

Memorandum

TO: Rachael N. Brown
PROJECT NO: 2022-002
PROJECT NAME: South Hill Support Campus Improvements – Phase 1

DATE: 10.24.2023
FROM:
SUBJECT: CUP Review Comment Response #3
Permit #: PLCUP20220128

The following is the Design Team’s response to the CUP Review comments received on 09/14/2023 via email from Rachael N. Brown:

Discipline	Review Comment	Response
Engineering Review		
Civil	<ul style="list-style-type: none"> Provide the WHMM calculation printout to show that the infiltration trenches are feasible, infiltrate 100% and meet the flow control standard. 	<ul style="list-style-type: none"> WHMM calculation printouts have been included in the drainage report appendix and show 100% infiltration, meeting the flow control standard.
	<ul style="list-style-type: none"> Provide figure III-1.1 Runoff Treatment BMP Selection Flow Chart within the drainage report. [drainage report, pg 12] 	<ul style="list-style-type: none"> Figure III-1.1 Runoff Treatment BMP Selection Flowchart has been included in the drainage report.
Civil	<ul style="list-style-type: none"> This tax parcel is for the lot to the south. Revise to 0419043122. [site plan, pg 1] 	<ul style="list-style-type: none"> Plan set has been revised to show parcel no. 0419043122
Civil	<ul style="list-style-type: none"> Add general information ie linetypes, hatches, etc. to the project legend. [site plan, pg 4] 	<ul style="list-style-type: none"> Legends have been added to the plan set indicating all proposed materials with hatches, linetypes etc.
Civil	<ul style="list-style-type: none"> Phase 2 is for constructing the parking lot and addressing stormwater, revise accordingly. [drainage report, pg 16] 	<ul style="list-style-type: none"> The project has been updated to reflect new phasing. Phase 1.1 includes installation of the storm trunk line, and phase 1.2 includes construction of parking lot and on-site stormwater infrastructure. Phase 2 is intended for a future development phase.
Civil	<ul style="list-style-type: none"> Show the easement for 14th St PI SW to allow it to be discharged from the 14th St PI SW right of way. The Costco as-builts show there is an existing 15' storm drainage easement. [cup, pg 13] 	<ul style="list-style-type: none"> The easement shown in Costco as-builts has not been found to be recorded in county records, and therefore is not shown on the plan sheet.
Civil	<ul style="list-style-type: none"> Provide continuous groundwater monitoring data for the location of the proposed infiltration facility. Infiltration facilities require 5' of separation from the bottom of the proposed facility to the determined seasonal high groundwater. [drainage report, pg 28] 	<ul style="list-style-type: none"> Continuous groundwater monitoring has been included in the appendix of the drainage report with this comment response. A minimum of 5.0-feet of separation can be maintained between the proposed facility and the seasonal high groundwater.
Civil	<ul style="list-style-type: none"> There is no information provided regarding the build out conditions of Costco's 0419043123 parcel. How is it known that the 15" proposed storm pipe has capacity for this parcel, the overflow of the PSD's parking lot and 14th St's runoff? Provide additional calculations/information for sizing this overflow pipe for the contributing 	<ul style="list-style-type: none"> The drainage report has been revised to include capacity analysis for the proposed 15-inch overflow pipe. Since the development site and the new Costco site are required to infiltrate 100% of the 100-year storm, the pipe would only receive runoff from the 8,000 SF of impervious area

	flows over the 100-year storm event as outlined by the overflow stormwater easement agreement. [drainage report, pg 79.]	from 14 th St PI SW during a 100-year storm event. The 15-inch line has a capacity of 6.46 CFS, and would receive a runoff flow of 0.1662 CFS during a 100-year event, which equates to the pipe being 2.6% full during the 100-year storm event.
Civil	<ul style="list-style-type: none"> Provide the LID report showing that the project meets the LID performance standard per the proposed WWHM infiltration trench modeling. [drainage report, pg 89] 	<ul style="list-style-type: none"> The drainage report has been revised to include the WWHM report for the proposed infiltration trench meeting the LID performance standard.
Civil	<ul style="list-style-type: none"> Indicate the proposed infiltration trench is 4' deep per the wwhm calculation. [site plan,pg 14] 	<ul style="list-style-type: none"> Plans have been revised to show the 4' depth of the infiltration trench.
Civil	<ul style="list-style-type: none"> The analysis results are missing from this page. Be sure to include this on the next submittal. [drainage report, pg 90] 	<ul style="list-style-type: none"> Drainage Report has been revised to include WWHM Analysis results.
Civil	<ul style="list-style-type: none"> Why are additional gravel trenches modeled for both the northern and southern bioretention WWHM calculations? [drainage report, pg 153] 	<ul style="list-style-type: none"> The drainage report has been revised to show a single infiltration trench model in the WWHM reports in the appendix.
Civil	<ul style="list-style-type: none"> Clearly show that this sheet is phase 1 of the proposed project and the rest of the site plan is for for phase 2 of the development. All sheets indicate phase 1 within the project title. [site plan, pg 3] 	<ul style="list-style-type: none"> Project has been updated to reflect new phasing. Phase 1.1 includes installation of storm trunk line, and phase 1.2 includes construction of parking lot and on-site stormwater infrastructure. Phase 2 is intended for a future development phase.
Civil	<ul style="list-style-type: none"> Provide preliminary feasibility/modeling/additional information that proves the existing pond has capacity for the proposed 14th St runoff, overflow from PSD and Costco's proposed gas station overflow. [drainage report, pg 9] 	<ul style="list-style-type: none"> The original Costco Plans and Technical Information Report provided by Barghausen show that the pond was originally sized to receive runoff from both the existing Costco site and the undeveloped School District site. Since the school district development site and the new Costco site are required to infiltrate 100% of the 100-year storm, the pipe would only convey additional runoff from the 8,000 SF of impervious area from 14th St PI SW during a 100-year storm, and would receive a runoff flow of 0.1662 CFS during a 100-year event. The contributing area of 6.98 acres of undeveloped area (school district and future Costco development site) stated in the original TIR would generate a runoff flow of 0.6338 CFS during a 100-year storm event. Therefore, the development of the School District Site and the Future Costco site are reducing runoff flows to the pond during the 100-year storm event.
Civil	<ul style="list-style-type: none"> Has Costco conducted any preliminary geotechnical investigation? How will the school district and Costco deal with the proposed 15" pipe being undersized based on the limited information? [Stormwater Agreement]. 	<ul style="list-style-type: none"> It is unknown if the Costco team has conducted their own geotechnical investigations on their proposed future expansion site. However in coordination discussions with their development team, their team does not have concerns about feasibility of infiltration on their site based upon similar geotechnical investigations in

		the vicinity. Other geotechnical and infiltration testing for projects in the vicinity of the proposed development site have also found high infiltration rates within soils on proposed development sites.
Engineering Traffic Review		
Civil	<ul style="list-style-type: none"> Comment response does not address City's previous comment. Maintenance agreement not necessary with adjacent property owner for execution of an access easement. 	<ul style="list-style-type: none"> Per discussion with City of Puyallup easement will not be shown, however existing trees at corner of 14th St PI SW have been shown to be removed, and proposed fenceline has been shifted west.
Civil	<ul style="list-style-type: none"> Maintenance agreement not necessary with adjacent property owner. PSD can maintain/remove vegetation on their own property. 	<ul style="list-style-type: none"> Per discussion with City of Puyallup easement will not be shown, however existing trees at corner of 14th St PI SW have been shown to be removed, and proposed fenceline has been shifted west.
Civil	<ul style="list-style-type: none"> Maintenance agreement not necessary with adjacent property owner for placement of fence on PSD property. Re-align fence away from Costco drive isle to improve safety. 	<ul style="list-style-type: none"> Per discussion with City of Puyallup easement will not be shown, however existing trees at corner of 14th St PI SW have been shown to be removed, and proposed fenceline has been shifted west.