

**Exhibit A**  
**Hernando County**  
**Chalmer St. Lift Station and Force Main Replacement**  
**Summary of Task Descriptions**  
**McKim & Creed, Inc.**  
**April 2, 2021**

**Background**

Hernando County (County) owns and operates the Chalmer St. lift station (LS #62) located at 10326 Chalmer Street, Spring Hill, FL 34608. The County has identified this lift station for replacement along with the associated force main leaving the lift station. The County has request McKim & Creed to provide design, permitting, bid phase services, and construction administration phase services (except for construction observation) for the replacement of this lift station including new duplex pumps, pump control panel, generator, wet well, valve vault, and associated pipe. The design shall also include approximately 4,300LF of 10-inch force main from the lift station to the northeast corner of the Northcliffe and Landover intersection.

**Objective**

The objective of this project is to provide design, construction drawings, project specifications, permitting, opinion of construction cost for the improvements, bid and limited construction phase services, and record drawings upon completion of the work. McKim & Creed will coordinate and complete the geotechnical investigation, design services, and permit approvals (local, state, federal) to complete the work. The County intends to use the design as a basis to issue a bid for the construction of the lift station and force main.

McKim & Creed will complete the following tasks as part of the services under this Scope of Work:

- Task 1 – Project Management
- Task 2 – Data Collection and Analysis
- Task 3 – Lift Station and Force Main Design
- Task 4 – Permitting and Bidding Support
- Task 5 – Limited Construction Administration
- Task 6 – DRA Permitting and Analysis
- Task 7 – DRA Surveying

The scope of work included in each task is further defined and described below.

**Task 1 – Project Management**

This task includes project management, project team coordination, and periodic meetings with the County. Work associated with this task includes the following:

- Project Set-up
- Project Meetings
- Invoicing and Status Reports
- Schedule Management
- QA/QC

Project Meetings:

McKim & Creed will prepare an agenda and attend a project kickoff meeting, eight (8) monthly coordination meetings, and project deliverable meetings (to be held at the appropriate monthly coordination meeting) with County staff to discuss the recommended improvements and permitting needs. McKim & Creed will prepare meeting notes and distribute via email (pdf format) to the meeting attendees following the meeting.

QA/QC:

Quality reviews are an internal QA/QC procedure that will be performed by a senior-level technical reviewer, not directly involved in development of the documents. The senior level technical reviewer will review draft documents, calculations, and operational procedures.

**Task 2 – Data Collection and Analysis**

Under this task, McKim & Creed will review the following documents provided by the County:

- County Standards for Lift Stations which include Panels with Dataflow RTU
- Flood elevations
- Permits
- As-Built drawings
- Proposed lift station re-location

McKim & Creed will perform a site visit to the lift station to evaluate the accuracy of the provided documentation and perform additional field investigations.

**Subsurface Utility Engineering (SUE):**

McKim & Creed will utilize the Northcliffe Blvd Force Main drawings, developed by Others and provided by the County, to depict existing utility horizontal locations and depths along the proposed forcemain alignment. County to provide available Cad files for referencing into design documents.

Up to thirty (30) vacuum locates will be performed under this scope of work for “Level B” locates. SUE efforts will be coordinated with proposed survey efforts.

Services to be included are identified below:

- 30 test holes are included (Test holes are assumed to be in the grass).

- Stake test holes in the field.
- Submit dig tickets.
- Survey completed test holes.
- Submit VVH spreadsheet of test holes and include them in the Survey Cad file to be provided by Hernando County.

Services not included are identified below:

- MOT is NOT included in this fee and will be an additional charge if required.

**Surveying:**

McKim & Creed will perform a topographic and boundary survey for the approximately 4,300 LF force main corridor from edge of pavement to Right-of-Way (ROW) along Landover from the proposed lift station site to the northwest corner of the Northcliffe and Landover intersection. McKim & Creed will also include the existing LS #62 easement within the survey limits. These surveys will include visible structures, trees, driveways, sidewalks, utility poles, traffic signage, and other above grade features present within the identified corridor; apparent ROW; and invert elevations of existing, accessible storm water and wastewater structures. The survey will be certified by a licensed surveyor in the state of Florida.

**Geotechnical:**

McKim & Creed will subcontract a geotechnical consultant to perform up to one (1) boring up to 30-ft deep for the relocation of the lift station. McKim & Creed will review the findings and recommendation of the geotechnical engineer for consideration in the structural design of the new lift station. Up to sixteen (16) geotechnical borings will be performed to a maximum depth of 10-ft at each trenchless crossing location to be identified during design.

**Task 3 – Lift Station and Force Main Design**

Using the information obtained in the previous tasks, McKim & Creed will perform the following services under this task:

- Determine the wet well size and pump capacity requirements for the new lift station based on 20-yr flow projections (provided by the County).
- Design the gravity sewer improvements to transport the raw sewage from the existing onsite lift station location to the proposed lift station location.
- Design a new 10-inch 4,300 LF force main to be installed via open-cut methods to replace the existing force main along Landover from the proposed from the lift station site to the northeast corner of the Northcliffe and Landover intersection. Horizontal Directional Drilling (HDD) design will be included at each roadway and driveway crossing.
- Electrical design will include wire routing, design for the new pumps, addition of an automatic transfer switch for generator, site lighting improvements, and electrical panel design.

- Instrumentation and controls will be limited to design of the SCADA improvements and pump performance using Dataflow.
- Civil site design and layout of proposed lift station site.
- Electrical conduit, vent, drain and water line for future odor control routed to a location onsite to be determined by the County.
- Final design plans and specifications to bid the project for construction.

This project will consist of 30% Design, 60% Design, 90% Design and 100% Design (Issued for Bid - IFB) Packages. A single design package will be provided for the lift station and the associated force main and collection system improvements. The following services will be provided by McKim & Creed under the identified project milestones:

- Preliminary Design (30%)
  - Evaluate geotechnical, SUE, and survey findings
  - Identify design criteria requirements
  - Develop preliminary specification table of contents
  - Develop 30% complete design Drawings
- Design Development (60%)
  - Respond to comments on the preliminary design
  - Finalize form of bid
  - Update specification table of contents
  - Develop 60% specifications
  - Develop 60% design drawings
- Pre-Final Design (90%) – Prepare 90% design drawings and technical specifications. Table 1 below summarizes the anticipated number of design drawings for each discipline. These documents will be signed and sealed for permitting purposes.
- Issued for Bid (100%) – Update the 90% design drawings and specifications based on comments received from the County and the permitting agencies.

McKim & Creed will generate an Opinion of Probable Construction Cost (OPCC) for each design package, as follows:

- 30% Design - AACE Class 4
- 60% Design - AACE Class 3
- 90% Design - AACE Class 2
- IFB Design - AACE Class 1

A preliminary sheet count is provided in **Table 1**.

**TABLE 1** Preliminary Count of Drawings to be Developed

Preliminary List of Drawings	No.
Cover and General	4
Civil: Plan, Profile and Details	16
Architectural	0
Structural: Plan, Sections and Details	2
Mechanical: Plan, Sections and Details	4
Plumbing & HVAC	0
Electrical	7
Instrumentation	2
Total Estimated Drawings	33

Project Deliverables:

Project deliverables will only be provided in electronic format for the 30%, 60% and 90% Design Packages. For the IFB Package, McKim & Creed will provide three (3) signed and sealed hard copies and one (1) electronic copy (in pdf and dwg format) to the County for bidding purposes.

**Task 4 – Permitting and Bidding Support**

Permitting Support Services:

McKim & Creed will prepare the permit applications for the construction of the designed work, meet with regulatory agencies to review the permit applications and provide responses to additional information requested by the regulatory agencies, up to three (3) RAIs. The County will be responsible for all associated permitting fees. The permits to be included are as follows:

- Notification/Application for Constructing a Domestic Wastewater Collection/Transmission System
- Hernando County ROW Permit
- SWFWMD Environmental Resource Permit
- DRA Permit Exemption

Bidding Support Services:

McKim & Creed will attend one (1) pre-bid meeting which will be administered by the County. McKim & Creed will review and respond to the questions received from the bidders and will prepare up to three (3) addendum for the project (if necessary). McKim & Creed will evaluate the bids received and provide a recommendation to the County on award of the contract. These services are outlined below:

- Prepare Bid Documents (to include 100% Design documents and Bid Tabs) and Submit Bid Package to County

- Attend Pre-Bid Meeting
- Prepare up to three (3) addendum for the project (if necessary)
- Bid Evaluation
- Letter of Recommendation to Award

**Task 5 – Limited Construction Administration**

McKim & Creed will provide the following construction administration services:

- Review and respond to up to forty (40) shop drawing submittals.
- Review and respond to up to eight (8) requests for additional information.
- Prepare record drawings based on Contractor’s redline mark-ups. It is understood that the County will provide an in-house Resident Project Representative (RPR) for this project. The RPR will be responsible to communicate and document any deviations from the design documents to McKim & Creed. Any requested changes by the Contractor shall be accepted by McKim & Creed prior to implementation. Any requested deviations by the Contractor to the design documents requiring additional design effort will be identified to the County and performed by McKim & Creed for an additional fee at the request of the County. All deviations from the design documents should be identified on the Contractor’s redlines and consolidated by the RPR prior to delivery to McKim & Creed for incorporation into the Record Drawings.
- McKim & Creed will provide monthly field observation during construction which will be limited to up to eight (8) site visits in total.
- McKim & Creed will perform a walk-through with the County and Contractor at Substantial Completion to assist with startup and punch list development and again at final completion for project closeout.

Should the County request additional field observation services, they can be negotiated separately at a later date upon County request.

**Task 6 – DRA Permitting and Analysis (if required upon County approval)**

McKim & Creed will provide the following construction administration services:

- Schedule and attend a SWFWMD pre-application meeting
- Obtain and review stormwater model and parameters
- Estimate site fill amount required
- Develop a post-development model scenario and update related parameters
- Compile model results into a drainage results memorandum with GIS exhibits
- Respond to one (1) SWFWMD request for additional information

**Task 7 – DRA Surveying (if required upon County approval)**

McKim & Creed will provide the following construction administration services:

- Establish Horizontal Project Control (HPC): - Establish HPC Network on NAD83/2011 – 3 on-site control points to support future construction
- Establish Vertical Project Control (VPC): - Establish VPC Network on NAVD88 – 3 on-site control points to support future construction
- Survey existing Topography:
  - The limits of the Topographic Survey will be Hernando County parcel R32-323-17-5160-1068-0000.
  - Within the Survey Area the topography will include obtaining locations and descriptions of all visible above-ground improvements (i.e. curbing, driveways, light fixtures, meter boxes, etc.; finished floor elevations of all buildings adjacent to the survey limits; spot elevations on one hundred (100) foot cross sections where possible; tree location, type and diameter greater than four (4) inches diameter breast height (DBH). The work will include the location of storm inlets, gravity sanitary sewer inverts, manhole locations, and gravity storm sewer inverts. The corridor width of the Survey Area shall be Right-of-Way to Right-of-Way.
  - Locate a sufficient number of platted block and property corners to calculate and display the existing Right-of-Way and property boundary lines.
  - Within the Survey Area, collect high/low break lines in sufficient detail to develop a three- dimensional Digital Terrain Model (DTM)
  - Final survey shall be prepared in AutoCad Civil 3D utilizing Pinellas County Cad Kit and be prepared with 5' major and 1' minor contours. Final survey to be sheeted on 24" x 36" pages with 1" = 40' or smaller detail sheets. A final digital base file will also accompany the final survey.

### Assumptions

- County to provide a list of approved manufacturers for equipment and material.
- County Standard Specifications and details will be used where available. McKim & Creed Standard Engineering Specifications will be used where County Standard Engineering Specifications are unavailable.
- County to perform in-house construction observation services and provide McKim & Creed copies of construction observation reports.
- The County's RPR should be qualified for all disciplines being inspected. Per Florida Statutes, McKim & Creed shall maintain supervisor capacity and the RPR must submit daily reports to the Engineer. Should McKim & Creed be requested by the County to performed on-site RPR services, these services can be provided for an additional fee.
- Review of flow data, draw-down tests or performing parcel/population counts is not included in the project scope and will be performed/provided by the County.
- County will provide existing GIS shapefiles and hydraulic model.
- Construction services are based on an 8-month construction period. These services can be extended for an additional fee should the construction phase be longer than 8-month.

- Work for the lift station and force main will be performed and submitted to the County in parallel. Separate deliverables for each design are not included in this scope.
- County will perform necessary real-estate or easement acquisitions.
- No programming is included within this scope of services but can be negotiated separately at the request of the County.
- No material, instruments or construction are included in this scope of services.
- DRA improvements do not include structural design or bank stabilization design components.
- County will provide the design pump flow and head conditions along with the necessary force main sizing. Procurement, installation, monitoring and maintenance of any flow or pressure monitoring equipment are outside this Scope of Work and will be provided for an additional fee should these services be requested by the County.
- No hydraulic modeling effort is included within this scope of services, but can be provided for an additional fee if requested by the County.
- Existing generator will be relocated onsite without engineering evaluation or sizing related to the generator loads and demands.

**STAFFING – KEY PROJECT TEAM MEMBERS**

Project Manager/Lead Engineer	Kris Samples, PE
I&C	Mike Stoup, PE
Electrical Engineer	Aubrey Haudricourt, PE
Structural Engineer	Emmett Anderson, PE
QAQC	Mitch Chiavaroli, PE
Project Engineer Intern	Ryan Landson, EI

**SCHEDULE**

**TIME OF COMPLETION/SCHEDULE**

McKim & Creed will initiate work within one week after written Notice to Proceed. The following table summarizes McKim & Creed’s schedule for completing the design phase.

McKim & Creed’s Schedule for Design

Activity	Duration (days)
NTP	
Kickoff Meeting	7
30% Design	90
30% Design Review Meeting	10

60% Development	90
60% Development Review Meeting	10
90% Design	45
90% Design Review Meeting	10
100% Design	35
<b>Total</b>	<b>297</b>

The permitting duration is not within the control of McKim & Creed. Permit applications will be submitted within 7 days of the 90% design review meeting.

### FEES

The Work described herein will be performed on a Lump Sum basis. Monthly invoicing will be based on percent complete to date for each task. Scope of Work for the Tasks described herein will be performed for the Lump Sum Fee Amounts as shown below and as identified in **Exhibit B**:

TASK	TASK DESCRIPTION	TOTAL
<b>CHALMER ST. LIFTSTATION AND FORCEMAIN REPLACEMENT</b>		
1	Project Management and Administration	\$27,109.60
2	Data Collection and Analysis	\$59,932.16
3	Lift Station and Forcemain Design	\$123,775.63
4	Permitting and Bidding Support	\$19,032.56
5	Construction Administration	\$28,186.44
6	DRA Permitting and Analysis	\$18,750.40
7	DRA Surveying	\$4,500.00
	<b>TOTAL FEES</b>	<b>\$281,286.79</b>

**CONTRACT No. 18-R00020/PH - Continuing Engineering Services for Water, Wastewater and Reclaimed Water Projects  
EXHIBIT "B" TASK FEE QUOTATION PROPOSAL**

**PROJECT NAME: Chalmer Pumping Station Upgrade TASK ORDER No. 7**  
Doc. ID: 14622, BOCC Approved 7/10/18

PROJECT ACTIVITY	Mitch Chiavarelli Principal Engineer		Kris Samples Senior Project Manager		Mike Fadin Senior Engineer		Emmett Anderson Senior Engineer		Ryan Lamsdon Project Engineer II		Robbie Fusinato CADD Technician		Doreen Padgett Designer I		Diane Achenski Sr. Project Administrator		Basic Activity \$ AMOUNT	Man Hrs by Activity	Avg Hrly Rate
	Man Hrs	Cost	Man Hrs	Cost	Man Hrs	Cost	Man Hrs	Cost	Man Hrs	Cost	Man Hrs	Cost	Man Hrs	Cost	Man Hrs	Cost			
TASK 1 Project Management	8	250	65	200	22	195	22	195	10	135.36	0	65.44	6	96	0	99.39	25,509.60	133	191.80
TASK 2 Data Collection and Analysis	0	250	36	200	6	195	8	195	46	135.36	15	65.44	14	96	0	99.39	18,482.16	125	147.86
TASK 3 LS and FM Design	25	250	145	200	51	195	48	195	329	135.36	0	65.44	225	96	21	99.39	122,775.63	844	145.47
TASK 4 Permitting and Bidding Support	0	250	25	200	13	195	13	195	46	135.36	0	65.44	28	96	0	99.39	18,792.56	123	152.79
TASK 5 Construction Administration	0	250	31	200	20	195	16	195	66	135.36	0	65.44	40	96	12	99.39	27,186.44	185	146.95
TASK 6 DRA Permitting and Analysis	0	250	8	200	0	195	0	195	15	135.36	0	65.44	20	96	0	99.39	5,550.40	43	129.08
TASK 7 Surveying	0	250	0	200	0	195	0	195	0	135.36	0	65.44	0	96	0	99.39	0.00	0	0.00

SUB-TOTAL HOURLY COSTS \$ 218,296.79

Out-of-Pocket Expenses (actual cost - not to exceed) \$ 4,240.00

Miscellaneous Expenses (Subconsultant) \$ 58,750.00

**NOT TO EXCEED TOTAL LUMP SUM COST \$ 281,286.79**

Firm Name: <u>McKim &amp; Creed, Inc.</u> Signature: <u><i>Kris Samples</i></u> <u>Kris Samples / Sr. PM.</u> <small>(Printed Name and Title)</small> Date: <u>4/26/21</u>	<u>HCAD</u> Department Name <u>4/27/21</u> (Date)	<u><i>Richard Kirby IV</i></u> Authorized Signature <u>Richard Kirby IV</u> (Printed Name and Title)	HERNANDO COUNTY <u>James Wunderle</u> <small>(Printed Name and Title)</small> Digitally signed by James Wunderle Date: 2021.04.28 14:23:19 -04'00' (Date)
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TASK ORDERS ARE TO INCLUDE: SCOPE OF SERVICE, PROJECT TIME FRAME, FEE QUOTATION PROPOSAL, AND ANY OTHER RELATIVE ATTACHMENTS. TASK ORDERS ARE TO BE SUBMITTED IN ONE (1) SIGNED ORIGINAL COPY WITH A PURCHASE REQUISITION TO THE PURCHASING AND CONTRACTS DEPARTMENT.