

SCOPE OF SERVICES:

I. General

The project will consist of providing contract documents to restore the pavement and provide enhancements to Riverside Drive from Atlantic Boulevard to NE 14th Street.

The scope of services includes:

- Prepare preliminary design reports, project schedules, feasibility analyses, site plans and/or design alternative recommendations and preliminary cost estimates. Identify any design restrictions resulting from lack of right-of-way or unusual roadway configurations. Confirm right-of-way availability to complete designs in accordance with desirable roadway cross-sections.
 - Identify and procure any tests that may be necessary to carry out a sound design including soils, concrete strength, permeability/percolation, density, potholing, etc.
 - Prepare a detailed cost estimate at the 30%, 60% and 90% design intervals to confirm initial budget allocations and/or to seek the City's advice before proceeding with final designs. The firm will be responsible for cost controls throughout the design and construction project except for design and construction elements added or deleted by an expressed City directive.
 - Conduct presentations for elected officials, advisory boards, staff, and the public.
 - Prepare all required bidding and construction documents for the projects. This will include preparing surveys, 100% completed construction plans and documents, supplementary contract requirements, specifications, cost estimates, responses to Requests for Information (RFIs).
 - Attend a pre-DRC meeting. Prepare plans for review and approval by Development Review Committee (DRC); Planning and Zoning (P&Z); Architectural Appearance Committee (AAC); City's Building Department; Broward County Traffic Engineering; Broward County Water Resources; Florida Department of Health (HRS); Florida Department of Environmental Protection and any other applicable agency having jurisdiction.
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All work shall be prepared with English units in accordance with the latest editions of standards and requirements utilized by the City which include, but are not limited to, publications such as:

- Americans with Disabilities Act (ADA) Standards for Accessible Design
- AASHTO – Roadside Design Guide
- AASHTO – A Policy for Geometric Design of Highways and Streets
- AASHTO – Roadway Lighting Design Guide
- 40 C.F.R. 61, Subpart M - National Emission Standard for Hazardous Air Pollutants (NESHAP), Environmental Protection Agency (EPA)
- Florida Greenbook
- Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways

II. Scope of Work

TASK 1 – PRE-DESIGN SERVICES

Task 1a. Geotechnical Services- See Quest Scope

Task 1b. Survey Services – See Compass Point Scope

Task 1c. Traffic Data Collection and Analysis

- MARLIN shall perform all efforts required for traffic data collection, including crash reports, traffic counts, pedestrian and bicyclists counts.
- Deployment of video cameras and processing 12 daylight hours for pedestrian's activity to determine locations for crossings.
- Analyze existing and proposed intersection geometry, and provide optimized timing plans as needed.
- Coordinate with Broward County Traffic Engineering.
- Develop new timing plans for the intersection at Atlantic based on new geometry.

TASK 2 – MASTER PLAN PHASE

Task 2a. Workshop/Public Involvement

- The MARLIN team will follow a community engagement process by conducting two workshops. The first workshop will identify the opportunities and needs for this specific project corridor. The second workshop will focus on Alternatives Development for this specific project corridor.
- Prepare a PowerPoint presentation and attend up to 3 commission meetings.
- Prepare materials for the Public Meetings. Materials include Exhibits, Sign-In Sheet, Comment Form, and Fact Sheet for up two meetings.
- Attendance and Follow-up for two meetings.



- Preparation and attendance for two workshops supporting the Preferred Alternative Development Process.

Task 2b Concept Design

- The MARLIN team will provide sketch up sections for the different street conditions/character areas (including the concept alternatives and for the preferred alternative.
- The MARLIN team will produce concept plans (30% plans) for the corridor for the preferred alternative.

TASK 3 – PLANS PRODUCTION

The MARLIN team shall design the geometrics using the Standards that are most appropriate with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, pedestrian and bicycle concerns, ADA requirements, Safe Mobility For Life Program, and scope of work.

- The MARLIN team shall develop accurate quantities for all applicable pay items.
- The MARLIN Team shall prepare Roadway Plan Sheets, Utility Adjustment Sheets, Signing and Pavement Marking Plan Sheets, notes, and details. The plans shall include the following sheets necessary to convey the intent and scope of the project for the purposes of construction.
 1. Key Sheet
 2. Summary of Pay Items
 3. Typical Section
 4. Typical Section Details
 5. General Notes/Pay Item Notes
 6. Summary of Quantities
 7. Plan Sheets
 8. Paving and Grading Sheets
 9. Utility Adjustment Sheets.
- The signing and pavement marking plan component shall include;
 1. Summary of Pay Items
 2. Tabulation of Quantities
 3. General Notes
 4. Typical Details
 5. Plan Sheet
- The Marlin team will design street lighting including the retention of existing street lighting and/or conversion of existing lighting equipment with City-adopted standards



(i.e., FPL's Memphis, ATB2 or equivalent). Design will require extensive coordination with Public Works, Utilities, Planning and Zoning (landscape) Departments' Staff.

- Lighting Analysis shall include:
 1. Voltage Drop Calculations- develop voltage drop calculations showing the equation or equations used along with the number of luminaires per circuit, the length of each circuit, the size conductor or conductors used and their ohm resistance values.
 2. Prepare the Lighting Design file to include all necessary design elements and all associated reference files.
- The lighting plan component shall include:
 1. Tabulation of Quantities
 2. General Notes/Pay Items Notes
 3. Pole Data, Legend and Criteria
 4. Service Point Details
 5. Plan Sheets
 6. Light fixture and pole details and specifications
- Utility Coordination – Provide utility coordination with all affected utilities and obtain utility clear letters and/or utility relocation schedules in order to remove all conflicts in the design plans.

Task 3a – 60% Design Phase

The Marlin Team will develop 60% plans and submit plans for review as specified above for each plan's component

- Roadway Plans
- Signing and Marking Plans
- Signalization Plans
- Lighting Plans
- Landscaping & Irrigation Plans (including Tree Disposition Plans)
- Drainage Plans
- Water and Sewer Plans

Task 3b – 90% Design Phase

The Marlin Team will develop 90% plans and submit plans for review as specified above for each plan's component

- Roadway Plans
- Signing and Marking Plans
- Signalization Plans
- Lighting Plans



- Landscaping & Irrigation Plans
- Drainage Plans
- Water and Sewer Plans

Task 3c – 100% Design Phase

The Marlin Team will develop 90% plans and submit plans for review as specified above for each plan's component

- Roadway Plans
- Signing and Marking Plans
- Signalization Plans
- Lighting Plans
- Landscaping & Irrigation Plans
- Drainage Plans
- Water and Sewer Plans

Task 3d – Final Plans and Specifications Phase

- Update the 100% plans and respond to comments.
- Submit Signed and Sealed plans
 - Roadway Plans
 - Signing and Marking Plans
 - Signalization Plans
 - Lighting Plans
 - Landscaping & Irrigation Plans
 - Drainage Plans
 - Water and Sewer Plans
- Specification and Bid Package Preparation – Prepare specifications and bid documents as required by the City of Pompano Beach

TASK 4 – DRAINAGE DESIGN- See SSN Scope

TASK 5 – WATER AND SEWER DESIGN- See SSN Scope

TASK 6 – LANDSCAPE ARCHITECTURE – See Calvin, Giordano & Assoc. Scope

TASK 7 – POST DESIGN SERVICES

- Attend pre-construction meeting. Assume four (4) hours for attendance at the pre-construction meeting. **(4 hours)**
- Support Contractor in obtaining the necessary building construction permits.
- Provide written responses and/or revisions to all requests for information (RFIs). Assist with the review and technical evaluation of Contractor's request for change orders, and claims,



and provide recommendations and cost evaluations to the City. Assume four (4) hours for responses to four (4) requests for information (RFI's) per month. **(192 hours – 12 -month construction duration).**

- Review shop drawings, product data, and other submittals to determine compliance with the plans and specifications. Assume two (2) hours to review twenty-four (24) sets of shop drawings. **(48 hours)**
- Provide revisions as necessary and directed by the City. Assume four (4) hours for revisions to one (1) request per month. **(48 hours – 12-month construction duration).**
- Attend progress meetings- assume two (2) hours once a month **(24 hours- 12-month construction duration)**

TASK 8 – CONSTRUCTION ADMINISTRATION SERVICES

Construction Administration Activities include:

- Monitor Contractor Implementation and compliance with the plans.
- Attend progress meetings as necessary

(Assume 2 visit/week x 4 hrs = 8 hrs/week x 52 weeks = 416 hours)

III. Subconsultants

The below listed subconsultants will assist in the performance of the Work.

Subconsultant Name	Specialty or Expertise
Compass Point Surveyors	Survey
SSN Engineering	Drainage, Water & Sewer Design
Calvin, Giordano & Associates	Landscape Architecture
Quest	Geotechnical Services

IV. Schedule of Work

The anticipated length of service shall be fifteen (15) months for Design Services and twelve (12) months for Construction Administration and Post Design Services commencing after the Notice to Proceed. Consultant shall submit the Deliverables and perform the Work as depicted in the attached Schedule.

Activity or Task		Duration
Task	Notice to Proceed	TBD
1a	Survey	2 months from NTP
1b	Geotech	
1c	Traffic Data Collection and Analysis	
4a	Drainage-Data Collection	
2a	Workshops and Public Involvement	4months following Task 1a-1c
2b, 4b, 5a, 6a	30% Plans (Roadway, Landscaping, Drainage, Water and Sewer)	
	City of Pompano Beach Review	1 month*
3a, 4c, 5b, 6b	60% Plans (Roadway, Landscaping, Drainage, Water and Sewer)	4 months from 2b, 4b, 5a, 6a
	City of Pompano Beach Review	1 month*
3b, 4c, 5c, 6c	90% Plans (Roadway, Landscaping, Drainage, Water and Sewer)	3 months from 3a, 4c, 5b, 6b
	City of Pompano Beach Review	2 weeks*
3c, 4d, 5d, 6c	100% Plans (Roadway, Landscaping, Drainage, Water and Sewer)	2 months from 3b, 4c, 5c, 6c
	City of Pompano Beach Review	2 weeks*
3d,	Final Plans and Specs	2 months from 3c, 4d, 5d, 6c
4e, 5e, 6e 7 & 8,	Construction Administration & Post Design	Estimated 12 months for Construction
	Total Anticipated Project Time:	15 months Design 12 months Construction

*City review time is included in the next phase

V. Compensation

Consultant shall perform the work detailed in this Proposal for a Total fee of **\$ 699,762.10**

The City shall not be liable for any fee, cost, expense or reimbursable expense or other compensation beyond this amount unless approved in a supplemental work order.



SUMMARY OF COMPENSATION			
Task or Activity ID #	Task Name and/or Activity Description	Fee Amount	Fee Basis
1	Pre-Design Services		
1a	Geotechnical Services- Quest	\$35,000.00	Lump Sum
1b	Survey Services – Compass Point	\$62,810.00	Lump Sum
1c	Traffic Data Collection and Analysis	\$13,927.98	
2	Master Plan Phase		
2a	Workshop/Public Involvement	\$38,255.00	Lump Sum
2b	Concept Design	\$49,444.72	Lump Sum
3	Plans Production		
3a	60% Design Phase	\$51,584.62	Lump Sum
3b	90% Design Phase	\$48,869.64	Lump Sum
3c	100% Design Phase	\$40,724.70	Lump Sum
3d	Final Plans and Specifications Phase	\$40,724.70	Lump Sum
4	Drainage Design- SSN Scope	\$61,908.00	Lump Sum
5	Water and Sewer Design- SSN Scope	\$58,007.00	Lump Sum
6	Landscape Architecture – C,G & Assoc.	\$48,287.50	Lump Sum
7	Post Design Services	\$49,613.44	Lump Sum
8	Construction Administration Services	\$38,604.80	Lump Sum
	Reimbursables (with prior approval)	\$2,000.00	Time and materials
	Unforeseen Conditions (Optional Services**	\$60,000.00	Time and materials
	Total	\$699,762.10	

****Optional Services** -Due to the large number of underground utilities this line item is Included for unforeseen conditions such as additional SUE and GPR, Geotechnical exploration and/or video inspection of existing sewer lines. To be approved by City Project Manager prior to commencing work.



VI. Additional Services

Additional services and unforeseen circumstances beyond established scope shall be negotiated in good faith and at the sole discretion of the City.

VII. City Furnished Documents & Data

When appropriate and /or available, the CITY will provide project data including:

- Any existing agreements with Utility Agency Owners (UAO).
- All information that may come to the City pertaining to future improvements.
- All future information that may come to the City during the term of the CONSULTANT's Agreement, which in the opinion of the City is necessary for the prosecution of the work.
- Any available traffic and planning data.
- Engineering standards review services.
- All available information in the possession of the City pertaining to utility companies whose facilities may be affected by the proposed construction.
- Previously constructed Highway Beautification or Landscape Construction Plans
- Existing right of way maps.
- Design Reports
- Letters of authorization designating MARLIN as an agent of the City in accordance with F.S. 337.274.
- Phase reviews of plans and engineering documents.
- Regarding Environmental Permitting Services:
 - Approved Permit Document when available.
 - Approval of all contacts with environmental agencies.
 - General philosophies and guidelines of the City to be used in the fulfillment of this contract. Objectives, constraints, budgetary limitations, and time constraints will be completely defined by the Project Manager.
 - Appropriate signatures on application forms.

VIII. Project Manager

Marlin's Project Manager for this Project will be

Ms. Betsy Jeffers, P.E.
 Vice President
 Marlin Engineering Inc.
 3363 West Commercial Blvd
 Fort Lauderdale, FL 33309
 Phone: 954-809-4058



ESTIMATE OF WORK EFFORT AND COST - MARLIN Engineering (PRIME CONSULTANT)

Name of Project: Riverside Drive Streetscape Project
 County: Borward
 FPN: RFQ P-32-20

Contract No.: P-32-20

Consultant Name: MARLIN Engineering
 Consultant No.: _____
 Date: 9/29/2021
 Estimator: Betsy Jeffers

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Engineer Intern	Designer	Urban Planner	Engineering Technician	Utility Coordinator	CEI	Work Class- 12	Work Class- 13	Work Class- 14	Work Class- 15	Work Class- 16	SH By Activity	Salary Cost By Activity	Average Rate Per Task
Task 1- Pre-Design																			
1a. Survey	Compass																		
1b. Geotech	QUEST																		
1c. Traffic Data Collection and Analysis	130	0	0	0	20	55	0	0	55	0	0	0	0	0	0	0	130	\$13,927.98	
Task 2 -Preferred Alternative Development																			
2a. Workshops/Public Involvement	262	40	35	0	0	40	40	107	0	0	0	0	0	0	0	0	262	\$38,255.00	\$146.01
2b. Concept Development	373	20	20	40	0	76	112	112	0	0	0	0	0	0	0	0	380	\$49,444.72	\$130.19
Task 3 -Plans Production																			
3a. 60% Plans	380	19	19	38	38	38	114	114	0	0	0	0	0	0	0	0	380	\$51,584.62	\$135.75
3b. 90% Plans	360	18	18	36	36	36	108	108	0	0	0						360	\$48,869.64	\$135.75
3c. 100% Plans	300	15	15	30	30	30	90	90	0	0	0						300	\$40,724.70	\$135.75
3d. Final Plans and Specifications	300	15	15	30	30	30	90	90	0	0	0	0	0	0	0	0	300	\$40,724.70	\$135.75
Task 4 - Drainage Design	SSN																0		
Task 5 - Water & Sewer Design	SSN																0		
Task 6 - Landscape Architecture Design	Calvin																		
Task 7 -Post Design Services	316	47	32	32	32	79	95	0	0	0	0	0	0	0	0	0	316	\$49,613.44	\$157.00
Task 8 -Construction Administration	416	0	0	0	0	0	0	0	0	0	416	0	0	0	0	0	416	\$38,604.80	\$92.80
Total Staff Hours	2,837	174	154	206	186	384	649	621	55	0	416	0	0	0	0	0	2,844		
Total Staff Cost		\$44,982.29	\$33,408.00	\$37,563.12	\$33,263.23	\$43,263.36	\$69,643.13	\$66,874.66	\$4,147.00	\$0.00	\$38,604.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$371,749.60	\$130.72

Notes:

Check = \$371,749.60	
SALARY RELATED COSTS:	\$371,749.60
SUBTOTAL (PRIME) ESTIMATED FEE:	\$371,749.60
Subconsultant: Compass Point Surveyors	\$62,810.00
Subconsultant: Quest	\$35,000.00
Subconsultant: Calvin Giordano	\$48,287.50
Subconsultant: SSN- Drainage	\$61,908.00
Subconsultant: SSN-Water & Sewer	\$58,007.00
SUBTOTAL (SUBCONSULTANT/s) ESTIMATED FEE:	\$266,012.50
Reimbursable Expenses	\$2,000.00
Unforseen conditions (Optional Services)	\$60,000.00
GRAND TOTAL ESTIMATED FEE:	\$699,762.10

TASK 4 – DRAINAGE DESIGN

PROJECT UNDERSTANDING

The proposed scope includes analysis of existing drainage conditions and recommend drainage improvements along North Riverside Drive between NE 14th Street and East Atlantic Blvd.

SCOPE OF SERVICES

Task 4a: DATA COLLECTION AND SITE VISITS

SSN Engineering Staff will collect and review all available information such as records, maps, aerials, surveys, easements, ROW records, plans, record drawings, and standards that may be pertinent to the execution of this project. We will also review all requirements of agencies having jurisdiction over the project. As well as review the location and duration of local ponding and meet with City of Pompano Beach staff to get input. SSN will collect and review any other information that may have a bearing and impact on the planning, design, approval, permitting, construction, or operation of this project. SSN will coordinate with Kimley-Horn & Associates to collect all the information, calculations, and design information.

Task 4b: DRAINAGE ANALYSIS

Four different alternative drainage designs will be presented to the City and SSN will start drainage analysis based on selected alternative by the City. SSN will divide the entire project into small sub-basins based on the proposed roadway design and existing drainage systems. SSN will review the latest LiDAR topography (<https://bcgis.broward.org/lidar.htm>) in project vicinity to determine existing flow patterns as well as determine the boundary of each individual sub-basin by using the geotechnical report and proposed roadway plan. We will analyze and review existing drainage structure location and condition to re-use and interconnect with the new system, adjust tail water elevation for Sea Level Rise (SLR) based on US Army Corps of Engineers or Broward County's standard (Equivalent to NOAA Standard), create a drainage model for existing condition and proposed condition. We will do iterations of the proposed model by adjusting proposed drainage pipe and/or replacing existing drainage pipe, adding drainage structure in the model, until the model provides the best result. In this phase draft drainage report and draft drainage network plan will be produce.

Task 4c: DRAINAGE PLAN AND DRAINAGE DOCUMENT

Based on drainage analysis, SSN will design the drainage system, and produce drainage plan and create a conflict schedule of the proposed drainage structures/pipes with existing or proposed utilities. Draw the detail of pump station, treatment system, energy diffuser in outfall with pump, adding flap gate with all existing out fall etc. The plan sent will contain: Cover Sheet, Key Map, General Notes, plans, details and erosion control plan. There will be approximately twenty-four (24) sheets. In this phase Final Drainage Report will be produced and Final Engineering Construction Cost will be produced.

Task 4d: PERMITTING

- A. City of Pompano Beach – review and approval from city.
- B. Permit/License from Broward County Environmental Protection and Growth Management Department-ENVIRONMENTAL ENGINEERING AND PERMITTING DIVISION.
- C. Permit from Florida Department of Environment Protection (FDEP).
- D. We will submit engineering plans to all utilities for final coordination of dry utility service locations.
- E. During the permitting review phase of the project, we will follow up with the review agencies and provide responses to reasonable requests for additional information.

Task 4e: CONSTRUCTION PHASE SERVICES

SSN Engineering will provide services for construction phase services. Some of the responsibilities include Responding to Requests for Information (RFI), Reviewing contractor shop drawings and submittals, reviewing and approving monthly pay estimates, conducting periodic site visits (15 estimated), Preparation of project punch-lists for incomplete items, Attendance to pre-final and final inspections, Issue letter of substantial completion and issue certification of final project after applicable to close out permits.

ADDITIONAL SERVICES

In the event that an unforeseen issue should arise, the SSN remains available to provide additional services as requested by the City on the basis of our hourly rates.

INFORMATION PROVIDED BY CLIENT

The following information shall be provided to SSN Engineering, LLC, on which it will rely to complete the scope of services:

- A. New roadway design.
- B. Topographic and Boundary Survey of the Site
- C. Signatures on required applications
- D. Permit and application fees

FEE AND BILLING

We will provide services outlined above based on lump sum fee stated below:

Task 4a: DATA COLLECTION AND SITE VISITS \$ 4,661.48

Task 4b: DRAINAGE ANALYSIS..... \$ 14,346.32

Task 4c: DRAINAGE PLAN AND DRAINAGE DOCUMENT \$ 23,079.96

Task 4d: PERMITTING \$ 12,222.56

Task 4e: CONSTRUCTION PHASE \$ 7,597.69

TOTAL LUMP SUM FEE \$ 61,908

ADDITIONAL SERVICES \$ 100/Hour

| | |---| | HOUR AND COST BREAK DOWN FOR DRAINAGE PROPOSAL (FOLLOWING KIMLEY HORN DESIGN) | |---|

Title		Loaded rate
Project Manager		129.80
Senior Engineer		124.38
Engineer		97.34
CAD Person		64.96

Task Name	Project Manager		Senior Engineer		Engineer		CAD Person		Total	
	Time (hour)	Fee	Time (hour)	Fee	Time (hour)	Fee	Time (hour)	Fee	Time (hour)	Fee
Task 4a: DATA COLLECTION AND SITE VISITS	3	389.41	2	248.76	40	3893.40	2	129.92	47	4,661.48
Task 4b: DRAINAGE ANALYSIS	24	3115.26	30	3731.40	29	2822.72	72	4676.94	155	14,346.32
Task 4c: DRAINAGE PLAN AND DRAINAGE DOCUMENT	24	3115.26	30	3731.40	60	5840.10	160	10393.20	274	23,079.96
Task 4d: PERMITTING	5	649.01	20	2487.60	80	7786.80	20	1299.15	125	12,222.56
Task 4e: CONSTRUCTION PHASE SERVICES	5	649.01	5	621.90	65	6326.78	0	0.00	75	7,597.69
Subtotal									676	61,908.0

TASK 5 WATER AND SEWER DESIGN

PROPOSED WORKSCOPE

The proposed scope includes analysis and design of existing water and sewer system in North Riverside Drive between NE 14th Street and East Atlantic Blvd.

The scope consists of the following items:

- a. Compare the design flow with that of the flow capacity of the existing sewer system.
- b. Inspect manhole frame and lid. Replace manhole lids if necessary, with H20 grade lid loading.
- c. Identify potential sources of Inflow/Infiltration (I/I) in the existing sewer system.
- d. Smoke testing and/or Video inspection will be used to identify source of I/I, cracked pipes, slipped joints, grease, evidence of surcharging, and improper connections to the sewer collection system.
- e. Determine structural condition of the manhole and sewer segments.
- f. Locate and categorize structural defects of the sewer structures.
- g. Digitally photograph any identified structural defects in manholes and pipes.
- h. Identify television inspection locations in the sewer system.
- i. Review the Force Main size in the project area.
- j. Review the run time of Lift Station number 21 (if moratorium condition exists).
- k. Review the gravity sewer lines condition in the project limit.
- l. Evaluate the condition and location of existing water structures such as water meter, Fire hydrant, and any other related items. Provide solutions for any issues found on those items for the proposed improvement.
- m. Check if there is leakage by performing pressure/leakage test in the existing water main.

- n. Based on observation and testing, we will recommend and design proper solutions to the water and sewer system.
- o. Evaluate the existing force main to identify any issues and provide solutions in the plans.
- p. Redesign the water main, based on observation, usage data, and leakage test results.
- q. Provide 100% Water and Sewer Plans.

SSN Engineering will provide services for Construction Administration and observation. Some of the responsibilities include Responding to Requests for Information (RFI), Reviewing contractor shop drawings and submittals, reviewing, and approving monthly pay estimates, Conducting periodic site visits, Preparation of project punch-lists for incomplete items, Attendance to pre-final and final inspections, and Issue letter of substantial completion with certification of civil design/installation.

SCHEDULE

We will provide our services in an expeditious and orderly manner to meet the schedule mutually developed by the City and MARLIN for the various elements of the project.

FEE AND BILLING

We will provide services outlined above based on lump sum fee stated below:

- TASK 5a: Data collection/map existing lines \$ 10,010.00
- TASK 5b: 60% Plans production - \$15,072.00
- TASK 5c: 90% Plans Production \$15,072.00
- TASK 5d: 100% and Final Plans -and Specs \$13,752.00
- TASK 5e Construction Admin/Post Design..... \$ 4,003.00

Total lump sum fee..... \$58,007.00

HOUR AND COST BREAK DOWN FOR WATER AND SANITARY SEWER									
Title			Loaded rate						
Project Manager			129.80						
Senior Engineer			124.38						
Engineer			97.34						
CAD Person			64.96						
Task Name	Project Manager		Senior Engineer		Engineer		CAD Person		Total
	Time (hour)	Fee	Time (hour)	Fee	Time (hour)	Fee	Time (hour)	Fee	
Task 5a: DATA COLLECTION AND SITE VISITS	8	1038.40	15	1865.70	50	4867.00	36	2338.56	109 10,110
Task 5b: 60% PLANS PRODUCTION	10	1298.00	22	2736.36	60	5840.40	80	5196.80	172 15,072
Task 5c: 90% PLANS PRODUCTION	10	1298.00	22	2736.36	60	5840.40	80	5196.80	172 15,072
Task 5d: 100% and FINAL PLANS	8	1038.40	20	2487.60	55	5353.70	75	4872.00	158 13,752
Task 5e: Construction Administration/Post Design	3	389.40	10	1243.80	15	1460.10	14	909.44	42 4,003
Subtotal									892 58,007



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& Highway Design
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Governmental Services
Indoor Air Quality
Landscape Architecture
Planning
Project Management
Redevelopment
& Urban Design
Surveying & Mapping
Traffic Engineering
Transportation Planning
Water / Utilities Engineering
Website Development

1800 Eller Drive
Suite 600
Fort Lauderdale, FL
33316
954.921.7781 phone
954.921.8807 fax

www.cgasolutions.com

DATE: January 21, 2021
RE: Pompano Beach Riverside Drive Streetscape sub to Marlin Engineering
CLIENT: Marlin Engineering, Inc.
1700 NW 66th Avenue, Suite 106
Plantation, FL 33313
ATTENTION: Ms. Betsy Jeffers
CGA NO.: 21-4185

We are pleased for the opportunity to provide the following scope and fees for the Pompano Beach Riverside Drive Streetscape as a sub-consultant to Marlin Engineering Inc. We have included the items per our discussions for this project and trust that we have included all of the scope and associated fee (typical) that will be required.

I. Professional Landscape Architecture Services

A. Task 6a Data Collection and 30% or Preliminary Design- Total for this Task \$13,450.00

1. A tree inventory shall be provided for the project site including the proposed tree relocation and/or replacement when necessary to resolve proposed utility conflicts as part of this entire project scope. The tree valuation shall be calculated for the removals/relocation permit as noted on the plans to address the City's tree permit requirements. A tree Protection plan shall also be provided in this scope.
2. The tree disposition table and plan shall be developed to be utilized with the Tree application permit. We would anticipate that this permit would be submitted as one permit application to address the trees throughout the limit of work area. The Tree Disposition Plan will note the Scientific Name, Common name, Diameter at Breast Height, estimated height and spread, condition of existing trees and palms and value of each tree/palm and the disposition table overall. We would also anticipate that an Arborist prepared Tree Valuation will be required for each tree size requiring this report to meet the code.

3. A conceptual Planting Plan shall be developed for review by city staff and shall also be presented at a public meeting.
4. A color rendering of the overall streetscape Design is included in this scope at the 30% Phase. One revision to this plan is anticipated and included at the 60% phase. The color rendering total fee of \$5,520.00 is anticipated to cover this task. However, if more revisions are required due to many plan revisions these hours shall be billed hourly at the attached rates.

B. Task 6b - Permitting/60% Plans - Total for this Task \$12,603.75

1. Preparation of the 60% plans for the Tree Disposition, Arborist Tree valuations and Planting Plans. This shall include refining the tree issues by coordinating the valuation with the City Forester adding the City's required general notes and details, and adding enough trees to ensure that the required mitigation and planting requirements have been accurately noted.
2. A pre-DRC meeting with the City would be anticipated during this task. A maximum of six hours has been included in the scope to address meeting with City staff for this project. Processing of plans for review and approval by Development Review Committee (DRC); Planning and Zoning (P&Z); Architectural Appearance Committee (AAC); and City's Building Department may also be required and a maximum of forty hours has been included for this scope. The building department scope requires digitally signed and sealed plans and coordination with the city's Urban Forester. We understand that this project's design will require extensive coordination with Public Works, Nursery, Utilities, Planning and Zoning (landscape) Departments' Staff. Total anticipated fee for municipal coordination \$5,290.00.
3. Prepare 60% plans for the Planting Plans and the head layout only for the Irrigation Plans. Associated notes and details shall be included.
4. The development of Technical Specifications shall begin during this task in accordance with the schedule set forth by Marlin Engineering.

5. Prepare 60% cost estimate for the planting and irrigation scope for this project.
6. Provide the coordination with Marlin Engineering for the application process through the City of Pompano Beach and coordination with the City's Urban Forester. Provide comment/responses and plan revisions through that process.

C. Task 6c - Final Construction Documents -Total for this Task \$12,603.75

1. Prepare 90 & 100% Plans.
 - Prepare 90% plans which shall include Tree Disposition Plans, and Planting Plans, details and specifications and all applicable deliveries necessary to obtain permit approvals from all agencies having jurisdiction. This shall include the Digital Signing and Sealing as required by the City.
 - Final Irrigation plans, details and written specifications shall be finalized during this task and shall include tying to a city water meter. If no city water meter is available, consultant shall provide design in coordination with Civil Engineer to include ideal location of water supply source, tap specs, meter size etc. to provide source for Irrigation system.
2. Tree Permit plans shall be finalized in this task and include tree demolition and tree protection plans, Arborist Tree valuations, Relocation and Mitigation Plan for removed trees, details and specifications for the limit of work area only shall be included in this scope.
3. Update Landscape Architectural scope of Opinion of Probable Cost.
4. Prepare the technical specification and coordinate with Marlin Engineering for the other project specifications and the City's front-end specifications (boiler plate).

5. Submit 100% plans, technical specifications, and opinion of probable cost to the City for review. Provide Bidding assistance, begin to respond to RFI's, etc.

D. Task 6d - Project Management -Total for this Task \$2,500.00

1. Coordinate with Marlin Engineering to ensure that we adhere to Project Manager's schedule. This includes internal progress meetings, coordination meetings with the City, and design team, addressing client comments, and supporting documents for design. We would anticipate twenty-one hours would be required for this Task.

DI. Task 6e - Construction Administration Services - Total for this Task \$7,130.00

1. Coordination of the review of RFI's and Shop Drawing review for the selected contractor. We would anticipate twenty hours for this task.
2. Thirty hours of site inspection time has been provided for this project for the planting and irrigation installation. If further inspection time is required or requested these hours shall be billed hourly at the attached rates.
3. Development of the Final Punch List for the Planting and Irrigation scope and a final substantial completion inspection for the project. We would anticipate twelve hours to address these items.
4. Certification of as-builts are included if necessary for final permit approval.

COST OF THESE SERVICES (Lump Sum)		
I	Professional Landscape Architecture Services	\$48,287.50
TOTAL (Plus Hourly Services)		\$48,287.50

Hours Summary - Detail

Landscape Architecture Fort Lauderdale

Final Landscape Architecture

<u>Work Activity</u>	<u>Position</u>	<u>Hrs.</u>	<u>Rate</u>	<u>Total</u>
Specifications & bid documents	Associate Landscape Architect	3	\$165.00	\$495.00
Quality Control Review	Associate Landscape Architect	2	\$165.00	\$330.00
Planting Plans	Associate Landscape Architect	4	\$165.00	\$660.00
Planting Plans	Landscape CADD Technician	24	\$95.00	\$2,280.00
Dimensioning Plans	Landscape CADD Technician	8	\$95.00	\$760.00
Hardscape Plans	Landscape CADD Technician	8	\$95.00	\$760.00
Hardscape Details	Landscape CADD Technician	6	\$95.00	\$570.00
Subconsultant Coordination	Landscape Architect	3	\$115.00	\$345.00
Specifications & bid documents	Landscape Architect	6.5	\$115.00	\$747.50
Hardscape Plans	Landscape Architect	6	\$115.00	\$690.00
Planting Plans	Landscape Architect	16	\$115.00	\$1,840.00
Tree Preservation Plan	Landscape Architect	18	\$115.00	\$2,070.00
Budget Level Cost Estimate	Landscape Architect	20	\$115.00	\$2,300.00
Planting Plans	Senior Landscape Architect	4	\$130.00	\$520.00
Irrigation Plan & Details	Landscape Architect	40	\$115.00	\$4,600.00
Total Final Landscape Architecture		168.5		\$18,967.50

Preliminary Landscape Architecture

<u>Work Activity</u>	<u>Position</u>	<u>Hrs.</u>	<u>Rate</u>	<u>Total</u>
Conceptual Planting plans	Environmental Administrator	4	\$125.00	\$500.00
Conceptual Planting plans	Landscape CADD Technician	8	\$95.00	\$760.00
Conceptual Planting plans	Landscape Architect	8	\$115.00	\$920.00
Conceptual Design development options	Landscape Architect	16	\$115.00	\$1,840.00
Coordinate with City Staff	Landscape Architect	6	\$115.00	\$690.00
Prepare color renderings/exhibits	Landscape Architect	48	\$115.00	\$5,520.00

Landscape Architecture Fort Lauderdale**Preliminary Landscape Architecture**

<u>Work Activity</u>	<u>Position</u>	<u>Hrs.</u>	<u>Rate</u>	<u>Total</u>
Attend Commission Meeting (up to 2)	Landscape Architect	6	\$115.00	\$690.00
Total Preliminary Landscape Architecture		96		\$10,920.00

Urban Master Planning

<u>Work Activity</u>	<u>Position</u>	<u>Hrs.</u>	<u>Rate</u>	<u>Total</u>
Inventory and Data Collection	Landscape Architect	28	\$115.00	\$3,220.00
Community Workshop	Landscape Architect	22	\$115.00	\$2,530.00
Final Plan Graphic Development	Landscape Architect	28	\$115.00	\$3,220.00
Revisions and Comments	Landscape Architect	12	\$115.00	\$1,380.00
Meetings with Staff (up to 8)	Landscape Architect	8	\$115.00	\$920.00
Total Urban Master Planning		98		\$11,270.00

Landscape Architecture Construction

<u>Work Activity</u>	<u>Position</u>	<u>Hrs.</u>	<u>Rate</u>	<u>Total</u>
Shop drawing review and approval	Landscape Architect	24	\$115.00	\$2,760.00
Field visits/Inspections	Landscape Architect	38	\$115.00	\$4,370.00
Total Landscape Architecture Construction		62		\$7,130.00
Total Landscape Architecture Fort Lauderdale		424.5		\$48,287.50

Proposal Total	424.5	\$48,287.50
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SHORT FORM AGREEMENT

Client Marlin Engineering, Inc.
1700 NW 66th Avenue, Suite 106
Plantation, FL 33313

Project ~1.6 mile Riverside Drive
Improvement Between Atlantic Blvd. &
NE 14th St. Pompano Beach, Florida

Attention Ms. Betsy Jeffers, P.E.
Ph (954) 809 4058
Fax
Mob
eMail bjeffers@marlinengineering.com

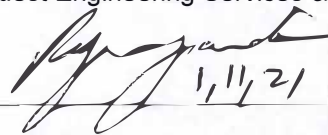
Prop. No. P-21012

Date 01/11/21

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	RATE (\$)	AMOUNT (\$)
1	Utility Clearance	Lump Sum	1.00	500.00	500.00
2	Mobilization of Drill Rig	Trips	7.00	300.00	2100.00
3	Flagmen (2 for 7 Days)	Hour	112.00	50.00	5600.00
4	SPT Borings (63 to 10' Depth each)	LF	630.00	15.00	9450.00
5	SPT Borings (21 to 15' Depth each)	LF	315.00	15.00	4725.00
6	3 Exfiltration Tests (10')	No.	3.00	375.00	1125.00
7	Soil Corrosivity Tests	No.	4.00	250.00	1000.00
8	Mobilization of Coring Machine	No.	1.00	150.00	150.00
9	Core Drilling - 2 Man Crew	Hour	6.00	120.00	720.00
10	Patch Core Locations with Cold Patch Asphalt	Lump Sum	1.00	30.00	30.00
11	Visual Classification, Misc. Tests - Staff Engr.	Hour	16.00	100.00	1600.00
12	Drafting	Hour	20.00	50.00	1000.00
13	Engineering Report, P.E.	Hour	40.00	175.00	7000.00
				TOTAL	35000.00

- Conditions:
1. The work will be done in accordance with the attached QuEST General Conditions.
 2. We understand that the test locations are accessible to our equipments.
 3. Services not listed here will be quoted upon request.
 4. Additional work requested will be billed at the same unit rates.

Sincerely,
Quest Engineering Services & Testing, Inc.



Acceptance

Agreed to by _____ on _____

Signature: _____

Title: _____

Company: _____

GENERAL CONDITIONS

1. **PARTIES AND SCOPE OF WORK:** Quest Engineering Services & Testing, Inc. (hereinafter referred to as "QuEST") shall include said company or its branch, subsidiary or affiliate performing the work. "Work" means the specific engineering, testing or other service to be performed by QuEST as set forth in QuEST's proposal. "Client" refers to the person or business entity ordering the work to be done by QuEST. The ordering of work from QuEST shall constitute acceptance of QuEST's proposal and these General Conditions. The client assumes sole responsibility for determining whether the quantity and the nature of the work ordered by the client are adequate for the client's intended purpose. The scope of our services does not include verifying compliance with life/fire safety and/or OSHA safety requirements.
2. **SCHEDULING OF WORK:** The services set forth in QuEST's proposal after client's acceptance will be accomplished in a timely and professional manner by QuEST at the prices quoted. If QuEST is required to delay commencement of the work or is required to stop or interrupt the progress of its work as a result of changes in the scope of the work requested by the client, interruptions in the progress of construction, or other causes beyond the direct reasonable control of QuEST, additional charges will be applicable and payable by client.
3. **ACCESS TO SITE:** Client will provide the requisite access to the site for QuEST to perform the work. QuEST shall take reasonable measures/precautions to minimize damage to the site as the result of its work or the use of its equipment. QuEST cannot be held responsible for any damage resulting from the testing or incidental to the testing.
4. **SAMPLE DISPOSAL:** Test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed thirty (30) days after submission of QuEST's report.
5. **RESPONSIBILITY:** QuEST shall not be responsible for supervising or implementing the means, methods, techniques, sequences or procedures of construction, evaluating, reporting or affecting job conditions concerning health, safety or welfare. QuEST has no right or duty to stop the contractor's work. Client is responsible to ensure that GC and other engineering firms involved in this project carry at least \$1M professional liability insurance.
6. **STANDARD OF CARE:** QuEST warrants that the findings, recommendations, specifications, or professional advice contained herein, have been promulgated after being prepared in accordance with generally accepted professional engineering practice in the industry. No other warranties are implied or expressed. Statements made in QuEST's reports are opinions based upon engineering judgments and should not be construed as facts. Should QuEST or any of its professional employees be found to have been negligent in the performance of its work for this contract, Client, all parties claiming through client and all parties claiming to have in any way relied upon QuEST's work agree that the maximum aggregate amount of the liability of QuEST, its officers, employees and agents shall be limited to \$10,000.00 or the total amount of fee paid to QuEST for its work performed on that project, whichever sum is greater.
7. **PAYMENT.** Client shall be invoiced periodically for work performed during the preceding period. Client agrees to pay each invoice within twenty five (25) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to for valid cause in writing within said period at the rate of eighteen (18) percent per annum until paid. Client agrees to pay QuEST's cost of collection of all amounts due and unpaid after sixty (60) days, including court costs and reasonable attorney's fees. These General Conditions are also notice that QuEST shall file a lien whenever necessary to collect past due amounts. Failure to make payment within 25 days of invoice shall constitute a release of QuEST from any and all claims which client may have, in tort or contract, whether known or unknown then.
8. **INDEMNITY:** Subject to the foregoing limitations, QuEST agrees to indemnify and hold client harmless from and against any and all claims, suits, costs and expenses including reasonable attorney's fees and court costs (if awarded in court), arising out of QuEST's negligence to the extent of QuEST's negligence. Client shall provide the same protection to the extent of its negligence or lack of requisite maintenance. In the event of a law suit, the client shall pay to QuEST the costs and expenses incurred by QuEST to investigate, answer & defend it, including reasonable attorneys'/ witness fees and court costs to the extent that QuEST prevails in such suit. The contract may not be assigned to a third party without written authorization from QuEST. Client agrees that they will undertake all maintenance as recommended in the maintenance manual, including inspections and necessary repairs called for as a result of these inspections.
9. **TERMINATION:** This Agreement may be terminated by either party upon ten day's prior written notice. In the event of termination, QuEST shall be compensated by client for all services performed up to and including the termination date, including reimbursable expenses.
10. **WITNESS FEES:** QuEST's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay QuEST's legal expenses, administrative costs and fees pursuant to QuEST's then fee schedule for QuEST to respond to any subpoena.
11. **PROVISIONS SEVERABLE:** In the event any of the provisions of these General Conditions should be found to be unenforceable, it shall be stricken and the remaining provisions shall be enforceable.
12. **ENTIRE AGREEMENT:** This agreement constitutes the entire understanding of the parties and may be amended or terminated only in writing, signed by each of the parties hereto.

SURVEYING AND MAPPING SCOPE OF SERVICES

I. TASK 1b- TOPOGRAPHIC ROUTE SURVEY

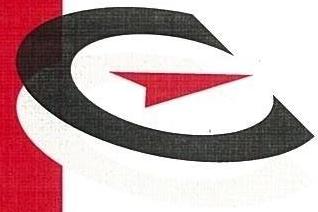
1. Professional surveying & mapping services consisting of field topography, locating existing vertical and horizontal control (GPS localization), baseline stationing, (established South to North & West to East), and locating all above and below ground (marked by others) existing facilities and utilities within the full right-of-way (including 10-feet back on each side of the right-of-way) of the established construction limits. The horizontal control will be referenced from the North American Datum of 1983/90 (NAD 83/90). The vertical control will be referenced to the North American Vertical Datum of 1988 (NAVD 88). The survey baseline will approximate the centerline of the right-of-way when possible. Durable markers will be used for field locating; stationing and reference points. Each 100-foot station will be clearly labeled using yellow paint. The survey work shall include the following:

Detailed Scope of Services:

- Topographic survey at 100-foot intervals and at major ground elevation changes to depict existing ground profile at proposed project area. All topographical surveys shall have stationing established from South to North and West to East. Station numbers will not be duplicated within the survey limits. This will be accomplished by creating a survey baseline in the field to collect pertinent data which shall include the following:
- Location of all visible fixed improvements within the right-of-way (Including 10-feet outside of right-ofway) easements and parcels of the project limits, including physical objects, roadway pavement, driveways, sidewalks, walls, curb, drainage swales, shrubs, trees, sprinklers heads and control valves, lift stations, signs, fences, power poles, and any other encumbrances.
- Location of all known above and below ground existing utilities: FP&L, Cable TV, Tele-Communication lines; Natural Gas, Potable Water (pipe diameter, TOP, valves TON), sanitary clean-outs within 10- feet of right-of-way), detailed data regarding Lift Stations, reclaimed water mains (pipe diameter, TOP and valves TON), storm sewers (pipe diameter, inverts and direction, rim/grate elevations), and all other accessible structures.
- Cross-Section elevations shall be indicated every 100-foot at a minimum, to indicate centerline grades, edge of pavement grades and shoulder grades, low points and all right-of-way lines. Intermediate grades shall be indicated at all grade breaks, driveways and sidewalks.
- Locations of up to (100) SUE points.

Deliverable:

Provide three (3) certified copies of the map(s) of survey along with electronic drawings in CAD and PDF format at 1"=20' scale and all project survey points collected in (*.asc) format.



February 2, 2021

PROPOSAL FROM CONSULTANT:

Benjamin R. Wiser, Manager
Compass Point Surveyors, PL
3710 Park Central Boulevard
Pompano Beach, FL 33064
Tel: (954) 332-8181
Email: brw@cp-surveyors.com

PROPOSAL FOR:

Construction layout and as-built surveying and mapping services on your project known as **POMPAÑO BEACH – RIVERSIDE DRIVE**, BROWARD County, Florida.

PROFESSIONAL FEE:

RECOVER HORIZONTAL & VERTICAL CONTROL:

Survey Crew	\$150.00/Hour	16	\$2,400.00
Project Surveyor	\$100.00/Hour	8	\$ 800.00
Project Manager	\$130.00/Hour	1	\$ 130.00
			\$3,300.00

CREATE BASELINES & MARK IN FIELD:

Survey Crew	\$150.00/Hour	24	\$3,600.00
Project Surveyor	\$100.00/Hour	12	\$1,200.00
Project Manager	\$130.00/Hour	2	\$ 260.00
			\$5,060.00

SPOT CHECK PREVIOUS SURVEY FOR (7,000 LF of Roadway R/O/W to R/O/W):

Survey Crew	\$150.00/Hour	36	\$5,400.00
Project Surveyor	\$100.00/Hour	36	\$3,600.00
Project Manager	\$130.00/Hour	2	\$ 260.00
			\$9,260.00

LOCATION & MEASUREMENTS FOR UTILITIES (Including Storm, Sanitary, Water, Electrical, Etc.):

Survey Crew	\$150.00/Hour	60	\$9,000.00
Project Surveyor	\$100.00/Hour	60	\$6,000.00
Project Manager	\$130.00/Hour	3	\$ 390.00
			\$15,390.00

TREE SURVEY:

Survey Crew	\$150.00/Hour	16	\$2,400.00
Project Surveyor	\$100.00/Hour	16	\$1,600.00
Project Manager	\$130.00/Hour	2	\$ 260.00
			\$4,260.00

LOCATION OF SUE DESIGNATIONS (Approximately 50 Per Client's Request):

Survey Crew	\$150.00/Hour	20	\$3,000.00
Project Surveyor	\$100.00/Hour	10	\$1,000.00
Project Manager	\$130.00/Hour	2	\$ 260.00
			\$4,260.00

SUE DESIGNATIONS (Approximately 50 Per Client's Request):

Test Holes (Grass/Dirt)	\$400/each	25	\$10,000.00
Test Holes (Concrete/Asphalt)	\$450/each	25	\$11,250.00
			\$21,250.00

\$62,810.00

