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# UTILITY ADVISORY COMMITTEE MEETING

## CITY OF LAKE CITY

January 14, 2021 at 6:00 PM

Venue: City Hall

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## AGENDA

*Due to the COVID-19 social distancing requirements, the City of Lake City will have limited seating available in the Council Chambers. All persons in attendance are strongly encouraged to wear a mask for the duration of the time they are at the meeting. The meeting will also be available via communications media technology.*

**CMT instructions are located at the end of this Agenda**

### Call to Order

### Roll Call

### Minutes

- [1.](#) December 29, 2020

### Approval of Agenda

### Presentations - None

### Persons Wishing to Address Committee

*Citizens are encouraged to participate in City of Lake City meetings. The City of Lake City encourages civility in public discourse and requests that speakers direct their comments to the Chair. Those attendees wishing to share a document and or comments in writing for inclusion into the public record must email the item to [submissions@lcfla.com](mailto:submissions@lcfla.com) no later than noon on the day of the meeting. Citizens may also provide input to individual council members via office visits, phone calls, letters and e-mail that will become public record.*

### Old Business - None

### New Business

- [2.](#) Utility Emergency Response Plan - (Mike Osborn)
- [3.](#) Water Main Extension to North Florida Mega Industrial Park Study - (Joe Helfenberger)

## Topics for Next Meeting

### Next Meeting Date

### Adjournment

### Zoom CMT Information

**Place:** Due to the COVID-19 social distancing requirements, this meeting is also available via communications media technology.

Members of the public may attend the meetings **online** at: <https://us02web.zoom.us/j/85143910809> or

**Telephonic by toll number (no cost to the city), audio only** at: 1-346-248-7799

**Meeting ID:** 851 4391 0809#

Then it will ask for Participant id, just press #.

**Telephonic by toll-free number (cost per minute, billed to the city, zero cost to the caller), audio only** at: 1-888-788-0099

**Meeting ID:** 851 4391 0809#

Then it will ask for Participant id, just press #.

### Public Participation

The public may participate at the appropriate time via: (i) video conference by utilizing the software chat function or raise hand function to request to speak; or (2) telephonically by dialing \*9 to raise hand. The Chair will allow for sufficient time for all participants to be heard.

Those attendees wishing to share a document must email the item to **submissions@lcfla.com** no later than noon on the day of the meeting.

Instructions for meeting attendance and participation are also available at [www.lcfla.com](http://www.lcfla.com) under the calendar entry for the corresponding City Council Regular Session Meeting.

To receive a copy of the agenda packet with supporting documentation, please contact the City Clerk's Office at **clerk@lcfla.com** or **386-719-5826**.

### Contingency Information

**Contingency Plan Meeting:** This will be activated and held if the City experiences connection or web conferencing failure. Any meeting taking place via the contingency

plan will be held and/or reconvened via a conference call utilizing the information provided below.

**The public may attend the contingency plan meeting as follows:**

1-844-992-4726 (toll free)

**Enter access code:** 173 541 6832#

Then it will ask for attendee ID number, just press #

The public may participate in the contingency plan meeting at the appropriate time when the chair requests public comment. The Chair will allow for sufficient time for all participants to be heard.

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**Pursuant to 286.0105, Florida Statutes,** *the City hereby advises the public if a person decides to appeal any decision made by the City with respect to any matter considered at its meetings or hearings, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.*

**SPECIAL REQUIREMENTS:** *Pursuant to 286.26, Florida Statutes, persons needing special accommodations to participate in these meetings should contact the **City Manager's Office at (386) 719-5768.***

**File Attachments for Item:**

1. December 29, 2020

**UTILITY ADVISORY COMMITTEE  
MEETING MINUTES  
December 29, 2020**

The City Utility Advisory Committee for the City of Lake City met on December 29, 2020, at 6:00 P.M. in the Council Chambers on the second floor of City Hall located on 205 North Marion Avenue, Lake City, Florida. The meeting was also available via communications media technology.

**MEMBERS**

Chris Greene – City Council Member-Chairman  
Todd Sampson – City Council Member  
Stephen Witt – Mayor Council Member

Steve Brown – Gas Department Director  
Paul Dyal – Executive Director of Utilities  
Joseph Helfenberger – City Manager – absent  
Thomas Henry – Public Works Director  
Mike Osborn – Water Treatment Plant Director  
Cody Pridgeon – Wastewater Treatment Plant Director  
Brian Scott – Distribution and Collection Director  
Daniel Sweat – Assistant City Manager  
Dave Young – Growth Management Director

**Support Staff**

Fred Koberlein – City Attorney  
Audrey Sikes – City Clerk - Committee Secretary

Call to Order

Mr. Greene called the meeting to order at 6:00 PM.

Roll Call

Mr. Greene asked Ms. Sikes to call roll. Attendance is indicated above.

1. Minutes – July 9, 2018

**Mayor Witt made a motion to approve the July 9, 2018 minutes as presented.**

**Mr. Sampson seconded the motion and the motion carried on a voice vote.**

Approval of Agenda

**Mayor Witt made a motion to approve the agenda as presented. Mr. Sampson seconded the motion and the motion carried on a voice vote.**

Presentations

2. Jim Zuber and Scott Stewart – Update on SR47 Cornerstone Crossing Project  
Mr. Stewart provided an overview and update on the twenty-seven (27) acre development that will be mostly retail. He stated there are no main challenges projected and he will put in a lift station with the goal of tying it into the City system.  
Mr. Stewart offered to assist the City with any easements that may be needed on the

corner of Arrowhead. He would like to get sewer and gas lines out to this area as soon as possible.

Mr. Brown suggested for the City to consider increasing the gas line due to the projected growth in that area.

Persons Wishing to Address Committee – None

Old Business – None

New Business

3. Review and make recommendation on City Council Ordinance No. 2020-2174 - An ordinance of the City of Lake City, Florida amending Section 102-36 of the City Code to provide for the waiver of impact fees for the development and construction of affordable housing; providing for repeal of ordinances in conflict; providing for severability; providing for codification; and providing an effective date.

Note: This Ordinance was referred to the Utility Advisory Committee via council action on December 21, 2020.

At this time Chairman Greene called upon Mr. Toy with the Florida Apartment Association for public comment. Mr. Toy provided, via email, suggested language changes for partial waivers for the committee to consider. Note: The verbiage was emailed out to the members in advance of the meeting.

Mr. Young reported there are few jurisdictions that have partial waivers and most of the affordable housing in Lake City is apartment units. He discussed implementing a 30% waiver and a ten year period.

Members discussed the responsibility for tracking the units to ensure they are still eligible for affordable housing for the ten year duration.

**Mr. Sampson made a motion to set aside City Council Ordinance No. 2020-2174 for staff to review further. Mayor Witt seconded the motion. A roll call vote was taken and the motion passed.**

<b>Mr. Sampson</b>	<b>Aye</b>
<b>Mayor Witt</b>	<b>Aye</b>
<b>Mr. Brown</b>	<b>Aye</b>
<b>Mr. Dyal</b>	<b>Aye</b>
<b>Mr. Henry</b>	<b>Aye</b>
<b>Mr. Osborn</b>	<b>Aye</b>
<b>Mr. Pridgeon</b>	<b>Aye</b>
<b>Mr. Scott</b>	<b>Aye</b>
<b>Mr. Sweat</b>	<b>Aye</b>
<b>Mr. Young</b>	<b>Aye</b>
<b>Mr. Greene</b>	<b>Aye</b>

4. Review and make recommendation on City Council Ordinance No. 2020-2175 An ordinance of the City of Lake City, Florida, to provide for the waiving and

suspension of water and sewer impact fees for a period of twelve (12) months as an inducement for economic development; requiring any applicant seeking to take advantage of the development incentive to apply for and acquire a building permit and commence construction of the development prior to the expiration of the development period; providing for severability; providing for conflicts; and providing an effective date.

Note: This Ordinance was referred to the Utility Advisory Committee via council action on December 21, 2020.

Customer Service Manager Katrina Medearis reported the amount of fees waived to date is \$212,793.59.

Mayor Witt supports the recommendation to waive the fees at this time but understands the importance of impact fees funding. He suggested a review of the fees to determine if the fees are too high.

Mr. Osborn and Mr. Dyal expressed concern with a continued waiver of impact fees and felt these funds were needed to fund infrastructure.

Mr. Greene would like to continue the waiver to encourage development in the community and re-evaluate the waiver again in twelve (12) months.

Mr. Brown discussed the gas appliance rebate program and suggested the use of a different waiver for residential and commercial.

**Mr. Sampson made a motion to recommend to City Council for consideration the approval of City Council Ordinance No. 2020-2175 which provides for the waiving and suspension of water and sewer impact fees for a period of twelve (12) months as an inducement for economic development. Mayor Witt seconded the motion. A roll call vote was taken and the motion passed.**

<b>Mr. Sampson</b>	<b>Aye</b>
<b>Mayor Witt</b>	<b>Aye</b>
<b>Mr. Brown</b>	<b>Aye</b>
<b>Mr. Dyal</b>	<b>Nay</b>
<b>Mr. Henry</b>	<b>Aye</b>
<b>Mr. Osborn</b>	<b>Aye</b>
<b>Mr. Pridgeon</b>	<b>Nay</b>
<b>Mr. Scott</b>	<b>Nay</b>
<b>Mr. Sweat</b>	<b>Aye</b>
<b>Mr. Young</b>	<b>Aye</b>
<b>Mr. Greene</b>	<b>Aye</b>

5. Discussion and Possible Action – Lake City Utilities for the North Florida Mega Industrial Park (Daniel Sweat)

6. Discussion and Possible Action – Mapping and Master Planning (Daniel Sweat)

Note: Item 5 and 6 were addressed together.

Mr. Sweat reported for the City to make an exact determination of utilities we must develop a Master Plan.

Mr. Sweat provided a comprehensive update of the Wastewater Treatment Plant, leachate, gas supply and water as it relates to the North Florida Mega Industrial Park.

Staff expressed the importance of having, in advance, the end user demand needs so the City can properly plan and configure capacity in all these areas.

Members were updated on the Water Use Permit.

Mr. Sweat reported staff is working with the County to determine what is in the County's growth plan.

Mr. Sweat stated the City Council needs to determine if efforts would be better spent on a shovel ready project. His recommendation is for the City to focus on the Bell Road Project and the I-75/State Road 47 Project.

Mr. Sweat stated the City has the ability to work with the County when the end user requirements are known. He reminded the vision must be clear between the governing bodies.

7. Discussion and Possible Action – Persons with Expertise in Utilities (Daniel Sweat)  
Mr. Sweat reported the Distribution and Collections Department is working with GIS to update drawings and identify errors.

Mr. Sweat provided the timeline schedule for St. Margaret's Wastewater Treatment Plant and updated members on the clarifier project.

Members concurred to have the Emergency Response Plan on the next agenda and to hold the next meeting on January 14, 2021 at 6:00 PM. Agenda items are due to the City Clerk by noon on January 6, 2021.

Mr. Zuber provided a heartfelt thanks to the Utility Advisory Committee members for the meeting tonight.

#### Adjournment

There being no further business, the meeting adjourned at 8:27 PM on a motion by Mr. Sampson and seconded by Mayor Witt.

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Audrey E. Sikes, MMC City Clerk



**File Attachments for Item:**

2. Utility Emergency Response Plan - (Mike Osborn)

<b>MEETING DATE</b>

# CITY OF LAKE CITY

## Report to Council

COUNCIL AGENDA	
<b>SECTION</b>	
<b>ITEM NO.</b>	

**SUBJECT:** Task Assignment for ERP

**DEPT / OFFICE:** Utilities / Water Treatment Plant

<b>Originator:</b> Michael L. Osborn		
<b>City Manager</b> Joseph Helfenberger	<b>Department Director</b> Paul Dyal	<b>Date</b> 1/04/21
<b>Recommended Action:</b> Council approve task for Jones Edmunds to provide a Utility Emergency Plan Update		
<b>Summary Explanation &amp; Background:</b>  The Price Creek Water Treatment Plant (WTP) must comply with the America’s Water Infrastructure Act (AWIA) of 2018. This requires a Risk and Resilience Assessment (RRA) to be completed on the water system and verification turned in to the EPA by June 30, 2021. Six months following that date of verification an Emergency Response Plan must follow up on the findings of RRA and verification turned in. The WTP is looking to get these requirements completed as soon as possible to avoid any chance of being fined for non-compliance. The RRA is completed, and this will project will complete the ERP.		
<b>Alternatives:</b> None		
<b>Source of Funds:</b> 410.72.536-030.31		
<b>Financial Impact:</b> \$45,500.00 this money was budgeted and is available for use in the WTP budget.		
<b>Exhibits Attached:</b> 1) Jones Edmunds Scope of Service		

## UTILITY EMERGENCY RESPONSE PLAN UPDATE

**PREPARED FOR:** Paul Dyal  
Executive Director of Utilities  
692 SW Saint Margarets Street  
Lake City, Florida 32025

**DATE:** December 18, 2020

**SUBJECT:** Jones Edmunds Opportunity No. 95110-448-20

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### PROJECT BACKGROUND

America’s Water Infrastructure Act of 2018 (AWIA) requires that all community water systems serving populations greater than 3,300 persons shall assess the risks to, and resilience of, its system (referred to hereinafter as the Risk and Resilience Assessment or “RRA”). The detailed RRA culminates with an Implementation Plan for capital and operational needs for risk and resilience management of the system. Due to the City’s population size, the assessment must be certified to the Administrator of the Environmental Protection Agency (EPA) by June 30, 2021.

Within six months of completion of the RRA, America’s Water Infrastructure Act of 2018 also requires a letter of certification to EPA that the Emergency Response Plan (ERP) for the utility has been updated. For the City’s system this date is December 30, 2021. Both the RRA and the ERP are required to be updated at least every 5 years thereafter. The ERP must contain the following elements:

- Strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system;
- Plans and procedures that can be implemented, and identification of equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water;
- Actions, procedures, and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes, and construction of flood protection barriers; and
- Strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system.

The ERP can be developed based on existing emergency plans such as the Hurricane Plan but is required to include response protocols for any type of emergency or event identified as a threat during the RRA. The suggested format for the ERP will be based on industry standards including the Federal Emergency Management Agency Comprehensive

## DRAFT

Preparedness Guide (CPG 101) and on American Water Works Association guidance M19 Emergency Planning for Water and Wastewater Utilities.

## SCOPE OF SERVICES

Jones Edmunds proposed the AWIA work be completed in two phases. The work associated with Phase 1 pertained to the RRA and was previously completed by Jones Edmunds and the City. The work related to Phase 2 includes the update to the City's ERP and is described herein.

### PHASE 2 – EMERGENCY RESPONSE PLAN UPDATE

#### TASK 1 – KICKOFF MEETING AND EXISTING ERP AND DOCUMENT REVIEW

**Kickoff Meeting:** During the kickoff meeting the CONSULTANT and CITY staff will establish the goals, expectations and metrics, and project logistics for Phase 2; identify appropriate members for the CITY's ERP Team (which may include representatives from outside agencies such as City/County emergency management, police, fire, HAZMAT, Department of Environmental Protection, and others related to emergency response); review threats from the risk assessment and mitigation measures which may include development of incident specific response plan; discuss utility background/history in emergencies and emergency exercises; identify documents to fit under the ERP umbrella for ease of use and update; and discuss industry standards for ERP, specific information for the ERP document, and submit a data request list.

**Data Collection and Review:** CONSULTANT will review the documents provided by the CITY to identify data gaps and assist in collecting other local, regional, and state resources to supplement the CITY's information. This includes the CITY's related plans and response procedures such as the following documents:

- Existing Emergency Response Plan,
- Emergency planning/response policies and procedures,
- Training and exercise plans,
- Equipment lists,
- Community emergency operations plans,
- Mutual aid agreements, and
- Emergency Communications Plan.

**Deliverables:** CONSULTANT will prepare an agenda, meeting materials, and meeting minutes for distribution to the CITY staff as documentation of proceedings. Electronic copies of the meeting minutes will be provided within two weeks of the meeting completion. A draft table of contents for the ERP document will be submitted for this task.

#### TASK 2 – STAFF INTERVIEWS, ACTION CHECKLISTS, AND WORKSHOP 1

CONSULTANT will conduct staff interviews to develop and update the Utility's Incident Management Team (IMT) and Emergency Action Levels (EALs). During Workshop 1, CONSULTANT and CITY's ERP Team will designate the incident management team, including identifying three people for each role. The CONSULTANT and ERP Team will develop and discuss incident action checklists (IACs) for threats/hazards identified in the RRA process as

## DRAFT

relevant to the CITY. These checklists may include actions for mitigation, preparedness, response, and recovery phases of an emergency. Up to 8 IACs will be developed based on the threats identified in the RRA.

**Deliverables:** CONSULTANT will prepare an agenda, meeting materials, and meeting minutes for distribution to CITY staff as documentation of the proceeding. Electronic copies of the meeting minutes will be provided within two weeks of each workshop completion. The IACs will be included in the draft ERP.

### TASK 3 – DRAFT AND FINAL ERP AND WORKSHOP 2

CONSULTANT will develop the draft ERP using guidance from USEPA, AWWA, FEMA, and the National Incident Management System/Incident Command System (NIMS/ICS) and data collected during site visits and interviews. CONSULTANT will include information from the existing CITY emergency response plan for the water system and append these to the updated ERP. The draft update may include the following components.

- Site Specific Information
- Roles and Responsibilities
- Core and Incident Specific Response Plans
- Communication Procedures
- Mitigation Strategies
- Training

The Draft ERP will be reviewed during Workshop 2 with the CITY ERP Team. CONSULTANT and CITY staff will discuss the CITY's comments and address data gaps (if any) to refine the ERP contents, communication protocols, and contact list. CONSULTANT and CITY staff will also determine the access rights for each incident-specific response procedure for CITY staff. CONSULTANT will update the draft ERP document and issue a final copy to the City.

**Deliverables:** The draft report will be delivered electronically for the City review. Up to 5 hard copies (available upon request) and an electronic version of the Final ERP will be submitted to the City Project Manager.

## ASSUMPTIONS

- The CITY is responsible for coordinating with all CITY staff and personnel who should be involved in the assessment including non-utility staff (such as from police or fire departments).
- It is assumed that up to 8 City employees will attend 2-hour workshops.
- CONSULTANT will provide up to 2 attendees during the workshops, interviews, and meetings.
- All existing documents will be provided by the CITY in electronic files which can be used in the ERP. If needed, CONSULTANT will review sensitive documents in the CITY's office.
- If CITY specific documents are not available for update, the CONSULTANT will use industry-standard incident action checklists for natural hazards and emergency response plans for drinking water systems.
- The CITY will provide an updated contact list for incorporation into the updated ERP.
- CONSULTANT's role is to facilitate and document the process. All decisions will be made by the CITY. As a result, the ERP is not a signed-and-sealed document.
- The CITY will submit the required certifications by letter, email, or electronic submission to the EPA Administrator, following completion of the ERP.

## SCHEDULE

The City's ERP certification must be completed by December 30, 2021. Jones Edmunds estimates that this project can be completed in 3 months following Notice to Proceed. A detailed Project Schedule with milestone deliverables and proposed meetings and workshops will be submitted to the City following the kickoff meeting.

## COMPENSATION

Jones Edmunds proposes to complete the Scope of Services outlined above for a not-to-exceed lump-sum fee of \$45,545. Services will be billed monthly on a percent complete basis by Task. The table below provides the breakdown of the Task Fees.

Tasks	Fee
Task 1: Kickoff Meeting and Existing ERP and Document Review	\$11,750
Task 2: Staff Interviews, Action Checklists and Workshop 1	\$14,650
Task 3: Draft and Final ERP and Workshop 2	\$19,100
<b>Total</b>	<b>\$45,500</b>

**File Attachments for Item:**

3. Water Main Extension to North Florida Mega Industrial Park Study - (Joe Helfenberger)

**MEMORANDUM**

**Date:** January 7, 2021  
**To:** Utility Advisory Committee  
**From:** Joseph Helfenberger, City Manager  
**Re:** Proposal for Water Route Study



I am asking for re-consideration of supporting the water route study proposed by Jones Edmunds on November 30, 2020 for the following reasons:

First, there are existing water capacity problems with supplying potable water to the prison. For example, when hydrants are being flushed at the airport, the water pressure is greatly reduced at the prison.

Second, a potable water extension to the NFMIP is needed regardless of whether any industrial development happens. There is a residential component to the development at the North Florida Mega Industrial Park (NFMIP) that is planned to take place soon and it will need potable water. This housing development will be on the west side of the NFMIP, closest to the City water plant. The range of housing projected is between 300 to 700 new residences. It is anticipated that a new housing development would occur much quicker than the industrial development and there is a critical shortage of housing in our community.

Third, there is a greater possibility that the NFMIP will be annexed into the City for future tax base if the City provides the potable water service that is needed in a timely manner. There is already 130,000 gallons per day of sewer capacity available and 30,000 CFS of natural gas available for the NFMIP. The residential property tax base would be estimated to increase in a range from \$51,900,000 to \$121,100,000 (Average residential home value in Columbia County (\$173,000) times the number of projected homes (300 to 700 homes) at full build out.

The study would provide an estimate of the time to design and construct the water extension and would also be helpful information when applying for grants and other funding sources for the project.

The water route study will need to be done for any master plan efforts and the cost of the study is not expected to change significantly depending upon the timing of the work. The cost is \$38,900 and it is expected to take approximately 90 days to complete the study from the time Jones Edmunds would be given authorization to begin.

I am recommending that the Utility Advisory Committee recommend to the City Council to approve this proposal.



November 30, 2020

Joe Helfenberger  
City Manager  
City of Lake City  
205 N. Marion Street  
Lake City, FL 32055

RE: Lake City Water Main Routing Study  
Jones Edmunds Opportunity No.: 95110-XXX-20

Dear Mr. Helfenberger:

In accordance with your request, Jones Edmunds is pleased to submit this Scope of Services for the Lake City Water Main Routing Study to evaluate water main route alternatives to provide potable water utility service from the City's Price Creek Water Treatment Plant to customers of the North Florida Mega Industrial Park.

## BACKGROUND

Columbia County (County) is developing the North Florida Mega Industrial Park (NFMIP) in conjunction with a private landowner, Weyerhaeuser, east of the City of Lake City (City). The construction of least one new business is anticipated by the end of 2021. The County is pursuing the permitting and construction of a raw water well but the timeline to completion is uncertain. This study will serve to provide recommendations for the City to provide potable water utility service from the Price Creek Water Treatment Plant (WTP) to the NFMIP, including pipe sizing, route alternatives, and cost estimating.

## SCOPE OF SERVICES

The Scope of Services is to prepare a Water Main Routing Study technical memorandum that will detail the recommend pipe size, water main route alternatives, and an engineer's opinion of probable construction cost for the recommended route. The expected tasks to be completed under this Scope of Services are described below.

### TASK 1: PROJECT MANAGEMENT AND KICKOFF MEETING

This task includes project initiation, project management, and the project kickoff meeting. Jones Edmunds proposes the subtasks below.

#### 1.1 PROJECT INITIATION AND PROJECT MANAGEMENT

The purpose of this subtask is to facilitate coordination and communication between the City and Jones Edmunds and to report project progress to the City on an ongoing basis.

- Monthly status reports will be provided to the City's Project Manager.

- Set up project files and prepare the Project Plan that will be used throughout the project. The Plan will summarize the City's goals and critical success factors, project schedule, project budgets, communication plan, accounting/invoicing procedures, and project contacts list. This will be a tool for all project team members to assess the project's progress.
- Monitor project progress (percent complete and schedule) and manage the project in conformance with the Project Plan to the extent possible throughout the contract. Monthly invoices will be submitted in accordance with the contract requirements.

## 1.2 KICKOFF MEETING

A project kickoff meeting will be held virtually through Microsoft Teams. During the kickoff meeting, the following will be discussed:

- Project purpose and objectives – confirm City goals.
- Project schedule.
- Project team roles, responsibilities, and communication.
- Critical success factors.
- Project schedule.
- Project data needs. Before the kickoff meeting Jones Edmunds will provide the City with a list of data needs. Anticipated data needs include, but may not be limited to:
  - Latest City geodatabases of the following: water supply and transmission system, wastewater collection and transmission system, natural gas transmission system, and other utilities.
  - For areas without known geodatabase information on system components, City staff will mark up a provided map at or before the kickoff meeting with pipe type, size, as well as age and material if known.
  - Record drawings and/or specifications for the Price Creek WTP and the potable water infrastructure in the vicinity of the NFMIP and Lake City Gateway Airport.
  - Pump curves for the Price Creek WTP high service pumps.
  - Available daily Supervisory Control and Data Acquisition (SCADA) pump run-time data and other available collected data for the past year such as recorded flows and pressures.
  - Monthly pump run-time data for the past year.
  - Number and type of connections and service-area population.
  - Level-of-service water flow in gallons per day and pressure in pounds per square inch for each known future development.
  - Monthly water use data within the service area for the past year.
  - Community Planning Documents with Land Use (future and existing) and population projections.
  - Other reports and documents as deemed necessary by City staff.

#### DELIVERABLES:

- Meeting agenda and meeting minutes will be e-mailed to the City's Project Manager.
- Status updates will be emailed monthly to the City's Project Manager.

#### KEY ASSUMPTIONS:

- All data will be provided in electronic format (Word, Excel, ArcGIS shapefile or geodatabase, and AutoCAD drawing files preferred; if not available, PDF) where available within 14 days of the Kickoff Meeting.

### TASK 2: DATA COLLECTION/DATA GAP ANALYSIS

- Develop maps and shapefiles identifying water transmission main data gaps.
- Review available SCADA data.
- Review as-builts of WTP and transmission system, and pump curves.
- Evaluate current and future maximum day potable and fire flow demands along the potential routes and destination to determine necessary pipe diameter to transmit required flows and maintain required pressures.
- Determine if adequate water supply and permitted capacity are available to meet the estimated demands.
- Prepare a draft technical memorandum (TM) summarizing the collected data findings, demand projections, and water main sizing.
- Attend one virtual meeting with City staff to discuss the data review and pipe sizing.

#### DELIVERABLES:

- PDF map of water transmission main data gaps.
- Meeting minutes emailed to the City's project manager follow the review meeting.
- Draft TM will be emailed to the City's project manager in PDF format.
- Status updates will be emailed monthly to the City's Project Manager.

#### KEY ASSUMPTIONS:

- If NFMIP customer flow and pressure demands are not available, Jones Edmunds will assume LOS based on the types of businesses that have expressed an interest in the park, industry-standard demands, and a percentage of estimated developable acreage.

### TASK 3: ROUTE EVALUATION AND MODEL SCENARIO DEVELOPMENT

Jones Edmunds will evaluate two route alternatives and model scenarios for a new water transmission main from the Price Creek WTP to the NFMIP. Considerations of the advantages and disadvantages of each route will include:

- Route length.
- Land or easement acquisition needs.

- Elevation.
- Potential utility conflicts.
- Construction requirements, i.e. length of directional drills versus open cuts.
- Potential future connections along the route.
- Potential for looping to minimize pressure drops.
- Wetlands along the route.

Jones Edmunds will develop model scenarios for each route based on the maximum daily flow and estimated pressures to determine the feasibility of each alternative. Jones Edmunds will update the draft TM to include a summary of the routing evaluation, including the relative advantages and disadvantages of each route and the proposed model parameters.

#### DELIVERABLES:

- PDF map of route alternatives.
- Status updates will be emailed monthly to the City's Project Manager.

#### KEY ASSUMPTIONS:

- City staff will provide preferred route alternatives for evaluation in electronic format (ArcGIS shapefile or geodatabase preferred; if not available, PDF) within 14 days of the Kickoff Meeting.
- This task does not include survey, geotechnical investigation, or environmental assessment. A desktop evaluation of existing geotechnical information and wetland boundaries will be performed.

### TASK 4: HYDRAULIC MODEL DEVELOPMENT AND ALTERNATIVES ANALYSIS

This task evaluates the City's existing potable water supply system's ability to transmit water from the Price Creek WTP to customers at the NFMIP.

Jones Edmunds proposes the following:

- Develop a hydraulic model of the existing potable water transmission system in the vicinity of the NFMIP using Bentley systems' WaterGEMS software. Model development will be based on the City's latest GIS data as provided by the City and collected in Tasks 1 and 2.
- Allocate existing and near-term projected flows generated in Task 1 to the Price Creek WTP. Flows will be allocated based on AADF and peaking factors will be used to adjust for MDF.
- Verify the model to the extent feasible based on the available existing SCADA data and the provided pump curves and as-builts.

- Perform hydraulic modeling evaluation to analyze the City's Price Creek WTP and existing potable water transmission system with the two possible route scenarios. Model scenarios will be conducted for near-term MDF.
- Meet with City staff to review modeled route alternatives. The goal of the meeting is to select a recommended route.

#### DELIVERABLES:

- Meeting minutes will be e-mailed to the City's Project Manager for distribution following the route review.
- Draft TM will be emailed to the City's project manager in PDF format.

#### KEY ASSUMPTIONS:

- Up to three scenarios will be modeled.
- Model will be calibrated based on existing user and SCADA data as provided by the City.

### **TASK 5: CAPITAL IMPROVEMENT PROJECT COSTS AND WATER MAIN ROUTING STUDY DEVELOPMENT**

#### 5.1 COST ESTIMATES OF RECOMMENDED IMPROVEMENTS

- Prepare planning-level Engineer's Opinion of Probable Construction Costs for recommended water main size and route. Costs will be presented in 2020 dollars. Costs associated with engineering and construction contingencies will be included.

#### 5.2 DRAFT AND FINAL WATER MAIN ROUTING STUDY

- Prepare the draft Water Main Routing Study summarizing the project effort for review and comment by the City.
- Meet with the City virtually to discuss the draft Study and receive comments.
- Following the review meeting, finalize the draft Study by incorporating the City's comments.

#### DELIVERABLES:

- Meeting minutes will be emailed to the City's project manager following the review meeting.
- Draft and Final Water Main Routing Study in PDF format.
- Final WaterGEMS and ArcGIS data collected and developed for the Study.

#### KEY ASSUMPTIONS:

- The cost opinions' accuracy range will be a Class 4 estimate, in accordance with the Association for the Advancement of Cost Engineering International's Cost Estimate Classification System (Recommended Practice No. 18R-97).

## PROJECT SCHEDULE

Jones Edmunds will begin working on this project within two weeks of receipt of a signed task order from the City. The estimated project schedule is as follows:

Task	Days	Days from NTP
Task 1 – Project Management and Kickoff Meeting	15	15
Task 2 – Data Collection and Data Gap Analysis	15	30
Task 3 – Route Evaluation and Scenario Development	15	45
Task 4 – Hydraulic Model Development and Alternative Analysis	30	75
Task 5 – Capital Improvement Project Costs and Water Main Routing Study Development	15	90
<b>Total</b>		<b>90</b>

## PROJECT FEE

Jones Edmunds proposes to perform the Scope of Services as described herein for a lump sum fee of \$38,900.

Task	Total Cost
Task 1 – Project Management and Kickoff Meeting	\$4,800
Task 2 – Data Collection and Data Gap Analysis	\$5,700
Task 3 – Route Evaluation and Scenario Development	\$6,500
Task 4 – Hydraulic Model Development and Alternative Analysis	\$8,900
Task 5 – Capital Improvement Project Costs and Water Main Routing Study Development	\$13,000
<b>Total Fee</b>	<b>\$38,900</b>

Jones Edmunds appreciates your trust in our staff in continuing to serve the City of Lake City and we look forward to working with the City on this important project. If you have any questions or wish to discuss any aspect of the proposed Scope of Services, please contact us at (352) 377-5821.

Sincerely,

  
Jamie Sortevik Bell, PE, CFM  
[jsbell@jonesedmunds.com](mailto:jsbell@jonesedmunds.com)