

Via Electronic Mail

12/2/2024



Mayor Julie Wilkins  
LaBelle City Hall  
481 West Hickpochee Avenue  
LaBelle, FL 33935

RE: Proposal for Design Engineering Services for Drinking Water System Improvements  
City of LaBelle, FL

Dear Mayor Wilkins:

Thank you for the opportunity for Woodard & Curran (W&C) to provide this proposal for professional Design Engineering Services pertaining to improvements to the Drinking Water System for the City of LaBelle (City) which include upgrades to the Membrane Water Treatment Facility, the Storage and Supply system, and the Transmission and Distribution system.

This project and the proposed scope encompass the recommendations included in the LaBelle Drinking Water Facilities Plan (DW Plan) that was prepared for the City of LaBelle in a collaborative effort by City Staff and W&C to meet the current and future needs of the City and the requirements of the Florida Department of Environmental Protection's (FDEP's) funding from Special Appropriation for Hurricanes Fiona and Ian (SAHFI). The DW Plan was developed to evaluate utility needs related to drinking water production, storage, and distribution to include improved resiliency, flood protection, health and safety, reliability, O&M efficiency and 20-year growth estimates.

## **PROJECT UNDERSTANDING AND APPROACH SUMMARY**

Based on the assessment performed in the DW Plan and the projected water demands from future developments, the City urgently needs to implement the recommendations of the DW Plan. Design Engineering Services provided by W&C will address the following Drinking Water System Improvements:

### **Distribution System & Storage Improvements**

1. A new up to 1,000,000 gallon pedosphere elevated water storage tank will be designed to provide redundancy for water storage tank maintenance and to increase the total system storage capacity to meet municipal standards and FAC 62-555.320 (19)(a).

The new pedosphere elevated storage tank's recommended location and height will be determined during hydraulic modeling analysis in the Preliminary Investigation phase. The tank site will be designed with additional miscellaneous work elements, including fencing, an access gate, yard piping, an emergency backup generator, a new electrical service connection, a driveway, exterior lighting, a security camera system, instrumentation, and communications equipment.



2. The transmission and distribution piping network will be analyzed. Elements of the network, including pipe and valve sizes and hydrants, that can limit the distribution of water during fire events will be identified and upgrades to the distribution system will be designed to eliminate these bottlenecks. A surge analysis will also be prepared that incorporates the new elevated storage tank. Distribution system improvements will include any upgrades that may be needed to eliminate high pressure spikes in the distribution network because of immediate stops/starts of the high service pumps.
3. W&C will prepare a valve replacement program for identifying and replacing non-functional mainline gate valves. This program will be executed with assistance from the City Staff to perform a valve exercising program to catalogue the City's isolation valves in the distribution network and identify the valves that are failing or inoperable. Faulty valves will be removed and replaced. It is estimated that one hundred forty (140) valves will need to be replaced.

### **Supply Wells & Membrane Water Treatment Facility Improvements**

1. W&C will design new backup generator infrastructure at the City's two (2) well sources to improve the City's ability to consistently supply raw water to the treatment plant during periods of primary utility power outages. Design includes new permanently mounted 200 kW generators, automatic transfer switches, and surge protectors to improve water source supply reliability. A specification for a trailer-mounted genset will also be prepared to serve as a backup for one of the well source generators in the event the permanently mounted generators are damaged.
2. W&C will upgrade the existing reverse osmosis (RO) skids at the Membrane Water Treatment Facility (MWTF) to add new RO pressure vessels and associated piping, valving, and instrumentation to increase the plant's treatment capacity from 0.75 MGD to 1.125 MGD and to provide full operating redundancy when one RO train is out of service for maintenance.
3. W&C will prepare a RO membrane replacement program for replacement of the existing membranes on both RO trains which have exceeded their useful life.
4. Specifications for new high service and concentrate pumps will be prepared to replace the existing pumps which are at the end of their useful life.
5. SCADA upgrades will be designed to incorporate all the plant, distribution system and storage upgrades. As part of these upgrades, the MWTF's cyber-security protocols will be reviewed and any recommendations for improvements or updates will be identified.
6. Specifications for critical shelf spares for the RO motor operated valves and the well pump variable frequency drives will be prepared.
7. The MWTF camera system design will be upgraded to enable the cameras at the well source locations and the MWTF to be viewed remotely over the internet.



8. The electrical and controls systems at the well source locations and the MWTF will be reviewed and improvements will be designed to the existing systems to provide for a greater level of protection against lightning strikes and supply-side power surges.
9. W&C will design two (2) new propane-powered pumps at the MWTF. One of these pumps will be a chlorine contact chamber (CCC) transfer pump and one will be a high service pump. Propane-powered pumps will enable one (1) transfer pump and one (1) high service pump in MANUAL mode in the event of damage to electrical supply and control equipment by lightning strikes.

The CCC transfer pump for pumping water from the treatment plant's chlorine contact chamber to the finished water storage tank has a design point of 1,050 gpm @ 39 ft TDH. The high service pump for pumping from the finished water storage tank into the distribution system has a design point of 1,850 gpm @ 140 ft TDH. The new propane-powered pumps will each replace an existing electrical-powered pump in poor condition in the same physical location.

10. W&C will design improvements to the chemical feed and storage area to provide protection from harsh environmental conditions, storm resiliency, increased equipment capacity, improvements to operator safety, and replacement of equipment that has exceeded its useful life. Design will include replacement of the existing chemical storage tanks and pumping equipment. A table listing each of the chemicals located in the chemical feed and storage area is provided below. New level sensors will be provided for each tank. Chemical metering pumps will be upsized compared to the existing pumps to allow them to treat the larger flow rate that the upgraded RO skids will be able to produce.

### MWTF Chemical Storage and Metering Pumps

Chemical	Chemical Storage Tanks	Chemical Metering Pump(s)	Level Sensors
Sodium Hypochlorite	Two 2,000-gallon bulk tanks One 75-gallon day tank	Two 6.0 gph duplex pump skids (4.0 gph existing)	Two ultrasonic
Sulfuric Acid	One 500-gallon bulk tank One 30-gallon day tank	One 1.5 gph duplex pump skid (1.0 gph existing)	One ultrasonic
Orthophosphate	One 275-gallon bulk tank One 10-gallon day tank	One 0.65 gph duplex pump skid (0.42 gph existing)	One ultrasonic
Sodium Hydroxide	One 1,550-gallon bulk tank One 40-gallon day tank	One 3.0 gph duplex pump skid (2.0 gph existing)	One ultrasonic
Hydrofluorosilicic Acid	One 240-gallon bulk tank One 35-gallon day tank	One 0.65 gph duplex pump skid (0.42 gph existing)	One ultrasonic
Antiscalant	One 55-gallon bulk tank One 25-gallon day tank	One 0.65 gph duplex pump skid (0.42 gph existing)	One ultrasonic

Design improvements will also include replacement of the existing chemical storage area with a fully enclosed, climate controlled chemical storage building. The building will be designed such that each chemical has its own secondary containment area. HVAC and electrical elements will be included in the building design.



## SCOPE OF WORK DETAILS

W&C will provide the following Engineering Design Services to the City to address the Drinking Water System Improvements described above:

### **PHASE 001 – Preliminary Investigations**

Phase 001 will be composed of Preliminary Investigative work including data gathering, system mapping, hydraulic modeling, and surge analyses. This Phase also includes subcontracted site investigation work including topographic surveys, subsurface utility location work, geotechnical studies, wetlands & endangered species investigations, and field data collection. Historical data will be gathered from the City's existing SCADA system at the MWTF when available.

The City has an existing WaterCAD hydraulic model, but the accuracy and completeness of the model is not yet known. Woodard & Curran will review the hydraulic model and update it as needed by comparing the current model to the most recent version of the City's Utilities Map. Updating the hydraulic model will be imperative to support the distribution system design work on this project.

1.1 Field Pressure Monitoring and Logging: Large portions of the existing distribution system are aging and are likely tuberculated, affecting their hydraulic capacity. To help determine the extent and magnitude of this reduction, pressure data loggers will be installed at multiple hydrants throughout the existing distribution system for approximately four weeks in duration. Exact quantities and locations of pressure monitors will need to be determined through discussions with the City and MWTF Operations personnel. Pressure monitoring will provide accurate data to better understand and model the distribution system under a variety of flow and pressure conditions particularly in the north area of the City where most of the antiquated distribution piping is located. The scope of this Task Order does not include supply and installation of the pressure monitors and data loggers.

1.2 Hydraulic Modelling: Once the hydraulic model has been fully updated to incorporate the real system and pressure data from the field installed pressure monitors, SCADA information collected from the MWTF, and other available information., the model will be run to evaluate flows and pressures throughout the distribution network under current flow conditions to identify and confirm any problem areas.

Next, the hydraulic model analysis will be run to assess the flow and pressure impacts on the potable water distribution system resulting from the addition of the proposed project improvements, along with increased projected demands from future developments. Water system storage and water age impacts will also be assessed. The hydraulic model effort will include recommendations for installation and sizing new equipment and piping for the distribution network. This work will also confirm the site and operating range for the elevated storage tank.

A Draft Technical Report summarizing the hydraulic model assumptions and results along with appropriate figures will be submitted to the City and MWTF Operations Team for review. Comments will be incorporated in the Final Technical Report, which will be used to define and



verify specific distribution system recommended changes and improvements. The City will be provided with a copy of the updated hydraulic WaterCAD model.

1.3 Surge Analysis: Issues with hydraulic pressure surges are a known problem at the existing MWTF which have resulted in damage to pumps and piping. W&C will perform a desktop surge analysis to model the water system operation and identify design improvements that will minimize hydraulic pressure surges in the water system. Possible solutions, such as pressure surge control valves or hydropneumatic tanks at one or more locations in the distribution network will be investigated as part of the analysis.

A Draft Technical Report summarizing the surge analysis assumptions and results along with appropriate figures will be submitted to the City and MWTF Operations Team for review. Comments will be incorporated in the Final Technical Report, which will be used to identify the distribution system recommended changes and improvements.

1.4 Survey & Subsurface Utility Locate: W&C's survey subconsultant will complete a ground survey using the City approved horizontal and vertical datum to create a base plan for the detailed design of the pipelines and the parcel identified for the elevated storage tank. This survey will include but not be limited to property lines, topography, utilities, drainage, physical features, and buildings. This information will also be used to confirm proposed infrastructure location in comparison to the 100-year and 500-year flood zone. A desktop review of available information will be performed to identify wetland resource areas. All survey and subsurface utility locate drawings will be stamped by a Florida professional surveyor. The City will be provided with copies of all final drawings.

1.5 Geotechnical Subsurface Studies: W&C's geotechnical subconsultant will conduct a geotechnical exploration, including soil sampling and borings, to ascertain the necessary geotechnical design parameters along the proposed pipeline routes and at locations of proposed new structures including the elevated storage tank. This task includes pre-exploration activities, such as reviewing published soils information and plans of underground utilities to facilitate the completion of subsurface exploratory test borings and analysis. A report summarizing all data and findings will be prepared and provided to the City.

1.6 Environmental Assessment: A site inspection and desktop analysis of the proposed pipeline routes and the parcel identified for installation of the elevated storage tank will be conducted for the presence of wetlands and/or endangered species. A report summarizing all data and findings will be prepared and provided to the City.

## **PHASE 002 – Construction Management Selection**

Phase 002 will consist of facilitating for the City the selection of the qualified Construction Manager At Risk (CMAR) for the project. This phase will include development of the Request for Qualifications (RFQ) for the Construction Manager at Risk (CMAR) for the project, coordinating CMAR interviews, and facilitating the evaluation of the RFQ packages received.

2.1 Preparation of RFQ: W&C will prepare an RFQ consisting of project summary, preliminary project schedule, and background, CMAR scope of services, RFQ submission requirements, owner's evaluation process/criteria/scoring, CMAR contract agreement, standard



terms and conditions, and a technical package that includes: Drawing List, Preliminary Site Plan, draft process flow diagrams, Equipment List, and preliminary demolition drawings. W&C will review the RFQ with the City before advertising it publicly.

2.2 CMAR RFQ Process: W&C will work with the City to advertise the RFQ. W&C will lead a pre-proposal meeting to introduce all proposers to the project and scope of work. W&C will address Requests for Information (RFIs) submitted by proposers as they are preparing their proposals in the form of RFQ Addenda. W&C will also assist with coordinating and attending CMAR interviews.

2.3 Evaluation of Proposals: W&C will review each proposal for accuracy and completeness and will work with the City to evaluate each proposal based on weighted criteria for selection. The evaluation criteria description and relative weight assigned to each will be defined in the RFQ package. A score will be assigned to each Proposal based on the evaluation criteria.

2.4 Project Management (PM): This task occurs concurrently with all the steps outlined above and consists of all those tasks necessary to inform the City of the project's needs; monitor and control the design process; coordinate information and meetings; coordinate with subcontractors and in-house design staff; reach timely decisions to meet the project schedule; prepare reports to the Client on the progress of the project and status of schedule and budget; and provide technical oversight of project activities.

Meetings: W&C will attend the following meetings which are included under the scope of this proposal:

- One (1) kickoff meeting and site visit at the beginning of the project with City Staff and Operations personnel to confirm W&C's understanding of the City's goals for the project and to review the written scope of work, project deliverables, project schedule, and project budget;
- One (1) Workshop with the City to discuss CMAR delivery, RFQ and selection approach;
- One (1) design review meeting to review the CMAR technical package and RFQ with City Staff and Operations personnel; and
- One (1) pre-proposal meeting as part of the CMAR RFQ process.

### **PHASE 003 – Preliminary Design 0-30%**

Phase 003 will consist of preliminary design development which will include the preparation of progressing to a Design Basis Report, with input from the CMAR. Design charrette meetings will be held with the City and CMAR to identify key decisions for each process of the WWTF design. Discussions may include building approach, materials of construction, equipment selection and sizing, and building and piping layouts. The decisions formed from these charrette meetings will form the basis for design, which will be summarized in a 30% Design Basis Report.



3.1 Process and Mechanical Design: W&C will prepare the basic process and mechanical design calculations and drawings for the project improvements including mechanical layouts. The proposed location of the elevated storage tank will be documented and a general arrangement site layout drawing prepared. Preliminary design criteria and general arrangement drawings for the new chemical building will also be developed. Upgrade requirements for the RO skids will be defined and basic drawings prepared. Demolition drawings and general arrangement drawings for replacement of the transfer and high service pumps will be prepared. Piping & Instrumentation Diagrams (P&ID) will be prepared for the RO skid upgrades, chemical building equipment, and drinking water pumps.

3.2 Electrical, Instrumentation, and Controls Design: W&C will prepare single line electrical diagrams for the elevated storage tank, chemical building, and the genset equipment to provide backup power for the raw water well pumps. Instrumentation and Controls (I&C) design for the project improvements will be detailed on the P&ID drawings and defined using instrument specification sheets. Selection and specification of instruments will be coordinated with City and WTF Operations Staff. The existing electrical and controls system, cyber-security system, camera system, and SCADA system will be reviewed and recommended upgrades will be identified and reviewed with the City and MWTF Operations Staff.

3.3 Civil and Structural Design: W&C will prepare a grading and utilities plan for the elevated storage tank site utilizing the base plan prepared from the ground survey. W&C will prepare general layout drawings for the chemical building. The single-line routing of proposed new and replacement pipelines will be established for the transmission and pipe looping mains and new distribution piping. Structural design will be based on the conditions identified in the geotechnical exploration work. Issues regarding additional easements and land acquisitions will be identified and brought to the City's attention for resolution.

3.4 Design Basis Report: A Design Basis Report (DBR) will be prepared to document and describe the design development of the system improvement Projects. The DBR will be organized to comply with the requirements of Florida Administrative Code and submitted to FDEP as part of the permitting process. This report will be submitted to the City for review and comment.

3.5 CMAR: W&C will coordinate design charette meetings to review the design basis of each process with the CMAR and City. Four (4) four-hour design charette meetings have been budgeted. W&C will also coordinate regular design review meetings with the CMAR. Meetings are anticipated to occur on a bi-weekly basis, but frequency can be adjusted as needed and agreed to by all parties. Six (6) 1-hour meetings have been budgeted for this phase.

3.6 Quality Assurance (QA)/Quality Control (QC): W&C will conduct regular internal technical reviews of all calculations, drawings, and reports prior to submitting the information to the City. Finalized 100% Design drawings and specifications will be stamped and signed by certified Florida professionals.

3.7 Project Management: This task occurs concurrently with all the steps outlined above and consists of all those tasks necessary to inform the City of the project's needs; monitor and control the design process; coordinate information and meetings; coordinate with



subcontractors and in-house design staff; reach timely decisions to meet the project schedule; prepare reports to the Client on the progress of the project and status of schedule and budget; and provide technical oversight of project activities.

Meetings: W&C will attend and facilitate the following meetings:

- One (1) kickoff meeting at the beginning of the project with City Staff and MWTF Operations personnel to confirm W&C's understanding of the City's goals for the project and to review the written scope of work, project deliverables, project schedule, and project budget;
- One (1) design review meeting to review the 30% Design drawings and the CMAR RFQ with City Staff and MWTF Operations personnel; and
- One (1) pre-bid meeting as part of the CMAR RFQ process.

#### **PHASE 004 – Intermediate Design 30-60%**

Phase 004 will consist of intermediate design development which includes the preparation of a 60% set of design plans and a Table of Contents (TOC) for the construction specifications. The Intermediate Design phase will include regular online design review meetings with the CMAR to obtain contractor input to the project design.

4.1 Process and Mechanical Design: W&C will prepare the full details for the process and mechanical design, a list of specifications, and detailed drawings for the new equipment, pumps, piping, valving, instrumentation, and chemical feed systems. Drawings will consist of mechanical layouts and details. The P&ID drawings will be updated with additional details as appropriate.

4.2 Electrical, Instrumentation, and Controls Design: W&C will prepare a list of specifications and draft the detailed electrical design drawings including drawings for control panels, cable pull and termination, wiring diagrams, cable duct and conduit routing, HVAC, interior & exterior lighting, and emergency power.

Project improvements will be designed with a high level of automation, allowing the facility to be able to run unmanned remotely in AUTO or to be operated locally in HAND or MANUAL mode if communication systems are compromised. I&C design is anticipated to include network architecture revisions, development of controls narratives (for changes to PLC, HMI, & SCADA), control panel design, and remote communication design.

HVAC: W&C will prepare HVAC sizing calculations, a list of specifications, and drawings for the HVAC system in the chemical building. HVAC design is anticipated to consist predominantly of air handling equipment and ductwork.

4.3 Civil, Structural, and Architectural Design: The general layout drawings for the chemical building will be refined and additional details added. Two-line pipe routing drawings for proposed new and replacement pipelines for the transmission and pipe looping mains and new distribution piping will be prepared showing plan and cross sectional elevation views. Piping standard details will also be added to drawings. Engineer will assist the Client in identifying





required easements or rights-of-way within FDOT jurisdiction for installation of new transmission or distribution mains.

W&C will prepare site design drawings. Design elements to be shown on the drawings for the elevated storage tank are expected to consist of site clearing and preparation, site grading, site layout, site utilities, stormwater management, fencing, driveway, and walkways. The addition of impervious area is expected to be limited; however, any permitting associated with additional impervious area will be addressed in Task 4.9 below.

Structural design, list of specifications, and drawings related to structural elements of the new facility will be prepared. Structural elements are anticipated to consist of foundation and footings, pipe supports and thrust restraints, chemical containment areas, containment area coatings, building trusses, building walls, and roofing. Detailed architectural design and drawings related to the aesthetics and architectural aspects of the improvements will be prepared. Architectural elements are anticipated to consist of the chemical building exterior and the elevated storage tank fencing and exterior tankage.

Plumbing design: Drawings and a list of specifications will be prepared for the chemical building. Plumbing details will include a potable water supply system, eye wash stations, and floor drains. This task will include the design of any plumbing necessary to ensure the chemical building meets local, state, and federal plumbing codes.

Fire Protection Design: If required by state and local codes, W&C will prepare a fire protection design for the enclosed chemical building. It is anticipated that a sprinkler system will need to be designed for the chemical storage areas. A certified fire protection expert will prepare the design.

4.4 Design Basis Report: The Design Basis Report (DBR) will be updated as the design work progresses to document the design development of the system improvement projects as required by FAC. The finalized DBR will be submitted to FDEP as part of the permitting process.

4.5 CMAR: W&C will coordinate regular design review meetings with the contractor. Meetings are anticipated to occur on a biweekly basis, but frequency can be adjusted as needed and agreed to by all parties.

4.6 Quality Assurance (QA)/Quality Control (QC): W&C will conduct regular internal technical reviews of calculations, drawings, and reports prior to submitting the information to the City. Finalized 100% Design drawings and specifications will be stamped and signed by certified Florida professionals.

4.7 Project Management: This task occurs concurrently with all the steps outlined above and consists of all those tasks necessary to inform the City of the project's needs; monitor and control the design process; coordinate information and meetings; coordinate with subcontractors and in-house design staff; reach timely decisions to meet the project schedule; prepare reports to the Client on the progress of the project and status of schedule and budget; and provide technical oversight of project activities.



Meetings: W&C will attend the follow meetings which are included under the scope of this proposal:

- One (1) design review meeting to review the 60% Design drawings with City Staff, CMAR, and MWTF Operations personnel; and
- Regularly scheduled online design review meetings with CMAR as described above.

4.8 Specifications: W&C will provide a Table of Contents listing the Construction Specifications that will be prepared by W&C to define the work, equipment, and materials to be performed and provided by the contractor.

4.9 Permitting: W&C will begin preparing and submitting permit applications required by state and federal requirements. Permits under the scope of work to be prepared by W&C include the following:

- FDEP Application for a Specific Permit to Construct PWS Components which includes submittal of the Design Basis Report,
- South Florida Water Management District (SFWMD) Environmental Resource Permit (ERP) for the new elevated storage tank (if required),
- Florida Department of Transportation (FDOT) Utility Permit to perform work within rights-of-way along roadways where proposed transmission and distribution main work will occur.
- Modify the City's Consumptive Use Permit (CUP) with SFWMD to change the City's water allocation so that it is consistent with the proposed drinking water upgrades and forecasted usage.

All permitting fees will be paid for directly by the City.

#### **PHASE 005– Final Design 60-100%**

Phase 005 will consist of final design development which includes the preparation of a 90% complete set of design plans and a full draft set of the construction specifications. The 90% design plans, specifications, and updated DBR will be reviewed with the City, the MWTF Operations Team, and CMAR.

Drawings, specifications, and the DBR will then be updated with any comments from the 90% design review. The drawings, specifications and DBR will go through one last QA/QC technical and content review by W&C Engineering Staff and a final set of 100% design construction documents will be prepared. All construction documents will be stamped and signed by registered Florida Professional Engineers. Construction documents will then be submitted to FDEP for review and approval for compliance with funding requirements.

5.1 Process and Mechanical Design: W&C will finalize the full details for the process and mechanical design, prepare a set of specifications, and finalize detailed drawings for the new equipment, pumps, piping, valving, tanks, and chemical feed systems. W&C will prepare



protocols for the replacement of the RO membranes and identification and replacement of failed distribution piping isolation valves.

5.2 Electrical, Instrumentation, and Controls Design: W&C will prepare the E&IC specifications and finalize the detailed design drawings including drawings for control panels, cable pull and termination, wiring diagrams, cable duct and conduit routing, HVAC, interior & exterior lighting, security cameras, and emergency power equipment. I&C design will be revised to finalize network architecture changes, controls narrative changes, control panel design, and remote communication design.

HVAC: W&C will finalize HVAC design, prepare specifications, and finalize drawings for the HVAC in the chemical building.

5.3 Civil, Structural, and Architectural Design: The general layout drawings for the chemical building will be finalized as will the drawings for the new and replacement pipelines for the transmission and pipe looping mains and new distribution piping. Piping standard details will be finalized. Detailed architectural design, specifications, and drawings related to the aesthetics and architectural aspects of the improvements will be finalized. Plumbing and Fire Protection design, corresponding specifications, and drawings will be finalized for the chemical building.

5.4 Design Basis Report: The scope includes one round of responses by W&C to address a Request for Additional Information (RAI) letter from FDEP pertaining to questions or comments about the DBR.

5.5 CMAR: W&C will coordinate regular design review meetings with the contractor. Meetings are anticipated to occur on a biweekly basis, but frequency can be adjusted as needed and agreed to by all parties.

5.6 Quality Assurance (QA)/Quality Control (QC): W&C will conduct regular internal technical reviews of all calculations, drawings, and reports prior to submitting the information to the City. Finalized 100% Design drawings and specifications will be stamped and signed by certified Florida professionals.

5.7 Project Management: This task occurs concurrently with all the steps outlined above and consists of all those tasks necessary to inform the City of the project's needs; monitor and control the design process; coordinate information and meetings; coordinate with subcontractors and in-house design staff; reach timely decisions to meet the project schedule; prepare reports to the Client on the progress of the project and status of schedule and budget; and provide technical oversight of project activities.

Meetings: W&C will attend the follow meetings which are included under the scope of this proposal:

- One (1) design review meeting to review the 90% Design drawings and specifications with City Staff, CMAR, and MWTF Operations personnel; and
- Regularly scheduled online design review meetings with CMAR as described above.



5.8 Specifications: W&C will provide a complete set of Specifications that will be prepared to define the work, equipment, and materials to be performed and provided by the contractor. This project will utilize Engineer’s standard bidding and contractual (front-end) specifications based on the integrated Engineers Joint Contract Documents Committee (EJCDC) construction series documents, Florida bidding laws and regulations, and FDEP SAHFI funding requirements. General requirements and technical specifications will be Engineer master guide specifications based on Construction Specifications Institute standards (including MasterFormat) which are coordinated with the EJCDC bidding/contractual documents.

5.9 Permitting: W&C will complete applying for and receipt of permits required by state and federal requirements as identified under 4.9 above.

**SCHEDULE**

The scope of work will be completed by W&C as indicated in the timeline noted below commencing from Authorization To Proceed (ATP) issued by the City.

PHASE	DESCRIPTION	ESTIMATED SCHEDULE TO COMPLETE
001	Preliminary Investigations	4 months from ATP
002	Construction Management Selection	3 months from ATP
003	Preliminary Design 0-30%	4 months from completion of Phase 001
004	Intermediate Design 30-60% for GMP Development	4 months from completion of Phase 003
005	Final Design 60-100%	4 months from completion of Phase 004

**ASSUMPTIONS AND UNDERSTANDINGS**

The following assumptions and understandings apply to the scope of work, schedule, and budget described herein.

1. The scope of this project is limited to the City of LaBelle water distribution system, potable water supply wells, and MWTF identified in the Drinking Water Facilities Plan.
2. No additional survey, geotechnical, hydrogeological, or utility location is needed for the project design and permitting, beyond what is included in the Scope herein.



3. Extensive alternative evaluations and process equipment selection were conducted as part of the DW Facilities Plan. Therefore, additional alternatives analysis will not be conducted as part of the design and is excluded from the scope of this project.
4. The scope herein is based on a Construction Manager At Risk (CMAR) approach. Engineering services associated with pre-procurement, evaluated bids and pre-selection of process equipment, instruments and related appurtenances are not included as part of this scope. If pre-procurement becomes advantageous and allowable by the funding agencies, this may be added for an additional fee.
5. A staffing analysis, a criticality analysis, or recommendations for staffing levels are not included.
6. Fees or engineering associated with land purchase, parcel sketches and legal descriptions, and easements (if applicable) are not included.
7. The scope does not include engineering services during construction or resident engineering services. A proposal for this work will be provided to the City under a separate Task Order prior to the construction phase of the project.
8. A site hazardous materials survey is not included.
9. W&C is not conducting a field condition assessment or camera recording of the existing distribution system or water mains.
10. The City will provide access to all existing infrastructure being upgraded during this design effort.
11. The City will provide the most recent available record plans and distribution system maps (as available).
12. All permitting fees shall be paid by the City.
13. Permitting for county and local permits required for construction will be applied for and obtained by the contractor.
14. The design will be in accordance with City of LaBelle Design Standards, when available.
15. Consumptive Use Permit modifications are not included.
16. This project does not include addressing FDEP findings during the City's November 2022 sanitary survey except for repair/replacement of water main isolation valves.
17. Improvements to the lime storage and feed system are not included.
18. Improvements to the raw water sand removal devices, cartridge filters, and degasifier are not included.
19. Attendance, participation, and presentations at public hearings or city council meetings are excluded from this scope of work.



**DELIVERABLES**

The deliverables for this project consist of the following which will all be electronic documents unless otherwise noted:

1. Electronic WaterCAD files for the Hydraulic Model and a report of the Hydraulic Model analysis.
2. Surge analysis report.
3. Permitting applications and issued permits.
4. All Preliminary Investigative Work reports and drawings including Environmental Assessments, Subsurface Utility Engineering and Location, Surveys, and Geotechnical Studies.
5. Draft and Final Design Basis Report, which includes an Engineer’s Estimate of Probable Construction Cost (EEOGCC)
6. 30% Progress Drawings and Preliminary Cost Estimate
7. CMAR RFQ, RFQ Addendums, and RFQ Evaluation Tabulation
8. 60% Progress Drawings for GMP Development
9. 90% Progress Drawings and Specifications
10. Final 100% Design Construction Drawings and Specifications

**BUDGET**

Compensation for the Engineering Services described herein will be based upon the following budget that is not to be exceeded without prior written authorization from the City:

Description of Work	Budget
Phase 001 – Preliminary Investigations	\$225,000
Phase 002 – Construction Management Selection	\$200,000
Phase 003 – Preliminary Design 0-30%	\$500,000
Phase 004 – Intermediate Design 30-60%	\$300,000
Phase 005 – Final Design 60-100%	\$296,000
<b>Total Fee</b>	<b>\$1,521,000</b>

All phases are lump sum and will be invoiced monthly on a percent complete basis.

**TERMS AND CONDITIONS**



The Scope of Services will be completed in accordance with the Master Professional Services Agreement for professional and/or engineering services (Agreement), dated October 10, 2024, between the City and Woodard & Curran, Inc.

## **CLOSING**

We greatly appreciate this opportunity to offer our engineering services. If you accept this proposal and wish to proceed with the Scope of Services, please sign the below Authorization to Proceed and return a copy for our files.

Please feel free to contact me at 863-354-4416 or [jdemello@woodardcurran.com](mailto:jdemello@woodardcurran.com) if you have any questions regarding this proposal or require any further information.

Sincerely,

Woodard & Curran, Inc.

A handwritten signature in blue ink, appearing to read "Justin F. deMello".

Justin F. deMello, PE  
Vice President

CC: Shawn Brown and Frank Miller




The parties hereto have executed this Agreement by their duly authorized agents as of the date indicated below.

**AUTHORIZATION BY:**

WOODARD & CURRAN, INC.

CITY OF LABELLE, FL

  
12/2/2024  
\_\_\_\_\_  
Signature                                  Date

Justin deMello, PE

\_\_\_\_\_  
Name (printed)

Vice President

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature                                  Date

Julie Wilkins

\_\_\_\_\_  
Name (printed)

Mayor

\_\_\_\_\_  
Title