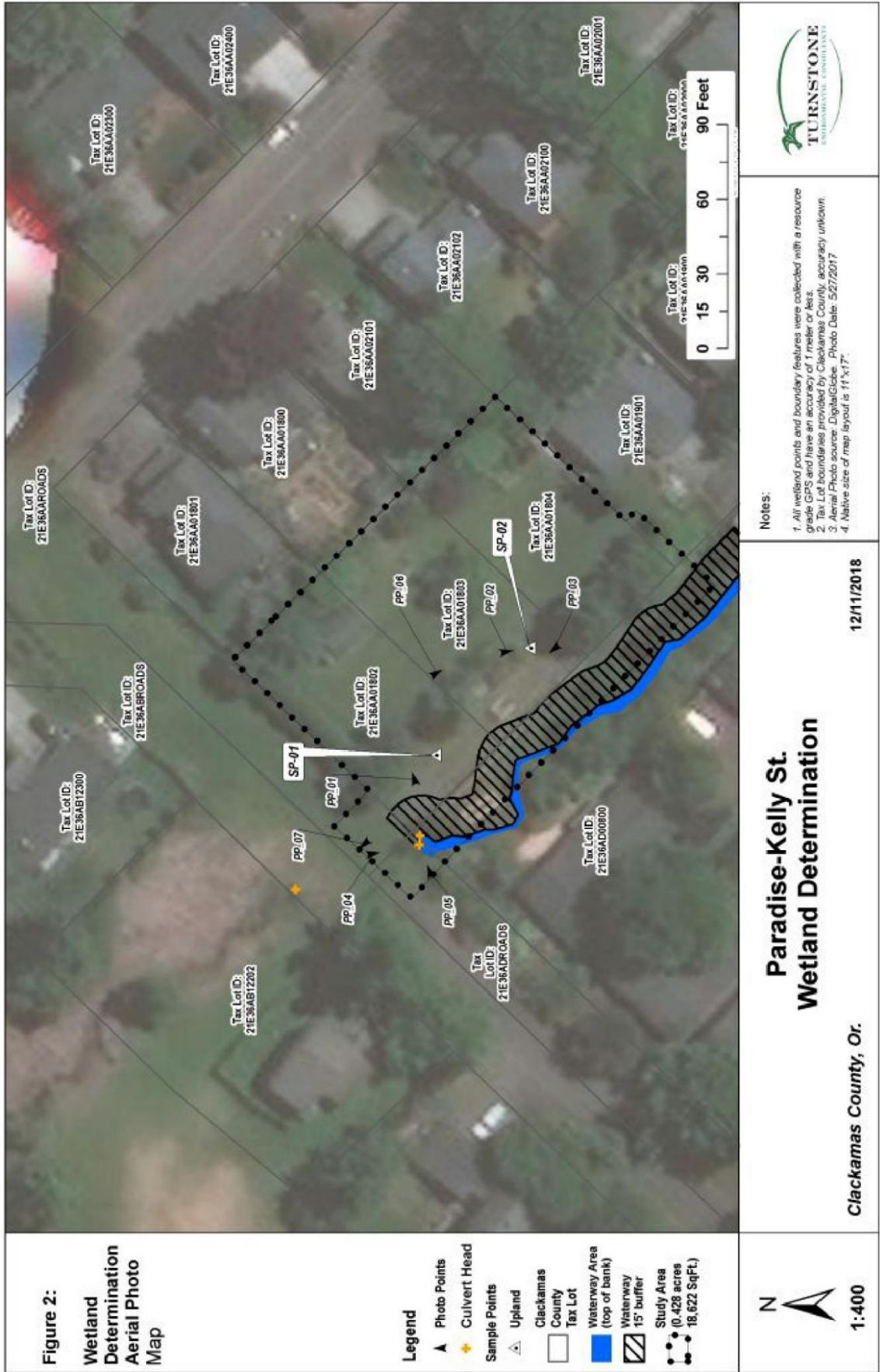
- Locally Significant Wetlands, DSL 2005
- Other Wetlands, DSL 2005
- Specific Wetland Identifier
- Rivers & Ponds
- West Linn City Limits
- Taxlot Base Map***

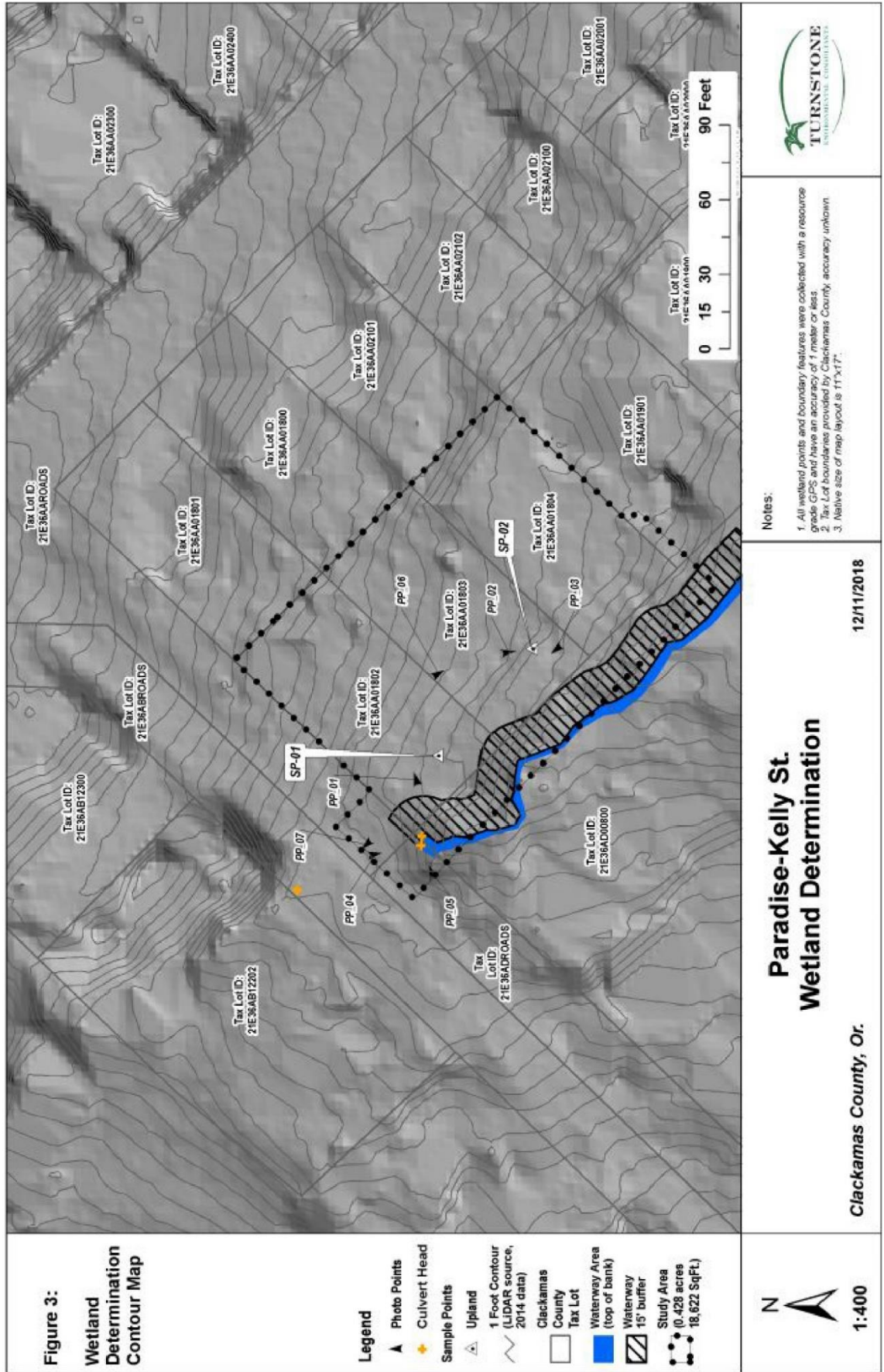
West Linn GIS
 GEOGRAPHIC INFORMATION SYSTEMS



Appendix B:

Wetland Determination Maps







Appendix C:

Wetland Determination Data Forms &

Ground-level Photographs

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

Project/Site: 4325 Kelly Street City/County: West Linn State: OR Sampling Date: 05-Dec-18
 Applicant/Owner: Dennis Caudell-Paradise Homes State: OR Sampling Point: SP_01
 Investigator(s): Joe Bettis Section, Township, Range: S 36 T 2 S R 1 E
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave Slope: 10.0 % / 5.7°
 Subregion (LRR): MLRA 2 Lat.: 45.35713 Long.: -122.625154 Datum: WGS 84
 Soil Map Unit Name: Saum silt loam, 8 to 15 percent slopes NWI classification:

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Rel.Strat. Cover	Indicator Status	
Tree Stratum (Plot size: 10 m)				
1. Cedrus deodara	20	<input checked="" type="checkbox"/> 57.1%	FACU	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>37.5%</u> (A/B)
2. Cupressus x leylandii	15	<input checked="" type="checkbox"/> 42.9%	FACU	
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
35 = Total Cover				
Sapling/Shrub Stratum (Plot size: 5 m)				
1. Prunus avium	10	<input checked="" type="checkbox"/> 50.0%	FACU	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>62</u> x 4 = <u>248</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>112</u> (A) <u>418</u> (B) Prevalence Index = B/A = <u>3.732</u>
2. Buddleja davidii	5	<input checked="" type="checkbox"/> 25.0%	FACU	
3. Rubus armeniacus	5	<input checked="" type="checkbox"/> 25.0%	FAC	
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
20 = Total Cover				
Herb Stratum (Plot size: 1 m)				
1. Poa annua	25	<input checked="" type="checkbox"/> 43.9%	FAC	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Senecio vulgaris	10	<input checked="" type="checkbox"/> 17.5%	FACU	
3. Lolium perenne	10	<input checked="" type="checkbox"/> 17.5%	FAC	
4. Geranium molle	5	<input type="checkbox"/> 8.8%	UPL	
5. Trifolium subterraneum	5	<input type="checkbox"/> 8.8%	UPL	
6. Hypochaeris radicata	1	<input type="checkbox"/> 1.8%	FACU	
7. Veronica arvensis	1	<input type="checkbox"/> 1.8%	FACU	
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
57 = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
0 = Total Cover				
% Bare Ground in Herb Stratum: <u>45</u>				
Remarks: Cedrus deodara & Cupressus x leylandii wetland status assigned by observer.				

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: SP_01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	7.5YR	3/3	100				Silt Loam	
12-14	7.5YR	3/3	100				Silt Loam	5% charcoal & 1% 10YR 3/4 concretions by volume
14-20	7.5YR	4/3	100				Silt Loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

2 cm Muck (A10)
 Red Parent Material (TF2)
 Other (Explain in Remarks)

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

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:
 Diffuse boundary at 14"

Hydrology

Wetland Hydrology Indicators:

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

Field Observations:

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

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

Remarks:
 Dry to 20"

Plot ID: **SP_01**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1067.JPG** Orientation: -facing

Lat/Long or UTM : Long/Easting: **-122.625154** Lat/Northing: **45.35713**

Description:



Photo File: **IMG_1065.JPG** Orientation: -facing

Lat/Long or UTM: Long/Easting: **0** Lat/Northing: **0**

Description:

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

Project/Site: 4325 Kelly Street City/County: West Linn State: OR Sampling Date: 05-Dec-18
 Applicant/Owner: Dennis Caudell-Paradise Homes State: OR Sampling Point: SP_02
 Investigator(s): Joe Bettis Section, Township, Range: S 36 T 2 S R 1 E
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave Slope: 10.0% / 5.7°
 Subregion (LRR): MLRA 2 Lat.: 45.357029 Long.: -122.624983 Datum: WGS 84
 Soil Map Unit Name: Saum silt loam, 8 to 15 percent slopes NWI classification:

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

VEGETATION - Use scientific names of plants.

		Dominant Species?		
Tree Stratum (Plot size: 10 m)	Absolute % Cover	Rel.Strat. Cover	Indicator Status	
1. Cupressus x leylandii	15	<input checked="" type="checkbox"/> 100.0%	FACU	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)
2.	0	<input type="checkbox"/> 0.0%		
3.	0	<input type="checkbox"/> 0.0%		
4.	0	<input type="checkbox"/> 0.0%		
	15	= Total Cover		
Sapling/Shrub Stratum (Plot size: 5 m)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>45</u> x 3 = <u>135</u> FACU species <u>50</u> x 4 = <u>200</u> UPL species <u>13</u> x 5 = <u>65</u> Column Totals: <u>108</u> (A) <u>400</u> (B) Prevalence Index = B/A = <u>3.704</u>
1. Prunus avium	10	<input checked="" type="checkbox"/> 100.0%	FACU	
2.	0	<input type="checkbox"/> 0.0%		
3.	0	<input type="checkbox"/> 0.0%		
4.	0	<input type="checkbox"/> 0.0%		
5.	0	<input type="checkbox"/> 0.0%		
	10	= Total Cover		
Herb Stratum (Plot size: 1 m)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
1. Lolium perenne	25	<input checked="" type="checkbox"/> 30.1%	FAC	
2. Poa annua	15	<input checked="" type="checkbox"/> 18.1%	FAC	
3. Hypochaeris radicata	15	<input checked="" type="checkbox"/> 18.1%	FACU	
4. Trifolium subterraneum	5	<input type="checkbox"/> 6.0%	UPL	
5. Geranium molle	5	<input type="checkbox"/> 6.0%	UPL	
6. Senecio vulgaris	5	<input type="checkbox"/> 6.0%	FACU	
7. Digitalia sanguinalis	5	<input type="checkbox"/> 6.0%	FACU	
8. Equisetum arvense	5	<input type="checkbox"/> 6.0%	FAC	
9. Malva neglecta	3	<input type="checkbox"/> 3.6%	UPL	
10.	0	<input type="checkbox"/> 0.0%		
11.	0	<input type="checkbox"/> 0.0%		
	83	= Total Cover		
Woody Vine Stratum (Plot size:)				
1.	0	<input type="checkbox"/> 0.0%		
2.	0	<input type="checkbox"/> 0.0%		
	0	= Total Cover		
% Bare Ground in Herb Stratum: <u>20</u>				
Remarks:				

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: SP 02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	7.5YR	3/3	100				Silt Loam	5% charcoal by volume
16-20	7.5YR	4/3	100				Silt Loam	

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

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

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

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Hydrology

Wetland Hydrology Indicators:

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

Field Observations:

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

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

Remarks:
 Dry to 20"

Plot ID: **SP_02**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1066.JPG** Orientation: -facing

Lat/Long or UTM : Long/Easting: **-122.624983** Lat/Northing: **45.357029**

Description:

No Photo

Photo File: **None.bmp** Orientation: -facing

Lat/Long or UTM : Long/Easting: **0** Lat/Northing: **0**

Description:

Plot ID: **PP_03-04**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1069.JPG** Orientation: South southeast -facing
Lat/Long or UTM : Long/Easting: **-122.624983** Lat/Northing: **45.357029**
Description: **PP_03**



Photo File: **IMG_1070.JPG** Orientation: South southeast -facing
Lat/Long or UTM : Long/Easting: **45.357201** Lat/Northing: **-122.625326**
Description: **PP_04**

Plot ID: **PP_05-06**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1071.JPG** Orientation: East northeast -facing
Lat/Long or UTM : Long/Easting: **-122.624983** Lat/Northing: **45.357029**
Description: **PP_05**

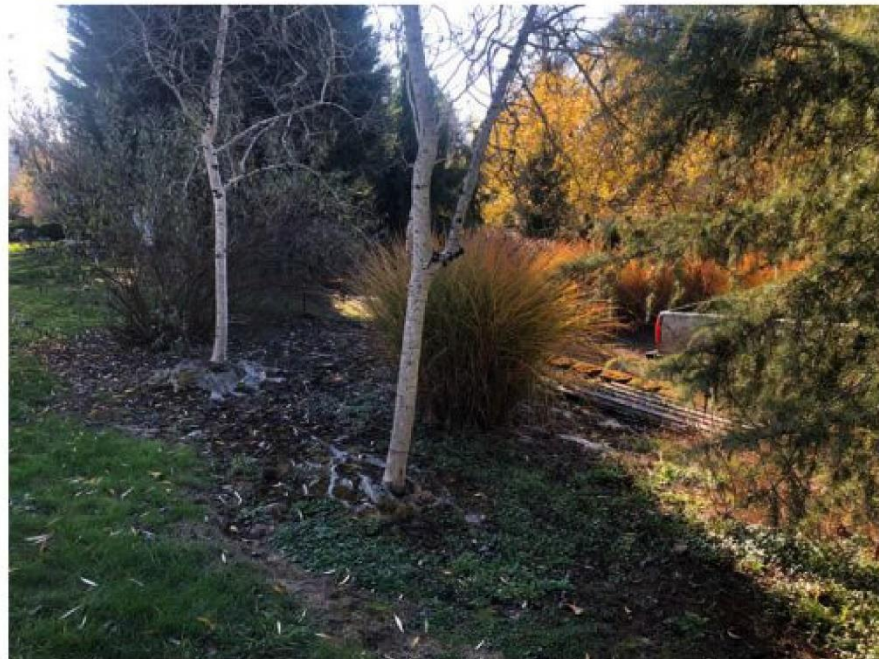


Photo File: **IMG_1072.JPG** Orientation: East southeast -facing
Lat/Long or UTM : Long/Easting: **0** Lat/Northing: **0**
Description: **PP_06**

Plot ID: **PP_07**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1073.JPG** Orientation: Northwest -facing

Lat/Long or UTM : Long/Easting: **-122.624983** Lat/Northing: **45.357029**

Description:

No Photo

Photo File: **None.bmp** Orientation: -facing

Lat/Long or UTM : Long/Easting: **0** Lat/Northing: **0**

Description:



Appendix D:

References

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- Winterbrook Planning (Winterbrook). 2003. *West Linn Wetland, Riparian and Wildlife Habitat Inventory*.

Exhibit 2

Stormwater Design

January 2, 2019

4325 Kelly St

West Linn, OR

Stormwater Management Report (SWMR) for Proposed Stormwater Rain Garden

Prepared for:

Paradise Homes
20659 NE Lakeside Drive
Fairview, OR 97024

Prepared by:

Aquarius Environmental, LLC
2117 NE Oregon Street, Ste 502
Portland, OR 97232
503.828.0265
www.aquariusenv.com



Stormwater Management Report (SWMR)

Table of Contents

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2.2	Site Description	2
3	Existing Stormwater Conditions	2
4	Proposed Conditions.....	2
5	Sizing	2
6	Operation & Maintenance (O&M).....	3
7	Engineering Conclusions.....	3

Tables

Table 1. Calculated peak flow rate and runoff volume summary.

Appendices

Appendix A: Plan Sheet

Abbreviations

ac	acres
bgs	below ground surface
CB	catch basin
cfs	cubic feet per second
DB	Drainage Basin
DEQ	Oregon Department of Environmental Quality
gpm	gallons per minute
ID	inner diameter
IE	invert elevation
LF	linear feet
NPDES	National Pollution Discharge Elimination System
SBUH	Santa Barbara Urban Hydrograph
sq ft	square feet
SWMR	Stormwater Management Report
SWMM	<i>2016 City of Portland Stormwater Management Manual</i>

1 Engineer's Certification

I hereby certify that this Stormwater Management Report for 4325 Kelly Street has been prepared by me or under my supervision and meets minimum standards of the City of West Linn and normal standards of engineering practice. I hereby acknowledge and agree that the jurisdiction does not and will not assume liability for the sufficiency, suitability, or performance of drainage facilities designed by me.

Digitally Signed 1/02/19



RENEWAL DATE: 6/30/2020

Aquarius Environmental, LLC
Daniel A. Scarpine, P.E.
Principal Engineer

2 Project Summary

This project proposes to provide approximately 1,100 square foot driveway access to existing 3 lots (4325, 4327, 4329 respectively). Runoff from the driveway will convey to a proposed raingarden which manages stormwater from driveway surfaces.

In conformance with City of West Linn standards, AE prepared this Stormwater Management Report (SWMR) pursuant to the requirements of the 2016 *City of Portland Stormwater Management Manual (SWMM)*. The following SWMR, along with a Plan Sheet (Appendix A), describes the sizing, location, and installation plans of the proposed rain garden.

2.1 Site Location

The project site (Site) is located at 4325 Kelly Street, West Linn, Oregon (21 E 36AA - Tax Lots 1802, 1803, 1804).

2.2 Site Description

The existing 15,000 square foot site is undeveloped. The Site is entirely zoned R4.5(Residential 4.5). New single family residential development is proposed. The site is located adjacent to the Sunset Creek water resource area (WRA)

3 Existing Stormwater Conditions

Currently runoff from the site conveys to Sunset Creek. The southwest portion of the Driveway/Parking area runoff was conveyed to an existing rain garden located west of the existing house.

4 Proposed Conditions

Approximately 1,100 square feet of new driveway will be constructed. A new proposed stormwater rain garden will be located on the southern edge of the roadway to collect, treat, and detain runoff prior to discharge to Sunset Creek.

Runoff from future house development will be separately managed by raingardens adjacent to any proposed homes.

5 Sizing

The proposed rain garden is sized following the presumptive approach sizing factor of 0.10 times the contributing impervious area.

	Impervious Area		Minimum Rain Garden Size (sq ft)
	Acre	Sq Ft	
<i>Driveway Rain Garden</i>	0.025	1,100	110

To uniformly distribute flow and collection, the proposed development has the raingarden parallel to the driveway which provides approximately 200 square feet of facility. This exceeds the minimum required by approximately 1.8X.

6 Operation & Maintenance (O&M)

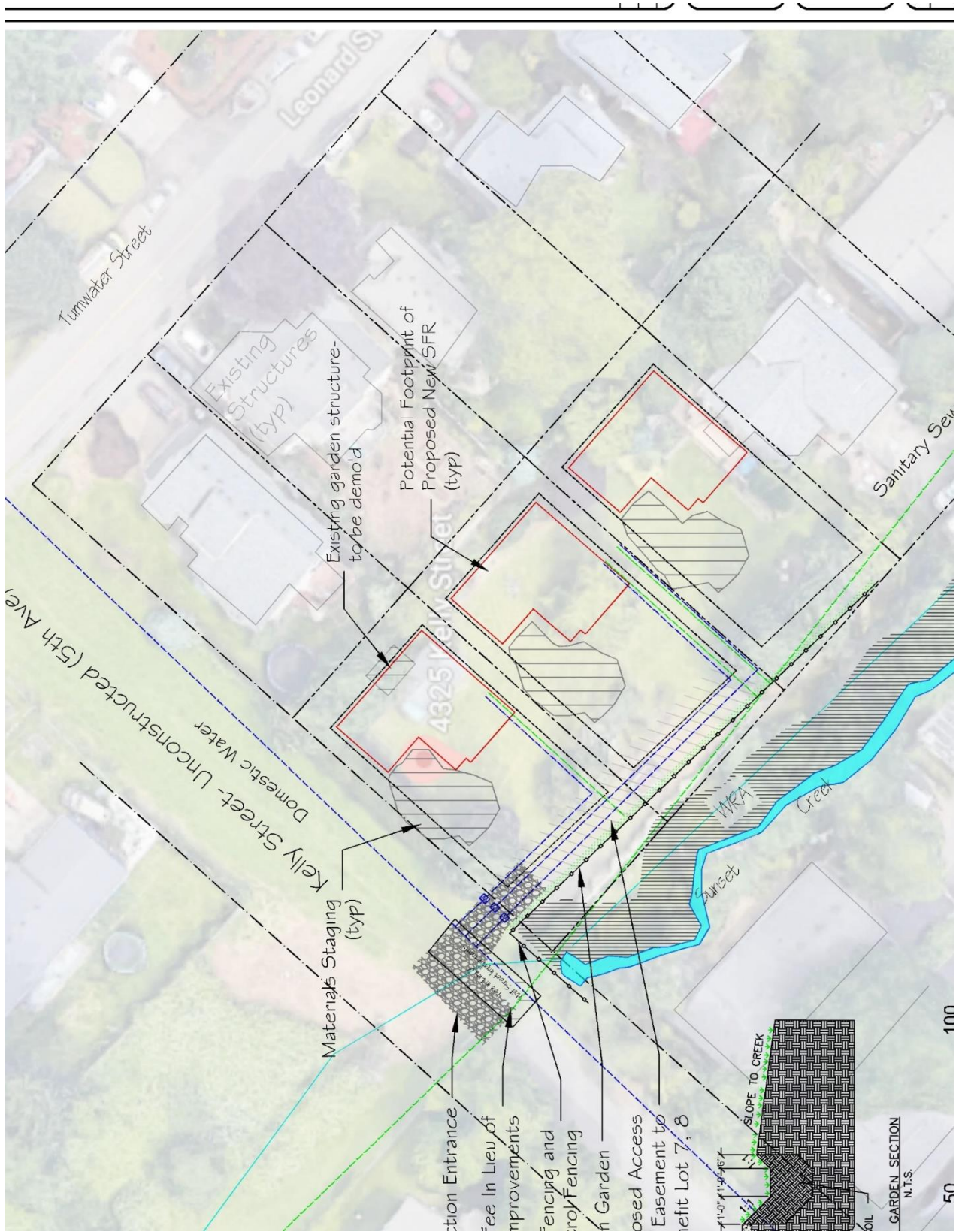
Maintenance of the rain garden will be required to clean out potential settled solids and maintain the vegetation. The rain garden will require regular weeding and inspection of plants.

The rain garden shall be planted with plants on the 2016 SWMM Approved Plant list (Appendix H).

7 Engineering Conclusions

The proposed rain garden described in this SWMR is expected to meet the site's needs for driveway stormwater management.

Appendix A: Plan Set



Paradise Homes

Fairview, Oregon

503.710.1227 Paradise@frontier.com

Building the Northwest Style at a Higher Level of Performance

Hay Properties- Project Narrative

New SFRs in WRA – Specifically 4327 Kelly Street

12/28/2018

Address	4325 Kelly Street	4327 Kelly Street	4329 Kelly Street
State ID	2 1E 36AA 1802	2 1E 36AA 1803	2 1E 36AA 1804
Tax ID	01830095	01830102	01830111
Size	5,000 sq ft	5,000 sq ft	5,000 sq ft
Zone	R 4.5	R 4.5	R 4.5
Owner	Ching Hay 4356 Riverview Ave, West Linn, OR 97068 503.784.7102	Applicant	Paradise Homes Dennis Caudell Paradise@frontier.com 503.710.1227
Work Scope	New SFR	New SFR	New SFR
WRA Review	West Linn Development Code Chapter 32		
MDA Calculation (sq. ft.)	MDA: 5,000	MDA: 5,000	MDA: 5,000
Mitigation / Revegetation	<i>West Linn Development Code Section 32.090, 32.100</i>		

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Proposal:

The proposed development consists of three previously developed lots; one with proposed driveway access from Kelly Street and the others with access via a future access easement granted by 4325 Kelly St to the benefit of 4327 and 4329 Kelly St. The lots have remained unimproved from the original development and are used as back yard space associated with the adjacent SFR at 4356 Riverview Ave.

For each of the three existing lots, development will include approximately 5,000 square feet or the maximum disturbance area permitted within the WRA. All proposed development will occur within the existing building envelope indicated in the underlying zone.

Site Description:

The site is comprised of three 5,000 square foot lots, for a total of 0.34 acres. It is bounded by single family residences to the North, East, an apartment complex to the South and unimproved Kelly Street to the West. An ephemeral portion of Sunset Creek lies just across the property line to the South.

The site contains 8,373 square feet of Water Resource Area (WRA) overlay classification. 6,627 square feet of the site is not classified as WRA. The site does not contain any floodplain.

There are no wetlands on the property or in the creek vicinity. Slopes greater than 10 percent only exist on Lot 8 (TL 1803). This includes areas of slopes no greater than 13 percent. The creek bed consists of a small ravine that is generally approximately 18" wide by 6" deep. Water, when present in the summer, flows about 1" deep.

West Linn CDC 14.030 Permitted Uses

Permitted Uses

Single-Family detached residential units are uses permitted outright in the R 4.5 zone.

This application proposes three single family detached residential units.

The criterion is satisfied

West Linn CDC 14.070 Dimensional Requirements

Dimensional Requirements for Uses Permitted Outright and Uses Permitted Under Prescribed Conditions

A. Minimum lot size shall be- 4500 sq ft-

Proposed lots are all 5,000 sq ft.

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

All proposed front lot widths are 50 ft. Lengths are 100 feet.

C. The average minimum lot width shall be 35 feet.

All proposed lot widths are 50 ft.

D. Repealed by Ord. 1622.

Under the hardship provisions per CDC 32.110, where development is situated as far as practical from the WRA, front and side setbacks may be reduced up to 50% (per Ch 32.110(F)).

E. The minimum yard dimensions or minimum building setback areas from the lot line shall be:

1. For a front yard, 20 feet; except for steeply sloped lots where the provisions of CDC 41.010 shall apply.

With 50% reduction per 32.110(F), Front yard set backs are 10 ft for all lots.

2. For an interior side yard, five feet.

50% reduction per 32.110(F) notwithstanding, side yards are 5 ft for all lots.

3. For a side yard abutting a street, 15 feet.

Side yards do not abut a street for this application.

4. For a rear yard, 20 feet.

Rear yard set backs are 20 ft for all lots.

F. The maximum building height shall be 35 feet except for steeply sloped lots in which case the provisions of Chapter 41 CDC shall apply.

Building height is limited, for this proposal to 35'

G. The maximum lot coverage shall be 40 percent.

Maximum lot coverage will not exceed 40% of lot area (5,000 x 0.40 = 2,000 sq ft).

H. The minimum width of an accessway to a lot which does not abut a street or a flag lot shall be 15 feet.

Access is proposed for 4327 and 4329 Kelly St via a 15' wide access easement from Kelly St, granted by the owner of 4325 Kelly St. The easement will be recorded in association with building permit plan review.

I. The maximum floor area ratio shall be 0.45. Type I and II lands shall not be counted toward lot area when determining allowable floor area ratio, except that a minimum floor area ratio of 0.30 shall be allowed regardless of the classification of lands within the property. That 30 percent shall be based upon the entire property including Type I and II lands. Existing residences in excess of this standard may be replaced to their prior dimensions when damaged without the requirement that the homeowner obtain a non-conforming structures permit under Chapter 66 CDC.

This application proposes development associated with Type II lands- maximum floor area criteria of this subchapter is excepted. Minimum floor area is proposed to exceed 30% of lot area (5,000 x 0.30 = 1500 sq ft).

J. The sidewall provisions of Chapter 43 CDC shall apply. (Ord. 1538, 2006; Ord. 1622 § 24, 2014; Ord. 1675 § 17, 2018)

Proposed home design shall comply with or utilize exemptions provided in West Linn CDC Chapter 43

West Linn CDC 32.060 Approval Criteria for the Standard Process

A. WRA protection/minimizing impacts.

1. Development shall be conducted in a manner that will avoid or, if avoidance is not possible, minimize adverse impact on WRAs.

Under the hardship provisions per CDC 32.110, the minimum required distance from the creek to the house and associated improvements is 15 feet. New homes will be placed as close to the northern property line (opposite of the creek) as practical. To that end, front and side setbacks will be reduced up to 50 percent per Chapter 32.110(F).

2. Mitigation and re-vegetation of disturbed WRAs shall be completed per CDC 32.090 and 32.100, respectively.

1. All trees, shrubs and ground cover to be planted are to be native plants selected from the Portland Plant List;
2. Trees are to be at least one-half inch in caliper, and planted between eight and 12 feet on center, at a rate of five trees per every 500 square feet of disturbance area, and a minimum of 2 species.
3. Shrubs are to be in at least a one-gallon container or the equivalent, and planted between four and five feet on center, or clustered in single species groups of no more than four plants, with each

cluster planted between eight and 10 feet on center at a rate of 25 plants every 500 square feet of disturbance area, and a minimum of 2 species.

4. Any invasive non-native or noxious vegetation is to be removed within the mitigation area prior to planting.
5. A minimum survival rate of 80 percent of the materials planted is expected after three years. Plants that die will be replaced in kind, and monitored by the owner;
6. Plants are to be mulched and watered and weeded for three years.
7. Planting will occur between Dec 1st and April 30th as appropriate for the respective stock, and will be protected as appropriate from wildlife damage.

B. Storm water and storm water facilities.

1. *Proposed developments shall be designed to maintain the existing WRAs and utilize them as the primary method of storm water conveyance through the project site unless:*

a. The surface water management plan calls for alternate configurations (culverts, piping, etc.); or

b. Under CDC 32.070, the applicant demonstrates that the relocation of the water resource will not adversely impact the function of the WRA including, but not limited to, circumstances where the WRA is poorly defined or not clearly channelized.

Re-vegetation, enhancement and/or mitigation of the re-aligned water resource shall be required as applicable.

2. *Public and private storm water detention, storm water treatment facilities and storm water outfall or energy dissipaters (e.g., rip rap) may encroach into the WRA if:*

a. Accepted engineering practice requires it;

b. Encroachment on significant trees shall be avoided when possible, and any tree loss shall be consistent with the City's Tree Technical Manual and mitigated per CDC 32.090;

c. There shall be no direct outfall into the water resource, and any resulting outfall shall not have an erosive effect on the WRA or diminish the stability of slopes; and

d. There are no reasonable alternatives available.

3. *Roadside storm water conveyance swales and ditches may be extended within rights-of-way located in a WRA. When possible, they shall be located along the side of the road furthest from the water resource. If the conveyance facility must be located along the side of the road closest to the water resource, it shall be located as close to the road/sidewalk as possible and include habitat friendly design features (treatment train, rain gardens, etc.).*

SFR development will incorporate rain gardens to infiltrate/dissipate runoff from driveways and structures or other disturbed areas. Associated runoff will not encroach upon significant trees. There will not be any direct outfall into Sunset Creek. Proposed SFR development within the WRA is not adjacent to or within right-of-way(s). Please see Exhibit 2 for details.

4. *Storm water detention and/or treatment facilities in the WRA shall be designed without permanent perimeter fencing and shall be landscaped with native vegetation.*

Stormwater rain garden design will incorporate native plantings appropriate for stormwater infrastructure applications.

5. *Access to public storm water detention and/or treatment facilities shall be provided for maintenance purposes. Maintenance driveways shall be constructed to minimum width and use water permeable paving materials. Significant trees, including roots, shall not be disturbed to the degree possible. The encroachment and any tree loss shall be mitigated per CDC 32.090. There shall also be no adverse impacts upon the hydrologic conditions of the site.*

Proposed SFR development within the WRA is not adjacent to or within right-of-way(s) or public areas.

This section does not apply.

6. *Storm detention and treatment and geologic hazards: Per the submittals required by CDC 32.050(F)(3) and 92.010(E), all proposed storm detention and treatment facilities must comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards, there will be no adverse off-site impacts caused by the development (including impacts from increased intensity of runoff downstream or constrictions causing ponding upstream), and the applicant must provide sufficient factual data to support the conclusions of the submitted plan.*

Please see the engineered stormwater design attached as Exhibit 2

C. Repealed by Ord. 1647.

D. WRA width.

The WRA width for a Water Resource is 65' from the ordinary high water as indicated in Table 32-2. Under the hardship provisions per CDC 32.110, the minimum required distance from the creek to the house and associated improvements is 15 feet.

Please see the Wetland Determination attached as Exhibit 1.

E. Potential Hazards and Risk Mitigation

Per the submittals required by CDC 32.050(F)(4), the applicant must demonstrate that the proposed methods of rendering known or potential hazard sites safe for development, including proposed geotechnical remediation, are feasible and adequate to prevent landslides or other damage to property and safety. The review authority may impose conditions, including limits on type or intensity of land use, which it determines are necessary to mitigate known risks of landslides or property damage.

The site's WRA is a narrow ephemeral portion of Sunset Creek bound by a shallow "ravine" less than 12 inches in depth and 20 inches in width.

The applicant requests the Planning Director waive any applicable requirement for submittal of a topographical survey and for submittal of a geologic report, in order to help the applicant reduce costs associated with this development.

- Platted in 1889, this previously developed land has remained unimproved for use as back yard lawn.
- The areas are well established and stable, without any visible hazard, evidence of slope failure or potential for failure. The site does not present any development constraints due to slope, drainage or geologic hazards.
- DOGAMI Statewide Geohazards Database identifies this area as a moderate (Landslide Possible) landslide risk, like more than half of all the developed land within the City of West Linn. DOGAMI characterizes Landslide Risk as Low, Moderate, High and Very High.
- Contours on the City's GIS generally depict a 10% slope across the three lots. This meets the CDCs Chapter 2 definition for a Type III land at its very lowest criteria.
- The site topography is flat and landscaped with terracing at either end of the lots. This creates an effective topography of less than 10% slopes within the buildable envelope of the lots. This factor alone would meet the definition of a Type IV land.

F. Roads, driveways and utilities.

1. New roads, driveways, or utilities shall avoid WRAs unless the applicant demonstrates that no other practical alternative exists. In that case, road design and construction techniques shall minimize impacts and disturbance to the WRA by the following methods:

a. New roads and utilities crossing riparian habitat areas or streams shall be aligned as close to perpendicular to the channel as possible.

b. Roads and driveways traversing WRAs shall be of the minimum width possible to comply with applicable road standards and protect public safety. The footprint of grading and site clearing to accommodate the road shall be minimized.

c. Road and utility crossings shall avoid, where possible:

- 1) Salmonid spawning or rearing areas;*
- 2) Stands of mature conifer trees in riparian areas;*
- 3) Highly erodible soils;*
- 4) Landslide prone areas;*
- 5) Damage to, and fragmentation of, habitat; and*
- 6) Wetlands identified on the WRA Map.*

2. Crossing of fish bearing streams and riparian corridors shall use bridges or arch-bottomless culverts or the equivalent that provides comparable fish protection, to allow passage of wildlife and fish and to retain the natural stream bed.

3. New utilities spanning fish bearing stream sections, riparian corridors, and wetlands shall be located on existing roads/bridges, elevated walkways, conduit, or other existing structures or installed underground via tunneling or boring at a depth that avoids tree roots and does not alter the hydrology sustaining the water resource, unless the applicant demonstrates that it is not physically possible or it is cost prohibitive. Bore pits associated with the crossings shall be

restored upon project completion. Dry, intermittent streams may be crossed with open cuts during a time period approved by the City and any agency with jurisdiction.

4. No fill or excavation is allowed within the ordinary high water mark of a water resource, unless all necessary permits are obtained from the City, U.S. Army Corps of Engineers and Oregon Department of State Lands (DSL).

5. Crossings of fish bearing streams shall be aligned, whenever possible, to serve multiple properties and be designed to accommodate conduit for utility lines. The applicant shall, to the extent legally permissible, work with the City to provide for a street layout and crossing location that will minimize the need for additional stream crossings in the future to serve surrounding properties.

Kelly Street will be extended as minimally as possible to provide access to the lots.

G. Passive Recreation.

This application does not propose any passive recreation as described in this section.

This section does not apply.

H. Daylighting Piped Streams.

This property does not contain any daylighted stream elements, and this proposal does not create any new daylighting.

This section does not apply

I. Habitat Friendly Development Practices

The following habitat friendly development practices shall be incorporated into the design of any improvements or projects in the WRA to the degree possible:

- 1. Restore disturbed soils to original or higher level of porosity to regain infiltration and storm water storage capacity.*
- 2. Apply a treatment train or series of storm water treatment measures to provide multiple opportunities for storm water treatment and reduce the possibility of system failure.*
- 3. Incorporate storm water management in road rights-of-way.*
- 4. Landscape with rain gardens to provide on-lot detention, filtering of rainwater, and groundwater recharge.*
- 5. Use multi-functional open drainage systems in lieu of conventional curb-and-gutter systems.*
- 6. Use green roofs for runoff reduction, energy savings, improved air quality, and enhanced aesthetics.*
- 7. Retain rooftop runoff in a rain barrel for later on-lot use in lawn and garden watering.*
- 8. Disconnect downspouts from roofs and direct the flow to vegetated infiltration/filtration areas such as rain gardens.*
- 9. Use pervious paving materials for driveways, parking lots, sidewalks, patios, and walkways.*

10. *Reduce sidewalk width to a minimum four feet. Grade the sidewalk so it drains to the front yard of a residential lot or retention area instead of towards the street.*
11. *Use shared driveways. 3 SFR lots will be using the same shared access driveway with shorter individual driveways to each house.*
12. *Reduce width of residential streets and driveways, especially at WRA crossings.*
13. *Reduce street length, primarily in residential areas, by encouraging clustering.*
14. *Reduce cul-de-sac radii and use pervious and/or vegetated islands in center to minimize impervious surfaces.*
15. *Use previously developed areas (PDAs) when given an option of developing PDA versus non-PDA land.*
16. *Minimize the building, hardscape and disturbance footprint.*
17. *Consider multi-story construction over a bigger footprint. (Ord. 1623 § 1, 2014; Ord. 1635 § 19, 2014; Ord. 1647 § 5, 2016; Ord. 1662 § 7, 2017).*

Some Habitat Friendly Development Practices to be utilized in this development are as follows:

- Revegetation will use native shrubs, trees and grasses;
- Driveways and access roadways will use filter strip(s) for runoff pretreatment;
- Rain Barrels will capture roof runoff for later use in landscaped areas;
- Sidewalks will shed runoff to landscaped areas;
- Shared access roadways;
- All proposed development is in Previously Developed Areas;
- Smaller footprint development;
- Efficient Home Design and Construction.

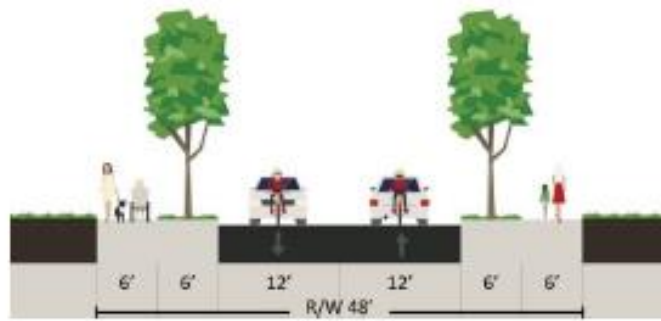
Public Works Standards 5.0016

5.0016 Half =Street plus Travel Lane Construction

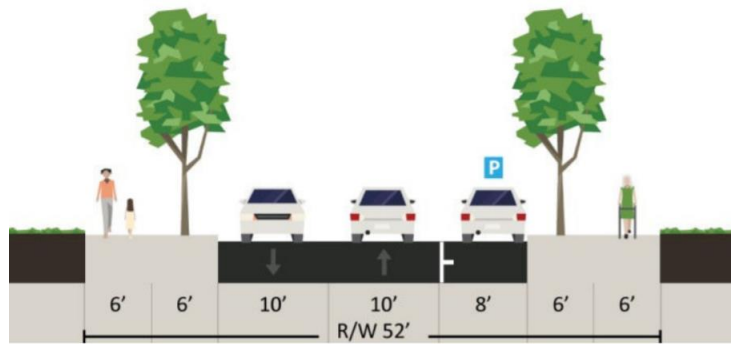
Applies to development where abutting property frontage is to be developed and the opposite frontage property is undeveloped, and the full improvement will occur with future development and right-of-way dedication. The City indicated on October 5, 2018 that a Fee in Lieu of half street improvements is preferred in this location.

The portion of this application relating to development of Taxlots 1803 (4327 Kelly Street) and 1804 (4329 Kelly Street) does not adjoin the unimproved section of Kelly street. Access to the property is provided via an access easement granted to the benefit of Taxlot 1803 to be recorded with Clackamas County Recorder at the time of building permit application. As indicted, Half street improvements will be in the form of Fee in lieu of construction. See Request for Waiver and project quantities calculation attached as Exhibit 4.

The City appears indecisive whether a 24-foot local street or a 28-foot local is appropriate in this location. As a courtesy, this proposal provides an option for both standards that the City may select as appropriate.



24-foot Local (No Parking)



28-foot Local (Parking on One Side)

The criterion is satisfied

Stormwater Management

Rain Gardens

The proposed development will utilize rain gardens and vegetated areas to manage stormwater runoff from respective impervious areas. Specifically- runoff from the house roofs, driveways and the access easement roadway will convey to the rain garden areas located in the property and the edge of the roadway respectively. Sheet flow volumes exceeding design limits will still flow through grass and existing plantings prior to flow to Sunset Creek.

See the stormwater design report section attached as Exhibit 2.

The criteria is satisfied.

Sanitary Sewer Easement Dedication

Public Sanitary Sewer Easement

Please see proposed attached as Exhibit 5.

In addition, in a memo from the City dated April 19, 2019, the following was brought up:

“Additionally, the property owner at 2080 Tumwater has contacted the City about their private sewer lateral crossing 4327 Kelly Street. The location of this sewer lateral shall be shown on the plans and the proposed easement covering that line. If this line conflicts with the proposed building footprint, the applicant is encouraged to work with the adjacent property owner to relocate that lateral.”

This issue has been resolved. The sewer line for 2080 Tumwater will be connected to Tumwater Street where an existing sewer line exists. There will be no sewer line from Tumwater Street through 4327 Kelly Street.

Figure 1 Site Plan

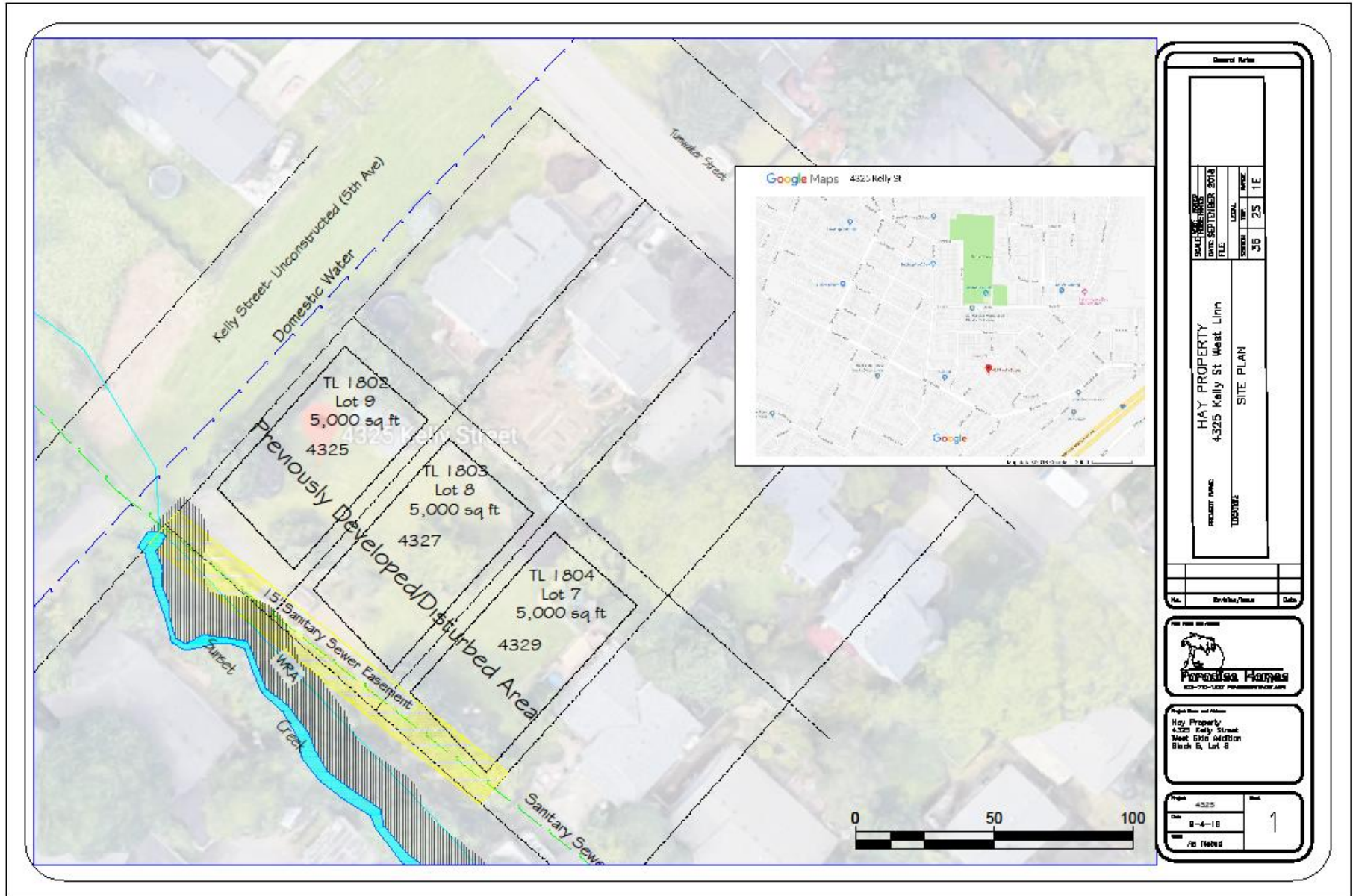


Figure 2 Lot Plan

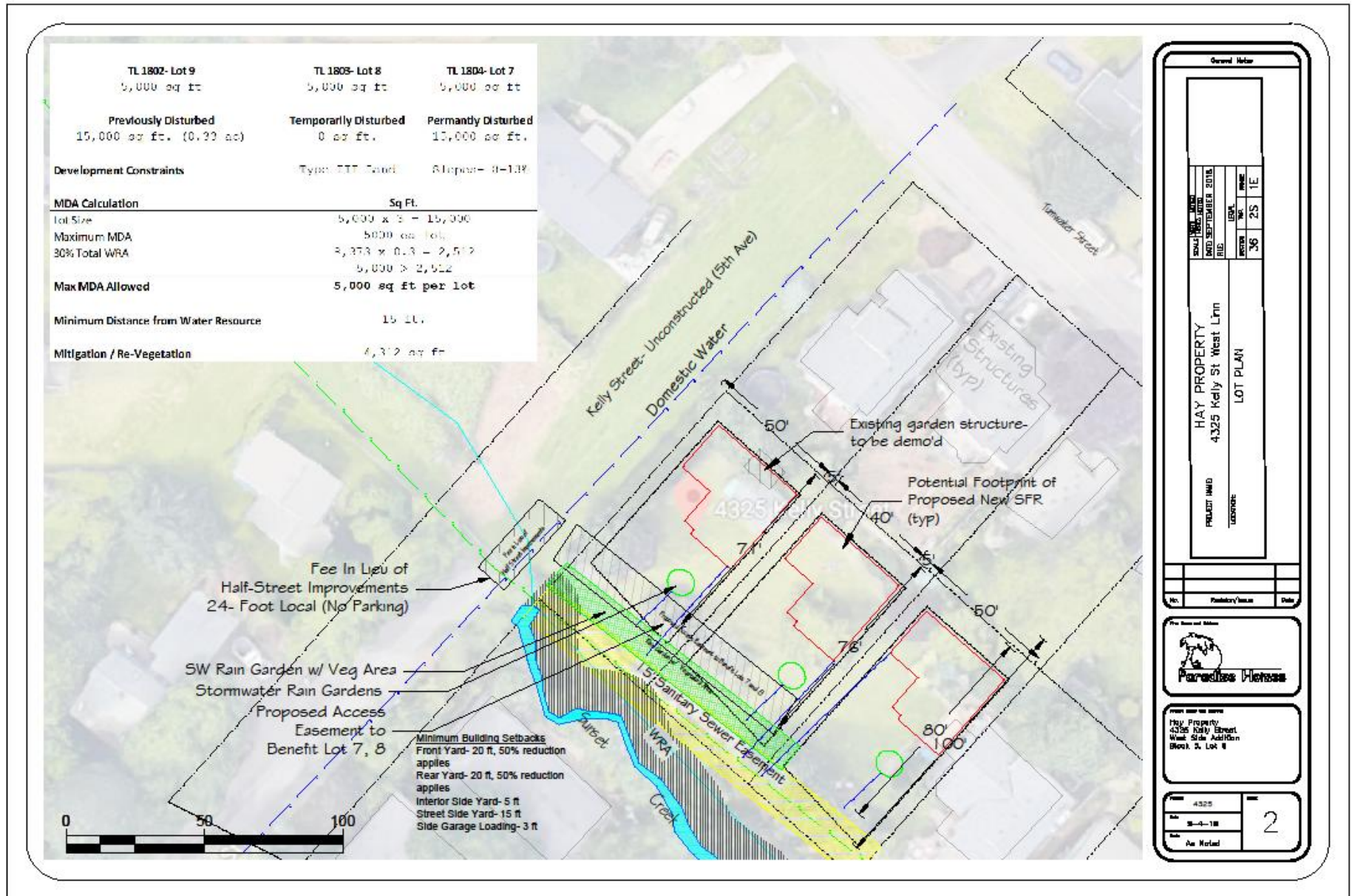


Figure 3 Construction Management Plan

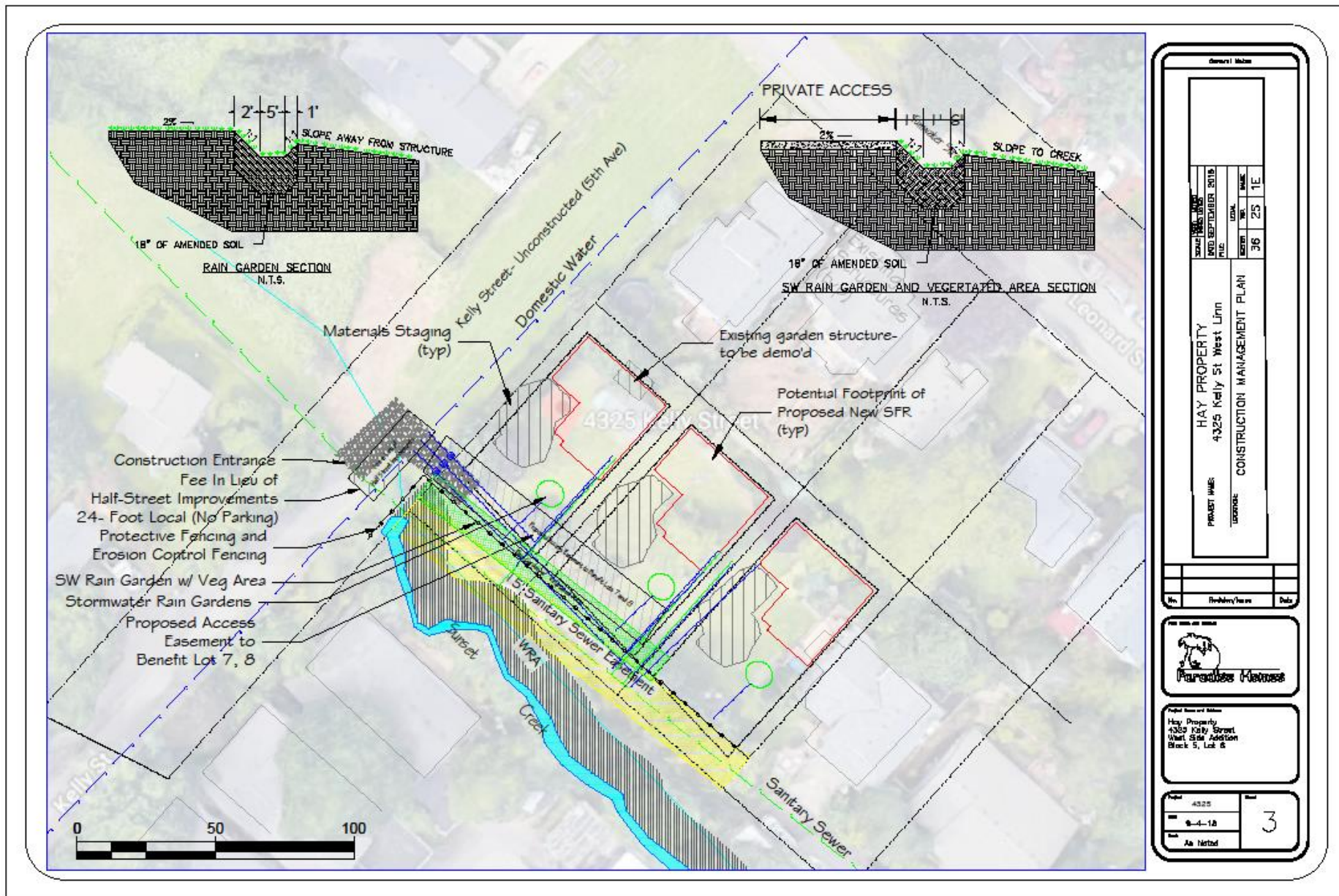


Figure 4 Mitigation Plan

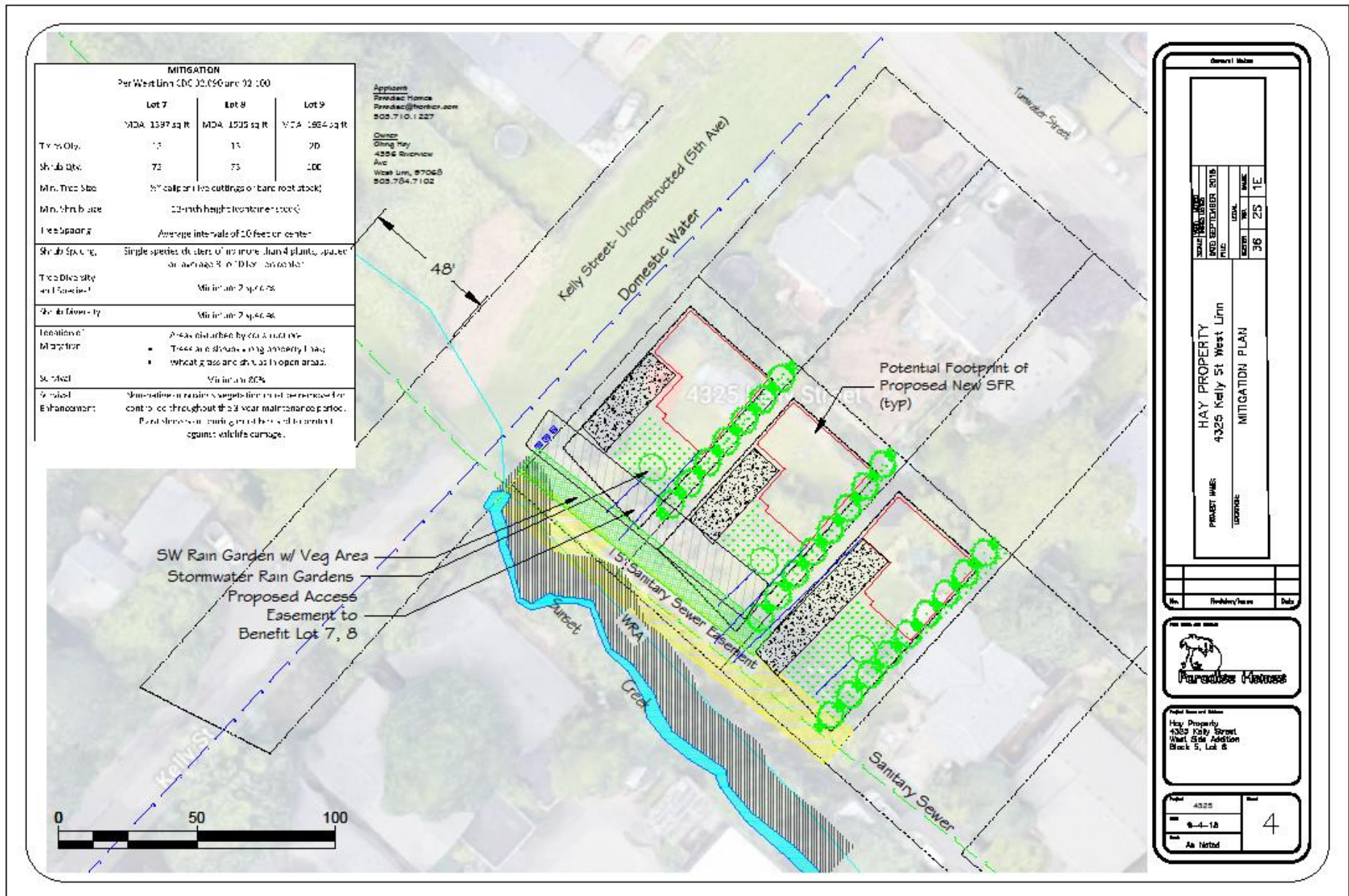


Figure 5 Half-Street Improvements Plan

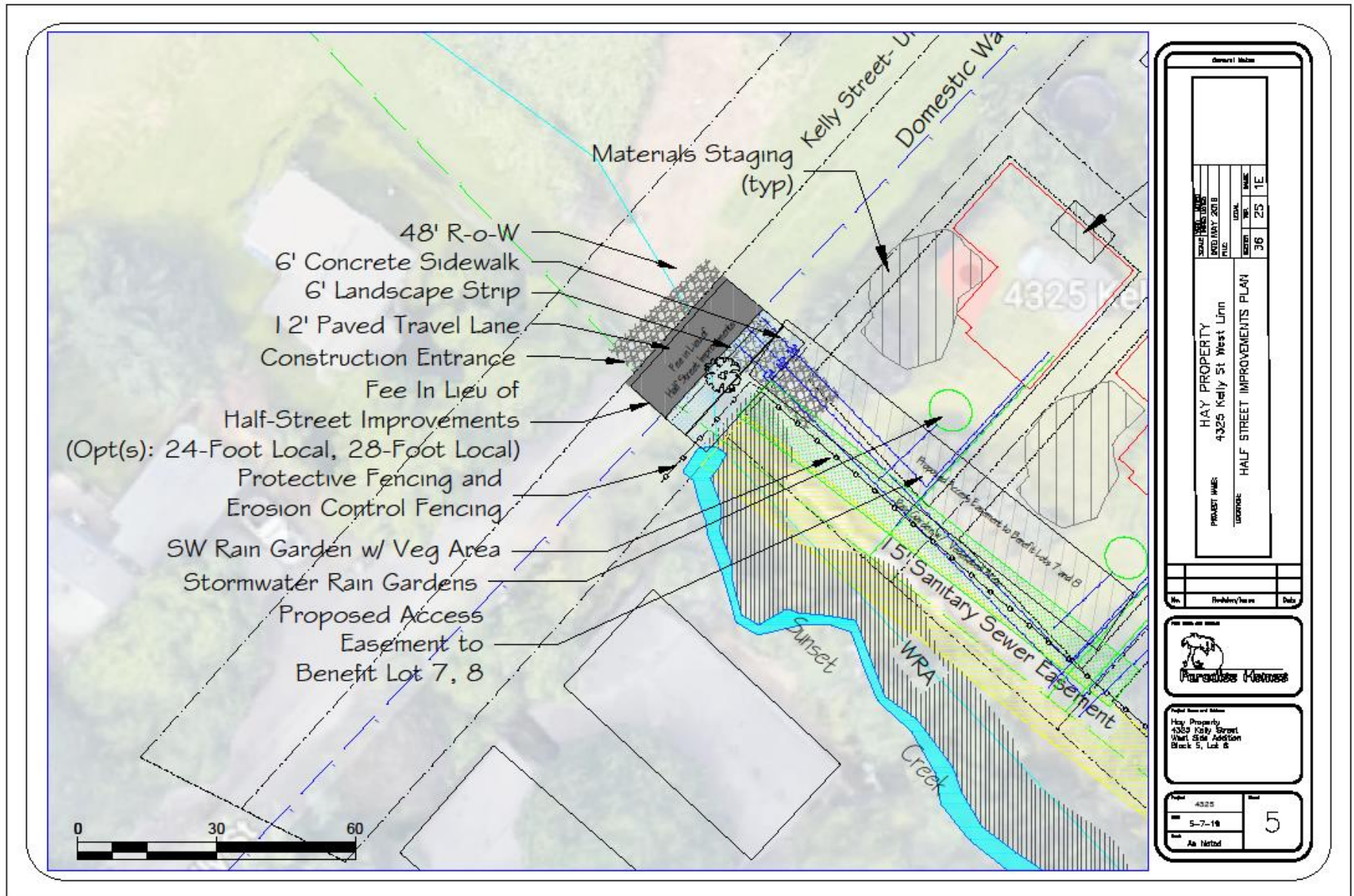
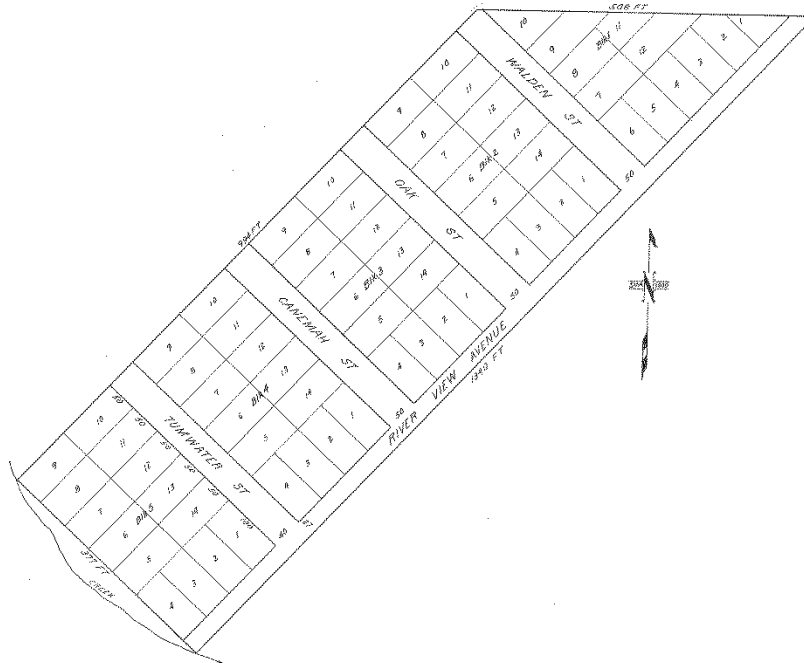


Figure 6 Plat- 036- P1

WEST SIDE ADDITION
TO
OREGON CITY
SCALE 1"=100'



KNOW ALL MEN BY THESE PRESENTS--THAT WE, JAMES P. SHAW AND EMILIE C. SHAW HIS WIFE, DO HEREBY MAKE, ESTABLISH AND DECLARE THIS PLAT TO BE A MAP OF WEST SIDE ADDITION TO OREGON CITY, AND THE LANDS THEREIN REPRESENTED BEING SITUATED IN SECTION 36 IN TOWNSHIP 2 SOUTH RANGE 1 EAST OF THE WILLAMETTE MERIDIAN, AND MORE FULLY DESCRIBED AS BEGINNING AT THE NORTH WEST CORNER OF ROBERT MOORES DONATION LAND CLAIM IN SAID SECTION 36 T. 2 S. R. 1 E., RUNNING THENCE SOUTH 89° 45' E. 500 FEET TO A STAKE, THENCE S. 42° WEST 1840 FEET TO A CREEK, THENCE WESTERLY BY THE MEANDERS OF SAID CREEK TO DONATION CLAIM LINE BETWEEN JULIA ANN LEWIS AND ROBERT MOORE, THENCE ALONG SAID LINE N 42° E. TO PLACE OF BEGINNING.

WE HEREBY DEDICATE TO THE PUBLIC FOREVER AS STREETS AND ROADS ALL SUCH PORTIONS OF LAND UPON SAID MAP AS THE SAME ARE THEREUPON LAID DOWN AND MAPPED.

IN WITNESS WHEREOF WE HAVE HEREUNTO SET OUR HANDS AND SEALS THIS 15TH DAY OF JUNE, 1889,
IN PRESENCE OF
H. U. CROSS
CHAS. B. BURNS

JAMES P. SHAW SEAL
EMILIE C. SHAW SEAL

STATE OF OREGON }
COUNTY OF CLACKAMAS } SS

BE IT REMEMBERED THAT ON THIS 15TH DAY OF JUNE, 1889, BEFORE ME THE UNDERSIGNED NOTARY PUBLIC IN AND FOR OREGON PERSONALLY APPEARED THE ABOVE NAMED JAMES P. SHAW AND EMILIE C. SHAW, KNOWN TO ME TO BE THE PERSONS DESCRIBED IN AND WHO EXECUTED THE ABOVE DEDICATION AND TOWN PLAT, AND THE SAID JAMES P. SHAW AND EMILIE C. SHAW ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME FOR THE USES AND PURPOSES THEREIN MENTIONED.

IN WITNESS WHEREOF I HAVE HEREUNTO SET MY HAND AND SEAL.

SEAL
OF
NOTARY

HARVEY E. CROSS
NOTARY PUBLIC FOR OREGON

STATE OF OREGON }
COUNTY OF CLACKAMAS } SS

I, N. O. WALDEN, BEING FIRST DULY SWORN DEPOSE AND SAY--I SURVEYED THE LAND REPRESENTED ON THE ANNEXED PLAT. THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS THE LAND AS REPRESENTED ON SAID PLAT. THAT I PLANTED A STONE MONUMENT INDICATING THE INITIAL POINT OF SUCH SURVEY OF FOLLOWING DIMENSIONS 6 X 6 X 6 AT THE N. W. CORNER OF SAID TRACT.

N. O. WALDEN

SUBSCRIBED AND SWORN TO BEFORE ME THIS 15TH DAY OF JUNE, 1889.
SEAL
H. E. CROSS
OF
NOTARY
NOTARY PUBLIC FOR OREGON

STATE OF OREGON }
COUNTY OF CLACKAMAS } SS

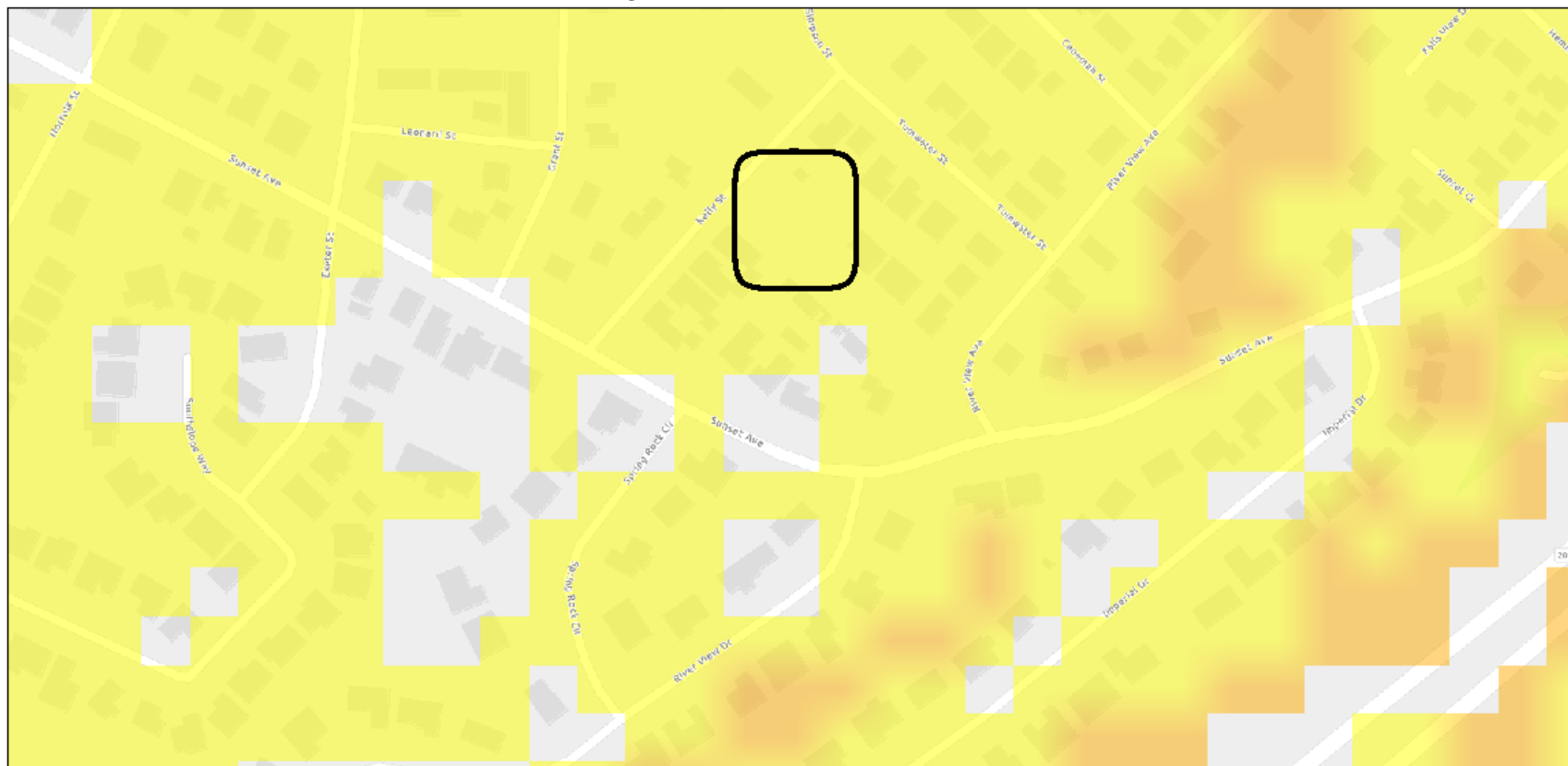
I HEREBY CERTIFY THAT THE WITHIN INSTRUMENT WAS FILED FOR RECORD JUNE 15TH, 1889, AT 3 O CLOK AND---MIN. P. M. REQUEST OF SHAW AND RECORDED JUNE 15, 1889, IN BOOK OF PLATS.
H. P. JOHNSON, COUNTY CLERK

STATE OF OREGON }
COUNTY OF CLACKAMAS } SS

I, E. C. HAGRETT, RECORDER OF SAID COUNTY, CERTIFY THE WITHIN AND FOREGOING TO BE A TRUE AND CORRECT COPY OF THE MAP HERE FILED IN MY OFFICE AND IN MY CARE AND CUSTODY, JUNE 25, 1889.
E. C. Hagrett
COUNTY RECORDER

Figure 7 DOGAMI Landslide Hazard Map

4325 Kelly St- DOGAMI Landslide Hazard



October 19, 2018

Landslide Hazard

- Red: Band_1
- Green: Band_2
- Blue: Band_3

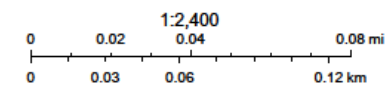


Figure 8
GIS Map with 2 ft Contours

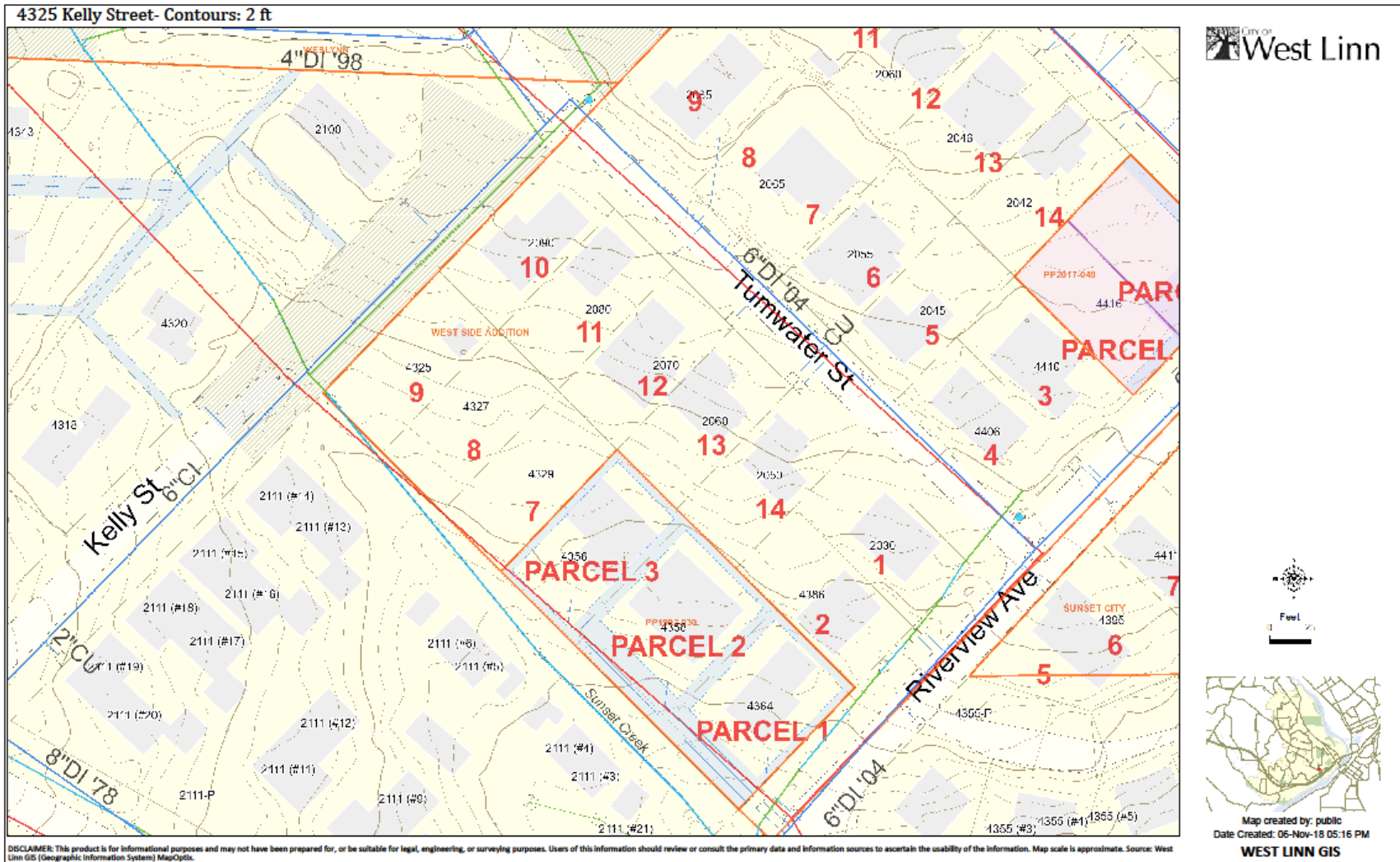


Figure 9

City of West Linn WRA Map

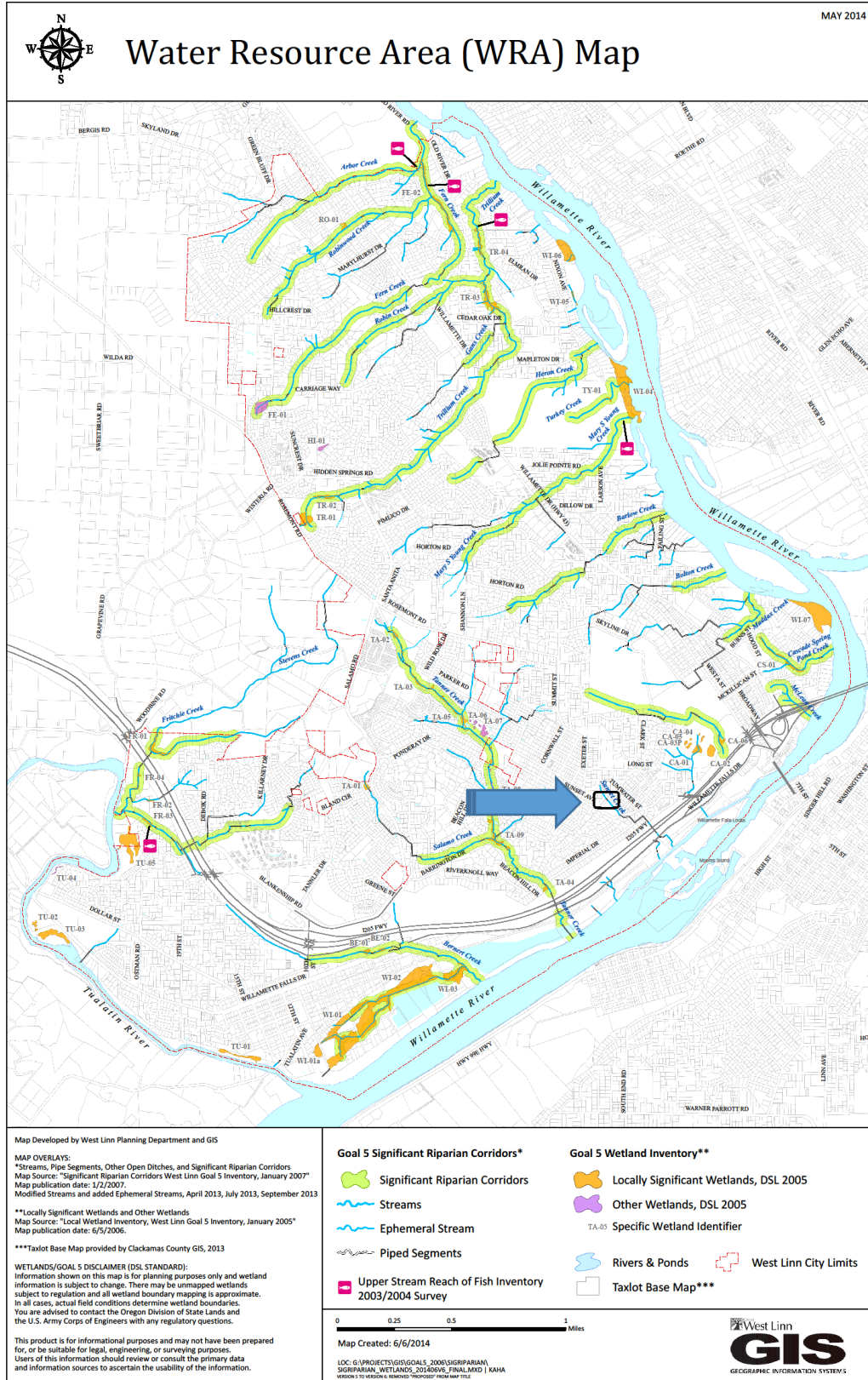


Exhibit 1
Wetland Determination

4325 Kelly Street West Linn Wetland Determination

PREPARED FOR: Dennis Caudell, Paradise Homes
 PREPARED BY: Turnstone Environmental Consultants, Inc. (Turnstone)
 COPIES: Jeff Reams (Turnstone)
 DATE: December 17th, 2018

Introduction

Turnstone conducted a wetland and waterways determination for a 0.43-acre Study Area that includes the entirety of tax lots 1802, 1803, 1804 and a portion 800 (tax maps 21E36AA & 21E36AD) in West Linn, Clackamas County, Oregon. The Study Area also includes a small portion of public road right of way north of the existing terminus of Kelly Street. The purpose of this memorandum is to provide information that will help guide future land use planning for the parcel and ensure compliance with regulatory statutes related to protection of wetlands and other waters. The client wishes to develop tax lots 1802, 1803 and 1804 as single-family residences and has commissioned this report to convey the location and condition of aquatic resources that may be subject to city regulations. A portion of the Study Area adjacent to the channel of Sunset Creek is included in the City of West Linn’s Water Resource Area (WRA) map and subject to protection through development buffers (Appendix A-Figure 1).

Study Area Setting and Land Use

The legal description of the Study Area is SE 1/4 of NE 1/4, Section 36 in Township 2 South, Range 1 East. The centroid coordinates for the Study Area are 45.3570923°, -122.6249728°. The Study Area is situated on a southeast-facing slope and local topography is influenced by the drainage swale occupied by Sunset Creek.

Study Area (shaded) overview map



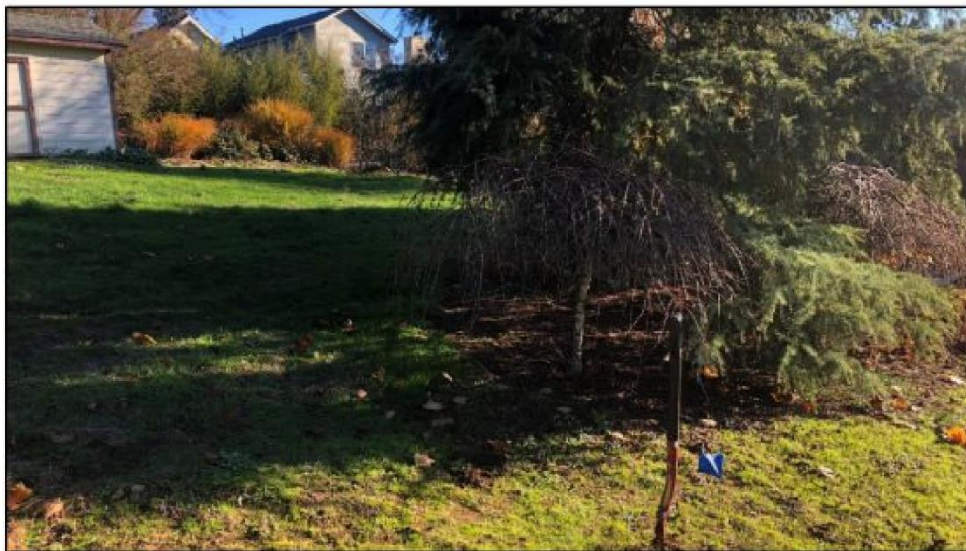
Source: West Linn GIS (Geographic Information System) MapOptix.

The portions of tax lots 1802, 1803 are currently maintained as a landscaped yard, with lawns and ornamental tree and shrub plantings. Mature Leyland cypress (*Cupressus x leylandii*), Deodar cedar (*Cedrus deodara*) and quaking aspen (*Populus tremuloides*) trees along with ornamental grasses (*Miscanthus sinensis*) and flowering cherry trees (*Prunus pendula*) are planted along the Study Area lot lines. The portion of tax lot 800 included in the Study Area contains the channel of Sunset Creek and is a combination of landscaped areas and riparian vegetation dominated by willows (*Salix cf. sitchensis*). Local land use is dominated by medium-density single-family homes. The Study Area is within the Abernethy Creek-Willamette River catchment area (HUC10: 1709000704). No wetlands included in the National Wetland Inventory (NWI) are located in the Study Area (USFWS 2018). The nearest NWI wetlands are located along Tanner Creek to the southwest, at Camassia Natural Area to the Northeast and along the Willamette River to the south. Beyond the channel of Sunset Creek, no wetlands or waters are identified in the West Linn local wetland inventory (Winterbrook 2003).

Methods

Field investigation of the Study Area was conducted on December 5th, 2018. The field investigation utilized the "Routine Onsite" method from the Corps Wetland Delineation Manual (USACE, 1987) as guidance. The Study Area was traversed by foot and a visual assessment was conducted for hydrophytic vegetation, suspect topographical features, and wetland hydrology indicators. Two sample plots were placed upslope of the Sunset Creek channel to document upland (non-wetland) conditions there. Sample plot soil pits were dug to a depth of 20". Absolute aerial cover of plant species was reported for tree, shrub and herb layers, utilizing 10-, 5-, 1-meter square plots respectively. Soil colors (wet) were determined using Munsell soil color charts (Gretag Macbeth 2000). Ordinary High-Water Lines (OHWLs) were determined by mapping the upland limit of the physical and biological characteristics outlined in Army Corps of Engineers Regulatory Guidance Letter 05-05 (USACE 2005). Considering that the timing of field investigation coincided with a dry period, wetland hydrology would be assumed for plots possessing both positive hydric soil and hydrophytic vegetation determinations, though in practice each sampling area resulted in upland soil and vegetation determinations.

Looking northeast towards SP_01



Results

No wetlands are present within the Study Area and each of the sample plots resulted in upland determinations. The location of Study Area sample plots is illustrated in Appendix B-Figures 1 & 2. Wetland delineation data forms and ground-level photographs are included in Appendix C. Soils in the Study Area are predominately dark brown (7.5YR 3/3) and silt loam in texture and do not the redoximorphic features associated with persistent seasonally high ground water. A single soil map unit (major component) is present in the Study Area: “Saum silt loam, 8 to 15 percent slopes” (NRCS 2018). The map unit is non-hydric and described as well-drained. Soils observed during field investigation closely resemble the pedon descriptions of “Saum” soils. Study Area sample plots were dominated by ornamental trees and lawn grasses including perennial ryegrass (*Lolium perenne*) along with a mix of annual weeds including common groundsel (*Senecio vulgaris*), crabgrass (*Digitalis sanguinalis*), dovefoot geranium (*Geranium molle*), subterranean clover (*Trifolium subterraneum*) and annual bluegrass (*Poa annua*). Within the Study Area, channel of Sunset Creek is located primarily on tax lot 800 with a small portion on the adjacent public road right of way. Vegetation along the northern section of the creek is maintained as a backyard, with lawn grasses interspersed by raised beds and ornamental plantings. Vegetation along the lower, southern portion of the creek is more natural in character and hosts native riparian species including willows, western red-cedar (*Thuja plicata*) and ferns (*Athyrium filix-femina*). The channel is somewhat incised and the OHWL was determined by mapping the top of bank. The channel, along with the proposed 15’ development buffer is illustrated in Appendix B-Figures 1 & 2.

Looking south toward SP_02



Mapping Method

Sample points and waterway lines were collected using an EOS™ Arrow Gold GPS receiver paired with a mobile computer equipped with ESRI™ Collector software. RTK positioning over a digital cellular network was utilized to correct GPS data and points are accurate to within 4 cm. To calculate areas and create associated figures, GPS data was collected in a WGS 84 geographic coordinate system and later transformed into a local coordinate system, NAD 1983 State Plane Oregon North FIPS3601 Feet. A CAD file has been provided to the client for incorporation into proposed site layout exhibits.

Looking at Sunset Creek on the north portion of tax lot 800.



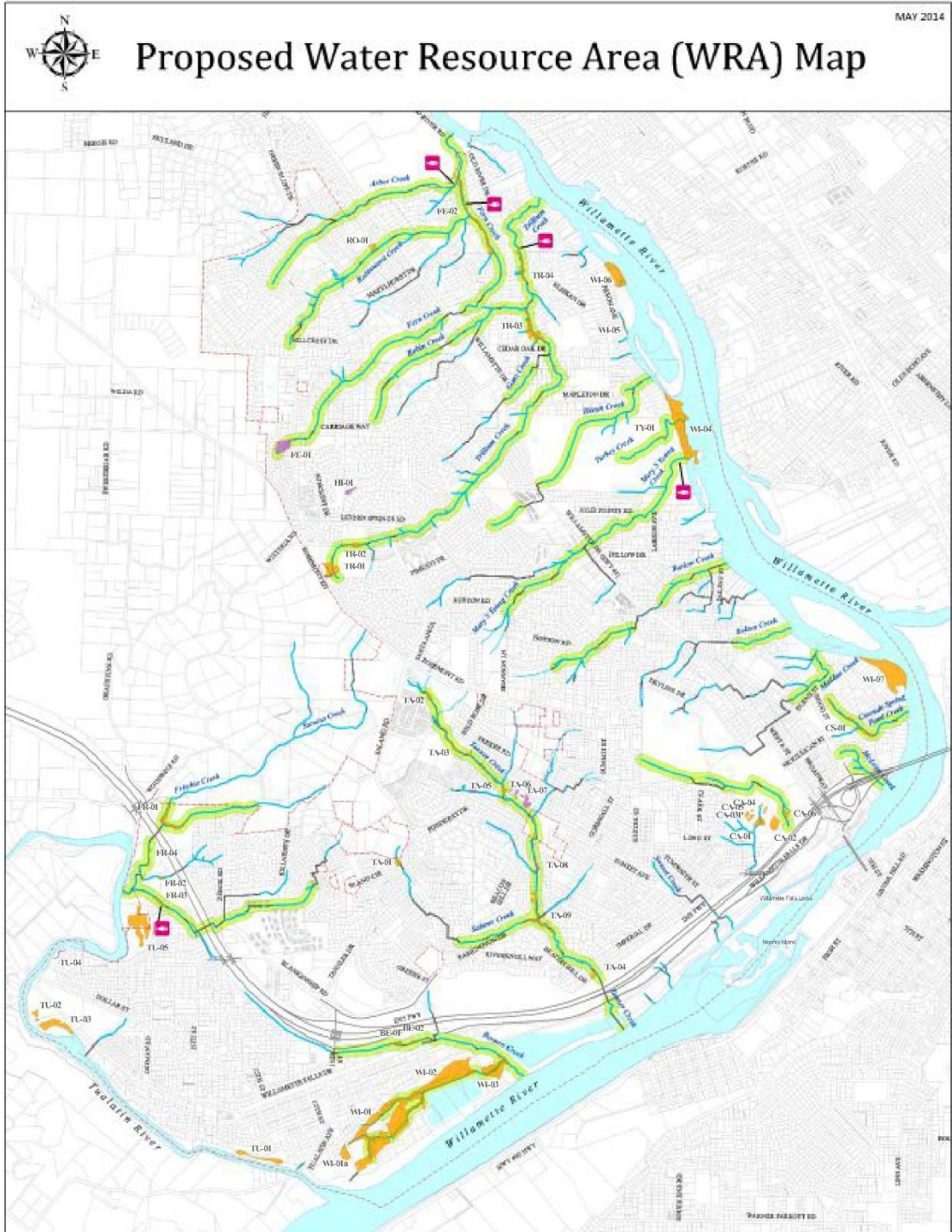
Looking northwest from the south-central portion of the Study Area





Appendix A:

West Linn WRA Map



Map Developed by West Linn Planning Department and GIS

MAP OVERLAYS:
 *Streams, Pipe Segments, Other Open Ditches, and Significant Riparian Corridors
 Map Source: "Significant Riparian Corridors West Linn Goal 5 Inventory, January 2007"
 Map Publication date: 1/27/2007
 Modified Streams and added Ephemeral Streams, April 2013, July 2013, September 2013

**Locally Significant Wetlands and Other Wetlands
 Map Source: "Local Wetland Inventory, West Linn Goal 5 Inventory, January 2005"
 Map Publication date: 6/4/2006.

***Taxlot Base Map provided by Clackamas County GIS, 2013

WETLANDS/GOAL 5 DISCLAIMER (DSL STANDARD)
 Information shown on this map is for planning purposes only and wetland information is subject to change. There may be unimproved wetlands subject to regulation and all wetland boundary mapping is approximate. In all cases, actual field conditions determine wetland boundaries. You are advised to contact the Oregon Division of State Lands and the U.S. Army Corps of Engineers with any regulatory questions.

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Goal 5 Significant Riparian Corridors*

- Significant Riparian Corridors
- Streams
- Ephemeral Stream
- Piped Segments
- Upper Stream Reach of Fish Inventory 2003/2004 Survey

Goal 5 Wetland Inventory**

- Locally Significant Wetlands, DSL 2005
- Other Wetlands, DSL 2005
- Specific Wetland Identifier
- Rivers & Ponds
- West Linn City Limits
- Taxlot Base Map***

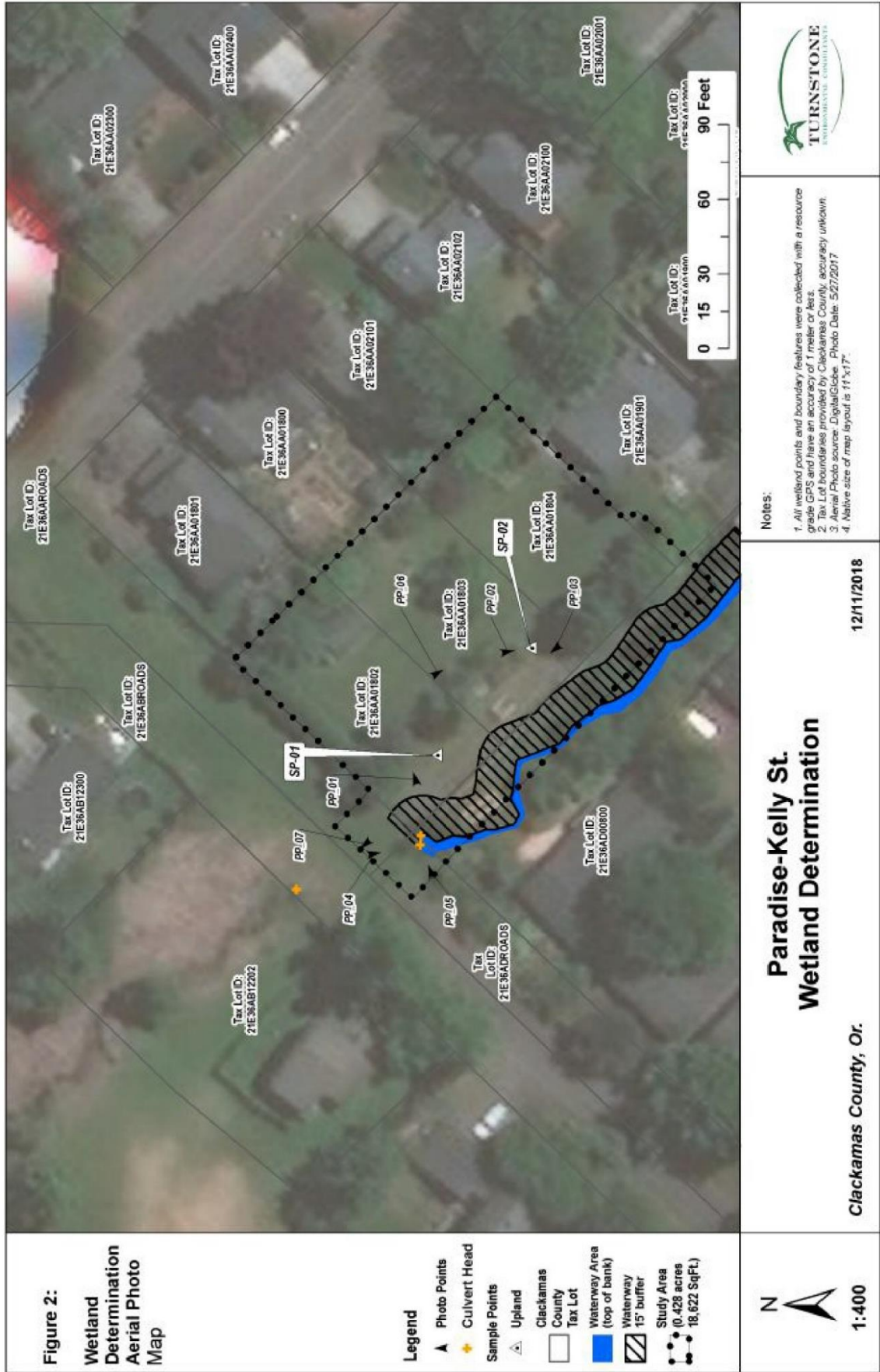
0 0.25 0.5 1 Miles
 Map Created: 5/13/2014
 LOC: G:\PROJECTS\GIS\GOALS_2007\OSR\HBM\WORKP\LOCAL_WETLANDS_20130505_PROPOSED\WRA.MXD

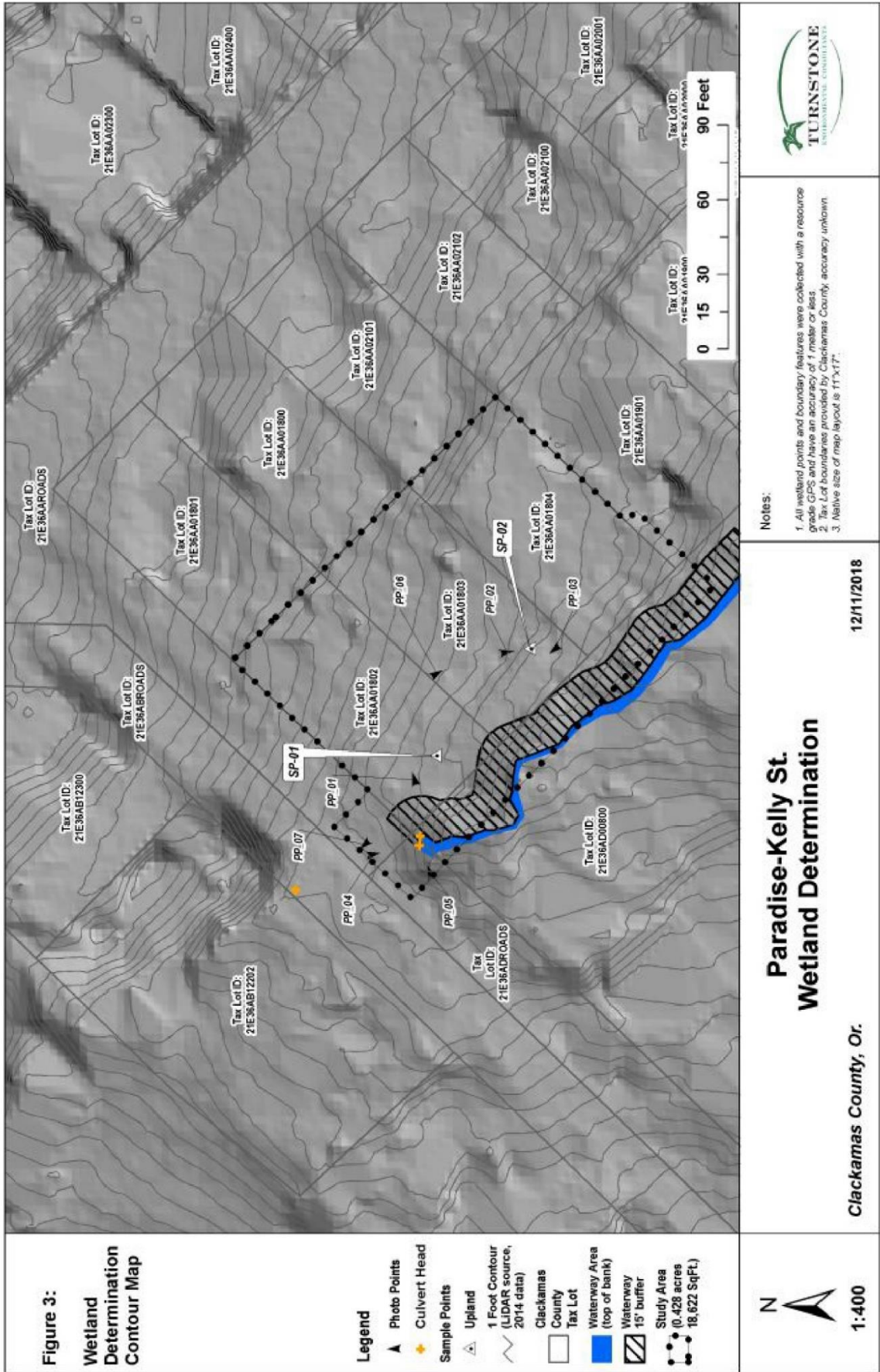




Appendix B:

Wetland Determination Maps







Appendix C:

Wetland Determination Data Forms &

Ground-level Photographs

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

Project/Site: 4325 Kelly Street City/County: West Linn State: OR Sampling Date: 05-Dec-18
 Applicant/Owner: Dennis Caudell-Paradise Homes Sampling Point: SP_01
 Investigator(s): Joe Bettis Section, Township, Range: S 36 T 2 S R 1 E
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave Slope: 10.0 % / 5.7°
 Subregion (LRR): MLRA 2 Lat.: 45.35713 Long.: -122.625154 Datum: WGS 84
 Soil Map Unit Name: Saum silt loam, 8 to 15 percent slopes NWI classification:

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

VEGETATION - Use scientific names of plants.

		Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 10 m)	Absolute % Cover	Rel.Strat. Cover		
1. Cedrus deodara	20	<input checked="" type="checkbox"/> 57.1%	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A)
2. Cupressus x leylandii	15	<input checked="" type="checkbox"/> 42.9%	FACU	Total Number of Dominant Species Across All Strata: <u>8</u> (B)
3. _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: <u>37.5%</u> (A/B)
4. _____	0	<input type="checkbox"/> 0.0%		
	35	= Total Cover		
Sapling/Shrub Stratum (Plot size: 5 m)				Prevalence Index worksheet:
1. Prunus avium	10	<input checked="" type="checkbox"/> 50.0%	FACU	Total % Cover of: Multiply by:
2. Buddleja davidii	5	<input checked="" type="checkbox"/> 25.0%	FACU	OBL species <u>0</u> x 1 = <u>0</u>
3. Rubus armeniacus	5	<input checked="" type="checkbox"/> 25.0%	FAC	FACW species <u>0</u> x 2 = <u>0</u>
4. _____	0	<input type="checkbox"/> 0.0%		FAC species <u>40</u> x 3 = <u>120</u>
5. _____	0	<input type="checkbox"/> 0.0%		FACU species <u>62</u> x 4 = <u>248</u>
	20	= Total Cover		UPL species <u>10</u> x 5 = <u>50</u>
Herb Stratum (Plot size: 1 m)				Column Totals: <u>112</u> (A) <u>418</u> (B)
1. Poa annua	25	<input checked="" type="checkbox"/> 43.9%	FAC	Prevalence Index = B/A = <u>3.732</u>
2. Senecio vulgaris	10	<input checked="" type="checkbox"/> 17.5%	FACU	
3. Lolium perenne	10	<input checked="" type="checkbox"/> 17.5%	FAC	
4. Geranium molle	5	<input type="checkbox"/> 8.8%	UPL	
5. Trifolium subterraneum	5	<input type="checkbox"/> 8.8%	UPL	
6. Hypochaeris radicata	1	<input type="checkbox"/> 1.8%	FACU	
7. Veronica arvensis	1	<input type="checkbox"/> 1.8%	FACU	
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
	57	= Total Cover		
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation
2. _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 2 - Dominance Test is > 50%
	0	= Total Cover		<input type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹
% Bare Ground in Herb Stratum: <u>45</u>				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: Cedrus deodara & Cupressus x leylandii wetland status assigned by observer.				

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: SP 01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	7.5YR	3/3	100				Silt Loam	
12-14	7.5YR	3/3	100				Silt Loam	5% charcoal & 1% 10YR 3/4 concretions by volume
14-20	7.5YR	4/3	100				Silt Loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (FB)	

2 cm Muck (A10)
 Red Parent Material (TF2)
 Other (Explain in Remarks)

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

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:
 Diffuse boundary at 14"

Hydrology

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes No Depth (inches):

Water Table Present? Yes No Depth (inches):

Saturation Present? (includes capillary fringe) Yes No Depth (inches): **Wetland Hydrology Present?** Yes No

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

Remarks:
 Dry to 20"

Plot ID: **SP_01**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1067.JPG** Orientation: -facing

Lat/Long or UTM : Long/Easting: **-122.625154** Lat/Northing: **45.35713**

Description:



Photo File: **IMG_1065.JPG** Orientation: -facing

Lat/Long or UTM : Long/Easting: **0** Lat/Northing: **0**

Description:

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

Project/Site: 4325 Kelly Street City/County: West Linn State: OR Sampling Date: 05-Dec-18
 Applicant/Owner: Dennis Caudell-Paradise Homes State: OR Sampling Point: SP_02
 Investigator(s): Joe Bettis Section, Township, Range: S 36 T 2 S R 1 E
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave Slope: 10.0 % / 5.7°
 Subregion (LRR): MLRA 2 Lat.: 45.357029 Long.: -122.624983 Datum: WGS 84
 Soil Map Unit Name: Saum silt loam, 8 to 15 percent slopes NWI classification:

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.

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

VEGETATION - Use scientific names of plants.

		Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (Plot size: 10 m)	Absolute % Cover	Rel.Strat. Cover		
1, Cupressus x leylandii	15	<input checked="" type="checkbox"/> 100.0%	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)
2, _____	0	<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3, _____	0	<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)
4, _____	0	<input type="checkbox"/> 0.0%		
	15	= Total Cover		
Sapling/Shrub Stratum (Plot size: 5 m)				Prevalence Index worksheet:
1, Prunus avium	10	<input checked="" type="checkbox"/> 100.0%	FACU	Total % Cover of: Multiply by:
2, _____	0	<input type="checkbox"/> 0.0%		OBL species <u>0</u> x 1 = <u>0</u>
3, _____	0	<input type="checkbox"/> 0.0%		FACW species <u>0</u> x 2 = <u>0</u>
4, _____	0	<input type="checkbox"/> 0.0%		FAC species <u>45</u> x 3 = <u>135</u>
5, _____	0	<input type="checkbox"/> 0.0%		FACU species <u>50</u> x 4 = <u>200</u>
	10	= Total Cover		UPL species <u>13</u> x 5 = <u>65</u>
Herb Stratum (Plot size: 1 m)				Column Totals: <u>108</u> (A) <u>400</u> (B)
1, Lolium perenne	25	<input checked="" type="checkbox"/> 30.1%	FAC	Prevalence Index = B/A = <u>3.704</u>
2, Poa annua	15	<input checked="" type="checkbox"/> 18.1%	FAC	
3, Hypochaeris radicata	15	<input checked="" type="checkbox"/> 18.1%	FACU	
4, Trifolium subterraneum	5	<input type="checkbox"/> 6.0%	UPL	
5, Geranium molle	5	<input type="checkbox"/> 6.0%	UPL	
6, Senecio vulgaris	5	<input type="checkbox"/> 6.0%	FACU	
7, Digitaria sanguinalis	5	<input type="checkbox"/> 6.0%	FACU	
8, Equisetum arvense	5	<input type="checkbox"/> 6.0%	FAC	
9, Malva neglecta	3	<input type="checkbox"/> 3.6%	UPL	
10, _____	0	<input type="checkbox"/> 0.0%		
11, _____	0	<input type="checkbox"/> 0.0%		
	83	= Total Cover		
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:
1, _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation
2, _____	0	<input type="checkbox"/> 0.0%		<input type="checkbox"/> 2 - Dominance Test is > 50%
	0	= Total Cover		<input type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 ¹
% Bare Ground in Herb Stratum: <u>20</u>				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:				

¹Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil

Sampling Point: SP 02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	7.5YR	3/3	100				Silt Loam	5% charcoal by volume
16-20	7.5YR	4/3	100				Silt Loam	

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

Indicators for Problematic Hydric Soils³:

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Hydrology

Wetland Hydrology Indicators:

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

Field Observations:

Surface Water Present? Yes No Depth (inches):

Water Table Present? Yes No Depth (inches):

Saturation Present? (includes capillary fringe) Yes No Depth (inches): **Wetland Hydrology Present?** Yes No

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

Remarks:

Dry to 20"

Plot ID: **SP_02**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1066.JPG** Orientation: -facing

Lat/Long or UTM : Long/Easting: **-122.624983** Lat/Northing: **45.357029**

Description:

No Photo

Photo File: **None.bmp** Orientation: -facing

Lat/Long or UTM : Long/Easting: **0** Lat/Northing: **0**

Description:

Plot ID: **PP_03-04**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1069.JPG** Orientation: South southeast -facing
Lat/Long or UTM : Long/Easting: **-122.624983** Lat/Northing: **45.357029**
Description: **PP_03**



Photo File: **IMG_1070.JPG** Orientation: South southeast -facing
Lat/Long or UTM: Long/Easting: **45.357201** Lat/Northing: **-122.625326**
Description: **PP_04**

Plot ID: **PP_05-06**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1071.JPG** Orientation: East northeast -facing
Lat/Long or UTM : Long/Easting: **-122.624983** Lat/Northing: **45.357029**
Description: **PP_05**

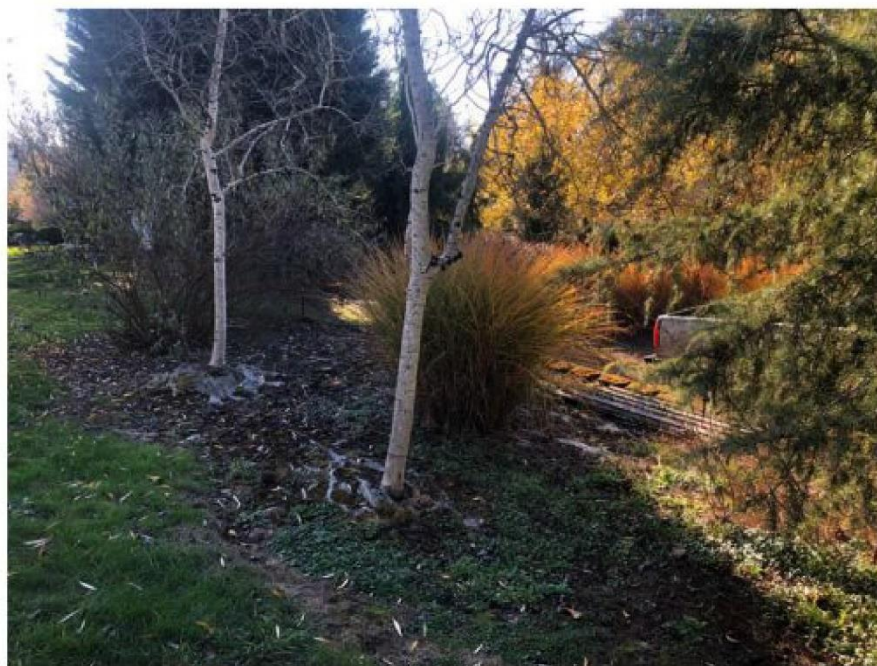


Photo File: **IMG_1072.JPG** Orientation: East southeast -facing
Lat/Long or UTM: Long/Easting: **0** Lat/Northing: **0**
Description: **PP_06**

Plot ID: **PP_07**

Photo Path: C:\Users\Sedge\Documents\Projects\Paradise Homes_Kelly St_



Photo File: **IMG_1073.JPG** Orientation: Northwest-facing

Lat/Long or UTM : Long/Easting: **-122.624983** Lat/Northing: **45.357029**

Description:

No Photo

Photo File: **None.bmp** Orientation: -facing

Lat/Long or UTM : Long/Easting: **0** Lat/Northing: **0**

Description:



Appendix D:

References

- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe, 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service.
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- Gretag Macbeth. 2000. *Munsell Soil Color Charts, 2000 Edition*. Baltimore, MD.
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- U. S. Geological Survey (USGS). 1985. *7.5' Quadrangles for Canby (O45122C6) and Oregon City (O45122C5)*.
- Winterbrook Planning (Winterbrook). 2003. *West Linn Wetland, Riparian and Wildlife Habitat Inventory*.

Exhibit 2
Stormwater Design

May 2, 2019

4325 Kelly St

West Linn, OR

Stormwater Management Report (SWMR) for Proposed Stormwater Rain Garden

Prepared for:

Paradise Homes
20659 NE Lakeside Drive
Fairview, OR 97024

Prepared by:

Aquarius Environmental, LLC
2117 NE Oregon Street, Ste 502
Portland, OR 97232
503.828.0265
www.aquariusenv.com



Stormwater Management Report (SWMR)

Table of Contents

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2.2	Site Description.....	2
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Tables

Table 1. Calculated peak flow rate and runoff volume summary.

Appendices

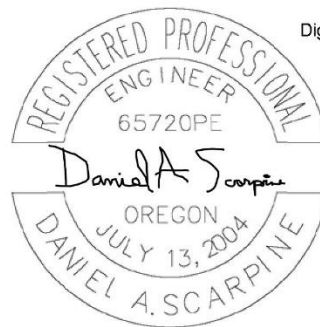
Appendix A: Plan Sheet

Abbreviations

ac	acres
bgs	below ground surface
CB	catch basin
cfs	cubic feet per second
DB	Drainage Basin
DEQ	Oregon Department of Environmental Quality
gpm	gallons per minute
ID	inner diameter
IE	invert elevation
LF	linear feet
NPDES	National Pollution Discharge Elimination System
SBUH	Santa Barbara Urban Hydrograph
sq ft	square feet
SWMR	Stormwater Management Report
SWMM	<i>2016 City of Portland Stormwater Management Manual</i>

1 Engineer's Certification

I hereby certify that this Stormwater Management Report for 4325 Kelly Street has been prepared by me or under my supervision and meets minimum standards of the City of West Linn and normal standards of engineering practice. I hereby acknowledge and agree that the jurisdiction does not and will not assume liability for the sufficiency, suitability, or performance of drainage facilities designed by me.



Digitally Signed 5/2/2019

RENEWAL DATE: 6/30/2020

Aquarius Environmental, LLC
Daniel A. Scarpine, P.E.
Principal Engineer

2 Project Summary

This project proposes to provide approximately 1,100 square foot driveway access to existing 3 lots (4325, 4327, 4329 respectively). Runoff from the driveway will convey to a proposed raingarden which manages stormwater from driveway surfaces.

In conformance with City of West Linn standards, AE prepared this Stormwater Management Report (SWMR) pursuant to the requirements of the *2016 City of Portland Stormwater Management Manual (SWMM)*. The following SWMR, along with a Plan Sheet (Appendix A), describes the sizing, location, and installation plans of the proposed rain garden.

2.1 Site Location

The project site (Site) is located at 4325 Kelly Street, West Linn, Oregon (21 E 36AA - Tax Lots 1802, 1803, 1804).

2.2 Site Description

The existing 15,000 square foot site is undeveloped. The Site is entirely zoned R4.5(Residential 4.5). New single family residential development is proposed. The site is located adjacent to the Sunset Creek water resource area (WRA)

3 Existing Stormwater Conditions

Currently runoff from the site conveys to Sunset Creek southwest portion of the Driveway/Parking runoff was conveyed to an existing rain garden located west of the existing house.

4 Proposed Conditions

Approximately 1,100 square feet of new driveway will be constructed. A new proposed stormwater rain garden will be located on the southern edge of the roadway to collect treat and detail runoff prior to discharge to Sunset Creek.

Runoff from future house development will be separately managed by raingardens adjacent to any proposed homes. Each home site is planned to have approximately 1,000 square feet of impervious roof area.

5 Sizing

The proposed rain gardens are sized following the presumptive approach sizing factor of 0.10 times the contributing impervious area.

	<u>Impervious Area</u>		<u>Minimum Rain Garden Size (sq ft)</u>
	Acre	Sq Ft	
<i>Driveway Rain Garden</i>	0.025	1,100	110
<i>Residence Rain Garden(s)</i>	0.022	1,000	100

To uniformly distribute flow and collection, the proposed driveway development has the raingarden parallel to the driveway which provides approximately 200 square feet of facility. This exceeds the minimum required by approximately 1.8X.

Residence raingardens will be located on each home site and configured as required to meet site layout needs to provide the minimum rain garden size of 100 square feet.

6 Operation & Maintenance (O&M)

Maintenance of the rain garden will be required to clean out potential settled solids and maintain the vegetation. The rain garden will require regular weeding and inspection of plants.

The rain garden shall be planted with plants on the 2016 SWMM Approved Plant list (Appendix H).

7 Engineering Conclusions

The proposed rain garden(s) described in this SWMR is expected to meet the site's needs for driveway and residence stormwater management.

Exhibit 3
Infiltration Tests

Location	Date	Test Hole Number
4325 Kelly St	May 10, 2019	TP01
Depth to Bottom of Hole	Dimension of Hole	Test Method
25"	12" dia	Simplified
Tester's Name	DRC	
Tester's Company	Paradise	
Tester's Contact Number	503-710-1227	
Depth (ft)	Soil Texture	
0 - 2.1	Clay Loam	

Presaturation Start Time
 Presaturation End Time

Time	Time Interval (minutes)	Measurement (inches)	Drop in Water Level (inches)	Infiltration Rate (inches/hr)	Remarks
9:09		19			Fill
9:21	0:12	20.75	1.75	8.75	
9:32	0:11	22	1.25	6.82	
9:49	0:17	23	1	3.53	
10:01	0:12	23.5	0.5	2.50	
10:14	0:13	25	1.5	6.92	
10:25	0:11	25	0	0.00	
10:30	0:05	19	-6		Fill
10:43	0:13	21	2	9.23	
10:54	0:11	22.5	1.5	8.18	
11:06	0:12	24	1.5	7.50	
11:18	0:12	25	1	5.00	
11:29	0:11	19	-6		Fill
11:40	0:11	20	1	5.45	
11:53	0:13	21	1	4.62	
12:05	0:12	22	1	5.00	
12:15	0:10	23	1	6.00	
12:25	0:10	24	1	6.00	

Location	Date	Test Hole Number
4327 Kelly St	May 10, 2019	TP02
Depth to Bottom of Hole	Dimension of Hole	Test Method
28"	12" dia	Simplified
Tester's Name	DRC	
Tester's Company	Paradise	
Tester's Contact Number	503-710-1227	
Depth (ft)	Soil Texture	
0 - 2.33	Clay Loam	

Presaturation Start Time
 Presaturation End Time

Time	Time Interval (minutes)	Measurement (inches)	Drop in Water Level (inches)	Infiltration Rate (inches/hr)	Remarks
9:09		22			Fill
9:21	0:12	23.5	1.5	7.50	
9:32	0:11	24	0.5	2.73	
9:49	0:17	24.5	0.5	1.76	
10:01	0:12	25	0.5	2.50	
10:14	0:13	25.5	0.5	2.31	
10:25	0:11	26	0.5	2.73	
10:30	0:05	23.5	-2.5		Fill
10:43	0:13	24	0.5	2.31	
10:54	0:11	24.5	0.5	2.73	
11:06	0:12	25	0.5	2.50	
11:18	0:12	25.5	0.5	2.50	
11:29	0:11	23	-2.5		Fill
11:40	0:11	24	1	5.45	
11:53	0:13	25	1	4.62	
12:05	0:12	25.5	0.5	2.50	
12:15	0:10	26	0.5	3.00	
12:25	0:10	26.5	0.5	3.00	

Exhibit 4

Fee-In-Lieu of Half Street Improvements



REQUEST FOR WAIVER OF STREET IMPROVEMENTS

PAYMENT OF FEE-IN-LIEU

22500 Salamo Rd. Box 800; West Linn, OR 97068

Phone: (503)722-5500 Fax: (503)656-4106

Email: cwl_rowpermits@westlinnoregon.gov



Complete and sign all fields and the statement below indicating your application for a waiver of street improvements and the option to make a payment in lieu of construction of street improvements as allowed by West Linn Community Development Code section 96.010.

APPLICANT INFORMATION					PROJECT INFORMATION		
Applicant Name:		Paradise Homes			Project Address	4327 Kelly St, West Linn	
Address:		20659 NE Lakeside Drive			Permit #		
City:	Fairview	State:	OR	97024			
Phone:	710-1227	Fax:				Project description	New SFR
Email:	paradise@frontier.com						

I, Ching Hay, the legal owner(s) of property at 4327 Kelly Street hereby apply for a waiver of street improvements in accordance with section 96.010 of the West Linn Community Development Code and agree to make a payment in-lieu of constructing said street improvements.

Applicant may provide three cost estimates to the City for approval or provide quantities to be assessed by City staff at recent construction values. A final payment calculation will be provided by the City.

Owner(s) Signature:

Ching Hay		4/4/19
Print	Signature	Date

Print	Signature	Date

24-Foot Local Street

PROJECT QUANTITIES				
	Quantity	Unit	Cost/Unit	Total Cost
Mobilization	1	LS	\$1,500	\$1,500
Sawcut AC	12	LF	\$3.00	\$36.00
Remove Existing AC	1	SY	\$9.00	\$9.00
10-inches of 1-1/2" Crushed Rock	25	SY	\$15.00	\$375.00
2-inches of 3/4"-0 Crushed Rock	2.25	SY	\$5.00	\$11.25
4" Level 3 1/2" Dense HMAc	4.5	SY	\$35.00	\$157.50
Curb and Gutter	32	LF	\$35.00	\$1,120.00
Concrete Sidewalk	192	SF	\$6.00	1,152.00
Concrete Inlet	1	EACH	\$1,200.00	\$1,200.00
Storm Manhole	0	EACH	\$0	\$0
Storm Pipe	0	LF	\$0	\$0
Planter/Swale Soil/Landscape	32	LF	\$100.00	\$3,200.00
Street Tree	1	EACH	\$175.00	\$175.00
Traffic Control	0	LS	\$0	\$0
Erosion Control	1	LS	\$500	\$500
Engineering	1	LS	\$0	\$0
TOTAL COST				\$9,435.75

28-Foot Local Street

PROJECT QUANTITIES				
	Quantity	Unit	Cost/Unit	Total Cost
Mobilization	1	LS	\$1,500	\$1,500
Sawcut AC	12	LF	\$3.00	\$36.00
Remove Existing AC	1	SY	\$9.00	\$9.00
10-inches of 1-1/2" Crushed Rock	29.25	SY	\$15.00	\$438.75
2-inches of 3/4"-0 Crushed Rock	2.63	SY	\$5.00	\$13.16
4" Level 3 1/2" Dense HMAc	5.27	SY	\$35.00	\$184.28
Curb and Gutter	32	LF	\$35.00	\$1,120.00
Concrete Sidewalk	192	SF	\$6.00	1,152.00
Concrete Inlet	1	EACH	\$1,200.00	\$1,200.00
Storm Manhole	0	EACH	\$0	\$0
Storm Pipe	0	LF	\$0	\$0
Planter/Swale Soil/Landscape	32	LF	\$100.00	\$3,200.00
Street Tree	1	EACH	\$175.00	\$175.00
Traffic Control	0	LS	\$0	\$0
Erosion Control	1	LS	\$500	\$500
Engineering	1	LS	\$0	\$0
TOTAL COST				\$9,528.19

dennis caudell

From: Pepper, Amy <APepper@westlinnoregon.gov>
Sent: Friday, October 5, 2018 2:57 PM
To: dennis caudell
Cc: Arnold, Jennifer
Subject: Fee in lieu - Kelly Street
Attachments: ord_1646_2016_transportation_system_plan_local_street_cross_section.pdf; PI-Fee In Lieu of Street Improvements Request Associated with A Building Permit.docx

Dennis ~

Per our meeting, attached you will find a fee in lieu request and a copy of the local street cross-section from the City's Transportation System Plan. We would anticipate the 24-foot local (no parking) cross-section would be adequate in this location.

Please let me know if you have any questions about this information.

Amy

Amy Pepper
Senior Project Engineer
Engineering

22500 Salamo Rd
West Linn, Oregon 97068
apepper@westlinnoregon.gov
westlinnoregon.gov
503-722-3437



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

dennis caudell

From: Arnold, Jennifer <jarnold@westlinnoregon.gov>
Sent: Wednesday, June 12, 2019 1:20 PM
To: [REDACTED]; dennis caudell
Subject: RE: 4327 Kelly Street

The April 4th date was a mistake and this response is in reference to the May submittal. Apologies for the confusion.

Jennifer

From: [REDACTED]
Sent: Wednesday, June 12, 2019 1:18 PM
To: dennis caudell <caudell.d@paradise-env.com>; Arnold, Jennifer <jarnold@westlinnoregon.gov>; Pepper, Amy <APepper@westlinnoregon.gov>
Subject: Re: 4327 Kelly Street

Also note that there was another submittal made on May 16. This appears to reference April 4.

[REDACTED]
[REDACTED]
[REDACTED]

From: dennis caudell <caudell.d@paradise-env.com>
Sent: Wednesday, June 12, 2019 12:23 PM
To: Arnold, Jennifer; Pepper, Amy
Cc: [REDACTED]
Subject: RE: 4327 Kelly Street

Jennifer, Amy;

- Please see the attached copy of a message from Amy wherein she indicates that “we would anticipate a 24-foot local...”. The email also includes an attachment, presumably from the City’s standards. We are certainly willing to provide a proposed Fee-In-Lieu for the 28-foot local street, but we are not very clear .on why we have such a moving target here.

Please verify, for the record, which will be required for this proposal- 24-foot local or 28-foot local street improvements.

- The shared driveway is still shown on the proposal- it is labeled as "Proposed Access Easement to Benefit Lot 7 and 8". The stormwater facility is also shown, as is the 15' sewer easement centered over the existing sewer line. The detail shows both the access and the stormwater facility outside of the easement area.

We are eager to make necessary changes upon your clarification. Please indicate how we can make this clearer to move this process forward.

Please feel free to call to discuss as necessary. Thank you.

Sincerely,

Dennis Caudell

Paradise Group General Contractors

503.710.1227

Paradise@frontier.com

Notice: It is OK to print this email. Paper is a biodegradable, renewable, sustainable product made from trees. Growing and harvesting trees provides jobs for millions of men and women, and working forests are good for the environment, providing clean air, clean water, wildlife habitat and carbon storage. When you don't need it anymore, be sure to put it in a bin designated for recycling, and it will come back to us as new paper or paperboard! The paper industry plants more than it harvests and today there are 25% more trees in the developed world than in 1900.

From: Arnold, Jennifer <jarnold@westlinnoregon.gov>

Sent: Wednesday, June 12, 2019 11:21 AM

To: dennis caudell <paradise@frontier.com>; 'C HAY' <mhay8650@msn.com>

Subject: FW: 4327 Kelly Street

Hello,

Below is the response from our Engineering Department regarding your submitted application materials received April 4, 2019. Your application is still considered incomplete with the 180 day timeline for completeness expiring July 30, 2019.

Jennifer

Subject: 4327 Kelly Street

I have reviewed the revised submittal for the WRA permit for 4327 Kelly Street and have the following comments:

1. Fee in lieu should be based on street improvements for a 28-foot local street, the City's local street standard. The application should be updated to remove the 24' foot cross-section and any notes related to the 24-foot cross-section and replaced with the 28-foot cross section found in the City's Construction Standards.
2. The applicant removed the proposed shared driveway from the plans. The project will be conditioned to provide a 15' sewer easement centered over the existing sewer line. Stormwater facilities will not be allowed to be installed in this area. The applicant has been made aware of this requirement and bears the risk of continuing to move forward with this project without recognizing the impact of this requirement on the exact location of the driveway. Additionally, fee in lieu is applicable for all improvements to the edge of the shared drive. As such, both the shared drive and proposed stormwater facility must be shown on the site plan to assure the fee in lieu can be adequately reviewed and calculated.

Revisions and resubmittal of the plans is required.

Jennifer Arnold
Associate Planner
Planning

22500 Salamo Rd.
West Linn, Oregon 97068
jarnold@westlinnoregon.gov
westlinnoregon.gov
503-742-6057



[Click to Connect!](#)

Exhibit 5

Sanitary Sewer Utility Easement

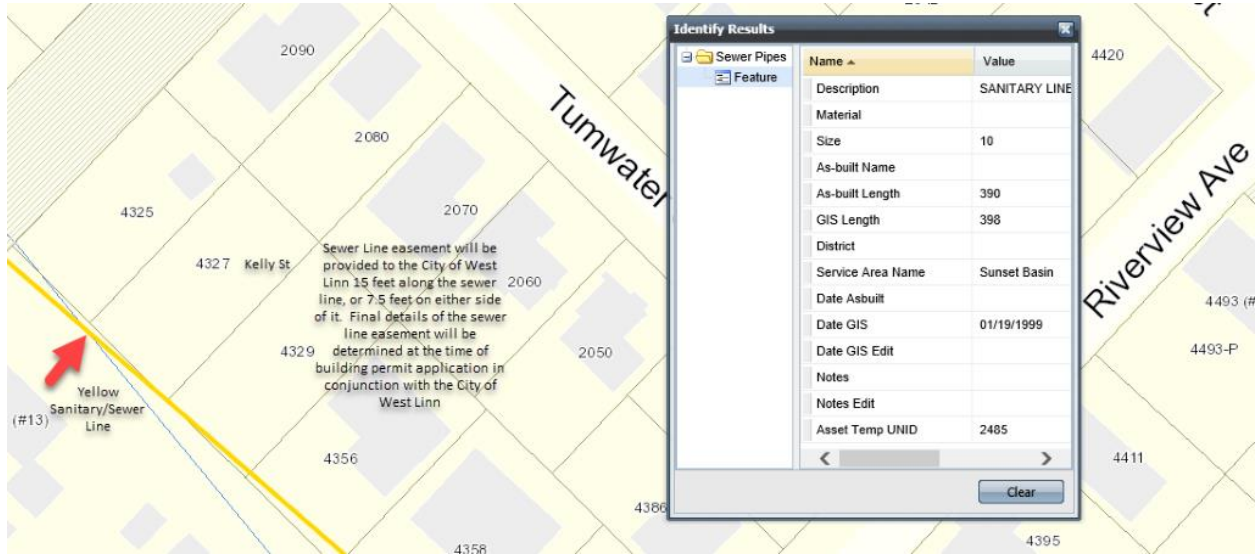


Exhibit A

BOUNDARY SURVEY FOR BERNARD ECKERSON
LOTS 7 THRU 11, BLOCK 5
WEST SIDE ADDITION TO OREGON CITY
PART OF THE ROBERT MOORE DLC NO. 71 IN
THE NE 1/4 OF THE NE 1/4 OF SECTION 36, T2S R1E, W.M.
CITY OF WEST LINN
 CLACKAMAS COUNTY, OREGON
 DECEMBER 16, 1998
 SCALE 1" = 30'

GAYLORD LAND SURVEYING, INC.
 15000 S.E. LINDEN LANE
 MILWAUKIE, OREGON 97267
 (503) 654-1492

REGISTERED
 PROFESSIONAL
 LAND SURVEYOR

OREGON
 JULY 19, 1996
 PATRICK M. GAYLORD
 27367
 RENEWED THRU 06/30/99

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO SET THE CORNERS OF LOT 7 THRU 11, BLOCK 5, WEST SIDE ADDITION TO OREGON CITY. I HELD THE 1" IRON PIPE IN CONCRETE AT THE INITIAL POINT OF WESTSIDE ADDITION TO OREGON CITY AND A POINT 50 FEET AT RIGHT ANGLES FROM THE 3/4" IRON PIPE AT THE INTERSECTION OF THE WESTERN LINE OF KELLY STREET AND THE NORTH LINE OF SUNSET AVENUE FOR THE WESTERN LINE OF THE DLC NO. 71. I THEN HELD THE EASTERN RIGHT OF PER PS 23921 AND PARTITION PLAT NO. 1992-30. BASED ON THESE SURVEYS, I THEN HELD THE PLAT RECORD DISTANCES AND RECORD BEARINGS BASED ON PS 23921 AND PARTITION PLAT NO. 1992-30 TO SET THE LOT CORNERS. THE WIDTH OF OREGON CITY THE WIDTH OF 40 FEET IS MARKED OUT AND A WIDTH OF 50 FEET IS WRITTEN IN PLACE OF THE 40. THERE IS NO CLOSING DISTANCE ON THIS LINE OF THE PLAT. I HAVE NOT TRIED TO RESOLVE THE TRUE WIDTH OF TUNMATER STREET AS IT HAS NO EFFECT ON THIS SURVEY.

NOTES & LEGEND

- = SET 5/8" Ø 30" IRON ROD WITH YELLOW PLASTIC CAP MARKED "GAYLORD
- = PLS 929" ON DECEMBER 18 1998
- = MONUMENT FOUND AS NOTED
- ALL PIPE DIAMETERS ARE INSIDE MEASUREMENT
- BASIS OF BEARINGS - SE RIGHT OF WAY LINE OF KELLY STREET = N 42°00'00" E
- PER THE PLAT OF WEST SIDE ADDITION TO OREGON CITY
- (RECORD)1 = PS 5466
- (RECORD)2 = PS 23921
- (RECORD)3 = PS 23894
- (RECORD)P = PLAT OF WESTSIDE ADDITION TO OREGON CITY
- (R/M) = RECORD AND MEASURED PER RECORD NOTED

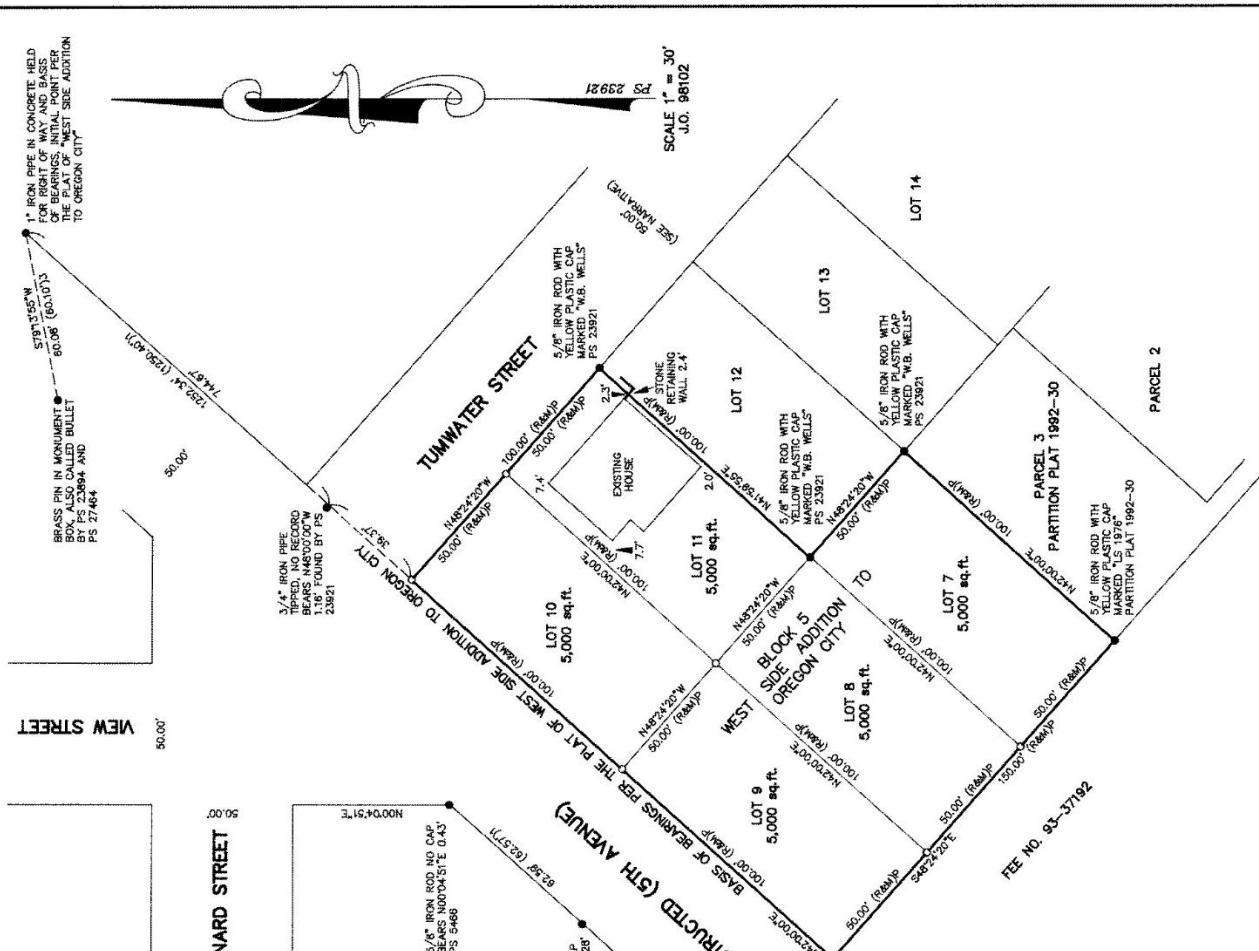
REFERENCES

- PLAT OF WEST SIDE ADDITION TO OREGON CITY
- PARTITION PLAT 1992-30
- PS 5466
- PS 14237
- PS 16307
- PS 23921
- PS 23894
- PS 27444
- PS 27464

HELD A POINT 50 FEET

MEASURED AT RIGHT ANGLES
 FOR RIGHT OF WAY AND BASIS
 OF BEARINGS PER PS 5466 AND
 PS 23921. IRON ROD AND
 RECORD BEARS N1121.77E 0.21'

PS-28069
 CLACKAMAS COUNTY, OREGON
 RECEIVED
 JAN 1999
 DATE FILED: 1/14/99



SCALE 1" = 30'
 U.D. 98102

Paradise Homes

Fairview, Oregon

503.710.1227 Paradise@frontier.com

Building the Northwest Style at a Higher Level of Performance