

TASK ORDER No. 4

**CONTINUING PROFESSIONAL SERVICES
(Civil Engineering – Transportation)**

THIS TASK ORDER FOR CONTINUING PROFESSIONAL SERVICES (“Task Order”) is made on the day of _____, between the **City of Lake Worth Beach**, a Florida municipal corporation (“City”) and **Mock Roos & Associates, Inc.**, a Florida CORPORATION (“CONSULTANT”).

1.0 Project Description:

The City desires the CONSULTANT to provide those services as identified herein for the Project. The Project is described in the CONSULTANT’s Proposal, dated July 1, 2025 and services are generally described as: S. East Coast Street and S. “H” Street Improvement (the “Project”).

2.0 Scope

Under this Task Order, the CONSULTANT will provide the City of Lake Worth Beach Public Works with civil engineering related to transportation consulting services for the Project as specified in the **CONSULTANT’s proposal attached hereto and incorporated herein as Exhibit “1”**.

3.0 Schedule

The services to be provided under this Task Order shall be completed within 365 calendar days from the City’s approval of this Task Order or the issuance of a Notice to Proceed.

4.0 Compensation

This Task Order is issued for a lump sum, not to exceed the amount of \$490,947.50. The attached proposal identifies all costs and expenses included in the lump sum, not to exceed amount.

5.0 Project Manager

The Project Manager for the CONSULTANT is Garry G. Gruber, phone (561) 472-6293; email: garry.gruber@mockroos.com and, the Project Manager for the City is Jamie Brown, phone: (561) 586-1720; email: jbrown@lakeworthbeachfl.gov.

6.0 Progress Meetings

The CONSULTANT shall schedule periodic progress review meetings with the City Project Manager as necessary but every 30 days as a minimum.

7.0 Compliance with section 787.06, Florida Statutes.

By signing this Task Order before a notary public and taking an oath under the penalty of perjury, the CONSULTANT attests and warrants that the CONSULTANT does not use coercion for labor or services as defined in section 787.06, Florida Statutes (2024).

8.0 Authorization

This Task Order is issued pursuant to the Continuing Professional Services Agreement (Civil Engineering – Transportation) based on RFQ#23-300 between the City of Lake Worth Beach and the CONSULTANT, dated March 28, 2023 ("Agreement" hereafter). If there are any conflicts between the terms and conditions of this Task Order and the Agreement, the terms and conditions of the Agreement shall prevail.

IN WITNESS WHEREOF, the parties hereto have made and executed this Task Order No. 4 as of the day and year set forth above.

CITY OF LAKE WORTH BEACH, FLORIDA

By: _____
Betty Resch, Mayor

ATTEST:

By: _____
Melissa Ann Coyne, City Clerk

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

By: _____
Glen J. Torcivia, City Attorney

APPROVED FOR FINANCIAL
SUFFICIENCY

By: _____
Yannick Ngendahayo, Financial Services Director

CONSULTANT: **MOCK ROOS & ASSOCIATES, INC.**

By: _____
Garry G. Gruber, P.E., Senior Vice President

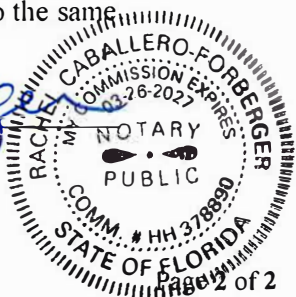
[Corporate Seal]

STATE OF FLORIDA _____)
COUNTY OF PALM BEACH)

THE FOREGOING instrument was acknowledged before me by means of ~~physical presence~~ or online notarization on this 1st day of July, 2025, by Garry G. Gruber, as the Senior Vice President [title] of Mock, Roos & Associates, Inc., a Florida Corporation authorized to do business in the State of Florida, who is personally known to me or who has produced _____ as identification, and who did take an oath under penalty of perjury that the facts stated with regard to section 787.06, Florida Statutes, are true and correct, and that he or she is duly authorized to execute the foregoing instrument and bind **MOCK ROOS & ASSOCIATES, INC.** to the same.

Rachel C. Forberger
Notary Public Signature

Notary Seal:



Page 2 of 2

**Proposal to Provide Professional Engineering Services for
City of Lake Worth Beach**

S. East Coast Street and S. “H” Street Improvement

**(S. East Coast St. from 6th Avenue S. to Lake Ave., S. H Street 6th Ave. to Lake Ave. and 1st-5th
Ave. from S. East Coast St. to Dixie Hwy)**

A. Project Description:

The City of Lake Worth Beach has obtained FDOT Local Agency Program (LAP) funding in connection with the proposed roadway reconstruction traffic flow modifications to the existing S. East Coast Street, S. “H” Street, and cross streets 1st Avenue S., 2nd Avenue S., 3rd Avenue S., 4th Avenue S., and 5th Avenue S., between S. East Coast Street and S. Dixie Hwy. These streets total approximately 7,600 linear feet.

Right-of way widths, as provided by Palm Beach County PAPA maps, for the existing streets are as follows:

- S. East Coast Street: 30 feet wide, partially 40 feet wide
- S. H Street: 40 feet wide
- Cross Streets: 40 feet wide on each street

The Initial Phase submittal of this project will primarily consist of a 30% Preliminary Engineering and Master Plan Development for each of the aforementioned City-owned streets, in preparation for development of construction documents. The goal of the Initial Phase is to create one way traffic flow on the included streets, along with streetscape improvements such as sidewalks, street lighting, designated on-street vehicle parking, etc. where practical, while maintaining preservation of accessibility to existing commercial and industrial properties along each street. All proposed roadway improvements shall be within the existing rights-of-way. No coordination for Temporary Construction Easements (TCE’s) or right-of entry agreements is included.

Following the Master Plan Development, plans for the Constructability Phase (100%) and Production Phase (FINAL) will be prepared using the most recent available County aerial photography, supplemented by the topographic survey, in accordance with the following standards:

- Applicable Provisions of the Palm Beach County *Thoroughfare Road Design Procedures (latest edition)*, and Traffic Standards (T-P-24).
- FDOT Standard Plans (FY 2025=26)
- FDOT Standard Specifications for Road and Bridge Construction (FY2025-26)
- AASHTO “A Policy on Geometric Design of Highways and Streets”, 7th Edition, dated 2018
- FDOT “Florida Greenbook”, 2018 edition

Mock•Roos will provide the services as outlined below in B. Scope of Services. The work will be performed in accordance with the submittal requirements of the FDOT LAP PHASES.

B. Scope of Services:

Task 1 - Preliminary Engineering & Master Plan (INITIAL PHASE)

1. Attend kick-off meeting with City staff and review project objectives. Review FDOT LAP requirements and discuss proposed improvements with City staff.
2. Provide the services of a Professional Surveyor to perform topographic survey within the project limits. See proposal from Brown & Phillips, dated June 4, 2025.
3. Provide the services of a Geotechnical Engineer to perform geotechnical investigations. See proposal from WIRX Engineering, LLC, dated January 28, 2025. Provide the services of an electrical engineer to prepare street lighting plans and photometrics. See proposal from Quantum Electrical Engineering, Inc. dated February 25, 2025.
4. Provide the services of an electrical engineer to prepare preliminary street lighting plans and photometrics. See proposal from Quantum Electrical Engineering, Inc. dated February 25, 2025.
5. Develop multiple Conceptual Typical Sections for each street/roadway. Typical sections will provide one travel lane, along with the desired sidewalks, bicycle lanes and parking spaces, potential streetlights, concrete bulbouts, etc. within each existing right-of-way. Up to 2 alternative typical sections will be developed for each street but limited to 10 in total.
6. Perform field observations during design. Photo document existing conditions and facilities.
7. Perform a Master Plan Development to create a plan view of the desired typical section for each street. This plan will include an assessment of the current street gradients and the need to adjust longitudinal slopes to accommodate runoff of storm water and mitigate future flooding within the right-of-way.
8. Develop design for reconstruction of the existing roadway (subgrade, base and pavement surface) to improve the service life of each road. Usage of existing underlying concrete slab(s) on East Coast Street will be considered.
9. Develop potential re-grading design of each proposed roadway surface to provide positive drainage surface flow to existing or proposed catch basins.
10. Develop provisions for drainage collection and discharge systems as determined appropriate, to collect storm water based on the revised road grading. These systems will be conceptually designed for connection to two existing outfall pipes along 1st Avenue S. and 3rd Avenue S.

Task 2 - Construction Documents (CONSTRUCTABILITY and PRODUCTION PHASES)

1. Prepare construction drawings for Initial (30%), Constructability (100%) and Production (FINAL) Phases. Professional services shall include the preparation of a set of engineering construction plans and estimated costs for the construction of the above-described improvements. Technical specifications will be the *FDOT Standard Specifications for Road and Bridge Construction*. Drawings will consist of:

- a. Project Location/Title Sheet.
 - b. Summary of Pay Items, with pay item footnotes required.
 - c. Construction Notes and Legends.
 - d. Plan View Base Map from surveys, on County aerial photography.
 - e. Inclusion of any public utilities in the project area that may affect the project, to be incorporated in the base map file.
 - f. Typical Sections showing the proposed improvements.
 - g. Construction Plan Sheets (plan and profile views, 1"=20' scale – 22x34 format) indicating finished grades, supporting data, profiles, etc.
 - h. Intersection Plans.
 - i. Lighting Plans and Photometrics (by Quantum Electrical Engineering).
 - j. Roadway Cross Sections.
 - k. Selected Driveway Profiles.
2. Calculate quantities of the proposed improvements and provide a preliminary estimate of construction cost, based on unit prices from previous recent projects, with each progress submittal.
3. Perform utility coordination with affected utility companies. Determine any potential above-ground or underground utility conflicts that may affect the components of the project. Design of utility relocations shall be the responsibility of each respective utility company/agency. Utility conflict resolution with City owned facilities may be performed as additional services.
4. Provide plans for City and FDOT reviews, and prepare responses to agency comments, as follows:
 - a. INITIAL PHASE 30% progress submittal to City; incorporate any revisions – resubmit to City for City submission to FDOT.
 - b. CONSTRUCTABILITY PHASE (100%) progress submittal to the City for review including revisions from 30% review – make revisions and resubmit 100% package to City for City submission to FDOT; receive and review FDOT comments; prepare responses to FDOT Constructability comments and make appropriate plan revisions.
 - c. PRODUCTION PHASE FINAL submittal to City for review, including FDOT ERC comments; make revisions – resubmit to the City for FDOT Production Package submittal; receive and address FDOT comments, if any – resubmit Final Production Package to the City for FDOT.
 - d. FINAL DOCUMENTS – Signed and Sealed.

All submittals to be made electronically in pdf format.

Task 3 - Permitting

1. Research SFWMD permit status and requirements. Submit a general permit application to SFWMD for the project. Respond to up to two (2) Requests for Additional Information (RAIs).

Task 4 - Project Coordination

1. Provide and coordinate the services of subconsultants of the project. Perform QA/QC reviews of subconsultant documents, in-house documents and project deliverables.
2. Provide Project Coordination directly with the City on the progress schedule, submittals, and communicating directives from either the City or FDOT. Attend meetings as requested with the City and/or FDOT.
3. Assist the City addressing any questions and providing relevant data to FDOT to obtain the LAP Funding on this project. Construction plans will be assembled, and construction cost estimates prepared on FDOT LAP funding forms, provided to meet the above-described progress review schedules. Responses to comments will be provided and plans revised as determined appropriate.

Assumptions

- No Public Involvement Services are anticipated.
- The City will complete a cultural resource assessment, or any other supplemental reports as required for inter-agency coordination.
- No landscaping design is included.
- Design of utility relocations shall be the responsibility of each respective utility company/agency. No subsurface utility exploration is included. Utility conflict resolution with City owned facilities may be performed as additional services.
- Opinions of Cost. Because Mock•Roos does not control the cost of labor, materials, equipment or services furnished by others, methods of determining prices, or competitive bidding or market conditions, any opinions rendered as to costs, including but not limited to the costs of construction and materials, are made solely based on its judgment as a professional familiar with the industry. Mock•Roos cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinions of cost. Mock•Roos 's services required to bring costs within any limitation established by the City will be paid for as additional Services.
- The work is expected to be completed within existing rights-of-way and easements. If additional easements or right-of-entry agreements are needed, they will be coordinated by the City/Contractor.

C. Fee and Rates:

The total fee to provide the Scope of Services outlined above is **\$490,947.50**. Mock•Roos will complete the Scope of Services for a lump sum fee. See "Attachment A" for estimate of hours and professional fees.

D. Acceptance and Authorization to Proceed:

This proposal is acceptable and Mock•Roos has authorization to proceed with the Scope of Services upon Mock•Roos receiving a Purchase Order for these services.

MOCK•ROOS

Signed: 

Name: Garry G. Gruber, P.E.

Title: Senior Vice President

Date: July 1, 2025

S. EAST COAST STREET FROM 6TH AVE. TO LAKE AVE

S. H STREET 6TH AVE S TO LAKE AVE

1ST - 5TH AVE FROM S. EAST COAST STREET TO DIXIE HWY

City of Lake Worth Beach

"ATTACHMENT A"

20-Jun-25

C3017.00

TASK DESCRIPTION	Principal/ Corp. Officer	Sr. Project Manager	Sr. Project Engineer	Project Engineer	Engineer Intern	Total Hours	Amount
Task 1 - Preliminary Engineering & Master Plan (INITIAL PHASE)	18	70	132	160	198	578	\$ 99,080.00
1. Review and analysis of adjacent properties and right-of-ways	0	2	12	0	0	14	\$ 2,910.00
2. Prepare Base Maps for 7 Streets - 1"=20' (est 15 sheets)	0	2	4	20	40	66	\$ 9,670.00
3. Prepare Typical Sections for 30'/40' R/W (7 streets) up to 10 options	2	8	12	24	40	86	\$ 13,820.00
4. Establish Preliminary Street Alignments	2	8	8	20	26	64	\$ 10,570.00
5. Develop Conceptual Street Grading Plans (7 streets)	1	2	20	24	0	47	\$ 8,870.00
6. Conceptual Drainage Collection/Discharge Systems	1	2	8	8	20	39	\$ 6,190.00
7. Identify Existing Utilities and Potential Conflicts	1	4	12	16	16	49	\$ 8,320.00
8. Prepare Conceptual Lighting Plan w/input from electrical sub	2	8	8	0	16	34	\$ 5,920.00
7. Prepare Master Plan for proposed roadway and drainage improvements	2	4	16	20	40	82	\$ 13,060.00
9. Prepare Preliminary Cost Estimates	1	6	12	20	0	39	\$ 7,450.00
10. Coordinate w/surveyor & geotechnical engineer	0	8	8	8	0	24	\$ 4,800.00
11. Meetings with City staff & other agencies	6	16	12	0	0	34	\$ 7,500.00
Task 2 - Construction Documents (CONSTRUCTABILITY & PRODUCTION PHASES)	8	48	252	356	512	1176	\$ 188,900.00
1A. INITIAL PHASE Roadway Drawings (30%)	2	16	72	80	100	270	\$ 44,940.00
1B. CONSTRUCTABILITY PHASE Roadway Drawings (100%)	2	8	60	100	140	310	\$ 49,080.00
1C. PRODUCTION PHASE Roadway Drawings (FINAL)	2	8	24	40	60	134	\$ 21,500.00
2. Proposed Drainage Design	2	8	80	80	140	310	\$ 49,780.00
3. Utility Coordination (relocation plans by utility co.)		4	8	32	48	92	\$ 13,980.00
4. Prepare Plan Submittals to City and FDOT		4	8	24	24	60	\$ 9,620.00
Task 3 - Permitting	0	6	32	48	68	154	\$ 24,570.00
1. Permit Application to SFWMD		2	20	20	24	66	\$ 10,950.00
2. Agency Response - RAI 1		2	8	16	24	50	\$ 7,810.00
3. Agency Response - RAI 2		2	4	12	20	38	\$ 5,810.00
Task 4 - Project Coordination	16	44	56	36	40	192	\$ 36,340.00
1. with Design Subconsultants	8	16	16	16		56	\$ 11,520.00
2. Coordination with City and FDOT	8	20	20			48	\$ 10,520.00
3. Address FDOT Comments		8	20	20	40	88	\$ 14,300.00
TOTAL MAN HOURS	42	168	472	600	818	2100	
TOTAL LABOR COSTS	\$ 10,080.00	\$ 37,800.00	\$ 96,760.00	\$ 102,000.00	\$ 102,250.00		\$ 348,890.00
HOURLY LABOR RATES	\$ 240.00	\$ 225.00	\$ 205.00	\$ 170.00	\$ 125.00		
	BASIC SERVICES:					Salary Related Costs	\$ 348,890.00
						Out-of-pocket costs: Reproduction	\$ 750.00
						TOTAL ENGINEERING SERVICES FEE	\$ 349,640.00
	SUBCONSULTANT SERVICES:						
	Topographical Survey (Brown & Phillips, Inc.)						\$ 82,967.50
	Supplemental Geotechnical Engineering (WIRX Engineering, LLC)						\$ 13,650.00
	Street Lighting Design (Quantum Electrical Engineering, Inc.)						\$ 44,690.00
	TOTAL SUBCONSULTANT FEES						\$ 141,307.50
	TOTAL PROJECT FEES						\$ 490,947.50



June 4, 2025

Dennis J. Thomas, P.E.
Mock Roos & Associates, Inc.
5720 Corporate Way
West Palm Beach, FL 33407

**Re: South East Coast Street (6th Avenue South to ±650' South of Lake Avenue) and
South H Street (6th Avenue South to Lake Avenue)
Lake Worth Beach FDOT LAP Project - Route Topographic Survey**

Dear Dennis:

Thank you for the opportunity to provide you with the following services for the subject site. This proposal is based on documentation and information provided by your office. We will review any title work supplied by you. The scope of services is as follows:

SCOPE OF SERVICES

I. RIGHT-OF-WAY

We will compile information from existing plats and deeds (per the PAPA website) and prepare a project base map showing the existing right-of-way and any pertinent parcel information abutting the right-of-way.

II. HORIZONTAL PROJECT NETWORK CONTROL

The survey will be oriented to Palm Beach County horizontal control (NAD 83/90 Adjustment). We will obtain the sectional and geodetic control information from the Palm Beach County Survey Department. The limits of the survey are South East Coast Street and South H Street plus five cross streets (6th Avenue South to Lake Avenue), extending to U.S. Highway 1. The approximate limits of the survey are outlined in red (except the area highlighted in blue which is not included in the survey) on Attachment 'B'.

III. VERTICAL PROJECT NETWORK CONTROL

A level run will be performed along the route using the existing Palm Beach County (or City of Lake Worth Beach) benchmarks (NAVD 1988). Benchmarks will be set along the route, not exceeding 600 feet apart, so that we will have at least one benchmark per plan sheet. All benchmarks will be set outside of the right of way.

IV. SECTION TIES AND PROPERTY TIES

We will tie in section corners and property corners along the route to check the present alignment of South East Coast Street and South H Street. We will try to locate as many corners as possible to positively establish the current right of way. Not a boundary survey.

V. TOPOGRAPHY AND CROSS SECTIONS

A topographic survey will be performed along the route in accordance with the Standards of Practice as contained in Chapter 5J-17.050 -17.052, Florida Administrative Code, pursuant to Section 472.027 of the Florida Statutes. The survey will tie in all visible features such as, but not limited to, existing pavement, curbing, and sidewalks; water, sanitary sewer, and drainage facilities; signs, striping and light poles, and other above-ground topographic features. These locations will extend from within the right-of-way corridor to 10' outside the right-of-way. We will cross-section the proposed route at 50' intervals, with additional sections taken as needed along curved portions, or in areas that require additional shots to obtain an accurate depiction of the existing ground grades. In addition, we will obtain the finished floor elevations within 10' of the right-of-way.

VI. AS-BUILTS

We will attempt to get as-built information on all the pipes leading out of any storm or sanitary sewer structures found. We will show invert elevations, pipe sizes and materials for all pipes located including outfall pipes.

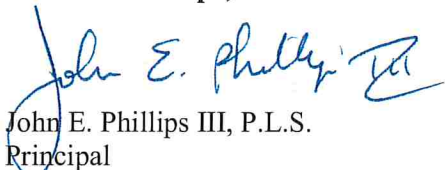
VII. TREE SURVEY

We will locate native trees 4 inches in diameter or larger in the right of way. Trees will be measured at breast height, and palms will be measured at clear trunk height. Hedges and ground cover will not be located or shown on the survey. Exotic trees such as Melaleuca, Brazilian pepper and Australian pine will not be located or shown on the survey. We will identify the various types of trees located on this site based on common knowledge of tree species. A qualified landscape architect should be employed for positive identification of tree species. We will then produce a drawing showing all the trees located. We will provide you with signed and sealed hard copies and an AutoCAD file of the trees located.

VIII. CLOSURE

A drawing will be produced which will show all the features located. We propose to provide Mock Roos with hard copies, a digitally signed PDF file, and an AutoCAD file in the version requested. We will perform the scope of services for a **lump sum fee of \$82,967.50** (see Attachment 'A' for an hourly breakdown). Any additional work will be done on an hourly basis as approved by you. Please do not hesitate to call me with any questions you might have regarding this proposal. We look forward to working with you on this project.

Brown & Phillips, Inc.


John E. Phillips III, P.L.S.
Principal

Attachment

JEP/mb

This Proposal accepted this ____ day of ____, 2025

By: _____

Mock Roos & Associates, Inc.

Print Name: _____

Title: _____



BROWN & PHILLIPS, Inc.

PROFESSIONAL SURVEYING SERVICES

ATTACHMENT 'A'

**South East Coast Street (6th Avenue South to ±650' South of Lake Avenue)
and South H Street (6th Avenue South to Lake Avenue)
Lake Worth Beach FDOT LAP Project**

Type of Survey: Route Topographic

Size: ±7150'

Date: June 4, 2025

TASK - Route Topo	SURVEY CREW	CADD TECH	SURVEY TECH	PLS	COMMENTS
Meetings and Coordination				8	
Horizontal Project Network Control	27		40	16	Establish control and right-of-way
Vertical Project Network Control	30		8	1	Set benchmarks along corridor
Baseline Layout	15		3		Layout baseline at 100' intervals
Reference Points	8		2		Set reference points
Section Ties	4		0.5		Tie in Horizontal Control
Subdivision & Property Ties	24		8	4	Tie in adjoining property corners
Side Street Surveys	50				Side street topo to US 1
Topography and Cross Sections	107		35	9	Locate all above ground features and 50' cross sections to 10' outside R/W
As-builts	30		8	2	As-built storm and sanitary structures
Geotech Borings	15		3	1	Locate soil borings
Tree Survey	7		1		Located planted trees in R/W
Topographic Survey		74	20	10	Prepare topographic survey (±14 sheets)
Address Comments	8	10	12	5	
Total Hours:	325	84	140.5	56	
Rate/Hour	\$150.00	\$105.00	\$115.00	\$165.00	
Subtotal:	\$48,750.00	\$8,820.00	\$16,157.50	\$9,240.00	
Total Labor Cost:					\$82,967.50

Other Direct Costs:

Legal Description & Sketch

quantity

unit

cost/unit

total

Other

each
cost x markup

\$650.00
1.20

\$0.00
\$0.00

Total Other Direct Costs:

\$0.00

TOTAL PRICE

\$82,967.50





January 28, 2025

Mock Roos & Associates Inc.

5720 Corporate Way
West Palm Beach, FL 33407

Attention: Tyler Thompson, P.E.

Email: tyler.thompson@mockroos.com

**Subject: Proposal for Pavement Exploration
 Southeast Coast Street & South H Street
 Lake Worth Beach, Florida
 WIRX Proposal No.: 25-P-012**

Dear Tyler Thompson,

WIRX Engineering, LLC (WIRX) is pleased to submit this proposal for the above-referenced project. WIRX proposes to perform a pavement exploration program to identify the existing pavement section thicknesses and the nature of the subgrade. This proposal presents our proposed scope of work and establishes our schedule and fee for performing the work.

SCOPE OF SERVICES

The proposed scope of work for the project consists of the following:

1. Visit the site to field mark the planned coring locations, and observe the existing site conditions.
2. Contact Sunshine 811 to request field location and clearance of underground utilities in the areas of the corings as per Florida Statutes. See below for further details.
3. Prepare a Temporary Traffic Control Plan and implement it during our field exploration for traffic control and safety purposes in accordance with the FDOT Standard Plans for Road Construction. Flaggers will be provided to close a lane of traffic. See below for further details.
4. Mobilize a truck-mounted drill rig and personnel.
5. Advance sixteen (16) pavement cores to determine the asphalt thickness. Upon removal of the asphalt core, an auger boring will be advanced to determine the nature and thickness of the base material as well as the nature of the subgrade materials.
6. Following completion of the coring operations, the boreholes will be backfilled with drill cuttings and the asphalt surface will be patched.
7. Visually classify the collected soil samples in the field classified using the American Association of State Highway and Transportation Officials (AASHTO) Soil Classification System in general accordance with the American Society of Testing and Materials (ASTM) test designation D-3282, titled "*Classification of Soils and Soils-Aggregate Mixtures for Highway Construction Purposes*".

8. Prepare a geotechnical data report presenting the results of the field exploration.

We presume that a Right-of-Way Construction permit will not be needed. A Temporary Traffic Control Plan will be prepared and implemented during our field exploration for safety purposes. If a permit is required, please notify us and we will revise our fee estimate accordingly.

Prior to the mobilization of the drilling equipment, WIRX will notify Sunshine State One-Call of Florida, Inc. (SSOCOF) of the planned exploration to allow affected utility companies the opportunity to mark the location of buried utility lines in the proposed exploration areas. The locating process will require a lead time of 3 to 5 business days. WIRX cannot take responsibility for damages to private underground lines or structures and/or underground services which do not subscribe to SSOCOF; their locations should be provided by the Client prior to commencement of the fieldwork. For further assurance, a private underground utility locator may be retained to scan the proposed test locations using ground penetrating radar technology.

SCHEDULE/DELIVERABLES

We will start the field exploration program within 4 weeks of notice to proceed. We preliminarily estimate that our field work will have a duration of 2 days. We expect to provide the final report signed and sealed by a registered professional engineer within 6 weeks of notice to proceed; however, accelerations of this schedule may be facilitated, if needed.

COMPENSATION & TERMS

Based upon our understanding of the project and interpretation of your requirements, we propose to perform the scope of work outlined previously for a lump sum fee of **\$13,650.00**, as outlined in Attachment A - Fee Breakdown.

Please sign and return Attachment B - Proposal Acceptance form as an indication of your acceptance of our proposal terms and authorization to proceed with the work. Our work will be performed in accordance with the General Terms and Conditions presented as Attachment C.

CLOSURE

WIRX appreciates the opportunity to provide our services for this project, and trust that the scope of work and fee presented in this proposal are clear and understandable. Should the proposal contents require any clarification or amplification, please feel free to contact us.

Sincerely,
WIRX Engineering, LLC



Andrew Nixon, P.E.
Senior Engineer
AndrewNixon@wirxeng.com

Attachments: A – Fee Breakdown
B – Proposal Acceptance Form
C – General Terms and Conditions





Attachment A - Fee Breakdown

**Pavement Exploration
Southeast Coast Street & South H Street
Lake Worth Beach, Florida
WIRX Proposal No.: 25-P-012**

	Qty	Unit	Unit Price	Total
1.0 FIELD EXPLORATION				
1.1 <u>Field Work & Utility Coordination</u>				
1.1.1 Staff Engineer	6	Hour	\$ 135.00	\$ 810.00
1.2 <u>Temporary Traffic Control - Est. 2 Days</u>				
1.2.1 TTC Plan - Project Engineer	4	Hour	\$ 135.00	\$ 540.00
1.2.2 TTC Mobilization	2	Day	\$ 1,100.00	\$ 2,200.00
1.2.3 Signs & Cones	2	Day	\$ 200.00	\$ 400.00
1.2.4 Flaggers (2 @ \$75.00/hour each)	16	Hour	\$ 150.00	\$ 2,400.00
1.3 <u>Pavement Cores (16)</u>				
1.3.1 Pavement Cores & Patching	16	Each	\$ 250.00	\$ 4,000.00
		TOTAL FIELD WORK		\$ 10,350.00
2.0 PROFESSIONAL ENGINEERING AND REPORTING SERVICES				
2.1 Senior Engineer	2	Hour	\$ 185.00	\$ 370.00
2.2 Project Engineer	16	Hour	\$ 155.00	\$ 2,480.00
2.3 CAD Technician	6	Hour	\$ 75.00	\$ 450.00
		TOTAL PROFESSIONAL SERVICES		\$ 3,300.00
				TOTAL AMOUNT \$ 13,650.00

February 25, 2025

Mr. Garry Gruber
Mock Roos & Associates Inc.
5720 Corporate Way,
West Palm Beach, FL 33407

Subject: Electrical Engineering Design Services Fee Proposal for City of Lake Worth Beach S. East Coast Street and South H Street Lighting Plans.

Dear Mr. Gruber:

Quantum Electrical Engineering, Inc. (Quantum) is pleased to provide Mock Roos & Associates, Inc. (MRA) an electrical engineering design services fee proposal for Lake Worth Beach – S. East Coast Street and South H Street Lighting. The Proposal is based on MRA emails with project information dated 2/19/256.

The following items are included in our scope:

Task 1: Preliminary 35% Design

- All coordination meetings with the City, MRA Design Team and Lake Worth Utilities. (LWU).
- Provide lighting recommendations for MRA concept plans for final selection of roadway design.
- Perform photometric lighting calculations (point-by-point) for new roadway options. Photometric calculations shall be per Florida Greenbook standards.
 - S.Eastcoast Street between Lake Ave and 6th Ave (2700')
 - South H. Street between Lake Ave and 6th Ave (2700')
 - 1st Avenue between S Eastcoast St and US1 (450')
 - 2nd Ave S. between S Eastcoast St and US1 (450')
 - 3rd Ave S. between S Eastcoast St and US1 (450')
 - 4th Ave between S Eastcoast St and US1 (450')
 - 5th Ave between S Eastcoast St and US1 (450')

Task 2: Construction Drawings 95% Design

- Includes incorporation of FDOT/City comments.
- Design new lighting and associated electrical distribution system for the new lighting utilized City selected light pole and fixture. Includes electrical details, electrical calculations, electrical voltage drop, and one-line/riser diagrams.
- Design demolition/coordination of removal of any existing lighting within the project limits.

- Perform photometric lighting calculations (point-by-point) for final roadway design. Photometric calculations shall be per Florida Greenbook standards.
- Design new 240V, single phase 100A electrical service points to power the roadway lighting. Includes coordination with LWU, electrical details, electrical calculations, electrical voltage drop, and one-line/riser diagrams.
- The electrical system design shall be based on City / NEC Standards.

Task 3: Bid Production

- Includes design of final bid documents incorporating all comments.
- Includes incorporation of FDOT/City comments.
- Includes RFI responses and addenda revisions during bidding.
- Includes response to permit comments and associated plan revisions.

Exclusions and Assumptions

- MRA shall provide all base drawings to Quantum in AutoCAD 2023 or higher.
- Quantum shall provide electrical design to the MRA in AutoCAD 2023 or higher.
- Quantum shall provide an electronic set of electrical plans, specifications & estimates to MRA for 35% and 95% reviews and Bid plans.
- MRA shall provide all printing of design documents (plans & specifications) for reviews, bid phases, permits and construction phases.
- Quantum shall provide 1-set of electronic signed and sealed electrical plans to MRA for permit.
- Does not include any kind of structural/foundation design, wind load calculations, irrigation, traffic signalization, CCTV or arc flash analysis.
- Does not include the relocation of existing LWU, AT&T and/or Comcast overhead/underground lines.
- Does not include construction services.

Our proposed Lump-Sum fee Task 1 is:	\$ 14,835.00
Our proposed Lump-Sum fee Task 2 is:	\$ 27,280.00
Our proposed Lump-Sum fee Task 3 is:	\$ 2,575.00
Our proposed total Lump-Sum fee is:	\$ 44,690.00

Sincerely,



Amy L. Champagne-Baker, PE

LAKE WORTH BEACH- NEW ROUNDABOUT AT 120TH STREET AND LAKE WORTH ROAD ELECTRICAL DESIGN
QUANTUM ELECTRICAL ENGINEERING, INC.
SCOPE FEE SUMMARY
FEE PROPOSAL ELECTRICAL DESIGN to MRA 02/25/2025

	Rate	\$170.00	\$150.00	\$145.00	\$85.00	\$140.00	\$50.00		
	Proj. Mgr.	Prof. Eng	Proj. Eng	CADD/Tech	Field Eng.	Clerical	Total		TOTAL
PHASE OF WORK	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Expenses	TASK COST
35% Preliminary Documents									
Design Review Mtgs		8					8		\$1,200.00
On-Site Discovery and Verifications		8	8				16		\$2,360.00
LWU Coordination		4					4		\$600.00
Photometric Plans		40		55			95		\$10,675.00
Subtotal	0	60	8	55	0	0	123		\$14,835.00
95% Design Documents									
Design Review Mtgs		8					8		\$1,200.00
Electrical Design Drawings		40	40	40			120		\$15,200.00
Photometric Plans		16	24	40			80		\$9,280.00
Specifications & Cost Estimate		8				8	16		\$1,600.00
Subtotal	0	72	64	80	0	8	224		\$27,280.00
100% Design/Permit Documents									
Design Drawings		2	4	4			10		\$1,220.00
Specifications & Cost Estimate		2				4	6		\$500.00
Permitting Comment Revisions		2		2			4		\$470.00
Bid and Award Services		2		1			3		\$385.00
Subtotal	0	8	4	7	0	4	23		\$2,575.00
Grand Total Hours	0	140	76	142	0	12	370		\$44,690.00
Grand Total Labor Cost	\$0.00	\$21,000.00	\$11,020.00	\$12,070.00	\$0.00	\$600.00			