

BUSINESS CASE FORM

New Project or Budget Change? **Assigned Project #**

Requested by: **Date:**
Project Manager / Area Manager

Project Name:

Company:

Business Unit:

Project Owner:

BU Type:

Project Manager:

Budget Owner / RP:

Start Date:

Region:

Estimated End Date:

State:

Primarily Like-For-Like Asset Replacement?

Project Type: (check all that apply)

Will project replace/retire any assets:

- Growth
- Maintenance
- Replacement
- Upgrade
- Cost Reduction
- EH&S Compliance
- Other
- Developer Agreement
- Divestment
- Acquisition
- Rate Case
- Deferred Maintenance

	Engineering	Construction	Total
Previously Requested:	0		0
This Request:	194,500		194,500
Still to be Requested:			0
Total Project Budget:	194,500	0	194,500

Description:

Design, permit, bid preparation and CEI services for the replacement and rerouting of the following force main segments:

Lift Station C-1 Force Main - Replace 3,100LF of 12" AC pipe from Markham Woods Rd. to the Springs.

Lift Station F-5 Force Main - Reroute the force main through the former Sabal Palm golf course for a distance of 5,400LF.

Lift Station L-2 Force Main - Replace the existing force main through a rear easement to the Wekiva WWTF and connect to a newly installed 24" force main at the southwest corner of the plant site.

Timeline Considerations:

This is a proforma project included in the Utility's 2020 rate filing that must be completed by 12/31/21 to qualify as proforma. Construction of the replacement force mains is subject to a review of bid proposals and alignment with the capital plan.

Inter-dependent Project Project Number: Project Name: (If applicable)

Have engineering evaluations been performed? Engineering project number: (If applicable)

JUSTIFICATION / ALTERNATIVES

Justification and Benefits:

The L-2, F-5 and C-1 force main segments mainly consist of AC and class PVC pipe constructed during the 1970's to 1980's. Based upon their critical nature, age, material and size these assets have been identified as having a high consequence of failure and outlived their service life.

The C-1 force main (12" AC pipe) is a wastewater transmission main that connects the east side of the Sanlando collection system to a point of connection in The Springs subdivision. This force main is the only means of conveyance under I-4. In 2013 and 2018, the Utility decommissioned the Des Pinar and Shadow Hills WWTFs, respectively, on the east side of I-4 after diverting all flow to the Wekiva Plant through the C-1 FM, which necessarily has elevated the criticality of this asset. The new force main will provide a reliable means of conveying wastewater to the plant and thereby maintain the delivery of sewer service to the customers.

The F-5 lift station receives the flow from approximately 40% of the Sanlando system mainly through the C-1 force main. The wastewater is then pumped to the Wekiva WWTF. The force main that leaves the lift station along Sabal Palm Drive consists of 12" PVC class pipe that is undersized causing pipe velocities to exceed 10 fps when both pumps at LS F-5 are running. This bottleneck hydraulically restricts the flow causing an increase in pump run times and total dynamic head conditions. The new force main will consist of PVC and HDPE materials that are sized to remove the bottleneck. Most of the new force main will be relocated to utility easements away from road rights-of-way that will decrease the likelihood of future impacts caused by development or road projects initiated by others.

The L-2 force main is an 8" AC pipe that runs behind several residences through a rear easement to the Wekiva WWTF. This force main lies adjacent to the Wekiva Plant's #1 percolation pond that has failed twice in that area resulting in significant spill events. The new force main will be installed in the same location through the rear easement to the Wekiva Plant property, then rerouted along the westerly fence line to the southwest corner of the plant property where the pipe will be connected to a new 24" force main being constructed under a separate project.

Risk Evaluation

A previous engineering evaluation and hydraulic model of the majority of the Sanlando force main network identified the C-1, F-5 and L-2 force mains as having a very high consequence of failure rating based on pipe age, pipe material type, size, failure history, and criticality.

Alternatives Considered:

The age, size, material type and criticality were used as the justification to replace each of the three force mains. All of the force main segments were modeled under a separate project to determine the optimum sizing and routes. This offered the opportunity to take into consideration alternative pipe routes that improved hydraulics and reduced the impact on lift station pumps, especially during extended wet weather flow conditions.

Technical Review Summary:

Project was reviewed and approved by the CPRT on 5/21/2020 without the need for correction or revision.

Kimley»Horn

March 19, 2020

Bryan Gongre
Utilities Inc., of Florida
200 Weathersfield Ave.
Altamonte Springs, FL 32714

Re: C-1 Force Main Replacement Proposal
Sanlando Service Area

Dear Bryan:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") is pleased to submit this letter agreement (the "Agreement") to Utilities Inc., of Florida ("Client") for providing services related to the designing the replacement 12-inch C-1 force main. The force main will be replaced from the west side of the I-4 crossing to the new force main located in the Springs subdivision.

Project Understanding

The C-1 force main is modeled to be approximately 3,100 feet of 12-inch force main and connect to the 12" force main recently installed in the Springs development. The route runs along an easement from the I-4 right of way to Markham Woods Road. The route continues south along Markham Woods Road and cuts west through another easement to cross a creek to get to the ultimate point of connection. The route along Markham Woods Road is expected to be tight and several soft digs are planned along the route to better define the subsurface conditions. Additionally, a small amount of surveying will be completed to map the bottom of the creek to be able to properly design the creek crossing with sufficient depth.

Scope of Services

Kimley-Horn will provide the services specifically set forth below.

Task 1 – Route Analysis

This task includes soft digs to positively locate the force main in six locations and to survey the limits and bottom of the creek. No environmental work is included in this task to identify wetland limits as the intent is to directionally drill under any of these areas. The route is preliminarily set, but the discovery of these locations may cause some modification.

Task 2 – Design and Permitting

This task is the preparation of plans and specifications for the selected force main route. A survey of the entire route will not be performed, however. Sanlando GIS, record drawings, and soft dig information will be used to lay out the force main and water main for the construction plans. The plans will be developed in 20 scale. No profiles will be developed.

Technical specifications and bidding documents will be prepared. A private bid will be solicited from at least three contractors. Bid documents will be electronically distributed to bidders. Any questions during the bidding period will be addressed as needed. Bids will be received electronically, reviewed, and

tabulated for consideration.

FDEP force main permitting will be the only required permit for this project.

Task 3 – Construction Services

This task will include any shop drawing review, responses to contractor questions, inspection of progress (as requested), review of final testing and clearance, and record drawing preparation.

Services Not Included

Any other services, including but not limited to the following, are not included in this Agreement:

- Geotechnical
- Environmental
- Survey
- Structural
- Electrical

Additional Services

Any services not specifically provided for in the above scope will be billed as additional services and performed at our then current hourly rates.

Information Provided By Client

We shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives.

Fee and Expenses

Kimley-Horn will perform the services in Tasks 1 - 3 for the total lump sum fee below. Individual task amounts are informational only. All permitting, application, and similar project fees will be paid directly by the Client.

Task 1: Route Analysis	\$10,000
Task 2: Design and Permitting	\$45,000
Task 3: Construction Services	\$12,000
Total Lump Sum Fee	\$67,000

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

Closure

In addition to the matters set forth herein, our Agreement shall include and be subject to, and only to, the attached Standard Provisions, which are incorporated by reference. As used in the Standard

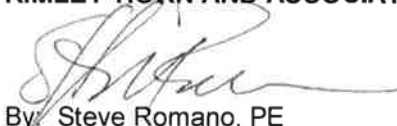
Provisions, "Consultant" shall refer to Kimley-Horn and Associates, Inc., and "Client" shall refer to Utilities Inc., of Florida.


Kimley-Horn, in an effort to expedite invoices and reduce paper waste, submits invoices via email in an Adobe PDF format. We can also provide a paper copy via regular mail if requested. Please include the invoice number and Kimley-Horn project number with all payments.

If you concur in all the foregoing and wish to direct us to proceed with the services, please have authorized persons execute both copies of this Agreement in the spaces provided below, retain one copy, and return the other to us. We will commence services only after we have received a fully-executed agreement. Fees and times stated in this Agreement are valid for ninety (90) days after the date of this letter.

We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.


Very truly yours,
KIMLEY-HORN AND ASSOCIATES, INC.


By: Steve Romano, PE
Sr. Project Manager


Authorized By: Jay Jackson, PE
Title: Principal/Sr. Vice President

AUTHORIZED BY:

UTILITIES INC., OF FLORIDA


Printed Name: Bryan K. Gongre
Title: Regional Manager

6/25/2020
Date

Attachment – Standard Provisions



February 16, 2020

Bryan Gongre
Utilities Inc., of Florida
200 Weathersfield Ave.
Altamonte Springs, FL 32714

Re: F-5 Force Main Replacement
Sanlando Service Area

Dear Bryan:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") is pleased to submit this letter agreement (the "Agreement") to Utilities Inc., of Florida ("Client") for providing services related to the designing a replacement force main from the F-5 master pump station north through the Alexander development to the stub out in the Duke Power Easement.

Project Understanding

The force main system in the Sanlando service area has been modeled to determine a more effective configuration. This configuration includes a new force main from the F-5 master pump station to be constructed along the stormwater easements along the Alexander property. This property was the redevelopment of the old Sabal Point golf course. This route is approximately 5400 linear feet and appears generally clear. However, at the Duke substation there is very little space. As an alternate route, the force main can be rerouted along Sabal Palm Drive where it crosses the easement. This increases the route by approximately 200 linear feet but potentially has fewer conflicts.

Scope of Services

Kimley-Horn will provide the services specifically set forth below.

Task 1 – Force Main Route Analysis

The existing route runs along Wekiva Springs Road and constitutes the shortest route, however there is little remaining space along Wekiva Springs Road for another pipeline. Therefore, the route north through the Alexander development is more practical. There are a few tight areas through this route but it is generally open. As part of the route analysis Kimley-Horn will review the record drawings of the Alexander development, existing GIS drawings, and up to 10 soft digs along the route to confirm existing piping. A physical review of the route will be completed to confirm the recorded data available.

Task 2 – Design and Permitting

This task is the preparation of plans and specifications for the selected raw water main route. A survey of the route will not be performed. Sanlando GIS, record drawings, and soft dig information will be used to lay out the force main for the construction plans. The plans will be developed in 20 scale. Profiles will be required for road crossings.

Technical specifications and bidding documents will be prepared. A private bid will be solicited from at least three contractors. Bid documents will be electronically distributed to bidders. Any questions during

the bidding period will be addressed as needed. Bids will be received electronically, reviewed, and tabulated for consideration.

FDEP permitting will be required for this project for the force main route. The route will also be coordinated with Duke Energy to construct the pipeline in the power easement. Duke has specific design requirements which will need to be complied with within the plans. A right of way utilization permit will be required by Seminole County and we will assist the selected contractor as needed.

Task 3 – Construction Services

This task will include any shop drawing review, responses to contractor questions, inspection of progress (as requested), review of final testing and clearance, and record drawing preparation.

Services Not Included

Any other services, including but not limited to the following, are not included in this Agreement:

- Geotechnical
- Survey
- Structural
- Electrical

Additional Services

Any services not specifically provided for in the above scope will be billed as additional services and performed at our then current hourly rates.

Information Provided By Client

We shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives.

Fee and Expenses

Kimley-Horn will perform the services in Tasks 1 - 3 for the total lump sum fee below. Individual task amounts are informational only. All permitting, application, and similar project fees will be paid directly by the Client.

Task 1 Force Main Route Analysis	\$12,000
Task 2: Design and Permitting	\$53,000
Task 3: Construction Services	\$15,000
Total Lump Sum Fee	\$80,000

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

Closure

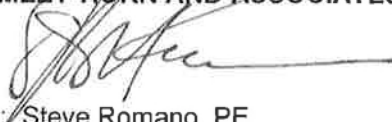
In addition to the matters set forth herein, our Agreement shall include and be subject to, and only to, the attached Standard Provisions, which are incorporated by reference. As used in the Standard Provisions, "Consultant" shall refer to Kimley-Horn and Associates, Inc., and "Client" shall refer to Utilities Inc., of Florida.


Kimley-Horn, in an effort to expedite invoices and reduce paper waste, submits invoices via email in an Adobe PDF format. We can also provide a paper copy via regular mail if requested. Please include the invoice number and Kimley-Horn project number with all payments.

If you concur in all the foregoing and wish to direct us to proceed with the services, please have authorized persons execute both copies of this Agreement in the spaces provided below, retain one copy, and return the other to us. We will commence services only after we have received a fully-executed agreement. Fees and times stated in this Agreement are valid for ninety (90) days after the date of this letter.

We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.


Very truly yours,
KIMLEY-HORN AND ASSOCIATES, INC.


By: Steve Romano, PE
Sr. Project Manager


Authorized By: JAY JACKSON, PE
Title: SR VP

AUTHORIZED BY:

UTILITIES INC., OF FLORIDA


Printed Name: Bryan Gongre
Title: Regional Manager

6/25/2020
Date

Attachment – Standard Provisions

Kimley»Horn

February 16, 2020

Bryan Gongre
Utilities Inc., of Florida
200 Weathersfield Ave.
Altamonte Springs, FL 32714

Re: L-2 Force Main Replacement
Sanlando Service Area

Dear Bryan:

Kimley-Horn and Associates, Inc. ("Kimley-Horn" or "Consultant") is pleased to submit this letter agreement (the "Agreement") to Utilities Inc., of Florida ("Client") for providing services related to the designing a replacement force main from the Wheatland lift station to the connection point on the Wekiva WRF site.

Project Understanding

The L-2 force main is modeled to be an 8-inch force main and connect to the 24" force main under design at the southwest corner of the treatment plant site. The route runs along a rear property easement until it reaches the treatment facility. The route is expected to be largely open for construction, however a new sidewalk will need to be placed in the route that is outside of the treatment facility limits.

Scope of Services

Kimley-Horn will provide the services specifically set forth below.

Task 1 – Route Analysis

This task includes soft digs to positively locate the force main in three locations. The route is preliminarily set, but the discovery of these locations may cause some modification.

Task 2 – Design and Permitting

This task is the preparation of plans and specifications for the selected route. A survey of the route will not be performed. Sanlando GIS, record drawings, and soft dig information will be used to lay out the force main for the construction plans. The plans will be developed in 20 scale. No profiles will be developed.

Technical specifications and bidding documents will be prepared. A private bid will be solicited from at least three contractors. Bid documents will be electronically distributed to bidders. Any questions during the bidding period will be addressed as needed. Bids will be received electronically, reviewed, and tabulated for consideration.

FDEP force main permitting will be the only required permits for this project.

Task 3 – Construction Services

This task will include any shop drawing review, responses to contractor questions, inspection of progress (as requested), review of final testing and clearance, and record drawing preparation.

Services Not Included

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Information Provided By Client

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Fee and Expenses

Kimley-Horn will perform the services in Tasks 1 - 3 for the total lump sum fee below. Individual task amounts are informational only. All permitting, application, and similar project fees will be paid directly by the Client.

Task 1: Force Main Route Analysis	\$3,000
Task 2: Design and Permitting	\$30,000
Task 3: Construction Services	\$5,500
Total Lump Sum Fee	\$38,500

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

Closure


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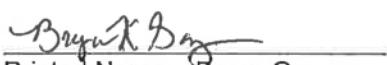
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Sr. Project Manager


Authorized By: Jay Jackson, PE
Title: SR VP

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UTILITIES INC., OF FLORIDA


Printed Name: Bryan Gongre
Title: Regional Manager

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