
October 5, 2023

City of Tacoma
Planning and Development Services
Attn: Ms. Mieke Hoppin, PE
747 Market St
Tacoma, WA 98402

Project: Tacoma Subaru MOD Facility
Subject: Comment Response Letter SDEV23-0202

Dear Ms. Hoppin

This letter is in response to your comments dated July 28th, 2023, regarding the above referenced project. The comments are included below (verbatim) for your reference. Our responses are shown in **bold** after each comment.

Redlined -1a. Tacoma Subaru MOD Civil Set 04.19.2023

1. See separate comment memo SDEV23-0202 - Storm-Sewer - Comment Memo #1 for additional stormwater/wastewater comments.

Response: Understood, this memo is addressed separately below.

2. Provide the SDEV permit number and all other related permits on the cover sheet.

Response: The permit number has been added to the lower right corner of all sheet in the Civil set.

3. silt fence line-type missing

Response: The silt fence is now being shown correctly on sheet C1.0

4. Provide a note that all inlets 200ft downstream of the project site shall be protected.

Response: Note 3 for Detail 1 on sheet C1.1 has been added to the plan set. This note states that all downstream inlets within 200 feet of the project site shall be protected.

5. PER TMC 13.06.090.B.1.e, street trees are required. See long notes for specs.

Response: Street trees are now shown and notes per TMC 13.06.090.B.1.e. Please see sheet C2.0.

6. See Pedestrian Design requirements of TMC 13.06.090.F.4.f - needs to be a different material or raised - see long notes.

Response: A raised concrete sidewalk is now proposed. This sidewalk is shown on the north side of the parcel and can be found on sheet C2.0.

7. If gate is automatic or powered, provide location and details for emergency access Knox Switch. If gate is operated manually, provide location of Knox Box.

Response: The gate shall be manually operated. The location of the Knox box is now shown on sheet C2.0.

8. This is TPU owned property. No infrastructure changes may be performed on this property without consent of TPU. Coordinate with Greg Muller at 253-502-8256 or GMuller@cityoftacoma.org

Response: All portions of the project proposed on TPU property have been removed from the plan set.

9. A separate building permit is required for the retaining wall and should be applied for at the same time as the Site Development Permit.

Response: All portions of the project proposed on TPU property have been removed from the plan set.

10. Provide revisions including structural calculations for and construction details for retaining walls.

Response: All portions of the project proposed on TPU property have been removed from the plan set.

11. Special Inspection for compaction is required - Provide a completed City of Tacoma Special Inspection form for special inspection. The form can be found at:
<https://www.tacomapermits.org/wp-content/uploads/2021/12/Tacoma-Special-Inspection-Form.pdf>

Response: A special inspections form has been filled out and is being submitted with the resubmittal package. The form checked the soils box and Geotechnical area stating compaction testing is required.

12. If the stair is to remain provide details of handrails and stairs with relationship to the property lines. If any portion of the stair is on the adjacent property, access/easement agreements will be required.

Response: All portions of the project proposed on TPU property have been removed from the plan set.

13. Provide revisions showing an accessible route to the adjacent building to the south. Include access/easement agreements for being able to construct or cross the property between the 2 buildings

Response: All portions of the project proposed on TPU property have been removed from the plan set.

14. Provide revisions including access/easement agreements for the retaining wall to be located on the adjacent property.

Response: All portions of the project proposed on TPU property have been removed from the plan set.

15. Reference COT standard detail for BMP L613

Response: Keynote 14 on sheet C2.0 is now referencing BMP L613.

16. Show all doors and access points for proposed building.

Response: All doors for the proposed building are now shown on sheet C2.0. The doors are shown on a faded light grey layer around the perimeter of the building.

17. Per comments from PRE22-0206 this driveway drop shall be replaced. This work can be completed with a right of way construction permit.

Response: Replaced driveway drops are now shown on the project drawings. These can be seen on sheets C2.0, C3.0 and C3.1.

18. Provide ramp elevations to confirm ADA standards are met.

Response: Blow ups for the ADA ramps have been added to sheet C3.1.

Storm-Sewer Comment Memo #1

GENERAL

1. Site Development review and/or approval of this project is conditional and based on the information presented at this time. Additional Site Development review and stormwater mitigation may be required due to changes in the project scope imposed by other departmental review of the project or the applicant, including, but not limited to, requirements for right of way improvements (roadways, sidewalks, etc.) or additional parcels being identified as part of a combined project.

Response: Understood

GENERAL –ADDITIONAL PERMIT/ASSESSMENT/DOCUMENTATION NEEDED

2. A sanitary sewer assessment may be owed for portions of this project. For details, contact Britany Avila at bavila@cityoftacoma.org.

Response: On August 16th, 2023 Ms. Avila was contacted. It was determined that no additional sewer assessment was needed for this project. Please see the Email from Ms. Avila attached.

3. This project is proposing an infiltration facility that is regulated under Ecology's underground injection control (UIC) well program. Register with the Washington State Department of Ecology. Registration and program information is available at: <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Underground-injection-control-program> or by calling (360) 407-6143. This requirement typically applies to all infiltration trenches regardless of the size of the system, except single family facilities that receive only roof runoff.

Response: The proposed infiltration system shall be registered with the DOE as a UIC well as required by the state. We would like to request that this be made a condition of final approval as the approval of a UIC through DOE can take up to 3 months. Thank you for your consideration of this request.

4. Off-site improvement (improvements to the City of Tacoma Right-of-Way abutting the subject parcels) are required for this project but are not described in the Stormwater Site Plan or shown on the plan set. Contact Adam Barnett (abarnett2@cityoftacoma.org) for a list of the required off-site improvements. Update reports and plan sets as necessary to include the complete project including all onsite and offsite work.

Response: On August 16th, 2023 Mr. Barnett was contacted with regards to additional frontage improvements to be required. It was determined that two driveway drops need to be replaced. These driveway are now shown as being replaced on the drawings. Please see sheet C2.0 and C3.0.

5. This project is located within the South Tacoma Groundwater Protection District (STGPD). Businesses that handle or store hazardous substances in excess of 220 pounds or have infiltration system which manage stormwater from pollution generating surfaces are required to obtain a South Tacoma Groundwater Protection District operating permit. Visit: <https://www.tpchd.org/healthy-places/waste-management/business-pollution-prevention/south-tacoma-groundwater-protection-district> for more information.

Response: The STGPD application has been filled out and is being submitted to TPCHD for approval. A draft of this application has been provided to COT as proof of submittal.

6. The City of Tacoma and TPCHD developed a guidance document that provides the circumstances and requirements for approval of infiltration facilities for managing pollution-generating stormwater runoff in the STGPD. The document, "South Tacoma Groundwater Protection District Infiltration Policy" is available at www.cityoftacoma.org/stormwater. Each request to infiltrate will be reviewed and approved on a case by case basis. Additional information on the STGPD is located on the TPCHD website at <http://www.tpchd.org/environment/groundwater/south-tacoma-groundwater-protection-district/>.

Response: The STGPD application has been filled out and is being submitted to TPCHD for approval. A draft of this application has been provided to COT as proof of submittal.

ACCESS AND EASEMENTS

7. A covenant and easement agreement is required for the proposed stormwater facilities. A template covenant and easement agreement can be found online at www.TacomaPermits.org under Resource Library/Sanitary Sewer & Stormwater Library. Please complete the template and ensure accurate signatory and legal description information and upload the document to Accela, in MS Word format, with your next revision submittal. This document is reviewed and signed by the City first prior to any applicant signatures. The City will inform the applicant when the document is available for owner signature and recording. Reference: SWMM: Vol. 4, Ch. 5.

Response: A Draft of this document has been prepared for COT review. The draft is being submitted with this resubmittal package.

STORMWATER SITE PLAN

GENERAL

8. Utilize the City of Tacoma Stormwater Site Plan Template available at www.cityoftacoma.org/stormwatermanual_templates. Reference: SWMM: Vol. 2, Ch. 1.

Response: The Report has been updated to utilized the COT template.

9. In order to determine which Minimum Requirements, apply to a project complete the Project Threshold Table available at www.cityoftacoma.org/stormwatermanual_templates. Please note, the Project Threshold Table is an excel document with tabs for different project types – ensure you are utilizing the correct tab specific to your project and revising the table as necessary. The provided table does not have all the values needed. The Reference: SWMM: Vol. 2, Ch. 4.

Response: The project threshold table has been completed and is being submitted with the resubmittal package.

10. Provide a map showing the downstream flowpath from the project site to the Puget Sound – include all receiving waterbodies along flowpath. Assume that water does not infiltrate along flowpath and will ultimately reach the Puget Sound. Include a map for each TDA or if each flowpath can be clearly distinguished, one map will suffice. Clearly show the ¼ mile point for determining TDA. Reference: SWMM: Vol. 2, Ch. 4. Section 3.1.1 of the Stormwater Site Plan appears to state that this project is located within the Flett Creek Drainage Basin but it appears a large portion may be located within the Foss Subbasin.

Response: A map in now shown in the Stormwater Report showing the potential downstream flowpath should stormwater runoff leave the project site.

PROPOSED PROJECT SITE CONDITIONS

11. Provide a proposed conditions basin map(s) that shows the following:
- Outline and Square Footage of New Hard Surface Areas
 - Outline and Square Footage of Replaced Hard Surface Areas
 - Outline and Square Footage of New Pollution Generating Hard Surface Areas
 - Outline and Square Footage of Replaced Pollution Generating Hard Surface Areas
 - Outline and Square Footage of Hard Surface Areas to Remain Unaltered
 - Outline and Square Footage of Areas Converted from Vegetation to Lawn/Landscaped Areas
 - Outline and Square Footage of Areas Converted from Native Vegetation to Pasture
 - Outline and Square Footage of Pollution Generating Pervious Surfaces
 - Outline and Square Footage of Vegetation Areas to Remain Unaltered

- Outline and Square Footage of Lawn/Landscaped Areas to Remain Unaltered
- Outline of Threshold Discharge Areas

Each area should have a separate color or shading to clearly distinguish one area from another. The provided Figure C3.0 provides some information but not all items. Reference: SWMM: Vol. 2, Ch. 4.

Response: Seven color coded maps have been created to delineate the Proposed and existing project conditions. These maps are being submitted as part of the Stormwater report and separately as they are small within the Report and may be difficult to read clearly.

SECTION 4.4 – PERFORMANCE GOALS

12. The words in this section suggest that Minimum Requirement #1-5 apply to this project not Minimum Requirement #6, #7, or #8 though flow control and treatment are provided for this project. If the threshold table and valuation are correct, it appears this project may only trigger MRs #1-5 and no other requirements apply. See Executive Directive ESD22-02 – Redevelopment Project Minimum Requirements at www.cityoftacoma.org/stormwatermanual for updated redevelopment language. For commercial and industrial projects, the valuation is compared to the existing Project Site (not site) improvements. The valuation includes interior improvements as well. Verify all values are accurate and utilize the updated flowchart and language to determine which Minimum Requirements apply to the project.

Response: ESD22-02 has been reviewed with regards to the project thresholds for this design. The proposed improvements are thought to cost around \$470,000, which is 45% of the assted value of the project site. Therefore, only MR #1-5 should apply to this project.

MINIMUM REQUIREMENT #3 – SOURCE CONTROL

13. Utilize the worksheet available at www.cityoftacoma.org/stormwatermanual. The provided worksheet is from the 2008 Stormwater Management Manual. This project is required to utilize BMPs from the 2021 Stormwater Management Manual.

Response: MR #3 has been updated with revised Source Control BMPs please see page 19 of the Stormwater Report.

MINIMUM REQUIREMENT #5 – ONSITE STORMWATER MANAGEMENT

14. The proposal is to utilize an infiltration facility that does not utilize the sizing and design criteria from BMP L602 so the project must utilize the LID Performance Standard to ensure compliance with Minimum Requirement #5.

Response: The LID performance standard is being utilized in this design. Please see the WWHM calculations for Flow Control attached to the Storm report as Appendix C.

15. If the applicant ultimately elects to utilize the List Approach, include the infeasibility checklist for any BMPs deemed infeasible. Checklists are available at

www.cityoftacoma.org/stormwatermanul_templates. Include a reference to the associated documents used for determining infeasibility such as Soils Report, survey showing project site topography, maps showing distance to property lines, etc. Reference: SWMM: Vol. 2, Ch. 4.

Response: The project is meeting the LID performance standard. Therefore, the infeasibility checklists are not needed.

MINIMUM REQUIREMENT #6 – STORMWATER TREATMENT

16. See comment above it is unclear if treatment is needed for this project. If infiltration is ultimately chosen, treatment will be needed in order to infiltrate PGHS in the South Tacoma Groundwater Protection District even if not required by the SWMM.

Response: MR # 6 is not triggered by the project thresholds table. However, infiltration within the STGPD requires treatment of stormwater. Therefore, stormwater treatment is being provided using a modular wetland system.

17. If treatment is ultimately proposed, provide a stormwater treatment basin map clearly showing surfaces requiring treatment and surfaces receiving treatment (facility contributing areas). Reference: SWMM: Vol. 2, Ch. 4.

- Outline and Square footage of areas requiring treatment
- Outline and Square footage of areas receiving treatment
- Outline and Square footage of areas receiving treatment that is pollution generating
- Outline and Square footage of areas bypassing treatment
- Outline and Square footage of areas bypassing treatment that are pollution generating.

Response: Treatment Basin maps have been included within Section F of the Storm Report and also submitted separately as they legibility within the small document is difficult to read.

18. If treatment is ultimately needed, it is unclear if oil control is required for this project. Revise report and plans to include an oil control facility or provide a discussion if oil treatment is not required. Reference: SWMM: Vol. 1, Ch. 1.

Response: Treatment is required for this project based on being located within the STGPD, however oil control is not required for this project. This project is considered a medium intensity commercial site and oil control is required based on the SWMM thresholds. These thresholds are listed below:

- Areas of commercial or industrial sites subject to an expected average daily traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area, or 300 total trip ends per day.
- Areas of commercial or industrial sites subject to petroleum storage and transfer in excess of 1,500 gallons per year, not including routinely delivered heating oil.

- Areas of commercial or industrial sites subject to parking, storage, or maintenance of 25 or more vehicles that are over 10 tons gross weight (trucks, buses, trains, heavy equipment, etc.).

- A road intersection with a measured ADT count of 25,000 vehicles or more on the main roadway and 15,000 vehicles or more on any intersecting roadway, excluding projects proposing primarily pedestrian or bicycle use improvements.

The project site does not meet or exceed any of these above listed thresholds. Therefore, oil control is not required.

19. If treatment is utilized, include the most current Use Level Designation -pulled from the Washington State Department of Ecology website -(<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Emerging-stormwater-treatment-technologies>)as an attachment/appendix to the SSP Report. Reference: SWMM: Vol. 4, Ch. 2.

Response: The most current GULD is now attached to the Storm report as Appendix D

20. Provide sizing calculations for the proposed modular wetland. The WWHM outputs provide a flowrate but do not show the ultimate sizing needed for the contributing area.

Response: Stormwater Treatment calculations for Contech Engineered Solutions are now provided within the Storm Report in Appendix B.

21. Provide documentation that the Modular Wetland has undergone Contech review and approval as required by the General Use Level Designation.

Response: Stormwater Treatment calculations for Contech Engineered Solutions are now provided within the Storm Report in Appendix B.

MINIMUM REQUIREMENT #7 – FLOW CONTROL

22. See comment above it is unclear if flow control is needed for this project. If infiltration is ultimately chosen, provide a flow control basin map clearly showing surfaces requiring flow control and surfaces receiving flow control (facility contributing areas).

- Outline and Square footage of areas requiring flow control
- Outline and Square footage of areas receiving flow control
- Outline and Square footage of areas bypassing flow control

Response: MR #7 flow control is not required for this project based on the project thresholds table. However, a stormwater infiltration facility is being used onsite and flow control is being provided. A map has been provided showing the areas receiving flow control and the bypassed areas.

23. If this project is required to provide flow control, the predeveloped condition must be modeled as forested.

Response: Flow Control is not required. The existing condition of the project site is being modeled in the existing condition. The project site appears to be very close to the 40% impervious area shown as Figure 1-4 of the SWMM.

24. An infiltration rate of 2 inches per hour was utilized for sizing. The geotechnical report states that prior to final design, one or more field infiltration tests should be performed at the planned system location and depth. It is unclear if these additional field tests were completed to verify the design infiltration rate chosen as no additional information was included to substantiate the infiltration rate chosen.

Response: In-lieu of additional testing, this project is proposing to use a design infiltration rate of 0.50 in/hr. The stormwater infiltration system has been redesigned using StormTech Infiltrators. In the current site conditions additional geotechnical testing is not feasible based on the location of the proposed facility and existing buildings/utilities found onsite. Language for this modification has been added to the Storm Report under MR #5.

CONVEYANCE SYSTEM-SPECIFIC COMMENTS

25. All new conveyance systems shall be designed using the full backwater analysis and the design events are as follows:
- For privately-maintained systems:
 - For the 10-year, 24-hour design storm, assuming a Type 1A rainfall distribution (3.0-inches) using a 10-minute timestep, there shall be a minimum of 0.5 feet of freeboard between the water surface and the top of any maintenance hole or catch basin.
 - For the 100-year, 24-hour design storm, assuming a Type 1A rainfall distribution (4.1-inches) using a 10-minute timestep, overtopping of the pipe conveyance system may occur, however, the additional flow shall not extend beyond half the lane width of the outside lane of the traveled way and shall not exceed 4 inches in depth at its deepest point.
 - For the 100-year, 24-hour design storm assuming a Type 1A rainfall distribution (4.1-inches) using a 10-minute timestep, off-channel storage on private property is allowed with recording of the proper easements. When this occurs, the additional flow over the ground surface is analyzed using the methods for open channels described in Section 3.4.4 Open Channel Design Events. Per Joint Administrative Policy and Procedure Directive No. 2021-02-001, Environmental Services/Site Development Group will evaluate and determine the acceptability of this type of localized flooding. The starting tailwater elevation to be used in the backwater analysis for pipe systems is the water surface elevation of the proposed connection at an assumed depth of 90% full. If the project engineer does not believe a full backwater analysis is warranted they must provide justification as to why and include all modeling outputs and assumptions for any alternative methods used.

Response: A full backwater analysis should not be required for this project. In the current condition the entire impervious surface is directed to the onsite conveyance system which connects directly to the City of Tacoma Stormwater drainage system. It is our understanding that this system is currently functioning and does not have backwater issues.

In the newly developed condition the proposed infiltration facility is being sized to infiltrate 100% of stormwater runoff from the replaced surfaces. The amount of runoff being directed to the City system is being greatly reduced. Should the infiltration facility back up, minimal runoff would enter the City system. This amount of runoff would not compare to the amount of runoff currently being discharged from the site.

The current conveyance pipe analysis considering the pipe flow depth of the system at the 100 year storm should be adequate for this project.

CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN

26. Utilize the City of Tacoma Construction Stormwater Pollution Prevention Plan Report Template available at www.cityoftacoma.org/stormwatermanual_templates. Reference: SWMM: Vol. 2, Ch. 5.

Response: The report has been updated with the COT template

27. Section 12 references County inspectors. This project would utilize City of Tacoma inspectors.

Response: All references to the County have been removed as the report has been updated with the COT template.

28. Provide the complete WWHM printout.

Response: A WWHM Printout of the TESC calculations has been provided.

29. Include the Temporary Sediment Trap BMP.

Response: BMP C240 Sediment Trap has been added to the SWPPP.

30. Under Section 8.13 clearly describe how the proposed BMPs including the proposed modular wetland and infiltration system will be protected.

Response: The Report has been updated with the COT template. The plans clearly showing the area to be protected. Inlet protection is used to protect all conveyance systems and facilities.

OPERATION AND MAINTENANCE MANUAL

31. The Operation and Maintenance Manual must include:

- A narrative description of the stormwater facilities.
- A description of each stormwater facility, including what it does and how it works. Include any manufacturer's documentation and recommendations. For City maintained facilities located in the public right of way, do not include manufacturer's documentation and recommendations as part of the submittal.

- A description of all maintenance tasks and the frequency of each task for each facility. Include any manufacturer's recommendations. For City maintained facilities located in the Public Right of Way, do not include this with the submittal.
- A sample maintenance activity log indicating emergency and routine actions to be taken for all stormwater features.
- It is recommended to include a cost estimate for maintenance of each facility.

Response: The O and M report has been updated with the COT template. Maintenance requirements from the SWMM, StormTech and Modular Wetland have been provided.

32. Update Section 4.0 to clearly describe the required inspections per the GULD.

Response: The GULD approval is provided within the report. This document describes the needed maintenance as well as the Modular Wetland Manual.

33. Do not include the temporary erosion and sediment control BMPs in the O&M. The O&M is intended for permanent stormwater facilities.

Response: Understood

CIVIL PLANS

General

34. Changes or revisions to the originally approved permit submittal shall be submitted to the City prior to construction. Provide a note on the plan set. Reference: SWMM: Vol. 2, Ch. 7.

Response: A Revisions Note has been added to sheet C0.1

35. The applicant shall submit record drawings ("as-builts") to the City when the project is completed. Provide a note on the plan set. Reference: SWMM: Vol. 2, Ch. 7.

Response: A record Drawings note has been added to sheet C0.1

36. The Engineer of Record shall provide an Engineer's Certification to the City of Tacoma after facility installation and prior to permit final inspection and/or closeout. Provide a note on the plan set. Reference: SWMM: Vol. 2, Ch. 7.

Response: An Engineers Certificate Note has been added to sheet C0.1

Sheet C1.0

37. The Temporary Erosion and Sedimentation Drawings shall include the following information, at a minimum:
- Name, address and 24-hour contact telephone number(s) of the designated emergency contact person. The emergency contact information may be supplied at the pre-construction meeting.

- Name, address, and phone number of the Erosion and Sediment Control Lead (ESC), Certified Erosion and Sediment Control Lead (CESCL), or Certified Professional in Erosion and Sediment Control (CPESC) as applicable. Reference: SWMM: Vol. 2.

Response: the Emergency Note and CESCL Note have been updated on sheet C1.0

38. It is unclear from the plan set where the sediment trap discharges. Show tightline or stabilized path from the spillway of the sediment trap to the City storm system or other approved discharge location.

Response: The sediment trap overflows to the east. Runoff would sheet flow east over the existing pavement and into the City storm system. This inlet will be protected using Inlet Protection. This is now shown more clearly on sheet C1.0

39. Clearly show how the area where the infiltration system is proposed will be protected during construction.

Response: Keynote 11 has been added to sheet C1.0. This note states that the infiltration area shall be protected with orange high visibility fencing during construction.

Sheet No Number – Located After C1.0

40. Provide a sheet number.

Response: Sheet C1.1 is now labeled.

41. TESC Note #7 conflicts with Element #7 and Detail 1, which state to clean or remove and replace inlet protection devices when sediment has filled 1/3 of the available storage. Revise note. Reference: SWMM: Vol. 1, Ch. 1.

Response: TEC note #7 has been removed, please refer to Detail 1 sheet C1.1.

Sheet C3.0

42. Provide additional spot elevations to more clearly show the stormwater flow line divide between the existing areas on the east and the replaced areas on the west to ensure all areas shown as receiving treatment are receiving treatment.

Response: Additional spot elevations have been provided on sheet C3.0 to more clearly convey the proposed runoff flow paths. In addition the proposed flow control map provided should provide more clarity.

43. Show the discharge location for the proposed footing drains. Stormwater from roofs shall not be connected to or allowed to infiltrate into the footing drain system. Footing drains may connect to the roof system provided the following are met:
- the connection of roof and footing drain discharge lines be a minimum of five feet horizontally from the building,

- the footing drain invert elevation be a minimum of 6 inches above the roof invert elevation at the connection point, and
- a yard drain, clean out, or other type of structure to allow for access and maintenance be installed at the connection points. Reference: SWMM: Vol. 1, Ch. 4.

Response: The footing drain connection are now shown on sheet C3.0. These connections should meet the COT requirements.

44. All catch basins, inlets, etc. shall be marked. The City of Tacoma has curb markers/stencils available for both public and private projects. Contact the Project Site Plan Reviewer or stormandsewer@cityoftacoma.org to obtain curb markers for the project. Provide a note on the plan set. Reference: Vol. 5, Ch. 4.

Response: Note 11 has been added to sheet C3.0 of the Drainage notes on this drawing.

45. The minimum cover for all pipe materials shall be 3 feet in areas of vehicular traffic unless manufacturer's recommendations or calculations are provided from the Professional Engineer to demonstrate that the pipe can withstand less cover. Cover shall be measured from the top edge of the pipe to the final grade. Reference: SWMM: Vol. 5, Ch. 4.

Response: CPEP or Corrugated Poly Ethylene Pipe has a minimum surface coverage in traffic loading areas of 2 feet. Please see the attached Technical note from ADS.

46. It appears the infiltration trench is 25 feet wide which coincides with the WWHM calculations. Verify and update the callout.

Response: The infiltration facility dimension have been corrected. Please see sheet C3.0.

47. It appears that items described as SDMH are actually Type 2 catch basins. Update for clarity.

Response: The infiltration system has been updated based on the revised infiltration rate of 0.5 in/hr. All facilities have been clearly labeled. SDCB #5 is clearly called out as a type 2 manhole in the storm structure table on sheet C3.0

Sheet C3.1

48. Provide the width, depth, and number of perforated pipes on the detail for the infiltration trench.

Response: This design has been changed to a Storm Tech Chamber System. The individual chambers are shown on the plans. However, they are not specifically called out.

49. The washed rock shall conform to BMP 720 – Infiltration Trenches which has a larger aggregate than the WSDOT specification.

Response: A not has been added under Infiltration Trench Notes #2, regarding drain rock to conform to BMP 720. Please see sheet C3.2

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50. Perforated pipe shall conform to WSDOT Standard Specification 9-05.2.

Response: Perforated pipe is no longer called out on the plan set.

51. Geotextile shall conform to BMP 720 – Infiltration Trenches. Provide documentation that proposed Mirafi meets the specifications.

Response: A note has been added to sheet C3.2 under Infiltration trench notes. This note calls out geotextiles to conform with BMP 720.

Sheet C4.0

52. Show the minimum finished floor elevation of the proposed and existing structure(s).

Response: The FF elevations of the proposed structure are now shown on sheet C4.0. For information regarding the existing FF elevations of the small structures to be removed please see the existing contours on sheet C1.0

53. Trash compactors and dumpsters that have food or liquid bearing waste (including ordinary garbage) must be placed on a pad with a drain to the wastewater system. Trash compactor hydraulic reservoirs or hoses shall be contained within the perimeter of the drainage pad. Reference: SWMM: Vol. 6 – BMP S117; TMC 12.09.

Response: The project site will not dispose of garbage onsite. This garbage from this facility shall be taken to the existing campus trash facility located to the south.

54. Pads for compactors and dumpsters that drain to the wastewater system shall not receive runoff from adjacent areas. Provide a ridgeline or berm around exterior pads draining to the City wastewater system to prevent runoff. Reference: TMC 12.08.

Response: The project site will not dispose of garbage onsite. This garbage from this facility shall be taken to the existing campus trash facility located to the south.

55. Any discharge to the sanitary sewer that is not domestic waste may require approval from Source Control. Contact Shawn Madison, Source Control at (253) 502-2120 or smadison@cityoftacoma.org for questions related to pre-treatment devices.

Response: The project site will not dispose of garbage onsite. This garbage from this facility shall be taken to the existing campus trash facility located to the south.

56. Provide PVC pipe type on the plan set. Reference: SSM: Section 3.2.

Response: PVC type (SDR35) is now shown on sheet C4.0.

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57. The construction notes reference a sewer pump but it is unclear if one is required. If a sewer pump is necessary, review and approval will be required by the City.

Response: All notes referencing a sewer pump have been removed. It is anticipated that a gravity connection will be utilized.

If you have any questions, please call me at (253) 514.2413.

Sincerely,

Daniel Hendrickson, PE
Principal

DJH/

c:

From: dan hendricksoncc.com
Sent: Wednesday, August 16, 2023 9:14 AM
To: Avila, Britany
Cc: Hoppin, Mieke
Subject: RE: SDEV23-0202 Sewer Requirements

Good morning Britany,

Thank you for the clarification, we appreciate your help.

Best,

Dan Hendrickson, PE | Principal



6909 Ford Dr NW, Gig Harbor, WA 98335

253.514.2413 **TEL** | dan@hendricksoncc.com | **EMAIL**

From: Avila, Britany <BAvila@cityoftacoma.org>
Sent: Wednesday, August 16, 2023 8:54 AM
To: dan hendricksoncc.com <dan@hendricksoncc.com>
Cc: Hoppin, Mieke <MHoppin@cityoftacoma.org>
Subject: RE: SDEV23-0202 Sewer Requirements

Good morning Dan,

There is no outstanding IN-LIEU sewer assessment owed for this property.

Mieke- Thank you for bringing this to the applicant's attention, however, after further review, there is no in lieu sewer assessment owed. I will update the map accordingly.

Britany Avila
Senior Real Estate Specialist
City of Tacoma
Public Works Department | Facilities Management Division | Real Property Services
747 Market ST, Tacoma, WA 98402
Desk: 253.591.5277
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Website: www.cityoftacoma.org



From: dan hendricksoncc.com <dan@hendricksoncc.com>

Sent: Tuesday, August 15, 2023 12:16 PM

To: Avila, Britany <BAvila@cityoftacoma.org>

Subject: SDEV23-0202 Sewer Requirements

Hi Britany,

Mieke Hoppin has commented on this Site Development permit regarding a potential sanitary sewer assessment. Could you please provide us with details regarding what is need for this project?

Thank you,

Dan Hendrickson, PE | Principal



6909 Ford Dr NW, Gig Harbor, WA 98335

253.514.2413 **TEL** | dan@hendricksoncc.com | **EMAIL**