



March 25, 2021

Mr. Feng Jiang, P.E.
City of Hollywood Department of Public Utilities
Engineering and Construction Services Division
1621 North 14th Avenue
Hollywood, Florida 33020

**RE: Sewage Force Mains Assessment Training,
Miscellaneous Engineering and Technical Services
City Project No. 7108**

Dear Mr. Jiang:

In accordance with our Professional Services Agreement for General Engineering Consulting Services for Water, Sewer, Reuse and Stormwater Infrastructure Projects - City Project No. 17-1325 (the "Agreement"), Kimley-Horn and Associates, Inc., (hereinafter referred to as "Consultant", "We" or "Kimley-Horn"), is pleased to submit this proposal for professional engineering consulting services to the City of Hollywood Department of Public Utilities (hereinafter referred to as "Client" or "City") relative to the above-referenced project.

PROJECT UNDERSTANDING

The City of Hollywood Department of Public Utilities would like to retain the services of the Consultant to provide training to Public Utilities staff in the assessment of the physical condition of existing sewage force mains in order to estimate remaining service life and the need for repair, rehabilitation and/or replacement. Kimley-Horn provided similar services to the City of West Palm Beach back in 2016, and the City of Hollywood would like for Kimley-Horn to provide those same services to train in-house staff in performing these tasks, which were previously performed by outside consultants.

Additionally, the City of Hollywood is requesting that Kimley-Horn provide miscellaneous engineering and technical services to assist City staff in seeking grant opportunities to help cover and/or offset the cost of various projects throughout the City. As requested by the City, Kimley-Horn would prepare, write, apply for, and administer the grants. Grants sought and considered may be from Federal, State, municipal, or other non-governmental sources. It is understood that grant applications are time sensitive and that adequate time is required for grant preparation and writing. The amount of time necessary is dependent on the particular grant and will be discussed and agreed upon between the Client and Consultant with each request for specific grant assistance prior to authorization to proceed.

TASK 1 – SEWAGE FORCE MAIN ASSESSMENT TRAINING

The Consultant will develop a Standard Operating Procedure (SOP) for conducting Phase 1 and Phase 2 level sewage force main assessments and will provide limited assistance to the City of Hollywood (City) as they perform a reliability assessment of two existing force mains currently owned and

maintained by the City. It is understood that the SOP will be developed for ductile iron pipe (DIP) and cast-iron pipe (CIP).

A force main assessment typically can consist of a four-phase approach, including a Pre-Assessment, Preliminary Investigations, Detailed investigations, and Post Assessment Report. This work authorization includes the development of an SOP and providing assistance to the City with the first two phases of the assessment, as the last two phases may not be required depending on the results of the first two phases.

The Standard Operating Procedure manual will be developed with applicable attachments for the City to use for future assessments. The Consultant will conduct a seminar for City staff to review the Standard Operating Procedure and address questions from City staff. The Consultant will also answer questions and provide guidance while the City prepares their own force main assessment.

For the force main assessment, it is understood that the City will perform the assessment in-house and will only require the Consultant to perform the following tasks:

- Provide assistance in selection of an ultrasonic field gauge
- Accompany the City for portions of the field work such as coupon extraction and field measurements at existing ARV manholes

Assistance for other tasks related to the development of the force main assessment can be provided upon approval by the City as part of a contingency task.

With this understanding, the Consultant will provide the services specifically set forth below.

1.1 – Standard Operating Procedure and Training

The Consultant will develop a Standard Operating Procedure for conducting Phase 1 and Phase 2 level force main assessments. The SOP will also include a summary of options for proceeding with Phase 3 and Phase 4 if they are required. As part of the SOP, the Consultant will provide a list of the documentation that is typically gathered and reviewed as part of Phase 1, a list of procedures that are typically performed as part of the assessment, guidelines for calibrating and taking measurements with an ultrasonic gauge, a procedure for analyzing the measurements, and guidelines for interpreting and making recommendations based on the data gathered and reviewed during the assessment. The SOP will also include an excel spreadsheet with the analysis calculations that will be developed for up to two example field measurements. It is important to note that this spreadsheet will need to be modified for the material, size, thickness, age, allowances, operating pressure, and trench type and depth of the pipe that is being investigated before it can be used for any future assessments.

The Consultant will provide a draft of the SOP to the City and attend up to one meeting with the City to review preliminary review comments.

After the SOP is finalized, the Consultant will provide the final SOP in report format to the City and will conduct a training seminar for City staff to review and explain the assessment process, to review the calculations that are performed as part of a force main assessment, and to answer questions the City

staff may have on the SOP. The goal of the training seminar is to allow City staff to independently conduct force main assessments within their system in the future.

As part of the seminar preparation, the Consultant will prepare a power point presentation and deliverables to be handed out to those attending the training. It is assumed that the seminar will be no more than four (4) hours.

The Consultant will provide an example Table of Contents with a List of Recommended Attachments that can be used by the City to develop the (FM I.D.) Force main Assessment Report and future Assessment Reports. It is assumed that City staff will prepare a summary report for their force main using the SOP, example Table of Contents, and List of Recommended Attachments.

1.2 – Field Assistance for Pre-Assessment and Preliminary Investigations

The Consultant will perform the following as part of assisting the City with conducting their Phase 1 and Phase 2 level force main assessments:

- The Consultant will provide a recommendation to the City with up to three (3) options for ultrasonic meters that the City could purchase to conduct their own ultrasonic testing.
- The Consultant will accompany the City staff as they use an extracted pipe coupon to calibrate the City's purchased ultrasonic gauge. The gauge can then be used to take thickness measurements on the same pipe in the existing ARV vaults and/or other locations where the pipe is accessible. It is understood that the City will identify a location to extract a coupon from the pipe (s).
- The Consultant will also accompany City staff for up to two (2) days while they perform field measurements at existing ARV manholes. It is understood that City staff will be responsible for the confined space entry requirements, maintenance of traffic and cleaning the pipe as required. The Consultant will work with the City while they measure from the manhole rim to the top of the pipe and take thickness measurements with their ultrasonic field equipment. Ultrasonic field measurements should be taken around the circumference of the pipe in the ARV manholes so that pipe thickness can be determined at that particular location. This data can then be compared to the original pipe thickness so that the rate of corrosion can be estimated. This will allow the approximate remaining useful life of those segments of DIP/CIP pipeline that were measured to be-estimated.

1.3 – Allowance for Additional Meetings and Field Work

If requested by the City in writing, the Consultant can provide additional services to assist the City as they perform force main assessments. The following services could be performed as part of this assistance:

- Perform additional field services beyond what is described in Task 1.2.
- Respond to City questions during development of their force main assessments.
- Provide a peer review of the force main assessment (s) performed by the City.

It is understood that these services will be performed at the agreed upon hourly rate.

DELIVERABLES

The following deliverables for the force main evaluation and training will be provided as a result of the efforts described in the Scope of Services:

- Standard Operating Procedure with Attachments (Up to 5 hard copies and digital copy)
- Hand-out materials during Training Seminar
- Memorandum for recommendation for ultrasonic gauge

ADDITIONAL SERVICES

If authorized by City in writing, the Consultant will provide additional services that may be required above and beyond those described in the above tasks. These services may include, but are not limited to, the following:

- 1) Pre-Assessment, Preliminary and Detailed Investigations and Post-assessment Reports
- 2) Any other services not specifically listed in the above Tasks

TO BE PROVIDED BY CLIENT

- 1) Remove existing pipe coupons for inspection
- 2) Provide the premises for training presentation

TASK SCHEDULE

It is anticipated that an initial draft of the SOP can be provided within six (6) to eight (8) weeks from the approval of this work authorization. We will provide a final SOP that incorporates the review comments and be prepared for the seminar within four (4) weeks of receiving those comments. The Consultant will work diligently to achieve this schedule. Tasks 1.2 and Task 1.3 will be performed commiserate with the City's schedule.

TASK 2 – MISCELLANEOUS ENGINEERING AND TECHNICAL SERVICES

2.1 - Identify Funding Opportunities

It is understood that the identification of a potential grant opportunity may come from the Client or from the Consultant. When a potential opportunity is identified, Kimley-Horn will assemble a grant writing team tasked to review the grant requirements, including timeframe for submittal. During this task, it will be important for Kimley-Horn to gain a full understanding of the Client's problem and/or project. Kimley-Horn will seek final agreement on the problem and/or project, mission, strategy, and objectives for the use of the funds. These are key points that need to be identified early on during the preparation of a grant.

2.2 - Project Coordination

The Consultant will assist in the scheduling of meetings, the development of timetables, proposal language and the development of the grant application. Under this task, the Consultant will prepare for and facilitate a kick-off meeting with City Staff to review application requirements and details. During this meeting the following will be covered:

- Consultant will provide the Client with a list of necessary materials that may be in the possession
- of the Client or another consultant of the Client. Consultant will review with the Client the timeliness

2.3 - Community Engagement

Under certain circumstances, the preparation and writing of grants requires input from the community. This task will include the identification of community engagement needs under a grant. It further includes the preparation for, facilitation of, and summary from any community meetings, public meetings, or community assessment that may be part of a grant application requirement. (It is understood that “meetings” may also include “workshops” or “open houses,” as deemed appropriate.)

2.4: Grant Preparation and Writing

Consultant will perform the following services under this task:

- Provide consultation, planning, and strategizing with Client throughout the process.
- Understand the compliance guidelines provided for the grant and advise the Client of such requirements.
- Prepare and ask questions for clarity during available question and answer periods.
- Develop timelines and the strategy to ensure timely submission of the application.
- Structure workflow and execute plan for the grant application.
- Collaborate with appropriate stakeholders to obtain signatures, data, forms, etc.
- Locate, identify, research, collect, and analyze data as set forth in the grant application guidelines.
- Provide research and research assistance, if necessary.
- Develop language for both the grant application narratives and data including, if necessary, charts, tables, and diagrams to illustrate data.
- Prepare supplemental documents required for grant application completion.
- Prepare grant application with all required documents.
- Consultant will review the draft application with Client and make one round of revisions prior to submitting the grant application.

2.5 - Grant Application Submittal, Evaluation and Monitoring

Consultant will submit the grant application to the required agency and/or organization in the method required under the grant. Consultant will monitor the evaluation process of the agency or organization and apprise the Client of status of award notifications.

2.6 - Grant Administration

At the request of the Client, Consultant will administer the terms of the grant on behalf of the Client.

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. Additional services we can provide include, but are not limited to, the following:

- Meetings with agency/organization staff.
- Technical experience related to grant application interviews with agency staff.
- Miscellaneous engineering-related services.

TO BE PROVIDED BY CLIENT

The Client shall provide materials requested by Consultant in a timely fashion to support the grant application (i.e. maps, data, reports, studies, and other similar record), if available. 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.

TASK SCHEDULE

Services will be performed as expeditiously as practicable, when requested.

FEE AND BILLING

Kimley-Horn will perform the services in Tasks 1.1 and 1.2 for the lump sum labor fees shown in the following table and the attached "Staff-Hour Estimate" in "Exhibit A". Services in Tasks 1.3 and 2 will be performed on an as-needed basis as authorized by the Client and will be billed hourly based on the "Consultant's Hourly Rate Schedule" ("Exhibit B") from the Agreement. In addition to labor fees, direct reimbursable expenses will be billed in accordance with the terms of the Agreement. All permitting, application, and similar project fees will be paid directly by the Client.

Lump Sum Tasks

<u>Task No.</u>	<u>Description</u>	<u>Lump Sum Labor Fees</u>
1.1	Standard Operating Procedure and Training	\$24,072.60
1.2	Field Assistance for Pre-Assessment and Preliminary Investigations	\$8,455.29
Total Lump Sum Fee		\$32,527.89

Hourly Not to Exceed Tasks

<u>Task No.</u>	<u>Description</u>	<u>Labor Fees</u>
1.3	Allowance for Additional Meetings and Field Work	\$22,575.96
2	Miscellaneous Engineering and Technical Services	\$100,000.00

GRAND TOTAL (ALL TASKS) **\$155,103.84**

Lump sum labor fees will be invoiced monthly based upon the overall percentage of services performed. Hourly Not to Exceed Tasks will be billed as time and materials, and reimbursable expenses will be invoiced based upon expenses incurred. 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

The terms and conditions of Professional Services Agreement for General Engineering Consulting Services for Water, Sewer, Reuse and Stormwater Infrastructure Projects - Project No. 17-1325 between City of Hollywood and Kimley-Horn and Associates, Inc. shall govern this scope of services.

If you concur with the foregoing and wish to direct us to proceed with the aforementioned services, please issue a Notice to Proceed in writing to the Consultant referencing this Scope of Services document as Exhibit "A". We appreciate this opportunity to submit a letter agreement. Please contact Juan Jimenez at (305) 535-7784 or email at juan.jimenez@kimley-horn.com if you have any questions.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Aaron E. Buchler, P.E.
Senior Vice-President



Juan E. Jimenez, P.E.
Project Manager, Associate

enclosures:

Exhibit A – Staff-hour Estimate

Exhibit B – Consultant's Hourly Rate Schedule

EXHIBIT A

STAFF-HOUR ESTIMATE

STAFF - HOUR ESTIMATE

Project Name: Sewage Force Mains Assessment Training, Miscellaneous Engineering and Technical Services
City Project No. TBD
Client: City of Hollywood Department of Public Utilities
Date Prepared: 10/1/2020
Estimated By: Juan E. Jimenez, P.E.

KH Task #	KHA Task Name Subtask Name/Description	DIRECT LABOR (STAFF HOURS)					KH Labor Hours by Task	KH Labor Fees by Task	Sub- Consultant Fees by Task
		Principal P8 (hours)	Senior Prof. P6-P7 (hours)	Project Manager P5 (hours)	Project Engineer P3 (hours)	Support Staff N (hours)			
	Hourly Rates (\$/hr.)	\$ 362.97	\$ 273.57	\$ 196.63	\$ 117.12	\$ 85.49			
1.1	Standard Operating Procedure and Training								
	<i>Develop Standard Operating Procedure and Attachments</i>	1.0	8.0	24.0	9.0	4.0	46.0	\$ 8,666.69	\$ -
	<i>Meet with City up to one time (draft SOP review)</i>	0.5	3.0	3.0	0.0	0.0	6.5	\$ 1,592.09	\$ -
	<i>Respond to one round of City comments</i>	0.5	2.0	4.0	4.0	2.0	12.5	\$ 2,154.61	\$ -
	<i>Prepare for seminar including power point presentation and hand-outs</i>	0.5	6.0	18.0	16.0	6.0	46.5	\$ 7,749.11	\$ -
	<i>Conduct seminar for the City</i>	3.0	6.0	6.0	0.0	0.0	15.0	\$ 3,910.11	\$ -
	Subtotal Hours by Classification	5.5	25.0	55.0	29.0	12.0	126.5	\$ 24,072.60	\$ -
	Subtotal \$ by Classification	\$ 1,996.34	\$ 6,839.25	\$ 10,814.65	\$ 3,396.48	\$ 1,025.88	Subtotal Task 1.1		\$ 24,072.60
1.2	Field Assistance for Pre-Assessment and Preliminary Investigations								
	<i>Recommend ultrasonic gauges</i>	0.5	1.0	4.0	4.0	2.0	11.5	\$ 1,881.04	\$ -
	<i>Accompany City to look at excavated pipe / calibration assistance</i>	0.0	3.0	6.0	0.0	2.0	11.0	\$ 2,171.47	\$ -
	<i>Accompany City to take measurements for their forcemain assessment</i>	0.0	9.0	9.0	0.0	2.0	20.0	\$ 4,402.78	\$ -
	Subtotal Hours by Classification	0.5	13.0	19.0	4.0	6.0	42.5	\$ 8,455.29	\$ -
	Subtotal \$ by Classification	\$ 181.49	\$ 3,556.41	\$ 3,735.97	\$ 468.48	\$ 512.94	Subtotal Task 1.2		\$ 8,455.29
1.3	Allowance for Additional Meetings and Field Work								
	<i>Up to four meetings/6 conference calls with City</i>	4.0	6.0	24.0	0.0	4.0	38.0	\$ 8,154.38	\$ -
	<i>Peer review report</i>	2.0	8.0	12.0	0.0	4.0	26.0	\$ 5,616.02	\$ -
	<i>Additional field work</i>	0.0	18.0	18.0	0.0	4.0	40.0	\$ 8,805.56	\$ -
	Subtotal Hours by Classification	6.0	32.0	54.0	0.0	12.0	104.0	\$ 22,575.96	\$ -
	Subtotal \$ by Classification	\$ 2,177.82	\$ 8,754.24	\$ 10,618.02	\$ -	\$ 1,025.88	Subtotal Task 1.3		\$ 22,575.96
2	Miscellaneous Engineering and Technical Services								
	<i>Miscellaneous Engineering and Technical Services</i>						0.0	\$ 100,000.00	\$ -
							0.0	\$ -	\$ -
							0.0	\$ -	\$ -
	Subtotal Hours by Classification	0.0	0.0	0.0	0.0	0.0	0.0	\$ 100,000.00	\$ -
	Subtotal \$ by Classification	\$ -	\$ -	\$ -	\$ -	\$ -	Subtotal Task 2		\$ 100,000.00

GRAND TOTAL \$ 155,103.84

EXHIBIT B

CONSULTANT'S HOURLY RATE SCHEDULE

EXHIBIT B

Consultant's Hourly Rate Schedule

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