CES • NW
INCORPORATED
CIVIL ENGINEERING & SURVEYING

February 17, 2022

Anthony Hulse
City of Puyallup
Development Services Center
333 S Meridian
Puyallup, WA 98371

RE: Pro-Vac, Permit No. E-21-0071, CES 20083

Dear Anthony,

On behalf of our client, KB Homes, we are resubmitting revised plans and documents for the above referenced project. Below are the comments as written, with a response explaining how each comment was addressed.

DOCUMENT REVIEW COMMENTS
STORMWATER REPORT

1. The attached Geotech report states that it is a draft. During the resubmission please submit the report without this text.
   Response: **Final Geotech report and addendum is included in the revised drainage report.**

2. The project proposes greater than 5,000SF of new plus replaced hard surfaces, thus minimum requirements 1-9 apply. The redevelopment flow chart on page 9 of the report and MR 5 on page 10 conflict.
   ***Response*: The project has been redesigned to repave the gravel areas with permeable pavement. The plans have been updated accordingly.**

3. As mentioned during the pre-application meeting, any storage and access to them shall be paved. The 2105200180 parcel is already using the site for storage of vehicles. Revise the plan to show the additional paving. This increase in paving will likely trigger the thresholds of minimum requirements 6-9, more specifically triggering the requirements of runoff treatment, flow control and wetland protection. The revised plan should state how the project will meet these requirements.
   Response: **The project has been redesigned to repave the gravel areas with permeable pavement. The plans have been updated accordingly.**

4. Minimum Requirement #3 Source control of pollution is not the same as the operation and maintenance manual. Provide criteria from the IV-2.1 Applicable (Mandatory) operational source control BMPs under this heading rather than referencing the O&M manual.
   Response: **A source control manual is included as Attachment B to the maintenance agreement. The drainage report has been revised accordingly.**

5. How are hard surfaces in the right of way being mitigated?
   Response: **The project meets both flow control and LID performance standards. The frontage improvements are modelled as bypass.**

CIVIL PLAN SHEETS

Sheet 1 of the set

1. Add the surveyed sheet as part of the submittal.
   Response: **Topographic Survey added to the plan set.**

2. The surveyed plan should be signed by Seth O'hare
   Response: **Survey signed by Charles E Podzaline, PLS.**

3. Revise the sheet numbering throughout the set, some of the pages are mis-numbered.
   Response: **Numbering revised as indicated.**

Sheet C1

1. Provide a map legend that includes the various used linetypes and hatches. Clearly show existing vs proposed conditions.
   Response: **Legend has been updated accordingly.**

2. Provide the landscaping sheets as part of the legend. Add the planning approval block to those sheets.
   Response: **The landscaping plans have been revised accordingly.**

3. Provide the following on this sheet: Owner/developer's name, address, & phone number; Engineer's name, address, & phone number
   Response: **Additional information added as requested.**

4. Add sheets L1.1, L1.2, L2 and pages 11,12 and 13 to the sheet index on this page. Revise the sheet numbering.
   Response: **Landscaping sheets added to the index on C1.**

Sheet C2

1. Show the construction staging area on this sheet as described by element 9 of the SWPPP
   Response: **The construction staging area has been added to Sheet C2.**

2. Place inlet protection in the catch basins in Inter Ave SE
   Response: **Inlet protection is provided in Inter Ave SE.**

Sheet C3

1. Create a note to amend all disturbed soils per CS 01.02.08a on Sheet C6
   Response: **Note added to the plans.**

2. Any storage areas or access to storage shall be paved. Provide storm water mitigation for the hard surfaces.
   Response: **The gravel areas are now paved with permeable pavement. Runoff treatment is provided by the underlying soils since they meet the treatment requirements of Section 4.4.2 of Volume V of the Manual.**

Sheet C4

1. Place a type I CB at the gutter low point per city standard 02.01.03
   Response: **CB added as indicated.**

2. Show the water line in Inter Ave. It appears there is a discrepancy as to where water connects.
   Response: **Water line is shown.**

3. Provide half street improvements per detail A on this sheet. Show the 2-5% transition slope required on the southern travel lane per city standard.
   Response: **The project does not propose to reconstruct half of Inter Avenue. The roadway widening is the appropriate standard plan and the typical section has been revised accordingly. An overlay is provided to centerline.**

4. Provide the ROW and pavement width dimensions.
   Response: **Dimensions have been added as requested.**

5. Include the notes for the half street improvements as the detail has been altered to be site-specific.
   Response: **Notes from pavement widening have been added as requested.**

CITY INTER-DEPARTMENTAL COMMENTS

STORM

1. The existing CB, located on Inter Ave and proposed to be connected to with the new storm, will need to be replaced with a Type II if not being used to collect surface stormwater.
   Response: **The catch basin's in Inter Ave SE collect runoff.**

2. Confirm whether a control structure or treatment facility would be required as part of the propose fill station and/or surface runoff from the site. To the knowledge of the collections division, all existing site CB's are Type I.
   Response: **A control structure or treatment facility is not proposed as part of the fill stations.**

SEWER

1. Be aware of the existing sanitary lateral; service tap is roughly 60 feet east of the manhole. If the property line cleanout is not up to grade, consider doing this for better maintenance access.
   Response: **A note has been added to the plans.**

WATER
Sheet C3:

1. There appears to be a water fill station. Please identify what it is on the plans. This is a specialized complex installation and it should have its own detail on this sheet.
    a) The plans call for a 4-inch wet tap with 4-inch service meter. This installation will also require a 4-inch above ground RPBA (include City Standard detail 03.04.03 to this plan set). The 4-inch meter will be in a vault, which should be placed so it will not be continually driven over by vehicles using the water fill station. It might be a good idea to locate the meter and RPBA on the west side of the existing 8-inch water main.
    Response: **A meter and RPBA has been added to the plans as requested.**

    b) The water filling points are called out as FDCs. The normal hose used to fill Vactor trucks, sweepers, and water tank trucks are set up to attached to a 2-1/2-inch National Standard Thread (NST) male fitting. An FDC is set up with a 5-inch Storz fitting.
    Response: **The water fill station callouts has been revised according.**

    c) This water fill station appears to be configured so two vehicles can be filled with water at the same time. How are the vehicle drivers supposed to turn the water on and off? Water will likely be under pressure to each fill point. Each fill point will need to have its own water control valve. Because of the risk of water hammer, this control valve cannot be a one-quarter-turn ball valve. It will likely need to be a hand operated wheel gate valve. Some sort of drainage system should be built into the design, so the system can be drained and winterized during freezing weather conditions.
    Response: **The water fill stations exist and are operated without valves.**

    d) Do you need a storm drainage system to collect water that overflows from vehicle storage tanks?
    Response: **A storm system already exists adjacent to the fill stations that can collect water that overflows from the vehicles**

2. There is an existing water service where the water meter and DCVA sits in the proposed driveway approach. This water meter and DCVA are not designed to have heavy vehicle traffic continually traveling over them. Abandon this water service by scheduling a water main shutdown with the Water Division. Remove the water service tap and install a brass plug in the 12-inch water main on the south side of Inter Ave. Install a new water service on the east side of this driveway approach. Place the water meter directly behind sidewalk and place the DCVA 3-feet west of the new water meter location. Tie back to the existing private water line in the driveway that feeds the building in the northwest corner of the property. Add City Standard details 03.03.01, and 03.04.01 to this plan set.
    Response: **The meter and DVCA has been relocated. From the driveway and the details have been added to the plans.**

3. Please note that the private water service line to the northwest corner building is not marked on these plans. With this construction project, there is a fair chance that this private service line will be hit. The contractor is responsible for any repairs.
   Response: **Understood, the service line will be located and potholed during construction to avoid any conflicts. A note has been added to the plans.**

4. Add a Storz fitting to the existing fire hydrant inside this property.
   Response: **A callout has been added to the plans.**

5. The proposed FDC must be placed a minimum 10-feet and a maximum 15-feet from the existing fire hydrant.
   Response: **The FDC location now meets these requirements.**

6. Key Note 14 should read 'FDC Riser' not 'FDC Line'.
   Response: **Key Note 16 calls out the FDC riser.**

7. For the proposed DDCVA that will be installed inside the building, include City Standard detail 03.10.01-2 Double Detector-Check Valve Assembly Installation (Notes) to this plan set.
   Response: **This detail has been added to the plans.**

Sheet C4:

1. See comment on Sheet C3 for existing service in proposed driveway approach.
   Response: **The existing service is being relocated outside of the driveway approach.**

Sheet C7:

1. Add City Standard details 03.03.01, 03.04.01, 03.04.03, and 03.10.01-2.
   Response: **These details have been added to the Plans.**

Sheet L1-1:

1. No trees within 10-feet of proposed water service on Inter Ave. Maintain clear zone around proposed water meter and DCVA.
   Response: **The proposed trees meet this clearance.**

2. Maintain 3-foot clear zone around fire hydrant, FDC, and PIV.
   Response: **3-foot clear zone is provided around the hydrant, FDC and PIV. A note has been added to the plans.**

Sheet L1-2:

1. No trees within 10-feet of existing water service. Maintain clear zone around existing water meter and DCVA.
   Response: **Clear zone maintained around water meter and DCVA.**

TRAFFIC

1. Review lighting comments to be supplied by Bryan Roberts.
   Response: **Understood.**

FIRE

1. Comply with Engineering comments.
   Response: **Understood.**

2. If existing Fire Hydrant is approved by all, a 3' clearance is required from pipe bollards.
   Response: **Understood, a note has been added to the plans.**

3. FDC and PIV will need pipe bollards for protection.
   Response: **A curb is provided around these so bollards should not be necessary.**

4. Provide fire lane stripping and no parking sign layout. Include all of the 20' fire lane, all parking islands, and all sides of FDC, PIV, Fire Hydrant.
   Response: **The striping and signage is callout on the dimensioning plan.**

PLANNING

1. All parking areas and outdoor storage areas must be paved
   Response: **The storage areas are now paved with permeable pavement.**

2. Provide fill and excavation volumes
   - If the sum of filled and excavated material exceeds 500 cubic yards, SEPA checklist will be required

   Response: **Earthwork quantities are provided on Sheet C1.**

Sheet L1.1:

1. Overlay proposed and existing utility lines on landscaping plan
   Response: **Landscaping plans have been revised accordingly.**

2. Provide calculation of % of paved areas that are landscaped with interior landscaping to meet PMC 20.58.005. At least 10% of paved areas shall be landscaped:
   a. PMC 20.58.005 (1) All paved areas of over 10,000 square feet shall have at least five percent of all paved areas landscaped to provide shade to reduce the heat island effect related to paved surfaces, reduce storm water runoff, improve air quality, provide visual breaks to large paved areas and improve general appearance. Perimeter landscaping shall not be calculated as part of the required amount of internal parking lot landscaping. Internal parking lot landscaping design and spacing shall conform to the "Type IV" landscaping standards contained in the city's vegetation management standards (VMS) manual.
      Response: **Landscaping plans have been revised accordingly.**

   b. In order to further mitigate the impacts of more substantial expanses of paved areas on development sites, the following shall apply:
      (a) In the event that a project provides 20 percent more than the required minimum number of parking stalls (per PMC 20.55.010) for a specific use or group of uses on a development complex site, or in the event that the total sum of

paved areas on a site exceeds 100,000 square feet, at least 10 percent of all paved areas shall be landscaped in accordance with this section and the vegetation management standards (VMS) manual.
Response: **Landscaping plans have been revised accordingly.**

1. See redlines for further Planning comments
   Response: **Understood, those comments have been addressed on the revised plans.**

We believe we have addressed all your comments. Please review and approve at your earliest convenience. Let me know if you have any additional concerns or need additional information.

Regards,

Dan P Smith, PE
Senior Project Manager

Prepared by AH