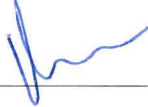


**CITY OF MARYSVILLE AGENDA BILL**

**EXECUTIVE SUMMARY FOR ACTION**

**CITY COUNCIL MEETING DATE: November 25, 2019**

<b>AGENDA ITEM:</b>	
Wastewater Collection System Infiltration & Inflow Evaluation	
<b>PREPARED BY:</b>	<b>DIRECTOR APPROVAL:</b> 
Matthew Eyer, Storm/Sewer Supervisor	
<b>DEPARTMENT:</b>	
Public Works	
<b>ATTACHMENTS:</b>	
Two copies of the Professional Services Agreement with BHC	
<b>BUDGET CODE:</b>	<b>AMOUNT:</b>
401 533042453580 541000 S1920	\$140,964
<b>SUMMARY:</b>	
<p>The Wastewater Collection System Infiltration and Inflow Evaluation is being performed because it is a requirement of the City's National Pollution Discharge Elimination System (NPDES) Waste Discharge Permit WA0022497. Inflow and Infiltration (I&amp;I) is the unintended flow of ground water and/or surface water into the sewer collection system. This evaluation will determine if I&amp;I into the sewer collection system is excessive and if additional efforts are needed to address it. Tasks to be performed as part of this evaluation will include analysis of existing lift station data, localized flow monitoring and system smoke testing when warranted. The deliverables of this evaluation will be a report that will be submitted to the Department of Ecology and that will be incorporated into the capital facility portion of the Sewer Comprehensive plan update as needed. This project was budgeted for as part of the 2019-2020 Biennial Budget for the amount of \$150,000.</p>	

**RECOMMENDED ACTION:**

Staff recommends that Council authorize the Mayor to sign and execute the Professional Services Agreement for the Wastewater Collection System Infiltration & Inflow Evaluation with BHC Consulting, Inc. in the amount of \$140,964.

**RECOMMENDED MOTION:**

I move to authorize the Mayor to sign and execute the Professional Services Agreement for the Wastewater Collection System Infiltration & Inflow Evaluation with BHC Consulting, Inc. in the amount of \$140,964.

**PROFESSIONAL SERVICES AGREEMENT BETWEEN  
CITY OF MARYSVILLE  
AND BHC CONSULTANTS**

**THIS AGREEMENT** (“Agreement”) is made and entered into as of the date of the last signature below, by and between the City of Marysville, a Washington State municipal corporation (“City”), and BHC Consultants, a limited liability corporation, licensed/incorporated in Washington, organized under the laws of the state of Washington, located and doing business at 1601 Fifth Avenue Suite 500, Seattle, WA 98101 (“Consultant”).

In consideration of the terms, conditions, covenants, and performances contained herein, the parties hereto agree as follows:

**1. SCOPE OF SERVICES.** The Consultant shall provide the work and services described in the attached **EXHIBIT A**, incorporated herein by this reference (the “Services”). All services and materials necessary to accomplish the tasks outlined in the Scope of Services shall be provided by the Consultant unless noted otherwise in the Scope of Services or this Agreement. All such services shall be provided in accordance with the standards of the Consultant’s profession.

**2. TERM.** The term of this Agreement shall commence on December 10, 2019 and shall terminate at midnight on December 31, 2020. The parties may extend the term of this Agreement by executing a written supplemental amendment.

**3. COMPENSATION.** The Consultant shall be paid by the City for Services rendered under this Agreement as described in **EXHIBIT A** and as provided in this section. In no event shall the compensation paid to Consultant under this Agreement exceed One Hundred Forty Thousand Nine Hundred Sixty Four Dollars (**\$140,964**) within the term of the Agreement, including extensions, without the written agreement of the Consultant and the City. Such payment shall be full compensation for the Services and for all labor, materials, supplies, equipment, incidentals, and any other expenses necessary for completion.

The Consultant shall submit a monthly invoice to the City for Services performed in the previous calendar month in a format acceptable to the City. The Consultant shall maintain time and expense records and provide them to the City upon request.

The City will pay timely submitted and approved invoices received before the 20th of each month within thirty (30) days of receipt.

**4. CONSULTANT’S OBLIGATIONS.**

**4.1 MINOR CHANGES IN SCOPE.** The Consultant agrees to accept minor changes, amendments, or revisions to the scope of the Services, as may be required by the City, when such

changes, amendments, or revisions will not have any impact on the cost of the Services or the proposed delivery schedule.

**4.2 ADDITIONAL WORK.** The City may desire to have the Consultant perform additional work or services which are not identified in the scope of the Services. If the parties agree to the performance of additional work or services, the parties will execute a written supplemental amendment detailing the additional work or services and compensation therefore. In no event will the Consultant be compensated for preparing proposals for additional work or services. In no event shall the Consultant begin work contemplated under a supplemental amendment until the supplemental amendment is fully executed by the parties.

**4.3 WORK PRODUCT AND DOCUMENTS.** The work product and all documents produced under this Agreement shall be furnished by the Consultant to the City, and upon completion of the Services shall become the property of the City, except that the Consultant may retain one copy of the work product and documents for its records. The Consultant will be responsible for the accuracy of the Services, the work product, and all documents produced under this Agreement, even though the Services have been accepted by the City.

In the event that the Consultant defaults on this Agreement or in the event that this Agreement is terminated prior to the completion of the Services or the time for completion, all work product and all documents and other materials produced under this Agreement, along with a summary of work as of the date of default or termination, shall become the property of the City. The summary of Services provided shall be prepared at no additional cost to the City. Upon request, the Consultant shall tender the work product, all documents, and the summary to the City within five (5) business days. Tender of said work product shall be a prerequisite to final payment under this Agreement.

The Consultant will not be held liable for reuse of work product or documents produced under this Agreement or modification of the work product or documents for any purpose other than those identified in this Agreement without the written authorization of the Consultant.

**4.4 PUBLIC RECORDS ACT.** Consultant acknowledges that the City is subject to the Public Records Act, chapter 42.56 RCW (the "PRA"). All records owned, used, or retained by the City are public records subject to disclosure unless exempt under the PRA, whether or not the records are in the possession or control of the City or Consultant. All exemptions to the PRA are narrowly construed.

a. **Confidential Information.** Any records provided to the City by the Consultant which contain information that the Consultant in good faith believes is not subject to disclosure under the PRA shall be marked "Confidential" and shall identify the specific information that the Consultant in good faith believes is not subject to disclosure under the PRA and a citation to the statutory basis for non-disclosure.

b. **Responding to Public Records Requests.** The City shall exercise its sole legal judgment in responding to public records requests.

- (1) The City may rely upon the lack of notification from the Consultant in releasing any records that are not marked “Confidential.”
- (2) If records identified as “Confidential” by the Consultant are responsive to a PRA request, the City will seek to provide notice to Consultant at least ten (10) business days before the date on which the City anticipates releasing records. The City is under no obligation to assert any applicable exemption on behalf of the Consultant. The Consultant may seek, at its sole cost, an injunction preventing the release of information which it believes is protected. In no event will the City have any liability to Consultant for any failure of the City to provide notice prior to release.
- (3) If the City, in its sole legal judgment, believes that the Consultant possesses records that (1) are responsive to a PRA request and (2) were used by the City, the City will request the records from the Consultant. The Consultant will, within ten (10) business days:
  - i. Provide the records to the City in the manner requested by the City;
  - ii. Obtain a court injunction, in a lawsuit involving the requester, covering all, or any confidential portion of, the records and provide any records not subject to the court injunction; or
  - iii. Provide an affidavit, in a form acceptable to the City Attorney, specifying that the Consultant has made a diligent search and did not locate any requested documents.

c. **Indemnification.** In addition to its other indemnification and defense obligations under this Agreement, the Consultant shall indemnify and defend the City from and against any and all losses, penalties, fines, claims, demands, expenses (including, but not limited to, attorneys fees and litigation expenses), suits, judgments, or damages (collectively “Damages”) arising from or relating to any request for records related to this Agreement, to the extent such Damages are caused by action or inaction of the Consultant. This indemnification and defense obligation shall survive the expiration or termination of this Agreement.

**4.5 MAINTENANCE/INSPECTION OF RECORDS.** The Consultant shall maintain all books, records, documents, and other evidence pertaining to the costs and expenses allowable under this Agreement in accordance with generally accepted accounting practices. All such books and records required to be maintained by this Agreement shall be subject to inspection and audit by representatives of the City and/or the Washington State Auditor at all reasonable times, and the Consultant shall afford the proper facilities for such inspection and audit.

Representatives of the City and/or the Washington State Auditor may copy such books, accounts, and records where necessary to conduct or document an audit. The Consultant shall preserve and make available all such books of account and records for a period of three (3) years after final payment under this Agreement. In the event that any audit or inspection identifies any discrepancy in such financial records, the Consultant shall provide the City with appropriate clarification and/or financial adjustments within thirty (30) calendar days of notification of the discrepancy.

**4.6 INDEMNITY.**

a. **Indemnification and Hold Harmless.** The Consultant shall defend, indemnify, and hold the City, its officers, officials, employees, and volunteers harmless from any and all claims, injuries, damages, losses, or suits including attorney fees, arising out of or resulting from the acts, errors, or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

b. Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence.

c. The provisions of this Section 4.6 shall survive the expiration or termination of this Agreement.

d. The Consultant hereby knowingly, intentionally, and voluntarily waives the immunity of the Industrial Insurance Act, Title 51 RCW, solely for the purposes of the indemnity contained in subpart "a" of this Section 4.6. This waiver has been mutually negotiated by the parties.

\_\_\_\_\_ (City Initials)

RAD <sup>Consultant</sup> (~~Contractor~~ Initials)

RAD 11/6/2019

**4.7 INSURANCE.**

a. **Insurance Term.** The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the Services hereunder by the Consultant, its agents, representatives, or employees.

b. **No Limitation.** Consultant's maintenance of insurance as required by the Agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

c. **Minimum Scope of Insurance.** Consultant shall obtain insurance of the types and coverage described below:

- (1) Automobile Liability insurance covering all owned, non-owned, hired, and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage.
- (2) Commercial General Liability insurance shall be at least as broad as ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, stop-gap independent contractors and personal injury and advertising injury. The City shall be named as an additional insured under the Consultant's Commercial General Liability insurance policy with respect to the Services performed for the City using an additional insured endorsement at least as broad as ISO CG 20 26.
- (3) Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
- (4) Professional Liability insurance appropriate to the Consultant's profession.

d. **Minimum Amounts of Insurance.** Consultant shall maintain the following insurance limits:

- (1) Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.
- (2) Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
- (3) Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.

e. **Other Insurance Provision.** The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain that they shall be primary insurance as respect the City. Any Insurance, self-insurance, or self-insured pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

f. **Acceptability of Insurers.** Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

g. **Verification of Coverage.** The Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the Services.

h. **Notice of Cancellation.** The Consultant shall provide the City with written notice of any policy cancellation within two business days of the Consultant's receipt of such notice.

i. **Failure to Maintain Insurance.** Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five (5) business days notice to the Consultant to correct the breach, immediately terminate the Agreement or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.

j. **Insurance to be Occurrence Basis.** Unless approved by the City all insurance policies shall be written on an "Occurrence" policy as opposed to a "Claims-made" policy. The City may require an extended reporting endorsement on any approved "Claims-made" policy. Professional liability insurance may be written on a "Claims-made" basis if it is maintained for a period of three (3) years following completion of the services.

k. **City Full Availability of Consultant Limits.** If the Consultant maintains higher insurance limits than the minimums shown above, the City shall be insured for the full available limits of Commercial General and Excess or Umbrella liability maintained by the Consultant, irrespective of whether such limits maintained by the Consultant are greater than those required by this Agreement or whether any certificate of insurance furnished to the City evidences limits of liability lower than those maintained by the Consultant.

**4.8 LEGAL RELATIONS.** The Consultant shall comply with all federal, state, and local laws, regulations, and ordinances applicable to the Services to be performed under this Agreement. The Consultant represents that it and all employees assigned to perform any of the Services under this Agreement are in full compliance with the statutes of the State of Washington governing the Services and that all personnel to be assigned to the Services are fully qualified and properly licensed to perform the work to which they will be assigned.

**4.9 INDEPENDENT CONTRACTOR.**

a. The Consultant and the City understand and expressly agree that the Consultant is an independent contractor in the performance of each and every part of this Agreement. The Consultant expressly represents, warrants, and agrees that the Consultant's status as an independent contractor in the performance of the Services required under this Agreement is consistent with and meets the six-part independent contractor test set forth in RCW 51.08.195 or as hereafter amended. The Consultant, as an independent contractor, assumes the entire responsibility for carrying out and accomplishing the Services required under this Agreement. The Consultant shall not make

a claim of City employment and shall not claim any related employment benefits, social security, and/or retirement benefits.

b. The Consultant shall be solely responsible for paying all taxes, deductions, and assessments, including but not limited to federal income tax, FICA, social security tax, assessments for unemployment and industrial injury, and other deductions from income which may be required by law or assessed against either party as a result of this Agreement. In the event the City is assessed a tax or assessment as a result of this Agreement, the Consultant shall pay the same before it becomes due.

c. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work to the Services that the Consultant performs under this Agreement.

d. Prior to commencement of Services, the Consultant shall obtain a business license from the City.

#### 4.10 EMPLOYMENT.

a. The term “employee” or “employees” as used herein shall mean any officers, agents, or employee of the Consultant.

b. Any and all employees of the Consultant, while performing any Services under this Agreement, shall be considered employees of the Consultant only and not of the City. The Consultant shall be solely liable for: (1) any and all claims that may or might arise under the Workman’s Compensation Act, Title 51 RCW, on behalf of any said employees while performing any Services under this Agreement, and (2) any and all claims made by any third party as a consequence of any negligent act or omission on the part of the Consultant or its employees while performing any Services under this Agreement.

c. The Consultant represents, unless otherwise indicated below, that all employees of the Consultant that will perform any Services under this Agreement have never been retired from a Washington State retirement system, including but not limited to Teacher (TRS), School District (SERS), Public Employee (PERS), Public Safety (PSERS), law enforcement and fire fighters (LEOFF), Washington State Patrol (WSPRS), Judicial Retirement System (JRS), or otherwise. *(Please use initials to indicate No or Yes below.)*

Rad No, employees performing the Services have never been retired from a Washington state retirement system.

\_\_\_\_\_ Yes, employees performing the Services have been retired from a Washington state retirement system.



In the event the Consultant checks “no”, but an employee in fact was a retiree of a Washington State retirement system, and because of the misrepresentation the City is required to defend a claim by the Washington State retirement system, or to make contributions for or on account of the employee, or reimbursement to the Washington State retirement system for benefits paid, the Consultant hereby agrees to save, indemnify, defend and hold the City harmless from and against all expenses and costs, including reasonable attorney fees incurred in defending the claim of the Washington State retirement system and from all contributions paid or required to be paid, and for all reimbursement required to the Washington State retirement system. In the event the Consultant checks “yes” and affirms that an employee providing work has ever retired from a Washington State retirement system, every said employee shall be identified by the Consultant and such retirees shall provide the City with all information required by the City to report the employment with Consultant to the Department of Retirement Services of the State of Washington.

**4.11 NONASSIGNABLE.** Except as provided in **EXHIBIT B**, the Services to be provided by the Consultant shall not be assigned or subcontracted without the express written consent of the City.

**4.12 SUBCONTRACTORS AND SUBCONSULTANTS.**

a. The Consultant is responsible for all work or services performed by subcontractors or subconsultants pursuant to the terms of this Agreement.

b. The Consultant must verify that any subcontractors or subconsultants the Consultant directly hires meet the responsibility criteria for the Services. Verification that a subcontractor or subconsultant has proper license and bonding, if required by statute, must be included in the verification process. If the parties anticipate the use of subcontractors or subconsultants, the subcontractors or subconsultants are set forth in **EXHIBIT B**.

c. The Consultant may not substitute or add subcontractors or subconsultants without the written approval of the City.

d. All subcontractors or subconsultants shall have the same insurance coverage and limits as set forth in this Agreement and the Consultant shall provide verification of said insurance coverage.

**4.13 CONFLICTS OF INTEREST.** The Consultant agrees to and shall notify the City of any potential conflicts of interest in Consultant’s client base and shall obtain written permission from the City prior to providing services to third parties when a conflict or potential conflict of interest exists. If the City determines in its sole discretion that a conflict is irreconcilable, the City reserves the right to terminate this Agreement.

**4.14 CITY CONFIDENCES.** The Consultant agrees to and will keep in strict confidence, and will not disclose, communicate, or advertise to third parties without specific prior written consent from the City in each instance, the confidences of the City or any information regarding the City or the Services provided to the City.

**4.15 DISCRIMINATION PROHIBITED AND COMPLIANCE WITH EQUAL OPPORTUNITY LEGISLATION.** The Consultant agrees to comply with equal opportunity employment and not to discriminate against any client, employee, or applicant for employment or for services because of race, creed, color, religion, national origin, marital status, sex, sexual orientation, age, or handicap except for a bona fide occupational qualification with regard, but not limited to, the following: employment upgrading; demotion or transfer; recruitment or any recruitment advertising; layoff or terminations; rates of pay or other forms of compensation; selection for training; or rendition of services. The Consultant further agrees to maintain (as appropriate) notices, posted in conspicuous places, setting forth its nondiscrimination obligations. The Consultant understands and agrees that if it violates this nondiscrimination provision, this Agreement may be terminated by the City, and further that the Consultant will be barred from performing any services for the City now or in the future, unless a showing is made satisfactory to the City that discriminatory practices have been terminated and that recurrence of such action is unlikely.

**4.16 UNFAIR EMPLOYMENT PRACTICES.** During the performance of this Agreement, the Consultant agrees to comply with RCW 49.60.180, prohibiting unfair employment practices.

**5. CITY APPROVAL REQUIRED.** Notwithstanding the Consultant's status as an independent contractor, the Services performed pursuant to this Agreement must meet the approval of the City, which shall not be unreasonably withheld if the Services have been completed in compliance with the Scope of Services and City requirements.

**6. GENERAL TERMS.**

**6.1 NOTICES.** Receipt of any notice shall be deemed effective three (3) calendar days after deposit of written notice in the U.S. mail with proper postage and address.

Notices to the City shall be sent to the following address:

**CITY OF MARYSVILLE**

Matthew Eyer  
80 Columbia Avenue  
Marysville, WA 98270

Notices to the Consultant shall be sent to the following address:

**BHC CONSULTANTS, LLC**

Peter Cunningham, P.E.

1601 Fifth Avenue Suite 500

Seattle, WA 98101

**6.2 TERMINATION.** The City may terminate this Agreement in whole or in part at any time by sending written notice to the Consultant. As per Section 6.1, the Consultant is deemed to have received the termination notice three (3) calendar days after deposit of the termination notice in the U.S. mail with proper postage and address. The termination notice is deemed effective seven (7) calendar days after it is deemed received by the Consultant.

If this Agreement is terminated by the City for its convenience, the City shall pay the Consultant for satisfactory Services performed through the date on which the termination is deemed effective in accordance with payment provisions of Section 3, unless otherwise specified in the termination notice. If the termination notice provides that the Consultant will not be compensated for Services performed after the termination notice is received, the City will have the discretion to reject payment for any Services performed after the date the termination notice is deemed received.

**6.3 DISPUTES.** The parties agree that, following reasonable attempts at negotiation and compromise, any unresolved dispute arising under this Agreement may be resolved by a mutually agreed-upon alternative dispute resolution of arbitration or mediation.

**6.4 EXTENT OF AGREEMENT/MODIFICATION.** This Agreement, together with exhibits, attachments, and addenda, represents the entire and integrated Agreement between the parties and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended, modified, or added to only by a written supplemental amendment properly signed by both parties.

**6.5 SEVERABILITY.**

a. If a court of competent jurisdiction holds any part, term, or provision of this Agreement to be illegal or invalid, in whole or in part, the validity of the remaining parts, terms, or provisions shall not be affected, and the parties' rights and obligations shall be construed and enforced as if the Agreement did not contain the particular part, term, or provision held to be invalid.

b. If any part, term, or provision of this Agreement is in direct conflict with any statutory provision of the State of Washington, that part, term, or provision shall be deemed inoperative and null and void insofar as it may conflict, and shall be deemed modified to conform to such statutory provision.

**6.6 NONWAIVER.** A waiver by either party of a breach by the other party of any covenant or condition of this Agreement shall not impair the right of the party not in default to avail itself of any subsequent breach thereof. Leniency, delay, or failure of either party to insist upon strict performance of any agreement, covenant, or condition of this Agreement, or to exercise any right herein given in any one or more instances, shall not be construed as a waiver or relinquishment of any such agreement, covenant, condition, or right.

**6.7 FAIR MEANING.** The terms of this Agreement shall be given their fair meaning and shall not be construed in favor of or against either party hereto because of authorship. This Agreement shall be deemed to have been drafted by both of the parties.

**6.8 GOVERNING LAW.** This Agreement shall be governed by and construed in accordance with the laws of the State of Washington.

**6.9 VENUE.** The venue for any action to enforce or interpret this Agreement shall lie in the Superior Court of Washington for Snohomish County, Washington.

**6.10 COUNTERPARTS.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same Agreement.

**6.11 AUTHORITY TO BIND PARTIES AND ENTER INTO AGREEMENT.** The undersigned represent that they have full authority to enter into this Agreement and to bind the parties for and on behalf of the legal entities set forth herein.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

CITY OF MARYSVILLE

By \_\_\_\_\_  
Jon Nehring, Mayor

DATED this 6th day of November, 2019.

BHC CONSULTANTS

By Ron Dorn  
Ron Dorn  
Its: President

ATTEST/AUTHENTICATED:

\_\_\_\_\_, Deputy City Clerk

Approved as to form:

\_\_\_\_\_  
Jon Walker, City Attorney

**EXHIBIT A**  
**Scope of Services**

## EXHIBIT A

### SCOPE OF WORK City of Marysville Wastewater Collection System Inflow and Infiltration Evaluation

#### Statement of Understanding

Infiltration and inflow (I/I) is the wastewater component consisting of stormwater surface runoff entering the sewer system (inflow) and infiltration from storm-saturated ground conditions. Inflow typically enters the sewer system directly through storm sewer connections, basement sump pumps, roof drains, and submerged manholes. Infiltration occurs as groundwater leaks into the sewer system through cracked or broken pipes and manholes or through loose joints and connections. I/I is important in determining the peak day and peak hour flows throughout the system, which are important when considering system capacity. I/I can vary significantly due to changes in groundwater tables, rainfall intensity, and rainfall duration.

The City of Marysville (City) is required to conduct an I/I evaluation to meet the requirements of Section S4.E "Infiltration and Inflow Evaluation" of The City's NPDES Permit (Waste Discharge Permit No. WA0022497). City-wide I/I rates were evaluated as part of the 2011 Sewer Comprehensive Plan (SCP). Based on US EPA criteria, that evaluation concluded that I/I is not considered excessive in the City. However, this was based on measurements at the treatment plant only, which can obscure high I/I rates in individual basins. This project will consist of three primary parts:

- An updated evaluation of more recent flow data to determine whether or not I/I within the entire collection system is still considered not excessive per US EPA criteria.
- Evaluation of existing pump station data to calculate individual basins I/I rates and suggest locations for additional flow monitoring to identify the most significant locations of I/I.
- Install additional flow meters and evaluate the collected data.

#### Scope of Work

The Scope of Work tasks are separated into four components where applicable:

1. Work Tasks: tasks that will be completed by the Consultant.
2. Receivables: elements that will be provided by the City.
3. Assumptions: assumptions used to develop each Work Task.
4. Deliverables: the finished product that will be delivered to the City via electronic and/or hard copy.

#### Task 1 – Project Management

Work Tasks:

- 1.1 Client and Team Coordination. Coordinate with City staff and provide regular status updates through meetings, telephone communication, and e-mail during the project. Proactively manage team resources needed to complete the project.
- 1.2 Monthly Invoices. Prepare monthly invoices.

Receivables:

- Approved Contract.

Assumptions:

- Project duration is twelve (12) months.

Deliverables:

- Up to twelve (12) monthly invoices and progress reports.
- One project kickoff meeting is included.

### **Task 2 – US EPA I/I Evaluation**

Work Tasks:

- 2.1 Review WWTP Flow Data. Prepare data request for I/I evaluation. Collect and review wastewater treatment plant (WWTP) flow meter data provided by the City.
- 2.2 I/I Evaluation Study. Assess measurable infiltration and inflow using existing monitoring records on a City-wide basis. Assess I/I rates per US EPA criteria to determine if they are considered excessive. Prepare a Draft and Final I/I Evaluation Study report summarizing any measurable infiltration and inflow and the results of the evaluation.

Receivables:

- 2-5 years of flow meter data from the WWTP.
- Flows from major industrial or commercial users (greater than 50,000 gpd).
- Current sewered population.
- One (1) consolidated set of City review comments on the Draft I&I Evaluation Study.

Assumptions:

- The City will provide requested data and information within five (5) working days of request.

Deliverables:

- Information and data request within five (5) days of notice to proceed.
- Draft and Final I&I Evaluation Study (PDF).

### **Task 3 – Preliminary Basin I/I Evaluation**

Work Tasks:

- 3.1 Review City Flow Data. Prepare data request. Collect and review flow and/or pump runtime information and data provided by the City.
- 3.2 Basin Analysis. Delineate basins based on tributary areas to pump stations or other metered locations. Assess measurable infiltration and inflow using existing monitoring records for each basin. Assess I/I rates per US EPA criteria to determine if they are considered excessive. Identify locations where additional metering will be located. Prepare a technical memorandum showing location of proposed additional metering. Meet with City to discuss results of Basin Analysis and location of proposed flow monitors.
- 3.3 Prepare Report. Prepare a Draft Basin I&I Evaluation Study summarizing I/I data and results of the evaluation.

Receivables:

- Flow meter and pump runtime data from pump stations and any other metered locations.
- One (1) consolidated set of City review comments on the Draft Basin I&I Evaluation Study.
- City staff feedback on number and location of meters to be installed.

Assumptions:

- The City will provide requested data and information within five (5) working days of request.
- Per basin populations will be provided by the City, or will be estimated based on number of parcels and typical people/parcel, and corroborated by typical per capita flow rates and measured dry weather flow.
- No modeling will be performed as part of this project.
- One meeting with project manager and staff engineer is included.

Deliverables:



- Information and data request within five (5) days of notice to proceed.
- Draft Basin I&I Evaluation Study (PDF).

#### **Task 4 – Flow Monitoring and Additional Basin I/I Evaluation**

##### Work Tasks:

- 4.1 Install and Monitor Flow Meters. Provide metering locations to ADS to install and collect data from up to eight (8) sites throughout the City. Sites will be monitored for eight (8) months. ADS Scope of Work is included as an Attachment.
- 4.2 Basin Analysis. Assess measurable infiltration and inflow using additional data collected for selected basins. Reassess I/I rates within these selected basins per US EPA criteria to confirm the initial assessment as to whether or not I/I is considered excessive as an assessment benchmark. Meet with City to discuss results of additional Basin Analysis and location of smoke testing.
- 4.3 Smoke testing. Smoke test at two (2) locations for a total of 11,000 lineal feet. ADS Scope of Work is included as an Attachment.
- 4.4 Update Report. Finalize the Basin I&I Evaluation Study by incorporating City comments, summary of additional data collected, and evaluation of the additional monitoring data.

##### Receivables:

- Flow meter and pump runtime data from pump stations and any other metered locations.
- One (1) consolidated set of City review comments on the Draft Basin I&I Evaluation Study.
- Any known information concerning bypasses, overflows, base flows, critical surcharge areas, and maintenance habits
- City input on location of smoke testing.
- One (1) complete set of collection system drawings (maps) for the test area.
- Disclosure of any known sanitary system hazards.
- Other information required by ADS to perform services under the Agreement.

##### Assumptions:

- The City will provide requested data and information within five (5) working days of request.
- BHC will hire ADS to perform the additional flow monitoring.
- Budget reflects eight (8) flow monitoring locations and 5,500 lf of pipe to be smoke tested.
- Two meetings with project manager and staff engineer are included.
- City to provide ADS additional traffic control services at locations requiring more than ADS' standard traffic control services, which include 1 arrowboard or flashing vehicle beacon, 2 signs, and 18 cones.
- City to pay all local licenses and any permits fees, as required.
- City to provide access to the site of work with sufficient area for placement of personnel and equipment, including all right-of-way and ramps, including, but is not limited to exposing manholes and clearing easements.
- If sewer line is dirty and/or debris is evident, City will ensure that selected sites have been jet cleaned to minimize hydraulic deficiencies or select an alternate location.
- City will send mail notifications to residents prior to smoke testing.
- City will provide all permits and approvals necessary for ADS to perform smoke testing.

##### Deliverables:

- Information and data request within five (5) days of notice to proceed.
- Draft and Final Basin I&I Evaluation Study (PDF).
- Draft and Final Smoke Testing Study (PDF).

## Exclusions

Due to the nature of work scoped herein, the following items are excluded from this Scope of Work:

- Modeling.
- Detailed design and preparation of construction drawings and specifications.
- Environmental monitoring.
- Wastewater sampling and sampling support.
- Surveying.
- Geotechnical investigations and inspections. Previous geotechnical investigations performed in the vicinity (if available) will be reviewed.
- Permitting support.

## Estimated Fee

The estimated fee is \$140,964. A breakdown of the fee estimate is included as Exhibit B.

## Schedule

Approximate project milestones are shown below.

Project Notice to Proceed	December 10, 2019
Final US EPA I&I Evaluation Study	December 20, 2019
Draft Basin I&I Evaluation Study	December 20, 2019
Flow Monitoring	December 16, 2019 – August 21, 2020
Final Basin I&I Evaluation Study	September 25, 2020

**Appendix B  
Project Budget**

P.M.: Peter Cunningham

Project No.: \_\_\_\_\_

Date: 11/6/19

Project Name Wastewater Collection System Inflow and Infiltration Evaluation

Task No.	Task Description	Princ. Engr./QC <i>Giese</i>		Proj. Manager <i>Cunningham</i>		Staff Engineer <i>Palmerton/Bryant</i>		GIS Specialist <i>Tolentino</i>		Project Admin <i>Pierson</i>		Clerical/WP <i>Sifferman</i>		Subconsultant w/ 10% Markup	Total		
		\$230		\$180		\$120		\$125		\$125		\$110			Cost	Hours	Cost
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost				
<b>1</b>	<b>Project Management</b>																
1.1	Client and Team Coordination		\$0	22.0	\$3,960		\$0		\$0	4.0	\$500	4.0	\$440		30	\$4,900	
1.2	Monthly Invoices		\$0	6.0	\$1,080		\$0		\$0	12.0	\$1,500		\$0		18	\$2,580	
														Subtotal	\$0	48	\$7,480
<b>2</b>	<b>US EPA I/I Evaluation</b>																
2.1	Review WWTP Flow Data		\$0	4.0	\$720	4.0	\$480		\$0		\$0		\$0		8	\$1,200	
2.2	I/I Evaluation Study	1.0	\$230	8.0	\$1,440	32.0	\$3,840	4.0	\$500		\$0	2.0	\$220		47	\$6,230	
														Subtotal	\$0	55	\$7,430
<b>3</b>	<b>Preliminary Basin I/I Evaluation</b>																
3.1	Review City Flow Data		\$0	4.0	\$720	8.0	\$960		\$0		\$0		\$0		12	\$1,680	
3.2	Basin Analysis		\$0	16.0	\$2,880	40.0	\$4,800	16.0	\$2,000		\$0		\$0		72	\$9,680	
3.3	Prepare Report	2.0	\$460	16.0	\$2,880	40.0	\$4,800	8.0	\$1,000		\$0	4.0	\$440		70	\$9,580	
														Subtotal	\$0	154	\$20,940
<b>4</b>	<b>Flow Monitoring and Additional Basin I/I Evaluation</b>																
4.1	Install and Monitor Flow Meters		\$0	4.0	\$720	4.0	\$480	2.0	\$250		\$0		\$0	\$71,867	10	\$73,317	
4.2	Basin Analysis		\$0	24.0	\$4,320	24.0	\$2,880	4.0	\$500		\$0		\$0		52	\$7,700	
4.2	Smoke Testing		\$0	4.0	\$720	4.0	\$480		\$0		\$0		\$0	\$14,850	8	\$16,050	
4.2	Update Report	2.0	\$460	16.0	\$2,880	24.0	\$2,880	4.0	\$500		\$0	8.0	\$880		54	\$7,600	
														Subtotal	\$86,717	124	\$104,667
<b>TOTAL DIRECT LABOR</b>		<b>5</b>	<b>\$1,150</b>	<b>124</b>	<b>\$22,320</b>	<b>180</b>	<b>\$21,600</b>	<b>38</b>	<b>\$4,750</b>	<b>16</b>	<b>\$2,000</b>	<b>18</b>	<b>\$1,980</b>	<b>\$86,717</b>	<b>381</b>	<b>\$140,517</b>	
<b>6</b>	<b>Reimbursable Expenses</b>																
	Mileage @		\$0.580 per mile													\$406	
	Drawing Reproductions															\$0	
	Report/Specifications Reproductions															\$0	
	Mailings															\$0	
	Subtotal															\$406	
	Markup @		10%													\$41	
<b>TOTAL REIMBURSABLE EXPENSES</b>																<b>\$447</b>	
<b>TOTAL BASE BUDGET</b>																<b>\$140,964</b>	

**EXHIBIT B**  
**Subcontractors/Subconsultants**

**Below is a list of approved subcontractors/subconsultants:**

**ADS Environmental Services**

---

---

---

**OR**

**There are no approved subcontractors or subconsultants.**