City of Jacksonville, Florida

Lenny Curry, Mayor

Department of Public Works
Engineering & Construction Management Division
214 N. Hogan Street, 10th Floor
Jacksonville, FL 32202
(904) 255-8762
www.coj.net

ONE CITY. ONE JACKSONVILLE.

October 8, 2018

TO: Gregory W. Pease, Chairman
Professional Services Evaluation Committee

THRU: John P. Pappas, P.E.
Director

10/11/18 11:22:32
Procurement Division

FROM: William J. Joyce, P.E.
Director of Operations

R. Duane Kent, P. E.
Public Works Project Manager

SUBJECT: P-59-17 Professional Design Services for LaSalle Street Outfall
PWEN462SW-06505-PW0708-01

The purpose of this amendment is to expand the study area of the LaSalle Street Outfall Project to include portions of LaRue Avenue, Riviera Street, Colombo Street, Moro Avenue, Belmonte Avenue, San Marco Boulevard, River Road, Laverne Street, and Landon Avenue. This additional study area is being added at the request of the Director of Public works with the intent of ensuring all stormwater entering the LaSalle Street drainage system is accounted for and addressed in the recommendations provided by the Consultant. Negotiations have resulted in the attached Scope of Services, Exhibit C and Fee Schedule, Exhibit D. JSEB firms to be utilized to meet the 20% Participation Percentage Plan for this contract are detailed on a separate attachment.

Accordingly, this is to recommend that Contract No. 10434, originally executed May 20, 2018, between the City and Four Waters Engineering, Inc. for Professional Design Services for LaSalle Street Outfall be amended to incorporate the attached Scope of Services, Exhibit C and Fee Schedule, Exhibit D, to increase the lump sum amount for Design Services by $133,709.29 to a new lump sum amount of $508,001.20 and to increase the not to exceed limits for: Surveying Services by $124,283.66 to a new limit of $238,233.62, Subsurface Utility Engineering Services by $58,450.75 to a new limit of $106,215.18 Thereby increasing the maximum indebtedness to the city by $316,443.70 to a new maximum of $856,850.00. All other terms and conditions are as provided in the RFP and the City's standard contract language.

WJJ/lw

Attachment: Exhibits C & D
JSEB Participation

cc: Lori West, Contract Specialist

ab

SCOPE OF SERVICES

FOR ENGINEERING SERVICES FOR

PHASE 1 – 30% DESIGN & ESTIMATING

LASALLE STREET OUTFALL IMPROVEMENTS

ADDITIONAL DRAINAGE BASIN AREA – LARUE AVENUE, RIVIERA STREET, COLOMBO STREET, MORO AVENUE, BELMONTE AVENUE, SAN MARCO BOULEVARD, RIVER ROAD, LAVERNE STREET, AND LANDON AVENUE

CITY OF JACKSONVILLE, FLORIDA

I. GENERAL SCOPE OF PROJECT

A. The intent of the project is to furnish Phase 1- 30% Design & Estimating services for the LaSalle Street Outfall Improvements Project which consists of installation of a stormwater pump station located at the City owned lot between 936 and 952 LaSalle Street and an outfall to the St. Johns River in the right-of-way (ROW) of LaSalle Street. The primary purpose of the project is to alleviate flooding to the residents and businesses in the LaSalle Street drainage basin to the City's approved level of service. It was determined recently by City Staff and evaluation of continued flooding, that the drainage basin south of LaSalle Street is connected to the LaSalle Street Outfall. The City has requested that Four Waters Engineering (4Waters) provide a scope of work to include this additional area for analysis and proposed drainage improvements to potentially be discharged through the LaSalle Street stormwater system and proposed pump station. The additional drainage area will increase the total LaSalle Street analysis area by approximately 45%. The additional area is south of the LaSalle drainage basin and includes portions of LaRue Avenue, Riviera Street, Colombo Street, Moro Avenue, Belmonte Avenue, San Marco Boulevard, River Road, and Laverne Street, and part of the Landon Avenue drainage system. The purpose of this document is to discuss the additional scope of work necessary to meet the City's objective.

B. The additional project limits include approximately 45 acres and are generally delineated in the attachment to the scope of work based on the City's request.

C. It is intended that Consultant's services will result in data collection, existing conditions analysis and stormwater model, proposed improvements model with alternatives and cost estimates, 30% drawings completed to a level of detail to provide a cost estimate, determination of water quality levels and treatment required by the St. Johns River Water Management District (SJRWMD), drainage calculations and reporting, and 30% design cost estimate.

D. Consultant's services on the project are anticipated to be in three (3) phases, Phase 1 – 30% Design & Estimating, Phase 2 – Final Design, and Phase 3 – Professional Services During Construction (PSDC), with separate negotiation and fee for each phase. At the City's option and upon completion of the 30% Design & Estimating phase, Consultant's services may be extended to Phase 2 for Final Design and/or development of the design-build bidding package after negotiation of mutually satisfactory terms.

E. Work during the Phase 1 – 30% Design & Estimating will concentrate, in order, on:

Exhibit C'

EXHIBIT C

1. Drainage basin data collection of the existing conditions to prepare drainage analysis of the existing conditions and proposed improvements, including survey of existing drainage basin inlets; survey of potential stormwater conveyance improvement area and storage routes; pump down, cleaning, and CCTV of the existing stormwater conveyance system main trunk lines on LaRue Avenue, Belmonte Avenue, and Landon Avenue and also plugging and pump down of the isolated system along LaVerne Street, River Road, and San Marco Boulevard to Riviera Street; and ASCE 38-02 Quality Level "A" and "B" subsurface utility locates.
2. Drainage analysis of the existing conditions and proposed preliminary design alternatives with Team recommendations to the City.
3. Identify permits that will be required to construct the project, coordinate with the associated agencies, and evaluate and assess the likelihood and/or difficulties of obtaining each permit.
4. Prepare 30% design and construction plans to a level of detail to an approximate Class 2 cost estimate per the Association for the Advancement of Cost Engineering International, Inc. (AACE) suitable for a Class 2 cost estimate per AACE (typical to 30% to 60% deliverable); stormwater quantity and quality calculations; preliminary pump hydraulics and selection; and other issues related to the construction of this project.
5. Prepare presentation materials and assist the City in presenting the proposed work at a Public Information Meeting and respond to any concerns related to the project.

II. PROJECT INITIATION & DATA COLLECTION

A. Project Initiation

Upon notice to proceed, 4Waters will coordinate with City contacts to request the additional available basin area data items for evaluation. 4Waters will update the project schedule in coordination with the team subconsultants which clearly identifies project milestones and deliverables. Schedule will be provided to the City and the 4Waters Team.

B. Data Collection and Review:

The 4Waters Team will obtain and utilize all available information from the City for the area that encompasses the additional basin area to be evaluated (approximately 45 acres), including but not limited to available survey, City GIS stormwater basins, stormwater structure layers (inlets, pipes, pipe sizes, outfalls, etc.), as-builts, LiDAR, aerial, land use layers, soils data, CCTV videos, and other available pertinent data. After collecting all available data, including as-built data received from the City contacts, the 4Waters Team will determine necessary survey data required to supplement the available information and complete an existing conditions stormwater model and analysis. The 4Waters Team will complete the necessary existing conditions data collection by gathering elevation data of existing stormwater structures in the additional drainage basin, a topographic survey of potential stormwater conveyance and storage routes, pump down, cleaning, and CCTV of some of the existing stormwater conveyance system lines. The 4Waters Team recommends inspecting the condition of the existing conveyance main trunk lines due to the importance that this stormwater pipe may have on the design. The stormwater conveyance main trunk lines inspection will aid in determining pipe defects, groundwater inflow, and necessary repairs required for planned design usage such as pipe upsize and/or as additional stormwater storage facility. The jet cleaning required for the CCTV will also clean the existing lines from silt and debris, which will allow for additional drainage capacity of the current state of the existing stormwater system.

Exhibit C

III. DRAINAGE ANALYSIS & PRELIMINARY DESIGN ALTERNATIVES

A. Determine Existing Conditions:

All data collected will be organized, evaluated and documented to prepare the existing conditions analysis of the additional drainage basin, existing conditions of the conveyance system main trunk lines, continuity of the drainage system connected to the LaSalle Street main trunk line, and potential storage capacity areas. The additional drainage basin area will be verified with the collected data and field site visits. Sub-basins will be determined along with necessary drainage calculations to evaluate the existing conditions. Based on other designs in this project vicinity and the project basin area, the existing conditions are assumed to require 15 to 30 sub-basins to be created to accurately represent the existing conditions of the additional drainage basin area. A stormwater existing conditions model will be developed in a modeling software platform acceptable to the SJRWMD to evaluate problematic and critical features of the conveyance system and identify areas of needed improvement. The stormwater model will be verified with available City storm event data and high-water marks gathered from survey. The stormwater model will be used to evaluate the mean annual/24 hr, 5 yr/24 hr, and the design storm event prior to the St. Johns River bulkhead being overtopped, and the results will be documented in the Drainage Analysis & Preliminary Design Alternatives Report. A thorough QA/QC will be conducted by Almond Engineering on the existing condition sub-basins, hydrology calculations, stormwater model, results, recommendations, and report. *The scope of work does not include an evaluation or recommendation of improvements for the Landon Avenue pump station located on San Marco Boulevard or the immediate basin of the pump station. The attached figure shows the additional drainage basin area included in this scope of work.*

B. Consult with Regulatory Agencies (COJ and SJRWMD): ***No additional fee is necessary for the additional drainage basin area; it is included in the approved LaSalle Street Outfall Improvements Proposal. The original scope of work is provided below.***

The 4Waters Team will perform pre-application meetings, as appropriate, with the various regulatory agencies concerning the project design and associated regulatory requirements, to ensure preliminary regulatory approval and an understanding of necessary water quality requirements prior to proceeding with the preliminary design alternatives. The 4Waters Team will coordinate with the City regarding pre-application meetings and will provide meeting minutes from any pre-application meetings.

C. Proposed Conditions and Preliminary Design Alternatives:

Preliminary design alternatives will be based on the evaluation of the survey data, CCTV results, and the existing conditions stormwater model results. The 4Waters Team will develop up to three (3) alternative preliminary designs (included with the LaSalle Basin) which will evaluate the mean annual/24 hr, 5 yr/24hr, and the design storm event prior to the St. Johns River bulkhead being overtopped. If the identified design storm event prior to the St. Johns River bulkhead overtopping is determined unrealistic, another design storm event will be selected based on practical construction installation, project pump station site limitations, and cost considerations for water quantity and quality treatment design with the coordination and approval of the City. A proposed improvements stormwater model will be developed for each of the (3) alternative preliminary designs (included with the LaSalle Basin) to evaluate the design parameters required to accommodate the associated peak flows of the storm events. Based on other designs in this project vicinity and the project basin area, the proposed conditions are assumed to have 20 to 35 sub-

EXHIBIT C

basins created to accurately represent the proposed improvements of the additional drainage basin area.

The proposed improvements may include the identified improvements to the stormwater conveyance system found from the existing conditions model, CCTV inspection identified repairs, the proposed pump station and outfall, and potentially an extension of the stormwater conveyance to improve connectivity and routing to the pump station and/or increase available storage of the stormwater system of the LaSalle Basin and the additional drainage basin area. The alternatives may include pump size, wet well size, storage vault size, outfall discharge size, water quality treatment structures, and other critical design elements impacting project restrictions and increased costs. The Drainage Analysis & Preliminary Design Alternatives Report (included with the LaSalle Basin) will include the following for each alternative design: explanation of recommended improvements, preliminary cost estimates, preliminary design figures, and model results. The report will also include a comparison summary matrix of the design alternatives identifying and weighting the pros and cons with a 4Waters Team recommendation to the City. The 4Waters Team will investigate and suggest electrical equipment elevations based on previous storm events and projected sea level rise based on available models and the pump station design lifespan. A thorough QA/QC will be conducted by Almond Engineering on the proposed improvements, sub-basins, hydrology calculations, stormwater model, results, recommendations, and report. *This scope of work does not include an evaluation or recommendation of improvements for the Landon Avenue pump station located on San Marco Boulevard or the immediate basin of the pump station. The attached figure shows the additional drainage basin area included in this scope of work.*

D. Consult with City Representatives:
No additional fee for the additional drainage basin area, it is included in the approved LaSalle Street Outfall Improvements Proposal. The original scope of work is provided below.

At this point the 4Waters Team will have defined the general existing conditions and preliminary design alternatives and will consult with the City Representatives to review the status of the findings and Team recommendations. The Drainage Analysis & Preliminary Design Alternatives Report will aid the City in determining which proposed drainage improvements and drainage design level of service accommodation for the 4Waters Team to proceed with the 30% design.

III. 30% DESIGN & ESTIMATING

A. Preliminary Pump Station Layout:
No additional fee for the additional drainage basin area, it is included in the approved LaSalle Street Outfall Improvements Proposal. The original scope of work is provided below.

After the City has reviewed the Drainage Analysis & Preliminary Design Alternatives Report and approved a proposed design, the 4Waters Team will prepare up to two (2) preliminary pump station site layouts for the City to review. The layouts will include a general layout of the pump station facility which may include the wet well, trash rack, electrical equipment, generator, fuel tank, storage structure, treatment structures, and parking. The 4Waters Team includes an architect who will assist with the layout of the site and coordination with the City to determine acceptable options for façade of any above ground structures. The City approved layout will be used in completing the 30% pump station design and drawings.

Exhibit C

EXHIBIT C

B. 30% Design

Using the approved City pump station layout, the 4Waters Team will proceed with the 30% design that will include the LaSalle Street drainage basin and the additional drainage basin to the south. 30% design will include the following components:

- Hydraulic evaluation and pump selection with ICPR updates.
- Pump station layout design.
- Forcemain outfall design.
- Stormwater pipe improvements from the CCTV inspections.
- Stormwater conveyance system improvements identified from existing conditions model.
- Stormwater conveyance system extension, if necessary.
- Survey and SUE performance within the limits of proposed stormwater conveyance system extension.
- Electrical design
- Structural design
- Water Quality treatment design

The 30% design will be developed to a level of detail necessary to approximate a Class 2 cost estimate per AACE. The 30% design will include 30% design drawings including cover sheet, index, key map, drainage maps (pre and post), project layout, general notes, pump station site layout, pump station plan and profile, forcemain route, existing stormwater main trunk improvements, conveyance improvements or extension, stormwater treatment, structural, electrical, standard City details, and known JEA utility conflicts. The design will reference the ASCE 24-14 Flood Resistant Design and Construction guidelines document.

The 30% design submittal will include 30% drawings, 30% drainage report, Class 2 cost estimate per AACE, list of specifications, and a 30% design submittal technical memorandum. Items that *may not* be included in the 30% design are construction details such as specific utility conflict details, outfall detail, MOT, horizontal control, architecture, landscape, forcemain and stormwater profiles, sediment and erosion control, paving plans, and utility adjustment plans. A thorough QA/QC will be conducted by Almond Engineering on the design documents to ensure consistency and accuracy of information across the multi-disciplinary plan set and drainage report. *This scope of work does not include an evaluation or recommendation of improvements for the Landon Avenue pump station located on San Marco Boulevard or the immediate basin of the pump station. The attached figure shows the additional drainage basin area included in this scope of work.*

C. Consult with City Representatives:

No additional fee for the additional drainage basin area, it is included in the approved LaSalle Street Outfall Improvements Proposal. The original scope of work is provided below.

A meeting with the City and the 4Waters Team will be scheduled to conduct an overview of the 30% design, drawings, address City questions or concerns, and to determine the next phase of the project design desired by the City.

D. Public Meeting Presentation:

No additional fee for the additional drainage basin area, it is included in the approved LaSalle Street Outfall Improvements Proposal. The original scope of work is provided below.

Exhibit C

EXHIBIT C

The 4Waters Team will support the City with two (2) Public Information Meetings, as necessary, with appropriate presentation materials. It is anticipated the first meeting will be conducted at the beginning of the project to explain the purpose of the project and explain the presence of surveyors and other 4Waters Team members. The second meeting will be conducted during the evaluation/design phase to explain the proposed design to the public and to receive feedback from residents and business owners to be included in the following design phase. Prior to each public meeting up to four variable message boards (VMBs) will be placed around the project area for up to seven days to inform the public about the meeting.

IV. PERMITTING

No additional fee for the additional drainage basin area, it is included in the approved LaSalle Street Outfall Improvements Proposal. The original scope of work is provided below.

A. The 4Waters Team will conduct a pre-application meeting with City of Jacksonville Development Department and SJRWMD. The SJRWMD meeting will discuss the water quality treatment required for the project design and necessary design and calculations required. The City of Jacksonville Development Department meeting will discuss the preliminary pump station layout, landscape improvements, architecture or fencing requirements, zoning requirements, and other potential improvements for the proposed project.

V. PROJECT REQUIREMENTS

A. Design Requirements:

1. All drainage recommendations shall be based on the City of Jacksonville Standard Specifications and Details, the Land Development Procedures Manual, the Camp, Dresser and McKee, Inc. Master Stormwater Management Plan and the regulations and policies of applicable permitting agencies.

2. All water and sewer recommendations and improvements shall be in accordance with JEA Water and Sewer Standards Manual, latest edition, and the requirements of the Florida Department of Environmental Protection (FDEP).

3. Any roadway restoration designed as part of this project shall be based on the "Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways, State of Florida", Latest Edition; the current edition of the "City Standards" and the "Land Development Procedures Manual"; Florida Department of Transportation Roadway and Traffic Standards; and the American Association of State Highway and Transportation Officials Policies and Guidelines. All roadway restoration designs and roadway impacts due to construction shall include maintenance of traffic (MOT) design for all phases of construction.

4. The 4Waters Team shall identify, based on the completed Phase 1 survey, areas of potential utility conflict with the proposed stormwater improvements. This may include existing utilities owned or operated by the Jacksonville Electric Authority (JEA), JEA Water & Sewer Business Unit, AT&T, Comcast, Teco/Peoples Gas System or other public and private utilities. The 4Waters Team will initiate coordination with the utility owners to identify conflicts with existing or potential future facilities and necessary adjustments or relocations to be addressed in Phase 2 of the project, as directed by the City.

Exhibit C

5. The 4Waters Team shall prepare a drainage analysis of the existing conditions of the additional drainage basin area, determine proposed improvements with design alternatives located in the additional drainage basin area, and 30% design drawings, cost estimate, and a drainage report for the stormwater conveyance improvements, stormwater pump station, and stormwater outfall. The site location and design of these stormwater improvements are to be within the City ROWs and property, specifically Belmonte Avenue or the alley between Flagler Avenue and Belmonte Avenue. The site location and design of these stormwater improvements shall be in accordance with the City of Jacksonville standards.

6. 4Waters Team representatives shall attend and assist in two (2) Public Information Meetings, if requested by the Program Manager. This is included in the approved LaSalle Street Outfall Improvements proposal.

B. Project Specific Requirements:

1. <u>Survey</u>

a. <u>Extents of Survey</u> – Survey shall be provided by R.E. Holland & Associates as described below to support the additional drainage basin area analysis and the necessary improvements to the stormwater collection system. R.E. Holland's scope of work will be determined after a complete review of all available existing survey information from the City has been conducted during the Data Collection and Review task to determine the level of effort necessary to supplement and provide a comprehensive understanding of the existing conditions.

1) Additional Drainage Basin Area: Survey data will be provided for approximately 90 stormwater structures within the additional drainage basin area including grate/lid elevations, invert elevations, and pipe sizes; 25 spot elevations of centerline of road within basin, 25 finished floor elevations (FFE) of buildings selected by engineer, and 10 high water mark elevations. (R.E. Holland & Associates Tasks 3 and 4)

2) Stormwater Conveyance Extension Roadway Route: Detailed route survey will be provided, as necessary, for an extension or improvement of the stormwater conveyance system along LaRue Avenue, Riviera Street, and Belmonte Avenue connected to the LaSalle Street drainage system (does not pick up Riviera Street that outfalls on Laverne Street), including 25 feet along each side of the intersections, for a total length of approximately 1600 feet. (R.E. Holland & Associates Task 1A and Task 2)

3) Stormwater Conveyance Extension Alley Route (Contingency): Detailed route survey will be provided, as necessary, for an extension to improve the stormwater conveyance system of the additional drainage basin area along the alley between Flagler Avenue and Belmonte Avenue south of LaSalle Street, for a total length of approximately 1000 feet. This is included as a contingency for a potential route for stormwater improvements, storage capacity, and potential construction cost savings from improved constructability. (R.E. Holland & Associates Task 1B and Task 2)

b. <u>Baseline Control</u> - The Consultant shall establish control lines relative to the existing right-of-way, with all ground control points referenced to State Plane Coordinates, NAD83/90 for future use.

EXHIBIT C

c. Bench Levels - Vertical control for the project will originate from existing published governmental bench marks referenced to NAVD 1988.

d. Topography –

1) Stormwater Conveyance Extension Roadway Route: The 4Waters Team shall acquire topography within the stormwater conveyance extension roadway route, as necessary. Survey shall be for the full right-of-way including the foundation of the houses on both sides of the road, and 25 feet back at the intersection with Landon Avenue. Topography will be provided on a 50-foot grid. Location of any visible above ground improvements including sanitary and drainage structures including pipe inverts and sizes, overhead utility lines, poles, trees, curbing, sidewalks, and FFEs as noted.
2) Stormwater Conveyance Extension Alley Route (Contingency): The 4Waters Team shall acquire topography within the stormwater conveyance extension alley route, as necessary. Survey shall be for the full right-of-way including the foundation of the houses on both sides of the road, and 25 feet back at the intersection with Landon Avenue. Topography will be provided on a 50-foot grid. Location of any visible above ground improvements including sanitary and drainage structures including pipe inverts and sizes, overhead utility lines, poles, trees, curbing, sidewalks, and FFEs as noted.

e. Tree Survey – A tree survey will be provided along the stormwater conveyance extension route (roadway and/or alley), as necessary. Tree identifications will be provided along with locations of any trees within the right-of-way for all trees 4" DBH and larger.

f. Underground Utilities – ASCE 38-02 Quality Level "B" utility locates will be provided to identify and designate all underground utilities within the extents of the stormwater conveyance extension route (roadway and/or alley), as necessary. The utilities will be marked on the surface by a representative of F.R. Aleman & Associates, Inc. utilizing both electromagnetic (EM) and ground penetrating radar (GPR), as necessary.

Existing as-built information will be incorporated and field-verified where possible. All pertinent vertical information on pipe, inverts, conduits, etc., will be obtained where possible. It is anticipated that additional verification of subsurface utilities (ASCE 38-02 Quality Level "A") will be required by excavation. Level "A", Soft-Dig services will be performed to accurately locate and determine the elevation of existing underground utilities that may be in conflict with the proposed improvements.

1) Stormwater Conveyance Extension Roadway Route: Two (2) days of Level "B" utility designating will be necessary. 20 Level "A" Soft Digs are anticipated to be necessary for the project route and are included in the contingency scope of work.
2) Stormwater Conveyance Extension Alley Route (Contingency): One (1) day of Level "B" utility designating will be necessary. 10 Level "A" Soft Digs are

Exhibit C

EXHIBIT C

anticipated to be necessary for the project route and are included in the contingency scope of work.

g. Mapping - On site mapping will be produced on plan sheets at a scale of 1 inch = 20 feet, including side street information.

2. **Geotechnical** – No additional geotechnical data will be gathered.

3. **Closed Caption Television (CCTV) Inspection**– The objective of the CCTV Inspection is to assess the condition of the existing stormwater system of the additional drainage basin area located on LaRue Avenue, Riviera Street, Belmonte Avenue, and Landon Avenue northeast of the Belmonte Avenue and Landon Avenue intersection. The 18" diameter storm sewer collection system in the additional drainage basin is approximately 2,800 feet (includes 400 feet of cross pipes). The following scope of services for CCTV Inspection will be provided by Blood Hound:

- CCTV Inspection and Pipeline Assessment -
  - CCTV inspection of 2,400 feet of 18-inch storm sewer piping and structures;
  - CCTV inspection of 20 feet upstream of all connecting storm water pipes into the main storm sewer trunk lines, (estimated at 400 feet);
  - Identification of defects and overall piping condition assessment in accordance with the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP);
  - Plugging and pump out of the storm water lines to be CCTV inspected will be provided by Blood Hound; the existing storm sewer system is understood to remain full of water even during low tide;
  - Maintenance of Traffic;
  - All necessary permitting;
  - Pipeline Assessment Report will be provided including:
    - Identification and location of all defects in the storm sewer system;
    - Assessment and PACP scoring of all identified defects;
    - All video camera recordings.

b. Jetting and Cleaning (Contingency) – The condition of the existing 18-inch storm sewer is unknown, but due to the understanding that the storm sewer system is typically full of water, it is probable that there is substantial sediment and debris in the pipelines which would inhibit the ability to effectively CCTV inspect the pipeline. Accordingly, a contingency has been included for jetting and cleaning of the 18-inch storm sewer pipelines. The jetting and cleaning scope of services include the following:
   - Use of jetter truck for high pressure cleaning of storm sewer collection pipelines;
   - Disposal of collected debris and sediment including two (2) disposals per day over five (5) days. Blood Hound requires City of Jacksonville authorization letter to transport and dump to Trail Ridge Landfill.

c. Plug and Pump Down (Contingency) – The condition of the 12-inch storm sewer along LaVerne Street, River Road, and San Marco Boulevard to Riviera Street is unknown, but the system does outfall on LaVerne Street to the St. Johns River and it is assumed that

Exhibit 'C'

EXHIBIT C

the system is typically full of water. To facilitate collection of survey data for the storm sewer system in this area, Blood Hound will provide the following services, as necessary:

- Furnish and install/remove plug at LaVerne Street outfall;
- Provide portable pump for pumping down storm sewer to allow for survey data collection;
- Up to one week of time included.

C. Project Submittal Requirements:

1. Drainage Analysis & Preliminary Design Alternatives Report: The additional drainage basin area will be included with the approved LaSalle Street Outfall Improvements scope of work that includes: Up to three (3) bound reports and an electronic PDF version of the report (on CD or thumb drive) to be furnished to addressees stipulated by the Program Manager at the completion of this task. These reports shall be marked up by the agencies involved and returned for inclusion in follow-on design work. Each agency's mark-up shall be returned with the next design submittal, showing the 4Waters Team's response to each agency comment.

2. 30% Design: The additional drainage basin area will be included with the approved LaSalle Street Outfall Improvements scope of work that includes: Up to three (3) sets of full-size (24" x 36") and an electronic PDF version (on CD or thumb drive) of the preliminary drawings shall be furnished to addressees stipulated by the Program Manager at the completion of this phase. These drawings shall be marked up by the agencies involved and returned for inclusion in follow-on design work. Each agency's mark-up shall be returned with the next design submittal, showing the 4Waters Team's response to each agency comment. Documents shall include the following items, as a minimum:

   a. Location map with beginning and ending project stations.

   b. Drainage map(s) showing existing elevations, contours, major structures with high water information, and drainage areas with direction of flow indicated.

   c. Plan sheets showing existing topography, reference points, baseline of surveys, begin/end stations, existing roadway and existing and proposed City-owned water, sewer, and stormwater facilities; other located existing utilities; also benchmark datum, existing ground line and anticipated subsoil and profile and location of water table.

   e. Drainage report based on 30% design.

   f. The geotechnical report giving the results of the exploratory borings and providing recommendations for earthwork, piping installation by various installation methods proposed, and pump station site recommendations.

   g. A list of all permits that will be necessary to construct the project.

   h. Preliminary Opinion of Probable Cost.

3. Utility Coordination: During this work, the 4Waters Team will be expected to furnish up-to-date drawings at the earliest possible time to assist utilities in locating their facilities for the purpose of resolving conflicts with the construction.

Exhibit C

EXHIBIT C

4. Design Reviews: The 4Waters Team, when submitting the Drainage Analysis & Preliminary Design Alternatives and 30% design submittal completion points, will allow up to four (4) weeks review time for each submittal and, if requested, will attend and prepare meeting minutes of a review conference at the end of the period to discuss the agency comments. In addition, if directed by the Program Manager, a complete review will be held at the project site. Any changes, refinements, or modifications developed in each review shall be incorporated into the design or otherwise disposed of before proceeding to follow-on design work. Each agency's markup shall be returned with the next follow-on submittal, showing the Consultant's response to the agency comments.

D. Permitting Requirements:
No additional fee for the additional drainage basin area, it is included in the approved LaSalle Street Outfall Improvements Proposal. The original scope of work is provided below.

1. With the Drainage Analysis & Preliminary Design Alternatives stage submittal, the 4Waters Team shall provide the City with a list of all permits that will need to be acquired to construct the project.

2. The 4Waters Team shall take minutes/notes of all meetings with the permitting agencies. These notes shall be transcribed and furnished to the Program Manager.

3. The 4Waters Team shall keep a log of permit activities performed by 4Waters or our subconsultants for review by the City.

4. No formal permit submittals will be prepared during Phase 1, only permit coordination to determine feasible, permittable solutions for the project design. Phase 2 will include such services, but not be limited to, preparing first permit submittals, assisting with responses to requests for Additional Information, modification to Permit Application and documents, review and modification of design drawings to meet permit conditions.

   The following permits are anticipated to be required for this project based on the scope of work identified herein and in the Project RFP.

   a. SJRWMD Environmental Resource permit
   b. City of Jacksonville 10-Set Review
   d. FDEP – NPDES

E. Additional Requirements:

1. Provide dialogue with the Streets and Drainage Division, Traffic Engineering Division, Engineering Division, and JEA Water & Sewer Business Unit pertinent to all phases.

2. Provide dialogue with all affected utility companies as appropriate.

3. Plans shall be standard 24" x 36" CADD Bond sheets in black and white with 22" x 34" inside borders to facilitate half-size printing (if requested). Additionally, the Consultant shall submit all drawings in electronic form using a standard .dwg format. Specific layer format will be

Exhibit C

furnished to the Engineering Division. Additionally, all drawing files will be converted to PDF. Electronic documents will be provided on CD or thumb drive.

4. The City shall be the Owner of the submitted documents.

5. The Consultant shall take notes of all design/review meetings held with City agencies. These notes shall be transcribed and furnished to the Program Manager for concurrence as soon as practical after the date of the meeting.

VI. TIME SCHEDULE

A. The additional time required to complete the additional scope of work in conjunction with the original approved LaSalle Street Outfall Improvements including drainage analysis, field data collections, and 30% design shall be 5 months, not including City review time.

The evaluation of the existing conditions and proposed improvements alternatives for the original LaSalle Street Outfall Improvements and the proposed additional area need to be completed together. Accordingly, if the City desires to proceed with the evaluation of the additional drainage area, the original LaSalle Street Outfall Improvements project may need to be put on hold at the completion of the existing conditions data collection, verification, and existing conditions model development to await approval of the additional drainage area scope of work. Accordingly, this may result in a necessary increase in the 5-month timeframe.

VII. PROGRESS REPORTING

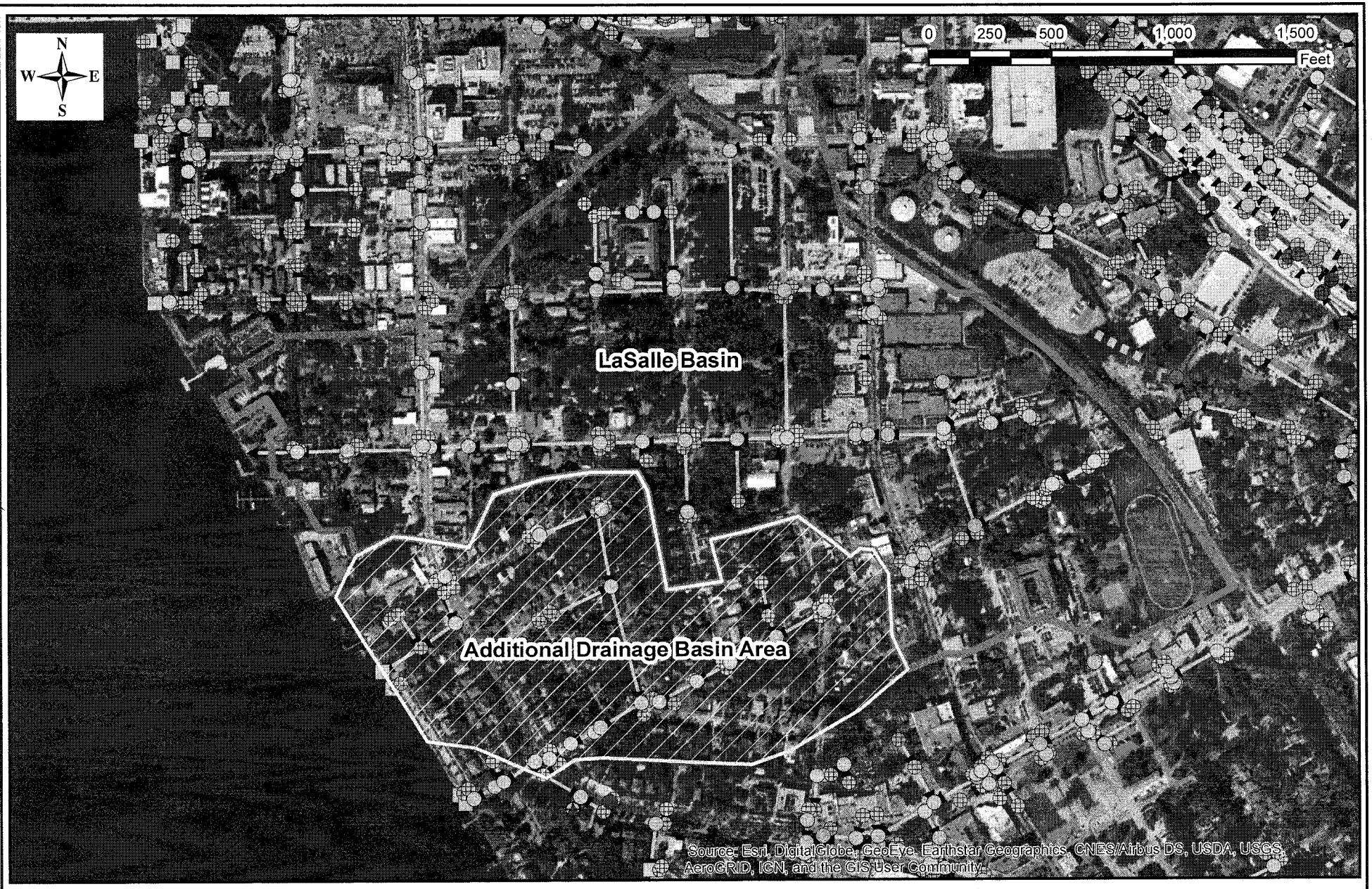
A. The Design Consultant will provide a schedule for all activities anticipated as part of this Project. Microsoft Project-based scheduling software will be used to build and maintain the design schedule. All significant milestones will be identified. The Design Consultant will submit an updated schedule on a monthly basis to the Program Manager. This schedule will accompany and support the Consultant's Invoice. In those instances where no invoice will be submitted, the updated schedule will still be required. In the event of unforeseen delays, the Consultant will attempt to minimize these delays and report on actions taken to maintain the original schedule. Any changes made to the schedule will be explained. Significant activities for the past month and projected activities for the next month will be highlighted. Any support requests or issues will be identified with recommendations from the Consultant.

VIII. NOTICE TO PROCEED

No work on this project shall be performed until a contract amendment has been executed and a Notice to Proceed is issued which specifically authorizes such work.

File Name: LaSalle_Jiva_V4 Path: P:\18-1010 Lasalle St Outfall\16.0 GIS\Map Document\LaSalle_Jiva_V4.mxd Date Saved: 8/20/2018 6:42:04 PM

EXHIBIT D



LaSalle Street Outfall Improvements- Additional Drainage Basin Area
City of Jacksonville
Date: August 20, 2018

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

FOUR WATERS ENGINEERING

EXHIBIT A

Exhibit D
CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL

1. Project LaSalle Street Outfall Improvments - Expanded Drainage Basin investigation - Amendment 1	**2. Proposal No. / Contract No.** P-59-17 / 10434
3. Name of Consultant Four Waters Engineering, Inc.	**4. Date of Proposal** September 13, 2018

PART II - LABOR RELATED COSTS

5. Direct Labor (Limiting Amount)	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Principle Engineer	$ 62.50	31	$ 1,937.50	
Project Manager	$ 52.88	108	$ 5,711.04	
Design Engineer	$ 51.44	240	$ 12,345.60	
Designer or Technician	$ 39.42	470	$ 18,527.40	
Drafter	$ 25.63	208	$ 5,331.04	
Field Inspector			$ 0.00	
Clerical	$ 24.38	38	$ 926.44	
TOTAL DIRECT LABOR	$ 40.89	1095		$ 44,779.02
6. Overhead (Combined Fringe Benefit & Administrative)				
Overhead Rate	150 % x Total Direct Labor			$ 67,168.53
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				**$ 111,947.55**
8. PROFIT: Labor Related Costs (Item 7)		x	10%	$ 11,194.76

PART III - OTHER COSTS

9. Miscellaneous Direct Costs (Lump Sum)		
Printing	$ 323.45	
Transportation & Shipping	$ 305.25	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$ 628.70
10. SUBCONTRACTS (Lump Sum)		
Almond Engineering (QA/QC)	$ 9,938.28	
SUB-CONTRACT SUB-TOTAL		$ 9,938.28
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$ 133,709.29
11. REIMBURSABLE COSTS (Limiting Amount)		
R.E. Holland & Associates, Inc. (Survey and SUE)	$ 94,659.72	
R.E. Holland & Associates, Inc. (Contingency - Survey/SUE)	$ 29,623.94	
Add'l survey Alley between Belmonte Ave and Flagler Ave		
Blood Hound (CCTV)	$ 30,620.00	
Blood Hound (Contingency - Cleaning/Jetting)	$ 16,280.00	
Blood Hound (Contingency - Plug and Pump Down)	$ 11,550.75	
SUB-TOTAL REIMBURSABLES		$ 182,734.41

PART IV - SUMMARY

TOTAL AMOUNT OF CONTRACT (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10, and 11)	**$ 316,443.70**
12. TOTAL PRIOR CONTRACT AMOUNT	$ 540,406.30
TOTAL AMENDED CONTRACT AMOUNT	**$ 856,850.00**

Exhibit 'D'

PROJECT FACT SHEET

NAME OF PROJECT: LaSalle Street Outfall Improvements - Additional Drainage Basin Area
FROM: LaSalle Street Drainage Basin
TO: Landon Avenue
DATE: September 13, 2018
ESTIMATOR NAME / DATE: Angela Bryan
September 13, 2018
CONSULTANT: Four Waters Engineering, Inc.
RFP NO.: P-59-17
PREPARED: August 30, 2017 (RFP Response)

CONSULTANT SALARY RATES:

Principal	$62.50	/hr
Project Manager	$52.88	/hr
Design Engineer	$51.44	/hr
Designer or Technician	$39.42	/hr
Drafter	$25.63	/hr
Field Inspector		/hr
Clerical	$24.38	/hr

APPROVED OVERHEAD RATE 150 %

SUBCONSULTANT:

See attached documentation for Sub Consultant Rates

Surveyor : MAN RATE= 4-MAN RATE=
PLS = DRAFTER =
TECH = CLERICAL =

Structural Engineer: $
Geotechnical Engineer: $
Environmental Engineer: $
Signalization Engineer: $

Drawing Scales

Plan & Profile: Horizontal-	1" = 20	Feet
Vertical-	1" = 2	Feet
Maint. of Traffic Plans-	1" = 40	Feet
Signing & Pav't Marking-	1" = 20	Feet
Signalization-	1" = 20	Feet

Major Project Components	Storm Water	Storm Water Forcemain	Storm Water PS
	2600 LF	0 LF	0 EA

No. of Minor Side Street Approacl 0
No. of Signalized Intersections: 0
No. of Major Street Crossings: 0
No. of Creek Crossings: 0

Number of Bridges to be Construc 0 Widenec 0
No. of Interchanges Included in the Design I 0
No. of Guide Signs to be Added or Replacec 0

Number of Pond Sites: 0
Length of Major Ditches: 0 Feet
Number of Major Cross Drai 4
Length Requiring Underdrain: Feet

	2 Phases	3 Phases	4 Phases	
Length of Roadway Requiring Maintenance of T	N/A			Feet
Intersections Requiring Maintenance of Traffic I	N/A			

Back of Sidewalk Profiles Require No
Tree Planting Plans Required? Yes

ESTIMATE OF WORK EFFORT AND FEE FOR CONSTRUCTION PLANS

CONSULTANT: Four Waters Engineering, Inc.

NAME OF PROJECT: LaSalle Street Outfall Improvements - Additional Drainage Basin Area

RFP NO.: P-59-17

FROM: LaSalle Street Drainage Basin

TO: Landon Avenue

DATE: September 13, 2018

No. / ACTIVITY	PRINCIPAL RATE/HR= $62.50		PROJECT MANAGER RATE/HR= $52.88		DESIGN ENGINEER RATE/HR= $51.44		DESIGNER RATE/HR= $39.42		DRAFTSMAN RATE/HR= $25.63	
	MAN HOURS	LABOR COST	MAN HOURS	LABOR COST	MAN HOURS	LABOR COST	MAN HOURS	LABOR COST	MAN HOURS	LABOR COST
1 Project Initiation & Data Collectio	1	$62.50	12	$634.62	20	$1,028.85	36	$1,419.23	20	$512.52
2 Existing Conditions Drainage Analysis	5	$312.50	20	$1,057.69	44	$2,263.46	130	$5,125.00	24	$615.03
3 Proposed Conditions Drainage Analysis & Preliminary Design Alternatives	12	$750.00	32	$1,692.31	78	$4,012.50	156	$6,150.00	44	$1,127.55
4 30% Design & Estimating	13	$812.50	44	$2,326.92	98	$5,041.35	148	$5,834.62	120	$3,075.14
5 Permitting	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
		$0.00		$0.00		$0.00		$0.00		$0.00
		$0.00		$0.00		$0.00		$0.00		$0.00
TOTAL	31	$1,937.50	108	$5,711.54	240	$12,346.15	470	$18,529	208	$5,330

No. / ACTIVITY	FIELD INSPECTOR RATE/HR= $0.00		CLERICAL RATE/HR= $24.38		MAN HOURS BY ACTIVITY	SALARY COST BY ACTIVITY	AVG. HOURLY COST	SALARY COST DIST. %
	MAN HOURS	LABOR COST	MAN HOURS	LABOR COST				
1 Project Initiation & Data Collectio	0	$0.00	4	$97.53	93	$3,755.25	$40.38	8.4
2 Existing Conditions Drainage Analysis	0	$0.00	6	$146.29	229	$9,519.98	$41.57	21.3
3 Proposed Conditions Drainage Analysis & Preliminary Design Alternatives	0	$0.00	12	$292.59	334	$14,024.95	$41.99	31.3
4 30% Design & Estimating	0	$0.00	16	$390.12	439	$17,480.64	$39.82	39.0
5 Permitting	0	$0.00	0	$0.00	0	$0.00	$0.00	0.0
		$0.00		$0.00	0	$0.00	$0.00	0.0
		$0.00		$0.00	0	$0.00	$0.00	0.0
TOTAL	0	$0.00	38	$926.52	1095	$44,780.81	$40.90	100.0

MISCELLANEOUS DIRECT COST

CONSULTANT Four Waters Engineering, Inc.

RFP NO.: P-59-17

PREPARED: September 13, 2018

NAME OF PROJECT: LaSalle Street Outfall Improvements - Additional Drainage Basin Area

FROM: LaSalle Street Drainage Basin

TO: Landon Avenue

ITEM DESCRIPTION								ITEM TOTAL	COMMENTS
Drafting Medium: (Original Reproducibles - Mylar)									
		0	Sheets @		$12.00	Per Sheet =		$0.00	
Reproduction (Blue Line & Sepias)		B&W 24x36	B&W 11x17	B&W 8 1/2x11	Color 8 1/2x11				
Project Init & Data Collect		4	20	40	16	Sheets			
Exist Cond Drain Analysis		16	20	80	40	Sheets			
Prop Cond Drain & Alts		10	30	360	150	Sheets			3 copies Drainage report (500-750 pgs)
30% Design & Estimating		60	120	378	43	Sheets			3 hard copies deliverable
Permitting		0	0	0	0	Sheets			Coordination/Permit Determinations
Total Sheets		90	190	858	249				
Cost:	24x36 (B&W)	90	Sheets @		$ 1.25	=	$112.50		
	11x17 (B&W)	190	Sheets @		$ 0.20	=	$38.00		
	8 1/2x11 (B&W)	858	Sheets @		$ 0.10		$85.80		
	8 1/2x11 (Color)	249	Sheets @		$ 0.35	=	$87.15	$323.45	
Travel From: [Consultant Office Location]									
To Project:	# Trips								
Transport.	10	x	45	miles x	$0.545	per mile*			
To City Hall:	# Trips								
Transport.	0	x	45	miles x	$0.545	per mile*			
To Other Agency:	# Trips								
Transport.	0	x	45	miles x	$0.545	per mile*		$245.25	
Shipping	Courier Delivery				4	= @ $15.00 ea		$60.00	
Other (Specify)									
TOTAL COST								$628.70	

*2018 IRS Mileage Rate

Exhibit D

SUMMARY OF MANHOUR REQUIREMENTS

CONSULTANT: Four Waters Engineering, Inc.

RFP NO.: P-59-17

Prepared: September 13, 2018

NAME OF PROJECT: LaSalle Street Outfall Improvements - Additional Drainage Basin Area

FROM: LaSalle Street Drainage Basin

TO: Landon Avenue

ITEM	NO. OF SHEETS	TOTAL MANHOURS	COMMENTS
113 Basic Roadway Plan Prep.	0	0	Includes Utility Adjustment Services
109 Drainage Design	16	170	
115 Bridge Design	0	0	
110 Traffic Signal Design	0	0	
111 Signing/Symbol Plans	0	0	
112 Lighting Plans	0	0	
114 Environmental/Permitting	0	0	
Field Review			Included in Above Items
Plans Checking			Included in Above Items
TOTAL	16	170	10.63 Hours/Sheet without Environmental & Permitting

DESIGN SURVEY PARTIES			
	SIZE OF PARTY	PARTY DAYS	
	3-Man	0	
	4-Man	0	
TOTAL NUMBER OF PARTY DAYS		0	

Exhibit B

ROADWAY PLANS PREPARATION

CONSULTANT: Four Waters Engineering, Inc.

NAME OF PROJECT: LaSalle Street Outfall Improvements - Additional Drainage Basin Area

RFP NO.: P-59-17

FROM: LaSalle Street Drainage Basin

Prepared September 13, 2018

TO: Landon Avenue

ITEM	SCALE	UNIT	NO. OF UNITS	NO. OF SHEETS	M-H PER UNIT	TOTAL MANHOURS	COMMENTS
113 Utility & Railroad	1"=						
Utility Adjustment Sheets	1"=20'	Sheet	0	0	0.00	0.00	
Railroad Key Map		Sheet	0	0	0.00	0.00	
Railroad Plan Sheet		Sheet	0	0	0.00	0.00	
Railroad Drainage Struct.		Section	0	0	0.00	0.00	
Water & Sewer Design		Sheet	0	0	0.00	0.00	
Railroad Hearings		Each	0		0.00	0.00	
UTILITIES & RAILROADS TOTALS				0		0.00	Include These Totals in Roadway Plans Preparation on Sheet 6

109 Basic Roadway Plan Prep.	1"=						
Drainage Map - Rural		Sheet	0	0	0.00	0.00	
Drainage Map - Urban	1"=100'	Sheet	2	2	10.00	20.00	Drawing Development & Drafting
Supplementary Drain. Map	1"=20'	Sheet	6	6	10.00	60.00	Drawing Development & Drafting
Drainage Design - Rural		L.S.	0	0	0.00	0.00	
Drainage Design - Urban		L.S.	1	4	40.00	40.00	Drawing Development & Drafting
Design - Major X-Drains		Each	2	1	10.00	20.00	
Drainage Struct. - Rural		Sheet	0	0	0.00	0.00	
Drainage Struct. - Urban		Sheet	0	0	0.00	0.00	Drawing Development & Drafting
Summary - Drainage Struct		Sheet	0	0	10.00	0.00	
Ret/Det Basins		Sheet	0	0	0.00	0.00	
Outfalls & Laterals		Sheet	3	3	10.00	30.00	Drawing Development & Drafting
Underdrain Plans		Sheet	0	0	0.00	0.00	
Erosion Control Plans		Sheet	0	0	0.00	0.00	
DRAINAGE TOTALS				16		170.00	

PERMITTING AND ENVIRONMENTAL

CONSULTANT: Four Waters Engineering, Inc.
RFP NO.: P-59-17
PREPARED: September 13, 2018

NAME OF PROJECT: LaSalle Street Outfall Improvements - Additional Drainage Basin Area
FROM: LaSalle Street Drainage Basin
TO: Landon Avenue

ITEM	SCALE	UNIT	NO. OF UNITS	NO. OF SHEETS	M-H PER UNIT	TOTAL MANHOURS	COMMENTS
Permitting/Environmental	1"=						
Permit Prep. and Coordination							
SJRWMD Environmental Resources Permit Coordination and Permit Determination	20	Project	0	0	#DIV/0!	0.00	Coordination to determine requirements
COJ Permit Coordination	20	Project	0	0	#DIV/0!	0.00	Coordination to determine requirements
PERMITTING TOTALS				0		0.00	

Note: Scope of work is accommodated by the original approved LaSalle Street Outfall Improvements

EXHIBIT 'D'

LASALLE STREET OUTFALL IMPORVEMENTS

ADDITIONAL DRAINAGE BASIN AREA

SUBCONSULTANT PROPOSAL

ALMOND ENGINEERING

CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project LaSalle Street Outfall Improvements - Additional Drainage Basin	**2. Proposal Number** P-59-17
3. Name of Consultant Almond Engineering	**4. Date of Proposal** July 13, 2018

PART II - LABOR RELATED COSTS				
5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Principal	$ 62.50	4	$ 250.00	
Project Manager/EOR	$ 52.88	13	$ 687.44	
Design Engineer	$ 41.82	64	$ 2,676.48	
Designer or Technician	$ 27.27	0	$ 0.00	
Drafter	$ 25.36	0	$ 0.00	
Field Inspector	$ 75.00	0	$ 0.00	
Clerical	$ 21.63	0	$ 0.00	
TOTAL DIRECT LABOR	$44.62	81		$ 3,613.92
6. Overhead (Combined Fringe Benefit & Administrative) Overhead Rate 150 % x Total Direct Labor				$ 5,420.88
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$ 9,034.80
8. PROFIT: Labor Related Costs (Item 7) x 10%				$ 903.48

PART III - OTHER COSTS		
9. Miscellaneous Direct Costs		
Transportation & Shipping	$ 0.00	
Original Reproducibles	$ 0.00	
Reproduction	$ 0.00	
Other	$ 0.00	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$ -
10. SUBCONTRACTS (Lump Sum)		
SUB-CONTRACT SUB-TOTAL		$ -
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$ 9,938.28
11. REIMBURSABLE COSTS (Limiting Amount)		
SUB-TOTAL REIMBURSABLES		$ -

PART IV - SUMMARY	
TOTAL AMOUNT OF CONTRACT (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$ 9,938.28**

Exhibit 'D'

ESTIMATE OF WORK EFFORT AND FEE FOR CONSTRUCTION PLANS

CONSULTANT: Almond Engineering

RFP NO.: P-59-17

DATE: July 13, 2018

NAME OF PROJECT: LaSalle Street Outfall Improvements - Additional Drainage Basin

FROM: LaSalle Street Drainage Basin

TO: Landon Avenue

No.	/ ACTIVITY	PRINCIPAL RATE/HR= $62.50		PROJECT MANAGER/EOR RATE/HR: $52.88		DESIGN ENGINEER RATE/HR= $41.82		DESIGNER RATE/HR: $27.27		DRAFTSMAN RATE/HR: $25.36	
		MAN HOURS	LABOR COST	MAN HOURS	LABOR COST	MAN HOURS	LABOR COST	MAN HOURS	LABOR COST	MAN HOURS	LABOR COST
1	Project Initiation and Data Collection	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
2	Drainage Analysis & Preliminary Design Alternatives	2	$125.00	6.5	$343.72	32	$1,338.24	0	$0.00	0	$0.00
3	30% Design & Estimating	2	$125.00	6.5	$343.72	32	$1,338.24	0	$0.00	0	$0.00
4	Permitting	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00
			$0.00		$0.00		$0.00		$0.00		$0.00
			$0.00		$0.00		$0.00		$0.00		$0.00
			$0.00		$0.00		$0.00		$0.00		$0.00
	TOTAL	4	$250.00	13	$687.44	64	$2,676.48	0	$0	0	$0

No.	/ ACTIVITY	FIELD INSPECTOR RATE/HR= $75.00		CLERICAL RATE/HR: $21.63		MAN HOURS BY ACTIVITY	SALARY COST BY ACTIVITY	AVG. HOURLY COST	SALARY COST DIST. %
		MAN HOURS	LABOR COST	MAN HOURS	LABOR COST				
1	Project Initiation and Data Collection	0	$0.00	0	$0.00	0	$0.00	$0.00	0.0
2	Drainage Analysis & Preliminary Design Alternatives	0	$0.00	0	$0.00	40.5	$1,806.96	$44.62	50.0
3	30% Design & Estimating	0	$0.00	0	$0.00	40.5	$1,806.96	$44.62	50.0
4	Permitting	0	$0.00	0	$0.00	0	$0.00	$0.00	0.0
			$0.00		$0.00	0	$0.00	$0.00	0.0
			$0.00		$0.00	0	$0.00	$0.00	0.0
			$0.00		$0.00	0	$0.00	$0.00	0.0
	TOTAL	0	$0.00	0	$0.00	81	$3,613.92	$44.62	100.0

MISCELLANEOUS DIRECT COST

CONSULTANT: Almond Engineering

RFP NO.: P-59-17

PREPARED: July 13, 2018

NAME OF PROJECT: LaSalle Street Outfall Improvements - Additional Drainage Basin

FROM: LaSalle Street Drainage Basin

TO: Landon Avenue

ITEM DESCRIPTION								ITEM TOTAL	COMMENTS
Drafting Medium: (Original Reproducibles - Mylar)									
		0	Sheets @		$12.00	Per Sheet =		$0.00	
Reproduction (Blue Line & Sepias)									
		24x36	11x17	8 1/2x11					
Phase I (30%)		0	0	0	Sheets				
Phase II (60%)		0	0	0	Sheets				
Phase III (90%)		0	0	0	Sheets				
Phase IV (100%)		0	0	0	Sheets				
Permitting		0	0	0	Sheets				
	Total Sheets	0	0	0					
Cost:	24x36	0	Sheets @	$	1.25	=	$0.00		
	11x17	0	Sheets @	$	0.20	=	$0.00		
	8 1/2x11	0	Sheets @	$	0.10	=	$0.00	$0.00	
Travel From: [Consultant Office Location]									
To Project:	# Trips								
Transport.	0 x	44	miles x	$	0.545	per mile*			
To City Hall:	# Trips								
Transport.	0 x	44	miles x	$	0.545	per mile*			
To Other Agency:	# Trips								
Transport.	0 x	30	miles x	$	0.545	per mile*		$0.00	
Shipping		Deliveries @ $15.00 each					0	$0.00	
Other (Specify)								$0.00	
TOTAL COST								$0.00	

* 2018 IRS Rate for mileage

EXHIBIT D

LASALLE STREET OUTFALL IMPORVEMENTS

ADDITIONAL DRAINAGE BASIN AREA

SUBCONSULTANT PROPOSAL

R.E. HOLLAND & ASSOCIATES, INC.

R.E. Holland & Associates, Inc.
9770 Baymeadows Rd. Suite #125
Jacksonville, FL 32256

PROFESSIONAL LAND SURVEYORS
R.E. HOLLAND
Jacksonville Florida

Phone: 904-260-6300
Fax: 904-646-3272
LB# 6755

22 August 2018

Michael R. Klink, PE
Four Waters Engineering, Inc.
324 6th Avenue North
Jacksonville Beach, Fl 32250

Re: COJ LaSalle Street Outfall Project Survey Proposal

Dear Michael:

Pursuant to your request and on behalf of the firm, we are pleased to submit our proposal for our services on the above referenced project. We are confident that our survey product will be an asset to your design activities. Based on our telephone conversation, a review of our records and a personal walk over of the site, we are pleased to offer the following scope of work and fee proposal for your review and approval:

SCOPE OF WORK:

TASK 1A: Prepare a Topographic, Tree and Route Survey of the proposed drainage outfall route along the public right-of-way of Belmonte Avenue, from LaSalle Street to the intersection with Landon Avenue. Included in the route will be Larue Avenue, from LaSalle St. to the intersection of Belmonte Avenue. For a project centerline length of approximately 1975 feet, plus 25 feet along each side intersection street, for a total project survey length of approximately 2100 linear feet. The route survey shall be utilized for the purposes of a civil engineering design for a proposed COJ Storm Water Pump Station. Width of the survey effort will be from Right of Way to Right of Way, and will include the horizontal location of the foundation of the houses on both sides of the roadway. Overhead utility lines, poles, trees, curbing, and sidewalks, along with the finished floor elevations of all buildings along LaSalle Street, will also be gathered. Location of any visible above ground improvements, including sanitary and drainage structures, inverts and sizes is included under this proposed scope. Topography cross sections will be provided on a 50 stationing. All trees 6 inches and larger within the Rights of Way will be located. (see attached map).

TASK 1B: Prepare a Topographic, Tree and Route Survey of the proposed drainage route along the public rights-of-way of the alley between Belmonte Ave. and Flagler Ave. Begin at LaSalle Street and terminate at the intersection of Landon Ave. (see attachment) for a project centerline length of approximately 1150 feet, plus 25 feet along each side intersection street, for a total project survey length of approximately 1200 linear feet; scope of work will be the same as Task 1A above.

TASK 2. Provide supplemental SUE efforts via F. R. Aleman to meet ASCE 38-02 Quality Level A 30 test holes and Level B underground utility designations for the length of the proposed routes (see attached proposal from Aleman).

TASK 3. Provide limited survey data on all storm water structures (see attachment location); provide grate/lid elevations, invert elevations, and pipe sizes and apparent direction; also provide 20 individual spot elevations of centerline of roadway within the basin area, together with 20 FFE's of selected buildings, all as directed by engineer; 5 high water mark elevations, where visible and readily accessible, will be located.

TASK 4. Provide limited survey data on all storm water structures (see attachment location); provide grate/lid elevations, invert elevations, and pipe sizes and apparent direction; also provide 5 individual spot elevations of centerline of roadway within the basin area, together with 5 FFE's of selected buildings, all as directed by engineer; 5 high water mark elevations, where visible and readily accessible, will be located.

Deliverables will be a Topographic and Boundary Survey CADD file per the CADD requirements as received from JEA. Horizontal datum shall be referenced to State Plane Coordinates (NAD 83/90) for the State of Florida and vertical datum shall be referenced to NAVD 1988 from a published governmental Bench Mark. Location of underground utility services will be performed by others as a subcontractor to the CLIENT. It is understood that COJ will provide field support as needed for the cleaning out and/or opening of all storm water structures, in order that accurate survey measurements can be obtained. It is further understood that COJ/JEA will inform all affected property owners along the proposed route of our impending presence on site on their private property for the purposes of obtaining the required survey data for the engineering design.

Tree identifications performed in conjunction with a request for tree locations will be identified as to species to the best of our knowledge and belief; however, R. E. Holland & Associates, Inc. will assume no liability, expressed or implied, for the correctness of said species identification. COJ protected tree locations will be provided within the existing R/W for all trees 6" DBH and larger. Jurisdictional wetlands, if any, will be located from field points as established by others and at an additional fee of $1.00/ft. as measured from point to point.

We anticipate delivery of the preliminary product within 90 days from receipt of written Notice To Proceed, weather and site conditions permitting. Final deliverables shall be two (2) signed and sealed blueline prints, and an electronic drawing file, if requested. Additional sealed copies may be furnished at a nominal charge, if requested. We are ready to begin our services immediately upon receipt of Notification to Proceed. Our fees for the above services will be as noted on the attached man hour estimate; estimated fees will not be exceeded without prior written authorization from the CLIENT. We shall invoice you on a monthly progressive billing cycle for the to-date percent complete and we will expect full payment for each monthly invoice within 10 days from the date of the respective invoice.

This scope of work is for a "one time" performance of the services as outlined herein; any survey points that are destroyed or lost due to construction activities, vandalism, acts of God, etc. that require replacement shall be replaced at CLIENT's expense and upon your authorization. Should the scope of work be changed by CLIENT either in writing or verbally, CLIENT agrees to pay R. E. Holland & Associates, Inc. for any additional work involved in said changes at our Standard Billing Rates, unless a supplemental contract is agreed to and executed by both parties prior to the commencement of the changes. In the event all or a portion of the work prepared or partially prepared by our firm be suspended, abandoned, or terminated by CLIENT or others, CLIENT shall pay R. E. Holland & Associates, Inc. for all fees, charges and services provided for the project, not exceeding any contractual limits specified herein.

R. E. Holland & Associates, Inc. will not be liable for damages resulting from the actions or inactions of any regulatory or governmental agencies, and shall only act as an advisor on behalf of CLIENT in all governmental relations. All original papers, documents and all work product and copies thereof, produced as a result of or incidental to this contract shall remain the property of R. E. Holland & Associates, Inc. CLIENT agrees to grant us the right to assign without notice this agreement or any part thereof as we shall deem necessary for the completion of this project. We agree not to unreasonably damage the subject property, but CLIENT agrees to grant R. E. Holland & Associates, Inc. the right to cut bushes and trees and to remove other objects interfering with our work as necessary in the performance of our work.

by the addressee. It is further understood and agreed that this contract is between R. E. Holland & Associates, Inc. and the addressee only, and payment to R. E. Holland & Associates, Inc. shall not be contingent on payment(s) from a third party.

This agreement supersedes any prior agreement, either expressed or implied, between the parties and that the terms and conditions stated herein constitute the full and complete agreement between the parties and no change or amendment thereof shall be effective except as agreed to in writing by both parties. If the above conditions are acceptable to CLIENT, please indicate your acknowledgment and agreement by executing this proposal in the space provided below.

Once again, we appreciate this opportunity to submit this proposal to you and we look forward to hearing from you in the near future. If you have any questions, please do not hesitate to call me personally.

Thank you!

R. E. HOLLAND & ASSOCIATES, INC.

Thomas J Smith, PSM
Vice President

Accepted By:_____
Printed Name:_____
Date:_____

CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project LaSalle Street Outfall - Additional Basin Task 1A	**2. Contract Number** P-59-17
3. Name of Consultant R.E. Holland & Associates, Inc.	**4. Date of Proposal** 7/11/2018

PART II - LABOR RELATED COSTS

5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Principal	$ -	0	$ 0.00	
Project Manager	$ 54.55	26.5	$ 1,445.58	
Design Engineer or Architect	$ -	0	$ 0.00	
MOT	$ 58.18	0	$ 0.00	
Drafter	$ 36.36	170	$ 6,181.81	
Survey Crew	$ 54.55	250	$ 13,636.37	
Clerical	$ 16.36	7.5	$ 122.70	
TOTAL DIRECT LABOR	$47.11	454		$ 21,386.46
6. Overhead (Combined Fringe Benefit & Administrative) Overhead Rate 150 % x Total Direct Labor				$ 32,079.68
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$ 53,466.14
8. PROFIT: Labor Related Costs (Item 7 x 10%				$ 5,346.61

PART III - OTHER COSTS

9. Miscellaneous Direct Costs		
Transportation & Shipping	$ 0.00	
Original Reproducibles	$ 0.00	
Reproduction	$ 0.00	
Other	$ 0.00	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$ -
10. SUBCONTRACTS (Lump Sum)		
FR Aleman SUE Designations (2 days designating, 20 test holes, 5.33 PM hours)	$ 10,426.97	
	$ 0.00	
	$ 0.00	
	$ 0.00	
SUB-CONTRACT SUB-TOTAL		$ 10,426.97
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$ 69,239.72
11. REIMBURSABLE COSTS (Limiting Amount)		
Construction Support Services	$ 0.00	
SUB-TOTAL REIMBURSABLES		$ -

PART IV - SUMMARY

TOTAL AMOUNT OF CONTRACT (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$ 69,239.72**

CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project LaSalle Street Outfall - Additional Basin Task 1B	**2. Contract Number** P-59-17
3. Name of Consultant R.E. Holland & Associates, Inc.	**4. Date of Proposal** 7/11/2018

PART II - LABOR RELATED COSTS				
5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Principal	$ -	0	$ 0.00	
Project Manager	$ 54.55	15	$ 818.25	
Design Engineer or Architect	$ -	0	$ 0.00	
MOT	$ 58.18	0	$ 0.00	
Drafter	$ 36.36	80	$ 2,908.80	
Survey Crew	$ 54.55	92	$ 5,018.60	
Clerical	$ 16.36	8	$ 130.88	
TOTAL DIRECT LABOR	$45.52	195		$ 8,876.53
6. Overhead (Combined Fringe Benefit & Administrative)				
Overhead Rate	150 % x Total Direct Labor			$ 13,314.80
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$ 22,191.33
8. PROFIT: Labor Related Costs (Item 7)	x	10%		$ 2,219.13

PART III - OTHER COSTS		
9. Miscellaneous Direct Costs		
Transportation & Shipping	$ 0.00	
Original Reproducibles	$ 0.00	
Reproduction	$ 0.00	
Other	$ 0.00	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$ -
10. SUBCONTRACTS (Lump Sum)		
FR Aleman SUE Designations (1 days designating, 10 test holes, 2.67 PM hours)	$ 5,213.48	
	$ 0.00	
	$ 0.00	
	$ 0.00	
SUB-CONTRACT SUB-TOTAL		$ 5,213.48
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$ 29,623.94
11. REIMBURSABLE COSTS (Limiting Amount)		
Construction Support Services	$ 0.00	
SUB-TOTAL REIMBURSABLES		$ -

PART IV - SUMMARY	
TOTAL AMOUNT OF CONTRACT (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$ 29,623.94**

CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL	
1. Project LaSalle Street Outfall - Additional Basin Task 3	**2. Contract Number** P-59-17
3. Name of Consultant R.E. Holland & Associates, Inc.	**4. Date of Proposal** 7/11/2018

PART II - LABOR RELATED COSTS				
5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Principal	$ -	0	$ 0.00	
Project Manager	$ 54.55	6	$ 327.27	
Design Engineer or Architect	$ -	0	$ 0.00	
MOT	$ 58.18	22	$ 1,280.00	
Drafter	$ 36.36	30	$ 1,090.91	
Survey Crew	$ 54.55	80	$ 4,363.64	
Clerical	$ 16.36	8	$ 130.91	
TOTAL DIRECT LABOR	$49.27	146		$ 7,192.73
6. Overhead (Combined Fringe Benefit & Administrative) Overhead Rate 150 % x Total Direct Labor				$ 10,789.09
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$ 17,981.82
8. PROFIT: Labor Related Costs (Item 7) x 10%				$ 1,798.18

PART III - OTHER COSTS		
9. Miscellaneous Direct Costs		
Transportation & Shipping	$ 0.00	
Original Reproducibles	$ 0.00	
Reproduction	$ 0.00	
Other	$ 0.00	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$ -
10. SUBCONTRACTS (Lump Sum)		
	$ 0.00	
	$ 0.00	
	$ 0.00	
	$ 0.00	
	$ 0.00	
SUB-CONTRACT SUB-TOTAL		$ -
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$ 19,780.00
11. REIMBURSABLE COSTS (Limiting Amount)		
Construction Support Services	$ 0.00	
SUB-TOTAL REIMBURSABLES		$ -

PART IV - SUMMARY	
TOTAL AMOUNT OF CONTRACT (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$ 19,780.00**

CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION
CITY OF JACKSONVILLE, FLORIDA

PART I - GENERAL

1. Project LaSalle Street Outfall - Additional Basin Task 4	**2. Contract Number** (904) 260-6300
3. Name of Consultant R.E. Holland & Associates, Inc.	**4. Date of Proposal** 8/22/2018

PART II - LABOR RELATED COSTS

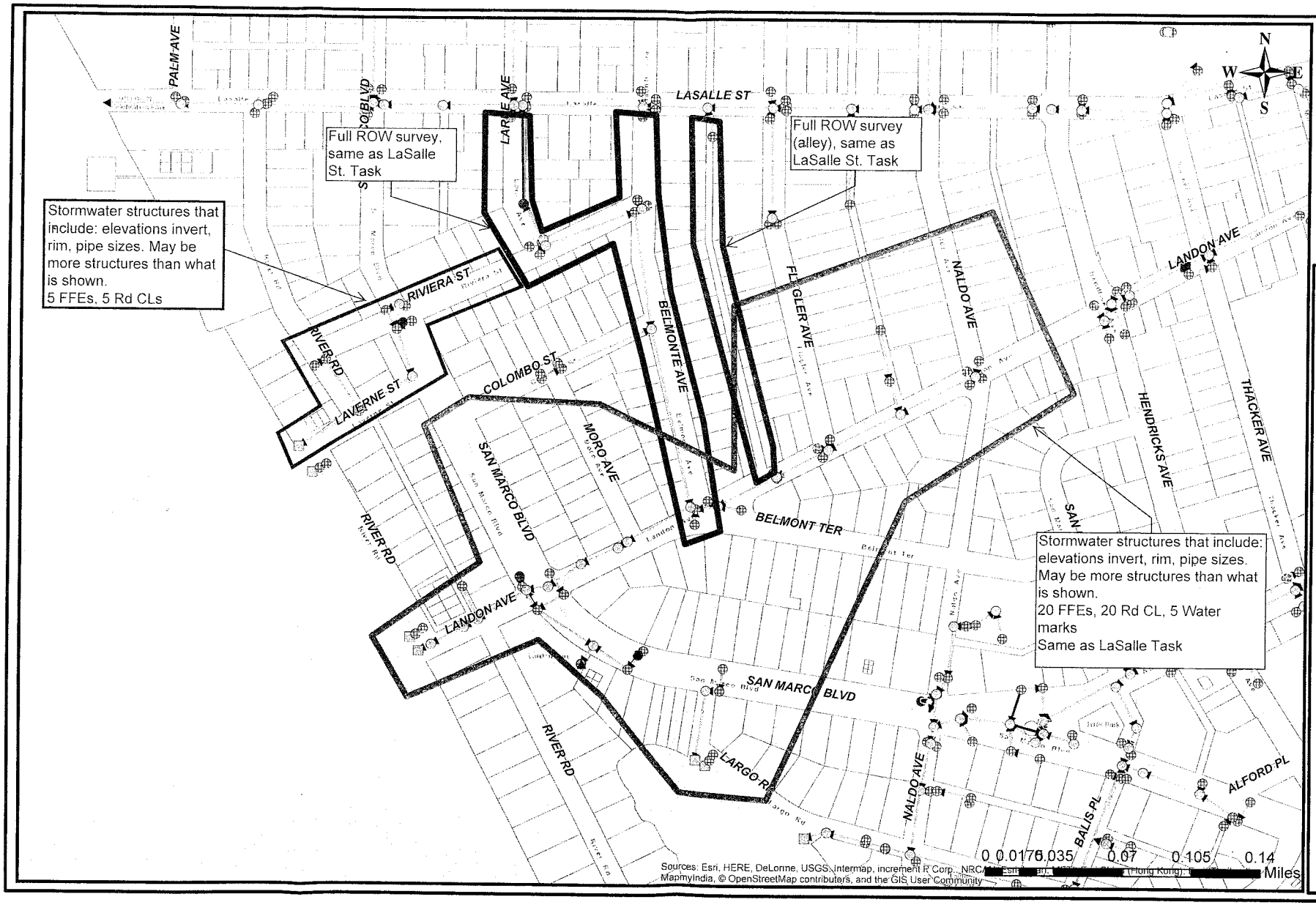
5. Direct Labor	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Principal	$ -	0	$ 0.00	
Project Manager	$ 54.55	3	$ 163.64	
Design Engineer or Architect	-	0	$ 0.00	
MOT	$ 58.18	0	$ 0.00	
Drafter	$ 36.36	15	$ 545.45	
Survey Crew	$ 54.55	24	$ 1,309.09	
Clerical	$ 16.36	2	$ 32.73	
TOTAL DIRECT LABOR	$46.61	44		$ 2,050.91
6. Overhead (Combined Fringe Benefit & Administrative)				
Overhead Rate	150 % x Total Direct Labor			$ 3,076.36
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$ 5,127.27
8. PROFIT: Labor Related Costs (Item 7	x	10%		$ 512.73

PART III - OTHER COSTS

9. Miscellaneous Direct Costs		
Transportation & Shipping	$ 0.00	
Original Reproducibles	$ 0.00	
Reproduction	$ 0.00	
	$ 0.00	
MISCELLANEOUS DIRECT COSTS SUB-TOTAL		$ -
10. SUBCONTRACTS (Lump Sum)		
SUE Designations	$ 0.00	
	$ 0.00	
	$ 0.00	
	$ 0.00	
	$ 0.00	
SUB-CONTRACT SUB-TOTAL		$ -
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)		$ 5,640.00
11. REIMBURSABLE COSTS (Limiting Amount)		
Addenda Support	$ 0.00	
Construction Support Services	$ 0.00	
SUB-TOTAL REIMBURSABLES		$ -

PART IV - SUMMARY

TOTAL AMOUNT OF CONTRACT (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11)	**$ 5,640.00**



FOUR WATERS ENGINEERING

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. This data is not to be used for legal, engineering, or surveying purposes or intended for site-specific plan or design.

Figure: Additional Survey Quote Areas

File Name: M:\RK WORKING MAP LaSalle 11_17 Path: P:\18-1010 Lasalle St Outfall\16.0 GIS\Map Documents\Survey additional quote\MRK WORKING MAP LaSalle 11_17.mxd Date Saved: 3/28/2018 3:04:32 PM

F.R. ALEMAN
& Associates, Inc.
6196 Lake Gray Blvd., Ste. 101, Jacksonville, Florida 32073
Tel: (904) 779-5972 | Fax: (904) 779-5974

CONSULTING ENGINEERS & SURVEYORS
www.fr-aleman.com
FRAJax@fr-aleman.com

July 11th, 2018

R.E. HOLLAND & ASSOCIATES, INC.
ATTN: Tom Smith, PSM
Executive Vice President
9770 Baymeadows Rd, Suite 105
tjs@reholland.net

RE: **LaSalle Outfall Project-Additional Services**

SUBJECT: Price Proposal for Subsurface Utility Locating Services

Dear Mr. Smith,

Per your request, F.R. Aleman & Associates, Inc. (FRA) is pleased to submit our proposal to provide subsurface utility locating services to your organization as follows:

20 Utility Test Holes @ $ 300.00 per Test Hole (Belmonte & Laure, red route)	=	$ 6,000.00
2 Day of Designating Services @ $1840 per Day (Belmonte & Laure, red route)	=	$ 3,680.00
10 Utility Test Holes @ $300.00 per Test Hole (Belmonte & Flagler, purple route)	=	$ 3,000.00
1 Day of Designating Services @ $1840 per Day (Belmonte & Flagler, purple route)	=	$ 1,840.00
8 Hs of Project Manager (Both routes)	=	$ 1,120.45
Total	=	**$ 15,640.45**

DESCRIPTION OF SERVICES

GENERAL NOTES

FRA will provide subsurface utilities engineering (SUE) personnel, tools and specialized equipment to locate apparent underground public utilities. FRA is aware that utility test holes are being requested on an as needed basis, and exact locations have not yet been established. Utility Test Holes shall be performed per ASCE/CI 38-02 (Quality Level A) Standards. This proposal is based on public agencies allowing standard Maintenance of Traffic (MOT) (limited to Index 613) and typical daylight operations (8:00 AM – 5:00 PM). FDOT General Use Permit is included in this proposal. Should additional permitting and/or MOT be required, this proposal may need revision. Restoration shall be limited to standard SUE practices. Should additional restoration become necessary, this proposal may need revision. FRA will not be providing survey for this project; the project surveyor will be responsible to record our field markings for entry into project database.

DESIGNATING

This service will include but not be limited to the following:

- Electromagnetic (EM) induction is a method in which a transmitter signal is applied by directly coupling to a target. So long as the target is metallic, a receiver is used to detect the transmitted signal. Passive detection is another technique used to locate naturally occurring magnetic fields that exist on power

cables generating a 50/60 Hz signal. Some utility systems contain portions of non-metallic material, and, therefore, may be unlocatable using EM techniques.

- Ground penetrating radar (GPR) can assist in identifying non-metallic utilities and other structures which are unidentifiable using traditional EM techniques. The GPR method transmits EM waves which are pulsed at discrete distance and time intervals. The transmitted pulse radiates through the earth until a portion of energy is reflected from interfaces of contrasting electrical properties (e.g., pavement and soil interface, soil changes, and buried metallic objects), while the remaining energy continues until reaching additional reflectors, repeating the process. Reflected energy is received by the antenna for interpretation by the operator. Factors such as soil moisture, clay content, and variations in the dielectric constants of materials control the effectiveness of the GPR method. Wet, conductive soils severely attenuated GPR signals and thus affect the depth of exploration. GPR energy cannot transmit through ferrous objects since metal acts as a pure reflector. To accurately conduct a radar survey, several scans must be made across the target area. Confined or obstructed areas that restrict the scanning pattern an impeded the data collected and reduce the accuracy of the desired results.

UTILITY TEST HOLES

This service will include but not be limited to the following:

- Working in existing streets, roads, rights of way, etc., for excavating, measuring and recording the location, depth and condition of known underground utilities along project route.
- Excavation of test holes in such a manner as to prevent any damage to wrappings, coatings or other protective coverings (by use of vacuum/pressure excavations, hand digging, etc.).
- Furnishing and installation of color-coded, above ground, markers at grade level (e.g., PK nails, wooden hubs, and steel rods) directly above the centerline of the utility structure and recording the utility cover on the marker.
- Utility test holes shall not to exceed 225 sq. in. per cut.
- Cleanup of work sites to equal or better condition than before excavation.
- Backfill material shall be same or like material removed from test hole. No special backfill material is included in proposal.

CONDITIONS & EXCLUSIONS

Locating of underground utilities for pre-excavation:

- Utilities shall be marked per F.S. 556, prior to FRA field crew's work is to be performed. Following FRA work and prior to excavation, the contractor is responsible for securing locations of utilities through Sunshine One Call (800-432-4770) or 811.
- Utility locations are being provided to prevent or reduce the likelihood of utility conflicts and/or damage during excavation.
- Results are dependent upon field conditions at the time of locating services.
- FRA's proposed services do not include any support during construction phase. FRA would be please to provide similar services during construction phase (scope and fee to be determined).

FRA will use its best efforts to locate utilities but cannot guarantee all underground public can be located. We have estimated approximately **30 Utility Test Holes & 3 Day of Designating** for apparent underground public utilities. Should significantly more utilities be found, or if utilities cannot be located, more test holes may be required. If needed, any additional test holes will be at the same rate as above and only done at your direction.

FRA appreciates the opportunity to submit this proposal and looks forward to our association on this project. This proposal is valid for acceptance through **30 DAYS FROM QUOTE** after which it shall be subject to reconfirmation by

FRA. If this proposal is accepted prior to the above date, this pricing will be in effect through **60 DAYS FROM QUOTE** after which time it shall be subject to review and adjustment by FRA.

If you find this proposal acceptable, please sign the agreement in the spaces provided below and return the executed copy for our files, which will serve as your formal authorization for our services. We are prepared to commence work upon your authorization. Please do not hesitate to contact me if you have a question.

Sincerely,

Lis R. Tolstoy, PSM
Florida Regional Survey/SUE Director
FRAJax@fr-aleman.com

ACCEPTED AND AGREED:	
Client:	R.E. Holland & Associates, Inc.
Approved By:	
Title:	
Date:	
Client Project No.	

Contract Fee Summary for
LaSalle St Outfall - Additional Services

PART I - GENERAL

1. Project - LaSalle St Outfall Additional Services	**2. Project Number**
3. Name of Consultant F.R. Aleman and Associates, Inc.	**4. Date of Proposal** 7/11/2018

PART II - LABOR RELATED COSTS

5. DIRECT LABOR	Hourly Rate	Estimated Hours	Estimated Cost	TOTAL
Principal			$ 0.00	
Project Manager (Responsible Prof.)	$ 46.00	8	$ 368.00	
Senior Project Engineer			$ 0.00	
Project Engineer			$ 0.00	
Engineer Intern			$ 0.00	
Senior Designer			$ 0.00	
Sr. Utility Coordinator	$ 56.50		$ 0.00	
Sr. Utility Technician	$ 28.00		$ 0.00	
Utility Technician	$ 25.00		$ 0.00	
Designer/GIS Survey-SUE Analyst	$ 35.50		$ 0.00	
CADD Technician	$ 32.62		$ 0.00	
Clerical	$ 20.00		$ 0.00	
			TOTAL DIRECT LABOR	**$ 368.00**
6. OVERHEAD (Combined Fringe Benefits & Administrative)				
Overhead Rate	176.79%			$ 650.59
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				**$ 1,018.59**
8. PROFIT: Labor Related Costs (Item 7)			x 10%	$ 101.86
			SUB-TOTAL SALARY RELATED COSTS	**$ 1,120.45**

PART III - OTHER SERVICES p/Units

9. MISCELLANEOUS DIRECT COSTS		Estimated Units	Unit Price	
SUE Services - Designating	(Day)	3	$ 1,840.00	$ 5,520.00
SUE Services - Locating	(Day)		$ 1,880.00	
Test Holes (Soft Surface) Min. 5 for mobilization	(Unit)	30	$ 300.00	$ 9,000.00
Test Holes (Hard Surface) Min. 5 for mobilization	(Unit)		$ 360.00	$ -
Standard MOT Services	(Day)		$ 500.00	$ -
Advanced MOT Services	(Day)		$ 1,200.00	$ -
			MISCELLANEOUS DIRECT COSTS SUB-TOTAL	**$ 14,520.00**
10. SUBCONTRACTS (Lump Sum)				
			SUB-CONTRACT SUB-TOTAL	**$ -**

PART IV - SUMMARY

TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)	**$ 15,640.45**

LASALLE STREET OUTFALL IMPORVEMENTS

ADDITIONAL DRAINAGE BASIN AREA

SUBCONSULTANT PROPOSAL

BLOOD HOUND, LLC

Blood Hound
750 Patricks Place
Brownsburg, IN 46112

ESTIMATE

Created Date	7/11/2018
Estimate Number	40812
District	NFL

Customer	Four Waters Engineering	Name	Michael Klink
Billing Phone	(904) 414-2400	Phone	(904) 414-2400 xt 54
Billing Address	324 6th Avenue North Jacksonville Beach, FL 32250	Email	mklink@4weng.com
Job Site Location	Larue Street Project, 1600 Larue Street, Jacksonville, Florida, 32207		

Product	Quantity	Sales Price	Total Price
Jetting (unit)	2,800.00	$5.10	$14,280.00
Jetting (unit)	10.00	$200.00	$2,000.00
Main Line Sewer Cam per unit	2,800.00	$3.65	$10,220.00
Miscellaneous	1.00	$12,000.00	$12,000.00
Traffic Control - Level 4	6.00	$1,400.00	$8,400.00
	Grand Total		$46,900.00

Scope of Work

Customer SOW inspection of storm system

BHUG SOW

Client requests pricing for jet cleaning and video reporting of 18" storm pipes.

- Run is 1600 feet. It is highlighted in purple.
- Include inspection of laterals for 20, so estimate assumes 20 of these additional pipes so an additional 400 feet.
- Traffic control needed-road will need one lane diverted around work site
- Solid waste disposal at City of Jacksonville site is $50/ton.
- Per client we will use of city fire hydrant to fill water tanks for jetting
- Trail Ridge Landfill will require an authorization letter to transport and dump on behalf of the City of Jacksonville and charge to their account.

Customer has requested an estimate based on the following scope of work:

- CCTV and Inspect multiple lines as follows:
  - Camera inspection with PACP reporting of storm pipes for the City of Jacksonville.
  - This includes 20' of all connecting laterals as shown on the provided map.
  - Main pipe is 18" per client.
    - Estimate is based on 2,000 LFT of pipe.
    - Estimate also includes a $200.00 fee per Inlet to clean in order to access pipes. Assumes up to 10 Inlets.
      - Per foot price of $3.65 will be invoiced for CCTV.
    - Client would also like 20' upstream of all connecting stormwater pipes into the main trunk line.
    - This stormwater pipe is generally full of water and will require to be plugged and pumped out for TVing.

Blood Hound
750 Patricks Place
Brownsburg, IN 46112

ESTIMATE

Created Date	7/11/2018
Estimate Number	40812
District	NFL

- Please note that while Traffic Control is included, we have NOT included any Permitting in this estimate. If they are needed then additional fees will be added to the invoice.
- Client has also requested pricing for Jetting/Cleaning the lines. It is not known if this service would be performed by Blood Hound of the City.
  - Per foot price of $5.10 will be charged for Jetting/Cleaning. Please note this price includes up to two disposals per day (5 days). Any additional disposal trips necessary will be invoiced out at an additional $400.00 per trip. It is suggested that the lines are drained/dewatered prior to cleaning without having to haul the water away.
- Client has requested the pricing be based on a per foot basis.
- Lines vary in length.
- Manhole access and truck can get next to access point.
- Approximately 300 LFT between Manholes.
- Lines will require Jetting/Cleaning.
- Client provided Prints/Images where they have tried to indicate the lines that need to be inspected.
- Client is responsible for all GPS Data Collection if needed.
- Blood Hound will locate and mark with paint the locations on the surface and identify on a not-to-scale site sketch.
- A PACP report and all recordings will be provided to client. PACP Report is for Robotic Camera Videos ONLY. An additional fee would be charged if a report is needed on videos created from Push/Pull Cameras.
- Estimate includes daily rates for traffic control up to 5 days.
- Misc. Item was added to cover the pump and hose, as well as set up in order to dewater the pipes prior to cleaning. Per City, the water can be pumped to the river. This pay item also includes plugging the pipe for the work to take place.

Blood Hound will use electromagnetic (EM) and ground-penetrating-radar (GPR) equipment to locate private underground utilities at site indicated by client. All findings will be marked according to APWA standard. Customer is responsible for calling 811 for locates of any public utilities. If the scope of work should change or is different than that listed on estimate, please call our office for a revised estimate.
Unless expressly noted, Vacuum Excavation estimates do not include any of the following services: Permitting, Traffic Control, Restoration, Special Restoration, Special Backfill or Waste Disposal. If you need any of those services please call our office for a revised estimate.
Blood Hound is not responsible for the condition of the pipes or structures before or after jetting/clearing service is performed. Unsatisfactory conditions could be present within the structure and any services may bring those deficiencies to light.
In the event of inclement weather, if the client still requests for crew to arrive on site, then the client will be responsible for minimum charges even if no work is performed.

****Payment is due at the time of service, unless you already have an account with us. If you do have an account with us, payment terms are Net 30 days, unless otherwise stated in a pre-approved contract. To learn more, please call the office at 888-858-9830.**

****PRICE MAY VARY BASED ON ACTUAL TIME ON SITE. The above pricing is based only on the information supplied by the customer. If a site walkthrough has not been conducted, this may affect the price.**

WE LOOK FORWARD TO WORKING WITH YOU!

Blood Hound
750 Patricks Place
Brownsburg, IN 46112

Plug and Pump Down (Contingency)

ESTIMATE

Created Date	9/11/2018
Estimate Number	42130
District	NFL

Customer	Four Waters Engineering	Name	Angela Bryan
Billing Phone	(904) 414-2400	Phone	(904) 414-2400
Billing Address	324 6th Avenue North Jacksonville Beach, FL 32250	Email	abryan@4weng.com
Job Site Location	Laverne St. Project, 1733 River Rd., Jacksonville, Florida, 32207		

Product	Quantity	Sales Price	Total Price
Miscellaneous	1.00	$4,950.75	$4,950.75
Per Diem	4.00	$150.00	$600.00
Project Manager-Unit	5.00	$1,200.00	$6,000.00
		Grand Total	$11,550.75

Scope of Work

Customer SOW	survey the storm pipe system
BHUG SOW	Estimate does NOT include any actual surveying of the line. That service will be performed by others.

Client has requested Blood Hound's Services for the following Scope of Work in order to pump down a 12" Storm Pipe so that it can be surveyed:

- Work is expected to take 2-3 days to complete and estimate below is based on a single week.
- Pump - $2,990.00
- Plug - $120.75
- Plug Installation/Removal - $1,380.00
- Gas - $460.00
- Project Manager - $1,200 per day for five (5) days.
- 4 Nights of Hotel/Per Diem - $150.00 Each
- If service is needed for longer than one week, then additional fees would be required.

Blood Hound will use electromagnetic (EM) and ground-penetrating-radar (GPR) equipment to locate private underground utilities at site indicated by client. All findings will be marked according to APWA standard. Customer is responsible for calling 811 for locates of any public utilities. If the scope of work should change or is different than that listed on estimate, please call our office for a revised estimate.
Unless expressly noted, Vacuum Excavation estimates do not include any of the following services: Permitting, Traffic Control, Restoration, Special Restoration, Special Backfill or Waste Disposal. If you need any of those services please call our office for a revised estimate.
Blood Hound is not responsible for the condition of the pipes or structures before or after jetting/clearing service is performed. Unsatisfactory conditions could be present within the structure and any services may bring those deficiencies to light.
In the event of inclement weather, if the client still requests for crew to arrive on site, then the client will be responsible for minimum charges even if no work is performed.

****Payment is due at the time of service, unless you already have an account with us. If you do have an account with us, payment terms are Net 30 days, unless otherwise stated in a pre-approved contract. To learn more, please call the office at 888-858-9830.**

Blood Hound
750 Patricks Place
Brownsburg, IN 46112

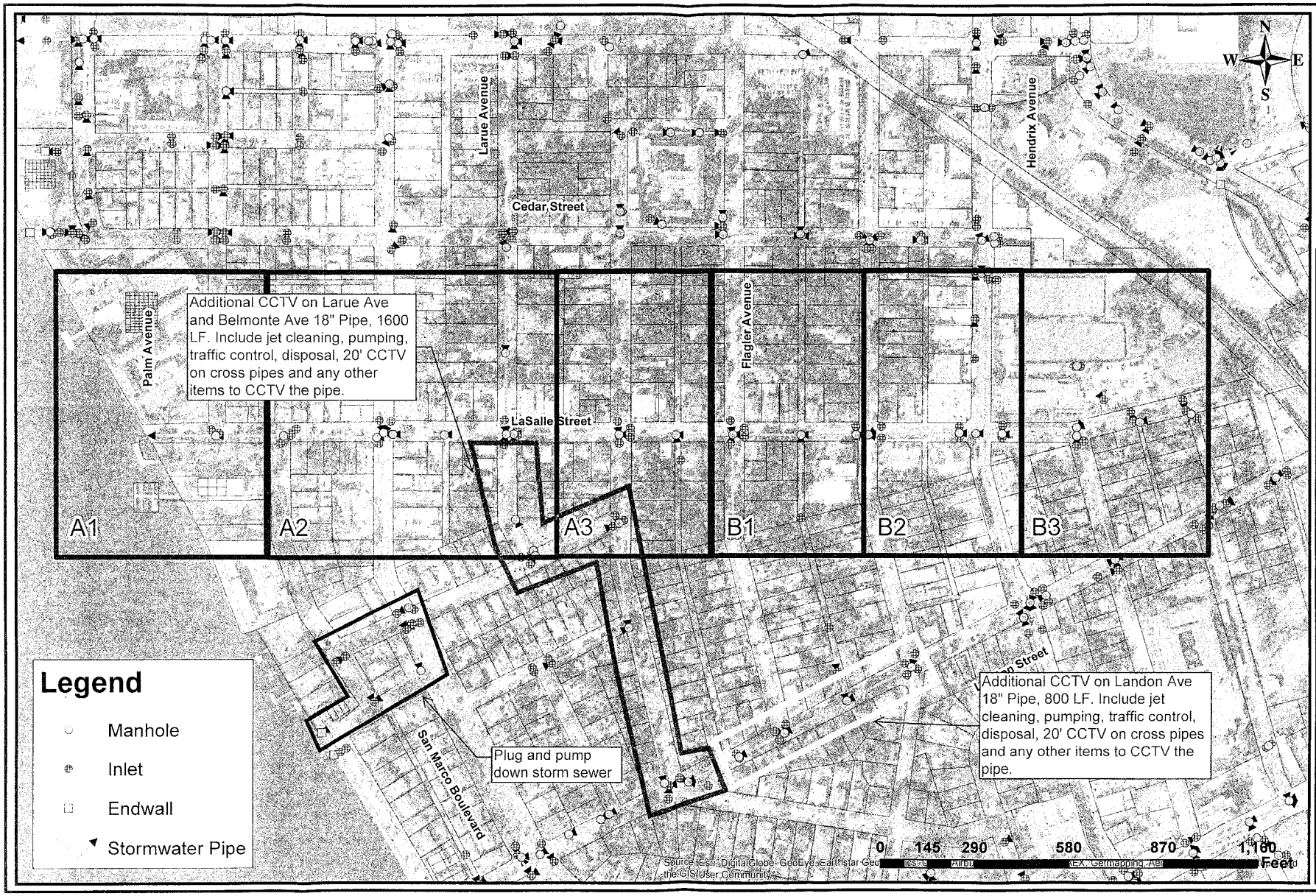
ESTIMATE

Created Date	9/11/2018
Estimate Number	42130
District	NFL

****PRICE MAY VARY BASED ON ACTUAL TIME ON SITE. The above pricing is based only on the information supplied by the customer. If a site walkthrough has not been conducted, this may affect the price.**

WE LOOK FORWARD TO WORKING WITH YOU!

Phone #: 888-858-9830 **Fax #:** 888-858-9829 **Email:** BHI@bhug.com **Website:** bhug.com



FOUR WATERS ENGINEERING

DISCLAIMER: This map is for reference and illustration purposes only. It provides are derived from multiple sources with varying levels of accuracy. The information shown on this map is not intended for site specific use or design.

LaSalle Street - Key Map
Bloodhound CCTV

File Name: LaSalle_Bloodhound Path: P:\18-1010 Lasalle St Outfall\16.0 GIS\Map Document\Bloodhound\LaSalle_Bloodhound.mxd Date Saved: 6/22/2018 3:48:42 PM

EBO FORM 1
SCHEDULE OF SUBCONTRACTOR/SUBCONSULTANT PARTICIPATION

Name of Proposer: **Four Waters Engineering, Inc.**

Project Title: **LaSalle Street Outfall Improvements**

Proposal Number: **P-59-17** Total Base Proposal Amount (if applicable): **$316,443.70**

***Please list all JSEBs first**

Full Company Name	JSEB Category (African-American, Women, Asian, Native American, Non-MBE or Hispanic)	Type of Work to be Performed	Total Contract Value or Percentage
Four Waters Engineering, Inc.	JSEB - Women	Drainage and Pump Station Design Engineering	**$316,443.70**

Attach additional list of subcontractors/sub-consultants as needed

CONSULTANT/SUBCONTRACTOR/SUPPLIER TOTAL VALUES	
African-American Participation Total	$ **0.00**
Hispanic-American Participation Total	$ **0.00**
Native-American Participation Total	$ **0.00**
Asian-American Participation Total	$ **0.00**
Woman Participation Total	$ **316,443.70**
Non-MBE Participation Total	$ **0.00**

The undersigned will enter into a formal Agreement with the JSEB Suppliers/Consultants/Subcontractors identified herein for work listed in this schedule conditioned upon execution of a contract with the City of Jacksonville. Under penalties of perjury I declare that I have read the foregoing conditions and instructions and the facts are true to the best of my knowledge and beliefs.

Signature of Proposer: _____ Title: President Date: Sept. 18, 2018

Print Name: Angela Bryan