

City of Cocoa Task Order #2024-01

Courtenay Parkway Water Main Relocation

Describing a specific agreement between Kimley-Horn and Associates, Inc. (“Kimley-Horn”), and the City of Cocoa (“City”), in accordance with the terms of the Continuing Services Agreement (Q-23-12-COC-B) dated June 20, 2023

PROJECT UNDERSTANDING

The overall objective of the Courtenay Parkway Water Main Relocation (the “Project”) is to replace two (2) existing water mains along S. Courtenay Parkway between Cone Road and Carib Drive due a Brevard County roadway widening project. Kimley-Horn understand that the City would like to replace the existing 8-inch asbestos cement (AC) and 4-inch AC water mains with one common water main, totaling approximately 2,500 linear feet. The City will provide the modeling for the future sized water main, which is currently anticipated to be a 12-inch water main. The Project will include connecting the existing water services to the new 12-inch water main and removal of the existing AC water mains. Kimley-Horn understands that Brevard County is currently under design for the roadway widening project and the City will provide the design plans and survey for the road improvements.

Kimley-Horn understands that the City is requesting design services, permitting, and bidding services only and that construction phase services will be provided in a separate work order closer to the time of construction.

SCOPE OF SERVICES

TASK 1 – Project Management and Coordination

A. Project Kickoff Meeting and Staff Coordination

Kimley-Horn will conduct a kick-off meeting with the City and their representatives to discuss the overall project. Prior to the meeting, Kimley-Horn will walk the proposed route to confirm constructability issues to be discussed at the kick-off meeting. Kimley-Horn will coordinate with City staff for the duration of the design task.

B. Subconsultant Coordination

Kimley-Horn will coordinate with NADIC Engineering for the proposed geotechnical borings along the route. NADIC’s proposal is included as an attachment to the contract. An allowance of \$15,000 is included for anticipated survey of test holes, if necessary.

C. Permitting Coordination

Kimley-Horn will pay the permitting fees, without markup, associated with the Brevard County Right-of-Way permit and inspection fee and Florida Department of Environmental Protection (FDEP) permit. Coordination of the associated fees includes administrative and technical costs associated with the determination, payment, and confirmation of the payment of these fees.

- a. The permitting fees associated with the FDEP permit, Brevard County right-of-way permit and inspection fee are anticipated to be \$40,000. Kimley-Horn will invoice the City the direct cost of each permitting fee separately and independent of monthly project invoicing. Each fee invoice will include backup documentation regarding the determination of the fee amount. The invoice shall be prepared upon final confirmation of the fee amount in an invoice cycle preceding payment of the fee by Kimley-Horn to the permitting agency. Once invoice is paid, the application fee will be released to the permitting agency.

TASK 2 – Preliminary Engineering**A. Data Review and Collection**

Kimley-Horn will review data and information provided by the City for the Brevard County roadway widening project. This review will include reviewing the existing roadway plans provided by Brevard County and City as-builts or GIS of existing water mains.

B. Preliminary Plans

Kimley-Horn will provide a preliminary design (30% Plan) to the City for review. The preliminary design will address the requirements of the project and shall include the base survey in the background. The intent of the preliminary design is for Kimley-Horn to acquire the City's acceptance of the new water main alignment that will be noted on the base sheets (without profiles). The intended location of geotechnical locations and soft dig locations will be noted.

TASK 3 – Project Documentation

- A. Following approval of the preliminary design (30%), Kimley-Horn will prepare a 60% design submittal to the City for review. All construction documents shall comply with the current requirements of the City of Cocoa Utilities' Technical Provisions and Standard Details Manual, dated 2024. Existing utility information provided by the utility companies will be used in conjunction with the Brevard County Road Widening information as a basis for the design of the water main system layout. Kimley-Horn will also provide an opinion of probable construction cost (OPCC) with this submittal.

The 60% construction drawings will consist of the following components:

- a. Cover sheet
 - b. General Notes
 - c. Overall project key sheet
 - d. Plan and profile sheets (1"=20' horizontal) and (1"=4' vertical) (approximately 5 sheets)
 - e. Utility conflict details (approximately 2 sheets)
 - f. Typical details and additional items that may be needed (approximately 3 sheets)
- B. Upon approval of the 60% design by the City, Kimley-Horn will prepare the 90% design incorporating City comments from the 60% review and develop the plans to a level that (if no additional comments are made) would be sufficient for submittal of permit applications to the applicable permitting agencies standards. The Consultant will provide an updated OPCC and draft technical specifications with the 90% submittal.
- C. Upon acceptance of the 90% design by the City, Kimley-Horn will finalize the plans and project upfront and technical specifications for a complete set of documents to be used for bidding and construction.

TASK 4 – Permitting

- A. Kimley-Horn will prepare permit applications for permits to construct the water main for submittal to the following agencies:
- a. FDEP – Notice of Intent to use the General Permit for Construction of Water Main Extensions for PWSs (FDEP Form 62-555.900(7) Alternate). The permit and supporting documentation will be submitted electronically.

- b. Brevard County Right-of-Way Permit and Inspection Fee – Permitting for right-of-way along S. Courtenay Parkway with Brevard County. An OPCC will be provided for the Brevard County right-of-way inspection fee for the project.
- B. Kimley-Horn shall respond to up to two (2) Requests for Additional Information (RAIs) from each of the permitting agencies listed above. The amount of hours will be billed hourly at a not to exceed amount listed in the method of compensation section.

TASK 5 – Roadway Widening Project Coordination

A. County and Consultant Coordination

Kimley-Horn will coordinate the design of the water main relocation with Brevard County and DRMP, Inc. for the duration of the design. This includes specific design review at roadway design milestones to confirm if any roadway or drainage improvements have been changes which will impact the proposed water main design. It is anticipated that approximately 50 manhours will be utilized for this task. The amount of hours will be billed hourly at a not to exceed amount listed in the method of compensation section.

TASK 6 – Bidding

- A. Kimley-Horn will prepare a final bid package to the City that incorporates all of the City's comments along with an updated set of bidding specifications.
- B. Kimley-Horn will attend one (1) pre-bid meeting with the City for the project.
- C. Kimley-Horn will respond to RAI's associated with the bidding of the project with the bidding contractors. The responses to RAI's during the bidding process will be billed hourly.
- D. Kimley-Horn will review the bids and bidder qualifications. Following the review, Kimley-Horn will prepare a written recommendation for the award of the construction contract.

Information Provided by the City

Kimley-Horn shall be entitled to rely on the completeness and accuracy of all information provided by the City, or the City's consultants or representatives. The City shall provide all information requested by Kimley-Horn during the project, including but not limited to the following:

- South Courtenay Parkway Road Widening Plans – AutoCAD format.
- South Courtenay Parkway Survey – AutoCAD format.
- Reasonable access to operations, maintenance, and engineering staff.
- AutoCAD drawings of City design standards.
- Available as-built drawings.
- Advertisement and distribution of bid packages.

Additional Services

Any services not specifically provided for in the above scope will be considered additional services and can be performed at Kimley-Horn's contracted hourly rates. Additional services we can provide include, but are not limited to, the following:

- Review of additional regulatory agencies other than those specified.
- Submittal of documents beyond those specified.
- Environmental reviews or permits.
- Land acquisition.
- Permitting fees or applications not listed above.

- Attendance at additional meetings and public hearings beyond those identified above.
- Construction Phase Services.
- Any services not specifically described in the above scope of services.

PROJECT DELIVERABLES

- A. Drawings shall be prepared on a 22-inch by 34-inch border using Consultants standard drawing format. All drawings will be completed using Consultant's drafting standards.
- B. The deliverables to be provided for this project include:
- a. Design Meeting Minutes – electronically submitted.
 - b. All submittals will be electronically submitted, which include the following:
 - i. Project plans and specifications.
 - ii. Permit applications (FDEP and Brevard County Right-of-Way).
 - iii. Bid tabulation and recommendation letter.
 - c. One printed set of 22-inch by 34-inch and one printed set of 11-inch by 17-inch plans will be provided at the 60, 90, and final design.

SCHEDULE

Kimley-Horn will initiate work on the Project within two weeks of an executed notice to proceed from the City. Kimley-Horn will provide the services as expeditiously as possible to meet a mutually agreed upon schedule.

METHOD OF COMPENSATION

Services under this Work Order will be provided shall not exceed a total of **\$169,106.67** in accordance with the terms and conditions of the Continuing Services Agreement between the City of Cocoa and Kimley-Horn, dated June 20, 2023. Tasks 1-4 and 6 shall be paid in lump sum amounts. Tasks 5 and 6a will be billed on an hourly not to exceed at the hourly rates listed in the MSA. Expenses will be provided to the City as pass through.

TASKS		FEE
1	Project Management and Coordination	\$12,564
2	Preliminary Design	\$14,492
3	Design (60%, 90%, 100%)	\$44,828
4	Permitting	\$7,704
4a	Permitting RAI (Hourly)	\$2,760
5	County Coordination (Hourly)	\$9,320
6	Bidding Package	\$8,284
6a	Bidding RAI (Hourly)	\$5,288
Expenses		
Permitting Fees		\$40,000 ¹
NADIC Engineering		\$8,866.67
Survey (Allowance)		\$15,000 ²

Notes:

1. FDEP permit and Brevard County inspection fee is assumed to be \$40,000 total. Permit fees are estimated but will be provided at actual cost and invoiced separately.
2. Survey is included as an allowance. The City will be provided the proposal for exact fees at time of proposal.

Services provided under this Task Work Order will be invoiced on a monthly basis. All invoices will include a description of services provided.

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

Please email all invoices to _____

ATTACHMENTS:

Exhibit A: Fee Table

Exhibit B: NADIC Engineering Scope

ACCEPTED:

THE CITY OF COCOA, FLORIDA

KIMLEY-HORN AND ASSOCIATES, INC.

BY: _____

BY: _____

TITLE: _____

TITLE: _____

DATE: _____

DATE: _____

EXHIBIT A

Courtenay Parkway Water Main Relocation FEE SCHEDULE														
	Senior Engineer II		Project Manager		Project Engineer		Analyst I		CAD/GIS Designer		Administrative		Total	
Rate:	\$290.00		\$205.00		\$195.00		\$148.00		\$144.00		\$110.00			
	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee	Hours	Fee
Task 1: Project Management	4	\$ 1,160.00	32	\$ 6,560.00	12	\$ 2,340.00	8	\$ 1,184.00	0	\$ -	12	\$ 1,320.00	68	\$ 12,564.00
Task 2: Preliminary Design	4	\$ 1,160.00	2	\$ 410.00	14	\$ 2,730.00	24	\$ 3,552.00	40	\$ 5,760.00	8	\$ 880.00	92	\$ 14,492.00
Task 3: Design	16	\$ 4,640.00	-	\$ -	40	\$ 7,800.00	72	\$ 10,656.00	128	\$ 18,432.00	30	\$ 3,300.00	286	\$ 44,828.00
Task 4: Permitting	2	\$ 580.00	2	\$ 410.00	10	\$ 1,950.00	18	\$ 2,664.00	10	\$ 1,440.00	6	\$ 660.00	48	\$ 7,704.00
Task 4a: RAI Responses (Hourly)		\$ -		\$ -	4	\$ 780.00	8	\$ 1,184.00	4	\$ 576.00	2	\$ 220.00	18	\$ 2,760.00
Task 5: County Coordination (Hourly)	4	\$ 1,160.00	8	\$ 1,640.00	16	\$ 3,120.00	20	\$ 2,960.00	0	\$ -	4	\$ 440.00	52	\$ 9,320.00
Task 6: Bidding	2	\$ 580.00	4	\$ 820.00	12	\$ 2,340.00	18	\$ 2,664.00	10	\$ 1,440.00	4	\$ 440.00	50	\$ 8,284.00
Task 6a: RAI Questions (Hourly)		\$ -	2	\$ 410.00	10	\$ 1,950.00	12	\$ 1,776.00	8	\$ 1,152.00		\$ -	32	\$ 5,288.00
Total	32	\$9,280.00	50	\$ 10,250.00	118	\$ 23,010.00	180	\$ 26,640.00	200	\$ 28,800.00	66	\$7,260.00	646	\$ 105,240.00
Expenses														
Permitting Fees														\$ 40,000.00
NADIC Engineering														\$ 8,866.67
Survey (Allowance)														\$ 15,000.00
													SUBTOTAL	\$ 169,106.67

*Rates are per Continuing Services Agreement dated June 20, 2023 between City of Cocoa and Kimley-Horn.

May 16, 2024

Kimley-Horn

7341 Office Park Place, Suite 102
Melbourne, Florida 32940

Attention: Mr. Tucker Hunter, P.E.

RE: Geotechnical Engineering Fee Proposal for
Cocoa Water Main Relocation
City of Cocoa, Florida
NADIC Project No. PQ.GEO-CV24025

Dear Mr. Hunter:

As per your email dated May 14, 2024, **Nadic Engineering Services, Inc. (NADIC)** is pleased to provide this Fee Proposal for the relocation of approximately 2,500 linear feet of a Water Main located along Courtenay Parkway, spanning from Cone Road to Carib Drive on Merritt Island, Florida.

This proposal presents our understanding of the project, our recommended scope of services, cost and schedule for providing these services.

The purpose of this investigation will be to explore the soil and groundwater conditions at the site and to use the information obtained to provide geotechnical engineering recommendation for engineering design and construction effort for the proposed Water Main Relocation. Our recommended scope of services includes the following:

- 1) Coordinate boring location, including field reconnaissance, mark boring location at the sites.
- 2) Coordinate clearance and meetings with utility locators
- 3) Mobilize truck mounted drill rig and personnel.
- 4) Provide maintenance of Traffic (MOT) during the drilling operations.
- 5) Perform a total of four (4) Standard Penetration Test (SPT) borings to a depth of 15 feet as requested.
- 6) Collect groundwater level measurement and estimate normal wet seasonal high groundwater table.
- 7) Backfill soil borings with like insitu materials removed.
- 8) Visually examine all recovered soil samples in accordance to ASTM D2487 and perform laboratory tests on selected representative soil samples. The laboratory testing shall include Sieve analysis, Atterberg limits, organic content and natural moisture content, as appropriate.
- 9) Incorporate the results of the field and laboratory testing in a formal report with engineering evaluation and recommendations for site preparation, fill placement and compaction, including:
 - Site preparation including excavation techniques, expectations, depth of removal and over-excavation, safe slopes for any permanent cuts or fills, and improvements of in-situ soils, if applicable
 - Support of excavations including protection of existing adjacent utilities/structures during construction, lateral pressures for design of excavation support systems and any displacement monitoring recommendations
 - Constructability considerations including temporary excavation slopes, sheeting and shoring/cofferdams, traffic control/maintenance, excavatability, possibility of heave of excavation bottoms, and applicable dewatering issues and methods
 - Influence of deleterious soils, if encountered, on foundation design and recommendations to mitigate detrimental effects

- Backfill materials including onsite availability, recommended index properties, aggregate gradations, classifications in accordance with ASTM D2487 and moisture and density compaction criteria
- Compaction characteristics and suitability of onsite soils for use as engineered and other fills and other pertinent earthwork recommendations, including shrinkage factors
- Possible effects of pipeline construction on the surface and subsurface facilities in the alignment and recommended measures to control detrimental effects or ground subsidence.
- Any other geological or geotechnical recommendations considered by the geotechnical engineer to be pertinent to the project.

In accordance with the proposed scope of services and unit prices, we estimate the total (Not-To-Exceed) cost for our geotechnical services to be **\$8,866.67**. Our schedule to complete the described work will be four (4) working weeks from your written notice to proceed.

The fee presented above does not include environmental investigation and evaluation. However, if visible contamination is noticed, it shall be reported to Kimley-Horn. In case, potential contamination is observed, **NADIC** will present a proposal for the additional cost.

NADIC appreciates the opportunity of working with you, Kimley-Horn and the City of Cocoa on this project. If you have any questions regarding this proposal, or if we may be of further assistance, please do not hesitate to contact the undersigned.

Sincerely,

NADIC ENGINEERING SERVICES, INC.



Godwin N. Nnadi, Ph.D., P.E.

Principal Engineer

Attachment: Attachment A – Computation of Geotechnical Cost

**ATTACHMENT A - COMPUTATION OF GEOTECHNICAL COST
COCOA WATER MAIN RELOCATION
CITY OF COCOA, FLORIDA**

Component/Unit Description	UNIT	WATER MAIN	QTY	RATE	WATER MAIN	TOTAL COST
I. FIELD EXPLORATION:						
1. Crew & Equipment Mobilization:						
Mud Bug Rig Mobilization	Ea.		0	\$750.00		\$0.00
Truck Rig Mobilization	Ea.	1.0	1	\$565.00	\$565.00	\$565.00
Barge/Amphibious Mobilization - Ramp	Ea.		0	\$12,500.00		\$0.00
MOT Portable Safety Sign	Ea.	6	6	\$65.00	\$390.00	\$390.00
MOT Arrow Board	Ea.		0	\$120.00		\$0.00
MOT Attenuator Truck	Hr		0	\$270.00		\$0.00
MOT Channelization Cones (each)	Ea.	30	30	\$6.00	\$180.00	\$180.00
Support Truck	Hr	10	10	\$120.00	\$1,200.00	\$1,200.00
GPS Unit	Day	1	1	\$100.00	\$100.00	\$100.00
MOT Traffic Control Officer	Hr		0	\$85.00		\$0.00
2. Standard Penetration Test Borings(ASTM D-1586):- Truck Drill Rig						
SPT Truck 0-50 Ft	LF	60	60	\$20.00	\$1,200.00	\$1,200.00
SPT Truck 50-100 Ft	LF		0	\$26.39		\$0.00
6. Auger Borings(ASTM D-1452):						
401-Geo Auger Borings-H& Truck/Mud Bug	LF		0	\$17.00		\$0.00
402-Geo Auger Borings-Track	LF		0	\$18.00		\$0.00
9. Truck and Crew:						
Drill Rig and Crew – Truck/Mud Bug (2 person)	Hr	1	1	\$250.00	\$250.00	\$250.00
Drill Rig and Crew – Truck/Mud Bug (3 person)	Hr		0	\$325.00		\$0.00
14. Site Reconnaissance/Utility Coordination/Boring Location:						
a. - Engineer	hrs.	1	1	\$108.42	\$108.42	\$108.42
b. -Sr. Engineering Tech	hrs.	5	5	\$81.57	\$407.85	\$407.85
19. Pavement Cores:						
	Ea.		0	\$280.00		\$0.00
Totals for Field Exploration					\$4,401.27	\$4,401.27

**ATTACHMENT A - COMPUTATION OF GEOTECHNICAL COST
COCOA WATER MAIN RELOCATION
CITY OF COCOA, FLORIDA**

Component/Unit Description	UNIT	WATER MAIN	QTY	RATE	WATER MAIN	TOTAL COST
II. LABORATORY TESTING:						
1. Visual Exam./Stratify(ASTM D-2488): -Senior Technician.	hrs.	1	1	\$81.57	\$81.57	\$81.57
2. Grain Size Analysis:						
822- Soils Particle Anlys AASHTO T99 No Hydrome	Ea.	4	4	\$113.33	\$453.32	\$453.32
812 -Soils Material Finer then 200 sieve FM 1-T011	Ea.		0	\$75.28		\$0.00
819-Soil Organic Content Ignition FM 1-T 267:	Ea.	2	2	\$55.00	\$110.00	\$110.00
826-Soil Plastic Limit & Plasticity Index AASHTO T	Ea.	2	2	\$55.00	\$110.00	\$110.00
811-Soil Liquid Limit AASHTO T89:	Ea.	2	2	\$55.00	\$110.00	\$110.00
816-Soil Moisture Content AASHTO-T265):	Ea.	5	5	\$21.74	\$108.70	\$108.70
805-Soils Corrosion Series FM 5-550 to 5-553: (pH, Sulfate, Chloride, Resistivity)	Ea.		0	\$215.00		\$0.00
Totals for Laboratory Testing					\$973.59	\$973.59
III. ENGINEERING AND TECHNICAL SERVICES:						
1. Principal Engineer:	hrs.	1	1	\$236.30	\$236.30	\$236.30
2. Senior Engineer:	hrs.		0	\$199.70		\$0.00
3. Project Engineer:	hrs.	12	12	\$170.19	\$2,042.28	\$2,042.28
4. Engineer:	hrs.	6	6	\$108.42	\$650.52	\$650.52
5. Cadd/Computer Technician	hrs	4	4	\$79.50	\$318.00	\$318.00
6. Senior Engineering Technician:	hrs.	3	3	\$81.57	\$244.71	\$244.71
7. Secretarial/Clerical:	hrs.		0	\$59.92		\$0.00
Totals for Engineering and Technical Services			26		\$3,491.81	\$3,491.81
Totals for all Services					\$8,866.67	\$8,866.67