

UPGRADING SIX SEWER PUMP STATIONS

EXHIBIT B

SCOPE OF WORK

PROJECT DESCRIPTION

The following project is based on recommendations identified in the *City of Longview Sewer System Capacity Report, dated February 2010*, and the *Pump Station Evaluations and Condition Survey Report, dated February 2010*. The project purpose is to upgrade or replace six (6) existing pump stations to improve access, provide new equipment, and in some cases increase capacity to provide for the next 20 years based on population and flow projections. The upgraded pump stations will meet applicable existing safety codes and environmental rules and regulations. Detailed design work and verification of predicted flows may result in modifications to the scope of work that may affect pump station and pipe sizing, location, and alignment. Improvements for each pump station will be designed in accordance with the current edition of the Washington State Department of Ecology's Criteria for Sewage Works Design (Orange Book) and applicable City standards.

The pump stations to be upgraded or replaced as part of this project are:

2725 32nd Avenue Pump Station (S7) – current capacity 350 gpm (single pump);
5343 Oriole Pump Station (S22) – current firm capacity is 100 gpm;
2402 38th Avenue Pump Station (S4) – current firm capacity is 400 gpm;
373 Roy Morse Pump Station (S19) – current firm capacity is 150 gpm;
3356 Olympia Way Pump Station (S1) – current firm capacity is approximately 1,500 gpm;
2566 Corman Road Pump Station (S36) – current firm capacity is 160 gpm.

It is anticipated that three sets of plans, specifications and contract documents will be prepared. The first set of documents will be for the S19 and S36 pump stations; the second set will be for the S7 and S22 pump stations; and the third set will be for the S1 and S4 pump stations.

The three proposed sets of plans and specifications consist of:

Set No. 1:

1. 373 Roy Morse Pump Station (S19) – The existing package pump station is anticipated to be replaced with a new duplex submersible pump station. It is anticipated that the existing wetwell will be rehabilitated (interior to be cleaned, patched and coated) and re-utilized. A new upper wetwell section and top with access hatches will replace the existing fiberglass portion of the existing wet well. New valve and flow meter vaults will be designed. Electrical, control and alarm systems will be contained within stainless steel, pedestal- mounted, climate-controlled panel(s) located within a kiosk adjacent to the pump station, and will have SCADA components installed, tested, and ready for integration into the City SCADA system. A receptacle and a manual transfer switch for a portable generator will also be included.

Two new submersible pumps (one duty, one redundant) with guide rails and lift chains/cables will be installed within the wetwell. Firm pump capacity will be approximately 150 gpm with one pump out of service. It is anticipated that constant speed pumps will be utilized.

Bypass pumping is anticipated to be required during construction.

2. 2566 Corman Road Pump Station (S36) – The existing submersible pump station is anticipated to be replaced with a new duplex submersible pump station. It is anticipated that the existing wetwell will be rehabilitated (interior to be cleaned, patched and coated) and re-utilized. A new upper wetwell section and top with access hatches will replace the existing upper portion of the wet well. New valve and flow meter vaults will be designed. Electrical, control and alarm systems will be contained within stainless steel, pedestal mounted, climate-controlled panels located along the edge of the ROW next to the station, and will have SCADA components installed, tested, and ready for integration into the City SCADA system. A receptacle and manual transfer switch for a portable generator will also be included.

Two new submersible pumps (one duty, one redundant) with guide rails and lift chains/cables will be installed within the wetwell. Firm pump capacity will be approximately 200 gpm with one pump out of service. It is anticipated that constant speed pumps will be utilized.

Bypass pumping is anticipated to be required during construction.

Set No. 2:

1. 2725 32nd Avenue Pump Station (S7) – The existing pump station is anticipated to be replaced with a new duplex submersible pump station. It is anticipated that the existing wetwell will be rehabilitated (interior to be cleaned, patched and coated) and re-utilized. A new upper wetwell section and top with access hatches will replace the existing upper portion of the wet well. New valve and flow meter vaults will be designed. Electrical, control and alarm systems will be contained within stainless steel, pedestal mounted, climate-controlled panels located along the edge of the ROW next to the station, and will have SCADA components installed, tested, and ready for integration into the City SCADA system. A receptacle and manual transfer switch for a portable generator will also be included.

Two new submersible pumps (one duty, one redundant) with guide rails and lift chains/cables will be installed within the wetwell. Firm pump capacity will be approximately 350 gpm with one pump out of service. It is anticipated that constant speed pumps will be utilized.

Bypass pumping is anticipated to be required during construction.

2. 5343 Oriole Pump Station (S22) – The existing submersible pump station is anticipated to be replaced with a new duplex submersible pump station. It is anticipated that the existing wetwell will be rehabilitated (interior to be cleaned, patched and coated) and re-utilized. A new upper wetwell section with access hatches will replace the existing upper portion of the wet well. New valve and flow meter vaults will be designed. Electrical, control and alarm systems will be contained within stainless steel, pedestal mounted, climate-controlled panels located along the edge of the ROW next to the station, and will have SCADA components installed, tested, and ready for integration into the City SCADA system. A receptacle and manual transfer switch for a portable generator will also be included.

Two new submersible pumps (one duty, one redundant) with guide rails and lift chains/cables will be installed within the wetwell. Firm pump capacity will be 100-150

gpm with one pump out of service. It is anticipated that constant speed pumps will be utilized.

Bypass pumping will be required during construction.

A right-of-way monument near the existing pump station will be re-established.

Set No. 3:

1. 3356 Olympia Way Pump Station (S1) – The existing pump station is anticipated to be replaced with a new submersible pump station with three or four pumps. It is anticipated that a new pump station facility will be constructed adjacent to the existing pump station. The new pump station will consist of a below grade wetwell, valve vault and flow meter vault and an above grade building, similar in design to the new Hudson Pump Station building, that will house electrical and control equipment, odor control equipment and a onsite standby electrical generator with automatic transfer switch.

It is anticipated that the existing pump station will remain in service until the new pump station is constructed and ready to be placed into full service. This will minimize the amount of bypass pumping required during construction. Once the new pump station is in full service the existing pump station facility will be demolished.

Three or four new submersible pumps (one lead, one lag, one redundant or one duty, one redundant for low flow and high flow conditions) with guide rails and lift chains/cables will be installed within the wetwell. Firm pump capacity will be 2,550-2,850 gpm with the largest pump out of service. It is anticipated that VFD's will be incorporated into the pumping design for this pump station. SCADA components will be installed, tested, and ready for integration into the City SCADA system.

It is anticipated that some bypass pumping will be required during construction when connecting to the influent and discharge pipelines.

3. 2402 38th Avenue Pump Station (S4) – The existing pump station is anticipated to be replaced with a new duplex submersible pump station. It is anticipated that a new pump station facility will be constructed adjacent to the existing pump station and within existing public right-of-way. The new pump station will consist of a below grade wetwell, valve vault and flow meter vault. Electrical, control and alarm systems will be contained within stainless steel, pedestal mounted, climate-controlled panels located along the edge of the ROW next to the station, and will have SCADA components installed, tested, and ready for integration into the City SCADA system. A receptacle and manual transfer switch for a portable generator will also be included.

Two or three new submersible pumps (one duty, one redundant or one lead, one lag, one redundant) with guide rails and lift chains/cables will be installed within the wetwell. Firm pump capacity will be 900-1,000 gpm with the largest pump out of service. It is anticipated that constant speed pumps will be utilized.

Bypass pumping is anticipated to be required during construction.

SCOPE OF WORK

PERIODIC REVIEW OF SCOPE, BUDGET AND SCHEDULE BY ENGINEER AND CITY

The following scope of work and associated budget and schedule have been prepared by Engineer and reviewed with the City based on currently known information related to the project and reasonable project assumptions. The scope of work, budget and schedule are subject to change based on new information that may become available, or issues that arise that are beyond the control of the Engineer and/or the City. Since the budget and schedule are based on the identified scope of work, the Engineer and the City agree they will formally review the scope, budget and schedule as appropriate but at least every three months, or when requested by either the Engineer or the City. These reviews are intended to minimize the risk to the City and the Engineer of significant out of scope work being performed that could impact the Engineer's ability to complete the project within the original budget and schedule. If out of scope work is identified, the Engineer will notify the City of the need for out of scope work, the specific out of scope work required, and an estimate of cost and time required to perform the out of scope work. The City can then determine if the out of scope work is required. The Engineer and the City will then determine if a contract amendment is required to incorporate the out of scope work into the contract and will execute a contract amendment as appropriate.

ASSUMPTIONS

The identified Scope of Work is based on the following assumptions. In the event that any ultimate facts or events differ from these assumptions, Engineer's scope of work, schedule and compensation shall be adjusted accordingly.

- A. The project is funded with City funds only and no outside funding requirements will apply.
- B. The City will provide Engineer with copies of available drawings and other relevant information for each pump station.
- C. All plan drawings will be developed in AutoCAD Civil 3D 2015.
- D. Engineer will have lead responsibility for coordination with Cowlitz PUD, Comcast, Cascade Networks, Century Link and other non-City utilities identified within the public right-of-way.
- E. Washington Department of Ecology approval of plans and specifications is not required.
- F. Engineer will contact utility notification center for utility locates prior to performing field survey work and geotechnical boring work.
- G. Survey work will be performed based on NAVD88 vertical datum and NAD83/91 horizontal datum.
- H. Engineer will establish 2 survey control points (benchmarks) at each pump station site for Engineer's use and for use by construction contractors.
- I. A SEPA Checklist will not be required to be prepared by Engineer for any of the project bid packages.
- J. Flygt submersible pumps will be the basis of design and specification development for each of the pump stations.

- K. A geotechnical boring will be completed and monitoring well installed, samples obtained, and lab analysis performed at each new wetwell location.
- L. Geotechnical test pits will be excavated at each pump station site that does not have a boring advanced. Engineer assumes City will excavate and backfill the test pits.
- M. Existing wetwells to be re-utilized will be rehabilitated through cleaning, patching of concrete, and application of an appropriate coating. Floor slabs in existing wetwells may also need to be modified.
- N. Design of electrical and control panels will be based on City standard panel designs.
- O. Engineer assumes City field staff will participate in review of the design documents as part of the City's review team.
- P. No new easements are required for any of the pump stations.
- Q. No new property is required to be acquired by the City for any of the pump station sites.
- R. Site access and right-of-way permit, if required, for geotechnical boring and test pit work will be provided to Engineer by the City.
- S. Drilling cuttings from the geotechnical boring work will be drummed and disposed of offsite by the drilling subcontractor.
- T. Geotechnical explorations do not include environmental assessments, and each pump station site is assumed to be "clean" regarding contaminated and hazardous materials.
- U. The existing Olympia Way Pump Station may have materials containing lead or asbestos. It is assumed the City has or will perform a hazardous material evaluation for the existing structure and will make evaluation results available to the Engineer.
- V. Up to four property corners will be required to be researched, set or reset.
- W. No boundary line adjustment work is required for any of the pump station sites.
- X. No cultural or historical resource evaluation or investigation is required to be performed for any of the pump stations.
- Y. No wetland, biological or habitat investigation or reports are required for this project.
- Z. None of the pump station sites are located within City defined Critical Areas and no special reports such as a hydrogeological evaluation will be required for any of the sites.
- AA. New wetwells to be designed and constructed for 3356 Olympia Way Pump Station (S1) and 2402 38th Avenue Pump Station (S4) will be designed and constructed as caissons of either pre-cast or cast-in-place concrete depending on final wetwell sizing.
- BB. Pumps will be sized based on the referenced 2010 reports unless pump run time evaluations indicate different sizing is necessary. This is appropriate due to the built out condition of each of the areas served by the various pump stations.
- CC. Inlet flow drops for 3356 Olympia Way Pump Station (S1) and 2402 38th Avenue Pump Station (S4) if required will be similar to the final inlet drop implemented at the City's new Hudson Pump Station facility.
- DD. Construction traffic control plans will be required for the 2402 38th Avenue Pump Station (S4); other pump stations will use standard plans for single-lane closures.

- EE. Building, mechanical, and fire safety permits will be required for 3356 Olympia Way (S4). Applications to be prepared and submitted to City Community Development Department by City staff. Engineer will provide drawings and design criteria as required for the applications.
- FF. No site frontage improvements such as curb, gutter and sidewalk are required for any of the pump station sites. Frontage or similar work will be limited to removal and replacement of features necessary to the pump station construction.
- GG. No temporary construction easements will be required for any of the pump stations.
- HH. A SWPPP addressing stormwater management during construction will be prepared for each construction contract.
- II. No stormwater modeling or stormwater report is required for pump stations within or adjacent to the public right-of-way. For the Olympia Way pump station it is assumed a roof downspout infiltration trench will be acceptable with site drainage connected to the City's storm sewer system similar to what was done at the Hudson Pump Station site.
- JJ. Groundwater removed as part of construction will be required to be settled and monitored for turbidity prior to discharge to the City's storm sewer system or the sanitary sewer system. A plan will be developed for groundwater management will be developed for each site.
- KK. City standard details will be utilized as applicable.
- LL. Public involvement is not required for this project.
- MM. Landscaping will be required at the 373 Roy Morse Park and 3356 Olympia Way pump stations. Other sites will be restored to pre-construction conditions or better.
- NN. City will provide special inspections or contract separately with a firm to provide special inspections for structural reinforcing, concrete cylinders, and compaction testing during construction.

The following tasks will be performed for each of the three sets of design documents to be prepared for this project.

MEETINGS AND PROJECT ADMINISTRATION

Engineer shall provide project administration and attend meetings as follows:

General project administration.

- A. Adjust the scope, schedule and budget as necessary and update the scope, schedule and budget as the project proceeds.
- B. Prepare monthly narrative progress reports during project and submit them to the City for review.
- C. Review the plans, specifications and contract documents with City at the completion of the pre-design phase (approximately 15%) and again at the 50%, 90% and 100% completion stages.

- D. City representatives are invited to attend Engineer's regular project team meetings held at Engineer's Longview office. These meetings are scheduled to be held weekly through 15% design completion and then every two weeks thereafter.

DESIGN PHASE ENGINEERING SERVICES

Preliminary Design Phase – Basic Engineering

During the Preliminary Design Phase, the Engineer shall:

- A. Consult with the City and to verify the general scope, extent, character and schedule of the project.
- B. Research, evaluate and prepare preliminary design documents that consist of the final design criteria and site layout, preliminary plans of the pump stations, outline specifications and written descriptions of the project. Provide weekly in-house quality control meetings with Engineer's design team and City personnel and hold a formal review meeting with the City at completion of the pre-design work which is estimated to be about 15% completion of the design.
- C. Engineer will prepare an opinion of probable construction cost for each pump station with a 25% contingency for use in verifying the City has budgeted sufficient funds for implementation of the project.
- D. Coordinate Engineer's field surveying work with utility locate service to verify the location of the other utilities.
- E. Advise the City if additional data or services not included in this contract are necessary and assist the City in obtaining such data and services.
- F. Provide Preliminary Design Phase deliverables as follows:
 - 1. Prepare monthly progress reports and submit to City.
 - 2. Submit a preliminary opinion of total project construction cost to the City for review.
 - 3. A recommendation to purchase additional land, if necessary, for each pump station.

Final Design Phase – Basic Engineering

During the Final Design Phase, the Engineer shall:

- A. Prepare final design plans, specifications and contract documents to show the general scope, extent and character of the work to be performed by a contractor, hereafter called Plans and Specifications. Each set of specifications will be prepared in conformance with the Construction Specifications Institute (CSI) format as modified by the City.
- B. Plans for upgrades or replacement of 373 Roy Morse Pump Station (S19) and 2566 Corman Road Pump Station (S36) are anticipated to consist of approximately thirty three (33) drawing sheets (measuring 22"x34"). Plans for the pump stations are anticipated to consist of approximately two (2) general Plans, four (4) civil Plans, two (2) mechanical Plans, one (1) architectural Plan, one (1) structural Plan and fourteen (14) electrical/control Plans, and seven (7) standard and miscellaneous detail Plans.
- C. Plans for upgrades or replacement of 2725 32nd Avenue Pump Station (S7) and 5343 Oriole Pump Station (S22) are anticipated to consist of approximately thirty three (33)

drawing sheets (measuring 22"x34"). Plans for the pump stations are anticipated to consist of approximately two (2) general Plans, four (4) civil Plans, two (2) mechanical Plans, one (1) architectural Plan, one (1) structural Plan and fourteen (14) electrical/control Plans, and seven (7) standard and miscellaneous detail Plans. Documents and plans from the first set will be re-utilized to the greatest extent possible in development of this set of documents.

- D. Plans for upgrades or replacement of 3356 Olympia Way Pump Station (S1) and 2402 38th Avenue Pump Station (S4) are anticipated to consist of approximately seventy nine (79) drawing sheets (measuring 22"x34"). Plans for the pump stations are anticipated to consist of approximately two (2) general Plans, eight (8) civil Plans, six (6) mechanical Plans, six (6) architectural Plans, two (2) structural Plans and forty three (43) electrical/control Plans, ten (10) standard and miscellaneous detail Plans, and one traffic control Plan.
- E. Each set of contract documents and technical specifications will be one volume with approximately 500-600 pages (8 ½" x 11"). The City will prepare the upfront contract documents consisting of: Invitation to Bid; Instructions to Bidders; Bid Proposal; Notice of Award; Agreement and Bond forms; General and Supplementary Conditions; Prevailing Wage Rates.

Engineer will prepare all remaining technical specifications for each set of document, including the Division 01 Technical Specification sections.

It is anticipated that the majority of the construction contract documents prepared for the first set of plans and specifications will be able to be re-utilized with appropriate changes and modifications for the second and third sets of specifications.

- F. Bi-weekly in-house quality control meetings will be held by Engineer's project team. City personnel are welcome to attend these meetings. Formal review meetings will be held with the City at the 50%, 90% and 100% completion stages of the work.
- G. Prepare bid items and quantities and assist in the preparation of other related documents. The City will prepare the contract forms, general conditions and supplementary conditions, bid forms, invitations to bid, and other related documents.
- H. Advise the City of any adjustments to the latest opinion of probable project construction costs resulting from changes in general scope, extent, or character or design requirements of the project or construction costs. Furnish to City a revised opinion of probable project construction costs based on the Plans and specifications. The opinion of probable project construction costs is scheduled to be updated at the 50% and 90% submittal stages and will be finalized upon completion of each set of contract documents.
- I. Provide electrical design engineering services through a subcontract with a professional electrical engineering firm.
- J. Provide structural design engineering services through a subcontract with a professional structural engineering firm.
- K. Provide technical criteria, written descriptions and data to the City for filing applications for permits with or obtaining approvals of such governmental authorities as have jurisdiction to approve the design and/or construction of the project, and assist City in consultations with appropriate authorities.

- L. Coordinate with other utilities. Establish point of contact, provide Plans of each pump station to them for review, and coordinate and meet with utilities as necessary.
- M. Final Design Phase Deliverables include the following:
 - 1. Monthly progress reports submitted to City.
 - 2. Updates of schedule and budget at the 60% design stage, submitted to City.
 - 3. Submit updated opinion of probable project construction cost at the 60%, 90% and 100% completion stages.
 - 4. Plans and project descriptions to allow the City to file applications for permits and approvals.
 - 5. Submit 50% and 90% complete plans and specifications to the City for review and comment in electronic .pdf format.
 - 6. Submit final (100% complete) plans and specifications to City in electronic .pdf and AutoCAD format.

ADDITIONAL SERVICES OF ENGINEER DURING DESIGN

Additional services which are included in this contract are as follows:

- A. Provide a field survey for locations of the pump station properties, other utilities, right-of-way, property lines adjacent to pump station sites, two benchmarks at each pump station site, and for preparation of plans during design. Survey will identify and map bypass pumping routes for sanitary sewage, groundwater management discharge points, and will tie in the storm manhole at the intersection of Pacific Way and Corman Road.
- B. Provide a geotechnical evaluation to determine foundation and dewatering requirements for each facility through a subcontract with a professional geotechnical engineering firm.
- C. Additional Services Deliverables include the following:
 - 1. A geotechnical soils report with findings and recommendations for foundation and dewatering

BIDDING PHASE ENGINEERING SERVICES

Following approval of the contract documents by the City and after receiving written authorization to proceed with the Bidding Phase, Engineer shall:

- A. Coordinate with City to provide electronic bidding documents to be placed on the Builders Exchange Web site.
- B. Prepare for and attend pre-bid conference for each bid package.
- C. Receive questions from plan holders, potential bidders and suppliers and prepare appropriate answers for City to incorporate into addenda.
- D. Prepare conformance documents incorporating addenda changes for use during construction.
- E. Bidding and Award Phase Deliverables include the following:
 - 1. Information to be incorporated into addenda.

2. Electronic copies in .pdf and AutoCAD format of conformance documents with all addenda incorporated.

CONSTRUCTION PHASE ENGINEERING SERVICES

It is anticipated that construction of each set of pump stations will take 9-12 months. At the time of execution of this contract, the City anticipates self-performing construction management and on-site field inspection.

Limitations of Responsibility. Engineer shall not be responsible for the acts or omissions of any Contractor, or of any subcontractor or supplier, or any of the Contractor(s)' or subcontractor's or supplier's agents or employees or any other persons (except Engineer's own employees and agents) at the site or otherwise furnishing or performing any of the Contractor(s)' work.

After written authorization to proceed with construction phase services, the Engineer shall provide the following services during construction of each of the three sets of pump stations:

A. Project Management

Throughout the duration of the project, the Project Manager's activities will include oversight of the Engineer's Construction Phase Support Team operations, including on-site field visits, office engineering, and sub-consultants, answering questions regarding contract administration, and offering advice to the City on construction issues.

B. Review of Submittals, Substitutions and Operation and Maintenance Manuals

Engineer will review and comment on the Contractor's shop drawings, equipment and material submittals, testing reports, and construction schedule, for conformance with the requirements of the Contract Documents. For budgeting purposes it is assumed that 70 separate and distinct submittal packages will be processed, including one re-submittal for 20% of the packages. Processing and reviewing submittals in excess of this amount shall be considered additional work.

The Engineer will review operation and maintenance manuals, schedules, guarantees, bonds and certificates of inspection, tests and approvals which are to be assembled by Contractor(s) in accordance with the Contract Documents (such review will only be to determine that their content complies with the requirements of, and in the case of certificates, tests and approvals that the results certified indicate compliance with, the Contract Documents); and shall transmit them to the City with written comments.

C. Issue Interpretations and Clarifications and Assist with Negotiations of Change Orders

Engineer shall provide written interpretation of Contract Documents and other information in support of the City's construction manager and/or on-site field inspector and in response to the Contractors inquiries. Engineer shall also assist the City with change orders and negotiating the cost of change orders with the Contractor.

D. On-Site Observation

The City is providing a construction manager and on-site field inspector separate from this Contract. The Engineer will perform the following services for each of the three construction contracts:

1. Attend Preconstruction conference.
2. Attend up to 15 construction progress meetings at the request of the City.
3. Provide geotechnical inspection for installation of caisson wetwells and

dewatering wells.

4. Provide engineering field assistance to the City's construction manager and/or in-field inspector on an as needed/requested basis.
5. Electrical inspection and start-up testing which includes site visits by the electrical consultant.
6. Assist in preparing preliminary and final checklist for the completed construction and completion of punch list items.
7. Conduct a site inspection with the City and construction contractor to determine if the work is substantially complete and a final inspection to determine if the completed work is acceptable.

E. Construction Record Drawings

As the Engineer of Record, Engineer will prepare construction record drawings incorporating revisions of the project as the Contractor has recorded them. AutoCAD electronic files of the final construction record drawings plus one full-size set and one half-size set will be provided to the City.

CONSTRUCTION MANAGEMENT AND OBSERVATION SERVICES

It is the City's intent to self-perform construction management and observation for the three construction contracts. At its sole discretion, the City may request Engineer provide such services for any or all three of the construction contracts. Upon such a request, the City and the Engineer may negotiate a mutually acceptable scope of services and budget for such work and a contract amendment will be executed to incorporate such work into the contract.

SCHEDULE MILESTONES:

The Engineer has assumed construction for the first set of pump stations will begin in July or August 2015 and be complete by May 2016. Engineer has assumed construction for the second and third sets of pump stations will begin in April or May 2016 and be complete in April 2017. The following table presents scheduled start and end dates for project milestones:

<i>Milestones:</i>	<i>Start Date</i>	<i>End Date</i>
Notice to Proceed	March 16, 2015	
Perform Survey Field Work	March 16, 2015	March 31, 2015
Perform Geotechnical Field Work	March 16, 2015	April 3, 2015
Review Existing PS Drawings and Information	March 16, 2015	April 3, 2015
Develop Design Criteria for First Set of Pump Stations	April 6, 2015	April 16, 2015
Develop Preliminary Site Plan for First Set of Pump Stations	April 13, 2015	April 24, 2015
Develop Design Criteria for Second & Third Sets of Pump Stations	April 13, 2015	April 24, 2015
Develop Preliminary Site Plans for Second & Third Sets of Pump Stations	April 27, 2015	May 11, 2015
Prepare 50% Design Documents for First Set of Pump Stations	April 27, 2015	May 28, 2015
Prepare Preliminary Opinion of Construction Costs for City Review	May 28, 2015	June 1, 2015
Conduct 50% Design Review Meeting with City	June 4, 2015	June 4, 2015
Prepare 90% Design Documents for First Set of Pump Stations	June 5, 2015	June 26, 2015

Conduct 90% Design Review Meeting with City	July 2, 2015	July 3, 2015
Prepare 100% Design Documents for First Set of Pump Stations	July 2, 2015	July 13, 2015
Conduct 100% Design Review Meeting with City	July 15, 2015	July 15, 2015
Bid Phase for First Set of Pump Stations	July 27, 2015	August 17, 2015
Construction Phase for First Set of Pump Stations	September 17, 2015	March 31, 2015
Prepare 50% Design Documents for Second Set of Pump Stations	August 18, 2015	Oct. 6, 2015
Prepare 50% Design Documents for Third Set of Pump Stations	August 18, 2015	Oct. 6, 2015
Conduct 50% Design Review Meeting with City	October 29, 2015	October 29, 2015
Prepare 90% Design Documents for Second & Third Sets of Pump Stations	October 30, 2015	December 18, 2015
Conduct 90% Design Review Meeting with City	January 6, 2016	January 6, 2016
Prepare 100% Design Documents for Second & Third Sets of Pump Stations	January 7, 2016	February 1, 2016
Conduct 100% Design Review Meeting with City	February 3, 2016	February 3, 2016
Bid Phase for Second & Third Set of Pump Stations	February 15, 2016	March 9, 2016
Construction Phase for Second & Third Sets of Pump Stations	March 28, 2016	December 29, 2016
Project Closeout	April 3, 2017	April 28, 2017

Note: Schedule milestones will be adjusted on a day for day basis for any delay in the assumed start date.