

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (“Consulting Agreement” or “Agreement”) is made and entered into this 13th day of March, 2018, by and between **Merrick & Company**, a Colorado Corporation, whose address is 2480 West 26th Ave., Suite B225, Denver, Colorado 80211 (hereinafter referred to as “Consultant”) and the **TOWN OF ERIE, COLORADO**, a Colorado municipal corporation, whose address is 645 Holbrook Street, P.O. Box 750, Erie, Colorado 80516 (hereinafter referred to as “Town” or “Erie”).

W I T N E S S E T H

WHEREAS, the Town desires to engage the Consultant to render the professional services described in this Consulting Agreement and the Consultant is qualified and willing to perform such services in accordance with, and subject to the provisions of this Consulting Agreement; and,

WHEREAS, legal authority exists to engage the Consultant and sufficient funds have been budgeted and are available for the work to be performed by the Consultant under this Agreement, and other necessary approvals have been obtained.

NOW, THEREFORE, in consideration of the mutual promises, covenants and obligations of the parties hereto, the terms, covenants and conditions hereof, and intending to be legally bound, the Town and the Consultant agree as follows:

1. The Project. The Consultant's services are engaged under this Consulting Agreement for the following project: **Water Master Plan Update for Potable and Non-Potable and a Water Asset Management Plan, P18-264** (“Project”).

2. Consultant’s Services. The Consultant shall, during the term of this Agreement, provide the services to the Town as set forth in Exhibit “A”, attached hereto and incorporated herein by this reference (the “Services”). The Consultant shall perform the Services competently, efficiently, and in accordance with the highest standards of its profession. The Consultant shall perform the Services meeting all industry safety standards.

3. Additional Services. The Town may request the Consultant to perform additional work or phases of the Project in addition to the Services. The Consultant agrees to perform the additional work or phases of the Project if the Town so requests, either pursuant to an amendment to this Consulting Agreement or a new agreement in which the Town and the Consultant shall define the scope of, and additional payment for, the additional work or phases of the Project.

4. Compensation. In consideration for the performance of the Services, the Town shall pay to the Consultant a fee in the total amount of **\$125,000**, and payable in accordance with the payment schedule, as set forth in Exhibit “A”, attached hereto and incorporated herein by this reference.

5. Reimbursable Expenses. The Town agrees to reimburse the Consultant for the reimbursable expenses incurred by the Consultant in connection with the Services, such expenses to be described in detail in Exhibit “A”. Travel expenses between the Town and the Consultant's office shall not be considered reimbursable expenses. The Consultant shall maintain an accurate record of all such expenses and provide itemized records and copies of receipts when submitting such expenses to the Town for reimbursement. The maximum amount reimbursable by the Town

to the Consultant under this Consulting Agreement shall be set forth on Exhibit "A". Such expenses not described on Exhibit "A", shall not be reimbursed by the Town.

6. Commencement and Completion of Services. The Consultant understands and agrees that time is an essential requirement of this Consulting Agreement. The term of this Consulting Agreement shall commence on the date of this agreement and shall end on **December 31, 2018**. The Services shall be completed as soon as good practice and due diligence will permit.

7. Termination.

A. This Consulting Agreement may be terminated by either party upon Ten (10) days prior written notice to the other party in the event of a substantial failure by the other party to fulfill its obligations under this Consulting Agreement through no fault of the terminating party.

B. This Consulting Agreement may be terminated by the Town in its sole discretion upon Ten (10) days prior written notice to the Consultant.

C. In the event of termination as provided for in this paragraph, the Town shall pay the Consultant in full for Services performed to the date of notice of termination plus any Services the Town deems necessary during the notice period. Said compensation shall be paid upon the Consultant's delivering or otherwise making available to the Town all data, drawings, specifications, reports, estimates, summaries and such other information and materials as may have been accumulated by the Consultant in performing the Services included in this Consulting Agreement, whether completed or in progress.

8. Insurance.

8.1 Consultant shall procure and maintain, and shall cause any subcontractor of Consultant to procure and maintain, the minimum insurance coverages listed below. Such coverages shall be procured and maintained with forms and insurers acceptable to the Town. All coverages shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by Consultant pursuant to paragraph 17 of this Consulting Agreement. In case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

A. Workmen's Compensation Insurance and Employer's Liability Insurance to cover obligations imposed by applicable laws for any employee of Consultant or a subcontractor engaged in the performance of work under this Consulting Agreement.

B. General liability insurance with minimum combined single limits of One Million Dollars (\$1,000,000) each occurrence and One Million Dollars (\$1,000,000) aggregate. The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employees' acts), blanket contractual, products, and completed operations. The policy shall contain a severability of interests provision.

C. Comprehensive Automobile Liability insurance within single limits for bodily injury and property damage of not less than One Million Dollars (\$1,000,000) each occurrence and One Million Dollars (\$1,000,000) aggregate with respect to each of Consultant's owned, hired or non-owned vehicles assigned to or used in the performance of this Consulting Agreement. The policy shall contain a severability of interests provision.

D. Professional Liability insurance within minimum single limits of not less than One Million Dollars (\$1,000,000) each occurrence and One Million Dollars (\$1,000,000) aggregate.

8.2 The policies required by subparagraphs B and C, above shall be endorsed to include the Town and the Town's officers and employees as additional insureds. Every policy required above shall be primary insurance, and any insurance carried by the Town, its officers, or its employees, or carried by or provided through any insurance pool of the Town, shall be excess and not contributory insurance to that provided by the Consultant. The Consultant shall be solely responsible for any deductible losses under any policy require above.

8.3 A certificate of insurance shall be completed by the Consultant's insurance agent and provided to the Town as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be reviewed and approved by the Town prior to commencement of the Consulting Agreement. The certificate shall identify this Consulting Agreement and shall provide that the coverages afforded under the policies shall not be cancelled until at least thirty (30) days prior written notice has been given to the Town. Consultant shall notify the Town within ten (10) days if the coverages afforded under the policies are materially changed. The completed Certificate of Insurance shall be sent to: Town Clerk, Town of Erie, PO Box 750, Erie, CO 80516

8.4 Notwithstanding any other portion of this Consulting Agreement, failure on the part of Consultant to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of this Consulting Agreement for which the Town may immediately terminate this Consulting Agreement, or, at its discretion, the Town may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all money so paid by the Town shall be repaid by the Consultant to the Town upon demand, or the Town may offset the cost of the premiums against any money due to the Consultant from the Town.

8.5 The parties hereto understand and agree that the Town is relying on, and does not waive or intend to waive by any provision of this Consulting Agreement, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, Section 24-10-101, et seq., C.R.S., as from time to time amended, or any other law, protection or limitation otherwise available to the Town, its officers, or its employees.

9. Payment of Subcontractors. Consultant shall contract with and pay any and all subcontractors used by Consultant in the performance of the Project. The Town shall in no event have any liability to any subconsultant, and Consultant shall hold the Town harmless with respect to any payments alleged to be due to Consultant's subcontractors.

10. Compliance with Applicable Laws. In connection with the execution of this Consulting Agreement, the Consultant shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, or disability. Such actions shall include, but not be limited to the following: employment; upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Consultant shall comply with the Americans with Disabilities Act (Public Law 101-336), and all applicable regulations and rules promulgated by the Equal Employment Opportunity Commission and the Colorado Civil Rights Commission. At all times during the performance of the Agreement, Consultant shall strictly

adhere to all applicable federal, state and Town laws that have been or may hereafter be established. This shall include, without limitation, the United States Department of Labor standards. As used in this paragraph, and hereafter, the term "laws" shall include, without limitation, all federal, state and Town codes, charters, ordinances, laws, standards, rules and regulations. The indemnification and termination provisions of this Consulting Agreement shall apply with respect to Consultant's failure to comply with all applicable laws or regulations.

10A. No Discrimination In Employment. In connection with the performance of work under this Agreement, Consultant agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified on the basis of race, color, ancestry, creed, religion, national origin, gender, age, military status, sexual orientation, marital status, or physical or mental disability and further agrees to insert the foregoing provision in all subcontracts hereunder

11. Prohibited Interest.

A. The Consultant agrees that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its Services hereunder. The Consultant further agrees that in the performance of the Consulting Agreement, no person having any such interest shall be employed.

B. No official or employee of the Town shall have any interest, direct or indirect, in the Consultant, this Consulting Agreement or the proceeds therefrom.

12. Independent Contractor. The Consultant shall perform all Services as an independent contractor, and nothing in this Consulting Agreement is intended to or shall create a relationship of employer-employee, joint venturers, or partners, between the parties. The Consultant shall be solely responsible for all federal and state income taxes attributable to the monies payable to the Consultant for the Services.

13. Books and Records. The Consultant's books and records with respect to the Services and reimbursable costs shall be kept in accordance with generally accepted accounting principles and practices, consistently applied, and will be made available for the Town's inspection at all reasonable times at the places where the same may be kept. The Consultant shall not be required to retain such books and records for more than three (3) years after completion of the services.

14. Obligation of Non-Disclosure. The Consultant agrees to keep confidential any and all drawings, reports, documents, memoranda, research, plans, analysis, maps, photographs, designs, information and work product either provided by the Town or generated by the Consultant pursuant to this Consulting Agreement, or provided to the Consultant by other consultants. Consultant shall make use of the information or items set forth hereinabove for any purpose, including public hearings of the Town, as expressly directed by the Town, for the Town's benefit. Consultant shall not use the information or items set forth hereinabove for its own account, or another's account, or in any manner detrimental to the Town. The Town acknowledges the need to share said information and items referred to hereinabove with the Consultant's subconsultants under this Consulting Agreement, and hereby approves such sharing and use.

15. Acknowledgement of Ownership. Consultant acknowledges that all drawings documents, information and materials relating to the Services performed and the Project for which

the Services are performed, as well as those items described in paragraph 14, are or shall become, upon termination of this Consulting Agreement, the exclusive property of the Town.

16. Return of Information. Promptly upon the Town's request, and in any event upon the termination of this Consulting Agreement for any reason, all documents, materials and writings, as well as those items described in paragraph 14, and all copies thereof provided by the Town to the Consultant, directly or indirectly, shall be returned by the Consultant to the Town.

17. Professional Liability. The Consultant shall exercise in its performance of the Services hereunder the standard of care required by Colorado law. The Consultant shall be liable to the Town for any loss, damages, or costs incurred by the Town for the repair, replacement or correction of any part of the Project which is deficient or defective as a result of any failure of the Consultant to comply with this standard.

18. Communications. All communications relating to the day-to-day Services for the Project shall be exchanged between the respective Project representatives of the Town and the Consultant who will be designated by the parties promptly upon commencement of the Services.

19. Indemnification. Consultant agrees to indemnify and save harmless the Town against any and all claims, debts, demands, damages or obligations which may be asserted against the Town arising by reason of, or in connection with, any alleged act or omission of Consultant or any person claiming under, by or through Consultant, at Consultant's own expense using those attorneys that the Town deems appropriate. If, however, it becomes necessary for the Town to defend any action arising by reason of, or in connection with, any alleged act or omission of Consultant or any person claiming under, by or through Consultant seeking to impose liability for such claim or demand, Consultant shall pay all court costs, witness fees, expert witness fees, and attorney's fees, incurred by the Town in effecting such defense in addition to any other sums which the Town may be called upon to pay by reason of the entry of any judgment, assessment, bond, writ or levy against the Town in the litigation in which such claims are asserted. Consultant shall be subrogated to any and all amounts paid by it on behalf of the Town to any claims that the Town may have as a result of said payments to any person or third persons which are the reason or cause of said payments.

20. No Assignment. Consultant's duties and obligations pursuant to this Consulting Agreement require a particular expertise and skill, and may not be assigned to any third party or agency without the express written consent of the Town, which consent may be withheld at the sole discretion of the Town.

21. Notices. Any notices required or permitted hereunder shall be sufficient if personally delivered or if sent by certified mail, return receipt requested, addressed as follows:

If to the Town:

Town Engineer
Town of Erie
P.O. Box 750
Erie, Colorado 80516

With a copy (which shall not constitute notice) to:

Mark R. Shapiro
Mark R. Shapiro, P.C.
1650 38th Street, Suite 103
Boulder, Colorado 80301

If to the Consultant:

Terrence P. Kenyon
2480 W. 26th Street, Unit B255
Denver, Colorado 80211

Notices personally delivered shall be effective upon delivery. Mailed notices shall be effective three (3) business days after mailing.

22. Agreement Subject to Annual Appropriation.

A. The parties hereto understand and agree that the amount of **\$125,000** has been budgeted for compensation for work done pursuant to this Consulting Agreement for the current fiscal year ending December 31, 2018. This is a full and lawful appropriation as required by appropriate statute for this project. In the event that the Town fails to appropriate sufficient funds to cover any compensation which may become due for the fiscal year beginning January 1, 2019, then, and in that event, this Consulting Agreement shall immediately terminate as of December 31, 2018, without further action of any party. The Town shall provide notice to Consultant prior to December 31, 2018, as to whether an appropriation has been made for further work anticipated following December 31, 2018.

B. The amount of money appropriated by the Town is equal to or in excess of the Consulting Agreement amounts due herein for the current fiscal year.

C. The Town shall be prohibited from issuing any change order or other form of order or directive requiring additional compensable work to be performed, which work causes the aggregate amount payable under this Consulting Agreement to exceed the amount appropriated for the original Consulting Agreement, unless Consultant is given written assurance by the Town that lawful appropriations to cover the cost of the additional work have been made or unless such work is covered under a remedy-granting provision in this Consulting Agreement.

23. Prohibition Against Employment of Illegal Aliens.

A. By its signature on this Agreement, Consultant certifies that, as of the time of its signature, it does not knowingly employ or contract with an illegal alien and that, in order to verify that it does not employ any illegal aliens, the Consultant will participate in the E-Verify Program created in Public Law 104-208, as amended, and expanded in Public Law 108-156, as amended, administered by the United States Department of Homeland Security and the Social Security Administration.

B. Consultant agrees that it shall not knowingly employ or contract with an illegal alien to perform work under this Agreement; and that it shall not enter into a contract with a subcontractor that fails to certify to the Consultant that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract.

C. Consultant has verified through participation in the E-Verify Program that the Consultant does not employ any illegal aliens.

D. Consultant shall not use the E-Verify Program procedures to undertake preemployment screening of job applicants while work under this Agreement is being performed.

E. If Consultant obtains actual knowledge that a subcontractor performing work under this Agreement knowingly employs or contracts with an illegal alien, the Consultant

shall: (1) notify the subcontractor and the Town within three days that the Consultant has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and (2) terminate the subcontract with the subcontractor if, within three days of receiving the notice required herein, the subcontractor does not stop employing or contracting with the illegal alien; except that the Consultant shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

F. The Consultant shall comply with any reasonable request by the Colorado Department of Labor and Employment made in the course of an investigation that the Department is undertaking pursuant to the authority established in C.R.S. section 8-17.5-101(5).

G. If Consultant violates a provision of this Illegal Alien section, the Town may terminate this Agreement for breach of contract. If the Agreement is so terminated, the Consultant shall be liable for actual and consequential damages to the Town. Consultant understands that, in the event of such a termination, Town is required to notify the office of the Colorado Secretary of State.

24. Attorney's Fees; Interest. In any action brought to enforce the provision(s) of this Consulting Agreement, the prevailing party shall be entitled to an award of all reasonable attorney's fees and costs, including expert witness' fees, expended or incurred, to be recovered as part of the costs therein. Any fees and expenses not paid to Consultant by the Town when due shall earn interest at the rate of six percent (6%) per annum.

25. Waiver. Failure to insist upon strict compliance with any of the terms, covenants, and/or conditions hereof shall not be deemed a waiver of such terms, covenants or conditions, nor shall any waiver or relinquishment of any right or power hereunder at any one time or more times be deemed a waiver or relinquishment of such right or power at any other time or times.

26. Amendments to Agreement. No changes, alterations or modifications to any of the provisions hereof shall be effective unless contained in a written agreement signed by both parties.

27. Entire Agreement. This Consulting Agreement shall constitute the entire agreement between the parties hereto and shall supersede all prior contracts, proposals, representations, negotiations and letters of intent, whether written or oral, pertaining to the Services.

28. Situs, Venue and Severability. The laws of the State of Colorado shall govern the interpretation, validity, performance and enforcement of this Consulting Agreement. For the resolution of any dispute arising hereunder, venue shall be in the Courts of the County of Weld, State of Colorado. If any provision of this Consulting Agreement shall be held to be invalid or unenforceable, the validity and enforceability of the remaining provisions of this Consulting Agreement shall not be affected thereby.

29. Paragraph Headings. Paragraph headings are inserted for convenience only and in no way limit or define the interpretation to be placed upon this Consulting Agreement.

30. Binding Agreement. This Consulting Agreement shall be binding upon and for the benefit of the parties hereto, their successors and assigns.

IN WITNESS WHEREOF, the parties hereto have executed this Consulting Agreement as of the day and year first-above written.

TOWN:

TOWN OF ERIE,
a Colorado municipal corporation

By: _____
Tina Harris, Mayor

ATTEST:

By: _____
Jessica Koenig, Deputy Town Clerk

CONSULTANT:

Merrick & Company,
a Colorado corporation

By: _____
Terrence P. Kenyon, Principal

ATTEST:

By: _____
Ronald E. Dvorak, Principal

EXHIBIT "A"

(Services to be provided by Consultant)

February 28, 2018

Town of Erie
c/o Ms. Wendi Palmer, Civil Engineer
645 Holbrook Street
Erie, Colorado 80516

RE: PROPOSAL FOR POTABLE WATER AND NON-POTABLE WATER MASTER PLANS, AND ASSETS MANAGEMENT PLAN

At the Town's request, Merrick & Company is pleased to submit this proposal to provide engineering and master planning services. This proposal has been written following a discussion of the status of the Town's existing Potable Water and Non-Potable Water Master Plans. During that meeting, it was determined that the Town would like to update those Master Plans and the Asset Management Plan encompassing its water infrastructure and facilities.

BACKGROUND

The Town of Erie owns and operates its own water utility and non-potable water reuse system. The 2010 census recorded the Town's population at 18,135. However, the Town has been rapidly developing and growing in the past eight years. The Town completed master plans for both systems in 2013 and 2014, respectively. Merrick also prepared the Town's first Water Utility Asset Management Plan in 2013, which provided an inventory of its water assets and estimated long-term financing needs. These updates and previous plans based their future development projections on the 2005 Comprehensive Plan.

Since the Town updated its comprehensive plan in 2015, it is in the process of updating its utility Master Plans. Merrick is currently updating in the Wastewater Collection System Master Plan and associated hydraulic model. Merrick's familiarity with the Town's 2015 Comprehensive Plan and up-to-date development information places us in the ideal position to review the Town's potable water and non-potable water systems concurrently. Our proposal addresses the Town's need for:

- An updated comprehensive Potable Water Master Plan;
- An updated comprehensive Non-Potable Water Master Plan; and
- An updated Water Utility Asset Management Plan, to include Non-Potable facilities

SCOPE OF WORK

General: Upon award of the work, we will schedule a kickoff meeting with the Town to confirm the project scope and key tasks, identify critical path items, and ensure everyone has the same understanding of the project and its deliverables. We already have copies of previous Master Plans, digital mapping (i.e. GIS geodatabase), and many as-built drawings. We will use the meeting to identify any gaps in the information that we have encountered and gather any additional information reasonably available from the Town.

Comprehensive Potable Water and Non-Potable Master Plans: The need for comprehensive master planning is to confirm ultimate development, water system demands, and the required capacity to result in an integrated and optimally designed dual distribution system. The Master Plans will evaluate concepts introduced in the previous Plans and reports; revise population growth and demand projections; update hydraulic models; develop phased improvement recommendations; and establish capital cost estimates, providing the information needed for the Town to develop long range capital improvements budgets. During development of the Master Plans, we will coordinate with the Town's attorney, Paul Zilis, to evaluate water rights implications and opportunities.

Specific tasks for the Potable Water Master Plan would include:

1. Review as-built drawings, previous Master Plans and reports, water quality records, digital mapping (i.e. GIS geodatabase), and other pertinent documents.
2. Reassess land use to update ultimate water demand projections based on the 2015 Comprehensive Plan Update, and additional information since 2015, including possible areas for annexation.
3. Update network model to include all water transmission and distribution mains, tanks, and other facilities constructed since the completion of the 2013 Master Plan, if not already included in the model. (Note: Some of these assets have already been added based on information from the Town.)
4. Recommend needed improvements to water facilities to provide future capacity based on 5-year, 10-year, and ultimate planning levels.
5. Identify potential locations for an aboveground Zone 3 storage tank.
6. Review recommendations for conversion of the south Wastewater Treatment Plant to water treatment for winter flows or for other identified uses. Coordinate with Paul Zilis regarding water rights implications, if determined necessary. Our evaluation would be limited to a discussion and stop short of any preliminary design of this site.
7. Evaluate conversion of several existing parks from potable to non-potable water use.
8. Address existing site limitations for expansion at the existing Water Treatment Plant. Discuss the feasibility and implications of a second satellite plant based on planned development and the existing water supply and distribution system layout.
9. Evaluate concerns with the Broomfield interconnect, i.e. disinfection by free chlorine versus Broomfield's chloramines.
10. Update the overall system master plan drawing.

11. Prepare preliminary level cost estimates and prioritize recommended improvements needed to develop a Capital Improvement Program.
12. Evaluate the current operating and maintenance practices with staff. Make recommendations for exercising valves, fire hydrants, tank cleaning, and other regular maintenance items with consideration given to critical supplies, such as hospitals, medical clinics, and schools.
13. Review results of the above analyses with Town staff and obtain consensus on a recommended approach.
14. Present the findings in a final report, to include drawings and details as needed to illustrate the improvements. Provide an electronic copy of the data, including the water system model, maps in GIS format, and any other information pertinent to the Master Plan.

Specific tasks for the Non-Potable Water Master Plan would include:

1. Review as-built drawings, previous Master Plans and reports, water quality records, digital mapping (i.e. GIS geodatabase), and other pertinent documents.
2. Review water supply (C-BT, ditch rights, reclaimed water) and update as needed. Consider the Northern Integrated Supply Project and Windy Gap Firing Project as part of the evaluation.
 - a. Evaluate opportunities for leveraging the water rights and supply - coordinate with Paul Zilis.
 - b. Evaluate concerns with raw water for non-potable irrigation, e.g. *Bryozoa* present in the Erie and Coal Creek ditches.
3. Review non-potable water demands and update as determined necessary. Consider areas or developments that could take advantage of reuse, e.g. areas to the west.
 - a. Incorporate demands for parks that may be converted from potable to non-potable water in the future.
4. Update the non-potable distribution network model. Identify potential storage sites for Pressure Zone 2, i.e. southern zone.
5. Update the overall system master plan drawing.
6. Evaluate the current operating and maintenance practices with staff and make recommendations for exercising valves, tank cleaning, and other regular maintenance items.
7. Develop rules and regulations, design criteria, standard detail drawings (if needed), and recommended policies for creating the Non-Potable Water Utility.
8. Prepare preliminary level cost estimates and prioritize recommended improvements.
9. Review results of the above analyses and draft Master Plan with Town staff at a work session. Obtain agreement or input on the draft conclusions and recommendations.
10. Present the findings in a final report, to include drawings and details as needed to illustrate the improvements. Provide an electronic copy of the data, including water system model, maps in GIS format, and any other information pertinent to the Master Plan.
11. Coordination with Kelly DiNatale if determined necessary.

Water Utility Asset Management Plan: The practice of managing infrastructure capital assets can minimize the total cost of owning and operating them while delivering the desired level of service to customers. The Asset Management Plan (AMP) will evaluate concepts introduced in the previous Plan and reports; update asset inventory; and develop a long-term financial plan for funding

replacements, upgrades, and expansion of the Town's water infrastructure. The AMP can be provided as a stand-alone document or tailored to be a chapter in the Potable Water Master Plan. The intent is that the AMP will be a "living" document, which can be periodically updated by staff.

Specific tasks for the AMP would include:

1. Update the inventory, by functional category, for all water and non-potable infrastructure facilities, including the water treatment plant; transmission, and distribution mains; tanks; pump stations; and pressure-reducing valve (PRV) vaults/manholes.
 - a. Inventory will include installation year, size, material, equipment, assessment of condition, expected life, etc.
2. Evaluate each significant asset as to its capacity and how it relates to system requirements, suitability, and integration with the overall system.
3. Determine the relative age, condition, and expected remaining life of major assets. Field inspections of reasonably accessible facilities, such as the water treatment plant, pump stations, tanks, and PRVs will be conducted, if needed, with staff to help determine condition and obtain operation staff input.
4. Estimate the value of Erie's assets in terms of replacement cost new (RCN) in 2018 dollars.
5. Establish approximate annual funding needs for maintaining the assets. This information could later be used to establish a reserve fund for replacements as part of the Town's water utility rate structure.
6. Make recommendations, if determined appropriate, for modifications which could improve operations and/or reduce operations and maintenance costs.
7. Present the findings in a final report, to include normalized replacement/decay curves, capital replacement cost tables, and estimated annual funding needs. Provide an electronic copy of the report and data.

ESTIMATED FEES

The work will be completed on an hourly rate plus expenses basis in accordance with the attached Schedule of Hourly Rates.

Project Startup. The estimated total fee for the Project Startup phase is \$3,000.

Potable Water Master Plan. The estimated total fee for the comprehensive Potable Water Master Plan phase services is \$52,000.

Non-Potable Water Master Plan. The estimated total fee for the comprehensive Non-Potable Water Master Plan phase services is \$48,000.

Asset Management Plan. The estimated total fee for the water and sanitary sewer Asset Management Plan is \$22,000.

Assumptions:

In preparing this proposal, we've made the following assumptions:

- Operational staff will be available to guide Merrick staff on tours of potable and non-potable water system facilities.
- Based on discussions with the Town, it is assumed that the Comprehensive Development Plan and population growth projections have been developed internally. Merrick's scope does not include verification of these findings.
- The Town will make available previous planning reports, population projections, drawings (including the water treatment plant site) and relevant information.
- The Town will provide digital mapping (i.e. GIS geodatabase), as-built drawings, inventory records, and other relevant documentation of its assets.
- Time for consultation with Paul Zilis and Kelly DiNatale is included in our fee; however, costs for their time is not included.

Respectfully Submitted,
Merrick & Company



Terrence P. Kenyon, P.E.
Principal/Senior Project Manager



Casey Burtis, P.E.
Project Engineer



Allyson Junker, E.I.T.
Design Engineer

cc: Todd Fessenden
cc: Russell Pennington

Enclosures: Man-Hour Allocation Spreadsheet
Schedule of Hourly Rates

Man-Hour Allocation Spreadsheet

Town of Erie

Water MP Update, Non-Pot MP Update, Asset Mgmt Plan

		ESTIMATED HOURS					ESTIMATED DOLLARS		
		Kenyon	Burtis	Junker					
		Senior Project Principal	Design Engineer II	Design Engineer	Senior CAD Technician	Clerical	Travel Expenses (per mile)	Other Expenses	Extended Task
TASKS		\$196.00	\$115.00	\$100.00	\$117.00	\$85.00	\$ 0.545	\$1.00	
1	Project Startup								
1.1	Scope/Goals Development								
1.1.1	Kickoff Meeting	2.0	2.0	2.0	0.0	0.0	52		\$850.00
1.1.2	Memorandum Production	1.0	0.0	4.0	0.0	0.0		\$50.00	\$646.00
1.2	Coordination meeting with Town's Attorney	4.0	4.0	0.0	0.0	0.0	52		\$1,272.34
	SUBTOTAL TASK 1	7.0	6.0	6.0	0.0	0.0	104.0	\$50.00	\$2,769.00
2	Water Master Plan								
2.1	Existing System Evaluation								
2.1.1	Facilities visit and evaluation	8.0	0.0	8.0	0.0	0.0	52	\$150.00	\$2,546.00
2.1.2	Review of available information	2.0	4.0	4.0	0.0	0.0			\$1,252.00
2.1.3	Inventory and request for missing data	0.0	4.0	8.0	0.0	0.0			\$1,260.00
2.1.4	Update GIS data	0.0	8.0	4.0	0.0	0.0			\$1,320.00
2.2	Design Water Demand Projection Analysis								
2.2.1	Development of future projections	2.0	12.0	16.0	0.0	0.0			\$3,372.00
2.2.2	Evaluation of future demands	4.0	16.0	20.0	0.0	0.0			\$4,624.00
2.3	Water System Assessment								
2.3.1	Hydraulic model of the distribution system	0.0	32.0	12.0	0.0	0.0			\$4,880.00
2.3.2	WTP sites evaluation	4.0	2.0	32.0	4.0	0.0			\$4,682.00
2.3.3	Evaluation of Broomfield interconnect	4.0	4.0	8.0	0.0	0.0			\$2,044.00
2.4	Master Plan Development								
2.4.1	Recommended improvements	4.0	16.0	16.0	0.0	0.0			\$4,224.00
2.4.2	Cost estimates/Capital Improvements Program	2.0	12.0	20.0	0.0	4.0			\$4,112.00
2.4.3	Master Plan mapping/exhibits	2.0	12.0	12.0	24.0	0.0			\$5,780.00
2.4.4	System maintenance recommendations	2.0	16.0	16.0	0.0	0.0			\$3,832.00
2.5	Document Production/Finalization	4.0	4.0	8.0	4.0	16.0		\$150.00	\$4,022.00
2.6	Meetings								
2.6.1	Draft plan review meeting	2.0	2.0	2.0	0.0	2.0	52		\$1,020.34
2.6.2	Final plan review meeting	2.0	2.0	2.0	0.0	0.0	52		\$850.34
2.6.3	Oral presentation to Town Council	2.0	2.0	2.0	2.0	8.0	52	\$150.00	\$1,914.34
	SUBTOTAL TASK 2	44.0	148.0	190.0	34.0	30.0	208.0	\$450.00	\$51,735.36

3	Non-Potable Water Master Plan								
3.1	Existing System Evaluation								
3.1.1	Facilities visit and evaluation	2.0	4.0	4.0	0.0	0.0	52	\$150.00	\$1,430.00
3.1.2	Review of available information	2.0	4.0	4.0	0.0	0.0			\$1,252.00
3.1.3	Inventory and request for missing data	0.0	4.0	8.0	0.0	0.0			\$1,260.00
3.1.4	Update GIS data	0.0	4.0	8.0	0.0	0.0			\$1,260.00
3.2	Design Water Demand Projection Analysis								
2.2.1	Consideration future service areas	2.0	12.0	16.0	0.0	0.0			\$3,372.00
2.2.2	Evaluation of future demands	4.0	12.0	20.0	0.0	0.0			\$4,164.00
3.3	Non-Potable Water System Model/Assessment	0.0	12.0	20.0	4.0	0.0			\$3,848.00
3.4	Master Plan Development								
3.4.1	Recommended improvements	4.0	20.0	20.0	0.0	0.0			\$5,084.00
3.4.2	Cost estimates/Capital Improvements Program	2.0	12.0	20.0	0.0	4.0			\$4,112.00
3.4.3	Master Plan mapping/exhibits	2.0	12.0	20.0	40.0	0.0			\$8,452.00
3.4.4	Non-potable water policy development	2.0	12.0	20.0	20.0	0.0			\$6,112.00
3.5	Document Production/Finalization	2.0	4.0	8.0	4.0	16.0		\$150.00	\$3,630.00
3.6	Meetings								
3.6.1	Draft plan review meeting	2.0	2.0	2.0	0.0	2.0	52		\$1,020.34
3.6.2	Final plan review meeting	2.0	2.0	2.0	0.0	0.0	52		\$850.34
3.6.3	Oral presentation to Town Council	2.0	2.0	2.0	2.0	8.0	52	\$150.00	\$1,914.34
	SUBTOTAL TASK 3	28.0	118.0	174.0	70.0	30.0	208.0	450.0	\$47,761.36
4	Asset Management Plan								
4.1	Asset Inventory								
4.1.1	Update inventory by functional category	0.0	12.0	12.0	0.0	0.0			\$2,580.00
4.1.2	Evaluation of major assets	4.0	12.0	16.0	0.0	4.0			\$4,104.00
4.1.3	Field inspection of assets	0.0	4.0	4.0	0.0	0.0	52		\$888.34
4.2	Asset Management Plan Development								
4.2.1	Estimation of assets value	2.0	16.0	20.0	0.0	0.0			\$4,232.00
4.2.2	Determination of annual funding needs	2.0	12.0	16.0	0.0	4.0			\$3,712.00
4.3	Document Production/Finalization	4.0	8.0	12.0	0.0	12.0		\$150.00	\$4,074.00
4.4	Meetings								
4.4.1	Draft plan review meeting	2.0	2.0	2.0	0.0	0.0	52		\$850.34
4.4.2	Final plan review meeting	2.0	2.0	2.0	0.0	4.0	52	\$150.00	\$1,340.34
	SUBTOTAL TASK 4	16.0	68.0	84.0	0.0	24.0	156.0	\$300.00	\$21,781.02
	TOTAL ALL TASKS	95.0	340.0	454.0	104.0	84.0	676.0	1250.0	\$124,046.42



Schedule of Standard Hourly Billing Rates

Personnel Work Class	Effective January 1, 2018 Per Hour
PROJECT MANAGEMENT:	
Principal	\$219.00
Senior Project Manager	\$196.00
Project Manager	\$175.00
PROJECT ENGINEERING:	
Senior Project Engineer	\$158.00
Project Engineer	\$135.00
Senior Design Engineer	\$115.00
Design Engineer	\$100.00
FIELD ENGINEERING:	
Senior Inspector	\$115.00
Field Engineering Technician/Inspector	\$100.00
DRAFTING:	
Senior CADD Technician	\$117.00
CADD Technician	\$92.00
ADMINISTRATION:	
Clerical	\$85.00

Rates will be negotiated for personnel with qualifications not identified in the above schedule.

Monthly rates can be furnished for full-time Inspectors.

BILLABLE EXPENSES:

Courier	Cost
Subconsultant	Cost plus 5%
GPS System	\$110.00/unit/day
Vehicle Mileage	Current Allowable IRS Rate
Special Software	Cost
Travel	Cost
Printing/Reproduction	Cost
Other Materials or Equipment	Cost

This Schedule of Standard Hourly Billing Rates is considered to be "CONFIDENTIAL" information. Release of any information contained herein to third parties is prohibited without written consent from Merrick & Company. The above standard rates will be held firm through December 31, 2018.