



Agenda
Hearing Examiner Meeting
Monday, May 11, 2020
City Hall Council Chambers | 625 Swift Boulevard
Public Telephonic Access: (253)215-8782 or (301) 715-8592 Meeting ID No. 964 2315 5767

Note: Governor Inslee's Proclamation 20-28 prohibits meetings from being conducted in person. For this meeting, the Hearing Examiner will meet remotely. The public may attend this meeting remotely by calling the phone numbers provided.

Hearing Examiner: Gary McLean

Liaisons: Staff Liaison: Planning Manager Stevens

Public Hearing - 6:00 p.m.

Public Hearing Explanation:

New Business - Public Hearing:

1. SMP2020-101 & SSDP2020-101
Shoreline Substantial Development & Special Use Permit- Columbia Park Trail East
City of Richland - Public Works
2. S2020-101 Preliminary Plat of Falconridge
Bauder Homes, LLC
3. S2020-102 Preliminary Plat of Skyline South
Spink Engineering on behalf of Dennis Sawby

Adjournment

The next Hearing Examiner Meeting is determined as needed.

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HEARING EXAMINER AGENDA ITEM COVERSHEET

Meeting Date: 5/11/2020

Agenda Category: New Business - Public Hearing

Prepared By: Shane O'Neill, Senior Planner

Subject:

SMP2020-101 & SSDP2020-101

Shoreline Substantial Development & Special Use Permit- Columbia Park Trail East

City of Richland - Public Works

Department:

Development Services

Recommended Motion:

Staff recommends the Hearing Examiner approve both permits subject to the conditions of approval listed in the staff report.

Summary:

Richland's Public Works Department has applied for Shoreline Master Program Substantial Development and Special Use Permit approval to fully reconstruct a 1.1-mile segment of Columbia Park Trail and to reconstruct an existing parking lot on the north side of Columbia Park Trail. Road work includes adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations, storm drainage collection system including on-site swales and underground infiltration systems, and transitioning the existing overhead electrical power lines to underground facilities. Only a portion on the 1.1-mile road segment is overlain by shoreline regulatory reach environments but the full project scope is evaluated in the staff report.

Title 19 (RMC) classifies this Shoreline Substantial Development & Special Use Permit as a type II permit and is being processed under the optional consolidated permit processing procedures as set forth in RMC 19.20.020(B).

Attachments:

1. SMP2020-101 - CPT - FULL Staff Report

**CITY OF RICHLAND DEVELOPMENT SERVICES DIVISION
STAFF REPORT TO THE HEARING EXAMINER**

GENERAL INFORMATION:

PROPOSAL NAME: Columbia Park Trail East

LOCATION: A 1.1-Mile Segment of Columbia Park Trail East of Fowler Street; including a parking lot on the north side of Columbia Park Trail

APPLICANT: City of Richland

FILE NO.: SMP2020-101, SSDP2020-101 & EA2019-135

DESCRIPTION: Request to fully reconstruct a 1.1-mile segment of Columbia Park Trail and to reconstruct an existing parking lot on the north side of Columbia Park Trail. Road work includes adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations, storm drainage collection system including on-site swales and underground infiltration systems.

PROJECT TYPE: Shoreline Master Program Type II Shoreline Substantial Development & Special Use Permit. These applications are being processed under the Optional Consolidated Permit Processing procedures as set forth in RMC 19.20.020(B).

HEARING DATE: May 11, 2020

REPORT BY: Shane O'Neill, Senior Planner

RECOMMENDED ACTION: Approval subject to the proposed conditions of approval



The City of Richland Public Works Department has applied for a Shoreline Management Substantial Development & Special Use Permit to fully reconstruct a 1.1-mile segment of Columbia Park Trail (CPT) and to reconstruct an existing parking lot on the north side of Columbia Park Trail. The project site is approximately 10-acres in area. Road work includes adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations, storm drainage collection system including on-site swales and underground infiltration systems. Work on the parking lot will be within the Corps of Engineers owned land, leased to the City of Richland.

The parking lot area is a unique component of this project in that the parking lot lies outside of the public right-of-way. The parking area to be improved with this project can be bifurcated as a result of its shape. The map below (Figure 3) divides the parking area into Area “A” and Area “B” for discussion purposes. Parking area “A” belongs to Wye Park and parking area “B” belongs to Bateman Island Park.

Area A is currently paved with 16 striped parking stalls (including 1 ADA stall). Stormwater generated from Area A is diverted to a narrow open concrete-lined channel extending across the park lawn toward the river. Once this water reaches the north edge of the lawn the water simply falls down an embankment above the Sacajawea Trail bordering the shoreline.

Parking Area B was perhaps paved many years ago, but is now a rough gravel surface with several pot-holes. The seam between Area B and the CPT roadway is in poor condition, consisting of several deep holes causing vehicles to slow-down excessively in the right-of-way before entering the parking lot. This slowing in the westbound travel lane is a potentially hazardous traffic movement.

Some of the site photos (Exhibit 7) taken by staff illustrate the current condition of both parking areas.



Figure 2 – Parking Lot Areas Map

SITE HISTORY

The site and surrounding vicinity have a long history of pre and post-European-contact human use. A detailed description of the natural and cultural history of

the site and its surrounding vicinity, including Bateman Island, is provided in the Cultural Resources Assessment included herein as Exhibit 6.

Properties surrounding the project's boundaries were annexed into Richland by way of three separate annexations. Most of the area now called "the Richland Wye" was brought into the City in 1965. Additional land, mostly to the east of the 1965 annexation, was brought into the City in 1981 & 1982. Before being brought into the City, the Wye was primarily developed with single-family homes and small commercial retail service businesses. More recently the Wye has experienced a surge of development/redevelopment with larger multi-family apartment complexes and large-scale offices which express a heightened level of architecture and site design.

SITE DESCRIPTION & ADJACENT LAND USES

The projects site is a 1.1-mile segment of Columbia Park Trail (right-of-way) together with a 0.53-acre parking lot on the north side of Columbia Park Trail at the approximate mid-point. The site forms a linear polygon oriented in the east-west direction; curving slightly to the south on the east-end; and having a slight bulb on the north side near the approximate mid-point.

Most of this 1.1-mile segment of the Columbia Park Trail right-of-way is eighty-feet-wide with the exception of a 500-foot segment across from Spaulding Avenue which is ninety six (96) feet-wide. Approximately 2,005 linear feet of the site is currently treated with sidewalk; accounting for 17% of the respective road frontage(s). There are nine (9) intersections with other public rights-of-way; they are: Fowler Street, Montana Avenue, Spaulding Avenue, Georgia Avenue, Florida Avenue, Dakota Avenue, Delaware Avenue, Carolina Avenue and N. Columbia Center Blvd.

The north side of Columbia Park Trail provides several riverward access points through public lands. In particular, Wye Park and Bateman Island Park are both adjacent to the projects' boundaries. The somewhat bifurcated parking lot (Figure 2) serving these two parks is located directly south of the isle of land connecting Bateman Island to the shore.

Considering its long, spanning shape, the site is adjacent to several different zones and current land uses. Generally, land north of the site contains: vacant land, commercial businesses and public park lands offering access to the Yakima Delta shoreline. These lands to the north contain much more open-space compared to the vicinity south of the project site. Lands on the south side of the project site contain several vacant parcels, a variety of commercial and office businesses, residential apartment complexes and a few non-conforming single-family homes.

EXISTING ZONING

A bulk of the project site occupies the Columbia Park Trail public street right-of-way. Dedicated rights-of-way are not assigned zoning as they are not available for permanent land uses other than public transportation. As such, only those portions of the project site lying on fee simple parcel(s) are applied with city zoning. There is a small (0.53-acre) parking lot on the north side of Columbia Park Trail lying outside of public right-of-way at about the mid-point of the project site. The parking lot crosses over a property line also serving as a boundary between zoning districts. The westerly parcel (USACOE owned) is zoned Parks & Public Facilities (PPF) while the easterly parcel (City of Richland owned) is zoned Commercial Recreation (CR). The westerly parcel belongs to the municipal park named “Wye Neighborhood Park”. The easterly parcel belongs to Bateman Island, a park primarily consisting of primitive hiking trails leading users from Columbia Park Trail to Bateman Island proper. The westerly parcel is owned by the Army Corps. of Engineers (ACOE) and is leased to the City. An image of the aforementioned park configuration is provided below (Figure 3) with the subject parking lot identified in red.

Because the project does not propose any changes to existing land uses, Richland’s zoning regulations have minimal effect on this review.



Figure 3 - Parks Map

Zoning Purpose Statements

The stated purposes of the Parks & Public Facilities (**PPF**) zone (as set forth in RMC 23.30.010.A) is as follows:

A. The parks and public facilities district (PPF) is a special use classification intended to provide areas for the retention of public lands necessary for open spaces, parks, playgrounds, trails and structures designed for public recreation and to provide areas for the location of buildings and structures for public education, recreation and other public and semi-public uses. This zoning classification is intended to be applied to those portions of the city that are designated as developed open space and public facility under the city of Richland comprehensive plan.

The stated purposes of the Commercial Recreation (**CR**) zone (as set forth in RMC 23.22.010.G) is as follows:

G. The commercial recreation district (CR) is a special commercial district providing for the establishment of such uses as marinas, boat docking facilities, resort motel and hotel facilities, and other commercial uses which are consistent with waterfront oriented development, and which are in conformance with RMC Title 26, Shoreline Management, and with the U.S. Corps of Engineers requirements, and providing for regulations to protect the business and residents of the city from objectionable influences, building congestion and lack of light, air and privacy. This zoning classification is intended for those portions of the city that are designated as waterfront or commercial under the Richland comprehensive plan.

By way of analysis, the subject re-surfacing project will not alter the existing land from its current parking lot use on either parcel. After the project has been completed the parking lot will continue to be used for public parking and thus the project has no land use implications.

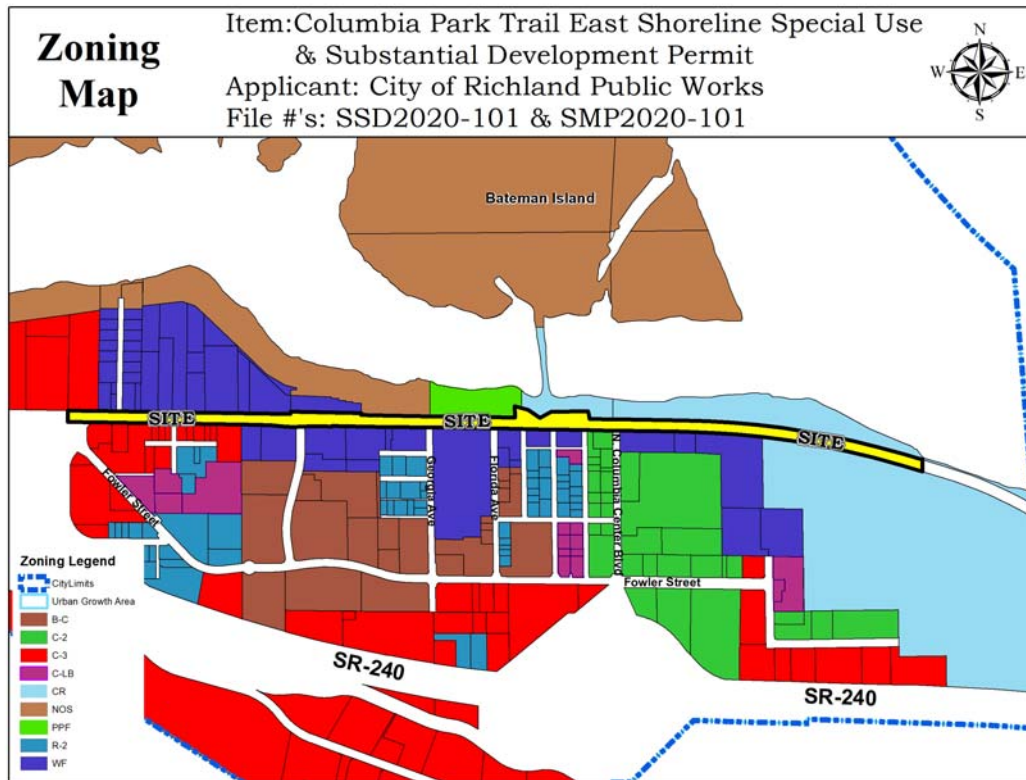


Figure 4 – Zoning Map

COMPREHENSIVE PLAN

The Comprehensive Plan designates a portion of the site as suitable for Developed Open Space land uses. Properties to the north and south are applied with several different land use designations as illustrated in detail in figure 2 (above). A bulk of the site itself is public right-of-way and is not applied with land use designations.

The following Comprehensive Goals & Policies have been selected in support of the subject proposal:

County-wide planning Policy #1

Open space and recreation – Encourage the retention of open space and the development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks.

(City) Land Use Goal 5:

The City will encourage efficient use and location of municipal and public facilities such as transportation centers, utility facilities, schools, parks and other public uses.

Policy 2 – The City will ensure that public facilities are of a scale compatible with surrounding areas.

Policy 3 – The City, through its land use plan and development regulations, will ensure that public facilities are specifically located to be compatible with existing and planned surrounding land uses.

Land Use Goal 6:

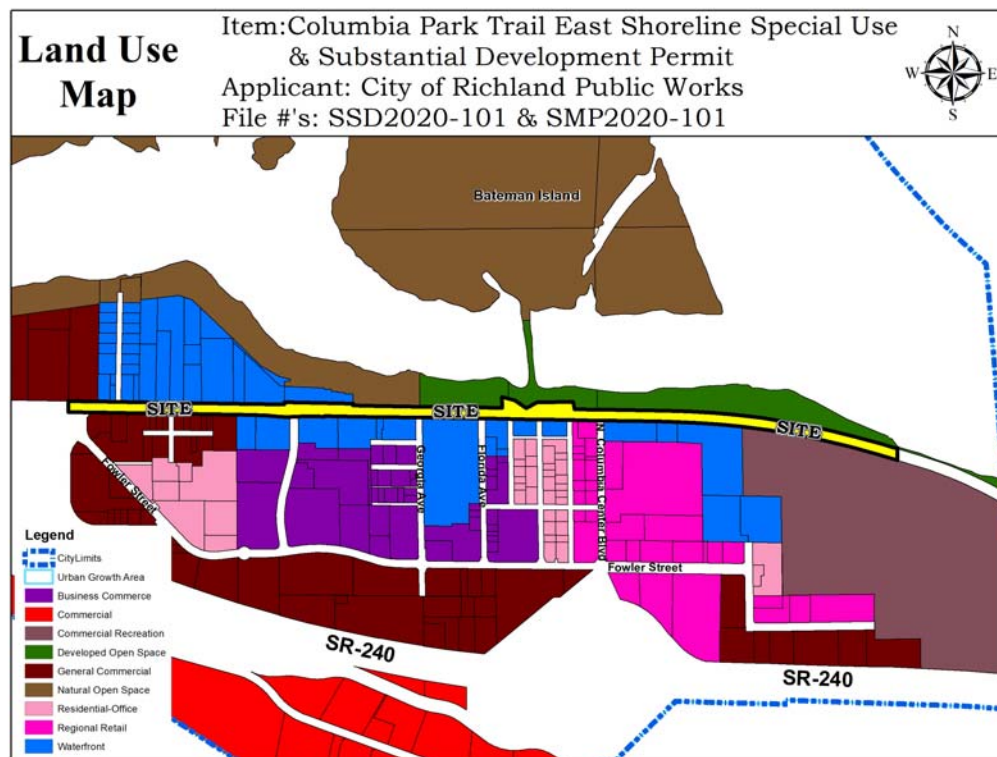
The City will protect and conserve its natural resources and critical lands and provide public access based on ability of the resource to support the use.

Policy 1 – The City will make all public river shoreline accessible to the public, subject to regulation protecting public safety, sensitive habitat areas and wildlife.

Policy 2 – The City will encourage development of water-oriented recreational, cultural and related commercial facilities in certain Columbia River locations to enhance and diversify Richland's community recreational resources and its attractiveness to tourists.

Policy 3 – Except as addressed in Policy 2, the City will protect the natural riparian areas along the Yakima River and the riparian area along the Columbia River so as not to diminish the quality of the shoreline environment.

Policy 4 – In cooperation with appropriate agencies, the City will identify and regulate the use of wetlands, essential habitat areas and other critical lands within the urban growth area.



PUBLIC NOTIFICATION TIMELINE:

Application Date	March 2, 2020
Combined Notice of Application & Hearing Mailed	March 9, 2020
Combined Notice of Application & Hearing Posted	March 10, 2020
Combined Notice of Application & Hearing Published	March 8, 2020
SEPA DNS Issued	Dec. 30, 2019
Public Hearing	May 11, 2020

The notice of application and public hearing was provided through posting of the property, mailing of notice to property owners within 300 feet of the site and publication in the *Tri-City Herald* newspaper. Copies of the notices and affidavits are included in Exhibit 3 – Notices and Affidavits.

Public Comments

At the time this report was finalized, Planning staff received one comment letter from the public at large. The letter from the owners of 1333 Columbia Park Trail (Park Trail LLC) supports the project and states their delight with the prospect of this road project coming to fruition.

Agency Comments

In response to the City's project notification and invite to comment three comment letters were received from two agencies; they are: Bonneville Power Administration (BPA), and the Washington State Department of Ecology (DOE). BPA provided one comment stating "no objection" to the project. DOE provided a total of two comment letters; one response to SEPA review and one response to the shoreline permit itself. All comment letters are provided herein as Exhibit 5.

UTILITY AVAILABILITY

Domestic water, sewer and electrical power lines are in place to serve the site and have adequate capacity to supply the proposed project. The proposed lighting system will only place additional demand on electrical services. Increased visitor traffic resulting from improved lighting may have an indirect impact on the sewer and water services associated with the park restrooms.

TRANSPORTATION

Columbia Park Trail is classified as a minor arterial roadway in the City's Transportation Plan. Temporary traffic delays and detours will be in-place during times when road construction activity is occurring. Road work typically occurs during normal weekday business hours. A "Potential Detour Route" map is included in the NEPA documents incorporated by reference. The map indicates that CPT traffic will be redirected onto Fowler Street.

Over the past several years, development projects which triggered the requirement to make right-of-way improvements have made payments in-lieu of

making improvements to CPT. Funds collected have been reserved and are being used to contribute costs of this project. This method was offered to affected property owners to avoid redundancy and waste. Because the subject CPT project involves road centerline re-alignment any required road improvements like curb, gutters and sidewalks would have to be removed and reconstructed as part of this project. In this way, some property owners adjacent to the project limits will enjoy seeing their long-held payments be put to use. A public comment letter to this effect is included in Exhibit 5.

Approximately 83% of the 1.1-mile segment of CPT currently lacks sidewalk facilities. The CPT East project proposes to install a combination of 5-foot-wide sidewalks and a 12-foot-wide multi-use path, on both sides of CPT. The multi-use path will be applied to the north side of CPT for a distance of 4,455 linear feet (0.84-miles) and will be separated from the roadway by a narrow landscaped median containing street trees spaced about eighty (80) feet apart.

ENVIRONMENTAL REVIEW

This project underwent review for potential impacts to the environmental at both State (SEPA) and Federal (NEPA) levels. A cultural resources survey (Exhibit 6) was conducted by Northwest Anthropology who then prepared a report describing the results. Generally, the survey indicates the proposed project will not disturb any historic properties but due to the two (2) known archaeological sites within the Area of Potential Effect (APE) the report recommends cultural monitoring occur during all ground disturbing activities within and east of the Wye Parking lot. The report states that WISAARD's predictive model indicates there is a very high likelihood archaeological sites will be encountered in the APE due to the site's close proximity to Bateman Island and the confluence of the Columbia and Yakima Rivers.

General summaries of each environmental review are provided in the sections below. Respective environmental review records are incorporated into this report directly as exhibits and by reference. NEPA environmental impact review documentation is incorporated by reference as Exhibit 8.

NEPA

The project is categorically excluded (CE) from NEPA review pursuant to 23 CFR 771.117(c)(22) which adds projects confined to the existing operational right-of-way as actions that meet the criteria for CE's. The existing operational right-of-way is defined by features typically associated with a transportation facility's footprint, including the roadway itself, bridges, interchanges, and fixed guideways. The existing operational right-of-way also includes clear zones, traffic control signage, rest areas with direct access to the highway, transit power substations, and transit maintenance facilities. A project is considered to be in the existing operational right-of-way if it meets both of the following criteria:

- *The project is in a right-of-way that has been disturbed or transformed for an existing transportation facility; and*
- *The portion of the right-of-way that the project affects is maintained for transportation purposes.*

Due to the project's exempt status the NEPA record is not detailed and extensive as compared to other projects requiring environmental assessment or environmental impact statements. The NEPA environmental review records for this project are made available to the Hearing Examiner upon request.

SEPA

By virtue of the fact that this project requires a shoreline substantial development & special use permit, which are land use actions, also requires compliance with the provisions of the State Environmental Policy Act [WAC 197-11-800(1)(a)(iv)]. The applicant filed an environmental checklist (Exhibit 4) with the SMP/SSDP applications. After reviewing the SEPA checklist, plans and application materials, a Determination of Non-Significance (Exhibit 4) was issued on December 30, 2019. In response to SEPA noticing one comment letter was received from the Department of Ecology (Exhibit 5). Project details were also sent to Lori B. White, Wetlands/Shorelands Federal Permit Specialist, representing the Central Regional Office of the Washington Department of Ecology. Lori stated that she has no specific concerns with the project proposal.

SHORELINE MASTER PROGRAM (SMP)

Richland's Shoreline Master Program (RMC Title 26) implements the Washington State Shoreline Management Act of 1971 (RCW 90.58) which requires permitting for "substantial development", a term generally including projects located within the shoreline jurisdiction valued over \$7,047; among other criteria.

Permit Qualifiers

Similar to the way SEPA works, Richland's Shoreline Master Program contains a list of exempt projects-types not requiring review (RMC 26.50.020 & WAC 173-27-040). The proposed road reconstruction project does not qualify for any of the listed exemptions.

Value

The Public Works project engineer applies a \$4.5M to \$5M valuation estimate to this project. Additionally, Columbia Park Trail East is a project listed in the Benton-Franklin Council of Governments 2020-2025 Transportation Improvement Program (TIP) with an estimated project cost of \$4,830,000. This value far exceeds the \$7,047 minimum project value trigger and thus does not qualify of exemption on the basis of value.

Location

The "shoreline jurisdiction" is defined as those lands lying 200-feet landward of the ordinary high-water mark (OHWM). The SMP applies different environmental

designations, termed “regulatory reach environments”, to SMP jurisdictional lands as mapped in the Plan. Figure 5 (below) illustrates how portions of the project site are overlain by two SMP environments. A small portion of the overall site fall within the Recreation Conservancy environment while a majority of the site under SMP jurisdiction falls within the Recreation environment. Although a bulk of the overall project site lies beyond the boundaries of the SMP’s jurisdiction, those areas under SMP jurisdiction trigger the need for SMP review and permitting.

SMP ENVIRONMENTAL DESIGNATIONS

Whereas City zoning districts are not applied to public rights-of-way, Shoreline Master Program environmental designations do overlay public streets. SMP environments differ from standard city zoning in this way. Furthermore, the SMP emphasizes matters related to shoreline access and any construction activity potentially affecting shoreline resources. The SMP Environment Map (Figure 5, below) illustrates which portions of the site lie within the Recreation Conservancy designation and which portions of the site lie within the Recreation SMP designation.

Recreation Conservancy Environment

An approximately 0.43-acre portion of the site, shown in violet in Figure 5, lie within the Recreation Conservancy environment. The purpose of the Recreation Conservancy environment is “to satisfy some of the needs of the community for low intensity recreation uses with minimal modification of the shoreline character. The intensity of recreational uses should be designed to avoid alteration of existing vegetation as much as feasible and introduce low levels of human use” (RMC 26.10.021). A recreation conservancy environment designation is assigned to public lands on the shoreline which have been modified by past human uses or activities but retain a range of ecological functions such that low intensity uses are most appropriate (RMC 26.10.022).

26.10.023 Management Policies

- A. *Management plans for these lands shall strike an appropriate balance between enjoyment of these areas and limiting potential adverse effects to aquatic areas, the land, associated vegetation, and wildlife. Some areas have the character of natural open space and shall receive a higher level of protection.*
- B. *A use with associated levels of human activity that would degrade the ecological functions or natural character of the shoreline area should not be allowed.*
- C. *The following new uses are not allowed in the recreation conservancy environment:*
 - 1. *Commercial uses, except for low intensity activities which enhance public enjoyment of the land;*
 - 2. *Industrial uses;*

- 3. Residential uses;
 - 4. Recreation uses requiring more than minor modification of shoreline vegetation and topography;
 - 5. In-stream structures of a magnitude that would alter natural geohydraulic processes or be a substantial visual intrusion to users of the area; and
 - 6. Roads, parking areas and utility corridors and facilities that can be feasibly located outside of shorelines.
- D. Scientific, historical, cultural, educational, research, and low intensity recreational access uses, including paved trails for regional trail systems or ADA access may be allowed; provided, that no significant ecological impact on the area will result. For the most part, soft surface trails should be employed.
 - E. All activities or significant vegetation removal that would reduce the capability of vegetation to perform normal ecological functions is not allowed.
 - F. Utility facilities should be located and designed to minimize impact on scenic views or aesthetic qualities and minimize environmental impact.

Recreation Environment

An approximately 1.94-acre portion of the site, shown in green in Figure 5, lies within the Recreation environment. The Recreation Environment on Richland's shorelines is designed "to satisfy the needs of the community for higher intensity recreation uses including both water-oriented and non-water-oriented uses."

This environment includes existing and planned parks where native vegetation has been replaced by introduced species for aesthetic enjoyment as well as for active areas such as informal lawn areas, picnic areas and sports fields. The local community makes extensive use of developed parks along the shoreline for a variety of recreation uses and strongly supports these areas. Water-oriented uses are preferred, but non-water-oriented uses are allowed as long as the location and configuration does not substantially interfere with enjoyment of the shoreline (RMC 26.10.031).

26.10.033 Management Policies

In applying the use chart in this program, and the zoning allowed uses the following shall guide the liberal interpretation of these regulations.

- A. A use with associated levels of human activity that would substantially degrade existing ecological functions of the shoreline area should not be allowed.
- B. The intensity of uses within the shoreline should generally follow a gradation with lower intensity uses nearer the shoreline and higher intensity uses at a greater distance, except for uses such as boat launches that require a shoreline location.
- C. The following new uses are not allowed in the Recreation Environment:
 - 1. Industrial uses.

2. *Commercial uses, except for franchises granted by the city which enhance public enjoyment of the shoreline and the overall recreational setting.*
3. *In-stream structures of a magnitude that would alter natural geo-hydraulic processes or be a substantial visual intrusion to users of the area.*
- D. *A wide variety of recreation uses are appropriate with a preference for water-oriented uses and activities including beaches, in-water structures, boat launches and other facilities that enhance the public enjoyment of the shoreline including active and passive uses such as boating, fishing, birdwatching, and similar uses.*
- E. *Non water-oriented recreation uses such as lawn areas and picnic areas that are enhanced by the ability to enjoy the aesthetic qualities of the shoreline are the next priority.*
- F. *Active recreation uses such as sports fields may be located within the shoreline jurisdiction, provided they do not displace opportunities for water-oriented uses. In general, such uses shall be located more than 100 feet from OHWM, unless specific site conditions justify a closer location.*
- G. *Structures that serve recreation and community uses including gymnasias and community centers should be located outside shoreline jurisdiction unless specific site conditions justify a closer location.*
- H. *Roads and parking areas should be located as far from the water as feasible, preferably outside of shoreline jurisdiction.*
- I. *Utility facilities should be located and designed to minimize impact on scenic views or aesthetic qualities and minimize environmental impact.*

Permitted Uses

Richland's Shoreline Master Program contains a table of land uses (RMC 26.30.011) indicating which land use activities are either unpermitted (X), permitted (P) or require special use permits (SU). To use the table a project first be matched with one or more of the listed land use categories. In this case the road and parking lot reconstruction project fits into the following three (3) land use categories under the Transportation section: (1) *Roads and Railroads Serving Shoreline Uses*, (2) *Roads and Railroads Not Serving Shoreline Uses* and (3) *Parking Areas Serving Primary Use within the Shoreline*. The abbreviated table below shows uses 1 & 2 (as listed above) require Special Use permit review whereas use 3 (parking areas) is permitted.

Land Use	Natural	Recreation Conservancy	Recreation	Rural	Residential	Waterfront	Industrial Conservancy
Transportation							
Roads and Railroads Serving Shoreline Uses	X	SU	SU	SU	SU	SU	SU
Roads and Railroads Not Serving Shoreline Uses	X	SU	SU	SU	SU	SU	SU
Parking Areas Serving Primary Use within the Shoreline	X	P	P	P	P	P	P
Parking Areas Not Serving Primary Use within the Shoreline	X	X	X	X	X	X	X
Parking as a Principal Use	X	X	X	X	X	X	X

Table 1 - Excerpt from RMC 26.30.011

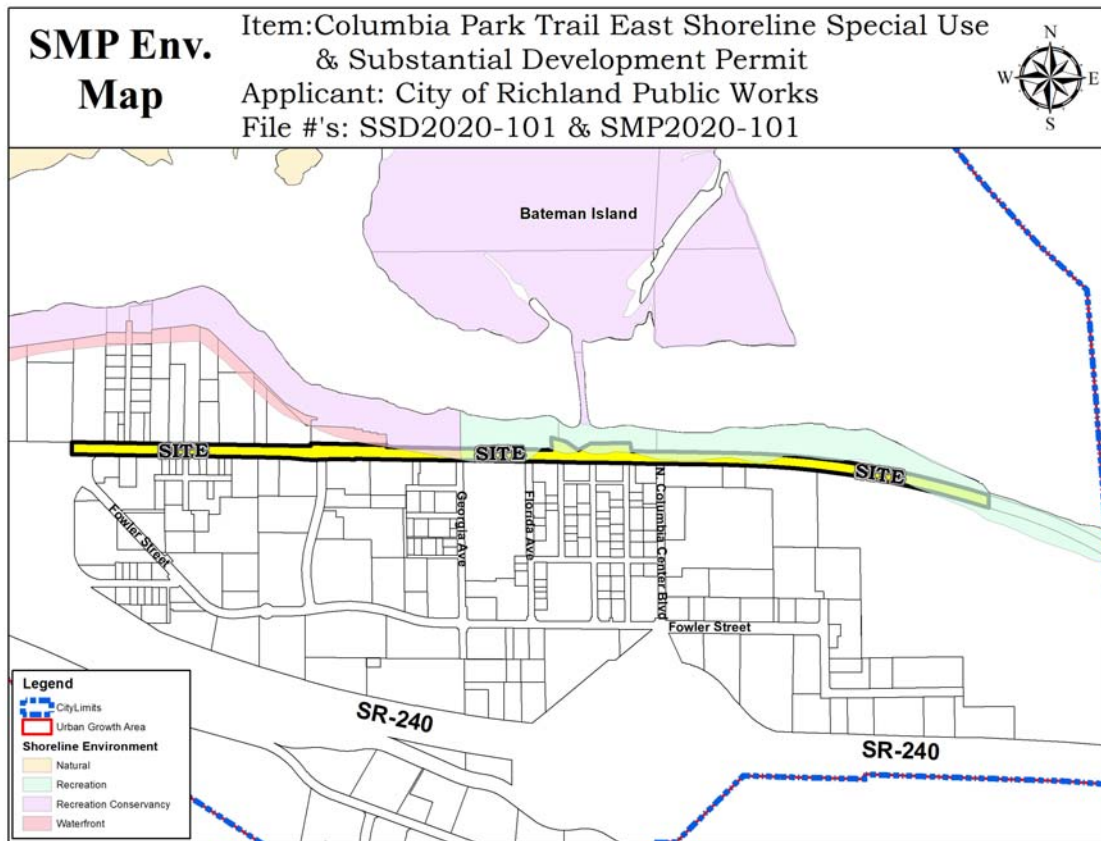


Figure 6 – SMP Environment Map

ANALYSIS

Columbia Park Trail East proposes to reconstruct an existing 1.1-mile segment of the Columbia Park Trail (CPT) right-of-way together with a small parking lot serving a riverfront City park on USACOE-owned land. And though the project involves realigning CPT, all project work will occur on previously disturbed land.

Substantial Development Permit (SSDP)

The project conforms to the criteria established for the review of shoreline substantial development permit applications as follows:

RMC 26.50.040 Approval Criteria.

A. Conformance with the Shoreline Management Act of 1971, as amended

Richland's Municipal Code states that the purpose of Richland's shoreline program is to implement the Shoreline Management Act of 1971. Therefore, if a project is compliant with the City's shoreline regulations, it would also be compliant with the State act. This analysis will focus on how the project conforms to the City's recently adopted updated Shoreline Master Program.

B. General conformance with the goals of the shoreline program, the general development policies of the plan elements, and the applicable policy statements for the use activity and the shoreline environment

The policies contained in the Shoreline Master Program associated with the Recreation environment place priority on both water-oriented and non-water-oriented recreational land uses including public parks. The proposed road improvement project would maintain transportation facilities serving the existing public parks; thereby supporting SMP permitted land uses. Access to the existing park facilities would be improved by resurfacing project and the addition of roadside sidewalks would improve pedestrian access to the existing waterfront parks.

Policies of the Recreation Conservancy environment seek to provide low-intensity recreation opportunities with an emphasis on conserving the natural condition of the shoreline's character by limiting potentially adverse impacts on aquatic areas, the land, associated vegetation and wildlife. Management policies of this environmental designation do not relate well with the proposed project but vegetation removal/alteration is clearly discouraged.

C. Compliance with the applicable environment regulations

The proposed project complies with the recreation and recreation conservancy environment use regulations in that the proposed road project

would continue to provide for full public access to the shoreline through all of the existing points of access. Both environments emphasize the preservation of public river access.

D. Compliance with the applicable use activity regulations

SMP Section 26.30.100 provides operational parameters for transportation facilities, roads and bridges, in the shoreline jurisdiction. These regulations are primarily oriented towards projects proposing new or expanded roads and bridges with one notable exception. RMC 26.30.100.A.10 reads:

“10. Landscape planting is required along all shoreline roads, parking, and turnout facilities to:

- a. Provide buffers between pedestrian and auto users;*
- b. Enhance the shoreline driving experience; and*
- c. Enhance and complement potential views of shoreline areas.”*

Plan detail (Exhibit 2) sheets C-01 through C-11 and sheets ST1 through ST6 illustrate the City's intent to treat the riverward (north) side of Columbia Park Trail with street trees placed within a roadside stormwater swale. This proposed design feature satisfies the landscaping requirement(s) above in two ways. First, it provides a physical buffer (by way of distance and vegetation) between pedestrian and auto users. Second, the street trees will enhance and compliment views of the shoreline while at the same time not obstruction said views.

E. Consideration of the recommendations and comments of the Richland parks and recreation commission as the proposed development will affect and be affected by the goals and objectives of City plans for parks, trail and open spaces

By way of explanation, Richland's Parks and Public Facilities Department was invited to comment on this project. By the time the stated comment period expired, no response from Parks had been received. Planning staff then reminded Parks of the importance of their input on this project affecting City parks. Again, Parks remained silent. For this reason, compliance with this criterion has not been confirmed.

Planning staff can offer the general assurance that improved parking serving city parks together with the new multi-use path serving parks, are two features of the CPT-East project which generally enhance the functionality of the affected parks by way of improved access. In this regard it is unlikely the Parks Department objects to this City project.

F. General conformance with the provisions of the Richland comprehensive plan

The project is consistent with the land use designations contained in the comprehensive plan and is consistent with the City's land use goals and policies as mentioned in the preceding details.

The land use classification of Columbia Park Trail will not be affected or altered as a result of the proposed roadway project. Some applicable Comprehensive Plan goals and policies are referenced on pages 6 & 7 of this report.

The subject segment of Columbia Park Trail extends east directly into the neighboring City of Kennewick. Reconstructing this roadway will improve the connectivity between the two cities, which contributes to fulfilling the Transportation vision in the Comprehensive Plan of maintaining efficient connectivity with neighboring jurisdictions.

The project is compatible with General Community Goal 9 to provide and support an efficient, varied, and well-maintained transportation network. Furthermore, the following goals and policies of the Comprehensive Plan's Transportation Element support project approval:

TE Goal 1

- Policy 5: Plan and implement transportation system improvements that meet the needs of all areas and residents.
- Policy 6: Plan transportation facilities that are compatible with adjacent uses.

TE Goal 4

- Policy 2: Implements landscaping and other types of buffers along major transportation corridors.
- Policy 4: Plan new streets and consider modifying existing streets to include stormwater management best practices to reduce pollution from stormwater runoff.

The project's component of adding sidewalks in places where there previously were none supports the Plan's general goals promoting the development of non-motorized transportation facilities.

G. Consideration of provisions for facilities and improved designs to accommodate and encourage use by the physically handicapped

The new roadway design includes ADA compliant accessibility standards such as pedestrian sidewalk ramps and properly sloped sidewalk; thereby promoting a safer environment for disabled persons.

H. Compliance with the State Environmental Policy Act (SEPA)

A determination of non-significance was issued by the City on December 30, 2019, completing the SEPA process.

I. Compliance with applicable provisions of the Richland Municipal Code

Only the parking lot portion(s) of this site are applied with city standard zoning districts because public roadways are void of zoning. Figures 2 & 4 in this report help illustrate the zoning configuration overlaying the subject Wye Park parking lot. The westerly fifth (approximately) of the parking area is zone Parks and Public Facilities (PPF) and the remainder is zoned Commercial Recreation (CR).

Zoning Code section 22.30.020 - Public use districts permitted land uses - lists "parking lots" as a permitted (retail) use in the Parks and Public Facilities (PPF) zone without footnotes leading to other requirements or development standards. On the other hand, Zoning Code section 23.22.030 indicates parking lots are not permitted in the Commercial Recreation (CR) zone. To justify allowing the repair of the existing parking lot in the CR zone staff offers Zoning Code section 23.66 – Nonconforming uses – which provides limitation and allowances relative to pre-existing non-conformities. In terms of project limitations, a nonconforming use shall not be enlarged, increased or extended to occupy a greater area than was occupied before the project began (RMC 23.66.020.A). The proposed project activities do fall within these limits.

Further, RMC 23.66.060.A – Nonconforming parking lots - reads as follows:

"Nothing contained in this chapter shall be construed to require a change in any aspect of a structure or facility covered thereunder including, without limitation, parking lot layout, loading space requirements and curb cuts, for any structure or facility which existed on the date of adoption of the ordinance codified in this title."

The Code language above appears to have been specifically crafted to exempt nonconforming parking lots from being subject to the standard constraints placed on most other nonconforming uses. From the citations above Planning staff finds the matter of land use to be inconsequential relative to the redevelopment of pre-existing non-conforming parking lots.

Special Use Permit (SUP)

The project conforms to the criteria established for the review of shoreline special use permit applications as follows:

RMC 26.50.050(D) Special use permit criteria

D. Uses which are classified in this shoreline program as special uses may be authorized; provided, that the applicant demonstrates all of the following:

- 1. That the proposed use is consistent with the policies, regulations and standards of RCW [90.58.020](#) and this shoreline program;*

Considering the CPT-East project activities are confined to the existing right-of-way and other previously-disturbed areas, the project complies with the intent of RCW 90.58.020 and RMC Title 26 which give preference to uses in the following order of preference:

- (1) Recognize and protect the statewide interest over local interest;*
- (2) Preserve the natural character of the shoreline;*
- (3) Result in long term over short term benefit;*
- (4) Protect the resources and ecology of the shoreline;*
- (5) Increase public access to publicly owned areas of the shorelines;*
- (6) Increase recreational opportunities for the public in the shoreline;*
- (7) Provide for any other element as defined in RCW **90.58.100** deemed appropriate or necessary.*

Columbia Park Trail serves as an access road to several river-access points. By redeveloping CPT the community will experience the long-term benefit of improved access facilities while preserving the natural character of the shoreline. In-turn the project will maintain, or possibly increase, the recreational opportunities for the public in the shoreline.

- 2. That the proposed use will not interfere with the normal public use of public shorelines;*

Although project construction activities may temporarily interfere with the adjacent river access-points, in the long-term the project will maintain or marginally improve public use of the shorelines. The CPT-East project includes no features which would further restrict shoreline access.

- 3. That the proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under Richland's comprehensive plan and shoreline master program;*

The CPT-East roadway improvement project is compatible with the existing properties fronting the roadway segment by providing an improved access corridor. The project is also consistent with the transportation element of Richland's Comprehensive Plan.

4. That the proposed use will cause no significant adverse effects to the shoreline environment in which it is to be located; and

The roadway project does not involve removal of shoreline vegetation nor will it disturb priority species habitat because ground-disturbing activities are confined to the existing paved surfaces. A thorough review of the project's potential environmental impacts was conducted by City staff. As a result of the review City staff issued a determination of non-significance.

5. That the public interest suffers no substantial detrimental effect.

CPT-East will serve the public interest by improving and installing transportation, pedestrian and utility facilities. The effect of project completion on adjacent property owners and residents City-wide, will be enhanced multi-modal transportation. The proposed improvements will help rejuvenate the Richland Wye by showing the City's willingness to invest in this river-oriented fringe of the community, which should facilitate further investment by private developers.

Utilities

In terms of affected public utilities, CPT-East involves installing a new roadside storm drainage system and the transition of overhead power lines to underground. There will also be a small amount of new City waterline installed near Montana Avenue together with a few sewer services to be installed. The use regulations section of the Shoreline Master Program (Section 26.30.110) provides an additional set of review criteria for projects involving utilities. A selected set of specifically applicable criteria from said section are provided below.

C. Linear facilities consisting of pipelines, sewers, cables and other facilities roughly parallel to the shoreline shall be discouraged except where no other feasible alternative exists. At the time of replacement of such facilities that are close to their lifespan, or when such facilities are expanded, relocation outside of the shoreline may be required as if they were new facilities. When permitted, design shall assure that maintenance of the facilities does not result in a net loss of shoreline ecological functions or significant impacts to other shoreline resources and values.

Placing electrical power underground is the respective project component to which the following response applies. Consistent with other responses to similar review criteria, utility construction associated with CPT-East will be confined to

the currently developed portion of the right-of-way. Reconstructing electrical power utilities underground will not require disturbance to shoreline vegetation or other habitat types. Because of this configuration, the electrical utility component will not result in a net loss of shoreline ecological functions or significant impacts to other shoreline resources and/or values.

D. Utilities shall be located in the least sensitive portions of a site and outside of natural open space areas, where feasible, and be designed to minimize environmental impact, avoid significant natural, historic, archaeological, or cultural sites to the maximum extent feasible, and mitigate unavoidable impacts.

The project satisfies this criteria by avoiding all of the described areas of impact. Detailed descriptions of methods to avoid disturbance to artifacts are provided in the NEPA review documentation included by reference as Exhibit 8.

E. Utilities, where permitted, shall meet the following design criteria:

1. Facilities should occupy as little of the shoreline as feasible and should be located in existing rights-of-way and, if possible, should share existing facilities where feasible. Utility installation parallel to the shoreline should be avoided to the maximum extent feasible. Utilities shall cross the shoreline area by the shortest, most direct route, unless such route would cause substantial significant environmental damage.

2. Utilities shall be located and designed to minimize alterations to the natural environment, be located outside of natural open space areas, where feasible, and fit the existing topography as much as possible, and should be designed to minimize and mitigate environmental impact.

3. Facilities shall be located and designed to minimize introducing elements that change the existing character of the shoreline, obstruct views enjoyed by residences or from public access facilities, or obstruct scenic vistas.

4. Utility crossings of water bodies shall be attached to bridges or located in other existing facilities, if feasible. If new installations are required to cross water bodies or wetlands, they should avoid disturbing banks and streambeds, and shall be designed to avoid the need for shoreline stabilization. Crossings shall be tunneled or bored where feasible. Installations shall be deep enough to avoid failures or need for protection due to exposure due to stream bed mobilization, aggregation, or lateral migration. Underwater utilities shall be placed in a sleeve if feasible to avoid the need for excavation in the event of the need for maintenance or replacement.

F. New electrical distribution lines within the shoreline shall be placed underground. Distribution lines that cross water or other sensitive areas may be allowed to be placed above ground if:

- 1. Underground installation would substantially disrupt ecological functions and processes of water bodies and wetlands, and horizontal drilling or similar technology that does not disturb the surface is not feasible;*
- 2. Visual impacts are minimized to the extent feasible; and*
- 3. If overhead facilities require that native trees and other vegetation in a sensitive areas buffer cannot be maintained in a natural condition, compensatory mitigation shall be provided on or off site.*

G. Stormwater, wastewater, or water supply pump stations, and stormwater discharge facilities such as dispersion trenches, level spreaders, and outfalls may be located in the shoreline jurisdiction if:

- 1. Due to topographic or other physical constraints there are no feasible locations for these facilities outside the shoreline;*
- 2. The facility minimizes and compensates for impacts to sensitive area buffers; and*
- 3. Any discharge facility is designed and maintained to prevent erosion or other adverse impacts.*

H. Construction shall be designed to protect the shoreline against erosion, uncontrolled or polluting drainage and other factors detrimental to the environment, both during and after construction.

I. Roadways or other facilities to access utility installations within sensitive area buffers shall be no wider than needed to construct, maintain, or repair the utility.

K. Public Access. Utility development shall provide for compatible, multiple uses of sites and rights-of-way through coordination with local government agencies. Such uses include shoreline access in accordance with RMC 26.20.050, trail systems, and other forms of recreation and transportation, provided such uses will not unduly interfere with utility operations, endanger public health and safety, or create a significant and disproportionate liability for the owner.

PROPOSED CONDITION(S) OF APPROVAL

Staff is recommending the following conditions of approval be attached to the shoreline substantial development & special use permit to ensure that the project conforms to all applicable City codes and standards:

1. The project shall proceed in substantial conformance with the plans submitted by the Public Works Department included in this report as Exhibit 2;
2. Project activities affecting parking lots, as shown in Exhibit 2, are limited to the existing parking area and may not result in an expanded footprint beyond what was in existence as of the date of this report;
3. Construction equipment and materials staging areas shall not involve removal or disturbance of vegetation within the shoreline jurisdiction;
4. A copy of all other local, state and federal permits shall be provided to the Planning Division within 14 days of issuance; and
5. Best Management Practices, including, but not limited to stormwater prevention measures, shall be implemented.

SUGGESTED FINDINGS AND CONCLUSIONS

Staff has completed its review of the request for a Shoreline Substantial Development & Special Use Permit (SMP2020-101 & SSDP2020-101) to reconstruct a 1.1-mile segment of Columbia Park Trail together with the parking lot serving Wye Park and Bateman Island Park subject to the proposed conditions of approval listed above and recommends approval of the request based on the following:

1. Public notice of application and hearing was provided in accordance with the requirements of the Richland City code;
2. The City of Richland Comprehensive Plan designates the subject site as suitable for Developed Open Space land uses such as public parks;
3. The affected parking lot serves the Richland Wye Park and the Bateman Island Park;
4. The existing seam between the Wye Park and Bateman Island Park parking lots and the Columbia Park Trail right-of-way is significantly deteriorated. The condition of this asphalt seam presents a potential traffic hazard;

5. On November 5, 2019, Council authorized the submittal of Richland's grant application to the Benton Franklin Council of Governments for the CPT-East project through Resolution 141-19;
6. On January 7, 2020, Council adopted Resolution No. 02-20, amending the 2020-2025 TIP, and accepting the Surface Transportation Block Grant Highway Infrastructure Program funding for the CPT-East project;
7. The Columbia Park Trail Improvements – East project is identified in the City's Capital Improvement Plan. The project is fully funded with the last piece of funding being secured by Resolution No. 20-20, Surface Transportation Block Grant Highway Infrastructure Program funding;
8. The project was reviewed under SEPA and the City issued a Determination of Non-significance on December 30, 2019;
9. The property is publicly owned and is located within the jurisdictional limits of the Columbia River and is therefore subject to the provisions of the Richland Shoreline Master Program and requires the issuance of a Shoreline Substantial Development & Special Use Permit;
10. Public notice of the application and the public hearing was provided as required under Richland City code and other public agencies were given an opportunity to review the application including the Washington State Departments of Ecology and Fish and Wildlife and the US Army Corps of Engineers;
11. The site is located within the Recreation Conservancy and Recreation environments as identified in the Richland Shoreline Master Program;
12. The application is consistent with the policies contained in the Shoreline Master Program relating to recreational uses in the Recreation Conservancy and Recreation environments;
13. The proposed project enhances a recreational land use and is given priority by the Shoreline Master Program (RMC26.30.080);
14. The application is consistent with the Recreation and Recreation Conservancy environment use regulations contained in RMC Section 26.30.011 in that the project promotes recreational activities along the shoreline by way of improved access;
15. The project design satisfies the review criteria for transportation facilities within the shoreline jurisdiction (RMC 26.30.100);

16. The project satisfies the review criteria for utility projects within the shoreline jurisdiction (RMC 26.30.110);
17. The project satisfies the shoreline substantial development permit review criteria (RMC 26.50.040);
18. The project satisfies the shoreline special use permit review criteria (RMC 26.50.050);
19. The proposed use is consistent with the policies, regulations and standards of RCW 90.58.020 and Richland's shoreline program;
20. The proposed project is consistent with the City's Comprehensive Plan;
21. The project is consistent with the provisions of the City's Park & Public Facilities zoning regulations relating to land use;
22. The proposed use will not interfere with the normal public use of public shorelines;
23. The proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under Richland's comprehensive plan and shoreline master program;
24. The proposed use will cause no significant adverse effects to the shoreline environment in which it is to be located;
25. The public interest will suffer no substantial detrimental effect as a result of the project;
26. The proposed conditions of approval are necessary and desirable to ensure that the project meets all applicable City regulations and standards and to ensure affected parks continue to provide the same recreational functions and amenities as they do currently; and
27. As conditioned, the project is consistent with the provisions of Richland's Shoreline Master Program, its comprehensive plan and zoning regulations and should be approved.

EXHIBIT LIST

1. SMP & SDDP Applications
2. Plan Details
3. Public Notices and Affidavits
4. SEPA Checklist and DNS
5. Public & Agency Comments
6. Cultural Resources Survey
7. Site Photos
8. NEPA environmental impact review documentation (by reference)
9. Resolution No. 02-20

**Shoreline Master Program
Special Use Application****Note: A Pre-Application meeting is required prior to submittal of an application.****PROPERTY OWNER INFORMATION**☐ Contact Person

Owner: Corps of Engineers (lease #W912EF-1-04-14 to COR Parks Dept.) & City of Richland Public Works Dept (ROW/Street)

Address:

Phone:

Email:

APPLICANT/CONTRACTOR INFORMATION (if different)☒ Contact Person

Company: City of Richland Public Works Dept.

UBI#

Contact: Sheldon Williamson

Address: 625 Swift Blvd., MS-26, Richland, WA 99352

Phone: (509) 942-7492

Email: swilliamson@ci.richland.wa.us

PROPERTY INFORMATION

Legal Description: Parts of section 29 & 30 T9N R29E, Columbia Park Trail East from Fowler to Hanford Reach Driveway including Wye Park parking lots

Parcel #

Current Zoning: Split C-2 & C-3

Current Land Use Designation:

Split: GCOM, WTF,
URD, NOS, RR

Shoreline Designation:

Recreation conservancy,
waterfront, recreation**DESCRIPTION OF PROJECT**

The project is located along Columbia Park Trail between Fowler Drive and the Hanford Reach Driveway, covering approximately 1.1 miles within Sections 29 and 30 of T9N R29E. This corridor services as a minor arterial and access point to Columbia Park West, Richland Marina, Bateman Island, along with businesses, residential homes, and business office complex. Parts of the Columbia Park Trail East corridor included in the project see over 5000 ADT. This improvement project will include a full reconstruction of the existing roadway including adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, undergrounding of existing power (removal of power poles) pedestrian crossing locations (RRFBs (2) and new ADA ramps), storm drainage collection system including on-site swales and storm drainage piping network (storm pipes, catch basins, storm manholes). An Ecology stormwater grant will allow for the treatment of stormwater prior to being discharged in the Columbia River along with the rehabilitation of the parking lots for the Wye Park (including storm drainage collection system). Work on the parking lots will be within the Corps of Engineers owned land, leased to the City of Richland as is the east end of the project street work.

PURPOSE

The purpose of a Special Use permit is to provide a system within the master program which allows flexibility in the application of use regulations in a manner consistent with the policies of RCW 90.58.020. In authorizing a special use, special conditions may be attached to the permit by local government or the department to prevent undesirable effects of the proposed use and/or to assure consistency of the project with the act and the Richland Shoreline Master Program.

APPLICATION MUST INCLUDE

1. Completed Application and Filing Fee
2. Title Insurance company certificate, issued no more than 30 days prior to application, showing ownership of the property and all lien holders
3. A site plan, drawn to scale, showing all details of the proposal – include property lines, easements, building location(s) and dimensions, parking areas, access driveways, landscaping areas, critical area features, fences, signs, storm water control features, existing wells and drainfields, fire hydrants, significant cut or fill areas, etc. See WAC 173-27-180
4. Preliminary layout of building interior (uses and sizes of rooms)
5. Any other information the Administrator deems necessary to determine compliance with applicable codes and WAC 173-27-180
6. SEPA Checklist

COMPLETE QUESTIONS AS THOROUGHLY AS POSSIBLE

Describe how the proposed use is consistent with the policies of RCW 90.58.020 and the Richland Master Program:

The proposed use of the project (minor arterial roadway) is the same as the current use of the project with the exception of additional enhancements including pedestrian facilities (sidewalks, multi-use path, RRFB crossing locations, ADA ramps), bike facilities (bike lanes, multi-use path), streetlights (to current standards), and storm collection / treatment. All items are enhancements to the existing street creating a safer and more appealing street that will hopefully encourage redevelopment.

The Wye park parking lot repaving will enhance the entrance to Wye Park and Bateman island nature area.

Describe how the proposed use will not interfere with the normal public use of public shorelines:

The reconstruction project will enhance access and usability of existing park / nature areas (i.e. shoreline) by providing a multi-use path, sidewalks, and / or bike lanes within the project area. Existing access to Bateman Island, Wye Park, Richland Marina will remain after the project is completed (minor disruptions in access will be required during the construction project).

Describe how the proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under the Comprehensive Plan and Shoreline Master Program:

As an enhancement project to an existing street, the project is compatible with both current authorized uses and potential future uses as defined in the zoning and land use. New driveways will be built for access to each existing business, home, or park access. New ADA ramps will facilitate better pedestrian accesses including access to businesses. New bike lanes and multi-use path will include more access for additional people. These enhancements meet shoreline goal #7 (from the COR Shoreline Master Plan) in providing circulation: "Develop a safe and convenient shoreline circulation system to meet the needs for efficient movement of people, consistent with the shoreline environments, located and designed to minimize adverse impact on the environment."

Describe how the proposed use will cause no significant adverse effects to the shoreline environment in which it is to be located and how the public interest suffers no substantial detrimental effect:

The project has the potential to enhance the shoreline with the collection and treatment of storm drainage runoff, provide additional access via sidewalks, bike lanes, and a multi-use path. Street lights will make the street safer at night and the new paving, sidewalks, and curb & gutter will beautify the entire corridor.

I authorize employees and officials of the City of Richland the right to enter and remain on the property in question to determine whether a permit should be issued and whether special conditions should be placed on any issued permit. I have the legal authority to grant such access to the property in question.

I also acknowledge that if a permit is issued for land development activities, no terms of the permit can be violated without further approval by the permitting entity. I understand that the granting of a permit does not authorize anyone to violate in any way any federal, state, or local law/regulation pertaining to development activities associated with a permit.

I hereby certify under penalty of perjury under the laws of the State of Washington that the following is true and correct:

1. I have read and examined this permit application and have documented all applicable requirements on the site plan.
2. The information provided in this application contains no misstatement of fact.
3. I am the owner(s), the authorized agent(s) of the owner(s) of the above referenced property, or I am currently a licensed contractor or specialty contractor under Chapter 18.27 RCW or I am exempt from the requirements of the Chapter 18.27 RCW.
4. I understand this permit is subject to all other local, state, and federal regulations.

Note: This application will not be processed unless the above certification is endorsed by an authorized agent of the owner(s) of the property in question and/or the owner(s) themselves. If the City of Richland has reason to believe that erroneous information has been supplied by an authorized agent of the owner(s) of the property in question and/or by the owner(s) themselves, processing of the application may be suspended.

Applicant Printed Name: Sheldon Williamson

Applicant Signature: Sheldon Williamson Date 2/24/2020



Shoreline Master Program Substantial Development Application

Note: A Pre-Application meeting is required prior to submittal of an application.

PROPERTY OWNER INFORMATION

☐ Contact Person

Owner: Corps of Engineers (lease #W912EF-1-04-14 to COR Parks Department), & COR Public Works Dept (ROW / street)

Address:

Phone:

Email:

APPLICANT/CONTRACTOR INFORMATION (if different)

☐ Contact Person

Company: City of Richland Public Works Department

UBI#

Contact: Sheldon Williamson

Address: 625 Swift Blvd, MS-26 Richland, WA 99352

Phone: (509) 942-7492

Email: swilliamson@ci.richland.wa.us

PROPERTY INFORMATION

Legal Description: Parts of section 29 & 30 T9N R29E, Columbia Park Trail East from
Fowler to Hanford Reach Driveway including Wye Park parking lots

Parcel #

Current Zoning:

Split: Waterfront, C-3 (general business), PPF (Parks & Public facilities), CR (commercial recreation), C-2 (Retail business)

Current Land Use Designation:

Split: GCOM (general commercial), WTF (waterfront), URD (urban recreational district), NOS (natural open space), RR (retail regional)

Shoreline Designation:

Recreation conservancy, waterfront, recreation

DESCRIPTION OF PROJECT (Size of structure(s), amount of grading/filling, impacts to wetlands and/or buffers etc.)

The project is located along Columbia Park Trail between Fowler Drive and the Hanford Reach Driveway, covering approximately 1.1 miles within Sections 29 and 30 of T9N R29E. This corridor services as a minor arterial and access point to Columbia Park West, Richland Marina, Bateman Island, along with businesses, residential homes, and business office complex. Parts of the Columbia Park Trail East corridor included in the project see over 5000 ADT.

This improvement project will include a full reconstruction of the existing roadway including adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, undergrounding of existing power (removal of power poles) pedestrian crossing locations (RRFBs (2) and new ADA ramps), storm drainage collection system including on-site swales and storm drainage piping network (storm pipes, catch basins, storm manholes). An Ecology stormwater grant will allow for the treatment of stormwater prior to being discharged in the Columbia River along with the rehabilitation of the parking lots for the Wye Park (including storm drainage collection system). Work on the parking lots will be within the Corps of Engineers owned land, leased to the City of Richland as is the east end of the project street work.

Storm drainage collection structures to be included in project: storm manholes (up to 10' deep, 48" diameter), storm piping (PVC) 12" and 18" diameter, varying depths (4' to 10' deep), catch basins (typical City sized 24" diameter), various overflow collection structures from swales, and swale storm collection system.

Other structures in project include: streetlights (26 total w/ conduits and J-boxes), rapid flash beacon systems (2), power utility for undergrounding existing overhead power (conduit, vaults), fire hydrants (moved from existing locations), and minor amount of water and sewer work (mainly new services).

Grading to include removal of existing street for reconstruction / new construction of street at 14" deep (8" CSBC, 2" CSTC, 4" HMA). Fill will be minor with most material to be exported from site (note all rock and asphalt will be imported into the project). A rough estimate of material that will be excavated (removal of existing street section) is 10,000 CY. Approximately 26,000 SY of new street and 11,700 LF of curb & gutter.

Wetlands and buffer area should not be impacted as project is within the existing footprint of disturbed / developed area.

APPLICATION MUST INCLUDE

1. Completed Application and Filing Fee
2. Title Insurance company certificate, issued no more than 30 days prior to application, showing ownership of the property and all lien holders
3. A site plan, drawn to scale, showing all details of the proposal – include property lines, easements, building location(s) and dimensions, parking areas, access driveways, landscaping areas, critical area features, fences, signs, storm water control features, existing wells and drainfields, fire hydrants, significant cut or fill areas, etc. See WAC 173-27-180
4. Preliminary layout of building interior (uses and sizes of rooms)
5. Any other information the Administrator deems necessary to determine compliance with applicable codes
6. SEPA Checklist

I authorize employees and officials of the City of Richland the right to enter and remain on the property in question to determine whether a permit should be issued and whether special conditions should be placed on any issued permit. I have the legal authority to grant such access to the property in question.

I also acknowledge that if a permit is issued for land development activities, no terms of the permit can be violated without further approval by the permitting entity. I understand that the granting of a permit does not authorize anyone to violate in any way any federal, state, or local law/regulation pertaining to development activities associated with a permit.

I hereby certify under penalty of perjury under the laws of the State of Washington that the following is true and correct:

1. I have read and examined this permit application and have documented all applicable requirements on the site plan.
2. The information provided in this application contains no misstatement of fact.
3. I am the owner(s), the authorized agent(s) of the owner(s) of the above referenced property, or I am currently a licensed contractor or specialty contractor under Chapter 18.27 RCW or I am exempt from the requirements of the Chapter 18.27 RCW.
4. I understand this permit is subject to all other local, state, and federal regulations.

Note: This application will not be processed unless the above certification is endorsed by an authorized agent of the owner(s) of the property in question and/or the owner(s) themselves. If the City of Richland has reason to believe that erroneous information has been supplied by an authorized agent of the owner(s) of the property in question and/or by the owner(s) themselves, processing of the application may be suspended.

Applicant Printed Name: Sheldon Williamson

Applicant Signature: Sheldon Williamson Date 2/28/2020

CONSTRUCTION PLANS FOR:

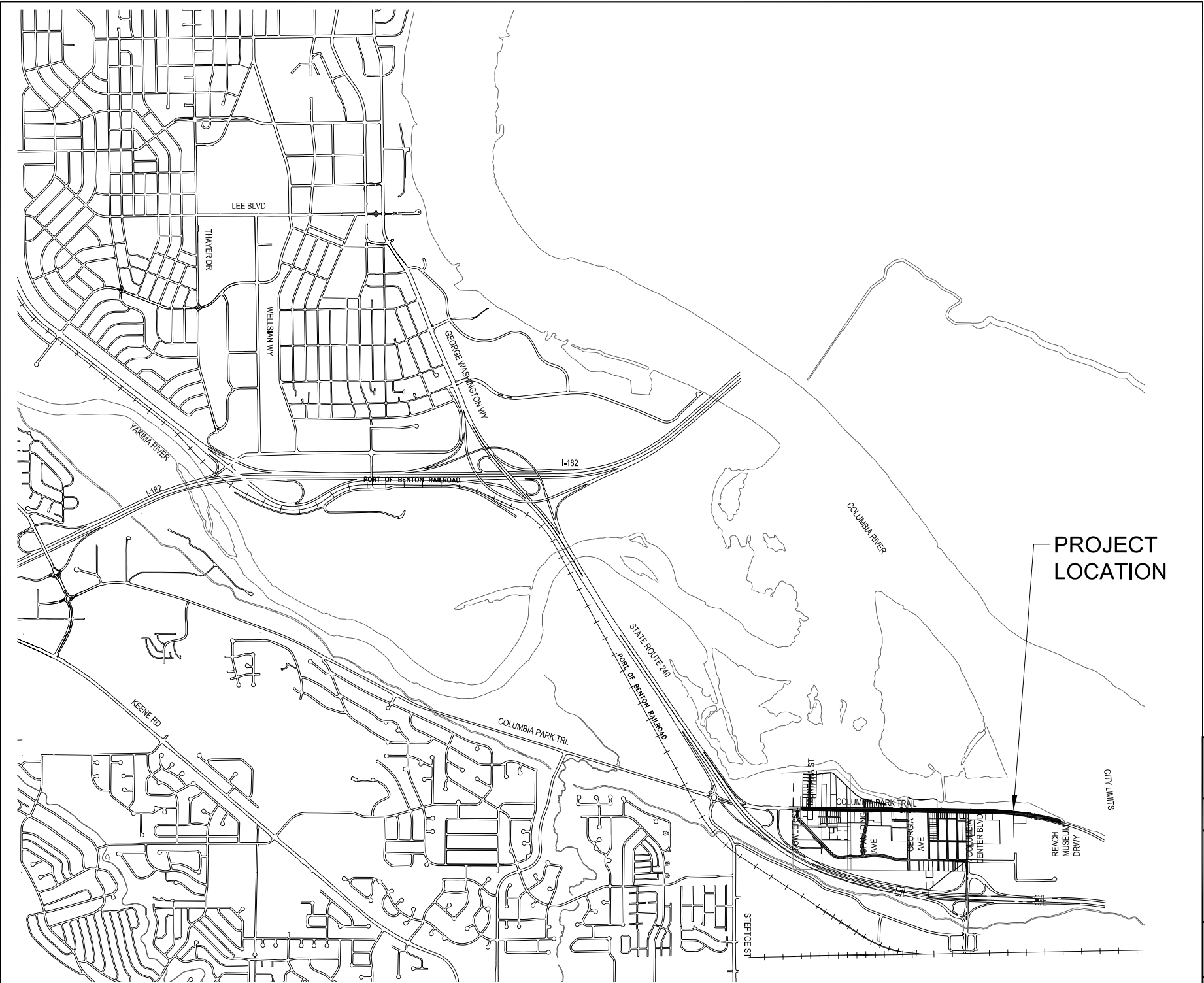
COLUMBIA PARK TRAIL EAST IMPROVEMENTS

(FOWLER ST. TO REACH MUSEUM DWY.)

Exhibit 2

CONTACTS:
CITY OF RICHLAND, ENGINEERING DEPT. SHELDON WILLIAMSON (W)(509)942-7492 (C)(509)531-1990
CITY OF RICHLAND, WATER DEPT. MIKE ENNIS (C)(509)531-7915
CITY OF RICHLAND, SEWER DEPT. HECTOR MORENO (C)(509)539-4849
CITY OF RICHLAND, ENERGY SERVICES DEPT. KELLY HILL (W)(509)942-7416 (C)(509)420-6469
CITY OF RICHLAND, SURVEY DEPT. BRANDIN LOPEZ (W)(509)942-7512
CITY OF RICHLAND, STREET DEPT. CHAD BOOTHE (W)(509)942-7524 (C)(509)531-9168
CITY OF RICHLAND, PARKS & FACILITIES DEPT. SHAWN HARPER (W)(509)942-7527 (C)(509)578-9338
CITY OF RICHLAND, TRAFFIC ENGINEERING JOHN DESKINS (W)(509)942-7514
CASCADE NATURAL GAS GREG MILLER (W)(509)736-5547 (C)(509)579-1185 24 HOUR EMERGENCY 1-888-522-1130
CHARTER COMMUNICATIONS JUNIOR CAMPOS (W)(509)222-2552 (C)(509)491-0222
FRONTIER COMMUNICATION JOSEPH CICHY (C)(509)736-3722
LS NETWORKS WINFRED VOGT (W)(503)414-0475

CONTRACT #: SB XX-###



DRAWING INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	LEGEND, ABBREVIATIONS AND GENERAL NOTES
3	KEY MAP INDEX
4	TYPICAL ROAD SECTIONS
5	CORINGS INFORMATION
6 TO 11	CONSTRUCTION DETAILS
DTL-01 TO DTL-04	DETAIL INFORMATION
INT-01 TO INT-06	INTERSECTION AND ADA RAMP DETAILS
RRFB1-RRFB4	RECTANGULAR RAPID FLASH BEACON PLANS (RRFB)
C-01 TO C-11	PLAN AND PROFILE SHEETS
ST-01 TO ST-06	SIGNING AND STRIPING PLANS

REGION NO.	STATE	FEDERAL AID PROJECT NUMBER
10	WA	STPUL-TAP-3504(002)

60% REVIEW
SUBMITTAL

Columbia Park Trail East Improvements

(Fowler St. to Reach Museum Dwy.)

Cover Sheet

CITY OF
RICHLAND
PUBLIC WORKS DEPARTMENT

ONE INCH

AT FULL SIZE, IF NOT ONE INCH,
SCALE ACCORDINGLY

811
Know what's below.
Call before you dig.



CAD DWG: columbia_park_trl_cover
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ##-###
SHEET 1 OF OF

www.ci.richland.wa.us

PLAN SYMBOLOGY

EXISTING		NEW			
	R/W	RIGHT OF WAY		R/W	RIGHT OF WAY
	P/L	PROPERTY LINE		P/L	PROPERTY LINE
		EASEMENT			EASEMENT
		MONUMENT			MONUMENT/CONTROL POINT
		CURB & GUTTER			CURB & GUTTER
	EP	EDGE OF PAVEMENT		EP	EDGE OF PAVEMENT
	EG	EDGE OF GRAVEL		EG	EDGE OF GRAVEL
	TOE	TOE OF BANK		TOE	TOE OF BANK
	TOB	TOP OF BANK		TOB	TOP OF BANK
	DRT	EDGE OF DIRT			SAWCUT LINE
	WET	WATER EDGE (APPROX.)			GRADING LIMIT
		FENCE			FENCE
		SIGN			SIGN
		STREET WATER FLOW			STREET WATER FLOW
		ABANDONED LINE			ABANDONED LINE
	W	WATER LINE		W	WATER LINE
	SS	SANITARY SEWER LINE		SS	SANITARY SEWER LINE
	SD	STORM DRAIN LINE		SD	STORM DRAIN LINE
	IRR	IRRIGATION LINE		IRR	IRRIGATION LINE
		PIPE CAP OR FLANGE			PIPE CAP OR FLANGE
		REDUCER			REDUCER
		TEE W/ THRUST BLOCK			TEE W/ THRUST BLOCK
		22.5°/45° OR 90° ELBOW W/THRUST BLOCK			22.5°/45° OR 90° ELBOW W/THRUST BLOCK
		GATE VALVE/BUTTERFLY VALVE			GATE VALVE/BUTTERFLY VALVE
		FIRE HYDRANT			FIRE HYDRANT
		AIR/VACUUM VALVE ASSEMBLY			AIR/VACUUM VALVE ASSEMBLY (LOCATED AT HIGH POINT)
		WATER METER			WATER METER
		BLOW OFF ASSEMBLY			BLOW OFF ASSEMBLY
		BOLLARD			BOLLARD
		SEWER MANHOLE			SEWER MANHOLE
		SEWER CLEAN OUT			SEWER CLEANOUT
		STORM MANHOLE			STORM MANHOLE
		STORM CATCH BASIN/MANHOLE			STORM CATCH BASIN/MANHOLE
		CATCH BASIN			CATCH BASIN
		DITCH/SWALE			DITCH/SWALE
		END OF CULVERT			END OF CULVERT
	P	UNDERGROUND POWER		P	UNDERGROUND POWER
	OHP	OVERHEAD POWER		OHP	OVERHEAD POWER
	C	CONDUIT		C	CONDUIT
	SL	STREET LIGHT CIRCUIT		SL	STREET LIGHT CIRCUIT
	FO	UNDERGROUND FIBER OPTIC		FO	UNDERGROUND FIBER OPTIC
	J	JUNCTION BOX/POWER VAULT		J	JUNCTION BOX/POWER VAULT
		STREET LIGHT OR YARD LIGHT			STREET LIGHT OR YARD LIGHT
		MAILBOX			MAILBOX
		BRUSH OR TREES		TREE TYPE	TREE TYPE
		UTILITY POLE		TREE TYPE	TREE TYPE
		GUY WIRE		TREE TYPE	TREE TYPE
	T	UNDERGROUND TELEPHONE			SPOT ELEVATION
	T	TELEPHONE BOX			SPOT ELEVATION
	G	UNDERGROUND NATURAL GAS			SPOT ELEVATION
		BORING OR CORING LOCATION			SPOT ELEVATION
	XXX	CONTOUR LINE		XXX	CONTOUR LINE

MATERIALS IN PLAN/SECTION

	=	HANDICAP DETECTABLE PATTERN		=	CRUSHED SURFACING/QUARRY SPALLS/ BASE COURSE
	=	CONCRETE AREA (REMOVE & REPLACE)		=	ROAD REBUILD AREA
	=	NEW HMA AREA (PLAN & SECTION)		=	DEMO AREA (PLAN)
	=	CRUSHED SURFACE TOP COURSE		=	TOPSOIL/EARTH (SECTION)

ABBREVIATIONS

&	=	AND	E	=	EAST	N	=	NORTH	T	=	UNDERGROUND TELEPHONE
ABAN	=	ABANDONED	EB	=	EASTBOUND	NIC	=	NOT IN CONTRACT	TAN	=	TANGENT
AC	=	ASBESTOS CONCRETE	EG	=	EDGE OF GRAVEL				TBC	=	TOP BACK CURB
ACP	=	ASPHALT CONC. PAVEMENT	EL	=	ELEVATION OR ELBOW	OC	=	ON CENTER	TEMP	=	TEMPORARY
APPROX	=	APPROXIMATE	EP	=	EDGE OF PAVEMENT	OD	=	OUTSIDE DIAMETER	TOB	=	TOP OF BANK, BOLT, BEAM
AVE	=	AVENUE	ESMT	=	EASEMENT	OHP	=	OVERHEAD POWER	TOC	=	TOP OF CURB, CONCRETE
BEG	=	BEGIN	EVC	=	END VERTICAL CURVE	P	=	UNDERGROUND POWER	TOE	=	BOTTOM OF BANK
BK	=	BACK	EVCE	=	END VERTICAL CURVE ELEVATION	PC	=	POINT OF CURVATURE	TOP	=	TOP OF PIPE
BFV	=	BUTTERFLY VALVE	EVCS	=	END VERTICAL CURVE STATION	PCC	=	POINT OF COMPOUND CURVATURE	TOW	=	TOP OF WALL
BLVD	=	BOULEVARD	EXIST	=	EXISTING	PED	=	PEDESTAL OR PEDESTRIAN	TYP	=	TYP
BM	=	BENCHMARK				PI	=	POINT OF INTERSECTION			
BOC	=	BACK OF CURB	FG	=	FINISHED GRADE	P/L	=	PROPERTY LINE	USBR	=	UNITED STATES BUREAU OF RECLAMATION
BOT	=	BOTTOM	FH	=	FIRE HYDRANT	PP	=	POWER POLE	UPRR	=	UNION PACIFIC RAILROAD
BRC	=	BEARING OR BRIDGE	FIN	=	FINISHED	PRC	=	POINT OF REVERSE CURVE			
BVC	=	BEGIN VERTICAL CURVE STATION	FL	=	FLANGE	PSI	=	POUNDS PER SQUARE INCH	VC	=	VERTICAL CURVE
BVCE	=	BEGIN VERTICAL CURVE ELEVATION	FO	=	FIBER OPTIC	PT	=	POINT OF TANGENCY	VERT	=	VERTICAL
BVCS	=	BEGIN VERTICAL CURVE	FOC	=	FACE OF CURB	PVC	=	POLYVINYL CHLORIDE	VPC	=	VERTICAL POINT OF CURVE
			FOG	=	FACE OF GUTTER	PVI	=	POINT OF VERTICAL INTERSECTION	VPI	=	VERTICAL POINT OF INTERSECT
			FT	=	FEET, FOOT	PVIC	=	POINT OF VERTICAL INTERSECTION CURVE	VPT	=	VERTICAL POINT OF TANGENCY
C&G	=	CURB & GUTTER				PVMT	=	PAVEMENT	W	=	WATER, WEST, WIDE, WIRE
CB	=	CATCH BASIN	G	=	UNDERGROUND NATURAL GAS				W/	=	WITH
CDF	=	CONTROL DENSITY FILL	GPM	=	GALLONS PER MINUTE	R	=	RADIUS	WB	=	WESTBOUND
CF	=	CROSS FRAME	GR	=	GRADE	RD	=	ROAD	WSDOT	=	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
CL	=	CENTERLINE, CLASS, CLOSE	GV	=	GATE VALVE	RJ	=	RESTRAINED JOINT	WSSS	=	WASHINGTON STATE STANDARD SPECIFICATIONS
CLR	=	CLEARANCE				RT	=	RIGHT	WWF	=	WELDED WIRE FABRIC
CMP	=	CORRUGATED METAL PIPE	H	=	HIGH, HORIZONTAL	R/W, ROW	=	RIGHT OF WAY	WY	=	WAY
CO	=	CLEAN OUT	HMA	=	HOT MIX ASPHALT						
COM	=	COMMERCIAL	HOR	=	HORIZONTAL	S	=	SOUTH			
CONC	=	CONCRETE				SCH	=	SCHEDULE			
C/COND	=	CONDUIT	IE	=	INVERT ELEVATION	SD	=	STORM DRAIN			
CONST	=	CONSTRUCTION LINE	INV	=	INVERT	SDCB	=	STORM DRAIN CATCH BASIN			
CSBC	=	CRUSHED SURFACE BASE COURSE	IRR	=	IRRIGATION	SEP	=	SEPARATION			
CSTC	=	CRUSHED SURFACE TOP COURSE				SF	=	SQUARE FOOT			
CT	=	COURT				SH, SHDLR	=	SHOULDER			
CTV	=	CABLE TELEVISION	JB	=	JUNCTION BOX	SHT	=	SHEET			
CY	=	CUBIC YARDS	JCT	=	JUNCTION	SI	=	STATION INTERSECT			
						SL	=	UNDERGROUND STREET LIGHTING, SLOPE			
DCVA	=	DOUBLE CHECK VALVE ASSEMBLY	L	=	LENGTH, ANGLE	SQ	=	SQUARE			
DI	=	DUCTILE IRON	LF	=	LINEAR FOOT	SS	=	SANITARY SEWER			
DIA	=	DIAMETER	LN	=	LANE	ST	=	STREET			
DR	=	DRAIN OR DRIVE	LT	=	LEFT	STA	=	STATION			
DWY	=	DRIVEWAY				STND	=	STANDARD			
DWG	=	DRAWING	MAX	=	MAXIMUM	STL	=	STEEL			
			MC	=	MECHANICAL CONTRACTOR OR COUPLING	SW	=	SIDEWALK			
			MH	=	MANHOLE	SY	=	SQUARE YARD			
			MIN	=	MINIMUM						
			MJ	=	MECHANICAL JOINT						
			MON	=	MONUMENT						

GENERAL NOTES

- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, METHODS & SEQUENCES OF CONSTRUCTION INCLUDING THE SAFETY OF ALL WORKERS & THE GENERAL PUBLIC.
- NO PUBLIC WATER VALVES OR HYDRANTS SHALL BE OPENED OR CLOSED (OPERATED) BY ANYONE BUT CITY OF RICHLAND STAFF.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE MOST CURRENT EDITION OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE & MUNICIPAL CONSTRUCTION.
- ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS & HIGHWAYS" (MUTCD).
- THE LOCATIONS OF ALL KNOWN EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. LOCATIONS ARE BASED ON INFORMATION OBTAINED FROM THE SITE, INFORMATION OF RECORD DRAWINGS & INFORMATION PROVIDED TO ENGINEER. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
- THE CONTRACTOR SHALL BE REQUIRED TO CALL 811 OR 1-800-424-5555 (WEBSITE: WWW.WASHINGTON811.COM) TWO BUSINESS DAYS PRIOR TO COMMENCING ANY EXCAVATION ACTIVITIES TO DETERMINE FIELD LOCATIONS OF ALL UNDERGROUND UTILITIES, AS REQUIRED BY LAW.
- ANY CHANGES OR MODIFICATIONS TO THE PROJECT PLANS SHALL FIRST BE APPROVED BY THE CITY ENGINEER OR HIS/HER REPRESENTATIVE.
- METHODS OF DUST & EROSION CONTROL PROPOSED TO BE USED BY THE CONTRACTOR SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL TAKE ANY NECESSARY MEANS TO KEEP FROM TRACKING MUD & DEBRIS OUT ONTO THE EXISTING STREETS, & SHALL ALSO KEEP MUD & ANY OTHER DEBRIS FROM HIS SITE FROM ENTERING THE EXISTING PUBLIC STORM DRAINAGE SYSTEM.
- CONTRACTOR SHALL PROVIDE DETAILED "AS-BUILT" RECORDS SHOWING LOCATION, DEPTH, SIZE & MATERIAL TYPE OF ALL PIPING INSTALLED OR ENCOUNTERED DURING CONSTRUCTION OF IMPROVEMENTS.
- CONTRACTOR SHALL COORDINATE SCHEDULED WORK WITH ACTIVITIES TO BE PERFORMED BY UTILITIES & WORK SHOWN TO BE COMPLETED BY "CITY FORCES".
- THE FACE OF CURB SHALL BE STAMPED AT ALL UTILITY CROSSINGS, MAIN LINES, & SERVICE LINES AS FOLLOWS:
"S" – SANITARY SEWER
"W" – WATER
"I" – IRRIGATION
"C" – CONDUITS
"SD" – STORM DRAIN

GENERAL SYMBOLOGY

	##	CURB RADII DATA (PLAN VIEW)
	##	CONSTRUCTION NOTES
	X	DETAIL NUMBER
	X	SHEET LOCATION
		ARROW INDICATES DIRECTION OF PLAN VIEW NORTH



Know what's below.
Call before you dig.

ABBREVIATION NOTES

- THESE ABBREVIATIONS APPLY TO THE ENTIRE SET OF CONTRACT DRAWINGS.
- LISTING OF ABBREVIATIONS DOES NOT IMPLY ALL ARE USED IN THE CONTRACT DRAWING
- ABBREVIATIONS SHOWN ON THIS SHEET INCLUDE VARIATIONS OF THE WORD. FOR EXAMPLE, "MOD" MAY MEAN MODIFY OR MODIFICATION; "INC" MAY MEAN INCLUDED OR INCLUDING; "REINF" MAY MEAN EITHER REINFORCE OR REINFORCING.
- SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.

SURVEY NOTES

- TOPOGRAPHIC SURVEY PREPARED BY CITY OF RICHLAND
- VERTICAL DATUM: NAVD88
HORIZONTAL DATUM: SGS84
BENCHMARKS ARE CONTROL MONUMENTS: SEE PLAN SHEETS



CITY OF RICHLAND

PUBLIC WORKS DEPARTMENT

Columbia Park Trail East Improvements

(Fowler St. to Reach Museum Drv.)

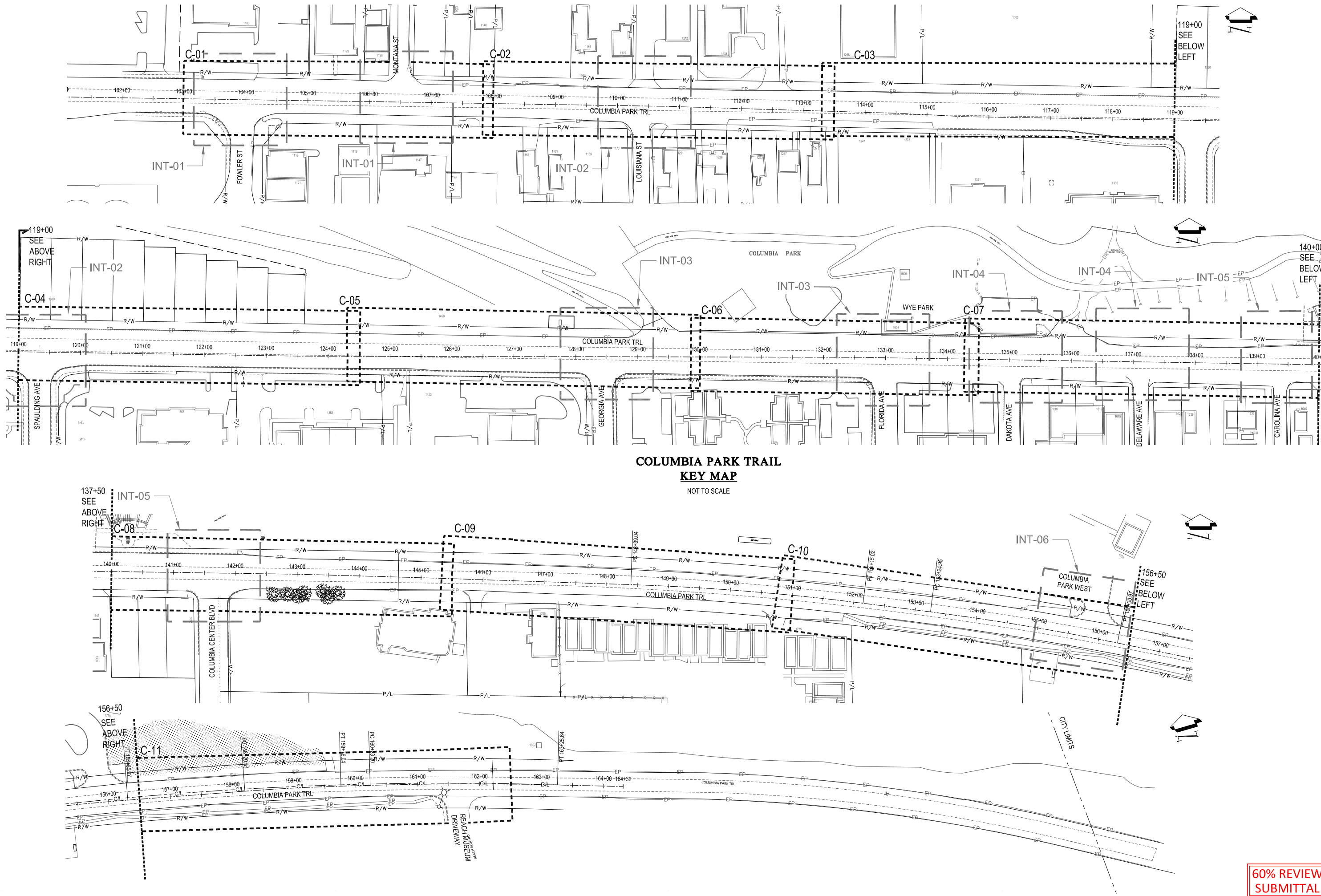
Legend, Abbreviations and General Notes

ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG:	columbia park trl_cover
CONTRACT NO:	20-0029
DATE:	02-21-2020
DRAWN BY:	LD
DESIGN BY:	SAW
RECORD DWG:	##-###

SHEET
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OF

60% REVIEW
SUBMITTAL



COLUMBIA PARK TRAIL
KEY MAP
NOT TO SCALE



CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

Key map index
REGION NO. STATE FEDERAL AID PROJECT NUMBER
TO WA STIPUL-TAP-3504(002)

03 OF 03
SHEET

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ONE INCH
AT FULL SIZE, IF NOT ONE INCH,
SCALE ACCORDINGLY
CAD DWG:
columbia park trl_cover
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ##-###



Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Dwy.)

60% REVIEW
SUBMITTAL

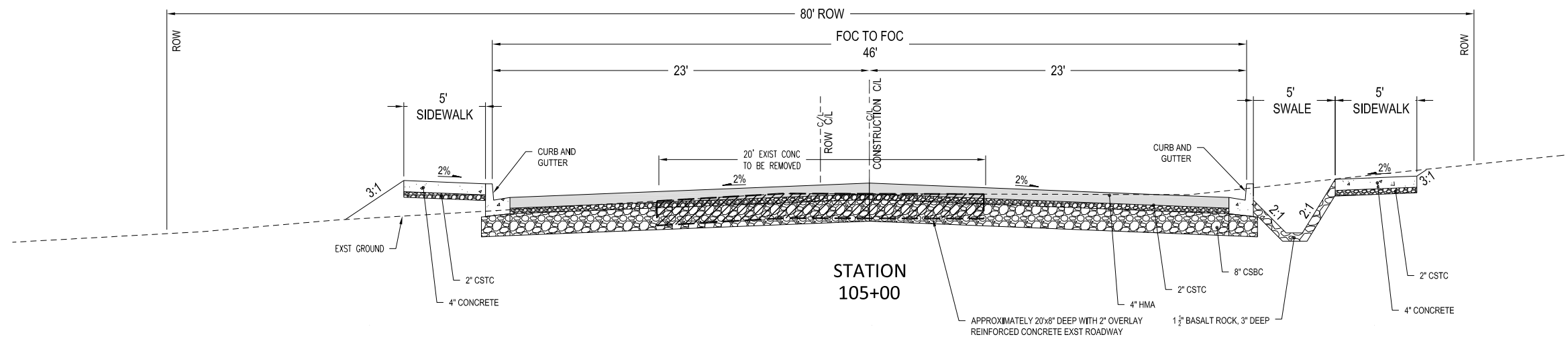
REGION NO.	STATE	FEDERAL AID PROJECT NUMBER
10	WA	X

| → ONE INCH ← |

 AT FULL SIZE, IF NOT ONE INCH,
 SCALE ACCORDINGLY

AD DWG: Columbia park trl_sections CONTRACT NO: SB ##-### DATE: 2-20-20 DRAWN BY: LD DESIGN BY: SAW RECORD DWG: ##-### SHEET

04 OF OF



HMA CORE INFORMATION (SEE C SHEET FOR LOCATIONS)											
SAMPLE NUMBER	1 	2 	3 	4 	5 	6 	7 	8 	9 	10 	11 
STATION	106+10.00	109+60.00	113+10.00	116+60.00	120+10.00	123+60.00	127+10.00	130+60.00	134+10.00	137+59.00	141+09.00
OFFSET	7' RT	0	18' LT	0	15' RT	0	13' LT	0	25' RT	0	18' LT
SAMPLE DATE	10-05-19	10-05-19	10-12-19	10-05-19	10-05-19	10-05-19	10-12-19	10-05-19	10-12-19	10-12-19	10-12-19
HMA (INCHES)	8-1/2	1-3/8	3	1-3/4	6-1/2	1-3/4	4	2	3	2	3
HMA LAYERS	5	1	3	1	3	1	3	1	2	2	3
CONCRETE THICKNESS	N/A	7-1/8	N/A	6-3/4	N/A	6-3/4	N/A	6-3/4	N/A	6 1/4	N/A
REBAR DEPTH	N/A	4	-	N/A	N/A	4-1/2	-	N/A	-	N/A	-
CRUSHED AGGREGATE	-	-	2" CSTC	-	-	-	2" CSTC	-	2" CSTC	-	2" CSTC
SUBGRADE SOIL	COBBLES	COBBLES	COBBLES	COBBLES	CEMENT OR CLAY	COBBLES	COBBLES	COBBLES	COBBLES	COBBLES	COBBLES

SAMPLE NUMBER	12 	13 	14 	15 	16 	17 	18 	19 	20 	21 
STATION	144+60.00	148+10.00	151+61.00	155+10.00	158+60.00	162+08.00	165+58.00	169+09.00	172+57.00	136+00.00
OFFSET	6.5' LT	16.7' LT	5.3' RT	5' LT	14.8' LT	0	14.7' RT	4.7' RT	16' LT	23' LT
SAMPLE DATE	10-12-19	10-12-19	10-12-19	10-12-19	10-12-19	10-12-19	10-12-19	10-12-19	10-12-19	10-12-19
HMA (INCHES)	5	3 1/4	2	2 3/8	3 1/2	3/4	1 1/4	N/A	2	3 3/4
HMA LAYERS	3	3	2	2	2	1	2	N/A	2	3
CONCRETE THICKNESS	3 1/2	N/A	7	7 1/2	N/A	6 3/4	N/A	6 3/4	N/A	N/A
REBAR DEPTH	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CRUSHED AGGREGATE	CSTC PATCH	2" CSTC	N/A	N/A	2" CSTC	N/A	2" CSTC	N/A	2" CSTC	2" CSTC
SUBGRADE SOIL	COBBLES	COBBLES	COBBLES	COBBLES	COBBLES	COBBLES	COBBLES	COBBLES	COBBLES	COBBLES

*INDICATES INDIVIDUAL LIFTS OF HMA THAT DISINTEGRATED DURING SAMPLING



CITY OF RICHLAND PUBLIC WORKS DEPARTMENT	REVISION		NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements <i>(Fowler St. to Reach Museum Drv.)</i>	Corings information	REGION NO.	STATE	FEDERAL AID PROJECT NUMBER

ONE INCH

AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG:
columbia park trl_cover

CONTRACT NO: 20-0029

DATE: 02-21-2020

DRAWN BY: LD

DESIGN BY: SAW

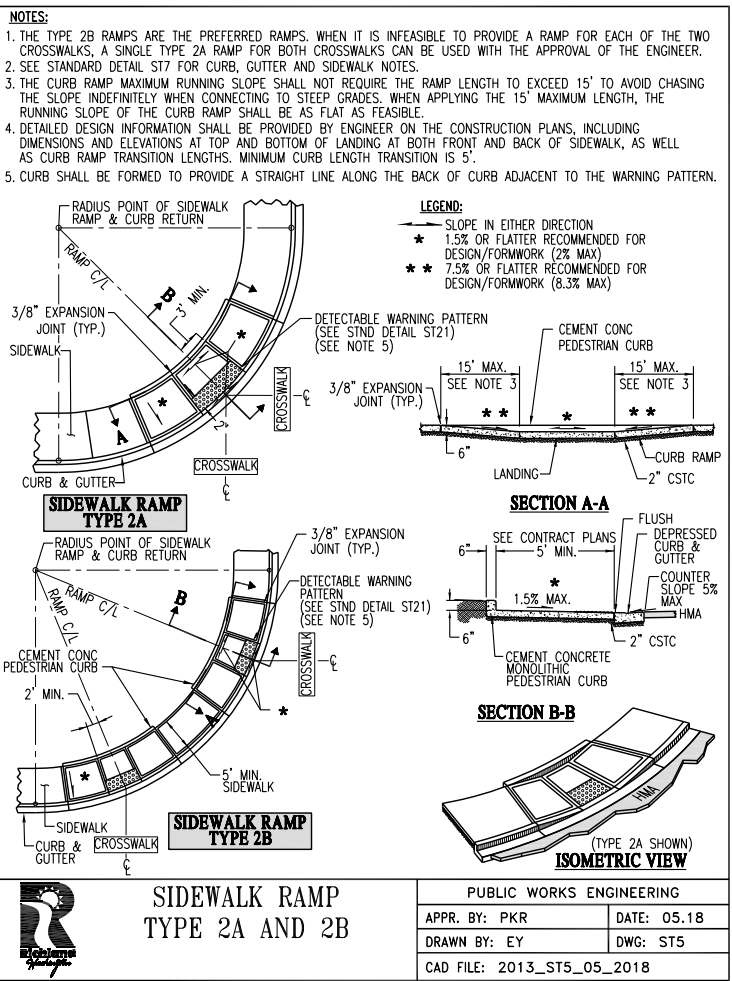
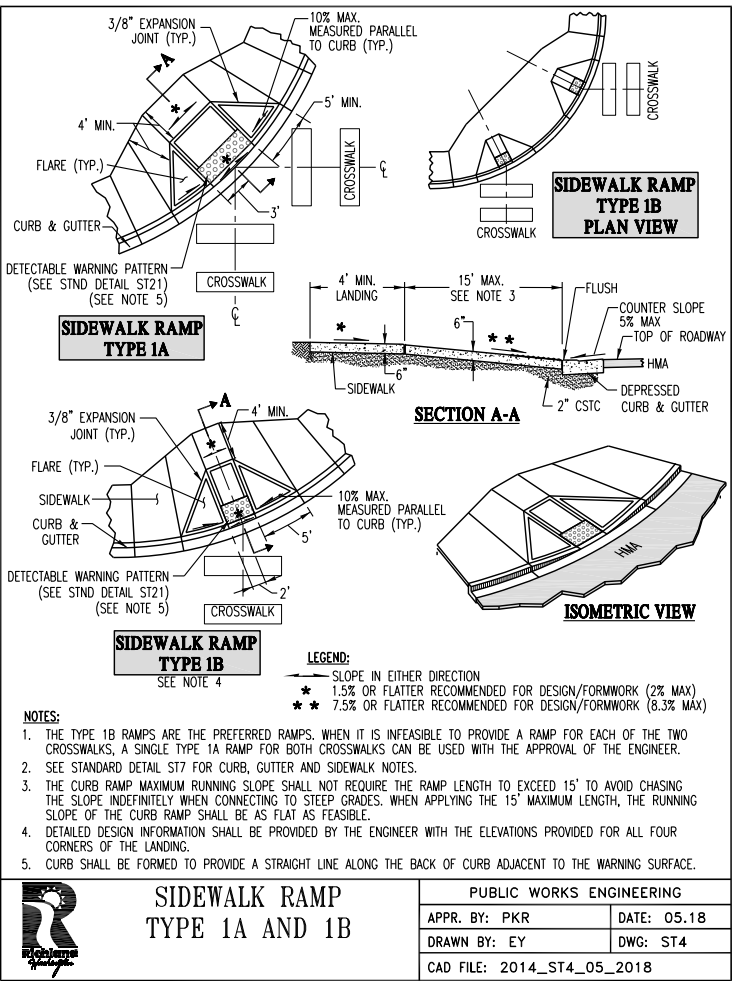
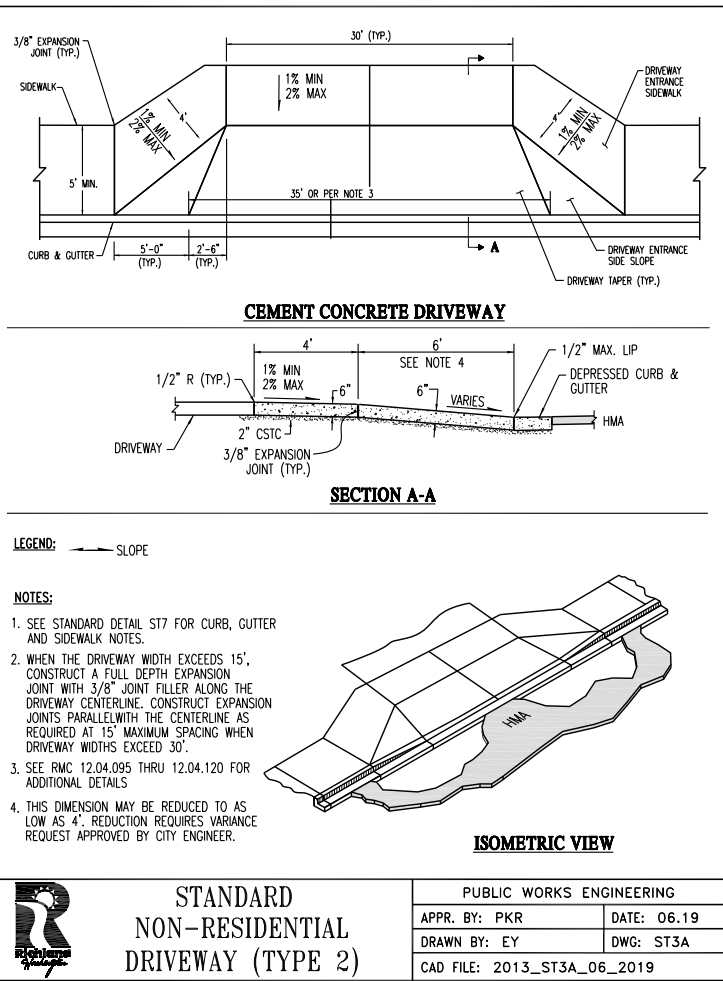
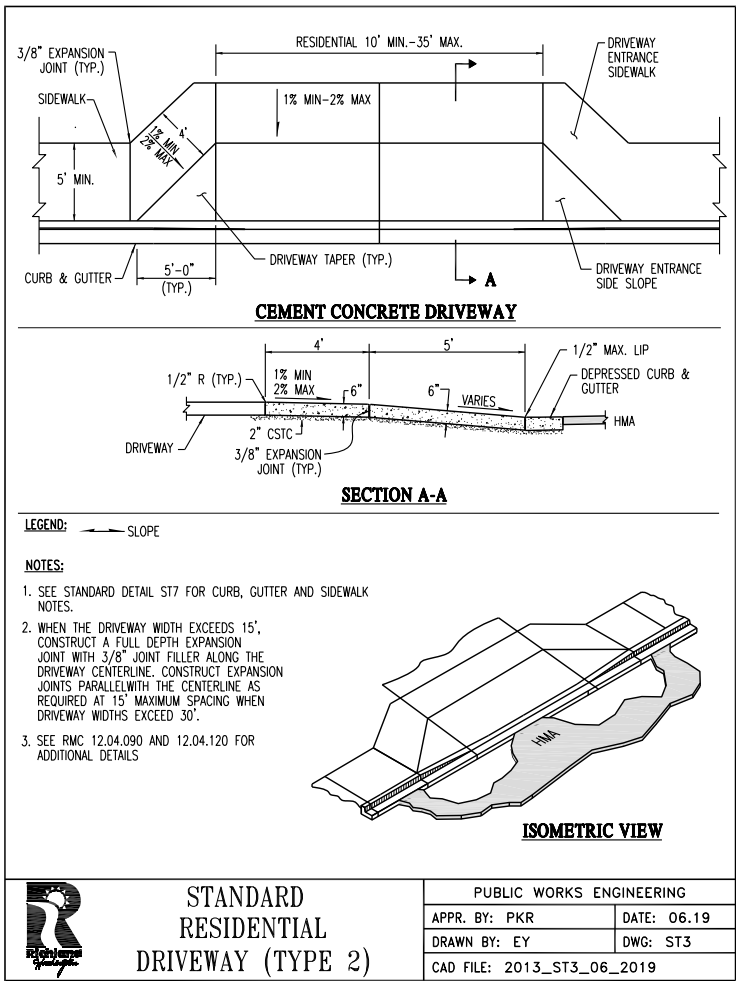
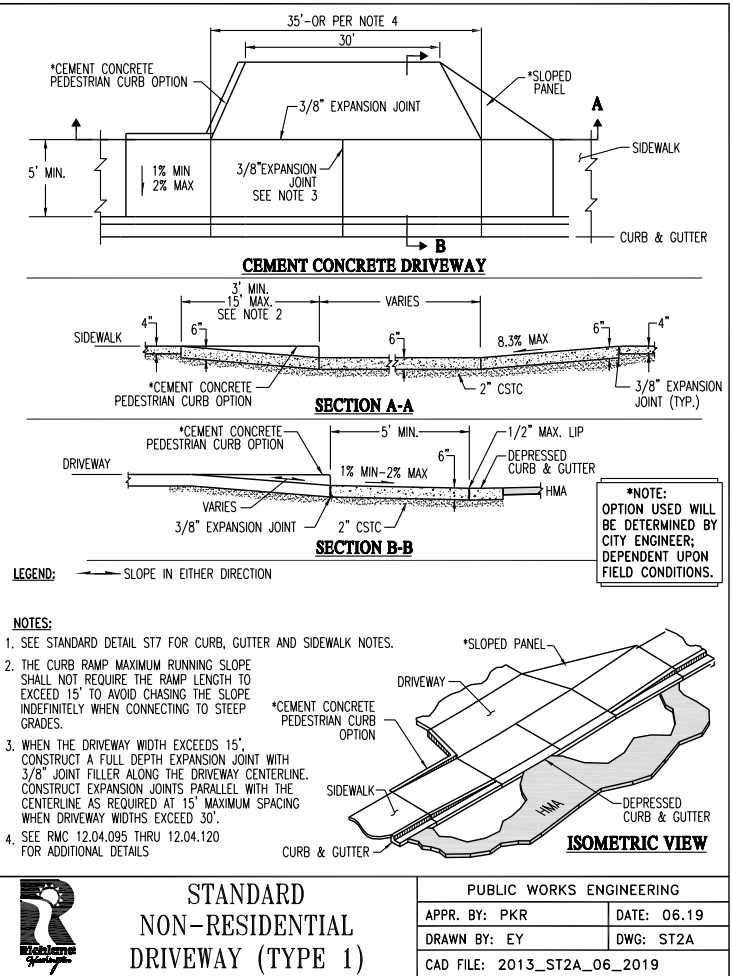
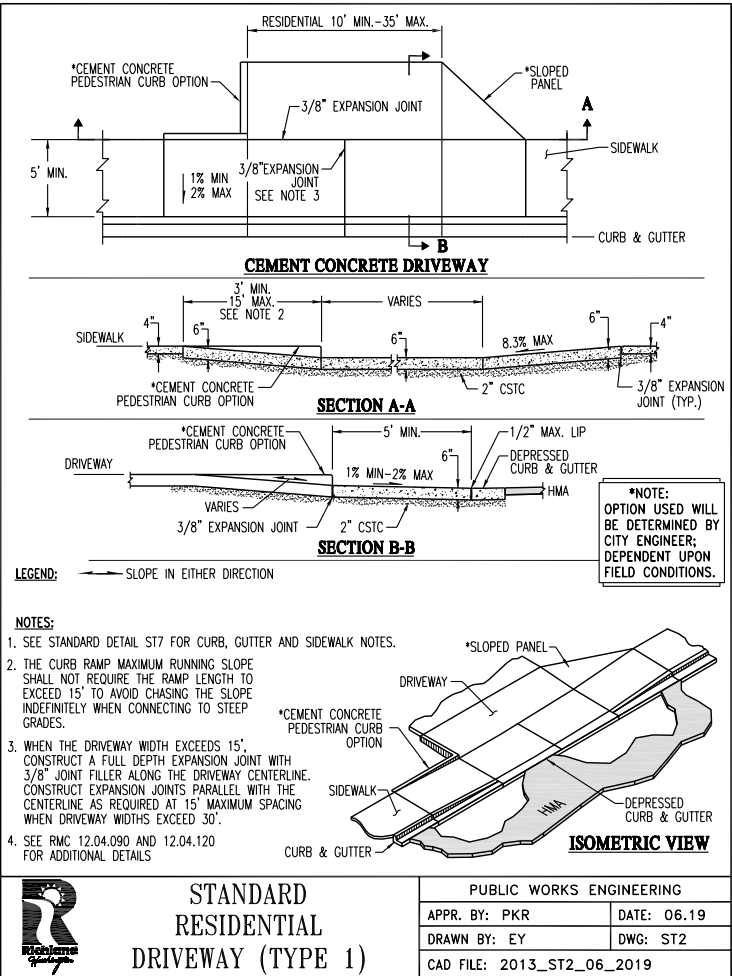
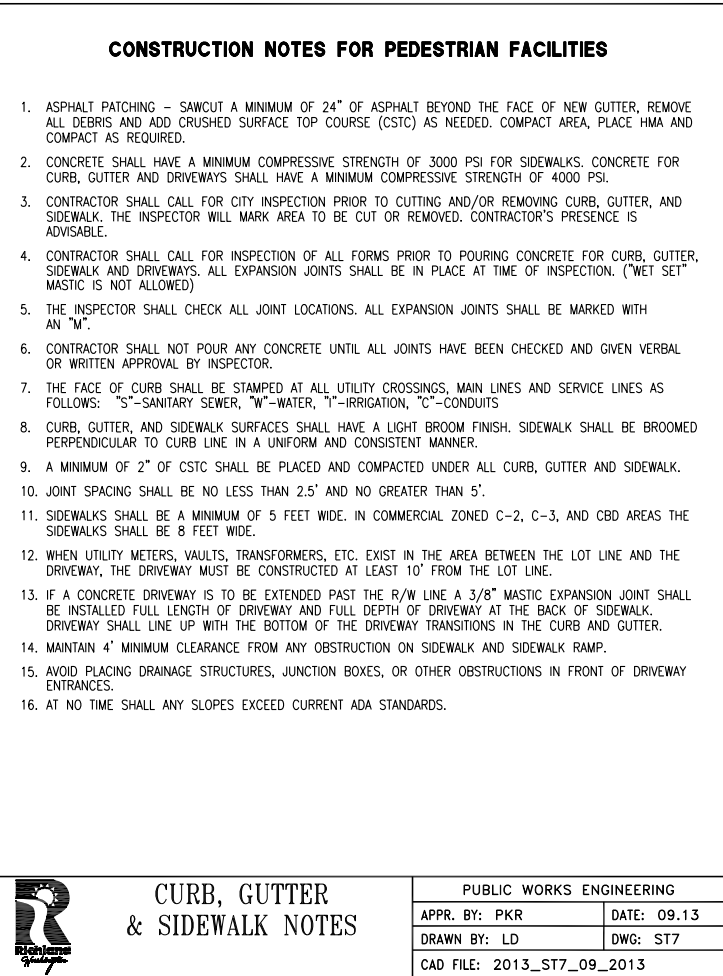
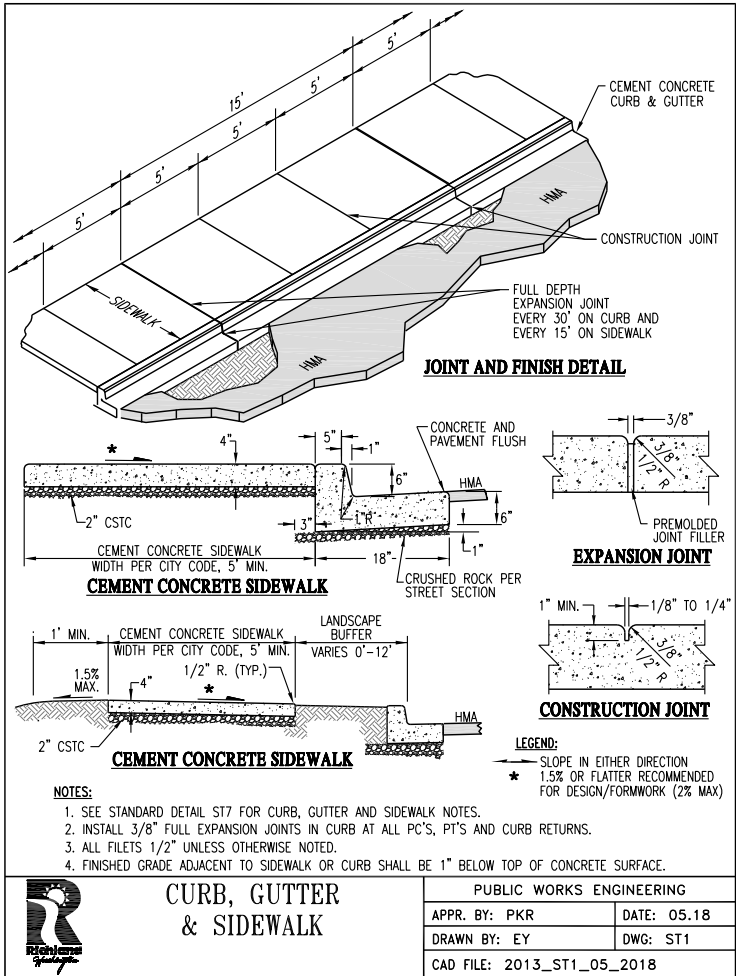
RECORD DWG: ##-###

SHEET

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OF

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REVISION

NO.	DESCRIPTION	BY	DATE

CITY OF RICHLAND

PUBLIC WORKS DEPARTMENT

60% REVIEW SUBMITTAL

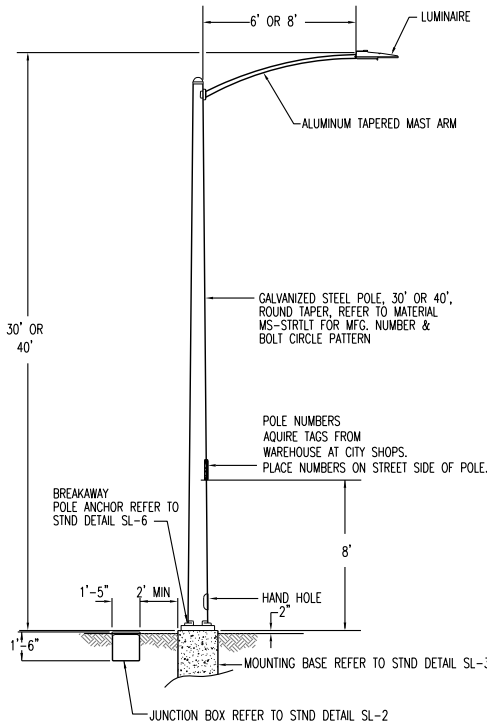
Construction Details

REGION NO. STATE FEDERAL AID PROJECT NUMBER TO WA STIPUL-TAP-3504(002)

AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG: columbia park trl cover
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ###-###
SHEET

06 OF **06**

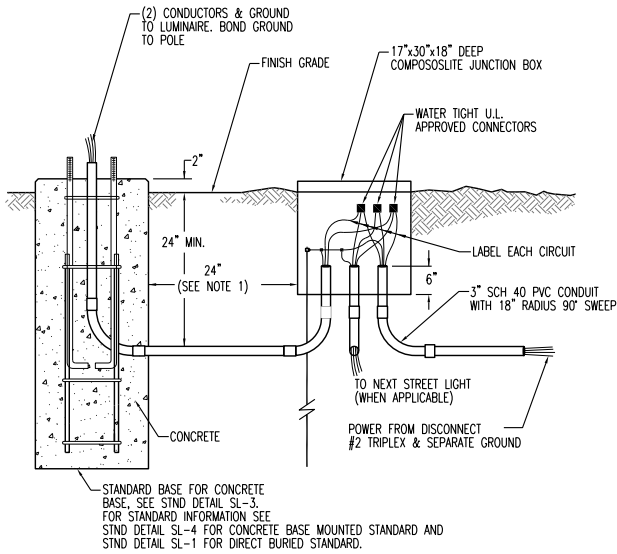


SEE TECHNICAL SPECIFICATION TS-STRLTL FOR DESIGN INFORMATION
SEE MATERIAL SPECIFICATION MS-STRLTL FOR MANUFACTURING AND MATERIALS INFORMATION



STREET LIGHTING STEEL POLE 30/40FT CONCRETE BASE

PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 11.15
DRAWN BY: LD	DWG: SL-4
CAD FILE: 2015_SL4_11_2015	



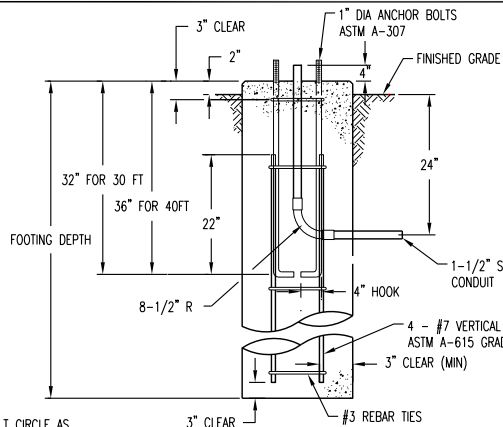
NOTES:

- SET JUNCTION BOX IN THE PROPER LOCATION SUCH THAT IT IS AS LITTLE OVER 24" FROM STREET LIGHT FOUNDATION AS POSSIBLE. SOIL UNDER BOX SHALL BE RESTORED TO 95% COMPACTION. SET BOX AT AN ELEVATION SUCH THAT THE TOP OF THE BOX COVER IS APPROXIMATELY 2" ABOVE FINISHED GRADE UNLESS BOX IS TO BE SURROUNDED BY ASPHALT OR CONCRETE. SET BOX LEVEL WITH AND PARALLEL TO STREET.
- SWEEP CONDUIT UP INTO JUNCTION BOX A MINIMUM OF 6". INSTALL BELL ENDS OR BUSHINGS ON ALL EXPOSED CONDUIT ENDS IN JUNCTION BOX.
- ALLOW SUFFICIENT SLACK IN CONDUCTORS SUCH THAT SPLICES MAY BE REMOVED A MINIMUM OF 36" FROM SPLICE BOX.
- JUNCTION BOXES SHALL BE COMPOSOLITE AS MANUFACTURED BY QUAZITE CORPORATION OR APPROVED EQUAL. BOXES SHALL BE CONCRETE GRAY COLOR IN APPEARANCE. COVER SHALL UTILIZE A PENTA-HEAD BOLD TO SECURE IT TO BOX. THE COVER SHALL HAVE THE LOGO "ELECTRICAL" PERMANENTLY MARKED ON IT.



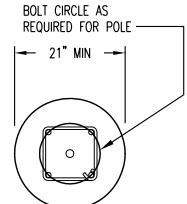
STREET LIGHTING JUNCTION BOX & MOUNTING BASE

PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 11.15
DRAWN BY: LD	DWG: SL-2
CAD FILE: 2015_SL2_11_2015	



MOUNTING BASE DETAIL

NOTE: CONCRETE STRENGTH = 4000 PSI CONCRETE CLASS 4000P.
CONCRETE STRENGTH = 2400 PSI PRIOR TO SETTING POLE.



MOUNTING BASE TOP VIEW

POLE LENGTH (FEET)	MINIMUM FOOTING DEPTH IN FEET SEE SOIL TABLE		
	A	B	C
30	5'0"	6'6"	8'0"
40	5'6"	7'0"	8'6"

NOTE:

FORMING MATERIALS (SONOTUBE) SHALL BE REMOVED FROM THE TOP OF THE FOUNDATION TO SIX INCHES BELOW FINISHED GRADE AFTER CONCRETE HAS HAD A CHANCE TO SET UP.

SOIL BELOW MOUNTING BASE TO BE UNDISTURBED.

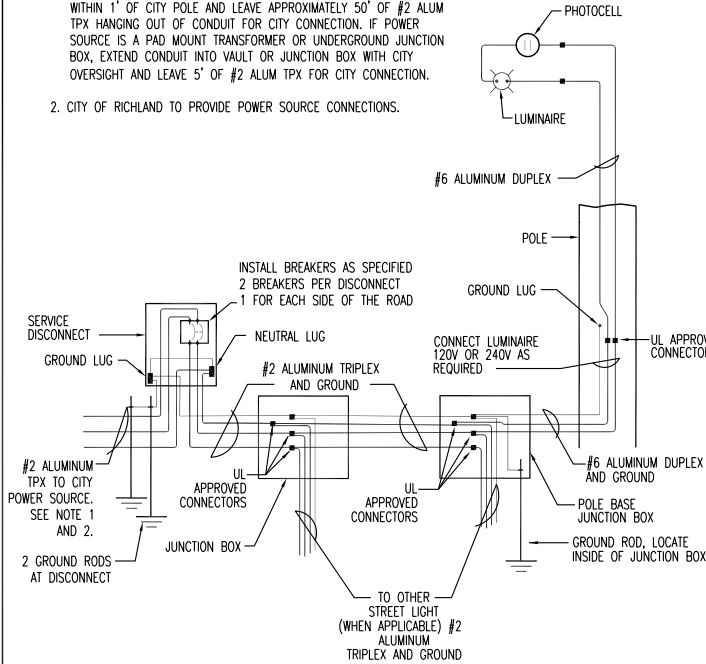


STREET LIGHTING MOUNTING BASE DETAILS CONCRETE SUPPORT

PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 11.15
DRAWN BY: LD	DWG: SL-3
CAD FILE: 2015_SL3_11_2015	

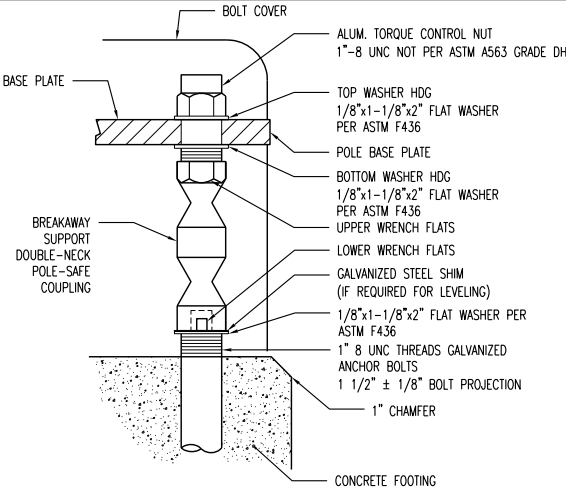
NOTES:

- IF POWER SOURCE IS OVERHEAD POWER LINE EXTEND CONDUIT TO WITHIN 1' OF CITY POLE AND LEAVE APPROXIMATELY 50' OF #2 ALUM TYP HANGING OUT OF CONDUIT FOR CITY CONNECTION. IF POWER SOURCE IS A PAD MOUNT TRANSFORMER OR UNDERGROUND JUNCTION BOX, EXTEND CONDUIT INTO VAULT OR JUNCTION BOX WITH CITY OVERSIGHT AND LEAVE 5' OF #2 ALUM TYP FOR CITY CONNECTION.
- CITY OF RICHLAND TO PROVIDE POWER SOURCE CONNECTIONS.

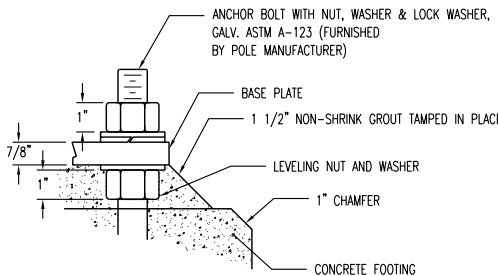


STREET LIGHTING WIRING DIAGRAM

PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 07.17
DRAWN BY: LD	DWG: SL-5
CAD FILE: 2015_SL5_07_2017	



BREAKAWAY POLE ANCHOR DETAIL

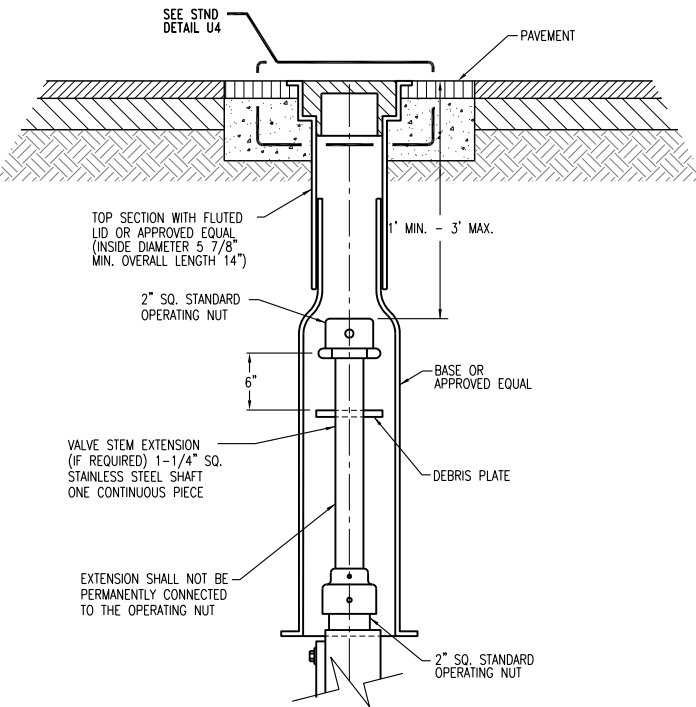


NON-BREAKAWAY ANCHOR DETAIL



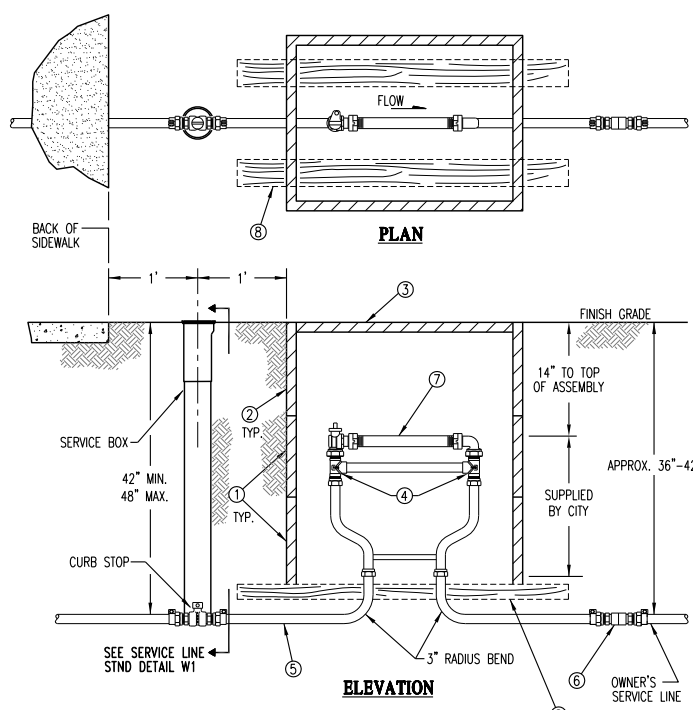
STREET LIGHTING POLE ANCHOR CONCRETE SUPPORT

PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 07.17
DRAWN BY: LD	DWG: SL-6
CAD FILE: 2015_SL6_07_2017	



WATER VALVE BOX

PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 12.2010
DRAWN BY: SC NYBY	DWG: W9
CAD FILE: 2012_W9_12_2010	



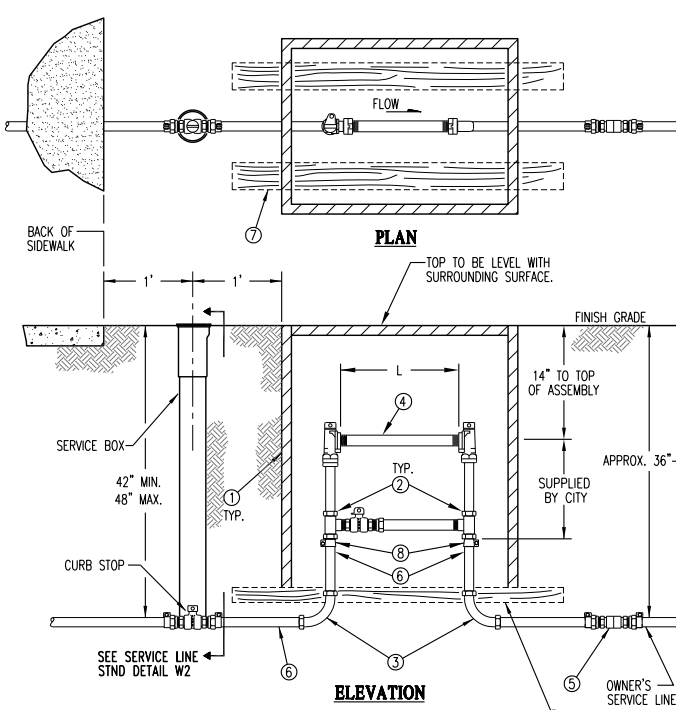
METER ASSEMBLY MATERIALS *SUPPLIED BY CITY

- 2 EA. METER BOX, 12", MIDDLE SECTION,
- 1 EA. METER BOX, 12", TOP SECTION,
- 1 EA. METER BOX COVER, W/CAST IRON LID, TOP OF METER BOX TO BE LEVEL WITH SURROUNDING SURFACE.
- 1" METER SETTER
- 5' TUBING, COPPER, 1" TYPE K, SOFT-ROLLED.
- 1" COUPLING
- 1" METER JUMPER
- 2 EA. PRESSURE TREATED 2" x 4" x 4' LONG.



WATER METER ASSEMBLY FOR 3/4" & 1" METERS

PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 09.13
DRAWN BY: LD	DWG: W3
CAD FILE: 2013_W3_09_2013	



METER ASSEMBLY MATERIALS *SUPPLIED BY CITY

- METER BOX (CONCRETE) (1-TOP SECTION, 2-MIDDLE SECTIONS & 1-LID).
- 2" METER SETTER (WITH VERTICAL CONNECTION TEES).
- 2" x 90' COMPRESSION ELL.
4. 2" GALV. STEEL METER JUMPER
- 2" COUPLING.
- 2" TYPE "L" COPPER TUBING.
- 2 EA. PRESSURE TREATED 2" x 4" x 4' LONG.
- COUPLING.



WATER METER ASSEMBLY FOR 2" METERS

PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 09.13
DRAWN BY: LD	DWG: W4
CAD FILE: 2013_W4_09_2013	



CITY OF RICHLAND

PUBLIC WORKS DEPARTMENT

REVISION

NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements (Fowler St. to Reach Museum Drv.)

Construction Details

REGION NO.	STATE	FEDERAL AID PROJECT NUMBER	TO	WA	STIPUL-TAP-3504(002)

ONE INCH

AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

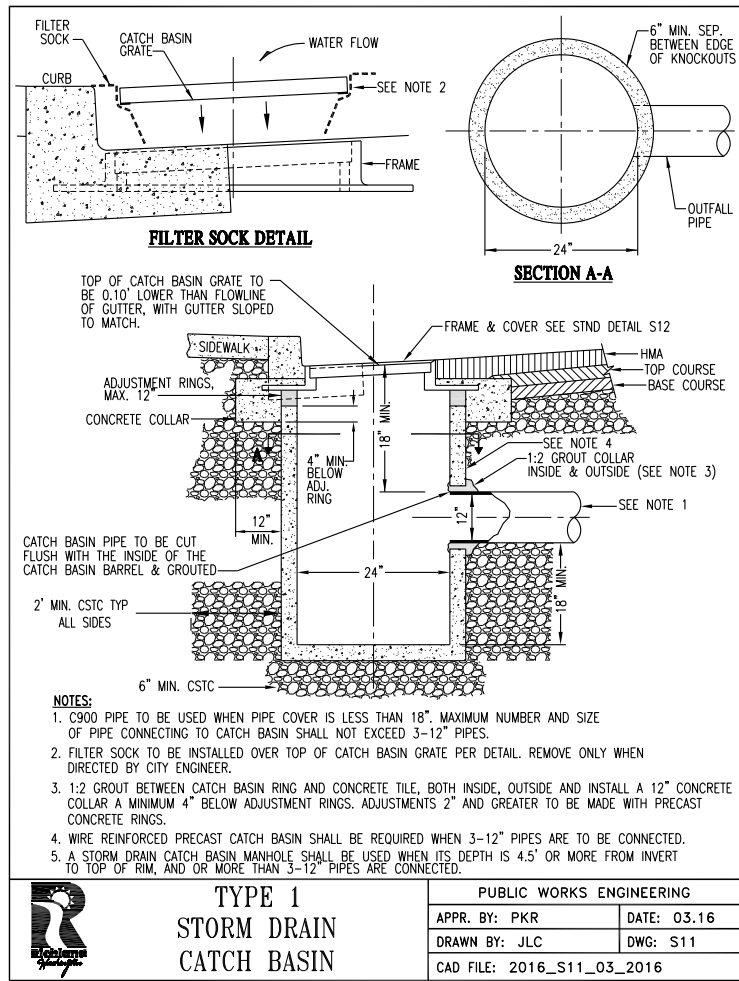
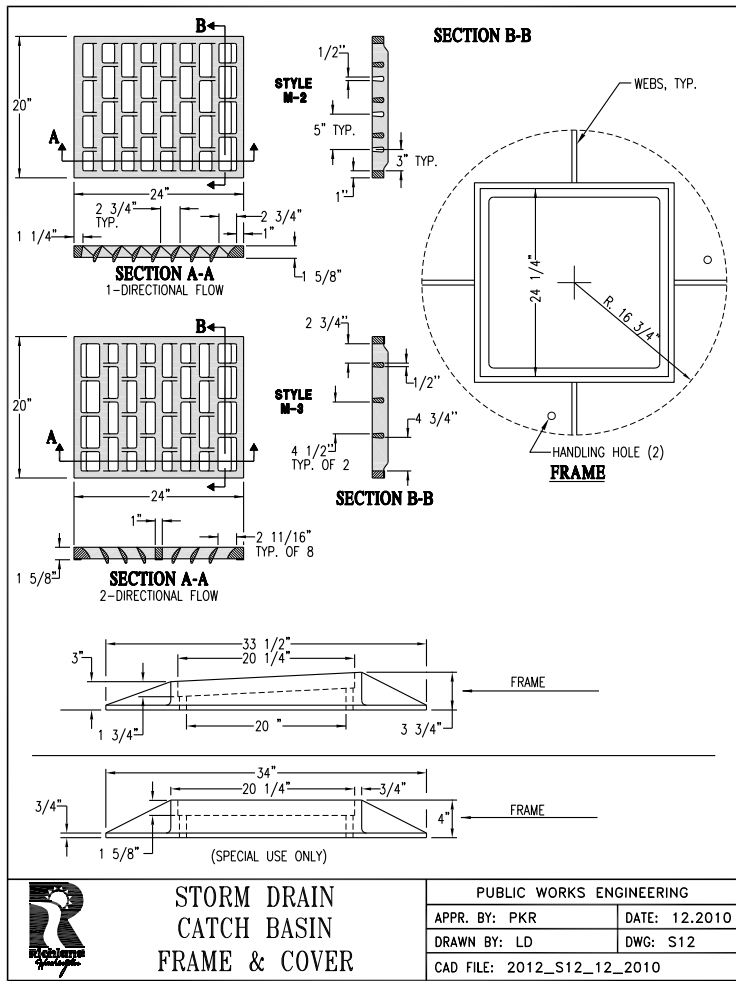
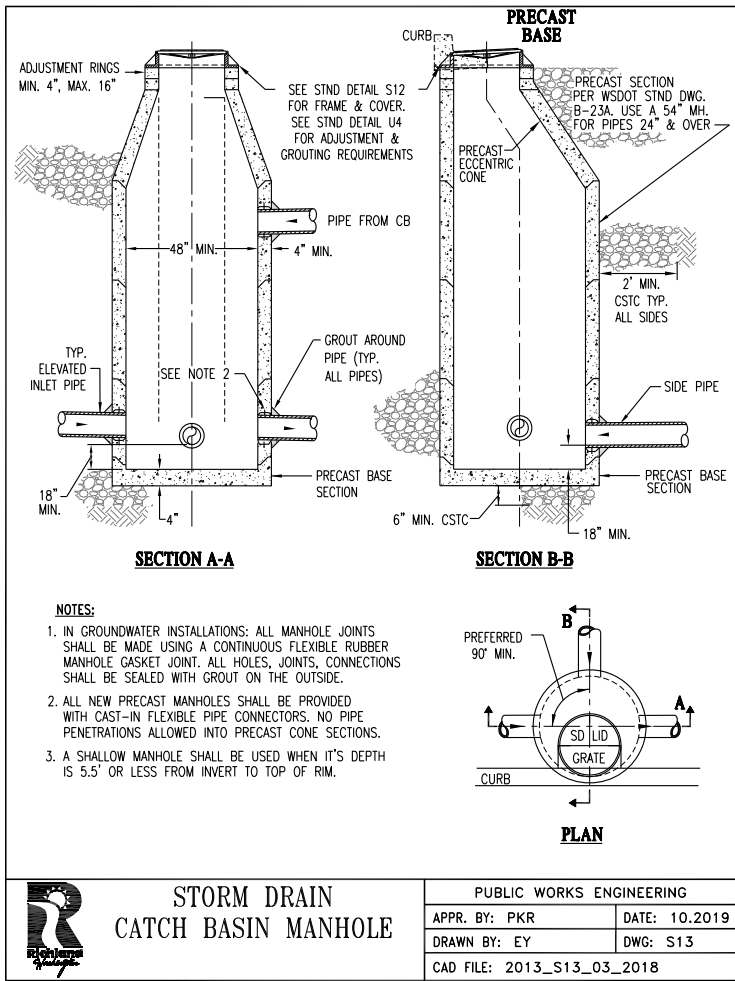
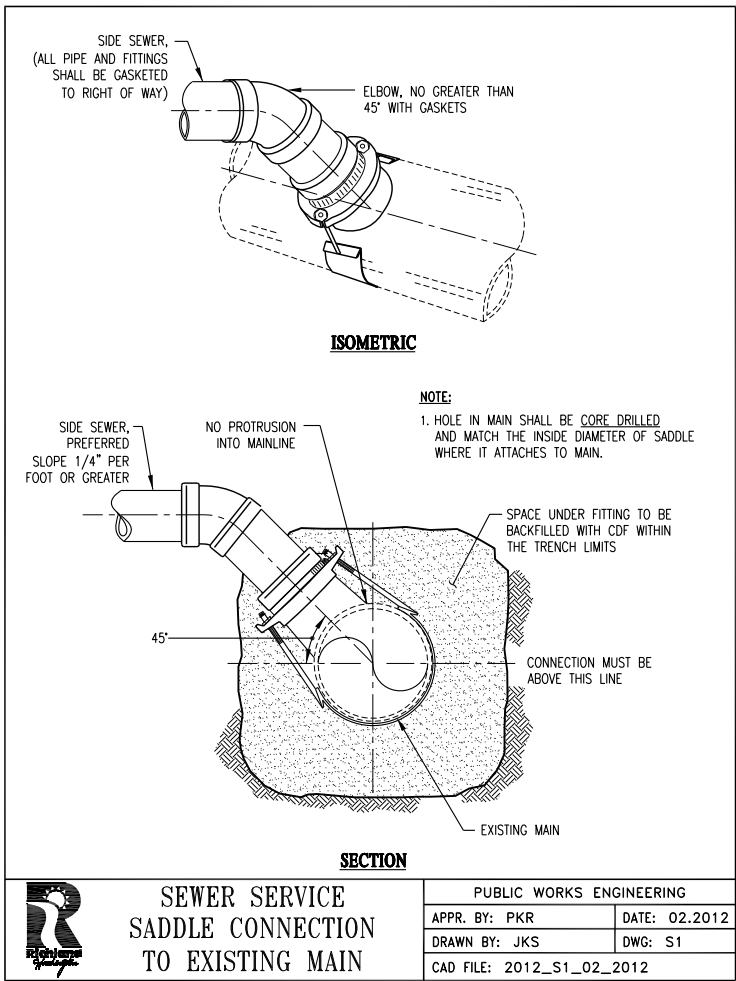
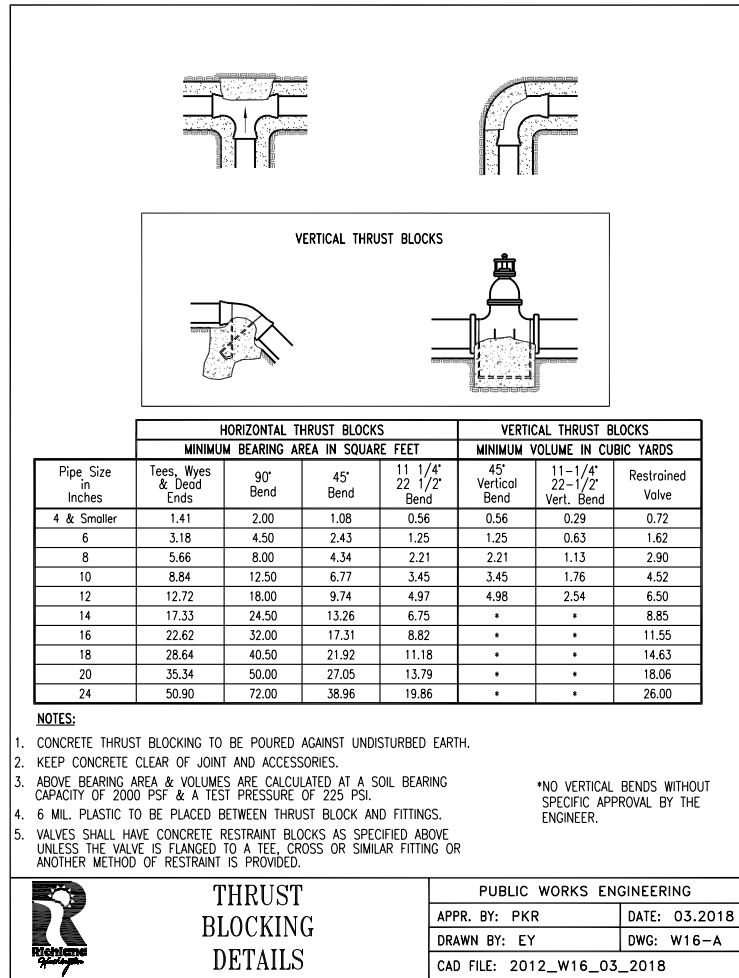
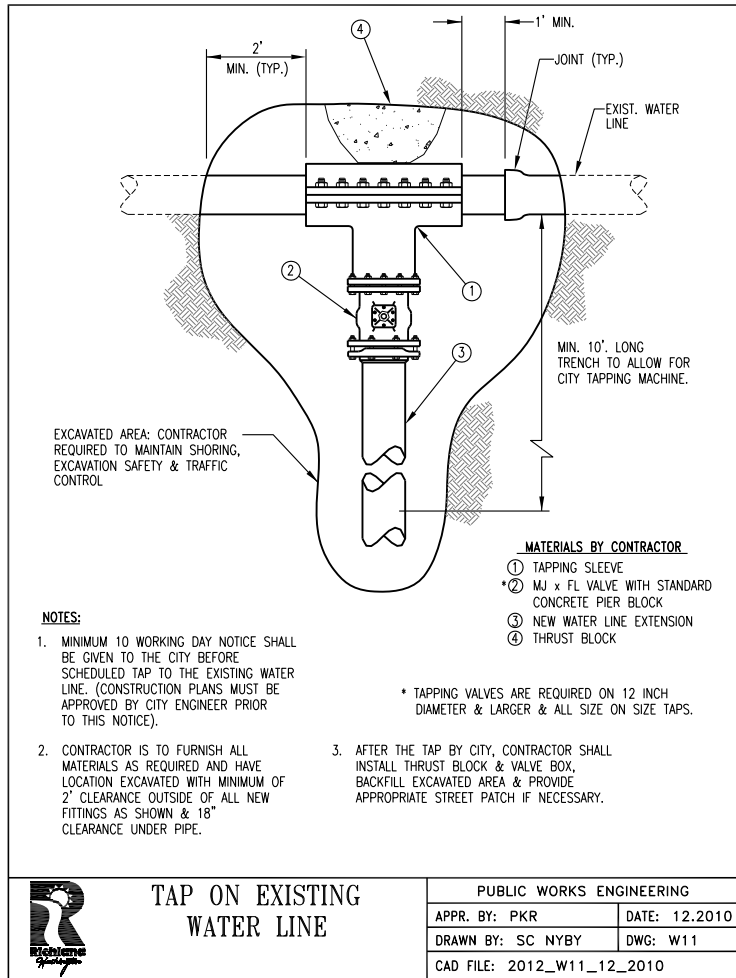
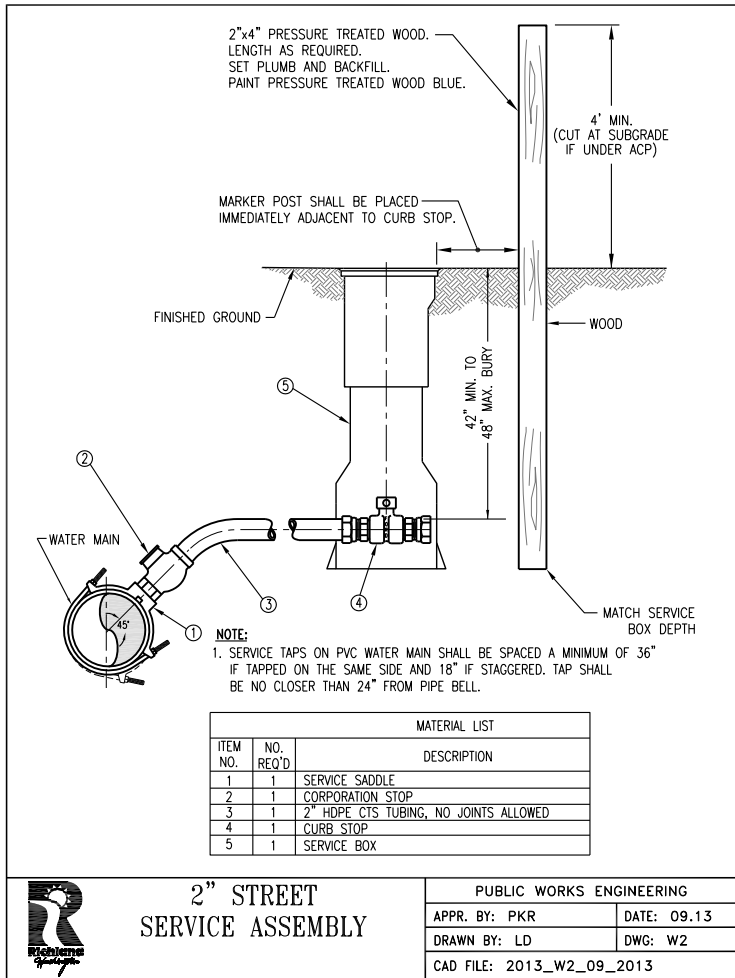
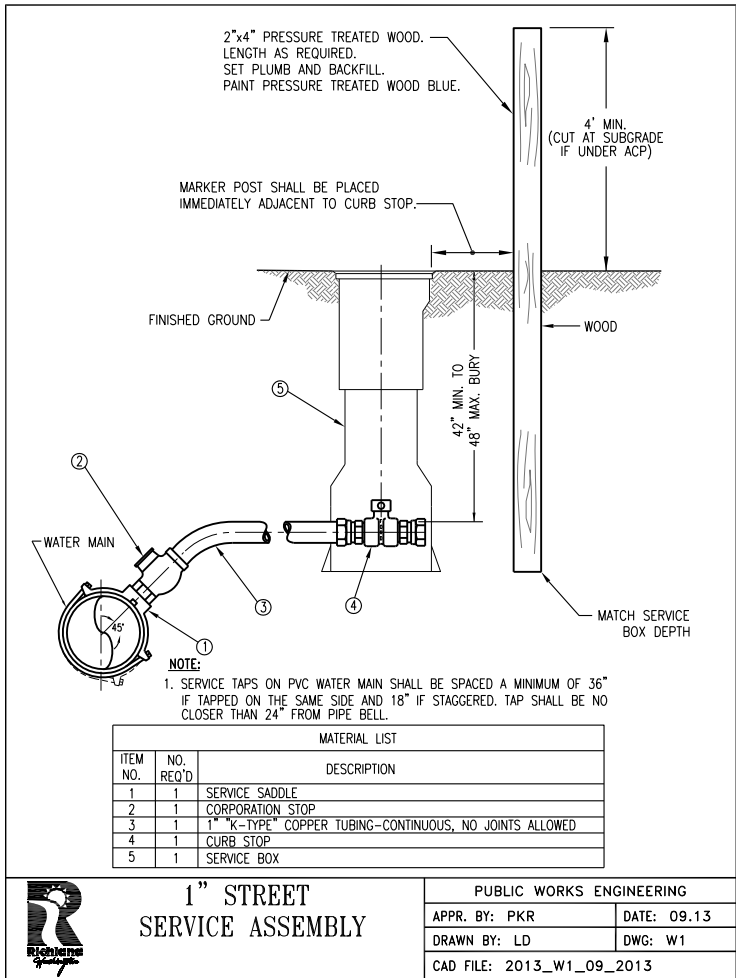
CAD DWG: columbia park trl-cover
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ###-###
SHEET

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CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

REVISION

NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

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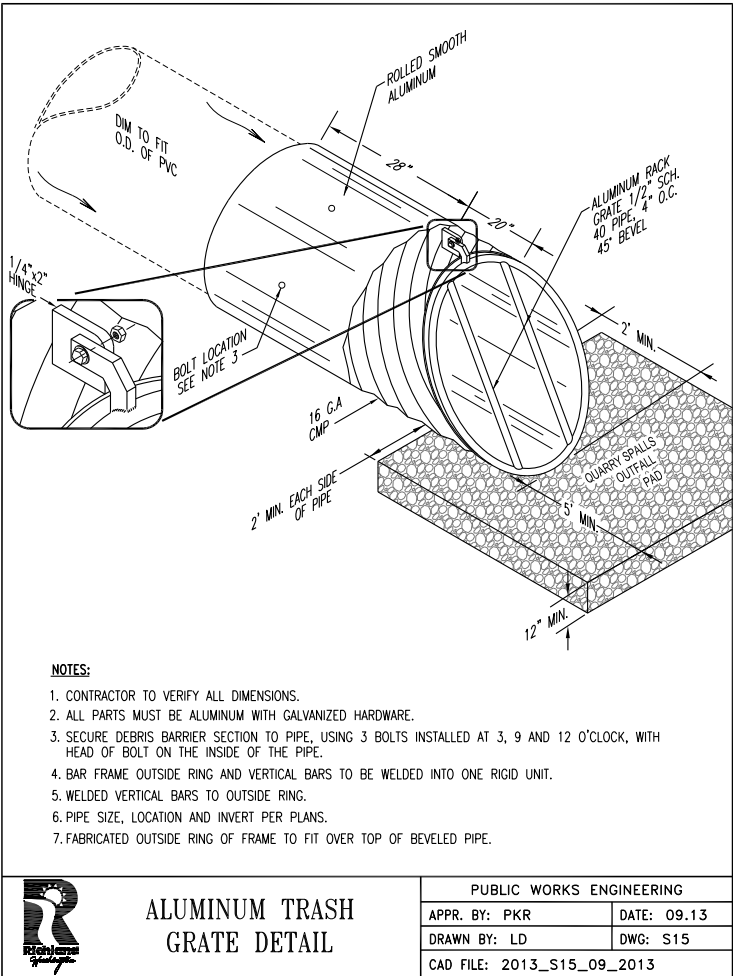
Construction Details

REGION NO.	STATE	FEDERAL AID PROJECT NUMBER

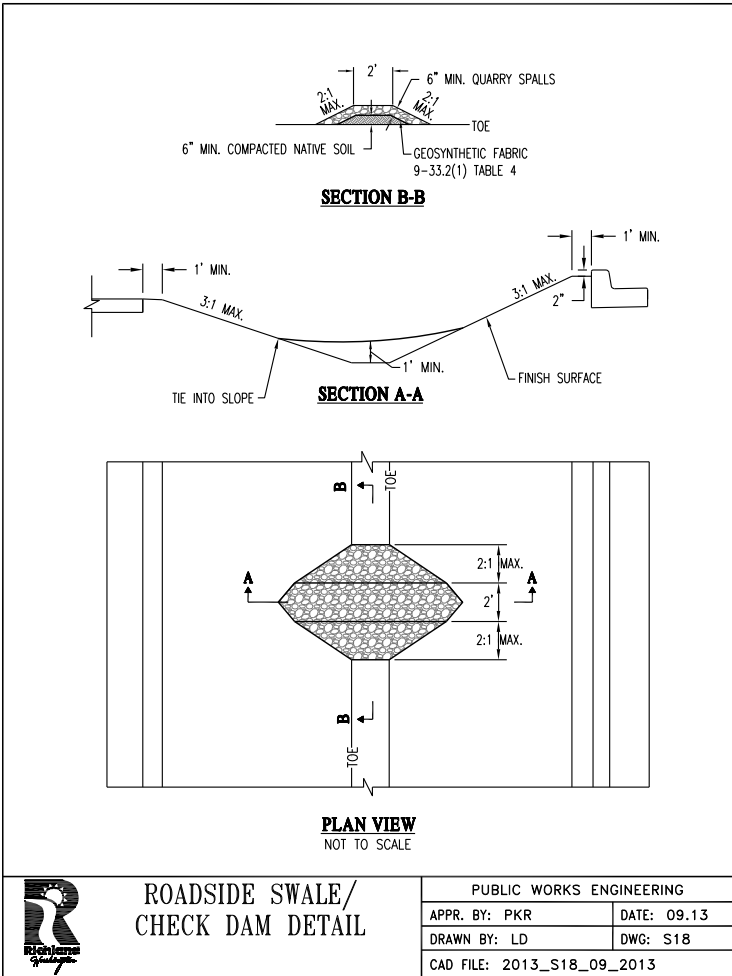
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG:
columbia park trl cover
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ###-###
SHEET

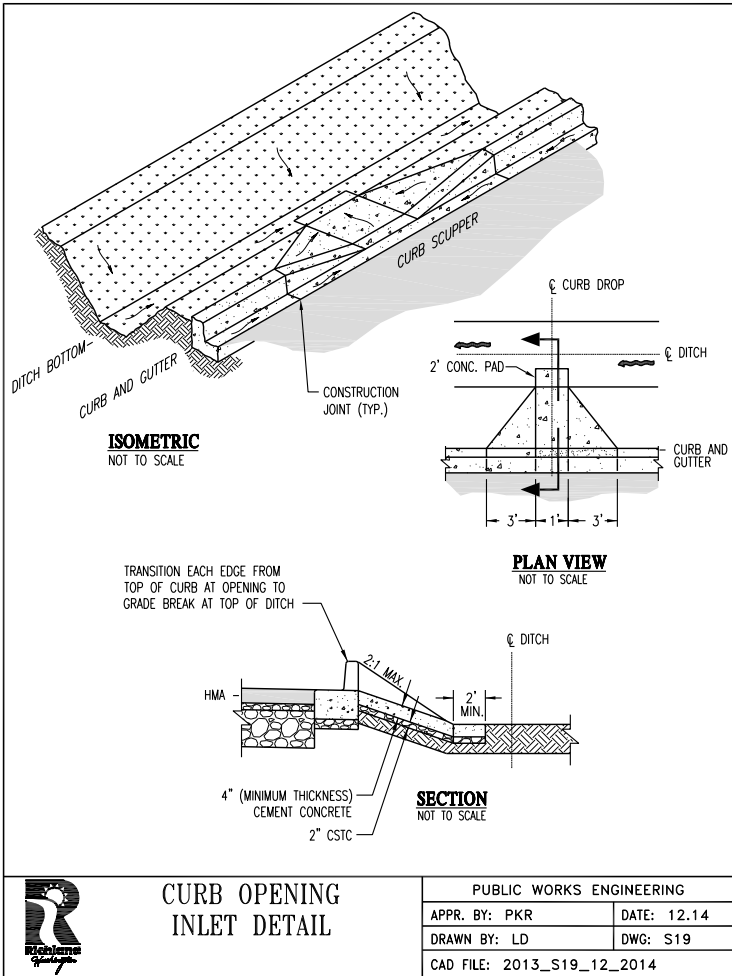
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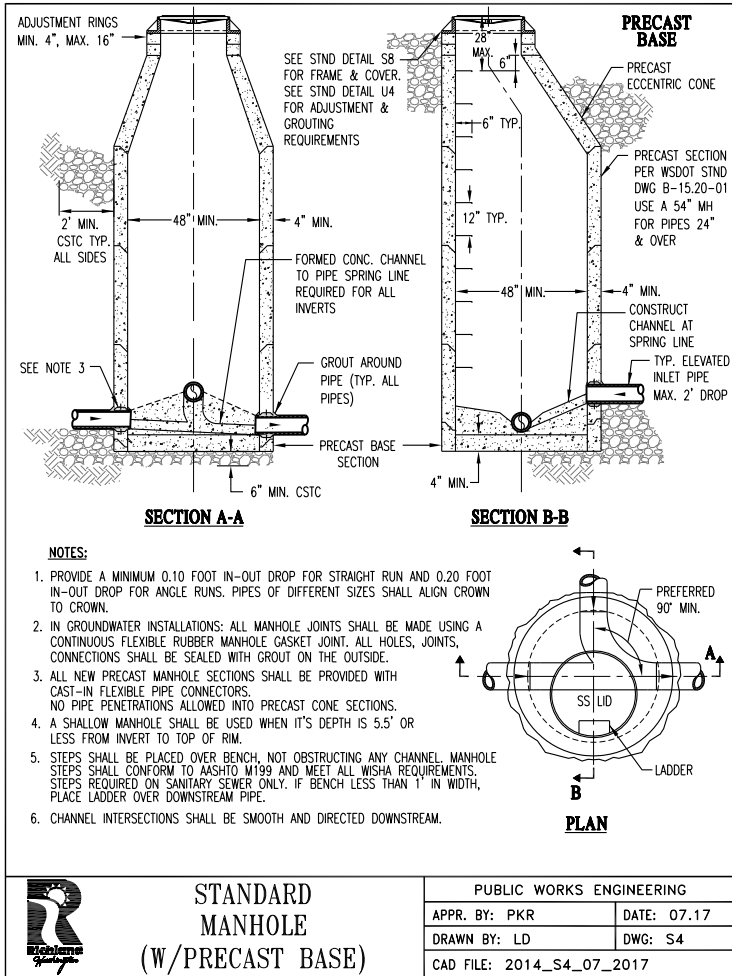
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APPR. BY: PKR	DATE: 09.13
DRAWN BY: LD	DWG: S15
CAD FILE: 2013_S15_09_2013	



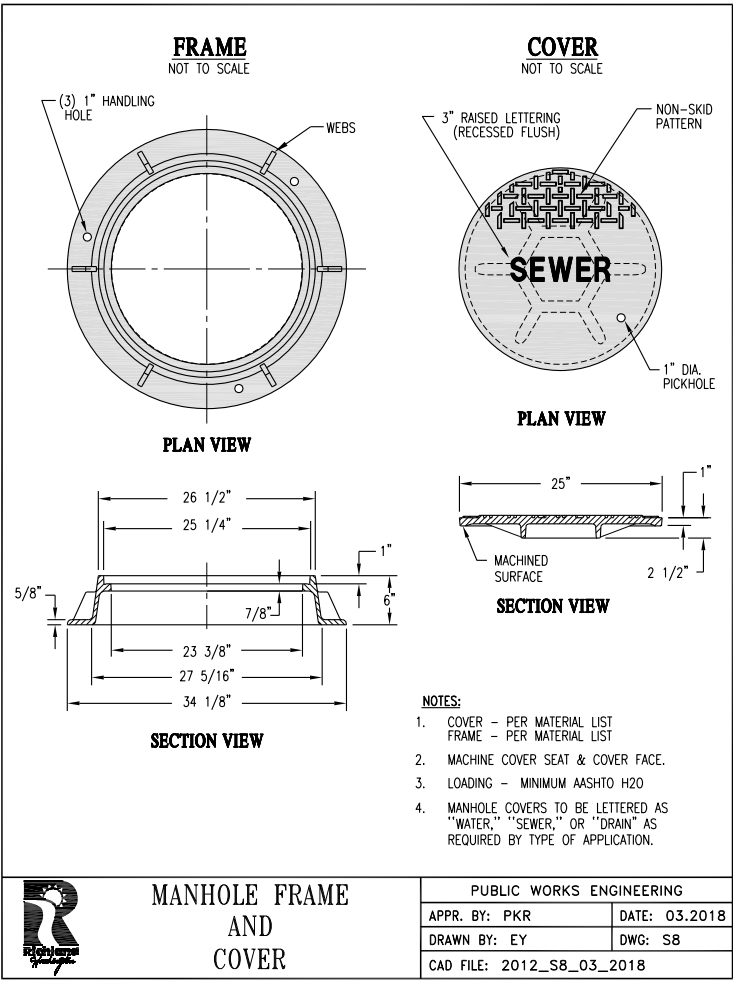
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		APPR. BY: PKR	DATE: 09.13
		DRAWN BY: LD	DWG: S18
		CAD FILE: 2013_S18_09_2013	



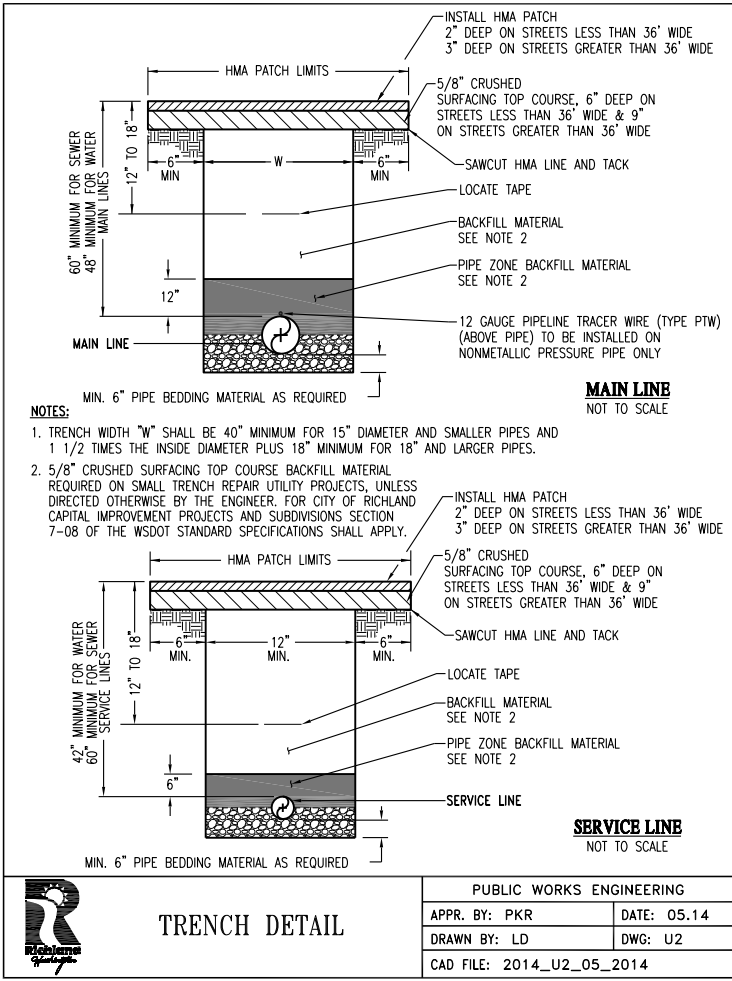
	CURB OPENING INLET DETAIL	PUBLIC WORKS ENGINEERING	
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		CAD FILE: 2013_S19_12_2014	



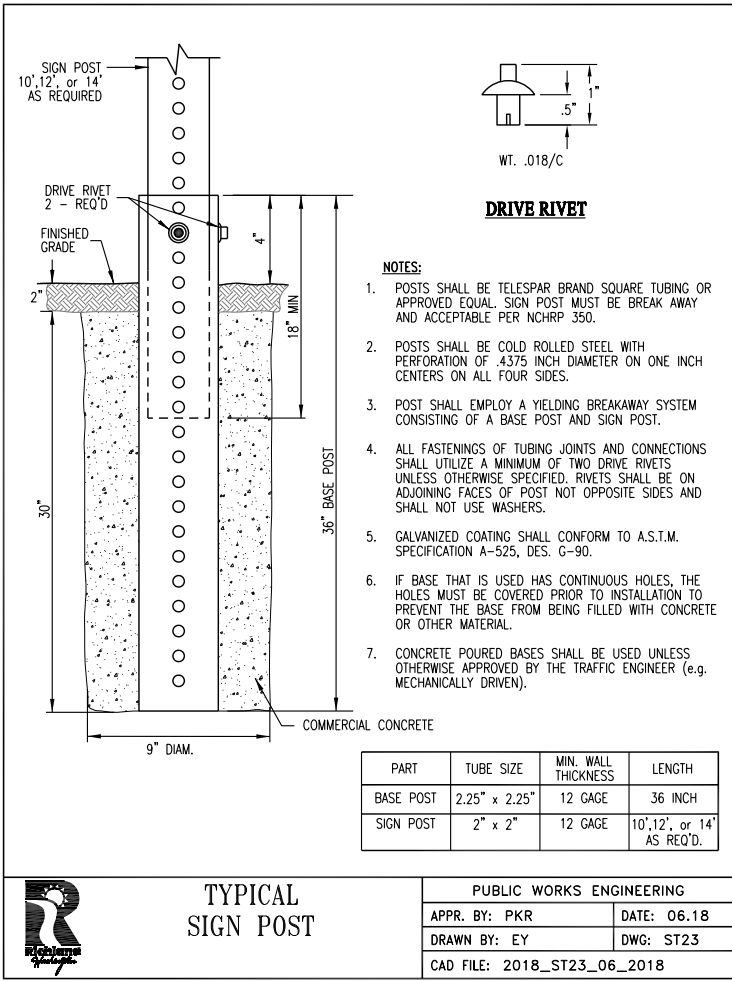
	STANDARD MANHOLE (W/PRECAST BASE)	PUBLIC WORKS ENGINEERING	
		APPR. BY: PKR	DATE: 07.17
		DRAWN BY: LD	DWG: S4
		CAD FILE: 2014_S4_07_2017	



PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 03.2018
DRAWN BY: EY	DWG: S8
CAD FILE: 2012_S8_03_2018	



	TRENCH DETAIL	PUBLIC WORKS ENGINEERING	
		APPR. BY: PKR	DATE: 05.14
		DRAWN BY: LD	DWG: U2
		CAD FILE: 2014_U2_05_2014	



	TYPICAL SIGN POST	PUBLIC WORKS ENGINEERING	
		APPR. BY: PKR	DATE: 06.18
		DRAWN BY: EY	DWG: ST23
		CAD FILE: 2018_ST23_06_2018	

CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

REVISION

NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

Construction Details

REGION	NO. STATE	FEDERAL AID PROJECT NUMBER	WA	STIPUL-TAP-3504(002)

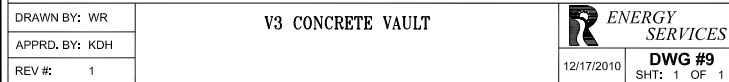
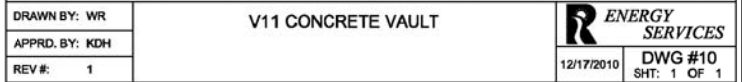
60% REVIEW SUBMITTAL

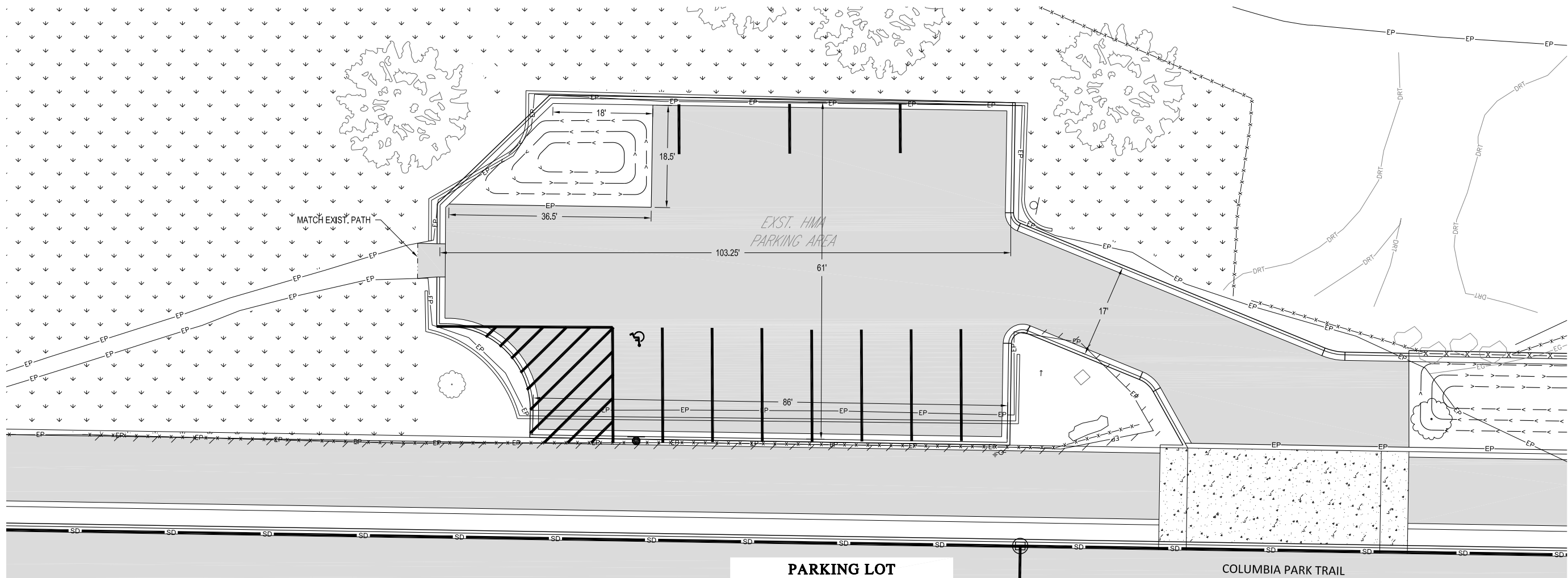
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG:	columbia park trl cover
CONTRACT NO:	20-0029
DATE:	02-21-2020
DRAWN BY:	LD
DESIGN BY:	SAW
RECORD DWG:	###-###

SHEET

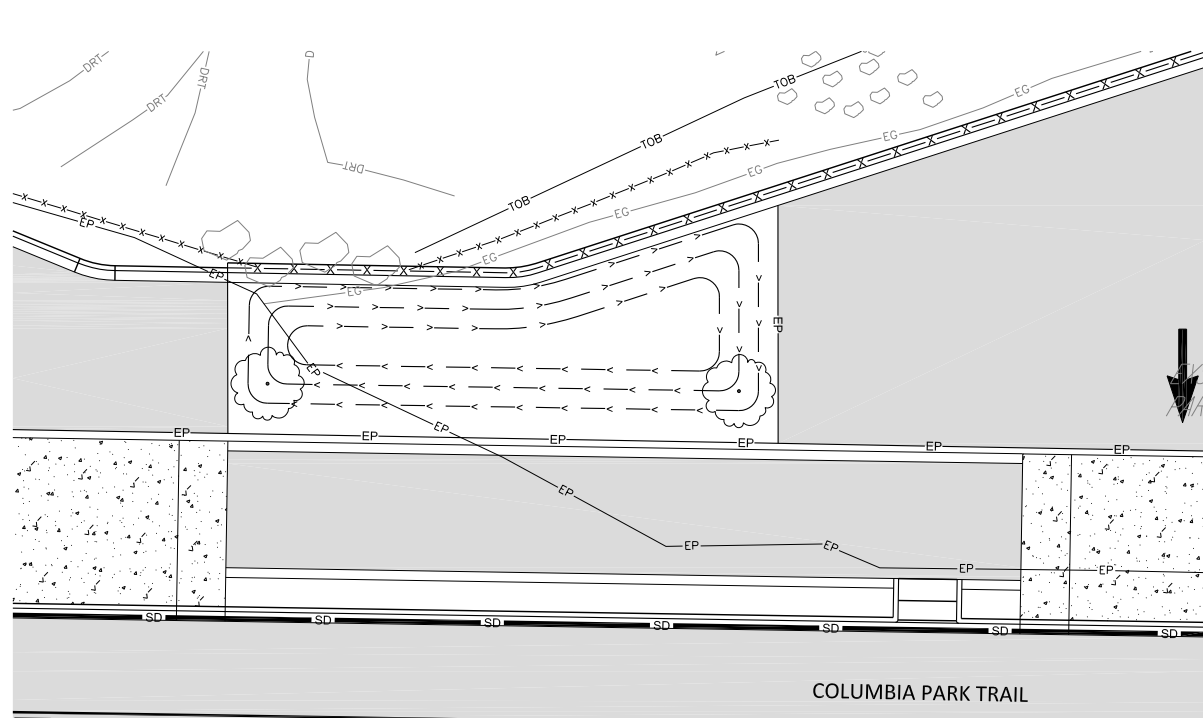
10 OF 10





**PARKING LOT
PLAN VIEW**

SCALE:
1"=10' (22x34), 1"=20' (11x17)



**PARKING LOT SWALE
PLAN VIEW**

SCALE:
1"=10' (22x34), 1"=20' (11x17)



CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

REVISION		NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

Parking lot and Swale Detail

REGION	NO.	STATE	FEDERAL AID PROJECT NUMBER

ONE INCH
AT FULL SIZE, IF NOT ONE INCH,
SCALE ACCORDINGLY

CAD DWG:	columbia park trl_detail
CONTRACT NO:	20-0029
DATE:	02-21-2020
DRAWN BY:	LD
DESIGN BY:	SAW
RECORD DWG:	##-###

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SUBMITTAL**



CITY OF RICHLAND

PUBLIC WORKS DEPARTMENT

REVISION		NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements

(Fowler St. to Reach Museum Drv.)

Swale Detail

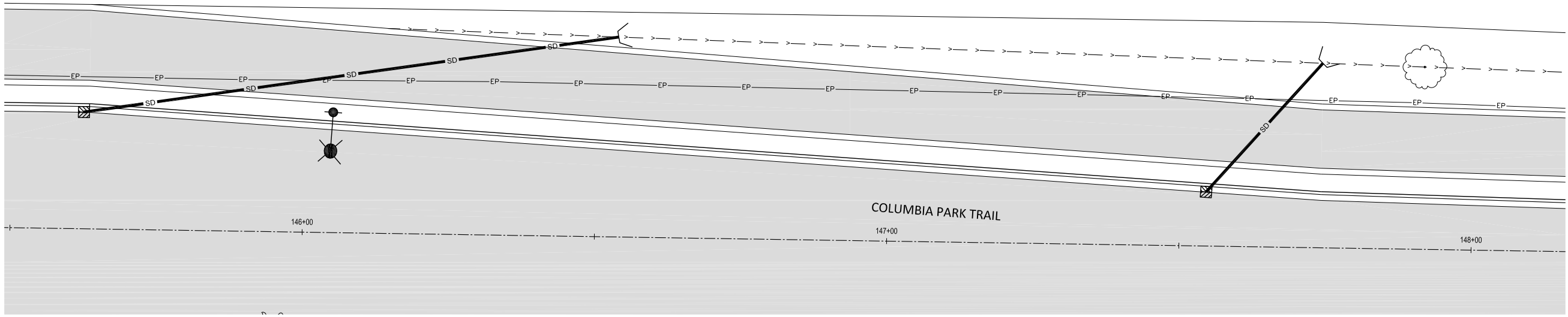
REGION	NO.	STATE	FEDERAL AID PROJECT NUMBER

AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG:
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CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ##-###

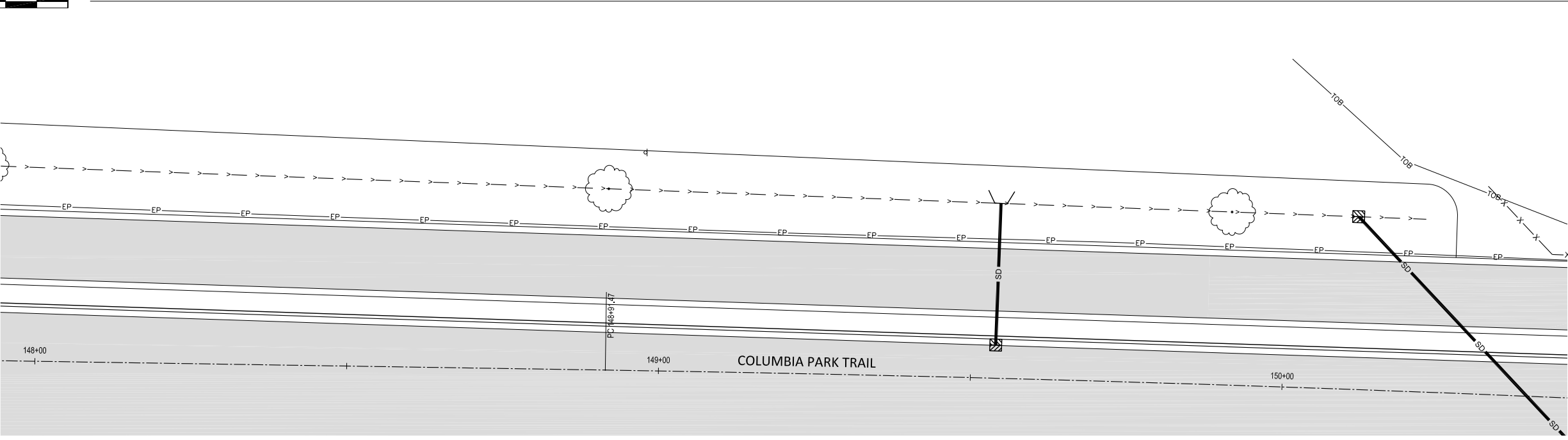
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SUBMITTAL



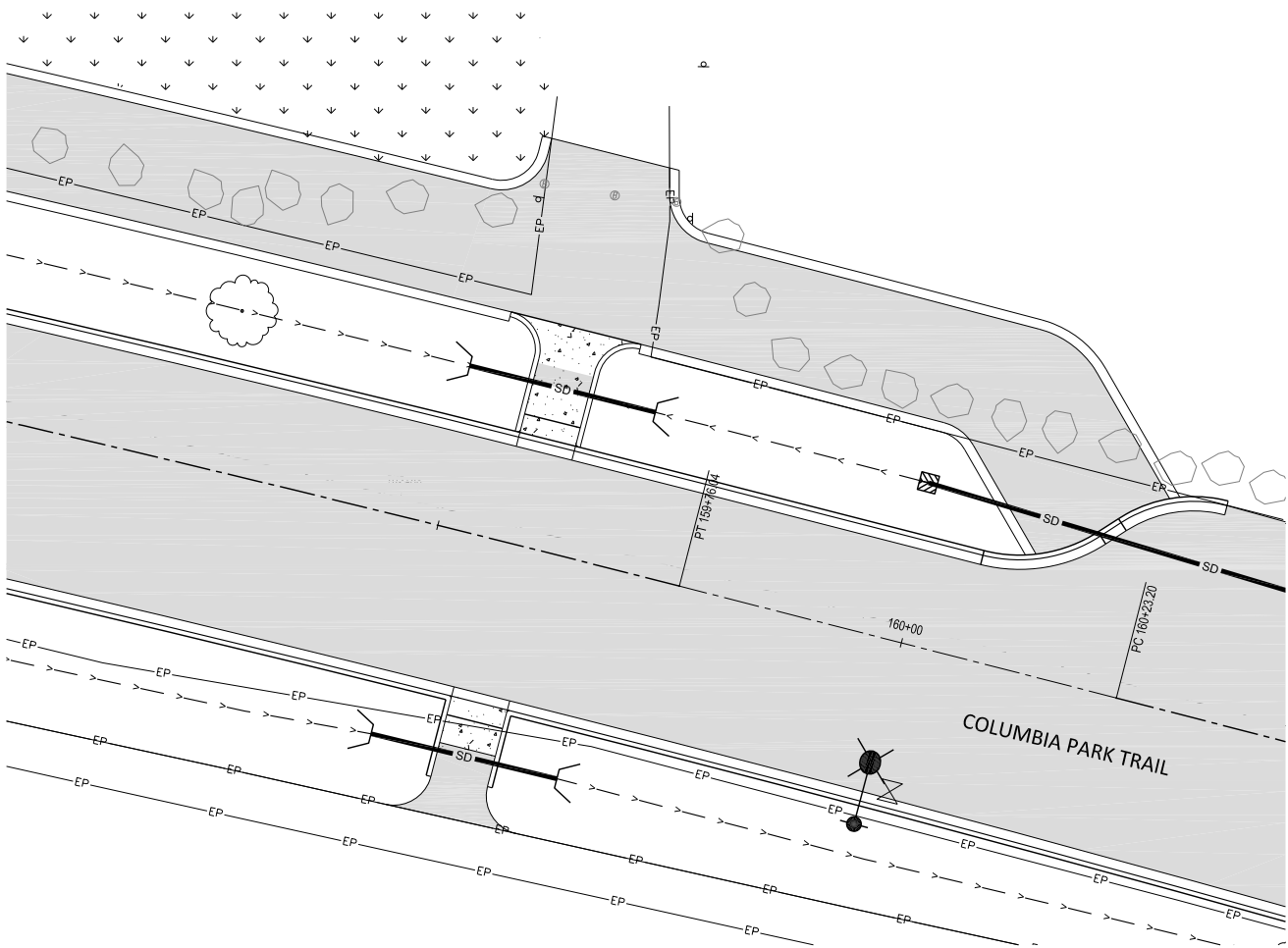
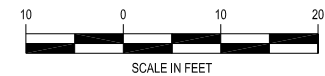
SWALE
PLAN VIEW

SCALE:
1"=10' (22x34), 1"=20' (11x17)



SWALE
PLAN VIEW

SCALE:
1"=10' (22x34), 1"=20' (11x17)



MULTI-USE PATH DETAIL
PLAN VIEW

SCALE:
1"=10' (22x34), 1"=20' (11x17)



CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

REVISION		NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

Multit-use Path Detail

REGION	NO.	STATE	FEDERAL AID PROJECT NUMBER
		WA	STPIL-TAP-3504(002)

ONE INCH

AT FULL SIZE. IF NOT ONE INCH,
SCALE ACCORDINGLY

CAD DWG:	columbia park trl_detail
CONTRACT NO:	20-0029
DATE:	02-21-2020
DRAWN BY:	LD
DESIGN BY:	SAW
RECORD DWG:	##-###

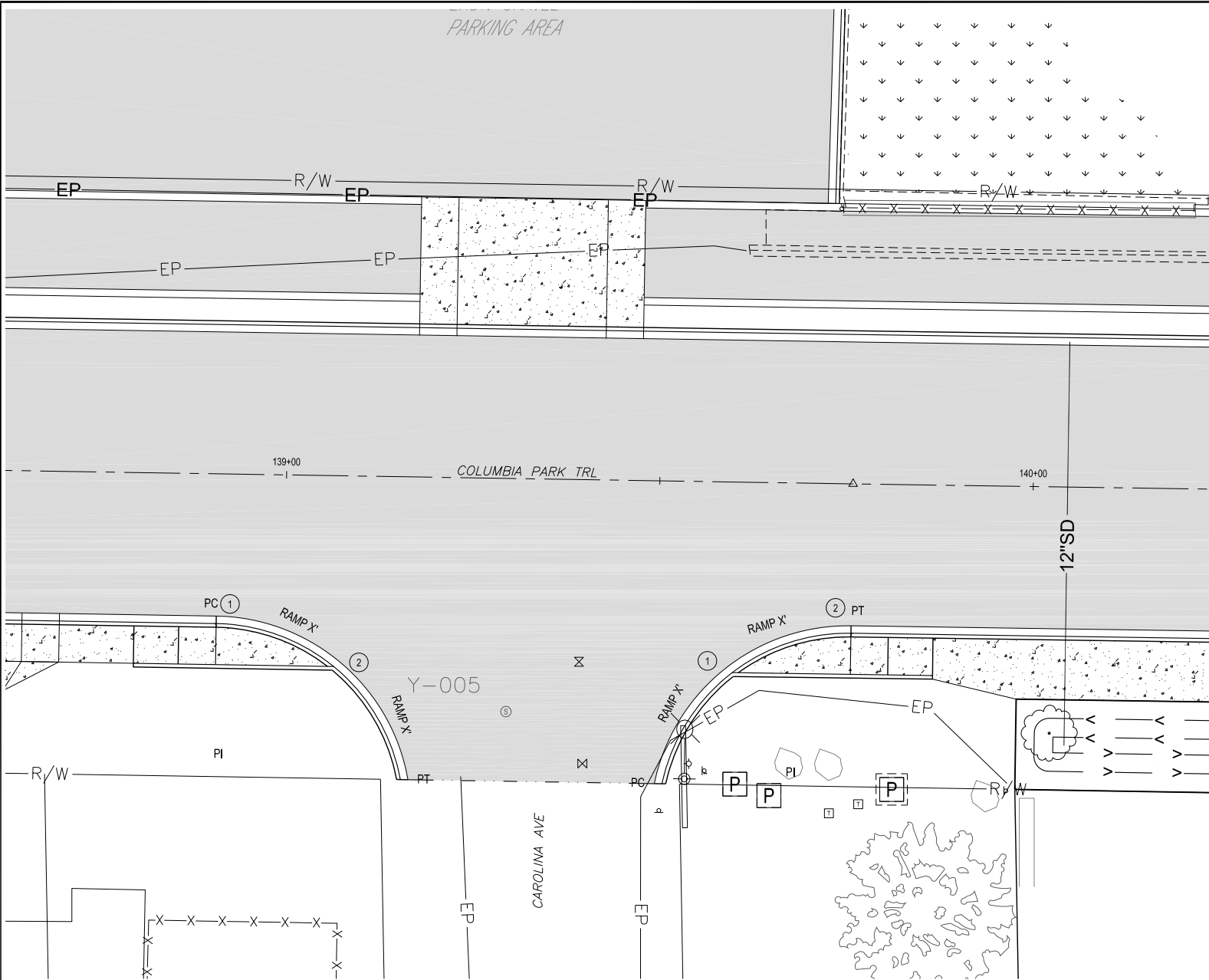
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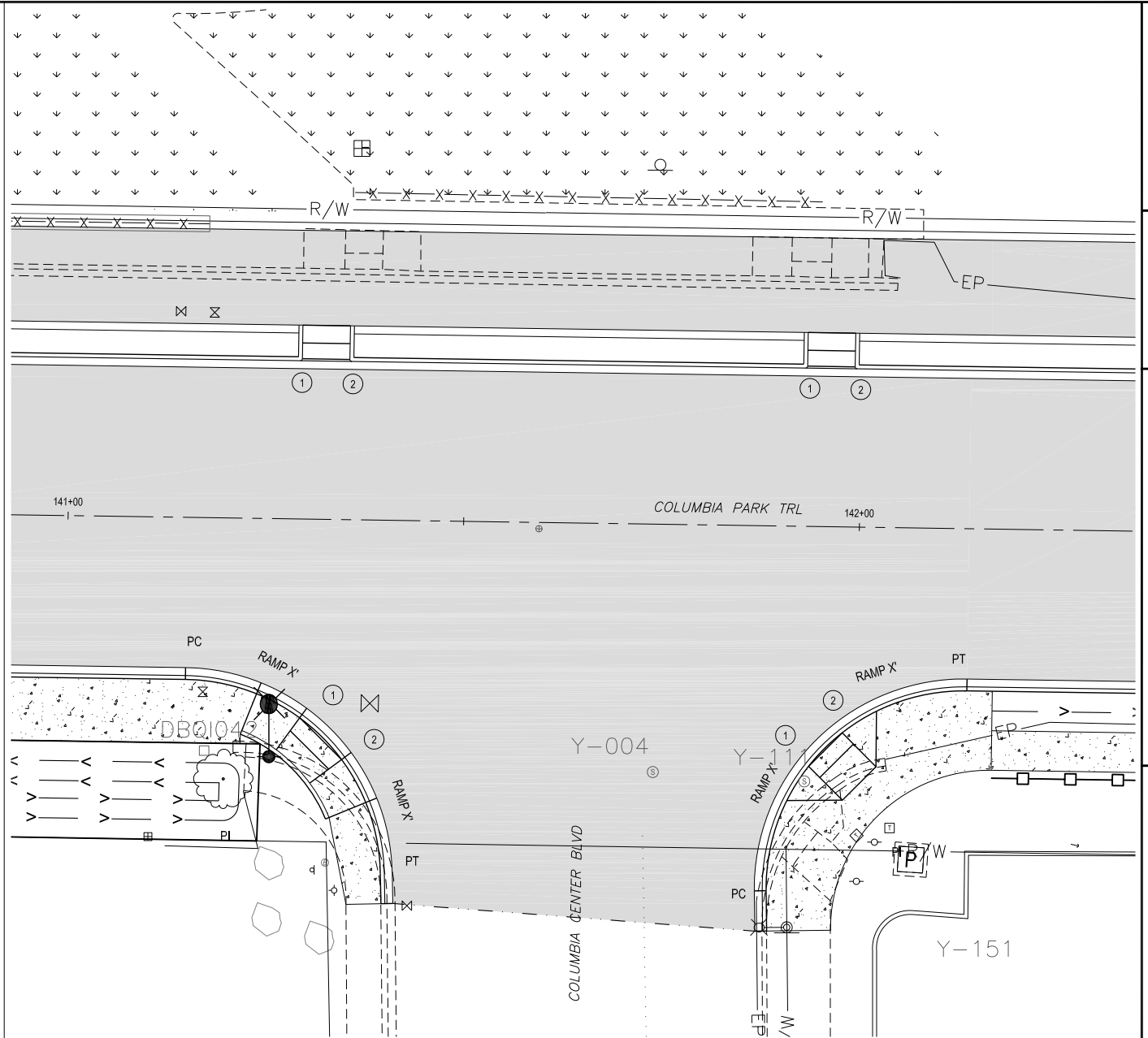
60% REVIEW
SUBMITTAL



**COLUMBIA PARK TRAIL AND CAROLINA AVE
INTERSECTION DETAIL**



SCALE:
1"=10' (22x34) 1"=20' (11x17)



**COLUMBIA PARK TRAIL AND COLUMBIA CENTER BLVD
INTERSECTION DETAIL**



SCALE:
1"=10' (22x34) 1"=20' (11x17)

NOTES:

- 1. ALL RAMP LENGTHS ARE AT FACE OF CURB.
- 2. ALL UTILITY ADJUSTMENTS, IMPROVEMENTS AND REPAIRS AND SIGN RELOCATIONS ARE SHOWN ON C SHEETS.



CITY OF RICHLAND PUBLIC WORKS DEPARTMENT	REVISION	NO.	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Dr.)

Intersection and Ada Ramp Detail

REGION NO. STATE FEDERAL AID PROJECT NUMBER
TO WA STPL-1AP-3504(002)

ONE INCH

AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG:
columbia park trl_int_details
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ##-###

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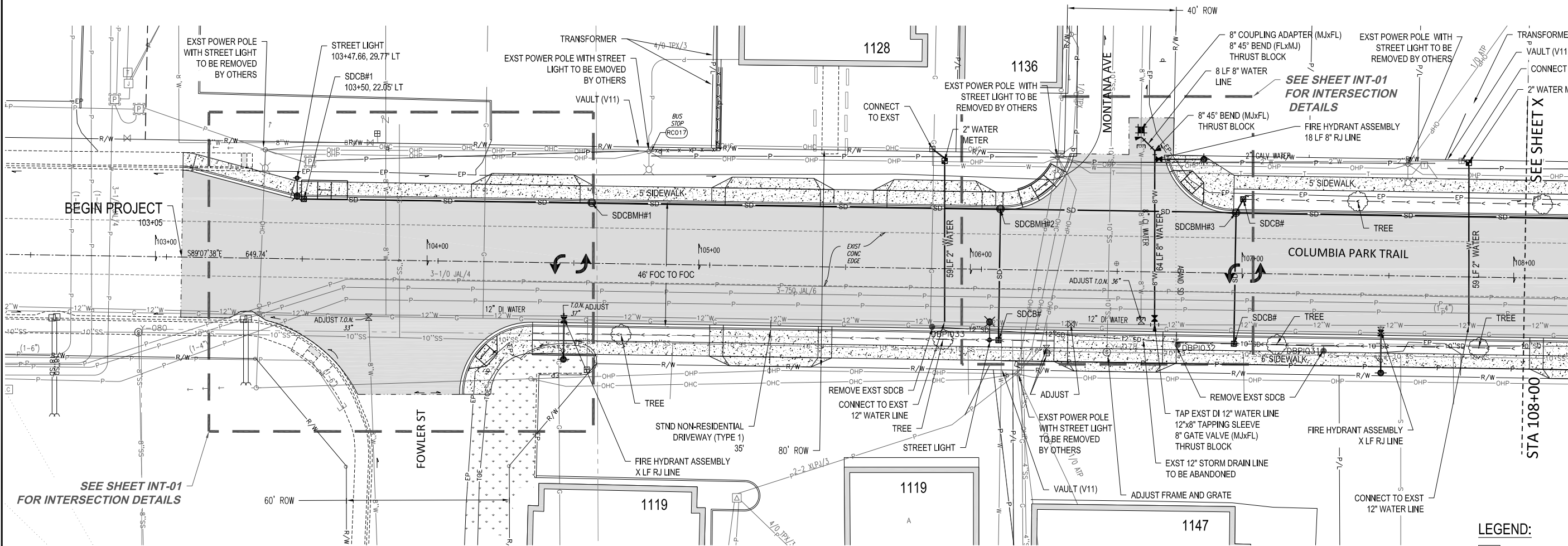
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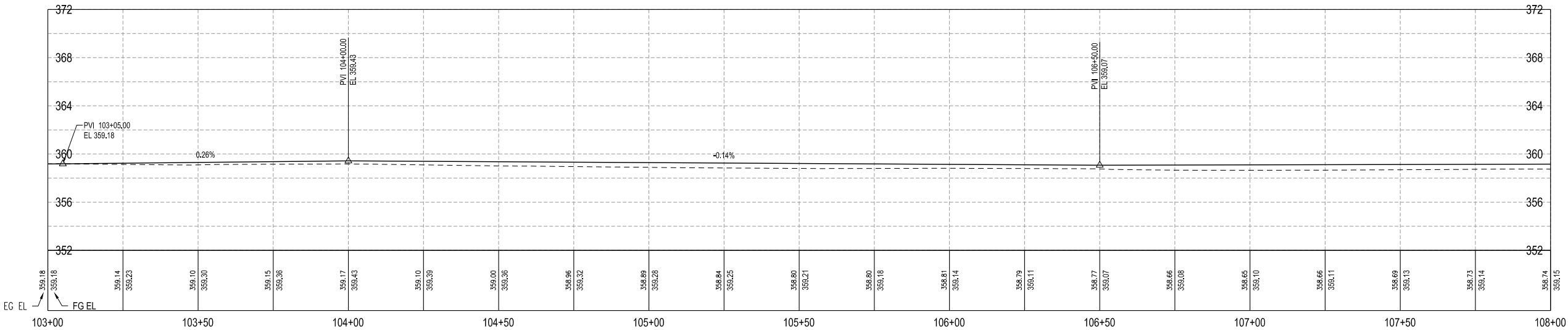
60% REVIEW
SUBMITTAL





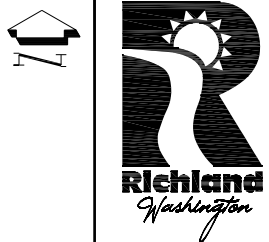
COLUMBIA PARK TRAIL
PLAN VIEW

SCALE:
1"=20' (22x34), 1"=40' (11x17)



COLUMBIA PARK TRAIL
PROFILE VIEW

SCALE:
1"=20' (22x34), 1"=40' (11x17)



CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

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Plan and Profile

REGION NO. STATE FEDERAL AID PROJECT NUMBER
TO WA STPL-1AP-3504(022)

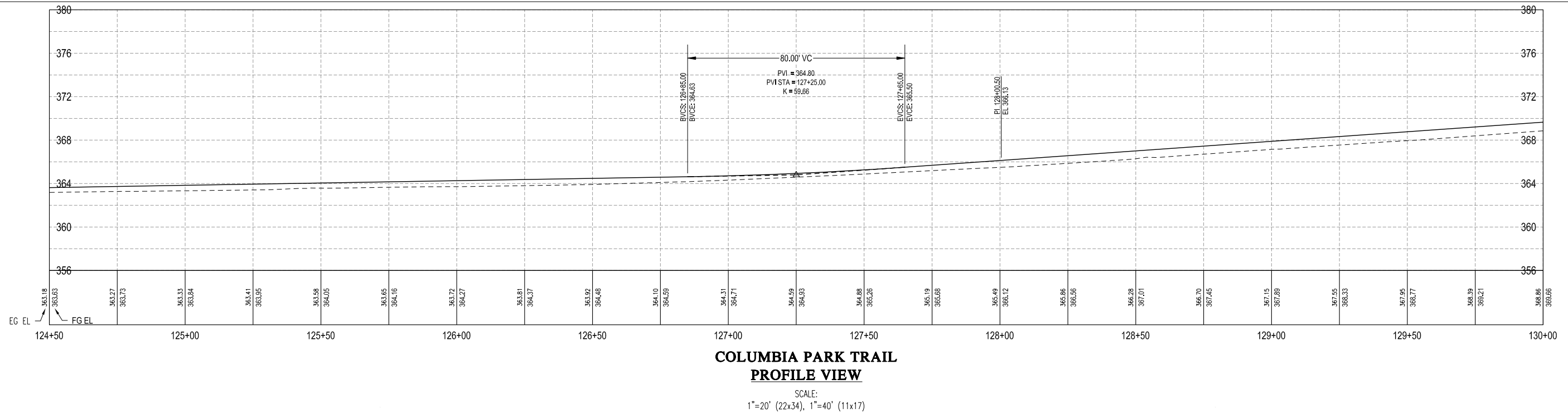
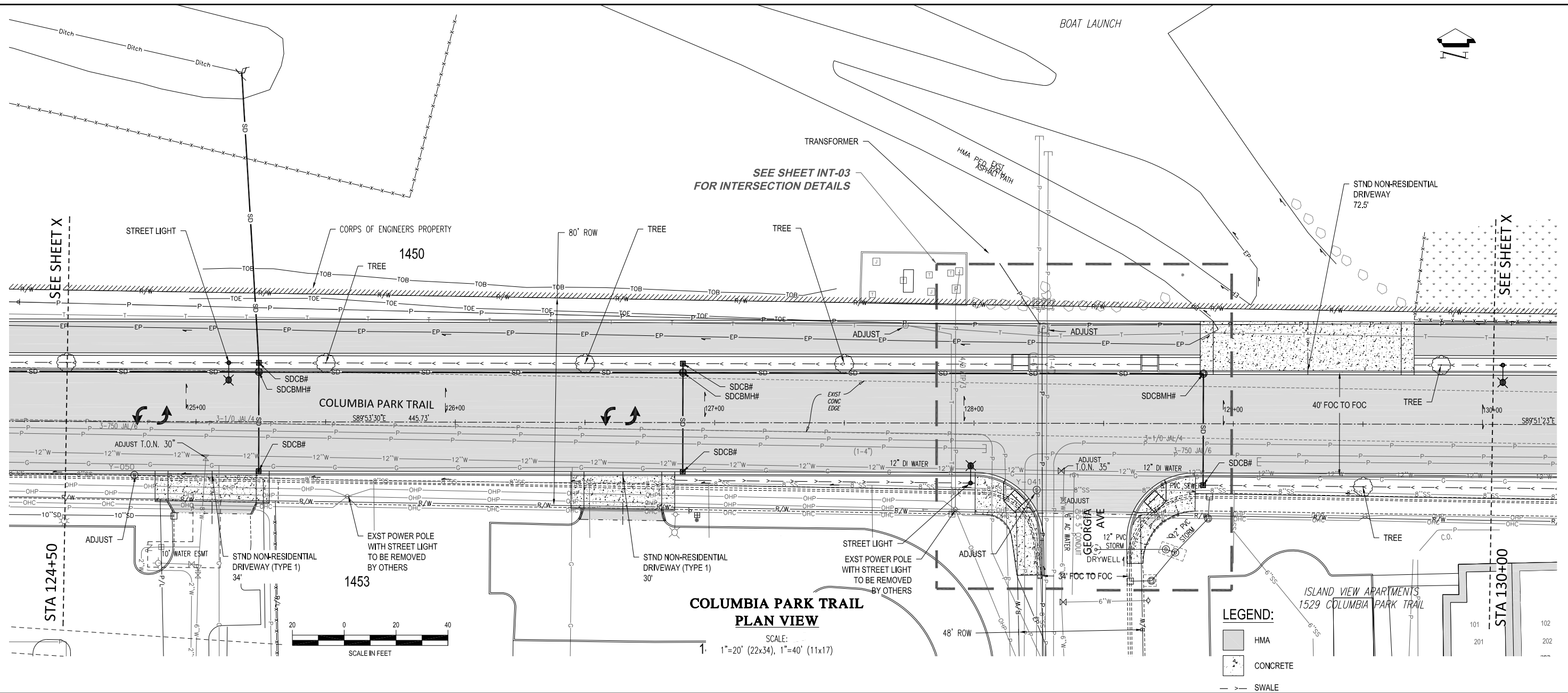
ONE INCH
AT FULL SIZE. IF NOT ONE INCH,
SCALE ACCORDINGLY

CAD DWG:
columbia park trl_plan_set
CONTRACT NO: 20-0029
DATE: 2-20-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ###-###

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SCALE:
1"=20' (22x34), 1"=40' (11x17)



CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT
REVISION

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Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drwy.)

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REGION NO.	STATE	FEDERAL AID PROJECT NUMBER
10	WA	STPUL-TAP-3504(002)

FLAN AND FLORE

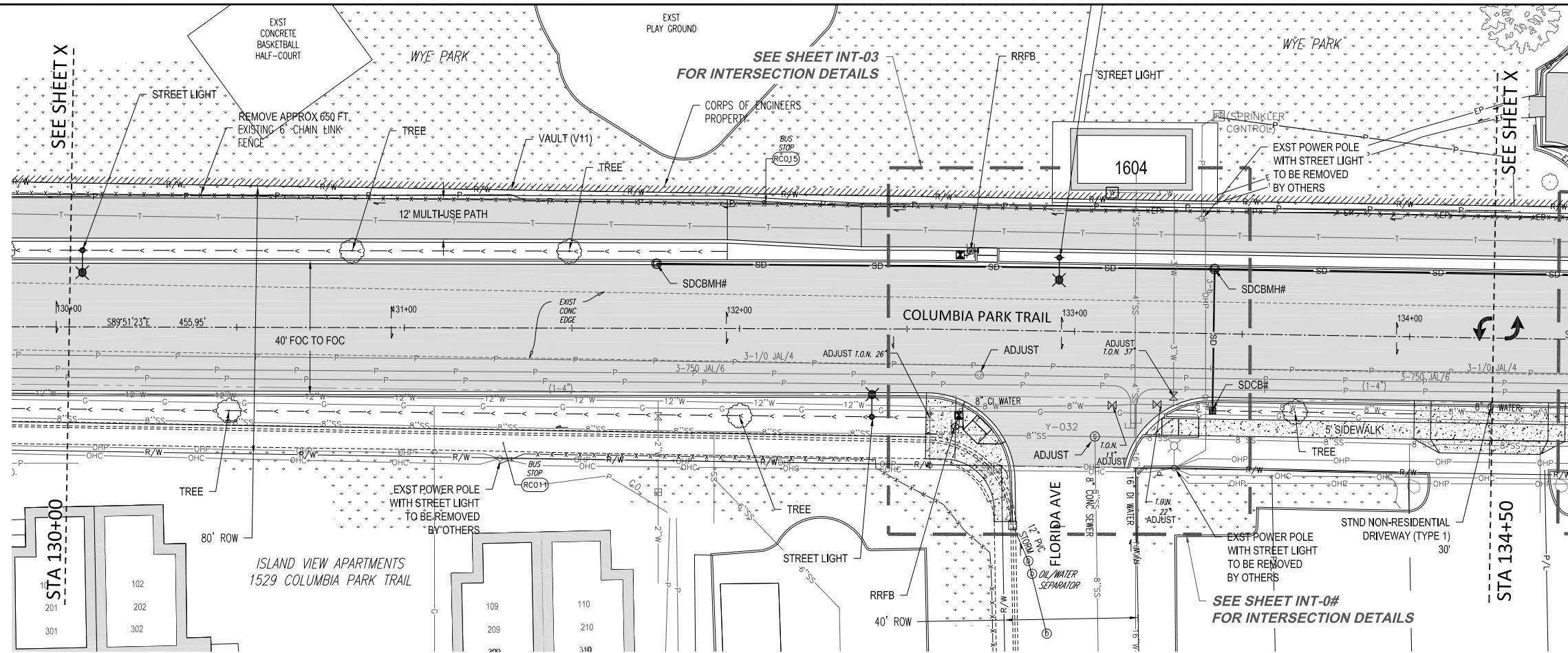
ONE INCH 

IF FULL SIZE, IF NOT ONE INCH,
SCALE ACCORDINGLY

D DWG:	Columbia park trl_plan set
TRACT NO:	20-0029
TE:	2-20-2020
AWN BY:	LD
SIGN BY:	SAW
CORD DWG:	##-###

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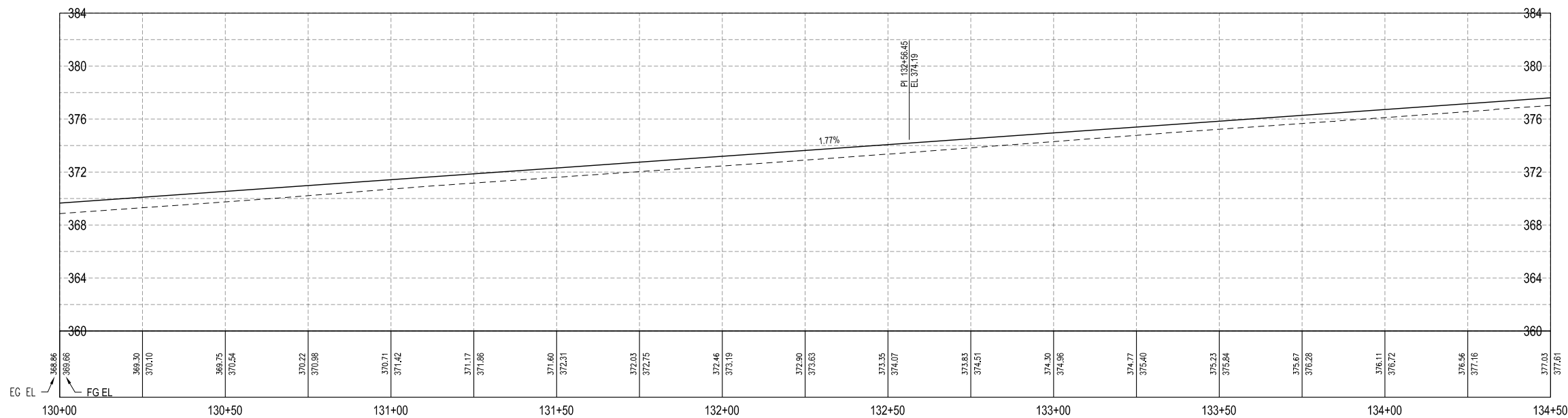


COLUMBIA PARK TRAIL
PLAN VIEW

SCALE:
1"=20' (22x34), 1"=40' (11x17)

LEGEND:

- HMA
- CONCRETE
- SWALE



COLUMBIA PARK TRAIL
PROFILE VIEW

SCALE:
1"=20' (22x34), 1"=40' (11x17)

71



CITY OF RICHLAND

PUBLIC WORKS DEPARTMENT

REVISION

Columbia Park Trail East Improvements

(Fowler St. to Reach Museum Drv.)

Plan and Profile

REGION NO. STATE FEDERAL AID PROJECT NUMBER
TO WA STPIL-TAP-3504(022)

60% REVIEW
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ONE INCH

AT FULL SIZE. IF NOT ONE INCH,
SCALE ACCORDINGLY

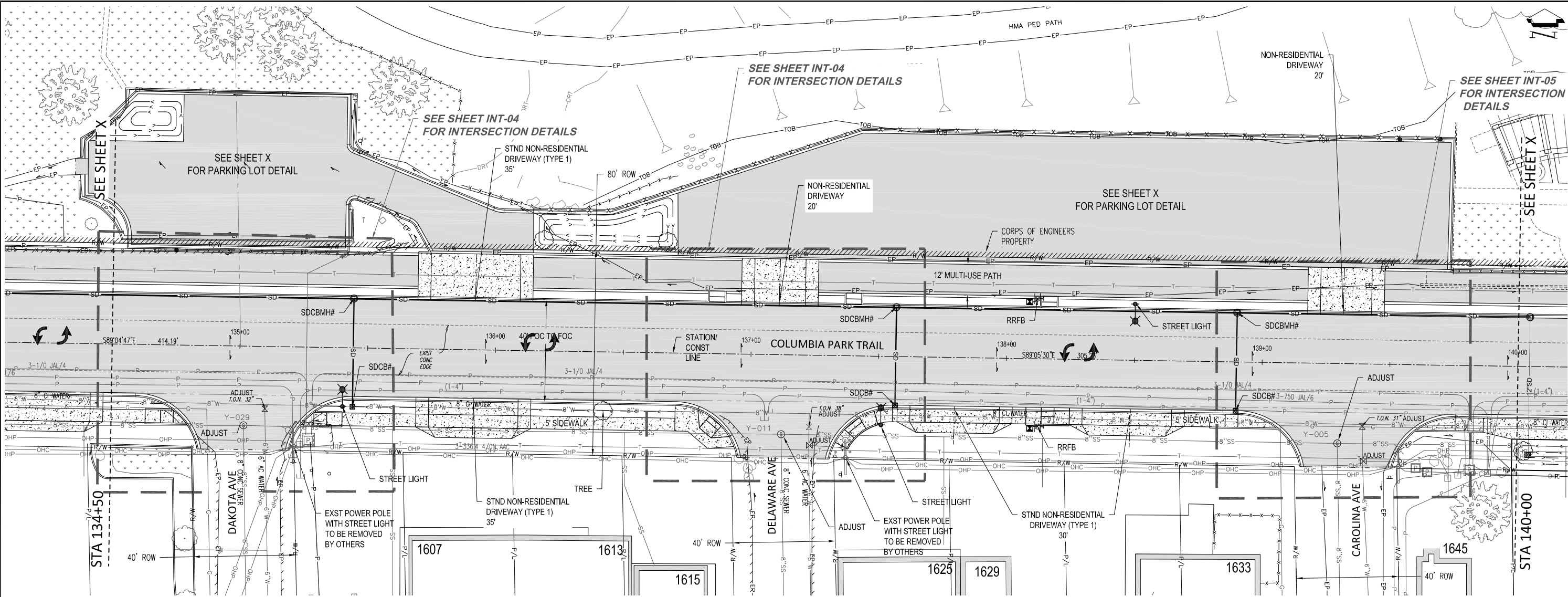
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DATE: 2-20-2020
DRAWN BY: LD
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RECORD DWG: ##-###

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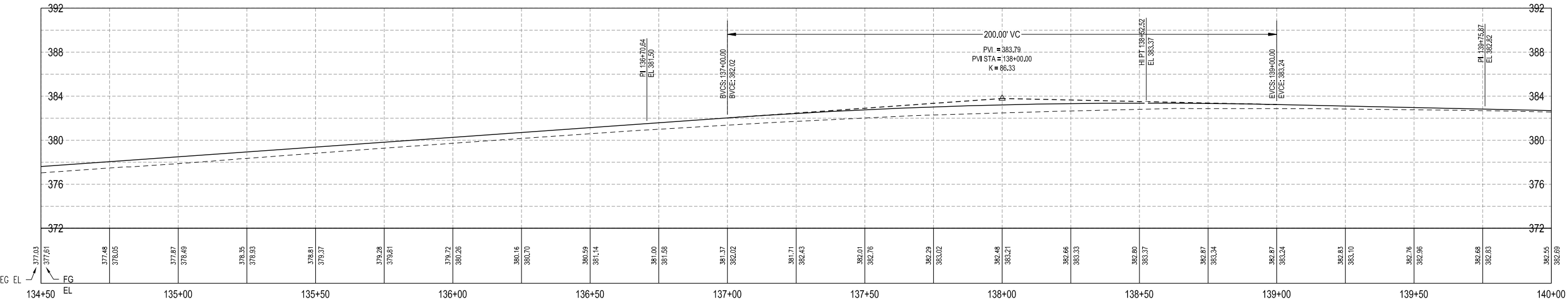
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COLUMBIA PARK TRAIL
PLAN VIEW

SCALE:
1"=20' (22x34), 1"=40' (11x17)



COLUMBIA PARK TRAIL
PROFILE VIEW

SCALE:
1"=20' (22x34), 1"=40' (11x17)



CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

REVISION	NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

Plan and Profile

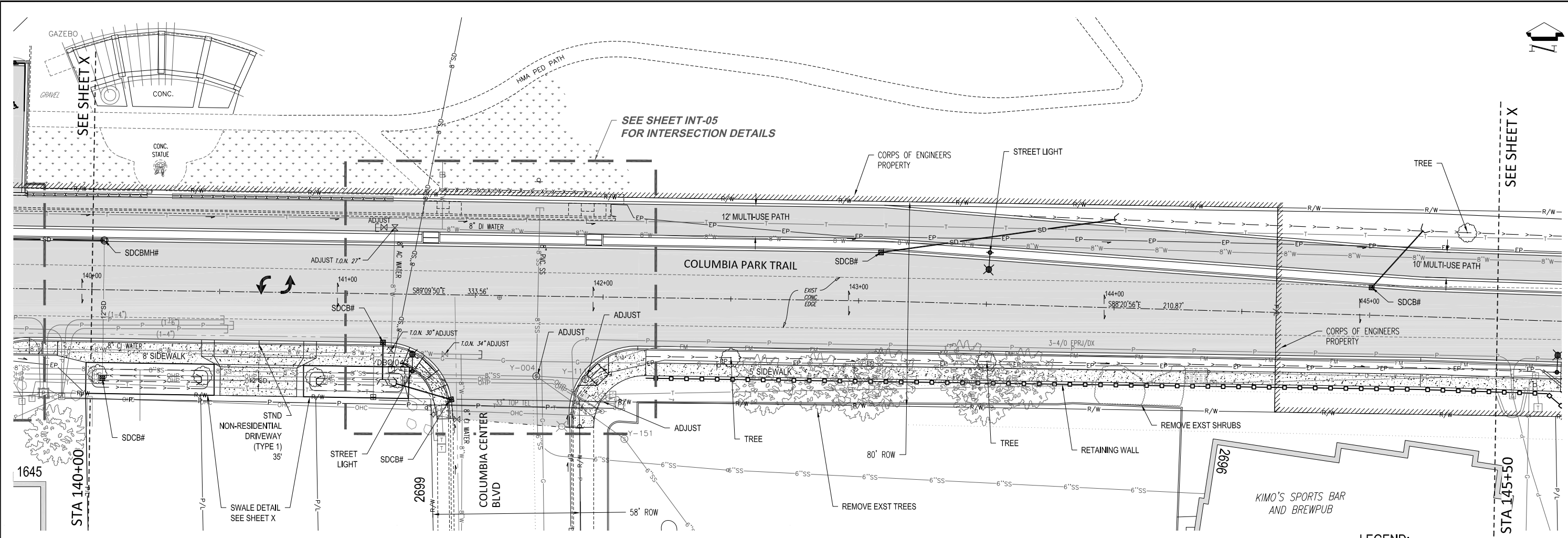
60% REVIEW SUBMITTAL

REGION NO. STATE FEDERAL AID PROJECT NUMBER
TO WA STPL-TAP-3504(002)

AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG:
columbia park trl_plan set
CONTRACT NO: 20-0029
DATE: 2-20-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ###-###

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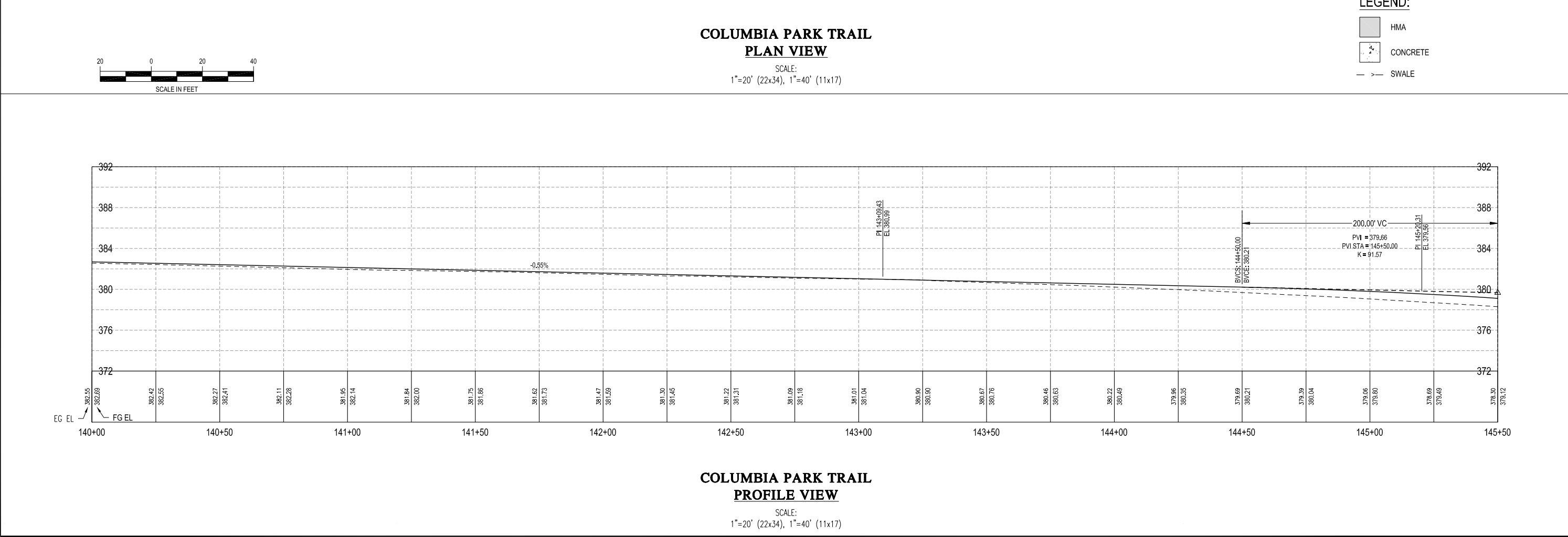


COLUMBIA PARK TRAIL
PLAN VIEW

SCALE:
1"=20' (22x34), 1"=40' (11x17)

COLUMBIA PARK TRAIL
PROFILE VIEW

SCALE:
1"=20' (22x34), 1"=40' (11x17)





CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

REVISION	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Dry.)

Plan and Profile

REGION	NO.	STATE	FEDERAL AID PROJECT NUMBER

TO WA STPL-TAP-3504(022)

60% REVIEW SUBMITTAL

CAD DWG: columbia park trl_plan set
CONTRACT NO: 20-0029
DATE: 2-20-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ###-###

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Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Dwy.)

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Plan and Profile

REGION NO.	STATE	FEDERAL AID PROJECT NUMBER
10	WA	STPUL-TAP-3504(002)

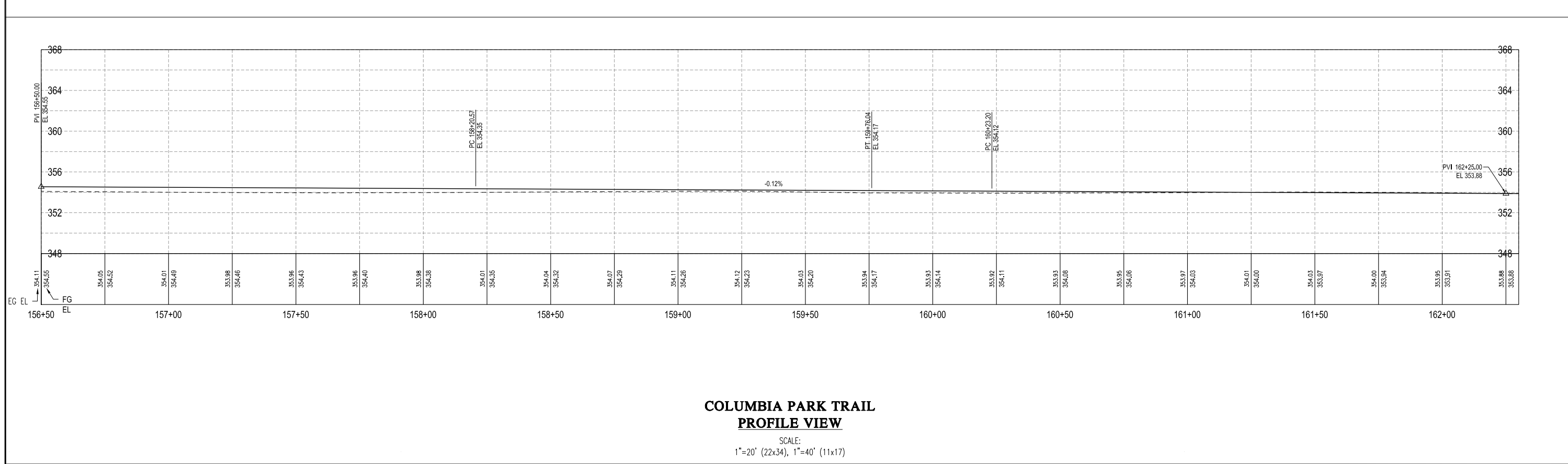


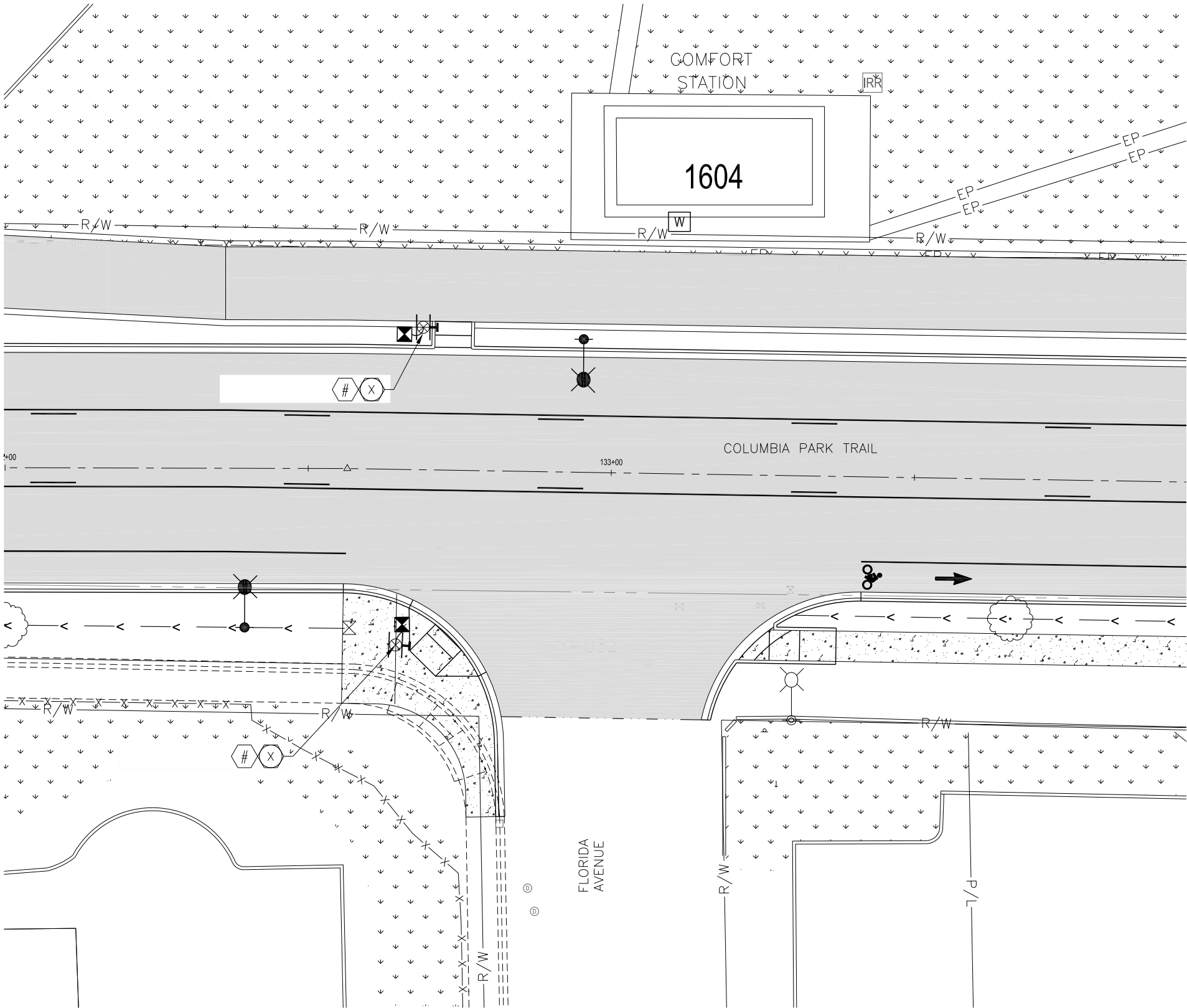
 AT FULL SIZE, IF NOT ONE INCH,

 SCALE ACCORDINGLY

CAD DWG:
columbia_park_trl_plan.set
CONTRACT NO: 20-0029
DATE: 2-20-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ##-###

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COLUMBIA PARK TRAIL AND FLORIDA AVENUE

SCALE:
1"=10' (22x34), 1"=20' (11x17)

CONSTRUCTION RRFB NOTES

1. INSTALL TYPE I POLE FOUNDATION WITH CURB BASE PER WSDOT STANDARD PLAN J-20.11-02, SHEET 2 OF 2. SET FOUNDATION WITH PELCO AP-1095-GVL ANCHOR BOLT CAGE.
2. INSTALL TYPE 1 RRFB EQUIPMENT ON TYPE I POLE USING PELCO BASE MODEL PB-5334-35-GVL-PNC. INCLUDE SIGNAGE, LIGHT BARS, CONTROL CABINET AND CAMPBELL GUARDIAN PUSHBUTTON.
3. INSTALLATION OF FOUNDATION, CONDUIT AND JUNCTION BOX BY OTHERS.
4. INSTALL TYPE 1 QUARTZITE JUNCTION BOX ADJACENT TO TYPE I OR TYPE III POLE FOR GROUNDING OF THE RRFB ASSEMBLY POLE. CONNECT THE POLE FOUNDATION AND JUNCTION BOX WITH 2" SCHEDULE 40 PVC CONDUIT.
5. INSTALL TYPE 2 RRFB EQUIPMENT ON TYPE I POLE USING PELCO BASE MODEL PB-5334-35-GVL-PNC. INCLUDE SIGNAGE, LIGHT BARS, CONTROL CABINET AND CAMPBELL GUARDIAN PUSHBUTTON.
6. INSTALL TYPE III MAST ARM POLE FOUNDATION PER WSDOT STANDARD PLAN J-26.10-03. FOUNDATION SHALL BE PER ALTERNATE #2, 3'-0" ROUND WITH DEPTH OF 11'-0".
7. INSTALL TYPE III POLE WITH MAST ARM PER RRFB POLE SHEET AND 16 FOOT LUMINAIRE ARM. INSTALL TWO SETS OF OVERHEAD SINGLE SIDED 48"x48" PEDESTRIAN SIGNS AND SINGLE SIDED RRFB LIGHT BARS ON THE MAST ARM PER OVERHEAD MOUNTING DETAIL THIS SHEET. LEVEL THE SIGN AND LIGHT BAR TO THE GROUND, NOT THE ARM. INSTALL TYPE 2 RRFB (DOUBLE SIDED) EQUIPMENT INCLUDING CONTROL CABINET, SOLAR PANEL, 36"x36" PEDESTRIAN SIGNS AND LIGHT BAR ON THE POLE.
8. INSTALL CAMPBELL GUARDIAN PUSHBUTTON ON POLE OR POST.
9. REPAIR ASPHALT OR CONCRETE SIDEWALK AS NECESSARY.
10. INSTALL CITY STANDARD LED LUMINAIRE PER SPECIFICATIONS. NOTE ALL INSTALLATIONS ARE ON MINOR ARTERIALS EXCEPT GEORGE WASHINGTON WAY AT GUYER AVE, WHICH IS A PRINCIPAL ARTERIAL.
11. INSTALL CONDUCTORS TO EXISTING JUNCTION BOX AND BACK TO STREET LIGHT SERVICE. ADD SEPERATE BREAKER FOR RRFB.
12. INSTALL TYPE I POLE FOUNDATION WITH STANDARD BASE PER WSDOT STANDARD PLAN J-21.10-04, SHEET 1 OF 2. SET FOUNDATION WITH PELCO AP-1095-GVL ANCHOR BOLT CAGE.
13. INSTALL TYPE PPB POST.
14. SET UP SYSTEM FOR AC RRFB.

15. INSTALL THERMOPLASTIC CROSSWALK BLOCKS AS SHOWN.
16. INSTALL THERMOPLASTIC STOPBAR AS SHOWN
17. REMOVE EXISTING FLAGS AND POST.
18. INSTALL 36"x36" R1-5B ON CITY STANDARD POST
19. INSTALL 12"x36" OM-3L OBJECT MARKER
20. REMOVE EXISTING SIGN

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF RICHLAND STANDARDS AND SPECIFICATIONS, WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARDS AND SPECIFICATION, AND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. THE LOCATIONS OF FEATURES SHOWN SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION WORK.
3. ALL WORK SHALL BE CONSISTENT WITH UTILITY AGENCY REQUIREMENTS. THE CONTRACTOR SHALL CONTACT ALL PERTINENT UTILITY AGENCIES 48 HOURS PRIOR TO COMMENCING WORK, AND SHALL COORDINATE WITH AFFECTED UTILITY AGENCIES THROUGHOUT THE PROJECT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANY AND THE CITY IMMEDIATELY UPON DAMAGE AND BE RESPONSIBLE FOR REPLACING ANY DAMAGED EQUIPMENT TO THE SATISFACTION OF THE AFFECTED UTILITY COMPANY AND/OR THE CITY.
5. THE JUNCTION BOX AND CONDUIT LOCATIONS SHOWN ARE APPROXIMATE. JUNCTION BOXES SHALL BE PLACED OUTSIDE OF SIDEWALKS UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER. JUNCTION BOXES LOCATED IN SIDEWALK SHALL HAVE NON-SKID UDS.
6. POLE LOCATIONS SHALL BE STAKED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL VERIFY ACCEPTABLE MINIMUM OVERHEAD CLEARANCE FOR ALL SIGNAL HEADS ABOVE THE STREET PRIOR TO PLACING FOUNDATIONS OR ORDERING SIGNAL POLES.
8. THE CONTRACTOR SHALL KEEP ALL EXISTING TRAFFIC SIGNAL EQUIPMENT IN OPERATION PRIOR TO TURN-ON OF PROPOSED TRAFFIC SIGNAL EQUIPMENT. COORDINATE WITH CITY OF RICHLAND FOR SWITCH-OVER PROCEDURE AND ALLOWABLE CLOSURES.
9. THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.



SCALE IN FEET

NOTES:

1. THESE NOTES CORRESPOND TO POLES LISTED ON SHEET C4

LEGEND			
	SIGNAL CONTROLLER CABINET		SIGN (MAST ARM)
	SERVICE DISCONNECT PEDESTAL		PEDESTRIAN PUSH BUTTON ASSEMBLY
	TYPE-1 JUNCTION BOX		SIGNAL POLE AND MAST ARM
	TYPE-2 JUNCTION BOX		VEHICLE SIGNAL TURN HEAD
	TYPE-3 JUNCTION BOX		TYPE 1 POLE
	EMERGENCY VEHICLE PREEMPTION DETECTOR		TYPE PPB POLE
	VEHICLE SIGNAL HEAD		LUMINAIRE
	PEDESTRIAN SIGNAL HEAD		WIRING SCHEDULE NOTE (SEE SHEET X)
	VIDEO DETECTION CAMERA		
	SIGNAL POLE NUMBER		



CITY OF RICHLAND

PUBLIC WORKS DEPARTMENT

REVISION

NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

RRFB Plan

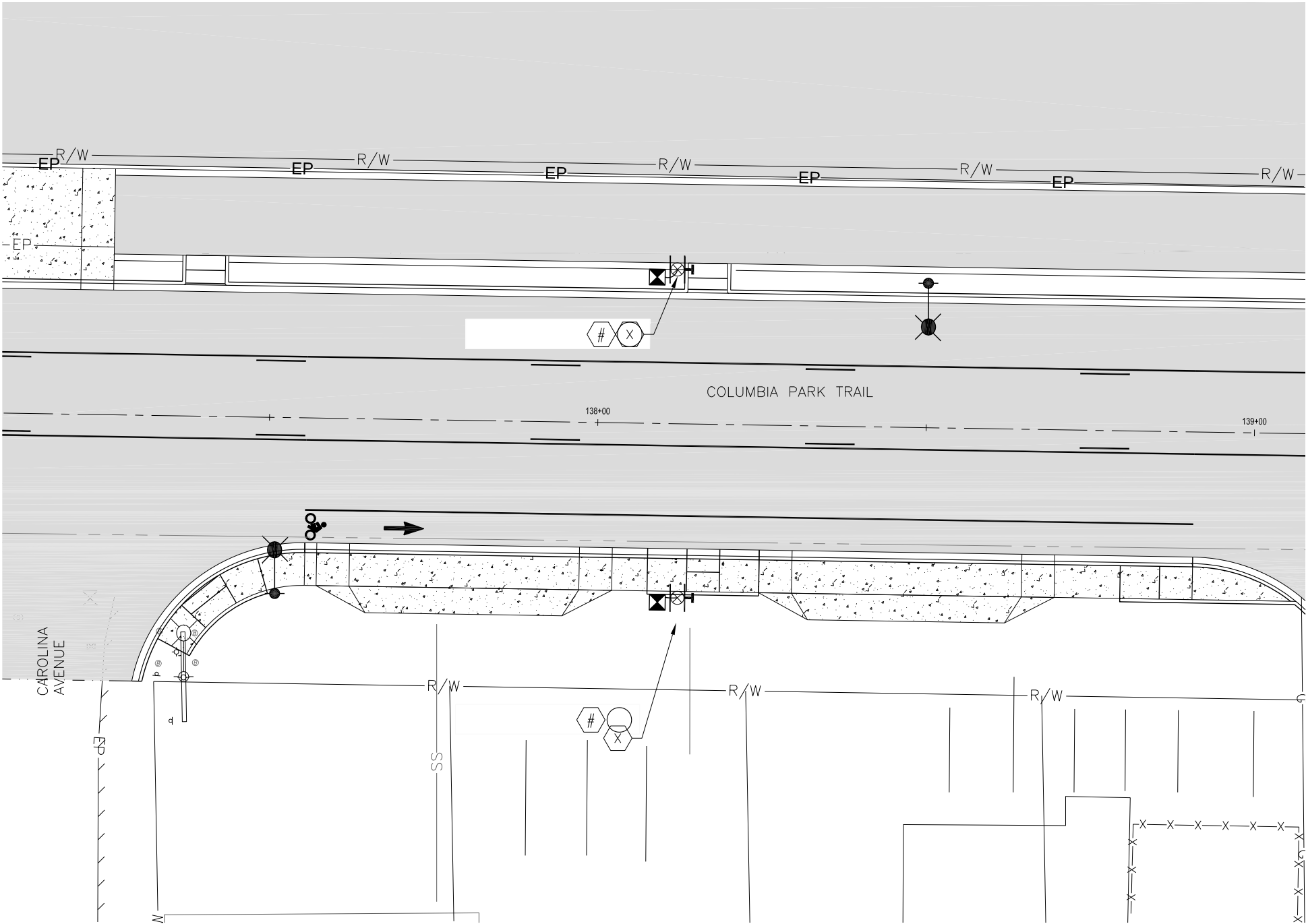
60% REVIEW
SUBMITTAL

REGION NO.	STATE	FEDERAL AID PROJECT NUMBER
	WA	STPUL-TAP-3504(002)

AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG:
columbia park trl_rrfb
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ###-###

SHEET
RRFB-01
OF
OF



COLUMBIA PARK TRAIL AND CAROLINA AVENUE

SCALE:
1"=10' (22x34), 1"=20' (11x17)

CONSTRUCTION RRFB NOTES

1. INSTALL TYPE I POLE FOUNDATION WITH CURB BASE PER WSDOT STANDARD PLAN J-20.11-02, SHEET 2 OF 2. SET FOUNDATION WITH PELCO AP-1095-GVL ANCHOR BOLT CAGE.

2. INSTALL TYPE 1 RRFB EQUIPMENT ON TYPE I POLE USING PELCO BASE MODEL PB-5334-35-GVL-PNC. INCLUDE SIGNAGE, LIGHT BARS, CONTROL CABINET AND CAMPBELL GUARDIAN PUSHBUTTON.

3. INSTALLATION OF FOUNDATION, CONDUIT AND JUNCTION BOX BY OTHERS.

4. INSTALL TYPE 1 QUAZITE JUNCTION BOX ADJACENT TO TYPE I OR TYPE III POLE FOR GROUNDING OF THE RRFB ASSEMBLY POLE. CONNECT THE POLE FOUNDATION AND JUNCTION BOX WITH 2" SCHEDULE 40 PVC CONDUIT.

5. INSTALL TYPE 2 RRFB EQUIPMENT ON TYPE I POLE USING PELCO BASE MODEL PB-5334-35-GVL-PNC. INCLUDE SIGNAGE, LIGHT BARS, CONTROL CABINET AND CAMPBELL GUARDIAN PUSHBUTTON.

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9. REPAIR ASPHALT OR CONCRETE SIDEWALK AS NECESSARY.

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14. SET UP SYSTEM FOR AC RRFB.
15. INSTALL THERMOPLASTIC CROSSWALK BLOCKS AS SHOWN.

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17. REMOVE EXISTING FLAGS AND POST.

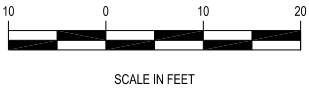
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19. INSTALL 12"x36" OM-3L OBJECT MARKER

20. REMOVE EXISTING SIGN

GENERAL NOTES

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- NOTES:
1. THESE NOTES CORRESPOND TO POLES LISTED ON SHEET C4

LEGEND			
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	SERVICE DISCONNECT PEDESTAL		PEDESTRIAN PUSH BUTTON ASSEMBLY
	TYPE-1 JUNCTION BOX		SIGNAL POLE AND MAST ARM
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	EMERGENCY VEHICLE PREEMPTION DETECTOR		TYPE PPB POLE
	VEHICLE SIGNAL HEAD		LUMINAIRE
	PEDESTRIAN SIGNAL HEAD		WIRING SCHEDULE NOTE (SEE SHEET X)
	VIDEO DETECTION CAMERA		
	SIGNAL POLE NUMBER		



CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG:
columbia park trl_rrfb
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ##-###

SHEET
RRFB-02
OF
OF

60% REVIEW
SUBMITTAL

RRFB Plan
REGION NO. STATE FEDERAL AID PROJECT NUMBER
TO WA STIPUL-TAP-3504(002)

RRFB Plan

a.	VEHICLE DISPLAY	f.	LUMINAIRE
b.	MAST ARM MTD. SIGN	g.	PEDESTRIAN DISPLAY
c.	STREET NAME SIGN	h.	RRFB CONTROL
d.	PRE-EMPT DETECTOR	i.	APS PPB-M
e.	POST MTD. SIGN	j.	HANDHOLE/TERMINAL CABINET
		k.	VIDEO DETECTION CAMERA

STD. NO. XX	SIGNAL STANDARD NO.	STD. NO. 02
SRXXX, MP XXX.XX	STATE ROUTE AND MILE POST NO.	SR97, MP 069.09
MANUFACTURER APPROVED DWG. XXXXXX	APPROVED DRAWING NO.	MANUFACTURER APPROVED DWG. AB12345
FAB. X/XX/XXXX	FABRICATION DATE	FAB. 6/14/2002
		EXAMPLE

CORROSION RESISTANT METAL TAG SECURED WITH (2) 0.125" RIVETS AS FOLLOWS:

- POLE SHAFT - LOCATED WITHIN 6" ABOVE HAND HOLE (TYPE II & III).
- SIGNAL AND LUMINAIRE MAST ARM (TYPE II & III) - LOCATED WITHIN 6" OF THE LUMINAIRE ARM AND THE POLE SHAFT CONNECTION POINT (TYPE III).

TEXT SHALL BE A MINIMUM OF 3/16" HIGH, STAMPED OR EMBOSSED.

① MOUNTING COUPLING INSTALLED AT OFFSET DISTANCE INDICATED IN CHART. FOR TYPE N MOUNTS ONLY, DRILL 1" DIA. HOLE IN MAST ARM AND INSTALL PLASTIC SPLIT BUSHING FOR CABLE ENTRANCE.

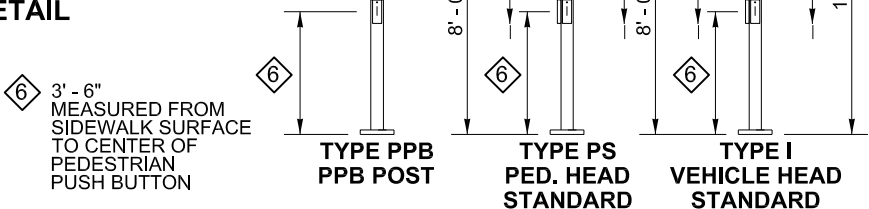
SIGN	HEIGHT	WIDTH	AREA
b	3.0 FT	N/A	7.5 SQ. FT.
c	3.0 FT	N/A	36.0 SQ. FT.
e	N/A	3.0 FT	15.0 SQ. FT.



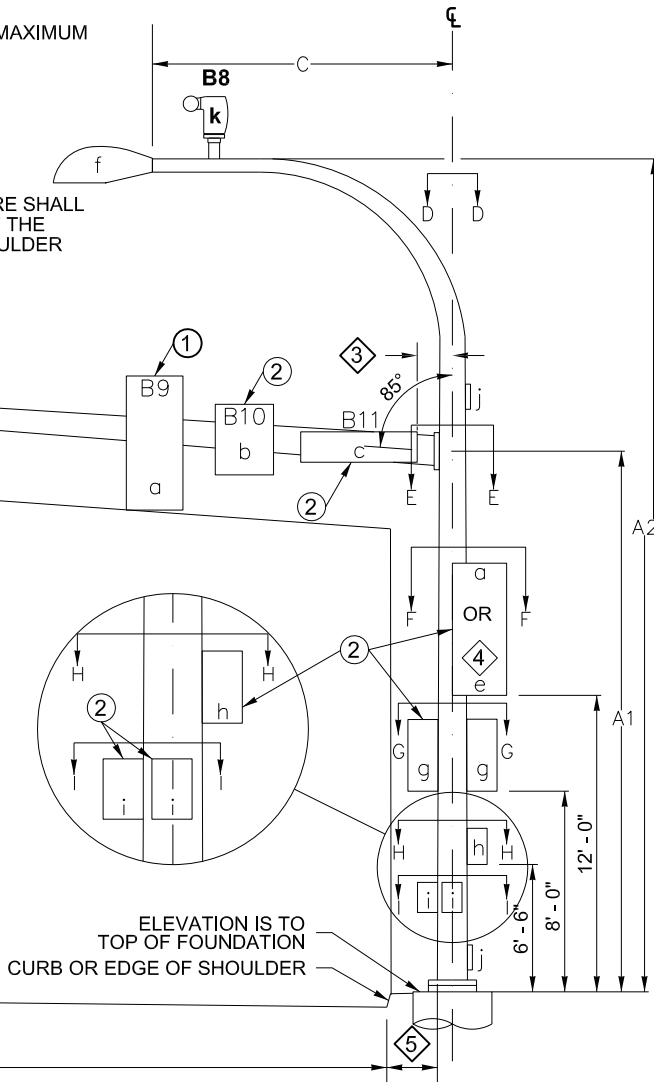
LUMINAIRE MAST ARM X Y Z (ft) ³	
MAST ARM LENGTH	X Y Z (ft) ³
6'	19.8
8'	26.4
10'	33.0
12'	39.6
14'	46.2
16'	52.8

STANDARD TYPE		STANDARD PLAN REFERENCES			
		POLE	FOUNDATION	ELECTRICAL	
			STANDARD	CURB	
PPB	FIXED	J-20.10	J-20.10	J-20.11	J-20.10
	BREAKAWAY	J-20.15	J-20.15		J-20.15
PS		J-20.16	J-21.10		J-20.20
I		J-21.15	J-21.10		J-21.20
II, III, SD		N/A	J-26.10, J-26.15	N/A	N/A

NOTE:
FOR PPB, PS, AND
TYPE 1 POLES USE
NORTH AS A
REFERENCE FOR 0°
(CLOCKWISE)



SIGNAL DISPLAY VERTICAL CLEARANCE TO ROADWAY					
	MIN.	MAX.			
HORIZONTAL DISTANCE FROM STOP LINE	ALL	40'	45'	50'	53'–180'
3 SECTION 12" 5 SECTION CLUSTER 12"	16.5'	17.5'	19.2'	20.9'	22.0'
4 SECTION 12"	16.5'	17.0'	18.0'	19.7'	20.8'
5 SECTION 12"	16.5'	17.0'	17.5'	18.5'	19.6'
MEASURED FROM BOTTOM OF SIGNAL HEAD BACKPLATE TO ROADWAY					



7 DMS OR VMS IS NOT ALLOWED ON THESE POLES.

TYPE II, III & SD SIGNAL STANDARD

5 PLACEMENT SHALL BE 2' - 0" MIN. FROM FACE OF CURB OR EDGE OF SHOULDER;

[illegible]

* ELEVATION IS TO TOP OF FOUNDATION. FIELD VERIFY ELEVATION PRIOR TO ORDERING SIGNAL STANDARDS.

****** CALCULATED POLE XYZ (FT³) IS THE SUM OF THE TOTAL XYZ (FT³) FOR THE SIGNAL ARM AND THE XYZ (FT³) FOR THE LUMINAIRE ARM (IF PRESENT).



CITY OF RICHLAND

Columbia Park Trail East Improvements

60% REVIEW
SUBMITTAL

RRFB Pole Chart

REGION NO.	STATE	FEDERAL AID PROJECT NUMBER
10	WA	STPUL-TAP-3504(002)

ONE INCH

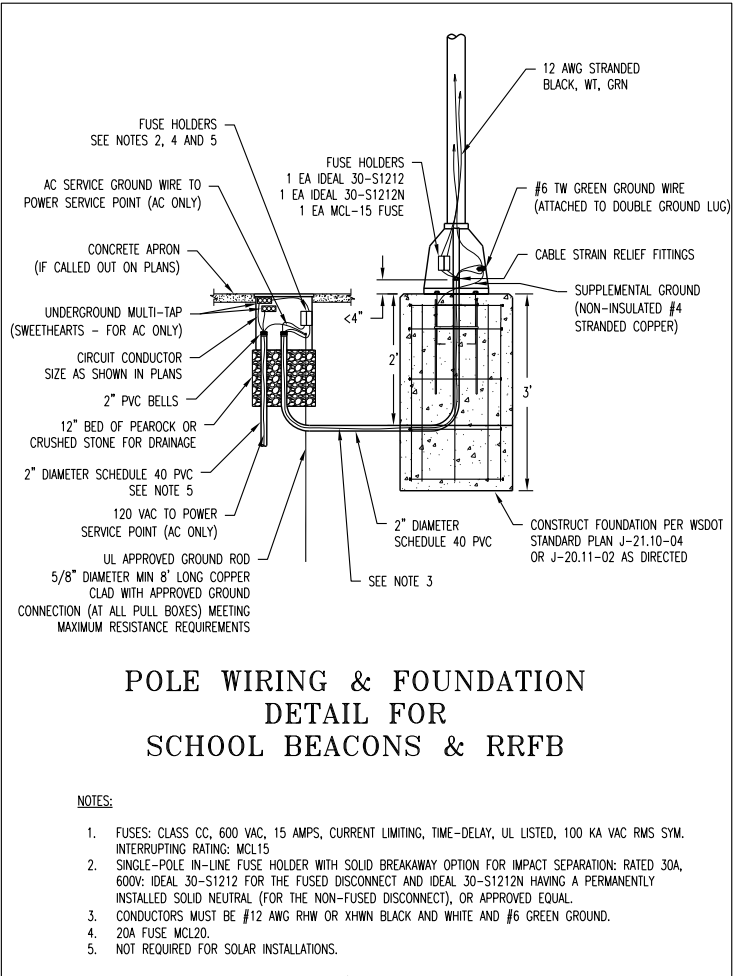
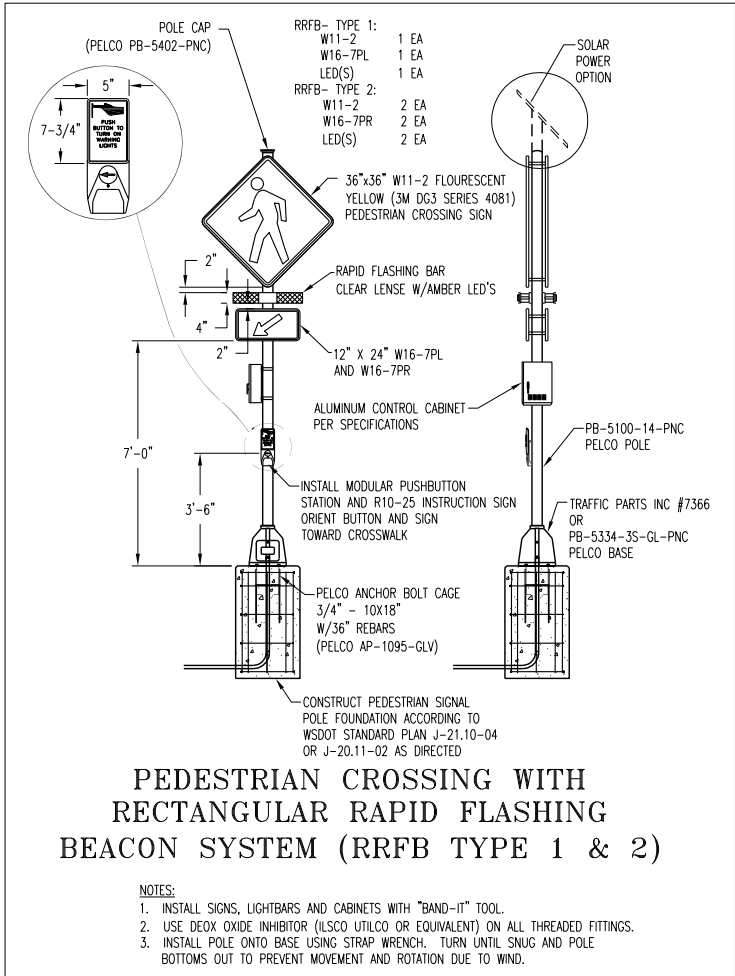
AT FULL SIZE, IF NOT ONE INCH,
SCALE ACCORDINGLY

CAD DWG:
columbia park trl_rrfb
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ##-##-##

SHEP

RRFB-03

OF





CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

REVISION

NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

RRFB Details

60% REVIEW
SUBMITTAL

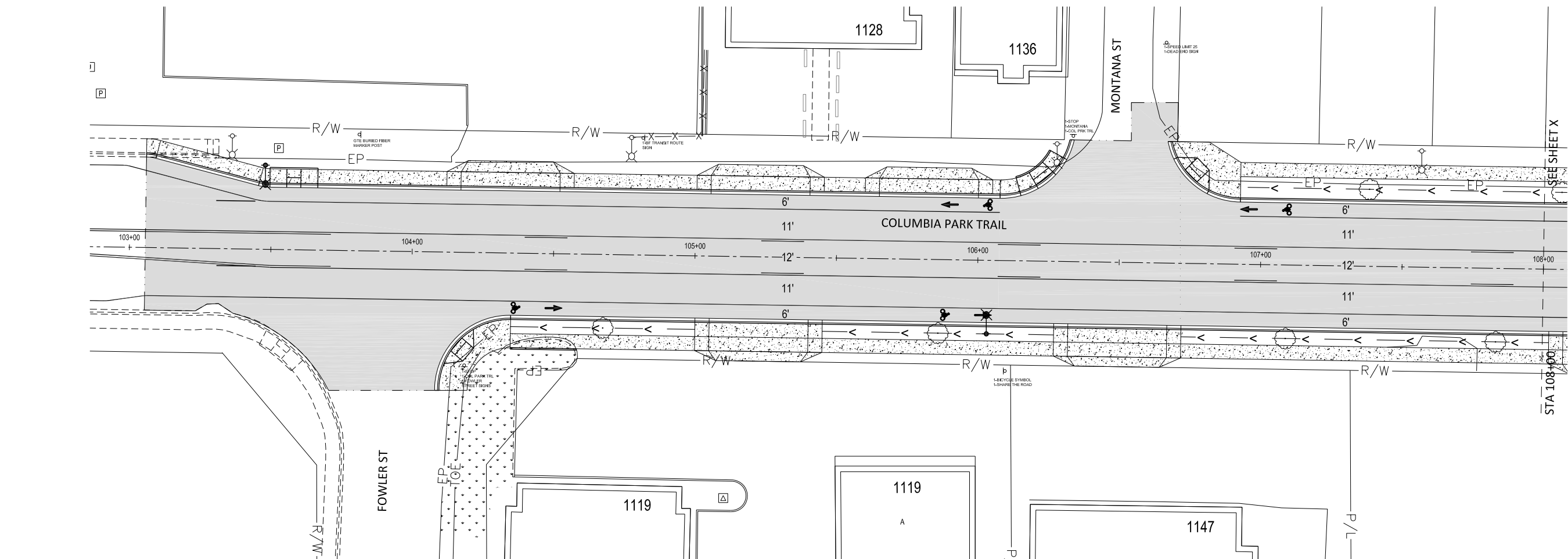
REGION	NO.	STATE	FEDERAL AID PROJECT NUMBER
TO	WA	STPUL-TAP-3504(002)	

ONE INCH

AT FULL SIZE. IF NOT ONE INCH,
SCALE ACCORDINGLY

CAD DWG:
columbia park trl_rrfb
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: SAW
RECORD DWG: ##-###

SHEET
RRFB-04
OF
OF



**COLUMBIA PARK TRAIL
PLAN VIEW**
SCALE:
1"=20' (22x34), 1"=40' (11x17)

SYMBOL LEGEND:

- 4" YELLOW CENTERLINE - SKIP PATTERN = 10' LINE AND 30' GAP
- 4" WHITE LANE LINE - SKIP PATTERN = 10' LINE AND 30' GAP
- 4" WHITE EDGE LINE
- YELLOW DOUBLE CENTERLINE - TWO 4" YELLOW LINES SEPARATED BY 4"
- TWO-WAY LEFT-TURN LANE LINE - TWO 4" YELLOW LINES SEPARATED BY 4". INSIDE YELLOW USES SKIP PATTERN OF 10' LINE AND 30' GAP
- 8" WIDE LANE LINE - WHITE
- 4" YELLOW SOLID CENTERLINE
- 4" DOTTED LANE OR EXTENSION LINE WITH COLOR C (W=WHITE, Y=YELLOW) & SKIP PATTERN # (1 = 1' LINE AND 3' GAP, 2 = 2' LINE AND 6' GAP, 3 = 3' LINE AND 9' GAP)
- 8" WIDE DOTTED LANE OR EXTENSION LINE WITH COLOR C (W=WHITE, Y=YELLOW) & SKIP PATTERN # (1 = 1' LINE AND 3' GAP, 2 = 2' LINE AND 6' GAP, 3 = 3' LINE AND 9' GAP)

- TRAFFIC ARROW FOR LOW SPEED ROADWAYS PER WSDOT STANDARD PLAN M-24.40-02 WHERE T=TYPE
 - 1S = STRAIGHT TRAFFIC ARROW FOR THRU TRAFFIC
 - 2SR = RIGHT-TURN TRAFFIC ARROW
 - 2SL = LEFT-TURN ARROW
 - 3SR = SHARED THRU AND RIGHT-TURN ARROW
 - 3SL = SHARED THRU AND LEFT-TURN ARROW
 - 4 = SHARED LEFT-TURN AND RIGHT-TURN ARROW
 - 6SL = DIAGONAL MERGE LEFT ARROW
 - 6SR = DIAGONAL MERGE RIGHT ARROW
 - 7S = SHARED THRU, LEFT-TURN, AND RIGHT-TURN ARROW
- 18" STOP BAR WHERE STA = STATION LOCATION
- CROSSWALK- 2' X 8' BLOCKS ALIGNED AND SPACED PER WSDOT STANDARD PLAN M-15.10-01
- BIKE LANE SYMBOL PER WSDOT STANDARD PLAN M-9-50.02 WITH OPTIONAL ARROW A (0=NONE, 1=THRU, 2=RIGHT-TURN, 3=LEFT-TURN) AND WHERE
- SHARED LANE MARKING

60% REVIEW
SUBMITTAL

CITY OF RICHLAND PUBLIC WORKS DEPARTMENT	REVISION	NO.	DESCRIPTION	BY	DATE

Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

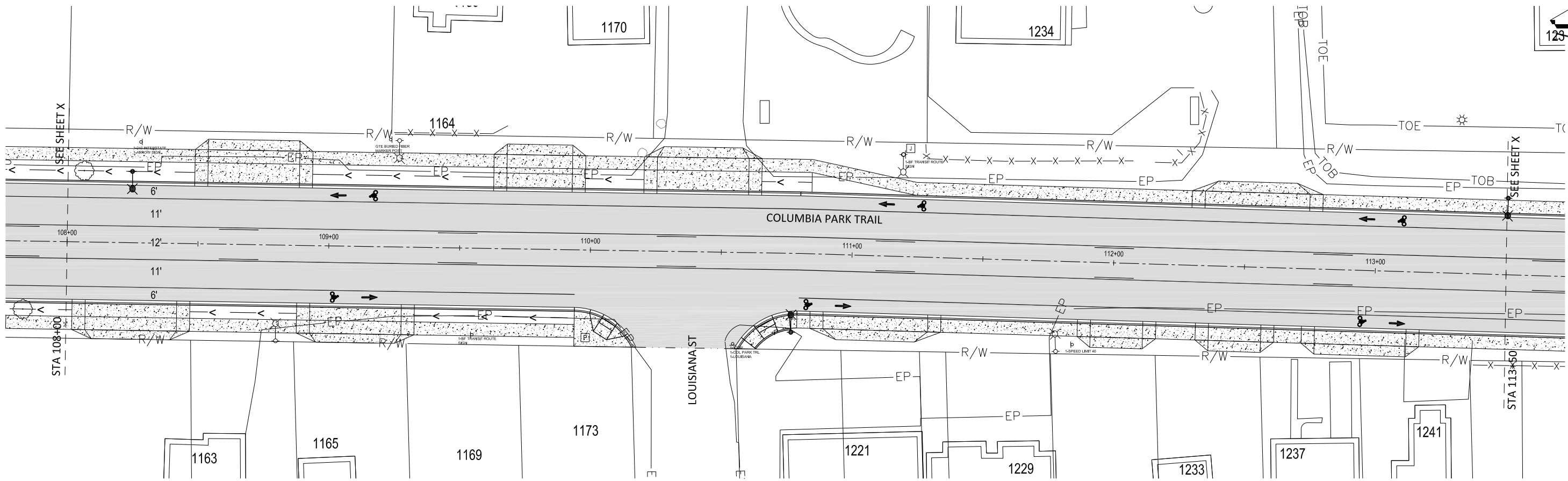
Signing and Striping Plan

ONE INCH

AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY

CAD DWG: columbia park trl_striping
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: JD
RECORD DWG: ##-###

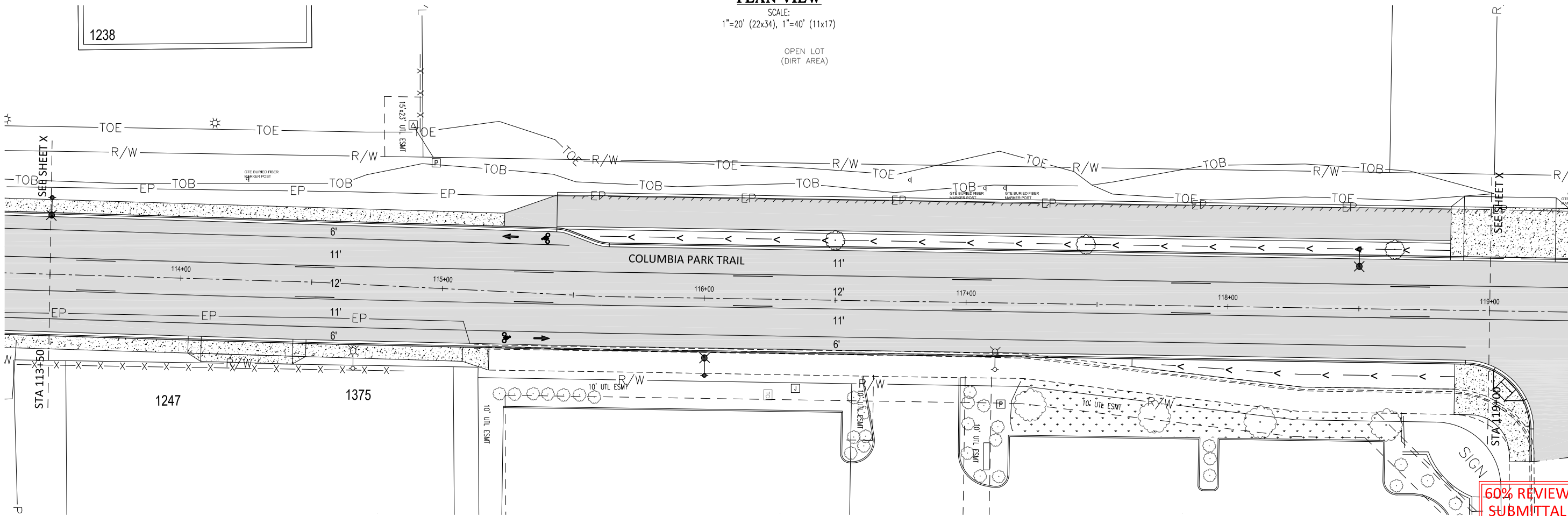
ST1 OF OF



**COLUMBIA PARK TRAIL
PLAN VIEW**

SCALE:
1"=20' (22x34), 1"=40' (11x17)

OPEN LOT
(DIRT AREA)



CITY OF RICHLAND
PUBLIC WORKS DEPARTMENT

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Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Drv.)

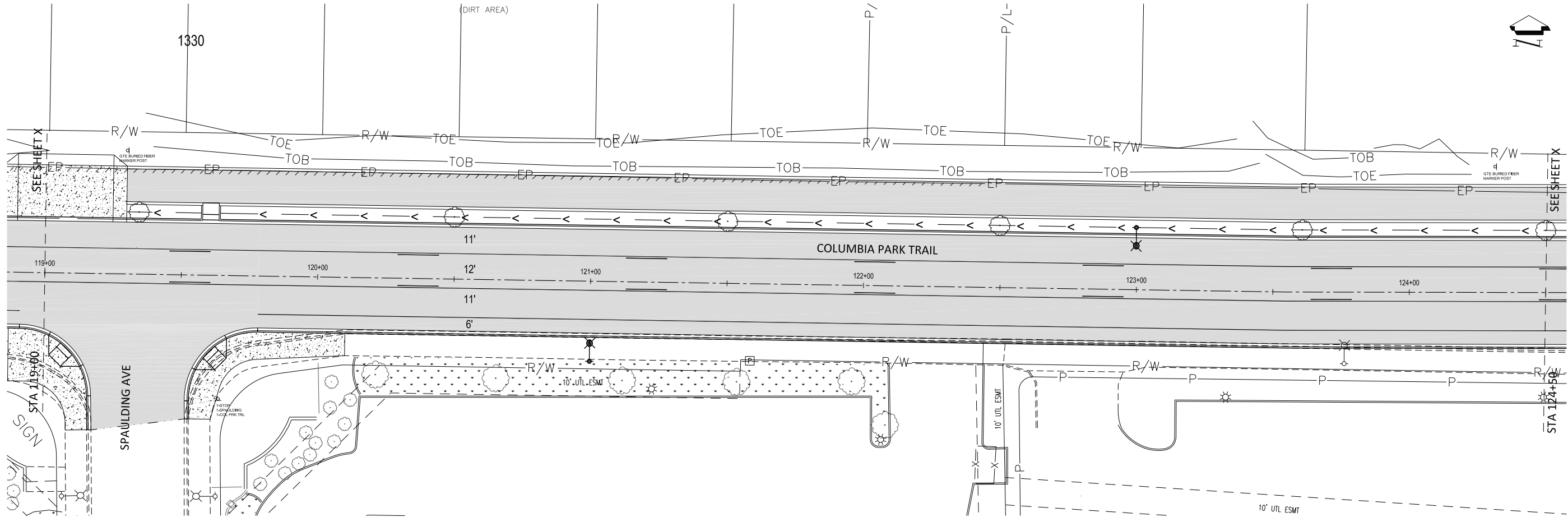
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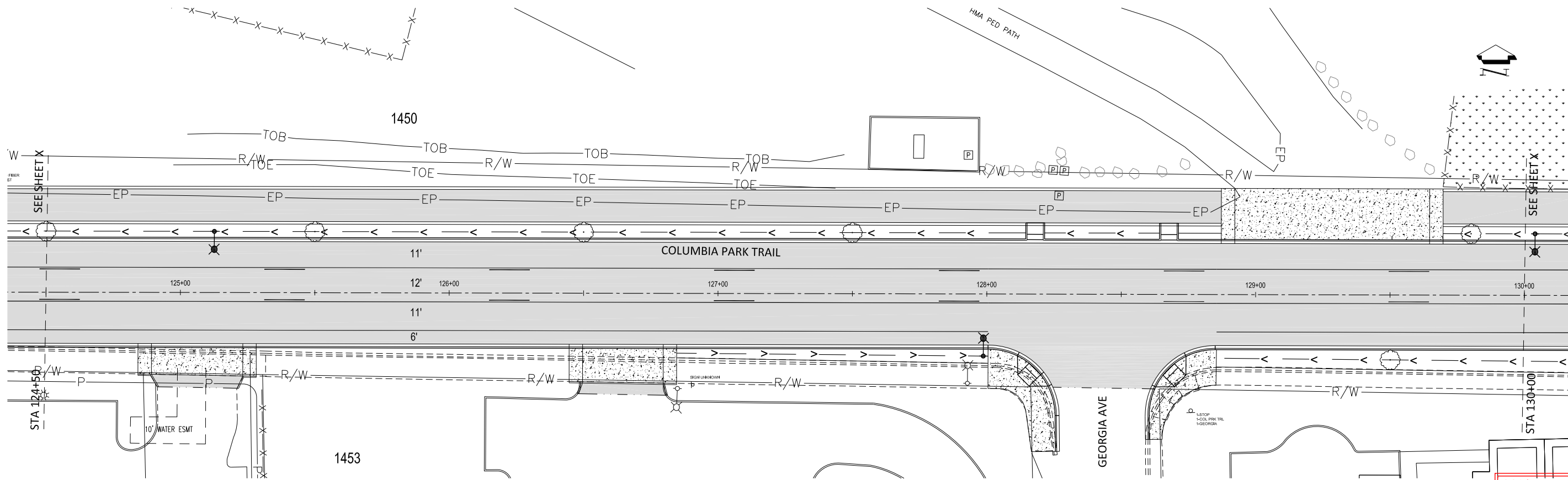
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OF
OF

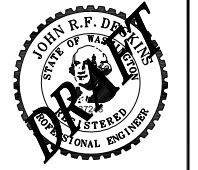
**60% REVIEW
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**COLUMBIA PARK TRAIL
PLAN VIEW**
SCALE:
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Columbia Park Trail East Improvements
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SHEET

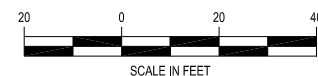
ST3 OF **OF**



REVISION			
NO.	DESCRIPTION	BY	DATE

Signing and Striping Plan

 ONE INCH AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
CAD DWG: columbio park trl_stripping
CONTRACT NO: 20-0029
DATE: 02-21-2020
DRAWN BY: LD
DESIGN BY: JD
RECORD DWG: ###-###
SHEET ST4 OF OF



SCALE:
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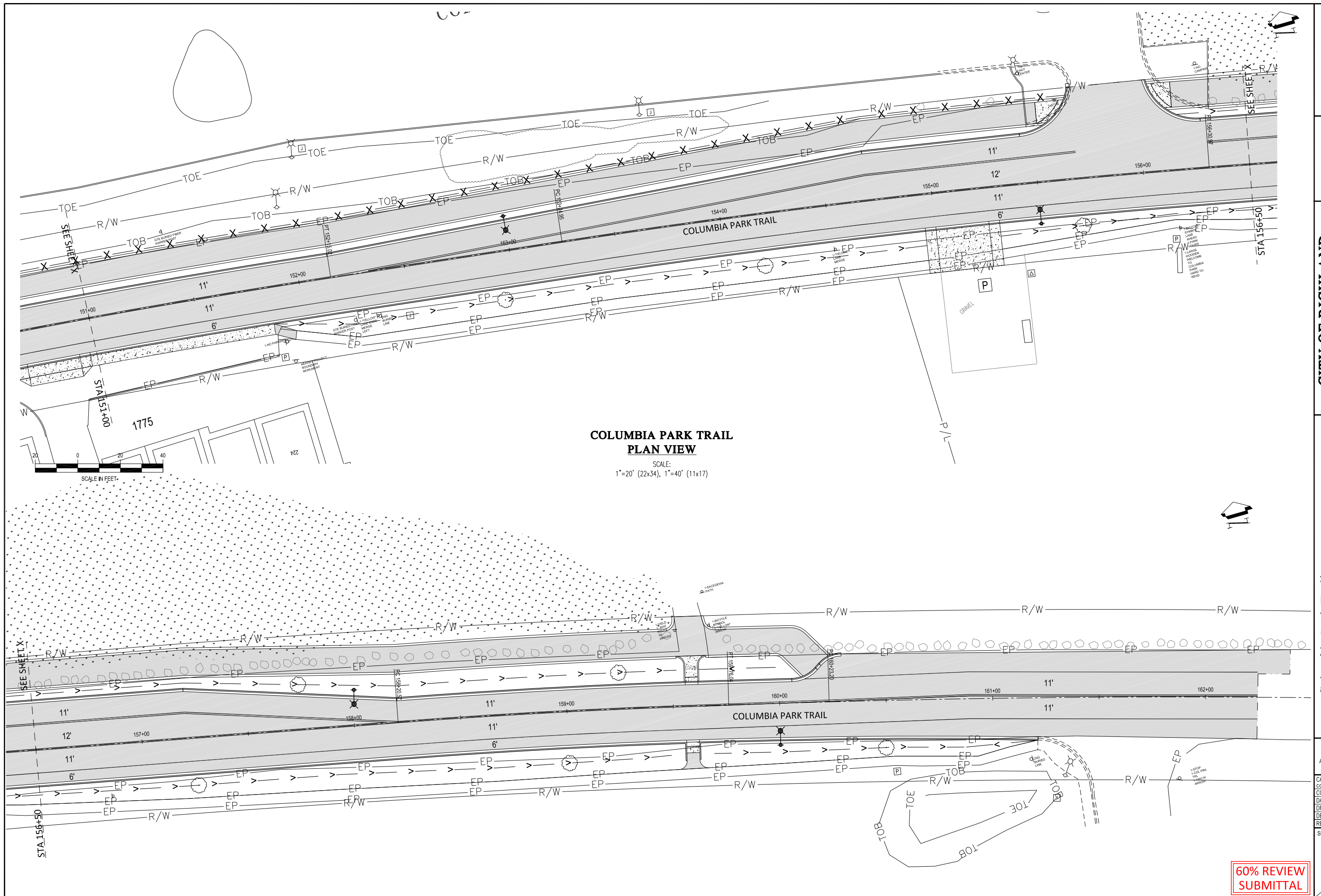
Columbia Park Trail East Improvements
(Fowler St. to Reach Museum Dwy.)

Signing and Striping Plan

ONE INCH

AD DWG:	Columbia park trl_stripping
CONTRACT NO:	20-0029
DATE:	02-21-2020
DRAWN BY:	LD
DESIGN BY:	JD
RECORD DWG:	##-###
SHEET	

OF
OF





CITY OF RICHLAND
NOTICE OF APPLICATION AND PUBLIC HEARING
SHORELINE SUBSTANTIAL DEVELOPMENT AND SPECIAL
USE PERMIT (SMP2020-101 & SSDP2020-101)

Notice is hereby given that the City of Richland Public Works Department has applied for a Shoreline Management Substantial Development & Special Use Permit to fully reconstruct a 1.1-mile segment of Columbia Park Trail and to reconstruct an existing parking lot on the north side of Columbia Park Trail. Road work includes adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations, storm drainage collection system including on-site swales and underground infiltration systems. Work on the parking lot will be within the Corps of Engineers owned land, leased to the City of Richland. A SEPA DNS was issued for this project on Dec. 30, 2019 (EA2019-135). The proposal has been determined to be consistent with the City of Richland's Critical Areas regulations.

Copies of the complete application packet, SEPA Checklist and related materials can be obtained by visiting the City of Richland website (www.ci.richland.wa.us).

The Richland Hearings Examiner will conduct a public hearing and review of the application at 6:00 p.m., Monday, April 13, 2020 in the Richland City Hall Council Chambers, 625 Swift Boulevard. All interested parties are invited to attend and present testimony at the public hearing.

Any person desiring to express their views or to be notified of any decisions pertaining to this application should notify Shane O'Neill, Senior Planner, 625 Swift Boulevard, MS #35, Richland, WA 99352. Comments may also be emailed to soneill@ci.richland.wa.us. Written comments should be received no later than 5:00 p.m. on Monday, April 6, 2020 to be incorporated into the staff report. Comments received after that date will be entered into the record at the hearing.

The application will be reviewed in accordance with the regulations in RMC Title 19 Development Regulations Administration and Title 26 Shoreline Master Program. Appeal procedures of decisions related to the above referenced application are set forth in RMC Chapter 19.70. Contact the Richland Planning Division at the above referenced address with questions related to the available appeal process.

Vicinity Map

Item: Columbia Park Trail East Shoreline Special Use
& Substantial Development Permit
Applicant: City of Richland Public Works
File #'s: SSD2020-101 & SMP2020-101





**CITY OF RICHLAND
NOTICE OF SEPA DETERMINATION**

Date Notice Issued: December 30, 2019, per WAC 197-11-340(2)

File #s: EA2019-135

Proponent: City of Richland Public Works Department

Proposal: Columbia Park Trail Improvements - East. The project includes a full reconstruction of the existing roadway including adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations (RRFBs (2) and new ADA ramps), storm drainage collection system including on-site swales and potentially underground infiltration systems. An Ecology stormwater grant will allow for the treatment of stormwater prior to being discharged in the Columbia River along with the rehabilitation of the parking lots for the Wye Park (including storm drainage collection system). Work on the parking lots will be within the Corps of Engineers owned land, leased to the City of Richland.

The project is consistent with RMC Chapter 22.10, Critical Areas. A Shoreline Management Substantial Development and Shoreline Special Use Permit will be applied for at a later date.

Location of Proposal: Columbia Park Trail from Fowler Street on the western terminus to Hanford Reach Drive on the eastern terminus (approximately 1.1 miles), Richland, WA. Located within Sections 29 & 30, Township 9 North, Range 29 East, W.M., Richland, WA.

Determination: The City has reviewed the project for environmental impacts and has issued a determination of non-significance using the process outlined in WAC 197.11.340. This may be the only opportunity to comment on the environmental impacts of the proposal.

Public Comments Due: January 14, 2020

Contact: Mike Stevens, Planning Manager
625 Swift Blvd, MS-35
Richland, WA 99352
mstevens@ci.richland.wa.us

AFFIDAVIT OF MAILING

STATE OF WASHINGTON)
) ss.
COUNTY OF BENTON)

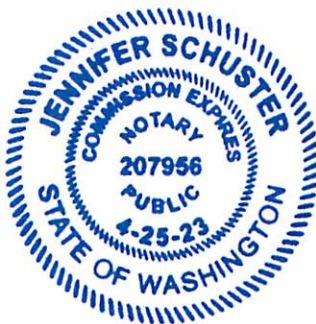
COMES NOW, Briana Ghbein, who, being first duly sworn upon oath deposes and says:

1. I am an employee in the Planning & Development Department for the City of Richland.

2. On the 9th day of March, 2020, I mailed a copy of the attached NOTICE OF APPLICATION and SHORELINE MANAGEMENT PUBLIC HEARING NOTICE (SMP2020-101 & SSDP2020-101) to the attached list of individuals via regular USPS on the date indicated above. The Richland Hearing Examiner will conduct a public hearing at 6:00 PM on Monday, April 13, 2020 in the Richland City Council Chambers, 625 Swift Boulevard.


Signed: Briana Ghbein

SIGNED AND SWORN to before me this 9th day of March, 2020 by Jennifer Schuster.




Notary Public in and for the State of Washington,

Jennifer Schuster
Print Name
Residing at 625 Swift Blvd
My appointment expires: 4-25-23



CITY OF RICHLAND
NOTICE OF APPLICATION AND PUBLIC HEARING
SHORELINE SUBSTANTIAL DEVELOPMENT AND SPECIAL
USE PERMIT (SMP2020-101 & SSDP2020-101)

Notice is hereby given that the City of Richland Public Works Department has applied for a Shoreline Management Substantial Development & Special Use Permit to fully reconstruct a 1.1-mile segment of Columbia Park Trail and to reconstruct an existing parking lot on the north side of Columbia Park Trail. Road work includes adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations, storm drainage collection system including on-site swales and underground infiltration systems. Work on the parking lot will be within the Corps of Engineers owned land, leased to the City of Richland. A SEPA DNS was issued for this project on Dec. 30, 2019 (EA2019-135). The proposal has been determined to be consistent with the City of Richland's Critical Areas regulations.

Copies of the complete application packet, SEPA Checklist and related materials can be obtained by visiting the City of Richland website (www.ci.richland.wa.us).

The Richland Hearings Examiner will conduct a public hearing and review of the application at 6:00 p.m., Monday, April 13, 2020 in the Richland City Hall Council Chambers, 625 Swift Boulevard. All interested parties are invited to attend and present testimony at the public hearing.

Any person desiring to express their views or to be notified of any decisions pertaining to this application should notify Shane O'Neill, Senior Planner, 625 Swift Boulevard, MS #35, Richland, WA 99352. Comments may also be emailed to soneill@ci.richland.wa.us. Written comments should be received no later than 5:00 p.m. on Monday, April 6, 2020 to be incorporated into the staff report. Comments received after that date will be entered into the record at the hearing.

The application will be reviewed in accordance with the regulations in RMC Title 19 Development Regulations Administration and Title 26 Shoreline Master Program. Appeal procedures of decisions related to the above referenced application are set forth in RMC Chapter 19.70. Contact the Richland Planning Division at the above referenced address with questions related to the available appeal process.

Vicinity Map

Item: Columbia Park Trail East Shoreline Special Use
& Substantial Development Permit
Applicant: City of Richland Public Works
File #'s: SSD2020-101 & SMP2020-101



Owner	Mail Address	City	State	Zip
YMCA OF THE GREATER TRI-CITIES	1234 COLUMBIA PARK TRAIL	RICHLAND	WA	99352
TAPTEAL OWNER LLC	600 UNIVERSITY ST, STE 1708	SEATTLE	WA	98101
SLEATER CHARLES B	15404 N WEBBER CANYON RD	BENTON CITY	WA	99320
SLEATER GERALD D & DELORIS	104105 E BADGER RD	KENNEWICK	WA	99338-9100
BWR HOLDINGS LLLP	8131 W GRANDRIDGE BLVD, STE 210	KENNEWICK	WA	99336
WELCH ROBERT	129 S ELY ST	KENNEWICK	WA	99336-2902
PERFECTION PROPERTIES MANAGEMENT LLC	15 N AUBURN	KENNEWICK	WA	99336
BEN FRANKLIN TRANSIT	1000 COLUMBIA PARK TRAIL	RICHLAND	WA	99352-4851
GOVERNMENT	CORP OF ENGINEER			0
MYERS E DEAN & CAROLYN R	1901 GEORGE WASHINGTON WAY	RICHLAND	WA	99354-2382
WASHINGTON SECURITIES & INVESTMENT CORP	8901 W TUCANNON AVE STE 110	KENNEWICK	WA	
GAMACHE LLC	1212 COLUMBIA PARK TRAIL	RICHLAND	WA	99352
MALHAN RAJIV & MONICA	1231 COUNTRY RIDGE DR	RICHLAND	WA	99352-7763
CITY OF RICHLAND	625 SWIFT BLVD., MS-09	RICHLAND	WA	99352
COUGARS PROPERTY LLC	7015 ALDERMAN RD	PASCO	WA	99301
CRUZ RODRIGUEZ JAIME & RODRIGUEZ CHRISTINE	1453 CARSON ST	RICHLAND	WA	99352
SINGLETON LIONELL	PO BOX 3392	PASCO	WA	99302
ROSE DAVID W & MONIKA I	630 SUMMIT ST	RICHLAND	WA	99352
RAMIREZ EDUARDO	2712 FLEMING LN	PASCO	WA	99301
FORD GREGORY & AMY	4818 W 20TH CT	KENNEWICK	WA	99338
SLEATER GERALD & DELORIS M	104105 E BADGER RD	KENNEWICK	WA	99338-9100
RATTLESNAKE MOUNTAIN INVESTMENTS LLC	PO BOX 6317	KENNEWICK	WA	99336
ROGERS RICHARD A & CAREL L	10712 W COURT ST	PASCO	WA	99301
HUGHES JOHN L & VERNA T	1101 N JEFFERSON PL	KENNEWICK	WA	99336-7671
RUIZ MARINA	1240 MONTANA ST	RICHLAND	WA	99352
SIFUENTEZ OLIVIA R	1312 DAKOTA AVE	RICHLAND	WA	99352
JOGAMI LLC	1455 COLUMBIA PARK TRL STE 201	RICHLAND	WA	99352-4711
IRVING PASCO LLC	5745 BLACK LAKE BELMORE RD SW	OLYMPIA	WA	98512
FERQUERON ET AL RUTH LORRAINE	1235 SE CARSON ST	RICHLAND	WA	99352-4705
ADSG LLC	3561 REGENT ST	RICHLAND	WA	99352
FGL LLC	44404 E SHANNON LN	WEST RICHLAND	WA	99353
S.V.V.K. LLC	2333 DAVISON AVE	RICHLAND	WA	99354-1920
ALLPRO INC	1232 COLUMBIA PARK TRAIL	RICHLAND	WA	99352
MUNLEY JOHN T & BRENDA H	38903 OIE HWY	BENTON CITY	WA	99320
BOICE TYLER M	5019 W IRVING ST	PASCO	WA	99301
PARK TRAIL LLC	1333 COLUMBIA PARK TRAIL STE 210	RICHLAND	WA	99352
C & S HANGAR LLC	6398 SHALE ST	WEST RICHLAND	WA	99353
FORD GROUP LLC	4818 W 20TH CT	KENNEWICK	WA	99338
RF MCD LLC	PO BOX 6317	KENNEWICK	WA	99336-0317
RICHLAND SKY APARTMENTS LLC	6710 E CAMELBACK STE 100	SCOTTSDALE	AZ	85251
ELLINGSEN STEVE & CARLA	11907 SHORELINE CT	PASCO	WA	99301
FORESITE DEVELOPMENT CORP	1101 N JEFFERSON PL	KENNEWICK	WA	99336-7671
1321 LLC	1321 COLUMBIA PARK TRAIL	RICHLAND	WA	99352

AFFIDAVIT OF POSTING

STATE OF WASHINGTON)
) ss.
COUNTY OF BENTON)

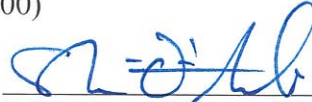
COMES NOW, **Shane O'Neill**, who, being first duly sworn upon oath deposes and says:

1. I am an employee in the Planning & Development Department for the City of Richland.

2. On the 10th day of March, 2020, I posted the attached NOTICE OF PUBLIC HEARING, File Numbers SMP2020-101 & SSDP2020-101 at the following locations:

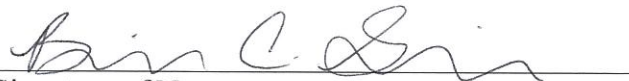
On the north side of Columbia Park Trail at the park addressed 1604 Columbia Park Trail (APN 1-30991000027000); and

On the north side of Columbia Park Trail near the City limits line where it intersects with 1802 Columbia Park Trail (APN 1-29992000001000)



Print Name: Shane O'Neill

SIGNED AND SWORN to before me this 11th day of March, 2020 by SHANE O'NEILL.



Signature of Notary

Briana C. Ghbein
Printed Name

Notary Public in and for the State of Washington,

Residing in Benton County

My appointment expires: 4-25-23



AFFIDAVIT OF PUBLICATION

Account #	Ad Number	Identification	PQ	Amount	Cols	Depth
450543	0004512249	SEPA EA2019-135	D2586000 4401	\$133.48	1	4.88 In

Attention: Jana Duncan

RICHLAND CITY OF/LEGALS
625 SWIFT BLVD.
RICHLAND, WA 99352

CITY OF RICHLAND
NOTICE OF SEPA DETERMINATION

Date Notice Issued: December 30, 2019, per WAC 197-11-340(2)
File #s: EA2019-135

Proponent: City of Richland Public Works Department

Proposal: Columbia Park Trail Improvements - East. The project includes a full reconstruction of the existing roadway including adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations (RRFBs (2) and new ADA ramps), storm drainage collection system including on-site swales and potentially underground infiltration systems. An Ecology stormwater grant will allow for the treatment of stormwater prior to being discharged in the Columbia River along with the rehabilitation of the parking lots for the Wye Park (including storm drainage collection system). Work on the parking lots will be within the Corps of Engineers owned land, leased to the City of Richland.

The project is consistent with RMC Chapter 22.10, Critical Areas, A Shoreline Management Substantial Development and Shoreline Special Use Permit will be applied for at a later date.

Location of Proposal: Columbia Park Trail from Fowler Street on the western terminus to Hanford Reach Drive on the eastern terminus (approximately 1.1 miles), Richland, WA. Located within Sections 29 & 30, Township 9 North, Range 29 East, W.M., Richland, WA.

Determination: The City has reviewed the project for environmental impacts and has issued a determination of non-significance using the process outlined in WAC 197.11.340. This may be the only opportunity to comment on the environmental impacts of the proposal.

Public Comments Due: January 14, 2020

Contact: Mike Stevens, Planning Manager
625 Swift Blvd, MS-35
Richland, WA 99352
mstevens@ci.richland.wa.us

COUNTY OF BENTON)

.SS

STATE OF WASHINGTON)

Victoria Rodela, being duly sworn, deposes and says, I am the Legals Clerk of The Tri-City Herald, a daily newspaper. That said newspaper is a local newspaper and has been approved as a legal newspaper by order of the superior court in the county in which it is published and it is now and has been for more than six months prior to the date of the publications hereinafter referred to, published continually as a daily newspaper in Benton County, Washington. That the attached is a true copy as it was printed in the regular and entire issue of the Tri-City Herald and not in a supplement thereof, ran 1 time(s) commencing on 01/05/2020, and ending on 01/05/2020, and that said newspaper was regularly distributed to its subscribers during all of this period.

VRodela

(Signature of Legals Clerk)

SUBSCRIBED AND SWORN BEFORE
ME THIS 6th DAY OF January, 2020

Stefani Scott Beard

Notary Public in and for the State of Texas
residing in Dallas County



Extra charge for lost or duplicate affidavits.
Legal document please do not destroy!

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background [\[HELP\]](#)

1. Name of proposed project, if applicable:

Columbia Park Trail Improvements-East

2. Name of applicant:

City of Richland, Public Works Department

3. Address and phone number of applicant and contact person:

**Sheldon Williamson
625 Swift Blvd.
Richland, WA 99352
509-942-7492
swilliamson@ci.richland.wa.us**

4. Date checklist prepared:

12/13/2019

5. Agency requesting checklist:

City of Richland

6. Proposed timing or schedule (including phasing, if applicable):

May 2020-December 2020

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- **NEPA documentation**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No.

10. List any government approvals or permits that will be needed for your proposal, if known.

- **NEPA**
- **USACE Permit**
- **Shoreline Development Permit**

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to

describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Reconstruct the street to provide 3-lanes, with curb, gutter, sidewalks, bike lanes, street lights, drainage facilities and streetscape on both sides. TAP funds will be used for the sidewalk and bike lanes.

The project is located along Columbia Park Trail between Fowler Drive and the Hanford Reach Driveway, covering approximately 1.1 miles within Sections 29 and 30 of T9N R29E. This corridor services as a minor arterial and access point to Columbia Park West, Richland Marina, Batman Island, along with businesses, residential homes, and business office complex. Parts of the Columbia Park Trail East corridor included in the project see over 5000 ADT.

This improvement project will include a full reconstruction of the existing roadway including adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations (RRFBs (2) and new ADA ramps), storm drainage collection system including on-site swales and potentially underground infiltration systems. An Ecology stormwater grant will allow for the treatment of stormwater prior to being discharged in the Columbia River along with the rehabilitation of the parking lots for the Wye Park (including storm drainage collection system). Work on the parking lots will be within the Corps of Engineers owned land, leased to the City of Richland.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Sec. 29,30, T.9N., R29E.

Columbia Park Trail from Fowler St. on the western terminus of the project, to Hanford Reach Dr. on the eastern terminus of the project.

Vicinity Map Attached

B. Environmental Elements [\[HELP\]](#)

1. Earth [\[help\]](#)

a. General description of the site:

(circle one) Flat, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

~3%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Unknown, all existing areas are covered with asphalt.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

None.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

None.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Same as before. All asphalt and concrete will be installed in same footprint as previous, no net PGIS gain.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

None.

2. Air [\[help\]](#)

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Emissions resultings from the use of construction equipment used during construction of the roadway.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Eliminate unnecessary idling of construction equipment and water down exposed soils to prevent the suspension of dust in the immediate vicinity.

3. Water [\[help\]](#)

a. Surface Water: [\[help\]](#)

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes, the Columbia River.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Some will be performed within 150 ft of the Columbia River.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water: [\[help\]](#)

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Any runoff from dust mitigation, construction activities or stormwater will flow to and be collected in existing catchbasins and roadside swales/ditches meant for infiltration/conveyance. New created storm water runoff from street will be collected into a storm drain system possibly a mix of surface infiltration, underground infiltration, and conveyance to be determined. Existing outfalls in the area will be analyzed for possible stormwater pre-treatment. Water runoff from construction related activities will not discharge directly to surface waters.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

None.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Contractor is required to provide an erosion control plan prior to starting construction. Included in the erosion control plan is how to use BMP to control construction water runoff and tracking of dirt on the streets (contractor to be required to clean the streets as necessary during construction). Existing storm drainage system within construction area will be protected and / or cleaned as required.

4. Plants [\[help\]](#)

- a. Check the types of vegetation found on the site:

 x deciduous tree: alder, maple, aspen, other

☐ evergreen tree: fir, cedar, pine, other
☒ shrubs
☒ grass
☐ pasture
☐ crop or grain
☐ Orchards, vineyards or other permanent crops.
☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
☐ water plants: water lily, eelgrass, milfoil, other
☐ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

No vegetation will be removed or altered.

c. List threatened and endangered species known to be on or near the site.

None.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None.

e. List all noxious weeds and invasive species known to be on or near the site.

None.

5. Animals [\[help\]](#)

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other _____

Hawks, herons, songbirds, waterfowl. Salmonids are located in the Columbia River. However no work will affect this waterbody or the fish.

b. List any threatened and endangered species known to be on or near the site.

None known.

c. Is the site part of a migration route? If so, explain.

No.

d. Proposed measures to preserve or enhance wildlife, if any:

None

e. List any invasive animal species known to be on or near the site.

None known.

6. Energy and Natural Resources [\[help\]](#)

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electricity will be used to meet the energy needs of the project beyond the normal fuels used for construction equipment.

- b. Would your project affect the potential use of solar energy by adjacent properties?
If so, generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental Health [\[help\]](#)

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?
If so, describe.

- 1) Describe any known or possible contamination at the site from present or past uses.

None.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating

life of the project.

None.

- 4) Describe special emergency services that might be required.

Emergency services that may be required during construction include access to medical facilities in the area. These facilities likely include the following:

**Kadlec Medical Center
888 Swift Blvd
Richland, WA 99352**

- 5) Proposed measures to reduce or control environmental health hazards, if any:

The Contractor will be required to provide all personnel with personal protective equipment (PPE) and comply with all work-site safety requirements. A Spill Prevention Control & Containment (SPCC) plan is required to be submitted by the contractor before construction starts.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Area noise will not affect the project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Typical construction related noise of short term duration will happen during construction. Included source of noises would be excavators, dump trucks, front loaders and other types of typical construction equipment as needed. Hours between 7am and 6pm.

- 3) Proposed measures to reduce or control noise impacts, if any:

The Contractor will be required to follow the City's noise ordinance (RMC 9.16) during construction- typically construction cannot start before 7am.

8. Land and Shoreline Use [\[help\]](#)

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Public Right of Way (streets), Parks, Recreation.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

- c. Describe any structures on the site.

Roadway, Pedestrian facilities, parking lots.

- d. Will any structures be demolished? If so, what?

No.

- e. What is the current zoning classification of the site?

Commercial Recreation, Developed Open Space, Waterfront, General Commercial, Retail Regional

- f. What is the current comprehensive plan designation of the site?

Waterfront, Retail Regional, Developed Open Space

- g. If applicable, what is the current shoreline master program designation of the site?

Recreation, Natural, Recreation Conservancy

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Adjacent to but not within critical area floodplains

- i. Approximately how many people would reside or work in the completed project?

None.

- j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None.

9. Housing [\[help\]](#)

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics [\[help\]](#)

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

None.

b. What views in the immediate vicinity would be altered or obstructed?

None.

b. Proposed measures to reduce or control aesthetic impacts, if any:

Multituse pathways, improved roadway surfaces will produce positive aesthetic impacts.

11. Light and Glare [\[help\]](#)

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation [\[help\]](#)

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Parks, Marina, walkways.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

None.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None.

13. Historic and cultural preservation [\[help\]](#)

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.

None.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None at this time. A cultural survey will be completed as part of the NEPA process.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

DAHP Cultural & Resources Review as part of the NEPA

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None.

14. Transportation [\[help\]](#)

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Columbia Park Trail, Columbia Center Blvd. Fowler St. Montana Ave., Louisiana Ave, Spaulding Ave., SE Georgia Ave., Florida Ave, Dakota Ave., Delaware Ave. SE, SE Carolina Ave., WA-240

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Yes. There are eastbound and westbound transit stops along the project site.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

The proposed street section will remove all on-street parking due to adding bike lanes / sidewalks and changing the width of the street section. Parking at the Wye Park will be reduced due to meeting current City codes for parking lot spacing (and defining the spaces).

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Yes, improvements to Public streets, pedestrian facilities, bicycle lanes, parking lots.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

None.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would

be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Current traffic volumes are at 5794 ADT, the same volume is considered to be present when the project is finished.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any:

There is a proposed detour route on Fowler st.

15. Public Services [\[help\]](#)

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

None.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities [\[help\]](#)

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other irrigation

c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Stormwater improvements to existing parking lot and roadways to include curb and gutter, catch basins. Power will be retrofitted from overhead to underground. New streetlights will be added along the entire project area.

C. Signature [\[HELP\]](#)

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____



Name of signee Brian Pope
Position and Agency/Organization Civil Engineer I City of Richland
Date Submitted: _____

D. Supplemental sheet for nonproject actions [\[HELP\]](#)

(IT IS NOT NECESSARY to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Not at all likely to have any of these affects.

Proposed measures to avoid or reduce such increases are:

None.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Not at all likely to affect these items as the proposal is only to improve existing facilities and not increase footprint or obtain any ROW.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

None.

3. How would the proposal be likely to deplete energy or natural resources?

There will be no depletion of natural resources or energy due to this proposal as the roadway and parking lots will be used in the same manner. The increase in bicycle lanes and multi-use pathways will most likely have a positive affect on energy and natural resources.

Proposed measures to protect or conserve energy and natural resources are:

None.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

The proposal will help protect the Wye park and surrounding recreation area, to include the Columbia River by improving and containing the parking within resurfaced parking lot and by containing and treating the stormwater that is currently infiltrated onsite.

Proposed measures to protect such resources or to avoid or reduce impacts are:

None.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

It will encourage land and shoreline uses compatible with current plans by improving current facilities.

Proposed measures to avoid or reduce shoreline and land use impacts are:

None.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

No increased demands are anticipated, the number of travel lanes on the the roadway will be decreased.

Proposed measures to reduce or respond to such demand(s) are:

None.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

No conflicts are anticipated, as the proposal is following NEPA, SEPA, and Local environmental permitting processes.



File No. EA2019-135

CITY OF RICHLAND
Determination of Non-Significance

Description of Proposal: Columbia Park Trail Improvements - East. The project includes a full reconstruction of the existing roadway including adding curb & gutter, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations (RRFBs (2) and new ADA ramps), storm drainage collection system including on-site swales and potentially underground infiltration systems. An Ecology stormwater grant will allow for the treatment of stormwater prior to being discharged in the Columbia River along with the rehabilitation of the parking lots for the Wye Park (including storm drainage collection system). Work on the parking lots will be within the Corps of Engineers owned land, leased to the City of Richland.

The project is consistent with RMC Chapter 22.10, Critical Areas. A Shoreline Management Substantial Development and Shoreline Special Use Permit will be applied for at a later date.

Proponent: City of Richland Public Works Department

Location of Proposal: Columbia Park Trail from Fowler Street on the western terminus to Hanford Reach Drive on the eastern terminus (approximately 1.1 miles), Richland, WA. Located within Sections 29 & 30, Township 9 North, Range 29 East, W.M., Richland, WA.

Lead Agency: City of Richland

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

() There is no comment for the DNS.

(X) This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen days from the date of issuance.

() This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

Responsible Official: Mike Stevens

Position/Title: Planning Manager

Address: 625 Swift Blvd., MS #35, Richland, WA 99352

Date: December 30, 2019

Signature 



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1250 W Alder St • Union Gap, WA 98903-0009 • (509) 575-2490

January 9, 2020

Mike Stevens
City of Richland
PO Box 190
Richland, WA 99352

Re: EA 2019-135

Dear Mike Stevens:

Thank you for the opportunity to comment on the determination of nonsignificance for the Columbia Park Trail Improvements-East. We have reviewed the documents and have the following comments.

WATER QUALITY

Project with Potential to Discharge Off-Site

If the project anticipates disturbing ground with the potential for stormwater discharge off-site, the NPDES Construction Stormwater General Permit is recommended. This permit requires that the SEPA checklist fully disclose anticipated activities including building, road construction and utility placements. Obtaining a permit may take 38-60 days.

The permit requires that a Stormwater Pollution Prevention Plan (Erosion Sediment Control Plan) shall be prepared and implemented for all permitted construction sites. These control measures must be able to prevent soil from being carried into surface water and storm drains by stormwater runoff. Permit coverage and erosion control measures must be in place prior to any clearing, grading, or construction.

In the event that an unpermitted Stormwater discharge does occur off-site, it is a violation of Chapter 90.48 RCW, Water Pollution Control and is subject to enforcement action.

More information on the stormwater program may be found on Ecology's stormwater website at: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/>. Please submit an application or contact **Lloyd Stevens, Jr.** at the Dept. of Ecology, 509-574-3991, with questions about this permit.

Sincerely,

Gwen Clear
Environmental Review Coordinator
Central Regional Office
509-575-2012
crosepa@ecy.wa.gov





STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
1250 West Alder Street • Union Gap, Washington 98903-0009 • (509) 575-2490

April 1, 2020

Shane O'Neill
City of Richland
PO Box 190
Richland, WA 99352

Re: SMP2020-101, SSDP2020-101

Dear Shane O'Neill:

Thank you for the opportunity to comment on the determination of nonsignificance for the reconstruction of a 1.1 mile segment of Columbia Park Trail and north side parking lot. We have reviewed the documents and have the following comments.

WATER QUALITY

Project with Potential to Discharge Off-Site

If the project anticipates disturbing ground with the potential for stormwater discharge off-site, the NPDES Construction Stormwater General Permit is recommended. This permit requires that the SEPA checklist fully disclose anticipated activities including building, road construction and utility placements. Obtaining a permit may take 38-60 days.

The permit requires that a Stormwater Pollution Prevention Plan (Erosion Sediment Control Plan) shall be prepared and implemented for all permitted construction sites. These control measures must be able to prevent soil from being carried into surface water and storm drains by stormwater runoff. Permit coverage and erosion control measures must be in place prior to any clearing, grading, or construction.

In the event that an unpermitted Stormwater discharge does occur off-site, it is a violation of Chapter 90.48 RCW, Water Pollution Control and is subject to enforcement action.

More information on the stormwater program may be found on Ecology's stormwater website at: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/>. Please submit an application or contact **Lloyd Stevens, Jr.** at the Dept. of Ecology, 509-574-3991, with questions about this permit.

Sincerely,

A handwritten signature in blue ink that reads "Gwen Clear".

Gwen Clear
Environmental Review Coordinator
Central Regional Office
509-575-2012
crosepa@ecy.wa.gov



Department of Energy

Bonneville Power Administration
2211 North Commercial Avenue
Pasco, WA 99301

TRANSMISSION SERVICES

March 30, 2020

In reply refer to: Shoreline Permit Review (SMP2020-101 & SSDP2020-101)
Located within a Portion of Sections 29 & 30, Township 9 North,
Range 29 East, W.M., Benton County, Washington

Shane O'Neill
Senior Planner
City of Richland
505 Swift Boulevard
Richland, WA 99352

Dear Shane:

Bonneville Power Administration (BPA) has had the opportunity to review Shoreline Permit Review (SMP2020-101 & SSDP2020-101). The proposal is for Columbia Park trail improvements. The project is generally located from Fowler Street to Hanford Reach Drive in Richland, WA.

In researching our records, we have found that this proposal will not directly impact BPA's facilities in that area. BPA does not have any objections to the approval of this request at this time.

Thank you for the opportunity to review this application. If you have any questions regarding this request or need additional information, please feel free to contact me. I can be reached at (503) 230-5510 or by email at mjdeklyen@bpa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mike DeKlyen", is written over a horizontal line.

Mike DeKlyen
BPA Field Realty Specialist

April 7, 2020

By e-mail to soneill@ci.richland.wa.us

Shane O'Neill, Senior Planner
City of Richland
Public Works Department
625 Swift Blvd, MS #35
Richland, WA 99352

Re: Upcoming Columbia Park Trail East Construction Project
Shoreline Substantial Development and Special Use Permit
(SMP 2020-101 & SSDP 2020-101)

Dear Mr. O'Neill:

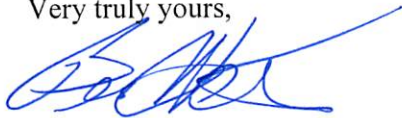
Park Trail, LLC developed its property at the corner of Columbia Park Trail and Spaulding Avenue—1333 Columbia Park Trail—in 2006. The property opened to tenants in January 2007.

Park Trail, LLC also assisted in the development of 1321 Columbia Park Trail—the property immediately to the west of 1333 Columbia Park Trail.

During the course of site selection and development of the property, the City of Richland reassured us that Columbia Park Trail would be redeveloped as a lovely boulevard with sidewalks and other amenities. After waiting patiently, we are excited to see that the City is going to address this matter. This area should be inviting to clients as well as to recreational use. Unfortunately, due to the current state of Columbia Park Trail, that has not been the case.

We are excited that the City is ready to proceed with reconstruction of Columbia Park Trail so that this area can continue redeveloping into an inviting location for businesses and recreational users.

Very truly yours,



BERNIE WALTER



P. CRAIG WALKER



SHEA C. MEEHAN



KRISTI NELSON



SANDRA GAMBLE

CULTURAL RESOURCES REPORT COVER SHEET

DAHP Project Number: 2019-12-09348

Author: Heather Hansen, M.A., James Knobbs, M.A., Darby Stapp, Ph.D.

Title of Report: 2020 Cultural Resources Assessment for the Columbia Park Trail East Improvements Project, Benton County, Richland, WA

Date of Report: March 25, 2020

County(ies): Benton Section: 29& 30 _Township: 9 N Range: 29E

Quad: _____ Acres: 10

PDF of report submitted (REQUIRED) ☒ Yes

Historic Property Inventory Forms to be Approved Online? ☐ Yes ☒ No

Archaeological Site(s)/Isolate(s) Found or Amended? ☐ Yes ☒ No

TCP(s) found? ☐ Yes ☒ No

Replace a draft? ☐ Yes ☒ No

Satisfy a DAHP Archaeological Excavation Permit requirement? ☐ Yes # ☒ No

Were Human Remains Found? ☐ Yes DAHP Case # ☒ No

DAHP Archaeological Site #:

45BN00605

45BN01660

- Submission of PDFs is required.
- Please be sure that any PDF submitted to DAHP has its cover sheet, figures, graphics, appendices, attachments, correspondence, etc., compiled into one single PDF file.
- Please check that the PDF displays correctly when opened.

2020 Cultural Resources Assessment for the Columbia Park Trail East Improvements Project, Benton County, Richland, WA

DAHP Project No.: 2019-12-09348

Prepared for:
Sheldon Williamson
City of Richland
swilliamson@ci.richland.wa.us

Prepared by:
Heather Hansen, M.A.
James Knobbs, M.A., RPA
and Darby Stapp, Ph.D., RPA
Northwest Anthropology LLC
PO Box 1721
Richland, WA

March 25, 2020



NORTHWEST ANTHROPOLOGY

Executive Summary

Northwest Anthropology LLC (NWA) signed a contract on December 26, 2019 with the City of Richland (CoR) to conduct a cultural resource assessment for the Columbia Park Trail East Improvements, Richland, Benton County, Washington. The purpose was to determine the potential for important cultural resources to be located in the project area, to document any cultural resources discovered, and to make recommendations on the need to conduct additional cultural investigations prior to development. The need for a cultural resource survey was identified during the environmental review process required by the National Environmental Policy Act (NEPA). Furthermore, the City of Richland is applying for a shoreline permit and has submitted a State Environmental Protection Act (SEPA) review to facilitate in the planning of the project. Washington State Department of Transportation (WSDOT) was identified as the lead agent (Williamson 2019b). A part of the cultural assessment work was conducted on United States Army Corps of Engineers (USACE) land. The work plan was submitted to Sheldon Williamson (CoR) and Scott Hall (USACE) in conjunction with an ARPA permit on January 22, 2020. The ARPA permit was approved on March 6, 2020 (USACE 2020; No. DACW68-9-20-21). Field work began on March 9, and concluded on March 11, 2020.

The research design was implemented in March 2020 and included the following activities: historical and site background research, an intensive pedestrian survey, and the excavation of 39 shovel test probes (STPs) in 20-m intervals. The background research identified two archaeological sites (45BN00605 and 45BN01660) which are located within the Area of Potential Effect (APE) (Williamson 2019a). There is one listing in the National Register of Historic Places (NRHP), BN00161, Columbia Park Island Archaeological Site/Bateman Island, which is located directly north of the project.

The pedestrian survey observed modern refuse typically associated with roads. However, one pre-contact chert flake was observed outside the project's APE. A basalt and mortar structure located adjacent to Columbia Park Trail will not to be affected by the project. In addition, the 1930s concrete highway that runs through the middle of Columbia Park Trail East and which will be destroyed is not considered significant because of loss of integrity.

Of the 39 STPs excavated, 32 contained items such as small (3–6 cm) clear, brown, and/or green translucent glass fragments, several undiagnostic rusted pieces of metal, 2 rusted undiagnostic nails, several small (1–3 cm) fragments of plastic, several small shell fragments, and one small red brick fragment. All of the items were found 0 to 20 cm below surface. NWA did not collect any of the cultural material; material was deposited at the bottom of the STP and backfilled.

Based upon results of the historical research and the field investigations, it is the professional opinion of NWA Principal Investigator Darby C. Stapp, Ph.D., RPA, that no historic properties will be disturbed (i.e., archaeological sites eligible for listing in the National Register of Historic Places) within the APE. However, due to the sensitivity of the area, as represented by the two known archaeological sites located within the APE, NWA recommends that cultural monitoring occur for all ground disturbing activities located within and east of the Wye Park/parking lot, Richland, Washington.

NWA's professional conclusions and recommendations concerning the potential for project-related impacts to cultural resources should not be considered to constitute project clearance with regard to the treatment of cultural resources or permission to proceed. This report should be submitted to the appropriate state and local review agencies for their comments prior to the commencement of the project.

Table of Contents

Executive Summary	i
Introduction.....	1
Environmental Setting	2
Cultural Setting	2
Cultural Resources in the Vicinity.....	3
Historic Maps and Aerial Photography.....	9
Research Design.....	13
Archaeological Fieldwork.....	13
Results.....	16
Summary	24
References.....	26

Figures

Figure 1. 2017 USGS Kennewick topographic map with project area outlined in center. Scale 1:24,000.....	1
Figure 2. 1865 GLO map with rough project area outlined.....	10
Figure 3. 1917 USGS Pasco topographic map with project area and proposed STPs overlaid. Scale 1:125,000.....	10
Figure 4. 1934 Metsker map with APE/Columbia Park Trail highlighted, center, through map. Map on file at Kennewick Public Library.....	11
Figure 5. 1955 historical aerial photo with project area and proposed STPs overlaid.	11
Figure 6. 1996 Google Earth image with project area and proposed STPs overlaid.	12
Figure 7. 2009 Google Earth image with project area and proposed STPs overlaid.	12
Figure 8. Google Earth map of GPS points for STPs for the 2020 cultural resource assessment for the Columbia Park Trail East Improvement Project.....	14
Figure 9. Overview of project area located at STP 3 looking east.	17
Figure 10. Overview of project area at STP 10 looking west. GL on right and CP on left.	17
Figure 11. Overview of project area, in the Wye Park parking lot, looking west.	17
Figure 12. Typical material found in an STP. From STP 23 found at a depth of approximately 0–20 cm.....	17
Figure 13. Overview of project area, at STP 24 looking east at STP locations 25–30. In the marina parking lot.	18
Figure 14. Ventral side of chert flake observed on the surface next to the marina parking lot, 270 cm east of STP 25. Note the potlid scar.....	18
Figure 15. Dorsal side of chert flake observed on the surface next to the marina parking lot, 270 cm east of STP 25. Flake scars displayed lustrous and non-lustrous.	18
Figure 16. Shell fragments and red brick fragment from STP 34. Found within 0–30 cm below surface.	18
Figure 17. Overview of basalt and mortar structure located in grass looking northwest. Note the bushes to each side.	19
Figure 18. Closer view of basalt and mortar structure looking northwest. Tape measure is at one meter in length.....	19
Figure 19. Close up view of the basalt and mortar structure. Tape measure at 50 cm.	20

Tables

Table 1. Archaeological sites within one mile of the project as documented in WISAARD.....	5
Table 2. Cultural resource surveys within one mile of the project as documented in WISAARD.....	6
Table 3. Results of excavation of 39 STPs.	21

2020 Cultural Resources Assessment for the Columbia Park Trail East Improvements Project, Benton County, Richland, WA

Introduction

This cultural survey was prepared by Northwest Anthropology LLC (NWA) for the City of Richland (City). The City is planning to fully reconstruct a segment of the existing Columbia Park Trail roadway, add curbs and gutters, sidewalks, multi-use paths, on-street bike lanes, new streetlights, pedestrian crossing locations, a storm drainage collection system including on-site swales and potentially underground infiltration systems, rehabilitation of the parking lots for the Wye Park, including storm drainage collection system, and utility work (Williamson 2019a). The Area of Potential Effect (APE) is located along Columbia Park Trail between Fowler Drive and the Hanford Reach Driveway and is approximately 1.1 miles in length and 10 acres in total (Figure 1; Williamson 2019a). The legal description of the project area is defined as: Section 29 and 30, Township 9 North, Range 29. NWA was contacted by Sheldon Williamson on December 11, 2019, to conduct a cultural resource survey of the property. The need for a cultural resource survey was identified during the environmental review process required by the National Environmental Policy Act (NEPA). Furthermore, the City of Richland is applying for a shoreline permit and has submitted a State Environmental Protection Act (SEPA) review to facilitate in the planning of the project. Washington State Department of Transportation (WSDOT) was identified as the lead agent (Williamson 2019b). A part of the cultural assessment work was conducted on United States Army Corps of Engineers (USACE) land.

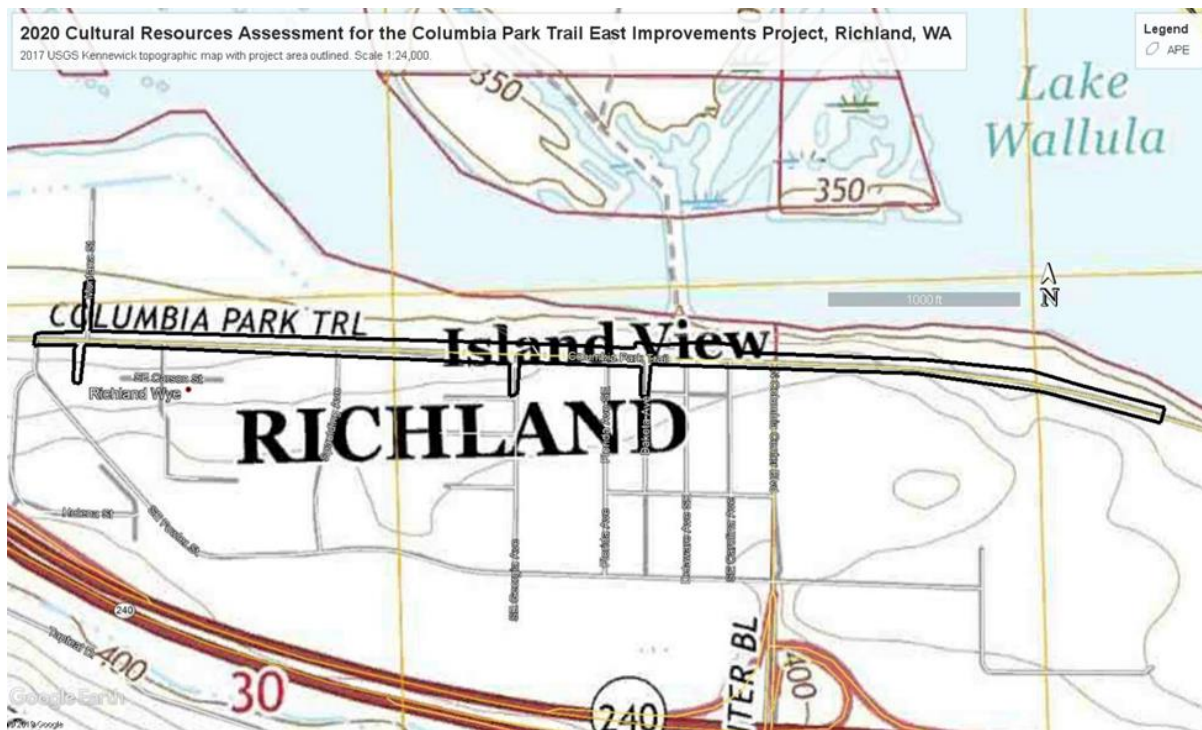


Figure 1. 2017 USGS Kennewick topographic map with project area outlined in center. Scale 1:24,000.

Based upon this information, NWA staff Heather Hansen and James Knobbs developed a work plan and research design (Hansen and Knobbs 2020). The work plan was submitted to Sheldon Williamson and Scott Hall (USACE) in conjunction with an ARPA permit application on January 22, 2020. The ARPA permit was approved on March 6, 2020 (USACE 2020; No. DACW68-9-20-21). Field work began on March 9, and concluded on March 11, 2020.

Environmental Setting

The present-day climate of the area which includes the APE consists of hot, dry summers and cool, moderately damp winters (Duncan 2007). The Columbia River, Yakima River, and various springs and streams make up or contribute to water resources. The Columbia River has been impacted by upstream storage dams, such as Grand Coulee Dam, which cause fluctuations in the river's flow.

The dominant landforms within the project area are stabilized sand dunes with loamy and gravelly sand. These dunes have been stabilized primarily by cheatgrass (*Bromus tectorum*). The dominant species are rubber rabbitbrush (*Ericameria nauseosa*), snow buckwheat (*Eriogonum niveum*), antelope bitterbrush (*Purshia tridentata*), and grasses including needle-and-thread (*Hesperostipa comata*), Indian ricegrass (*Achnatherum hymenoides*), and curly blue grass (*Poa secunda*). Invasives such as cheatgrass (*Bromus tectorum*), Russian thistle (*Salsola tragus*), and prickly lettuce (*Lactuca serriola*) are also present.

The project area is located in the city of Richland, which itself is located in the Mid-Columbia Valley. To the north are the Saddle Mountains and the Hanford Reach, to the south are the Horse Heaven Hills and the confluence of the Yakima and Columbia Rivers, to the east is the Palouse Slope, and to the west is the Yakima River Valley and Rattlesnake Mountain. This area is hot and dry and naturally covered by shrub-steppe habitat consisting primarily of Great Basin sagebrush (*Artemisia tridentata*) and Sandberg's bluegrass (*Poa secunda*) (Daubenmire 1970; Franklin and Dyrness 1988; Reidel et al. 1993).

The soil in the project area consists of Burbank loamy fine sand, Finley stony fine sandy loam, and Pasco fine sandy loam (USDA NRCS 2020). Burbank loamy fine sand consists of loamy fine sand to a depth of 5 inches, then loamy sand to a depth of 16 inches, very gravelly loamy sand to a depth of 30 inches, transitioning to extremely gravelly sand to a depth of 60 inches. Finley stony fine sandy loam consists of stony fine sandy loam to a depth of 3 inches, and then fine sandy loam to a depth of 13 inches, then very gravelly loam to a depth of 28 inches, and extremely cobbly loamy sand to a depth of 60 inches. Pasco fine sandy loam consists of fine sandy loam to a depth of 6 inches, and then silt loam to a depth of 60 inches.

Cultural Setting

The cultural resources in this area can be assigned to two cultural landscapes—the Native American Cultural Landscape, and the Early Settlers and Farming Landscape. The Native American Cultural Landscape includes a rich record of archaeological sites associated with pre-contact and ethnographic uses of the site. Native Americans have lived in and around the present-day Hanford Site for thousands of years. More than 8,000 years of pre-contact human activity have left extensive archaeological deposits along the Columbia River and, to a lesser degree, the off-river interior. The pre-contact chronology is well-established and documented in Volume 12 of the Smithsonian Institution's *Handbook of North American Indians, Plateau* (Ames et al. 1998; Chatters 1998).

Native American descendants of the area's original inhabitants continue to use this landscape to access traditional resources and places. Sacred and ceremonial areas are found across the landscape, as are locations where food and medicinal plants are gathered and animals hunted. Descendants include members of the Wanapum, Yakama Nation, Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, and the Confederated Tribes of the Colville Reservation. Concerning traditional cultural properties (TCPs), Click Relander in *Drummers and Dreamers* identifies a number of Wanapum-named locations along the Columbia River in Richland (Relander 1956). The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) also report numerous place names located along this stretch of the river (Hunn et al. 2015), and other tribes likely have named places as well.

During the late 1800s, immigrants from the east began to settle the area, first ranching and then farming. Resources relating to western settlement and agriculture largely characterize the Early Settlers and Farming Landscape. Richland was organized in the early 1900s to service the many irrigated farms that sprung up as the Richland Irrigation Canal and other irrigation systems began operation (Parker 1987; Sharpe 1998). The population of Richland increased during the second decade of the twentieth century—from 721 in 1910 to 1,042 in 1920, thereafter decreasing to 764 in 1930 and further to 567 in 1940 (Kubik 1994).

The early settlers' history in the Richland area came to an abrupt end in 1943 when the federal government acquired Richland lands for the war effort. Farming residents were given as little as 30 days to vacate the land on which many had lived for decades (Parker 1987; Kubik 1994; DOE-RL 2003). However, the government only took lands on the north side of the Yakima River. The segment of Columbia Park Trail being modified was once State Highway 410, which ran from Aberdeen, WA, to Lewiston, ID, from 1926 to 1967. With completion of McNary Dam, this segment of State Highway 410 converted to a local road. This concrete road still exists under the pavement. The project area is also located in a residential and commercial area that is known locally as the Richland Wye.

Cultural Resources in the Vicinity

To determine the pre-contact and historical nature of the project area, NWA staff consulted the Washington Information System for Architectural and Archaeological Data (WISAARD) digital repository, historical maps, ethnographic sources, historical society/museums, and local historical sources.

A review of WISAARD shows that 25 archaeological sites fall within 1 mile of the project boundary (Table 1); 21 sites are located in Benton County; 4 sites are located in Franklin County. Three sites are multi-component and contain artifacts such as lithic scatters, glass, metal, ceramics, and cobble chopper. Ten of the sites are historic and contain artifacts such as glass bottles, water pumps and other irrigation features, license plate, historic railroad, and historical house foundations. Twelve of the sites are pre-contact and contain artifacts such as campsites, lithic scatters, bones, house pit depressions, shell, fire modified rocks, cobbles, hammerstones, and burials and associated burial items. There are five cemetery sites within a one-mile radius of the project boundary—two in Benton County and three in Franklin County.

Archaeological sites 45BN00605 and 45BN01660 are located within the APE, as well as archaeological district 45DT00041. 45BN00605 is a multi-component site (lithic scatter, debitage, historic objects, hammerstone, animal bones, and shell) and was originally recorded in 1997 (Schultze and Thompson 2011a). 45BN01660 is also a multi-component site (basalt chopper, shouldered quartzite mano, lithic scatter, faunal material, and historic objects) and was originally

recorded in 2011 (Schultze and Thompson 2011b). Neither were found eligible for the National Register of Historic Places (NRHP).

There is one listing in the NRHP located near the project area—archaeological site BN00161, Columbia Park Island Archaeological Site/Bateman Island. BN00161 was originally documented in 1947 and determined eligible in 1980. Three archaeological sites (BN00047, BN00048, and BN00049) were recorded on the island before all three were incorporated into one site named BN00161. BN00161 contained at least 52 graves; individuals were reinterred June 12, 1976 at the Wanawish Indian Cemetery. Also found were faunal bone (including bison, deer, and antelope), graves goods such as abalone shell pendants and engraved shells, two obsidian knives, eight housepits, historic concrete foundations, and irrigation ditches and associated material. The island is identified as being inhabited by Wanapums and named *Akachpah* (Relander 1956). Lewis and Clark reached the island in October 1805 and noted procurement and processing of salmon (Moulton 1988). Between 1872 and 1951, the island was the home to several farmsteads (Hannum et al. 2001). Throughout the decades, the island was known by several different names including Riverview Island, Widgeon Island, Christensen, McCall, Hunt, and Backworth Island. The commonly used name, Bateman Island, came about when much of the island was purchased by the Bateman families—Wallace and his wife Eliza, and Charles and his wife Marie—in 1941. The island became part of the McNary Dam project under management of the United States Army Corps of Engineers (USACE) in 1951. In 1953, the island was leased to Benton County Parks and Recreation. By 1980, all former names stopped being used (Hannum et al. 2001).

There have been 39 cultural resource surveys conducted within 1 mile of the project area (Table 2). Four surveys occurred within the APE. Historical Research Associates, Inc. (HRA) conducted a cultural resource assessment in the eastern half of the APE in 2011 for the Hanford Reach National Monument Heritage and Visitor Center (Schultze et al. 2011). They conducted a pedestrian survey at 15-meter intervals east-west, and then again north to south. Subsurface testing included shovel test probes (STP) at a 50- and 25-meter grid pattern. Additional STPs were excavated around positive STPs. A total of 118 STPs were excavated to depths between 20 cm and 300 cm; 21 trenches were excavated to a length of 2 meters. The survey returned positive results for archaeological and historical artifacts that resulted in four low-density clusters. Two of these clusters were considered to extend boundaries of two known archaeological sites—BN00605 and BN 01660. The other two clusters were given site numbers BN01659 and BN01658.

National Heritage Inc. conducted a cultural resources inventory for a proposed interpretive site in 2004 located towards the center of the APE (Lenz 2004). National Heritage Inc. conducted a pedestrian survey and observed fragments of a historic foundation.

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) conducted monitoring and a small subsurface survey in association with the Columbia Park West Marina Project in 2001 (Miller 2001). Monitoring resulted in locating two pre-contact artifacts—a cobble and an obsidian flake. They were judged to be part of site BN00605. Six STPs were excavated to a depth of 105 cm. No items of archaeological or historical significance were observed.

Cultural Resource Consultants, Inc. (CRC) conducted a cultural resource assessment in the western half of the APE in 2015 for the City of Richland's Columbia Park Trail Stormwater LID Project (Berger 2015). CRC conducted a pedestrian survey on both sides of Columbia Park Trail. Subsurface testing included 11 STPs at select locations throughout the project where impervious surfaces, buried utilities, and other evidence of past ground disturbance were absent. CRC's assessment did not return any positive indication for cultural material.

WISAARD's predictive model indicates that the project is very high risk in terms of the likelihood that archaeological sites will be encountered at this location. This characterization is based largely upon the presence of Bateman Island and the confluence of the Columbia and Yakima Rivers. Based upon the very high risk indication, archaeological survey is highly advised prior to development.

A known Sahaptian cultural site, *Tilupipye* is located just west of the APE (Hunn et al. 2015). *Tilupipye* was a well-known healing spring; the Wanapums referred to it as *Tola Topepeia* (Relander 1956). A camp was located on the north side of the river and fishing was done on canoes. Columbia Point South was known as *Chamna*, a village at the mouth of the Yakima River. The villages were of medium size, and activities were varied, with fishing being the most prominent. There are several known village sites located just across the Columbia River (Hunn et al. 2015). The Wanapums identify an old village site, *Tomnosh*, near the APE, across from *Chamna* (Relander 1956). Bateman Island is identified as *Akachpah* (Relander 1956).

Table 1. Archaeological sites within one mile of the project as documented in WISAARD.

Smithsonian No.	Comments	Date Recorded	Eligibility
BN00019	campsite, 25 yards diameter, projectile point, shell	07/19/47	Survey/Inventory
FR00014	lithics, shell, bone	08/11/48	Survey/Inventory
FR00402	housepit depression, FCR, shell, discoidal knives	03/11/93	Survey/Inventory
BN00605	240 square meters, lithic scatter, historic objects, glass, metals, ceramics	01/31/01	Survey/Inventory
BN01658	pre-contact lithic material, hammerstone, FMR, grooved cobble, 35 x 15m	02/17/11	Survey/Inventory
BN01659	historic agriculture, metal cylinder pump motor, 15 x 30m, ca. pre-1953	02/17/11	Potentially Eligible
BN01660	historic and pre-contact components, lithic material, flakes, cobble chopper, pre contact camp, historic glass, wire nails, 160 x 80m, ca. pre-1900	02/17/11	Survey/Inventory
BN00052	prehistoric lithic scatter and shell midden	08/26/47	Survey/Inventory
BN00161	at least 35 burial remains uncovered dated 2,000 years. abalone pendants, engraved detaliu shells. hearths associated with pit houses and mat houses	04/30/68	State Register
FR00028	historic burials marked by cedar posts	08/11/47	Survey/Inventory
BN01757	medicine bottle neck and finish, historic isolate, ca. 1870–1920	08/21/13	Survey/Inventory
BN01459	pre-contact lithic material, flaked cobble isolate, 20 x 13cm, 8cm thick	01/17/07	Survey/Inventory

Smithsonian No.	Comments	Date Recorded	Eligibility
BN00618	one secondary basalt flake 4.3 x 3.0 x 0.9 cm	09/17/01	Survey/Inventory
BN00619	Hughes home site, historic habitation, 165 x 130m, 1910s–1990s; five features—concrete root cellar, water trough, glass and ceramic fragments, buried pipeline, and possible pump house site	09/17/01	Potentially Eligible
BN00587	site dimensions 160 x 30 meters, date of use undetermined, lithic scatter	01/30/01	Survey/Inventory
BN00018	campsite, 150 yards, shell	07/26/47	Survey/Inventory
BN00879	historic refuse scatter, 40 x 40m, 1920/1929–1954/1959	05/13/01	Potentially Eligible
BN01488	flaked cobble isolate, 12.3 cm x 10.6 cm x 2.6cm thick	11/27/07	Survey/Inventory
BN01489	historic license plate isolate, Washington state plate, ca. 1954, metal tag from 1957, 12 in x 6 in, tag reads: 60_510602 wn	11/27/07	Survey/Inventory
FR00101		04/30/67	Survey/Inventory
BN01328	historic concrete foundations/ irrigation feature, Hanford construction worker dwellings, 1940's, 60 x 60ft, 20x 20ft and 3 x 4 x 3ft	08/23/04	Potentially Eligible
BN01327	Bateman apartment house foundation, historic foundation, 37 x 14m, post 1919	05/25/04	Determined Not Eligible
BN01470	pre-contact ccs flake	07/31/07	Survey/Inventory
BN01679	Union Pacific railroad, historic railroad berm/ alignment, 1800 x 18 ft, 1884–1990	07/18/11	Potentially Eligible
BN00883	vista field runway corridor, site dimension- 963 x 43 m, site type—historic airfield runway corridor, date of use—1942–1980	05/13/02	Determined Not Eligible, Potentially Eligible

Table 2. Cultural resource surveys within a one mile of the project as documented in WISAARD.

Author	Title	Report Date	Doc. Type
Schultze, Carol	Phase I Intensive Survey of Columbia Park West for the Hanford Reach National Monument Heritage and Visitor Center, Richland	2/28/2011	Survey Report

Author	Title	Report Date	Doc. Type
Schroeder, William	A Section 106 Archaeological Review and Inventory of the Tri-Cities Meals on Wheels Project, 1824 Fowler Street, Richland, Parcel 129992030001004	10/15/2013	Survey Report
Dickson, Catherine	Inventory of Unsurveyed Lands within the McNary Project Area, Umatilla County, Oregon, Benton, Franklin, and Walla Walla Counties, Washington	12/11/2011	Survey Report
Greene, Jim	Chiawana Park Restroom, Playground, and Sewer Development Historic Resources Testing Project	3/7/2011	Survey Report
Miller, Carey	Letter to Jack Arnold RE: Monitoring of the Ground Disturbing Activities Associated with the Construction of the Hanford Reach Interpretive Center, Richland	5/20/2014	Monitoring Report
Berger, Margaret	Cultural Resources Assessment for the Columbia Park Trail Project, Richland	9/22/2015	Survey Report
Tracy, Ray	ADDENDUM for Chiawana Park Restroom, Playground and Sewer Development Historic Resources Testing Project	9/18/2011	Survey Report
Carmack, Corey	Kennewick and Columbia Irrigation Districts Pump Exchange Feasibility Study (KACIDPEFS), Cultural Resource Survey, Yakima Project -- Upper Columbia Area Office	9/30/2001	Survey Report
Carmack, Corey	Cultural Resource Survey, Kennewick and Columbia Irrigation Districts Pump Exchange Feasibility Study, 2003 Exploratory Drilling, Yakima River Basin Watershed Enhancement Program	5/31/2003	Survey Report
Hartmann, Glenn D.	Letter to Gary Beeman Regarding References: Supplemental Cultural Resources Investigations, SR 240: I-182 to Columbia Center Boulevard, Agreement Y-7898 TAD-AJ	5/15/2002	Survey Report
Miller, Carey L.	A Cultural Resource Inventory of the Vista Field Area, City of Kennewick	5/19/2002	Survey Report
Dickson, Catherine E.	To John Leier, re: Results of the Cultural Resource Protection Program's Testing of the Kurk Watts Easement Application Area	10/2/2001	Survey Report
Dickson, Catherine E.	A Cultural Resource Inventory of the Port of Kennewick's Proposed Spaulding Business Center Development, Benton County, Washington	10/10/2001	Survey Report
Miller, Carey	To Dave Bryant, RE: monitoring and testing for the Columbia Park West Marina	11/13/2001	Survey Report
Keith, Mary E.	Cultural Resource Inventory Report Tri-Cities Encroachments	3/20/2000	Survey Report
Miller, Carey L.	Edison Street Area Cultural Resource Testing in Columbia Park	3/28/2000	Survey Report

Author	Title	Report Date	Doc. Type
Wright, Mona K.	Cultural Resource Inventory Report: Request for Public Road/ Emergency Vehicle Turnaround Easement Within Columbia Park West	8/8/2000	Survey Report
Steinmetz, Shawn	Cultural Resource Inventory and Testing for the Kennewick Irrigation District Geologic Testing	10/24/2000	Survey Report
Ives, Ryan	A Cultural Resources Survey for Ben Franklin Transit Facilities Expansion	12/21/1998	Survey Report
Lenz, Brett R.	A Cultural Resources Survey of the Proposed Lewis and Clark Interpretive Viewpoint Near Kennewick	9/9/2004	Survey Report
Keith, Mary E.	Cultural Resource Inventory Report Tri-Cities Property Encroachments	9/5/1999	Survey Report
Hale, Mark	Cultural Resources Inventory of 16 Cellular Communication Tower Lease Areas, Morrow and Umatilla Counties, Oregon and Benton, Chelan, Grant, Kittitas and Yakima Counties, Washington	1/28/2001	Survey Report
Ferguson, Daryl E.	Cultural Resources Survey of a Proposed Apartment Complex, Gage Boulevard, City of Richland, Parcel 12598300006000	7/7/2002	Survey Report
Gilpin, Jennifer E.	Archaeological Resource Survey and Evaluation for the Hanford Reach Interpretive Center Project	9/30/2008	Survey Report
Shellenberger, Jon	Traditional Cultural Property and Archaeological Monitoring at McNary and Little Goose Projects 2013, 2014, 2015	3/31/2015	Monitoring Report
Bonstead Leah	FCRPS Fiscal Year 2017 Archaeological Site Monitoring at McNary, Lower Monumental, and Lower Granite Operating Projects, Washington and Idaho, DRAFT REPORT	11/29/2018	Monitoring Report
Chatters, James C.	Literature Review of Cultural Resources for the Pasco Parks Long Range Development Plan	4/30/1996	Survey Report
Miller, Carey L.	Letter to Cindy Cole: Monitoring Report for the Installation of Sacajawea Trail Markers, Installation of Electrical Lines and Concrete Pads for Vendor Stations, and Installation of Footings for a Sign at the Veterans' Memorial - All within Columbia Park.	8/1/2007	Monitoring Report
Senn, Amy	Letter to Gary Deardoff RE: Results of Cultural Resources Monitoring of Kiwanis Building Flagpole Excavation	6/2/2010	Monitoring Report
Steinmetz, Shawn	A Cultural Resource Survey of the City of Kennewick's Center Boulevard Extension	4/2/2003	Survey Report
Hartmann, Glenn D.	A Cultural Resources Survey of the Washington State Department of Transportation's SR 240: I-182 to Columbia Boulevard	6/17/1999	Survey Report

Author	Title	Report Date	Doc. Type
Dickson, Catherine E.	Test Excavation and Evaluation of the Richland Boat Ramp Site, Temporary Number 97-CTUIR-01-CRPP	2/18/1998	Survey Report
Van Pelt, Jeff	Letter to Dave Bryant Regarding City of Richland Columbia Park West Phase 1 Improvements, Cultural Resource Project: A Letter Report	10/28/1997	Survey Report
Steinmetz, Shawn	Cultural Resource Survey and Testing for the Kennewick Kiwanis Club Natural Gas Line within Columbia Park	4/19/2004	Survey Report
Dickson, Catherine D.	McNary Reservoir Cultural Resource Inventory Survey Report	8/19/1999	Survey Report
Dickson, Catherine	An Archaeological Survey of the Proposed Steptoe Street Extension	7/25/2006	Survey Report
Miller, Carey L.	A Cultural Resources Survey for the Richland Wye Levee Trail Improvements, City of Richland	2/20/2007	Survey Report
Sharpe, James J.	Archaeological Survey for the Jeff Schroeder Family Boat Dock, Pasco	3/31/2007	Survey Report
Senn, Amy K.	Letter Report to Phil Pinard RE: The Results of Cultural Resource Monitoring at the Richland Wye Levee	2/4/2008	Survey Report

Historic Maps and Aerial Photography

An 1865 GLO map, 1917 USGS, 1955 aerial, 1996 Google Earth image, and 2009 Google image were all consulted to establish a baseline for historical use. The 1865 GLO map indicates that there was an Indian trail running east/west along the shore of the Columbia River (Figure 2). The 1917 USGS map indicates that a road was developed with at least nine houses along side roads. No houses are present along what is now known as Columbia Park Trail (Figure 3). The 1934 Metsker map (courtesy of the Kennewick Public Library) shows the road that will later be named Columbia Park Trail and has been highlighted by the map's previous owner (Figure 4). The map identifies the following people as landowners, starting north of the road (to be Columbia Park Trail) and south of the Columbia River and moving right: J. E. Walker, P. Ryan, Hartford landco. J. W. Speer, and E. E. Hinkle; south of the road (to be Columbia Park Trail) and heading right: H. H. Peter, Col. Irrigation District, W. W. Yeisley, J. B. Grandy, Fed. Land Bk., Col. Irrigation District, County, and D. F. Cresswell; owners on Bateman Island: F. S. Burley, W. M. Nicholson, and H. H. Bowers.

The 1934 Metsker map identifies that Columbia Park Trail was a paved road, with two dirt roads heading south (Figure 4). There is an irrigation ditch located to the south of Columbia Park Trail, possibly feeding the farms located along Columbia Park Trail. There is a dirt road that leads to and continues onto Bateman Island, suggesting there is some form of water crossing at that juncture. The map identifies Bateman Island as Riverview Island.

The 1955 aerial image indicates that the area was used for agriculture with numerous structures and irrigation. A road leading to Bateman Island has been constructed (Figure 5). The 1996 Google Earth image shows that the area has been developed from agriculture to more

residential with sporadic commercial buildings (Figure 6). The 2009 Google Earth image shows that the area continues to be developed (Figure 7).



Figure 2. 1865 GLO map with rough project area outlined.

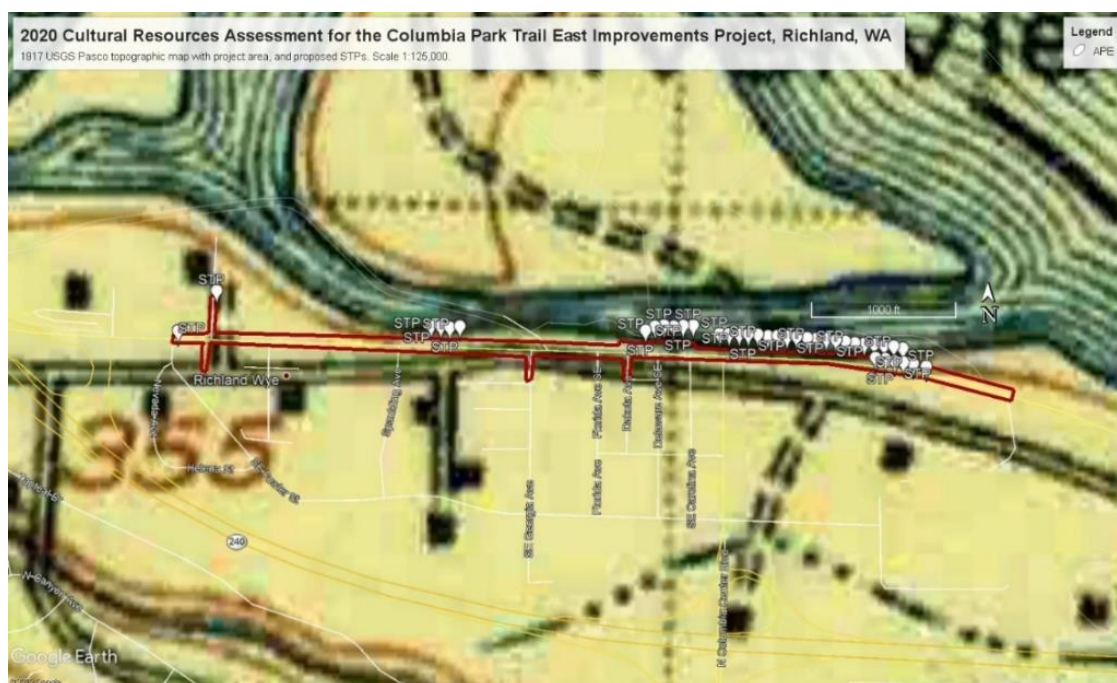


Figure 3. 1917 USGS Pasco topographic map with project area and proposed STPs overlaid. Scale 1:125,000.

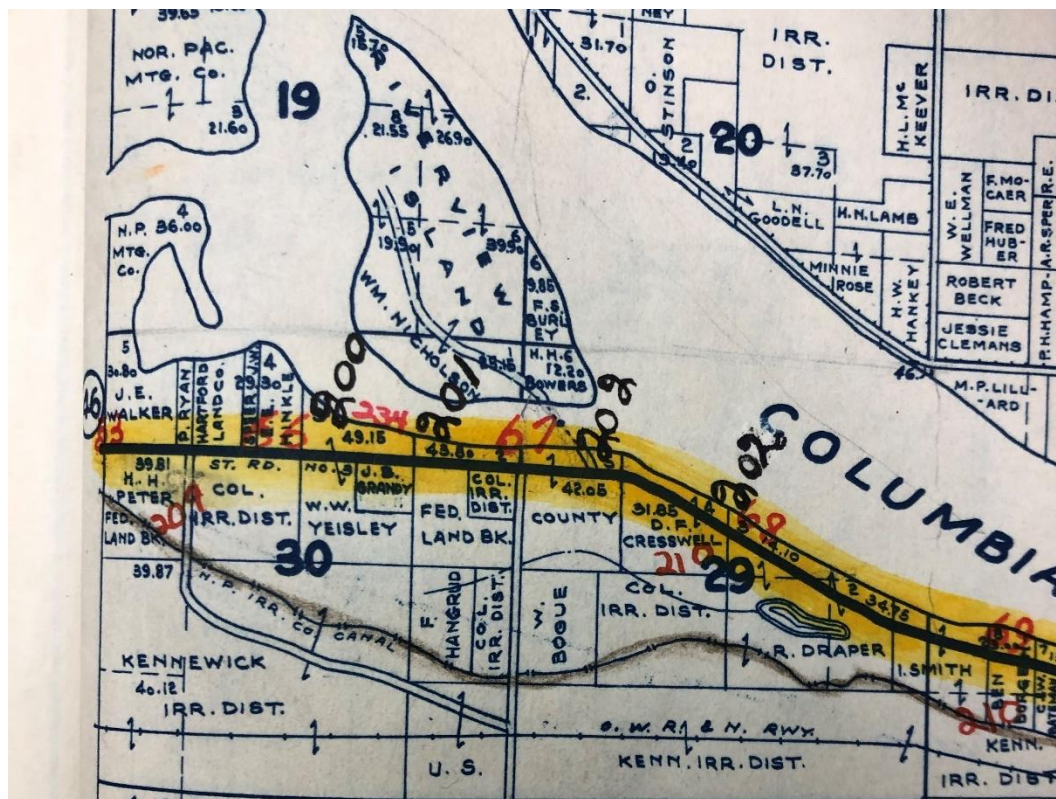


Figure 4. 1934 Metsker map with APE/Columbia Park Trail highlighted, center, through map. Map on file at Kennewick Public Library.



Figure 5. 1955 historical aerial photo with project area and proposed STPs overlaid.



Figure 6. 1996 Google Earth image with project area and proposed STPs overlaid.



Figure 7. 2009 Google Earth image with project area and proposed STPs overlaid.

Research Design

A research design was prepared prior to the start of fieldwork (Hansen and Knobbs 2020). This assessment is being conducted as part of a pre-construction review with the goal of satisfying compliance with Section 106 of the National Historic Preservation Act (NHPA). The objectives of the cultural resource survey are to determine potential impacts to important cultural resources located in the project area, to document any important cultural resources discovered, and to make recommendations on the need to conduct additional cultural investigations prior to development. To accomplish these goals, NWA staff reviewed background literature and archival material and conducted a systematic pedestrian survey and limited subsurface testing.

The APE is located directly south of the confluence of the Columbia and Yakima Rivers. Directly north is Bateman Island. Notable documented pre-contact settlements are known nearby. Based upon environmental criteria which typically correlate with pre-contact settlement and lifeways, the project area would be expected to be associated with a village or major camp as well as burials. Pre-contact use of the area would likely be associated with resource gathering, both flora and fauna. Based upon this information, archaeological evidence of pre-contact use expected in the project area includes: pre-contact formed tools, both isolated and caches; lithic detritus associated with tool making and sharpening; fishing tools such as net weights, fish hooks, fish bones; resource-processing mortar and pestles, hearths, and heat stones; animal bones; and other pre-contact tools, as well as housepit depressions, and other material associated with living.

Research focused on historic land use indicates that the area has been occupied since at least 1917. Debris associated with farming and living are to be expected. Such material might include glass fragments, metal fragments, nails, plastic fragments, and other small pieces of refuse. Numerous historical foundations have been observed near the area previously and can be expected. Behavior associated with irrigation is also to be expected and can include depressions, water pumps, and other tools.

Based upon this model of pre-contact and historic use, NWA used a project survey strategy to assess cultural resources including a pedestrian survey conducted at 10-meter wide transects, running parallel to Columbia Trail Park and other associated roads. Given the dense grass cover and concrete, the results of the surface survey were expected to be negative. The 39 STPs were placed 20 meters apart along Columbia Trail Park where previous recent cultural resource assessments have not previously tested. NWA did not anticipate conducting subsurface testing where the two known archaeological sites are located. Soils were screened through a 1/4-inch screen with a sample (30%) through a 1/8-inch screen (equating to roughly 1 shovel per 10 centimeters excavated). NWA did not collect artifacts. Cultural material was put at the bottom of the STP it was observed in and backfilled.

Archaeological Fieldwork

Fieldwork began on March 9, 2020. NWA personnel included Heather Hansen (HH), James Knobbs (JK), George Lucei (GL), and Chris Paul (CP). The weather was clear and sunny and 57 degrees Fahrenheit. NWA staff excavated STPs 1–16, starting in the western most part of the project area, at the intersection of Fowler Street and Columbia Park Trail and working west (Figure 8). STP 4 had to be offset due to intensive tumbleweeds. STP 4 was offset west by 7 meters (13 meters east from STP 3). STP 7 is located in the middle of a parking lot for Wye Park. STPs 3–7 were located in a ditch on the northern side of Columbia Park Trail due to no safe place to

excavate within the right-of-way (Figure 9). Each STP was photographed and its location documented with GPS points. Photographs were taken on a Fujifilm Finepix JZ camera; GPS points were taken on a Garmin GPSMAP 64st (Figure 8). Cultural material observed was photographed on an 8.5 x 11-inch page overlaid with a 1 cm x 1 cm grid. A photolog and STP forms were filled out. Documentation is on file at the NWA office in Richland, WA.



Figure 8. Google Earth map of GPS points for STPs for the 2020 cultural resource assessment for the Columbia Park Trail East Improvement Project.

The cultural items NWA staff observed on March 9 were small (3–6 cm) clear, brown, and/or green translucent glass fragments (Table 3). The majority of glass fragments were found 0 to 20 cm below surface, with the deepest being found at approximately 50 cm below surface. NWA did not collect any of the cultural material; material was deposited at the bottom of the STP and backfilled. The STPs were located within the right-of-way or very near Columbia Park Trail (Figure 10). Construction fill was found in every STP to an average depth of 20–30 cm. The soil was moist, STPs 1–7 silt loam to depths of 80 cm, and in STPs 8–16 sandy loam to a depth of 80 cm with a Munsell color of 10YR4/3.

Fieldwork continued on Tuesday, March 10, 2020. NWA personnel included Heather Hansen (HH), James Knobbs (JK), George Lucei (GL), and Chris Paul (CP). Weather was partly cloudy, and a high of 66 degrees Fahrenheit. STPs 17–30 were excavated. STPs 17–20 were excavated in the parking lot of Wye Park and were excavated on March 10 opposed to March 9 after consultation with the City of Richland, after informing the City that depressions might result from excavation and be of concern for drivers. STP 17 was offset from STP 7 (the nearest STP located in the eastern portion of the parking lot) by 20 meters due to asphalt (Figure 11). STP 18

was offset 320 cm east from its intended location to avoid asphalt. STP 21 was located within the park but was offset 340 cm southeast from its intended location to avoid a concrete path.

The cultural items NWA staff observed during testing on March 10 were small (3–6 cm) clear, brown, and/or green translucent glass fragments, several undiagnostic rusted pieces of metal, 1 rusted undiagnostic nail, and several small (1–3 cm) fragments of plastic (Figure 12, Table 3). All of items were found 0 to 20 cm below surface. NWA did not collect any of the cultural material; material was deposited at the bottom of the STP and backfilled. The soils of all STPs were moist with a Munsell color of 10YR4/3. Construction fill was found in STPs 17–20 and 23–25 to an average depth of 20–30 cm with loamy sand until the end of the STP. STP 22 was filled with angular and subangular gravel mixed with sandy loam until impenetrable cobble at a depth of 85 cm. STPs 24–30 were located at the bottom of a hill next to the marina parking lot, outside of the project's APE due to the fact that NWA staff could not safely excavate STPs within the right-of-way (Figure 13). STPs 24–28 were sandy loam with 5% or less small angular gravel till termination. STPs 29 and 30 were silty loam with 5% or less small angular gravel till termination with the soil much more compacted than STPs 24–28. One flake was observed on the surface by GL 270 cm east of STP 25 (Figure 14, Figure 15). The flake has lustrous and non-lustrous flake scars as well as one potlid flake scar indicating that it was heat treated. GPS coordinates of this flake were 11T 0328819 5122875. The flake was placed slightly south from its observed place in bushes. This flake was found outside of the project's APE; no other pre-contact cultural items were observed.

Fieldwork continued on Wednesday, March 11, 2020. NWA personnel included Heather Hansen (HH), James Knobbs (JK), George Lucei (GL), and Chris Paul (CP). Weather was sunny, and a high of 65 degrees Fahrenheit. JK and HH conducted a pedestrian survey in the morning. JK walked on the north side of Columbia Park Trail and HH on the south side, five meters from the right-of-way when possible, and starting from the western most part of the project area, at the corner of Fowler Street and Columbia Park Trail walking east. JK and HH observed concrete and small amounts of modern trash typically found on the side of roads. STPs 31–39 were excavated. STP 39 was located in the spot the pre-contact flake was observed.

The cultural items NWA staff observed during testing on March 11 were small (3–6 cm) clear, brown, and/or green translucent glass fragments, 1 rusted undiagnostic nail, small flaked fragments of white shell, 1 small fragment of red brick, and several small (1–3 cm) fragments of plastic (Figure 16, Table 3). All items were found between 0 to 20 cm below surface. NWA did not collect any of the cultural material; material was deposited at the bottom of the STP and backfilled. The soils of all STPs were dry with a Munsell color of 10YR3/2. STP 31 had construction fill to a depth of 60 cm then silty loam until termination. STPs 32–34 consisted of silty loam to an average depth of 67 cm and then fine powdery sand until termination. STPs 35–38 silty loam with mixed construction fill throughout until termination at an average of 50 cm depth due to large boulders.

A basalt and mortar structure was observed; it is most likely historic (Figure 17–Figure 19). The structure appears to be associated with some sort of previous landscaping or structure. The 1955 aerial (Figure 5) indicates that a structure was present near there. GPS coordinates of the basalt and mortar structure are 11T 0328957 5122831. The structure is perpendicular (running north/south) and 130 cm from the sidewalk. Total length was 310 cm, width of 80 cm, and a height

of 30 cm. Each end had a bush, and the end nearest the sidewalk had two trees east/west of the bush. This basalt and mortar structure is not expected to be impacted during the proposed construction.

The City provided information about the ca. 1930s concrete highway that is located beneath the current asphalt. The concrete highway is about 20 ft. wide, 7.5 in. deep, and beneath 2 in. of asphalt overlay. Because of its potential significance, and because it will be removed so Columbia Park Trail can be regraded, evidence of the concrete highway was sought in the field, however none was found. Given that the original highway has been covered with asphalt, its integrity is considered compromised and therefore, not a significant historic resource that needs to be addressed further.

Results

No new archaeological sites were identified as a result of the survey and testing. The materials excavated consisted primarily of silty loam to loamy sand, with construction fill to depths of about 30 cm in many of the STPs. Soils ranged from moist to dry. Of the 39 STPs excavated, 32 contained items such as small (3–6 cm) clear, brown, and/or green translucent glass fragments, several undiagnostic rusted pieces of metal, 2 rusted undiagnostic nails, several small (1–3 cm) fragments of plastic, several small flakes of shell, and one small red brick fragment. All items were found between 0 to 20 cm below surface (Table 3). NWA did not collect any of the cultural material; material was deposited at the bottom of the STP and backfilled.

One flake was observed on the surface by George Lucei 270 cm east of STP 25. The chert flake has lustrous and non-lustrous flake scars, as well as one potlid flake scar indicating that it was heat treated. GPS coordinates of this flake were 11T 0328819 5122875. The flake was placed slightly south from its observed place in bushes. This flake was found outside of the project's APE; no other pre-contact cultural items were observed.



Figure 9. Overview of project area located at STP 3 looking east.



Figure 10. Overview of project area at STP 10 looking west. GL on right and CP on left.



Figure 11. Overview of project area, in the Wye Park parking lot, looking west.

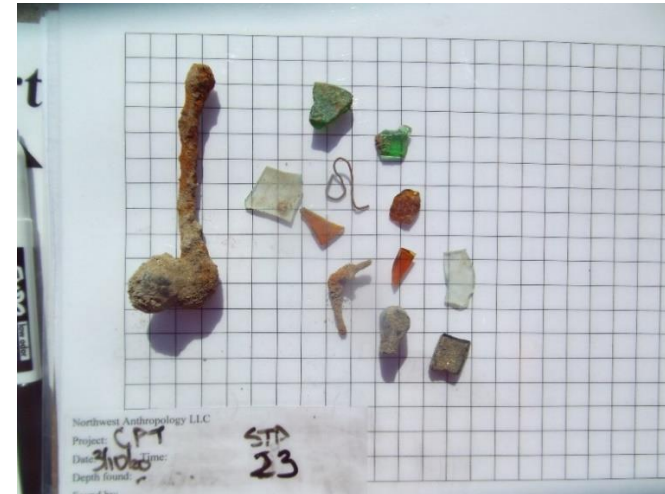


Figure 12. Typical material found in an STP. From STP 23, found at a depth of approximately 0–20 cm.



Figure 13. Overview of project area, at STP 24 looking east at STP locations 25–30. In the marina parking lot.

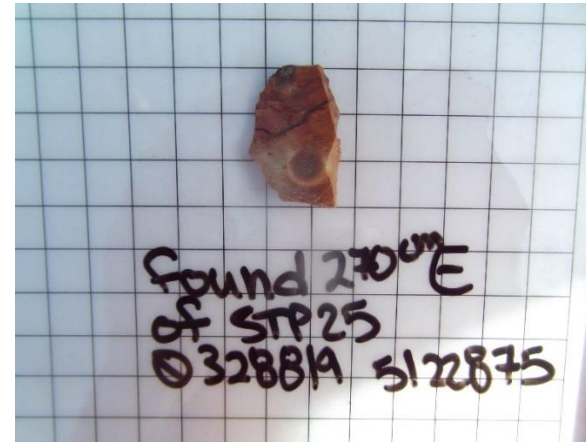


Figure 14. Ventral side of chert flake observed on the surface next to the marina parking lot, 270 cm east of STP 25. Note the potlid scar.

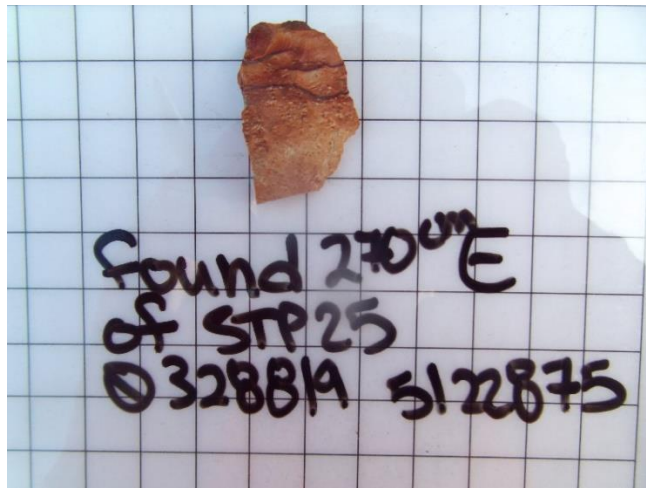


Figure 15. Dorsal side of chert flake observed on the surface next to the marina parking lot, 270 cm east of STP 25. Flake scars displayed lustrous and non-lustrous.



Figure 16. Shell fragments and red brick fragment from STP 34. Found within 0–30 cm below surface.



Figure 17. Overview of basalt and mortar structure located in grass looking northwest. Note the bushes to each side.



Figure 18. Closer view of basalt and mortar structure looking northwest. Tape measure is at one meter in length.



Figure 19. Close up view of the basalt and mortar structure.
Tape measure at 50 cm.

Table 3. Results of excavation of 39 STPs.

STP no.	UTM Coordinates (11T)	Excavation Time (min)	Unit Size (cm)	Termination Depth (cm)	Reason for Termination	Materials Observed	Depth found (cm)	NWA Staff
1	0327452 5122931	12	40	58	Impenetrable cobble	None	N/A	JK, CP, GL, HH
2	03274526 5123046	19	30	80	Impenetrable cobble	None	N/A	JK, CP, GL, HH
3	0327969 5122929	12	60	110		1 1.5 cm clear glass fragment, 2 3 cm red translucent glass fragments, 1 3 cm red brick fragment	~50	JK, CP, GL, HH
4	0327982 5122927	25	36	100		6 2-4 cm brown translucent glass fragments, 1 rusted bottle cap	0–15	JK, CP, GL, HH
5	0328007 5122926	13	36	110		7 brown bottle fragments including the top (largest piece ~10 cm long)	30–40	JK, CP, GL, HH
6	0328027 5122926	20	40	45		6 clear glass fragments (largest 6 cm), 14 green translucent glass fragments (largest 7 cm)	0–20	JK, CP, GL, HH
7	0328429 5122908	25	32	59	Boulder	2 5 cm white plastic fragments, 10 brown translucent glass fragments (largest 3 cm), 7 green translucent glass fragments (largest 2.5 cm), 2 2 cm white plastic fragments, 5 rusted metal fragments (largest 4 cm)	0–10	JK, CP, GL, HH
8	0328618 5122890	25	31	41	Boulder	2 1 cm green translucent glass fragments, 1 1 cm red plastic fragment	0–10	JK, CP, GL, HH
9	0328640 5122891	20	34	82	Impenetrable cobble	1 1 cm clear plastic fragment, 1 Rainier bottle cap, 1 21 cm copper wire, and a pull tab	0–10	JK, CP, GL, HH

STP no.	UTM Coordinates (11T)	Excavation Time (min)	Unit Size (cm)	Termination Depth (cm)	Reason for Termination	Materials Observed	Depth found (cm)	NWA Staff
10	328656 5122886	25	37	87	Impenetrable cobble	1 green translucent glass fragment, 1 clear glass fragment, 13 brown translucent glass fragments (1 frag. with "MA" label), 1 plastic McDonald's Ketchup wrapper	20–75	JK, CP, GL, HH
11	328676 5122881	10	42	30	Impenetrable cobble	1 7 cm rusted wire nail, 2 rusted fragments of metal		JK, CP, GL, HH
12	0328695 5122879	6	30	22	Utility line	None		JK, CP, GL, HH
13	0328717 5122879	15	35	68	Utility Line	1 1 cm brown glass fragment		JK, CP, GL, HH
14	0328737 5122883	16	42	106		1 clear glass fragment, 8 brown translucent glass fragments, 1 white glass fragment	10–30	JK, CP, GL, HH
15	0328757 5122881	10	32	100		5 clear glass fragments, 3 brown glass fragments, 1 glass fragment with label (possibly historic)	10–20	JK, CP, GL, HH
16	0328775 5122876	15	40	40	Utility line	2 clear glass fragments, 1 metal guitar pick	0–10	JK, CP, GL, HH
17	0328469 5122897	21	33	53	Boulder	1 1cm clear glass fragment, 1 1 cm brown glass fragment	~20	JK, CP, GL, HH
18	0328492 5122898	36	42	92	Impenetrable cobble	None	N/A	JK, CP, GL, HH
19	0328513 5122894	23	35	58	Impenetrable cobble	1 7 cm metal fragment, 1 red plastic fragment, 4 fragments of brown glass	0–10	JK, CP, GL, HH
20	0328527 5122904	26	37	68	Impenetrable cobble	1 rusted nail		JK, CP, GL, HH
21	0328550 5122897	28	36	98		3 1 cm brown translucent glass fragments, 1 rusted metal fragment		JK, CP, GL, HH

STP no.	UTM Coordinates (11T)	Excavation Time (min)	Unit Size (cm)	Termination Depth (cm)	Reason for Termination	Materials Observed	Depth found (cm)	NWA Staff
22	0328573 5122897	23	42	85	Impenetrable cobble	2 green translucent glass fragments, 1 brown glass fragment		JK, CP, GL, HH
23	0328591 5122892	35	38	100		1 rusted metal (possibly nail), 1 nail fragment, 2 clear glass fragments, 3 brown glass fragments, 2 green glass fragments, 1 small short metal wire, 2 black plastic fragments		JK, CP, GL, HH
24	0328801 5122883	13	40	110		2 2-3 cm brown translucent glass fragments		JK, CP, GL, HH
25	03228819 5122875	15	33	100		2 clear 1 cm glass fragments, 1 0.5 possible chert flake		JK, CP, GL, HH
26	03228840 5122876	8	35	110		None		JK, CP, GL, HH
27	0328858 5122875	11	45	100		4 3 cm rusted fragments of metal		JK, CP, GL, HH
28	0328879 5122871	14	32	100		1 3 cm brown translucent glass fragment, 1 0.5 cm clear glass fragment		JK, CP, GL, HH
29	0328899 5122869	15	35	100		1 3 cm green translucent glass fragment, 1 clear glass fragment, 1 2 cm rusted nail		JK, CP, GL, HH
30	03228917 5122867	10	36	100		2 rusted metal fragments, 1 rusted metal wire, 1 2 cm red plastic fragment		JK, CP, GL, HH
31	0328939 5122866	43	36	100		1 2 cm clear glass fragment, 1 white plastic fragment, 1 1 cm brown translucent glass fragment		JK, CP, GL, HH
32	032895 5122858	20	36	100		8 3 cm brown translucent glass fragments, 1 5 cm rusted nail		JK, CP, GL, HH
33	0329014 5122850	12	34	102		None		JK, CP, GL, HH

STP no.	UTM Coordinates (11T)	Excavation Time (min)	Unit Size (cm)	Termination Depth (cm)	Reason for Termination	Materials Observed	Depth found (cm)	NWA Staff
34	0328990 5122823	22	36	110		1 1.5 cm red brick fragment, multiple flakes of white shell		JK, CP, GL, HH
35	0328970 5122828	9	34	36	Boulder	2 1 cm brown translucent glass fragments		JK, CP, GL, HH
36	0328966 512828	6	34	26	Boulder	None		JK, CP, GL, HH
37	0328950 5122835	15	38	48	Boulder	1 2 cm brown translucent glass fragment		JK, CP, GL, HH
38	0328929	10	36	70	Boulder	1 2 cm clear glass fragment	10–20	JK, CP, GL, HH
39	0328823 5122881	10	36	103		4 2-3 cm brown translucent glass fragments, 1 1 cm red translucent glass fragment		JK, CP, GL, HH

Summary

Northwest Anthropology LLC signed a contract on December 26, 2019, to conduct a cultural resource assessment to determine if the activities associated with the Columbia Park Trail Improvement project would adversely impact important cultural resources. NWA staff Heather Hansen and James Knobbs developed a work plan and research design. The work plan was submitted to Sheldon Williamson and Scott Hall (USACE) in conjunction with an ARPA permit application on January 22, 2020. The ARPA permit was approved on March 6, 2020 (USACE 2020; No. DACW68-9-20-21).

To complete the assessment, background research was conducted, a pedestrian survey and 39 shovel test units were excavated on March 9–11, 2020. The background research identified two archaeological sites (45BN00605 and 45BN01660) located within the APE. There is one listing in the National Register of Historic Places (NRHP) BN00161, Columbia Park Island Archaeological Site/Bateman Island, which is located directly north of the project. The pedestrian survey observed modern refuse typically associated with roads. However, one pre-contact chert flake was observed outside the project's APE, as well as a basalt and mortar structure located adjacent to Columbia Park Trail but determined not to be affected by the project. In total, 32 of the 39 STPs excavated contained non-diagnostic cultural material, most of which is probably less than 50 years old (Table 3).

Based upon results of the historical research and the field investigations, it is the professional opinion of NWA Principal Investigator Darby C. Stapp, Ph.D., RPA, that no historic properties will be disturbed (i.e., archaeological sites eligible for listing in the National Register of Historic Places) within the Area of Potential Effect. However, due to the sensitivity of the area, and the two known archaeological sites (neither of which were deemed eligible for the NRHP) located within the APE, NWA recommends that cultural monitoring occur for all ground disturbing activities located within and east of Wye Park, Richland, WA.

This report is intended for the exclusive use of the Client and its representatives. NWA's professional conclusions and recommendations concerning the potential for project-related impacts to cultural resources should not be considered to constitute project clearance with regard to the treatment of cultural resources or permission to proceed with the project described in lieu of review by the appropriate reviewing or permitting agency. This report should be submitted to the appropriate state and local review agencies for their comments prior to the commencement of the project.

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Looking West

Fowler St.

Col. Prk. Trl.



Looking West

Parking Area "B"



Looking West

Bateman Island Parking Lot
(Parking Area "B")



Wye Park Parking Lot
Stormwater Drain

Bateman Island Park





Bateman
Island
Entrance

Parking
Area "B"

Road Seam



Bateman Island Entrance



Looking East

Columbia Park Trail



Looking East



Looking East

Col. Prk. Trl.



RESOLUTION NO. 02-20

A RESOLUTION of the City of Richland authorizing amendments to the 2020-2025 Transportation Improvement Program.

WHEREAS, RCW 35.77.010 requires local jurisdictions to prepare and adopt a six-year Transportation Improvement Program (TIP); and

WHEREAS, on June 4, 2019, by Resolution No. 73-19, Richland City Council adopted the 2020-2025 TIP; and

WHEREAS, on November 5, 2019, City Council adopted Resolution No. 141-19 authorizing the submittal of grant applications to the Benton-Franklin Council of Governments Surface Transportation Block Grant Program (STBG), Transportation Alternatives Program (TAP), and Highway Infrastructure Program (HIP); and

WHEREAS, the Benton-Franklin Council of Governments Board of Directors, at its December 20, 2019 meeting, awarded the City the following funds based on the City's applications:

1. STBG HIP funding for the Columbia Park Trail – East project in the amount of \$1,850,000 for construction;
2. STBG funding for the SR-240/Aaron Drive Flyover in the amount of \$173,000 for preliminary engineering;
3. STBG funding for the South George Washington Way Intersection Improvements in the amount of \$302,750 for preliminary engineering and \$389,250 for right-of-way;
4. TAP STBG funding for the Vantage Highway Pathway – Phase 2 in the amount of \$77,850 for preliminary engineering, \$86,500 for right-of-way and \$295,459 for construction;
5. TAP STBG funding for the Columbia River to Vista Field – Grade Separated Crossing in the amount of \$125,000 for planning.

WHEREAS, a TIP amendment is required to formally add these secured funds to the projects; and

WHEREAS, the proposed amendment is consistent with city, regional and state transportation plans; and

WHEREAS, Local Agency Agreements and Local Agency Prospectus documents are required by WSDOT to implement the projects; and

WHEREAS, the City Council held a duly advertised public hearing on January 7, 2020 to receive public input on the proposed TIP amendments.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Richland that an amendment to the 2020-2025 Transportation Improvement Program is approved, adding secured grant funds to the following projects:

1. Columbia Park Trail – East
2. SR-240/Aaron Drive Flyover
3. South George Washington Way Intersection Improvements
4. Vantage Highway Path – Phase 2
5. Island View to Vista Field Trail

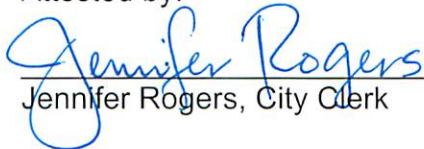
BE IT FURTHER RESOLVED that staff is authorized to prepare and execute the standard WSDOT Local Agency Agreements and Local Agency Prospectus documents as necessary to implement the projects.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately.

ADOPTED by the City Council of the City of Richland, Washington, at a regular meeting on the 7th day of January, 2020.


Robert J. Thompson, Mayor

Attested by:


Jennifer Rogers, City Clerk

Approved as to form:


Heather Kintzley, City Attorney



HEARING EXAMINER AGENDA ITEM COVERSHEET

Meeting Date: 5/11/2020

Agenda Category: New Business - Public Hearing

Prepared By: Shane O'Neill, Senior Planner

Subject:

S2020-101 Preliminary Plat of Falconridge
Bauder Homes, LLC

Department:

Development Services

Recommended Motion:

Staff recommends the Hearing Examiner approve the preliminary plat of Falconridge subject to the conditions of approval listed in the staff report.

Summary:

Bauder Homes LLC has applied for preliminary plat approval to divide 19.6 acres into 27 single-family residential lots and one tract known as the plat of Falconridge. The plat site occupies the peak(s) of Little Badger Mountain where Morency Drive currently terminates at the intersection of Falconcrest Loop. Falconridge will complete the partially constructed Falconcrest Loop roadway and will create a westerly extension of the same roadway ending in a cul-de-sac. Falconridge will complete the expired plat of Falconcrest.

Richland's Critical Areas Ordinance identifies the site as potentially sensitive due to the presence of steep slopes. Site-specific geotechnical reporting concludes the underlying geology is sufficiently stable to safely support the proposed residential neighborhood.

Attachments:

1. FULL Staff Report - Falconridge

**CITY OF RICHLAND DEVELOPMENT SERVICES DIVISION
STAFF REPORT TO THE HEARING EXAMINER**

GENERAL INFORMATION:

PROPOSAL NAME: Falconridge - Preliminary Plat

LOCATION: South/southeast of the intersection of Morency Drive and Falconcrest Loop

APPLICANT: Bauder Homes LLC

FILE NO.: S2020-101

DESCRIPTION: Request to divide 19.56 acres into 27 single family residential lots and one tract.

PROJECT TYPE: Type III Preliminary Plat

HEARING DATE: May 11, 2020

REPORT BY: Shane O'Neill, Senior Planner

RECOMMENDED ACTION: Approval subject to completion of proposed conditions

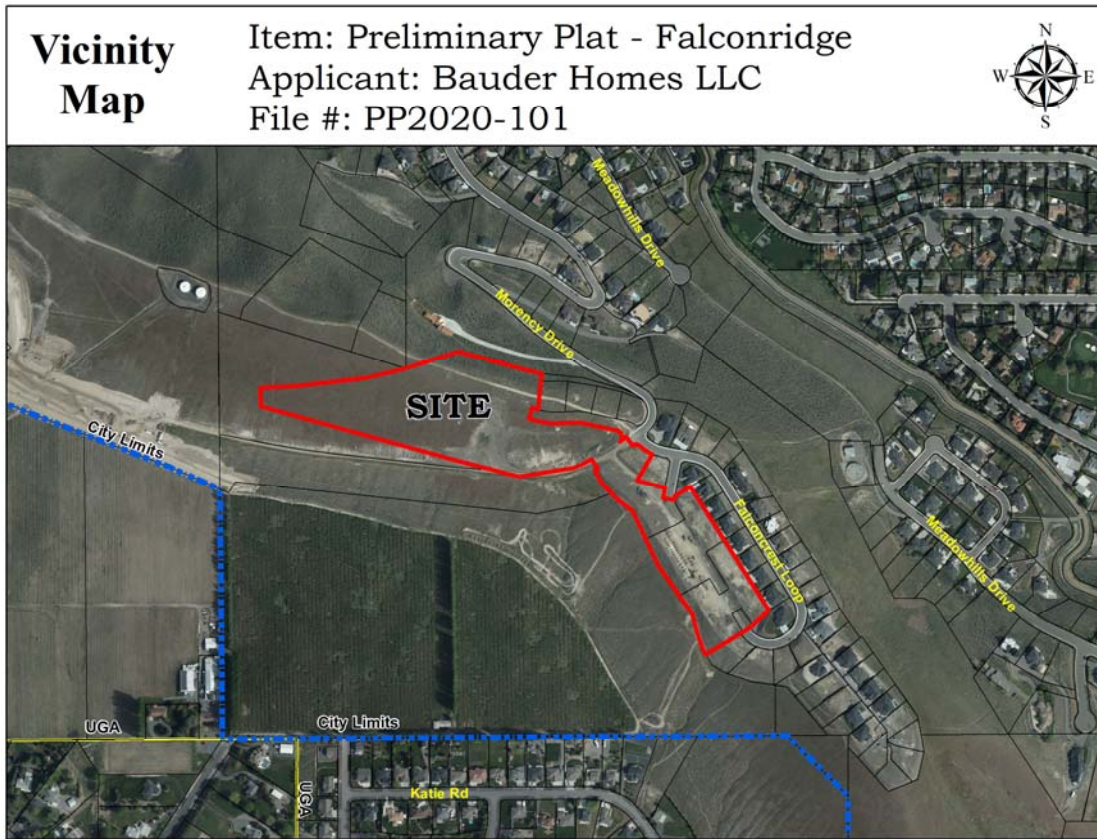


Figure 1 - Vicinity Map

DESCRIPTION OF PROPOSAL

Bauder Homes LLC has filed a preliminary plat application (Exhibit 1) to divide approximately 19.5 acres into twenty seven (27) residential lots known as the plat of Falconridge (Exhibit 2). Proposed lot sizes range from 10,996 square feet to 34,050 square feet; with an average lot size of 17,769 square feet. The site is comprised of three parcels totaling 19.5-acres. Falconridge is a continuation of the plat of Falconcrest which expired prior to completion.

Access to the plat of Falconridge would come from Morency Drive generally, while lots within the plat would be accessed from extensions of Falconcrest Loop on either side of Morency Drive.

GENERAL INFORMATION

SURVEYOR:	ROGERS SURVEYING. INC.
ANNEXATION DATE:	2003
COMPREHENSIVE PLAN:	LOW-DENSITY RESIDENTIAL (0 TO 5 DWELLING UNITS PER ACRE)
CURRENT ZONING:	R-1-10 (SINGLE-FAMILY RESIDENTIAL)

PROJECT DATA

GROSS PLAT AREA:	19.56-acres
NET PLANNING AREA:	11.01-acres
NUMBER OF LOTS:	27
NUMBER OF TRACTS:	1
LAND FOR STREETS:	1.86-acres
TRACT AREA:	6.7-acres
NET DENSITY:	2.4 units/acre

GENERAL BACKGROUND/SITE HISTORY

Sometime around 2006-2007 the subject site was included in the approval of a larger 40.7-acre, 145-unit residential PUD named "The Crest". The Crest proposed 58 single-family lots and 87 townhomes. Considering the magnitude of development conditions applied to The Crest, development was abandoned. One of the more significant development conditions was the City's requirement to build a small segment of off-site public roadway which now exists and is named Baum Street. Then owner, Milo Bauder, alternately decided to divide the land into several larger parcels, by way of exempt segregation, which he then further divided by submitting a series of five (5) short plat applications to create 15 lots. Remnants of these short plats can still be seen in the two smaller parcels comprising the subject site.

In 2011, the subject site was included in a preliminary plat application, to subdivide a 20-acre site into 44 single-family residential lots, named Falconcrest (Exhibit 9). The 27-lot final plat of Falconcrest Phase 1 was recorded in 2012. The east node of the subject preliminary plat of Falconridge is shown as phase 2 of Falconcrest. Because preliminary plat approval of Falconcrest has since expired, the current owner, Scott Bauder, has applied for another preliminary plat approval (Falconridge) in order to complete the hilltop development.

PHYSICAL FEATURES

The site consists of three irregularly-shaped parcels covering the Little Badger Mountain (also called East Badger) ridge-top together with a portion of the south/west slope. For general discussion purposes the plat site consists of two nodes, an east node and a west node which are separated by Morency Drive. Of the two general "nodes" comprising the site, the east node has been previously graded and is therefore devoid of its natural vegetation. As shown in the site photos taken by staff (Exhibit 3), the east node consists of two vacant, rocky, leveled-terraces containing sewer infrastructure. Whereas the west node exhibits less signs of ground-disturbance. The west node has been partially graded for road (Falconcrest Loop) access to four existing residential lots created via short plat (#3553, Exhibit 12) in 2018. Although not readily apparent, most, if not all of the west node has been previously disturbed for access and underground utility installation.

Topographically speaking, the east node of the site has previously undergone rough grading into two terraces and is relatively flat compared to the previous natural condition. This portion of the site can generally be described as rocky. Both terraces are comprised of basalt cobble, some of which belonged to the original hilltop that

was pushed-out to create the lower terrace. The east node contains the lowest site elevation of approximately 980-feet above sea-level.

The west node of the plat lies topographically above the east node and above the intersection of Morency Drive and Falconcrest Loop. When first entering the west node from said street intersection, immediately to the right (north) there are four (4) existing lots previously created by way of Short Plat #3553 which are being developed with single-family homes at the time this report is being written. The west node has been partially graded to create the westerly extension of Falconcrest Loop serving four lots belonging to Short Plat #3553. The west node remains in a more naturally sloping condition with a relatively continuous slope down the south side of the hill from the ridge-top. The hillside adjacent to the north boundary of west node falls very sharply, beginning as a cliff perched above the roof of a single-family home. Much of the north-slope here contains natural vegetation consisting of bunch-grasses and sagebrush. The west node contains the highest site elevation of approximately 1,150-feet above sea-level.

SITE DESCRIPTION & ADJACENT LAND USES

The subject site is comprised of three parcels, totaling 19.56-acres, on the top of Little Badger Mountain. Little Badger Mountain is a companion hill to Badger Mountain. With a peak elevation of approximately 1,200 feet above sea-level, Little Badger Mountain forms a ridgeline running in a northwest/southeast orientation. Little Badger is one of the more significant landmarks of the Tri-Cities area in an otherwise flat landscape.

Land surrounding the site is mostly vacant with the exception of the neighboring homes on Falconcrest Loop (north) to which the subject plat will appear to be part of once developed. There is one additional home (2495 Morency Drive) adjacent to and north of the west node of the plat site which is embedded into the steep hillside, perched above the residential neighborhood of Crested Hills and below the proposed plat of Falconridge. Land to the south first falls sharply before flattening-out into an area where a cherry orchard was previously removed and is being replaced with the single-family residential plat of Westcliffe Heights. Said steep slope belongs to the plat of Westcliffe Heights and is planned to be partially developed with homes. A centrally located feature of the plat site is the public right-of-way intersection of Morency Drive and Falconcrest Loop.

For reference, site photos taken by Planning Department staff are provided herein as Exhibit 3.

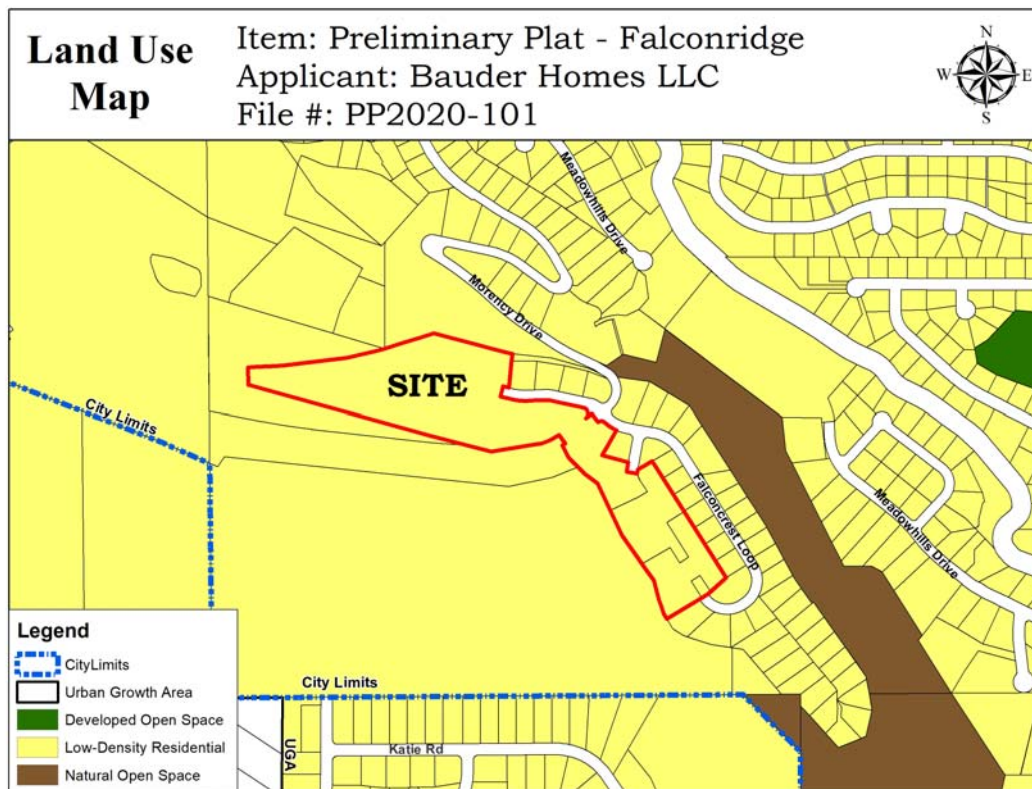


Figure 2 – Comprehensive Plan Map

COMPREHENSIVE PLAN

Richland's Comprehensive Plan designates the plat site for low-density residential development, allowing for residential densities ranging between 0 – 5 dwelling units per acre, equating to an average allowable residential density of 3.5 units per acre. The plat of Falconridge proposes a net residential density of 2.4 dwelling units/acre.

Applicable Goals & Policies

Provided below is a selected set of Comprehensive Plan goals & policies particularly applicable to the subject residential subdivision. Staff notes Natural Environment goals and policies specifically apply to Falconridge by encouraging preservation of prominent ridges and hillsides in south Richland to maintain views and to invite pedestrian access via trails. Staff does not find ways in which Falconridge attempts to preserve the ridgeline comprising the site.

Land Use Goal 3: Maintain a broad range of residential land use designations to accommodate a variety of lifestyles and housing opportunities.

Policy 1: Distribute residential uses and densities throughout the urban growth area consistent with the City's vision.

Land Use Goal 5: Ensure connectivity that enhances community access and promotes physical, social, and overall well-being so residents can live healthier and more active lives.

Policy 2: Promote pedestrian and bicycle circulation throughout the community by connecting with the infrastructure and the City's network of parks and trail system.

Land Use Goal 8: Address unique land use situations in the urban area with policies specific to those situations that ensure compatibility between land uses without infringing on private property rights.

Policy 4: Identify and encourage the preservation of lands, sites, and structures that have historical or archaeological significance.

Natural Environment Goal 1: Promote the protection, conservation, and restoration of natural areas, shorelines, and critical areas as unique assets to the community, and provide public access for enjoyment of such facilities based on the ability of the resource to support the use.

Policy 1: Use the critical areas ordinance, SMP, the state environmental policy act (SEPA), and other ordinances, as applicable, to designate and protect the critical areas and natural environment.

Policy 4: Encourage the public and/or private acquisition of the prominent ridges in the south Richland area to preserve views, protect shrub-steppe habitat, and to provide public access. Consider the preservation of the ridges and hillside areas through various standards.

Policy 5: Develop an integrated pedestrian trail system to provide access through the City's important natural features, such as prominent ridges and river-shore areas and provide necessary trail linkages between these natural features.

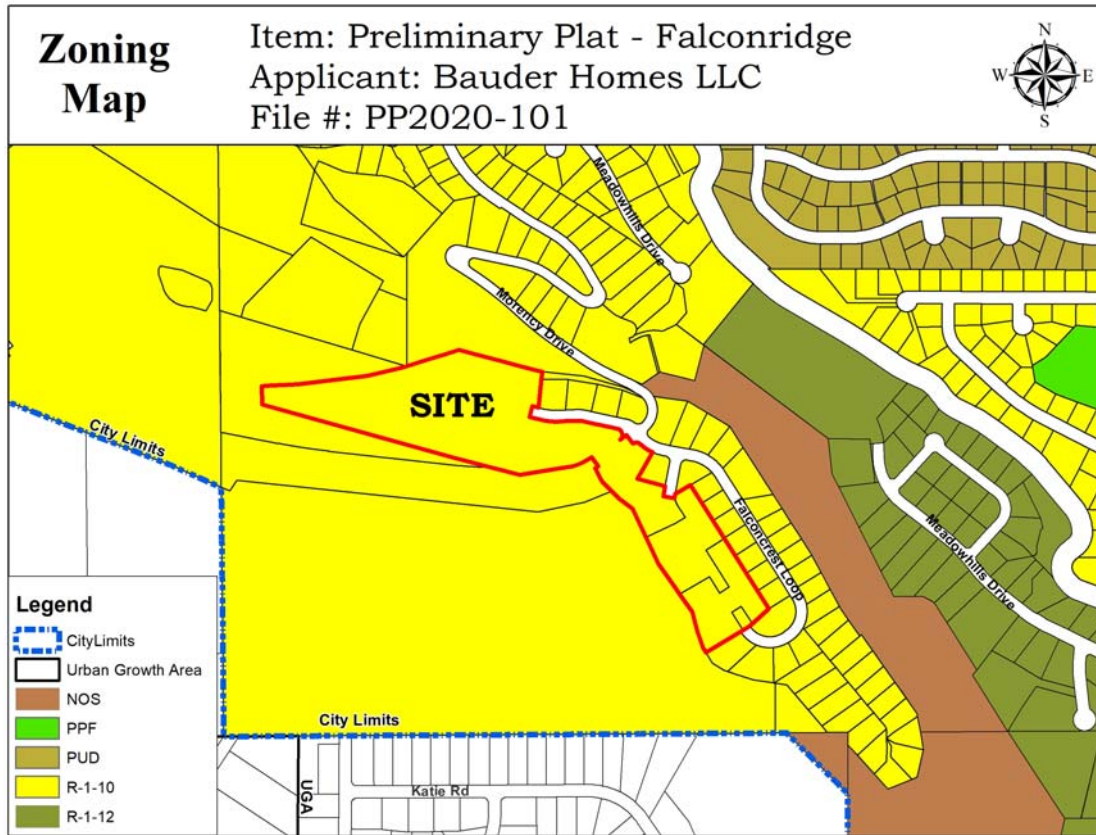


Figure 3 – Zoning Map

ZONING

This preliminary plat site is zoned R-1-10 (Single-Family Residential) allowing for each lot to be developed with one single-family home and accessory structures cumulatively covering up to forty percent (40%) of the respective parcel.

The R-1-10 zone imposes an 8,000 square foot minimum lot size with a requirement for a 10,000 square foot average lot size (4.3 units/acre). The proposal adheres to said limits.

Land Uses and Dimensional Standards

The following **R-1-10** standards apply to the proposed plat:

Uses Permitted:	Single family homes and accessory structures
Minimum lot size:	8,000 square feet
Front yard setback:	20 feet minimum
Side yard setback:	10 feet minimum
Rear yard setback:	25 feet minimum
Maximum building height:	30 feet (mid-roof-point)

CRITERIA FOR PRELIMINARY PLAT APPROVAL

Section 24.12.053 of the RMC sets forth the criteria that must be met before a preliminary plat application can be approved; it states:

The hearing examiner shall not recommend approval of any preliminary plat application, unless the approval is accompanied by written findings that:

- A. The preliminary plat conforms to the requirements of this title;*
- B. Appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school;*
- C. The public use and interest will be served by the platting of such subdivision and dedication; and*
- D. The application is consistent with the requirements of RMC 19.60.095*

RMC Section 24.12.050 designates the Hearing Examiner as the hearing body responsible for conducting the review of preliminary plat applications.

PUBLIC NOTICE

Application Date:	January 22, 2020
Notice of Hearing Mailed:	February 24, 2020
Notice of Hearing Posted:	February 24, 2020
Notice of Hearing Published:	March 1, 2020
Public Hearing:	May 11, 2020

A combined notice of application and optional SEPA determination of non-significance was provided by mailing notices to property owners within 300 feet. Public hearing notices were distributed through posting of the property, mailing of notice to property owners within 300 feet of the site and publication in the *Tri-City Herald* newspaper. Copies of the notices and affidavits are included in Exhibit 4.

Public hearing on this item was originally to be held on April 11, 2020. By way of explanation, the month of April is missing from the date schedule above due to Governor Inslee's "Stay Home-Stay Healthy" order in response to the 2020 COVID-19 incident whereby public gatherings, including public hearings, were temporarily suspended. As such the hearing was moved from April 13th to May 11th. Accordingly, public hearing notices advertising the new hearing date were re-sent to property owners within 300 feet of the site.

UTILITIES

Much of the utility infrastructure available to serve this plat was installed as part of the neighboring short plats and the final plat of Falconcrest Phase 1 to the north which developed the Falconcrest Loop right-of-way. Generally, sewer, water and electrical power are all immediately available for extension from the boundaries of

the subject plat site. More detail about each utility service is provided below. The utility-specific discussions below indicate existing underground utility infrastructure while also mentioning the need for extension. This is because each utility is not sufficiently extended to serve all lots proposed by the subject plat and utility mains will need relatively short extensions to service the proposed lots.

Sewer

The nearest sewer main available to serve Falconridge is located within the Falconcrest Loop right-of-way, both east and west of Morency Drive. This eight (8) inch sewer main will need to be extended into the Falconridge site to provide service. Considering portions of this plat occupy the highest elevation in Richland, approximately, there will be no need for special sewer infrastructure such as force-mains or lift-stations as gravity-fed sewer service is an available solution.

Water

Potable

The nearest water main available to serve Falconridge is located within the Falconcrest Loop right-of-way, both east and west of Morency Drive. This eight (8) inch water main is sufficiently sized to serve the plat but will need to be extended into the Falconridge site to provide service.

Irrigation

The project site is located outside of irrigation district boundaries of both the Kennewick Irrigation District (KID) and the Badger Mountain Irrigation District (BMID). The applicant proposes to use domestic water for irrigation purposes. City code generally requires all residential developments located south of the Yakima River be served by a separate source of irrigation water. RMC Section 18.16.080 provides an exemption to this requirement for single-family residential lots containing less than 1,000 square feet of pervious area, and for sites on ground sloped greater than six percent. The applicant has either option of limiting the irrigable portions of lots to meet the 1,000 square foot exemption or to annex the site into the Badger Mountain Irrigation District to provide the required separate source of irrigation water. Conditions of approval provided by the Public Works Department intentionally exclude any requirement(s) for the project to install irrigation water service separate from city potable water. The Public Works office has therefore granted a *de facto* exemption to the requirement to provide a separate source of irrigation water.

Electrical Power

The nearest electrical power line available to serve Falconridge is located within the Falconcrest Loop right-of-way, both east and west of Morency Drive. Power lines will need to be extended into the Falconridge site to provide service. There is sufficient capacity in the City power distribution system to service the proposed plat.

ACCESS/TRANSPORTATION

At the approximate mid-point of the plat site lies at the intersection of Morency Drive and Falconcrest Loop. As with the existing homes on Falconcrest Loop, the proposed project would be accessed via Morency Drive which extends from the

Crested Hills subdivision (below the site) up and over the ridge top of Little Badger Mountain. Morency Drive is classified as a “neighborhood collector” street which includes roadways serving as primary access between subdivisions and arterial/arterial collector streets.

The east node of the plat contains an undeveloped portion of right-of-way, named Falconcrest Loop, aligned in the shape of an oval. The developed portion of this road borders the adjacent homes to the north, however those homes do not gain direct vehicle access from Falconcrest Loop. The proposed plat will complete the currently incomplete segment of Falconcrest Loop.

Within the west node, a short segment of Falconcrest Loop currently extends northwesterly of Morency Drive. With development of Falconridge, Falconcrest Loop will be extended from its current temporary turn-around northwesterly to form a cul-de-sac. Plat approval is conditioned upon applying a more appropriate suffix to this segment of roadway other than “loop” as it does not form a loop in this location.

Legacy Lane extends through much of the plat of Westcliffe Heights and intersects with Queensgate Drive/Bermuda Road at the entrance to Westcliffe Heights. As future phases of the Westcliffe Heights subdivision are completed, Morency Drive will be extended slightly to the southwest where it will intersect with Legacy Lane. The description above is provided to explain that Morency Drive will be the sole means of access to Falconcrest for only a short period of time, until Legacy Lane is completed. Once this connection is achieved, residents of Falconcrest will have the option (likely the preferred option) to quickly descend the hill on Queensgate Drive instead of meandering through the narrower Morency Drive in the Crested Hills neighborhood. Some traffic generated by homes in Falconcrest will inevitably continue to use Morency Drive depending on the destination.

Staff draws the Hearing Examiner’s attention to recommended condition #55 requiring the existing “Private Drive Easement” noted on the preliminary plat to be constructed to city standards. This “roadway” was not constructed to a “city standard. If the intent of this road is to provide access to lots 21-27 then it shall be improved per Richland Municipal Code. This requires the roadway to be constructed 34-feet wide and curb, gutter and sidewalk to be installed along the lot frontages.

In regard to the level-of-service (LOS), pursuant to Sections 12.03.170 and 12.03.180 [RMC] this development proposal as submitted is in general conformance with the assumptions made for land use and scale/density. Through collection of impact fees, the project will comply with concurrency requirements of the Municipal Code.

To date, a traffic study/transportation analysis has not been prepared for the Falconridge project at-hand. Page 13 of the SEPA checklist (Exhibit 5) indicates the plat will generate approximately 270 vehicle trips per day at full build-out. The source of this trip generation volume figure is not referenced, cited or supported by additional documentation.

Staff points-out that a traffic impact analysis (TIA) was part of the 2011 Falconcrest preliminary plat record. The TIA is titled The Crest Traffic Impact Analysis because it was prepared for The Crest PUD project and was then re-used to review Falconcrest. This TIA was used in determining the value of constructing Baum Street and imposing the new roadway as a development condition. Said TIA was prepared by JUB Engineers Inc., in July of 2007 and indicates an expiration date of July 15, 2009 on the cover page.

FIRE SAFETY

Portions of the plat are adjacent to undeveloped properties over 5-acres in size and so are subject to the City's wildland fire protection requirements. The City has wildland fire protection requirements that apply to homes built on or adjacent to steep slopes that would impact lots within the proposed plat. Recommended condition of approval #57 requires compliance with these wildland fire protection requirements together with specific requirements related to installation of new fire hydrants.

SCHOOLS

The plat falls within the boundaries of the Richland School District. The proposed plat was routed to the district for review and commenting as part of the standard referral process. Though no comments from the district were received by the City, prior staff reports for nearby plat sites noted that the site is located within the White Bluff's district, but it is likely that future students from this development will be reassigned to either Marcus Whitman or Lewis and Clark Elementary. The elevation and slope of the access road may require students walk to a bus stop located near Morency Drive and Gage Blvd. Direct access to improved sidewalks is needed to ensure a safe walking route.

PARKS

The previous dedication and development of the Crested Hills Park provides adequate neighborhood area parks for the projected number of residents, based on City park standards. The City of Richland owns an additional 32.8-acres of open-space land consisting of the steep slopes adjacent to and lying below the home sites along the perimeter of Falconcrest Loop. Considering both Crested Hills Park and the 32.8-acres of open-space land were previously dedicated to the City as part of other developments, municipal park impact fees will be assessed for each new home at the time of building permit issuance.

Trails

One noteworthy feature of the Falconridge plat survey is the presence of the 15-foot [hiking] trail easement along the rear line(s) of lots 11 through 20 created by way of auditor file as part of previously recorded short plats. Said trail easement terminates/originates in the northwest corner of Lot 11. During past meetings between Planning staff and members of the local recreation group, Friends of Badger (FoB), the Planning Department understands FoB aims to achieve trail connectivity in the location of this plat. Friends of Badger wants to secure an easement extending from Lot 11, northwesterly up to the top of the ridgeline where

the hiking trail will be extended to connect with the planned trail within the plat of Westcliffe Heights. The city will not be conditioning plat approval on the developer providing new trail easements. Whether or not the applicant prefers to provide a trail easement is a private matter between interested parties.

CRITICAL AREAS

The general vicinity of the project site, including the subject site, is identified in the City's Critical Areas Ordinance (RMC 22.10.240) as being potentially geologically hazardous due to the presence of steep slopes. Accordingly, the Falconridge preliminary plat application materials included a geotechnical evaluation by Affordable Geotech Services LLC dated January 22, 2018 (Exhibit 8). The geotechnical report generally describes on-site subsurface conditions as being sufficiently stable to support the development at full build-out. An image taken by staff labeled "cut slope" illustrating the rocky substrate is provided in the set of site photos included herein as Exhibit 3. The geotechnical report revealed no site conditions warranting mitigation measures or further investigation.

The Hearing Examiner may notice the geotechnical report by Affordable Geotech Services only applies to lots belonging to the west node of the plat. By way of explanation, official City records for the expired preliminary plat of Falconcrest include a geotechnical evaluation applicable to the east node of Falconridge as lots therein previously belonged to Falconcrest. This older geotechnical report was prepared by Intermountain Materials Testing & Geotechnical, dated Oct. 12, 2012 and is provided herein as Exhibit 9.

The site is further identified as containing intact shrub-steppe priority habitat per WA Dept. of Fish & Wildlife (WDFW) mapping resources. To address potential concerns over the impacts to shrub-steppe habitat the City solicited input from the local WDFW biologist, Michael Ritter. Mr. Ritter's response letter (Exhibit 11) indicates no significant concerns relative to the potential loss of shrub-steppe on the Falconridge plat site.

SEPA

A SEPA checklist (Exhibit 5) addressing potential impacts of the proposed subdivision was included in the preliminary plat application. On March 26, 2020 staff issued a Determination of Non-Significance (DNS) (Exhibit 6) using the optional DNS process available under the provisions of WAC 197-11-355 whereby the SEPA comment period closes concurrent with close of the public hearing. City staff received no comments during the advertised SEPA comment period.

Falconridge preliminary plat application materials include a letter from Michael Ritter, Habitat Biologist with the State of Washington Department of Fish and Wildlife, confirming the project does not threaten priority habitat and species. This letter is provided as Exhibit 11.

AGENCY COMMENTS

A number of public agencies and City departments were given an opportunity to comment on the proposal. Comments were received from: Kennewick Irrigation District only. The City of Richland Energy Services and Public Works Departments also provided respective comments. All comments received from other agencies in response to project advertisement are provided herein as Exhibit 7. Comments from Richland Energy Services and from the city Public Works/Engineering Department are entered directly into the set of recommended approval conditions listed at the end of this report.

PUBLIC COMMENTS

At the time this report was prepared, the City received no comments from members of the general public.

ANALYSIS

The criteria approval of a preliminary plat application (RMC 24.12.053) are reprinted here, with a summary of how the application complies with the standard:

A. The preliminary plat conforms to the requirements of this title (RMC Title 24);

The City's subdivision regulations set forth specific requirements for the filing of an application, how notice of the application is to be provided and requires that the Hearing Examiner conduct a public hearing and make recommendation to the City Council. These steps have been followed to date.

B. Appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school;

- Crested Hills Park is a 5.8-acre neighborhood park located 0.7-miles north of the proposed plat site by way of vehicle travel.
- The larger 41.5-acre Badger Mountain Park is located approximately 3-miles north of the proposed plat site by way of vehicle travel. Badger Mountain Park contains outdoor sports fields and courts able to serve recreational needs of the broader surrounding vicinity.
- Badger Mountain South, to the west, is planned to contain several other open space areas including parks and trails. A direct connection will eventually be formed between Falconridge and the larger Badger Mountain South proper provided the plat of Falconridge constructs trail improvements within the 15-foot trail corridor easement (AF #'s 2011-019372 & 2012-037725) as shown on the Falconridge survey (Exhibit 2) encumbering the rear fifteen-feet of lots 11 through 20. Proposed condition of approval # 57 requires the developer construct a minimum 4-foot-wide soft surface trail within said easement.
- Contrary to the SEPA checklist, the site is not located along an existing bus route. The Ben Franklin Transit Authority provides bus service along Keene Road and Gage Blvd. approximately 3.5 miles to the east.

- The plat would be served by City domestic water lines currently existing within the boundaries of the project site. Water lines have capacity to provide for the proposed project.
- The City of Richland sanitary sewer system contains sufficient capacity to serve the proposed 27 home sites. Sanitary service will be extended to this project.
- The plat would be served by Richland Energy Services electrical power by way of service line extension.
- In accordance with City development standards, storm water drainage would have to be retained and managed on-site. The plat is designed to include an existing storm water management pond encumbering lots 7, 8 & 9.
- Richland School District was given the opportunity to comment. No comments from the District were received by the City.
- Planning staff notes a lack of contiguous sidewalk on Morency Drive available for children to walk to school or the nearest bus-stop.

C. The public use and interest will be served by the platting of such subdivision and dedication;

The proposed project is consistent with the Comprehensive Plan in terms of the proposed density of the plat. The project is consistent with the City's zoning regulations, and would be consistent with development patterns in the surrounding neighborhood considering existing topographic constraints. Provision of additional housing units will contribute to meeting the housing demand experienced in the Tri-Cities thereby serving public interest and demand. Completing the small segment of Morency Drive within Falconridge will provide connectivity with Legacy Lane in the neighboring plat of Westcliffe Heights.

D. The application is consistent with the requirements of RMC 19.60.095, which states:

No development application for a Type II or Type III permit shall be approved by the city of Richland unless the decision to approve the permit application is supported by the following findings and conclusions:

1) The development application is consistent with the adopted Comprehensive Plan and meets the requirements and intent of the Richland Municipal Code.

The proposal is generally consistent with the intent of the Comprehensive Plan and meets requirements of the Municipal Code as outlined above.

2) Impacts of the development have been appropriately identified and mitigated under Chapter 22.09 RMC.

Chapter 22.09 is the City's adoption of the State Environmental Policy Act provisions. The applicant filed an environmental checklist (Exhibit 5) for which the City issued and distributed a Determination of Non-Significance (Exhibit 6). Review and analysis of the proposed development reveals no compelling evidence of any potentially significant environmental impacts warranting mitigation nor further review.

3) The development application is beneficial to the public health, safety and welfare and is in the public interest.

The project is consistent with the City's Comprehensive Plan and development regulations and it therefore would be considered beneficial to public health, safety and welfare and would be in the public interest. As mentioned above, staff is recommending several requirements in the form of conditions, aimed at ensuring the development does not generate any significant impacts which would be detrimental to the peaceful enjoyment of existing land uses in the surrounding vicinity.

- E. *The development does not lower the level of service of transportation facilities below the level of service D, as identified in the Comprehensive Plan; provided, that if a development application is projected to decrease the level of service lower than level of service D, the development may still be approved if improvements or strategies to raise the level of service above the minimum level of service are made concurrent with development. For the purposes of this section, "concurrent with development" means that required improvements or strategies are in place at the time of occupancy of the project, or a financial commitment is in place to complete the required improvements within six years of approval of the development.*

The project would add 27 new residential lots to be accessed from newly constructed and existing roadways leading into the subdivision. Because the project is within the impact fee area, traffic studies are not required to prove level of service or identify mitigation. The fee becomes the mitigation; thereby fulfilling concurrency requirements.

- F. *Any conditions attached to a project approval are as a direct result of the impacts of the development proposal and are reasonably needed to mitigate the impacts of the development proposal.*

The conditions of approval recommended for this project are a direct result of imposing City development standards as contained in City code and are directly related to the development proposal.

FINDINGS AND CONCLUSIONS

Staff has completed its review the preliminary plat application for Falconridge (S2020-101) and recommends approval of the request subject to conformance with the conditions of approval included below based on the following findings:

Findings of Fact:

1. The Richland Comprehensive Plan designates the project site as suitable for low-density residential development with an allowable density range of 0 to 5 units per acre.
2. R-1-10 (Single-Family Residential) zoning is applied to the site which permits residential densities of up to 5 units per acre.
3. Falconridge preliminary plat consists of 27 residential lots (averaging 17,769 square feet) representing a net residential density of 2.4 units per acre based on the net 11-acres of residentially (R-1-10) zoned land(s).
4. Preliminary plats are classified as Type III permits (RMC 19.20.010.C).
5. Morency Drive is classified as a neighborhood collector roadway in the City's Comprehensive Plan.

6. The Falconridge preliminary plat lies within the boundary of the South Richland Collector Street Financing Plan (RMC 12.03). This plat shall therefore be subject to the fees administered by the finance plan for any phase submitted for approval. Since this property is included within the Financing Plan, it is exempt from the SEPA-related traffic study requirement (TIA).
7. Section 24.12.053 of the RMC sets forth standards for review of preliminary plats that require the Hearing Examiner to consider whether appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school.
8. The proposed preliminary plat provides for the extension of streets consistent with the surrounding street network, includes provisions for the extension of public domestic water, sewer, irrigation water and electrical power lines.
9. Appropriate development conditions will be applied to ensure improvements proposed to serve the preliminary plat are consistent with the City's development standards.
10. City standards call for the construction of a Secondary Emergency Access Road (SEVA) to serve any development that contains 16 or more homes served by a single access road. That portion of Falconridge west of Morency Drive, including lots created by Short Plat #3553, does not propose such a configuration and thus the plat does not trigger the need for SEVA(s).
11. The City has wildland fire protection requirements that apply to homes built on or adjacent to steep slopes that would impact lots within the proposed plat. Some of the proposed lots in Falconridge trigger the need for wildland fire protection requirements. The proposed conditions of approval address the affected lots.
12. The Richland School District was invited to comment and expressed no concerns with the plat.
13. City staff and other utility providers reviewed the project and have recommended specific conditions of approval as set forth in this report.
14. The applicant filed an environmental checklist along with their preliminary plat application as required under the State Environmental Policy Act.
15. After review of the checklist and application materials, staff issued a Determination of Non-Significance on May 26, 2020 using the optional DNS process.
16. Richland's Critical Areas ordinance identifies the site as being located within a potentially hazardous area due to the presence of steep slopes/geologic hazards.
17. The Washington (State) Department of Fish & Wildlife classifies the plat site as a Priority Habitat Area due to the potential presence of shrub-steppe plant and animal associations.
18. Fish & Wildlife biologist Michael Ritter issues a letter (Exhibit 11) indicating the plat project is unlikely to have negative impacts of priority habitat.

19. The applicant submitted a geo-technical report to comply with the City's Critical Areas Ordinance (RMC 22.10.280)
20. RMC 19.60.095(D) requires that development not lower the level of service standard for transportation facilities below a level of service D.
21. The proposed project would add 27 single family lots having direct access onto roadways proposed in the plat.
22. Falconridge lies within the boundary of the South Richland Collector Street Financing Plan (RMC 12.03). This plat is therefore be subject to the fees administered by the finance plan for any phase submitted for approval. Since this property is included within the Financing Plan, it is exempt from the SEPA-related traffic study requirement (TIA).

Conclusions of Law:

1. The site lies within a critical area due to potential geologic hazards due to the presence steep slopes on-site. Preliminary plat application materials included a geo-technical report qualifying the site as stable and suitable for residential construction.
2. The lots within the proposed subdivision are consistent with the provisions of the City's respective (R-1-10) zoning regulations.
3. The proposed preliminary plat conforms to the density and type of land use envisioned in the land use and transportation elements of the adopted Comprehensive Plan.
4. Pursuant to RMC Chapters 22.09 and 22.10, the procedures required under the State Environmental Policy Act have been completed.
5. As conditioned, the proposed preliminary plat makes appropriate provisions for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school.
6. Based on the above findings and conclusions, approval of the proposed preliminary plat of Falconridge, subject to the recommended conditions listed in this report, is warranted because the project conforms to the City's adopted comprehensive plan and zoning regulations; has followed the required State Environmental Policy Act procedures; and is consistent with the requirements of the City's subdivision regulations.

Overall Conclusion:

Based on the above findings and conclusions, approval of the proposed preliminary plat of Falconridge, subject to the recommended conditions listed herein, is warranted because the project conforms to the City's adopted

Comprehensive Plan and zoning regulations; has followed the required State Environmental Policy Act procedures; and is consistent with the requirements of the City's subdivision regulations.

RECOMMENDED CONDITIONS OF APPROVAL

Public Works

1. All final, approved plans for public improvements shall be submitted prior to pre-con on a 24" x 36" hardcopy format and also electronically in [.dwg] format compatible with the City's standard CAD software. Addendums are not allowed, all information shall be supplied in full size (and electronic) format. Electronic copies of the construction plans are required prior to the pre-con meeting along with the multiple sets of paper drawings. When construction of the public infrastructure has been substantially completed, the applicant shall provide paper and electronic record drawings in accordance with the City's "Record Drawing Requirements". The electronic record drawings shall be submitted in an AutoCAD format compatible with the City's standard CAD software. The final record drawings shall be submitted and approved by the City before the final punchlist inspection will be performed. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.
2. Any apnd all necessary permits that may be required by jurisdictional entities outside of the City of Richland shall be the responsibility of the developer to obtain.
3. A copy of the construction drawings shall be submitted for review to the appropriate jurisdictions by the developer and his engineer. All required comments / conditions from all appropriate reviewing jurisdictions (e.g.: Benton County, any appropriate irrigation districts, other utilities, etc.) shall be incorporated into one comprehensive set of drawings and resubmitted (if necessary) for final permit review and issuance.
4. Any work within the public right-of-way or easements or involving public infrastructure will require the applicant to obtain a right-of-way construction permit prior to beginning work, per RMC Chapter 12.08. The applicant shall pay a plan review fee based on a cost-per-sheet of engineering infrastructure plans. This public infrastructure plan review fee shall apply each time a project is submitted for review. This fee will be different for commercial projects versus subdivision projects. Please visit the Public Works Private Development page on the City's webpage to find the current per-sheet fee. A permit fee in the amount equal to 3% of the construction costs of the work within the right-of-way or easement will be collected at the time the construction permit is issued. A stamped, itemized Engineers estimate (Opinion of probable cost) and a copy of the material submittals shall be submitted along with the approved plan submittal.

5. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of the final plat. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of plat acceptance. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to application for plat acceptance.
6. A pre-construction conference will be required prior to the start of any work within the public right-of-way or easement. Contact the Public Works Engineering Division at 942-7500 to schedule a pre-construction conference.
7. Site plan drawings which involve the construction of public infrastructure shall be drawn on a standard 24" x 36" drawing format to a scale which shall not be less than 1"=40'.
8. All plan sheets involving construction of public infrastructure shall have the stamp of a current Washington State licensed professional engineer.
9. All construction plan sheets shall include the note "CALL TWO WORKING DAYS BEFORE YOU DIG 1-800-424-5555 (or "811")." Or: <http://www.call811.com/>
10. A copy of the preliminary plat shall be supplied to the Post Office and all locations of future mailbox clusters approved prior to final platting.

Design Standards:

11. Public improvement design shall follow the following general format:
 - A. All materials and workmanship shall be in conformance with the latest revision of the City of Richland Standard Specifications and Details, Public Infrastructure Design Guidelines, and the current edition of the State of Washington Standard Specifications for Road, Bridge, and Municipal Construction. Please confirm that you have the latest set of standard specs and details by visiting the City's web page.
 - B. Water lines shall be aligned on the south and east side of street centerlines.
 - C. Sanitary sewer shall be aligned on the north and west side of street centerlines.
 - D. Storm sewer shall be aligned on the south and east side of street centerlines.

- E. Any sewer or storm manholes that are installed outside of public Right of Way shall have an acceptable 12-foot wide gravel access road (minimum) provided from a public street for maintenance vehicles.
- F. 10-foot horizontal spacing shall be maintained between domestic water and sanitary sewer mainlines and service lines.
- G. Watermains larger than 8-inches in diameter shall be ductile iron.
- H. Watermains installed outside of the City Right of Way or in very rocky native material, shall be ductile iron and may need restrained joints.
- I. Fire hydrant location shall be reviewed and approved by the City Fire Marshal.
- J. Sewer mains over 15-feet deep shall be constructed out of SDR26 PVC or C900 PVC. The entire main from manhole to manhole shall be the same material.
- K. Water valves and manholes installed on private property shall be placed so as to avoid parked cars whenever feasible.
- L. All utilities shall be extended to the adjacent property (properties) at the time of construction.
- M. The minimum centerline finish grade shall be no less than 0.30 % and the maximum centerline finish grade shall be no more than 10.0 % for local streets. 12% can be allowed for local streets for short distances.
- N. The minimum centerline radius for local streets shall be 100-feet.
- O. Any filling of low areas that may be required within the public Right of Way shall be compacted to City standards.
- P. An overall, composite utility plan shall be included in the submitted plan set if the project is phased. This comprehensive utility plan benefits all departments and maintenance groups involved in the review and inspection of the project.
- Q. A detailed grading plan shall be included in the submitted plan set.
- R. For public utilities not located within public street rights-of-way the applicant shall provide maintenance access acceptable to the City and the applicant shall provide an exclusive 10-foot wide public utility easement (minimum) to be conveyed to the City of Richland.

- S. Final design of the public improvements shall be approved at the time of the City's issuance of a Right-of-way Construction Permit for the proposed construction.
 - T. All public improvements shall comply with the State of Washington and City of Richland requirements, standards and codes.
 - U. All cul-de-sacs shall have a minimum radius of 48-feet to the face of curb (57-foot ROW) to allow for adequate turning radius of fire trucks and solid waste collection vehicles.
 - V. Curb returns at minor intersections shall have a minimum radius of 25-feet. Curb returns at major intersections should have minimum radius of 30-feet but should be evaluated on a case by case basis.
 - W. All public streets shall meet design requirements for sight distance (horizontal, vertical and intersectional).
 - X. The final engineered construction plans shall identify locations for irrigation system, street lighting, gas service, power lines, telephone lines, cable television lines, street trees and mail boxes. All electrical appurtenances such as transformers, vaults, conduit routes, and street lights (including their circuit) need to be shown in the plan view.
 - Y. Construction plans shall reference all City of Richland standard details necessary to construct all public improvements which will be owned, operated, maintained by the City or used by the general public.
 - Z. The contractor shall be responsible for any and all public infrastructure construction deficiencies for a period of one year from the date of the letter of acceptance by the City of Richland.
12. If the project will be built in phases the applicant shall submit a master plan for the sanitary sewer, domestic water, storm drainage, electrical, street lighting and irrigation system for the entire project prior to submitting plans for the first phase to assure constructability of the entire project. This includes the location and size of any storm retention ponds that may be required to handle runoff.
13. If the City Fire Marshal requires a secondary emergency vehicle access, it shall be included in the construction plan set and be designed to the following standards:
- 2-inches compacted gravel, minimum (temp. SEVA only).
 - 2% cross-slope, maximum.
 - 5% slope, maximum. Any access road steeper than 5% shall be paved or be approved by the Fire Marshal.
 - Be 20-feet in width.

- Have turning-radii accommodating those needed for City Fire apparatus.
14. Secondary emergency vehicles accesses (SEVA's) shall be 20-feet wide, as noted. Longer secondary accesses can be built to 12-feet wide with the approval of the City of Richland Fire Marshal, however turn-outs are required at a spacing acceptable to the Fire Dept. Temporary SEVA's shall be constructed with 2-inches of compacted gravel, at a minimum. Permanent SEVA's shall be paved with 2-inches of asphalt over 4-inches of gravel, at a minimum.

Survey Monument Destruction:

15. All permanent survey monuments existing on the project site shall be protected. If any monuments are destroyed by the proposed construction, the applicant shall retain a professional land surveyor to replace the monuments and file a copy of the record survey with the City.
- A. No survey monument shall be removed or destroyed (the physical disturbance or covering of a monument such that the survey point is no longer visible or readily accessible) before a permit is obtained from the Department of Natural Resources (DNR). WAC 332-120-030(2) states "It shall be the responsibility of the governmental agency or others performing construction work or other activity (including road or street resurfacing projects) to adequately search the records and the physical area of the proposed construction work or other activity for the purpose of locating and referencing any known or existing survey monuments." (RCW 58.09.130).
 - B. Any person, corporation, association, department, or subdivision of the state, county or municipality responsible for an activity that may cause a survey monument to be removed or destroyed shall be responsible for ensuring that the original survey point is perpetuated. (WAC 332-120-030(2)).
 - C. Survey monuments are those monuments marking local control points, geodetic control points, and land boundary survey corners. (WAC 332-120-030(3)).

When a monument must be removed during an activity that might disturb or destroy it, a licensed Engineer or Land Surveyor must complete, sign, seal and the file a permit with the DNR.

It shall be the responsibility of the designing Engineer to identify the affected monuments on the project plans and include a construction note directing them to the DNR permit.

Traffic & Streets:

16. The "Falconridge" preliminary plat lies within zone 1 of the boundary of the South Richland Collector Street Financing Plan (RMC 12.03). This plat shall therefore be subject to the fees administered by the finance plan for any phase

submitted for approval. Since this property is included within the Financing Plan boundaries, it is exempt from the SEPA-related traffic study requirement (TIA).

17. Morency Drive shall be constructed to City standards to the southernmost lot line of either Lot 11 in Phase 3 or Lot 9 in Phase 1 (whichever is the furthest south) at the time of phase 1 construction. The entire road section (curb, gutter, sidewalks and street lights) shall be built with the face of curb at 17-feet off of centerline. The end of this construction shall be perpendicular to the centerline of the road. A ten-foot public utility easement along the Morency Drive frontage shall be provided on the face of the final plat.
18. The existing "Private Drive Easement" noted on the preliminary plat provides access to existing homes in Falconcrest Phase 1. This roadway was not constructed to a "city standard" at that time. If the intent of this road is to provide access to lots 21-27 then it shall be improved per Richland municipal code. This requires the roadway to be constructed 34-feet wide and curb, gutter and sidewalk to be installed along the lot frontages.
19. The 54-foot wide Falconcrest Loop right-of-way proposed in Phase 4 implies a double frontage roadway with driveways and accesses off of the NE side of it for lots 21-27. Given the existing steep grading along those lot frontages and the likelihood of them accessing off of the "private access easement" it's doubtful they will be taking access off of Falconcrest Loop. If so this right-of-way could be reduced to a 40-foot ROW and become a "single frontage" roadway.
20. The cul-de-sac west of Morency is labeled as "Falconcrest Loop". This name may need to be changed in order to comply with municipal code.
21. Sidewalks shall be installed along all public right-of-way frontages that building lots do not front on during construction of those phases (e.g., storm drainage ponds, parks, HOA tracts, etc.). The west end of the cul-de-sac ("Tract A") will need sidewalk installed around it when phase 2 is constructed.
22. The developer and his engineer shall demonstrate on the construction plans that all future driveways, sidewalks and pedestrian ramps will meet City and ADA requirements, and also provide at least 5-feet of separation between driveway and/or pedestrian ramp transitions.
23. Pedestrian ramps shall be designed to current City standard details and A.D.A. guidelines. Adequate right-of-way shall be provided at corners to allow for at least 1-foot of ROW behind the ped. ramp landing. Crosswalks between pedestrian ramps shall be designed to City guidelines and A.D.A. guidelines. Crosswalks at stop-controlled intersections shall have cross-slopes less than 2%. Crosswalks crossing thru-streets shall have cross-slopes less than 5%. The road profile shall be designed to accommodate this.

24. All proposed right-of-ways that are narrower than 54-feet shall have parking restricted, as per City standards.
25. Any roads narrower than 34-feet shall have parking restricted on one side, and any roads 27-feet or narrower shall have parking restricted on both sides. Street signs indicating restricted parking shall be installed prior to final platting at the developer's expense. The restricted parking areas shall be indicated on the construction plans and the final plat. All signage will be installed by the developer prior to final platting.
26. The vision-clearance triangle needs to be shown on all corner lots on both the construction plans and the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in a curve, it will have to be evaluated per AASHTO guidelines. This information may need to be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
27. All roads shall be constructed to provide for adequate fire truck & solid waste collection truck access & turnaround movements.
28. If the project is to be constructed in phases, all dead-end streets longer than 150-feet that will be continued later need to have temporary turnarounds built at the end of them. If the temporary turnaround is not located within the final plat an easement with a 50-foot radius will be required.

Domestic Water:

29. In accordance with municipal code, domestic water mains shall be extended to the adjoining properties adjacent to the preliminary plat, provided they are in the correct pressure zone.
30. The developer will be required to demonstrate that all phases are capable of delivering adequate fire flows prior to construction plans being accepted for review. This may require looping of the watermain from off-site locations, or oversizing of the main where needed.
31. The fire hydrant layout shall be approved by the City Fire Marshal.

Sanitary Sewer:

32. A 10-foot wide exclusive sanitary sewer easement shall be provided for any sewer main that is outside of the public Right-of-Way. Wider easements are required for mains that are buried deeper than 10-feet. If any manholes are located outside of the public Right-of-Way, maintenance truck access to said structure may be required.
33. Sanitary sewer shall be extended to the adjoining properties adjacent to the preliminary plat.

Storm Water:

34. All construction projects that don't meet the exemption requirements outlined in Richland Municipal Code, Section 16.06 shall comply with the requirements of the Washington State Department of Ecology issued Eastern Washington NPDES Phase II Municipal Stormwater Permit. The Developer shall be responsible for compliance with the permit conditions. All construction activities subject to this title shall be required to comply with the standards and requirements set forth in the Stormwater Management Manual for Eastern Washington (SWMMEW) and prepare a Stormwater Site Plan. In addition, a Stormwater Pollution Prevention Plan (SWPPP) or submission of a completed erosivity waiver certification is required at the time of plan submittal. The City has adopted revised standards affecting the construction of new stormwater facilities in order to comply with conditions of its NPDES General Stormwater Permit program. This project, and each phase thereof, shall comply with the requirements of the City's stormwater program in place at the time each phase is engineered. The project will require detailed erosion control plans.
35. All public storm drainage systems shall have their flow rate and storage capacity designed by a professional engineer following the core elements defined in the latest editions of the Stormwater Management Manual for Eastern Washington, the current Richland municipal codes, the Phase II Municipal Stormwater Permit, and the City's "Public Infrastructure Construction Plan Requirements and Design Guidelines". The storm water calculations shall be stamped by a professional engineer and shall include a profile of the storm system showing the hydraulic grade line. The calculations should include an accurate delineation of the contributing drainage area to accurately size the stormwater facilities. Passing the storm water downhill to an existing storm system will require an analysis of the downstream storm system to determine its capability of accepting the storm water without being overwhelmed. The applicant's design shall provide runoff protection to downstream property owners.
36. If any existing storm drainage or ground water seepage drains onto the proposed site, said storm drainage shall be considered an existing condition, and it shall be the responsibility of the property developer to design a system to contain or treat and release the off-site storm drainage.
37. Any proposed storm drainage retention facilities within the boundary of the proposed preliminary plat shall not adversely affect neighboring properties.
38. Prior to or concurrent with the submittal of the first phase the developer shall provide a Geotechnical report including the percolation rate of the soils in the area of any storm retention ponds. If the project constructs a storm retention pond then the engineer will need to demonstrate that the pond will drain itself within 72 hours after the end of a storm event, and not have standing water in it

longer than that. Engineering solutions are available for retention ponds that do not percolate within 72 hours.

39. As this property is upslope of developed properties the stormwater system shall include provisions for possible discharge of runoff onto downslope properties from storms in excess of the design storm. Those provisions may be required to include off-site downslope conveyance facilities and/or flowage easements allowing for the conveyance of stormwater to and across downslope properties.
40. The amount of post-development storm runoff from the proposed site shall not exceed the amount of pre-development runoff.
41. The parcel occupied by the stormwater basin shall be identified as a separate parcel or tract on the final plat and shall be dedicated to the City stormwater utility. The design of the basin shall include access features meeting the city's needs for maintenance.
42. The developer should consider the long-term appearance of the storm basin, particularly if it will occupy a prominent location in the development. City storm pond maintenance practices consist of semi-annual vegetation trimming and silt and debris removal, so if the developer wishes for the pond to be landscaped and visually appealing, then a homeowners association should be considered for long-term landscape maintenance responsibilities. These maintenance responsibilities shall be noted on the final plat. Basins designed as detention and evaporative basins need to include plantings that will tolerate or thrive in standing water. Planting designs for areas not routinely exposed to water shall include plants that will thrive without irrigation. At a minimum the landscaping plan should be consistent with the City's intended maintenance standard as described above.
43. The developer shall be responsible for landscaping the storm pond and for its maintenance and the plantings through the one-year infrastructure warranty period. At 11 months after the final acceptance date the developer shall clean the storm system and basin of all accumulated oil, sediment, and debris. After this maintenance is completed and inspected the City will begin routine maintenance of the system and basin. The developer shall replace any plantings that have failed to survive the warranty period. The developer shall also perform trimmings required to control weeds in excess of 18-inches in height for the 12-months following the date of final plat acceptance.

Final Platting / Project Acceptance Requirements:

44. When the construction is substantially complete a paper set of "record drawings" shall be prepared by a licensed surveyor and include all changes and deviations. Please reference the Public Works document "RECORD DRAWING REQUIREMENTS & PROCEDURES" for a complete description of

- the record drawing process. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.
45. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of a certificate of occupancy. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of final acceptance. Off-site ("third party") easements or right-of-ways for City infrastructure are the responsibility of the developer to obtain. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to application for final occupancy.
 46. Any off-site easements or permits necessary for this project shall be obtained and secured by the applicant and supplied to the City at the time of plat construction and prior to final plat acceptance by the City.
 47. Ten-foot wide public utility easements will be required on the final plat along both sides of all Right-of-Ways within the proposed plat.
 48. The vision-clearance triangle needs to be shown on all corner lots on the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in a curve, it will have to be evaluated per AASHTO guidelines. This information may need to be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
 49. The final plat shall include notes identifying all common areas including the private streets and tracts and acknowledging the ownership and maintenance responsibility by the homeowners association. A note shall be added to the face of the final plat that states: "The private roadways are for the use and benefit of the homeowners abutting said roads, and are to be maintained by said owners. The City of Richland accepts no maintenance responsibility for these roadways".
 50. A note shall be added to the face of the plat that states: "The private drives within this plat are fire lanes and parking may be restricted. The required no-parking signs shall be installed by the developer where applicable."
 51. Any roads narrower than 34-feet shall have parking restricted on one side, and any roads 27-feet or narrower shall have parking restricted on both sides. Street signs indicating restricted parking shall be installed prior to final platting at the developers expense. The restricted parking areas shall be indicated on the final plats.
 52. All landscaped areas within the plat that are in the public right-of-way shall be the responsibility of the homeowners to maintain.

53. Property with an unpaid L.I.D. assessment towards it must be paid in full or segregated per Richland Municipal Code 3.12.095.
54. Addressing brackets [] are needed on all lots and tracts in subsequent final plat submittals.
55. The intended use and ownership of all tracts within the plat shall be noted on subsequent final plat(s).
56. To ensure site grading provides for a useable trail corridor, a soft-surface trail no less than four (4) feet-wide shall be constructed within the trail corridor easement (AF#'s 2011-019372 & 2012-037725) encumbering the rear fifteen (15) feet of lots 11 through 20.
57. Subsequent final plat(s) shall contain a note advising future buyers of lot numbers 1, 2 & 16-20, as numbered on the preliminary plat survey, of the following construction-related requirements:
 - a) *All structures within 30 feet of a property line adjoining a wild-land area shall have noncombustible siding, soffit, and skirting on the side adjacent to the wild-land area.*
 - b) *Decks and porches 36 inches or less in height shall have skirting if within 30 feet of adjacent wild-land areas.*
 - c) *Skirting shall be sufficiently constructed so as not to allow the accumulation of combustible material under the deck or porch. The area under the deck or porch shall not be used for storage.*

Building Department

58. Grading shall be permitted by the City and performed in accordance with the Geotechnical Engineering report by Affordable Geotechnical Services and with Appendix J [IBC 2015]. Any specific geotechnical requirements regarding foundations and/or site slopes shall be noted on the (final) plat along with reference to the geotechnical investigation report.

Fire Department

59. Wild-land areas are areas which are undeveloped, uncultivated or unfit for cultivation, or considered by the city of Richland to be wasteland or desert, or which are any combination of these descriptions and which are deemed by the city of Richland as a hazard for wild fire purposes. The following requirements apply to buildings and structures constructed on, in, or near wild-land areas:
 - a) All structures within 30 feet of a property line adjoining a wild-land area shall have noncombustible siding, soffit, and skirting on the side adjacent to the wild-land area when the wild-land area is in excess of five contiguous acres.

This requirement shall not apply to interior lots of platted parcels of land and development phases whose streets are accessible and whose water system is operational.

- b) Decks and porches 36 inches or less in height shall have skirting if within 30 feet of adjacent wild-land areas when the wild-land area is in excess of five contiguous acres. Skirting shall be sufficiently constructed so as not to allow the accumulation of combustible material under the deck or porch. The area under the deck or porch shall not be used for storage.

The preliminary plat submitted has been determine to fall within the requirements listed above.

- 60. As determined by the Fire marshal, noncombustible siding or soffit material shall be required on the downhill side(s) of a structure that is within 30 feet of a grade that is 15 percent or greater in steepness. The grade shall be determined by the predominate slope on the downhill side measured from the structure or building and extending a maximum of 300 feet.

** Note: Fire Department condition numbers 60 & 61 (above) will be satisfied by applying the final plat note describe in condition #57.*

EXHIBIT LIST

1. Application
2. Preliminary Plat Survey
3. Site Photos
4. Public Notice & Affidavits
5. Environmental Checklist
6. Determination of Non-Significance
7. Agency Comments
8. Geotechnical Report by Affordable Geotechnical Services
9. Geotechnical Report by Intermountain Materials Testing & Geotechnical
10. Falconcrest Phase 1 Final Plat & As-Built Drawings
11. DFW Letter
12. Short Plat #3553



City of Richland
Development Services

625 Swift Blvd. MS-35
Richland, WA 99352
☎ (509) 942-7794
☎ (509) 942-7764

FP2020-101
Preliminary Plat Application

Note: A Pre-Application meeting is required prior to submittal of an application.

PROPERTY OWNER INFORMATION

☒ Contact Person

Owner: Bauder Homes LLC

Address: 2472 Falconcrest Loop, Richland, WA 99352

Phone: 509-727-8282

Email:

APPLICANT/CONTRACTOR INFORMATION (if different)

☐ Contact Person

Company:

UBI#

Contact:

Address:

Phone:

Email:

SURVEYOR INFORMATION

Contact: David Baalman, Rogers Surveying Inc.

Address: 1455 Columbia Park Trail, Suite 201, Richland WA 99352

Phone: 509-783-4141

Email: dbaalman@rogerssurveying.com

ENGINEER INFORMATION

Contact: Steve Spink, Spink Engineering

Address: 1623 Terminal Drive, Richland WA 99352

Phone: 509-946-1581

Email:

PROJECT DESCRIPTION

Long Plat

PROPERTY INFORMATION

Parcel #: 1-3598-300-0001-048; 1-3598-301-3342-007; 1-3598-301-3341-006 Zoning: R-1-10

Legal Description: See attached

Proposed Subdivision Name: Falconridge

Gross Plat Acreage: 19.56 AC

Number of Lots: 27

Smallest Lot Size: 10,996 SQ FT

Net Lot Area Acreage: 11.01

Avg Lot Size: 17,769 SQ FT

Largest Lot Size: 34,050 SQ FT

Domestic Water Supply: ☒ City ☐ Private Well

Sewage Disposal: ☒ City ☐ Septic

Irrigation Source: ☐ City ☐ Private Well ☐ Columbia Irrig District ☐ Kennewick Irrig District ☒ BMID

SEPA Checklist Submitted? ☒ Yes ☐ No

Title Report (Subdivision Guarantee) Submitted? ☒ Yes ☐ No

CONFIDENTIAL

100-443887-1000

100-443887-100

191

[illegible]

10-10-68

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

[illegible][illegible]

100-443887-1000

100-443887-1000

10-10-68

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

APPLICATION MUST INCLUDE

1. Completed Application and Filing Fee
2. 6- Full Size Copies & the .pdf file
3. 1 – 11" x 17" copy of proposed survey
4. Title Report showing ownership, easements, restrictions and accurate legal description of the property involved
5. SEPA Checklist
6. Other information as determined by the Administrator

I authorize employees and officials of the City of Richland the right to enter and remain on the property in question to determine whether a permit should be issued and whether special conditions should be placed on any issued permit. I have the legal authority to grant such access to the property in question.

I also acknowledge that if a permit is issued for land development activities, no terms of the permit can be violated without further approval by the permitting entity. I understand that the granting of a permit does not authorize anyone to violate in any way any federal, state, or local law/regulation pertaining to development activities associated with a permit.

I hereby certify under penalty of perjury under the laws of the State of Washington that the following is true and correct:

1. I have read and examined this permit application and have documented all applicable requirements on the site plan.
2. The information provided in this application contains no misstatement of fact.
3. I am the owner(s), the authorized agent(s) of the owner(s) of the above referenced property, or I am currently a licensed contractor or specialty contractor under Chapter 18.27 RCW or I am exempt from the requirements of the Chapter 18.27 RCW.
4. I understand this permit is subject to all other local, state, and federal regulations.

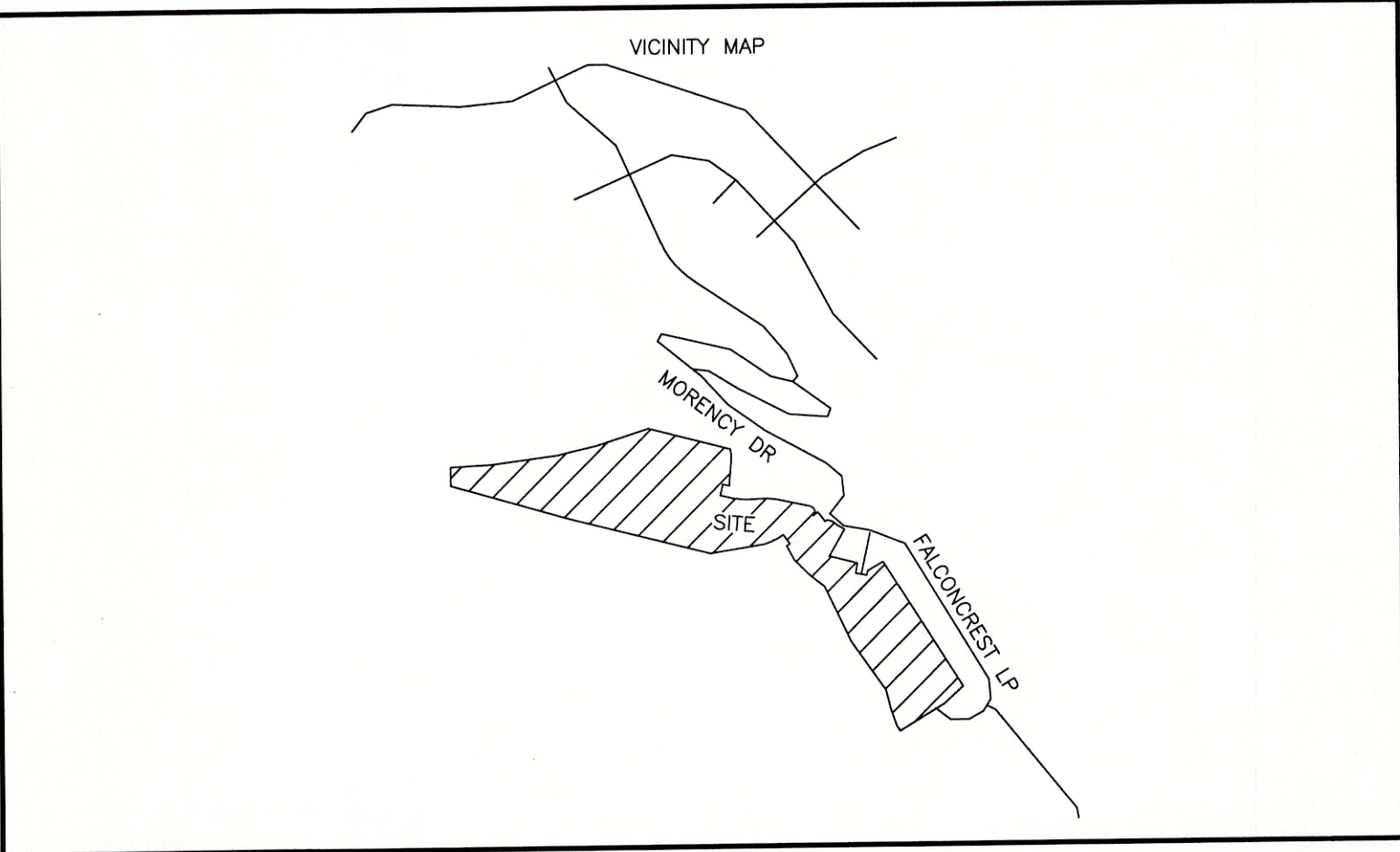
Note: This application will not be processed unless the above certification is endorsed by an authorized agent of the owner(s) of the property in question and/or the owner(s) themselves. If the City of Richland has reason to believe that erroneous information has been supplied by an authorized agent of the owner(s) of the property in question and/or by the owner(s) themselves, processing of the application may be suspended.

Applicant Printed Name: Scot Bawler

Applicant Signature: [Signature] Date 1/21/20

PRELIMINARY PLAT OF
FALCONCRIDGE

LOCATED IN A PORTION OF SECTION 35,
TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M.
CITY OF RICHLAND, BENTON COUNTY, WASHINGTON



LEGAL DESCRIPTION

PARCEL A
THAT PORTION OF THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., CITY OF RICHLAND, BENTON COUNTY, WASHINGTON DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTH QUARTER CORNER OF SAID SECTION 35; THENCE NORTH 89°36'32" EAST 251.93 FEET ALONG THE SOUTH LINE OF SAID SECTION 35 TO THE WEST LINE OF THAT PARCEL SHOWN AS TRACT 6 ON RECORD SURVEY 4205; RECORDED IN VOLUME 1 OF SURVEYS, PAGE 4205, RECORDS OF BENTON COUNTY; THENCE THE FOLLOWING FOUR COURSES ALONG THE WEST LINE OF TRACTS 6, 5 AND 4 OF SAID RECORD SURVEY 4205; THENCE NORTH 40°19'46" WEST 320.69 FEET; THENCE NORTH 81°18'15" WEST 234.53 FEET; THENCE NORTH 35°03'49" WEST 651.63 FEET; THENCE NORTH 25°17'12" WEST 141.29 FEET TO THE SOUTHWEST CORNER OF THAT PARCEL SHOWN AS "NEW PARCEL B" ON RECORD SURVEY RECORDED IN VOLUME 1 OF SURVEYS, PAGE 4793, RECORDS OF BENTON COUNTY AND THE TRUE POINT OF BEGINNING; THENCE THE FOLLOWING COURSES ALONG THE BOUNDARIES OF THOSE PARCELS SHOWN AS "NEW PARCEL A" AND "NEW PARCEL B" ON RECORD SURVEY VOLUME 1 PAGE 4793, RECORDS OF BENTON COUNTY; THENCE NORTH 25°17'12" WEST 151.19 FEET; THENCE NORTH 52°39'38" WEST 84.48 FEET; THENCE NORTH 45°13'48" WEST 110.55 FEET; THENCE NORTH 27°35'28" WEST 74.85 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 357.00 FEET; THENCE NORTHEASTERLY 17.87 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°52'06" (THE LONG CHORD OF SAID CURVE BEARS NORTH 55°49'37" EAST 17.87 FEET); THENCE NORTH 35°36'25" WEST 54.00 FEET TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 303.00 FEET; THENCE SOUTHWESTERLY 98.14 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18°33'27"; THENCE FEET THE LONG CHORD OF SAID CURVE BEARS SOUTH 63°46'49" WEST 97.71 FEET; THENCE SOUTHWESTERLY 98.14 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18°33'27"; THENCE SOUTH 80°53'57" WEST 282.27 FEET; THENCE NORTH 75°34'44" WEST 698.13 FEET; THENCE NORTH 73°47'03" WEST 587.86 FEET; THENCE NORTH 00°28'45" WEST 88.95 FEET; THENCE NORTH 87°04'04" EAST 194.01 FEET; THENCE NORTH 82°43'28" EAST 320.71 FEET; THENCE NORTH 77°03'54" EAST 166.28 FEET; THENCE NORTH 74°07'49" EAST 23.74 FEET; THENCE NORTH 72°28'39" EAST 263.93 FEET; THENCE SOUTH 75°08'14" EAST 405.57 FEET; THENCE SOUTH 84°08'19" EAST 210.66 FEET; THENCE SOUTH 74°14'07" EAST 201.24 FEET; THENCE SOUTH 65°22'23" EAST 52.56 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY MARGIN OF MORENCY DRIVE; THENCE SOUTH 56°55'35" EAST 34.02 FEET ALONG SAID RIGHT OF WAY MARGIN TO THE BEGINNING OF A CURVE CONCAVE TO THE WEST, HAVING A RADIUS OF 82.00 FEET; THENCE SOUTHERLY 156.33 FEET ALONG SAID RIGHT OF WAY MARGIN OF FALCONCREST LOOP, SAID POINT BEING THE BEGINNING OF A NON-TANGENT CURVE, SAID RIGHT OF WAY MARGIN; THENCE SOUTH 37°41'48" EAST 54.00 FEET TO THE BEGINNING OF A REVERSE CURVE HAVING A RADIUS OF 227.00 FEET; THENCE SOUTHERLY 73.62 FEET ALONG SAID RIGHT AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 80°18'54" TO THE BEGINNING OF A REVERSE CURVE HAVING A RADIUS OF 227.00 FEET; THENCE SOUTHERLY 73.62 FEET ALONG SAID RIGHT OF WAY MARGIN AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18°34'55" TO THE NORTHERLY MOST CORNER OF LOT 27 OF FALCONCREST PHASE 1; THENCE SOUTH 29°54'40" WEST 147.84 FEET ALONG THE NORTHWESTERLY LINE OF SAID LOT 27; THENCE SOUTH 75°35'19" EAST 139.09 FEET ALONG THE SOUTHWESTERLY LINE OF SAID LOT 27 TO THE NORTHWESTERLY RIGHT OF WAY MARGIN OF FALCONCREST LOOP; THENCE SOUTH 10°49'55" EAST 49.39 FEET ALONG SAID RIGHT OF WAY MARGIN; THENCE SOUTH 79°10'05" EAST 54.00 FEET TO THE SOUTHEASTERLY RIGHT OF WAY MARGIN OF FALCONCREST LOOP; THENCE NORTH 10°49'55" EAST 21.95 FEET ALONG SAID RIGHT OF WAY MARGIN FEET TO A POINT OF CURVE WITH A NON-TANGENT CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 73.00 FEET (THE LONG CHORD OF SAID CURVE BEARS SOUTH 10°43'21" EAST 53.64 FEET); THENCE SOUTHERLY 54.92 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 43°06'31"; THENCE SOUTH 32°16'37" EAST 71.25 FEET; THENCE SOUTH 57°43'23" WEST 54.00 FEET; THENCE SOUTH 64°48'23" WEST 158.00 FEET TO THE TRUE POINT OF BEGINNING; EXCEPT THAT PORTION OF SAID SOUTHWEST QUARTER DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF FALCONCREST LOOP AND MORENCY DRIVE, AS SHOWN ON THE PLAT OF FALCONCREST PHASE 1, RECORDED IN VOLUME 15 OF PLATS, PAGE 454, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE NORTH 46°59'00" EAST 43.10 FEET ALONG THE CENTERLINE OF SAID MORENCY DRIVE TO A POINT OF CURVATURE MONUMENT; THENCE NORTH 43°01'00" WEST 23.00 FEET TO THE NORTHWESTERLY RIGHT OF WAY MARGIN OF SAID MORENCY DRIVE AND THE TRUE POINT OF BEGINNING; THENCE SOUTH 52°18'13" WEST 43.31 FEET ALONG SAID RIGHT OF WAY MARGIN TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 125.00 FEET (THE LONG CHORD OF SAID CURVE BEARS NORTH 58°12'50" WEST 85.06 FEET); THENCE NORTHWESTERLY 86.79 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 39°46'57"; THENCE NORTH 78°06'19" WEST 158.51 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 300.00 FEET; THENCE WESTERLY 103.34 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 19°44'08"; THENCE SOUTH 82°09'33" WEST 12.27 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTH, HAVING A RADIUS OF 400.00 FEET; THENCE WESTERLY 118.82 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 17°01'12"; THENCE NORTH 05°06'33" EAST 159.24 FEET; THENCE NORTH 06°16'57" WEST 37.54 FEET TO A POINT ON THE BOUNDARY OF THAT PARCEL SHOWN AS "NEW PARCEL A" ON SURVEY RECORDED IN VOLUME 1 OF SURVEYS, PAGE 4793, RECORDS OF BENTON COUNTY; THENCE THE FOLLOWING COURSES ALONG SAID BOUNDARY: THENCE SOUTH 84°08'19" EAST 210.66 FEET; THENCE SOUTH 74°14'07" EAST 201.24 FEET; THENCE SOUTH 65°22'23" EAST 52.56 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY MARGIN OF MORENCY DRIVE; THENCE SOUTH 56°55'35" EAST 34.02 FEET ALONG SAID RIGHT OF WAY MARGIN TO THE BEGINNING OF A CURVE, CONCAVE TO THE WEST, HAVING A RADIUS OF 82.00 FEET; THENCE SOUTHERLY 156.33 FEET ALONG SAID RIGHT OF WAY MARGIN AND ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 109°13'48" TO THE TRUE POINT OF BEGINNING. (ALSO SHOWN AS NEW PARCEL F ON RECORD SURVEY NO. 5088 RECORDED ON NOVEMBER 7, 2018 UNDER AUDITOR'S FILE NO. 2018-033133)

PARCEL B
LOT 4, SHORT PLAT NO. 3342, ACCORDING TO THE SURVEY THEREOF RECORDED UNDER AUDITOR'S FILE NO. 2011-036222, RECORDS OF BENTON COUNTY, WASHINGTON, EXCEPT THAT PORTION DESCRIBED AS FOLLOWS: PLAT OF FALCONCREST PHASE 1, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 15 OF PLATS, PAGE 454, RECORDS OF BENTON COUNTY, WASHINGTON.

PARCEL C
LOT 4, SHORT PLAT NO. 3341, ACCORDING TO THE SURVEY THEREOF RECORDED UNDER AUDITOR'S FILE NO. 2011-036221, RECORDS OF BENTON COUNTY, WASHINGTON, EXCEPT THAT PORTION DESCRIBED AS FOLLOWS: PLAT OF FALCONCREST PHASE 1, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 15 OF PLATS, PAGE 454, RECORDS OF BENTON COUNTY, WASHINGTON. TOGETHER WITH THAT PORTION DESCRIBED AS FOLLOWS: REAL PROPERTY LOCATED IN THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, BENTON COUNTY, WASHINGTON BEING A PORTION OF PARCEL "C" AS SHOWN ON RECORD OF SURVEY RECORDED IN VOLUME 1 OF SURVEYS, PAGE 4205, RECORDS OF BENTON AND COUNTY AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE MOST SOUTHERLY CORNER OF LOT 4, SHORT PLAT NO. 3341 AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 3341, RECORDS OF BENTON COUNTY; THENCE NORTH 35°03'49" WEST, 202.88 FEET ALONG THE LINE COMMON TO SAID LOT 4 AND SAID PARCEL "C"; THENCE LEAVING SAID COMMON LINE SOUTH 14°39'43" EAST, 99.48 FEET; THENCE SOUTH 19°07'53" EAST, 79.85 FEET; THENCE SOUTH 31°49'48" EAST, 28.98 FEET; THENCE NORTH 58°47'38" EAST, 58.36 FEET TO THE POINT OF BEGINNING.

DEVELOPER/OWNER
BAUDER HOMES LLC
SCOT BAUDER
2472 FALCONCREST LOOP
RICHLAND, WA 99352
509-727-8282

DEVELOPER/OWNER
BAUDER ESTATE LLC
MILO BAUDER
2495 MORENCY DRIVE
RICHLAND, WA 99352
509-627-2523

PREPARED BY
ROGERS SURVEYING INC.
1455 COLUMBIA PARK TRAIL—STE 201
RICHLAND, WASHINGTON 99352
509-783-4141 (OFFICE)
509-783-2994 (FAX)

LAND USAGE	
GROSS PLANNING AREA	= 19.56 ACRES
1376 LINEAR FEET PLAT STREETS	= 1.86 ACRES
1 TRACT	= 6.69 ACRES
NET PLANNING AREA	= 11.01 ACRES
11.01 ACRES X 43560 SQ. FT.	= 17,769 SQ. FT.
27 LOTS	AVERAGE LOT SIZE
34,050 SQ FT	10,996 SQ FT
LARGEST LOT (6)	SMALLEST LOT (26)



RSI
ROGERS
SURVEYING INC., P.S.
1455 COLUMBIA PARK TRAIL
RICHLAND, WA 99352
PHONE (509) 783-4141
FAX: (509) 783-8994
www.rogerssurveying.com

Looking North



Looking East



SITE
(east node)

Approx. Prop. Line

Looking South

Rachel Rd

Plat of Westcliffe Heights



Looking West

Approx. Prop. Line

(west node)

SITE



Cut Slope





CITY OF RICHLAND

NOTICE OF APPLICATION, PUBLIC HEARING AND OPTIONAL DNS (S2020-101 & EA2020-105)

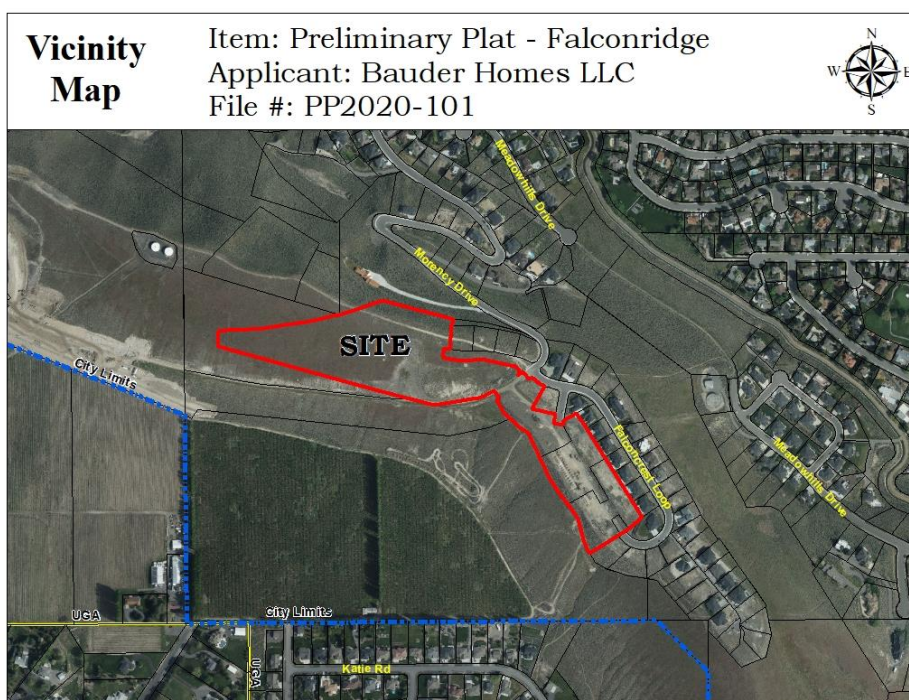
Notice is hereby given that Bauder Homes LLC (Scot Bauder) has filed a preliminary plat application to subdivide an approximately 19.56 acre site into 27 residential lots (Preliminary Plat of Falconridge). The project site is located near the intersection of Morency Drive and Falconcrest Loop upon Assessor's Parcel Numbers 135983000001048, 135983013342007 and 135983013341006. The proposed plat will have an average lot size of 17,769 square feet.

The Richland Hearings Examiner will conduct a public hearing and review of the application at 6:00 p.m., Monday, April 13, 2020 in the Richland City Hall Council Chambers, 625 Swift Boulevard. All interested parties are invited to attend and present testimony at the public hearing.

Environmental Review: The proposal is subject to environmental review. The City of Richland is lead agency for the proposal under the State Environmental Policy Act (SEPA) and has reviewed the proposed project for probable adverse environmental impacts and expects to issue a determination of non-significance (DNS) for this project. The optional DNS process in WAC 197-11-355 is being used. This may be your only opportunity to comment on the environmental impacts of the proposed development. The environmental checklist and related file information are available to the public and can be viewed at www.ci.richland.wa.us.

Any person desiring to express their views or to be notified of any decisions pertaining to this application should notify Shane O'Neill, Senior Planner, 625 Swift Boulevard, MS-35, Richland, WA 99352. Comments may also be faxed to (509) 942-7764 or emailed to soneill@ci.richland.wa.us. Written comments should be received no later than 5:00 p.m. on Friday, March 20, 2020 to be incorporated into the staff report. Comments received after that date will be entered into the record at the hearing.

The application will be reviewed in accordance with the regulations in RMC Title 19 Development Regulations Administration and Title 24 Plats and Subdivisions. Appeal procedures of decisions related to the above referenced application are set forth in RMC Chapter 19.70. Contact the Richland Planning Division at the above referenced address with questions related to the available appeal process.



Please publish the following:

Type of Legal Ad:	Public Hearing Notice
Date(s) of Publication:	Sunday, March 1, 2020
Richland's TCH Account:	
450543	
For Invoice Text Box on TCH Invoice	PC PHN – S2020-101
(Richland MUNIS Description)	
For PO Box on TCH Invoice	D2586000 4401
(Richland Account No. - MUNIS)	
Attention:	Jana Duncan (TF)

**CITY OF RICHLAND
NOTICE OF APPLICATION, PUBLIC HEARING AND OPTIONAL DNS**

The City of Richland received a preliminary plat application from Bauder Homes LLC to subdivide an approximately 19.56 acre site into 27 lots (Preliminary Plat of Falconridge). The project site is located near the intersection of Morency Drive and Falconcrest Loop upon Assessor's Parcel Numbers 135983000001048, 135983013342007 and 135983013341006.

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AFFIDAVIT OF MAILING

STATE OF WASHINGTON)
) ss.
COUNTY OF BENTON)

COMES NOW, Briana Ghbein, who, being first duly sworn upon oath deposes and says:

1. I am an employee in the Planning & Development Department for the City of Richland.

2. On the 24th day of February, 2020, I mailed a copy of the attached NOTICE OF APPLICATION, PUBLIC HEARING AND OPTIONAL DNS (S2020-101 & EA2020-105) to the attached list of individuals via regular USPS on the date indicated above. The Richland Hearing Examiner will conduct a public hearing at 6:00 PM on Monday, April 13, 2020 in the Richland City Council Chambers, 625 Swift Boulevard.


Signed: Briana Ghbein

SIGNED AND SWORN to before me this 24th day of February, 2020 by Jennifer Schuster.




Notary Public in and for the State of Washington,

Jennifer Schuster
Print Name
Residing at 625 Swift Blvd
My appointment expires: 4-25-23



CITY OF RICHLAND

NOTICE OF APPLICATION, PUBLIC HEARING AND OPTIONAL DNS (S2020-101 & EA2020-105)

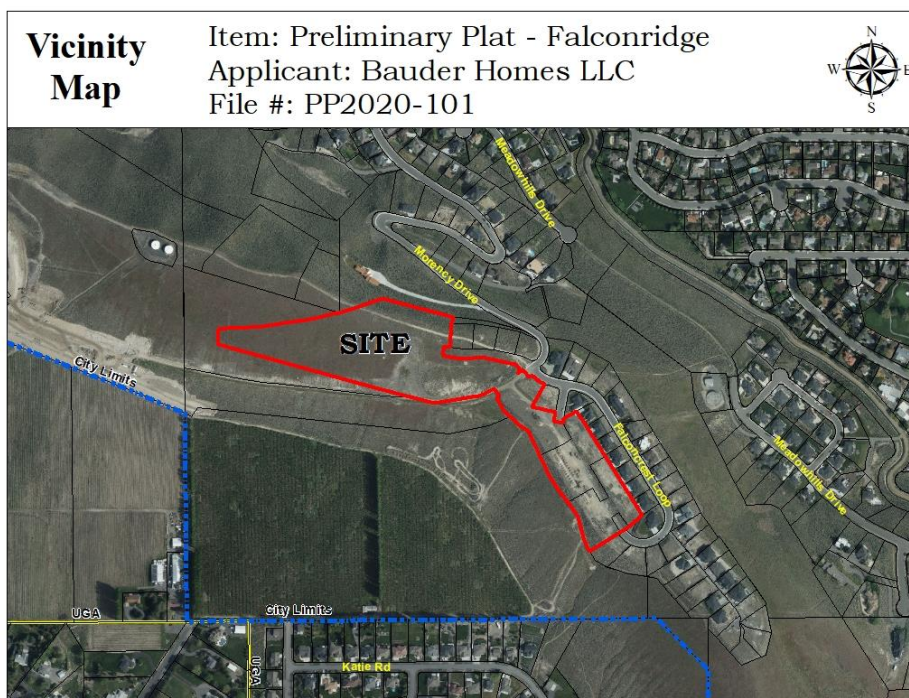
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The application will be reviewed in accordance with the regulations in RMC Title 19 Development Regulations Administration and Title 24 Plats and Subdivisions. Appeal procedures of decisions related to the above referenced application are set forth in RMC Chapter 19.70. Contact the Richland Planning Division at the above referenced address with questions related to the available appeal process.



Owner	Mail Address	City	State	Zip
BAUDER HOMES LLC	2495 MORENCY DR	RICHLAND	WA	99352
FRIENDS OF BADGER MOUNTAIN	PO BOX 24	RICHLAND	WA	99352
BAUDER LAND AND DEVELOPMENT INC	823 SUMMIT ST	RICHLAND	WA	99352
BAUDER SCOT J & CORTNEY L	2472 FALCONCREST LOOP	RICHLAND	WA	99352
BAUDER MILO	2495 MORENCY DR	RICHLAND	WA	99352
LUKE JULIE	1495 BADGER MTN LOOP	RICHLAND	WA	99352
BAUDER ESTATE LLC	6855 W CLEARWATER #101-153	KENNEWICK	WA	99336
SULLIVAN CORNELIUS J	2521 FALCONCREST LOOP	RICHLAND	WA	99352
WANG ZHEMING	2525 FALCONCREST LOOP	RICHLAND	WA	99352
AZUMA MIE	2591 FALCONCREST LP	RICHLAND	WA	99352
SANTANA ANTHONY A	2517 FALCONCREST LOOP	RICHLAND	WA	99352
ALVARADO CHAVEZ YOVANNY & MONICA L	2513 FALCONCREST LOOP	RICHLAND	WA	99352
HANSON DONALD W & SALLY O	2539 FALCONCREST LOOP	RICHLAND	WA	99352
CATS KARLEE R	2551 FALCONCREST LOOP	RICHLAND	WA	99352
HANSENS JOHN E	2531 FALCONCREST LOOP	RICHLAND	WA	99352
HERRIN JOHN G & EARLENE J	2535 FALCONCREST LOOP	RICHLAND	WA	99352

1
2 **AFFIDAVIT OF POSTING**

3
4 STATE OF WASHINGTON)
5) ss.
6 COUNTY OF BENTON)

7 COMES NOW, **Michael Stevens**, who, being first duly sworn upon oath deposes and says:

8 1. I am an employee in the Planning Division of the Development Services Department
9 for the City of Richland.

10 2. On the 24th day of February, 2020, I posted the attached NOTICE OF PUBLIC
11 HEARING, File Number S2020-101 (Falconridge Preliminary Plat) in the following locations:

12 Northwest corner of the intersection of Falconcrest Loop and Morency Drive, Richland, WA

13 
14 Signed: Michael Stevens

15 SIGNED AND SWORN to before me this 11th day of March, 2020, by Michael Stevens.



23 
24 Signature of Notary

25 Briana C. Ghbein
Printed Name

Notary Public in and for the State of Washington,

Residing in Benton County

My appointment expires: 4-25-23



AFFIDAVIT OF PUBLICATION

Account #	Ad Number	Identification	PO	Amount	Cols	Depth
450543	0004582055	PC PHN - S2020-101 (Richland MUNIS Descript	D2586000 4401	\$135.95	1	4.97 In

Attention: Jana Duncan (TF)

RICHLAND CITY OF/LEGALS
625 SWIFT BLVD.
RICHLAND, WA 99352

CITY OF RICHLAND
NOTICE OF APPLICATION,
PUBLIC HEARING AND OPTIONAL
DNS

The City of Richland received a preliminary plat application from Bauder Homes LLC to subdivide an approximately 19.56 acre site into 27 lots (Preliminary Plat of Falconridge). The project site is located near the intersection of Morency Drive and Falconcrest Loop upon Assessor's Parcel Numbers 135983000001048, 135983013342007 and 135983013341006.

The Richland Hearings Examiner will conduct a public hearing and review of the application at 6:00 p.m. on Monday, April 13, 2020 in the Richland City Hall Council Chambers, 625 Swift Boulevard. All interested parties are invited to attend and present testimony at the public hearing.

The proposal is subject to environmental review. The City of Richland is lead agency for the proposal under the State Environmental Policy Act (SEPA) and has reviewed the proposed project for probable adverse environmental impacts and expects to issue a determination of non-significance (DNS) for this project. The optional DNS process in WAC 197-11-355 is being used. This may be your only opportunity to comment on the environmental impacts of the proposed development. The environmental checklist and related file information are available to the public and can be viewed at www.ci.richland.wa.us.

Any person desiring to express their views or to be notified of any decisions pertaining to this application should notify Shane O'Neill, Senior Planner, 625 Swift Boulevard, MS-35, Richland, WA 99352. Comments may also be faxed to (509) 942-7764 or emailed to sonell@ci.richland.wa.us. Written comments should be received no later than 5:00 p.m. on Friday, March 20, 2020 to be incorporated into the staff report. Comments received after that date will be entered into the record at the hearing. Published: Sunday, March 1, 2020

COUNTY OF BENTON)

.SS

STATE OF WASHINGTON)

Victoria Rodela, being duly sworn, deposes and says, I am the Legals Clerk of The Tri-City Herald, a daily newspaper. That said newspaper is a local newspaper and has been approved as a legal newspaper by order of the superior court in the county in which it is published and it is now and has been for more than six months prior to the date of the publications hereinafter referred to, published continually as a daily newspaper in Benton County, Washington. That the attached is a true copy as it was printed in the regular and entire issue of the Tri-City Herald and not in a supplement thereof, ran 1 time(s) commencing on 03/01/2020, and ending on 03/01/2020, and that said newspaper was regularly distributed to its subscribers during all of this period.

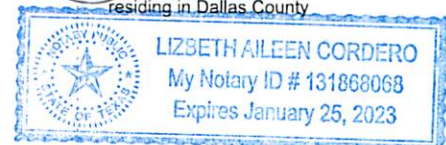
V Rodela

(Signature of Legals Clerk)

SUBSCRIBED AND SWORN BEFORE
ME THIS 2nd DAY OF March, 2020

Lizbeth Aileen Cordero

Notary Public in and for the State of Texas
residing in Dallas County



SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

USE OF CHECKLIST FOR NONPROJECT PROPOSALS:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND

1. Name of proposed project, if applicable: Plat of Falconridge
2. Name of applicant: Bauder Homes LLC
3. Address and phone number of applicant and contact person:
2742 Falconcrest Loop, Richland WA 99352

4. Date checklist prepared: 1-20-2020
5. Agency requesting checklist: City of Richland Planning Department
6. Proposed timing or schedule (including phasing, if applicable):
Summer 2020-Fall 2022 (tentative)

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
None

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
No

10. List any government approvals or permits that will be needed for your proposal, if known.
Planning department approval of subdivision, Public Works department approval of construction plans

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)
27 lot Long Plat

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Intersection of Falconcrest and Morency

B. ENVIRONMENTAL ELEMENTS

1. EARTH

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

25%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Gravel, rock, clay

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Minor grading for new roads & house pads (mostly completed already under prior permits)

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? 10%

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Engineered storm drain system to be installed as part of road construction

2. AIR

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Minor dust during construction phase

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Dust control during construction including water trucks & sprinklers

3. WATER

- a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

No

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water only; flow will be to engineered storm drain system

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

No

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Engineered storm drain system

4. PLANTS

a. Check the types of vegetation found on the site:

- ☐ deciduous tree: alder, maple, aspen, other
- ☐ evergreen tree: fir, cedar, pine, other
- ☒ shrubs
- ☒ grass
- ☐ pasture
- ☐ crop or grain
- ☐ Orchards, vineyards or other permanent crops.
- ☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- ☐ water plants: water lily, eelgrass, milfoil, other
- ☐ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Minimal - site is mostly cleared & grubbed already

c. List threatened and endangered species known to be on or near the site.

None

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Landscaping around 27 single family homes

e. List all noxious weeds and invasive species known to be on or near the site.

None

5. ANIMALS

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other _____

Songbirds

b. List any threatened and endangered species known to be on or near the site.

None

c. Is the site part of a migration route? If so, explain.

No

d. Proposed measures to preserve or enhance wildlife, if any:

None

e. List any invasive animal species known to be on or near the site.

None

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electric

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Energy efficient house design

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

1) Describe any known or possible contamination at the site from present or past uses.

None

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

None

4) Describe special emergency services that might be required.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

None

B. NOISE

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Traffic

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

None

- 3) Proposed measures to reduce or control noise impacts, if any:

None

8. LAND AND SHORELINE USE

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Site is currently vacant. Adjoining parcels are single family homes

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No

- c. Describe any structures on the site.

None

- d. Will any structures be demolished? If so, what?

No

e. What is the current zoning classification of the site?

R-1-10

f. What is the current comprehensive plan designation of the site?

g. If applicable, what is the current shoreline master program designation of the site?

NA

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No

i. Approximately how many people would reside or work in the completed project?

100

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None

9. HOUSING

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

27 middle income single family homes

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

- c. Proposed measures to reduce or control housing impacts, if any:

None

10. AESTHETICS

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

30'

- b. What views in the immediate vicinity would be altered or obstructed?

None

- c. Proposed measures to reduce or control aesthetic impacts, if any:

None

11. LIGHT AND GLARE

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Normal household lighting

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

- c. What existing off-site sources of light or glare may affect your proposal?

None

- d. Proposed measures to reduce or control light and glare impacts, if any:

None

12. RECREATION

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Hiking on Friends of Badger Mountain & City of Richland hiking trails

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

13. HISTORIC AND CULTURAL PRESERVATION

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.

No

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

None

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None

14. TRANSPORTATION

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Morency Dr; Falconcrest Loop. New roads will connect to existing

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Yes, part of Ben Franklin Transit system. Nearest stop 1.5 miles

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Construction of new public roads

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

270 trips per day, mostly during peak use hours

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

- h. Proposed measures to reduce or control transportation impacts, if any:

None

15. PUBLIC SERVICES

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No

- b. Proposed measures to reduce or control direct impacts on public services, if any.

None

16. UTILITIES

- a. Circle utilities currently available at the site:
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____
- b. Describe the utilities that are proposed for the project, the utility providing the service,
and the general construction activities on the site or in the immediate vicinity which might
be needed.

Electricity, water, sewer, cable TV, telephone

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the
lead agency is relying on them to make its decision.

Signature: _____

Name of signee _____

Position and Agency/Organization _____

Date Submitted: _____

File No. EA2020-105

CITY OF RICHLAND
Determination of Non-Significance

Description of Proposal: Preliminary Plat of Falconridge.

Proponent: Bauder Homes, LLC

Location of Proposal: The project site is located near the intersection of Morency Drive and Falconcrest Loop upon Assessor's Parcel Numbers 135983000001048, 135983013342007 and 135983013341006.

Lead Agency: City of Richland

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

() There is no comment for the DNS.

() This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen days from the date of issuance.

(X) This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

Responsible Official: Mike Stevens

Position/Title: Planning Manager

Address: 625 Swift Blvd., MS #35, Richland, WA 99352

Date: March 26, 2020

Signature _____



2015 South Ely Street
Kennewick, WA 99337
Customer Service 509-586-9111
Business 509-586-6012
FAX 509-586-7663
www.kid.org

March 19, 2020

Shane O'Neill
Senior Planner
City of Richland
505 Swift Blvd.
Kennewick, WA 99352

Subject: S2020-101 – Falconridge Preliminary Plat - Review Comments

Dear Mr. O'Neill:

This letter provides Kennewick Irrigation District (KID) review comments for Falconridge Preliminary Plat. The proposed Preliminary Plat is located outside of the KID Boundary, but is located above the Badger East Canal in the WE Quarter of Section 35, Township 09 North, Range 28 East, W.M.

1) Conditions Related to Design, Grading and Construction:

- a. Stormwater systems for the project should be designed to retain, at minimum, a 100-year storm event above the Badger East Lateral Canal and to minimize the introduction of water into the soils upgrading from the canal.

If you have any questions regarding these comments, please contact me at the address/phone number listed below.

Sincerely,

Rebecca S. Hiles
Staff Engineer



AFFORDABLE GEOTECH SERVICES, LLC

3019 Duportail Street, Suite 174
Richland, WA 99352
(509) 948-1770 • (509) 890-8811

Exhibit 8

Mr. Milo Bauder
2495 Morency Avenue
Richland, WA 99352

January 22, 2018

Project Number 18003

RE: REPORT
Geotechnical Evaluation
Proposed Falconridge Residential Development
Richland, WA

Dear Milo,

Affordable Geotech Services (AGS) has completed our geotechnical evaluation for the proposed residences located at Falconridge Residential Development in Richland, Washington. The location of the project is shown on the attached Vicinity Map, Figure 1. The purpose of our evaluation was to explore and evaluate subsurface conditions at the site and to provide you with recommendations to assist with the design of the proposed development and residential structures. This report presents the results of our field evaluation, laboratory test results, conclusions and recommendations.

PROJECT UNDERSTANDING

We understand the project consists of the development of a 4-lot short plat and a 9-lot long plat in Richland according to the plans submitted to us by Spink Engineering titled "Falconridge Grading, Sheets 1 of 2 and 2 of 2" undated. The project site is located west of the intersection of Morency Drive and Falconcrest Loop. The project will include the construction of Falconridge Lane and associated stormwater disposal facilities. We anticipate that the proposed residential structures will likely be a one- to two-story, wood-framed structures. We anticipate that structural loads will be on the order of 1 to 2 kips per lineal foot of wall, and column loads, if any, on the order of 30 kips or less.

FIELD EXPLORATIONS

We evaluated subsurface conditions at the site by excavating seven test pits (TP-1 through TP-7) on January 9, 2018. The test pits were excavated at locations selected by us and located in the field by Spink Engineering. The test pit locations are shown on the attached Site and Exploration Plan, Figure 2. Infiltration testing was not conducted during our field explorations, as up to 16 feet of material is needed to be excavated from the proposed storm drainage retention pond before infiltration testing can be conducted.

The test pits were excavated to between approximately 2½ and 8 feet below existing site grade with a track-mounted excavator using a 3-foot-wide bucket provided by Mahaffey Enterprises, Inc. under subcontract to Mr. Bauder. All of the test pits were terminated due to refusal on basalt bedrock. An engineer from our firm continuously observed the excavation of the test pits, logged the subsurface conditions, and obtained representative soil samples. The soils encountered in the test pits were visually described and classified in general accordance with ASTM D-2488. Logs of the test pits are presented on the Test Pit Log sheets attached to this report. Soil samples obtained from the test pits were stored in watertight containers and transported to a laboratory for further visual examination and testing.

The test pits were backfilled at the completion of the field evaluation. The backfill was compacted to the degree possible with the bucket on the backhoe, but will settle with time. We recommend that the backfill be removed and replaced with structural fill as recommended herein.

LABORATORY TESTING

Laboratory testing was performed on a representative soil sample obtained from the test pits. The test performed consisted of particle size analysis testing (ASTM C 136). This test was used to assist in soil classification and in the evaluation and formulation of engineering recommendations. The results of the laboratory test performed are attached to this report.

SITE CONDITIONS

Location and Surface Conditions

The project site is located west of the intersection of Morency Drive and Falconcrest Loop. The site is situated atop the middle of Little Badger Mountain. Specifically, the property is located in the southwest quarter of Section 35, Township 9 North, Range 28 East, W.M. approximately as shown on the attached Vicinity Map Figure 1. The site is currently undeveloped and covered with grass and sagebrush. The site slopes down to the south at an approximate 4H:1V (horizontal to vertical) slope, and to the north at an approximate 2H:1V slope.

General Soil Conditions

The USDA Natural Resources Conservation Service (NRCS) has mapped the soils on and around the site in the Soil Survey of Benton County, Washington as Kiona very stony silt loam, 0 to 30 percent slopes (KnE) and 30 to 65 percent slopes (KnF), and Shano silt loam, 30 to 65 percent slopes (ShF).

The Kiona series consists of well-drained, very stony, medium-textured soils underlain by basalt rubble. These soils developed under bunch grasses in a mixture of windblown deposits and basalt residuum. Drainage is good, and permeability is moderate. Runoff is reported as very slow to very rapid, depending on the slope. The hazard of water erosion is reported as slight to very severe, also dependent on the slope.

The Shano series consists of well-drained, medium-textured soils that developed under bunch grasses in silty, windblown deposits. Drainage is good, and permeability is moderate. Runoff is reported as rapid to very rapid, and the hazard of water erosion is severe to very severe. The site soils are shown on the attached NRCS Soil Map, Figure 3.

Subsurface Conditions

We encountered generally similar subsurface conditions at each of the test pit locations. Beneath the surficial vegetation at test pits TP-1, TP-2, TP-3, TP-6 and TP-7, we encountered sandy silt (ML). The sandy silt had varying amounts of gravel in it. We described the sandy silt as being moist to dry, and medium dense. The sandy silt extended to depths ranging between 1 and 7 feet below grade, but generally extended to depths between 1 and 3 feet.

Beneath the sandy silt, and at the ground surface at TP-5, we encountered a silty gravel (GM). We generally described the silty gravel as fine to coarse grained with cobbles, dry and dense. The silty gravel general ranged from 1 to 2.5 feet in thickness. In TP-7, an approximate 1.5-foot layer of sandy silt was encountered within the silty gravel.

Underlying the silty gravel, and at the ground surface at TP-4, we encountered basalt bedrock. The basalt was encountered at depths ranging between about 2.5 to 8 feet below the ground surface. At TP-4, the surficial soils had been removed from atop the bedrock. We generally described the basalt bedrock as dark grey, moderately fractured, and slightly to moderately weathered. All of the test pits were terminated in the basalt bedrock.

Groundwater was not encountered in the test pits. Detailed descriptions of the soil and geologic conditions encountered in the test pits are presented on the test pit logs attached with this report. The Unified Soil Classification System chart is also included for reference.

Liquefaction

Liquefaction may occur in loose, saturated cohesionless soils when they are subjected to earthquake ground motions. Liquefaction potential at the site was evaluated using the DCP (N-value) based method outlined in Seed and Harden (1990) and using the subsurface information from the test pits. The site soils are generally comprised of sandy silt that is medium dense, and in our opinion, the groundwater table is well below the site to influence the soils during a seismic event. Additionally, the mapped maximum earthquake S_s is less than 0.5g, therefore no liquefaction analysis is required for the site. In our opinion, the chance of liquefaction occurring at the site is extremely unlikely.

Slope Stability

We developed a slope profile based on the proposed grading plan and soil information. We estimated the soil strength parameters based on our experience with similar soils. We based our slope profile on soil conditions and ground surface elevations as they currently exist with the residential improvements constructed. We evaluated the slope stability using the computer program STB2006. Over 100 critical failure areas were analyzed and reviewed. In general, geotechnical professionals consider a slope with a 1.5 or greater safety factor stable for long term conditions.

The results indicate the residential improvements have a safety factor greater than 1.5; therefore, the slope is considered stable for long term conditions. No indications of slope instability were observed during our field investigation. Based on our analysis, the placement of the structures on the property does not adversely impact the stability of the slope.

CONCLUSION AND RECOMMENDATIONS

General

Based on the results of our site explorations and general understanding of the proposed construction, it is our opinion that the proposed residential development can generally be constructed as envisioned. Our conclusions and recommendations are based on our project understanding and experience with similar soil conditions. If soil conditions are encountered during construction that differ from those described in this report, we should be notified so that we may update our opinions and recommendations, if necessary. Specific recommendations for project design and construction are included in the following paragraphs of this report.

Pre-Wetting

Because of the dry soil conditions at the site, moisture conditioning will be necessary to facilitate the compaction of structural fill at the site and for dust control. We recommend pre-watering the areas to be excavated. By pre-watering, the moisture content of the soil can be brought to near optimum moisture content, thereby reducing the need to add water during the placement of the structural fill. Significant savings in time and effort during compaction can often be realized through pre-watering the excavation areas.

Site Preparation

Initial site preparation will include the removal of any existing vegetation from the site. We recommend that all vegetation and root zone be excavated and removed from the proposed construction area. After clearing and stripping operations are complete, we recommend that the exposed soil be scarified, moisture-conditioned, and compacted to at least 92 percent of the maximum dry density as determined by ASTM D 1557 (modified proctor) prior to construction or the placement of structural fill. Soft or pumping areas which cannot be adequately compacted should be over-excavated to firm soil or to a depth of 2 feet, whichever is less, and replaced with structural fill compacted to 95 percent of the modified proctor maximum dry density.

Structural Fill

Based on our explorations, it is our opinion that the native sandy silt and silty sand at the site are generally suitable for reuse as structural fill provided the materials are moisture conditioned for compaction and free of debris, organic material, and frozen soil. In our opinion, excavated basalt bedrock is also suitable for reuse as structural fill provided rock particles greater than about 10 inches in diameter are screened or graded out.

We recommend imported structural fill consist of granular material such as sands or gravels containing less than about 10 percent fines (material passing a No. 200 sieve). Imported structural fill should also be free of debris, organic material, frozen soil and rock particles greater than about 4 inches in diameter.

We recommend structural fill be moisture conditioned within about 2 percentage points of optimum moisture content and placed in horizontal lifts no thicker than 8 inches before compaction. We recommend structural fill be compacted to at least 95 percent of the maximum dry density as determined by ASTM D 1557 (modified proctor). For structural fill too coarse to permit density testing, greater than 30 percent retained on the $\frac{3}{4}$ -inch sieve (basalt shot rock), we recommend evaluation of compaction be accomplished through visual observation of proof-rolling. We recommend the proof-rolling be observed by a qualified geotechnical engineer to determine if the intent of the compaction specification has been achieved.

Non-structural fill should be placed in loose lifts not exceeding 12 inches in thickness and compacted to at least 85 percent of maximum dry density. Structural fill should not be placed on or over topsoil, non-structural fill, wet or frozen soils, or other unsuitable materials.

Temporary Excavations

Based on our subsurface explorations, it is our opinion the native soils can be excavated with standard soil excavation equipment. We characterized the soils encountered as Type C soils according to OSHA guidelines. We therefore recommend excavations greater than four feet deep be sloped no steeper than 1½H:1V (horizontal to vertical). Alternatively, deeper excavations may be shored or braced in accordance with OSHA specifications and local codes. We recommend excavations within fractured bedrock be sloped no steeper than ½H:1V. The project contractor will be responsible for ensuring that excavations are properly constructed for worker protection.

Slope Construction

Fill placed on slopes steeper than 5H:1V should be keyed and benched into the existing native soils or basalt bedrock. We recommend keyways be constructed 10 feet horizontally and a minimum of 5 feet vertically in locations where fill will be placed where it is greater than 5 feet in thickness. We recommend that benches be cut into the native slope a minimum of 10 feet horizontally and a minimum of 2 feet vertically. We recommend that the exposed soil of each bench be scarified, moisture-conditioned, and compacted to at least 92 percent of the maximum dry density prior to the placement of structural fill. If excavations for cut slopes expose basalt bedrock, the exposed surface should be proof-rolled as recommended above.

Fill slopes should be constructed with suitable structural fill prepared, placed and compacted as recommended above. We recommend that permanent cut and fill slopes be inclined no steeper than 2H:1V. Fill slopes should be overbuilt and then trimmed back to uniformly compacted material. The final slope surface should be track-walked or grid rolled to improve the slope's resistance to erosion. We recommend that surface drainage be directed away from all slope faces.

Slope Protection

The site soils are prone to erosion and will require protection and maintenance. Since the site soils are susceptible to wind and water erosion, it is strongly recommended that erosion control measures such as proper grading, erosion control blankets or fabrics, sprayed tackifiers, the rapid establishment of new vegetation or some combination of these, be utilized on all slopes comprised of the native soils within this project.

Foundations

Based on the data obtained from our field explorations and the test pit logs, it is our opinion that foundations for the proposed residential structures can be supported on compacted native soils, basalt bedrock, or structural fill placed on the compacted native soils or basalt bedrock. In order to reduce the potential for differential settlement, we do not recommend that foundations bear on a combination of native soils and basalt bedrock or basalt shot rock structural fill. We recommend that exterior foundations bear at least 24 inches below the exposed ground surface for frost protection or as required by local building codes.

We recommend that exposed foundation subgrades be compacted to 95 percent of the modified proctor maximum dry density. Foundation subgrades should be compacted to at least 12 inches horizontally beyond the footing perimeter. We recommend that foundation bearing surfaces be free of loose soil and debris. Foundations should not bear on topsoil, non-structural fill, or other unsuitable materials. We recommend that an experienced geotechnical engineer observe foundation subgrades to evaluate if suitable bearing soils are exposed and prepared as recommended prior to having the footing forms placed.

It is our opinion that foundations bearing on native soil prepared as recommended above may be designed using an allowable net soil bearing pressure of 1,500 pounds per square foot (psf). Foundations bearing on basalt bedrock or basalt shot rock structural fill may be designed using an allowable net bearing pressure of 4,000 psf. These bearing pressures may be increased by one-third for short-term wind and seismic conditions.

If the previous recommendations are implemented, it is our opinion that total settlement will be approximately 1 inch or less and that differential settlement will be less than ½ inch. We estimate that settlement of the native soil or structural fill occur rapidly with the application of loads during construction. If foundation subgrades become disturbed during construction and loose soil is not removed, settlements larger than those estimated may occur.

We recommend that all backfill placed on the exterior sides of the foundation walls be compacted to a minimum of 90 percent of the modified proctor maximum dry density. Beneath pads, slabs and steps, backfill should be compacted to a minimum of 95 percent of the modified proctor maximum dry density. Backfill should be brought up uniformly on both sides of foundation walls to minimize the potential for displacement.

Slope Setbacks

In accordance with IBC 2015 Section 1808.7.2 *Foundation Setback from Descending Slope Surface*, “Foundations on or adjacent to slope surfaces shall be founded in firm material with an embedment and setback from the slope surface sufficient to provide vertical and lateral support for the foundation without detrimental settlement. Where the slope is steeper than 1 unit vertical in 1 unit horizontal (100-percent slope), the required set back shall be measured from an imaginary plane 45 degrees to the horizontal, projected upward from the toe of the slope.” We recommend that the building footprint shall be setback from the top of the slope for a distance of a minimum of 10 feet and 10 feet from the bottom of the slope. The long term performance of the structure near slopes is dependent on the protection of slopes from erosion or over steepening by cutting into the toe of the slope. Lots should be maintained to prevent erosion or undermining the toe. If the slopes will be modified from their constructed configuration, we recommend properly designed retaining walls should be used.

Seismic Conditions

Based on our test pits and our review of well logs in the vicinity of the site, we interpret the site to be classified as Site Class D in accordance with Table 20.3-1 of Chapter 20 of ASCE 7. The spectral response accelerations for short periods (S_s) and a 1-second period (S_1) in the vicinity of the site were determined from Figures 1613.3.1(1) and 1613.3.1(2) of the 2015 IBC, respectively. The mapped S_s coefficient for the site is 0.424 and the mapped S_1 coefficient for the site is 0.163.

Lateral Foundation Resistance

Lateral foundation loads will be resisted by friction against the base of the foundation and the passive earth pressure acting against the sides of the foundation. For sliding resistance at the base of foundations, we recommend using a frictional coefficient of 0.4 for the contact between the foundation concrete and basalt bedrock or basalt shot rock structural fill. The passive earth pressure resulting from compacted soil backfill against the sides of foundations can be calculated as an equivalent fluid pressure using a fluid unit weight of 230 pounds per cubic foot (pcf). Both of the above values include a safety factor of about 1.5.

Concrete Slabs-On-Grade

We anticipate slab subgrades will consist of compacted native soils or structural fill. We recommend that slab subgrades be compacted to a minimum of 95 percent of the modified proctor maximum dry density. We recommend concrete slabs-on-grade be underlain by a minimum of 6 inches of crushed aggregate base. We recommend using Washington Department of Transportation (WSDOT) crushed surfacing below slabs (Standard Specification 9-03.9(3)). The crushed surfacing should be compacted to a minimum of 95 percent of the modified proctor maximum dry density.

EVALUATION LIMITATIONS

This report is for the exclusive use of Mr. Milo Bauder and his agents for use in design of the proposed project and preparation of construction documents. This report has been prepared to assist with the design and construction of the proposed Falconridge Residential Development in Richland, Washington. The information contained herein is not applicable to other sites. In the absence of our written approval, we make no representations and assume no responsibility to other parties regarding this report. The data, analyses, and recommendations presented may not be appropriate for other structures or purposes.

The analyses and recommendations submitted in this report are based on the data obtained from the test pits excavated at the locations indicated on the attached Site and Exploration Plan, Figure 2. It should be recognized that the explorations performed for this evaluation reveal subsurface conditions only at specific locations on the project site and that conditions in other areas could vary. Furthermore, the nature and extent of any such variations would not become evident until additional explorations are performed or until construction activities have begun. If significant variations are observed at that time, we may need to modify the conclusions and recommendations contained in this report to reflect the actual conditions encountered.

If there is a substantial lapse of time between the submission of this report and the start of work at the site, or if site conditions have changed due to natural causes or construction operations at or adjacent to the site, or if the basic project design is significantly modified from that assumed, we recommend that this report be reviewed to determine if the conclusions and recommendations contained herein are still applicable. Please see Important Information about Your Geotechnical Engineering Report attached to this report.

Our services consist of professional opinions and conclusions made in accordance with generally accepted geotechnical engineering principles and practices. This acknowledgement is in lieu of all warranties either expressed or implied.

We appreciate the opportunity to be of service. If you have any questions regarding this report or need additional information, please call us at (509) 890-8811.

Sincerely,

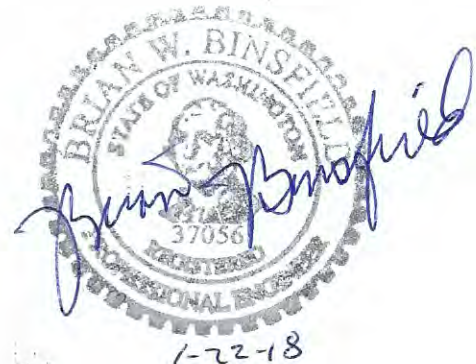
AFFORDABLE GEOTECH SERVICES, LLC



Brian W. Binsfield, P.E.
Principal Engineer

BWB/gsl

Addressee – MBauder2001@charter.net
scotbauder@gmail.com



Affordable Geotech Services

• Geotechnical • Geological • Retaining Walls • Construction Observation •

Attachments: Figure 1, Vicinity Map
 Figure 2, Site and Exploration Plan
 Figure 3, NRCS Soil Map
 Test Pit Logs (2)
 Unified Soil Classification System
 Sieve Analysis
 Important Information About Your Geotechnical Engineering Report



VICINITY MAP

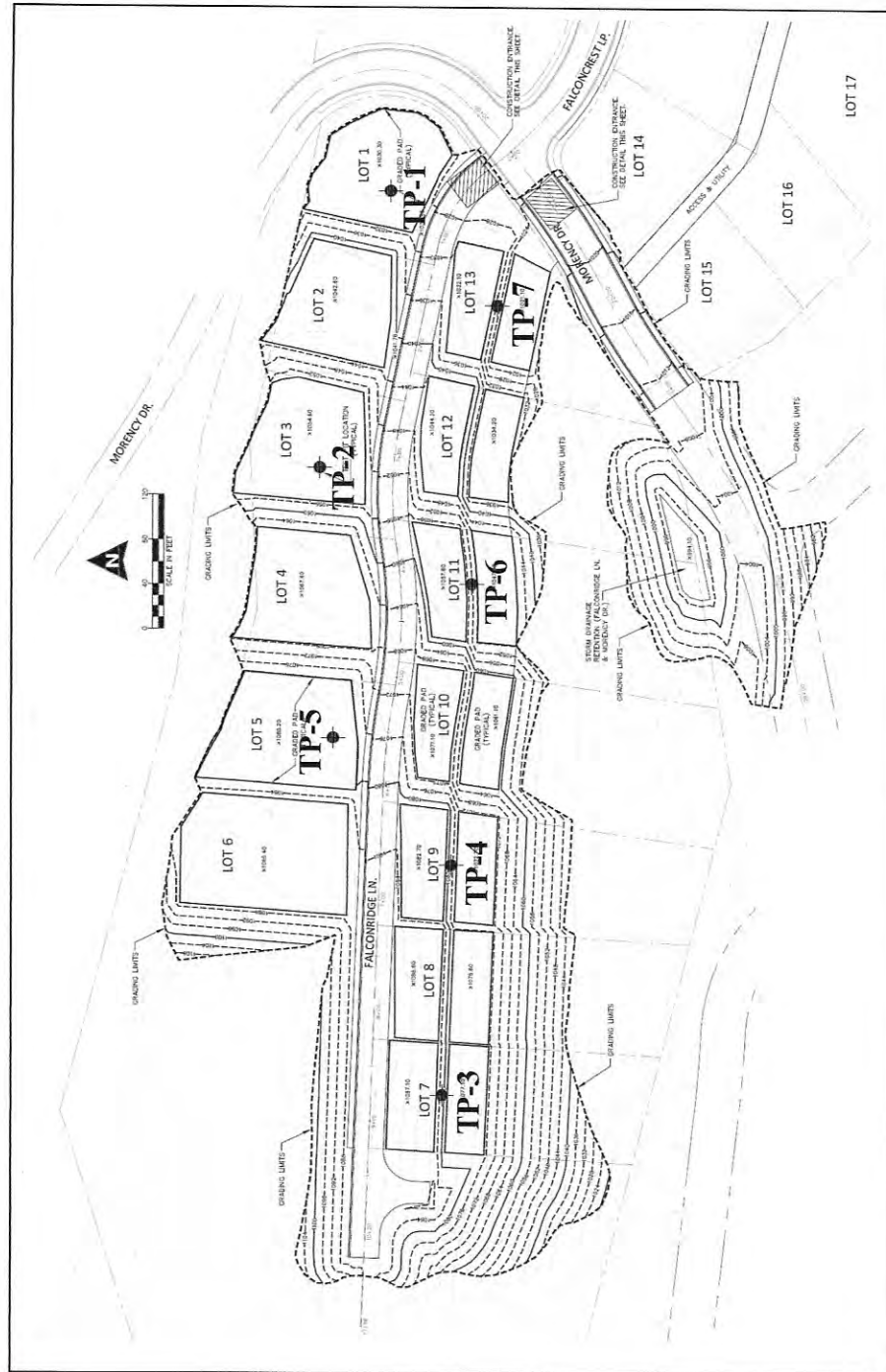
Falconridge Residential Development
Richland, Washington

January 2018

Project No. 18003

Figure

1



SITE AND EXPLORATION PLAN

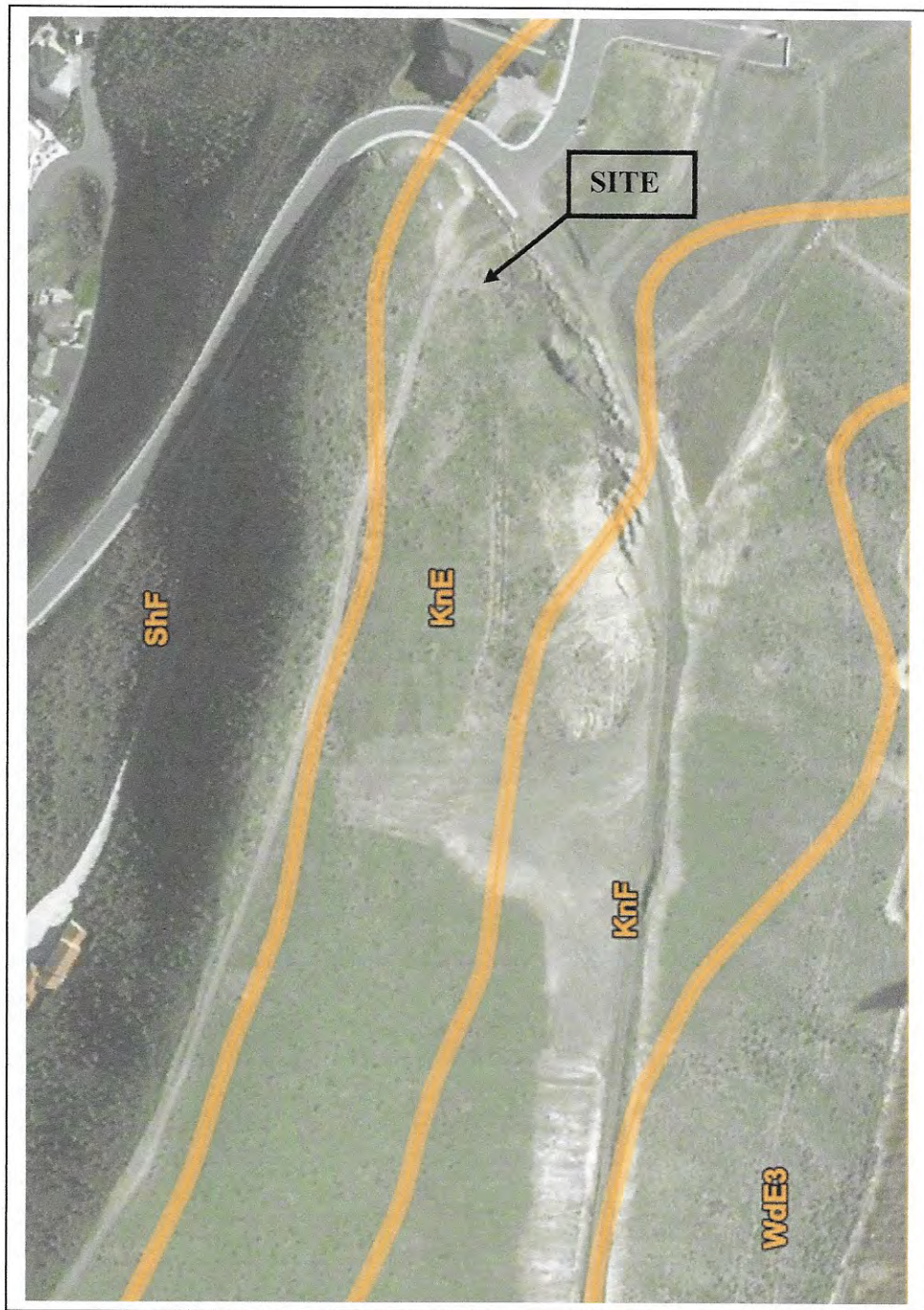
Falconridge Residential Development
Richland, Washington

January 2018

Project No. 18003

Figure

2



NRCS SOIL MAP

Falconridge Residential Development
Richland, Washington

January 2018

Project No. 18003

Figure

3

TEST PIT LOGS

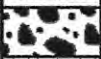
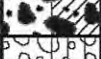
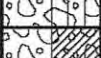
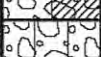
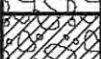
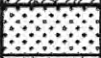
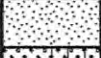
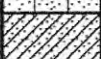
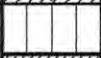
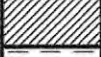
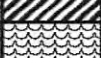
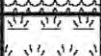
Depth (feet)	USCS Soil Classification	Location & Description
<u>TP-1</u>		
Lot 1, Ground Surface Elevation: 1,035.5		
0.0 – 3.0	ML	SANDY SILT w/ GRAVEL, lt. brown, moist to dry, medium dense
3.0 – 4.0	GM	SILTY GRAVEL, fine to coarse grained, with cobbles, lt. brown, dry, dense
4.0 – 6.0	Bedrock	BASALT, dk. grey, moderately fractured, moderately weathered
Test pit terminated due to refusal at 6 feet depth on 01/09/18		
No Groundwater observed		
No caving observed		
<u>TP-2</u>		
Lot 3, Approximate Ground Surface Elevation: 1,060		
0.0 – 1.5	ML	SANDY SILT w/ GRAVEL, lt. brown, moist to dry, medium dense
1.5 – 3.0	GM	SILTY GRAVEL, fine to coarse grained, with cobbles, brownish white, dry, dense
3.0 – 4.0	GM	SILTY GRAVEL, fine to coarse grained, with cobbles, lt. brown, moist to dry, dense
4.0 – 7.0	Bedrock	BASALT, brown and grey, moderately fractured, moderately weathered
Test pit terminated due to refusal at 7 feet on 01/09/18		
No Groundwater observed		
No caving observed		
<u>TP-3</u>		
Lot 7, Ground Surface Elevation: 1,070		
0.0 – 1.5	ML	SANDY SILT, some gravel, lt. brown, moist, medium dense
1.5 – 2.5	GM	SILTY GRAVEL, fine to coarse grained, with cobbles, brownish white, dry, dense
2.5 – 2.7	Bedrock	BASALT, dk. grey, moderately fractured, slightly weathered
Test pit terminated due to refusal at 2.7 feet depth on 01/09/18		
No Groundwater observed		
No caving observed		
<u>TP-4</u>		
Lot 9, Approximate Ground Surface Elevation: 1,070		
0.0 – 2.5	Bedrock	BASALT, grey, moderately fractured, moderately weathered
Test pit terminated due to refusal at 2.5 feet on 01/09/18		
No Groundwater observed		
No caving observed		

TEST PIT LOGS

(continued)

<u>Depth (feet)</u>	<u>USCS Soil Classification</u>	<u>Location & Description</u>
<u>TP-5</u>		
Lot 5, Ground Surface Elevation: 1,086.5		
0.0 – 2.3	GM	SILTY GRAVEL, fine to coarse grained, with cobbles, brown, moist, dense
2.3 – 2.5	Bedrock	BASALT, dk. grey, slightly fractured, slightly weathered
Test pit terminated due to refusal at 2.5 feet depth on 01/09/18		
No Groundwater observed		
No caving observed		
<u>TP-6</u>		
Lot 11, Ground Surface Elevation: 1,050		
0.0 – 7.0	ML	SANDY SILT, some gravel, lt. brown, moist to dry, medium dense
7.0 – 8.0	GM	SILTY GRAVEL, fine to coarse grained, with cobbles, brownish white, dry, dense
8.0 – 8.5	Bedrock	BASALT, dk. grey, moderately fractured, slightly weathered
Test pit terminated due to refusal at 8.5 feet depth on 01/09/18		
No Groundwater observed		
No caving observed		
Bulk soil sample obtained at 2 feet depth (72.7% passing the #200 sieve)		
<u>TP-7</u>		
Lot 13, Ground Surface Elevation: 1,029.4		
0.0 – 1.0	ML	SANDY SILT, trace gravel, brown, moist, medium dense
1.0 – 3.5	GM	SILTY GRAVEL, fine to coarse grained, with cobbles, lt. brown, dry, dense
3.5 – 5.0	ML	SANDY SILT, trace gravel, lt. brown, dry, loose to medium dense
5.0 – 7.0	GM	SILTY GRAVEL, fine to coarse grained, brownish white, dry, dense
7.0 – 7.5	Bedrock	BASALT, dk. grey, moderately fractured, slightly weathered
Test pit terminated due to refusal at 7.5 feet depth on 01/09/18		
No Groundwater observed		
No caving observed		
Bulk soil sample obtained at 3½ feet depth		

UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D2488

MAJOR DIVISION			GROUP SYMBOL	LETTER SYMBOL	GROUP NAME
COARSE GRAINED SOILS CONTAINS MORE THAN 50% FINES	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVEL WITH * 5% FINES		GW	Well-graded GRAVEL
				GP	Poorly graded GRAVEL
		GRAVEL WITH BETWEEN 5% AND 15% FINES		GW-GM	Well-graded GRAVEL with silt
				GW-GC	Well-graded GRAVEL with clay
				GP-GM	Poorly graded GRAVEL with silt
				GP-GC	Poorly graded GRAVEL with clay
		GRAVEL WITH ≥ 15% FINES		GM	Silty GRAVEL
				GC	Clayey GRAVEL
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SAND WITH * 5% FINES		SW	Well-graded SAND
				SP	Poorly graded SAND
		SAND WITH BETWEEN 5% AND 15% FINES		SW-SM	Well-graded SAND with silt
				SW-SC	Well-graded SAND with clay
				SP-SM	Poorly graded SAND with silt
				SP-SC	Poorly graded SAND with clay
		SAND WITH ≥ 15% FINES		SM	Silty SAND
				SC	Clayey SAND
FINE GRAINED SOILS CONTAINS MORE THAN 50% FINES	SILT AND CLAY	LIQUID LIMIT LESS THAN 50		ML	Inorganic SILT with low plasticity
				CL	Lean inorganic CLAY with low plasticity
				OL	Organic SILT with low plasticity
		LIQUID LIMIT GREATER THAN 50		MH	Elastic inorganic SILT with moderate to high plasticity
				CH	Fat inorganic CLAY with moderate to high plasticity
				OH	Organic SILT or CLAY with moderate to high plasticity
			HIGHLY ORGANIC SOILS		

NOTES:

- 1) Sample descriptions are based on visual field and laboratory observations using classification methods of ASTM D2488. Where laboratory data are available, classifications are in accordance with ASTM D2487.
- 2) Solid lines between soil descriptions indicate change in interpreted geologic unit. Dashed lines indicate stratigraphic change within the unit.
- 3) Fines are material passing the U.S. Std. #200 Sieve.

Affordable Geotech Services

• Geotechnical • Geological • Retaining Walls • Construction Observation •

☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspections

Brian Binsfield
Affordable Geotech Services, LLC
3019 Duportail Street, Suite 174
Richland, WA 99352

Phone: 509-948-1770
Fax:
Other: E-REPORTS ONLY

Project: Falcon Ridge Development- Lab Testing
Project Manager: Eric Howard
Lab Technician: David Taylor
Test Date: January 11, 2018

As requested MTI has performed sieve analysis testing on the sample referenced below. The testing was performed in accordance with current standards indicated below. The results obtained in our laboratory were as follows:

Source and Description:	TP-6 2-2 ½ Feet, Sandy Silt							
Date Obtained:	01/09/2018							
Sample ID:	18-2001							
Sampling and Preparation:	ASTM D75:	X	AASHTO T2:		ASTM D421:		AASHTO T87:	
Test Standard:	ASTM C117:		AASHTO T11:		ASTM D1140:		ASTM D5444:	
	ASTM C136:	X	AASHTO T27:		ASTM D422:		AASHTO T88:	

Sieve Size	Percent Passing
2"	
1.5"	
1"	
¾"	
½"	
3/8"	
#4	100
#8	99
#10	99
#16	98
#30	94
#40	92
#50	90
#100	85
#200	72.7

If there are questions concerning this report (R180001L-011418=L=S-S182001.pdf), please contact the project manager at 971-217-3815.

Respectfully submitted,
MATERIALS TESTING & INSPECTION, INC.

Howard D Vitkus

Howard D. Vitkus, PE
Technical Director - Portland

cc:

Important Information about Your Geotechnical Engineering Report

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply the report for any purpose or project except the one originally contemplated.*

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ – sometimes significantly – from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not over rely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

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A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having our geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Contractors are Responsible for Site Safety on their Own Construction Projects

Geotechnical engineers' recommendations are not intended to direct the contractor's procedures, methods, schedule or management of the work site. The contractor is solely responsible for job site safety and for managing construction operations to minimize risks to on-site personnel and to adjacent properties.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineer's responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

**INTERMOUNTAIN MATERIALS TESTING & GEOTECHNICAL**

PO Box 2801
Pasco, WA 99302
(509) 545-9217 • (509) 545-9243 FAX

Page 1 of 2

Milo Bauder
120 Meadow Hills Drive
Kennewick, WA 99336

October 12, 2012

Project Number M11251

PROJECT: Falconcrest
Richland, WA

SUBJECT: Summary of field observations
Summary Report # 1
August 2, 2011 through September 5, 2012

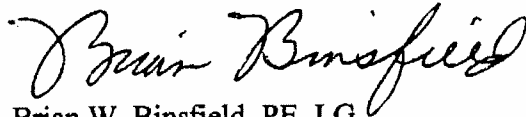
At your request, we have provided field and laboratory testing services for the subject project. Services were limited to the examination and testing of specific construction components, selected at your discretion. An evaluation of Lots 1 through 16 and 42 through 44 was documented by ALLWEST Testing & Engineering and summarized in their evaluation report dated April 12, 2012. This letter summarizes the results of our observations on the remaining lots within the development, which includes: Lots 1, 2, and 3 of Short Plat 3343, Lots 1, 2, and 3 of Short Plat 3344, and Lots 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41 of the Long Plat.

Our involvement for this project has been limited to observation of earthwork during the placement of structural fill on the lots within the development. The results of our observations were documented in our Reports #1 through Report #30. Due to the coarse, granular nature of the structural fill placed on the lots (greater than 30% retained on the ¾" sieve) conventional maximum density and compaction testing was not appropriate. Compaction of the structural fill was therefore evaluated through visual observation and proof-rolling.

It is our understanding that mass grading on the lots is now complete. We understand, however, that boulder retaining walls are proposed along the lot lines between lots 25 through 30. Based on the results of our observations, it is our opinion that the fill placed on the subject lots within the development has been compacted to the intent of the recommendations presented in ALLWEST's Geotechnical Engineering Evaluation Addendum report dated December 31, 2008. Based on our observations, it is our opinion that the lots are suitable for the construction of single family residences. We recommend that single-family residences constructed on the lots be constructed in accordance with the requirements of the latest versions of the International Building Code, International Residential Code, and City of Richland building code.

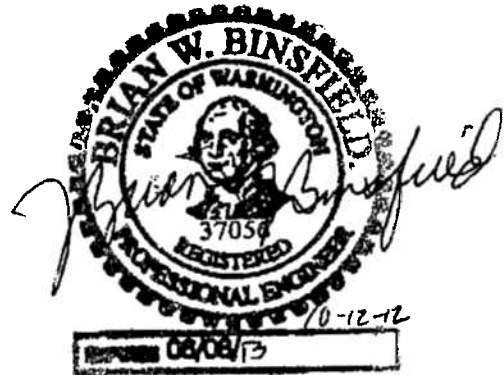
If you have any questions regarding this report, please call.

Respectfully Submitted:
INTERMOUNTAIN MATERIALS TESTING



Brian W. Binsfield, PE, LG
Mgr. Engineering Services

SLW/saf
Addressee - 2
Mbauder2001@charter.net
dmccarty@ci.richland.wa.us
emacdig@msn.com





Materials Testing
Geotechnical Engineering
Environmental Services

April 12, 2012
Project No. 212-018G

Mr. Milo Bauder
120 Meadow Hills Drive
Richland, Washington 99352

Re: Geotechnical Engineering Evaluation of Lot Grading
Falcon Crest Lots 1 through 16 and 42 through 44
Richland, Washington

Dear Mr. Bauder:

As you requested, we have completed a geotechnical evaluation of the lot grading for the proposed residential structures at the above-referenced sites in Richland, Washington. The purpose of the evaluation is to evaluate the grading for conformance to the recommendations of our Geotechnical Engineering Evaluation Addendum report to you dated December 31, 2008. This report summarizes the results of our observations and opinions.

PROJECT DESCRIPTION

The sites are located in the Falcon Crest subdivision in Richland, Washington. We understand that the proposed structures will be one- to two-story, wood-frame buildings with conventional foundations and either slab-on-grade or joist-supported floors. We anticipate that structural loads will be relatively light, on the order of 1 to 2 kips per lineal foot of wall and column loads, if any, on the order of 30 kips or less

AVAILABLE INFORMATION

We were provided drawings of the project from Rogers Surveying, Inc. and Spink Engineering, LLC. These drawings included a plat map for Falcon Crest which was prepared by Rogers Surveying, Inc. and was dated November 2, 2011. This plan showed plan views of the lots including the property lines, the proposed roadways, and existing ground surface elevation contours.

Spink Engineering, LLC provided us grading plans for Falcon Crest and the adjacent short plats. These plans showed the existing and proposed ground surface elevation contours, proposed lots, and proposed roadways. These plans were dated August 10, 2011. A copy of the plat is attached (see Figure 2). Lots 1 through 16 and 42 through 44 that are addressed by this report are indicated by a red "X" on the specific lots.

FIELD OBSERVATIONS

A geotechnical engineer from our firm visited the site on February 9, 2012 to visually observe the site features. Site grading activities were ongoing at the time of our visit. The overburden soils were being excavated and removed from the lots. We observed that the subject lots were excavated into the basalt bedrock. The exposed bedrock consisted of highly fractured to slightly fractured basalt.

OPINIONS AND RECOMMENDATIONS

Our observations of the site grading indicate that foundations will bear on basalt bedrock on the subject lots. Based on our field observations and review of the plans, it is our opinion that the basalt bedrock is suitable for support of the anticipated foundation loads. However, if foundations will be located within 15 feet of the crest of the slope, we recommend that a licensed geotechnical engineer evaluate the proposed construction relative to stability of the foundations.

We recommend that bedrock be removed from below footings to provide a uniform subgrade. We recommend placing a minimum 12-inch cushion of fill compacted to a minimum of 92 percent of the maximum dry density determined in accordance with the American Society for Testing and Materials (ASTM) Method of Test D 1557 (modified Proctor).

We recommend that all hard surfaces (i.e., driveways, sidewalks, slabs, etc.) be underlain by structural fill or bedrock. We recommend the structural fill consist of granular material such as sands or sandy gravels with minor amounts of fines (material passing a 200 sieve). Structural fill should be free of organic matter, frozen soil and deleterious debris. Material with 15 percent or greater fines will need to be moisture conditioned to near optimum moisture content for compaction to be achieved. In wet weather or spring conditions, using silty to clayey soils for structural fill may delay construction and increase costs. The on-site soils may be used as structural fill provided particles larger than six inches are removed. The site soils which will be reused as backfill or fill are likely to be near to dry of the optimum moisture content. These soils may require wetting to achieve adequate compaction.

Site Grading and Drainage

Because of the depth of excavation for the basements, we recommend dampproofing all below-grade walls adjacent to habitable space. We also recommend installation of perimeter drintile to protect against water-related problems (primarily from seepage in the foundation wall backfill). The drintile should be placed adjacent to the footings at or below bottom-of-footing elevation. The drintile should be covered with a free-draining aggregate (e.g., pea gravel, $\frac{3}{4}$ -inch nominal crushed gravel, etc.) to a minimum of 6 inches above the top of the pipe. The aggregate should be wrapped in a water-permeable geotextile fabric to prevent migration of fines and to reduce the potential for clogging. Drintile should be routed to an interior sump (with pump) or can be outletted down-slope from the structures to allow for gravity drainage, if site grades allow.

We recommend that the site be graded such that storm run-off water is directed away from the structures. We recommend that landscape areas be sloped a minimum of 6 inches within 10 feet of the building and that slabs be sloped a minimum of 2 inches. In addition, we recommend gutters and downspouts with long splash blocks or extensions. We do not recommend directing roof drains into a foundation drintile system.

REPORT LIMITATIONS

This report has been prepared to assist in the design and construction of the proposed residential structures on Falcon Crest Lots 1 through 16 and 42 through 44 in Richland, Washington. Our services consist of professional opinions and conclusions made in accordance with generally accepted geotechnical engineering principles and practices. This acknowledgement is in lieu of all warranties either expressed or implied.

REMARKS

It has been a pleasure being of service to you on this project. If you have any questions or need additional information, please do not hesitate to call us at your convenience.

Sincerely,

ALLWEST Testing & Engineering, LLC

Paul T. Nelson, P.E.
Senior Geotechnical Engineer

Chris C. Beck, P.E.
Principal Engineer

Attachments: Figure 1, Site Location Map
Figure 2, Plat Map

PLAT OF FALCONCREST PHASE 1

AND ALSO IN A PORTION OF THE SOUTH 1/2 OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M.
CITY OF RICHLAND, BENTON COUNTY, WASHINGTON

Exhibit 10

LEGAL DESCRIPTION

LEGAL DESCRIPTION
FALCONCREST (phase 1)

REAL PROPERTY LOCATED IN THE SOUTH HALF OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN AND THE NORTHEAST QUARTER OF SECTION 2, TOWNSHIP 8 NORTH, RANGE 28 EAST, WILLAMETTE MERIDIAN, CITY OF RICHLAND, BENTON COUNTY, WASHINGTON, AND ALL OF LOT 4 OF SHORT PLAT NO. 3343 AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 3343, AND A PORTION OF LOT 4 OF SHORT PLAT NO. 3321, AS RECORDED AT PAGE 3321 AND A PORTION OF LOT 4 OF SHORT PLAT NO. 3342, AS RECORDED AT PAGE 3342 AND A PORTION OF LOT 4 OF SHORT PLAT NO. 3341 AS RECORDED AT PAGE 3341 AND A PORTION OF LOT 4 OF SHORT PLAT NO. 3344 AS RECORDED AT PAGE 3344 ALL IN VOLUME 1 OF SHORT PLATS, AND ALL OF AN ACCESS EASEMENT AS RECORDED UNDER AUDITOR'S FILE NO. 2011-016687, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTH QUARTER CORNER OF SAID SECTION 35; THENCE NORTH 89°36'32" EAST, 251.93 FEET ALONG THE SOUTH LINE OF SAID SECTION 35 TO THE TRUE POINT OF BEGINNING;

THENCE NORTH 40°19'46" WEST A DISTANCE OF 302.59 FEET; THENCE NORTH 81°23'35" WEST A DISTANCE OF 162.94 FEET; THENCE NORTH 73°12'44" WEST 86.11 FEET; THENCE NORTH 71°28'34" WEST A DISTANCE OF 64.92 FEET; THENCE NORTH 56°09'06" WEST A DISTANCE OF 63.84 FEET; THENCE NORTH 31°49'48" WEST A DISTANCE OF 58.05 FEET; THENCE NORTH 56°47'38" EAST A DISTANCE OF 247.76 FEET; THENCE NORTH 48°18'28" EAST A DISTANCE OF 122.15 FEET; THENCE NORTH 32°16'37" WEST A DISTANCE OF 706.77 FEET TO A POINT ON THE SOUTHEASTLY LINE OF LOT 3 OF SHORT PLAT NO. 3342 AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 3342, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE NORTH 59°52'56" EAST ALONG SAID SOUTHEASTLY LINE A DISTANCE OF 118.34 FEET TO THE MOST EASTERLY CORNER OF SAID LOT 3 AND BEING ON A POINT OF CURVE, THE RADIUS POINT BEARS SOUTH 48°28'34" WEST; THENCE ALONG A CURVE CONCAVE TO THE SOUTHWEST HAVING A CENTRAL ANGLE OF 37°48'01", A RADIUS OF 173.00 FEET AN ARC LENGTH OF 113.66 FEET AND A CHORD BEARING OF NORTH 60°20'46" WEST AND A CHORD DISTANCE OF 111.63 FEET TO A POINT OF TANGENT; THENCE NORTH 79°10'05" WEST A DISTANCE OF 23.56 FEET TO A POINT OF CURVE; THENCE ALONG A CURVE TO THE LEFT HAVING A CENTRAL ANGLE OF 90°00'00", A RADIUS OF 25.00 FEET AN ARC DISTANCE OF 39.27 FEET TO A POINT OF TANGENT AND CONTINUING ALONG SAID LOT 3; THENCE SOUTH 10°49'55" WEST ALONG THE WEST LINE OF SAID LOT 3 A DISTANCE OF 144.84 FEET TO THE MOST SOUTHERLY CORNER OF SAID LOT 3; THENCE CONTINUING SOUTH 10°49'55" WEST A DISTANCE OF 21.95 FEET; THENCE NORTH 79°10'05" WEST A DISTANCE OF 54.00 FEET; THENCE NORTH 10°49'55" EAST A DISTANCE OF 49.39 FEET; THENCE NORTH 75°35'19" WEST A DISTANCE OF 139.09 FEET; THENCE NORTH 29°54'40" EAST A DISTANCE OF 147.84 FEET TO A POINT ON CURVE, THE RADIUS POINT BEARS NORTH 24°02'12" EAST; THENCE ALONG A CURVE CONCAVE TO THE NORTHEAST HAVING A CENTRAL ANGLE OF 18°34'55", A RADIUS OF 227.00 FEET AN ARC DISTANCE OF 73.62 FEET AND A CHORD BEARING OF NORTH 56°40'20" WEST AND A CHORD DISTANCE OF 73.30 FEET TO A POINT OF REVERSE CURVE, THE RADIUS POINT BEARS SOUTH 48°28'34" WEST; THENCE ALONG A CURVE CONCAVE TO THE SOUTHWEST HAVING A CENTRAL ANGLE OF 80°18'54", A RADIUS OF 25.00 FEET AN ARC DISTANCE OF 35.04 FEET AND A CHORD BEARING OF NORTH 87°32'20" WEST AND A CHORD DISTANCE OF 32.24 FEET; THENCE LEAVING SAID CURVE NORTH 37°41'47" WEST A DISTANCE OF 54.00 FEET; THENCE NORTH 52°18'13" EAST A DISTANCE OF 89.21 FEET TO A POINT OF CURVE; THENCE ALONG A CURVE TO THE LEFT HAVING A CENTRAL ANGLE OF 109°13'48", A RADIUS OF 82.00 FEET AN ARC DISTANCE OF 156.33 FEET TO A POINT OF TANGENT; THENCE NORTH 56°55'35" WEST A DISTANCE OF 63.17 FEET; THENCE NORTH 65°00'00" WEST A DISTANCE OF 103.56 FEET TO A POINT OF CURVE; THENCE ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 08°26'12", A RADIUS OF 1023.00 FEET AN ARC DISTANCE OF 150.63 FEET TO A POINT OF TANGENT; THENCE NORTH 56°33'48" WEST A DISTANCE OF 134.69 FEET TO A POINT OF CURVE; THENCE ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 09°39'12", A RADIUS OF 1523.00 FEET AN ARC DISTANCE OF 256.80 FEET TO A POINT OF REVERSE CURVE, THE RADIUS POINT BEARS SOUTH 43°05'24" WEST; THENCE ALONG A CURVE CONCAVE TO THE SOUTHWEST HAVING A CENTRAL ANGLE OF 02°20'36", A RADIUS OF 1777.00 FEET, AN ARC DISTANCE OF 72.67 FEET TO THE NORTHEAST CORNER OF LOT 1 OF CRESTED HILLS PHASE 7 AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 0359, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE CONTINUING ALONG SAID CURVE HAVING A CENTRAL ANGLE OF 00°51'53", A RADIUS OF 1777.00 FEET AN ARC DISTANCE OF 26.82 FEET TO A POINT ON THE NORTHEASTLY LINE OF SAID LOT 11 AND BEING AN ANGLE POINT ON THE PLAT BOUNDARY; SAID LOT 11, HAVING A CENTRAL ANGLE OF 77°07'24", A RADIUS OF 128.00 FEET AN ARC DISTANCE OF 46.80 FEET TO A POINT ON CURVE, THE RADIUS POINT BEARS SOUTH 39°52'54" EAST (RADIAL) ALONG SAID PLAT BOUNDARY A DISTANCE OF 106.80 FEET TO A POINT ON THE SOUTHWESTLY LINE OF LOT 1 OF SAID PLAT; THENCE LEAVING SAID PLAT BOUNDARY SOUTH 56°55'35" EAST A DISTANCE OF 66.42 FEET TO A POINT OF CURVE; THENCE ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 28°26'57", A RADIUS OF 128.00 FEET AN ARC DISTANCE OF 59.09 FEET TO THE NORTHWEST CORNER OF LOT 1 OF SHORT PLAT NO. 3321 AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 3321, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE CONTINUING ALONG SAID CURVE AND ALONG THE WESTERLY LINE OF SAID LOT 1, HAVING A CENTRAL ANGLE OF 77°07'24", A RADIUS OF 128.00 FEET AN ARC DISTANCE OF 172.29 FEET TO A POINT OF REVERSE CURVE, THE RADIUS POINT BEARS SOUTH 43°21'04" EAST; THENCE ALONG A CURVE CONCAVE TO THE EAST HAVING A CENTRAL ANGLE OF 97°28'14", A RADIUS OF 25.00 FEET, AN ARC DISTANCE OF 42.54 FEET AND A CHORD BEARING OF SOUTH 02°05'41" EAST AND A CHORD DISTANCE OF 37.59 FEET TO A POINT OF REVERSE CURVE, THE RADIUS POINT BEARS NORTH 39°08'42" EAST; THENCE ALONG A CURVE CONCAVE TO THE NORTHEAST AND ALONG THE SOUTHERLY LINE OF SAID LOT 1, HAVING A CENTRAL ANGLE OF 08°19'49", A RADIUS OF 173.00 FEET, AN ARC DISTANCE OF 85.54 FEET AND A CHORD BEARING OF SOUTH 65°00'10" EAST AND A CHORD DISTANCE OF 84.67 FEET TO A POINT OF TANGENT; THENCE SOUTH 65°00'10" EAST AND CONTINUING ALONG SAID PLAT BOUNDARY A DISTANCE OF 106.80 FEET TO A POINT ON THE SOUTHWESTLY LINE OF LOT 1 OF SAID PLAT; THENCE LEAVING SAID PLAT BOUNDARY SOUTH 56°55'35" EAST A DISTANCE OF 66.42 FEET TO A POINT OF CURVE; THENCE ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 28°26'57", A RADIUS OF 128.00 FEET AN ARC DISTANCE OF 59.09 FEET TO THE NORTHWEST CORNER OF LOT 1 OF SHORT PLAT NO. 3321 AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 3321, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE CONTINUING ALONG SAID CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 46°33'29" A RADIUS OF 227.00 FEET AN ARC DISTANCE OF 185.78 FEET TO A POINT OF TANGENT; THENCE SOUTH 32°16'37" EAST ALONG THE SOUTHWESTLY LINE OF SAID LOT 1 AND LOT 2 OF SAID SHORT PLAT NO. 3342 AND LOT 1 THROUGH 3 OF SHORT PLAT NO. 3341, AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 3341, AND LOTS 1 THROUGH 3 OF SHORT PLAT NO. 3344, AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 3344, ALL IN RECORDS OF BENTON COUNTY, WASHINGTON; THENCE ALONG A CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 60°25'38", A RADIUS OF 167.00 FEET AN ARC DISTANCE OF 176.13 FEET TO THE SOUTHWESTLY CORNER OF SAID LOT 1 OF SHORT PLAT NO. 3343, AS RECORDED IN VOLUME 1 OF SHORT PLATS, PAGE 3343, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE ALONG A CURVE CONCAVE TO THE SOUTHWEST HAVING A CENTRAL ANGLE OF 80°18'54", A RADIUS OF 25.00 FEET AN ARC DISTANCE OF 35.04 FEET AND A CHORD BEARING OF NORTH 87°32'20" WEST AND A CHORD DISTANCE OF 32.24 FEET TO THE MOST SOUTHERLY CORNER OF SAID LOT 2 OF SHORT PLAT NO. 3343; THENCE NORTH 50°07'55" EAST ALONG THE SOUTHEASTLY LINE OF SAID LOT 2 OF SHORT PLAT NO. 3343 A DISTANCE OF 195.30 FEET TO THE MOST NORTHERLY CORNER OF LOT 4 OF SAID SHORT PLAT NO. 3343; THENCE SOUTH 35°11'45" EAST ALONG THE NORTHEASTLY LINE OF LOT 4 OF SAID SHORT PLAT NO. 3343 A DISTANCE OF 468.09 FEET TO AN ANGLE POINT OF SAID LOT 4, THENCE SOUTH 10°19'48" EAST A DISTANCE OF 89.81 FEET TO THE SOUTH LINE OF SAID SECTION 35; THENCE CONTINUING SOUTH 10°19'48" EAST A DISTANCE OF 82.42 FEET TO A POINT OF ANGLE OF SAID LOT 4; THENCE SOUTH 12°35'26" WEST A DISTANCE OF 138.80 FEET TO A POINT OF ANGLE OF SAID LOT 4; THENCE SOUTH 67°34'22" WEST A DISTANCE OF 152.92 FEET TO A POINT OF ANGLE OF SAID LOT 4; THENCE NORTH 41°58'08" WEST A DISTANCE OF 198.11 FEET TO A POINT OF ANGLE OF SAID LOT 4; THENCE NORTH 42°49'04" WEST A DISTANCE OF 91.12 FEET TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 2 AND A POINT OF ANGLE OF SAID LOT 4; THENCE NORTH 00°01'41" EAST ALONG SAID WEST LINE A DISTANCE OF 59.87 FEET TO THE NORTH QUARTER CORNER OF SAID SECTION 2 AND BEING A POINT OF ANGLE OF SAID LOT 4; THENCE SOUTH 89°36'32" WEST ALONG THE SOUTH LINE OF SAID SECTION 35 AND LOT 4 A DISTANCE OF 98.24 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINING 14.34 ACRES.

SURVEYOR'S CERTIFICATION

I, MICHAEL C. FOWLER, A REGISTERED LAND SURVEYOR IN THE STATE OF WASHINGTON, (REG.#34587) HEREBY CERTIFY THAT THE PLAT OF FALCONCREST PHASE 1 AS SHOWN HEREON IS BASED UPON ACTUAL FIELD SURVEY OF THE LAND DESCRIBED AND THAT ALL ANGLES, DISTANCES, AND COURSES ARE CORRECTLY SHOWN AND THAT THE MONUMENTS HAVE BEEN SET AND THE LOT CORNERS STAKED AS SHOWN ON THE PLAT.

Michael C. Fowler
MICHAEL C. FOWLER
DATE: 12/27/2012

AUDITOR'S CERTIFICATE

FILED FOR RECORD THIS 27th DAY OF December, 2012 A.D., AT 55 MINUTES PAST 2 P.M. AND RECORDED IN VOLUME 15 OF PLATS, PAGE 454, AT THE REQUEST OF MILO BAUDER.

Brenda Chilton
BENTON COUNTY AUDITOR
DATE: 2012-040924
FEE NUMBER

SHEET 1 OF 2

PROJECT: 02812
REVISION: 11-20-12 (MCF)

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING
C1	16.07	50.00	18°25'07"	N05°41'57"W 16.00'
C2	21.78	50.00	24°57'35"	N27°23'18"W 21.61'
C3	37.85	50.00	43°22'42"	N18°10'44"W 36.96'
C4	101.75	167.00	34°54'32"	S49°36'34"E 100.18'
C5	82.30	167.00	28°14'14"	S81°10'57"E 81.47'
C6	78.63	167.00	28°58'33"	N71°12'40"E 77.90'
C7	86.21	167.00	28°34'36"	N42°56'05"E 85.25'
C8	178.13	167.00	60°25'38"	N02°03'55"W 168.07'
C9	219.91	140.00	90°00'00"	N12°43'23"E 197.99'
C10	219.91	140.00	90°00'00"	S77°16'37"E 197.99'
C11	50.19	140.00	71°53'16"	N00°32'50"E 46.96'
C12	31.86	113.00	18°08'18"	S49°21'19"E 31.76'
C13	177.50	113.00	90°00'00"	S77°16'37"E 159.81'
C14	177.50	113.00	90°00'00"	N12°43'23"E 159.81'
C15	28.48	20.00	81°35'17"	N66°35'06"W 26.13'
C16	18.81	110.00	9°47'50"	N77°31'10"E 18.79'
C17	27.92	173.00	9°14'50"	N36°54'02"W 27.89'
C18	113.66	173.00	37°38'40"	N60°20'46"W 111.63'
C19	39.27	25.00	90°00'00"	S58°49'55"W 35.36'
C20	163.68	200.00	46°53'28"	N55°43'21"W 159.15'
C21	185.78	227.00	46°53'29"	N55°43'21"W 180.64'
C22	85.54	173.00	28°19'49"	S85°00'14"E 84.67'
C23	42.54	25.00	97°28'14"	S02°05'41"E 37.59'
C24	172.29	128.00	77°07'24"	N08°05'16"E 159.58'
C25	123.83	200.00	35°28'26"	S81°25'53"E 121.86'
C26	128.94	227.00	31°44'12"	S83°16'29"E 124.33'
C27	39.27	25.00	90°00'00"	N12°43'23"E 35.36'
C28	52.32	227.00	13°12'17"	S72°33'57"E 52.20'
C29	73.62	227.00	18°34'55"	S56°40'20"E 73.30'
C30	35.04	25.00	80°18'54"	N87°32'20"W 32.24'
C31	156.33	82.00	109°13'48"	N02°18'41"W 133.71'
C32	59.09	128.00	26°26'57"	N43°42'06"W 58.56'
C33	143.86	82.00	82°61'12"	S60°46'54"E 143.73'
C34	150.63	1023.00	82°61'12"	S60°46'54"E 150.50'
C35	256.80	1523.00	9°39'12"	S51°44'12"E 256.30'
C36	248.85	1477.00	9°39'12"	S51°44'12"E 248.55'
C37	102.07	1823.00	3°12'29"	N48°30'51"W 102.06'
C38	99.50	1777.00	3°12'29"	N48°30'51"W 99.48'
C39	77.46	80.00	55°28'31"	N60°22'21"W 74.47'
C40	17.46	75.89	13°11'00"	N70°22'26"E 17.43'
C41	35.16	34.00	59°15'01"	N02°33'48"W 33.61'
C42	200.17	105.00	109°13'48"	N02°18'41"W 171.21'
C43	147.25	1000.00	8°26'12"	S60°46'54"E 147.12'
C44	252.72	1500.00	9°39'12"	S51°44'12"E 252.42'
C45	100.78	1800.00	3°12'29"	N48°30'51"W 100.77'

NOTE:
X DENOTES FND. 5/8" REBAR WITH YELLOW CAP STAMPED: RSI-JAB
21384 PER ROS 1-4334

34135
FND. SCRIBE IN CULVERT PER SHORT PLAT NO. 1452

NOT FND POSITION FROM ROS 142

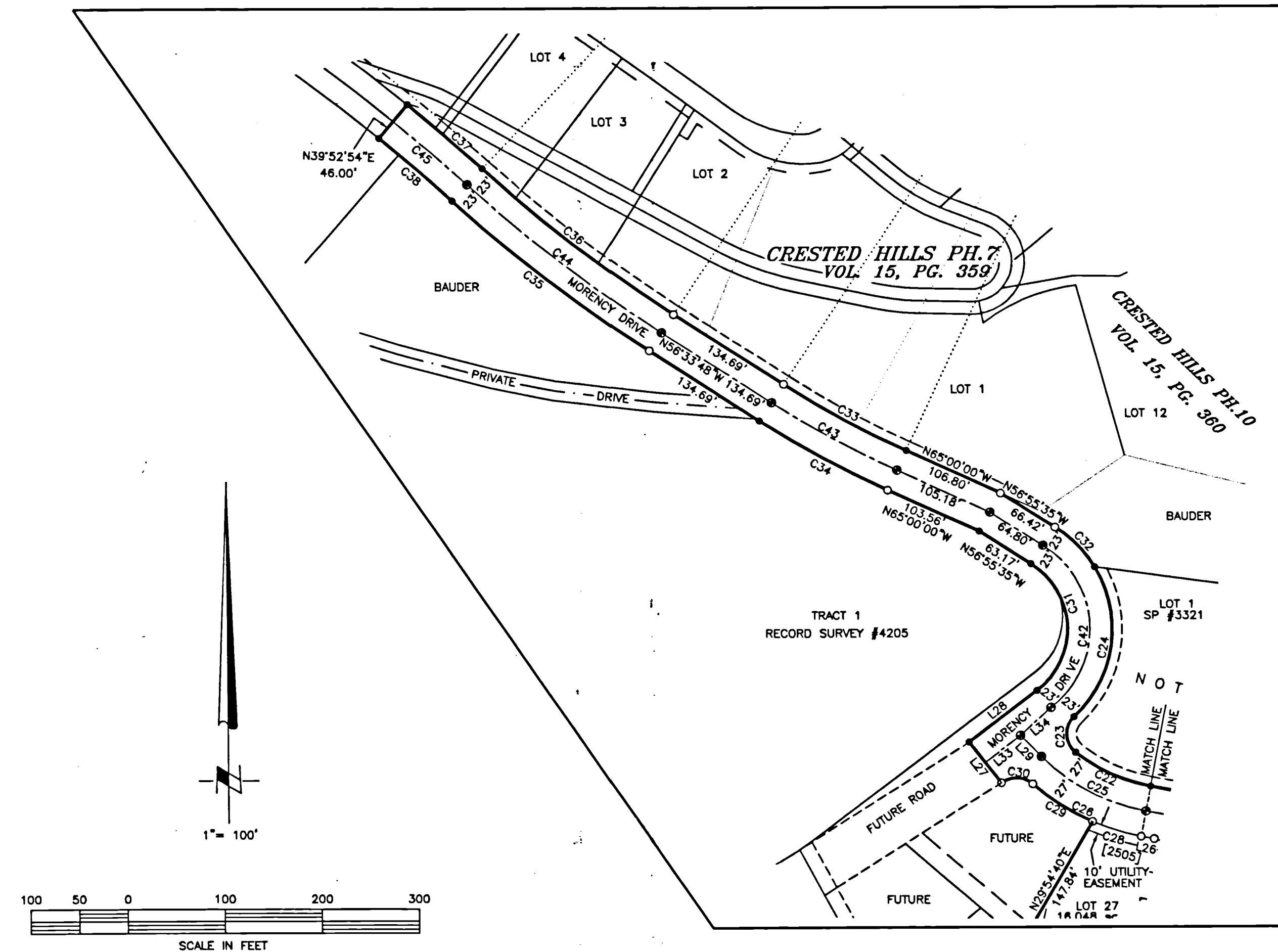
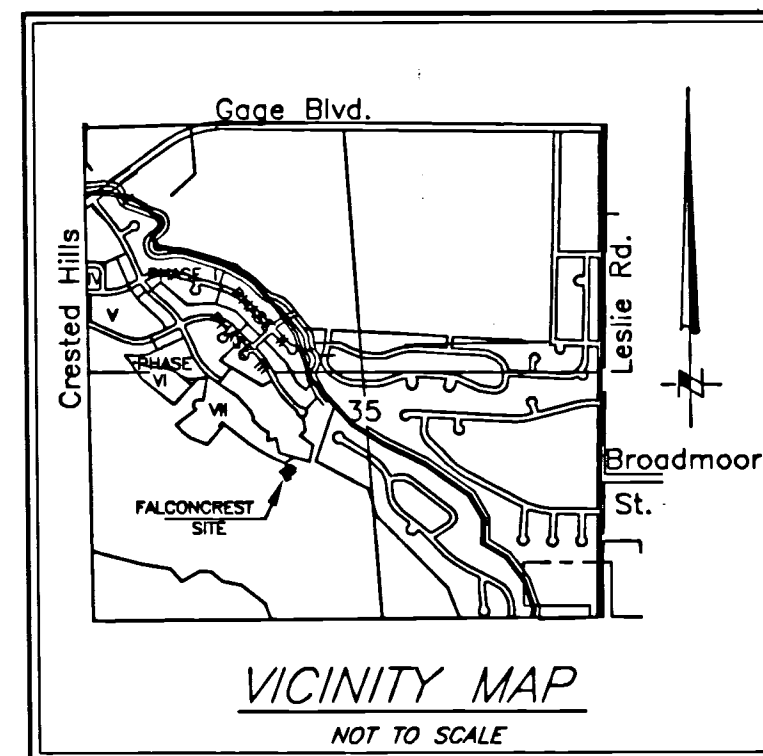
FND 5/8" REBAR (BENT) PER ROS 142 (VISITED 2/10)

NOTE:
FND 5/8" REBAR FOR 4 PROPERTY CORNERS LYING IN CUL-DE-SAC PERIMETER.

POSITION FROM SHORT PLAT NO. 2378

PLAT OF FALCONCREST PHASE 1

LOCATED IN A PORTION OF THE NE 1/4 OF SECTION 02, TOWNSHIP 8 NORTH, RANGE 28 EAST, W.M.
AND ALSO IN A PORTION OF THE SOUTH 1/2 OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M.
CITY OF RICHLAND, BENTON COUNTY, WASHINGTON

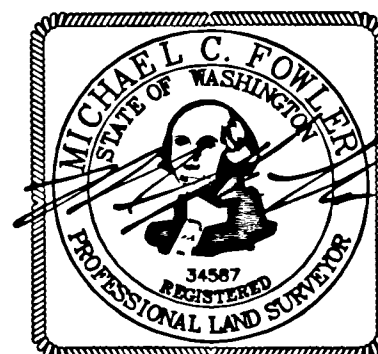


CITY OF RICHLAND NOTES

1. ADDRESSES SHOWN IN BRACKETS [] ARE SUBJECT TO CHANGE BY THE CITY OF RICHLAND, ZIP CODE 99352.
2. CENTRALIZED DELIVERY UNITS (CUB/MAILBOX) TO BE INSTALLED PRIOR TO ISSUANCE OF ANY BUILDING PERMIT. CONTACT USPS FOR CRITERIA.
3. HOME BUILDERS CONSTRUCTING HOMES ADJACENT TO THE PUBLIC ACCESS TRAIL EASEMENT ON THE SOUTHWEST SIDE OF THE PLAT SHALL ERECT A TEMPORARY DEBRIS FENCE ALONG THE SOUTH, WEST AND EAST SIDES OF THEIR LOTS TO PREVENT DEBRIS FROM HOME CONSTRUCTION FROM FALLING TOWARD THE EASEMENT AREA.
4. LOT OWNERS ADJACENT TO THE PUBLIC ACCESS TRAIL EASEMENT SHALL NOT MAKE ANY LOT IMPROVEMENTS INCLUDING GRADING WHICH WOULD INTERFERE WITH PUBLIC ACCESS ALONG THE EASEMENT OR STEEPEN THE SLOPE ADJACENT TO THE TRAIL WITHOUT CITY OF RICHLAND APPROVAL.
5. THE FALCONCREST PLAT LIES WITHIN THE BOUNDARY OF THE SOUTH RICHLAND COLLECTOR STREET FINANCING PLAN (RMC 12.03). AS SUCH, EACH BUILDING PERMIT WITHIN THE PLAT SHALL THEREFORE BE SUBJECT TO THE FEES ADMINISTERED BY THE FINANCE PLAN FOR ANY PHASE SUBMITTED FOR APPROVAL.
6. THE PRIVATE DRIVES WITHIN THIS PLAT ARE FIRE LANES AND PARKING IS RESTRICTED. THE REQUIRED NO-PARKING SIGNS SHALL BE INSTALLED BY THE DEVELOPER WHERE APPLICABLE.
7. THE PRIVATE ROADS ARE FOR THE USE OF AND BENEFIT OF THE HOMEOWNERS THAT ABUT SAID ROADS, AND ARE TO BE MAINTAINED BY SAID OWNERS. THE CITY OF RICHLAND ACCEPTS NO MAINTENANCE RESPONSIBILITY FOR THESE PRIVATE ROADS.
8. ALL RESIDENTIAL BUILDING CONSTRUCTION THAT LIES ADJACENT TO UNPLATTED PROPERTY, SHALL BE SUBJECT TO COMPLIANCE WITH THE CITY OF RICHLAND'S WILD LAND FIRE PROTECTION REQUIREMENTS AS SPECIFIED IN RICHLAND MUNICIPAL CODE SECTION 21.010.030.

GENERAL NOTES

1. BASIS OF BEARINGS: THE SOUTH LINE OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., BENTON COUNTY, WASHINGTON.
2. ○ = SET 5/8" REBAR W/YELLOW PLASTIC CAP STAMPED "RSI MCF 34587".
3. ● = FOUND 5/8" REBAR.
4. (R) = RECORD (SHORT PLAT 1729) (M) = MEASURED



SURVEYOR'S CERTIFICATION

I, MICHAEL C. FOWLER, A REGISTERED LAND SURVEYOR IN THE STATE OF WASHINGTON, (REG. #34587) HEREBY CERTIFY THAT THE PLAT OF FALCONCREST PHASE 1 AS SHOWN HEREON IS BASED UPON ACTUAL FIELD SURVEY OF THE LAND DESCRIBED AND THAT ALL ANGLES, DISTANCES, AND COURSES ARE CORRECTLY SHOWN AND THAT THE MONUMENTS HAVE BEEN SET AND THE LOT CORNERS STAKED AS SHOWN ON THE PLAT.

Michael C. Fowler
DATE 12/17/12

OWNERS CERTIFICATE

KNOW ALL PERSONS BY THESE PRESENTS THAT BAUDER FAMILY LIVING TRUST, OWNER OF THE LAND SHOWN ON THE PLAT OF FALCONCREST PHASE 1, HEREBY DECLARE SAID PLAT AND DEDICATE TO THE PUBLIC, FOR THE USE OF THE PUBLIC FOREVER, ALL EASEMENTS AND RIGHT OF WAYS AS SHOWN HEREON.

Milo B Bauder

MILO B. BAUDER, TRUSTEE
BAUDER FAMILY LIVING TRUST

ACKNOWLEDGMENT

STATE OF WASHINGTON } S.S.
COUNTY OF BENTON }

I CERTIFY THAT I KNOW OR HAVE SATISFACTORY EVIDENCE THAT MILO BAUDER SIGNED THIS INSTRUMENT, ON OATH STATED THAT HE/SHE WAS AUTHORIZED TO EXECUTE THE INSTRUMENT AND ACKNOWLEDGED IT AS THE TRUSTEE OF THE BAUDER FAMILY LIVING TRUST TO BE THE FREE AND VOLUNTARY ACT OF SUCH PARTY FOR THE USES AND PURPOSES MENTIONED IN THE INSTRUMENT.

DATED: 12-18-12

Marcy R. Pyle

NOTARY PUBLIC AND FOR THE STATE OF WASHINGTON

TITLE: NOTARY

MY APPOINTMENT EXPIRES: MAY 09, 2013



APPROVALS

THIS PLAT IS HEREBY APPROVED BY AND FOR THE CITY OF RICHLAND, CO. OF BENTON, STATE OF WASHINGTON.

Walter K. Jackson	12/21/2012
CITY MANAGER	DATE
Dan C. Barkman acting	12/21/12
CITY CLERK	DATE
Pat R.	12/20/2012
CITY ENGINEER	DATE
Maureen Bourne	12/19/12
CHAIRMAN CITY PLANNING COMMISSION	DATE

TREASURER'S CERTIFICATE

I HEREBY CERTIFY THAT THE TAXES ON THE LAND DESCRIBED HEREON HAVE BEEN PAID TO AND INCLUDING THE YEAR 2012. Advance Taxes 2013

Diana C. Davidson by Kim R. Jacobs	12-27-2012
BENTON COUNTY TREASURER	DATE
Barbara Wagner by George Kelly	12-27-2012
BENTON COUNTY ASSESSOR	DATE

1-3598-300-0001-023 Ptn.
1-3598-300-0001-028 Ptn.
1-3598-301-3321-004 Ptn.
1-3598-301-3341-004 Ptn.
1-3598-301-3342-004 Ptn.
1-3598-401-3343-004 All
1-3598-401-3343-005 All
1-3598-301-3344-004 Ptn.

AUDITOR'S CERTIFICATE

FILED FOR RECORD THIS 27th DAY OF December, 2012, AT 55
MINUTES PAST 2 P. M. AND RECORDED IN VOLUME 15 OF PLATS,
PAGE 454, AT THE REQUEST OF MILO BAUDER.

Brenda Chilton

BENTON COUNTY AUDITOR

By Deputy

2012-040924

FEE NUMBER

SHEET 2 OF 2

PROJECT: 02812

REVISION: NONE

F:\BAUDER\FALCONCREST\12\02812-FALCON-CREST-PH1_REV2.DWG 12-11-12

RSI

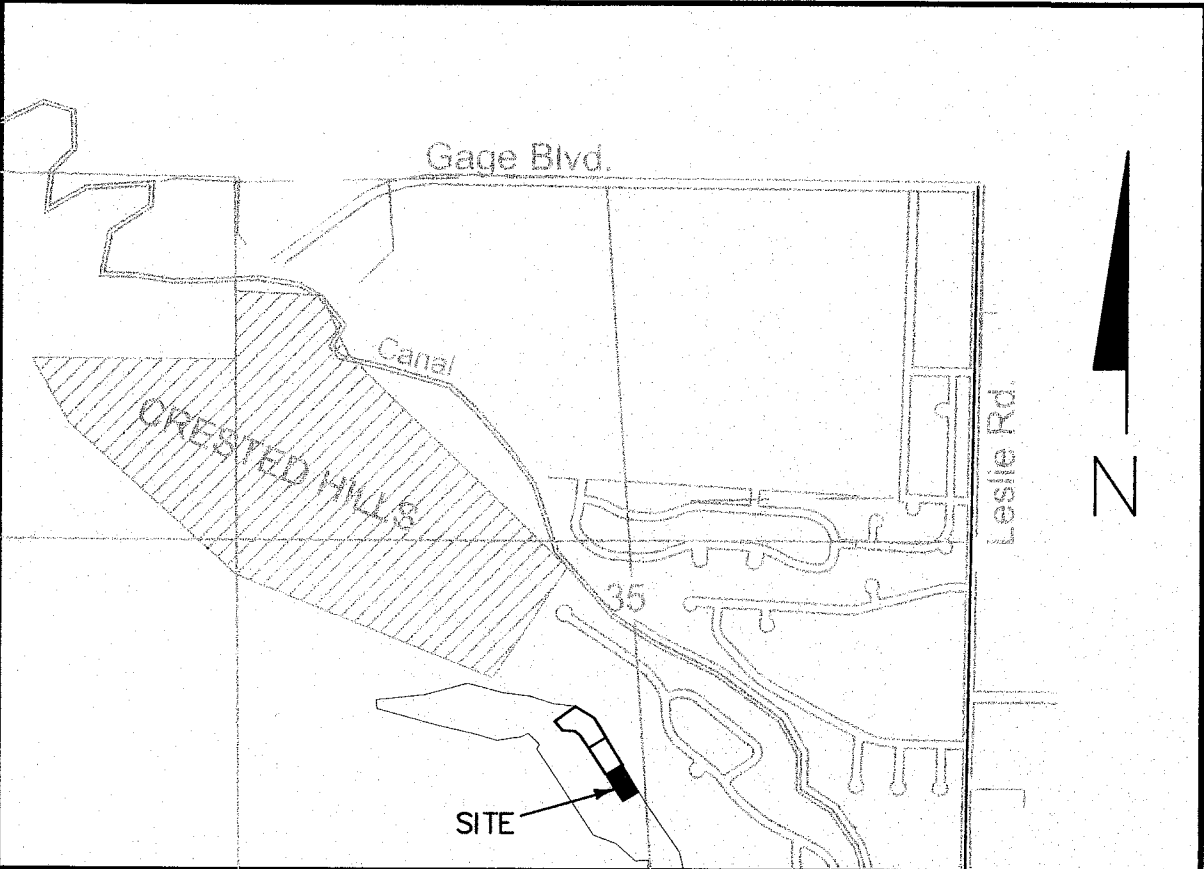
CALL 1-800-424-5555 AND NON-MEMBER UTILITIES FOR UTILITY LOCATE 2 BUSINESS DAYS PRIOR TO EXCAVATION

CREST TRACT 4

SECTION 35, T. 9 N., R. 28 E., W.M.

GENERAL CONSTRUCTION NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST REVISION OF THE CITY OF RICHLAND STANDARD SPECIFICATIONS AND DETAILS AND THE CURRENT ADDITION OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION. PLEASE CONFIRM THAT YOU HAVE THE LATEST CITY STANDARD SPECIFICATIONS BY VISITING THE CITY'S WEB PAGE.
- ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, UTILITY EASEMENT, OR INVOLVING THE CONSTRUCTION OF PUBLIC INFRASTRUCTURE WILL REQUIRE THE APPLICANT TO OBTAIN A RIGHT-OF-WAY PERMIT PRIOR TO CONSTRUCTION. A PLAN REVIEW AND INSPECTION FEE IN THE AMOUNT EQUAL TO 5% OF THE CONSTRUCTION COSTS OF THE WORK THAT WILL BE ACCEPTED AS PUBLIC INFRASTRUCTURE OR IS WITHIN THE RIGHT-OF-WAY OR EASEMENT WILL BE COLLECTED AT THE TIME THE PERMIT IS ISSUED. A STAMPED, ITEMIZED ENGINEERS ESTIMATE (OPINION OF PROBABLE COST) SHALL BE USED TO CALCULATE THE 5% FEE.
- ONCE THE PLANS HAVE BEEN ACCEPTED BY THIS DEPARTMENT, A PRE-CONSTRUCTION CONFERENCE WILL BE REQUIRED PRIOR TO THE START OF ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY OR EASEMENT. CONTACT THE CIVIL AND UTILITY ENGINEERING DIVISION AT 942-7500 OR 942-7742 TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE.
- WHEN THE CONSTRUCTION OF THE INFRASTRUCTURE HAS BEEN SUBSTANTIALLY COMPLETED, THE APPLICANT SHALL PROVIDE 3 MIL MYLAR RECORD DRAWINGS TO THE CITY, AND ALSO AN ELECTRONIC COPY OF SAID RECORD DRAWINGS IN A FORMAT COMPLIANT WITH THE CITY'S CADD SOFTWARE. THE MYLAR RECORD DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER AND SHALL BE SUBMITTED AND APPROVED BY THE CITY BEFORE THE FINAL PUNCHLIST INSPECTION WILL BE PERFORMED. ALL FINAL PUNCHLIST ITEMS SHALL BE COMPLETED OR FINANCIALLY GUARANTEED PRIOR TO RECORDING THE FINAL PLAT. MYLAR RECORD DRAWINGS OF STREET LIGHTS ARE ALSO REQUIRED PRIOR TO FINAL INSPECTION.
- NO WORK ON THIS PROJECT SHALL COMMENCE UNTIL A CITY OF RICHLAND RIGHT-OF-WAY PERMIT HAS BEEN ISSUED.
- ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
- THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL HAVE A CURRENT CITY OF RICHLAND BUSINESS LICENSE.
- THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL BE LICENSED BY THE STATE OF WASHINGTON AND BONDED TO DO WORK IN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CONSTRUCTION DEFICIENCIES FOR A PERIOD OF ONE-YEAR FROM THE DATE OF ACCEPTANCE BY THE CITY OF RICHLAND.
- THE CONTRACTOR SHALL BE REQUIRED TO CALL 1-800-424-555 OR "811" A MINIMUM OF TWO WORKING DAYS PRIOR TO COMMENCING ANY EXCAVATION ACTIVITIES TO DETERMINE FIELD LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES.
- ANY CHANGES OR MODIFICATIONS TO THE PROJECT PLANS SHALL FIRST BE APPROVED BY THE CITY ENGINEER OR HIS REPRESENTATIVE.
- THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- THE FACE OF CURB SHALL BE STAMPED AT ALL UTILITY CROSSINGS, MAIN LINES AND SERVICE LINES AS FOLLOWS:
"S" - SANITARY SEWER "I" - IRRIGATION "G" - GAS
"W" - WATER "C" - CONDUITS "D" - STORM
- ALL FIRE HYDRANTS AND GUARD POSTS SHALL BE PAINTED OSHA SAFETY YELLOW, QUICKSET ENAMEL NO. 3472 HYDRANT YELLOW AS MANUFACTURED BY "FARWEST MANUFACTURING COMPANY" OR APPROVED EQUAL.
- FIRE HYDRANTS AND STREET LIGHTS SHALL BE INSTALLED 2-FOOT BEHIND THE BACK OF SIDEWALK TO THE FACE OF EQUIPMENT WHERE THE SIDEWALK IS ADJACENT TO THE CURB AND 6-FOOT BEHIND THE BACK OF CURB WHERE THE SIDEWALK IS NOT ADJACENT TO THE CURB UNLESS OTHERWISE NOTED ON THE PLANS.
- ANY DAMAGED OR BADLY DETERIORATED CONCRETE CURB, GUTTER AND SIDEWALK WITHIN PUBLIC RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED. THIS INCLUDES ANY CURB DAMAGED BY CONSTRUCTION EQUIPMENT DURING THE PROJECT.
- 2-INCHES OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED BENEATH ALL SIDEWALKS PRIOR TO PLACEMENT OF CONCRETE.
- ALL STORM DRAINAGE MANHOLES SHALL BE CONSTRUCTED WITH A "SUMP" IN THE BOTTOM OF THEM, IN ACCORDANCE WITH THE STANDARD DETAILS.
- IRRIGATION VALVE BOXES OR LIDS WITHIN THE ROADWAY OR PUBLIC RIGHT-OF-WAY SHALL BE PER CITY OF RICHLAND SPECIFICATION "RICH 931" CAST IRON LID AND SHALL HAVE "IRR" CAST INTO TOP.
- A MINIMUM HORIZONTAL SEPARATION OF TEN-FOOT SHALL BE MAINTAINED BETWEEN WATER MAINS AND SEWER MAINS AND SERVICE LINES. WATER MAINS SHOULD CROSS OVER THE TOP OF SEWER MAINS WITH A MINIMUM VERTICAL SEPARATION OF 18-INCHES. ANY CROSSING WITH A VERTICAL SEPARATION OF LESS THAN 18-INCHES OR ANY CROSSING IN WHICH THE WATER MAIN CROSSES BELOW THE SEWER MAIN SHALL BE IN ACCORDANCE WITH WASHINGTON STATE DEPARTMENT OF ECOLOGY STANDARDS. PRESSURIZED SEWER MAINS SHALL NOT CROSS OVER POTABLE WATER MAINS IN ANY CASE. IF A MINIMUM VERTICAL SEPARATION OF 12-INCHES CANNOT BE MAINTAINED BETWEEN MAINLINE PIPES, CDF OR CONCRETE SHALL BE USED AS BACKFILL IN PLACE OF NATIVE SOILS OR GRAVEL.
- RESIDENTIAL SEWER SERVICES SHALL BE 4-INCHES IN DIAMETER AND SHALL EXTEND 10-FOET BEYOND THE RIGHT-OF-WAY INTO THE LOT. THE END SHALL BE MARKED WITH A MARKER POST INSTALLED IN ACCORDANCE WITH THE CITY STANDARD DETAILS.
- RESIDENTIAL WATER SERVICES SHALL BE 1-INCH IN DIAMETER AND SHALL EXTEND 1-FOOT BEYOND THE BACK OF SIDEWALK THROUGH THE CURB STOP. THE END SHALL BE MARKED WITH A MARKER POST INSTALLED IN ACCORDANCE WITH THE CITY STANDARD DETAILS.
- THE CONTRACTOR SHALL TAKE ANY NECESSARY MEANS TO KEEP FROM TRACKING MUD AND DEBRIS OUT ONTO THE EXISTING STREETS, AND SHALL KEEP MUD AND ANY OTHER DEBRIS FROM THIS SITE FROM ENTERING THE EXISTING PUBLIC STORM DRAINAGE SYSTEM.
- THE CONTRACTOR SHALL SUPPLY A DUST CONTROL PLAN PRIOR TO STARTING WORK IN ACCORDANCE WITH RMC CHAPTER 9.16.046, SECTION J.
- ALL DISTURBED AREAS SHALL BE HYDRO-SEEDED AT THE COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL TAKE CARE TO PREVENT CONSTRUCTION SITE RUNOFF FROM ENTERING INTO THE CITY'S STORM WATER SYSTEM IN ACCORDANCE WITH RMC CHAPTER 16.05. CONSTRUCTION MATERIALS THAT MAY INTRODUCE SEDIMENT INTO THE STORM WATER SYSTEM MAY NOT BE STOCKPILED IN THE STREET. SUCH MATERIALS MAY INCLUDE, BUT ARE NOT LIMITED TO, CONSTRUCTION MATERIALS, SOIL, SAND, GRAVELS, ETC.



VICINITY MAP



VERTICAL DATUM IS CITY OF RICHLAND. BENCHMARK IS EXISTING BRASS CAP MONUMENT AT INTERSECTION OF BAUM ST. & CLERMONT DR., ELEV. 695.80.

COMPACTION STANDARDS

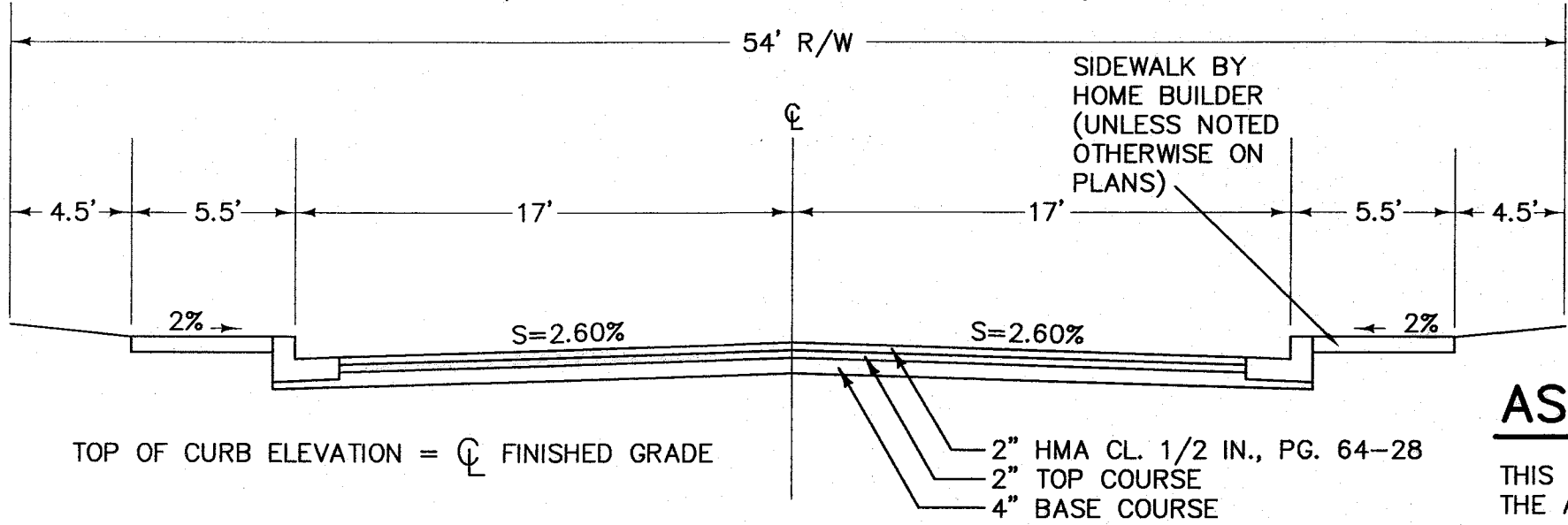
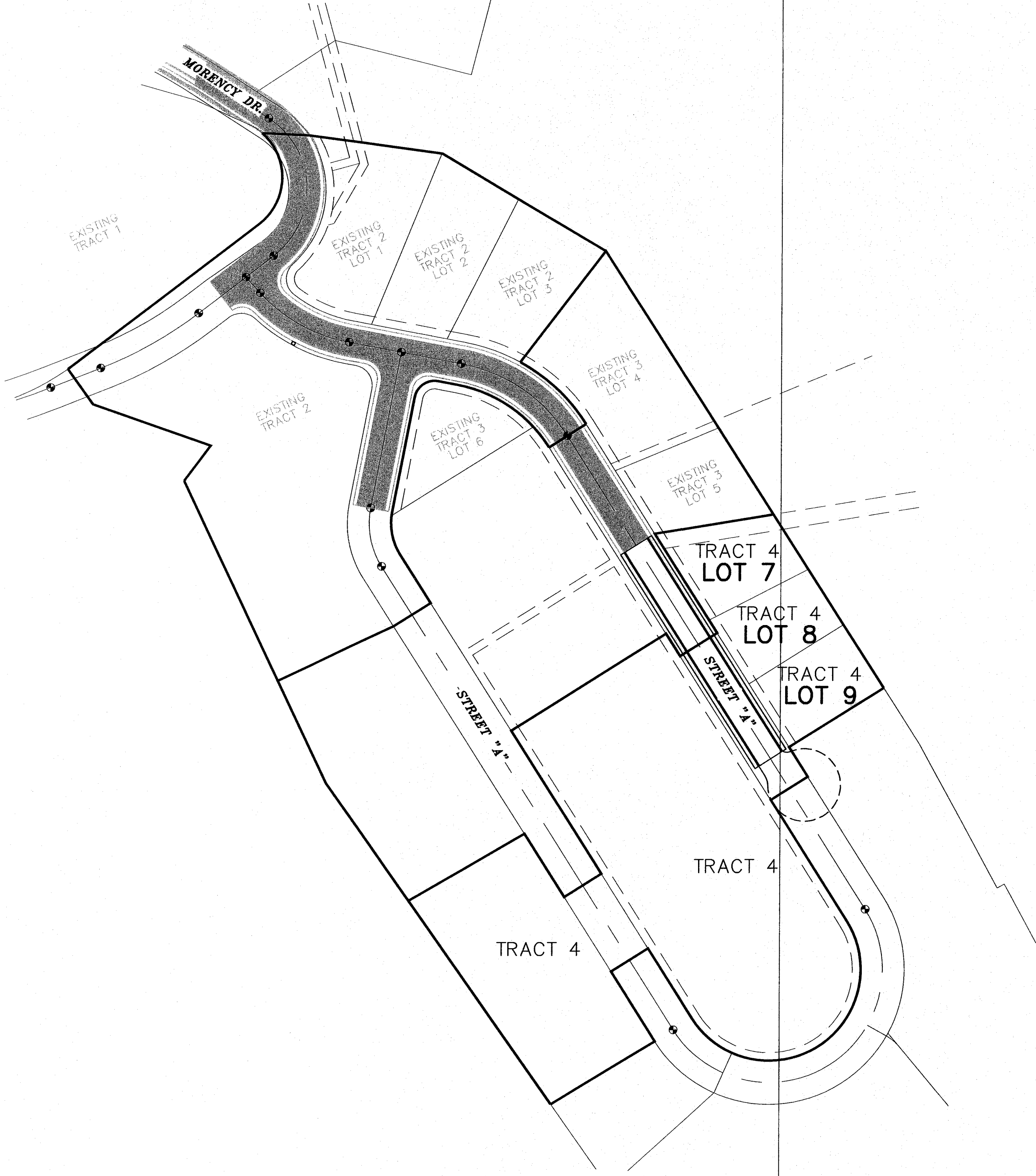
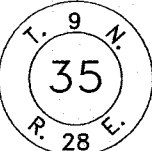
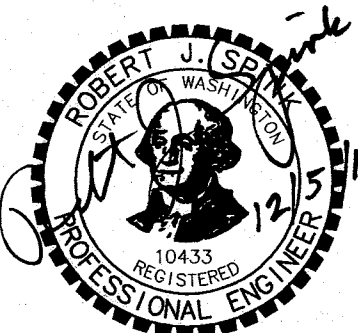
HMA	-	92% MAX. DENSITY ASSHTO T230-68
CRUSHED SURFACING	-	98% MAX. DENSITY ASTM D-698
TOP 8" SUBGRADE & STREET EMBANKMENT	-	98% MAX. DENSITY ASTM D-698
LOT EMBANKMENTS	-	98% MAX. DENSITY ASTM D-698
TRENCH BACKFILL	-	98% MAX. DENSITY ASTM D-698

SHEET INDEX

SHEET 1	COVER SHEET
SHEET 2	STREET "A" PLAN & PROFILE
SHEET 3	STREET LIGHT PLAN
SHEET 4	GRADING PLAN
SHEET 5	GRADING PLAN

CONTACT LIST

DEVELOPER	MILO BAUDER (509) 521-1608
LAND SURVEYOR	ROGERS SURVEYING MIKE FOWLER (509) 783-4141
DESIGN ENGINEER	SPINK ENGINEERING STEVE SPINK (509) 946-1581
SEWER, WATER & STREETS	CITY OF RICHLAND JASON REATHAFORD (509) 942-7742
ELECTRICAL	CITY OF RICHLAND ENERGY SERVICES KELLY HILL (509) 942-7416
TELEPHONE	FRONTIER SHAWN MCVAY (509) 735-5318
TV	CHARTER COMMUNICATIONS DEAN KELLEY (509) 222-2665
GAS	CASCADE NATURAL GAS ARNIE GARZA (509) 735-7333



TYPICAL ROADWAY SECTION

AS-BUILT PLANS

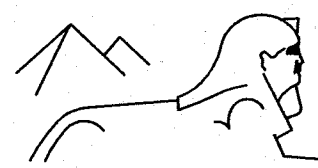
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CREST TRACT 4

RICHLAND WASHINGTON

DESIGN FOR:
MILO BAUDER
2495 MORENCY DR.
RICHLAND, WA 99352
(509) 521-1608

REV.	DATE	DESCRIPTION	BY	APP'D
2	12/5/11	RECORD DRAWING AS-BUILTS	SWS	RJS
1	7/18/11	REVISED PER CITY REVIEW	SWS	RJS



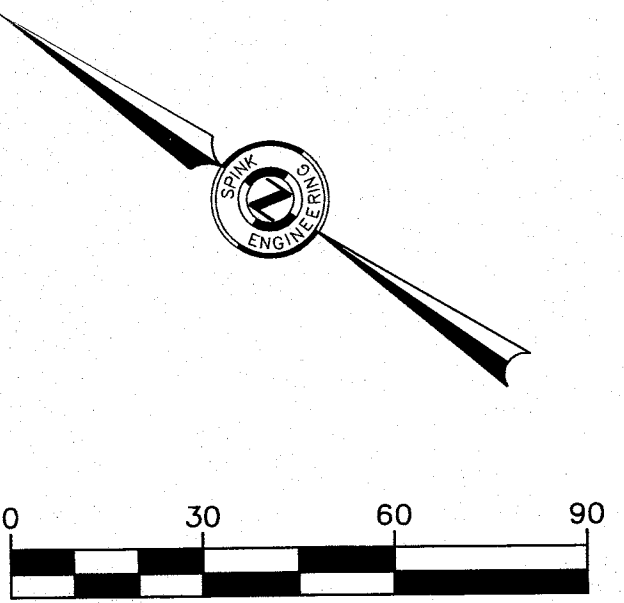
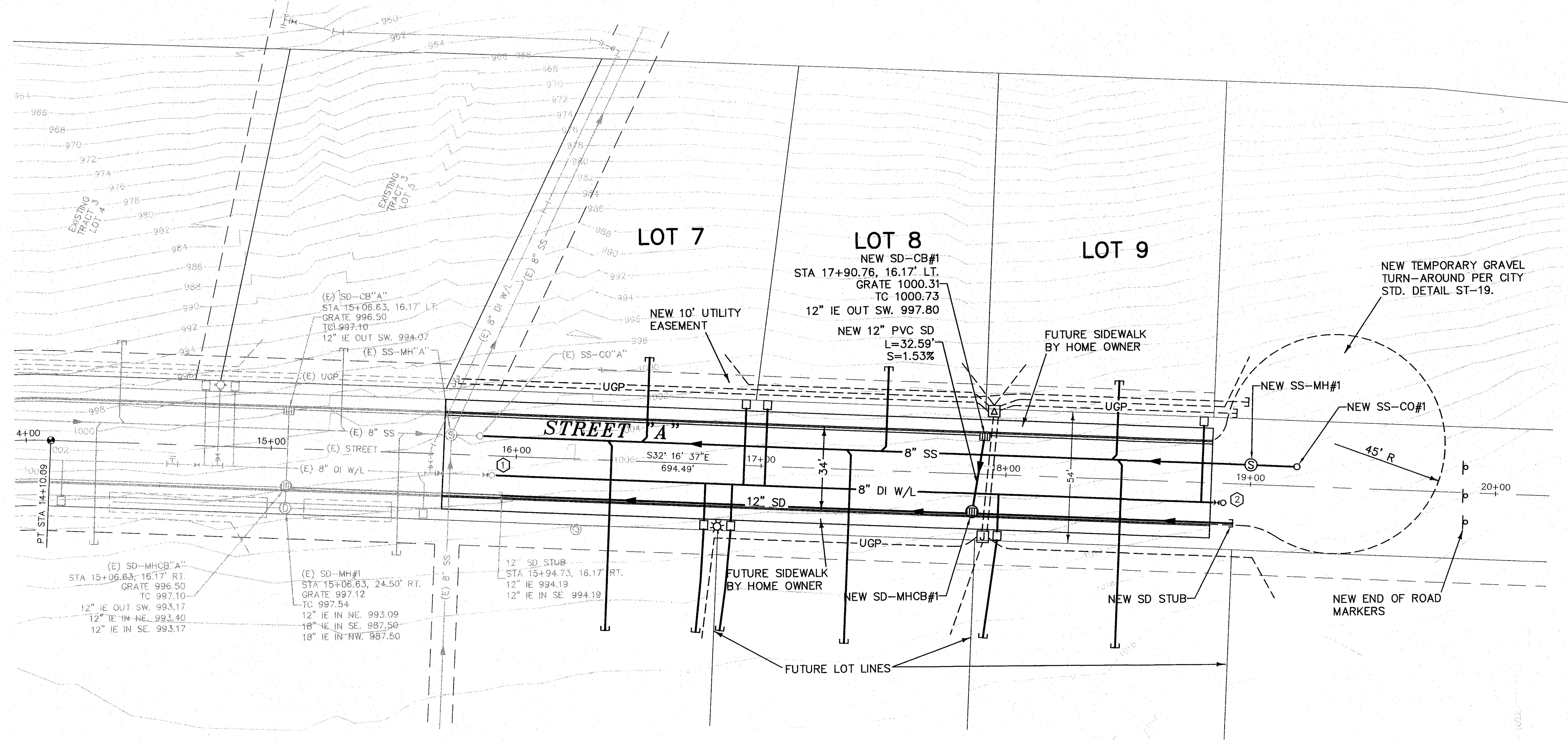
SPINK ENGINEERING, LLC.
1045 JADWIN AVE., SUITE E
RICHLAND, WASHINGTON 99352
(509) 946-1581

10136-PH3.DWG	SHEET 1 OF 5
DATE: 6/12/11	JOB # 11-125
DRAWN BY: SWS	

CALL 1-800-424-5555 AND NON-MEMBER UTILITIES FOR UTILITY LOCATE 2 BUSINESS DAYS PRIOR TO EXCAVATION

WATER FITTING SCHEDULE

- 1. STA 15+90.30, 8.00' RT. REMOVE (E) 2" TEMP. BLOW-OFF ASSEMBLY. CONNECT TO (E) 8" W/L.
- 2. STA 18+89.13, 8.00' RT. NEW 2" TEMP. BLOW-OFF ASSEMBLY. THRUST BLOCK.



LEGEND

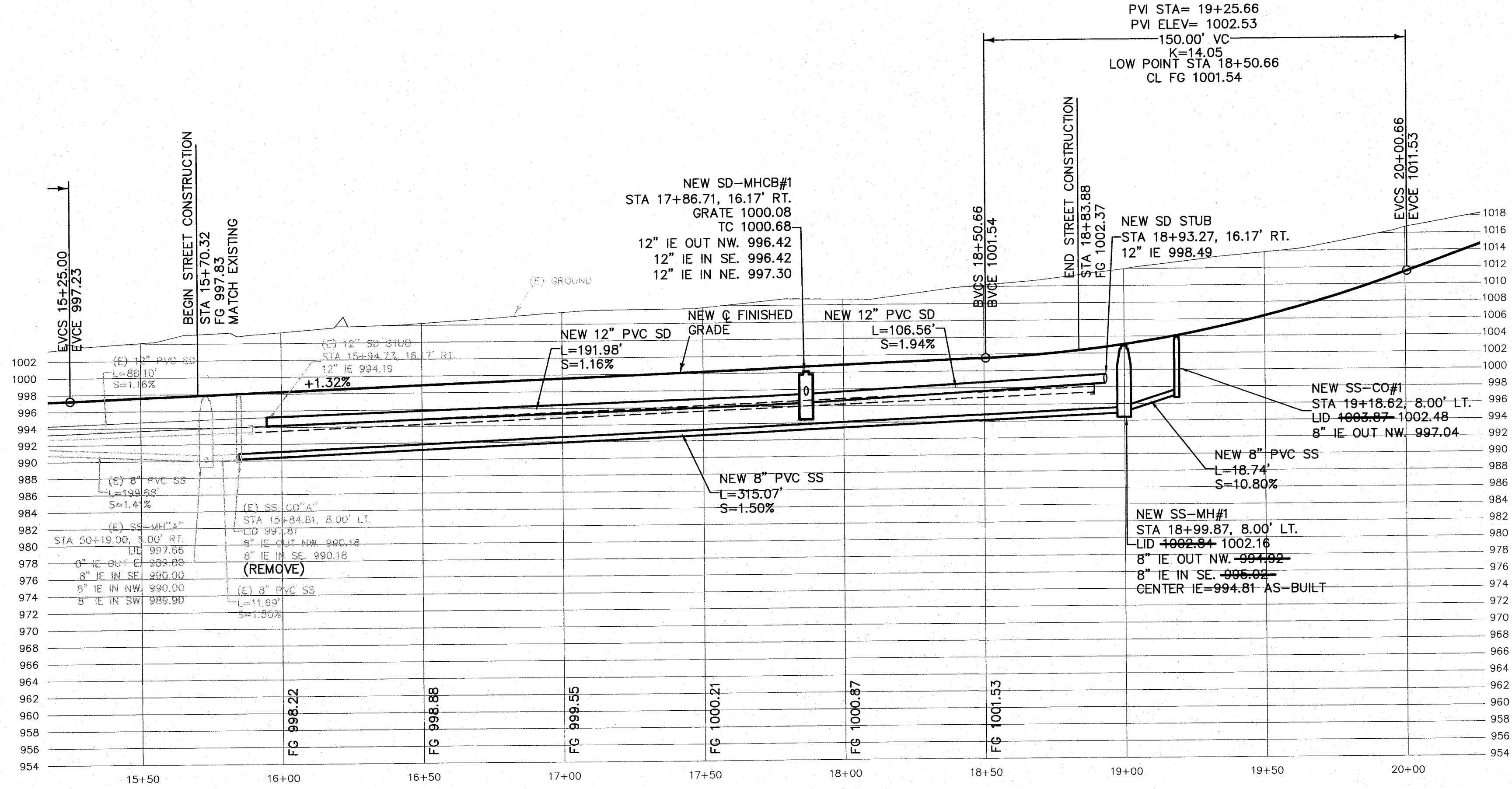
- EXISTING FIRE HYDRANT
- EXISTING VALVE
- NEW VALVE
- NEW FIRE HYDRANT
- NEW WATER SERVICE
- EXISTING SEWER MANHOLE
- NEW SEWER MANHOLE
- NEW SEWER SERVICE
- NEW STORM DRAIN MANHOLE
- NEW STORM DRAIN MANHOLE w/CATCH BASIN GRATE
- NEW STORM DRAIN CATCH BASIN
- NEW IRRIGATION SERVICE
- NEW STREET LIGHT
- NEW PIPE FLOW ARROW
- NEW MONUMENT
- NEW POWER TRANSFORMER
- NEW POWER VAULT
- NEW POWER JUNCTION BOX

CONSTRUCTION NOTES

- CONTRACTOR SHALL MAINTAIN A MIN. OF 4 FEET OF COVER OVER NEW AND EXISTING WATER AND SEWER MAINS.
- CONTRACTOR SHALL INSTALL MAIL BOX CLUSTER UNITS PER RICHLAND POST OFFICE STANDARDS. CONTRACTOR SHALL INSTALL 10 LF OF SIDEWALK IN FRONT OF MAIL BOX CLUSTER UNITS.
- SANITARY WATER MAINS SHALL BE DUCTILE IRON CLASS 50 OR C900 PVC PIPE. SANITARY SEWER MAINS UP TO 15 FEET DEEP SHALL BE PVC SDR PIPE MEETING THE REQUIREMENTS OF ASTM D3034 AND D1869. SANITARY SEWER MAINS DEEPER THAN 15 FEET SHALL BE C900 PVC OR SDR 26 PVC, 115 PSI, MEETING THE REQUIREMENTS OF ASTM F679. STORM DRAIN LINES SHALL BE SDR 35 PVC OR CONCRETE AND SHALL MEET THE REQUIREMENTS OF ASTM D3034.
- CONTRACTOR SHALL ADJUST NEW AND EXISTING VALVE BOXES TO GRADE AFTER PAVING.
- LIVE WATERLINE TAPS OR CUT-IN TAPS TO EXISTING PUBLIC WATERLINES TO BE PERFORMED BY CITY CREWS AT THE DEVELOPER'S EXPENSE.
- CONTRACTOR SHALL COORDINATE LOCATION AND CONSTRUCTION OF POWER, TELEPHONE, GAS AND TV CABLE LINES AND SERVICES WITH VARIOUS UTILITIES.
- STORM DRAIN CATCH BASIN AND CATCH BASIN/MANHOLE STATION AND OFFSETS SHOWN ON THESE PLANS ARE TO CENTER OF GRATE.
- PEDESTRIAN RAMPS SHALL BE TYPE 2A PER CITY OF RICHLAND STANDARD DETAIL ST-5. CONTRACTOR SHALL PROVIDE RAMP CURB CUTS ONLY, UNLESS SIDEWALK IS BEING CONSTRUCTED BY DEVELOPER.
- ALL FIXTURES THAT REQUIRE ADJUSTMENT TO GRADE THAT ARE LOCATED OUTSIDE OF PAVED AREAS SHALL HAVE A 30"x 30"x 8" THICK CONCRETE COLLAR PER CITY STANDARDS.
- ALL CURB RETURN RADII ARE 25 FEET TO FACE OF CURB.
- WATER SERVICE LINES LONGER THAN 50 FEET SHALL BE UPSIZED TO 1-1/2" DIAMETER AND SHALL BE CONTINUOUS PIECES OF PIPE WITH NO COUPLINGS.
- CONTRACTOR SHALL REMOVE AND WASTE ALL ON-SITE DEBRIS PRIOR TO CONSTRUCTION.

ABBREVIATIONS

- (E) EXISTING
- SS SANITARY SEWER
- SD STORM DRAIN
- MH MANHOLE
- CB CATCH BASIN
- W/L WATERLINE
- STA STATION
- IE INVERT ELEVATION
- L LENGTH
- R RADIUS
- S SLOPE
- VC VERTICAL CURVE
- BVCS BEGIN VERTICAL CURVE STATION
- BVCE BEGIN VERTICAL CURVE ELEVATION
- EVCS END VERTICAL CURVE STATION
- EVCE END VERTICAL CURVE ELEVATION
- IRR IRRIGATION
- UGP UNDERGROUND POWER
- ACP ASPHALT CONCRETE PAVEMENT
- FG FINISHED GRADE
- PR PEDESTRIAN RAMP
- HMA HOT MIXED ASPHALT
- LS LANDSCAPING
- R/W RIGHT-OF-WAY



AS-BUILT PLANS

THIS DRAWING IS A TRUE AND ACCURATE REPRESENTATION OF THE ACTUAL CONSTRUCTION TO THE BEST OF OUR KNOWLEDGE. IT IS SUGGESTED THAT THIS PLAN BE USED IN CONJUNCTION WITH FIELD VERIFICATION OF LOCATION AND ELEVATION OF IMPROVEMENTS IN QUESTION.

CREST TRACT 4

RICHLANDWASHINGTON

DESIGN FOR:

MILO BAUDER

2495 MORENCY DR.

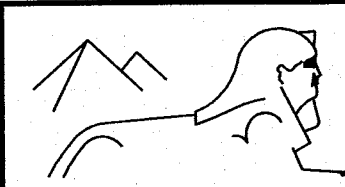
RICHLAND, WA 99352

(509) 521-1608

STREET "A" PROFILE

SCALE: 1"=30' HORIZ.
1"=10' VERT.

REV	DATE	DESCRIPTION	BY	APP'D
2	12/5/11	RECORD DRAWING AS-BUILTS	SWS	RJS
1	7/18/11	REVISED PER CITY REVIEW	SWS	RJS



SPINK ENGINEERING, LLC.

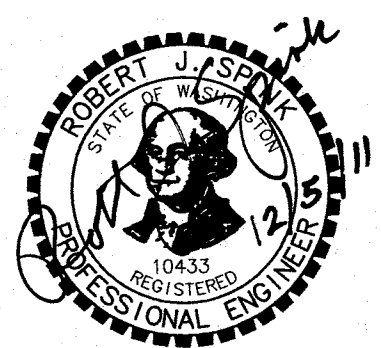
1045 JADWIN AVE., SUITE E

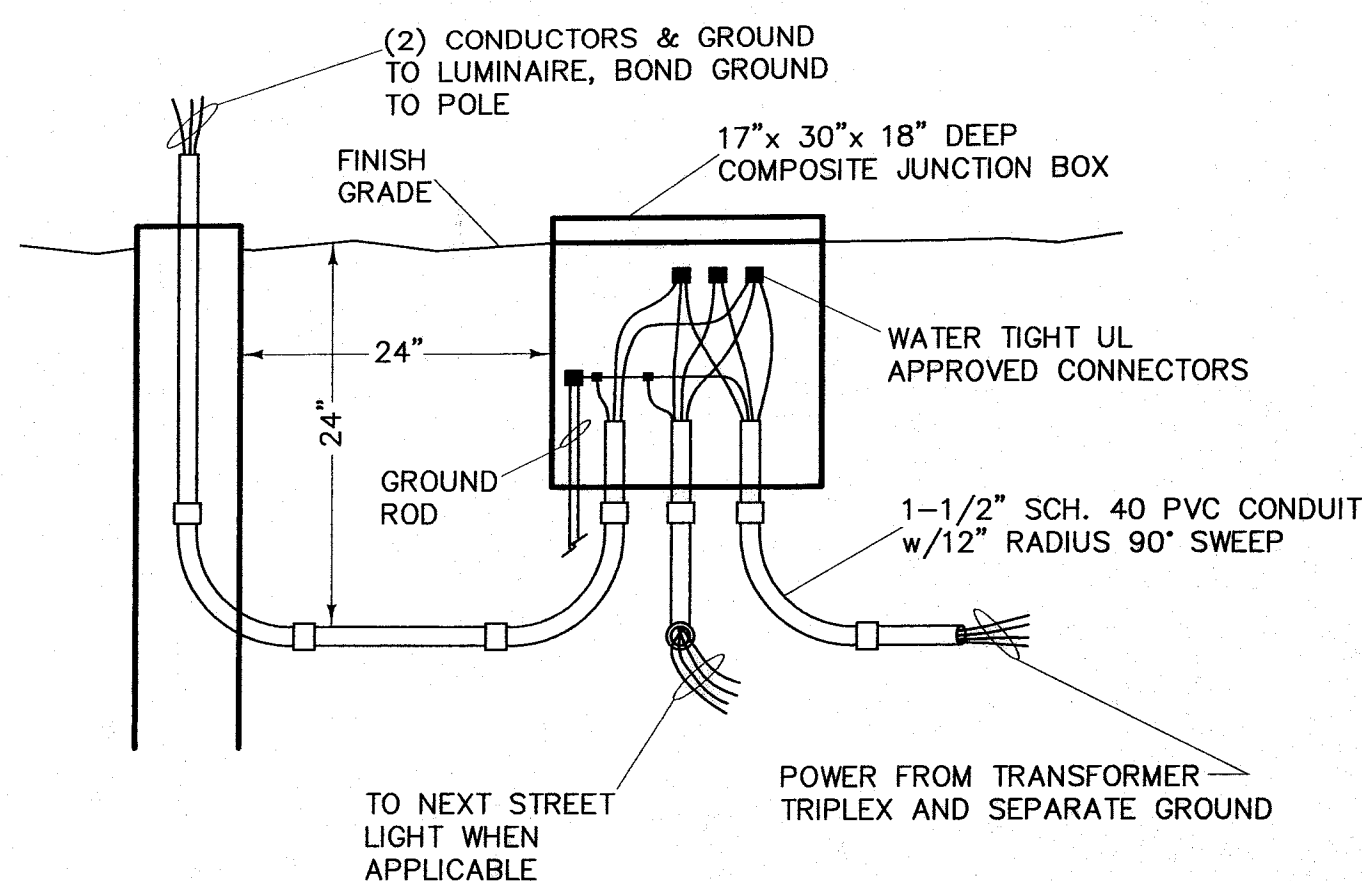
RICHLAND, WASHINGTON 99352

(509) 946-1581

ST. "A" PLAN & PROFILE

10136-PH3.DWG	
DATE: 6/12/11	SHEET 2 OF 5
DRAWN BY: SWS	JOB # 11-125





STREET LIGHT JUNCTION BOX DETAIL

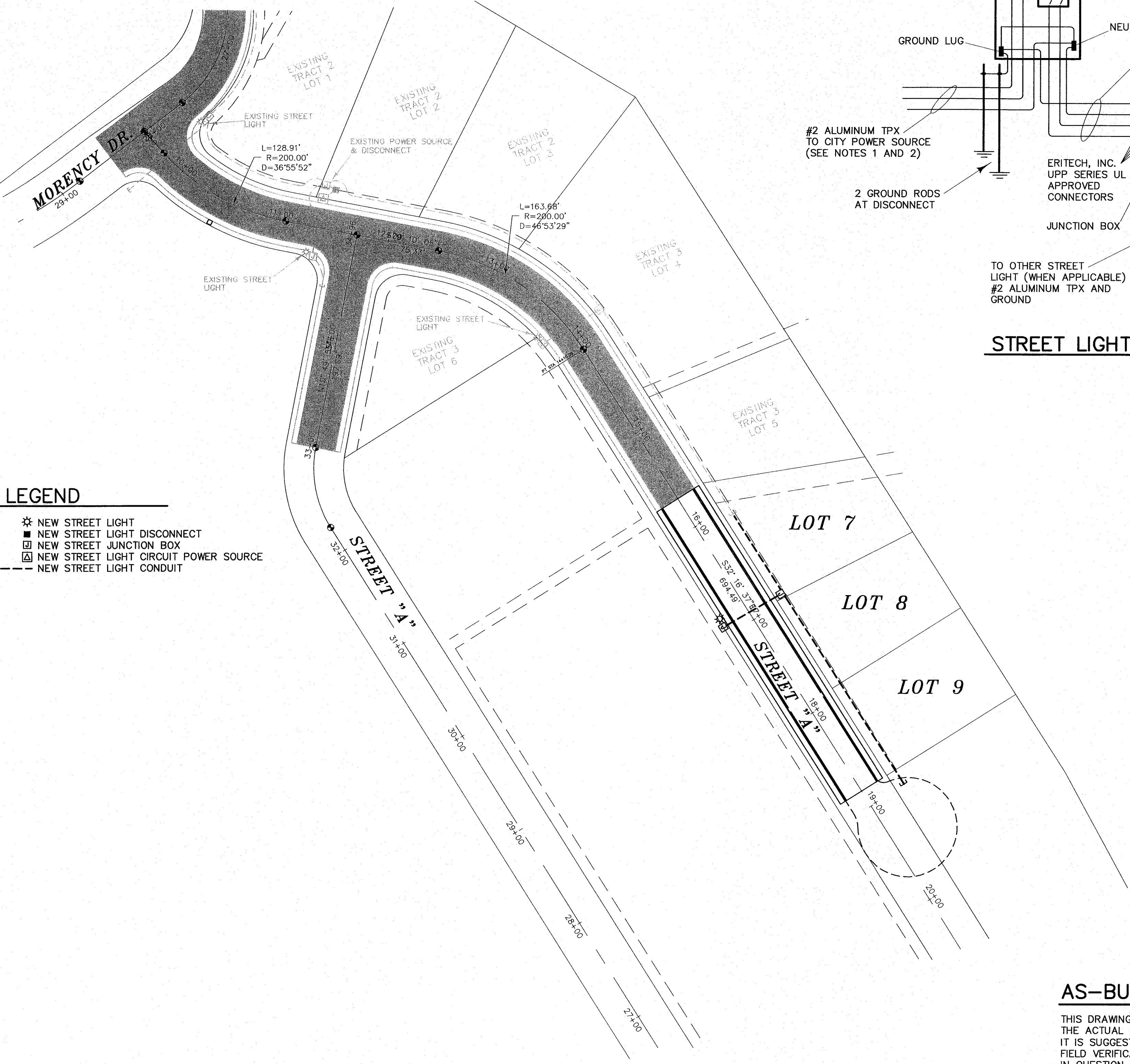
1. SET JUNCTION BOX IN THE PROPER LOCATION SUCH THAT IT IS AS LITTLE OVER 24" FROM STREET LIGHT FOUNDATION AS POSSIBLE. SOIL UNDER BOX SHALL BE RESTORED TO 95% COMPACTION. SET BOX AT AN ELEVATION SUCH THAT THE TOP OF THE BOX COVER IS APPROXIMATELY 2" ABOVE FINISHED GRADE UNLESS BOX IS TO BE SURROUNDED BY ASPHALT OR CONCRETE. SET BOX LEVEL WITH AND PARALLEL TO STREET.
2. SWEEP CONDUIT UP INTO JUNCTION BOX A MINIMUM OF 6". INSTALL BELL ENDS OR BUSHINGS ON ALL EXPOSED CONDUIT ENDS IN JUNCTION BOX.
3. ALLOW SUFFICIENT SLACK IN CONDUCTORS SUCH THAT SPLICES MAY BE REMOVED A MINIMUM 36" FROM SPLICE BOX.
4. JUNCTION BOXES SHALL BE COMPOSOLITE AS MANUFACTURED BY QUAZITE CORPORATION OR APPROVED EQUAL. BOXES SHALL BE CONCRETE GRAY COLOR IN APPEARANCE. COVER SHALL UTILIZE A PENTA-HEAD BOLT TO SECURE IT TO BOX. THE COVER SHALL HAVE THE LOGO "STREET LIGHTING" PERMANENTLY MARKED ON IT.

STREET LIGHTING NOTES

1. STREET LIGHT SYSTEM TO BE FURNISHED AND INSTALLED IN CONFORMANCE WITH CITY OF RICHLAND ENERGY SERVICES STANDARD SPECIFICATIONS REGARDING INSTALLATION AND MATERIALS.
2. CONTRACTOR TO OBTAIN AND HAVE ON-SITE TECHNICAL SPECIFICATIONS TS-STRLT AND MATERIAL SPECIFICATIONS MS-STRLT. COPIES ARE AVAILABLE AT THE CITY OF RICHLAND ENERGY SERVICES DEPARTMENT.
3. LUMINAIRE MOUNTING HEIGHT - 28' LAMP WATTAGE - 100 HPS 120 V
4. THE INSTALLING ELECTRICIAN MUST GET A PERMIT FROM THE STATE DEPARTMENT OF LABOR AND INDUSTRIES AND HAVE THEIR APPROVAL OF THE SYSTEM PRIOR TO THE CITY HOOKING UP POWER.
5. AFTER CONSTRUCTION IS COMPLETED, THE FOLLOWING MUST BE PERFORMED PRIOR TO CITY HOOK-UP (ENERGIZATION).
 - A. ELECTRICIAN MUST PERFORM MEGGER TEST IN THE PRESENCE OF AN EMPLOYEE OF RICHLAND'S ELECTRICAL ENGINEERING DEPT.
 - B. ELECTRICIAN MUST PERFORM A FUNCTIONAL TEST OF THE LIGHTING SYSTEM IN THE PRESENCE OF AN EMPLOYEE OF RICHLAND'S ELECTRICAL ENGINEERING DEPT.
 - C. MYLAR AS-BUILT DRAWINGS MUST BE PROVIDED TO THE CITY. DRAWINGS ARE TO BE 24"x 36" MYLAR AND SUBMITTED TO CIVIL AND ENVIRONMENTAL ENGINEERING DEPARTMENT OF THE CITY. THE DRAWINGS MUST DENOTE EACH AND ALL (BUT NOT LIMITED TO) THE FOLLOWING: WIRE SIZE, CONDUIT SIZE, DISCONNECT(S), JUNCTION BOXES, POLE HEIGHTS AND POINT OF FEED, LIGHT SIZE AND TYPE MUST ALSO BE INCLUDED AS WELL AS MATERIAL CATALOG/PRODUCT NUMBERS.
6. CITY OF RICHLAND ELECTRICAL DEPARTMENT WILL PROVIDE ELECTRICAL SERVICE TO POINT OF CONNECTION OF LIGHTING SYSTEM. COST OF SERVICE IS TO BE PAID BY CONTRACTOR.
7. CONTRACTOR SHALL WARRANTEE, IN WRITING, THE LIGHTING SYSTEM FOR ONE YEAR AFTER ENERGIZATION OF THE SYSTEM.
8. CENTER OF STREET LIGHT POLES TO BE LOCATED 2' BEHIND THE BACK OF CURB.
9. CONTRACTOR TO ACQUIRE POLE NUMBER TAGS FROM WAREHOUSE AT CITY SHOPS AND ATTACH TAGS TO STREET SIDE OF POLES PER CITY OF RICHLAND SPECIFICATIONS. POLES TO BE NUMBERED AS SHOWN ON PLAN.

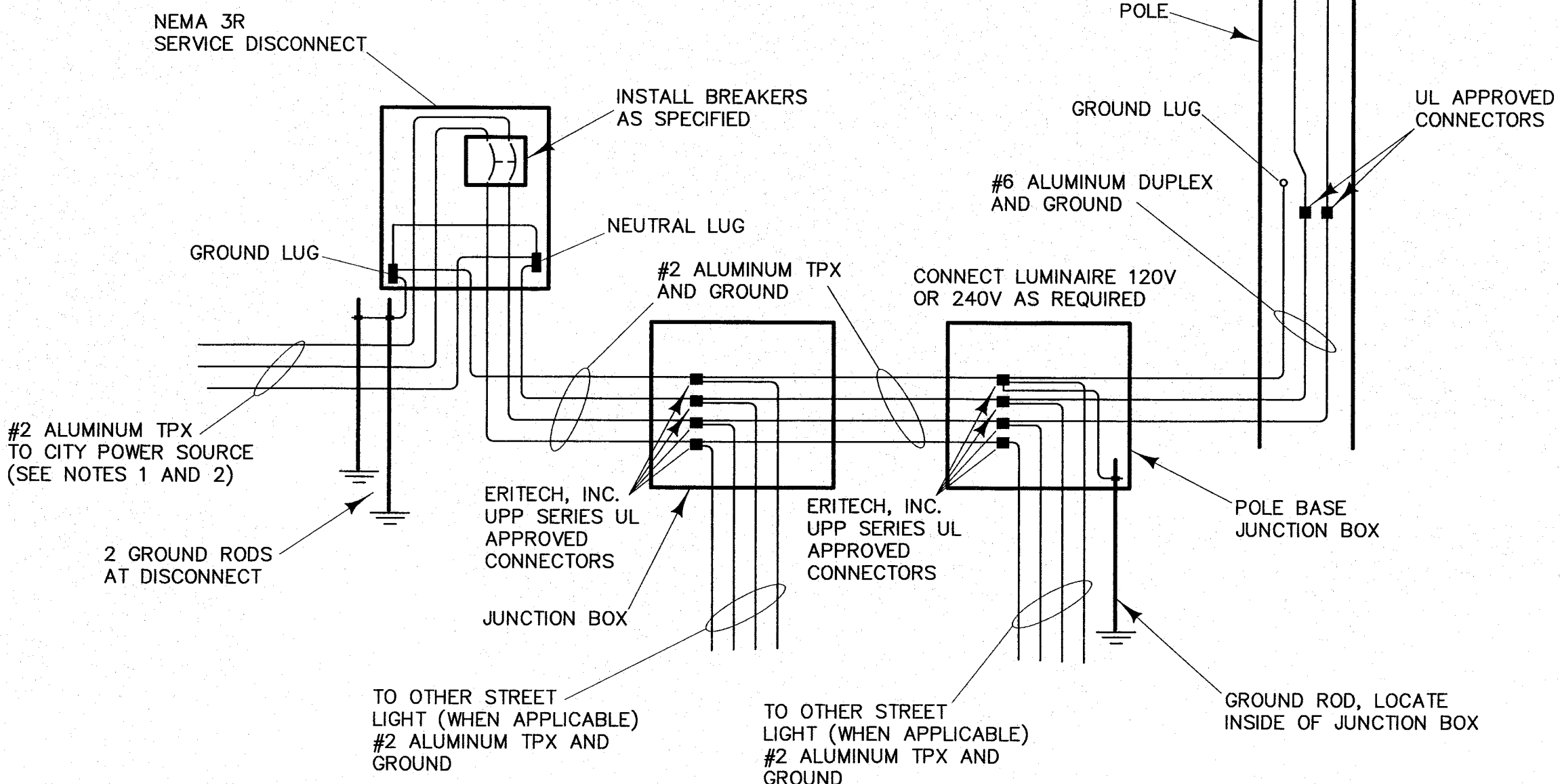
LEGEND

- * NEW STREET LIGHT
- NEW STREET LIGHT DISCONNECT
- NEW STREET JUNCTION BOX
- △ NEW STREET LIGHT CIRCUIT POWER SOURCE
- NEW STREET LIGHT CONDUIT



NOTES

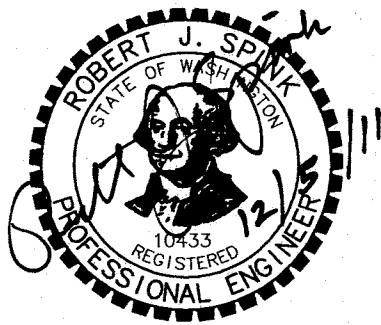
1. IF POWER SOURCE IS OVERHEAD POWER LINE, EXTEND CONDUIT TO WITHIN 1' OF CITY POLE AND LEAVE APPROXIMATELY 50' OF #2 ALUM. TPX HANGING OUT OF CONDUIT FOR CITY CONNECTION.
- IF POWER SOURCE IS PAD MOUNT TRANSFORMER OR UNDERGROUND JUNCTION BOX, EXTEND CONDUIT INTO VAULT OR JUNCTION BOX WITH CITY OVERSIGHT AND LEAVE 5' OF #2 ALUM. TPX FOR CITY CONNECTION.
2. CITY OF RICHLAND TO PROVIDE POWER SOURCE CONNECTIONS.



STREET LIGHT STANDARD WIRING DIAGRAM

AS-BUILT PLANS

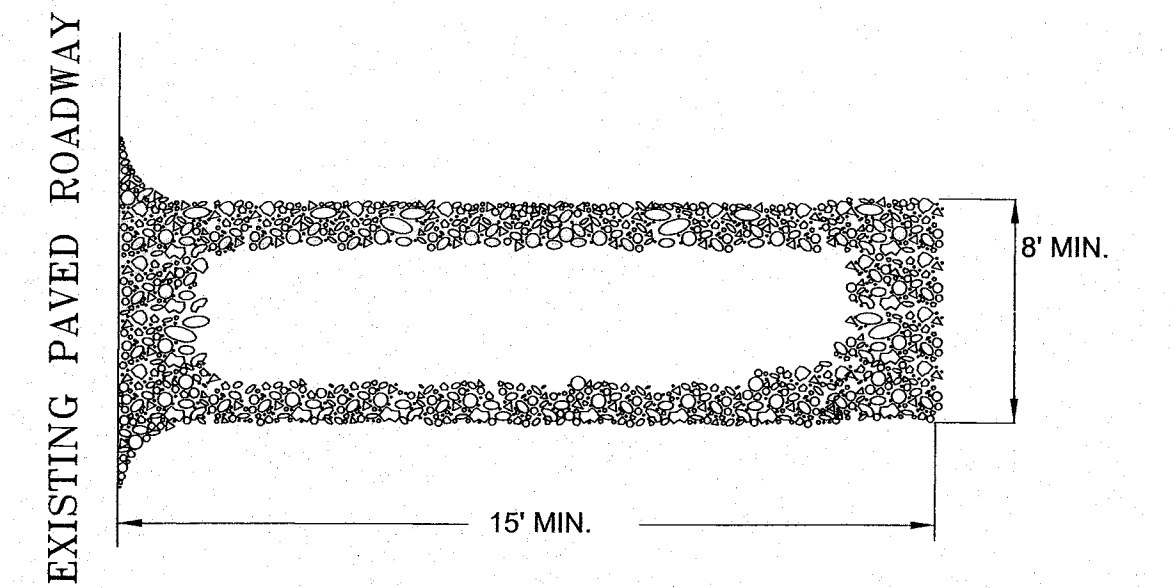
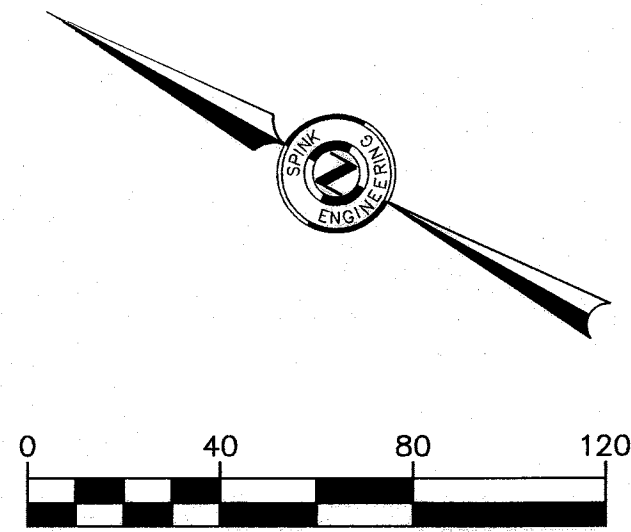
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CREST TRACT 4		DESIGN FOR: MILO BAUDER 2495 MORENCY DR. RICHLAND, WA 99352 (509) 521-1608		SPINK ENGINEERING, LLC. 1045 JADWIN AVE., SUITE E RICHLAND, WASHINGTON 99352 (509) 946-1581		STREET LIGHT PLAN	
RICHLAND	WASHINGTON					10136-PH3.DWG	
						DATE: 6/12/11	SHEET 3 OF 5
						DRAWN BY: SWS	JOB # 11-125

CALL 1-800-424-5555 AND NON-MEMBER UTILITIES FOR UTILITY LOCATE 2 BUSINESS DAYS PRIOR TO EXCAVATION

CONTRACTOR TO CONSTRUCT EARTH BERM TO PROTECT LOWER PROPERTIES FROM ROLLING ROCKS. CONTRACTOR SHALL CONSIDER THIS COMMENT TO BE TYPICAL OF ALL GRADING ACTIVITIES DURING THIS PHASE OF CONSTRUCTION AND ANY FUTURE PHASES WHERE ROLLING ROCKS MAY BE A HAZARD.



- NOTES:
1. INSTALL AS SOON AS POSSIBLE, PRIOR TO BEGINNING CLEARING OR GRADING.
 2. USE 2-TO-3 INCH FRACTURED AGGREGATE STONE WITH MINIMAL FINES.
 3. ENTRANCE MUSE BE AT LEAST 8- FEET WIDE AND 15- FEET LONG.
 4. REPLACE AS NEEDED WHEN FULL OF SEDIMENT, AND TO MAINTAIN SIX-INCH DEPTH.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

EROSION/SEDIMENTATION CONTROL (ESC) NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE, AT ALL TIMES, DURING CONSTRUCTION FOR EROSION AND SEDIMENTATION CONTROL. THE CONTRACTOR SHALL INSTALL A SILT FENCE AND/OR STRAW BALES AROUND PERIMETER OF PROJECT SITE, IF NEEDED, TO PROTECT ADJACENT PROPERTIES FROM WIND BLOWN DUST & SAND AND FROM SEDIMENTATION TRANSPORTED BY WATER RUN-OFF.
2. THE ESC FACILITIES, IF NEEDED, MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
3. DURING THE CONSTRUCTION PERIOD ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
4. AT NO TIME SHALL MORE THAN 1 FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
5. ALL DISTURBED AREAS SHALL BE HYDRO-SEEDED AT THE COMPLETION OF THIS PROJECT.

GENERAL NOTES

1. CONTOURS SHOWN ON THIS PLAN ARE FINISHED GRADE.
2. GRADING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING EVALUATION PREPARED BY "ALLWEST MATERIALS TESTING," DATED DECEMBER 31, 2008, AND ALL ADDENDA.

ESTIMATED EARTHWORK

135,375 CUBIC YARDS EXCAVATION
92,100 CUBIC YARDS EMBANKMENT
(FIGURES ARE "NEAT LINE")

AS-BUILT PLANS

THIS DRAWING IS A TRUE AND ACCURATE REPRESENTATION OF THE ACTUAL CONSTRUCTION TO THE BEST OF OUR KNOWLEDGE. IT IS SUGGESTED THAT THIS PLAN BE USED IN CONJUNCTION WITH FIELD VERIFICATION OF LOCATION AND ELEVATION OF IMPROVEMENTS IN QUESTION.



OVERALL GRADING PLAN

CREST TRACT 4 LOTS 7, 8, & 9 RICHLAND WASHINGTON		DESIGN FOR: MILO BAUDER 2495 MORENCY DR. RICHLAND, WA 99352 (509) 521-1608	RECORD DRAWING AS-BUILTS DATE: 12/5/11 DESCRIPTION: RECORD DRAWING AS-BUILTS BY: SWS APP'D: RJS		SPINK ENGINEERING, LLC. 1045 JADWIN AVE., SUITE E RICHLAND, WASHINGTON 99352 (509) 946-1581	10136.DWG DATE: 6/12/11 DRAWN BY: SWS	SHEET 4 OF 5 JOB # 11-125
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CALL 1-800-424-5555 AND NON-MEMBER UTILITIES FOR UTILITY LOCATE 2 BUSINESS DAYS PRIOR TO EXCAVATION

CONTRACTOR TO CONSTRUCT EARTH BERM
TO PROTECT LOWER PROPERTIES FROM ROLLING
ROCKS. CONTRACTOR SHALL CONSIDER THIS COMMENT
TO BE TYPICAL OF ALL GRADING ACTIVITIES DURING THIS
PHASE OF CONSTRUCTION AND ANY FUTURE PHASES WHERE
ROLLING ROCKS MAY BE A HAZARD.



AS-BUILT PLANS

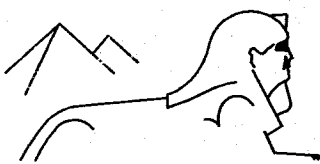
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12-5-11

OVERALL GRADING PLAN

CREST TRACT 4 LOTS 7, 8, & 9		DESIGN FOR: MILO BAUDER 2495 MORENCY DR. RICHLAND, WA 99352 (509) 521-1608		10136.DWG	
RICHLAND	WASHINGTON	12/5/11		DATE: 6/12/11	SHEET 5 OF 5
		RECORD DRAWING AS-BUILTS		DRAWN BY: SWS	JOB # 11-125
		BY: APP'D			



SPINK ENGINEERING, LLC.
1045 JADWIN AVE., SUITE E
RICHLAND, WASHINGTON 99352
(509) 946-1581



Exhibit 11

State of Washington
Department of Fish and Wildlife
Habitat Program
2620 North Commercial Avenue, Pasco, WA 99301
Phone: (509) 543-3319, E-mail, Michael.Ritter@dfw.wa.gov

MWR-10-19

June 5, 2019

Spink Engineering
Steve Spink
Richland, WA 99352

Dear Mr. Spink,

Thank you for contacting the Washington Department of Fish and Wildlife (WDFW) regarding the plat submittal packages in the City of Richland for Skyline South and Falcon Ridge II.

WDFW appreciates the foresight by the City to have you contact us as an initial step to identify and address any issues related to Priority Habitats and Species (PHS), and other important natural resources.

Based on my review of the WDFW PHS database and Google Earth, there are no PHS issues such as shrub-steppe habitat or animal species occurrences associated with either preliminary plat.

While the PHS databases identifies that entire ridgeline and hill sides of Falcon Ridge II as priority shrub-steppe habitat, Google earth reveals that most if not all of the land are for Falcon Ridge II was previously disturbed.

Please contact me with any questions.

Sincerely,

A handwritten signature in black ink that reads "Michael Ritter".

Michael Ritter
Habitat Biologist

CITY OF RICHLAND NOTES:

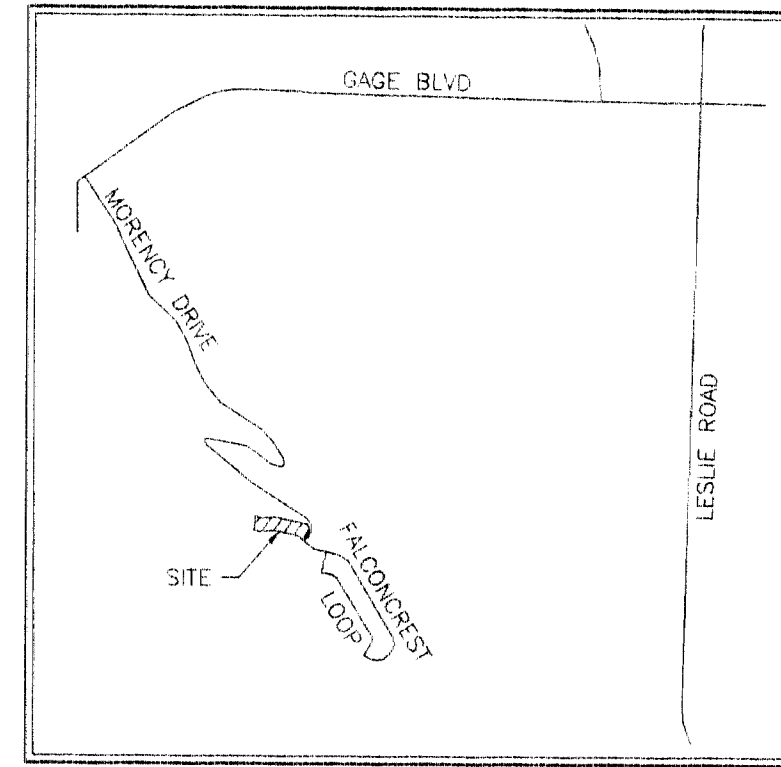
1. ADDRESS NUMBERS [NOTED IN BRACKETS] ARE SUBJECT TO CHANGE BY THE CITY OF RICHLAND. ZIP CODE: 99352.

2. THE UTILITY EASEMENTS SHOWN HEREON ARE HEREBY GRANTED FOR THE USE, ACCESS AND MAINTENANCE BY THE SHORT PLATTED PROPERTY'S CURRENT UTILITY PROVIDER. SAID UTILITY EASEMENTS ARE FOR THE USE, ACCESS AND MAINTENANCE OF ELECTRIC POWER, TELEPHONE, CABLE AND OTHER DEFINED UTILITIES, TO AND OR THROUGH SAID LOTS.

3. NO BUILDING PERMITS FOR THE PROPOSED LOTS SHALL BE ISSUED FOR ANY STRUCTURE REQUIRING POTABLE WATER AND SANITARY SEWER SERVICE UNTIL AN APPROVED WATER AND SEWER DISTRIBUTION SYSTEM THAT WILL PROVIDE SERVICES TO THE LOT THAT THE STRUCTURE WILL BE BUILT UPON HAS BEEN DESIGNED AND ACCEPTED BY THE CITY OF RICHLAND ENGINEERING DEPARTMENT. NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED FOR ANY STRUCTURE UNTIL SAID SYSTEM IS CONSTRUCTED AND ACCEPTED BY THE CITY OF RICHLAND ENGINEERING DEPARTMENT, AND PROOF OF SUCH BE SUBMITTED TO THE DEVELOPMENT SERVICES DEPARTMENT. UTILITY INFORMATION IS AVAILABLE THROUGH THE CITY OF RICHLAND.

4. A SITE SPECIFIC GEOTECHNICAL STUDY AND REPORT PREPARED BY A LICENSED GEOTECHNICAL ENGINEER SHALL BE SUBMITTED TO THE CITY OF RICHLAND PRIOR TO THE ISSUANCE OF ANY GRADING OF BUILDING PERMITS BY THE CITY.

5. ALL LOTS WITHIN THE PLAT ARE SUBJECT TO THE CITY'S WILD LAND FIRE PROTECTION REQUIREMENTS AS DELINEATED IN RICHLAND MUNICIPAL CODE SECTION 21.01.030 OR AS THEY MAY BE SUBSEQUENTLY MODIFIED. ALL STRUCTURES MUST BE DEVELOPED WITH NON-COMBUSTIBLE SIDING, SOFFIT AND SKIRTING ON THE SIDE ADJACENT TO THE WILD-LAND AREA. DECKS OR PORCHES 36 INCHES OR LESS IN HEIGHT SHALL HAVE SKIRTING IF WITHIN 30 FEET OF ADJACENT WILD-LAND AREAS WHEN THE WILD-LAND AREA IS IN EXCESS OF FIVE CONTIGUOUS ACRES. SKIRTING SHALL BE SUFFICIENTLY CONSTRUCTED SO AS NOT TO ALLOW THE ACCUMULATION OF COMBUSTIBLE MATERIAL UNDER THE DECK OR PORCH. THE AREA UNDER THE DECK OR PORCH SHALL NOT BE USED FOR STORAGE.

VICINITY MAP
NTS

SHORT PLAT NO. 3553

PREPARED UNDER CITY OF RICHLAND SHORT PLAT ORDINANCE LOCATED IN THE NE 1/4 OF THE SW 1/4 OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M. CITY OF RICHLAND, BENTON COUNTY, WA

LEGAL DESCRIPTION

THAT PORTION OF THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., CITY OF RICHLAND, BENTON COUNTY, WASHINGTON DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF FALCONCREST LOOP AND MORENCY DRIVE, AS SHOWN ON THE PLAT OF FALCONCREST PHASE 1, RECORDED IN VOLUME 15 OF PLATS, PAGE 454, RECORDS OF BENTON COUNTY, WASHINGTON; THENCE NORTH 48°59'00" EAST 43.10 FEET ALONG THE CENTERLINE OF SAID MORENCY DRIVE TO A POINT OF CURVATURE MONUMENT; THENCE NORTH 43°01'00" WEST 23.00 FEET TO THE NORTHWESTERLY RIGHT OF WAY MARGIN OF SAID MORENCY DRIVE AND THE TRUE POINT OF BEGINNING; THENCE SOUTH 52°18'13" WEST 43.31 FEET ALONG SAID RIGHT OF WAY MARGIN TO THE BEGINNING OF A NON-TANGENT CURVE, CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 125.00 FEET (THE LONG CHORD OF SAID CURVE BEARS NORTH 58°12'50" WEST 85.06 FEET); THENCE NORTHWESTERLY 86.79 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 39°46'57"; THENCE NORTH 78°06'19" WEST 158.51 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 300.00 FEET; THENCE WESTERLY 103.34 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 19°44'08"; THENCE SOUTH 82°09'33" WEST 12.27 FEET TO THE BEGINNING OF A CURVE, CONCAVE TO THE NORTH, HAVING A RADIUS OF 400.00 FEET; THENCE WESTERLY 118.82 FEET ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 17°01'12"; THENCE NORTH 5°06'33" EAST 139.37 FEET; THENCE SOUTH 74°42'56" EAST 56.82 FEET; THENCE NORTH 87°18'45" EAST 147.74 FEET; THENCE SOUTH 77°43'35" EAST 295.31 FEET TO SAID NORTHWESTERLY RIGHT OF WAY MARGIN, SAID POINT BEING ON A NON-TANGENT CURVE, CONCAVE TO THE WEST, HAVING A RADIUS OF 82.00 FEET (THE LONG CHORD OF SAID CURVE BEARS SOUTH 3°54'58" WEST 122.62 FEET); THENCE SOUTHERLY 138.50 FEET ALONG THE ARC OF SAID CURVE AND ALONG SAID NORTHWESTERLY RIGHT OF WAY MARGIN THROUGH A CENTRAL ANGLE OF 96°46'34" TO THE TRUE POINT OF BEGINNING.

CONTAINS 87,261 SQUARE FEET, MORE OR LESS

OWNERS CERTIFICATE

WE, THE UNDERSIGNED, HEREBY CERTIFY THAT WE ARE THE OWNERS OF THE TRACT OF LAND DESCRIBED HEREON, THAT WE HAVE CAUSED SAID LAND TO BE SURVEYED AND SHORT PLATTED INTO LOTS AS SHOWN WITH OUR CONSENT AND IN ACCORDANCE WITH OUR DESIRES AND THAT THE EASEMENTS ON THE SHORT PLAT ARE HEREBY GRANTED FOR THE USES SHOWN THEREON.

Milo Bauder

MILO BAUDER, MEMBER
BAUDER HOMES, LLC

ACKNOWLEDGMENT

STATE OF WASHINGTON } S.S.
COUNTY OF BENTON

I CERTIFY THAT I KNOW OR HAVE SATISFACTORY EVIDENCE THAT Milo Bauder SIGNED THIS INSTRUMENT, ON OATH STATED THAT HE/SHE WAS AUTHORIZED TO EXECUTE THE INSTRUMENT AND ACKNOWLEDGED IT AS THE MEMBER OF BAUDER HOMES, LLC TO BE THE FREE AND VOLUNTARY ACT OF SUCH PARTY FOR THE USES AND PURPOSES MENTIONED IN THE INSTRUMENT.

DATED: 12-27-17

Karol A. Melde

NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON

TITLE: Notary Public

MY APPOINTMENT EXPIRES: 1-29-18

APPROVALS

I HEREBY CERTIFY THAT ALL CHARGEABLE REGULAR AND SPECIAL ASSESSMENTS COLLECTIBLE BY THIS OFFICE THAT ARE DUE AND OWING ON THE PROPERTY DESCRIBED HEREON ON THE DATE OF THIS CERTIFICATION HAVE BEEN PAID.

DATED THIS 3rd DAY OF January, 2018.

PARCEL NUMBER 1-3598-300-0001-047

Kenneth Spencer by David 01/03/2018
BENTON COUNTY TREASURER DATE

THE ANNEXED SHORT PLAT IS HEREBY APPROVED BY AND FOR THE CITY OF RICHLAND, COUNTY OF BENTON, STATE OF WASHINGTON.

Stef
CITY OF RICHLAND CITY ENGINEER

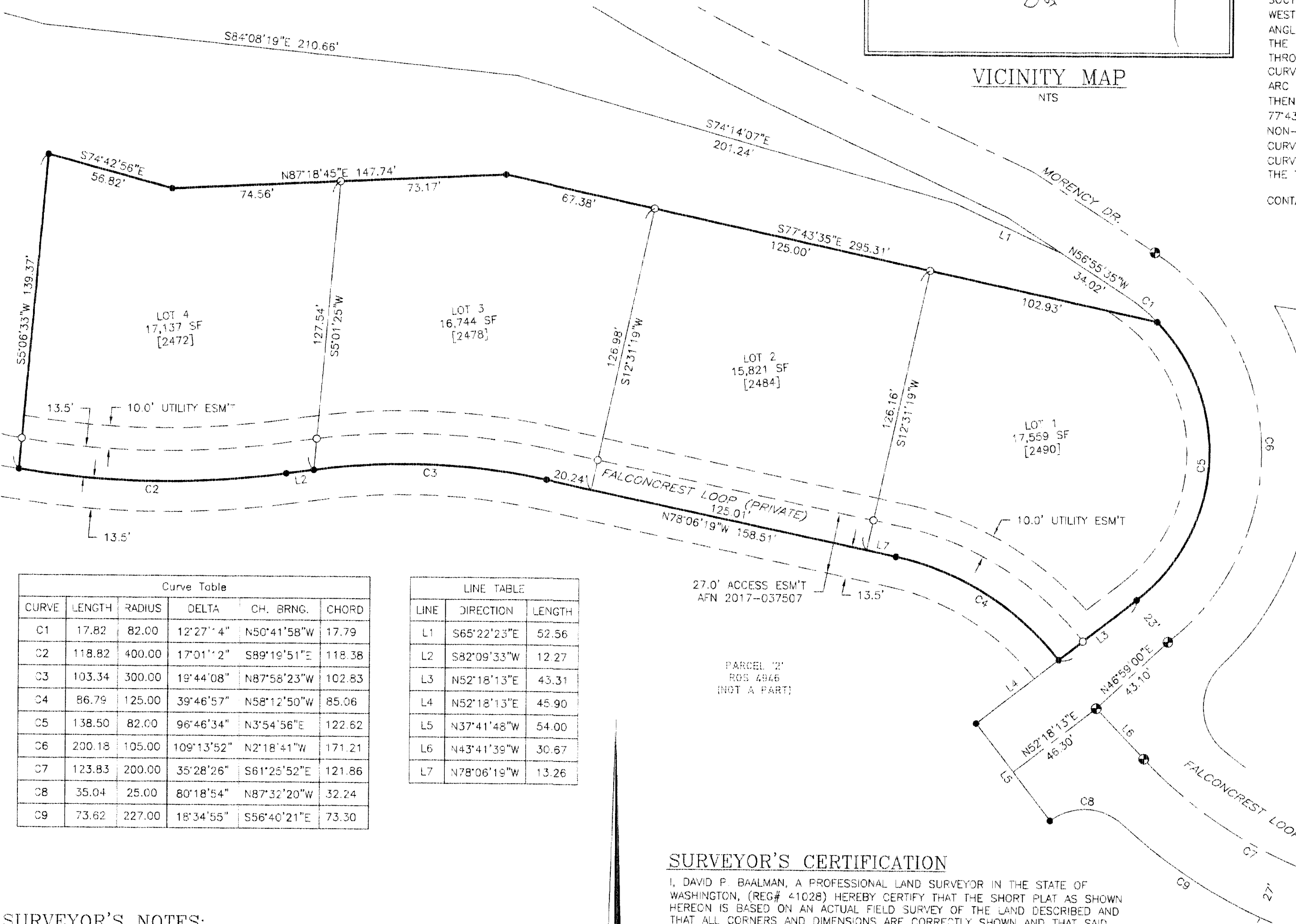
12/27/2017
DATE

AUDITOR'S CERTIFICATE

FILED FOR RECORD AT THE REQUEST OF ROGERS SURVEYING AT 10:40 A.M., THIS 3 DAY OF January, 2018 A.D., AND RECORDED IN VOLUME 1 OF SHORT PLATS, AT PAGE 3553, RECORDS OF BENTON COUNTY, WASHINGTON.

BRENDA CHILTON *Brenda Chilton* 2017-000186
BENTON COUNTY AUDITOR DEPUTY AUDITOR

CLIENT	BAUDER HOMES, LLC	JOB	23517
PROJECT	SHORT PLAT		
	SW 1/4, S35, T9N., R.28E., W.M.		
DRN. BY	BAG	SCALE	"= 100'
APPROVED	DPB	DATE	11/14/17
		ACAD VER	- NONE
		F.B. NO	- C3D17
		FILE:	23517-SP.DWG
		SHEET	1
		OF	1



Curve Table					
CURVE	LENGTH	RADIUS	DELTA	CH. BRNG.	CHORD
C1	17.82	82.00	12°27'4"	N50°41'58"W	17.79
C2	118.82	400.00	17°01'2"	S89°19'51"E	118.38
C3	103.34	300.00	19°44'08"	N87°58'23"W	102.83
C4	86.79	125.00	39°46'57"	N58°12'50"W	85.06
C5	138.50	82.00	96°46'34"	N3°54'56"E	122.62
C6	200.18	105.00	109°13'52"	N2°18'41"W	171.21
C7	123.83	200.00	35°28'26"	S61°25'52"E	121.86
C8	35.04	25.00	80°18'54"	N87°32'20"W	32.24
C9	73.62	227.00	18°34'55"	S56°40'21"E	73.30

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S65°22'23"E	52.56
L2	S82°09'33"W	12.27
L3	N52°18'13"E	43.31
L4	N52°18'13"E	45.90
L5	N37°41'48"W	54.00
L6	N43°41'39"W	30.67
L7	N78°06'19"W	13.26

SURVEYOR'S NOTES:

1. BASIS OF BEARINGS IS THE PLAT OF FALCONCREST PHASE 1, RECORDED IN VOLUME 15 OF PLATS, PAGE 454, RECORDS OF BENTON COUNTY, WASHINGTON.
2. ○ = SET 5/8" REBAR WITH ORANGE CAP STAMPED "RSI DPB 41028"
3. ● = FOUND 5/8" REBAR "RSI DPB 41028" OR MONUMENT AS NOTED.
4. ⊕ = FOUND 3" BRASS CAP IN MONUMENT CASE PER PLAT OF FALCONCREST PH 1
5. (R) = RECORD, (C) = COMPUTED, (M) = MEASURED, (P) = PLAT
6. EQUIPMENT AND PROCEDURES USED: DUAL FREQUENCY GPS RECEIVERS USING REAL TIME KINEMATIC METHODS & A 5" [2mm + 2ppm] TOTAL STATION USING CLOSED TRAVERSE & RADIAL SURVEY METHODS.

SURVEYOR'S CERTIFICATION

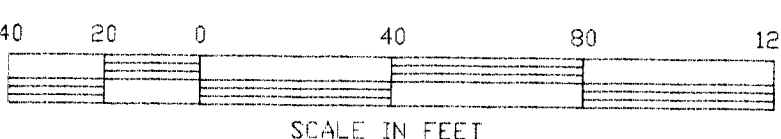
I, DAVID P. BAALMAN, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF WASHINGTON, (REG# 41028) HEREBY CERTIFY THAT THE SHORT PLAT AS SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY OF THE LAND DESCRIBED AND THAT ALL CORNERS AND DIMENSIONS ARE CORRECTLY SHOWN AND THAT SAID SHORT PLAT IS STAKED ON THE GROUND AS INDICATED HEREON.



David P. Baalman
DAVID P. BAALMAN

12-27-17
DATE

1"=40'



SCALE IN FEET

RSI ROGERS SURVEYING INC., P.S.
1455 COLUMBIA PARK TRAIL
RICHLAND, WA. 99352
PHONE (509) 783-4141
FAX: (509) 783-8994
www.rogerssurveying.com



HEARING EXAMINER AGENDA ITEM COVERSHEET

Meeting Date: 5/11/2020

Agenda Category: New Business - Public Hearing

Prepared By: Shane O'Neill, Senior Planner

Subject:

S2020-102 Preliminary Plat of Skyline South
Spink Engineering on behalf of Dennis Sawby

Department:

Development Services

Recommended Motion:

Staff recommends that the Hearings Examiner approve the requested preliminary short plat subject to the proposed findings of fact, conclusions of law and conditions of approval.

Summary:

Spink Engineering, applicant, on behalf of Dennis Sawby, owner has filed a preliminary plat application (Exhibit I) to divide approximately 9.79 acres of land into fifty four (54) residential lots known as the plat of Skyline South. Proposed lot sizes range from 3,006 square feet to 9,781 square feet; with an average lot size of 3,600 square feet. The proposed plat also includes four (4) tracts. Tracts A, B & C are reserved for open space, while Tract D is reserved for open space and storm retention. All tracts will be owned by the future home owner's association.

Access to the plat of Skyline South would come from Skyline Drive, while lots within the plat would be accessed from an interior loop road extending from Skyline Drive.

Attachments:

1. Full Staff Report - Skyline South S2020-102

**CITY OF RICHLAND DEVELOPMENT SERVICES DIVISION
STAFF REPORT TO THE HEARING EXAMINER**

GENERAL INFORMATION:

PROPOSAL NAME: Skyline South - Preliminary Plat

LOCATION: North of Interstate I-182 and east of Hill's Mobile Home Park

APPLICANT: Spink Engineering, applicant, on behalf of Dennis Sawby, owner

FILE NO.: S2020-102

DESCRIPTION: Request to divide 9.79 acres into 54 single family residential lots and four (4) tracts.

PROJECT TYPE: Type III Preliminary Plat

HEARING DATE: May 11, 2020

REPORT BY: Mike Stevens, Planning Manager

RECOMMENDED ACTION: Approval subject to completion of proposed conditions

DESCRIPTION OF PROPOSAL

Access to the plat of Skyline South would come from Skyline Drive, while lots within the plat would be accessed from an interior loop road extending from Skyline Drive.

SURVEYOR:	STRATTON SURVEYING. INC.
ANNEXATION DATE:	1995
COMPREHENSIVE PLAN:	HIGH-DENSITY RESIDENTIAL (AVERAGE OF 15 DWELLING UNITS PER ACRE)
CURRENT ZONING:	R-3 (MULTI-FAMILY RESIDENTIAL)

PROJECT DATA

GROSS PLAT AREA:	9.79-acres
NET PLANNING AREA:	4.68-acres
NUMBER OF LOTS:	54
NUMBER OF TRACTS:	4
LAND FOR STREETS:	2.44-acres
TRACT AREA:	2.67-acres
NET DENSITY:	11.5 units/acre

PHYSICAL FEATURES

The site consists of three irregularly-shaped parcels located north and west of Interstate 182 and south and east of Hills Mobile Home Park. A Columbia Irrigation District (CID) canal extends along the site's northern boundary with the Yakima River and associated riparian corridor located north of the CID Canal. Interstate 182 and associated rights of way extends along the site's southern border.

The site slopes from south to north with the highest portions of the property located near the proposed entrance and the lowest areas located adjacent to the CID canal.

The site was subject to a wildfire in 2018 with much of the site revegetating with native scrub/shrub vegetation.

A large Bonneville Electric Easement extends across the southern portion of the site and composes most of proposed Tracts A, B, C & D.

SITE DESCRIPTION & ADJACENT LAND USES

The site is irregularly shaped and slopes from the south to the north with an elevation change of approximately 80 feet. The highest point is near the entrance to the site with an elevation of 496' MSL, while the lowest portion of the site is adjacent to the CID canal with an elevation of 416' MSL.

Property to the west contains an existing manufactured home park, referred to as Hills Mobile Home Park. Property to the north beyond the CID canal is owned by the U.S. Army Corps of Engineers and is within the 100-year floodplain of the Yakima River. To the south and east is Interstate 182.

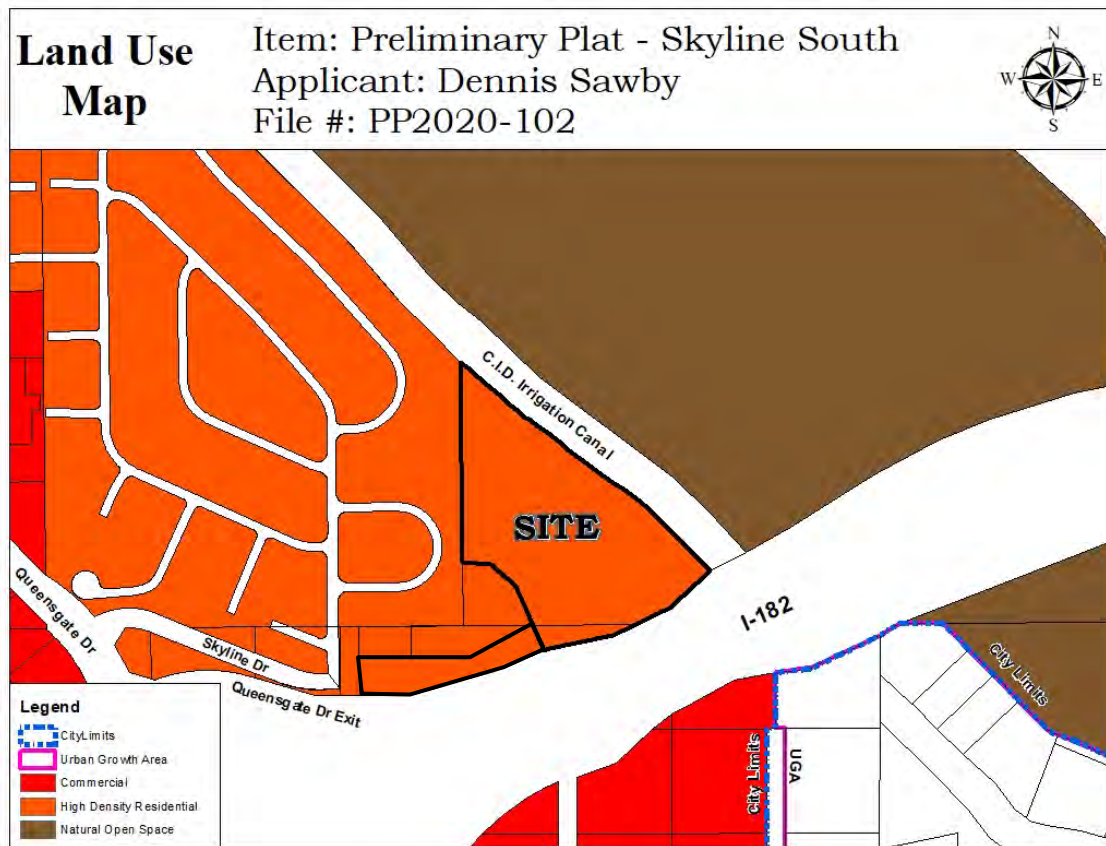


Figure 2 – Comprehensive Plan Map

COMPREHENSIVE PLAN

Richland's Comprehensive Plan designates the plat site for high-density residential development with an average allowable residential density of 15 units per acre. The plat of Skyline South proposes a net residential density of 11.5 dwelling units/acre. While under the goal of the Comprehensive Plan, given the physical characteristics of the site, the proposed preliminary plat layout appears to occur in a manner that will maximize density potential.

Applicable Goals & Policies

Provided below is a set of Comprehensive Plan goals & policies which are particularly applicable to the subject residential subdivision.

Land Use Goal 3: Maintain a broad range of residential land use designations to accommodate a variety of lifestyles and housing opportunities.

Policy 1: Distribute residential uses and densities throughout the urban growth area consistent with the City's vision.

Policy 3: Innovative and non-traditional residential developments can occur through the use of planned unit developments, density bonuses, new types of housing, and multi-use or mixed-use developments.

Land Use Goal 8: Address unique land use situations in the urban area with policies specific to those situations that ensure compatibility between land uses without infringing on private property rights.

Policy 4: Identify and encourage the preservation of lands, sites, and structures that have historical or archaeological significance.

Natural Environment Goal 1: Promote the protection, conservation, and restoration of natural areas, shorelines, and critical areas as unique assets to the community, and provide public access for enjoyment of such facilities based on the ability of the resource to support the use.

Policy 1: Use the critical areas ordinance, SMP, the state environmental policy act (SEPA), and other ordinances, as applicable, to designate and protect the critical areas and natural environment.

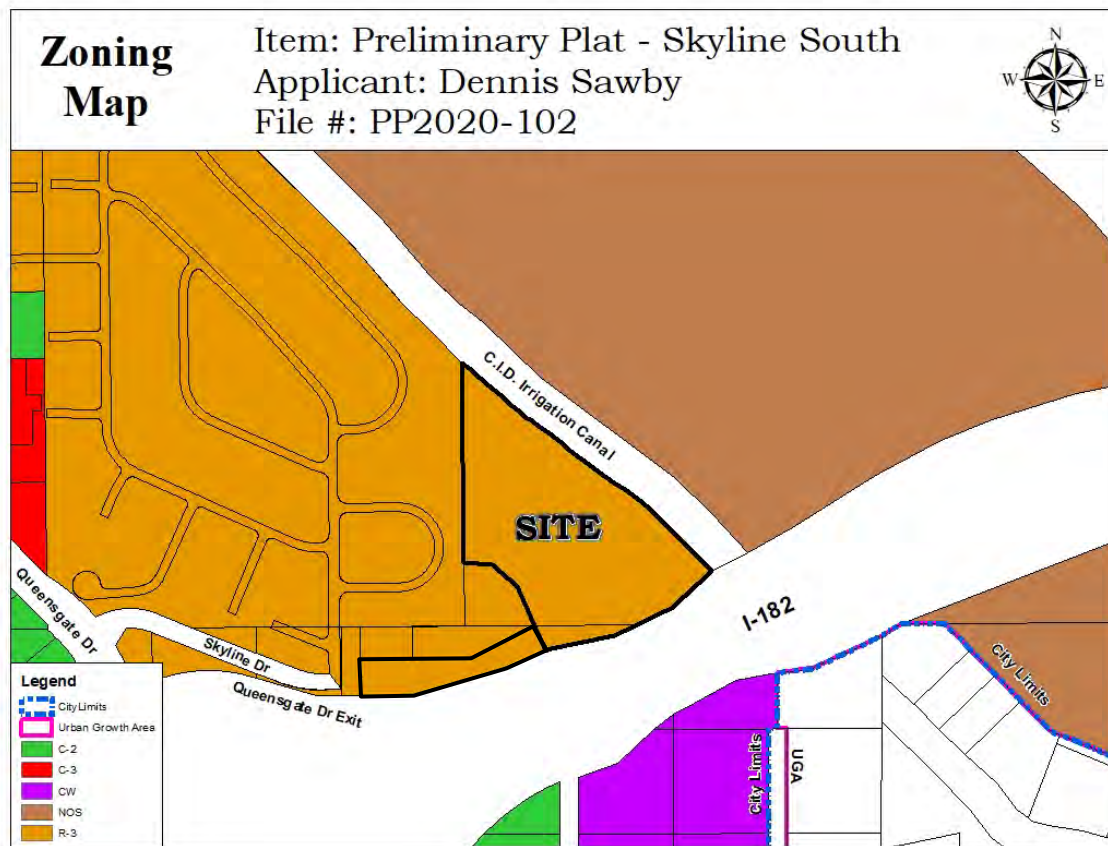


Figure 3 – Zoning Map

ZONING

This preliminary plat site is zoned R-3 (Multi-Family Residential) allowing for each lot to be developed with a variety of residential options ranging from detached single-family residences to large apartment complexes. One-family attached dwellings, commonly referred to as townhomes, are specifically listed as a permitted use with a maximum lot coverage of forty five percent (45%) of the respective parcel.

The R-3 zone imposes a 3,000 square foot minimum lot size for attached single-family residential development, which has been indicated by the developer.

Land Uses and Dimensional Standards

The following **R-3** standards apply to the proposed plat:

Uses Permitted:	Attached Single family homes
Minimum lot size:	3,000 square feet
Front yard setback:	20 feet minimum
Side yard setback:	6 feet minimum
Rear yard setback:	25 feet minimum
Maximum building height:	40 feet (mid-roof-point)

CRITICAL AREAS

The subject property contains, or is adjacent to critical areas as identified by the city's critical areas regulations (Title 22.10).

According to the Washington Department of Fish and Wildlife Priority Habitat Species (PHS) map, the site is located adjacent to an area identified as a Biodiversity Corridor. As a result, the applicant contacted Mike Ritter, WDFW Habitat Biologist, who provided a letter indicating that the subject property contains no PHS issues, such as shrub-steppe habitat or animal species. However, to further satisfy the City's Critical Areas requirements, the applicant hired TerraGraphics Environmental Engineering, Inc. to perform a full Critical Areas Report for the site (Exhibit 3). The report specifically addresses critical areas, such as Fish and Wildlife Conservation, Wetlands, Geologic Hazards and Aquifer Recharge Areas.

To summarize, the report indicates that no mitigation measures are necessary to protect from impacts to the Biodiversity Corridor (Fish and Wildlife Conservation), Wetlands or Aquifer Recharge Areas. The report does include a Geotechnical Investigation Report prepared by White Shield, Inc. The Geotechnical Investigation Report includes several recommendations to address the development as a result of steep slopes (15%). The Richland Building Division has reviewed the information contained within the Geotechnical Investigation and suggest that the recommendations be incorporated as conditions of approval of the proposed plat.

DEVIATION REQUEST

The applicant has requested a deviation (variance) to RMC 24.20.010, which requires the construction of a City standard 34-foot wide street within a 54-foot wide right-of-way (local street standard) (Exhibit 2).

The deviation has been requested due to the existence of three (3) Bonneville Power, high voltage overhead power poles. The poles are located in the center of the property and will not allow a City standard 34-foot wide street to be constructed. The applicant has requested approval to construct a City standard, 27-foot wide, 40-foot wide right-of-way, single frontage Local Street for approximately 550-feet, rather

than a 34-foot wide roadway within a 54-foot wide right-of-way. This portion of varied roadway would be constructed per City standard drawing ST14 and would include curb and gutter on both sides, a 5-foot wide sidewalk on the north side and would be posted with no parking signs on the south side.

Pursuant to RMC 24.24.040, Deviations – Requirements, the hearing examiner may authorize deviations from the requirements of Title 24, Plats and Subdivisions, that will not be contrary to public interest; but only where, owing to special conditions pertaining to a specific subdivision, the literal interpretation and strict application of the provisions or requirements of Title 24 would cause undue and unnecessary hardship. No such deviation from the provisions or requirements of Title 24 shall be authorized by the hearing examiner unless the hearing examiner finds that all of the following facts and conditions exist:

A. A written application for a deviation from subdivision standards, accompanied by an application fee as specified by the posted fee schedule, is submitted demonstrating all of the following:

1. That special conditions and circumstances exist which are peculiar to the land involved and which are not applicable to other lands in the same area;

Staff Comment: The site contains a high-voltage transmission line owned by the Bonneville Power Administration. The associated variable-width easement and pole locations reduce the area available to construct a typical city standard street.

2. That literal interpretation of the provisions of this title would deprive the applicant of rights commonly enjoyed by other properties in the same area or as necessary for the reasonable and acceptable development of the property;

Staff Comment: Without the granting of the requested deviation, the subject property would be unable to be subdivided as the location of the BPA easement and power poles removes land available for the construction of a typical city standard street.

3. That the special conditions and circumstances do not result from the actions of the applicant;

Staff Comment: The special conditions/circumstances result from the location of the existing BPA power poles. The property owner/applicant was not responsible for the power poles being located in their current configuration.

4. That granting the deviation requested will not confer on the applicant any special privilege that is denied by this title to other lands in the same area;

Staff Comment: The requested deviation will not confer on the applicant a special privilege that would ordinarily be denied to other lands under the same circumstances. The proposed 27' wide roadway meets International Fire Code Standards and is a standard that is occasionally utilized when circumstances dictate its necessity.

5. That the deviation will not nullify the intent and purpose of the comprehensive plan or this title (Title 24);

Staff Comment: The subject property is designated as high-density residential by the Richland Comprehensive Plan. The requested deviation will allow the property to be subdivided in a manner consistent with the purpose and intent of the Richland Comprehensive Plan.

6. Deviations with respect to those matters requiring the approval of the city engineer may be granted by the hearing examiner only with the recommendation of the city engineer.

Staff Comment: The requested roadway deviation has been reviewed and recommended for approval by the Richland Public Works Department (See Condition of Approval No. 18).

- B. The hearing examiner shall hold an open record hearing to consider the deviation application concurrently with the subdivision application.

CRITERIA FOR PRELIMINARY PLAT APPROVAL

Section 24.12.053 of the RMC sets forth the criteria that must be met before a preliminary plat application can be approved; it states:

The hearing examiner shall not recommend approval of any preliminary plat application, unless the approval is accompanied by written findings that:

- A. The preliminary plat conforms to the requirements of this title;*
- B. Appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school;*
- C. The public use and interest will be served by the platting of such subdivision and dedication; and*
- D. The application is consistent with the requirements of RMC 19.60.095*

RMC Section 24.12.050 designates the Hearing Examiner as the hearing body responsible for conducting the review of preliminary plat applications.

PUBLIC NOTICE

Application Date:	February 7, 2020
Notice of Hearing Mailed:	February 24, 2020
Notice of Rescheduled Public Hearing Mailed:	April 3, 2020
Notice of Hearing Posted:	February 24, 2020
Notice of Hearing Published:	March 1, 2020
Public Hearing:	April 13, 2020 postponed to May 11, 2020 due to Covid- 19, Stay Home Stay Healthy directive.

A combined notice of application and SEPA Optional DNS determination was provided by mailing notices to property owners within 300 feet. Public hearing notices were distributed through posting of the property, mailing of notice to property owners within 300 feet of the site and publication in the *Tri-City Herald* newspaper. Copies of the notices and affidavits are included in Exhibit 6. On April 3, 2020 the City of Richland posted notice of the postponed public hearing on the City website and also sent updated public hearing notices to all property owners within 300' of the project site. A subsequent notice was again sent to all property owners within 300' of the project site on Monday, May 4, 2020 notifying them of the Zoom Meeting procedures and call-in number to provide public testimony.

UTILITIES

All of the necessary public utilities are available on the site or very close to the site and available for extension as necessary.

Sewer

The nearest sewer main available to serve Skyline South is located within the right of way of the CID canal immediately north of the site. A 20" sanitary sewer connection to the main is located in the northeast portion of the site. New sewer main from the proposed development will be directed into this connection. Since the existing sewer main is located along the property's lowest grade there will be no need for special sewer infrastructure such as force-mains or lift-stations as gravity-fed sewer service is an available solution.

Water

Potable

The nearest water main available to serve Skyline South is located within the Skyline Drive right-of-way. This water main will need to be extended into the site to provide service. Because of the lack of a secondary emergency vehicle access, fire sprinkler systems will be required to be installed within all homes in this development. As a result, the applicant will be required to install a looped water system. Looping is required for redundancy in fire protection and also to prevent stagnation.

Irrigation

The project site is located outside of the irrigation district boundaries of both the Kennewick Irrigation District (KID) and the Badger Mountain Irrigation District (BMID). An irrigation source and distribution system, entirely separate from the City's domestic water system, shall be provided for this development. It will be the developer's responsibility to obtain irrigation water to service the proposed subdivision.

Electrical Power

Electrical power exists at the site and is available to serve the proposed development.

ACCESS/TRANSPORTATION

The proposed subdivision would be accessed via Skyline Drive which extends east from Queensgate Drive. Skyline Drive is classified as a "local" street which includes roadways serving as primary access between subdivisions and arterial/arterial collector streets.

In regard to the level-of-service (LOS), pursuant to Sections 12.03.170 and 12.03.180 [RMC] this development proposal as submitted is in general conformance with the assumptions made for land use and scale/density. Through collection of impact fees, the project will comply with concurrency requirements of the Municipal Code.

A Traffic Impact Analysis (TIA) has been prepared for the site and is included as an exhibit to this report (Exhibit 4). The report concludes that no site specific traffic mitigation measures are necessary as at no point will the LOS fall below "D", which has been deemed acceptable in the City of Richland and surrounding Tri-Cities region.

FIRE SAFETY

Portions of the plat are adjacent to undeveloped properties and so are subject to the City's wildland fire protection requirements. The City has wildland fire protection requirements that apply to homes built on or adjacent to steep slopes that would impact lots within the proposed plat. The recommended conditions of approval require compliance with these wildland fire protection requirements.

In addition, as indicated previously, because of the lack of a secondary emergency vehicle access, fire sprinkler systems will be required to be installed within all homes in this development. The applicant will be required to install a looped water system. Looping is required for redundancy in fire protection and also to prevent stagnation.

SCHOOLS

The plat falls within the boundaries of the Richland School District. The proposed plat was routed to the district for review and commenting as part of the standard referral process. No comments from the district were received by the City. Standard

city streets with appropriate sidewalks will be constructed as part of the proposed development and it is anticipated that Richland School District will make the necessary arrangements to accommodate the pickup and delivery of students residing in the new subdivision.

PARKS

The developer and/or builder will be required to pay Park Mitigation Fees as set forth in the City's adopted Fee Schedule. Fees received are used to construct and develop new city parks as well as to provide funding to maintain existing parks throughout the city.

SEPA

A SEPA checklist (Exhibit 7) addressing potential impacts of the proposed subdivision was included in the preliminary plat application. On March 25, 2020 staff issued a Determination of Non-Significance (DNS) (Exhibit 7) using the Optional DNS process available under the provisions of WAC 197-11-355.

AGENCY COMMENTS

A variety of public agencies and City departments were given an opportunity to comment on the proposal. Comments were received from: Washington State Departments of Ecology, Archaeology and Historic Preservation (DAHP), Bonneville Power Administration (BPA), Kennewick Irrigation District (KID) as well as the City of Richland Energy Services and Public Works Departments. All comments received are provided herein as Exhibit 8. Comments from Richland Energy Services, Richland Fire Department and from the city Public Works/Engineering Department are entered directly into the set of recommended approval conditions listed at the end of this report. Copies of their specific comments/conditions are contained within Exhibit 8.

Below, staff offers cursory summaries of comments provided by each agency together with responses by city staff:

- Bonneville Power Administration

A high voltage transmission line and associated variable width easement crosses over parts of the proposed subdivision and any work proposed to occur within the easement required BPA review and approval. BPA requests that the following language be included on the plat map:

"The Bonneville Power Administration (BPA) imposes certain conditions on the portions of those properties encumbered by its high voltage transmission line easement. BPA does not allow structures to be built within the easement, nor does it allow access to be blocked to any transmission facilities. Any activity that is to occur within the easement needs to be permitted by BPA prior to installation or construction. Information regarding the permitting process for proposed uses of the easement may be addressed to BPA Real Estate Field Services at (800) 282-3713."

Staff comment: Acknowledged. Staff has included a condition of approval requiring the language above be placed on the final plat.

- Kennewick Irrigation District (KID)

KID comments that the site is not located within the Kennewick Irrigation District.

Staff comment: Acknowledged.

- Department of Archaeology and Historic Preservation (DAHP)

DAHP recommends an archaeological survey in advance of ground-disturbing activities.

Staff comment: Acknowledged. A condition of approval regarding this issue has been added.

- Washington State Department of Ecology (Ecology)

Ecology advises the applicant about the need for NPDES Construction Stormwater General Permit requirements and for Stormwater Pollution Prevention Plan/Erosion Sediment Control Plan.

Staff comment: Acknowledged. NPDES permitting is currently part of the Public Works permitting process.

PUBLIC COMMENTS

At the time this report was prepared, the City had received no comments from residents of adjoining properties.

ANALYSIS

The criteria for approval of a preliminary plat application (RMC 24.12.053) are reprinted here, with a summary of how the application complies with the requisite standard:

A. The preliminary plat conforms to the requirements of this title (RMC Title 24);

- The City's subdivision regulations set forth specific requirements for the filing of an application, how notice of the application is to be provided and requires that the Hearing Examiner conduct a public hearing and make recommendation to the City Council. These steps have been followed to date.

B. Appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school;

- Several city parks and other recreational opportunities exist within approximately one mile of the project site. New homes within the proposed development will be required to pay Park Impact Fees, which are used to construct new parks and/or maintain existing park facilities within the city.

- The site is not located along an existing bus route. The Ben Franklin Transit Authority provides bus service to the area along Queensgate Drive approximately .2 miles to the north.
- The plat would be served by City domestic water lines currently existing adjacent to the project site. Water lines have capacity to provide for the proposed project.
- Sanitary sewer service will be extended to this project.
- The plat would be served by Richland Energy Services electrical power by way of service line extension.
- An irrigation source and distribution system, entirely separate from the City's domestic water system, shall be provided for this development.
- Kennewick Irrigation District indicated that the development site is not within their district boundaries.
- In accordance with City development standards, storm water drainage would have to be retained and managed on-site. The proposed plat design includes provisions for retaining and managing on-site storm water. Project specific designs have not been created yet; however, prior to the city allowing construction of the subdivision to occur, the development will need to be designed by a licensed civil engineer and meet the requirements of the city and state storm water regulations.
- Richland School District was given the opportunity to comment; however chose not to. The Richland School District currently serves approximately 13,000 children within a multitude of school facilities many of which are new or have been recently remodeled to accommodate the increasing student enrollment seen as a result of new housing being built within the area.

C. The public use and interest will be served by the platting of such subdivision and dedication;

- The proposed project is consistent with the Comprehensive Plan in terms of the proposed density of the plat. The project is consistent with the City's zoning regulations, and would be consistent with development patterns in the surrounding neighborhood considering existing topographic constraints. Provision of additional housing units will contribute to meeting the housing demand experienced in the Tri-Cities thereby serving public interest and demand.

D. The application is consistent with the requirements of RMC 19.60.095, which states:

No development application for a Type II or Type III permit shall be approved by the city of Richland unless the decision to approve the permit application is supported by the following findings and conclusions:

- 1) The development application is consistent with the adopted Comprehensive Plan and meets the requirements and intent of the Richland Municipal Code.*

The proposal is generally consistent with the intent of the Comprehensive Plan and does meet requirements of the Municipal Code as outlined above.

2) Impacts of the development have been appropriately identified and mitigated under Chapter 22.09 RMC.

Chapter 22.09 is the City's adoption of the State Environmental Policy Act provisions. The applicant filed an environmental checklist (Exhibit 7) for which the City issued and distributed a Determination of Non-Significance (Exhibit 7) after utilizing the Optional DNS process.

3) The development application is beneficial to the public health, safety and welfare and is in the public interest.

The project is consistent with the City's Comprehensive Plan and development regulations and it therefore would be considered beneficial to public health, safety and welfare and would be in the public interest. As mentioned above, staff is recommending several requirements in the form of conditions, aimed at ensuring the development does not generate any significant impacts which would be detrimental to the peaceful enjoyment of existing land uses in the surrounding vicinity.

- E. *The development does not lower the level of service of transportation facilities below the level of service D, as identified in the Comprehensive Plan; provided, that if a development application is projected to decrease the level of service lower than level of service D, the development may still be approved if improvements or strategies to raise the level of service above the minimum level of service are made concurrent with development. For the purposes of this section, "concurrent with development" means that required improvements or strategies are in place at the time of occupancy of the project, or a financial commitment is in place to complete the required improvements within six years of approval of the development.*

The project would add 54 new residential lots to be accessed from newly constructed and existing roadways leading into the subdivision. The Traffic Impact Analysis (TIA) performed by JUB Engineers, Inc. indicates that the proposed development is anticipated to generate 53 AM peak hour trips and 70 PM peak hour trips. No site specific mitigation measures have been suggested as the Level of Service (LOS) standard will not fall below LOS "D".

- F. *Any conditions attached to a project approval are as a direct result of the impacts of the development proposal and are reasonably needed to mitigate the impacts of the development proposal.*

The conditions of approval recommended for this project are a direct result of imposing City development standards as contained in City code and are directly related to the development proposal. Additional conditions have been included as a result of comments received by other agencies.

FINDINGS AND CONCLUSIONS

Staff has completed its review the preliminary plat application for Skyline South (S2020-102) and recommends approval of the request subject to conformance with the conditions of approval included below based on the following findings:

Findings of Fact:

1. Richland's Comprehensive Plan designates the plat site for high-density residential development with an average allowable residential density of 15 units per acre. The plat of Skyline South proposes a net residential density of 11.5 dwelling units/acre.
2. R-3 (Multi-Family Residential) zoning is applied to the site which permits residential densities of up to 15 units per acre.
3. Skyline South preliminary plat consists of 54 residential lots. Proposed lot sizes range from 3,006 square feet to 9,781 square feet; with an average lot size of 3,600 square feet. The proposed plat also includes four (4) tracts. Tracts A, B & C are reserved for open space, while Tract D is reserved for open space and storm retention. All tracts will be owned by the future home owner's association.
4. Skyline Drive is classified as a local roadway in the City's Comprehensive Plan.
5. The Skyline South preliminary plat lies within "Zone 2" of the boundary of the South Richland Collector Street Financing Plan (RMC 12.03). This plat shall therefore be subject to the fees administered by the finance plan for any phase submitted for approval.
6. Section 24.12.053 of the RMC sets forth standards for review of preliminary plats that require the Hearing Examiner to consider whether appropriate provisions are made for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school.
7. The proposed preliminary plat provides for the extension of streets consistent with the surrounding street network, includes provisions for the extension of public domestic water, sewer, irrigation water and electrical power lines.
8. Improvements proposed to serve the preliminary plat are consistent with the City's development standards.
9. City standards call for the construction of a Secondary Emergency Access Road (SEVA) to serve any development that contains 16 or more homes served by a single access road. Looping of the water main and requiring installation of individual fire sprinkler systems within each home is acceptable in this situation due to the inability for a SEVA to be constructed.
10. The City has wildland fire protection requirements that apply to homes built on or adjacent to steep slopes that would impact lots within the proposed plat. Some of the proposed lots in Skyline South trigger the need for wildland fire protection requirements.
11. The Richland School District was invited to comment and expressed no concerns with the plat.
12. City staff and other utility providers reviewed the project and have recommended specific conditions of approval as set forth in this report.
13. The applicant filed an environmental checklist along with their preliminary plat application as required under the State Environmental Policy Act.

14. After review of the checklist, application materials and receipt of agency and public comments, staff issued a Determination of Non-Significance on March 25, 2020 after utilizing the Optional DNS process.
15. Richland's Critical Areas ordinance identifies the site as being located within a potentially hazardous area due to the presence of steep slopes and adjacent to a Bio-Diversity Corridor (Wildlife Habitat Conservation Area).
16. The applicant submitted a critical areas report which also contained a geo-technical report.
17. RMC 19.60.095(D) requires that development not lower the level of service standard for transportation facilities below a level of service D.
18. The proposed project would add 54 single family lots that would have direct access onto roadways proposed in the plat.
19. The Skyline South preliminary plat lies within "Zone 2" of the boundary of the South Richland Collector Street Financing Plan (RMC 12.03). This plat shall therefore be subject to the fees administered by the finance plan for any phase submitted for approval.

Conclusions of Law:

1. The site lies within a critical area due to potential geologic hazards as a result of steep slopes. Preliminary plat application materials included a geo-technical report which qualify the site as very stable and suitable for residential construction.
2. The lots within the proposed subdivision are consistent with the provisions of the City's respective zoning regulations.
3. The proposed preliminary plat conforms to the density and type of land use envisioned in the land use and transportation elements of the adopted Comprehensive Plan.
4. Pursuant to RMC Chapters 22.09 and 22.10, the procedures required under the State Environmental Policy Act have been completed.
5. As conditioned, the proposed preliminary plat makes appropriate provisions for the public health, safety and general welfare and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and school grounds and all other relevant facts, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school.
6. Based on the above findings and conclusions, approval of the proposed preliminary plat of Skyline South, subject to the recommended conditions listed in this report, is warranted because the project conforms to the City's adopted comprehensive plan and zoning regulations; has followed the required State Environmental Policy Act procedures; and is consistent with the requirements of the City's subdivision regulations.

Overall Conclusion:

Based on the above findings and conclusions, approval of the proposed preliminary plat of Skyline South, subject to the recommended conditions listed below, is warranted because the project conforms to the City's adopted

Comprehensive Plan and zoning regulations; has followed the required State Environmental Policy Act procedures; and is consistent with the requirements of the City's subdivision regulations.

RECOMMENDED CONDITIONS OF APPROVAL

Public Works

Pre-Plat Specific Conditions

1. The preliminary plat is not showing any phase lines. Phasing is not required but if the project is to be phased during construction phasing lines need to be shown on the pre-plat map.
2. The existing roadway into Hills Mobile Home Park is already named "Skyline Drive". A different name will be needed for the entrance road into this project, or the existing Skyline Drive will have to be renamed.

General Conditions:

1. All final, approved plans for public improvements shall be submitted prior to pre-con on a 24" x 36" hardcopy format and also electronically in .dwg format compatible with the City's standard CAD software. Addendums are not allowed, all information shall be supplied in full size (and electronic) format. Electronic copies of the construction plans are required prior to the pre-con meeting along with the multiple sets of paper drawings. When construction of the public infrastructure has been substantially completed, the applicant shall provide paper and electronic record drawings in accordance with the City's "Record Drawing Requirements". The electronic record drawings shall be submitted in an AutoCAD format compatible with the City's standard CAD software. The final record drawings shall be submitted and approved by the City before the final punchlist inspection will be performed. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.
2. Any and all necessary permits that may be required by jurisdictional entities outside of the City of Richland shall be the responsibility of the developer to obtain.
3. A copy of the construction drawings shall be submitted for review to the appropriate jurisdictions by the developer and his engineer. All required comments / conditions from all appropriate reviewing jurisdictions (e.g.: Benton County, any appropriate irrigation districts, other utilities, etc.) shall be incorporated into one comprehensive set of drawings and resubmitted (if necessary) for final permit review and issuance.

4. Any work within the public right-of-way or easements or involving public infrastructure will require the applicant to obtain a right-of-way construction permit prior to beginning work, per RMC Chapter 12.08. The applicant shall pay a plan review fee based on a cost-per-sheet of engineering infrastructure plans. This public infrastructure plan review fee shall apply each time a project is submitted for review. This fee will be different for commercial projects versus subdivision projects. Please visit the Public Works Private Development page on the City's webpage to find the current per-sheet fee. A permit fee in the amount equal to 3% of the construction costs of the work within the right-of-way or easement will be collected at the time the construction permit is issued. A stamped, itemized Engineers estimate (Opinion of probable cost) and a copy of the material submittals shall be submitted along with the approved plan submittal.
5. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of the final plat. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of plat acceptance. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to application for plat acceptance.
6. A pre-construction conference will be required prior to the start of any work within the public right-of-way or easement. Contact the Public Works Engineering Division at 942-7500 to schedule a pre-construction conference.
7. Site plan drawings which involve the construction of public infrastructure shall be drawn on a standard 24" x 36" drawing format to a scale which shall not be less than 1"=40'.
8. All plan sheets involving construction of public infrastructure shall have the stamp of a current Washington State licensed professional engineer.
9. All construction plan sheets shall include the note "CALL TWO WORKING DAYS BEFORE YOU DIG 1-800-424-5555 (or "811")." Or: <http://www.call811.com/>
10. A copy of the preliminary plat shall be supplied to the Post Office and all locations of future mailbox clusters approved prior to final platting.

Design Standards:

11. Public improvement design shall follow the following general format:

- A. All materials and workmanship shall be in conformance with the latest revision of the City of Richland Standard Specifications and Details, Public Infrastructure Design Guidelines and the current edition of the State of Washington Standard Specifications for Road, Bridge, and Municipal Construction. Please confirm that you have the latest set of standard specs and details by visiting the City's web page.
- B. Water lines shall be aligned on the south and east side of street centerlines.
- C. Sanitary sewer shall be aligned on the north and west side of street centerlines.
- D. Storm sewer shall be aligned on the south and east side of street centerlines.
- E. Any sewer or storm manholes that are installed outside of public Right of Way shall have an acceptable 12-foot wide gravel access road (minimum) provided from a public street for maintenance vehicles.
- F. 10-foot horizontal spacing shall be maintained between domestic water and sanitary sewer mainlines and service lines.
- G. Watermains larger than 8-inches in diameter shall be ductile iron.
- H. Watermains installed outside of the City Right of Way or in very rocky native material, shall be ductile iron and may need restrained joints.
- I. All watermains outside areas zoned R1 shall be ductile iron.
- J. Fire hydrant location shall be reviewed and approved by the City Fire Marshal.
- K. Sewer mains over 15-feet deep shall be constructed out of SDR26 PVC or C900 PVC. The entire main from manhole to manhole shall be the same material.
- L. Water valves and manholes installed on private property shall be placed so as to avoid parked cars whenever feasible.
- M. All utilities shall be extended to the adjacent property (properties) at the time of construction.
- N. The minimum centerline finish grade shall be no less than 0.30 % and the maximum centerline finish grade shall be no more than 10.0 % for local streets. 12% can be allowed for local streets for short distances.
- O. The minimum centerline radius for local streets shall be 100-feet.
- P. Any filling of low areas that may be required within the public Right of Way shall be compacted to City standards.
- Q. An overall, composite utility plan shall be included in the submitted plan set if the project is phased. This comprehensive utility plan benefits all departments and maintenance groups involved in the review and inspection of the project.
- R. A detailed grading plan shall be included in the submitted plan set.

- S. For public utilities not located within public street rights-of-way the applicant shall provide maintenance access acceptable to the City and the applicant shall provide an exclusive 10-foot wide public utility easement (minimum) to be conveyed to the City of Richland.
 - T. Final design of the public improvements shall be approved at the time of the City's issuance of a Right-of-way Construction Permit for the proposed construction.
 - U. All public improvements shall comply with the State of Washington and City of Richland requirements, standards and codes.
 - V. All cul-de-sacs shall have a minimum radius of 48-feet to the face of curb (57-foot ROW) to allow for adequate turning radius of fire trucks and solid waste collection vehicles.
 - W. Curb returns at minor intersections shall have a minimum radius of 25-feet. Curb returns at major intersections should have minimum radius of 30-feet but should be evaluated on a case by case basis.
 - X. All public streets shall meet design requirements for sight distance (horizontal, vertical and intersectional).
 - Y. The final engineered construction plans shall identify locations for irrigation system, street lighting, gas service, power lines, telephone lines, cable television lines, street trees and mail boxes. All electrical appurtenances such as transformers, vaults, conduit routes, and street lights (including their circuit) need to be shown in the plan view.
 - Z. Construction plans shall reference all City of Richland standard details necessary to construct all public improvements which will be owned, operated, maintained by the City or used by the general public.
 - AA. The contractor shall be responsible for any and all public infrastructure construction deficiencies for a period of one year from the date of the letter of acceptance by the City of Richland.
12. If the project will be built in phases the applicant shall submit a master plan for the sanitary sewer, domestic water, storm drainage, electrical, street lighting and irrigation system for the entire project prior to submitting plans for the first phase to assure constructability of the entire project. This includes the location and size of any storm retention ponds that may be required to handle runoff.
13. If the City Fire Marshal requires a secondary emergency vehicle access, it shall be included in the construction plan set and be designed to the following standards:
- A. 2-inches compacted gravel, minimum (temp. SEVA only).
 - B. 2% cross-slope, maximum.
 - C. 5% slope, maximum. Any access road steeper than 5% shall be paved or be approved by the Fire Marshal.

- D. Be 20-feet in width.
- E. Have radii that are accommodating with those needed for City Fire apparatus.

Secondary emergency vehicles accesses (SEVA's) shall be 20-feet wide, as noted. Longer secondary accesses can be built to 12-feet wide with the approval of the City of Richland Fire Marshal, however turn-outs are required at a spacing acceptable to the Fire Dept. Temporary SEVA's shall be constructed with 2-inches of compacted gravel, at a minimum. Permanent SEVA's shall be paved with 2-inches of asphalt over 4-inches of gravel, at a minimum.

14. SURVEY MONUMENT DESTRUCTION:

All permanent survey monuments existing on the project site shall be protected. If any monuments are destroyed by the proposed construction, the applicant shall retain a professional land surveyor to replace the monuments and file a copy of the record survey with the City.

- A. No survey monument shall be removed or destroyed (*the physical disturbance or covering of a monument such that the survey point is no longer visible or readily accessible*) before a permit is obtained from the Department of Natural Resources (DNR). WAC 332-120-030(2) states "It shall be the responsibility of the governmental agency or others performing construction work or other activity (including road or street resurfacing projects) to adequately search the records and the physical area of the proposed construction work or other activity for the purpose of locating and referencing any known or existing survey monuments." (RCW 58.09.130).
- B. Any person, corporation, association, department, or subdivision of the state, county or municipality responsible for an activity that may cause a survey monument to be removed or destroyed shall be responsible for ensuring that the original survey point is perpetuated. (WAC 332-120-030(2)).
- C. Survey monuments are those monuments marking local control points, geodetic control points, and land boundary survey corners. (WAC 332-120-030(3)).

When a monument must be removed during an activity that might disturb or destroy it, a licensed Engineer or Land Surveyor must complete, sign, seal and file a permit with the DNR.

It shall be the responsibility of the designing Engineer to identify the affected monuments on the project plans and include a construction note directing them to the DNR permit.

Traffic & Streets:

15. The “Skyline South” preliminary plat lies within “Zone 2” of the boundary of the South Richland Collector Street Financing Plan (RMC 12.03). This plat shall therefore be subject to the fees administered by the finance plan for any phase submitted for approval.
16. The project applicant, at the City’s request, conducted a traffic study to assess the anticipated operations at the intersection of Skyline Drive and Queensgate Drive. The study confirmed that the project’s traffic loading will not result in an unacceptable level of service at this intersection. No vehicular traffic mitigation is required for this project, except for participation in the Title 12.03 impact fee program.
17. The portions of Skyline Drive that do not have home lots fronting on it shall be constructed full-width (curb, gutter, and all other typical frontage improvements) concurrent with the construction of the plat. Sidewalks along Skyline Drive shall be installed as noted in comment #24.
18. All proposed right-of-ways that are narrower than 54-feet shall have parking restricted, as per City standards. Street signs indicating restricted parking shall be installed prior to final platting at the developer’s expense. The restricted parking areas shall be indicated on the construction plans and the final plat. Skyline Drive from the west plat boundary to the point that it widens out to 54-feet shall conform with the City’s single frontage road standard. No parking will be allowed along the south side of this narrowed section of road. No Parking signs will be installed by the developer prior to final platting.
19. Road B shall intersect with Skyline Drive at an angle that is consistent with city design guidelines and municipal code. As proposed it is intersecting at too acute of an angle.
20. The intersection of “Road A” and “Road B” at the northwest corner of the project has a centerline curve that is much sharper than the minimum city standard of 100-feet. These two roads need to intersect at an angle consistent with city design guidelines and municipal code. This may result in a redesigned preliminary plat and a change to the road alignment and lot layout.
21. The existing public right-of-way for the existing Skyline Drive appears to stop short of the western plat boundary. The developer of this project shall dedicate a public right-of-way corridor or a “right-of-way dedication easement” to the city that connects the existing Skyline Drive right-of-way corridor to this preliminary plat.

22. The tee intersection of Skyline Drive at the entrance to the Hills Mobile Home Park shall be reconstructed to be a city standard tee intersection with curb & gutter, street lights and provisions for storm drainage. This reconstruction is necessary as this intersection is becoming a city right-of-way and shall meet city standards. The guardrail on the south side of Skyline Drive at the entrance to the plat shall be removed and replaced with city standard curb, gutter & sidewalk. See comment #23 below.
23. The existing driveway at the west end of the pre-plat lying on the north side of the proposed Skyline Drive shall either be removed or realigned. As shown on the pre-plat the new Skyline Drive alignment overlaps the existing driveway to these residential lots. Driveways to the existing homes shall be constructed on to Skyline Drive to city standards.
24. Sidewalks shall be installed along all public right-of-way frontages that building lots do not front on as follows:
 - The north side of Skyline Drive from the tee intersection into Hills Mobile Home Park to the intersection with "Road B".
 - Along the south side of existing Skyline Drive from the tee intersection into Hills Mobile Home Park to the intersection with Queensgate Drive. This will also require installation of approx. 245-feet of missing curb & gutter. Provisions for storm drainage may be needed also.
 - Both sides of "Road B" from the south side of Lots 1 & 54 to the intersection with "Skyline Drive";
 - Both sides of "Skyline Drive" from the south side of Lots 35 & 36 to the intersection with "Road B". The sidewalk on the south side of Skyline Drive shall terminate at the pedestrian ramp on the west side of this tee intersection.

These sections of sidewalk shall be constructed at the same time as the adjacent roadways. The off-site sidewalk along Skyline Drive shall be constructed with plat construction.

25. The developer and his engineer shall demonstrate on the construction plans that all future driveways, sidewalks and pedestrian ramps will meet City and ADA requirements, and also provide at least 5-feet of separation between driveway and/or pedestrian ramp transitions.
26. Pedestrian ramps shall be designed to current City standard details and A.D.A. guidelines. Adequate Right-of-Way shall be provided at corners to allow for at least 1-foot of ROW behind the ped. ramp landing. Crosswalks between pedestrian ramps shall be designed to City guidelines and A.D.A. guidelines. Crosswalks at stop-controlled intersections shall have cross-slopes less than 2%. Crosswalks crossing

thru-streets shall have cross-slopes less than 5%. The road profiles shall be designed to accommodate this.

27. A ten-foot public utility easement shall be provided adjacent to all public ROW corridors at the time of final platting.
28. The vision-clearance triangle needs to be shown on all corner lots on both the construction plans and the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in a curve, it will have to be evaluated per AASHTO guidelines. This information may need to be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
29. All roads shall be constructed to provide for adequate fire truck & solid waste collection truck access & turnaround movements.
30. If the project is to be constructed in phases, all dead-end streets longer than 150-feet that will be continued later need to have temporary turnarounds built at the end of them. If the temporary turnaround is not located within the final plat an easement with a 50-foot radius will be required.

Domestic Water:

31. The closest watermain available for this project is located in Queensgate Drive to the west. It shall be the responsibility of the developer to extend a watermain to this property to serve domestic water at the time of plat construction. This water main shall be sized to adequately supply domestic water and fire flows to the proposed development.
32. Because of the lack of a secondary emergency vehicle access, fire sprinkler systems are required in all homes within this development. Developments of this size with multiple fire hydrants and residential fire sprinkler systems require a looped water system. Looping is required for redundancy in fire protection and also to prevent stagnation. For this project looping shall be accomplished by installing two parallel water pipelines from separate connections to the existing water main in Queensgate Drive.
33. The developer will be required to demonstrate that all phases are capable of delivering adequate fire flows prior to construction plans being accepted for review.
34. The fire hydrant layout shall be approved by the City Fire Marshal.
35. In accordance with Richland Municipal Code Chapter 18.16.080, an irrigation source and distribution system, entirely separate from the City's

domestic water system, shall be provided for this development.

Construction plans will not be accepted for review until adequate and viable proof of an irrigation source is made available by the developer. The designing Engineer shall submit plans for the proposed irrigation system to the Irrigation District with jurisdiction over the property at the same time that they are submitted to the City for construction review. Plans shall be reviewed and accepted by said irrigation district prior to issuance of a Right-of-Way permit by the City. Easements shall be provided on the final plat for this system where needed.

Sanitary Sewer:

36. The closest sanitary sewer available for this development is located along the Northeast border of the property, in the CID canal property. It shall be the responsibility of the developer to obtain permission, in the form of an easement favoring the City, from the CID and to extend a sewer main to this property to serve sanitary sewer at the time of plat construction.
37. The preliminary plat shows a sewer main running beneath the home at lots 32 and 33. No structures are allowed over city sewer mains. This main shall be relocated to the open Tract D to the east.
38. A 10-foot wide exclusive sanitary sewer easement shall be provided for any sewer main that is outside of the public Right-of-Way. Wider easements are required for mains that are buried deeper than 10-feet. If any manholes are located outside of the public Right-of-Way, maintenance truck access to said structure will be required.

Ground Water:

39. Groundwater or subsurface springs may be present on this site. Given the amount of groundwater encountered in this area (in both developed and undeveloped areas), the possibility of an underdrain system being required exists. Please have test pits and/or bore-holes dug by a geotech engineer, and an evaluation from said engineer prior to permit application. If an underdrain system is not required, the geohydrology report needs to state so. The requested report also needs to address any potential groundwater impacts to existing properties downslope of the proposed preliminary plat. Also, if groundwater is encountered within 5-feet of finished grade during plat construction, an underdrain system will be required.

Storm Water:

40. All construction projects that don't meet the exemption requirements outlined in Richland Municipal Code, Section 16.06 shall comply with the requirements of the Washington State Department of Ecology issued Eastern Washington NPDES Phase II Municipal Stormwater Permit. The Developer shall be responsible for compliance with the permit conditions. All construction activities subject to this title shall be required to comply with the standards and requirements set forth in the Stormwater Management Manual for Eastern Washington (SWMMEW) and prepare a Stormwater Site Plan. In addition, a Stormwater Pollution Prevention Plan (SWPPP) or submission of a completed erosivity waiver certification is required at the time of plan submittal. The City has adopted revised standards affecting the construction of new stormwater facilities in order to comply with conditions of its NPDES General Stormwater Permit program. This project, and each phase thereof, shall comply with the requirements of the City's stormwater program in place at the time each phase is engineered. The project will require detailed erosion control plans.
41. All public storm drainage systems shall have their flow rate and storage capacity designed by a professional engineer following the core elements defined in the latest editions of the Stormwater Management Manual for Eastern Washington, the current Richland municipal codes, the Phase II Municipal Stormwater Permit, and the City's "Public Infrastructure Construction Plan Requirements and Design Guidelines". The storm water calculations shall be stamped by a professional engineer and shall include a profile of the storm system showing the hydraulic grade line. The calculations should include an accurate delineation of the contributing drainage area to accurately size the stormwater facilities. Passing the storm water downhill to an existing storm system will require an analysis of the downstream storm system to determine its capability of accepting the storm water without being overwhelmed. The applicant's design shall provide runoff protection to downstream property owners.
42. If any existing storm drainage or ground water seepage drains onto the proposed site, said storm drainage shall be considered an existing condition, and it shall be the responsibility of the property developer to design a system to contain or treat and release the off-site storm drainage.
43. If there are any natural drainage ways across the proposed pre-plat, the engineered construction plans shall address it in accordance with Richland Municipal code 24.16.170 ("Easements-watercourses").
44. Any proposed storm drainage retention facilities within the boundary of the proposed preliminary plat shall not adversely affect neighboring properties.

45. Prior to or concurrent with the submittal of the first phase the developer shall provide a Geotechnical report including the percolation rate of the soils in the area of any storm retention ponds. If the project constructs a storm retention pond then the engineer will need to demonstrate that the pond will drain itself within 72 hours after the end of a storm event, and not have standing water in it longer than that. Engineering solutions are available for retention ponds that do not percolate within 72 hours.
46. The amount of post-development storm runoff from the proposed site shall not exceed the amount of pre-development runoff.
47. The parcel occupied by the stormwater basin shall be identified as a separate parcel or tract on the final plat and shall be dedicated to the City stormwater utility.
48. The developer should consider the long-term appearance of the storm basin, particularly if it will occupy a prominent location in the development. City storm pond maintenance practices consist of semi-annual vegetation trimming and silt and debris removal, so if the developer wishes for the pond to be landscaped and visually appealing, then a homeowners association should be considered for long-term landscape maintenance responsibilities. These maintenance responsibilities shall be noted on the final plat. Basins designed as detention and evaporative basins need to include plantings that will tolerate or thrive in standing water. Planting designs for areas not routinely exposed to water shall include plants that will thrive without irrigation. At a minimum the landscaping plan should be consistent with the City's intended maintenance standard as described above.
49. The developer shall be responsible for landscaping the storm pond and for its maintenance and the plantings through the one-year infrastructure warranty period. At 11 months after the final acceptance date the developer shall clean the storm system and basin of all accumulated oil, sediment, and debris. After this maintenance is completed and inspected the City will begin routine maintenance of the system and basin. The developer shall replace any plantings that have failed to survive the warranty period. The developer shall also perform trimmings required to control weeds in excess of 18-inches in height for the 12-months following the date of final plat acceptance.

Final Platting / Project Acceptance Requirements:

50. When the construction is substantially complete a paper set of "record drawings" shall be prepared by a licensed surveyor and include all

changes and deviations. Please reference the Public Works document "RECORD DRAWING REQUIREMENTS & PROCEDURES" for a complete description of the record drawing process. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.

51. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of a certificate of occupancy. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of final acceptance. Off-site ("third party") easements or right-of-ways for City infrastructure are the responsibility of the developer to obtain. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to application for final occupancy.
52. Any off-site easements or permits necessary for this project shall be obtained and secured by the applicant and supplied to the City at the time of plat construction and prior to final plat acceptance by the City.
53. Ten-foot wide public utility easements will be required on the final plat along both sides of all Right-of-Ways within the proposed plat.
54. The vision-clearance triangle needs to be shown on all corner lots on the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in a curve, it will have to be evaluated per AASHTO guidelines. This information may need to be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.
55. A note shall be added to the face of the plat that states: *"The private drives within this plat are fire lanes and parking is restricted. The required no-parking signs shall be installed by the developer where applicable."*
56. Any roads narrower than 34-feet shall have parking restricted on one side, and any roads 27-feet or narrower shall have parking restricted on both sides. Street signs indicating restricted parking shall be installed prior to final platting at the developers expense. The restricted parking areas shall be indicated on the final plats.
57. All landscaped areas within the plat that are in the public Right of Way shall be the responsibility of the homeowners to maintain.

58. The intended use and ownership of all tracts within the plat shall be noted on the final plat.
59. Property with an unpaid L.I.D. assessment towards it must be paid in full or segregated per Richland Municipal Code 3.12.095.
60. Any restricted parking areas shall be indicated on the final plats.

Planning Conditions

61. Based on known cultural resources on or near the work site, an archaeological monitor must be present for all ground disturbing activities. Consistent with guidance provided by the State's Department of Archaeology & Historic Preservation the monitor must be a professional archaeologist who meets the Secretary of the Interior's standards for prehistoric archaeology. This condition can be satisfied if the applicant uses the services of a qualified monitor from the Confederated Tribes of the Umatilla Indian Reservation ("CTUIR") to provide on-site observation of ground-disturbing work associated with this project and document any archaeological resources observed during such monitoring.

Building Conditions

62. Grading shall be permitted by the City and performed in accordance with the Geotechnical Engineering report by Whiteshield, Inc. Any specific geotechnical requirements regarding foundations and/or site slopes shall be noted on the plat along with reference to the geotechnical investigation report.
63. Site grading permitting shall be contingent upon a geotechnical report providing specific soil load-bearing capacities and lot-specific recommendations as necessary.
64. Street designations shall be as set forth in RMC 12.01.060. Prior to submitting for the final plat, applicant shall submit three (3) street name options for each the street segments.
65. Addressing brackets [] are needed on all lots and tracts in subsequent final plat submittals.
66. Prior to submitting for the final plat, provide which lots, if any, will allow construction of multi-family (duplex) dwellings. Addressing will be generated accordingly.

Fire Department

67. Wild-land areas are areas which are undeveloped, uncultivated or unfit for cultivation, or considered by the city of Richland to be wasteland or desert, or which are any combination of these descriptions and which are deemed by the

city of Richland as a hazard for wild fire purposes. The following requirements apply to buildings and structures constructed on, in, or near wild-land areas:

- a) All structures within 30 feet of a property line adjoining a wild-land area shall have noncombustible siding, soffit, and skirting on the side adjacent to the wild-land area when the wild-land area is in excess of five contiguous acres. This requirement shall not apply to interior lots of platted parcels of land and development phases whose streets are accessible and whose water system is operational.
- b) Decks and porches 36 inches or less in height shall have skirting if within 30 feet of adjacent wild-land areas when the wild-land area is in excess of five contiguous acres. Skirting shall be sufficiently constructed so as not to allow the accumulation of combustible material under the deck or porch. The area under the deck or porch shall not be used for storage.

The preliminary plat submitted has been determine to fall within the requirements listed above.

- 68. As determined by the Fire marshal, noncombustible siding or soffit material shall be required on the downhill side(s) of a structure that is within 30 feet of a grade that is 15 percent or greater in steepness. The grade shall be determined by the predominate slope on the downhill side measured from the structure or building and extending a maximum of 300 feet.

EXHIBIT LIST

- 1. Application & Related Materials
- 2. Roadway Deviation Request
- 3. Critical Areas Report
- 4. Traffic Impact Analysis
- 5. Preliminary Plat Map & Related Drawings
- 6. Public Notices & Affidavits
- 7. Environmental Checklist & Determination of Non-Significance
- 8. Agency Comments & Public Comments

Exhibit 1



City of Richland
Development Services

625 Swift Blvd. MS-35
Richland, WA 99352
(509) 942-7794
(509) 942-7764

Preliminary Plat Application

Note: A Pre-Application meeting is required prior to submittal of an application.

PROPERTY OWNER INFORMATION

☒ Contact Person

Owner: Dennis Sawby

Address: 12904 Grandview Ln., Kennewick, WA 99338

Phone: 509-308-1423

Email: dennis@sawbyconstruction.com

APPLICANT/CONTRACTOR INFORMATION (if different)

☐ Contact Person

Company: Spink Engineering

UBI#

Contact: Steve Spink

Address: 1623 Terminal Dr., Richland, WA 99354

Phone: 509-946-1581

Email: steve@spinkeng.com

SURVEYOR INFORMATION

Contact: Derek Inglesbe, Stratton Surveying

Address: 313 N. Morain, Kennewick, WA, 99336

Phone: 509-735-7364

Email: derek@strattonsurvey.com

ENGINEER INFORMATION

Contact: Steve Spink, Spink Engineering

Address: 1623 Terminal Dr., Richland, WA 99354

Phone: 509-946-1581

Email: steve@spinkeng.com

PROJECT DESCRIPTION

~~56~~ Lot town home residential subdivision.
54

PROPERTY INFORMATION

115983012926002, 122982012926002

Parcel #: 122982012925003

Zoning: R3

Legal Description: See Attached Preliminary Plat

Proposed Subdivision Name: Skyline South

Gross Plat Acreage: 9.79

Number of Lots: 56

Smallest Lot Size: 3,006

Net Lot Area Acreage: 4.46

Avg Lot Size: ~~3,469~~ 3,469

Largest Lot Size: 11,594

Domestic Water Supply: ☒ City ☐ Private Well

Sewage Disposal: ☒ City ☐ Septic

Irrigation Source: ☒ City ☐ Private Well ☐ Columbia Irrig District ☐ Kennewick Irrig District

SEPA Checklist Submitted? ☒ Yes ☐ No

Title Report (Subdivision Guarantee) Submitted? ☒ Yes ☐ No

APPLICATION MUST INCLUDE

1. Completed Application and Filing Fee
2. 6- Full Size Copies & the .pdf file
3. 1 – 11" x 17" copy of proposed survey
4. Title Report showing ownership, easements, restrictions and accurate legal description of the property involved
5. SEPA Checklist
6. Other information as determined by the Administrator

I authorize employees and officials of the City of Richland the right to enter and remain on the property in question to determine whether a permit should be issued and whether special conditions should be placed on any issued permit. I have the legal authority to grant such access to the property in question.

I also acknowledge that if a permit is issued for land development activities, no terms of the permit can be violated without further approval by the permitting entity. I understand that the granting of a permit does not authorize anyone to violate in any way any federal, state, or local law/regulation pertaining to development activities associated with a permit.

I hereby certify under penalty of perjury under the laws of the State of Washington that the following is true and correct:

1. I have read and examined this permit application and have documented all applicable requirements on the site plan.
2. The information provided in this application contains no misstatement of fact.
3. I am the owner(s), the authorized agent(s) of the owner(s) of the above referenced property, or I am currently a licensed contractor or specialty contractor under Chapter 18.27 RCW or I am exempt from the requirements of the Chapter 18.27 RCW.
4. I understand this permit is subject to all other local, state, and federal regulations.

Note: This application will not be processed unless the above certification is endorsed by an authorized agent of the owner(s) of the property in question and/or the owner(s) themselves. If the City of Richland has reason to believe that erroneous information has been supplied by an authorized agent of the owner(s) of the property in question and/or by the owner(s) themselves, processing of the application may be suspended.

Applicant Printed Name: Steve Spink

Applicant Signature: Steve Spink Date 10-9-19

SUBDIVISION

Issued By:



CHICAGO TITLE INSURANCE COMPANY

Guarantee/Certificate Number:

62241800251

CHICAGO TITLE INSURANCE COMPANY
a corporation, herein called the Company

GUARANTEES

Dennis Sawby Construction, LLC

herein called the Assured, against actual loss not exceeding the liability amount stated in Schedule A which the Assured shall sustain by reason of any incorrectness in the assurances set forth in Schedule A.

LIABILITY EXCLUSIONS AND LIMITATIONS

1. No guarantee is given nor liability assumed with respect to the identity of any party named or referred to in Schedule A or with respect to the validity, legal effect or priority of any matter shown therein.
2. The Company's liability hereunder shall be limited to the amount of actual loss sustained by the Assured because of reliance upon the assurance herein set forth, but in no event shall the Company's liability exceed the liability amount set forth in Schedule A.

Please note carefully the liability exclusions and limitations and the specific assurances afforded by this guarantee. If you wish additional liability, or assurances other than as contained herein, please contact the Company for further information as to the availability and cost.

Chicago Title Company of Washington
6416 W. Okanogan Avenue
Kennewick, WA 99336

Countersigned By:

Authorized Officer or Agent



Chicago Title Insurance Company

By:

President

Attest:

Secretary

ISSUING OFFICE:

Title Officer: Mykee Hall
Chicago Title Company of Washington
6416 W. Okanogan Avenue
Kennewick, WA 99336
Phone: 509-783-7833
Main Phone: (509)783-7833
Email: mykee.hall@ctt.com

SCHEDULE A

Liability	Premium	Tax
\$1,000.00	\$350.00	\$30.10

Effective Date: February 12, 2018 at 08:00 AM

The assurances referred to on the face page are:

That, according to those public records which, under the recording laws, impart constructive notice of matter relative to the following described property:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Title to said real property is vested in:

Dennis Sawby Construction, LLC, a Washington limited liability company

subject to the matters shown below under Exceptions, which Exceptions are not necessarily shown in the order of their priority.

END OF SCHEDULE A

EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 122982012925003, 122982012926002 and 115983012926002

Parcel A:

Lot 3, Short Plat 2925, according to the Survey thereof recorded under Auditor's File No. 2006-002922, records of Benton County, Washington.

Parcel B:

Lot 2, Short Plat 2926, according to the Survey thereof recorded under Auditor's File No. 2006-002922, records of Benton County, Washington.

SCHEDULE B

1. General and special taxes and charges, payable February 15, delinquent if first half unpaid on May 1, second half delinquent if unpaid on November 1 of the tax year (amounts do not include interest and penalties):

Year: 2018
Tax Account No.: 122982012925003
Levy Code: R3
Assessed Value-Land: \$87,900.00
Assessed Value-Improvements: \$0.00

General and Special Taxes:

Billed: \$1,195.97
Paid: \$0.00
Unpaid: \$1,195.97

2. General and special taxes and charges, payable February 15, delinquent if first half unpaid on May 1, second half delinquent if unpaid on November 1 of the tax year (amounts do not include interest and penalties):

Year: 2018
Tax Account No.: 122982012926002
Levy Code: R3
Assessed Value-Land: \$12,850.00
Assessed Value-Improvements: \$0.00

General and Special Taxes:

Billed: \$186.47
Paid: \$0.00
Unpaid: \$186.47

3. General and special taxes and charges, payable February 15, delinquent if first half unpaid on May 1, second half delinquent if unpaid on November 1 of the tax year (amounts do not include interest and penalties):

Year: 2018
Tax Account No.: 115983012926002
Levy Code: R5
Assessed Value-Land: \$335,450.00
Assessed Value-Improvements: \$0.00

General and Special Taxes:

Billed: \$4,480.69
Paid: \$0.00
Unpaid: \$4,480.69

4. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: State of Washington
Purpose: Electric Transmission and/or distribution line
Recording Date: December 11, 1948
Recording No.: 227407

SCHEDULE B

(continued)

5. Covenants, conditions, restrictions, recitals, reservations, easements, easement provisions, dedications, building setback lines, notes, statements, and other matters, if any, but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth on Badger Heights Subdivision:

Recording No: 317551

6. Exceptions and reservations contained in deed:

From: United States of America

Recorded: March 15, 1954

Recording No.: 320076

As follows:

Right-of-way not exceeding 33 feet in width, for roadway and public utilities purposes, to be located across said land or as near as practicable to the exterior boundaries

7. Exceptions and reservations contained in deed:

From: United States of America

Recorded: November 20, 1957

Recorded in Volume 3 of Deeds, page 494

As follows:

Right-of-way not exceeding 33 feet in width, for roadway and public utilities purposes, to be located across said land or as near as practicable to the exterior boundaries

8. Right of way contract, including the terms, covenants and provisions thereof:

Recorded: March 18, 1960

Recording No.: 433723

In favor of: Cascade Natural Gas Corporation, its successors and/or assigns

For: To construct, maintain, inspect, operate, protect, repair, replace, alter or remove a pipeline or pipelines for the transportation of oil, gas and the products thereof

9. Relinquishment of all existing, future or potential easements for access, light, view and air, and all rights of ingress, egress and regress to, from and between said premises and the highway or highways to be constructed on lands conveyed by deed:

To: State of Washington

Recorded: May 12, 1980

Recording No.: 819679

10. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: State of Washington

Purpose: Relocation of Transmission lines

Recording Date: May 12, 1980

Recording No.: 819680

Note: Interest of State of Washington assigned to Benton Rural Electric Association by instrument recorded November 19, 1982 under Auditor's File No. 896216

SCHEDULE B

(continued)

11. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: State of Washington
Purpose: Relocation of Transmission Lines
Recording Date: May 12, 1980
Recording No.: 819681
Affects: Portion of said premises

12. Right of way contract, including the terms, covenants and provisions thereof:

Recorded: October 7, 1981
Recording No.: 850443
In Favor of: Cascade Natural Gas Corporation, its successors and assigns
For: To construct, maintain, inspect, operate, protect, repair, replace, alter or remove a pipeline or pipelines for the transportation of oil, gas and the products thereof
Affects: The East 20 feet of Lot 3, Block 2, Badger Heights Subdivision

13. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: State of Washington and its assigns
Purpose: Electric Transmission and/or distribution line
Recording Date: February 22, 1982
Recording No.: 856919
Affects: Portion of said premises

Note: Interest of State of Washington assigned to Benton Rural Electric Association by instrument recorded June 21, 1984, under Auditor's File No. 897688

14. Relinquishment of all existing, future or potential easements for access, light, view and air, and all rights of ingress, egress and regress to, from and between said premises and the highway or highways to be constructed on lands conveyed by deed:

To: State of Washington
Recorded: November 9, 1990
Recording No.: 90-19123

15. Covenants, conditions, restrictions, recitals, reservations, easements, easement provisions, dedications, building setback lines, notes, statements, and other matters, if any, but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth on Short Plat No. 2925 and 2926:

Recording No: 2006-002922 and 2006-002923

16. Terms and conditions as contained in the Road Maintenance Agreement::

Between: Johnathan P. Vetter and Willow Wilkerson
Recorded: April 12, 2011
Auditor's File No.: 2011-010666

END OF SCHEDULE B

When recorded return to:

DENNIS SAWBY CONSTRUCTION, LLC
12904 S Grandview Lane
Kennewick, WA 99338

132095 - \$6,395.20 - AV - 12/27/2017 - Benton County

BENTON FRANKLIN TITLE CO.

STATUTORY WARRANTY DEED

BF5437

The Grantor, **WILLO E WILKERSON**, as her separate estate

for and in consideration of Ten Dollars and other valuable consideration

in hand pays, conveys, and warrants to **DENNIS SAWBY CONSTRUCTION, LLC**, a Washington Limited Liability Company

the following described real estate, situated in the County of Benton, State of Washington:

Parcel A

Lot 3, Short Plat 2925, according to the Survey thereof recorded under Auditor's File No. 2006-002922 records of Benton County, Washington.

Parcel B

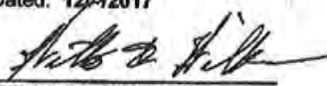
Lot 2, Short Plat 2926, according to the Survey thereof recorded under Auditor's File No. 2006-006923, records of Benton County, Washington.

Abbreviated Legal: **LOT 3, SP 2925 & LOT 2, SP 2926**

Tax Parcel Numbers(s): **1-2298-201-2925-003; 1-2298-201-2926-002;**
1-1598-301-2926-002

SUBJECT TO covenants, conditions, restrictions, reservations, easements and agreements of record, if any.

Dated: **12/27/2017**

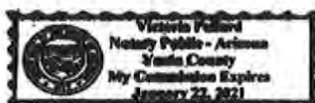


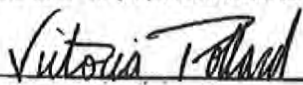
WILLO E WILKERSON

STATE OF **Arizona**
COUNTY OF **Yuma**) ss.

I certify that I know or have satisfactory evidence that **WILLO E WILKERSON** is/are the person who appeared before me, and said person acknowledged that she signed this instrument and acknowledged it to be her free and voluntary act for the uses and purposes mentioned in this instrument.

Dated: **12/27/2017**





Notary Public in and for the State of **Arizona**
Residing at **Yuma**
My appointment expires: **01/22/2021**

AFTER RECORDING RETURN TO:
STATE OF WASHINGTON
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION BUILDING KF-01
OLYMPIA, WA 98504

VOL 538 PAGE 1951
90-19123

FILED BY

Nov 9 3 37 PM '90

BOBBIE GACNER
BENTON COUNTY AUDITOR

QUITCLAIM DEED

IN THE MATTER OF SR 82, Goose Gap Road to Road 68 Interchange Vicinity

KNOW ALL MEN BY THESE PRESENTS, that the STATE OF WASHINGTON, for and in consideration of FIFTY AND NO/100 DOLLARS (\$50.00), hereby conveys and quitclaims unto NOAH L. WILKERSON AND WILLO E. WILKERSON, husband and wife, all right, title, and interest under the jurisdiction of the Department of Transportation, in and to the following described real property situated in Benton County, State of Washington:

That part of Lot 3, Block 2, BADGER HEIGHTS SUBDIVISION, according to the plat thereof recorded in Volume 5 of Plats, page 11, records of Benton County, lying Northwesterly of a line described as BEGINNING AT A POINT opposite Highway Engineer's Station LE 1233+00 on the LE Line Survey of SR 182, Goose Gap Road to Road 68 Interchange Vicinity, and 240 feet Northwesterly therefrom; thence Northeasterly to a point opposite Highway Engineer's Station LE 1235+00 on said LE Line Survey and 190 feet Northwesterly therefrom; thence Northeasterly parallel with said LE Line Survey to a point opposite Highway Engineer's Station LE 1237+00 thereon and the END of this line description.

The grantees herein, their successor or assigns, shall have no right of ingress and egress to, from, and between said SR 82, and the lands herein conveyed; nor shall the grantees herein, their successors or assigns, be entitled to compensation for any loss of light, view, and air occasioned by the location, construction, maintenance, or operation of said highway.

The specific details concerning all of which may be found on sheet 8 and 9 of that certain plan entitled SR 82, Goose Gap Road to Road 68 Interchange Vicinity, now of record and on file in the office of the Secretary of Transportation at Olympia, Washington, bearing date of approval December 29, 1978.

The grantee as part consideration herein does hereby agree to comply with all civil rights and anti-discrimination requirements of RCW Chapter 49.60, as to the lands herein described.

The lands herein described are not required for State highway purposes and are conveyed pursuant to the provisions of RCW Chapter 47.12.063.

Please return to:

STATE OF WASHINGTON
Department of Transportation KF-01
Land Management Office
Transportation Building
Olympia, Washington 98504

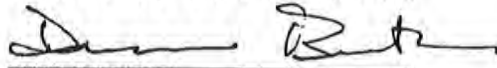
BENTON COUNTY
EXCISE TAX PAID

EXCISE TAX PAID

9300000004

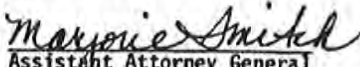
Dated at Olympia, Washington, this 5th day of November,
1990

STATE OF WASHINGTON

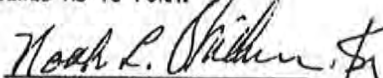


DUANE BERENTSON
Secretary of Transportation

APPROVED AS TO FORM:

By: 
Assistant Attorney General

REVIEWED AS TO FORM:

By: 
Noah L. Wilkerson or
Willo E. Wilkerson

STATE OF WASHINGTON)

): ss

County of Thurston)

On this 5th day of November, 1990, before me personally appeared DUANE BERENTSON, known to me as the Secretary of Transportation, Washington State Department of Transportation, and executed the foregoing instrument, acknowledging said instrument to be the free and voluntary act and deed of the State of Washington, for the uses and purposes therein mentioned, and on oath stated that he is authorized to execute said instrument.

Given under my hand and official seal the day and year last above written.




Notary Public in and for the State
of Washington, residing at Olympia

My Commission Expires 5/30/92

10656 et al

819680

EASEMENT FOR

Transfer to Rural Electrical
Association of Benton County

FA No. I-182-3(7)101
55142C
Parcel: 5-04307

In the Matter of SR 182, Goose Gap Road to Road 68 Interchange Vicinity

KNOW ALL MEN BY THESE PRESENTS, that the grantors N. L. Wilkerson and Willo E. Wilkerson, also shown of record as Willow Wilkerson, husband and wife

for and in consideration of ten (\$10.00) dollars and other valuable considerations

grant and convey unto the STATE OF WASHINGTON and its assigns, an easement over, under, upon and across the hereinafter described lands for the purpose of relocation of transmission lines.

Said lands being situated in Benton County, State of Washington, and described as follows:

All that portion of the hereinafter described Parcel "A" lying within a 20 foot strip of land being northwesterly, parallel, and contiguous to a line beginning at a point 190 feet northwesterly and opposite Highway Engineer Station (hereinafter referred to as HES) LE 1235+00 on the LE line centerline of SR 182, Goose Gap Road to Road 68 Interchange Vicinity; thence northeasterly parallel with said LE line centerline to a point opposite HES LE 1237+00; thence northeasterly to a point 250 feet northwesterly and opposite HES LE 1239+00; thence northeasterly to a point 300 feet northwesterly and opposite HES LE 1246+68.16; said strip extending from a line projected northwesterly at right angles to the centerline of said LE line centerline from HES LE 1235+25 northeasterly to a line projected northwesterly at right angles from HES LE 1240+00.

PARCEL "A": That portion of the southeast quarter of southwest quarter in Section 15, Township 9 North, Range 28 east, W.M., lying south and west of Columbia Irrigation District Canal.

The lands herein described contain an area of 1.04 acre, more or less, the specific details concerning all of which are to be found in that certain map of definite location now of record and on file in the office of the Secretary of Transportation at Olympia and bearing date of approval December 29, 1978, revised April 18, 1980.

It being understood and agreed that upon completion of construction, the easement rights granted herein are to be transferred to the Rural Electric Association of Benton County by an appropriate instrument to be placed of record and that thereafter the rights of the State shall cease and terminate.

The undersigned elects to surrender possession of the rights herein conveyed on the date of the State's acceptance of this instrument.

MAY 12 3 35 PM '80

394

INDEXED BY
CHECKED BY



Parcel No. 5-04307

It is understood and agreed that the delivery of this Easement is hereby tendered and that the terms and obligations hereof shall become binding upon the State of Washington unless and until accepted and approved hereon in writing for the Washington State Department of Transportation by its Secretary or his duly authorized representative.

Accepted and Approved:

Dated this 25th day of March 1980

Date

4/18/80

WASHINGTON STATE
Department of Transportation

By

Title

CHIEF RIGHT OF WAY AGENT

(INDIVIDUAL ACKNOWLEDGEMENT FORM)

STATE OF WASHINGTON

County of Benton

On this 25th day of March 1980
Willo E. Wilkerson

before me personally appeared N. L. Wilkerson and

to me known to be the individuals described in and who executed the foregoing instrument, and acknowledged that they signed and sealed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal the day and year last above written.



Notary Public in and for the State of Washington

Residing at Yakima

(CORPORATION ACKNOWLEDGEMENT FORM)

STATE OF

County of

On this day of

before me personally appeared

to me known to be the of the corporation that executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

Given under my hand and official seal the day and year last above written.

Notary Public in and for the State of

Residing at

EASEMENT FOR

Transfer to REA, Benton County

FROM

N. L. Wilkerson, et ux

TO

STATE OF WASHINGTON

IN

Benton

County

SR 182, Goose Gap Road to Road 68

Interchange Vicinity

Parcel No. 5-04307

FORM 202-102
DOT REVISED 10/77



Return Name and Address:

CASCADE TITLE CO.
8203. W. Quinault
Kenn. WA 99334

190521

CASCADE TITLE
PLEASE PRINT OR TYPE INFORMATION:

114.

Document Title:

Road Maintenance Agreement.

Grantor(s)(Last name first, first name, middle initials):

1. Jonathan P. Vetter
2. Will O Wilkerson
- 3.

Additional names on page _____ of document.

Grantee(s)(Last name first, first name, middle initials):

1. Jonathan P. Vetter
2. Willow Wilkerson.
- 3.

Additional names on page _____ of document.

Legal description (abbreviated: i.e., lot, block, plat or section, township, range, qtr./qtr.)

Lot 1 Short Plat 2925.

Additional legal is on page _____ of document.

Reference Number(s) of documents assigned or released:

Additional numbers on page _____ of document.

Assessor's Property Tax Parcel/Account Number: (MUST HAVE 15 DIGITS)

Property Tax Parcel ID is not yet assigned.

Additional parcel numbers on page _____ of document.

The Auditor/Recorder will rely on the information provided on the form. The staff will not read the document to verify the accuracy or completeness of the indexing information.

I am requesting an emergency nonstandard recording for an additional fee as provided in RCW 36.18.010. In understand that the recording processing requirements may cover up or otherwise obscure some part of the text of the original document.

Vuxnia Gallegos for Rachael Hannah.
Signature of Requesting Party

ROAD MAINTENANCE AGREEMENT

CASCADE TITLE CO.

R190521KJS.

113

Agreement made this 5 day of April 2011 by and between
Jonathan P. Vetter, Willo Wilkerson

RECITALS

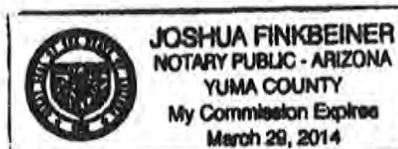
1. The undersigned parties are currently served by a road as delineated on
Lot 1, Short Plat 2925
records of Benton County, Washington, serving the following lots:
Lot 2 Short Plat 2925
Lot 3 Short Plat 2925
Lot 1 Short Plat 2926
Lot 2 Short Plat 2926
2. Said road is currently a gravel road in a good state of maintenance and repair.
3. The parties hereto desire to share in the maintenance of said road and as such, it is hereby agreed as follows:
 - A. All parties hereto shall equally share the expense or labor of maintaining or repairing said road in order to keep it in a good and passable state of repair and condition.
 - B. All parties hereby covenant to work together to establish rules and regulations if necessary with respect to the maintenance, repair, sharing and/or regulation of road use.
 - C. In the event of a dispute hereunder or in the event of suit to enforce rights hereunder, the prevailing party shall be entitled to costs and reasonable attorney fees.
 - D. This agreement shall inure to and be binding upon the heirs, assigns, personal representatives and successors of the parties and shall run with the land being benefited thereby or subservient thereto.

DATED THIS 5 DAY OF April 2011.

[Signature]
Jon Vetter

Willo Wilkerson personally appeared before me
this 5th day of April, 2011.

[Signature]
Notary Public

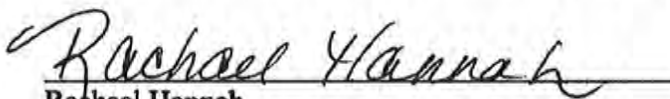


STATE OF WASHINGTON)

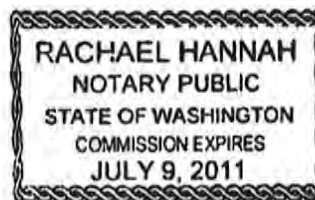
COUNTY OF BENTON)

On this day personally appeared before me JONATHAN P. VETTER to me known to be the individual(s) described in and who executed the within and foregoing instrument and acknowledged to me that he signed the same as his free and voluntary act and deed for the purposes therein mentioned.

Given under my hand and official seal this 11th day of April, 2011



Rachael Hannah
Notary Public in and for the State of Washington,
Residing at Kennewick
My Commission Expires: 7-9-11



ATTACHED TO ROAD MAINTENANCE AGREEMENT

320076

4-1222
(Jan. 1953)
Washington 0686

THE UNITED STATES OF AMERICA, TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

WHEREAS, A Certificate of the Land Office at Spokane, Washington is now deposited in the Bureau of Land Management, whereby it appears that full payment has been made by the claimant William Thomas Vestal pursuant to the provisions of the Act of Congress approved June 1, 1938 (52 Stat. 609), entitled "An Act to provide for the purchase of public lands for home and other sites," and the acts supplemental thereto, for the following-described land:

Willamette Meridian, Washington.

T. 9 N., R. 28 E.,

Sec. 22, NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$.

The area described contains 2.50 acres, according to the Official Plat of the Survey of the said Land, on file in the Bureau of Land Management:

NOW KNOW YE, That the UNITED STATES OF AMERICA, in consideration of the premises, and in conformity with the several Acts of Congress in such case made and provided, HAS GIVEN AND GRANTED, and by these presents DOES GIVE AND GRANT unto the said claimant and to the heirs of the said claimant the Tract above described; TO HAVE AND TO HOLD the same, together with all the rights, privileges, immunities, and appurtenances, of whatsoever nature, thereunto belonging, unto the said claimant and to the heirs and assigns of the said claimant forever; subject to any vested and accrued water rights for mining, agricultural, manufacturing,

or other purposes, and rights to ditches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local customs, laws, and decisions of courts; and there is reserved from the lands hereby granted, a right-of-way thereon for ditches or canals constructed by the authority of the United States. Excepting and reserving, also, to the United States, all coal, oil, gas, and other mineral deposits, in the land so patented, together with the right to prospect for, mine, and remove the same according to the provisions of said Act of June 1, 1938. This patent is subject to a right-of-way not exceeding 33 feet in width, for roadway and public utilities purposes, to be located across said land or as near as practicable to the exterior boundaries.

Excepting and reserving, also to the United States, pursuant to the provisions of the Act of August 1, 1946 (60 Stat. 755), all uranium, thorium, or any other material which is or may be determined to be peculiarly essential to the production of fissionable materials, whether or not of commercial value, together with the right of the United States through its authorized agents or representatives at any time to enter upon the land and prospect for, mine, and remove the same.

IN TESTIMONY WHEREOF, the undersigned authorized officer of the Bureau of Land Management, in accordance with the provisions of the Act of June 17, 1948 (62 Stat. 476), has, in the name of the United States, caused these letters to be made Patent, and the Seal of the Bureau to be hereunto affixed.

Given under my hand, in the District of Columbia, the FIFTH day of FEBRUARY in the year of our Lord one thousand nine hundred and FIFTY-FOUR and of the Independence of the United States the one hundred and SEVENTY-EIGHTH.

Patent No. 1142738

(Seal)
U. S. Department of the Interior
Bureau of Land Management

For the Director, Bureau of Land Management.

By Rose M. Beall, Acting Chief, Patents Section

Filed for record MAR 1 8 1960
Record of

CH 107

VERNER MILLER, County Auditor

433723

RIGHT OF WAY CONTRACT

Line No. _____
R/W No. _____
State Washington
County Benton
Rods 20
W. O. No. _____

For and in consideration of the sum of 250.00 Dollars cash, the receipt of which is hereby acknowledged, and in addition thereto, an aggregate sum equal to 250.00 Dollars per lineal rod of pipeline constructed under the terms hereof, to be paid at the time and in the manner hereinafter set forth, _____

John Walter Vanderbeek and Barbara Yoder Vanderbeek
1609 Davison Street

whose address is Richland, Washington

hereinafter referred to as Grantors, (whether one or more), do hereby grant and convey unto CASCADE NATURAL GAS CORPORATION, its successors and assigns, hereinafter referred to as Grantee, the right to select the route for and construct, maintain, inspect, operate, protect, repair, replace, alter and remove a pipeline or pipelines for the transportation of oil, gas and the products thereof, on, over and through the following described lands, of which Grantors warrant that they are the owners in fee simple, situated in the County of

Benton : State of Washington to-wit:

That portion of the southeast quarter of the southwest quarter, section 15, township 9 north, range 28 east, W. M., in Benton County, Washington, lying south and west of Columbia Irrigation District canal right of way.

Pipe to be installed approximately 650 feet west of center section line of section 15, township 9 north, range 28 east, W. M. through a right of way 20 (twenty) feet wide and parallel to the center section line previously described.

Section 15, Township 9 north, Range 28 east, together with the right of ingress and egress to and from said line or lines, or any of them, for the purposes aforesaid; hereby releasing and waiving as to Grantee, all rights under and by virtue of the homestead exemption laws of said state.

Grantee agrees that after it has completed its survey of the route for its pipeline and has established the route thereof and before pipeline construction is commenced, it will pay Grantors, in proportion to Grantors' respective interests, a total sum equivalent to 250.00 Dollars per lineal rod of pipeline so surveyed and established.

Grantors shall have the right to use and enjoy the above described premises, except as to the rights herein granted; and Grantors agree not to build, create or construct or to permit to be built, created or constructed any obstruction, building, engineering works, or other structures over or that would interfere with said pipeline or lines or Grantee's rights hereunder. Grantee hereby agrees to pay any damages which may arise to growing crops, pasturage, timber, fences or buildings of said Grantors from the exercise of the rights herein granted; said damages, if not mutually agreed upon, shall be ascertained and determined by three disinterested persons, one to be appointed by the undersigned Grantors, their successors, heirs or assigns, one to be appointed by the Grantee, its successors or assigns, and the third by the two so appointed, and the written award of such three persons shall be final and conclusive.

Should more than one pipeline be laid under this grant, at any time, an additional consideration, calculated on the same basis per lineal rod as specified above, shall be paid for each such line laid.

It is agreed that the obligation of Grantee to make any payment hereunder shall be satisfied by delivery of such payment to any of the Grantors for the benefit of all Grantors.

Any pipeline constructed by Grantee across lands under cultivation shall, at the time of construction thereof, be buried to such depths as will not interfere with such cultivation.

The Grantee shall have the right to assign this grant in whole or in part including, without limitation, the right of assignment under any presently outstanding or future mortgage or mortgages given to secure any bonds or other bona fide indebtedness of the Grantee.

It is agreed that this grant covers all the agreements between the parties hereto and that no representations or statements, verbal or written, have been made, modifying or adding to or changing the terms of this agreement.

The terms, conditions and provisions of this contract shall extend to and be binding upon the heirs, executors, administrators, personal representatives, successors and assigns of the parties hereto.

TO HAVE AND TO HOLD said right-of-way and easement unto said Grantee, its successors and assigns until such first pipeline be constructed and so long thereafter as a pipeline is maintained thereon.

IN WITNESS whereof the Grantors herein have executed this conveyance this 7th day of March, 1960

COUNTY EXCISE TAX

WITNESSES:

John Walter Vanderbeek 1/1/60
Barbara Yoder Vanderbeek 3/1/60

Paid \$ 2.50 Date 3-18-60 (Seal)

Interest Paid \$ _____ (Seal)

Rec. No. 15754 (Seal)

C. W. NESSLY
Benton County Treasurer (Seal)

By W. W. S. Deputy Treasurer

D-10656 et al

819681

EASEMENT FOR

Transfer to Bonneville Power
Administration

55142C
FA No. I-182-3(7)101
Parcel 5-04307

In the Matter of SR 182, Goose Gap Road to Road 68 Interchange Vicinity

KNOW ALL MEN BY THESE PRESENTS, that the grantor s N. L. Wilkerson and Willo E. Wilkerson,
also shown of record as Willow Wilkerson, husband and wife

for and in consideration of ten (\$10.00) dollars and other valuable considerations

grant and convey unto the STATE OF WASHINGTON and its assigns, an easement over, under, upon and
across the hereinafter described lands for the purpose of relocation of transmission lines

Said lands being situated in
follows:

Benton

County, State of Washington, and described as

All that portion of the hereinafter described Parcel "A" lying within the following
described tract:

Beginning at a point 110 feet northwesterly and opposite Highway Engineers Station
(hereinafter referred to as HES) W-TF 11+20 on the W-TF line centerline of SR 182,
Goose Gap Road to Road 68 Interchange Vicinity; thence South 73°40'11" West 119.95
feet; thence North 66°07'00" West 171.13 feet; thence North 61°57'00" East 2392.46
feet; thence South 35°51'00" West, 461.08 feet; thence South 70°00'24" West 203.08
feet; said point also being 300 feet northwesterly and opposite HES LE 1246+68.16 on
the LE line centerline of said project; thence southwesterly to a point 250 feet
northwesterly and opposite HES LE 1239+00; thence southwesterly to a point 190 feet
northwesterly and opposite HES LE 1237+00; thence southwesterly parallel with said
LE centerline to a point opposite HES LE 1235+00; thence southwesterly to a point
240 feet northwesterly and opposite HES LE 1233+00; thence southwesterly to the
point of beginning

PARCEL "A": That portion of the southeast quarter of southwest quarter in Section
15, Township 9 North, Range 28 East, W.M., lying south and west of
Columbia Irrigation District Canal, AND

✓ Lot 1, Block 1, Badger Heights, according to Plat thereof recorded in
Volume 5, page 11 of plats, records of Benton County; situate in the
County of Benton, State of Washington, AND

✓ Lot 4, Block 2, Badger Heights Subdivision, according to plat thereof
recorded in Volume 5 of plats, page 11, records of Benton County,
State of Washington, AND

✓ Lot 5, Block 2, Badger Heights Subdivision, according to plat thereof
recorded in Volume 5 of plats, page 11, records of Benton County, State
of Washington.

The lands herein described contain an area of 3.99 acres, more or less, the specific
details concerning all of which are to be found in that certain map of definite location
now of record and on file in the office of the Secretary of Transportation at Olympia
and bearing date of approval December 29, 1978, revised April 18, 1980.

It being understood and agreed that, upon completion of construction, the easement
rights granted herein are to be transferred to the Bonneville Power Administration by
an appropriate instrument to be placed of record and that thereafter the rights of the
State shall cease and terminate.

The undersigned elects to surrender possession of the rights herein conveyed on the
date of the State's acceptance of this instrument.

EX-12 3 20 1980

394

INDEXED BY 
CHECKED BY _____

It is understood and agreed that the delivery of this Easement is hereby tendered and that the terms and obligations hereof shall not become binding upon the State of Washington unless and until accepted and approved hereon in writing for the Washington State Department of Transportation by its Secretary or his duly authorized representative.

Accepted and Approved:

Dated this 25th day of March 1980

Date 4/14/80
WASHINGTON STATE
Department of Transportation
By: [Signature]
Title: CHIEF ENGINEER OF HIGHWAYS

[Signature]
[Signature]

(INDIVIDUAL ACKNOWLEDGEMENT FORM)

STATE OF WASHINGTON
County of Benton

On this 25th day of March 1980 before me personally appeared N. L. Wilkerson and Willo E. Wilkerson to me known to be the individual s described in and who executed the foregoing instrument, and acknowledged that they signed and sealed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Given Under my hand and official seal the day and year last above written.



[Signature]
Notary Public in and for the State of Washington
Residing at Yakima

(CORPORATION ACKNOWLEDGEMENT FORM)

STATE OF
County of

On this day of before me personally appeared to me known to be the of the corporation that executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.
Given under my hand and official seal the day and year last above written.

Notary Public in and for the State of
Residing at

8★J
9★H

EASEMENT FOR
Transfer to Bonneville Power Admin.
FROM
N. L. Wilkerson, et ux
TO
STATE OF WASHINGTON
IN
Benton County

SR 102, Goose Gap Rd. to Rd. 68
Interchange Vic.
Parcel No. 5-04307
FORM 288-102
DOT REVISED 10/77



CHICAGO TITLE

COMPANY OF WASHINGTON

62241800251

Remit Payment To:

Chicago Title Company of Washington

1111 3rd Avenue, Suite320

Seattle, WA 98101

Phone: (509)783-7833 Fax: (509)735-6297

Due upon receipt

INVOICE

Dennis Sawby Construction LLC

82913 Summit View Drive

Kennewick, WA 99338

Order Number: 62241800251

Invoice Date: February 15, 2018

Invoice Number: 62241800251-1

Operation: 02150.622451

Buyer/Borrower(s): Dennis Sawby Construction, LLC

Title Officer: Mykee Hall

Property Description:

612 & 638 Skyline Dr., Richland, WA 99352

Lot(s): 3 2 Short Plat No. 2925 & Short Plat No. 2926

Policies Applied For: Subdivision Guarantee/Certificate

1,000.00

Bill Code	Description	Amount
TP	Loan Policy (Coverage \$1,000.00) (Subdivision Guarantee/Certificate)	350.00 *
Subtotal:		\$ 350.00
Tax:		\$ 30.10
Invoice total amount due:		\$ 380.10

**Thank you for the opportunity to serve you.
Please return a copy of this invoice with your payment**

10-106561111
819679

WARRANTY DEED

I-182-3(7)101
55142C
Parcel 5-04307

In the Matter of State Route SR 182, Goose Gap Road to Road 68 Interchange Vicinity

KNOW ALL MEN BY THESE PRESENTS, That the Grantors N. L. Wilkerson and Willo E. Wilkerson, also shown of record as Willow Wilkerson, husband and wife,

for and in consideration of the sum of ten (\$10.00) - - - - - Dollars,
and other valuable consideration
hereby convey and warrant to the STATE OF WASHINGTON, the following described real estate situated in Benton County, in the State of Washington, to the same extent and purpose as if the rights herein granted had been acquired under Eminent Domain statute of the State of Washington:

All that portion of the hereinafter described Parcel "A" lying between the following described Line 1 and Line 2.

LINE 1: Beginning at a point 191.70 feet northeasterly and opposite Highway Engineers Station (hereinafter referred to as HES) W-TF 17+66.69 on the W-TF line centerline of SR 182, Goose Gap Road to Road 68 Interchange Vicinity; thence northeasterly to a point 213.40 feet northeasterly and opposite HES W-TF 16+49.72; thence southeasterly to a point 84.68 feet northeasterly and opposite HES W-TF 16+28.24; thence northeasterly to a point 90 feet northerly and opposite HES W-TF 14+50; thence northeasterly to a point 110 feet northwesterly and opposite HES W-TF 11+20; thence northeasterly to a point 240 feet northwesterly and opposite HES LE 1233+00 on the LE line centerline of said project; thence northeasterly to a point 190 feet northwesterly and opposite HES LE 1235+00; thence northeasterly parallel with said LE line centerline to a point opposite HES LE 1237+00; thence northeasterly to a point 250 feet northwesterly and opposite HES LE 1239+00; thence northeasterly to a point 300 feet northwesterly and opposite HES LE 1246+68.16 and end of Line 1 description.

LINE 2: Beginning at a point 80 feet southeasterly and opposite Highway Engineer's Station (hereinafter referred to as HES) TF-E 11+00 on the TF-E line centerline of SR 182, Goose Gap Road to Road 68 Interchange Vicinity; thence northeasterly parallel with said centerline to a point opposite HES TF-E 14+31.69; thence northeasterly to a point 110 feet southeasterly and opposite HES TF-E 15+57.38; thence northeasterly parallel with said centerline to a point opposite HES TF-E 21+57.41; thence northeasterly to a point 150 feet southeasterly and opposite HES LE 1234+00 on the LE line centerline of said project; thence northeasterly to a point 100 feet southeasterly and opposite HES LE 1236+00; thence northeasterly parallel with said LE line centerline to a point opposite HES LE 1238+00; thence northeasterly to a point 180 feet southeasterly and opposite HES LE 1240+15; thence northeasterly to a point 180.27 feet southeasterly and opposite HES LE 1240+28.96; thence northeasterly to a point 182.84 feet southeasterly and opposite HES LE 1241+65.03; thence northeasterly to a point 180 feet southeasterly and opposite HES LE 1244+40 and the end of Line 2 description.

PARCEL "A": TRACT A: That portion of the southeast quarter of southwest quarter in Section 15, Township 9 North, Range 28 East, W.M., lying south and west of Columbia Irrigation District Canal.

TRACT B: Lot 1, Block 1, Badger Heights, according to Plat thereof recorded in Volume 5, page 11 of plats, records of Benton County; situate in the County of Benton, State of Washington.

TRACT C: Lot 4, Block 2, Badger Heights Subdivision, according to plat thereof recorded in Volume 5 of plats, page 11, records of Benton County, State of Washington.

TRACT D: Lot 5, Block 2, Badger Heights Subdivision, according to plat thereof recorded in Volume 5 of plats, page 11, records of Benton County, State of Washington.

Also, the grantors herein convey and grant to the State of Washington all rights of ingress and egress (including all existing, future or potential easements of access, light, view and air) to, from and between SR 182, Goose Gap Road to Road 68 Interchange Vicinity and the remainder of said Parcel "A". EXCEPT that the grantors herein reserve for themselves their heirs, successors or assigns, the right of reasonable access to the AL line cul-de-sac.

The lands herein described contain an area of 5.04 acres, more or less, the specific details concerning all of which are to be found in that certain map of definite location now of record and on file in the office of the Secretary of Transportation and bearing date of approval December 29, 1978, revised, April 18, 1980.

The undersigned hereby agrees to surrender possession of the lands herein conveyed 90 days after receipt of payment.

BENTON COUNTY
EXCISE TAX-PAID

MAY 12 8 35 AM '80

CHECKED BY

89028

MAY 12 1980

5-04307

It is understood and agreed that the delivery of this deed is hereby tendered and that the terms and obligations hereof shall not become binding upon the State of Washington unless and until accepted and approved hereon in writing for the State of Washington, Department of Transportation, by its Secretary or his duly authorized representative.

Dated this 25th day of March 1980

Accepted and approved:

Date 4/14/80

STATE OF WASHINGTON
DEPARTMENT OF TRANSPORTATION

By [Signature]
Title CHIEF HIGHWAY AGENT

(Individual acknowledgment form)

STATE OF WASHINGTON.

County of Benton

ss.

I, the undersigned, a notary public in and for the State of Washington, hereby certify that on this 25th day of March 1980 personally appeared before me

N. L. Wilkerson and Willo E. Wilkerson

to me known to be the individuals described in and who executed the foregoing instrument, and acknowledged that they signed and sealed the same as their free and voluntary act and deed, and for the purposes therein mentioned.

Given under my hand and official seal the day and year last above written.



[Signature]
Notary Public in and for the State of Washington,

Residing at Yakima

(Corporation acknowledgment form)

STATE OF WASHINGTON.

County of _____

ss.

On this _____ day of _____ before me personally appeared _____ and _____

to me known to be the _____ and _____ of the corporation that executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that _____ authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

Given under my hand and official seal the day and year last above written.

Notary Public in and for the State of Washington.

Residing at _____

8★1 3★G

WARRANTY DEED

FROM

N. L. Wilkerson, et ux

TO

STATE OF WASHINGTON

IN

Benton

County

(SH No.)

State Route 182, Goose Gap Road to

road 68 Interchange Vicinity

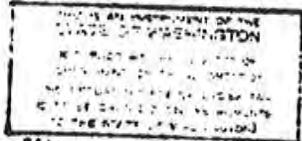
5-01301

856919

EASEMENT FOR
TRANSMISSION LINE

IN THE MATTER OF SR 182, Goose Gap Road to Road 68 Interchange Vicinity

KNOW ALL MEN BY THESE PRESENTS, that the grantors
N. L. Wilkerson and Willo E. Wilkerson,
also shown of record as Willow Wilkerson,
husband and wife



for and in consideration of monies previously paid and other benefits

grant and convey unto the STATE OF WASHINGTON and its assigns, an easement over, under, upon and across the hereinafter described lands for the purpose of entering and erecting, maintaining, repairing, rebuilding, operating and patrolling one or more lines(s) of electric power transmission structures and appurtenant signal lines, including the right to erect such poles, transmission structures, wires, cables and appurtenances as are necessary thereto, together with the present and future right to clear said right of way and keep the same clear of brush, timber, structures, and fire hazards, provided that fire hazards shall not be interpreted to include any growing crops other than trees. Said lands being situated in Benton County, State of Washington, and described as follows:

All that portion of the hereinafter described Parcel "A" lying within the following described tract:

Beginning at a point 110 feet northwesterly and opposite Highway Engineers Station (hereinafter referred to as HES) W-TF 11+20 on the W-TF line centerline of SR 182, Goose Gap Road to Road 68 Interchange Vicinity; thence South 73°40'11" West 119.95 feet; thence North 66°07'00" West 171.13 feet; thence North 61°57'00" East 2392.46 feet; thence South 35°51'00" West, 461.08 feet; thence South 70°00'24" West 203.08 feet; said point also being 300 feet northwesterly and opposite HES LE 1246+68.16 on the LE line centerline of said project; thence southwesterly to a point 250 feet northwesterly and opposite HES LE 1239+00; thence southwesterly to a point 190 feet northwesterly and opposite HES LE 1237+00; thence southwesterly parallel with said LE centerline to a point opposite HES LE 1235+00; thence southwesterly to a point 240 feet northwesterly and opposite HES LE 1233+00; thence southwesterly to the point of beginning.

PARCEL "A": That portion of the southeast quarter of southwest quarter in Section 15, Township 9 North, Range 28 East, W.M., lying south and west of Columbia Irrigation District Canal, AND

FILED BY

FEB 22 9 47 AM '82

VERNER MILLER, AUDITOR
DEPUTY

RECORDED IN VOL. 420

Lot 1, Block 1, Badger Heights, according to Plat thereof recorded in Volume 5, page 11 of plats, records of Benton County; situate in the County of Benton, State of Washington, AND

Lot 4, Block 2, Badger Heights Subdivision, according to plat thereof recorded in Volume 5 of plats, page 11, records of Benton County, State of Washington, AND

Lot 5, Block 2, Badger Heights Subdivision, according to plat thereof recorded in Volume 5 of plats, page 11, records of Benton county, State of Washington.

The lands herein described contain an area of 3.99 acres, more or less, the specific details concerning all of which are to be found in that certain map of definite location now of record and on file in the office of the Secretary of Transportation, State of Washington, at Olympia and bearing date of approval December 29, 1978, revised August 14, 1981

This conveyance is intended to supplement and further define the terms and conditions of that certain easement granted to the State of Washington and recorded May 12, 1980 under Auditor's File Number 819681, records of Benton County.

It is understood and agreed that the delivery of this easement is hereby tendered and that the terms and obligations hereof shall not become binding upon the State of Washington unless and until accepted and approved hereon in writing for the Washington State Department of Transportation by its Secretary or his duly Authorized representative.

Accepted and Approved:

Date: 2-16-82

WASHINGTON STATE

Department of Transportation

By: *[Signature]*

Title: CHIEF RIGHT OF WAY AGENT

Dated this 25 day of January 1982

*[Signature]**[Signature]**[Signature]**[Signature]*

RIGHT OF WAY CONTRACT

For and in consideration of the sum of Ten (\$10.00) Dollars and the receipt of which is hereby acknowledged, under

WESTON : State of WASHINGTON to-wit:

96989
5-77
DEKALB COUNTY
EXCISE TAX PAID

500

EXHIBIT "A"

PROPERTY DESCRIPTION: Lot 3, Block 2, Badger Heights Subdivision, according to the Plat thereof recorded in Volume 5 of Plats, page 11, in Benton County, Washington, EXCEPT that portion conveyed to the State of Washington for S.R. 182.

EASEMENT LOCATION: The East 30 feet of the above described property; together with the right during temporary periods Grantee may use such portions of said property along and adjacent to said right of way as may be reasonably necessary in connection with construction of its facilities.

Additional terms which are a part of this Right of Way Contract:

1. Grantee will exercise caution and assume the immediate liability of repairing an existing 14" water pipe should the same be disrupted.
2. Grantee agrees to restore the adjacent roadway, which is situated within the easement location, with crushed gravel.

administrators, personal representatives, successors and assigns of the parties hereto.

TO HAVE AND TO HOLD said right-of-way and easement unto said Grantee, its successors and assigns until such first pipeline be constructed and so long thereafter as a pipeline is maintained thereon.

IN WITNESS whereof the Grantors herein have executed this conveyance this 22nd day of September, 19 81

WITNESSES:

_____	<u>William A. Johnson</u>	(Seal)
_____	<u>Dorinda Galante</u>	(Seal)
_____		(Seal)

Transmission Ln Esmt Dec 11 1948 9:34
Nov 29 1948 \$400.00 .55 Federal
A. S. Murray and Elizabeth Murray, h & w, naat
to United States of America.

227383 to 227406 ng
227407

Form 52.

That ptn of North 150' of Govt Lot 3 of Section 22 and the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ and Govt Lot 7 of Sec 15-9-28, which lies within a strip of land 100' in width, the bdries of sd strip ly 50' distant from, on each side of, and plt survey lnof the Grandview-Richland transmission ln as now located and staked on the ground over, across, upon and/or adjacent to above desc prop, sd survey ln being desc as fol:

Bag at survey station 1487+07.7 a pt on N ln of Sec 22-9-28, sd pt being N 89° 39' E 820.5' from NW corner of sd Sec 22; th S 66° 07' E 1479.4' to survey station 1501+87.1; th N 35° 51' E a distance of 3062.9' to survey station 1532+50.0 a pt on the Sly bdry ln of the Bonneville Power Admr' Richland Substation site, sd pt being N 54° 09' W a distance of 169.0' from the Bonneville Power Admr monument marking the SEly corner of sd Substation Site, sd monument being N a distance of 1757.0' and West a distance of 1206.2' from SE corner of Section 15-9-28.

We, Austin J. Murray and Ramona A. ~~Murray~~ Murray, h & w, lessess, under an unrk'd lease, for a val con from gtor herein, hby ack, join in this instr for the sole and specific purp of subordinating any int we may have in the above desc prem to the Esmt being acq by the USA, and are not entering into or becoming a party in any degree or manner to the warranty cont herein.

The Gtee agrees that it will cause to be repaired any and all irrig structures damaged in the use of above esmt by it or anyone ~~ya~~ under its direction at the time of orig constr or subsequent repair, and will maintain its structures so that a maximum of cultivation may be practiced in the right of way. All areas not susceptible of cultivation by the gtors will be kept free of noxious weeds by the gtee.

A. S. Murray Elizabeth Murray

Austin J. Murray Ramona A. Murray

BCW Nov 29 1948 A. S. Murray and Elizabeth Murray, h & w, bef Floyce Paulson, NP Sl. Aug 28, 1950.
BCW Nov 29 1948 Austin J. Murray and Ramona A. Murray, h & w, bef Floyce Paulson, NP Sl. Aug 28, 1950.
Fld BCAT Co. Ml Bonneville, Portland.

Mtg Dec 11 1948 9:35
Dec 9 1948

H. A. Zoda and Vida C. Zoda, naat h & w,
to Wylie N. Cox and Lucile J. Cox, h & w.

253250
S-5766

227408

WTI form L 7.

Mortgages tsp \$596.00 ac 1 pn bed, covering:
Govt Lot 2, Except the North 966' thof, and the East 330' of Govt Lot 3, Except the North 966' thof; all in Section 32-9-25, except that ptn condemned by the Kennewick Irrig District for canal rtw; tgw an esmt for roadway over a 25' strip in the North 966' of sd Govt Lot 2.

15:22-9-28

SHORT PLAT NO. 2920

PREPARED UNDER CITY OF RICHLAND SHORT PLAT ORDINANCE LOCATED IN A PORTION OF SW 1/4 OF SECTION 15, AND ALSO LOCATED IN A PORTION OF NW 1/4 OF SECTION 22, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M. CITY OF RICHLAND, BENTON COUNTY, WASHINGTON

SEE SHEET 1 OF 2 FOR APPROVALS
SEE SHEET 2 OF 2 FOR OWNERS CERTIFICATE
SEE SHEET 2 OF 2 FOR ACKNOWLEDGMENTS
SEE SHEET 2 OF 2 FOR NOTES

RECORD LEGAL DESCRIPTION

PARCEL 1 (TAX PARCEL NO. 1-1998-200-0001-000) IS THE SOUTHWEST QUARTER OF SECTION 15, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., CITY OF RICHLAND, BENTON COUNTY, WASHINGTON, LYING SOUTH AND WEST OF THE COLUMBIA IRRIGATION DISTRICT CANAL, EXCEPT THAT PORTION DEDICATED TO THE STATE OF WASHINGTON BY INSTRUMENT RECORDED MAY 12, 1980, UNDER AUDITOR'S FILE NO. 816473.

PARCEL 2 (TAX PARCEL NO. 1-1998-200-0002-000) IS THE SOUTHWEST QUARTER OF SECTION 15, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., CITY OF RICHLAND, BENTON COUNTY, WASHINGTON, LYING SOUTH AND WEST OF THE COLUMBIA IRRIGATION DISTRICT CANAL, EXCEPT THAT PORTION DEDICATED TO THE STATE OF WASHINGTON BY INSTRUMENT RECORDED MAY 12, 1980, UNDER AUDITOR'S FILE NO. 816473.

TOGETHER WITH THAT PORTION OF LOT 3, BLOCK 2, RANGER HEIGHTS SUBDIVISION, LOCATED IN A PORTION OF SW 1/4 OF SECTION 15, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M., CITY OF RICHLAND, BENTON COUNTY, WASHINGTON, AS CONVEYED BY THE PLAT THEREOF RECORDED IN VOLUME 5 OF PLATS, PAGE 11, AND ABANDONED BY AFFILIANT OF SCHEMERS ERROR RECORDED UNDER 90-20826.

This map/plat is being furnished as an aid in locating the herein described land in relation to adjoining streets, natural boundaries and other land, and it is not a survey of the land depicted. Except to the extent a policy of insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.



SURVEYOR'S CERTIFICATION

I, GRADY WILKERSON, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF WASHINGTON, DO HEREBY CERTIFY THAT THE SURVEY SHOWN ON THIS SHORT PLAT IS A TRUE AND CORRECT REPRESENTATION OF THE LAND DESCRIBED AND THAT SAID SHORT PLAT IS SHOWN ON THE GROUND AS INDICATED HEREON.



AUDITOR'S CERTIFICATE

FILED FOR RECORD AT THE REQUEST OF RECORDS SURVEYING AT 12:22 P.M. THIS 27 DAY OF June, 2006, A.G. AND RECORDED IN VOLUME 1 OF SHORT PLATS, AT PAGE 2920, RECORDS OF BENTON COUNTY, WASHINGTON.

Bobbie Gaard by Debra M. 2006-002923
BENTON COUNTY AUDITOR

RSB
ROGERS SURVEYING INC., P.S.
1405 COLUMBIA PARK TRAIL
RICHLAND, WA 99354
PHONE (509) 783-4141
FAX (509) 783-4894
www.rogerssurveying.com

CLIENT	GRADY WILKERSON	JOB	33004
PROJECT	SHORT PLAT		
PORTION SW 1/4, SEC. 15, T.9N., R.28E., W.M.			
SCALE 1"=60'			
DATE 1-22-06			
BY GRADY WILKERSON			
DATE 1-22-06			
FILED 2006-002923			
SHEET 1 OF 2			

15:22-9-28

SHORT PLAT NO. _____

PREPARED UNDER SHORT PLAT ORDINANCE NO. 103
SECTION 8, TOWNSHIP 9 NORTH, RANGE 28 EAST, W.M.
BENTON COUNTY, WASHINGTON

This map/plat is being furnished as an aid in locating the herein described land in relation to adjoining streets, natural boundaries and other land, and it is not a survey of the land depicted. Except to the extent a policy of insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

OWNERS CERTIFICATE

WE, THE UNDERSIGNED, HEREBY CERTIFY THAT WE ARE THE OWNERS OF THE TRACT OF LAND DESCRIBED HEREON, THAT WE HAVE CAUSED SAID LAND TO BE SURVEYED AND THAT WE HAVE CAUSED THE SURVEY TO BE RECORDED IN THE PUBLIC RECORDS OF BENTON COUNTY, WASHINGTON, FOR THE PURPOSES SHOWN HEREON.

Mark S. Wilkerson Mark S. Wilkerson
Mark S. Wilkerson
Mark S. Wilkerson

NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON
RECORD AS WILLIAM E. WILKERSON
WILKERSON
WILKERSON

ACKNOWLEDGMENT

STATE OF WASHINGTON } 55.
COUNTY OF BENTON } 55.

THIS IS TO CERTIFY THAT ON THIS 17 DAY OF January, 2006, PERSONALLY APPEARED BEFORE ME, Mark S. Wilkerson and William E. Wilkerson, to be known to be the owners of the above described land, and they acknowledged to me that they signed the foregoing owners certificate and that they signed the same as their voluntary act and deed in witness whereof, I have set my hand and official seal the day and year first above written.

Mark S. Wilkerson
NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON
RECORD AS Mark S. Wilkerson
WILKERSON
WILKERSON

ACKNOWLEDGMENT

STATE OF WASHINGTON } 55.
COUNTY OF BENTON } 55.

THIS IS TO CERTIFY THAT ON THIS 17 DAY OF January, 2006, PERSONALLY APPEARED BEFORE ME, Mark S. Wilkerson and William E. Wilkerson, to be known to be the owners of the above described land, and they acknowledged to me that they signed the foregoing owners certificate and that they signed the same as their voluntary act and deed in witness whereof, I have set my hand and official seal the day and year first above written.

Mark S. Wilkerson
NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON
RECORD AS Mark S. Wilkerson
WILKERSON
WILKERSON

APPROVALS

I HEREBY CERTIFY THAT THE TAXES ON THE LAND DESCRIBED HEREON HAVE BEEN PAID TO AND INCLUDING THE YEAR 2005 (TAX PARCEL NO. 1-1528-200-0005-2005)
Donna A. Davidson
Donna A. Davidson
Donna A. Davidson

THIS LAMERED SHORT PLAT IS HEREBY APPROVED BY AND FOR THE CITY OF BENTON BENTON COUNTY, STATE OF WASHINGTON.
Mark S. Wilkerson
Mark S. Wilkerson
Mark S. Wilkerson

AUDITOR'S CERTIFICATE

FILED FOR RECORD AT THE REQUEST OF Mark S. Wilkerson,
THIS 17 DAY OF January, 2006, A.D., AND RECORDED IN VOLUME 1 OF
SHORT PLATS, AT PAGE 15946, RECORDS OF BENTON COUNTY, WASHINGTON.
Bobbie G. Giesch
Bobbie G. Giesch
Bobbie G. Giesch

DATE 01/19/06
NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON
RECORD AS Mark S. Wilkerson
WILKERSON
WILKERSON

NOTES:

1. BASIS OF BEARING IS THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 15, ACCORDING TO RECORD SURVEY NO. 1638, VOLUME 1 OF SURVEYS, PAGE 1638.
2. (M) = MEASURED (P) = PLAT (C) = COMPUTED (P) = PLAT
3. O - ORIENTS SET 5/8" x 24" REBAR WITH YELLOW PLASTIC CAP STAMPED "70-148 21354"
4. 8 - ORIENTS FOUND WOUND UP AS NOTED.
5. EQUIPMENT AND PROCEDURES USED: TOPCON GTS 225 (5 SECOND ZMM/SPRM)
6. MONUMENT POINT OF WAY OF SE-1/4 WAS COMPUTED FROM WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) AUTOMATED PLANT, FILE POST 100.68 TO COLUMBIA BRICK, SHEETS 68 AND 69, DATED OCTOBER 25, 1984.
7. THE RIGHT OF WAY OF THE COLUMBIA IRRIGATION DISTRICT CANAL IS BASED ON A FIELD SURVEY OF THE CANAL RIGHT OF WAY, DATED OCTOBER 25, 1984.
8. ADJUSTMENTS (AS) ARE SUBJECT TO CHANGE BY THE CITY OF BENTON AT THE CITY BUILDING PERMIT OFFICE.
9. NO RECORDING FEE FOR THE PREPARED LAMERED SHORT PLAT, BUT ANY STRUCTURE REQUIRING PORTABLE WATER AND SANITARY SEWER SERVICE AT ANY TIME MUST BE CONSIDERED TO BE A STRUCTURE THAT WILL PROVIDE SERVICE TO THE LOT THAT THE STRUCTURE WILL BE BUILT ON HAS BEEN RECORDED AND ACCEPTED BY THE CITY OF BENTON. FOR ANY STRUCTURE UNIT SAID SYSTEM IS CONSIDERED AND ACCEPTED BY THE CITY. UTILITY INFORMATION IS AVAILABLE THROUGH THE CITY OF BENTON.



SURVEYOR'S CERTIFICATION

I, Mark S. Wilkerson, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF WASHINGTON, (SEE MY LICENSE NO. 11528), DO HEREBY CERTIFY THAT I HAVE PERSONALLY CONDUCTED THE SURVEY OF THE LAND DESCRIBED ON THIS SHORT PLAT, AND THAT THE SAME IS CORRECTLY SHOWN AND THAT SAID SHORT PLAT IS BASED ON THE SURVEY AS INDICATED HEREON.

DATE 01/19/06

NOTARY PUBLIC
STATE OF WASHINGTON
My Appointment Expires Nov 2, 2006

NOTARY PUBLIC
State of Washington
My Appointment Expires Nov 2, 2006

NOTARY PUBLIC
State of Washington
My Appointment Expires Nov 2, 2006

ROGERS
SURVEYING INC., P.S.
1455 COLUMBIA BLVD. TALLAHASSEE, FL 32304
PHONE (904) 782-4141
FAX (904) 782-4141
www.rogerssurveying.com

CLIENT	GRADY WILKERSON	JOB	15904
PRODUCT	SHORT PLAT		
PORTION	SW 1/4, SEC. 15, T.9N., R.28E., W.M.		
DRAWN BY	CDW/RSV	SCALE	1" = 20'
APPROVED	CDW	DATE	1-19-06
		F. E. NO. NONE	
		FILE	15904.000
		SHEET	2



State of Washington
Department of Fish and Wildlife
Habitat Program
2620 North Commercial Avenue, Pasco, WA 99301
Phone: (509) 543-3319, E-mail, Michael.Ritter@dfw.wa.gov

MWR-10-19

June 5, 2019

Spink Engineering
Steve Spink
Richland, WA 99352

Dear Mr. Spink,

Thank you for contacting the Washington Department of Fish and Wildlife (WDFW) regarding the plat submittal packages in the City of Richland for Skyline South and Falcon Ridge II.

WDFW appreciates the foresight by the City to have you contact us as an initial step to identify and address any issues related to Priority Habitats and Species (PHS), and other important natural resources.

Based on my review of the WDFW PHS database and Google Earth, there are no PHS issues such as shrub-steppe habitat or animal species occurrences associated with either preliminary plat.

While the PHS databases identifies that entire ridgeline and hill sides of Falcon Ridge II as priority shrub-steppe habitat, Google earth reveals that most if not all of the land are for Falcon Ridge II was previously disturbed.

Please contact me with any questions.

Sincerely,

A handwritten signature in black ink that reads "Michael Ritter". The signature is written in a cursive, slightly slanted style.

Michael Ritter
Habitat Biologist



1623 Terminal Drive ▪ PO Box 922 ▪ Richland, WA 99352 ▪ 509-946-1581 ▪
www.spinkeng.com

February 6, 2020

Mike Stevens
Planning Manager
City of Richland Development Services
625 Swift Blvd. MS#35
Richland, WA 99352

RE: Skyline South Preliminary Plat
Roadway Standard Variance

Dear Mr. Stevens:

The entrance roadway corridor to this proposed development is constrained by the existence of three Bonneville Power, high voltage overhead power poles. These power poles are located in the center of the property approximately 180-feet east of the proposed street connection point to existing Skyline Dr. Clearance to the north or south of these power poles will not allow a City standard 34-foot wide, 54-foot right-of-way street. We propose a City standard, 27-foot wide, 40-foot right-of-way, single frontage local street. As shown on the preliminary plat, approximately 550-feet of this street standard would be utilized. The entrance roadway would widen prior to the first intersection. This portion of roadway would be constructed per City standard drawing ST14 and include curb & gutter on both sides, 5-foot sidewalk on the north side only and be posted no parking on the south side.

This proposal to utilize a narrower street standard meets the intent of City standard ST14 for single access only and meets fire code for minimum roadway width. There are two existing homes located on the north side of this proposed roadway that will have access to this street.

Thank you for consideration of this variance.

Sincerely:

Steve Spink
Spink Engineering

Exhibit 3

CRITICAL AREAS REPORT SKYLINE SOUTH DEVELOPMENT

**Report No. C19-202-COM-0919-001, Revision 0
September 2019**

**Prepared for:
Sawby Construction, LLC
12904 S. Grandview Dr
Kennewick, WA 99338**

Contract C19-202

**Prepared by:
TerraGraphics Environmental Engineering, Inc.
428 W. Shoshone St.
Pasco, WA 99301**

 **TerraGraphics**
www.terragraphics.com

Approval Form

Prepared by:

Approved electronically 9/30/19

Danielle Adams

Date: _____

Reviewed by:

Approved electronically 9/30/19

Shanna Cozad

Date: _____

Approved by:

Approved electronically 9/30/19

Randy Hermann

Date: _____

Record of Revision

Revision	Date	Pages/Sections Changed	Brief Description
0	9/30/19	N/A	Initial release

Table of Contents

1.0	INTRODUCTION	1
1.1	Purpose.....	1
1.2	Project Description.....	1
1.3	Scope.....	1
2.0	SITE CONDITIONS.....	3
2.1	General Site Conditions and Location	3
2.2	Legal Description.....	6
2.3	Site Features.....	6
2.3.1	Critical Areas	6
3.0	FISH AND WILDLIFE CONSERVATION	8
3.1	Vegetation Covers.....	8
3.2	Hydrologic Features.....	9
3.3	Site Species and Habitat.....	10
3.3.1	Priority Species and Habitat.....	13
3.4	Management Recommendations	14
3.5	Mitigation Issues	14
4.0	WETLANDS.....	14
5.0	GEOLOGIC HAZARDS	15
5.1	Site History	15
5.2	Site Soils, Geology, and Drainage	16
5.3	Site Exploration	16
5.4	Groundwater Conditions	19
5.5	Geologic Hazards	19
5.6	Proposed Site Management.....	19
5.6.1	Site Safety and Appropriateness	21
5.6.2	Surface Water Management.....	21
5.6.3	Construction Scheduling.....	21
5.6.4	Site Monitoring and Inspection.....	22
6.0	CRITICAL AQUIFER RECHARGE AREAS	22
6.1	Hydrogeologic Characteristics.....	22
6.1.1	Groundwater	22
6.1.2	Existing Water Infrastructure.....	22
6.2	Surface Waters	24
6.3	Groundwater Quality and Management.....	24
7.0	REFERENCES	24

Appendices

Appendix A

Geotechnical Investigation Report

Appendix B

Washington Fish and Wildlife Services Letter

Figures

Figure 1. Preliminary Plat Map.....	2
Figure 2. Vicinity Map.....	3
Figure 3. Skyline South Entrance	4
Figure 4. Skyline South looking Northeasterly.....	4
Figure 5. Skyline South looking Westward along KID Canal.....	5
Figure 6. Skyline South looking Southward	5
Figure 7. Site Map with Critical Areas	7
Figure 8. Sagebrush Outcroppings.....	8
Figure 9. Site Vegetative Cover Map	9
Figure 10. FEMA Flood Zones	10
Figure 11. Big Sagebrush (<i>Artemisia tridentata</i>) at Skyline South	11
Figure 12. Bluebunch Wheatgrass (<i>Pseudoroegneria spicata</i>) and Yarrow (<i>Achillea millefolium</i>) at Skyline South.....	12
Figure 13. Green Rabbitbrush (<i>Chrysothamnus viscidiflorus</i>) at Skyline South.....	13
Figure 14. Proposed Stormwater Management Map	17
Figure 15. Site Exploration Map.....	18
Figure 16. Site Grading Map	20
Figure 17. Proposed Water Infrastructure Map	23

Acronyms and Abbreviations

BMP	best management practice
CARA	Critical Aquifer Recharge Area
FEMA	Federal Emergency Management Agency
KID	Kennewick Irrigation District
NWI	National Wetlands Inventory
PHS	Priority Species and Habitat
RCW	<i>Revised Code of Washington</i>
Skyline South	22-lot subdivision development
SMP	City of Richland Shoreline Master Program
TerraGraphics	TerraGraphics Environmental Engineering, Inc.
WAC	<i>Washington Administrative Code</i>
WAFWS	State of Washington Department of Fish and Wildlife

1.0 INTRODUCTION

1.1 Purpose

TerraGraphics Environmental Engineering, Inc. (TerraGraphics) prepared this Critical Areas Report in support of construction of a proposed 22 lot subdivision (Skyline South) located in Richland, Washington. This Critical Areas Report (1) describes the current site conditions, (2) addresses Wetland and Fish and Wildlife Conservation, Critical Aquifer Recharges Areas (CARAs) Protection, and Geological Hazard Areas, and (3) describes proposed site management at this location, pursuant to the requirements of State Environmental Protection Act and Growth Management Act (Chapter 36.70A *Revised Code of Washington* [RCW]) and Richland Municipal Code Chapter 22.10, *Critical Areas*.

1.2 Project Description

The proposed development of the Skyline South site is located within parcels 115983012926002 and 122982012925003 in Richland, Washington as shown in Figure 1, and will include site grading and construction of associated roadways, utilities, stormwater infrastructure, and buildings.

1.3 Scope

TerraGraphics performed the following services in completion of this project:

- **Literature Review:** Review of relevant, readily available publications and resources pertaining to site conditions, wetlands, fish and wildlife conservation, CARAs, and the Geotechnical Investigation Report (Appendix A) at or near the Skyline South site.
- **Site Reconnaissance:** Performance of a site visit to document current site conditions including an existing infrastructure and access, physical features, vegetative covers, and site biodiversity/habitat, fish and wildlife species (if present), and to locate exploration test pits excavated at the sites as part of the geotechnical investigation previously performed (Appendix A).
- **Critical Areas Management Analysis:** Review and analysis of data and information relevant to potential critical areas at Skyline South site to develop site and project management recommendations to avoid or otherwise probable environmental impacts of the proposed site and project activities.
- **Report Preparation:** Preparation of a Critical Areas Report specific to the Skyline South site and relevant areas adjacent to the Skyline South site to meet the Process Permit and Application Requirements as outlined in Richland Municipal Code Chapter 22.10, *Critical Areas*.

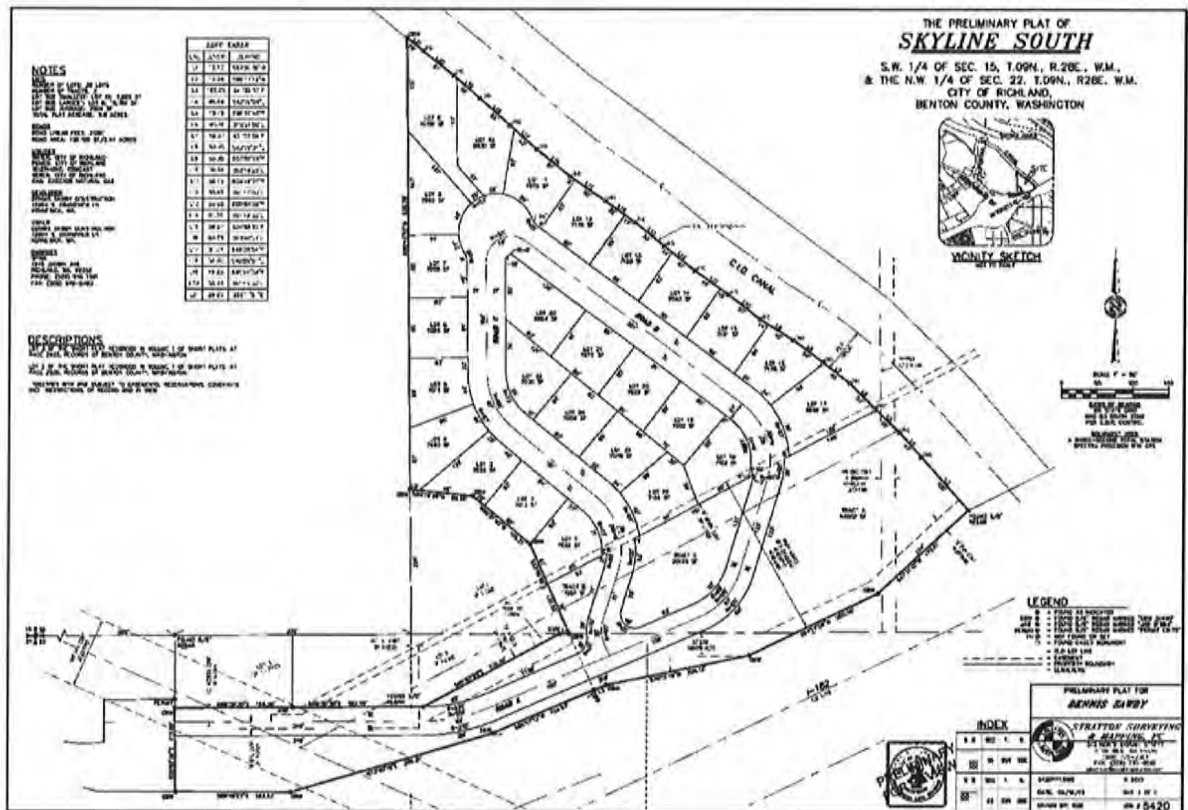


Figure 1. Preliminary Plat Map

2.0 SITE CONDITIONS

2.1 General Site Conditions and Location

The Skyline South site is located in southeast Richland, Washington, adjacent to Interstate 182 near the Yakima River as shown in Figure 2. The site is approximately 9.6 acres with proposed site access from Skyline Drive. The site is undeveloped land with disturbed and undisturbed soils with grassland cover with various outcroppings of sagebrush.

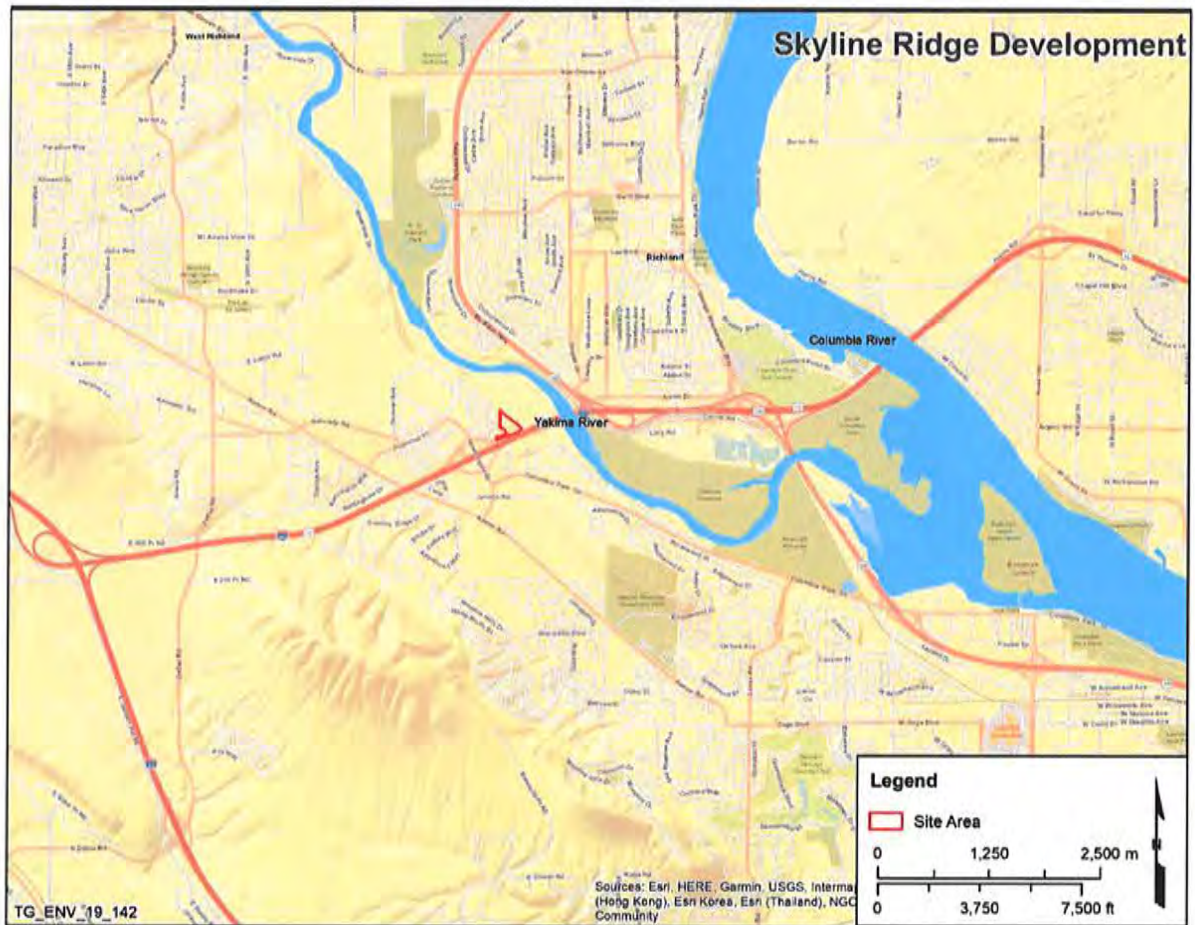


Figure 2. Vicinity Map

The Skyline South site is adjacent to existing single resident housing located on the southwestern site boundary. Interstate 182 bounds the property on the southeastern side. Large electric poles and lines run north-south through the property parallel to Interstate 182.

The northeastern project boundary is approximately 20 ft from the Kennewick Irrigation District (KID) canal of which an access road and the “biodiversity corridor” run parallel to on the north side. Skyline South located within 300 ft of the Richland “biodiversity (riparian) corridor” that is present adjacent to the Yakima River. The “biodiversity corridor” is located in the floodplains of the Yakima river, which consists of native vegetation and wildlife habitat. Figure 3 through

Figure 6 show the current conditions of the site as present during the site visit conducted on September 10, 2019.



Figure 3. Skyline South Entrance



Figure 4. Skyline South looking Northeasterly



Figure 5. Skyline South looking Westward along KID Canal



Figure 6. Skyline South looking Southward

2.2 Legal Description

The following legal description for the subject parcels was obtained from the Benton County, Washington Assessor's Real Property records¹:

Parcel 115983012926002: Section 15 Township 9 Range 28 Quarter SW; SHORT PLAT #2926, LOT 2, Lying within Section 15, RECORDED 1/27/2006, UNDER AUDITOR'S FILE NO. 2006-002923. RECORDED IN VOLUME 1 OF SHORT PLATS, AT PAGE 2926, RECORDS OF BENTON COUNTY, WASHINGTON. (linked with 1-2298-201-2926-002, different TCA's).

Parcel 122982012925003: Section 22 Township 9 Range 28 Quarter NW; SHORT PLAT #2925, LOT 3, RECORDED 1/27/2006, UNDER AUDITOR'S FILE NO. 2006-002922. RECORDED IN VOLUME 1 OF SHORT PLATS, AT PAGE 2925, RECORDS OF BENTON COUNTY, WASHINGTON.

2.3 Site Features

The Skyline South site is undeveloped with no occupied buildings or structures. At the site, there is a small shed with an electric meter attached but no other built structures. Along the northeastern site boundary, there are existing City of Richland utilities, of which the new development will be connected to. Multiple electrical lines and poles are present at the site running north-south. At the site entrance, there is an unpaved road and plantings of large bushes and shrubs. Vegetative cover at the site is primary grassland with sagebrush outcroppings with no trees present.

The Skyline South site generally slopes downhill northeasterly towards the adjacent KID canal and Richland "biodiversity corridor." Figure 7 shows the current topography, site features, and critical areas.

2.3.1 Critical Areas

"Critical areas" are defined in RCW 36.70A.030(5) and as stated in the Richland Municipal Code 22.10.010, as critical areas "perform many important and physical function and values that benefit the City of Richland and its residents." Critical areas include the following areas and ecosystems: wetlands, Critical Aquifer Recharge Areas (CARAs), fish and wildlife habitat conservation area, and frequently flooded areas, and geologically hazardous areas. Section 3.0 through Section 6.0 provide discussion of critical areas relevant to the Skyline South site as required by Richland Municipal Code 22.10.370. The critical areas in the vicinity of the Skyline South site include geologic hazards, floodplains, and wetlands (Figure 7). Geological hazards shown on this map contains steep slope greater than or equal to 15 percent. Also, the Richland "biodiversity corridor" present in the area between the KID canal and Yakima River located northeast of the site are defined as a geologic hazard for moderate to high liquefaction potential. Further discussion of geologic hazards is found in Section 5.5.

¹ <https://property.spataleat.com/wa/benton/#/>

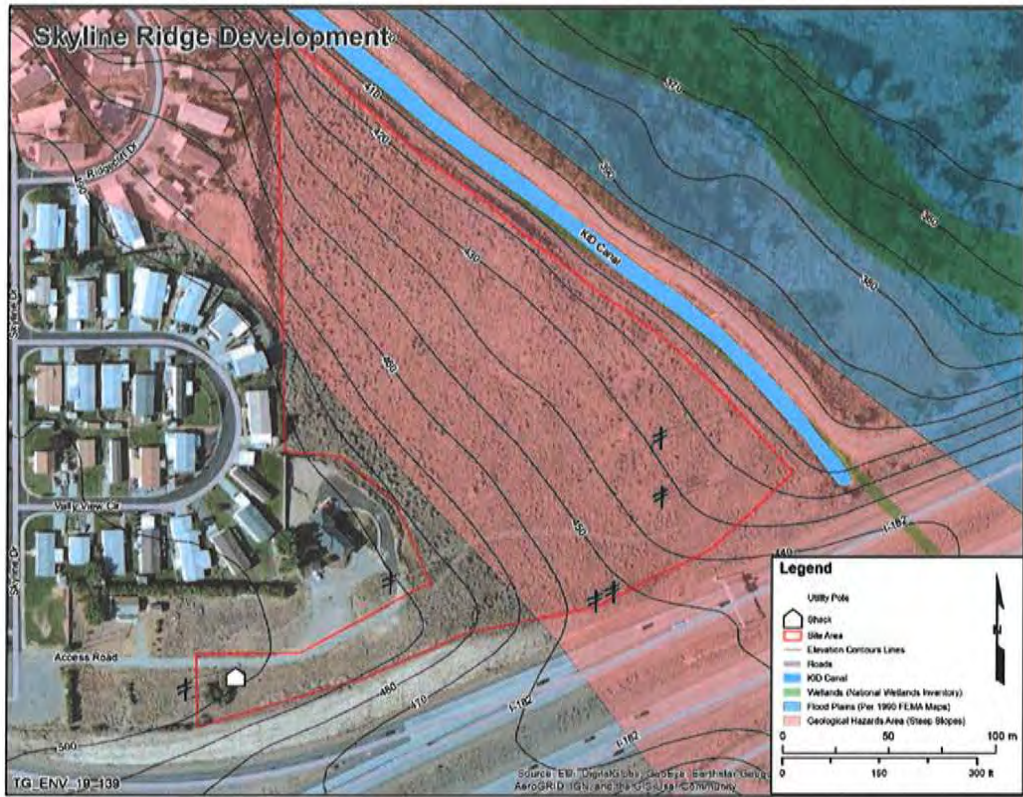


Figure 7. Site Map with Critical Areas

3.0 FISH AND WILDLIFE CONSERVATION

3.1 Vegetation Covers

The vegetative cover at the Skyline South site was primarily observed to be disturbed grassland with sagebrush outcroppings at shown in Figures 8 and 9. The specific vegetation observed at the Skyline South site is further described in Section 3.3.



Figure 8. Sagebrush Outcroppings

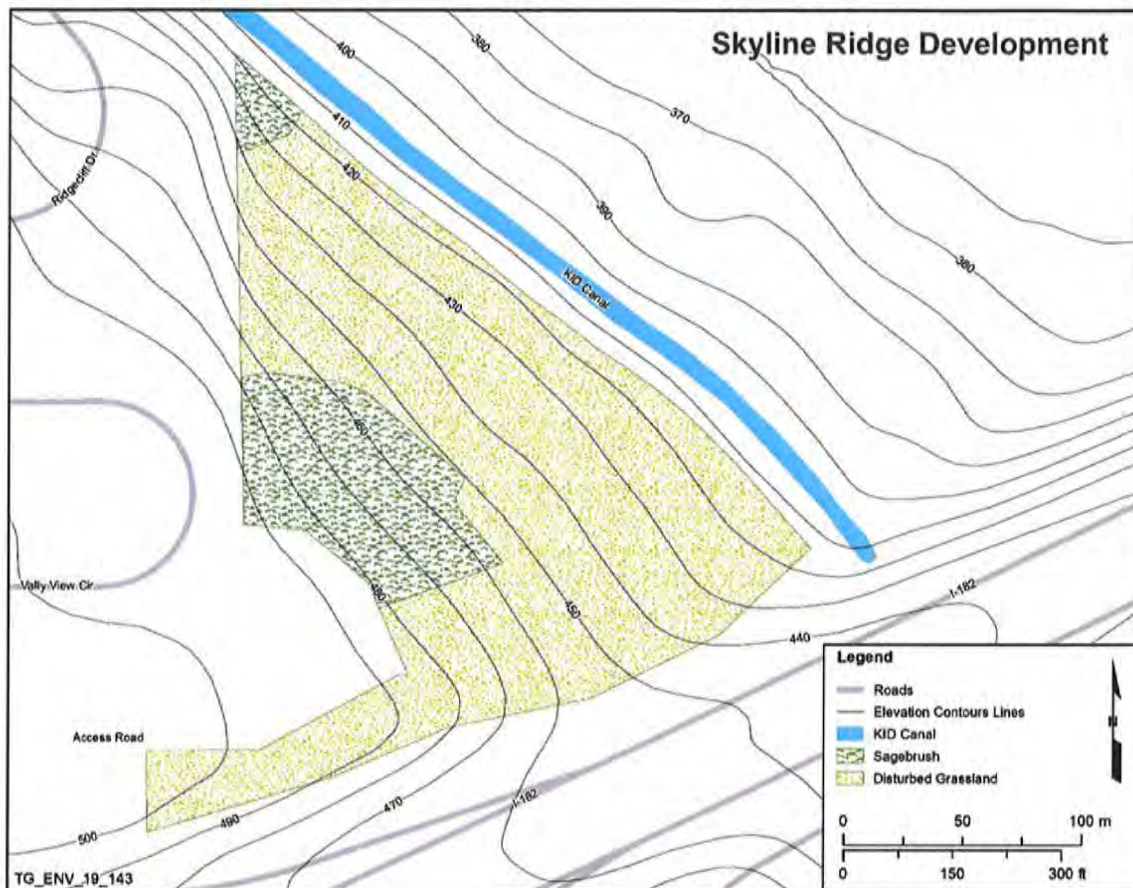


Figure 9. Site Vegetative Cover Map

In the sagebrush outcropping, sagebrush, and green rabbitbrush are prevalent. To document the prevalence of sagebrush and green rabbitbrush in these areas, a shrub survey was conducted in a 100 ft by 100 ft area within the larger sagebrush outcropping shown in Figure 9. Approximately 125 sagebrush and 20 green rabbitbrush were observed in the cordoned off area. Other vegetation described in Section 3.3 was mostly evenly distributed throughout the site with a high prevalence of Russian Thistle. During the summer of 2018, a wildfire consumed nearly all of the property. The larger stands of shrubs observed on the property along the western boundary were not impacted by the fire.

3.2 Hydrologic Features

There are no hydrologic features located at the Skyline South site. Adjacent to the multiple hydrologic features are present including the KID canal located along the northeastern boundary, farther north are various wetlands located in the Richland “biodiversity corridor” and the Yakima river. Based on the vicinity of the site to the Yakima river, the project is located in the Zone C flood plains as designated by Federal Emergency Management Agency (FEMA) as “areas of minimal flooding (no shading)” and thus falls outside of the 100-year and 500-year flood event boundaries, which corresponds to a less than 0.2 percent annual chance of a flood. FEMA determines flood elevations and flood plain boundaries. These are published in Flood Hazard

Boundary Maps based on a 100-year flood event. The FEMA designated flood plains for the Skyline South site are shown in Figure 10.

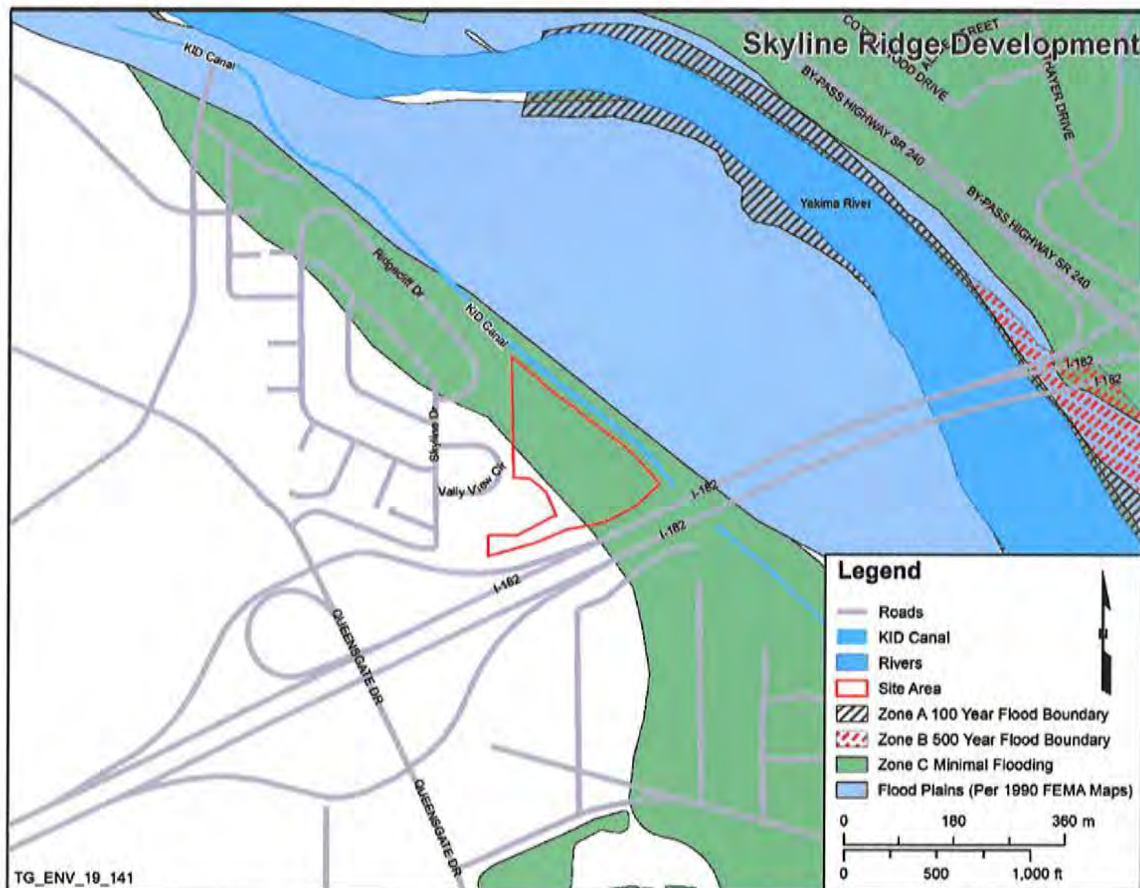


Figure 10. FEMA Flood Zones

3.3 Site Species and Habitat

The Skyline South site is disturbed grassland and shrub-steppe land. Previously, the property was designated as Mountain Basins Big Sagebrush Shrubland and priority Shrub-Steppe habitat but has since been reclassified as disturbed lands by the State of Washington Department of Fish and Wildlife (WAFWS), as documented in Appendix B and discussed in Section 3.3.1. In the summer of 2018, a majority vegetation at the Skyline South site was burnt by a fire of unknown cause. Most vegetation has since been reestablished at the site and evidence of the fire was not noted during the site visit conducted on September 10, 2019. During the site visit, no animal species were observed at the Skyline South site. However, the area and biodiversity corridor is likely home to some small mammals and birds typically of the area. The adjacent Richland “biodiversity corridor” is likely the primary habitat to wildlife in the area.

The plant species described below were observed at the Skyline South site during the site visit.

Big Sagebrush (*Artemisia tridentata*): Big sagebrush are evergreen shrubs with blue-gray to blue-green leaves and are native to the Columbia Basin. Plants have spreading branches from numerous main stems. Big sagebrush range in size from 2 ft up to 13 ft. Plants are adapted to arid areas of the West. Its evergreen leaves provide food and habitat for numerous species of animals (Tilley et al., 2008). Big sagebrush observed at the Skyline South site is shown in Figure 11.



Figure 11. Big Sagebrush (*Artemisia tridentata*) at Skyline South

Bluebunch Wheatgrass (*Pseudoroegneria spicata*): Bluebunch wheatgrass is a native perennial wheatgrass and is the state grass of Washington. Bluebunch wheatgrass is a large bunchgrass and grow from 1.5 ft to 4 ft in height. This grass begins to grow in March and forms seed spikes in late-June. Plants have extensive root systems and spread by seed. Bluebunch wheatgrass can be found on thin, rocky site and on very steep slopes. Bluebunch wheatgrass provide forage for large mammals and other wildlife (Ogle et al., 2010). Bluebunch wheatgrass was observed at the Skyline South site is shown in Figure 12.

Common Yarrow (*Achillea millefolium*): Common yarrow is a member of the sunflower family (Asteraceae) and is a perennial herb. Plants product several stems from an underground horizontal rootstock (rhizome). Leaves have varying degrees of hairiness and are evenly distributed along the stems. Plants flower May through June with whiteish to yellowish-white clusters of flowers. Yarrow is commonly found in mildly disturbed soil in grasslands. It is may be invasive in some regions and habitats (Hurteau, 2006). Yarrow was observed at the Skyline South site is shown in Figure 12.



Figure 12. Bluebunch Wheatgrass (*Pseudoroegneria spicata*) and Yarrow (*Achillea millefolium*) at Skyline South

Canadian Horseweed (*Conyza canadensis*): Canadian horseweed is herbaceous winter or summer annual native to North America. Canadian horseweed produce numbers flowers that results in windborne seed. Flowers hears are very small are white or purplish. Plants are members of the sunflower family (Asteraceae). Plants commonly grow in grasslands and disturbed sites (Tilley, 2012a).

Cheatgrass (*Bromus tectorum*): Cheatgrass is a prevalent, non-native, annual or winter annual grass, with “softly downy to short-hairy throughout, and generally 4 in. to 24 in. tall. The roots are shallow, and flowering occurs from April to mid-June depending on climate and location. Cheatgrass is reproduced by seen with germination in the fall and winter to early spring. It is considered noxious in roadsides, cropland, hayland, pastureland, etc. Cheatgrass is common in the Columbia Basin and is abundant over larges areas of sagebrush plant communities (Skinner et al., 2008).

Green rabbitbrush (*Chrysothamnus viscidiflorus*): Green rabbitbrush is a native, deciduous shrub with long narrow leaves similar to sagebrush. Plants can range in size from 2 ft to 4 ft tall. They often grow mixed with sagebrush in dry, sandy soils. Green rabbitbrush flower in later summer to early fall with bright yellow clusters of flowers. Shrub are plentiful in the Tri-Cities area, growing abundantly in West Richland and Tri-Cities roadways (O’Conner and Wieda, 2001). Green rabbitbrush was observed during the site visit conducted on September 10, 2019 and is shown in Figure 13.



Figure 13. Green Rabbitbrush (*Chrysothamnus viscidiflorus*) at Skyline South

Prickly lettuce (*Lactuca serriola*): Prickly lettuce is annual that is native to the Mediterranean region. Prickly lettuce are a member of the sunflower family (Asteraceae) and have a deep tap root. Plants produce a milky latex and produce many seeds. Plants grow from 1 ft to 5 ft in height. Flowering occurs late spring to early summer producing many yellow flowers. Prickly lettuce is considered a common weed throughout the United States (WSU, 2019).

Western Aster (*Symphyotrichum ascendens*): Western aster is native to western North America. Western aster occurs throughout western North America and is common in arid areas in sagebrush, rabbitbrush and pinyon juniper communities. Western aster is a rhizomatous perennial forb with flowering stems containing clusters of numerous flower heads. Flowers head bear purplish to violet ray flower surrounding a series of yellow disk flowers (Tilley, 2012b).

Russian Thistle (*Salsola kali*): Russian thistle is a bushy annual broadleaf plant that grows from 6 in. (15 cm) to 3 ft (0.9 m) in height. It is best grown in sandy soils and in disturbed soils. Plants produces numerous seeds from green flowers. Flowers bloom from mid-summer to fall. Russian thistle rapidly germinate and are considered to be invasive (UC, 2019).

3.3.1 Priority Species and Habitat

Based on a review by WAFWS, there are no Priority Species and Habitat (PHS) issues at the Skyline South site (referred to by WAFWS as Falcon Ridge II). This determination is documented at Appendix B. WAFWS noted that although the PHS database identifies the Skyline South site as priority shrub-steppe habitat, that a majority, “if not all of the land” is previously disturbed and is thus not of issue for development.

3.4 Management Recommendations

There are no significant impacts to critical fish and wildlife habitat and conservation, nor any PHS issues at the Skyline South site. However, based on the site topography and its proximity to the KID canal, implementation of best management practices (BMPs) to limit stormwater impacts during construction and post-construction are recommended. For construction, such BMPs for erosion and sediment control, may include:

- Site planning, grading, and construction sequencing
- Preservation of natural vegetation (where possible)
- Implementation of erosion control measure including dust control, geotextiles, seeding, etc.
- Implementation of sediment control measures including sediment traps, silt fences, storm drain inlet protection, etc.
- Good housekeeping and hazardous material management including general construction waste management, spill prevention, and control, etc.
- Inspections and enforcement of stormwater requirements.

In addition to erosion control measures as outlined in Section 5.6.2 and in the Geotechnical Investigation Report (Appendix A), the following BMPs are recommended to mitigate stormwater impacts post-construction:

- Use of infiltration measures such as grassed swales and infiltration trenches, etc. (where applicable)
- Inspection and maintenance of BMPs and erosion control measures for slope management.

3.5 Mitigation Issues

There are no significant impacts to critical fish and wildlife habitat and conservation nor any PHS issues at the Skyline South site. Thus, there are no mitigation issues for the Skyline South site.

4.0 WETLANDS

Based on a review of the U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) and the determination of no PHS at the site by WAFWS, there are no wetlands present at the Skyline South site. The Critical Areas map which shows the location of wetlands in the vicinity of Skyline South (Figure 7). No surface waters nor apparent depression that would be seasonally inundated with water (based on site topography) are present at the Skyline South site, nor any vegetative cover consistent with wetlands. Adjacent to the site, the NWI identifies multiple Freshwater Forested/Shrub Wetlands present within the Richland "biodiversity corridor."

Although the closest NWI wetland is within 300 ft of the Skyline South site, based on the site topography and the presence of the KID canal and adjacent accessed road, site activities will result in no significant impact to adjacent wetlands.

5.0 GEOLOGIC HAZARDS

Geologic hazards are identified and designated consistent with minimum guideline classifications defined in *Washington Administrative Code* (WAC) 365-190-080(4). Geologically hazardous areas including areas susceptible to the following types of hazards (City of Richland Shoreline Master Program (SMP) Update [Anchor QEA, 2016]):

- Erosion hazard
- Landslide hazard
- Seismic hazard
- Mine hazard

To identify the geologic site conditions, White Shield, Inc. performed a geotechnical investigation comprised of a literature review and field investigation for the Skyline South site. The results of the geotechnical investigation are presented in the Geotechnical Investigation Report (Appendix A).

5.1 Site History

The Skyline South site is currently undeveloped land with disturbed and undisturbed soils. There is no previously known development at the Skyline South site, with the exception of the installation of currently present electrical poles and lines. The Geotechnical Investigation Report (Appendix A) describes the Skyline South site geology and geological history as follows:

"The site is classified as outburst flood deposits of Glacial Lake Missoula, generally comprised of sand and silt (Qfs₃). There are nearby exposures of outburst flood deposits, sand and silt (Qfs₂), gravel (Pleistocene to Pliocene) (QP_{Lg}), and continental sand, silt and clay beds (Pliocene to Miocene) (P_{LMc}).

The Qfs deposits are generally described as lacustrine silt and fine sand a fluvial coarse to fine sand. The Qfs₂ are older deposits, and Qfs₃ younger. The QP_{Lg} are fluvial deposits consisting of compact to unconsolidated, clasts include quartzite, gneiss diorite, volcanic porphyries and basalt. The formation is generally referred to as the plio-Pleistocene and underlies the oldest Pleistocene deposits, but overlies the Ringold formation. We have found that this formation can contain any amount of gravels, sands, silts, and clays, some of which we have found to be highly expansive. It is generally impermeable. The P_{LMc} deposits are described as interbedded fluvial and lacustrine facies, local pebbles lenses and stringers. These are the Ringold formation and are generally capped by pedogenic carbonate and are considered impermeable."

As part of the development of the 22-lot subdivision, site grading and the creation of a stormwater basin and/or infiltration are planned and will result in the disturbance of Skyline South site soils.

5.2 Site Soils, Geology, and Drainage

The Skyline South site slopes moderately downhill northeasterly towards the adjacent Yakima River floodplains which run parallel to the site beyond the canal and access road located at the northeastern Skyline South site boundary. The site has various undulations and a manmade ridge from fill dumped along the northeastern project boundary approximately 20 ft from the adjacent KID canal. As indicated in the Geotechnical Investigation Report (Appendix A), the majority of the site is ungraded native soil deposits. The Pleistocene unit or Ringold Formation were not encountered within the proposed lot grading area but were found to be present in the area proposed for stormwater infiltration use.

No specific stormwater infiltration analysis was performed as part of the critical areas analysis or geotechnical investigation. Based on the site exploration performed as part of the geotechnical investigation, the proposed location of stormwater basin and/or infiltration pond, as shown in Figure 14, should be suitable if constructed by structural fill and property keyed and benched into the location. The use of underlying impermeable soils currently present at this location would not likely provide the infiltration capacity necessary for stormwater management at the Skyline South site.

5.3 Site Exploration

As part of the geotechnical investigation performed by White Shield, Inc., 16 exploration test pits were excavated at the site to perform geotechnical analysis and assess soil conditions at the Skyline South site. Results of the site exploration generally identified fine-sand top soils with little amounts of fine to course gravel and trace cobble with depth. A further description of the site exploration activities performed and specific results for test pit excavations (including test pit logs) are detailed in the Geotechnical Investigation Report (Appendix A). The location of site exploration test pits are shown in Figure 15.

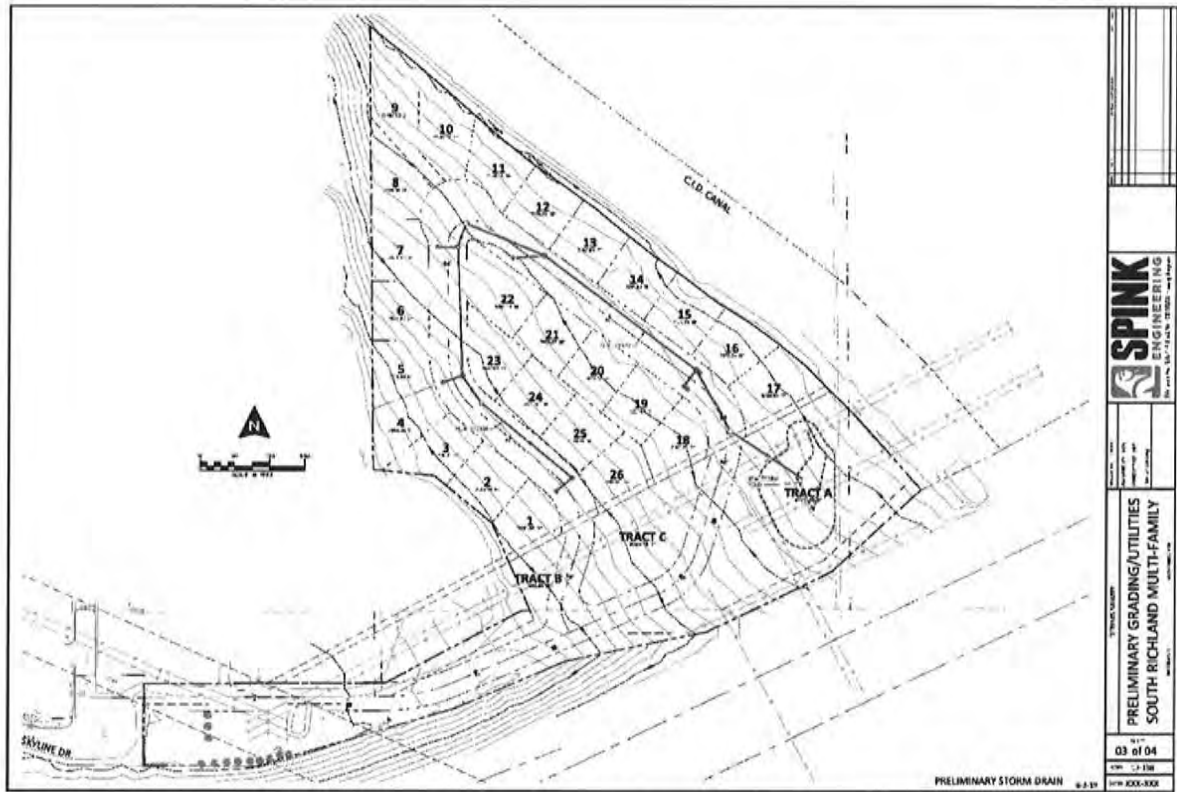


Figure 14. Proposed Stormwater Management Map

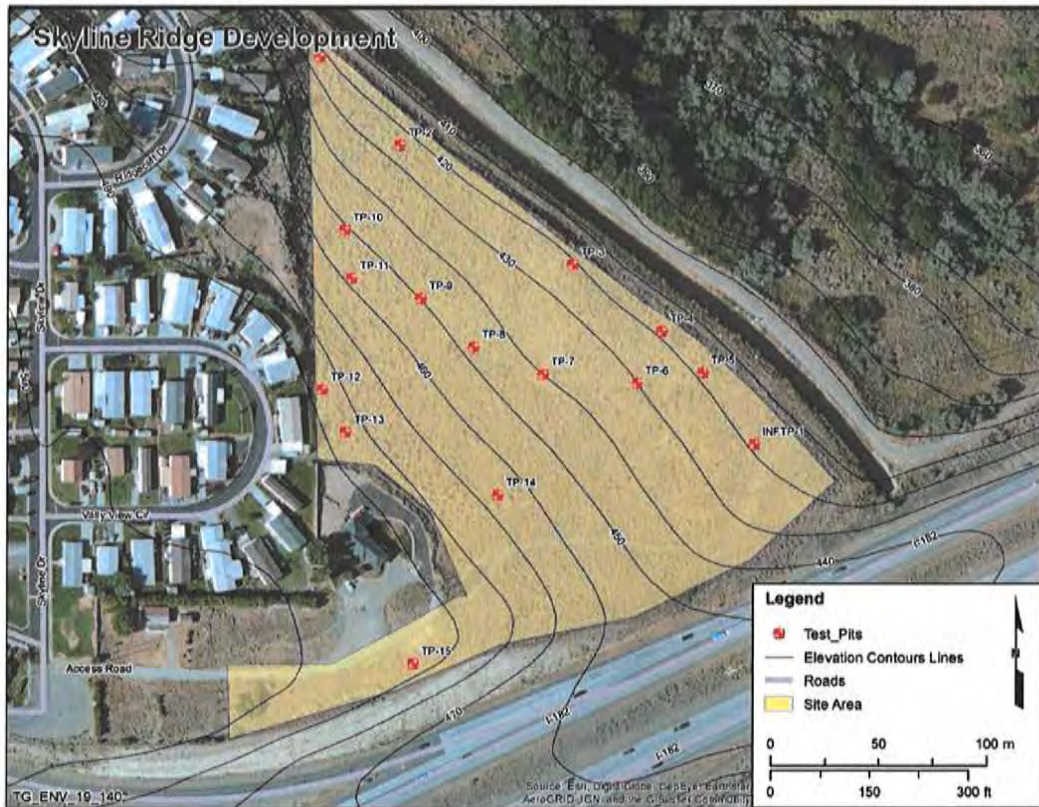


Figure 15. Site Exploration Map

5.4 Groundwater Conditions

Based on the assessment of nearby well logs, groundwater is assumed to be at a depth of 80 ft below ground surface. Groundwater at the Skyline South site in Benton County is part of the Columbia River Plateau regional aquifer system. The Columbia River Plateau regional aquifer system spans approximately 50,600 square miles, extending from northern Idaho, northeastern Oregon, and southeastern Washington. The aquifer system is made up of four aquifers: the suprabasalt sediment (overburden) aquifer, Saddle Mountain aquifer, Wanapum aquifer, and Grande Ronde aquifer. The Columbia Basin project, which redistributes water through a series of canals for agricultural use, has impacted water levels within the project area and largely influenced groundwater movement within the project area (Anchor QEA, 2016).

Precipitation and irrigation waters (where applicable) are largely the primary sources of groundwater recharge in the area. Local, state, and federal regulations have been established to minimize adverse impacts to groundwater quality. Such regulations govern water wells, septic tanks, storm water, etc. Additionally, to protect groundwater supply as required under the Federal Safe Drinking Water Act, the Washington Department of Health requires Group A water systems to implement wellhead protections programs to prevent contamination to groundwater used as a drinking water source (Anchor QEA, 2016).

5.5 Geologic Hazards

Based on City of Richland's SMP Inventory as documented in the Benton County geographic information system dataset, a review of geologic hazards present at the Skyline South site was performed. Steep slopes (15 percent or greater slope) are present at a majority of the site and thus may be an erosion hazard. Based on the geologic hazard definitions as described in the City of Richland SMP Update (Anchor QEA, 2016), no landslide hazards and mine hazards are present at the site.

Additionally, there is no identified seismic hazards at the site. However, the adjacent Richland "biodiversity corridor" is identified as a geologic hazard due to moderate to high liquefaction potential. The seismic activity in Benton County is low to moderate with a very low-to-high liquefaction susceptibility. Liquefaction can be described as phenomena in which soil strength and structure degrade quickly and act as quicksand as the result of earthquakes or strong vibrational occurrences. Liquefaction typically occurs in saturated loose sandy soils which typically occur in low-lying areas along coastal and lake shorelines and river valleys.

5.6 Proposed Site Management

To mitigate existing geological hazards and allow for site development the Skyline South site will be regarded as shown in Figure 16. As outlined in the Geotechnical Investigation Report (Appendix A), various geotechnical design recommendations for site grading and earthwork, site drainage and stormwater infiltration, foundations, pavements and slabs, and performance of onsite inspection visits by the geotechnical engineer will be performed to monitor earthwork, soil, and groundwater conditions and to document the geotechnical aspects of regrading the site and construction of Skyline South site infrastructure.



5.6.1 Site Safety and Appropriateness

Site safety will be managed by Sawby Construction, LLC, and other approved sub-contractors. Sawby Construction is responsible for maintaining a Site Safety Plan and Site Safety Manager as required. It is recommended that site safety meetings be conducted regularly as determined in the Site Safety Plan. Additionally, geotechnical design recommendations as outlined in the Geotechnical Investigation Report (Appendix A) should be adhered to, as applicable, including recommendations for site preparation, earthwork, and foundations. It is noted as part of the Geotechnical Investigation Report (Appendix A), that there is the potential to encounter problem soils, specifically plio-Pleistocene soils which have the potential to be highly expansive. Thus, compliance with appropriate site monitoring and inspection procedures are necessary to prevent foundation and road damage and ensure safe site conditions. Refer to the Geotechnical Investigation Report (Appendix A) for specific recommendations for site preparation, earthwork, and foundations.

5.6.2 Surface Water Management

As detailed in the Geotechnical Investigation Report (Appendix A), site grading techniques will be implemented to properly manage site drainage and stormwater. Landscape and lot grading be performed to meet building drainage requirements and to prevent ponding. All impervious surfaces will be sloped to drain into approved catch basins and then be piped to the onsite stormwater basin/infiltration pond as designed. Moisture conditioned and compacted final slope surfaces will be achieved to a maximum slope angle of 1V:2H for smooth slopes and 1V:3H for grassed and mowed slopes. If an onsite slope is steeper than 1V:3H, installation of erosion protection to prevent surface erosion will be designed into the final landscaping plan for the lot. Erosion protection measures for slope protection may include the following:

- Planting of drought-resistant plants (for arid landscapes) and plants to be watered using drip irrigation or light hand watering
- Use of erosion control blankets or geotextiles with sparsely placed suitable vegetation
- Use of landscape fabric covered with decorative gravel, rock, and cobble.

An onsite stormwater system including catch basins and a stormwater basin/infiltration pond will be used manage stormwater onsite. It is recommended in the Geotechnical Investigation Report (Appendix A) that structural fill be used to construct the stormwater basin/infiltration pond.

5.6.3 Construction Scheduling

Skyline South site construction will commence when approval of necessary permits, plans, and other necessary documentation is approved and obtained from project stakeholders as required. Construction and engineering inspections will be performed throughout the project. Inspections will be conducted as outlined in Section 5.6.4 to ensure proper site management and inspection and approval onsite activities and conditions.

5.6.4 Site Monitoring and Inspection

Construction and engineering inspections will be performed during site grading and construction to monitor site conditions and identify unexpected soil and groundwater conditions not previously identified during site exploration conducted as part of the geotechnical investigation. As stated in the Geotechnical Investigation Report (Appendix A), a geotechnical engineer, should perform the following onsite engineering inspections:

- Review of building construction plans
- Observation and approval of site grading, soil placement, and compaction
- Inspection, testing, and approval of building foundation sub-grade soil conditions
- Inspection and documentation of foundation and stem-wall backfill
- Inspection and documentation of stormwater collection and infiltration system
- Approval of final site grading.

6.0 CRITICAL AQUIFER RECHARGE AREAS

Based on City of Richland's SMP Inventory as documented in the Benton County geographic information system dataset, Skyline South site not identified as CARA. No CARAs are identified within the areas immediately adjacent to the Skyline South site.

6.1 Hydrogeologic Characteristics

6.1.1 Groundwater

Refer to Section 5.4 for the description of groundwater conditions at the Skyline South site.

6.1.2 Existing Water Infrastructure

There are no existing wells at the Skyline South site as confirmed during the site visit and through a search of the State of Washington Department of Ecology Well Report Viewer². City of Richland water lines are present at the northeastern site boundary adjacent to the KID canal. Water will be provided to Skyline South site development and residences through connection to the City of Richland water lines as shown in Figure 17.

² <https://fortress.wa.gov/ecy/wellconstruction/Map/WCLWebMap/default.aspx>

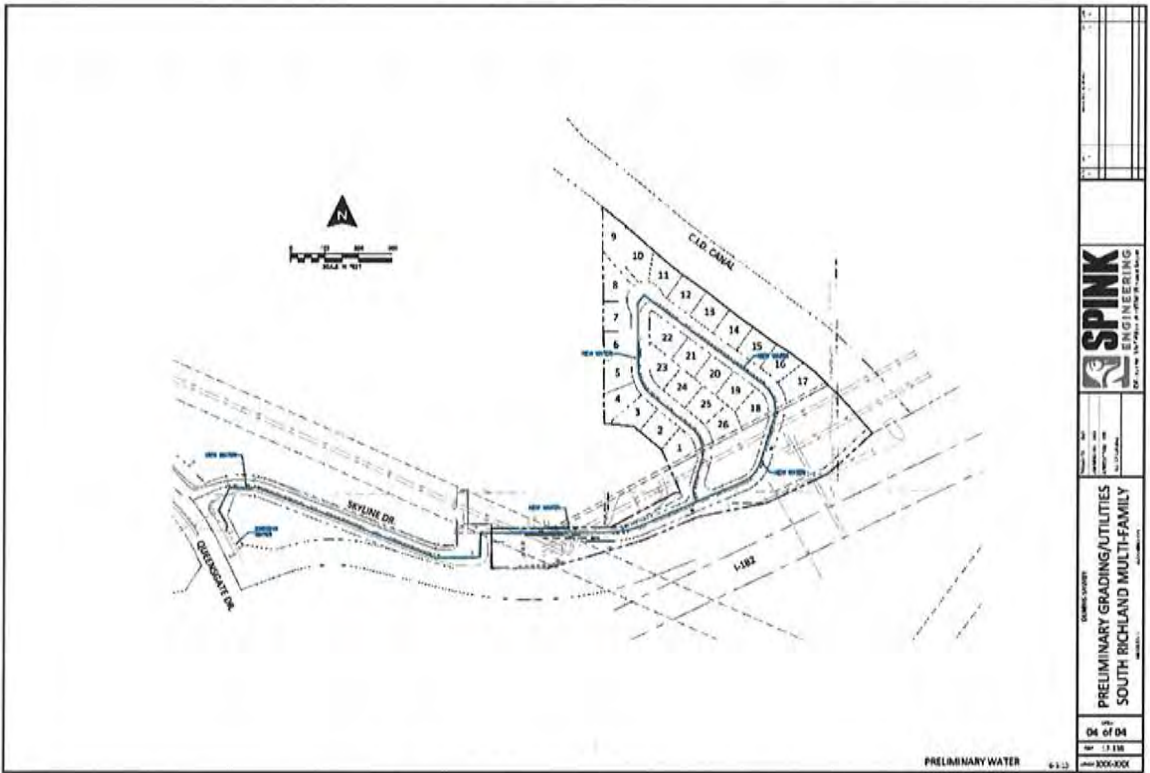


Figure 17. Proposed Water Infrastructure Map

6.2 Surface Waters

There are no surface waters at the Skyline South site. The KID canal is adjacent to the site along the northeastern site boundary. Additionally, there are freshwater forested/shrub wetlands located in the Richland “biodiversity corridor” located north of the KID canal and adjacent access road. A stormwater basin/infiltration pond and associated system and catch basin are proposed for permanent Skyline South site stormwater management.

6.3 Groundwater Quality and Management

There are no known groundwater quality issues at the Skyline South site. As indicated in Section 6.1.2, there are currently no groundwater wells at the site. Groundwater wells are not intended to be installed as part of development. Water will be provided to the site by the Richland Water Utility, which pumps and purifies water, maintains the water distribution system. Backflow protection for all connections to the City of Richland water distribution system is required. Further information on backflow protection requirements can be found at the City of Richland website’s Water Utility webpage³. The water quality report for the City of Richland is also available at this webpage.

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³ <https://www.ci.richland.wa.us/departments/public-works/water-utility>

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APPENDIX A
GEOTECHNICAL INVESTIGATION REPORT

**Geotechnical Investigation Report
Sawby Richland Development
12904 S. Grandview Lane
Kennewick, WA 99338**

June 27, 2019

Submitted To:

Mr. Dennis Sawby
Sawby Construction, LLC
12904 S. Grandview Lane
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White Shield, Inc. Project No. 119-032-01

*Sawby Richland Development
Richland, Washington*

*Geotechnical Investigation Report
June 27, 2019*

TABLE OF CONTENTS

CERTIFICATE OF ENGINEER	4
1.0 INTRODUCTION	5
1.1 Project Description and Background Information	5
1.2 Scope of Services	5
2.0 SITE INVESTIGATION	6
2.1 Literature Review	6
2.2 Field Investigation	6
2.3 Laboratory Testing and Analysis	6
3.0 SITE CONDITIONS	6
3.1 Surface Conditions and Lot Slopes	6
3.2 Site Soils	6
3.3 Regional and Local Geology	7
4.0 GEOTECHNICAL DESIGN RECOMMENDATIONS	7
4.1 Foundation Configuration	7
4.2 Site Preparation	7
4.3 Earthwork	7
4.3.1 Excavations	7
4.3.2 Site Grading	8
4.3.3 Cut and Fill Slopes	8
4.3.4 Structural Fill	8
4.4 Potential Problem Soils	8
4.5 Foundations	9
4.5.1 Design	9
4.5.2 Settlement	9
4.5.3 Foundation Backfill	9
4.5.4 Foundation Walls and Lateral Earth Pressure	10
4.5.5 Seismic Design Criteria	10
4.6 Slabs on Grade	11
4.7 Pavements	11
5.0 FINAL SITE GRADING AND EROSION CONTROL	11
6.0 SITE DRAINAGE AND STORMWATER INFILTRATION	12
7.0 CONSTRUCTION OBSERVATION AND ENGINEERING INSPECTIONS	12
8.0 REFERENCES	13

*Sawby Richland Development
Richland, Washington*

*Geotechnical Investigation Report
June 27, 2019*

FIGURES

Figure 1: Site Vicinity Map
Figure 2: Preliminary Site Plan
Figure 3: Soil Classification Chart

APPENDIX A

Test Pits TP-1 through TP-15 and INF TP-1

*Sawby Richland Development
Richland, Washington*

*Geotechnical Investigation Report
June 27, 2019*

CERTIFICATE OF ENGINEER

***Geotechnical Investigation Report
Sawby Richland Development
Richland, Washington***

The technical information and data contained in this report were prepared by, or under the direction and supervision of the undersigned, whose seal, as a professional engineer licensed to practice as such, is affixed below.

Prepared by:

Benjamin P. Staehr, PE
Senior Geotechnical Engineer



*Sawby Richland Development
Richland, Washington*

*Geotechnical Investigation Report
June 27, 2019*

1.0 INTRODUCTION

1.1 Project Description and Background Information

White Shield, Inc. (WSI) is pleased to present this Geotechnical Investigation Report for the construction of a proposed 22-lot subdivision within parcels 115983012926002 and 122982012925003 in Richland, WA. The location of the site is shown in Figure 1, Vicinity Map and preliminary site plan is provided on Figure 2, Exploration Site Plan. This area will include a 22-lot subdivision with associated roadways, utilities, and stormwater infiltration.

The site slopes moderately from the southwest to northeast and is bordered by the Hills Mobile Home Park to the west, KID irrigation canal to the northeast, and Interstate 182 to the south.

This report presents the results of our geotechnical investigation of this site. It includes a review of the site geology, a description of site soils and subsurface profile, and geotechnical recommendations and specifications for site grading and construction of home foundations consistent with International Residential Code requirements.

1.2 Scope of Services

Our scope of services for this project included the following:

- **Geologic Literature Review:** Relevant, readily-available geologic information on the site and surrounding area was reviewed for information regarding geologic conditions at or near the site.
- **Site Exploration:** Sixteen exploration test pits were excavated at the site to assess the soil conditions and to obtain representative soil samples for laboratory testing.
- **Laboratory Testing:** Soil testing included index properties testing, and sieve analyses, as required.
- **Geotechnical Engineering Analysis:** Data collected during the site exploration, literature research, and laboratory testing were analyzed to develop project-specific geotechnical design and construction recommendations for the project.
- **Report Preparation:** This geotechnical report contains the results of our work including information as it relates to the following:
 - Site exploration and laboratory test results
 - Soil/rock conditions and subsurface profile
 - Earthwork and site preparation recommendations
 - Site grading and soil placement recommendations
 - Slope design and construction recommendations
 - Foundation subgrade soil preparation recommendations
 - Allowable soil bearing capacities and maximum foundation bearing pressures
 - Foundation wall design parameters and design earth pressures
 - Pavement and slab-on-grade recommendations
 - International Residential Code (IRC) 2015 seismic design parameters
 - General site grading and drainage control requirements

*Sawby Richland Development
Richland, Washington*

*Geotechnical Investigation Report
June 27, 2019*

- **Geotechnical Construction Observation:** This report includes the outline of basic geotechnical requirements for construction observation and documentation to be performed during the construction process.

2.0 SITE INVESTIGATION

2.1 Literature Review

Information about the basic geology of the Pasco Basin was obtained from Lindsey (1996) and a discussion of the underlying Miocene-age basalt bedrock structure was provided from Reidel (et al., 1994). Information about the geologic setting of the site comes from many years of exploration work throughout Richland, West Richland, and Kennewick and from correlating the site data with regional geologic conditions.

2.2 Field Investigation

The subsurface investigation of this site included excavation of sixteen exploration test pits at locations shown on Figure 2.

The test pits were excavated with a tracked excavator. In general the test pits encountered fine sand top soil with little amounts of fine to coarse gravel and trace cobbles. All test pits heavily sloughed and intermediate gravel layers were encountered dependent in location. TP-14 and 15 near the top of the development included underlying silty sands. TP-15 included concrete rubble and debris to 6 feet. INF TP-1 encountered yellowish-orange soils including some clay content which we interpret as the underlying plio-Pleistocene unit which is exposed in the draw across the interstate. The test pit logs, provided in Appendix A (TP-1 through TP-15 and INF TP-1), include detailed descriptions of the subsurface soil types and condition.

2.3 Laboratory Testing and Analysis

Six soil samples were collected for classification and possible laboratory testing. All soil samples were classified under the Unified Soil Classification System (USCS). The soil descriptions were prepared according to the Burmister Classification System.

3.0 SITE CONDITIONS

3.1 Surface Conditions and Lot Slopes

The property is moderately sloping from the southwest to northeast with slight undulations throughout. The bulk of the site is ungraded native soil deposits. There are varying depths of dumped fill adjacent to the KID canal. Surface or subsurface water was not encountered during our explorations.

3.2 Site Soils

The local soils exposed during our explorations are generally outburst flood deposits of the Missoula floods with increasing amounts of gravel at depth. We did not encounter the plio-Pleistocene unit or Ringold formation within the lot grading area, however we did encounter the top of these units in the infiltration location.

*Sawby Richland Development
Richland, Washington*

*Geotechnical Investigation Report
June 27, 2019*

3.3 Regional and Local Geology

We reviewed the WADNR Geologic map of the Richland 1:100,000 Quadrangle (Riedel, et al.), 1994. The site is classified as outburst flood deposits of Glacial Lake Missoula, sand and silt (Qfs₃). There are nearby exposures of outburst flood deposits, sand and silt (Qfs₂), Gravel (Pleistocene to Pliocene) (QP_{Lg}), and continental sand, silt, and clay beds (Pliocene to Miocene) (P_{LMc}).

The Qfs deposits are generally described as lacustrine silt and fine sand and fluvial coarse to fine sand. The Qfs₂ are older deposits, and Qfs₃ younger. The QP_{Lg} are fluvial deposits consisting of compact to unconsolidated, clasts include quartzite, gneiss diorite, volcanic porphyries and basalt. This formation is generally referred to as the plio-Pleistocene and underlies the oldest Pleistocene deposits, but overlies the Ringold formation. We have found that this formation can contain any amount of gravels, sands, silts, and clays, some of which we have found to be highly expansive. It is generally impermeable. The P_{LMc} deposits are described as interbedded fluvial and lacustrine facies, local pebble lenses and stringers. These are the Ringold formation and are generally capped by pedogenic carbonate and are considered impermeable.

Based on our explorations we believe that the majority of the site consists of outburst sands and silts, with underlying Ringold soils and varying amounts of plio-Pleistocene soils at depth.

4.0 GEOTECHNICAL DESIGN RECOMMENDATIONS

4.1 Foundation Configuration

Building foundations should be extended through any fill soils on site and founded on native site soils below.

4.2 Site Preparation

Clear and grub all cut and fill areas of all surface vegetation and either use as landscape fill or haul offsite. Remove all roots and organic material, loose or soft soil, and old topsoil from all areas to receive fill soil, rockeries, pavement, foundations, driveways, etc. Positive drainage away from structures and pavement subgrade areas should be constructed and maintained throughout the project.

4.3 Earthwork

4.3.1 Excavations

Excavation of the surface fine sand and silt soil can be accomplished with a backhoe with a smooth bucket to prevent disturbance of subgrades or through mass grading equipment such as scrapers or dozers.

A maximum slope of 1V:2.0H (vertical to horizontal) is recommended for all unsupported excavation sidewalls in the sandy soil at the site. Any trenching or excavation over 4.0 feet bgs requires either the previously-mentioned side slopes or shoring and bracing of the excavation.

This information on slope protection is based on Occupational Safety and Health Administration (OSHA) regulations and is provided entirely as a service to our Client.

Sawby Richland Development
Richland, Washington

Geotechnical Investigation Report
June 27, 2019

Under no circumstances should the Client or their contractors or subcontractors interpret this information to mean, or otherwise imply, that White Shield, Inc. (WSI) assumes responsibility for construction site safety and/or temporary slope stability, or the contractor activities. Such responsibility is not implied and should not be inferred.

4.3.2 Site Grading

All excavated materials will be kept on site and used as backfill around foundation walls and structures and for grading around the homes. All soil fill placed on this lot during construction is considered to be structural fill that must be placed and compacted to the specifications listed in the following section 4.4.4 Structural Fill.

4.3.3 Cut and Fill Slopes

All finish slopes shall be graded to a maximum slope of 1V:2H. All fill slopes shall be constructed from the base upward by compacting the soil in layers, overbuilding the slope, and then finish grading to a maximum slope of 1V:2H. Temporary soil cuts should not exceed four feet unless approved by the geotechnical engineer and plans are made for providing immediate permanent structural support.

4.3.4 Structural Fill

For structural fill, use existing onsite soil or imported granular soil. The onsite soil can be used as structural fill provided it is free of organics, it is installed in maximum 8-inch-loose lifts and it is compacted in place. Structural fill soil shall not contain boulders exceeding 6 inches in diameter. Backfill soil next to building foundations shall be classified as primarily sand and gravel with no boulders or clasts exceeding 3 inches in diameter.

Imported fill should be well graded between coarse and fine with a maximum particle size of 1 inch and contain no deleterious materials. Imported fill should have a less than 20 percent by weight passing the No. 200 sieve. Imported soil fill shall be approved for use by a geotechnical engineer and soil compaction criteria shall be established for the specific material.

All structural fill shall be installed in 8-inch, maximum loose lifts, it shall be moisture conditioned to optimum moisture content and it shall be compacted to a dry density of at least 95 percent of its maximum dry density as determined by the modified proctor test using ASTM International (ASTM) D1557 or per onsite specification and approval by the geotechnical engineer.

Vibratory roller compactors or wheel roller compaction equipment will produce the best soil compaction results at this site. For backfilling next to the foundation walls, we recommend using a hand-operated jumping jack.

4.4 Potential Problem Soils

Though we did not encounter any of the plio-Pleistocene soils within the main area of the development, we did observe the top of this formation in the lower infiltration basin. These soils have exposures to the south near Tagaris Winery. These soils have a potential for being highly expansive based on our past experience. Although not encountered, due to the limited nature of test pit explorations it is possible that these

Sawby Richland Development
Richland, Washington

Geotechnical Investigation Report
June 27, 2019

soils may be uncovered during mass grading. We recommend that we be retained to monitor grading activities and contacted immediately if these soils are encountered. They contrast from the overlying sand and silt soils in both color and texture and are generally easily identified. If these soils are encountered, we need to be contacted immediately for further evaluation. There is the potential need for further treatment of these soils to prevent foundation and road damage if they are found to be expansive.

4.5 Foundations

4.5.1 Design

The proposed buildings can be supported on conventional spread footings. All footings should be supported on properly prepared subgrade in native soils or on structural fill as discussed in the previous paragraphs. If we are retained to monitor mass grading, there is no need for further geotechnical evaluation of individual lots.

The minimum widths of the continuous wall footings shall be consistent with current IRC standards. The bottom exterior of all footings shall be at least 24 inches below the lowest adjacent exterior grade for frost protection.

WSI recommends using a maximum soil bearing pressure of 1,500 pounds per square foot (lb/ft^2) for all footings that bear on the near-surface, or silty sand soil consistent with current IRC standards. Please note that this allowable soil bearing pressure assumes a minimum confinement depth, or depth of burial, of 2.0 feet bgs. For interior footings placed directly on the prepared subgrade and not backfilled, reduce the allowable bearing pressure to 750 psf.

An assessment of loading on the foundation system by the home designer, architect, or structural engineer is required to verify that the footing sizes comply with the previously-mentioned requirements and the footings are correctly proportioned for the specified bearing capacity.

For consideration of short period seismic and wind pressures, the allowable footing bearing pressure values provided in this section may be increased by one-third. Use a dynamic bearing capacity of $2,000 \text{ lb/ft}^2$ when sizing footings for transient forces. For lateral forces, use a friction coefficient of 0.4 between the base of the footings and the underlying subgrade soil.

4.5.2 Settlement

WSI estimates a maximum total settlement of less than 0.5 inch and a maximum differential settlement on the order of 30 percent of the maximum settlement over 50 feet. Our settlement estimate assumes that no disturbance of the foundation soil would be permitted during excavation and construction and the footings are prepared as described previously.

4.5.3 Foundation Backfill

The clear space around the exterior of all foundations and between the stem walls and footing trenches shall be backfilled in lifts and compacted to a minimum of 90 percent of maximum dry density per ASTM D1557, or per onsite inspection and approval by

Sawby Richland Development
Richland, Washington

Geotechnical Investigation Report
June 27, 2019

the geotechnical engineer. Care must be taken with the backfilling operation to provide foundation subgrade soil confinement pressure and to help limit infiltration and future settlement around the foundation. At this site, careful backfilling behind the basement walls is critical for preventing any storm drainage inflow into the foundation area.

4.5.4 Foundation Walls and Lateral Earth Pressure

For the design of elevated stem walls and garage foundation walls, use the data in the following Table 1:

Table 1: Native Soil Design Parameters

Assumed Soil Density	=	110 lb/ft ³
Assumed Soil Internal Friction Angle	=	30 degrees
Coefficient of At-Rest Earth Pressure,	K_0 =	0.50
At-Rest Earth Pressure Equivalent Fluid Density	=	55 lb/ft ³
Coefficient of Active Earth Pressure,	K_a =	0.33
Active Earth Pressure Equivalent Fluid Density	=	37 lb/ft ³
Coefficient of Passive Earth Pressure,	K_p =	3.00
Passive Earth Pressure Equivalent Fluid Density	=	330 lb/ft ³

Basement foundation walls should generally be designed using the at-rest lateral earth pressure value.

All foundation walls must be backfilled with compacted soil to fully mobilize the passive earth resistance. Backfill placed within 3 feet of foundation walls should be placed in maximum 12-inch, loose lifts and compacted to at least 90 percent of the maximum dry density, as determined by ASTM D1557.

4.5.5 Seismic Design Criteria

The soil profile at the site consists of silty sand surface soil underlain by dense fine to medium sand followed by dense sandy gravels. This soil profile conforms to a seismic design "Site Class D", still soil. For this site, use the following seismic design parameters found in the following Table 2:

Table 2: 2012 IBC Seismic Design Parameters

	Short Period	1 sec
Maximum Credible Earthquake Acceleration	$S_s = 0.422$	$S_1 = 0.161$
Site Class	D	
Site Coefficient	$F_a = 1.462$	$F_v = 2.277$
Adjusted Spectral Acceleration	$S_{MS} = 0.617$	$S_{M1} = 0.367$
Design Response Acceleration	$S_{DS} = 0.412$	$S_{D1} = 0.245$
Design Peak Ground Acceleration	0.186 g	

Based on the design response acceleration ($S_{DS}=0.412$) the buildings on this site are assigned a Seismic Design Category D consistent with IRC Table R301.2.2.1.1

*Sawby Richland Development
Richland, Washington*

*Geotechnical Investigation Report
June 27, 2019*

Additionally, due to a lack of near surface water, the potential for liquefaction of site soils under seismic loading is considered low to moderate for this site.

4.6 Slabs on Grade

Slabs-on-grade should be supported on subgrade soils prepared as described in Section 4.3.2 Site Grading subsection of this report. Clean crushed rock, at least 6 inches thick and compacted into place should be placed throughout the planned slab areas and over the exposed native soils. We recommend that all floor slabs be underlain by at least four inches of free-draining gravel with less than three percent by weight of the material passing Sieve No. 200 for use as a capillary break. A suitable vapor barrier, such as heavy plastic sheeting (6-mil minimum), should be placed over the capillary break material. An additional 2-inch thick moist sand layer may be used to cover the vapor barrier. This sand layer is optional and is intended to protect the vapor barrier membrane during construction.

4.7 Pavements

Pavement subgrade preparation, and structural filling where required, should be completed as recommended in the 4.3.2 Site Grading and 4.3.4 Structural Fill subsections of this report. The pavement subgrade should be proof-rolled with a heavy, rubber-tired piece of equipment to identify soft or yielding areas that require repair. We anticipate the areas needed for repair can be removed and replaced with clean crushed rock, compacted into place. We should be retained to observe the proof rolling and recommend repairs prior to placement of the asphalt or hard surfaces. WSI should approve all pavement subgrades.

Pavement sections should meet the City of Richland standard details for this development. As stated before, if any fine grained clayey soils are encountered within roadway excavations we should be notified immediately.

5.0 FINAL SITE GRADING AND EROSION CONTROL

The ground surface adjacent to the building shall slope away from the slab, stem walls, or foundation walls at 5 percent for a minimum distance of 10 feet from the structure per the requirements of the IRC, or an alternative drainage method shall be designed into the site drainage plan. Landscaping and lot grading should consider drainage requirements of the building and prevent ponding of water near the structures or in landscaped areas. All impervious surfaces shall be sloped to drain into an approved catch basin and piped to an appropriate infiltration system on-site.

All final slope surfaces should be moisture conditioned and compacted with a track dozer or some other compaction method that will work on the slope to achieve a smooth slope with a maximum slope angle of 1V:2H. A maximum slope of 1V:3H should be used if the slope will be maintained in grass and mowed. Finish soil slopes that are steeper than 1V:3H require some form of erosion protection to prevent water erosion at the surface in the event of an irrigation or domestic water line break. Erosion protection of these slopes should be designed into the final landscaping plan for the lot. Several options exist for slope protection and erosion control including but not limited to the following:

*Sawby Richland Development
Richland, Washington*

*Geotechnical Investigation Report
June 27, 2019*

- The slope can be planted with drought-resistant plants (desert landscape) and watered with drip irrigation systems or light hand watering.
- Erosion control blankets or geotextile can be utilized along with sparsely-placed suitable vegetation. The erosion control blanket provides more immediate slope protection with the vegetation and will aid in long-term stability.
- The slope can be covered with a landscape fabric and then covered with decorative gravel, cobble, or rock.

Existing slopes that are undisturbed and covered with native desert vegetation are all less than 1V:3H and do not require any form of erosion control.

6.0 SITE DRAINAGE AND STORMWATER INFILTRATION

No specific stormwater infiltration analysis was performed at this site. We collected representative soil samples from the site and can provide approximate infiltration values based on gradation analysis, if requested. If specific site infiltration rates are required further explorations will be necessary.

Based on our explorations, the proposed area within Tract A should be suitable for a storage basin and/or infiltration pond. However, we would not recommend excavating material from this location to construct the pond due to the underlying impermeable soils we found roughly 12-feet below grade. We would recommend the pond be constructed by structural fill that is properly keyed and benched into the location.

For stormwater design purposes, assume groundwater depth of approximately 80-feet below grade based on nearby well logs.

7.0 CONSTRUCTION OBSERVATION AND ENGINEERING INSPECTIONS

Geotechnical engineering construction observation is required during construction of both homes to monitor earthwork, soil, and groundwater conditions and to document the geotechnical aspects of constructing the homes. Construction observation will allow us to identify unexpected soil or groundwater conditions that were not identified in our site explorations and will allow us to adjust our geotechnical recommendations as required.

This project will require several onsite inspection visits by the geotechnical engineer to observe field conditions and verify the following items:

- Geotechnical engineering review of the building construction plans.
- Geotechnical engineering observation and approval of site grading, soil placement, and compaction.
- Geotechnical engineering inspection, testing, and approval of the building foundation subgrade soil conditions.
- Geotechnical engineering inspection and documentation of the backfill around foundation and stem walls.
- Geotechnical engineering inspection and documentation of the stormwater collection and infiltration system.
- Geotechnical engineering approval of final site grading.

*Sawby Richland Development
Richland, Washington*

*Geotechnical Investigation Report
June 27, 2019*

8.0 REFERENCES

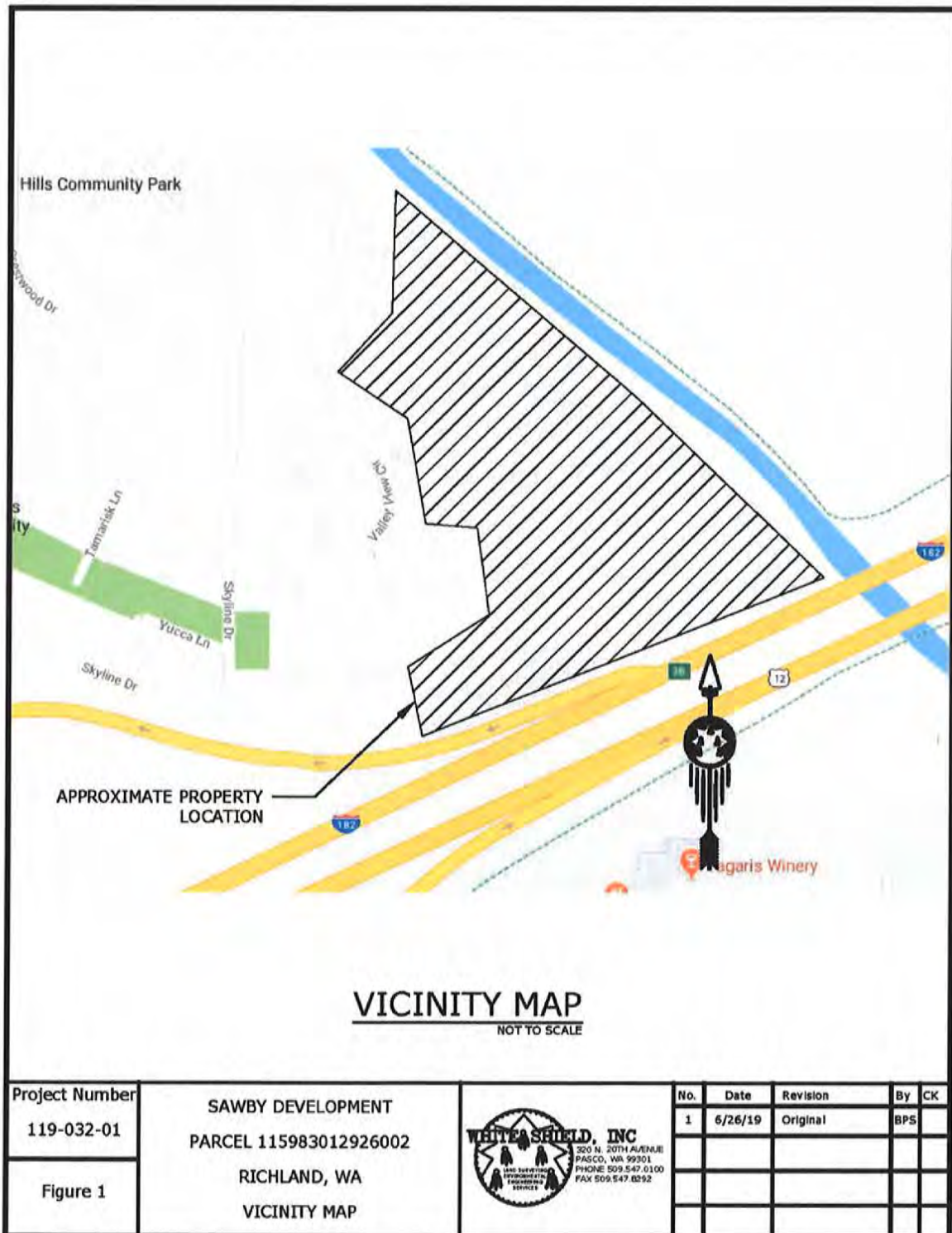
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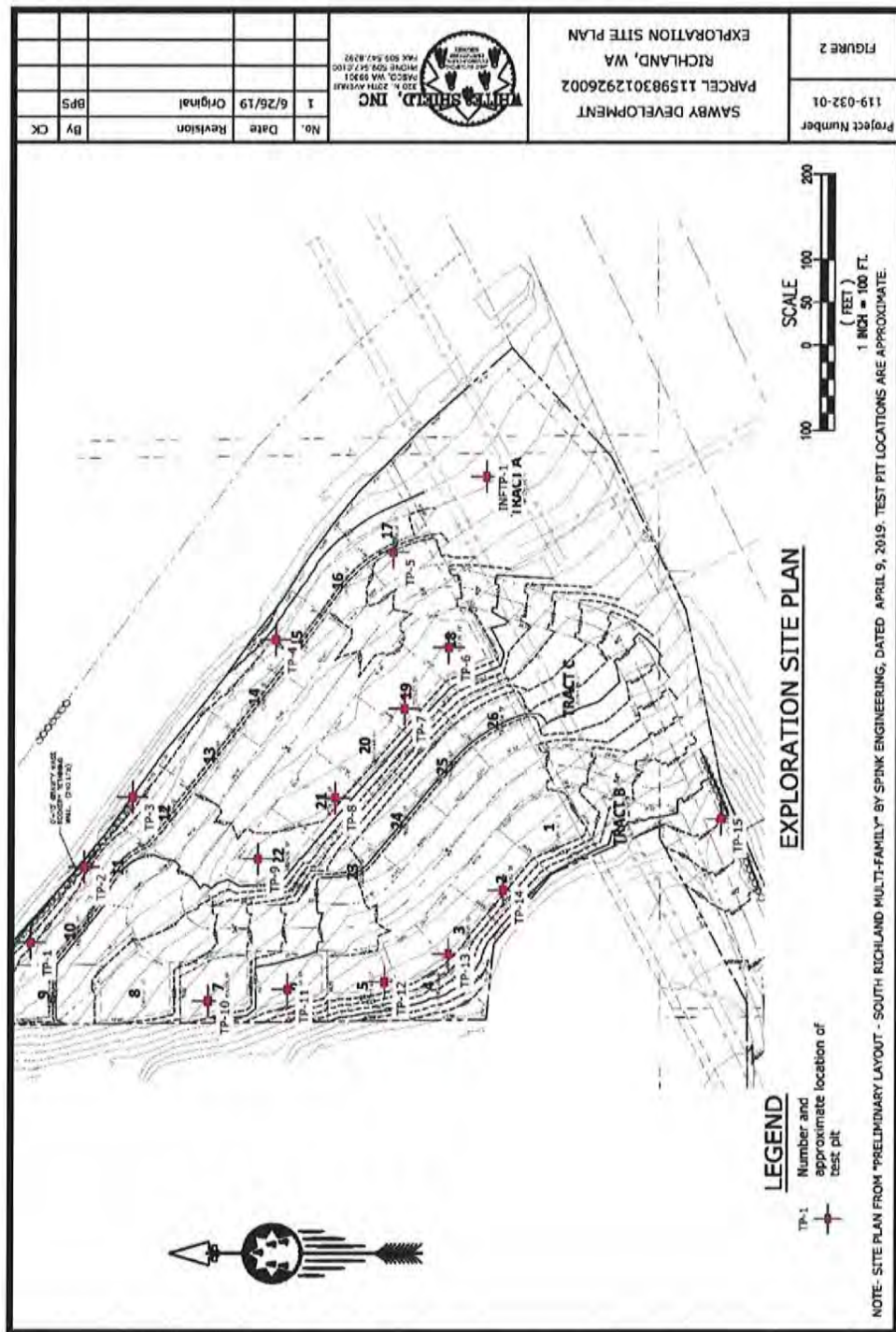
FIGURES

Figure 1: Vicinity Map

Figure 2: Preliminary Site Plan

Figure 3: Soil Classification Chart





UNIFIED SOIL CLASSIFICATION SYSTEM								
MAJOR DIVISIONS			GROUP SYMBOL	GROUP NAME				
COARSE - GRAINED SOILS MORE THAN 50 % RETAINED ON NO. 200 SIEVE	GRAVEL MORE THAN 50 % OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVEL	GW	WELL-GRADED, FINE TO COARSE GRAVEL				
			GP	POORLY-GRADED GRAVEL				
		GRAVEL WITH FINES	GM	SILTY GRAVEL				
			GC	CLAYEY GRAVEL				
	SAND MORE THAN 50 % OF COARSE FRACTION PASSES NO. 4 SIEVE	CLEAN SAND	SW	WELL-GRADED SAND, FINE TO COARSE SAND				
			SP	POORLY GRADED SAND				
		SAND WITH FINES	SM	SILTY SAND				
			SC	CLAYEY SAND				
FINE - GRAINED SOILS MORE THAN 50 % PASSES NO. 200 SIEVE	SILT AND CLAY LIQUID LIMIT LESS THAN 50 %	INORGANIC	ML	SILT				
			CL	CLAY				
		ORGANIC	OL	ORGANIC SILT, ORGANIC CLAY				
	SILT AND CLAY LIQUID LIMIT 50 % OR MORE	INORGANIC	MH	SILT OF HIGH PLASTICITY, ELASTIC SILT				
			CH	CLAY OF HIGH PLASTICITY, FAT CLAY				
		ORGANIC	OH	ORGANIC CLAY, ORGANIC SILT				
HIGHLY ORGANIC SOILS			PT	PEAT				
NOTES:								
1) Field classification is based on visual examination of soil in general accordance with ASTM D 2488-93.			SOIL MOISTURE MODIFIERS:					
2) Soil classification using laboratory tests is based on ASTM D 2488-93.			Dry - Absence of moisture, dusty, dry to the touch					
3) Descriptions of soil density or consistency are based on interpretation of blowcount data, visual appearance of soils, and/or test data.			Damp - No visible water, leaves hand dry.					
			Moist - Leaves water or mud on hand.					
			Wet - Visible free water or saturated, usually soil is obtained from below water table					
Project Number	SAWBY DEVELOPMENT		 WHITE SHIELD, INC 320 N. 20TH AVENUE PASCO, WA 99301 PHONE 509.547.0100 FAX 509.547.8292	No.	Date	Revision	By	CK
119-032-01	PARCEL 115983012926002			1	6/26/19	Original	BPS	
Figure 3	RICHLAND, WA USCS CLASSIFICATION							

APPENDIX A

Test Pits TP-1 through TP-15 and INF TP-1



TEST PIT TP-1

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.259050, -119.300540			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 428 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 9.5		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							0
1	Loose, Brown, Damp, fine SAND, trace F-c Gravel (FILL)		SP				
2	**Soil heavily sloughed						
3							
4							
5							
6							
7	Medium dense, Brown, Damp, fine SAND, trace F-c Gravel		SP				
8	**Soil heavily sloughed						
9							
10	TEST PIT terminated at 9.5 ft on 5/15/2019						
11							
12							
13							
14							

Page 1 of 1

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TEST PIT TP-2

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.258878, -119.300069	
PROJECT NAME Sawby Richland Development				COORD SYS GPS	
CLIENT Sawby Construction				SURFACE ELEVATION 428 ft	
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC	
		TOTAL DEPTH 9.5		CHECKED BY BPS	
COMMENTS					
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Penetration Resistance
					060
1	Loose, Brown, Dry, fine SAND, trace F-c Gravel (FILL)		SP		
2	**Soil heavily sloughed				
3					
4					
5					
6					
7	Medium Dense, Brown, Damp, fine SAND, trace F-c Gravel		SP		
8	**Soil heavily sloughed				
9					
10	TEST PIT terminated at 9.5 ft on 5/15/2019				
11					
12					
13					
14					

Page 1 of 1

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TEST PIT TP-3

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 48.258174, -119.299047			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 428 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 10.5		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							60
1	Loose, Brown, Damp, fine SAND, trace F-c Gravel (FILL)		SP				
2	**Soil heavily sloughed						
3							
4							
5							
6							
7	Medium Dense, Brown, Damp, fine SAND, trace f-c Gravel		SP				
8							
9							
10							
11	TEST PIT terminated at 10.5 ft on 5/15/2019						
12							
13							
14							



TEST PIT TP-4

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 48.257891, -119.298519			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 424 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 10.0		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							60
1	Loose, Brown, Damp, fine SAND, trace F-c Gravel (FILL) **Soil heavily Sloughed		SP				
2	Medium Dense to Loose, Brown, Damp, fine SAND, trace F-c Gravel **Soil heavily Sloughed		SP				
3							
4							
5							
6	Medium Dense, Grayish Brown, Damp, fine SAND, trace F-c Gravel		SP				
7							
8							
9							
10	TEST PIT terminated at 10.0 ft on 5/15/2019						
11							
12							
13							
14							

Page 1 of 1

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TEST PIT TP-5

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.257717, -119.298276	
PROJECT NAME Sawby Richland Development				COORD SYS GPS	
CLIENT Sawby Construction				SURFACE ELEVATION 432 ft	
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC	
		TOTAL DEPTH 10.0		CHECKED BY BPS	
COMMENTS					
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Penetration Resistance
					060
1	Loose, Brown, Damp, fine SAND, trace F-c Gravel (FILL)		SP		
2	**Soil heavily sloughed Loose, Brown, Damp, fine SAND, trace F-c Gravel		SP		
3	**Soil heavily sloughed				
4					
5	Medium Dense, Brown, Damp, fine SAND, trace F-c Gravel		SP		
6					
7					
8					
9					
10	TEST PIT terminated at 10.0 ft on 5/15/2019				
11					
12					
13					
14					

Page 1 of 1

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TEST PIT TP-6

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.257677, -119.298871			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 432 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 13.0		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							60
1	Loose to Medium Dense, Brown, Damp, fine SAND, trace F-c Gravel		SP				
2	**Soil heavily sloughed						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12	Loose to Medium Dense, Pale Brown, Dry, fine SAND, some F-c Gravel, trace Cobbles		SP				
13	TEST PIT terminated at 13.0 ft on 5/15/2019						
14							

Page 1 of 1

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TEST PIT TP-7

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 48.257720, -119.299231			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 436 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 13.0		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							60
1	Loose to medium Dense, Brown, Damp, fine SAND, trace F-c Gravel		SP				
2	**Soil heavily sloughed						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12	Medium Dense, Brown, Damp, fine SAND, some F-c Gravel		SP				
13	TEST PIT terminated at 13.0 ft on 5/15/2019						
14							

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Page 1 of 1



TEST PIT TP-8

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.258042, -119.299954			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 436 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 13.5		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							60
1	Loose, Brown, Damp, fine SAND, trace F-c Gravel		SP				
2	**Soil heavily sloughed						
3							
4							
5	Loose to Medium Dense, Dark Grayish Brown, Damp, fine SAND, some F-c Gravel		SP				
6							
7							
8							
9							
10							
11							
12							
13							
14	TEST PIT terminated at 13.5 ft on 5/15/2019						

Page 1 of 1

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TEST PIT TP-9

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.258042, -119.299954			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 436 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 14.5		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
1	Loose to Medium Dense, Brown, Damp, fine SAND, trace F-c Gravel		SP				
2	**Soil heavily sloughed						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12	Medium Dense, Brown, Damp, fine SAND, some F-c Gravel		SP				
13	** 6-inch gravel layer encountered at 12 feet						
14							
TEST PIT terminated at 14.5 ft on 5/15/2019							

Page 1 of 1

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TEST PIT TP-10

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 48.258345, -119.300683			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 456 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 15.0		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							60
1	Loose to Medium Dense, Brown, Damp, fine SAND, trace F-c Gravel		SP				
2	**Soil heavily sloughed						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14	Medium Dense to Dense, Pale Yellowish Brown, Damp, fine SAND, some F-c Gravel, trace Clay		SP				
15	** 6-inch gravel layer encountered at 13.5 feet						
15	TEST PIT terminated at 15.0 ft on 5/15/2019						

Page 1 of 1

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TEST PIT TP-11

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.258144, -119.300646			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 460 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 14.5		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							0
1	Loose to Medium Dense, Brown, Damp, fine SAND, trace F-c Gravel		SP				
2	**Soil heavily sloughed						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13	Medium Dense, Pale Yellowish Brown, Damp, fine SAND, some F-c Gravel			SP			
14	** 4-inch gravel layer encountered at 14.5 feet						
	TEST PIT terminated at 14.5 ft on 5/15/2019						

Page 1 of 1

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TEST PIT TP-12

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 48.257871, -119.300550			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 468 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 15.0		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							0
1	Loose to Medium Dense, Brown, Damp, fine SAND, trace F-c Gravel		SP				
2	**Soil heavily sloughed						
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14	Medium Dense, Pale Yellowish Brown, Damp, fine SAND, some F-c Gravel		SP				
15	TEST PIT terminated at 15.0 ft on 5/15/2019						

Page 1 of 1

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TEST PIT TP-13

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 48.257492, -119.300414			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 472 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 15.0		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
0							60
1	Loose, Brown, Damp, fine SAND, trace F-c Gravel		SP				
2	**Soil heavily sloughed						
3	** 6-inch gravel layer encountered at 7.0 feet						
4							
5							
6							
7	Medium Dense, Yellowish Brown, Damp, fine SAND, some F-c Gravel, trace Cobbles		SP				
8							
9							
10							
11							
12							
13							
14							
15	TEST PIT terminated at 15.0 ft on 5/15/2019						

Page 1 of 1

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TEST PIT TP-14

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.257223, -119.299507	
PROJECT NAME Sawby Richland Development				COORD SYS GPS	
CLIENT Sawby Construction				SURFACE ELEVATION 430 ft	
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC	
		TOTAL DEPTH 15.0		CHECKED BY BPS	
COMMENTS					
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Penetration Resistance
0					0
1	Loose to Medium Dense, Brown, Damp, fine SAND, trace F-c Gravel		SP		
2	**Soil heavily sloughed				
3					
4					
5					
6	Medium Dense to Dense, Yellowish Brown, Dry, fine Silty SAND, some F-c Gravel, trace Clay, weakly cemented		SP		
7					
8					
9					
10					
11					
12					
13					
14	Dense, Dry, Yellowish Brown, fine Silty SAND, some F-c gravel, trace Clay, moderately cemented		SP		
15	TEST PIT terminated at 15.0 ft on 5/15/2019				

Page 1 of 1

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TEST PIT TP-15

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.258529, -119.300028			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 488 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 13.0		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
1	Loose to Medium Dense, Brown, Dry, F-c Sandy GRAVEL, trace cobbles, Rubble (concrete and rocks) (Fill)		GP				
2							
3							
4							
5							
6	Medium Dense, Brown, Dry, F-c Sandy GRAVEL, trace Cobbles		GP				
7							
8							
9							
10							
11	Dense, Dry, Yellowish Brown, fine Silty SAND, some F-c gravel, trace Clay, moderately cemented		SP		Bag Sample		
12							
13	TEST PIT terminated at 13.0 ft on 5/15/2019						
14							

Page 1 of 1

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TEST PIT INF TP-1

PROJECT NUMBER 119-032-01		DRILLING DATE 5/15/19		COORDINATES 46.257417, -119.297976			
PROJECT NAME Sawby Richland Development				COORD SYS GPS			
CLIENT Sawby Construction				SURFACE ELEVATION 430 ft			
ADDRESS Skyline Drive, Richland WA		DRILLING METHOD Track Hoe		LOGGED BY EC			
		TOTAL DEPTH 14.0		CHECKED BY BPS			
COMMENTS							
Depth (ft)	Material Description	Graphic Log	USCS	Blow Count	Samples	Laboratory Test	Penetration Resistance
1	Loose to Medium Dense, Dark Yellowish Brown, Damp, fine SAND, trace F-c Gravel, weak cementation		SP		Bag Sample		
2	**Soil heavily sloughed						
3							
4							
5							
6							
7							
8							
9							
10	Medium Dense, Brown, Damp, fine Silty SAND, some F-c Gravel, trace Cobbles		SM				
11							
12	Medium Dense to Dense, Dry, Pale Brown with rust Orange layering, fine Silty SAND, trace C-f Gravel, trace Clay		SM				
13					Bag Sample		
14	Test Pit terminated at 14.0 ft on 5/15/2019						

Page 1 of 1

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APPENDIX B

WASHINGTON FISH AND WILDLIFE SERVICES LETTER



State of Washington
Department of Fish and Wildlife
Habitat Program
2620 North Commercial Avenue, Pasco, WA 99301
Phone: (509) 543-3319, E-mail: Michael.Ritter@dfw.wa.gov

MWR-10-19

June 5, 2019

Spink Engineering
Steve Spink
Richland, WA 99352

Dear Mr. Spink,

Thank you for contacting the Washington Department of Fish and Wildlife (WDFW) regarding the plat submittal packages in the City of Richland for Skyline South and Falcon Ridge II.

WDFW appreciates the foresight by the City to have you contact us as an initial step to identify and address any issues related to Priority Habitats and Species (PHS), and other important natural resources.

Based on my review of the WDFW PHS database and Google Earth, there are no PHS issues such as shrub-steppe habitat or animal species occurrences associated with either preliminary plat.

While the PHS databases identifies that entire ridgeline and hill sides of Falcon Ridge II as priority shrub-steppe habitat, Google earth reveals that most if not all of the land are for Falcon Ridge II was previously disturbed.

Please contact me with any questions.

Sincerely,

A handwritten signature in black ink that reads "Michael Ritter".

Michael Ritter
Habitat Biologist

South Richland Multi-Family Development

Traffic Impact Analysis

February 2018

Prepared by:



J-U-B ENGINEERS, Inc.
2810 W. Clearwater Avenue, Suite 201
Kennewick, Washington 99336

South Richland Multi-Family Development

Traffic Impact Analysis

February 2018



Prepared by:

Spencer Montgomery
Richard H. Door, PE



J-U-B ENGINEERS, Inc.
2810 W. Clearwater Avenue, Suite 201
Kennewick, Washington 99336

Table of Contents

Introduction and Background	1
Existing Conditions	2
Land Use	2
Roadway Characteristics	2
Crash History	2
Traffic Volumes	3
Operational Analysis	3
Future Conditions	7
Proposed Development	7
Trip Generation and Trip Distribution	7
Opening Year Conditions	7
2023 Conditions with the Duportail Street Extension	11
Summary and Recommendations	15

List of Figures

Figure 1. Existing Peak Hour Traffic Volumes	4
Figure 2. Trip Distribution Percentages	8
Figure 3. Site Generated Trips	9
Figure 4. Opening Traffic Volumes	10
Figure 5. 2023 Traffic Volumes	13

List of Tables

Table 1. Crash History at Queensgate Drive/Skyline Drive	3
Table 2. Level of Service Criteria for Unsignalized Intersections	5
Table 3. Summary of Existing Intersection Delay (sec) and Level of Service	6
Table 4. Summary of Opening Year Intersection Delay (sec) and Level of Service	11
Table 5. Comparison of Directional Split on Queensgate Drive	12
Table 6. Summary of 2023 Intersection Delay (sec) and Level of Service	12

Appendices

Appendix A– Collision History
Appendix B – Traffic Volumes
Appendix C – Capacity Analysis Worksheets
Appendix D – Conceptual Site Plan

Introduction and Background

Located in the south part of the City of Richland, between Queensgate Drive and the Yakima River, and north of I-182, lies an undeveloped parcel of land adjacent to The Hills Mobile Home Park. The owner desires to develop the approximately 10 acre parcel as a multi-family residential development with approximately 35 duplexes or 70 residential units. The sole access to the property will be from Skyline Drive which connects to Queensgate Drive where full movement of traffic is currently allowed.

The City of Richland has requested that a Traffic Impact Analysis (TIA) be performed to determine if the existing intersection of Queensgate Drive/Skyline Drive can provide acceptable Levels of Service for all movements with the additional traffic associated with the proposed development. If Levels of Service fall below acceptable standards certain movements may need to be restricted, such as left turns out of Skyline Drive and/or left turns into Skyline Drive. There is also concern that with the proximity of the Wal-Mart entrance to the north that queues for the northbound left turns into the Wal-Mart and queues for the southbound left turns onto Skyline Drive will have adequate storage space since they share the two-way-left-turn-lane.

In addition to existing conditions, this TIA has been performed to evaluate two future year scenarios:

- 1) Opening Year – which does not include the Duportail Extension over the Yakima River.
- 2) Year 2023 – which will include the future extension of Duportail Street over the Yakima River, connecting to Queensgate Drive north of the study area.

Existing Conditions

This section will document existing conditions with respect to land use, roadway characteristics, accident history, traffic volumes and traffic operations.

Land Use

East of Queensgate Drive, north of I-182 and south of Duportail Street, is primarily zoned as Multi-Family Residential east to the Columbia Irrigation District canal, except for the southeast corner of Duportail Street/Queensgate Drive which is zoned as General Retail. East of the CID canal is zoned as Natural Open Space. West of Queensgate Drive is zoned as Retail Business south of Duportail Street and General Retail with some Limited Business and Parks and Public Facilities north of Duportail Street.

Roadway Characteristics

Queensgate Drive is a minor arterial roadway with a speed limit of 35 MPH. North of the I-182 westbound ramps Queensgate Drive has 5 lanes including a two-way-left-turn lane. One of the northbound lanes is added from the I-182 westbound off-ramp, while one of the southbound lanes is dropped and becomes a westbound on-ramp. There is also one lane added southbound that comes from an I-182 westbound loop ramp resulting in two southbound and one northbound lane on the I-182 mainline overpass. There is curb, gutter, sidewalk and streetlights north of Skyline Drive, except for approximately a 170' missing piece of sidewalk on the east side immediately north of Skyline Drive. South of Skyline Drive there are no sidewalks through the I-182 interchange, but there are shoulders for pedestrians and disabled vehicles on the bridge over I-182. There is a driveway entrance to WalMart on Queensgate Drive approximately 475' north of Skyline Drive. Thus, northbound left turns into the WalMart must share the same turning space as the southbound left turns onto Skyline Drive. The intersection of Queensgate Drive/I-182 Westbound ramps is quite unique in that there is no traffic control – the added and dropped lanes at the intersection create the ability for every movement to be freeflowing with the exception of the northbound left turn to the westbound on-ramp which must yield to one southbound through lane. This left turning volume is relatively small, as discussed below

Skyline Drive is a 2-lane local street that connects to Queensgate Drive on the west, approximately 275' north of the I-182 westbound off-ramp, and to the Hills Mobile Home Park approximately 800 feet to the east. The westbound approach at the intersection is stop controlled. Skyline Drive is unstriped and is approximately 28' wide for most of its length, but at the intersection at Queensgate Drive is approximately 42' wide, and although unstriped, it does allow for two westbound vehicles to be side by side if the first arriving vehicle is positioned to accommodate another vehicle. There is curb and gutter on both sides but has no sidewalks or street lights. The speed limit is 25 MPH.

Crash History

At some busy unsignalized intersections drivers from minor street approaches may become frustrated and take risks that they might not otherwise take in order to enter or cross the flow of major street traffic, thus accepting smaller gaps in major street traffic resulting at times in crashes. A brief review of the crashes occurring at the intersection of Queensgate Drive/Skyline Drive over the five most recent years of available data reveals a total of 11 crashes within 100' of the intersection as shown in Table 1.

Table 1. Crash History at Queensgate Drive/Skyline Drive

Year	Number of Crashes
2012	2
2013	1
2014	1
2015	3
2016	4
Total	11

Detailed data on the collisions is included in Appendix A and shows that two collisions were associated with vehicles entering from the minor street. All the others were associated with vehicles traveling the same direction on Queensgate Drive and either a rear-end collision or a sideswipe accident.

Traffic Volumes

Manual turning movement counts were collected in 15 minute increments at the intersections of Queensgate Drive/Skyline Drive and at the WalMart Entrance from Queensgate Drive during the AM and PM peak hours on December 6, 2017. These peak hour traffic volumes are shown in Figure 1, with the 15-minute data included in Appendix B. There were 1,336 vehicles at the Queensgate Drive/Skyline Drive intersection during the AM peak hour, while in the PM peak hour the traffic volume was nearly double at 2,577.

Of the northbound vehicles approximately 80% come from the I-182 westbound off-ramp during both peak hours. (For the AM there was 587 vehicles exiting the I-182 westbound off-ramp of the total 729 vehicles northbound at Skyline Drive. For the PM there were 1,218 vehicles exiting the I-182 westbound off-ramp of the total 1,527 vehicles northbound at Skyline Drive.) This puts the majority of traffic in the curb lane making it somewhat more challenging for Skyline Drive traffic to turn right to join the northbound flow. In the southbound direction a similar phenomenon occurs, with only 8 % of AM and 11% of PM traffic exiting Queensgate Drive to go west on I-182 (as counted in the 2014 Corridor Study, see Appendix B), again leaving the majority of traffic in the closest through lane for any left turns from Skyline Drive to go southbound on Queensgate Drive. The two-way-left-turn-lane does provide the opportunity for westbound left turns from Skyline Drive to make a two-staged left turn to merge with the southbound traffic flow, this is further facilitated by the fact that there are no northbound left turns at Skyline Drive since it is a 3-legged intersection.

Operational Analysis

The analysis of Level-of-Service (LOS) is a means of quantitatively describing the quality of operational conditions of a roadway segment or intersection and the perception by motorists and passengers. Service levels are identified by letter designation, A – F, with LOS “A” representing the best operating conditions and LOS “F” the worst. Each LOS represents a range of operating conditions and one or more measures of effectiveness (MOE’s) are used to quantify the LOS of a roadway element. For intersections the MOE used is average control delay (seconds) per vehicle. While there are several methodologies for estimating the LOS of intersections, the most commonly used is presented in the Highway Capacity Manual and is the methodology used in this study (HCM 2010). The Highway Capacity Manual LOS criteria for unsignalized intersections are summarized in Table 2.

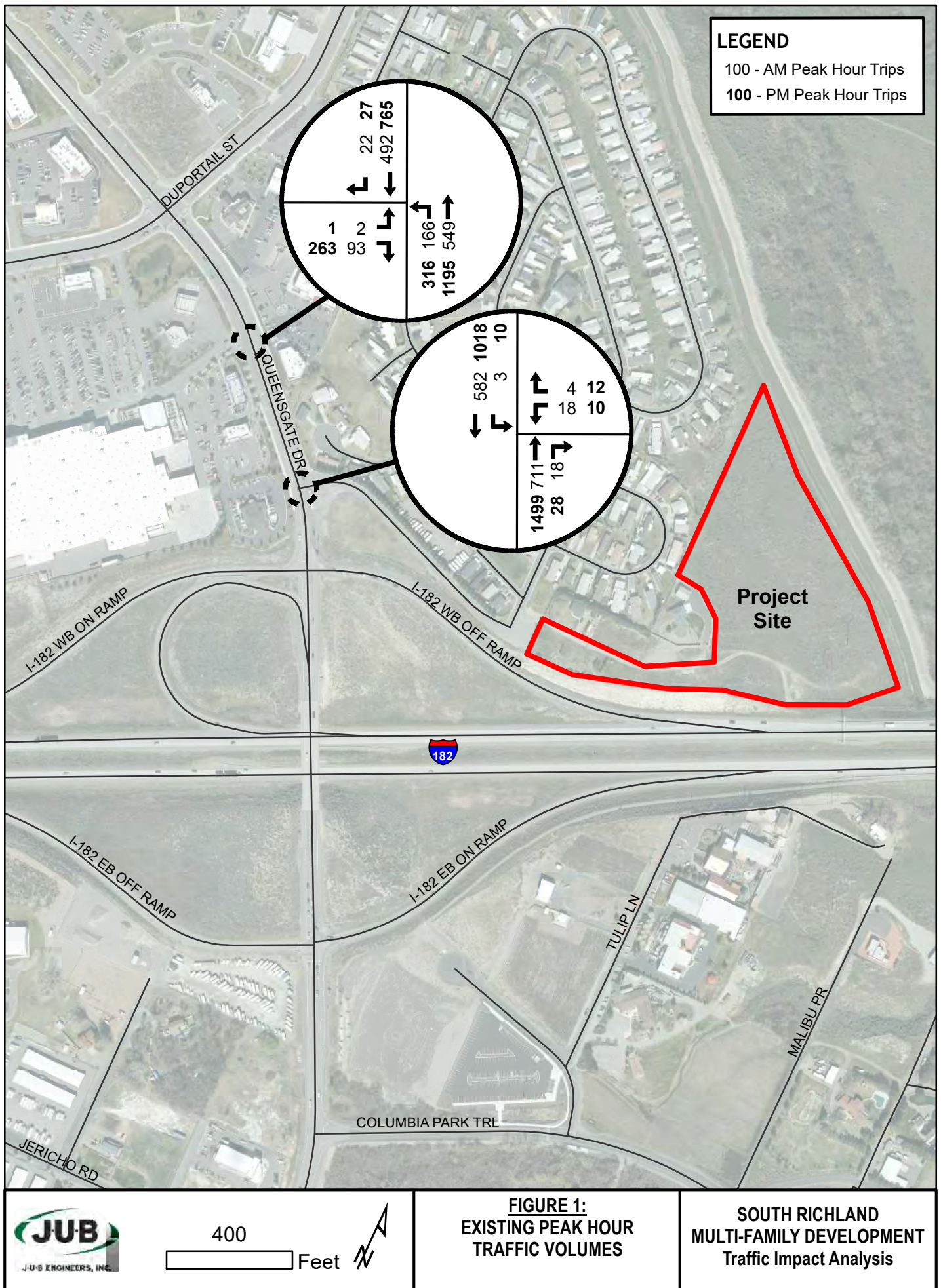


Table 2. Level of Service Criteria for Unsignalized Intersections

Level of Service (LOS)	Average Control Delay (seconds/vehicle)
A	< =10
B	>10 - < 15
C	>15 - < 25
D	>25 - < 35
E	>35 - <50
F	>50
Source: <i>Highway Capacity Manual 2010</i> , Transportation Research Board, National Research Council, Washington, D.C., 2010.	

For unsignalized intersections “delay” is based on the availability of gaps in the major street to allow minor street movements to occur. As traffic volumes continue to increase, the availability of gaps will decrease and greater delay tends to result in driver frustration and anxiety, loss of time, unnecessary fuel consumption, and contributes to unnecessary air pollution. The City of Richland standard for Level of Service is LOS “D” for minor street approaches at unsignalized intersections, meaning the overall intersection LOS must be “D” or better.

Peak hour traffic volumes and existing intersection geometry were input into the Highway Capacity Software (HCS) to determine the delay and Level of Service at the intersection. The analysis allows for the input of the percentage of traffic using the shared through/right-turn lane. In this case 75% northbound and 10% southbound were used. (In order to input these factors to HCS the southbound lane had to be coded as a shared thru/right-turn lane. These factors do not show up in the printed report.) The results of the capacity analysis and intersection delay for the minor street approach as well as the major street left turn movements and are shown in Table 3 for the two study intersections, with the capacity worksheets included in Appendix C.

As shown in Table 3 all movements currently provide acceptable Levels of Service, with the westbound approach at Skyline Drive being the worst with LOS “D” and 22.3 seconds of average vehicle delay during the PM peak hour.

Queues lengths in the Highway Capacity Software are reported as 95% queue in terms of number of vehicles. An average vehicle length of 25’ was used, while rounding the number of vehicles up to the nearest whole vehicle for both the southbound left turn at Skyline Drive and the northbound left turn at the WalMart entrance. The combined queue lengths are 25’ in the AM and 100’ in the PM peak hour. The distance between the two access points on Queensgate Drive allows for approximately 475 feet of storage, thus the queues currently are easily accommodated within the storage available.

Table 3. Summary of Existing Intersection Delay (sec) and Level of Service

Intersection	Movement	Time Period	2017 Existing Conditions
Skyline Drive/ Queensgate Drive	Minor Street Approach	AM	WB--16.3/C
		PM	WB--22.3/C
	Major Street Left Turn	AM	SB--9.8/A
		PM	SB--15.1/C
WalMart Entrance/ Queensgate Drive	Minor Street Approach	AM	EB--11.1/B
		PM	EB--18.2/C
	Major Street Left Turn	AM	NB--9.5/A
		PM	NB--13.8/B

LEGEND

15.9/B Delay and Level of Service using existing lane configurations
NB= northbound, SB = Southbound, EB= eastbound, WB = Westbound

Future Conditions

Proposed Development

The proposed development includes up to 35 duplexes with 70 residential units. One internal loop road that connects to Skyline Drive will provide the only access to the development. The Conceptual Site Plan is included in Appendix D. The site has some topographical challenges thus the total number of units will be determined in final design phases. The Site Plan shows 32 duplexes, however this study is prepared for a maximum of 35 duplexes.

Trip Generation and Trip Distribution

An estimate of the new trips that the development might generate was made using the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition). Several residential land uses were examined and the rate for single family detached (Land Use 210) was determined to be the most appropriate. The Manual indicates that rates for various apartment uses apply when buildings have 4 or more units. Single Family Residential has the highest trip generation rate of all residential uses, and is thus conservatively high. ITE rates are as follows:

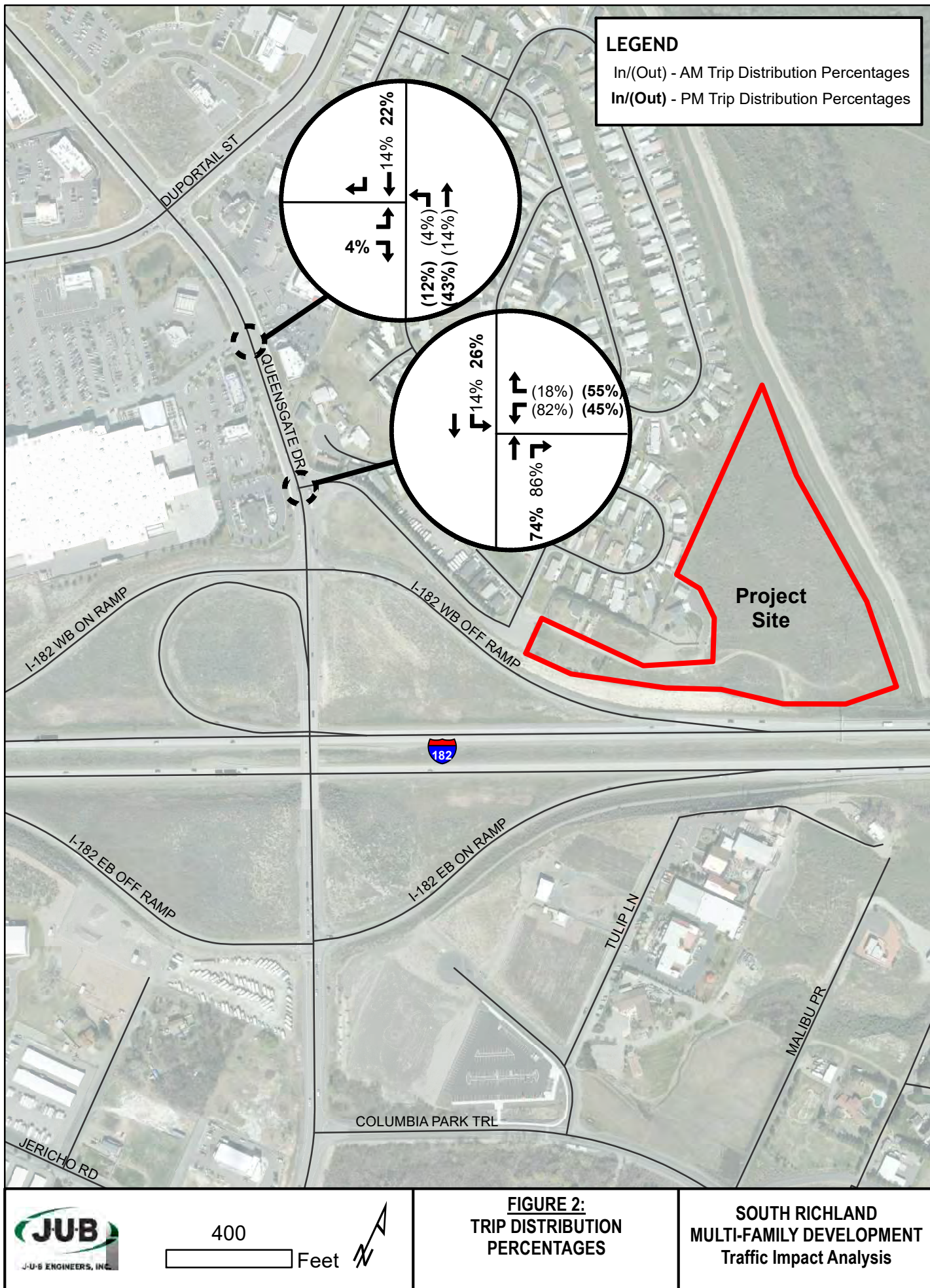
- Average Weekday Traffic – average rate of 9.52 trips per unit. With 70 residences this would result in 666 trips.
- AM Peak Hour of the adjacent roadway network – average rate of 0.75 trips per unit, resulting in 53 AM Peak Hour trips (13 inbound, 40 outbound).
- PM Peak Hour of the adjacent roadway network – average rate of 1.0 trips per unit, resulting in 70 PM Peak Hour trips (44 inbound, 26 outbound).

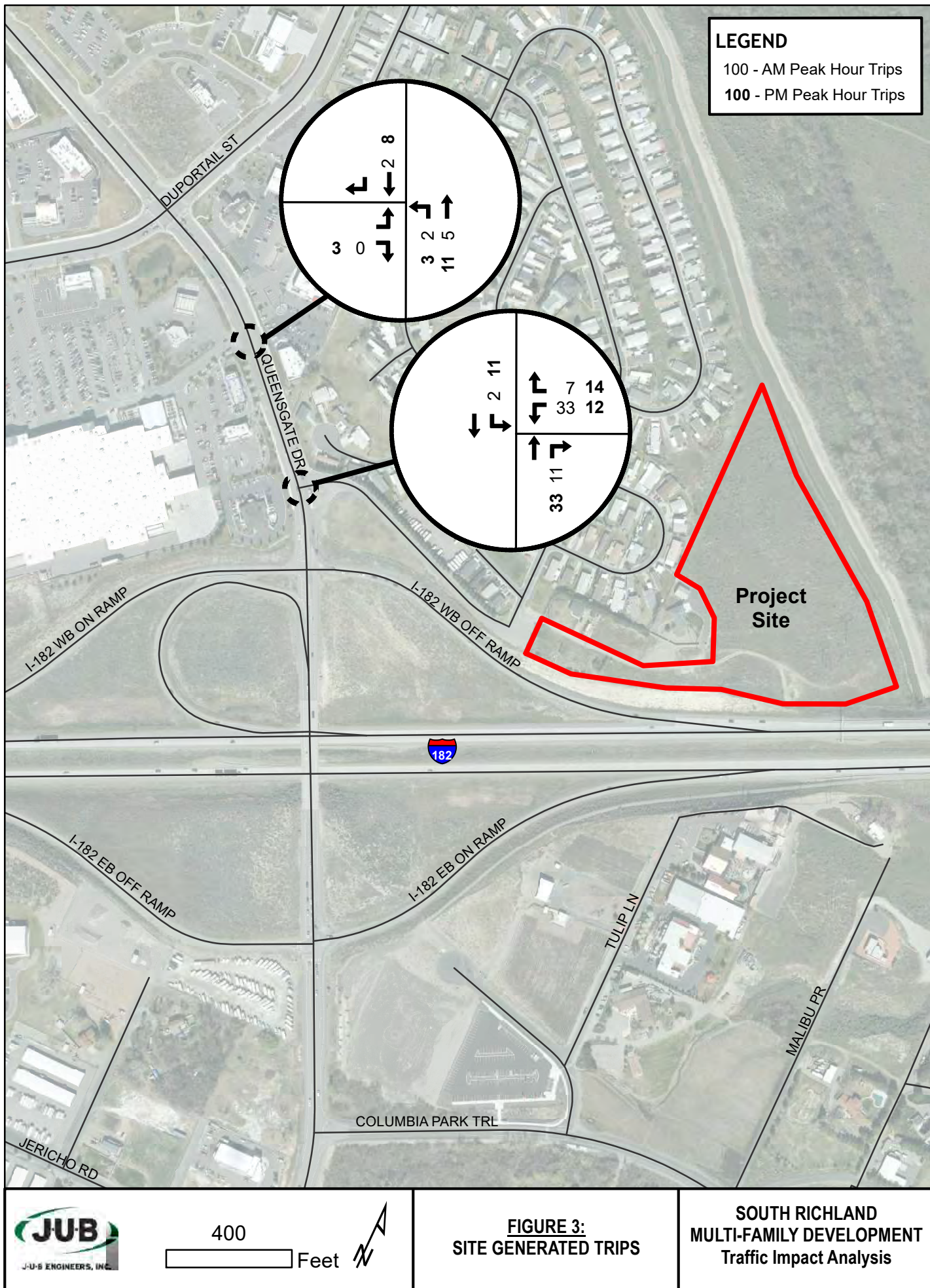
Trip distribution was calculated using existing traffic patterns and the number of vehicles to/from Skyline Drive at Queensgate Drive. In the morning over 80% of trips are to/from the south, while during the PM peak hour nearly 75% of trips are from the south but less than 50% make westbound left turns to go south on Queensgate Drive. The AM and PM peak hour trip distribution percentages are shown in Figure 2, with the resulting Site Generated Trips being shown in Figure 3. These site generated trips will be used for each of the future year scenarios described below.

Opening Year Conditions

The 2017 traffic counts collected as part of this study were compared with the 2014 traffic counts to determine a background traffic growth rate. Traffic volumes on Queensgate Drive north of the I-182 westbound ramps had grown at an annual rate of approximately 1.5%. Traffic volumes at the study intersections were increased by 1.5% and the site generated trips shown in Figure 3 were added as well to arrive at opening year traffic volumes shown in Figure 4. This assumes build-out of the site in 2018, which would be an aggressive schedule, but gives an understanding of how traffic operations may be without significant roadway network changes anticipated in the next few years.

Opening year traffic volumes shown in Figure 4 and existing intersection geometry were input into the Highway Capacity Software (HCS) to determine the delay and Level of Service at the intersection. The results of the capacity analysis and intersection delay are shown in Table 4 for the two study intersections with the capacity worksheets included in Appendix C.





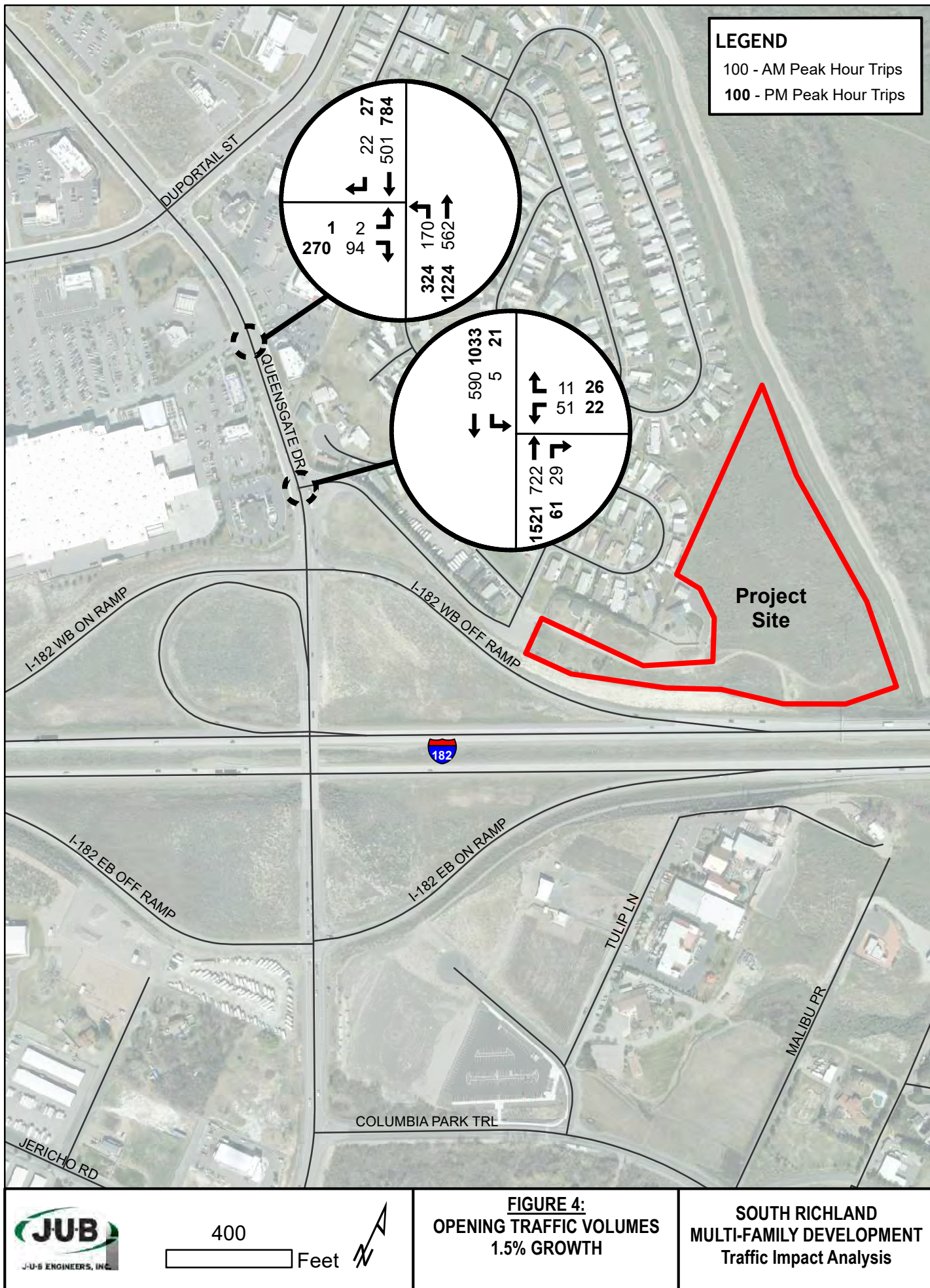


Table 4. Summary of Opening Year Intersection Delay (sec) and Level of Service

Intersection	Movement	Time Period	2017 Existing Conditions	2018 Opening Year
Skyline Drive/ Queensgate Drive	Minor Street Approach	AM	WB--16.3/C	WB--19.1/C
		PM	WB--22.3/C	WB--26.5/D
	Major Street Left Turn	AM	SB--9.8/A	SB--9.9/A
		PM	SB--15.1/C	SB--16.1/C
WalMart Entrance/ Queensgate Drive	Minor Street Approach	AM	EB--11.1/B	EB--11.2/B
		PM	EB--18.2/C	EB--19.0/C
	Major Street Left Turn	AM	NB--9.5/A	NB--9.5/A
		PM	NB--13.8/B	NB--14.3/B

LEGEND

15.9/B Delay and Level of Service using existing lane configurations
NB= northbound, SB = Southbound, EB= eastbound, WB = Westbound

As shown in the table, all movements are anticipated to function with acceptable Levels of Service, with slight increases in delay over existing conditions. The Skyline Drive approach adds 4 seconds of average vehicle delay to a total of 26.5 seconds, falling to LOS "D" in the PM peak hour.

Queues were examined again for this scenario with the total combined queues for the southbound left turn at Skyline Drive and the northbound left turn at the WalMart entrance being the same as existing conditions with 25' queue in the AM and 100' queue in the PM peak hour.

2023 Conditions with the Duportail Street Extension

The City of Richland has worked for several years to identify improvements to connect south Richland to the downtown and other areas north of the Yakima River. The result of these considerable efforts is the Duportail Street Bridge which will connect from SR 240 north of the Yakima River to Queensgate Drive and the City View commercial area south of the Yakima River. The project has recently been awarded and construction will commence soon, with completion in a few years. This significant project is anticipated to alter traffic patterns in the City View area.

As mentioned earlier, a corridor study was completed in 2014 for the portion of Queensgate Drive south of I-182. The study forecast traffic volumes for year 2034 that accounted for regional growth in traffic and included roadway network changes which included not only the Duportail Street Extension but the extension of Queensgate Drive south to connect to the Badger South Sub-Area.

A comparison of the directional split of traffic volumes was made for three scenarios to show the anticipated change in traffic patterns on Queensgate Drive between the I-182 westbound ramps and Skyline Drive due to the construction of the Duportail Bridge. The comparison is shown in Table 5 and shows that a shift in the directional distribution of traffic in the AM peak hour of nearly 10% is expected while in the PM peak hour the shift is 5%.

Table 5. Comparison of Directional Split on Queensgate Drive

Year	AM PEAK HOUR		PM PEAK HOUR	
	Total Volume	Percent of Traffic Northbound	Total Volume	Percent of Traffic Northbound
2014	1238	52%	2453	60%
2017	1329	55%	2555	60%
2034	2120	46%	3580	55%

In order to forecast traffic volumes for year 2023 conditions with the Duportail Bridge, the recent growth rate of 1.5% per year was carried forward for 6 years from 2017 for the through volumes on Queensgate Drive, both directions combined. Then the directional split of total traffic forecast in the corridor study for year 2034 was applied to each time period being evaluated. Traffic Volumes on Skyline Drive were held constant from the build scenario discussed earlier. The resulting Traffic Volumes are shown in Figure 5

The 2023 traffic volumes shown in Figure 5 and existing intersection geometry were input into the Highway Capacity Software (HCS) to determine the delay and Level of Service at the intersection for this scenario. The results of the capacity analysis and intersection delay are shown in Table 6 for the two study intersections with the capacity worksheets included in Appendix C.

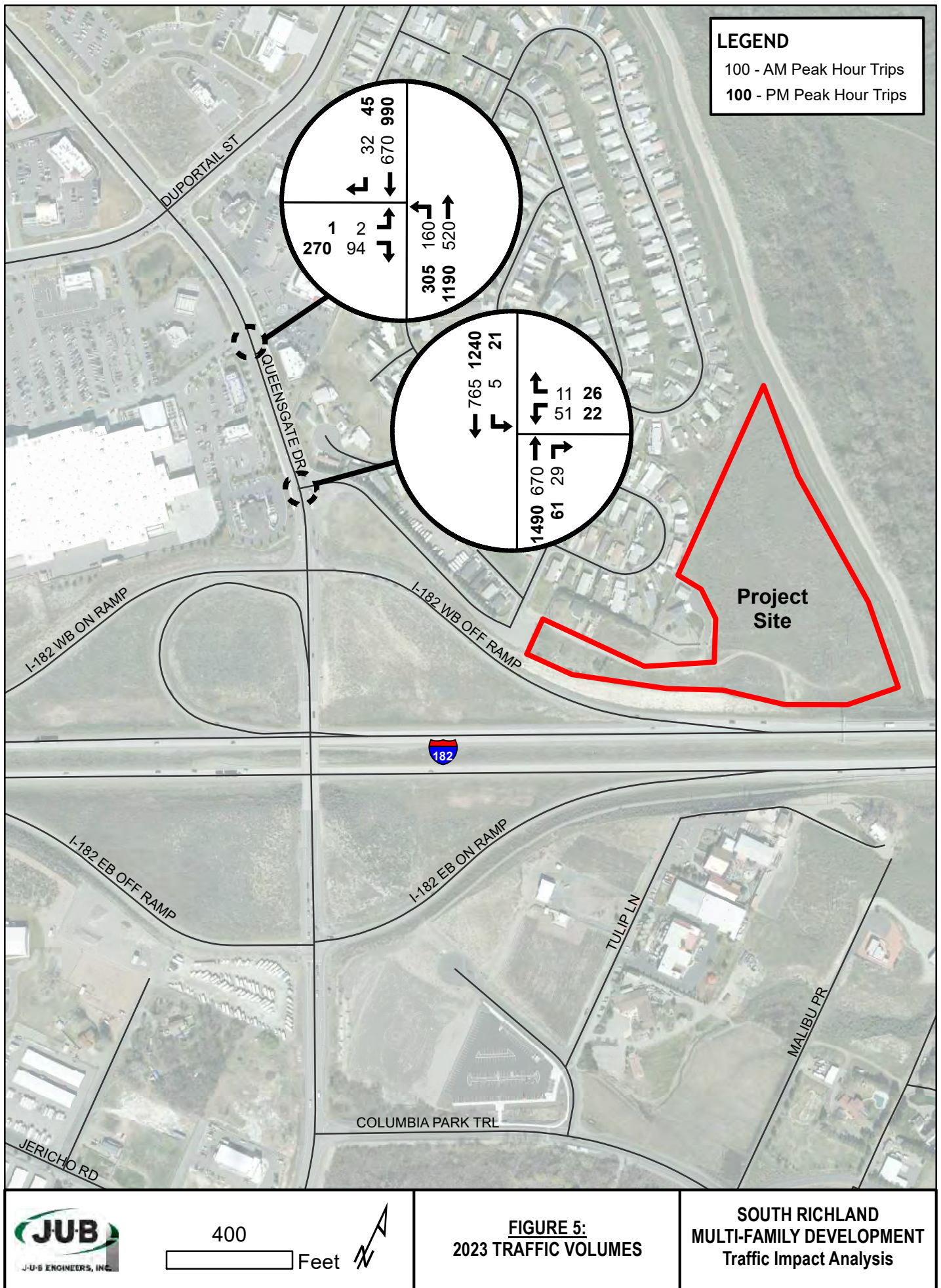
Table 6. Summary of 2023 Intersection Delay (sec) and Level of Service

Intersection	Movement	Time Period	2017 Existing Conditions	2018 Opening Year	2023 with Duportail Extension
Skyline Drive/ Queensgate Drive	Minor Street Approach	AM	WB--16.3/C	WB--19.1/C	WB--17.1/C
		PM	WB--22.3/C	WB--26.5/D	WB--26.5/D
	Major Street Left Turn	AM	SB--9.8/A	SB--9.9/A	SB--9.4/A
		PM	SB--15.1/C	SB--16.1/C	SB--15.7/C
WalMart Entrance/ Queensgate Drive	Minor Street Approach	AM	EB--11.1/B	EB--11.2/B	EB--12.3/C
		PM	EB--18.2/C	EB--19.0/C	EB--26.6/D
	Major Street Left Turn	AM	NB--9.5/A	NB--9.5/A	NB--10.5/C
		PM	NB--13.8/B	NB--14.3/B	NB--18.6/C

LEGEND

15.9/B Delay and Level of Service using existing lane configurations
NB= northbound, SB = Southbound, EB= eastbound, WB = Westbound

Interestingly, although there is growth in total traffic, the change in directional distribution of traffic on Queensgate Drive causes the delay for all movements at the Skyline intersection to go down slightly or stay the same during both AM and PM peak hours. At the WalMart Entrance all movements are forecast to have slightly higher delay, with the minor street approach falling to LOS "D" during the PM peak hour, even though this approach is dominated by right turn only vehicles.



Queues were examined again with the total combined queues for the southbound left turn at Skyline Drive and the northbound left turn at the WalMart entrance being the same as existing conditions with 25' queue in the AM and 125' queue in the PM peak hour.

Summary and Recommendations

Located in the south part of the City of Richland, between Queensgate Drive and the Yakima River, and north of I-182, lies an undeveloped parcel of land adjacent to The Hills Mobile Home Park. The owner desires to develop the approximately 10 acre parcel as a multi-family residential development with approximately 35 duplexes or 70 residential units. The sole access to the property will be from Skyline Drive which connects to Queensgate Drive where full movement of traffic is currently allowed.

This Traffic Impact Analysis (TIA) has been performed to determine if the existing intersection of Queensgate Drive/Skyline Drive can provide acceptable Levels of Service for all movements with the additional traffic associated with the proposed development. There is also concern that with the proximity of the Wal-Mart entrance to the north that queues for the northbound left turns into the Wal-Mart and queues for the southbound left turns onto Skyline Drive will have adequate storage space since they share the two-way-left-turn-lane.

The proposed development is anticipated to generate 53 AM peak hour trips and 70 PM peak hour trips. In addition to existing conditions, this TIA has been performed to evaluate three future year scenarios:

- 1) Opening Year – which does not include the Duportail Extension over the Yakima River.
- 2) Year 2023 – which will include the future extension of Duportail Street over the Yakima River, connecting to Queensgate Drive north of the study area.

The existing intersection of Skyline Drive at Queensgate Drive functions with acceptable Level of Service “C” during AM and PM peak hours, with 16.3 and 22.3 seconds of average vehicle delay respectively. Opening year the delay will be slightly higher with the PM adding 4 seconds and falling to LOS “D”.

By year 2023 the Duportail Street Bridge will be completed which is anticipated to cause changes in traffic patterns. In this scenario, even though there is projected continued growth of 1.5% per year in the corridor, the delay is slightly lower at the Skyline Drive intersection due to the anticipated change in the directional distribution of traffic on Queensgate Drive. The intersections will work well for several years to come.

Queues were examined for all scenarios to determine if adequate storage is provided in the two-way-left-turn-lane between Skyline Drive and the WalMart Entrance. Existing queues are a total of 125’, as are the opening year queues. The year 2023 queues total 150’. and are easily accommodated by the 475’ of storage space between the two left turn movements.

Appendix A

Collision History

Collision History at Queensgate Drive/Skyline Drive Intersection 2012 - 2016

PRIMARY TRAFFICWAY	INTERSEC TING TRAFFICW AY	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERE NCE POINT NAME	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	JUNCTION RELATIONSHIP	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	DRIVER CONTRIB UTING CIRCUMS TANCE 1 (UNIT 2)	VEHICLE 1 COMPASS DIRECTIO N FROM	VEHICLE 1 COMPASS DIRECTIO N TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO
QUEENSGATE DR		50	F	NW	SKYLINE	E198171	10/14/2012	14:11	No Injury	Not at Intersection and Not Related	From same direction - both going straight - both moving - sideswipe	Did Not Grant RW to Vehicle	South	North	South	Lane of Primary Trafficway	
QUEENSGATE DR		100	F	SE	SKYLINE	E206652	11/17/2012	18:10	No Injury	Not at Intersection and Not Related	From same direction - both going straight - both moving - sideswipe	Did Not Grant RW to Vehicle	North	South	North	Lane of Primary Trafficway	
QUEENSGATE DR		100	F	NW	SKYLINE	E295427	12/23/2013	17:11	Possible Inju	Not at Intersection and Not Related	From same direction - both going straight - one stopped - rear-end	Driver Interacting with Passengers, Anim	South	Vehicle Stopped	Vehicle Stopped	Lane of Primary Trafficway	
QUEENSGATE DR	SKYLINE DR					E314548	3/16/2014	11:36	No Injury	At Intersection and Related	Entering at angle	Did Not Grant RW to Vehicle	South	South	North	Lane of Primary Trafficway	
QUEENSGATE DR		40	F	NW	SKYLINE	E396931	01/30/2015	15:26	No Injury	Not at Intersection and Not Related	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	None	North	South	Vehicle Stopped	Vehicle Stopped
QUEENSGATE DR		40	F	NW	SKYLINE	E428441	05/29/2015	15:07	Possible Inju	Not at Intersection and Not Related	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	None	West	East	West	East
QUEENSGATE DR	SKYLINE DR					E447382	07/30/2015	09:22	No Injury	At Intersection and Related	Entering at angle	Making Left Turn	None	East	South	North	South
QUEENSGATE DR		70	F	S	SKYLINE	E503371	01/07/2016	17:10	Possible Inju	Not at Intersection and Not Related	From same direction - both going straight - both moving - sideswipe	Changing Lanes	None	North	South	North	South
QUEENSGATE DR	SKYLINE DR					E519171	02/23/2016	18:30	No Injury	At Intersection and Related	From same direction - both going straight - both moving - rear-end	Going Straight Ahead	None	North	South	North	South
QUEENSGATE DR	SKYLINE DR					E521996	03/05/2016	12:12	Possible Inju	At Intersection and Not Related	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	None	South	North	South	North
QUEENSGATE DR	SKYLINE DR					E586767	09/20/2016	17:10	No Injury	At Intersection and Not Related	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	None	North	South	North	Vehicle Stopped

Appendix B

Traffic Volumes

Existing Hour Period Turning Movement Volumes

6-Dec-17

Queensgate/Skyline Drive

AM PEAK HOUR	Northbound			Southbound			Eastbound			Westbound			Total Volume	
Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	15 minute	Hourly
7:00 - 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	337
7:30 - 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	621
7:45 - 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	954
8:00 - 8:15	0	162	6	1	159	0	0	0	0	8	0	1	337	1336
8:15 - 8:30	0	157	4	1	120	0	0	0	0	1	0	1	284	
8:30 - 8:45	0	170	4	0	153	0	0	0	0	4	0	2	333	
8:45 - 9:00	0	222	4	1	150	0	0	0	0	5	0	0	382	
TOTAL	0	711	18	3	582	0	0	0	0	18	0	4	1336	

Peak Hr Total	0	711	18	3	582	0	0	0	0	18	0	4	1336	
pk Period	729	715		585	600		0	21		22	0		1336	1336
	IN	OUT		IN	OUT		IN	OUT		IN	OUT		IN	OUT
Pk Hr	729	715		585	600		0	21		22	0		1336	1336

PM PEAK HOUR	Northbound			Southbound			Eastbound			Westbound			Total Volume	
Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	15 minute	Hourly
4:00 - 4:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 - 4:30	0	0	0	0	0	0	0	0	0	0	0	0	0	664
4:30 - 4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1331
4:45 - 5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1972
5:00 - 5:15	0	382	8	4	265	0	0	0	0	3	0	2	664	2577
5:15 - 5:30	0	416	6	0	238	0	0	0	0	1	0	6	667	
5:30 - 5:45	0	355	7	1	272	0	0	0	0	2	0	4	641	
5:45 - 6:00	0	346	7	5	243	0	0	0	0	4	0	0	605	
TOTAL	0	1499	28	10	1018	0	0	0	0	10	0	12	2577	

Peak Hr Total	0	1499	28	10	1018	0	0	0	0	10	0	12	2577	
pk Period	1527	1511		1028	1028		0	38		22	0		2577	2577
	IN	OUT		IN	OUT		IN	OUT		IN	OUT		IN	OUT
	1527	1511		1028	1028		0	38		22	0		2577	2577

Queensgate/WalMart Entrance

AM PEAK HOUR	Northbound			Southbound			Eastbound			Westbound			Total Volume	
Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	15 minute	Hourly
7:00 - 7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	333
7:30 - 7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	616
7:45 - 8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	945
8:00 - 8:15	37	126	0	0	135	9	1	0	25	0	0	0	333	1324
8:15 - 8:30	41	117	0	0	109	4	0	0	12	0	0	0	283	
8:30 - 8:45	44	128	0	0	122	3	1	0	31	0	0	0	329	
8:45 - 9:00	44	178	0	0	126	6	0	0	25	0	0	0	379	
TOTAL	166	549	0	0	492	22	2	0	93	0	0	0	1324	

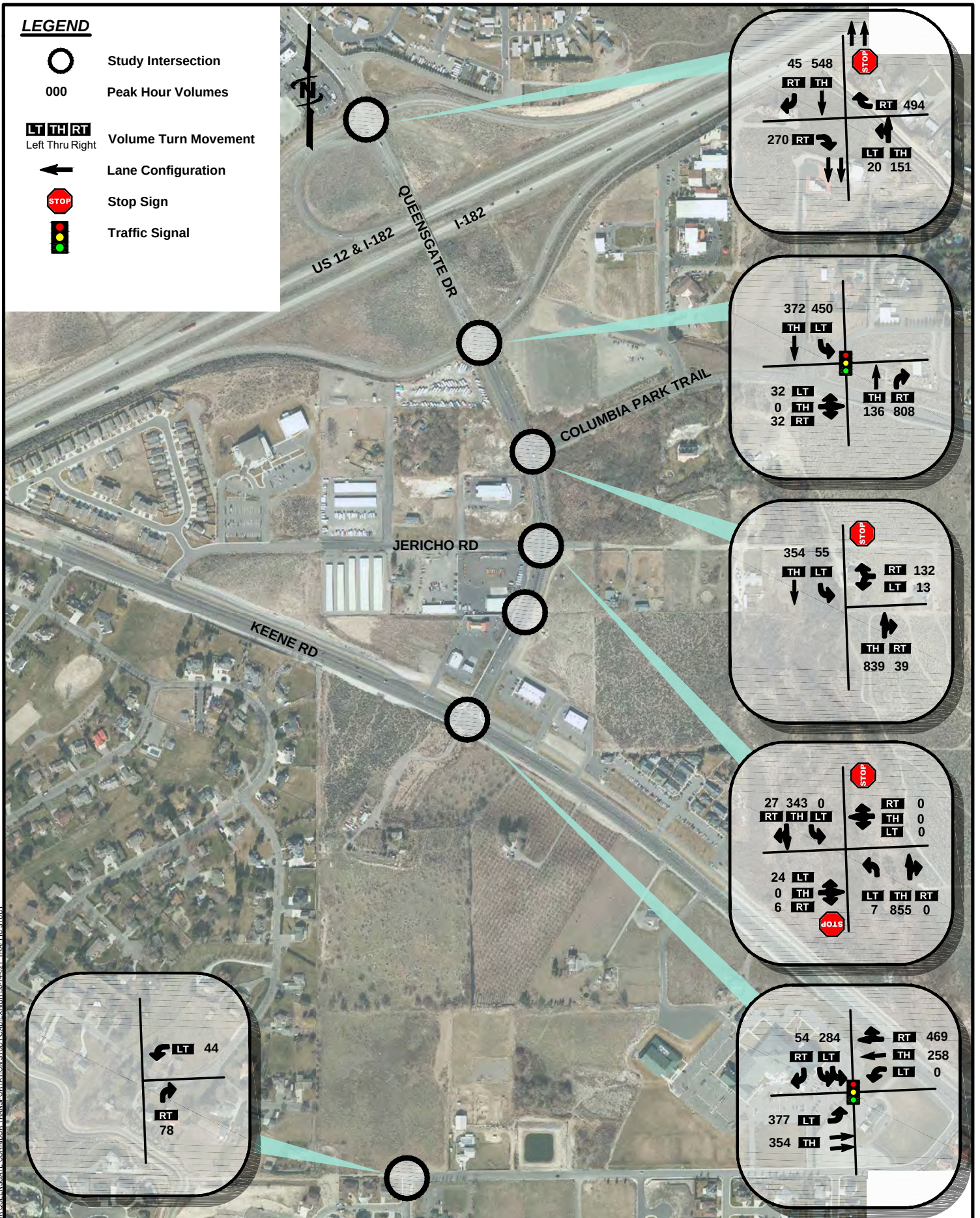
Peak Hr Total	166	549	0	0	492	22	2	0	93	0	0	0	1324	
pk Period	715	551		514	585		95	0		0	188		1324	1324
	IN	OUT		IN	OUT		IN	OUT		IN	OUT		IN	OUT
Pk Hr	715	551		514	585		95	0		0	188		1324	1324

PM PEAK HOUR	Northbound			Southbound			Eastbound			Westbound			Total Volume	
Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	15 minute	Hourly
4:00 - 4:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 - 4:30	0	0	0	0	0	0	0	0	0	0	0	0	0	660
4:30 - 4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1327
4:45 - 5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1961
5:00 - 5:15	81	303	0	0	204	7	0	0	65	0	0	0	660	2567
5:15 - 5:30	80	342	0	0	176	6	1	0	62	0	0	0	667	
5:30 - 5:45	82	277	0	0	205	2	0	0	68	0	0	0	634	
5:45 - 6:00	73	273	0	0	180	12	0	0	68	0	0	0	606	
TOTAL	316	1195	0	0	765	27	1	0	263	0	0	0	2567	

Peak Hr Total	316	1195	0	0	765	27	1	0	263	0	0	0	2567	
pk Period	1511	1196		792	1028		264	0		0	343		2567	2567
	IN	OUT		IN	OUT		IN	OUT		IN	OUT		IN	OUT
	1511	1196		792	1028		264	0		0	343		2567	2567

LEGEND

-  Study Intersection
- 000 Peak Hour Volumes
-  Volume Turn Movement
Left Thru Right
-  Lane Configuration
-  Stop Sign
-  Traffic Signal



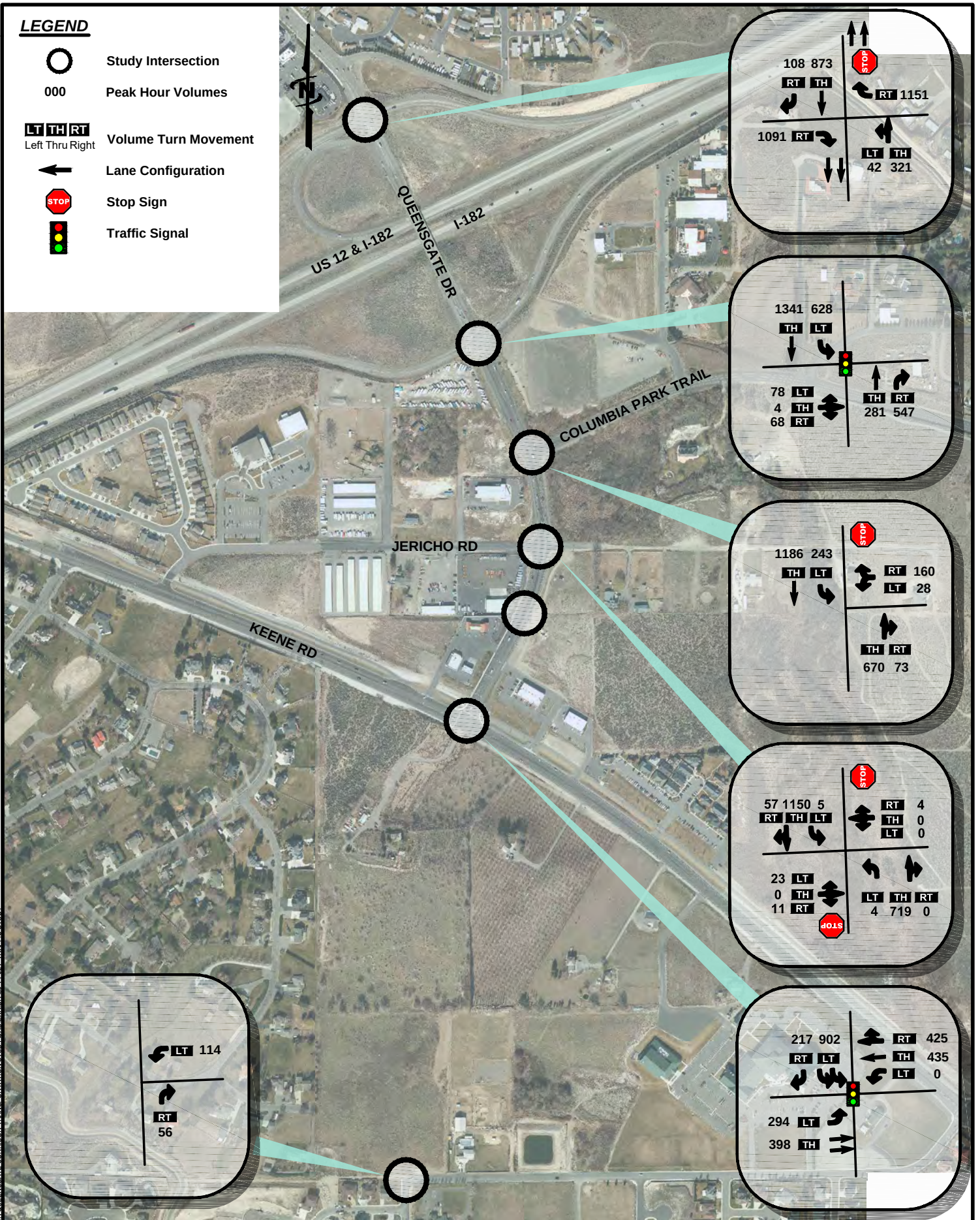
2014 AM PEAK
TRAFFIC VOLUMES

FIGURE
2

QUEENSGATE DRIVE CORRIDOR
TRAFFIC STUDY

LEGEND

-  Study Intersection
- 000 Peak Hour Volumes
- LT TH RT**
Left Thru Right Volume Turn Movement
-  Lane Configuration
-  Stop Sign
-  Traffic Signal



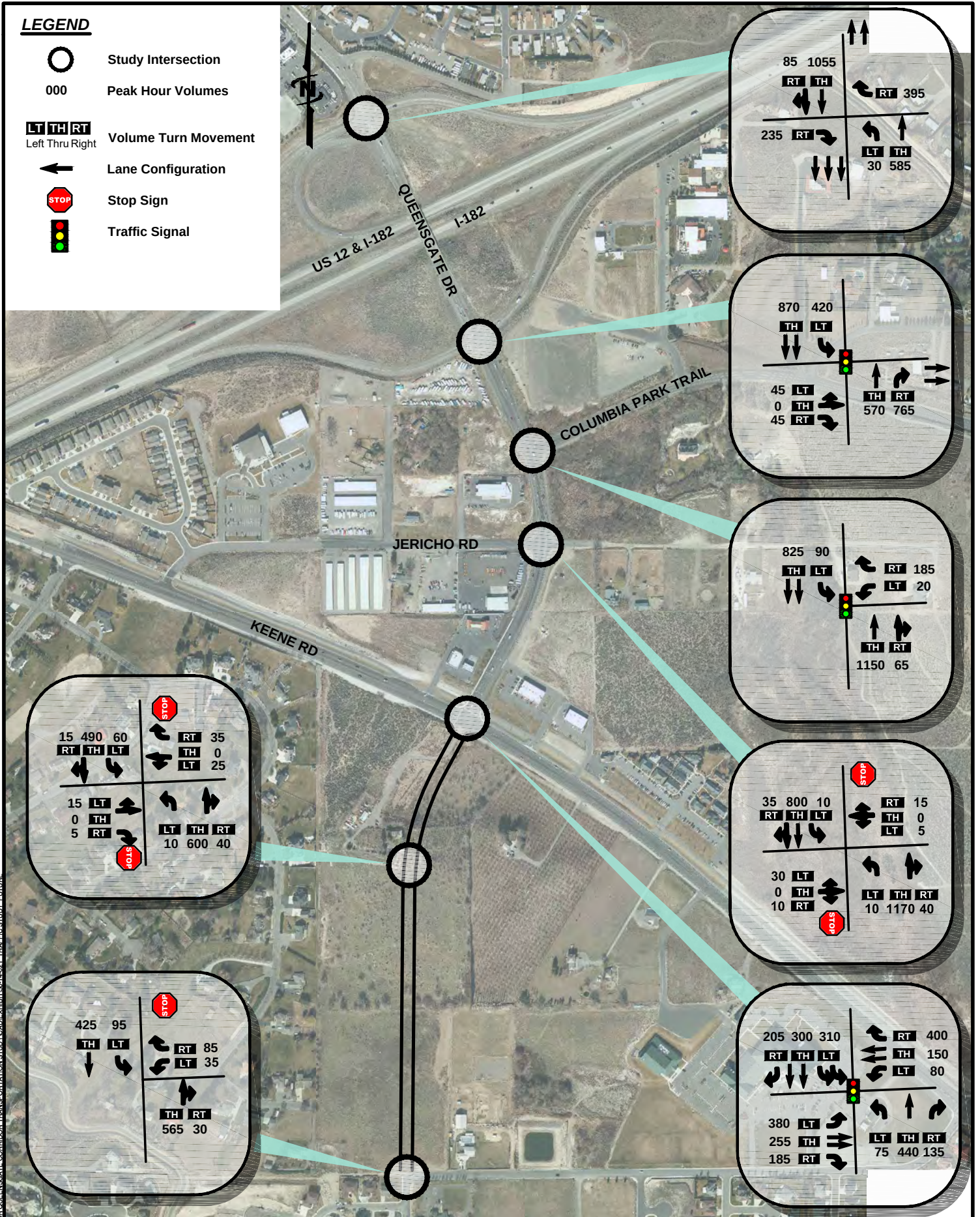
2014 PM PEAK
TRAFFIC VOLUMES

FIGURE
3

QUEENSGATE DRIVE CORRIDOR
TRAFFIC STUDY

LEGEND

-  Study Intersection
- 000** Peak Hour Volumes
- LT TH RT**
Left Thru Right Volume Turn Movement
-  Lane Configuration
-  Stop Sign
-  Traffic Signal



Engineers • Surveyors • Planners

2034 AM PEAK HOUR
VOLUMES

FIGURE
6

QUEENSGATE DRIVE CORRIDOR
TRAFFIC STUDY

LEGEND



Study Intersection

000

Peak Hour Volumes

LT TH RT
Left Thru Right

Volume Turn Movement



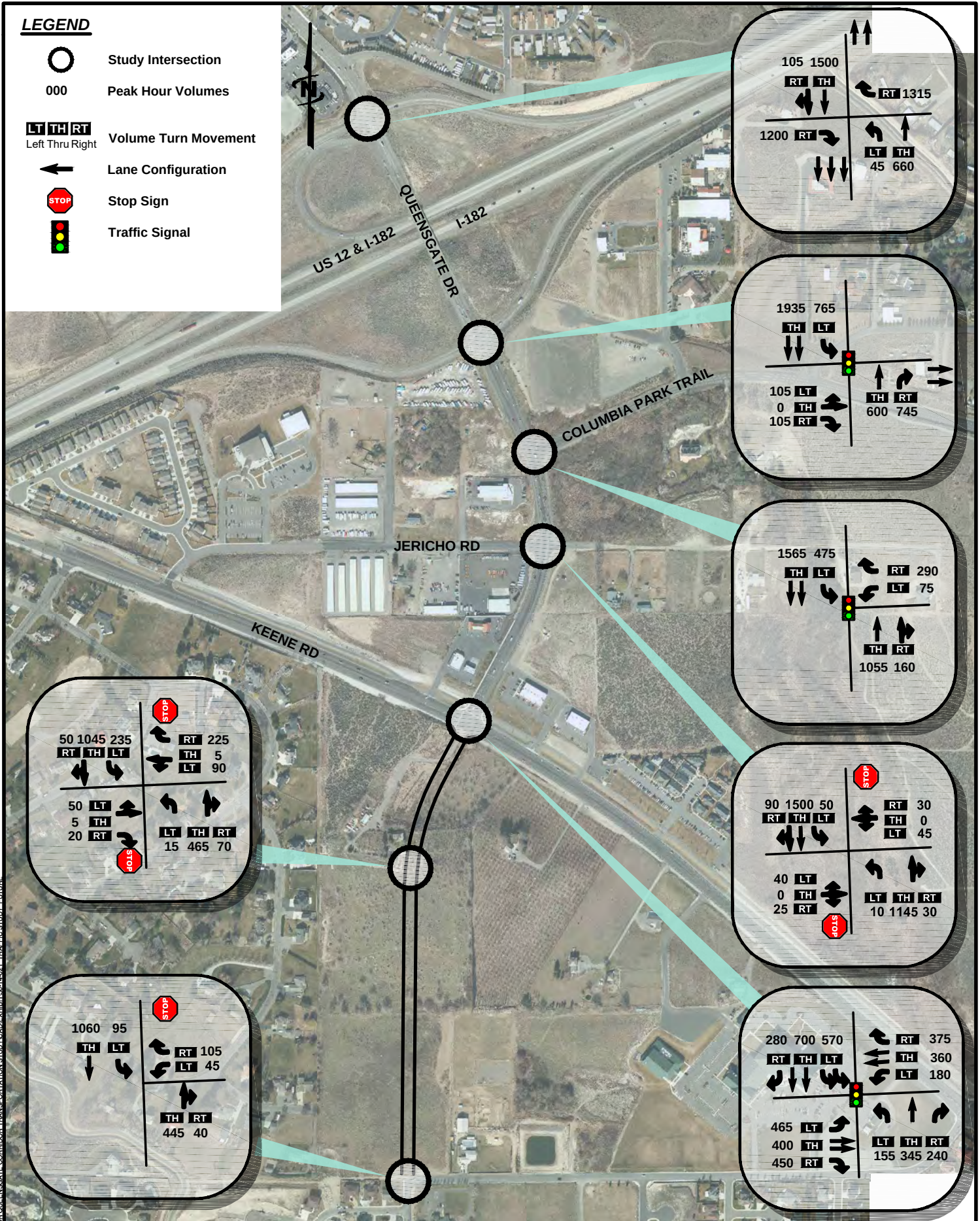
Lane Configuration



Stop Sign



Traffic Signal



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2034 PM PEAK HOUR
VOLUMES

FIGURE
7

QUEENSGATE DRIVE CORRIDOR
TRAFFIC STUDY

LAST UPDATE: 11/2/2014
PROJECT NAME: 11/2/2014
FILE: 30-14-021 TRAFFIC STUDY FUTURE

Appendix C

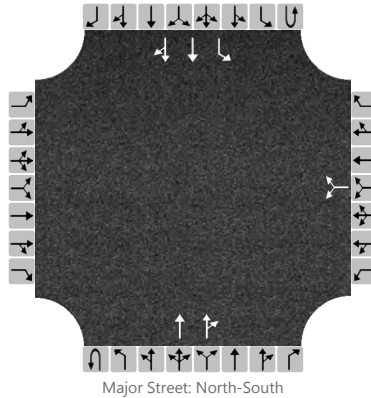
Capacity Analysis Worksheets

HCS 2010 Two-Way Stop-Control Report

General Information

Analyst	Montgomery	Intersection	Queensgate Dr/Skyline Dr
Agency/Co.	JUB Engineers	Jurisdiction	City of Richland
Date Performed	2/17/2018	East/West Street	Skyline Drive
Analysis Year	2017	North/South Street	Queensgate Drive
Time Analyzed	AM Peak	Peak Hour Factor	0.82
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Sawby Duplex Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	TR
Volume, V (veh/h)						18		4			711	18		3	582	0
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						27								4		
Capacity, c (veh/h)						345								752		
v/c Ratio						0.08								0.01		
95% Queue Length, Q ₉₅ (veh)						0.3								0.0		
Control Delay (s/veh)						16.3								9.8		
Level of Service, LOS						C								A		
Approach Delay (s/veh)					16.3								0.1			
Approach LOS					C											

HCS 2010 Two-Way Stop-Control Report

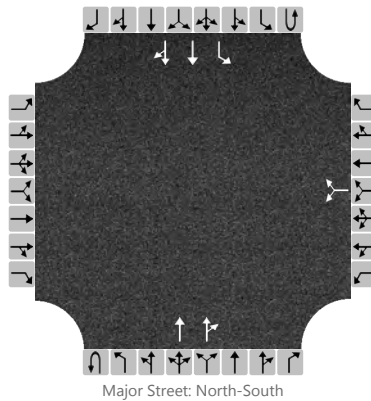
General Information

Analyst	Montgomery
Agency/Co.	JUB Engineers
Date Performed	2/7/2018
Analysis Year	2017
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	Sawby Duplex Development

Site Information

Intersection	Queensgate Dr/Skyline Dr
Jurisdiction	City of Richland
East/West Street	Skyline Drive
North/South Street	Queensgate Drive
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	TR
Volume, V (veh/h)						10		12			1499	28		10	1018	0
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

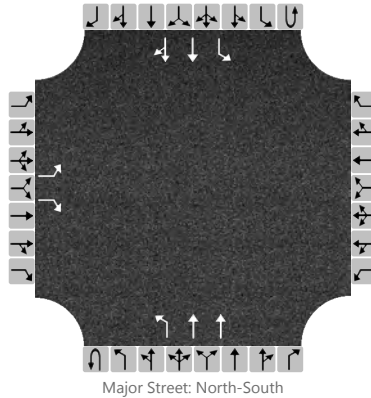
Flow Rate, v (veh/h)						24								11		
Capacity, c (veh/h)						232								367		
v/c Ratio						0.10								0.03		
95% Queue Length, Q ₉₅ (veh)						0.3								0.1		
Control Delay (s/veh)						22.3								15.1		
Level of Service, LOS						C								C		
Approach Delay (s/veh)					22.3								0.1			
Approach LOS					C											

HCS 2010 Two-Way Stop-Control Report

General Information

Analyst	Montgomery	Intersection	Queensgate Dr/WalMart
Agency/Co.	JUB Engineers	Jurisdiction	City of Richland
Date Performed	12/13/2017	East/West Street	WalMart Driveway
Analysis Year	2017	North/South Street	Queensgate Drive
Time Analyzed	AM Peak	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Sawby Duplex Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	2	0	0	1	2	0
Configuration		L		R						L	T			L	T	TR
Volume, V (veh/h)		2		93						166	549			0	492	22
Percent Heavy Vehicles (%)		3		3						3				3		
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1				4.1		
Critical Headway (sec)		6.86		6.96						4.16				4.16		
Base Follow-Up Headway (sec)		3.5		3.3						2.2				2.2		
Follow-Up Headway (sec)		3.53		3.33						2.23				2.23		

Delay, Queue Length, and Level of Service

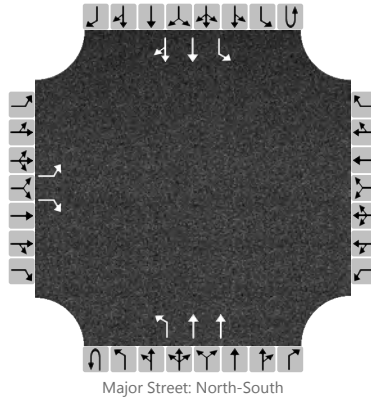
Flow Rate, v (veh/h)		2		103						184				0		
Capacity, c (veh/h)		262		708						991				958		
v/c Ratio		0.01		0.15						0.19				0.00		
95% Queue Length, Q ₉₅ (veh)		0.0		0.5						0.7				0.0		
Control Delay (s/veh)		18.8		10.9						9.5				8.8		
Level of Service, LOS		C		B						A				A		
Approach Delay (s/veh)	11.1								2.2				0.0			
Approach LOS	B															

HCS 2010 Two-Way Stop-Control Report

General Information

Analyst	Montgomery	Intersection	Queensgate Dr/WalMart
Agency/Co.	JUB Engineers	Jurisdiction	City of Richland
Date Performed	12/13/2017	East/West Street	WalMart Driveway
Analysis Year	2017	North/South Street	Queensgate Drive
Time Analyzed	PM Peak	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Sawby Duplex Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	2	0	0	1	2	0
Configuration		L		R						L	T			L	T	TR
Volume, V (veh/h)		1		263						316	1195			0	765	27
Percent Heavy Vehicles (%)		3		3						3				3		
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1				4.1		
Critical Headway (sec)		6.86		6.96						4.16				4.16		
Base Follow-Up Headway (sec)		3.5		3.3						2.2				2.2		
Follow-Up Headway (sec)		3.53		3.33						2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1		292						351				0		
Capacity, c (veh/h)		82		562						758				511		
v/c Ratio		0.01		0.52						0.46				0.00		
95% Queue Length, Q ₉₅ (veh)		0.0		3.0						2.5				0.0		
Control Delay (s/veh)		49.5		18.1						13.8				12.1		
Level of Service, LOS		E		C						B				B		
Approach Delay (s/veh)	18.2								2.9				0.0			
Approach LOS	C															

HCS 2010 Two-Way Stop-Control Report

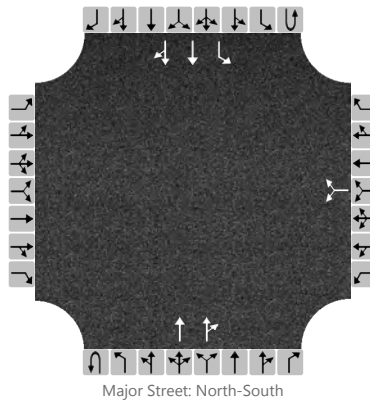
General Information

Analyst	Montgomery
Agency/Co.	JUB Engineers
Date Performed	2/17/2018
Analysis Year	2018
Time Analyzed	AM Peak - Opening Year
Intersection Orientation	North-South
Project Description	Sawby Duplex Development

Site Information

Intersection	Queensgate Dr/Skyline Dr
Jurisdiction	City of Richland
East/West Street	Skyline Drive
North/South Street	Queensgate Drive
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	TR
Volume, V (veh/h)						51		11			722	29		5	590	0
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

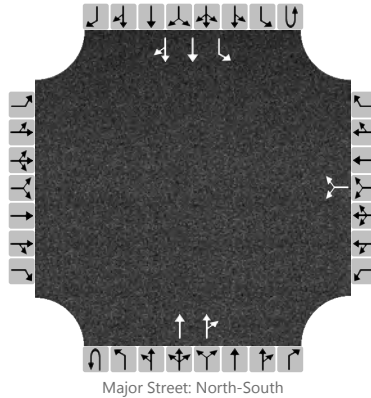
Flow Rate, v (veh/h)						75								6		
Capacity, c (veh/h)						331								735		
v/c Ratio						0.23								0.01		
95% Queue Length, Q ₉₅ (veh)						0.9								0.0		
Control Delay (s/veh)						19.1								9.9		
Level of Service, LOS						C								A		
Approach Delay (s/veh)					19.1								0.1			
Approach LOS					C											

HCS 2010 Two-Way Stop-Control Report

General Information

Analyst	Montgomery	Intersection	Queensgate Dr/Skyline Dr
Agency/Co.	JUB Engineers	Jurisdiction	City of Richland
Date Performed	2/7/2018	East/West Street	Skyline Drive
Analysis Year	2018	North/South Street	Queensgate Drive
Time Analyzed	PM Peak Opening Year	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Sawby Duplex Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	TR
Volume, V (veh/h)						22		26			1521	61		21	1033	0
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

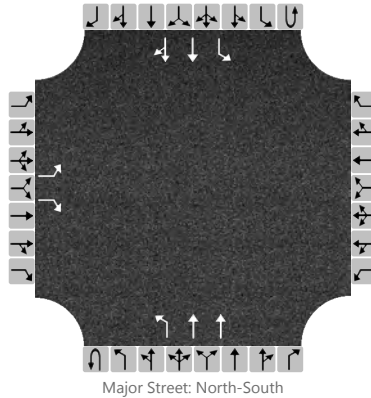
Flow Rate, v (veh/h)						53								23		
Capacity, c (veh/h)						220								348		
v/c Ratio						0.24								0.07		
95% Queue Length, Q ₉₅ (veh)						0.9								0.2		
Control Delay (s/veh)						26.5								16.1		
Level of Service, LOS						D								C		
Approach Delay (s/veh)					26.5								0.3			
Approach LOS					D											

HCS 2010 Two-Way Stop-Control Report

General Information

Analyst	Montgomery	Intersection	Queensgate Dr/WalMart
Agency/Co.	JUB Engineers	Jurisdiction	City of Richland
Date Performed	2/7/2018	East/West Street	WalMart Driveway
Analysis Year	2018	North/South Street	Queensgate Drive
Time Analyzed	AM Peak Opening	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Sawby Duplex Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	2	0	0	1	2	0
Configuration		L		R						L	T			L	T	TR
Volume, V (veh/h)		2		94						170	562			0	501	22
Percent Heavy Vehicles (%)		3		3						3				3		
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1				4.1		
Critical Headway (sec)		6.86		6.96						4.16				4.16		
Base Follow-Up Headway (sec)		3.5		3.3						2.2				2.2		
Follow-Up Headway (sec)		3.53		3.33						2.23				2.23		

Delay, Queue Length, and Level of Service

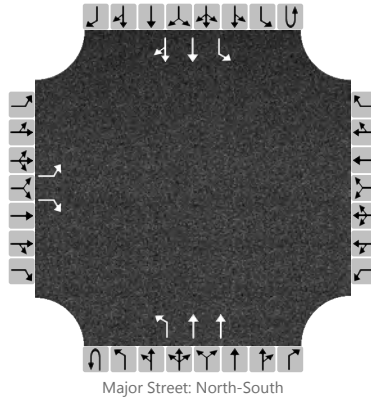
Flow Rate, v (veh/h)		2		104						189				0		
Capacity, c (veh/h)		255		704						982				947		
v/c Ratio		0.01		0.15						0.19				0.00		
95% Queue Length, Q ₉₅ (veh)		0.0		0.5						0.7				0.0		
Control Delay (s/veh)		19.2		11.0						9.5				8.8		
Level of Service, LOS		C		B						A				A		
Approach Delay (s/veh)	11.2								2.2				0.0			
Approach LOS	B															

HCS 2010 Two-Way Stop-Control Report

General Information

Analyst	Montgomery	Intersection	Queensgate Dr/WalMart
Agency/Co.	JUB Engineers	Jurisdiction	City of Richland
Date Performed	2/7/2018	East/West Street	WalMart Driveway
Analysis Year	2018	North/South Street	Queensgate Drive
Time Analyzed	PM Peak Opening	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Sawby Duplex Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	2	0	0	1	2	0
Configuration		L		R						L	T			L	T	TR
Volume, V (veh/h)		1		270						324	1224			0	784	27
Percent Heavy Vehicles (%)		3		3						3				3		
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1				4.1		
Critical Headway (sec)		6.86		6.96						4.16				4.16		
Base Follow-Up Headway (sec)		3.5		3.3						2.2				2.2		
Follow-Up Headway (sec)		3.53		3.33						2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1		300						360				0		
Capacity, c (veh/h)		76		554						744				496		
v/c Ratio		0.01		0.54						0.48				0.00		
95% Queue Length, Q ₉₅ (veh)		0.0		3.2						2.7				0.0		
Control Delay (s/veh)		53.0		18.9						14.3				12.3		
Level of Service, LOS		F		C						B				B		
Approach Delay (s/veh)	19.0								3.0				0.0			
Approach LOS	C															

HCS 2010 Two-Way Stop-Control Report

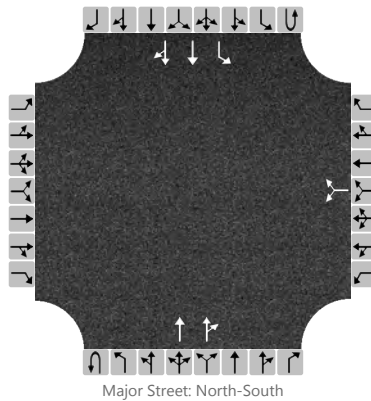
General Information

Analyst	Montgomery
Agency/Co.	JUB Engineers
Date Performed	2/17/2018
Analysis Year	2023
Time Analyzed	AM Peak - Short Term
Intersection Orientation	North-South
Project Description	Sawby Duplex Development

Site Information

Intersection	Queensgate Dr/Skyline Dr
Jurisdiction	City of Richland
East/West Street	Skyline Drive
North/South Street	Queensgate Drive
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	TR
Volume, V (veh/h)						51		11			670	29		5	765	0
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						69								6		
Capacity, c (veh/h)						367								830		
v/c Ratio						0.19								0.01		
95% Queue Length, Q ₉₅ (veh)						0.7								0.0		
Control Delay (s/veh)						17.1								9.4		
Level of Service, LOS						C								A		
Approach Delay (s/veh)					17.1								0.1			
Approach LOS					C											

HCS 2010 Two-Way Stop-Control Report

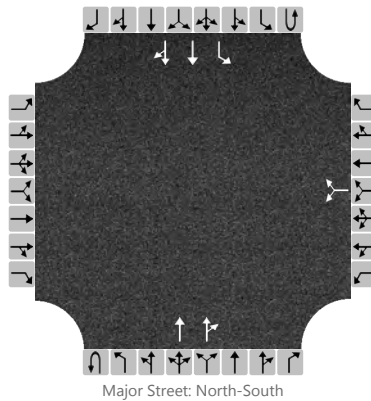
General Information

Analyst	Montgomery
Agency/Co.	JUB Engineers
Date Performed	2/7/2018
Analysis Year	2023
Time Analyzed	PM Peak Short-term
Intersection Orientation	North-South
Project Description	Sawby Duplex Development

Site Information

Intersection	Queensgate Dr/Skyline Dr
Jurisdiction	City of Richland
East/West Street	Skyline Drive
North/South Street	Queensgate Drive
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	TR
Volume, V (veh/h)						22		26			1490	61		21	1240	0
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.86		6.96						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

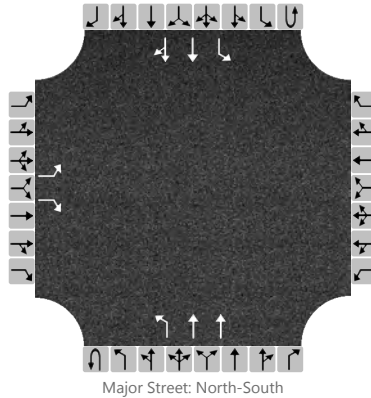
Flow Rate, v (veh/h)						53								23		
Capacity, c (veh/h)						220								358		
v/c Ratio						0.24								0.06		
95% Queue Length, Q ₉₅ (veh)						0.9								0.2		
Control Delay (s/veh)						26.5								15.7		
Level of Service, LOS						D								C		
Approach Delay (s/veh)					26.5								0.3			
Approach LOS					D											

HCS 2010 Two-Way Stop-Control Report

General Information

Analyst	Montgomery	Intersection	Queensgate Dr/WalMart
Agency/Co.	JUB Engineers	Jurisdiction	City of Richland
Date Performed	12/13/2017	East/West Street	WalMart Driveway
Analysis Year	2023	North/South Street	Queensgate Drive
Time Analyzed	AM Short Rnge (w/Dup)	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Sawby Duplex Development		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	2	0	0	1	2	0
Configuration		L		R						L	T			L	T	TR
Volume, V (veh/h)		2		94						160	520			0	670	32
Percent Heavy Vehicles (%)		3		3						3				3		
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1				4.1		
Critical Headway (sec)		6.86		6.96						4.16				4.16		
Base Follow-Up Headway (sec)		3.5		3.3						2.2				2.2		
Follow-Up Headway (sec)		3.53		3.33						2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2		104						178				0		
Capacity, c (veh/h)		227		606						827				985		
v/c Ratio		0.01		0.17						0.22				0.00		
95% Queue Length, Q ₉₅ (veh)		0.0		0.6						0.8				0.0		
Control Delay (s/veh)		21.0		12.2						10.5				8.7		
Level of Service, LOS		C		B						B				A		
Approach Delay (s/veh)	12.3								2.5				0.0			
Approach LOS	B															

HCS 2010 Two-Way Stop-Control Report

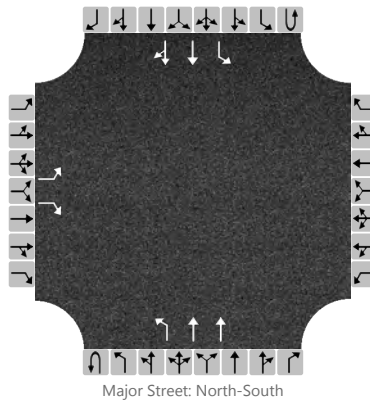
General Information

Analyst	Montgomery
Agency/Co.	JUB Engineers
Date Performed	12/13/2017
Analysis Year	2023
Time Analyzed	PM Short Rnge (w/Dup)
Intersection Orientation	North-South
Project Description	Sawby Duplex Development

Site Information

Intersection	Queensgate Dr/WalMart
Jurisdiction	City of Richland
East/West Street	WalMart Driveway
North/South Street	Queensgate Drive
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	2	0	0	1	2	0
Configuration		L		R						L	T			L	T	TR
Volume, V (veh/h)		1		270						305	1190			0	990	45
Percent Heavy Vehicles (%)		3		3						3				3		
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1				4.1		
Critical Headway (sec)		6.86		6.96						4.16				4.16		
Base Follow-Up Headway (sec)		3.5		3.3						2.2				2.2		
Follow-Up Headway (sec)		3.53		3.33						2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1		300						339				0		
Capacity, c (veh/h)		65		459						598				513		
v/c Ratio		0.02		0.65						0.57				0.00		
95% Queue Length, Q ₉₅ (veh)		0.0		4.6						3.5				0.0		
Control Delay (s/veh)		61.2		26.5						18.6				12.0		
Level of Service, LOS		F		D						C				B		
Approach Delay (s/veh)	26.6								3.8				0.0			
Approach LOS	D															

Appendix D

Conceptual Site Plan



DRAWN BY: SWS
DESIGNED BY: SWS
APPROVED BY: ARR
FILE: 17138.dwg

DENNIS SAWBY

CONCEPTUAL LAYOUT

SOUTH RICHLAND MULTIFAMILY

RICHLAND WASHINGTON

SHEET
1 of 1

JOB# 17-138

DWG# 600-XXX

12-14-17

NOTES

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. LOCATIONS OF SAID UTILITIES WERE DERIVED FROM FIELD ASBUILT OBSERVATIONS.

2. THE CONTOURS SHOWN WERE DERIVED FROM DIRECT FIELD OBSERVATIONS. ACCURACY OF SHOWN CONTOURS MEET OR EXCEED THE US NATIONAL MAP ACCURACY STANDARDS, OF ONE-HALF THE CONTOUR INTERVAL.

3. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY STRATTON SURVEYING AND MAPPING PC. FOR ALL INFORMATION REGARDING EASEMENTS, RIGHTS-OF-WAY AND TITLE OF RECORD SEE TITLE SEARCH REPORT PREPARED BY CASCADE TITLE COMPANY, ORDER NUMBER 62241800251, DATED 02/12/18, OF WHICH WAS RELIED UPON TO PLOT SAID ITEMS.

STRATTON SURVEYING AND MAPPING MAKES NO WARRANTIES AS TO MATTERS OF UNWRITTEN TITLE, SUCH AS, ADVERSE POSSESSION, ACQUIESCENCE, ESTOPPEL, ETC.

Z. FIELD WORK COMPLETED 01/30/18

SURVEY REFERENCES

-WSDOT PLANS, GOOSE GAP TO ROAD 68, DATED 1978
-RECORD OF SURVEY VOL 1, PAGE 1638
-RECORD OF SURVEY VOL 1, PAGE 2926
-RECORD OF SURVEY VOL 1, PAGE 4409
-SHORT PLAT VOL 1, PAGE 2925
-BADGER HEIGHTS SUBDIVISION

LEGEND

- = FOUND AS INDICATED
- = FOUND 5/8" REBAR MARKED "GBW 30440"
- = FOUND 5/8" REBAR MARKED "JAB 21384"
- = FOUND 5/8" REBAR MARKED "PERMIT 13173"
- (NS) = NOT FOUND OR SET
- = FOUND CASED MONUMENT
- = CONCRETE CURB AND GUTTER
- = CONCRETE CURB EXTRUDED
- = IRRIGATION CONTROL VALVE
- = LIGHT POLE, PARKING
- = LIGHT POLE, STREET
- = MAILBOX
- = POWER JBOX
- = POWER METER
- = POWER POLE W/ GUY WIRE
- = POWER TRANSFORMER
- = POWER CABINET
- = POWER VAULT
- = SANITARY SEWER MANHOLE
- = SANITARY SEWER CLEAN-OUT
- = SIGN
- = STORM CATCH BASIN
- = TELEPHONE PEDESTAL
- = WATER FIRE HYDRANT
- = WATER AIR RELEASE VALVE
- = WATER VALVE
- = WATER STOP
- = WATER METER
- = WATER WELL
- = WATER VAULT
- = FENCE
- = EASEMENT
- = PROPERTY BOUNDARY
- = CENTERLINE
- = SANITARY SEWER LINE
- = POWER LINE OVERHEAD
- = TELEPHONE UNDERGROUND
- = ROW OF BUSHES
- = TREE
- = EVERGREEN
- = CONCRETE
- = ASPHALT
- = GRAVEL ROAD

LOTS
NUMBER OF LOTS: 54 LOTS
NUMBER OF TRACTS: 4
SMALLEST LOT: 3006 SF
LARGEST LOT: 9781 SF
AVERAGE LOT: 3600 SF
TOTAL PLAT ACREAGE: 9.8 ACRES

TRACT USE AND OWNERSHIP
TRACTS A B AND C ARE RESERVED FOR OPEN SPACE.
TRACT D IS RESERVED FOR OPEN SPACE & STORM RETENTION.
ALL TRACTS WILL BE OWNED BY THE FUTURE HOME OWNERS ASSOCIATION.

ROADS
ROAD LINEAR FEET: 2186'
ROAD AREA: 106,180 SF/2.44 ACRES

UTILITIES
WATER: CITY OF RICHLAND
POWER: CITY OF RICHLAND
TELEPHONE: COMCAST
SEWER: CITY OF RICHLAND
GAS: CASCADE NATURAL GAS

OWNER/DEVELOPER
DENNIS SAWBY CONSTRUCTION 12904 S. GRANDVIEW LN, KENNEWICK, WA.

ENGINEER
SPINK ENGINEERING
RICHLAND, WA
PHONE: (509) 946 1581
FAX: (509) 946-6483

Exhibit 5

CURVE TABLE					
CURVE	LENGTH	RADIUS	Δ	CH DIREC.	CHORD
C1	43.60	150.00	16°39'20"	N74°56'27"E	43.45
C2	60.33	150.00	23°02'43"	S78°08'09"W	59.93
C3	100.99	250.00	23°08'43"	N78°05'08"E	100.31
C4	87.01	100.00	49°51'21"	N41°35'06"E	84.30
C5	121.90	100.00	69°50'28"	N18°15'48"W	114.49
C6	77.88	35.00	127°29'50"	S63°04'03"W	62.78
C7	87.00	100.00	49°50'48"	S25°36'16"E	84.28
C8	117.68	100.00	67°25'30"	N16°48'55"W	111.01
C9	37.51	50.00	42°59'05"	S04°35'42"E	36.64

DESCRIPTIONS

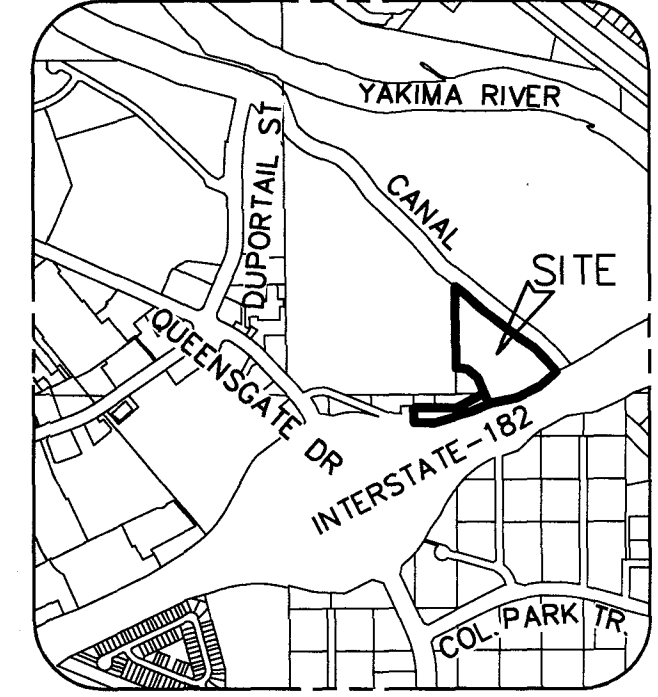
LOT 3 OF THE SHORT PLAT RECORDED IN VOLUME 1 OF SHORT PLATS, AT PAGE 2923, RECORDS OF BENTON COUNTY, WASHINGTON.

LOT 2 OF THE SHORT PLAT RECORDED IN VOLUME 1 OF SHORT PLATS, AT PAGE 2926, RECORDS OF BENTON COUNTY, WASHINGTON.

TOGETHER WITH AND SUBJECT TO EASEMENTS, RESERVATIONS, COVENANTS AND RESTRICTIONS, OF RECORD AND IN VIEW.

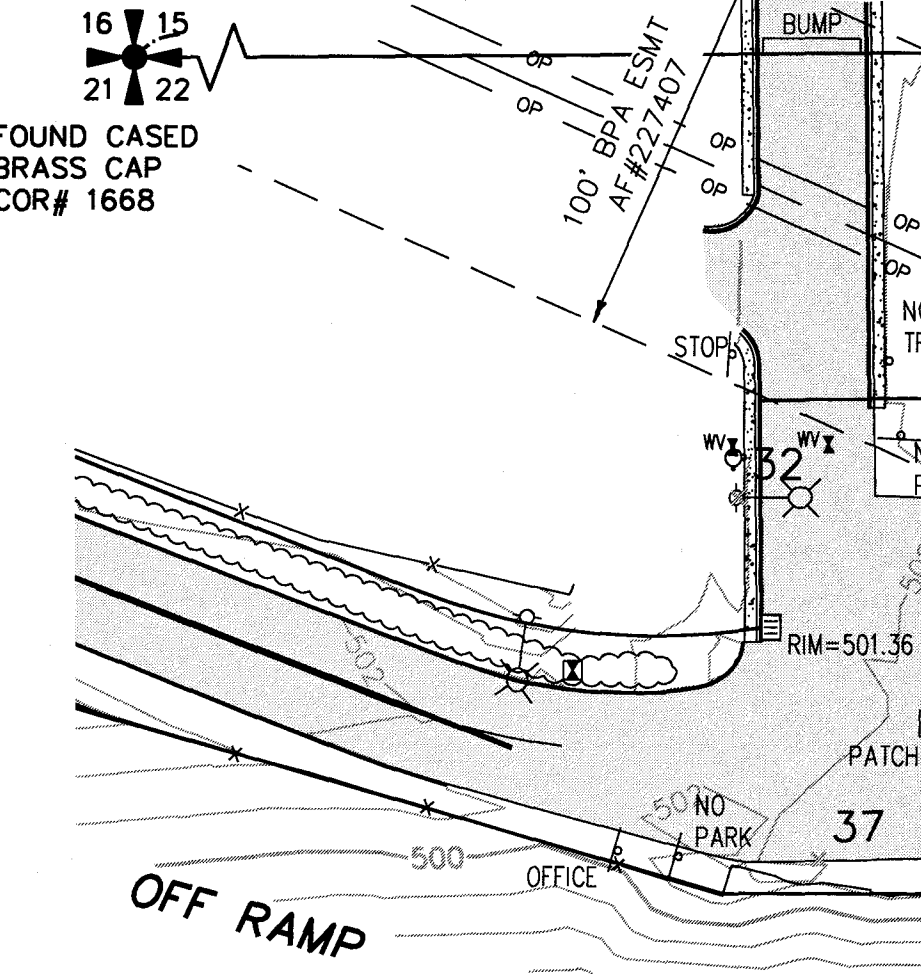
THE PRELIMINARY PLAT OF
SKYLINE SOUTH

S.W. 1/4 OF SEC. 15, T.09N., R.28E., W.M.,
& THE N.W. 1/4 OF SEC. 22, T.09N., R.28E. W.M.
CITY OF RICHLAND,
BENTON COUNTY, WASHINGTON



VICINITY SKETCH
NOT TO SCALE

LINE TABLE		
LINE	LENGTH	BEARING
L1	12.73	S89°39'30"W
L2	17.74	S66°47'12"W
L3	100.05	S41°36'37"E
L4	46.64	S42°30'09"E
L5	49.49	S46°20'45"E
L6	49.81	S45°21'00"E
L7	48.37	S51°22'04"E
L8	50.95	S53°35'34"E
L9	55.38	S57°56'06"E
L10	56.61	S52°19'28"E
L11	58.45	S54°46'27"E
L12	55.65	S51°44'03"E
L13	53.50	S50°59'06"E
L14	51.75	S54°19'32"E
L15	58.57	S54°48'19"E
L16	60.73	S50°59'21"E
L17	51.31	S48°39'54"E
L18	57.02	S48°29'04"E
L19	49.20	S49°22'39"E
L20	55.99	S51°46'32"E
L21	29.26	S50°11'51"E
L22	15.41	N26°05'15"W



HORIZONTAL CONTROL

WASHINGTON STATE SOUTH ZONE, US SURVEY FEET, NAD 83 (91). PER THE CITY OF RICHLAND CONTROL FILE, GPS TIES WERE MADE TO 1676, 1676 AND 1668 CONTROL POINTS, PROJECTED TO GROUND AT POINT 1668.

GROUND DISTANCES ARE SHOWN HEREON.



INDEX

1/4	1/4	SEC	T.	R.
15	09N	28E		
22	09N	28E		

PRELIMINARY PLAT FOR
DENNIS SAWBY

STRATTON SURVEYING & MAPPING, PC
313 NORTH MORAIN STREET
KENNEWICK, WA 98336
(509) 735-7364
FAX: (509) 735-6560
stratton@strattonsurvey.com

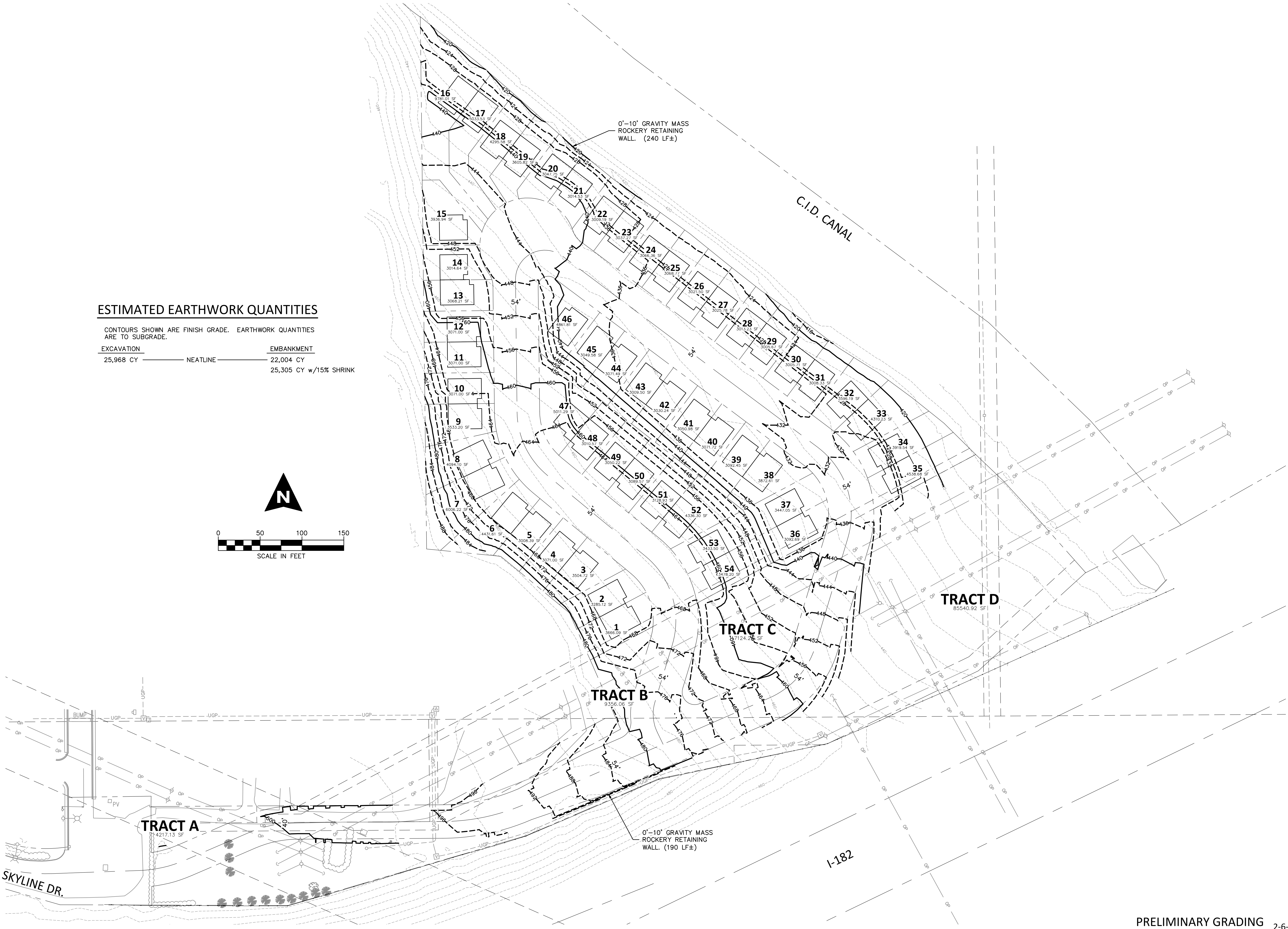
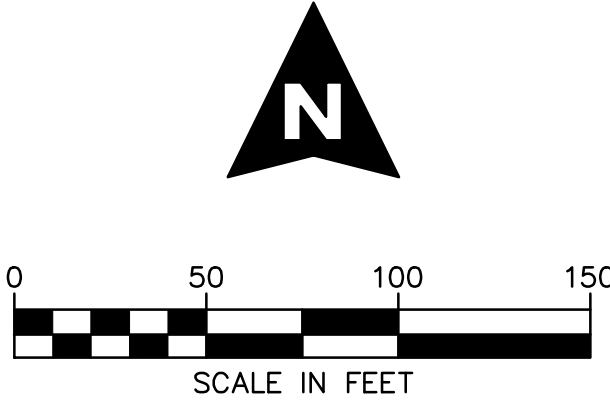
5420PP1.DWG © 2020

DATE: 02/06/20 SHT. 1 OF 1

DRAWN BY: DCI JOB # 5420

ESTIMATED EARTHWORK QUANTITIES

CONTOURS SHOWN ARE FINISH GRADE. EARTHWORK QUANTITIES ARE TO SUBGRADE.	
EXCAVATION	EMBANKMENT
25,968 CY	22,004 CY
NEATLINE	25,305 CY w/15% SHRINK



SPINK
ENGINEERING

1045 Indian Ave., Suite E, Richland, WA • 509.946.1581 • www.spinkeng.com

DRAWN BY: SWS	REVISION COMMENTS
DESIGNED BY: SWS	BY: APP
APPROVED BY: ARR	DATE
FILE: 17-138(12-20-19).dwg	

DENNIS SAWBY

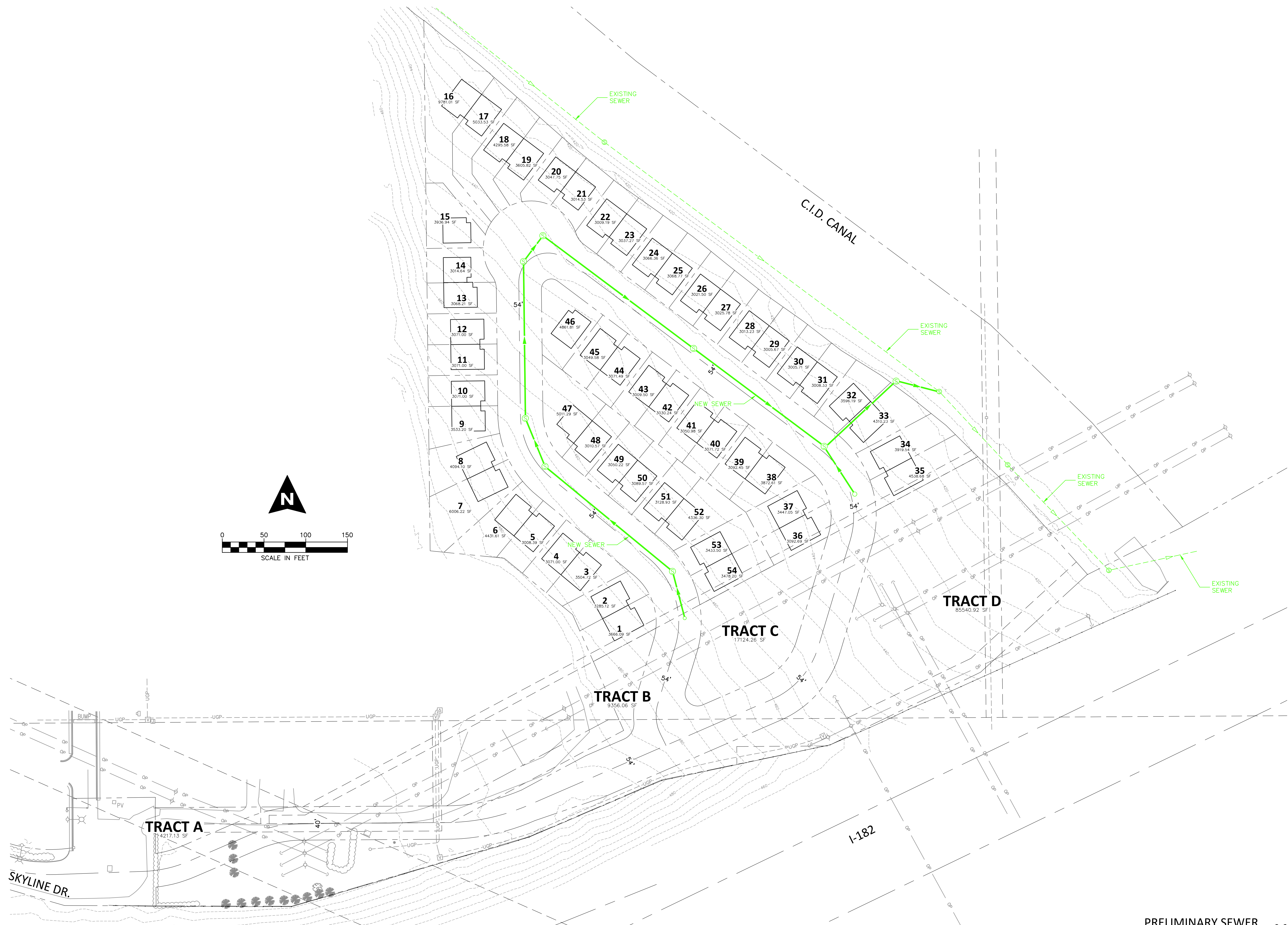
STREET & LOT LAYOUT
SLYLINE SOUTH

WASHINGTON
RICHLAND

SHEET
01 of 04

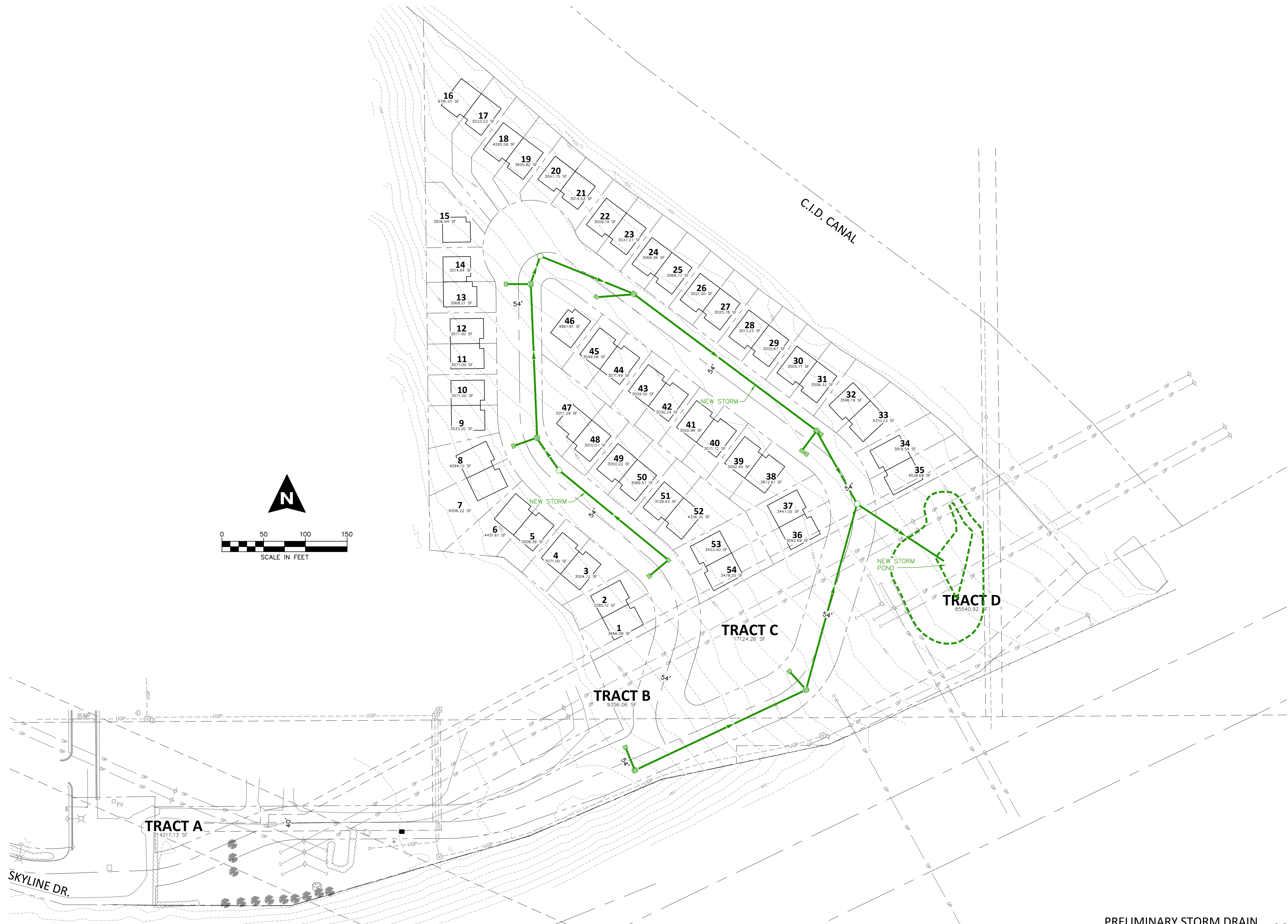
JOB# 17-138

DWG# XXX-XXX



PRELIMINARY SEWER 2-6-20

DENNIS SAWBY STREET & LOT LAYOUT SLYLINE SOUTH RICHLAND WASHINGTON	DRAWN BY: SWS DESIGNED BY: SWS APPROVED BY: ARR FILE: 17138(12-20-19).dwg	 SPINK ENGINEERING 1045 Jordan Ave., Suite E • Richland, WA • 509.946.1381 • www.spinkeng.com	REV.	DATE	BY
SHEET 02 of 04	JOB# 17-138				
DWG# XXX-XXX					

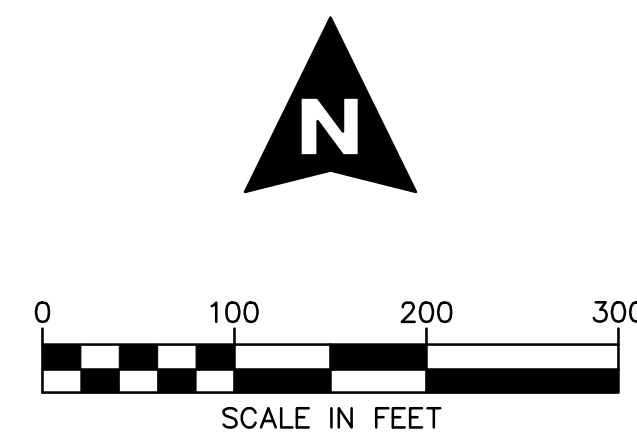


PRELIMINARY STORM DRAIN 2-6-20



SPINK
ENGINEERING

1045 Jordan Ave., Suite E • Richland, WA • 509.946.1531 • www.spinkeng.com



2-6-20

DENNIS SAWBY

JOB# 17-138

DWG# XXX-XXX

DRAWN BY: SWS
DESIGNED BY: SWS
APPROVED BY: ARR
FILE: 17-138(12-20-19).dwg

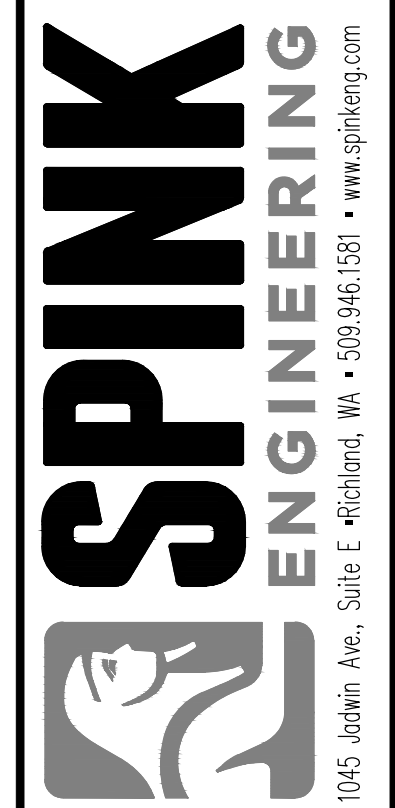
[illegible]

Exhibit 6



CITY OF RICHLAND NOTICE OF APPLICATION, PUBLIC HEARING AND OPTIONAL DNS (S2020-102 & EA2020-103)

Notice is hereby given that Spink Engineering, applicant, on behalf of Dennis Sawby, owner, has filed an application for a 54 lot residential subdivision referred to as Skyline South. The site is located north of Interstate I-182 and east of Hills Mobile Home Park. The Richland Hearings Examiner will conduct a public hearing and review of the application at 6:00 p.m., Monday, April 13, 2020 in the Richland City Hall Council Chambers, 625 Swift Boulevard. All interested parties are invited to attend and present testimony at the public hearing.

Environmental Review: The proposal is subject to environmental review. The City of Richland is lead agency for the proposal under the State Environmental Policy Act (SEPA) and has reviewed the proposed project for probable adverse environmental impacts and expects to issue a determination of non-significance (DNS) for this project. The optional DNS process in WAC 197-11-355 is being used. This may be your only opportunity to comment on the environmental impacts of the proposed development. The environmental checklist and related file information are available to the public and can be viewed at www.ci.richland.wa.us.

Any person desiring to express their views or to be notified of any decisions pertaining to this application should notify Mike Stevens, Planning Manager, 625 Swift Boulevard, MS-35, Richland, WA 99352. Comments may also be faxed to (509) 942-7764 or emailed to mstevens@ci.richland.wa.us. Written comments should be received no later than 5:00 p.m. on Friday, March 20, 2020 to be incorporated into the staff report. Comments received after that date will be entered into the record at the hearing.

The application will be reviewed in accordance with the regulations in RMC Title 19 Development Regulations Administration and Title 24 Plats and Subdivisions. Appeal procedures of decisions related to the above referenced application are set forth in RMC Chapter 19.70. Contact the Richland Planning Division at the above referenced address with questions related to the available appeal process.



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AFFIDAVIT OF MAILING

STATE OF WASHINGTON)
) ss.
COUNTY OF BENTON)

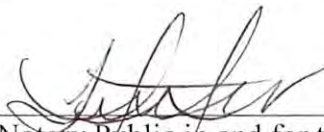
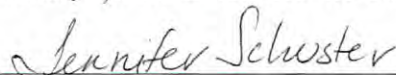
COMES NOW, Briana Ghbein, who, being first duly sworn upon oath deposes and says:

1. I am an employee in the Planning & Development Department for the City of Richland.
2. On the 24th day of February, 2020, I mailed a copy of the attached NOTICE OF APPLICATION, PUBLIC HEARING AND OPTIONAL DNS (S2020-102 & EA2020-103) to the attached list of individuals via regular USPS on the date indicated above. The Richland Hearing Examiner will conduct a public hearing at 6:00 PM on Monday, April 13, 2020 in the Richland City Council Chambers, 625 Swift Boulevard.


Signed: Briana Ghbein

SIGNED AND SWORN to before me this 24th day of February, 2020 by Jennifer Schuster.




Notary Public in and for the State of Washington,

Print Name
Residing at 625 Swift Blvd
My appointment expires: 4-25-23

AFFIDAVIT OF MAILING - 1
Notice of Application, Public Hearing, and Optional DNS attached.
Address list attached.



CITY OF RICHLAND NOTICE OF APPLICATION, PUBLIC HEARING AND OPTIONAL DNS (S2020-102 & EA2020-103)

Notice is hereby given that Spink Engineering, applicant, on behalf of Dennis Sawby, owner, has filed an application for a 54 lot residential subdivision referred to as Skyline South. The site is located north of Interstate I-182 and east of Hills Mobile Home Park. The Richland Hearings Examiner will conduct a public hearing and review of the application at 6:00 p.m., Monday, April 13, 2020 in the Richland City Hall Council Chambers, 625 Swift Boulevard. All interested parties are invited to attend and present testimony at the public hearing.

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Any person desiring to express their views or to be notified of any decisions pertaining to this application should notify Mike Stevens, Planning Manager, 625 Swift Boulevard, MS-35, Richland, WA 99352. Comments may also be faxed to (509) 942-7764 or emailed to mstevens@ci.richland.wa.us. Written comments should be received no later than 5:00 p.m. on Friday, March 20, 2020 to be incorporated into the staff report. Comments received after that date will be entered into the record at the hearing.

The application will be reviewed in accordance with the regulations in RMC Title 19 Development Regulations Administration and Title 24 Plats and Subdivisions. Appeal procedures of decisions related to the above referenced application are set forth in RMC Chapter 19.70. Contact the Richland Planning Division at the above referenced address with questions related to the available appeal process.



Owner	Mail Address	City	State	Zip
THE HILLS MOBILE HOME PARK	PO BOX 1050	NORTH BEND	WA	98045
OSBORN JEFFREY SCOTT	630 SKYLINE DRIVE	RICHLAND	WA	99352
DENNIS SAWBY CONSTRUCTION LLC	12904 GRANDVIEW LN	KENNEWICK	WA	99338
DANYLYUK LEONID & LARISA	1712 ROAD 44	PASCO	WA	99301-2622
VETTER JONATHAN P	620 SKYLINE DR	RICHLAND	WA	99352

AFFIDAVIT OF POSTING

STATE OF WASHINGTON)
) ss.
COUNTY OF BENTON)

COMES NOW, **Michael Stevens**, who, being first duly sworn upon oath deposes and says:

1. I am an employee in the Planning Division of the Development Services Department for the City of Richland.

2. On the 24th day of March, 2020, I posted the attached NOTICE OF PUBLIC HEARING, File Number S2020-102 (Skyline South Preliminary Plat) in the following locations:

The eastern terminus of Skyline Drive right-of-way, Richland, WA



Signed: Michael Stevens

SIGNED AND SWORN to before me this 11th day of March, 2020, by Michael Stevens.



Signature of Notary

Briana C. Ghbein

Printed Name

Notary Public in and for the State of Washington,

Residing in Benton County

My appointment expires: 4-25-23



AFFIDAVIT OF PUBLICATION

Account #	Ad Number	Identification	PO	Amount	Cols	Depth
450543	0004582081	PC PHN - S2020-102 (Richland MUNIS Descript	100 4401 (Richland Account No. -	\$126.06	1	4.60 In

Attention: Jana Duncan (TF)

RICHLAND CITY OF/LEGALS
625 SWIFT BLVD.
RICHLAND, WA 99352

**CITY OF RICHLAND NOTICE OF
APPLICATION, PUBLIC HEARING
AND
OPTIONAL DNS**

Spink Engineering filed an application on behalf of Dennis Sawby for a 54 lot residential subdivision referred to as Skyline South. The site is located north of Interstate I-182 and east of The Hills Mobile Home Park. The Richland Hearings Examiner will conduct a public hearing and review of the application at 6:00 p.m. on Monday, April 13, 2020 in the Richland City Hall Council Chambers, 625 Swift Boulevard. All interested parties are invited to attend and present testimony at the public hearing.

The proposal is subject to environmental review. The City of Richland is lead agency for the proposal under the State Environmental Policy Act (SEPA) and has reviewed the proposed project for probable adverse environmental impacts and expects to issue a determination of non-significance (DNS) for this project. The optional DNS process in WAC 197-11-355 is being used. This may be your only opportunity to comment on the environmental impacts of the proposed development. The environmental checklist and related file information are available to the public and can be viewed at www.ci.richland.wa.us.

Any person desiring to express their views or to be notified of any decisions pertaining to this application should notify Mike Stevens, Planning Manager, 625 Swift Boulevard, MS-35, Richland, WA 99352. Comments may also be faxed to (509) 942-7764 or emailed to mstevens@ci.richland.wa.us. Written comments should be received no later than 5:00 p.m. on Friday, March 20, 2020 to be incorporated into the staff report. Comments received after that date will be entered into the record at the hearing.

Published: Sunday, March 1, 2020

COUNTY OF BENTON)

.SS

STATE OF WASHINGTON)

Victoria Rodela, being duly sworn, deposes and says, I am the Legals Clerk of The Tri-City Herald, a daily newspaper. That said newspaper is a local newspaper and has been approved as a legal newspaper by order of the superior court in the county in which it is published and it is now and has been for more than six months prior to the date of the publications hereinafter referred to, published continually as a daily newspaper in Benton County, Washington. That the attached is a true copy as it was printed in the regular and entire issue of the Tri-City Herald and not in a supplement thereof, ran 1 time(s) commencing on 03/01/2020, and ending on 03/01/2020, and that said newspaper was regularly distributed to its subscribers during all of this period.

V Rodela

(Signature of Legals Clerk)

SUBSCRIBED AND SWORN BEFORE
ME THIS 2nd DAY OF March, 2020

[Signature]
Notary Public in and for the State of Texas
residing in Dallas County



Extra charge for lost or duplicate affidavits.
Legal document please do not destroy!



CITY OF RICHLAND

NOTICE OF RESCHEDULED PUBLIC HEARING

(S2020-102 & EA2020-103)

Notice is hereby given that the public hearing originally scheduled for Monday, April 13, 2020 for consideration of the Preliminary Plat of Skyline South (S2020-102 & EA2020-103) applied for by Steve Spink Engineering on behalf of Dennis Sawby, owner has been cancelled based on the Governor's "Stay Home - Stay Healthy" order.

The public hearing has been rescheduled for **Monday, May 11, 2020** in the Richland City Hall Council Chambers, 625 Swift Boulevard, Richland, WA. All interested parties are invited to attend and present testimony at the public hearing.

Notices of any further public hearing changes, as well as copies of the complete application packet, SEPA Checklist and related materials can be obtained by visiting the City of Richland website at www.ci.richland.wa.us.

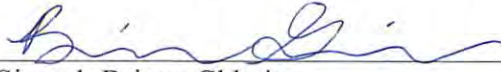


AFFIDAVIT OF MAILING

STATE OF WASHINGTON)
) ss.
COUNTY OF BENTON)

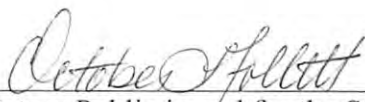
COMES NOW, Briana Ghbein, who, being first duly sworn upon oath deposes and says:

1. I am an employee in the Planning & Development Department for the City of Richland.
2. On the 3rd day of April, 2020, I mailed a copy of the attached RESCHEDULED NOTICE OF PUBLIC HEARING (S2020-102 & EA2020-103) to the attached list of individuals via regular USPS on the date indicated above. The Richland Hearing Examiner will conduct a public hearing at 6:00 PM on Monday, May 11, 2020 in the Richland City Council Chambers, 625 Swift Boulevard.


Signed: Briana Ghbein

SIGNED AND SWORN to before me this 3rd day of April, 2020 by October L. Follett.




Notary Public in and for the State of Washington,

October L. Follett
Print Name
Residing at Benton County
My appointment expires: 11-1-2020

AFFIDAVIT OF MAILING - 1
Rescheduled Notice of Public Hearing attached.
Address list attached.

SEPA ENVIRONMENTAL CHECKLIST***Purpose of checklist:***

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project,applicant," and "property or site" should be read as "proposal,proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements—that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. Name of proposed project, if applicable:
Sawby South Richland Multifamily Development
2. Name of applicant:
Dennis Sawby
3. Address and phone number of applicant and contact person:
12904 S. Grandview Ln., Kennewick, Wa 99338
Dennis Sawby (509) 308-1423
4. Date checklist prepared:
10-9-19
5. Agency requesting checklist:
City of Richland
6. Proposed timing or schedule (including phasing, if applicable):
Fall 2019 – Spring/Summer 2020
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
No.
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
SEPA checklist & Critical Areas Report.
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
No.
10. List any government approvals or permits that will be needed for your proposal, if known.
City Preliminary Plat Approval.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The property is 9.8 acres. The finished project will consist of 56 residential town home lots served by City streets & utilities.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The property is located in South Richland at the east end of Skyline Dr. The property is adjacent to and north of I-182 and adjacent to and east of Hills Mobile Home Park. See attached Preliminary Plat exhibit.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

(circle one): Flat, rolling, **hilly**, **steep slopes**, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)?

25%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The USDA Natural Resources Conservation Service (NRCS) has mapped the soils on and around the site as Quincy Loamy Sand, 0 to 30 percent (QuE).

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Total area of site is approximately 9.80 acres. The limits of the mass grading is approximately 6 acres. Approximately 26,000 cubic yards of material will be moved.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

General erosion may occur during grading and construction activities. Minor erosion may occur during rain events or dust control watering.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

38%

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Erosion and sedimentation control measures are required by the City of Richland. Typical measures include silt fence installation and dust control plans during construction.

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Equipment exhaust and dust during construction. Typical vehicle exhaust after construction.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

NONE.

3. Water

- a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The Yakima River is located approximately 1,600-feet northeast of the project site.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

After full build-out, storm run-off from impervious surfaces such as asphalt and concrete sidewalks will be captured in drainage conveyance systems and routed to

a storm drainage retention basin. Run-off from roof tops generally infiltrates into landscaping around homes.

2) Could waste materials enter ground or surface waters? If so, generally describe.
No.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.
No.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Storm run-off conveyance system with drainage retention basin. Soil stabilization on disturbed areas.

4. Plants

a. Check the types of vegetation found on the site:

- ☐ deciduous tree: alder, maple, aspen, other
- ☐ evergreen tree: fir, cedar, pine, other
- ☒ shrubs
- ☒ grass
- ☐ pasture
- ☐ crop or grain
- ☐ Orchards, vineyards or other permanent crops.
- ☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- ☐ water plants: water lily, eelgrass, milfoil, other
- ☒ other types of vegetation
Sage brush and native grasses.

b. What kind and amount of vegetation will be removed or altered?

Native grasses and sage brush will be removed from site where grading construction activities will occur. Limits of grading area is approximately 6 acres.

c. List threatened and endangered species known to be on or near the site.

There are no known threatened or endangered species on or near the project site.
Dept. of Fish & Wildlife has reviewed property and found no PHS issues.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

At full build-out, landscaping will be typical of residential neighborhood development. Landscaping may include grass, trees, shrubs, bushes, decorative rock, etc.

- e. List all noxious weeds and invasive species known to be on or near the site.
No known noxious weeds or invasive species.

5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, **songbirds**, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other X_____

Mice, rabbits, coyotes

- b. List any threatened and endangered species known to be on or near the site.
There are no known threatened or endangered species on or near the project site. No PHS issues per Dept. of Fish & Wildlife review.

- c. Is the site part of a migration route? If so, explain.
Richland is in the Pacific Flyway.

- d. Proposed measures to preserve or enhance wildlife, if any: None

- e. List any invasive animal species known to be on or near the site.
No known invasive species.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Underground electricity will be provided to each lot created on this site. If available, gas will also be provided. I assume both will be used for heating.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No.

- c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk

of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? No.

If so, describe.

- 1) Describe any known or possible contamination at the site from present or past uses.

None.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

None.

- 4) Describe special emergency services that might be required.

None.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

None.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

General car noise common to a residential neighborhood.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indi-cate what hours noise would come from the site.

Construction equipment during construction. General car noise common to a residential neighborhood after construction.

3) Proposed measures to reduce or control noise impacts, if any:

None

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The property is currently zoned Multiple Family Residential (R-3). A mobile home park is adjacent and west of the property.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

The property appears to be natural open space with no evidence of past usage for anything other than open range land.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

c. Describe any structures on the site.

None.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

Multiple Family Residential (R-3)

f. What is the current comprehensive plan designation of the site?

High Density Residential.

g. If applicable, what is the current shoreline master program designation of the site?

Property has no specific designation on the City Shoreline Master Plan.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No.

- i. Approximately how many people would reside or work in the completed project?
At full build-out, 56 single family town homes will be built on this site. Using 3 people per family, approximately 168 people will live on this site.
- j. Approximately how many people would the completed project displace?
None.
- k. Proposed measures to avoid or reduce displacement impacts, if any:
None.
- L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
City zoning regulations.
- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:
None.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, mid-dle, or low-income housing.
56 middle income units.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None.
- c. Proposed measures to reduce or control housing impacts, if any:
None.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
Maximum structure heights are controlled by City building standards. The principal exterior material will be per City building code.
- b. What views in the immediate vicinity would be altered or obstructed?
None.
- b. Proposed measures to reduce or control aesthetic impacts, if any:
None.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

General area lighting from homes and street lights.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

None.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None.

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

No.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No evidence known.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Washington Information System for Architectural & Archaeological Records Data has no information listed for this site.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

No proposed measures and no known permits required.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Property is located at the east end of Skyline Dr. Access to Queensgate Dr. and Interstate 182 is available near this site.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The City of Richland is served by the Ben Franklin Transit busing system. This project site is within the City limits.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

Currently the site is undeveloped land with no parking. At full build-out, Public streets will be constructed adjacent to residential home lots. Vehicle parking will be provided in accordance with general residential subdivision development.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). ____

No improvements required at this time. City preliminary plat review may include requirements of street improvements to Skyline Dr.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles).

What data or transportation models were used to make these estimates?

At full build-out, 52 single family residences will generate approximately 10 vehicle trips per day each. Approximately 520 vehicle trips per day will occur. Peak volumes will generally occur in the mornings and around 5pm.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any:

No.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

Increases to all public services will be required to meet the demand of 52 single family residences.

c. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

a. Circle utilities currently available at the site:

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

At full build-out, all public services listed above will be extended to each single family residence.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Steve Spink

Name of signee Steve Spink

Position and Agency/Organization Principal / Spink Engineering

Date Submitted: 10-10-19

COMMUNITY DEVELOPMENT DEPARTMENT

THIS APPLICATION WAS REVIEWED BY THE PLANNING DIVISION OF
THE COMMUNITY DEVELOPMENT DEPARTMENT. ANY COMMENTS

OR CHANGES MADE BY THE DEPARTMENT ARE ENTERED IN THE
BODY OF THE CHECKLIST AND CONTAIN INITIALS OF THE
REVIEWER

Reviewer Signature

Date

C. Signature [\[HELP\]](#)

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Steve Spink
Name of signee Steve Spink
Position and Agency/Organization Owner/Spink Engineering
Date Submitted: 1/13/20

D. Supplemental sheet for nonproject actions [\[HELP\]](#)

(IT IS NOT NECESSARY to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Proposed measures to avoid or reduce such increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks,



File No. EA2020-103

CITY OF RICHLAND
Determination of Non-Significance

Description of Proposal: Preliminary Plat of Skyline South.

Proponent: Spink Engineering, applicant, on behalf of Dennis Sawby, owner

Location of Proposal: The site is located north of Interstate I-182 and east of Hills Mobile Home Park upon Assessor's Parcel Numbers 122982012925003, 122982012926002 & 115983012926002.

Lead Agency: City of Richland

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

() There is no comment for the DNS.

() This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen days from the date of issuance.

(X) This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

Responsible Official: Mike Stevens

Position/Title: Planning Manager

Address: 625 Swift Blvd., MS #35, Richland, WA 99352

Date: March 26, 2020

Signature 

Exhibit 8

CITY OF RICHLAND PUBLIC WORKS ENGINEERING DEVELOPMENT COMMENTS

DATE: March 18, 2020

TO: MIKE STEVENS, PLANNING MANAGER

PLAT REVIEW BY: JASON REATHAFORD, ENGINEERING TECH 4
PETE ROGALSKY, PUBLIC WORKS DIRECTOR
JOHN DESKINS, TRAFFIC ENGINEER

PROJECT NAME: SKYLINE SOUTH PRELIMINARY PLAT (S2020-102)

PROJECT LOCATION: EAST OF HILLS MOBILE HOME PARK, WEST OF I-182

The Public Works Engineering Division has reviewed the preliminary plat received in this office on February 24, 2020 for the above referenced property and has the following conditions.

Pre-Plat Specific Conditions

1. The preliminary plat is not showing any phase lines. Phasing is not required but if the project is to be phased during construction phasing lines need to be shown on the pre-plat map.
2. The existing roadway into Hills Mobile Home Park is already named "Skyline Drive". A different name will be needed for the entrance road into this project, or the existing Skyline Drive will have to be renamed.

General Conditions:

1. All final, approved plans for public improvements shall be submitted prior to pre-con on a 24" x 36" hardcopy format and also electronically in .dwg format compatible with the City's standard CAD software. Addendums are not allowed, all information shall be supplied in full size (and electronic) format. Electronic copies of the construction plans are required prior to the pre-con meeting along with the multiple sets of paper drawings. When construction of the public infrastructure has been substantially completed, the applicant shall provide paper and electronic record drawings in accordance with the City's "Record Drawing Requirements". The electronic record drawings shall be submitted in an AutoCAD format compatible with the City's standard CAD software. The final record drawings shall be submitted and approved by the City before the final punchlist inspection will be performed. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.
2. Any and all necessary permits that may be required by jurisdictional entities outside of the City of Richland shall be the responsibility of the developer to obtain.
3. A copy of the construction drawings shall be submitted for review to the appropriate jurisdictions by the developer and his engineer. All required comments / conditions from all appropriate reviewing jurisdictions (e.g.: Benton County, any appropriate irrigation districts, other utilities, etc.) shall be incorporated into one comprehensive set of drawings and resubmitted (if necessary) for final permit review and issuance.
4. Any work within the public right-of-way or easements or involving public infrastructure will require the applicant to obtain a right-of-way construction permit prior to beginning work, per RMC Chapter 12.08. The applicant shall pay a plan review fee based on a cost-per-sheet of engineering infrastructure plans. This public infrastructure plan review fee shall apply each time a project is

submitted for review. This fee will be different for commercial projects versus subdivision projects. Please visit the Public Works Private Development page on the City's webpage to find the current per-sheet fee. A permit fee in the amount equal to 3% of the construction costs of the work within the right-of-way or easement will be collected at the time the construction permit is issued. A stamped, itemized Engineers estimate (Opinion of probable cost) and a copy of the material submittals shall be submitted along with the approved plan submittal.

5. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of the final plat. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of plat acceptance. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to application for plat acceptance.
6. A pre-construction conference will be required prior to the start of any work within the public right-of-way or easement. Contact the Public Works Engineering Division at 942-7500 to schedule a pre-construction conference.
7. Site plan drawings which involve the construction of public infrastructure shall be drawn on a standard 24" x 36" drawing format to a scale which shall not be less than 1"=40'.
8. All plan sheets involving construction of public infrastructure shall have the stamp of a current Washington State licensed professional engineer.
9. All construction plan sheets shall include the note "CALL TWO WORKING DAYS BEFORE YOU DIG 1-800-424-5555 (or "811")." Or: <http://www.call811.com/>
10. A copy of the preliminary plat shall be supplied to the Post Office and all locations of future mailbox clusters approved prior to final platting.

Design Standards:

11. Public improvement design shall follow the following general format:
 - A. All materials and workmanship shall be in conformance with the latest revision of the City of Richland Standard Specifications and Details, Public Infrastructure Design Guidelines and the current edition of the State of Washington Standard Specifications for Road, Bridge, and Municipal Construction. Please confirm that you have the latest set of standard specs and details by visiting the City's web page.
 - B. Water lines shall be aligned on the south and east side of street centerlines.
 - C. Sanitary sewer shall be aligned on the north and west side of street centerlines.
 - D. Storm sewer shall be aligned on the south and east side of street centerlines.
 - E. Any sewer or storm manholes that are installed outside of public Right of Way shall have an acceptable 12-foot wide gravel access road (minimum) provided from a public street for maintenance vehicles.
 - F. 10-feet horizontal spacing shall be maintained between domestic water and sanitary sewer mainlines and service lines.
 - G. Watermains larger than 8-inches in diameter shall be ductile iron.
 - H. Watermains installed outside of the City Right of Way or in very rocky native material, shall be ductile iron and may need restrained joints.
 - I. All watermains outside areas zoned R1 shall be ductile iron.
 - J. Fire hydrant location shall be reviewed and approved by the City Fire Marshal.
 - K. Sewer mains over 15-feet deep shall be constructed out of SDR26 PVC or C900 PVC. The entire main from manhole to manhole shall be the same material.
 - L. Water valves and manholes installed on private property shall be placed so as to avoid parked cars whenever feasible.

- M. All utilities shall be extended to the adjacent property (properties) at the time of construction.
 - N. The minimum centerline finish grade shall be no less than 0.30 % and the maximum centerline finish grade shall be no more than 10.0 % for local streets. 12% can be allowed for local streets for short distances.
 - O. The minimum centerline radius for local streets shall be 100-feet.
 - P. Any filling of low areas that may be required within the public Right of Way shall be compacted to City standards.
 - Q. An overall, composite utility plan shall be included in the submitted plan set if the project is phased. This comprehensive utility plan benefits all departments and maintenance groups involved in the review and inspection of the project.
 - R. A detailed grading plan shall be included in the submitted plan set.
 - S. For public utilities not located within public street rights-of-way the applicant shall provide maintenance access acceptable to the City and the applicant shall provide an exclusive 10-foot wide public utility easement (minimum) to be conveyed to the City of Richland.
 - T. Final design of the public improvements shall be approved at the time of the City's issuance of a Right-of-way Construction Permit for the proposed construction.
 - U. All public improvements shall comply with the State of Washington and City of Richland requirements, standards and codes.
 - V. All cul-de-sacs shall have a minimum radius of 48-feet to the face of curb (57-foot ROW) to allow for adequate turning radius of fire trucks and solid waste collection vehicles.
 - W. Curb returns at minor intersections shall have a minimum radius of 25-feet. Curb returns at major intersections should have minimum radius of 30-feet but should be evaluated on a case by case basis.
 - X. All public streets shall meet design requirements for sight distance (horizontal, vertical and intersectional).
 - Y. The final engineered construction plans shall identify locations for irrigation system, street lighting, gas service, power lines, telephone lines, cable television lines, street trees and mail boxes. All electrical appurtenances such as transformers, vaults, conduit routes, and street lights (including their circuit) need to be shown in the plan view.
 - Z. Construction plans shall reference all City of Richland standard details necessary to construct all public improvements which will be owned, operated, maintained by the City or used by the general public.
 - AA. The contractor shall be responsible for any and all public infrastructure construction deficiencies for a period of one year from the date of the letter of acceptance by the City of Richland.
12. If the project will be built in phases the applicant shall submit a master plan for the sanitary sewer, domestic water, storm drainage, electrical, street lighting and irrigation system for the entire project prior to submitting plans for the first phase to assure constructability of the entire project. This includes the location and size of any storm retention ponds that may be required to handle runoff.
13. If the City Fire Marshal requires a secondary emergency vehicle access, it shall be included in the construction plan set and be designed to the following standards:
- A. 2-inches compacted gravel, minimum (temp. SEVA only).
 - B. 2% cross-slope, maximum.
 - C. 5% slope, maximum. Any access road steeper than 5% shall be paved or be approved by the Fire Marshal.
 - D. Be 20-feet in width.
 - E. Have radii that are accommodating with those needed for City Fire apparatus.

Secondary emergency vehicles accesses (SEVA's) shall be 20-feet wide, as noted. Longer secondary accesses can be built to 12-feet wide with the approval of the City of Richland Fire Marshal, however turn-outs are required at a spacing acceptable to the Fire Dept. Temporary

SEVA's shall be constructed with 2-inches of compacted gravel, at a minimum. Permanent SEVA's shall be paved with 2-inches of asphalt over 4-inches of gravel, at a minimum.

14. **SURVEY MONUMENT DESTRUCTION:**

All permanent survey monuments existing on the project site shall be protected. If any monuments are destroyed by the proposed construction, the applicant shall retain a professional land surveyor to replace the monuments and file a copy of the record survey with the City.

- A. No survey monument shall be removed or destroyed (*the physical disturbance or covering of a monument such that the survey point is no longer visible or readily accessible*) before a permit is obtained from the Department of Natural Resources (DNR). WAC 332-120-030(2) states "It shall be the responsibility of the governmental agency or others performing construction work or other activity (including road or street resurfacing projects) to adequately search the records and the physical area of the proposed construction work or other activity for the purpose of locating and referencing any known or existing survey monuments." (RCW 58.09.130).
- B. Any person, corporation, association, department, or subdivision of the state, county or municipality responsible for an activity that may cause a survey monument to be removed or destroyed shall be responsible for ensuring that the original survey point is perpetuated. (WAC 332-120-030(2)).
- C. Survey monuments are those monuments marking local control points, geodetic control points, and land boundary survey corners. (WAC 332-120-030(3)).

When a monument must be removed during an activity that might disturb or destroy it, a licensed Engineer or Land Surveyor must complete, sign, seal and file a permit with the DNR.

It shall be the responsibility of the designing Engineer to identify the affected monuments on the project plans and include a construction note directing them to the DNR permit.

Traffic & Streets:

- 15. The "Skyline South" preliminary plat lies within "Zone 2" of the boundary of the South Richland Collector Street Financing Plan (RMC 12.03). This plat shall therefore be subject to the fees administered by the finance plan for any phase submitted for approval.
- 16. The project applicant, at the City's request, conducted a traffic study to assess the anticipated operations at the intersection of Skyline Drive and Queensgate Drive. The study confirmed that the project's traffic loading will not result in an unacceptable level of service at this intersection. No vehicular traffic mitigation is required for this project, except for participation in the Title 12.03 impact fee program.
- 17. The portions of Skyline Drive that do not have home lots fronting on it shall be constructed full-width (curb, gutter, and all other typical frontage improvements) concurrent with the construction of the plat. Sidewalks along Skyline Drive shall be installed as noted in comment #24.
- 18. All proposed right-of-ways that are narrower than 54-feet shall have parking restricted, as per City standards. Street signs indicating restricted parking shall be installed prior to final platting at the developer's expense. The restricted parking areas shall be indicated on the construction plans and the final plat. Skyline Drive from the west plat boundary to the point that it widens out to 54-feet shall conform with the City's single frontage road standard. No parking will be allowed along the south side of this narrowed section of road. No Parking signs will be installed by the developer prior to final platting.
- 19. Road B shall intersect with Skyline Drive at an angle that is consistent with city design guidelines and municipal code. As proposed it is intersecting at too acute of an angle.

20. The intersection of "Road A" and "Road B" at the northwest corner of the project has a centerline curve that is much sharper than the minimum city standard of 100-feet. These two roads need to intersect at an angle consistent with city design guidelines and municipal code. This may result in a redesigned preliminary plat and a change to the road alignment and lot layout.
 21. The existing public right-of-way for the existing Skyline Drive appears to stop short of the western plat boundary. The developer of this project shall dedicate a public right-of-way corridor or a "right-of-way dedication easement" to the city that connects the existing Skyline Drive right-of-way corridor to this preliminary plat.
 22. The tee intersection of Skyline Drive at the entrance to the Hills Mobile Home Park shall be reconstructed to be a city standard tee intersection with curb & gutter, street lights and provisions for storm drainage. This reconstruction is necessary as this intersection is becoming a city right-of-way and shall meet city standards. The guardrail on the south side of Skyline Drive at the entrance to the plat shall be removed and replaced with city standard curb, gutter & sidewalk. See comment #23 below.
 23. The existing driveway at the west end of the pre-plat lying on the north side of the proposed Skyline Drive shall either be removed or realigned. As shown on the pre-plat the new Skyline Drive alignment overlaps the existing driveway to these residential lots. Driveways to the existing homes shall be constructed on to Skyline Drive to city standards.
 24. Sidewalks shall be installed along all public right-of-way frontages that building lots do not front on as follows:
 - The north side of Skyline Drive from the tee intersection into Hills Mobile Home Park to the intersection with "Road B".
 - Along the south side of existing Skyline Drive from the tee intersection into Hills Mobile Home Park to the intersection with Queensgate Drive. This will also require installation of approx. 245-feet of missing curb & gutter. Provisions for storm drainage may be needed also.
 - Both sides of "Road B" from the south side of Lots 1 & 54 to the intersection with "Skyline Drive";
 - Both sides of "Skyline Drive" from the south side of Lots 35 & 36 to the intersection with "Road B". The sidewalk on the south side of Skyline Drive shall terminate at the pedestrian ramp on the west side of this tee intersection.
- These sections of sidewalk shall be constructed at the same time as the adjacent roadways. The off-site sidewalk along Skyline Drive shall be constructed with plat construction.
25. The developer and his engineer shall demonstrate on the construction plans that all future driveways, sidewalks and pedestrian ramps will meet City and ADA requirements, and also provide at least 5-feet of separation between driveway and/or pedestrian ramp transitions.
 26. Pedestrian ramps shall be designed to current City standard details and A.D.A. guidelines. Adequate Right-of-Way shall be provided at corners to allow for at least 1-foot of ROW behind the ped. ramp landing. Crosswalks between pedestrian ramps shall be designed to City guidelines and A.D.A. guidelines. Crosswalks at stop-controlled intersections shall have cross-slopes less than 2%. Crosswalks crossing thru-streets shall have cross-slopes less than 5%. The road profiles shall be designed to accommodate this.
 27. A ten-foot public utility easement shall be provided adjacent to all public ROW corridors at the time of final platting.
 28. The vision-clearance triangle needs to be shown on all corner lots on both the construction plans and the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in a

curve, it will have to be evaluated per AASHTO guidelines. This information may need to be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.

29. All roads shall be constructed to provide for adequate fire truck & solid waste collection truck access & turnaround movements.
30. If the project is to be constructed in phases, all dead-end streets longer than 150-feet that will be continued later need to have temporary turnarounds built at the end of them. If the temporary turnaround is not located within the final plat an easement with a 50-foot radius will be required.

Domestic Water:

31. The closest watermain available for this project is located in Queensgate Drive to the west. It shall be the responsibility of the developer to extend a watermain to this property to serve domestic water at the time of plat construction. This water main shall be sized to adequately supply domestic water and fire flows to the proposed development.
32. Because of the lack of a secondary emergency vehicle access, fire sprinkler systems are required in all homes within this development. Developments of this size with multiple fire hydrants and residential fire sprinkler systems require a looped water system. Looping is required for redundancy in fire protection and also to prevent stagnation. For this project looping shall be accomplished by installing two parallel water pipelines from separate connections to the existing water main in Queensgate Drive.
33. The developer will be required to demonstrate that all phases are capable of delivering adequate fire flows prior to construction plans being accepted for review.
34. The fire hydrant layout shall be approved by the City Fire Marshal.
35. In accordance with Richland Municipal Code Chapter 18.16.080, an irrigation source and distribution system, entirely separate from the City's domestic water system, shall be provided for this development. *Construction plans will not be accepted for review until adequate and viable proof of an irrigation source is made available by the developer.* The designing Engineer shall submit plans for the proposed irrigation system to the Irrigation District with jurisdiction over the property at the same time that they are submitted to the City for construction review. Plans shall be reviewed and accepted by said irrigation district prior to issuance of a Right-of-Way permit by the City. Easements shall be provided on the final plat for this system where needed.

Sanitary Sewer:

36. The closest sanitary sewer available for this development is located along the Northeast border of the property, in the CID canal property. It shall be the responsibility of the developer to obtain permission, in the form of an easement favoring the City, from the CID and to extend a sewer main to this property to serve sanitary sewer at the time of plat construction.
37. The preliminary plat shows a sewer main running beneath the home at lots 32 and 33. No structures are allowed over city sewer mains. This main shall be relocated to the open Tract D to the east.
38. A 10-foot wide exclusive sanitary sewer easement shall be provided for any sewer main that is outside of the public Right-of-Way. Wider easements are required for mains that are buried deeper than 10-feet. If any manholes are located outside of the public Right-of-Way, maintenance truck access to said structure will be required.

Ground Water:

39. Groundwater or subsurface springs may be present on this site. Given the amount of groundwater encountered in this area (in both developed and undeveloped areas), the possibility of an underdrain system being required exists. Please have test pits and/or bore-holes dug by a geotech engineer, and an evaluation from said engineer prior to permit application. If an underdrain system is not required, the geohydrology report needs to state so. The requested report also needs to address any potential groundwater impacts to existing properties downslope of the proposed preliminary plat. Also, if groundwater is encountered within 5-feet of finished grade during plat construction, an underdrain system will be required.

Storm Water:

40. All construction projects that don't meet the exemption requirements outlined in Richland Municipal Code, Section 16.06 shall comply with the requirements of the Washington State Department of Ecology issued Eastern Washington NPDES Phase II Municipal Stormwater Permit. The Developer shall be responsible for compliance with the permit conditions. All construction activities subject to this title shall be required to comply with the standards and requirements set forth in the Stormwater Management Manual for Eastern Washington (SWMMEW) and prepare a Stormwater Site Plan. In addition, a Stormwater Pollution Prevention Plan (SWPPP) or submission of a completed erosivity waiver certification is required at the time of plan submittal. The City has adopted revised standards affecting the construction of new stormwater facilities in order to comply with conditions of its NPDES General Stormwater Permit program. This project, and each phase thereof, shall comply with the requirements of the City's stormwater program in place at the time each phase is engineered. The project will require detailed erosion control plans.
41. All public storm drainage systems shall have their flow rate and storage capacity designed by a professional engineer following the core elements defined in the latest editions of the Stormwater Management Manual for Eastern Washington, the current Richland municipal codes, the Phase II Municipal Stormwater Permit, and the City's "Public Infrastructure Construction Plan Requirements and Design Guidelines". The storm water calculations shall be stamped by a professional engineer and shall include a profile of the storm system showing the hydraulic grade line. The calculations should include an accurate delineation of the contributing drainage area to accurately size the stormwater facilities. Passing the storm water downhill to an existing storm system will require an analysis of the downstream storm system to determine its capability of accepting the storm water without being overwhelmed. The applicant's design shall provide runoff protection to downstream property owners.
42. If any existing storm drainage or ground water seepage drains onto the proposed site, said storm drainage shall be considered an existing condition, and it shall be the responsibility of the property developer to design a system to contain or treat and release the off-site storm drainage.
43. If there are any natural drainage ways across the proposed pre-plat, the engineered construction plans shall address it in accordance with Richland Municipal code 24.16.170 ("Easements-watercourses").
44. Any proposed storm drainage retention facilities within the boundary of the proposed preliminary plat shall not adversely affect neighboring properties.
45. Prior to or concurrent with the submittal of the first phase the developer shall provide a Geotechnical report including the percolation rate of the soils in the area of any storm retention ponds. If the project constructs a storm retention pond then the engineer will need to demonstrate that the pond will drain itself within 72 hours after the end of a storm event, and not have standing water in it longer than that. Engineering solutions are available for retention ponds that do not percolate within 72 hours.

46. The amount of post-development storm runoff from the proposed site shall not exceed the amount of pre-development runoff.
47. The parcel occupied by the stormwater basin shall be identified as a separate parcel or tract on the final plat and shall be dedicated to the City stormwater utility.
48. The developer should consider the long-term appearance of the storm basin, particularly if it will occupy a prominent location in the development. City storm pond maintenance practices consist of semi-annual vegetation trimming and silt and debris removal, so if the developer wishes for the pond to be landscaped and visually appealing, then a homeowners association should be considered for long-term landscape maintenance responsibilities. These maintenance responsibilities shall be noted on the final plat. Basins designed as detention and evaporative basins need to include plantings that will tolerate or thrive in standing water. Planting designs for areas not routinely exposed to water shall include plants that will thrive without irrigation. At a minimum the landscaping plan should be consistent with the City's intended maintenance standard as described above.
49. The developer shall be responsible for landscaping the storm pond and for its maintenance and the plantings through the one-year infrastructure warranty period. At 11 months after the final acceptance date the developer shall clean the storm system and basin of all accumulated oil, sediment, and debris. After this maintenance is completed and inspected the City will begin routine maintenance of the system and basin. The developer shall replace any plantings that have failed to survive the warranty period. The developer shall also perform trimmings required to control weeds in excess of 18-inches in height for the 12-months following the date of final plat acceptance.

Final Platting / Project Acceptance Requirements:

50. When the construction is substantially complete a paper set of "record drawings" shall be prepared by a licensed surveyor and include all changes and deviations. Please reference the Public Works document "RECORD DRAWING REQUIREMENTS & PROCEDURES" for a complete description of the record drawing process. All final punchlist items shall be completed or financially guaranteed prior to recording of the final plat.
51. Public utility infrastructure located on private property will require recording of a City standard form easement prior to acceptance of the infrastructure and release of a certificate of occupancy. The City requires preparation of the easement legal description by the developer two weeks prior to the scheduled date of final acceptance. Off-site ("third party") easements or right-of-ways for City infrastructure are the responsibility of the developer to obtain. Once received, the City will prepare the easement document and provide it to the developer. The developer shall record the easement at the Benton County Assessor and return a recorded original document to the City prior to application for final occupancy.
52. Any off-site easements or permits necessary for this project shall be obtained and secured by the applicant and supplied to the City at the time of plat construction and prior to final plat acceptance by the City.
53. Ten-foot wide public utility easements will be required on the final plat along both sides of all Right-of-Ways within the proposed plat.
54. The vision-clearance triangle needs to be shown on all corner lots on the final plat document, in accordance with RMC Chapter 12.11.020. If the intersection is in a curve, it will have to be evaluated per AASHTO guidelines. This information may need to be designed by the engineer of record and supplied to the surveyor of record for inclusion into the final plat document.

55. A note shall be added to the face of the plat that states: *"The private drives within this plat are fire lanes and parking is restricted. The required no-parking signs shall be installed by the developer where applicable."*
56. Any roads narrower than 34-feet shall have parking restricted on one side, and any roads 27-feet or narrower shall have parking restricted on both sides. Street signs indicating restricted parking shall be installed prior to final platting at the developers expense. The restricted parking areas shall be indicated on the final plats.
57. All landscaped areas within the plat that are in the public Right of Way shall be the responsibility of the homeowners to maintain.
58. The intended use and ownership of all tracts within the plat shall be noted on the final plat.
59. Property with an unpaid L.I.D. assessment towards it must be paid in full or segregated per Richland Municipal Code 3.12.095.
60. Any restricted parking areas shall be indicated on the final plats.



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1250 West Alder Street • Union Gap, Washington 98903-0009 • (509) 575-2490

March 17, 2020

Mike Stevens
City of Richland
PO Box 190
Richland, WA 99352

Re: S2020-102

Dear Mike Stevens:

Thank you for the opportunity to comment during the optional determination of nonsignificance process for the Skyline South subdivision of 9.79 acres into 54 lots, proposed by Dennis Sawby. We have reviewed the documents and have the following comments.

WATER QUALITY

Project with Potential to Discharge Off-Site

If the project anticipates disturbing ground with the potential for stormwater discharge off-site, the NPDES Construction Stormwater General Permit is recommended. This permit requires that the SEPA checklist fully disclose anticipated activities including building, road construction and utility placements. Obtaining a permit may take 38-60 days.

The permit requires that a Stormwater Pollution Prevention Plan (Erosion Sediment Control Plan) shall be prepared and implemented for all permitted construction sites. These control measures must be able to prevent soil from being carried into surface water and storm drains by stormwater runoff. Permit coverage and erosion control measures must be in place prior to any clearing, grading, or construction.

In the event that an unpermitted Stormwater discharge does occur off-site, it is a violation of Chapter 90.48 RCW, Water Pollution Control and is subject to enforcement action.

More information on the stormwater program may be found on Ecology's stormwater website at: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/>. Please submit an application or contact **Lloyd Stevens, Jr.** at the Dept. of Ecology, 509-574-3991, with questions about this permit.

Sincerely,

A handwritten signature in blue ink that reads "Gwen Clear".

Gwen Clear
Environmental Review Coordinator
Central Regional Office
509-575-2012
crosepa@ecy.wa.gov



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

Mike Stevens
Planning Manager
City of Richland
505 Swift Blvd. MS #35
Richland, WA 99352

February 25, 2020

In future correspondence please refer to:
Project Tracking Code: 2020-02-01530
Property: City of Richland_Skyline South Residential Subdivision Project
Re: Survey Requested

Dear Mike Stevens:

Thank you for contacting the Washington State Historic Preservation Officer (SHPO) and Department of Archaeology and Historic Preservation (DAHP) and providing documentation regarding the above referenced project. A desktop review of our Statewide Predictive Model has identified the proposed project area as having high potential for archaeological resources. This is due, in part, to the proximity of the proposed project area to the Yakima River, a resource known to have been important to both historic and prehistoric people. Additionally, several previously recorded archaeological sites are located near or directly adjacent to the proposed project area, suggesting that other cultural resources may be present. Finally, the scale of the proposed ground disturbing actions would destroy any archaeological resources present. Identification during construction is not a recommended detection method because inadvertent discoveries often result in costly construction delays and damage to the resource. Therefore, we recommend a professional archaeological survey of the project area be conducted prior to ground disturbing activities. We also recommend consultation with the concerned Tribes' cultural committees and staff regarding cultural resource issues.

These comments are based on the information available at the time of this review and on behalf of the SHPO in conformance with Washington State law. Should additional information become available, our assessment may be revised.

Thank you for the opportunity to comment on this project and we look forward to receiving the survey report. Please ensure that the DAHP Project Number (a.k.a. Project Tracking Code) is shared with any hired cultural resource consultants and is attached to any communications or submitted reports. Should you have any questions, please feel free to contact me.

Sincerely,

Sydney Hanson
Transportation Archaeologist
(360) 586-3082
Sydney.Hanson@dahp.wa.gov



Stevens, Mike

From: Buechler, Ken
Sent: Tuesday, March 24, 2020 4:00 PM
To: Stevens, Mike
Subject: RE: Skyline South Public Works comments

Mike,
To reiterate what we talked about,

- 1) They will need hydrants at 600' along all of Skyline, as well as within the development itself.
- 2) Double water lines for a mutli-fed system.
- 3) 26' driving surface for Skyline with no parking posted on both sides of the road.
- 4) All buildings will be sprinklered due to lack of a SEVA.
- 5) Road grade limits are 12% (IFC states 10%) with a 2% cross slope limit.
- 6) And, all homes adjacent to wildland areas shall meet the following:

Wild-land areas are areas which are undeveloped, uncultivated or unfit for cultivation, or considered by the city of Richland to be wasteland or desert, or which are any combination of these descriptions and which are deemed by the city of Richland as a hazard for wild fire purposes. The following requirements apply to buildings and structures constructed on, in, or near wild-land areas:

- a. All structures within 30 feet of a property line adjoining a wild-land area shall have noncombustible siding, soffit, and skirting on the side adjacent to the wild-land area when the wild-land area is in excess of five contiguous acres. This requirement shall not apply to interior lots of platted parcels of land and development phases whose streets are accessible and whose water system is operational.
- b. Decks and porches 36 inches or less in height shall have skirting if within 30 feet of adjacent wild-land areas when the wild-land area is in excess of five contiguous acres. Skirting shall be sufficiently constructed so as not to allow the accumulation of combustible material under the deck or porch. The area under the deck or porch shall not be used for storage.

Your submitted plans have been determine to fall within these requirements.

When determined by the Fire marshal, noncombustible siding or soffit material shall be required on the downhill side(s) of a structure that is within 30 feet of a grade that is 15 percent or greater in steepness. The grade shall be determined by the predominate slope on the downhill side measured from the structure or building and extending a maximum of 300 feet.



Ken Buechler
Assistant Fire Marshal
625 Swift Blvd., Richland, WA 99352
(509) 942-7556

From: Stevens, Mike <mstevens@CI.RICHLAND.WA.US>
Sent: Tuesday, March 24, 2020 3:28 PM
To: Buechler, Ken <KBuechler@CI.RICHLAND.WA.US>
Subject: Skyline South Public Works comments



Mike Stevens
Planning Manager
625 Swift Blvd., MS-35 | Richland, WA 99352
(509) 942-7596

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Department of Energy

Bonneville Power Administration
2211 North Commercial Avenue
Pasco, WA 99301

Transmission Services

March 16, 2020

In reply refer to: Preliminary Plat - S2020-102 Skyline South
Located within a Portion of Section 15, Township 9 North,
Range 28 East, W.M., Benton County, Washington

Mike Stevens, Planning Manager
City of Richland Development Services Dept.
625 Swift Blvd. MS#35
Richland, WA 99352

Dear Mike:

The Bonneville Power Administration (BPA) has reviewed the above-mentioned proposed plat and its relationship to the BPA variable width transmission line easement that this plat impacts. BPA does have some concerns with the activities that may occur within the proposed plat.

BPA easements are taken with certain restrictions on the underlying land. In order to maintain operation and safety criteria, all activities planned within the BPA easement need to be approved by BPA prior to their occurrence. Activities that block maintenance crews (such as the installation of fences) or safety concerns (such as buildings, driveways, utilities, or small structures) need to be addressed prior to construction in order to avoid later modification, at the landowner's expense.

In order to avoid problems in this location and to notify prospective landowners, BPA requests that the following language be included on the plat map:

The Bonneville Power Administration (BPA) imposes certain conditions on the portions of those properties encumbered by its high voltage transmission line easement. BPA does not allow structures to be built within the easement, nor does it allow access to be blocked to any transmission facilities. Any activity that is to occur within the easement needs to be permitted by BPA prior to installation or construction. Information regarding the permitting process for proposed uses of the easement may be addressed to BPA Real Estate Field Services at (800) 282-3713.

In addition, BPA needs the opportunity to review the location of the proposed road to ascertain whether or not the clearance here allows for safe passage of vehicles (per National Electric Safety Code). This process takes up to 90 days to complete and is typically initiated by a land use application that the developer submits to BPA.

Whether or not this property is subdivided and/or this plat approved, the owner will need to submit a land use application, the associated application fee and acquire a Land Use Agreement from BPA, along with the county's building permit for any portion of the owner's development plans that lie within BPA's easement.

If you have any questions regarding this request or need additional information, please feel free to contact me. I can be reached at (503) 230-5510 or by email at mjdeklyen@bpa.gov.

Sincerely,



Mike DeKlyen
Realty Specialist

Stevens, Mike

From: Hill, Kelly
Sent: Tuesday, February 25, 2020 8:03 AM
To: Stevens, Mike
Subject: RE: S2020-102 Skyline South
Attachments: Skyline Easement.PNG

Mike,

Below are RES comments on the preliminary plat that was attached.

1. The 10' PUE that is adjacent to the road ROW is not shown throughout the development.
2. The existing electrical facilities in this project will need easements added to cover them. I have attached a screen shot.

Thanks



Kelly Hill
Chief Electrical Engineer
625 Swift Blvd. | Richland, WA 99352
(509) 942-7416

From: Stevens, Mike <mstevens@CI.RICHLAND.WA.US>
Sent: Monday, February 24, 2020 4:05 PM
To: Anthony Muai <anthony.muai@ci.kennewick.wa.us>; Anthony Von Moos <anthony.vonmoos@co.benton.wa.us>; Ashley Morton <AshleyMorton@ctuir.org>; Badger Mountain Irrigation District <bmidmanager@badgermountainirrigation.com>; Benton County - Segregations <Segregations@co.benton.wa.us>; Webcsr PUD <webcsr@bentonpud.org>; Bill Barlow <bbarlow@bft.org>; Boring, Michael <MBoring@CI.RICHLAND.WA.US>; Boshart, Thomas <tboshart@CI.RICHLAND.WA.US>; Buechler, Ken <KBuechler@CI.RICHLAND.WA.US>; Carrie Thompson <carrie.thompson@bnsf.com>; Catherine Dickson <catherinedickson@ctuir.org>; Clark Posey <clark.posey@co.benton.wa.us>; BCES Hamilton, Craig <c.hamilton@bces.wa.gov>; DAHP SEPA Reviews <sepa@dahp.wa.gov>; Darrick Dietrich <darrick@basindisposal.com>; Dean Kelley <dean.kelley@chartercom.com>; BCES Davis, Deanna <d.davis@bces.wa.gov>; Deborah Rodgers <dxrogers@bpa.gov>; Deskins, John <jdeskins@CI.RICHLAND.WA.US>; Eric Mendenhall <emendenhall@westrichland.org>; Florinda Coleman <florinda.coleman@co.benton.wa.us>; Ghbein, Briana <bghbein@ci.richland.wa.us>; Greg McCormick <gregory.mccormick@ci.kennewick.wa.us>; Greg Wendt <greg.wendt@co.benton.wa.us>; Gregory Goodwin <gregory.l.goodwin@ftr.com>; Gwen Clear <gcle461@ecy.wa.gov>; Hill, Kelly <khill@CI.RICHLAND.WA.US>; USPS Ina N. Beutler <ina.n.beutler@usps.gov>; Jason McShane <jmcsbane@kid.org>; Jennings, Tyler <tjennings@CI.RICHLAND.WA.US>; Jerrod Macpherson <Jerrod.Macpherson@co.benton.wa.us>; Joseph Cichy <joseph.cichy@ftr.com>; Joseph Cottrell <jecottrell@bpa.gov>; Junior Campos <junior.campos@charter.com>; Kelly Cooper <kelly.cooper@doh.wa.gov>; Kevin Knodel <kevin.knodel@rsd.edu>; Kevin Sliger <KSliger@bft.org>; KID Development <development@kid.org>; KID Webmaster <webmaster@kid.org>; Lopez, Brandin <blopez@CI.RICHLAND.WA.US>; M. Deklyne <mjdeklyne@bpa.gov>; BCES Map <map@bces.wa.gov>; Pasco99301 <99301PascoWA-Postmaster@usps.gov>; Paul Gonseth <gonsetp@wsdot.wa.gov>; ReathaFord, Jason <JReathaFord@CI.RICHLAND.WA.US>; Rebecca Hiles <rhiles@kid.org>; Review Team <reviewteam@commerce.wa.gov>; Richard Krasner <richard.krasner@rsd.edu>; USPS Richland Postmaster <99352RichlandWA-Postmaster@usps.gov>; Rick Dawson <rickd@bfhd.wa.gov>; Rob Rodger

<rob.rodger@bentoncleanair.org>; Robin Priddy <robin.priddy@bentoncleanair.org>; Roscoe Slade <roscoe@westrichland.org>; BCES Gates, Sarah <s.gates@bces.wa.gov>; Schiessl, Joe <JSchiessl@CI.RICHLAND.WA.US>; SEPA Center <sepacenter@dnr.wa.gov>; SEPA Register <separegister@ecy.wa.gov>; SEPA Unit <sepaunit@ecy.wa.gov>; Seth DeFoe <SDefoe@kid.org>; South Central Region Planning <scplanning@wsdot.wa.gov>; WA Dept of Fish & Wildlife <lopezlal@dfw.wa.gov>; WA Dept of Fish & Wildlife <rittemwr@dfw.wa.gov>; West, Julie <jwest@ci.richland.wa.us>; Westphal, Nichole <nwestphal@ci.richland.wa.us>; William Simpson <william.simpson@commerce.wa.gov>
Subject: S2020-102 Skyline South

Attached to this email is a copy of the public notice and application materials for the Preliminary Plat of Skyline South located within the City of Richland. The City of Richland is using the Optional DNS Process pursuant to WAC 197-11-355. As a result, this may be your only opportunity to comment on the environmental impacts of the proposed development.

Please review and submit comments back to me by 5:00 PM, Friday, March 20, 2020.

Due to the size of this email, some servers may not accommodate the amount of information contained within the email. Copies of the public notice and application materials can also be found by visiting the City of Richland website at <https://www.ci.richland.wa.us/departments/development-services/planning/pending-land-use-actions>.

Thank you,



Mike Stevens
Planning Manager
625 Swift Blvd. | Richland, WA 99352
(509) 942-7596

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Stevens, Mike

From: Rebecca Hiles <rhiles@kid.org>
Sent: Tuesday, March 3, 2020 9:42 AM
To: Stevens, Mike
Subject: RE: S2020-102 Skyline South

Mike,

KID has no comments on this as it outside of our District.

Rebecca S. Hiles, E.I.T.
Staff Engineer

Kennewick Irrigation District
2015 S. Ely Street
Kennewick, WA 99337
[509-460-5442](tel:509-460-5442) [Direct Line]
[509-586-6012](tel:509-586-6012) ext. 138 [Business Line]
[509-586-9111](tel:509-586-9111) [Customer Service]
<mailto:rhiles@kid.org>



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From: Stevens, Mike <mstevens@CI.RICHLAND.WA.US>
Sent: Monday, February 24, 2020 4:05 PM
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Subject: S2020-102 Skyline South

Attached to this email is a copy of the public notice and application materials for the Preliminary Plat of Skyline South located within the City of Richland. The City of Richland is using the Optional DNS Process pursuant to WAC 197-11-355. As a result, this may be your only opportunity to comment on the environmental impacts of the proposed development.

Please review and submit comments back to me by 5:00 PM, Friday, March 20, 2020.

Due to the size of this email, some servers may not accommodate the amount of information contained within the email. Copies of the public notice and application materials can also be found by visiting the City of Richland website at <https://www.ci.richland.wa.us/departments/development-services/planning/pending-land-use-actions>.

Thank you,



Mike Stevens
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