



PUBLIC WORKS DEPARTMENT

TECHNICAL MEMORANDUM

TO: Angela Vincent, Municipal Stormwater Permit Planner
WA State Dept. of Ecology

FROM: Dean Zavack, PE, NPDES Coordinator City of Gig Harbor

DATE: February 7, 2023

SUBJECT: Confirmation that the 2023 Gig Harbor SMSDM is equivalent to the 2021 Pierce County SMSDM

2023 Gig Harbor SMSDM revisions versus Pierce County 2021 SMSDM

The major differences are listed below of the 2023 GHSMSDM changes from the 2021 PCSMSDM. [Gig Harbor revisions to Minimum Requirements 1 -10 are in blue.](#)

Volume I Minimum Requirements (MRs) #1, #2, #3, and #4

No changes from the 2021 PCSMSDM

MR#5

[Sidewalk infiltration galleries are added to MR#5 – List #2 \(For projects in the UGA requiring MRs 1-10\) by footnote that states: “sidewalk infiltration galleries are equivalent to pervious concrete sidewalk.”](#)

[Detail 35.0 – Sidewalk Infiltration Galleries added to Section A Stormwater Standard Details. Pervious sidewalk is still allowed in the ROW but the engineer has the choice to use either pervious concrete or asphalt sidewalk or a concrete sidewalk infiltration gallery.](#)

MR#6 Water Quality Treatment

No changes from the 2021 PCSMSDM

MR#7- Flow Control

City of Gig Harbor Flow Control Exemptions

[Projects that abut any Saltwater body \(including tidally influenced rivers and streams\) are exempt from having to do flow control \(meet streambed protection standards\). All other Projects that discharge to the City storm system have to provide flow control \(streambed protection standards\).](#)

[See Gig Harbor Municipal Code 14.20.090:](#)

[14.20.090 Discharge of stormwater directly to Puget Sound](#)

[Development or redevelopment sites that abut Puget Sound or tidally influenced areas of rivers and streams discharging into Puget Sound do not need to meet the flow control requirements of](#)

the manual provided sufficient BMPs are provided to mitigate increased release rates and potential for erosion. All other requirements of the manual shall be met. (Ord. 1169 § 2, 2009).

Pierce County Stormwater Management and Site Development Manual MR#7 Flow Control Exemptions

Projects that discharge to any Saltwater body are flow control exempt provided that the conveyance system from the project site to Puget Sound is comprised entirely of manmade elements (e.g., pipes, ditches, outfall protection). The conveyance system between the project site and the exempt receiving water shall have sufficient hydraulic capacity to convey discharges from future build-out conditions from contributing areas of the site and the existing condition from the contributing offsite areas.

MR #8 Wetlands Protection,

No changes from the 2021 PCSMSDM

MR #9 Operation and Maintenance

City of Gig Harbor made changes to the Appendix 1-A- Example Maintenance Checklists

The changes include:

- Added Scotch Broom and Himalayan Blackberry specifically as noxious weeds that require removal in all stormwater facilities. Added to all maintenance check lists.
- Added existing Gig Harbor Municipal Code pertaining to requirements to remove noxious weeds within stormwater tracts and stormwater BMPs. Where the 2021 PCSMSDM says “applicable regulations” it was replaced with Gig Harbor Municipal Code GHMC 8.04.050 which pertains to removal of noxious weeds.

MR#10 Financial Liability

No changes from the 2021 PCSMSDM.

The minor differences between the manuals are:

- Pierce County replaced by “City of Gig Harbor”
- Cover and Acknowledgement page made specific to Gig Harbor.
- Gig Harbor Municipal Code replaced referenced Pierce County Code with Volumes 1 - VI.
- Gig Harbor Ordinances replaced referenced Pierce County Ordinances with Volumes 1 - VI
- Section A – Stormwater Standard Details edited, where errors were found, and minor edits to match with the City of Gig Harbor Public Works Standard Details, where required. Gig Harbor Detail Border replaces Pierce County border and details are approved by the City Engineer, versus approved by Pierce County.

Volume III– Flow Control Credits for Tree Retention and Tree Planting for Stormwater Modeling.

The City removed this section 3.3 since modeling for tree retention credits using WWHM2012 required different setbacks than that are allowed in Gig Harbor Municipal Code for tree retention. Removal of this modeling credit is more stringent since the credit allowed for smaller flow control facilities.

Comparison of Gig Harbor Flow Control Exemptions to 2021 Pierce County Stormwater Manual Exemptions.

Gig Harbor

Only projects that abut Puget Sound (shoreline properties) are flow control exempt. All other projects have to meet the Flow Control Standards of MR#7- meet streambed protection standards.

-Versus-

Pierce County

Any project that discharges to any saltwater body via all manmade conveyance is exempt from flow control providing there is sufficient hydraulic capacity to convey discharges from full-built out conditions of the project site and existing condition in the contributing offsite areas.

The City of Gig Harbor made this amendment to the 2021 PCSMSDM for the following reasons:

- Most of the conveyance trunklines within City of Gig Harbor have existing conveyance capacity issues downstream near the outfall.
- There is existing scouring and bank erosion at many of the existing City's marine outfalls. These marine outfalls require continuous extensive armoring and repair. Many of these outfalls are under docks and piers, which make it difficult to perform inspections and perform maintenance with equipment without using a barge and doing the repair work from water.
- Developers would extend a new storm system to an existing City trunkline without providing a full downstream capacity analysis using high tide, and future rising tide levels. The 2021 Pierce County or 2019 Ecology Stormwater Manuals have no requirements to perform conveyance capacity calculations at high tide water levels.

The City's MR#7 Flow Control is more stringent since it makes all development use flow control to streambed protections standards before they discharge to the City MS4, unless the project area abuts Puget Sound. There are less exemptions available, therefore it is more stringent. In conclusion, all of the changes in the 2023 Gig Harbor SMSDM provide equivalent or more restrictive environmental protection when compared to the 2021 PC SMSDM

Dean H Zavack, PE

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c: Aaron Hulst, PE, City Engineer, Jeff Langhelm, PE, Public Works Director,
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