

**HIGHLINE WATER DISTRICT
King County, Washington**

RESOLUTION 16-5-4D

**RESOLUTION AUTHORIZING PHASE 1 PRELIMINARY DESIGN SERVICES
CONTRACT #16-60-05 WITH STANTEC CONSULTING SERVICES, INC.
RELATING TO PROJECT 16-3 MANSION HILL RESERVOIR RELOCATION**

WHEREAS, in late 2015, Sound Transit selected the SR509/I-5 route for the Federal Way Link Light Rail Extension Project. The proposed alignment passes adjacent to the District 5.0 MG 490 Zone reservoir at Mansion Hill. The close proximity of the light rail will require the relocation of the reservoir; and

WHEREAS, the project will require several phases of work. The first phase will be preliminary engineering, including survey, geotechnical investigation, planning, permitting and overall project scoping. The first phase includes assisting the District in contract negotiations with Sound Transit for cost reimbursement. Subsequent phases will include design, permitting, construction inspection and administration. The District must complete the reservoir work by early 2019 to avoid conflicts with Sound Transit's construction; and

WHEREAS, on December 12, 2015, the District requested proposals for engineering services from four firms selected from the 2015 Municipal Research Services Center (MRSC) Consultant Roster. The District selected Stantec Consulting Services, Inc., to provide a scope of services for the consulting engineering services necessary for the proposed water main replacement; and

WHEREAS, the District's Engineer and General Manager reviewed the scope of services from Stantec Consulting Services, Inc. and recommend approval of this resolution; and

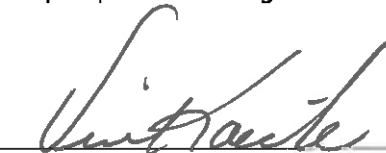
WHEREAS, the costs for these services will be reimbursed by Sound Transit.

NOW, THEREFORE, BE IT RESOLVED:


1. The General Manager or designee is authorized to enter into Contract #16-60-05 (Attachment 1, incorporated herein by this reference) with Stantec Consulting Services, Inc. for a not-to-exceed amount of \$647,172.06 for Phase 1 - Preliminary Design Services for Project 16-3 Mansion Hill Reservoir Relocation.
2. The General Manager and/or the District's Legal Counsel are authorized to make minor changes to the agreement if required.

ADOPTED BY THE BOARD OF COMMISSIONERS of Highline Water District, King County, Washington, at an open public meeting held this **4th** day of **May 2016**.

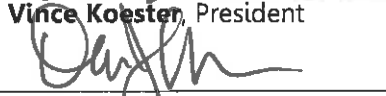
BOARD OF COMMISSIONERS



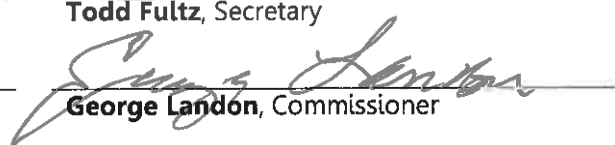
Vince Koester, President



Todd Fultz, Secretary



Daniel Johnson, Commissioner



George Landon, Commissioner



Kathleen Quong-Vermeire, Commissioner

ATTACHMENT 1

HIGHLINE WATER DISTRICT AGREEMENT FOR CONSULTING SERVICES

THIS AGREEMENT is entered into between **HIGHLINE WATER DISTRICT**, King County, Washington, a municipal corporation and special purpose district organized and existing under the laws of the State of Washington (hereafter referred to as "the District"), and **STANTEC CONSULTING SERVICES, INC.**, (hereafter referred to as "the Consultant") in consideration of the mutual benefits, terms and conditions hereinafter specified.

1. Scope of Consulting Services. Consultant shall provide consulting services to the District under the terms of this Agreement for the following Project: **16-3 Mansion Hill Reservoir Relocation – Phase 1 ("Project")**. The scope of services is more fully described on **Exhibit A** attached hereto and incorporated herein by this reference.
2. Compensation and Payment. District shall pay Consultant for the time and materials devoted to the Project as consideration for the performance of the services set forth on **Exhibit A**, not to exceed the amount of Six Hundred Forty Seven Thousand One Hundred Seventy Two and 06/100 Dollars (\$647,172.06). Such compensation shall be payable in the following manner:
 - 2.1 Consultant shall submit a detailed monthly billing for all services provided describing in reasonable and understandable detail the services rendered, fees charged and expenses incurred by Consultant during the previous month in accordance with a schedule of rates and charges set forth on **Exhibit B**, including fees and expenses for additional services authorized by District as provided herein. District shall pay the invoice within sixty (60) days of receipt, except as to any disputed amounts.
 - 2.2 Upon District's failure to pay within sixty (60) days of receipt the undisputed amount set forth in any monthly billing submitted to District by Consultant, such unpaid balance will bear interest at the rate of 1% per month until the amount of such unpaid balance, plus interest thereon shall be paid in full.
 - 2.3 Consultant shall maintain accounts and records of fees billed and expenses incurred as described in this Section 2 in accordance with generally accepted accounting principles, and agrees to make such accounts, records and supporting documentation available to the District and its authorized representatives for inspection at mutually convenient times, both during the Project work and for three (3) years following the final payment for services rendered or termination of the Consultant's services under this Agreement.
3. Schedule of Work. Consultant shall commence the performance of its services under this Agreement upon receipt of notice to proceed from the District to do so and shall provide the services in accordance with the schedule on **Exhibit C**, subject to delays for causes beyond the reasonable control of Consultant or as otherwise agreed to by District.

4. Subcontractors. Consultant shall not subcontract or assign any portion of the work covered by this Agreement without the prior written approval of the District, such consent to be given in District's sole discretion. Subject to the provisions of the preceding sentence, this Agreement shall be binding upon and inure to the benefit of the respective successors and assigns of the parties hereto.
5. Independent Contractor. Consultant is an independent contractor and not an employee of the District. Consultant shall be responsible in full for payment of its employees, including insurance and deductions, and for payment to any subcontractors. No personnel employed by Consultant shall acquire any rights or status regarding the District. All of the services required hereunder shall be performed by Consultant or under its direction, and all personnel engaged therein shall be fully qualified under applicable state, federal and local laws to undertake the work performed by them.
6. Changes in Scope of Services. The District may require changes or modifications in the scope of services to be performed under this Agreement. Any such changes or modifications shall be in writing and signed by the parties to this Agreement. The compensation for the changes or modifications, whether a decrease or increase, shall be on the same terms and conditions as set forth in Paragraph 2 above or in a manner otherwise mutually agreed to by the parties.
7. Insurance. Consultant shall maintain throughout the performance of this Agreement the following types and amounts of insurance.
 - 7.1 Comprehensive vehicle liability insurance covering personal injury and property damage claims arising from the use of motor vehicles with combined single limits of Two Million Dollars (\$2,000,000).
 - 7.2 Commercial General Liability Insurance written on an occurrence basis with limits no less than Two Million Dollars (\$2,000,000) combined single limit per occurrence and Two Million Dollars (\$2,000,000) aggregate for personal injury, bodily injury and property damage. Coverage shall include, but not be limited to: blanket contractual; products/completed operations; broad form property damage; explosion, collapse and underground (XCU) if applicable; and employer's liability; and
 - 7.3 Professional liability insurance (Errors and Omissions insurance) with limits no less than Two Million Dollars (\$2,000,000).

The insurance policies shall: (1) state that coverage shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability; (2) be primary to any insurance maintained by the District, except as respects losses attributable to the sole negligence of the District; and (3) shall state that the District will be given 45 days prior written notice of any cancellation, suspension, non-renewal or material change in coverage.

The District shall be named as an additional insured on the Commercial General Liability Insurance policy with regard to work and services performed by or on behalf of the Consultant and a copy of the endorsement naming the District as an additional insured

shall be attached to the Certificate of Insurance.

Before commencing work and services, Consultant shall provide to the District a Certificate of Insurance and required endorsements evidencing the insurance described above. The District reserves the right to request and receive a certified copy of all required insurance policies.

The above insurance limits do not constitute a limit on Consultant's liability to the District. Any payment of deductible or self-insurance retention shall be the sole responsibility of Consultant.

Consultant shall be solely responsible for the safety of its employees and subcontractors at the Project work site, and shall comply with all applicable federal, state and local statutes, regulations and ordinances regarding safety.

8. Indemnification. Consultant shall defend, indemnify and hold harmless the District, its elected and appointed officers, employees and agents and volunteers from and against all claims, injuries, damages, liabilities, losses of suits, including attorneys' fees and costs, arising out of or relating to Consultant's performance under this Agreement, except to the extent any injuries or damages caused by the negligence of the District. For the purposes of this indemnification, Consultant specifically and expressly waives any immunity granted under the Washington Industrial Insurance Act, Title 51 RCW. This waiver has been mutually negotiated and agreed to by the parties. If a court of competent jurisdiction determines that this contract is subject to RCW 4.24.115, Consultant's obligation to defend, indemnify and hold harmless the District, its officers, employees, agents and volunteers shall be limited to the extent of Consultant's negligence. The provisions of this Section shall survive the expiration of termination of this Agreement.
9. Ownership of Documents. Consultant agrees to return to District upon termination of this Agreement all documents, logs, drawings, photographs and other written or graphic material, however produced, received from District and used by Consultant in performance of its services hereunder. All documents, logs, drawings, specifications, designs, mylars, surveys, survey data, reports and other work product (collectively referred to as "Work Product") produced by Consultant in connection with the services rendered under this Agreement shall be owned by District. District shall own all copyrights to such Work Product and Consultant agrees to assign all ownership rights to such Work Product to the District. Reuse of any such Work Product by the District for other than a specific project or modification in use by the District of any of the Work Product without the Consultant's prior written approval shall be at the District's sole risk.
10. Standard of Care. Consultant warrants that its services shall be performed with the level of care, skill and competence of the consulting profession in accordance with the standard for professional services at the time the services are rendered.
11. Right of Entry. District shall provide for the right of entry of Consultant and its subcontractors and all necessary equipment in order to complete the services under this Agreement.

12. Compliance with Codes and Standards. Consultant's Professional Services shall be consistent with the standard of care and shall incorporate those publicly known federal, state and local laws, regulations, codes and standards that are applicable at the time Consultant renders its services.
13. Discovery of Hazardous Materials. The Parties recognize that unanticipated hazardous materials or suspected hazardous materials may be discovered on District's property or on property included as part of the site of work but not owned by District. The discovery of unanticipated hazardous materials may delay the Consultant's provision of the services required herein. In that event, the parties may extend the Contract Completion Date by mutual agreement.
14. Termination. This Agreement may be terminated by either Party upon five (5) days written notice for any reason. In the event of termination, Consultant shall be entitled to compensation for all services performed and costs incurred through and including the date of termination, except as to any disputed amounts.

15. General Provisions.

- 15.1 Notices. Any notice or demand desired or required to be given under this Agreement shall be in writing and deemed given when personally delivered, sent by facsimile machine, or deposited in the United States Mail (or with an express courier), postage prepaid, sent certified or registered mail, and addressed to the parties as set forth below or to such other address as either Party shall have previously designated by such a notice:

To the District:
Highline Water District
23828 30th Ave. S.
Kent, WA 98032

To the Consultant:
Stantec Consulting Services, Inc.
11130 N.E. 33rd Place, Suite 200
Bellevue, WA 98004-1465

Attn: Matt Everett, General Manager Attn:

- 15.2 Entire Agreement. This Agreement and its exhibit attachments contain the entire understanding between the District and Consultant relating to the consulting services which are the subject of this Agreement. This Agreement merges all prior discussions, negotiations, letters of understanding or other promises whether oral or in writing. Subsequent modification or amendment of this Agreement shall be in writing and signed by the parties to this Agreement.
- 15.3 Waiver. Waiver of any breach or default hereunder shall not constitute a continuing waiver or a waiver of any subsequent breach either of the same or of another provision of this Agreement.
- 15.4 No Third Party Rights. This Agreement is made only for the benefit of the District and Consultant and successors in interest and no third party or person shall have any rights hereunder whether by agency, as a third party beneficiary, or otherwise.

- 15.5 Jurisdiction/Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. Any suit to enforce or relating to this Agreement shall be brought in King County Superior Court, King County, Washington.
- 15.6 Severability. If any term, covenant or condition of this Agreement is held by a court of competent jurisdiction to be invalid, the remainder of this Agreement shall remain in effect.
- 15.7 Effective Date. The effective date of this Agreement shall be the date that this Agreement has been signed by authorized representatives of both Parties hereto ("Effective Date").

STANTEC CONSULTING SERVICES, INC.
("Consultant")

By _____
Typed Name _____
Its _____
Dated _____

HIGHLINE WATER DISTRICT
("District")

By _____
Typed Name _____
Its _____
Dated _____



Stantec Consulting Services Inc.
11130 NE 33rd Place Suite 200, Bellevue WA 98004-1465

EXHIBIT A

**PHASE 1 SCOPE OF SERVICES
FOR
HIGHLINE WATER DISTRICT MANSION HILL RESERVOIR RELOCATION
PROJECT 16-3**

April 26, 2016

Prepared By: Stantec Consulting Services, Inc.

Background

The Highline Water District Mansion Hill Reservoir Site is located several hundred feet north of S. 216th Street and adjacent to the west side of the I-5 right-of-way. The site is within the City of SeaTac. The site contains the following structures: a 5.0 million gallon (MG) steel reservoir, a 2.5 MG steel reservoir, two elevated steel tanks (1.0 MG and 0.25 MG), and Pump Station No. 1. The reservoirs are part of the 490 pressure zone and the elevated tanks are included in the 560 pressure zone. Also, telecommunication equipment owned by private companies is located on the two elevated tanks.

The 5.0 MG reservoir location conflicts with the proposed Federal Way Link Light Rail Extension alignment by Sound Transit. As a result, the 5.0 MG reservoir will need to be demolished and a new reservoir of size to be determined (TBD) will be constructed elsewhere on site. To make room for the new reservoir, the 0.25 MG elevated tank may need to be demolished and telecommunication equipment on the tank will need to be relocated. Also, a 30-inch water transmission main owned by Highline Water District will be impacted by the light rail alignment.

Work included in this Scope of Services will be included in the pending Sound Transit/ Highline Water District agreement.

Purpose

Highline Water District will contract with Stantec to provide consulting services for Phase 1 of the project. Stantec will be assisted by Carollo Engineers during certain tasks. Phase 1 activities include:

- Planning – Develop and analyze reservoir replacement alternatives and select a preferred alternative. This activity will also evaluate any other Highline Water District infrastructures that may be impacted by Sound Transit.
- Preliminary Engineering – Develop preliminary design drawings for the preferred alternative. Preliminary engineering will also include the evaluation of options if the 0.25 MG elevated tanks needs to be replaced.



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 2 of 14

Reference: Mansion Hill Reservoir Relocation Project

- **Geotechnical Investigation** – Conduct a geotechnical investigation to develop design parameters for the design of a new reservoir foundation.
- **Opinion of Probable Construction Costs** – Opinion of costs for the preferred alternative will be developed for negotiations with Sound Transit.
- **Construction schedule** – Develop a construction schedule based on Sound Transit’s 2019 completion date.
- **Surveying** – Conduct a survey of the necessary areas within the Mansion Hill site. Survey to include topographic, utility locates, and potholing if necessary.
- **Permitting** – Initiate the permitting process with the City of SeaTac.
- **Initiation of the Washington State Department of Health Engineering Project Report**, and updating the Highline Water District Water Comprehensive Plan.
- **Feasibility Study for a 30-inch water transmission main** - The light rail alignment will conflict with the existing 30-inch water main from the Crestview Reservoir and Pump Station to the Mansion Hill site. A section of the 30-inch water main will need to be relocated to avoid the conflict(s). The Crestview Pump Station is located near Military Road South and South 158th Street and it serves the 560 Pressure Zone.
- **Contract coordination assistance with Sound Transit.**

This Scope of Services contains a Statement of Services, a schedule, and a budget for Phase 1. It is assumed that Phase 1 will be substantially complete by February 28, 2017.

Statement of Services

The following tasks have been identified to complete the Phase 1 activities mentioned above:

Task 1: Project Management

Project management will include:

- **Preparation of a monthly budget status report and a summary of project activities conducted during the billing period to accompany monthly invoices.**
- **Administrative duties, such as project set up, contracting, monthly invoicing, and project assistance.**



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 3 of 14

Reference: Mansion Hill Reservoir Relocation Project

- Preparation of a Project Plan and a detailed project schedule. The schedule will be updated as needed.
- Budget, schedule, and quality tracking.
- Coordination and communications with project team, Highline Water District, and other stakeholders.
- Document management to include submittals, filing, and project closeout.

Deliverables: Monthly invoices, Project Plan, project status updates, and general correspondence.

Task 2: Task Force

The task force charter provides risk analysis, negotiation strategies, and high level decisions, as needed, during the planning, telecommunication tenant's negotiations, conceptual design, permitting, and Sound Transit coordination tasks. The task force is envisioned to be comprised of: Greg Hill (Stantec Principal), John Gillespie (Stantec PM), and Highline Water District staff members (TBD) and Highline Water District's legal counsel.

Other stakeholders or Stantec technical team members may become part of the task force under situational conditions. Team members will be included in the task force when their expertise and knowledge is relevant to the situation. The Stantec project manager will monitor each task or subtask requiring task force assistance and optimize team member skills for task force participation.

Assumptions:

- Task force to comprise (on average) 2 Stantec team members per task force activity. One task force activity every two months. Activity to average a duration of 5 hours, which includes preparation, writing of activity notes and technical memorandums, and distribution of materials.

Deliverables: Activity notes and technical memorandums.

Task 3: Planning

The end result of this task is to select a final alternative that will be used for the basis of design. All tasks and subtasks activities will be based on the final alternative.



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 4 of 14

Reference: Mansion Hill Reservoir Relocation Project

The Stantec and Carollo Engineers will research and collect information necessary to conduct an internal (planning) charrette that will set project goals, review risks, and define criteria for the alternatives analysis. Based on the planning charrette results, the team will finalize the alternatives analysis criteria. The information and data generated during the charrette and the process for finalizing the criteria will be included in a Technical Memorandum (Alternatives Analysis Criteria) submitted to Highline Water District.

After the alternatives analysis criteria have been finalized, the team will develop up to 4 project alternatives and analyze each alternative. The analysis will not only include the new reservoir but will also examine up to 3 options for replacing or not replacing the existing 0.25 MG elevated tank that may need to be demolished. Work associated with the 0.25 MG tank will be tracked separately as a stand-alone subtask in the budget. In addition to the analysis criteria evaluation, a hydraulic analysis will be performed on each alternative to confirm technical feasibility. The hydraulic analysis will evaluate:

- The pressure and velocity impacts to the system under peak hour demand conditions using extended period simulation.
- The impact to available fire flows throughout the system using steady state simulation. This analysis considers minimum allowed residual system pressure to be 20 psi during maximum day demand conditions per DOH regulations.
- Impacts to the other CIP improvements identified in the draft 2016 Water Comprehensive Plan and the future rezone recommendations near the reservoir site. Recommendations will be developed if CIP projects are modified with the recommended alternative.

A Technical Memorandum (Alternatives Analysis) will be generated and submitted to Highline Water District presenting the analysis for each alternative, including the hydraulic analysis.

A Decision Workshop will be conducted after the submission of the Alternatives Analysis Technical Memorandum. The Decision Workshop will include Highline Water District and the Stantec team. Alternatives and the ranking methodology will be presented at the workshop. The alternatives will be evaluated and a preferred alternative selected. A Technical Memorandum (Final Alternative) will be developed summarizing the Decision Workshop, final alternatives analysis criteria, and the final alternative selected.

Assumptions: Due to the short duration of this task, a formal Highline Water District technical memorandum review period will not be added to the task schedule. The technical memorandums will be submitted at the conclusion of each activity and if comments are provided by the District, the technical memorandums will be revised and submitted during the next task activity.



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 5 of 14

Reference: Mansion Hill Reservoir Relocation Project

Deliverables:

- Five paper copies and one electronic copy of the Technical Memorandum – Alternatives Analysis Criteria.
- Five paper copies and one electronic copy of the Technical Memorandum – Alternatives Analysis.
- Five paper copies and one electronic copy of the Technical Memorandum – Final Alternative.

Task 4: Preliminary Design

The preliminary design will be based on the preferred alternative selected from Task 3.

This task includes 7 subtasks, which are: surveying; geotechnical investigation; thirty percent design, budget development; schedule development; replacement options for the 0.25 MG elevated tank if it is to be removed; and Department of Health Submittals.

Subtask 4.1: Surveying

Stantec's in-house survey team shall conduct the necessary surveying at the Mansion Hill site. The survey limits will include the entire Mansion Hill site within the perimeter fence. It is necessary to survey the entire site so that proper information is available to: demolish the 5MG reservoir and the 0.25 MG elevated tank, grade the demolition areas, construct the new reservoir, properly locate existing utilities, and construct a new 0.25 MG tank if needed. Surveying is to include: Control Survey tied to WSDOT monumentation as available, on NAD83/2011 Washington North Zone horizontal, and NAVD/88 vertical datum; Topographic Survey to include 1-foot contours, location of existing on-site surface improvements, structures, and utilities; and limited Boundary Survey necessary to determine site property lines for mapping. Stantec will secure the services of Applied Professional Services (APS) to perform utility locates. It has been reported that old asbestos cement (AC) pipe pieces and sections may have been buried near the southwest corner of the site (near or within the new 5MG reservoir footprint). APS will use ground penetrating radar to help locate the buried AC pipes. Work associated with the buried AC pipe will be tracked separately as a stand-alone subtask in the budget.

It is anticipated that Sound Transit will acquire either an easement or fee title for some portion of the Mansion Hill site. The final property ownership of the Mansion Hill site configuration is currently undefined.



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 6 of 14

Reference: Mansion Hill Reservoir Relocation Project

Assumptions: Reviewing WSDOT Right of way plans, Sound Transit property take or purchase agreements, deeds, easements or setting of permanent property corners, Records of Survey, or Recording fees are not included in the scope. Stantec can provide a supplement to the scope of services for support in property transfer and coordination with WSDOT right-of-way plans as the project develops and this information is available.

Deliverables: Topographic survey map with detected underground utilities and above ground structures. The map will be provided in AutoCAD Civil 3D 2014, with one foot contours. Five map copies and one electronic map in PDF will be provided.

Subtask 4.2: Geotechnical Investigation

The purpose of this geotechnical investigation is to evaluate the soil conditions within the proposed development areas for use in foundation design of the new reservoir and to provide recommendations for site preparation, earthwork, temporary excavations, site drainage, utility placement, stormwater management, drainage, and erosion control.

We understand that the new tank will be supported on a shallow ring or mat foundation system. Foundation loads are expected to be high and site grading will include cuts and fills on the order of 4 feet or less. Stantec's in-house geotechnical group will conduct the geotechnical investigation.

The Geologic Map of the Des Moines Quadrangle, King County, Washington, indicates that the site is underlain by Vashon Glacial Till. Vashon Glacial Till generally consists of heterogeneous mixtures of sand, silt, and clay with gravel and cobbles. These materials are typically dense to very dense and nearly impermeable.

We propose to drill and sample four to six borings in the area of the proposed reservoir for subsurface exploration. The borings will range in depth from 20 to 30 feet below the existing site grades (or refusal), depending on the conditions encountered. Stantec will hire a drilling contractor.

In general, soil sampling will be conducted in intervals of 5 feet. Soil cuttings will be placed in clean dry 55-gallon steel drums and removed by the drilling contractor. Depth to groundwater will be measured during drilling; however, piezometers will not be installed as part of our investigation work because of the site's underlain soils (glacial till).

The explorations will be logged in the field and subsurface samples will be collected and transported to our office for further examination. At this time, laboratory testing will include



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 7 of 14

Reference: Mansion Hill Reservoir Relocation Project

moisture content analyses, sieve analyses, and Atterberg Limit determination if plastic soils are encountered. Stantec will secure the services of an analytical laboratory to conduct the soils testing.

A geotechnical report will be developed and it will present our conclusions and recommendations, including tank foundation design parameters, earthwork and grading, drainage considerations, erosion control, temporary excavations, utility trench and backfill requirements, pavement recommendations, soil compaction criteria and suitability of the on-site soil for reuse as fill.

Assumptions:

- Our scope of services do not include environmental site assessments (ESAs) or services including but not limited to, Phase I ESAs, Phase II ESAs, asbestos surveys and sampling, mold assessments, lead paint sampling, or any other type of environmental sampling and analysis. We can provide these services upon request from the District.
- Highline Water District to complete their review of the draft Geotechnical Investigation Report in one week.

Deliverables: Five paper copies and one electronic copy of the Draft and Final Geotechnical Investigation Report.

Subtask 4.3: Preliminary Design

A preliminary design will be developed for the construction of the new reservoir. In addition to the new reservoir, the design will include the demolition of the existing 5 MG reservoir and the 0.25 MG elevated tank if necessary, temporary erosion and sedimentation control, civil piping and details, and electrical controls.

Under this subtask, a feasibility study will be conducted on a 30-inch transmission main that may be impacted by the light rail alignment to the north of the Mansion Hill site. The transmission main begins at the Crestview Pump Station, near Military Road and S. 160th Street, and extends to the Mansion Hill site. The transmission main serves the 560 pressure zone.

The Stantec team will meet with Highline Water District during the preliminary design to ensure the design captures the needs of the District. If needed, the meetings will also address budget and schedule developments (Subtasks 4.4 and 4.5) and the replacement for the 0.25 MG elevated tank (Subtask 4.6) if it needs to be removed.



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 8 of 14

Reference: Mansion Hill Reservoir Relocation Project

Assumptions:

- Design package will include 12 to 14 drawings.
- Electrical controls and SCADA will match as closely as possible the controls and SCADA used at the existing 5 MG reservoir. Highline Water District's controls company, S&B, will be consulted during this task.
- The design package will show the reservoir shell but the actual shell design will be a design/build by the contractor. The reservoir foundation, piping, stairs, and appurtenances will be designed by the Stantec team.
- It will not be known until after the planning task is complete if the existing 0.25 MG elevated tank to be removed will need to be replaced with another tank or pump station, or not replaced at all. Additional design drawings will be needed if a replacement is necessary for the 0.25 MG tank. The additional drawings are not included in the level of effort for Phase 1 of this project.
- Six design progress meetings with Highline Water District, involving 4 to 6 Stantec team members. Four hours per meeting, this includes agenda and meeting preparation, and writing and distributing the minutes.
- Technical specifications will not be developed.
- Highline Water District will complete their review of the preliminary drawing set in two weeks.

Deliverables:

- Draft and final preliminary design drawings submitted electronically, along with two full size and five half size paper copies. Drawings will be developed using AutoCad 2014.
- Agenda and meeting minutes.

Subtask 4.4: Budget Development

The Stantec team will develop two budgets. One budget will involve the consultant team's cost to complete the work under Phase 1, as identified in this scope of services. The second budget will focus on the construction cost. The construction cost will be based on the results of the planning task and the preliminary design drawings. The construction budget will be reviewed by an



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 9 of 14

Reference: Mansion Hill Reservoir Relocation Project

independent person familiar with the construction required for this project. After the independent review comments have been addressed, the draft budget will be submitted to Highline Water District for review. Once Highline Water District has completed their review, the Stantec team will meet with the District to discuss review comments and finalize the budget.

Assumptions:

- Budget review meeting between the Stantec team and Highline Water District will consist of 4 to 5 Stantec team members. The meeting length will be 5 hours, which includes agenda and meeting preparation, and writing and distributing the meeting minutes.
- Highline Water District will complete their review of the draft budget in 2 weeks.

Deliverables:

- Five paper copies and one electronic copy of the draft and final opinion of probable construction cost budgets in Excel for coordination with Sound Transit.
- Agenda and meeting minutes.

Subtask 4.5: Schedule Development

The Stantec team will develop two schedules. One schedule will pertain to the consultant team's Phase 1 activities and the second schedule will incorporate Phase 2 (final permitting and design, Department of Health Project Report, final negotiations with Sound Transit, and bidding assistance) and construction. The Stantec team will meet with Highline Water District to discuss the District's review comments of the draft Phase 2 construction schedule.

Assumptions:

- Schedule review meeting between the Stantec team and Highline Water District will coincide with the draft budget review meeting.
- Highline Water District will complete their review of the draft budget in the same 2 week review period for the draft budget.

Deliverables: Five paper copies and one electronic copy of the draft and final Phase 2/construction schedule submitted in a Gantt format.



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 10 of 14

Reference: Mansion Hill Reservoir Relocation Project

Subtask 4.6: Replacement Options for the 0.25 MG Elevated Tank

To construct the replacement reservoir on the Mansion Hill site, the 0.25 MG elevated tank may need to be removed. The 0.25 MG tank currently serves the 560 pressure zone. If the tank needs to be removed, the pressure system will be analyzed to determine if the tank needs to be replaced with another tank or pump station, or can the system be adequately maintained without the replacement of the tank. Up to 3 options will be developed and construction costs associated with each option will be provided.

Deliverables: Five paper copies and one electronic copy of the draft and final Replacement Options Technical Memorandum.

Subtask 4.7: Department of Health Submittals

A Department of Health (DOH) Engineering Project Report will be required for this project. The Stantec team will prepare the draft Engineering Project Report under Phase 1. Based on the preliminary design, the intent is to submit the draft report to DOH for initial comments at the end of Phase 1. A review time of 2 months for DOH is assumed. The report will be finalized and resubmitted to DOH for final review and approval during Phase 2.

Highline Water District recently completed their draft Water Comprehensive Plan (WCP). The replacement of the 5 MG reservoir was included in the plan; however, the removal of the 0.25 MG elevated tank was not included in the WCP. As a result, an amendment to the WCP will need to be prepared and resubmitted to DOH if the 0.25 MG elevated tank is to be removed. Work associated with the amendment will be conducted by Carollo and tracked separately as a stand-alone subtask in the budget.

The Engineering Project Report and WCP amendment will be submitted to Highline Water District for review and the District's review comments will be addressed before the documents are submitted to DOH.

Assumptions:

- One meeting between the Stantec team and Highline Water District will be conducted to discuss the District's review of the draft documents. The Stantec team will consist of 3 to



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 11 of 14

Reference: Mansion Hill Reservoir Relocation Project

4 people. The meeting length will be 4 hours, which includes agenda, preparation, writing and distributing the meeting minutes.

- Highline Water District review of the Project Report will take 2 weeks.

Deliverables:

- Five paper copies and one electronic copy of the draft DOH Engineering Project Report.
- Five paper copies and one electronic copy of the draft and final WCP amendment.
- Agenda and meeting minutes.

Task 5: Permitting

Highline Water District will rely on Sound Transit's FWLE Final EIS documentation for NEPA and SEPA compliance, as well as other federal laws such as the Endangered Species Act. Once Task 4 (Preliminary Design) work is substantially complete, Sound Transit and Highline Water District will evaluate the proposed realignment of the water main and/or relocation of water storage facilities to determine if additional environmental review is required. Sound Transit shall be responsible for performing any additional environmental review in coordination with Highline Water District, including compliance with the National Historic Preservation Act if applicable.

The District will prepare the public notice (Notice of Intent) for a NPDES General Construction Stormwater permit from Ecology and apply for the permit using the required online form. The public notice will be posted in the paper(s) of record for two consecutive weeks. Once the SEPA process is complete, the District will submit the SEPA determination to the Department of Ecology (Ecology) via the online portal.

There are several permits that will be required from the City of SeaTac. These include: a land use permit (conditional use permit); a demolition and right-of-way permit for removing the reservoir, elevated tank, and water mains; and a site development permit (grading and drainage permit) required for site preparation including grading and excavation for the new reservoir and water mains. The Stantec team will initiate the preparation of these permit applications during Phase 1. Depending upon the level of detail provided in the conceptual design, some of the deliverables, such as the conditional use permit, demolition permit and/or grading permit application(s) may be able to be submitted under Phase 1. Permits not submitted under Phase 1 will be submitted during Phase 2. For example, the building permit will be submitted during Phase 2.

The permit process could impact the construction schedule due to long lead times in securing some of the permit/approvals, such as the conditional use permit or building permit because of changes to the design



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 12 of 14

Reference: Mansion Hill Reservoir Relocation Project

as a result of permit review comments and the potential permit backlog that exists with the permitting authorities at the time of permit submittal. To reduce possible construction schedule impacts, the Stantec team will initiate and/or complete required permit applications and materials as early as possible. During Phase 1, the project team will conduct a pre-application conference with the appropriate City of SeaTac staff to present the preliminary design and to receive comments on meeting the city's requirements during Phase 1. The City's comments will be addressed during Phase 1, if time allows. If not, the comments will be addressed early in Phase 2. The conditional use permit application will be prepared and submitted during Phase 1 since it potentially could have the longest lead time. The demolition, right-of-way, and grading/drainage permits applications will follow as the design progresses under Phases 1 and 2.

After submitting the permit applications we will respond to requests for additional information from the permit authorities and track the permits through the review process.

Optional Task: Stantec can assist with public involvement efforts if requested by preparing media materials and assisting with any public meetings. This task is not included in the budget.

Assumptions:

- The contractor will prepare and submit the application and exhibits for the Ecology NPDES General Construction Stormwater permit.
- The contractor will prepare the mechanical, electrical and plumbing permit applications.
- The permitting task includes attendance at a pre-application meeting with the City of SeaTac planning department and 2 coordination meetings with Highline Water District. All meetings to include 2 to 3 Stantec team members. Time allocated for meetings to be 4 hours, which includes travel, preparation and writing and distribution of meeting minutes.

Deliverables:

- One completed Conditional Use Permit application for the City of SeaTac.
- Agenda and meeting minutes.

Task 6: Sound Transit Coordination

The Stantec team will support Highline Water District in coordinating with Sound Transit. Coordination will include, but are not limited to: negotiating scope of services, budget, and schedule. The Stantec team will develop cost analysis of the improvements and identify the replacement of in-kind facilities and betterments. The team will also develop a construction cost analysis to quantify the value of the



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 13 of 14

Reference: Mansion Hill Reservoir Relocation Project

betterments within the proposed facilities. Primary Stantec negotiation members will be Greg Hill (Principal In Charge) and John Gillespie (Project Manager). Other team members may participate as needed.

Assumptions:

- Coordination team to comprise (on average) of 2 Stantec team members per coordination meeting. One negotiation meeting per month under Phase 1. Meetings to average a duration of 5 hours, which includes strategy development coordination with Highline Water District, and preparation, writing of meeting minutes, and distribution of minutes.

Deliverables:

- Meeting minutes
- Conference calls with Sound Transit, one call every two weeks.
- Prepare documents for Sound Transit review and address review comments.

Task 7: Preliminary Engineering for the 30-Inch Transmission Main

The proposed light rail and SR 509 alignments, located north of the Mansion Hill site, will cross an existing 30-inch ductile iron transmission main owned by Highline Water District. The transmission main supplies water from the Crestview Pump Station to the 560 pressure zone at the Mansion Hill site.

The Stantec team will evaluate the hydraulics of the existing 30-inch transmission main and make recommendations on replacing the main in kind or at a potentially reduced diameter such as 18 inch. Stantec will coordinate with Sound transit and WSDOT and advise the District on schedule for the relocation. A preliminary concept and budget will be developed for and included in a draft preliminary engineering memorandum. The Stantec team will meet with Highline Water District to discuss the District's review and comments of the draft memorandum. Highline Water District's comments will be addressed in the final preliminary engineering memorandum.

Assumptions:

- Highline Water District to provide the hydraulic model for the 30-inch water main.



April 26, 2016
Mr. Jeremy Delmar, P.E.
Page 14 of 14

Reference: Mansion Hill Reservoir Relocation Project

- Two meetings between the Stantec team and Highline Water District will be conducted. The Stantec team will consist of 3 to 4 people. The meeting length will be 4 hours, which includes preparation and writing and distributing the meeting minutes.
- The survey and design of the relocation of the 30-inch transmission main is not included in this scope of services. However, preliminary engineering diagrams, figures, and/or exhibits will be developed.

Deliverables:

- Draft and final Preliminary Engineering Memorandum, including associated preliminary engineering diagrams, figures, and/or exhibits.
- Agenda and meeting minutes.

Agenda Item No.: 5.4
Agenda Date: 5/04/16
Reviewed By: PA/me

SUBJECT: HWD Project 16-3 Mansion Hill Relocation
Authorize Phase 1 Preliminary Design Services Contract 16-60-05 with
Stantec Consulting Services, Inc.

CATEGORY	
<i>Executive</i>	<input type="checkbox"/>
<i>Administrative</i>	<input type="checkbox"/>
<i>Engineering/Operations</i>	<input checked="" type="checkbox"/>

FINANCIAL						
<i>Expenditures?</i>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
<i>Budgeted?</i>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
		<i>Amount:</i> \$ <u>647,172.06</u> <i>Plus WSST</i>				

ATTACHMENTS:

1. Resolution 16-5-4D
2. Attachment 1 – Contract 16-60-05 w/Exhibit(s) A, B and C

COMMENTS:

The first phase will be preliminary engineering, including survey, geotechnical investigation, planning, permitting and overall project scoping. The first phase includes assisting the District in contract negotiations with Sound Transit for cost reimbursement.

Staff recommends approval of this resolution.