

# **LATTA ENGINEERING, PLLC**

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*Consulting Civil Engineers*

November 30, 2017

Attn: Kristi Kyle – Planning Director  
City of Sultan  
319 Main St, Suite 200  
Sultan, WA 98294

**Re: Preliminary Plat Design Review Comments – PP2017-001 (Skyridge Estates Subdivision)  
31805 124<sup>th</sup> Street SE, Sultan, Washington**

Dear Ms. Kyle,

Latta Engineering Ltd (LE) has prepared this letter to summarize project design revisions in accordance with your City staff review comments letter Dated Nov. 13, 2017 (see attached copy for reference).

## **Planning Comments**

Comment 1: Add File No.: PP2017-001 to all plan sheets and documents.

- The City PFN had been added to all plan sheets and reports as noted.

Comment 2: Please show all building envelopes for corner lots.

- Building envelopes are now shown on all corner lots as noted.

Comment 3: Show building envelope for lot 156.

- Building envelopes is now shown on Lot 156 as noted.

Comment 4: Per SMC Section 16.58.090(1), one tree shall be planted or preserved for every 5,000 square feet of area or fraction thereof of a single family residential lot.

- This code section is understood and the code reference and requirement has been added to the Prelim Landscape Plan (See General Planting Notes, Sheet C-13).

Comment 5: Per SMC 16.58.110, trees shall be a minimum of seven (7) feet in trunk height at time of installation.

- This code section is understood and the code reference and requirement has been added to the Prelim Landscape Plan (See General Planting Notes, Sheet C-13).

Comment 6: Please see the Engineering Design and Development Standards (EDDS), Chapter 4-01 (B) Landscaping Planting Types for small, medium and large trees as well as shrubs and groundcover. (Attached).

- This code section is understood and the code reference and requirements have been added to the Prelim Landscape Plan (See General Planting Notes, Sheet C-13).

Comment 7: Per the Engineering Design and Development Standards (EDDS), Chapter 4-01 (D), Stormwater detention facilities shall be landscaped with vegetation buffers/screens. Fencing is required for safety in addition to landscaping. Vinyl-coated fencing in a dark, natural color to be installed in addition to the landscaping.

- This code section is understood and the code reference and requirements have been added to the Prelim Landscape Plan (See General Planting Notes, Sheet C-13).

Comment 8: Show/label all on-site septic systems and wells to be removed/decommissioned.

- Plan sheet C-2 has been updated with labels as noted.

Comment 9: Show location of all private or community wells within 100 feet of the proposed plat.

- Know and recorded private & community wells on or within 100 feet of the proposed plat are shown on Sheet C-2.

Comment 10: Please provide a recreation and open space plan that meets SMC Chapter 16.62 which includes the following and any additional requirements of Chapter 16.62:

- a) Per SMC Section 16.62.40(G), each development shall satisfy its recreation area requirement by installing the types of active recreational facilities that are most likely suited to an used by the age bracket and mobility of persons likely to reside in that development
  - See attached Recreation and Open Space Plan narrative dated 11-28-2017 which details the types of active recreational facilities proposed.
- b) Per SMC Section 16.62.040(1), where recreation facilities are provided, 25% of the facilities shall be ADA accessible pursuant to the IBC.
  - See attached Recreation and Open Space Plan narrative dated 11-28-2017 which calls out ADA accessibility requirements.
- c) Show compliance with SMC Section 16.62.050-Types of Recreation facilities to be provided. See Table 16.62-A of the SMC.
  - See attached Recreation and Open Space Plan narrative dated 11-28-2017 which details the types of active recreational facilities proposed
- d) On Sheet 11, please include the recreation open space square footages in each tract.
  - Proposed recreation open space square footages added to Sheet C-13 as noted.

Comment 11: This site lies within a "High Aquifer Vulnerability" critical aquifer recharge area. Per SMC 17.12.030(c) please submit a hydrogeologic site evaluation and/or best management practice program which adequately protects the groundwater resource.

- See attached Hydrogeologic Site Evaluation Report dated 11-30-2017 prepared by Northwest HydroGeo Consultants.

Comment 12: Revise the SEPA to include the "High Aquifer Vulnerability" critical aquifer recharge area.

- SEPA has been revised as noted (Section 8-G).

Comment 13: Revise SEPA, Transportation 14-C. No on-street parking is permitted.

- SEPA has been revised as noted (Section 14-C).

### **Public Works Comments**

General Comment 1: The City's consultant RH2 is evaluating concurrency (water and sewer availability), once the review is completed the City will contact you on the findings.

- Comment is noted.

General Comment 2: The location of the stormwater detention pond is within an existing easement (Bonneville Transmission Line). The applicant shall provide approval from the easement holder that this facility can be installed at this location.

- An "Application for Proposed Use of BPA Right-of-Way" has been submitted to Bonneville Power Administration (BPA) to initiate the formal design review process.
- See attached correspondence from BPA providing preliminary approval to locate the proposed subdivision access road, utilities, and stormwater pond within their easement.

General Comment 3: We did not review the utilities in great detail for this preliminary plat; however, it should be noted that upstream sewer mains shall be 8-inch diameter with terminal manholes instead of cleanouts.

- Comment understood and noted.

General Comment 4: The applicant shall provide a street connection for future development of the property lying to the west to address circulation.

- See revised plan sheets that show new proposed road and utility extension the adjacent property to the west as noted.
- Please note that as a result of this revision, the Skyridge plat application has be reduced to a total of 206 lots (i.e. formerly 207 lots).

### **Preliminary Stormwater Design Report**

Stormwater Comment 1: There is a concern for Lot 1 based upon the MTC Geotechnical Report dated August 2, 2017. The Geotechnical Report indicates that a portion of this lot is within or near the "most critical failure geometry." Any on-site infiltration trench for Lot 1 should be called out specifically on the plans to ensure that stormwater from the trench does not impact the steep slope.

- Comment understood and noted.
- See revised preliminary site Grading Plan (C-4) and Road H Plan (C-10) that shows the Geotechnical Engineer's Top of Slope Setback based on their quantitative slope stability analysis for the site. This line represents the slope setback (i.e. top of slope setback buffer) with on a 1.5 factor of safety. The geotechnical engineer has determined that proposed building foundations and stormwater infiltration trench facilities are to be installed outside of this setback boundary.
- Building setbacks and proposed roof stormwater infiltration trench are shown for Lot 1, (located entirely outside of the slope setback buffer) as noted.

Stormwater Comment 2: Per Section 111-3.3.9 of the Ecology Manual, an inverted tee is not listed as an acceptable pretreatment system for infiltration facilities. Any facility listed on the Basic Treatment Menu or in Section V-6 may be utilized. Please revise.

- General Response: Please note that the level of design provided in our preliminary stormwater design report is intended to demonstrate function and feasibility of the proposed stormwater management plan for land use review and preliminary plat approval only. A detailed Full Stormwater Site Plan design report will be prepared for the subdivision construction permit application stage which will fully detail all stormwater management improvements proposed to serve the development in accordance with City and WSDOE requirements.
- The inverted screened tees shown are proposed for initial pre-treatment only.
- Pre-treatment prior to infiltration will be achieved utilizing Aqua-Swirl® hydrodynamic separator units (or similar approved alternative) in accordance with WSDOE standards.

Stormwater Comment 3: From the WWHM output, it appears that Basin 2 needs a total of 370 linear feet of infiltration trench to infiltrate all non-roof related runoff. For the engineering plan set, please show each infiltration trench and provide a list of these trenches within the final Stormwater Site Plan so as to ensure all runoff is accounted for within this basin.

- See General Response in Comment 2 above.
- Individual infiltration trenches will be designed in full detail for each sub-basin (as described in the preliminary stormwater design report narrative) and shown on the engineering plan set as noted to ensure a runoff is fully mitigated.

Stormwater Comment 4: Section 6.4 refers to a bioswale intended for Basin 1; however, it appears this is yet to be included in the plan set. Please provide calculations on the sizing of this bioswale and locate the facility on the plan set as appropriate

- See General Response in Comment 2 above.
- Section 6.4 has been revised to eliminate the bio-swale basic treatment BMP. A hydrodynamic separator unit is now proposed in accordance with WSDOE standards

Stormwater Comment 5: Section 6.5 indicates that the conveyance system will adequately address runoff from the 25-year storm. Please provide calculations in the final Stormwater Site Plan. Likewise, please provide a full downstream analysis as indicated in Section 6.6 and a TESC Plan as indicated in Section 6.7.

- Comment noted.
- On-site conveyance and downstream analysis will be provided in the Full Stormwater Site Plan design report.

Stormwater Comment 6: Please revise Note 3 under "Roof Infiltration Notes" on Figure 4 to allow for a 6-foot minimum spacing between trench centerlines as noted in the Ecology Manual (Section 111-3.1.1)

- Note 3 revised.

Stormwater Comment 7: For the profile view on Figure 4, the perforated PVC pipe for the infiltration trench shall be 6-inch diameter per Section 111-3.1.1 of the Ecology Manual. Additionally, the distance from the far side of the catch basin to the beginning of the infiltration trench shall be 10 feet (refer to Figure 111-3.1.2 in the Ecology Manual)

- Detail has been revised as noted.

Stormwater Comment 8: On Figure 5, the minimum diameter rock allowed in the infiltration facility per the Manual is 1.5 inches. Currently the figure shows 3/4- to 1.5-inch-diameter rock. Please revise as necessary.

- Detail has been revised as noted.

### **Traffic Impact Analysis (TIA)**

TIA Comment 1: The TIA identifies 237 new single-family homes while the plans show 207. Please submit an addendum to the traffic study that reflects the correct number of lots and trips.

- See attached addendum by Gibson Traffic Consultants, Inc. dated 11/30/2017 as requested.

### **Preliminary Plans**

Sheet C-1: When available, provide a file number in the title block at the top of the plan sheet.

- Project File No. PP2017-001 added to all sheets as noted.

Sheet C-2: Per the City's Preliminary Plat checklist, please show buffers on the steep slope area located adjacent to the site (i.e., for all areas within 150 feet of the site).

- The Geotechnical Engineer's top of slope setback (buffer setback) is shown on the plans based on their slope stability analysis for the site.

Sheet C-2: Label existing structures to be removed.

- Existing structures to be removed have been labeled as noted.

Sheet C-3: Include perimeter dimensions for Open Space A and Park Tract A.

- Dimension labels added as noted.

Sheet C-4: We note a proposed sewer main (and easement) across Lot 156. Please indicate the purpose of this sewer extension, i.e., accommodate future expansion to the west.

- Sewer extension proposed is intended to serve future development on the property to the west.
- Note that this sewer extension alignment has been revised to the new road ROW proposed between Lots 163-164 (same purpose).

Sheet C-4: A preliminary roadway plan and profile shall be provided for 124th Street. The plan and profile should, at a minimum, identify where stormwater from the new pond will discharge, how stormwater will bypass beneath Road F, etc.

- See new Plan Sheets (C-11 and C-12) showing the 124 St Improvements including storm drainage as noted.

Sheet C-6: Both typical cross sections, On-Site Roads and 124th Street, show a 4.5-foot-wide planter. Per Snohomish County EDDS Standard Detail 3-050, the minimum width of the planter shall be 5 feet. The plans shall be revised accordingly.

- The applicant previously reviewed this design issue (minimum planter width requirement) with Public Works staff prior to prelim plat application.
- The applicant is requesting a deviation from the EDDS Standard to reduce the planter width from 5.0 ft to 4.5 ft (6" width reduction) for the on-site roads only in order to maintain a 50 right-ft-way width. Please note that a 4.5 ft planter width is more than sufficient for the intended use and is also greater than most urban typical section requirements.
- A standard 5 ft wide planter strip is proposed on the 124 St typical section.

Sheet C-6: The buildout pavement width shown for 124th Street is 30 feet. Per Snohomish County EDDS Standard Detail 3-065, the pavement width for a Collector is 36 feet. The plans shall be revised accordingly.

- The 124<sup>th</sup> St typical section and road plan has been revised as noted.

Sheet C-6: To ensure pedestrian facilities (sidewalks) are constructed to meet current ADA design standards, we recommend the applicant revise using a 1.5 percent (maximum) cross slope.

- Sidewalk cross slope grade revised to 1.5% as noted.

Sheet C-9: The profile for Road F does not appear to provide a landing or safe stopping area before entering the intersection. Per Snohomish County EDDS Standards Section 3-09, Intersections, landings shall have no more than 1 foot of elevation change for a distance of 20 feet (non-arterial road) measured from the ultimate right-of-way line for the road being intersected (124th Street). The plans shall be revised accordingly.

- Road F profile revised as noted.

Sheet C-11 (Now Sheet C-13): It appears that new street trees may be placed within the sight triangles at each intersection. Section 3-08 of the Snohomish County EDDS Standards shall be reviewed and the locations of the proposed street trees revised to comply.

- Preliminary street tree layout has been revised to eliminate street trees at all intersection sight triangles as noted.

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If you have any questions or comments regarding this letter, please contact the undersigned at (360) 671-7002.

Sincerely,

**Latta Engineering, PLLC**



Neil Latta, P.E.  
Principal Engineer

*Attachments*