CHAPTER G32

STORM SEWER

PERFORMANCE

A. Basic Function:

1. The Design-Builder shall conduct all work necessary to design, document, and construct stormwater management facilities to collect and convey runoff for the Project. Elements of Work shall include, but are not limited to, the following:

   a. Design and construction of a pavement drainage design system of structures and storm drains for the permanent Project facilities per City of Seattle Design Standards, including without limitation, Stormwater, Grading and Drainage Control Code (SMC 22.800 - 22.808) and its associated Director’s Rules.

   b. Design and construction of permanent Project pavement area runoff, water quality treatment and flow control facilities and associated conveyance system to allow gravity drain connection to the existing King County Regulator Station substructure.

      1) Runoff Treatment and Flow Control: Treatment and flow control will be required in accordance with the City of Seattle Municipal Code for discharge to the existing King County Regulator Station substructure.

   c. Protection or relocation of existing University of Washington 24-inch diameter storm drain to eliminate conflict with proposed bridge foundations and retaining wall.

   d. Bridge drainage systems

      1) The Design-Builder shall minimize the number of bridge drains on the elevated land bridge. If downspouts are used, all downspout parts shall be accessible for maintenance and cleaning. Bridge drains shall be per the City of Seattle Standard Plan 290 and Standard Specification 6-02.3(36) or as otherwise approved by the City.

      2) Bridge drainage system shall be designed to be architecturally integrated into the bridge form. Its appearance shall be minimized.

   e. As a part of the Stormwater Pollution Prevention Plan (SWPPP), prepare and implement a Spill Prevention Control and Countermeasures (SPCC) Plan and Temporary Erosion and Sediment Control (TESC) Plan during construction.

   f. The Design-Builder shall provide construction dewatering to keep excavation free from surface and groundwater during all phases of construction. A Temporary Dewatering Plan shall be prepared as part of the SWPPP and the City of Seattle’s Side Sewer Permit for Temporary Dewatering on Construction Sites obtained by the Design Builder.

   g. The Design Builder shall design and construct Seattle Public Utility (SPU) owned facilities to be compatible with SPU’s existing facilities and maintained by SPU in the future.

2. See Chapter C Bridges and Structures for additional requirements with respect to stormwater management for the Pedestrian Landbridge and other Project elements over the Triangle Garage or other structures.

3. In addition to the requirements of this chapter, comply with all applicable requirements as defined in this document.

B. Amenity and Comfort

1. The Design-Builder is encouraged to seek more cost effective solutions that provide equal or greater environmental benefit while meeting requirements for stormwater management for this
Project. A cost effective solution shall consider the innovative use of water quality treatment; low impact development or green stormwater infrastructure type BMPs; and incorporate design features which lead to the increased infiltration of stormwater where practical and feasible.

2. The Design-Builder shall minimize the disturbance of the existing pavement that is to remain.

C. Operations and Maintenance

1. The Design-Builder shall prepare a Drainage Maintenance Manual that describes the “what” and “when” maintenance procedures for all Project drainage facilities, including the maintenance requirements for flow control and treatment facilities.

D. Health and Safety:

1. Slipping: Provide storm drain grates with a non-slip surface.

2. Locate storm drain grates and lids outside of wheel paths for travel lanes on the Pedestrian Landbridge, NE Pacific Pl. roadway, and the Burke Gilman Trail and other portions of the Site.

PRODUCTS

1. Any proprietary stormwater treatment products proposed to be used by the Design-Builder shall be submitted to UW and the City of Seattle for review and acceptance, prior to being incorporated into the Project’s design or construction. Any such products proposed for use in the Project must have been already approved by the City of Seattle and the Washington State Department of Ecology for the intended use.

METHODS OF CONSTRUCTION

1. Construct the system using the following practices and procedures:

   a. City of Seattle Standard Plans and Specifications, City of Seattle Stormwater, Grading, and Drainage Control Code and all associated Director’s Rules.

2. SPU’s Operations field crews shall perform all core cuts for new connections into existing SPU owned storm drain and combined sewer lines.

3. During construction of the proposed bridge foundations the Design-Builder shall coordinate with SPU and King County when working in the vicinity of the 138-inch combined sewer.

END OF CHAPTER G32