



Town of Eatonville

DRINKING WATER DESIGN & ENGINEERING SERVICES Scope of Services

Section 1. General Description

The Architect and Engineering Consultant (A&E) shall furnish all professional engineering, design, permitting, coordination, and construction-phase support services required for the drinking water main along Kennedy Boulevard, beginning at 1000 West Kennedy Boulevard and terminating at the intersection of Kennedy Boulevard and East Street. These services shall include all work necessary to prepare complete design and bid documents for the Town of Eatonville's Drinking Water Infrastructure Improvements funded under the State Revolving Fund (SRF) Program. All services shall comply with SRF requirements, the Town's Design Standards, and all applicable federal, state, and local regulatory requirements.

The Town shall provide the A&E Consultant with all available survey data, master planning information, GIS records, and condition assessment documentation.

Section 2. Project Basis & Existing Information (Task DW-01 and Task DW-02)

2.1 Utilize, at a minimum, the following reference documents:

- Drinking water Master Plan
- Drinking water Facilities Plan
- Record drawings
- GIS and asset management datasets

2.2

Review and confirm all design assumptions based on the survey and utility information supplied by the Town.

2.3

Identify gaps or conflicts in existing information and request clarification through the Town's RFI process.



Town of Eatonville

DRINKING WATER DESIGN & ENGINEERING SERVICES Scope of Services

Section 3. Project Initiation & Coordination (Task DW-01)

3.1 Project Kickoff

The A&E Consultant shall participate in a project kickoff meeting with the Program Management Team (PMT) and Town staff to confirm project objectives, communication protocols, deliverable schedules, and design standards.

3.2 Ongoing Coordination

The A&E Consultant shall:

- Coordinate regularly with the PMT, including weekly or biweekly progress meetings.
- Review and integrate master planning data, survey data.
- Provide conflict identification, resolution strategies, and technical recommendations to the PMT.
- Coordinate with other utilities and agencies.

Section 4. Basis of Design (Task DW-02)

4.1 Basis of Design Reports (BOD)

The A&E Consultant shall prepare a phase-specific Basis of Design Report (BOD) for each drinking water project segment, including, but not limited to:

- Existing conditions and design criteria
- System demands and operational considerations
- Proposed pipe sizes, materials, appurtenances, and hydraulic performance expectations
- Phasing and constructability considerations
- Coordination requirements with adjacent infrastructure and agencies, including: The Orange County Road Widening Project, which may require relocation, adjustment, or redesign of drinking water transmission and distribution mains
- Environmental, permitting and SRF compliance requirements
- The recommended procedure for replacing the asbestos pipes with safer alternatives/techniques.



Town of Eatonville

DRINKING WATER DESIGN & ENGINEERING SERVICES Scope of Services

Section 5. Permitting & SRF Compliance (Task DW-08)

The A&E Consultant shall prepare and submit all necessary permits, including but not limited to:

- FDEP Drinking Water permit applications
- Dewatering/NPDES permits (if needed)
- Environmental and ecological compliance documentation required under the SRF clearinghouse process
- Temporary traffic control plans (if required)

The A&E Consultant shall ensure compliance with:

- American Iron and Steel (AIS)
- Davis-Bacon Prevailing Wage
- SRF Title Certification Documentation
- SRF Environmental Procedures

Section 6. Bid Package Preparation (Task DW-07)

The A&E Consultant shall prepare complete bid documents, including:

1. Instructions to bidders
2. Technical specifications (CSI format)
3. Bid forms
4. Special conditions
5. Quantity take-offs
6. Detailed pay items
7. Construction phasing requirements

Bid documents shall be coordinated with the PMT to ensure consistency with Town procurement requirements and SRF funding requirements.



Town of Eatonville

DRINKING WATER DESIGN & ENGINEERING SERVICES Scope of Services

Section 7. Design Services. (Task DW-03 thru Task DW-06)

7.1 Progressive Design Submittals

The A&E Consultant shall produce:

- **30% Preliminary Design**
- **60% Design & Draft Bid Documents**
- **95% Final Technical Design & Permit-Ready Documents**
- **100% Final Design Package**

Each milestone shall include:

- Plan and profile sheets
- Technical specifications
- Special provisions
- Phasing and traffic control (if applicable)
- Construction sequencing
- Preliminary and updated engineer's opinion of probable construction cost

7.2 Technical Design Elements

Design should address:

- New water main installations, relocations, and replacements for asbestos pipes.
- Trenchless and open-cut construction considerations
- Valve replacements and new valve connections to both the existing and new Water Treatment Plant (WTP)
- Fire hydrant replacements compliant with NFPA standards
- Pipe bedding, trenching, and erosion control requirements
- Connections to the existing Town system
- Protection of existing utility infrastructure



Town of Eatonville

DRINKING WATER DESIGN & ENGINEERING SERVICES Scope of Services

Section 8. Construction Phases & Packaging Support (Task DW-07)

Organize the Construction Phase as follows:

- B1-Relocate existing water main, 1000 W Kennedy Blvd (approx., 900LF).
- B2-Relocate & replacement existing water main, 920 W Kennedy Blvd to Campus View Dr (3,250 LF).
- B3-Relocate & replacement AC water main from Campus view Dr to I-4 (Approx 2,405 LF).
- C-Replace the AC main water pipe from I-4 to East St (approx. 3,500LF).

The A&E Consultant shall:

- Divide the drinking water improvements into multiple bid packages.
- Provide recommended package boundaries based on constructability and schedule constraints.
- Assist in developing a construction phasing strategy

Section 9. Pavement & Surface Restoration (Task DW-04)

Design pavement and surface restoration for all disturbed areas, including:

- Asphalt roadway restoration
- Concrete sidewalks, driveways, and curbs
- Landscaping and sod replacement
- Subgrade and base material requirements
- Pavement marking restoration

Section 10. Technical Specifications & Cost Estimation (Task DW-07)

The A&E Consultant shall:

- Prepare detailed technical specifications in accordance with FDEP Chapter 62-555, F.A.C., AWWA standards, OSHA regulations, and all applicable Town and County requirements.
- Provide an Engineer's Opinion of Probable Construction Cost (EOPC) at each design milestone (30%, 60%, 95%, and 100%), including detailed quantities, materials, labor, contingency, and construction phasing.



Town of Eatonville

DRINKING WATER DESIGN & ENGINEERING SERVICES Scope of Services

Section 11. BIM (3D Model) Development (Task DW-02 thru Task DW-07)

The A&E Consultant shall develop a BIM model (LOD 300) showing:

- Water main alignments
- Valves and Hydrants
- Utility conflicts
- Connection points to WTP
- 3D spatial coordination elements

Section 12. Operation Maintenance (O&M) Manual (Task DW-07)

Prepare an O&M Manual including:

- Valve Exercising Program
- Hydrant maintenance requirements
- Recommended flushing program
- Maps and asset identifiers
- Emergency shutdown procedures
- Long-term maintenance recommendations

Section 13. Traffic Control & Construction Coordination per phase (Task DW-04 thru Task DW-06)

The A&E Consultant shall include, at a minimum:

- Traffic Control / Maintenance of Traffic (MOT)
- Construction Sequencing Coordination
- Agency Coordination
- Access and Constructability
- Permits and Approvals
- Documentation



Town of Eatonville

DRINKING WATER DESIGN & ENGINEERING SERVICES Scope of Services

Section 14. Construction Phase Services (To be negotiated separately)

Upon awarding construction contracts, the A&E Consultant shall provide:

- Shop Drawing Reviews
- Responses to Requests for Information (RFIs)
- Attendance at construction meetings
- Change order technical evaluations
- Periodic site visits (as requested by the Town)
- Record Drawing / As-Built Preparation based on contractor redlines

Section 15. Deliverables

The A&E Consultant shall deliver the following:

- Basis of Design Reports
- 30%, 60%, 95%, 100% plan sets
- Specifications (Draft and Final)
- Permit applications and supporting documents
- Bid package(s)
- Engineer's Opinion of Probable Cost (EOPC) – Initial and Final
- Construction-phase engineering documentation
- Final record drawings in GIS-ready and CAD formats



Town of Eatonville

DRINKING WATER DESIGN & ENGINEERING SERVICES

Scope of Services

Section 16. Geotechnical Scope of Services (Task DW-02)

- Stake boring locations at the site.
- Clear utilities at the boring locations.
- Mobilize truck-mounted drilling equipment and personnel.
- Perform 20 borings to depths of 10 to 15 feet spaced at approximately 500-foot centers along the proposed pipeline alignment. Half of the borings will be auger borings and half will be Standard Penetration Test (SPT) borings .
- Perform up to five pavement cores along the existing roadway in areas where the roadway will need to be replaced during construction.
- Up to 2 nights of lane closure MOT will be provided to perform the pavement cores as well as any borings that need to be conducted in the road due to existing utilities.
- Perform routine laboratory soil classification tests to enhance visual soil classification, including corrosion series testing.
- Issue a geotechnical engineering report signed and sealed by a Geotechnical Engineer licensed in Florida that will address the following topics:
 - Subsurface conditions at the boring locations
 - Asphalt and base thickness at the core locations
 - Measured and estimated seasonal high groundwater depths
 - Geotechnical recommendations for site preparation, pipe bedding, water main installation, for open cut design, as well as testing recommendations for construction.

Town of Eatonville
DW 4802A0 Drinking
Water Design &
Engineering Services

DESIGN FEES



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

3. Labor Categories & Hourly Rates

(Consultant must complete the hourly rates.)

Labor Category	Role Description	Hourly Rate (\$)
Project Manager	Project oversight, coordination	\$317.06
Senior Engineer / Permitting	Design lead, QA/QC/FDEP Permitting	\$251.59
Project Engineer	Design calculations, plans	\$232.66
Engineer 2	Plan preparation/GIS/as-built development	\$187.07
Engineer 1	Plan preparation/GIS/as-built development	\$130.63
Construction Services Engineer	Shop drawings, RFIs	\$251.59
Administrative Support	Accounting/Document processing	\$93.68

Hourly rates shall remain fixed unless adjusted per Article 5 of the Agreement.



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

4. Breakdown of Lump Sum Tasks

(Consultant fills in amounts, PM reviews for alignment.)

Task	Lump Sum Fee (\$)
Task DW-01 – Project Management & Coordination	\$ <u>8,733.60</u>
Task DW-02 – Basis of Design Report	\$ <u>96,090.20</u>
Task DW-03 – 30% Design Submittal	\$ <u>34,165.58</u>
Task DW-04 – 60% Design Submittal	\$ <u>77,113.40</u>
Task DW-05 – 95% Design Submittal	\$ <u>69,582.88</u>
Task DW-06 – 100% Final Design Package	\$ <u>29,987.08</u>
Task DW-07 – Bid Documents Preparation	\$ <u>34,721.16</u>
Task DW-08 – Permitting & SRF Compliance	\$ <u>43,532.62</u>
TOTAL LUMP SUM AMOUNT	\$ <u>393,926.52</u>

5. Breakdown of Hourly (NTE) Tasks

Task	NTE Amount (\$)
Task DW-09 – Construction Phase Engineering Support	\$ ____
Task DW-10 – Additional Town / PMT Meetings	\$ ____
Task DW-11 – SRF Review Responses & Revisions	\$ ____
Task DW-12 – Misc. Technical Support (as authorized)	\$ ____
TOTAL NTE AMOUNT	\$ ____

6. Allowed Reimbursable Expenses



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

(Only as applicable; Town-issued policy applies.)

Category	Conditions
Mileage	As per Town travel policy
Printing of Large Format Sheets	Only if requested by the Town
Permit Fees	Actual cost, with receipts
Delivery & Courier Services	Only for required submissions

No markup shall be applied to reimbursables.

All other expenses are included in the lump sum or hourly rates.

7. Fee Summary

Category	Amount (\$)
Total Lump Sum Tasks	\$ <u>393,926.52</u>
Total NTE Tasks	\$ _____
Total Reimbursables (Estimated)	\$ <u>5,811.00</u>
GRAND TOTAL (Not-to-Exceed)	\$ <u>399,737.52</u>

**BLACK &
VEATCH**

Hourly Rate Schedule

2026-27 Rates

Labor Category	Hourly Billing Rate ¹
Project Manager I	\$232
Project Manager II	\$263
Sr. Project Manager	\$301
Project Director	\$337
Program Manager	\$344
Engineering Intern	\$103
Staff Engineer I	\$128
Staff Engineer II	\$157
Design Engineer	\$159
Engineer (Global Workforce ²)	\$94
Project / Planning Engineer I	\$178
Project / Planning Engineer II	\$194
Senior Engineer I	\$226
Senior Engineer II	\$255
Sr. Engineer (Global Workforce ²)	\$156
Engineering Manager	\$232
Senior Engineering Manager	\$279
Principal-In-Charge	\$372
QA/QC Manager	\$330
Technical Writer	\$325
CADD Technician I	\$135
CADD Technician II	\$162
Technician (Global Workforce ²)	\$79
Engineering Technician	\$165
Senior Engineering Technician	\$199
Accountant	\$131
Sr. Accountant	\$157

Labor Category	Hourly Billing Rate ¹
Administrative Support I	\$107
Administrative Support II	\$123
Operations Specialist	\$180
Construction Coordinator	\$180
Sr. Operations Specialist	\$261
Scheduler	\$157
Project/Program Scheduler	\$194
Project Controls Specialist	\$145
Sr. Project Controls Specialist	\$200
Risk/Construction Mgmt Director	\$349
Resident Inspector I	\$157
Resident Inspector II	\$194
Sr Resident Inspector	\$212
Construction Manager	\$248
Sr. Construction Manager	\$274
Construction Administrator	\$128
Cost Estimator	\$236
Senior Cost Estimator	\$287
Water Treatment Specialist	\$268
Sr. Water Treatment Specialist	\$343
Technical Specialist I	\$258
Technical Specialist II	\$298
Senior Technical Specialist	\$307
Consulting – Sr. Analyst	\$207
Consulting - Consultant	\$265
Consulting - Manager	\$308
Consulting - Principal	\$354

¹ Hourly rates include all labor; overhead; margins and profit; and customary expenses.

² Black & Veatch Integrated Global Workforce professionals located in offices outside of the U.S.



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

4. Breakdown of Lump Sum Tasks

(Consultant fills in amounts, PM reviews for alignment.)

Task	Lump Sum Fee (\$)
Task DW-01 – Project Management & Coordination	
Task DW-02 – Basis of Design Report	\$ <u>27,558.00</u>
Task DW-03 – 30% Design Submittal	\$ _____
Task DW-04 – 60% Design Submittal	\$ <u>11,508.00</u>
Task DW-05 – 95% Design Submittal	\$ <u>11,508.00</u>
Task DW-06 – 100% Final Design Package	\$ <u>11,509.00</u>
Task DW-07 – Bid Documents Preparation	\$ <u>14,169.00</u>
Task DW-08 – Permitting & SRF Compliance	\$ <u>21,963.00</u>
TOTAL LUMP SUM AMOUNT	\$ <u>98,215.00</u>

5. Breakdown of Hourly (NTE) Tasks

Task	NTE Amount (\$)
Task DW-09 – Construction Phase Engineering Support	\$ _____
Task DW-10 – Additional Town / PMT Meetings	\$ _____
Task DW-11 – SRF Review Responses & Revisions	\$ _____
Task DW-12 – Misc. Technical Support (as authorized)	\$ _____
TOTAL NTE AMOUNT	\$ _____

6. Allowed Reimbursable Expenses



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

(Only as applicable; Town-issued policy applies.)

Category	Conditions
Mileage	As per Town travel policy
Printing of Large Format Sheets	Only if requested by the Town
Permit Fees	Actual cost, with receipts
Delivery & Courier Services	Only for required submissions

No markup shall be applied to reimbursables.

All other expenses are included in the lump sum or hourly rates.

7. Fee Summary

Category	Amount (\$)
Total Lump Sum Tasks	\$ <u>98,215.00</u>
Total NTE Tasks	\$ _____
Total Reimbursables (Estimated)	\$ <u>540.00</u>
GRAND TOTAL (Not-to-Exceed)	\$ <u>98,755.00</u>

GEC



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

3. Labor Categories & Hourly Rates

(Consultant must complete the hourly rates.)

Labor Category	Role Description	Hourly Rate (\$)
Chief Engineer		\$300.00
Senior Engineer		\$270.00
Engineer Intern		\$140.00
Senior Engineering Technician		\$145.00
Engineering Technician		\$100.00
CADD/GIS Specialist		\$150.00
Secretary		\$100.00

Hourly rates shall remain fixed unless adjusted per Article 5 of the Agreement.



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

4. Breakdown of Lump Sum Tasks

(Consultant fills in amounts, PM reviews for alignment.)

Task	Lump Sum Fee (\$)
Task DW-01 – Project Management & Coordination	
Task DW-02 – Basis of Design Report	\$ <u>33,694.00</u>
Task DW-03 – 30% Design Submittal	
Task DW-04 – 60% Design Submittal	
Task DW-05 – 95% Design Submittal	
Task DW-06 – 100% Final Design Package	
Task DW-07 – Bid Documents Preparation	
Task DW-08 – Permitting & SRF Compliance	
TOTAL LUMP SUM AMOUNT	\$ <u>33,694.00</u>

5. Breakdown of Hourly (NTE) Tasks

Task	NTE Amount (\$)
Task DW-09 – Construction Phase Engineering Support	
Task DW-10 – Additional Town / PMT Meetings	
Task DW-11 – SRF Review Responses & Revisions	
Task DW-12 – Misc. Technical Support (as authorized)	
TOTAL NTE AMOUNT	

6. Allowed Reimbursable Expenses

GLE



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

3. Labor Categories & Hourly Rates

(Consultant must complete the hourly rates.)

Labor Category	Role Description	Hourly Rate (\$)
Project Manager	Project oversight, coordination	\$ <u>185.00</u>
Senior Engineer	Design lead, QA/QC	\$ <u>175.00</u>
Project Engineer	Design calculations, plans	\$ <u>165.00</u>
Permitting Specialist	FDEP permitting, SRF compliance	\$ <u>No offer</u>
CAD Technician	Drafting and plan preparation	\$ <u>95.00</u>
GIS Technician	GIS/as-built development	\$ <u>No offer</u>
Construction Services Engineer	Shop drawings, RFIs	\$ <u>No offer</u>
Administrative Support	Document processing	\$ <u>75.00</u>

Hourly rates shall remain fixed unless adjusted per Article 5 of the Agreement.



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

4. Breakdown of Lump Sum Tasks

(Consultant fills in amounts, PM reviews for alignment.)

Task	Lump Sum Fee (\$)
Task DW-01 – Project Management & Coordination	\$_____
Task DW-02 – Basis of Design Report	\$ <u>10,000</u>
Task DW-03 – 30% Design Submittal	\$_____
Task DW-04 – 60% Design Submittal	\$_____
Task DW-05 – 95% Design Submittal	\$_____
Task DW-06 – 100% Final Design Package	\$_____
Task DW-07 – Bid Documents Preparation	\$ <u>5,000</u>
Task DW-08 – Permitting & SRF Compliance	\$_____
TOTAL LUMP SUM AMOUNT	\$ <u>15,000</u>

5. Breakdown of Hourly (NTE) Tasks

Task	NTE Amount (\$)
Task DW-09 – Construction Phase Engineering Support	\$_____
Task DW-10 – Additional Town / PMT Meetings	\$_____
Task DW-11 – SRF Review Responses & Revisions	\$_____
Task DW-12 – Misc. Technical Support (as authorized)	\$_____
TOTAL NTE AMOUNT	\$_____

6. Allowed Reimbursable Expenses

TRIUNE



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

3. Labor Categories & Hourly Rates

(Consultant must complete the hourly rates.)

Labor Category	Role Description	Hourly Rate (\$)
Project Manager	Project oversight, coordination	\$ <u>N/A</u>
Senior Engineer	Design lead, QA/QC	\$ <u>260.00</u>
Project Engineer	Design calculations, plans	\$ <u>221.00</u>
Permitting Specialist	FDEP permitting, SRF compliance	\$ <u>N/A</u>
CAD Technician	Drafting and plan preparation	\$ <u>155.00</u>
GIS Technician	GIS/as-built development	\$ <u>N/A</u>
Construction Services Engineer	Shop drawings, RFIs	\$ <u>N/A</u>
Administrative Support	Document processing	\$ <u>92.00</u>

Hourly rates shall remain fixed unless adjusted per Article 5 of the Agreement.

Only the labor categories shown with rates apply to Triune's subconsultant scope; all others are not provided by Triune.



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

4. Breakdown of Lump Sum Tasks

(Consultant fills in amounts, PM reviews for alignment.)

Task	Lump Sum Fee (\$)
Task DW-01 – Project Management & Coordination	\$_____
Task DW-02 – Basis of Design Report	\$_____
Task DW-03 – 30% Design Submittal	\$_____
Task DW-04 – 60% Design Submittal	\$ <u>7,500.00</u>
Task DW-05 – 95% Design Submittal	\$ <u>1,500.00</u>
Task DW-06 – 100% Final Design Package	\$ <u>1,500.00</u>
Task DW-07 – Bid Documents Preparation	\$ <u>1,000.00</u>
Task DW-08 – Permitting & SRF Compliance	\$_____
TOTAL LUMP SUM AMOUNT	\$ <u>11,500.00</u>

5. Breakdown of Hourly (NTE) Tasks

Task	NTE Amount (\$)
Task DW-09 – Construction Phase Engineering Support	\$_____
Task DW-10 – Additional Town / PMT Meetings	\$_____
Task DW-11 – SRF Review Responses & Revisions	\$_____
Task DW-12 – Misc. Technical Support (as authorized)	\$_____
TOTAL NTE AMOUNT	\$_____

6. Allowed Reimbursable Expenses



Town of Eatonville

Drinking Water Design & Engineering Services Exhibit B – Fee Schedule Template

(Only as applicable; Town-issued policy applies.)

Category	Conditions
Mileage	As per Town travel policy
Printing of Large Format Sheets	Only if requested by the Town
Permit Fees	Actual cost, with receipts
Delivery & Courier Services	Only for required submissions

No markup shall be applied to reimbursables.

All other expenses are included in the lump sum or hourly rates.

7. Fee Summary

Category	Amount (\$)
Total Lump Sum Tasks	\$ <u>11,500.00</u>
Total NTE Tasks	\$ <u> </u>
Total Reimbursables (Estimated)	\$ <u>75.00</u>
GRAND TOTAL (Not-to-Exceed)	\$ <u>11,575.00</u>

END OF SCOPE AND FEE