

## TASK ORDER No. 1

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2015

### FORT LAUDERDALE PUBLIC WORKS DEPARTMENT

### 12065 - 777 BAYSHORE DRIVE STORMWATER IMPROVEMENTS

#### PROFESSIONAL SERVICES

This Task Order is pursuant to the Continuing Services Contract Agreement (No. 626-10881-4) Civil between the City of Fort Lauderdale, a Florida municipality, ("CITY") and Calvin, Giordano & Associates, Inc., ("CONSULTANT"), a Florida corporation, for Civil Engineering Consultant Services in accordance with the terms of the agreement for professional services dated November 6, 2012 between CITY and CONSULTANT ("MASTER AGREEMENT") and extended by City Commission on October 21<sup>st</sup>, 2014, beginning on November 6<sup>th</sup>, 2014 and ending on November 5<sup>th</sup>, 2015.

#### PROJECT BACKGROUND

This Project is part of the Phase I Storm Master Plan for the design of the drainage system along Bayshore Drive, Vistamar Street, and Terramar Street in the Central Beach Alliance Neighborhood of Fort Lauderdale, Florida. Residential properties have flooded during extreme storm events. Currently, flooding is affecting public/private property by accumulating over sidewalks and affecting the public's ability to safely access the road. Also, there is tidal influence on Bayshore Drive.

The following concerns have been stated by the residents:

- a. Frequent flooding and ponding occurs during every rain storm due to insufficient drainage infrastructure.
- b. The frequent heavy downpours and high tides have caused property damage to lawns, gardens, and structures (e.g. walls, fences, parking areas).
- c. Deep water on either side of street is an issue for owners and guests to enter and exit cars. Vehicles are being damaged since exhausts are being submerged by water when exiting garages. Conditions force pedestrian and vehicle traffic along the center line of road (highest point) to avoid deep waters.
- d. Following each rain storm, building personnel have to clean up debris.
- e. In one incident, the police had to block off streets on Birch and Vista Mar Street to prevent cars stalling in water.

#### PROJECT DESCRIPTION

The Project includes the design of a new stormwater system to address documented flooding issues at the site. This Project is included in Phase I of the Stormwater Master Plan. The 777 Bayshore Drive Stormwater Improvements Project is located in the City of Fort Lauderdale. The Project encompasses the roads and right-of-way on Bayshore Drive, Vistamar Street and Terramar Street. A generalized address is 777 Bayshore Drive, Fort Lauderdale, FL 33304.

The total project area is approximately 3 acres, which includes the roads and right-of-way. See "Exhibit 1" for project location. The existing project area consists of roads, sidewalks, and green areas. This Task Order will consist of a drainage analysis of the existing stormwater conveyance system. A new drainage system analysis with tidal check valve improvements shall be provided as part of the full drainage report. The design may also include drainage wells.

The task order includes the following services:

1. Surveying & Data Collection
  - a. CONSULTANT shall verify and update the existing survey done in 2013, which will be provided by the CITY. Any additional survey data (utility location, hydrographic surveys, testing services, etc.) that may be required for permitting shall be provided by the CONSULTANT. Should televising be necessary to verify field data for a pipe run or structural integrity, it shall be provided by the CITY.
2. Civil Design
  - a. The project area shall be analyzed and a drainage report shall be produced representing existing conditions for the storm events listed in the Scope of Services. A design alternative model shall also be produced demonstrating the potential benefits from the addition of tidal check valves on the system outfalls. It is anticipated that the design will include drainage wells, but the final determination will be based on the CITY's desired level of service (LOS). The Florida Department of Environmental Protection (FDEP) requires a Reasonable Assurance Report (RAR) completed by a hydrogeological engineer in order to demonstrate minimal potential for the well to adversely affect surface water bodies and underlying aquifers. A Specific Capacity Test will also be needed for the design. The RAR and the specific capacity test will be handled by a sub-consultant

The project schedule shall be updated on a weekly basis and submitted to the CITY's Project Manager. In addition, the schedule shall also be updated and submitted with each pay request.

### **SPECIFIC SCOPE OF SERVICES AND DELIVERABLES**

This Task Order will cover the civil engineering services required to perform a drainage study of the existing stormwater drainage system that serves **777 Bayshore Drive Stormwater Improvements Project**.

The CONSULTANT is responsible for all work of its sub consultants/subcontractors to meet the deliverables included on this Task Order.

CONSULTANT shall provide all engineering services described on the tasks herein below:

#### Task 1

##### **Survey**

Conduct a survey of the overall storm drainage infrastructure system within the projects limits being defined as bounded on the west by the Intracoastal Waterway, bounded on the East by S.R. A-1-A, bounded on the north by Vistamar Street and bounded on the south by Seville Street. Survey data for each drainage structure (manhole and/or inlet) will consist of a rim elevation, size of each invert pipe and type of pipe material together with a horizontal location referenced to the Florida State Plane Coordinate System. Survey data will be referenced vertically to North American Vertical Datum 1988 (NAVD88) and horizontally to Florida State Plane Coordinates, North American Datum 83/90

(NAD 83/90). The survey will be prepared in accordance with the standards as set forth by Chapter 5J-17 of the Florida Administrative Code, pursuant to Florida Statutes Chapter 472.027.

A topographic survey will be prepared for the intersection of Bayshore Drive and Vistamar Street with detailed spot elevations being obtained for edge of pavement, centerline of streets and adjacent sidewalks. The survey limits will extend 150 ft. in each direction from the intersection and will encompass all the drainage structures within the area and include spot elevations in areas that have evidence of ponding or standing water within the topographic survey limits. Survey data will be referenced vertically to North American Vertical Datum 1988 (NAVD88) and horizontally to Florida State Plane Coordinates, North American Datum 83/90 (NAD 83/90). The survey will be prepared in accordance with the standards as set forth by Chapter 5J-17 of the Florida Administrative Code, pursuant to Florida Statutes Chapter 472.027.

## Task 2

### Drainage Design

CONSULTANT shall prepare a preliminary investigation of the existing drainage systems within the project limits. CONSULTANT shall also prepare a drainage analysis to determine the drainage requirements and the cost of the project. The proposed drainage system must comply with South Florida Water Management District (SFWMD) criteria, Broward County criteria and must satisfy level of service (LOS) set forth by the CITY. Consultant shall utilize record drawings and survey data provided by the CITY and from Task 1 above to conduct a drainage analysis of the project limits. The analysis shall provide guidance in identifying the drainage system deficiencies near 777 Bayshore Drive. This study shall be developed using any applicable software (ICPR, Cascade, etc.). Hydrologic and hydraulic storm events to be modeled include the 3-Year 1-Day, 10-Year 1-Day, 25-Year 3-Day, and 100-Year 3-Day. Soil data shall be utilized from the Soil and Water Conservation Service Broward County Soil Survey. Aerial imagery will be used to develop a land use area breakdown. CONSULTANT shall prepare a summary report with the findings of the analysis including a description of the existing conditions, a model input summary, a post-model of potential improvements from retrofitting the outfalls with tidal check valves, and a recommendation for effective improvements that coincide with the CITY's needs. Within 14 days of receiving the 30% drainage report submittal, the CITY shall inform the CONSULTANT how to proceed with the proposed design. CONSULTANT shall also obtain all necessary approvals from the CITY prior to proceeding with a design alternative. CONSULTANT shall prepare and submit meeting minutes.

CONSULTANT shall attend the following meetings only:

- One (1) project kick-off meeting with the CITY (to be held upon receipt of the executed proposal)
- One (1) CITY Commission Meeting
- One (1) design coordination meeting with the CITY
- One (1) pre-application meeting with the COUNTY
- One (1) bidding coordination meeting with the CITY
- One (1) Prebid Meeting

### **Conceptual Cost Estimate of Recommended Alternatives**

CONSULTANT shall prepare the cost estimate of the conceptual design alternatives recommended in the drainage report.

Task 3

### **Design Services**

Our drainage calculations will be suitable for permitting through FDEP, Broward County, and SFWMD. CONSULTANT will coordinate with the permitting agencies and respond to any comments. All permitting fees shall be the responsibility of the CITY. 60%, 90%, and 100% plans will be provided to the CITY for review. Written technical specifications will be provided for review. Front end specifications will be provided by the CITY. CONSULTANT will provide an Engineer's Opinion of Probable Cost at the 60%, 90%, and 100% submittals. CONSULTANT will review questions during bidding and provide recommendation for award.

Task 4

### **Hydrogeological**

The Reasonable Assurance Report (RAR) will ensure that discharge will occur below a semi-confining layer into a G-III aquifer (Total Dissolved Solids [TDS] concentration greater than 10,000 milligrams per liter) as dictated by the Florida Administrative Code (FAC). The RAR will be required for permitting through FDEP.

Task 5

### **Specific Capacity Test**

The Specific Capacity Test will be utilized for determining expected capacities of any proposed drainage wells onsite. One test will be conducted in a potential injection zone locations to a depth below the expected casing depth. This location will be determined after review of the RAR and after consulting with the CITY and the driller. Since the Specific Capacity Test will require pumping of large volumes of water, CONSULTANT requests disposal of the ground water and drill cuttings on the Client's property.

Task 6

### **Exfiltration Testing**

Exfiltration tests will be performed in general accordance with SFWMD specifications to a depth of six feet each. At the completion of the onsite work, a brief report will be provided describing the testing procedures conducted and the hydraulic conductivity (k-values of the soils).

### **Deliverables:**

Deliverables for this project shall consist of the following:

#### **Drainage Study**

- Drainage Report
- Post-analysis with potential improvements from retrofitting outfalls with check valves and the installation of drainage wells

- Conceptual Cost Estimate

#### Plans

- 30% Design Submittal
- 30% Cost Estimate
- 60% Construction Plans and Specifications
- 60% Cost Estimate
- 90% Construction Plans and Specifications
- Permitting – all approvals from applicable permitting agencies
- 100% Construction Plans and Specifications
- 100% Cost Estimate
- Project Schedule

#### Bidding Services

- Responses to bidding RFIs, if required
- Review of bids and recommendation for award

The deliverables need to include DWG, PDF, WORD, Cascade, ICPR or other relevant routing files and Excel files in original format as required by Contract Agreement Article 11. The drawings need to comply with CITY CAD Standards.

### **PROJECT ASSUMPTIONS**

Specific assumptions for the project:

- CONSULTANT shall review all City, County, and State records, data and/or other documentation available to review land ownership, easements, or other restrictions that may affect the project and the surveying deliverables of this task order.
- CONSULTANT shall use survey equipment and data collection systems capable of delivering complete surveys and task order deliverables as stated in the scope of work section of this task order.
- CONSULTANT shall prepare hydraulic, water quality, flood plain watershed modeling and analysis utilizing EPA's Storm Water Management Model (SWMM), Cascade, or ICPR for the preparation of the recommended alternatives associated with the stormwater management system near 777 Bayshore Drive, Fort Lauderdale, FL 33304. CONSULTANT shall calibrate the models to be consistent with observable and proposed conditions.
- For the specific Capacity Test the cost of disposal at a permitted disposal facility is not included in this task order.
- When performing the Exfiltration Test the Consultant assumes that the site will be accessible to the drilling truck and underground utilities will be cleared by 811 prior to the onsite work.

### **CITY'S RESPONSIBILITIES**

- CITY shall provide existing survey data, project records, drawings, reports, studies, etc.
- The City's project manager, or a designated representative, will coordinate the project for the CITY.

- CITY will provide decision on which design Alternative to proceed with the development of the design plans.
- Meeting attendance.
- Timely review of submittals. (not to exceed 14 days)

### **ADDITIONAL SERVICES**

If authorized in writing by the CITY as an amendment to this Task Order, the CONSULTANT shall furnish, or obtain from others, Additional Services of the types as listed in the Master Agreement. The CITY, as indicated in the Master Agreement, will pay for these services.

The following services are NOT included in this proposal and will be considered Additional Services, which will be addressed in a separate contractual agreement. The services include but are not limited to:

- Architectural, structural (i.e. retaining walls, bridges, docks), mechanical (i.e. fire pumps), fire protection, geotechnical and testing, environmental assessment, power, gas, telephone, cable television, site lighting services.
- Calculations of off-site flood stages.
- Construction quality control inspections.
- Off-site engineering and negotiations for off-site easements, if required (other than as specified in the Scope of Services)
- Professional land surveying not included in the scope of services (i.e. buried utility investigation, easement research, condominium documents, project stakeout and as-built drawings),
- Professional services required due to conditions different from those itemized under the Scope of Services or due to events beyond the control of Calvin, Giordano & Associates, Inc.
- Professional services required, due to changes in the site plan initiated by the CLIENT, their representatives or other consultants (e.g. architects, landscape architects, etc.) after either design or preparation of the construction drawings has commenced.
- Construction services (this will be provided in a separate task order).

### **MEETING ATTENDANCE**

Due to the difficulties of predicting the number or duration of meetings, no meetings other than those listed above, are included in the Schedule of Fees shown below. Preparation for and meeting attendance, as necessary, will be provided on a time and materials basis and will be billed at the standard hourly rates in accordance with the attached Hourly Rate Schedule.

### **PERFORMANCE SCHEDULE**

The CONSULTANT shall perform the services identified in Task 1 through 5 inclusive within 90 working days of written Notice to Proceed as shown on the task order schedule on **Exhibit 2**.

### **PROJECT FUNDING**

Performance of this project is at the CITY's discretion and may be contingent upon the CITY receiving funding and work shall not begin until the CITY notifies the CONSULTANT that funding sources for this project are in place.

**METHOD OF COMPENSATION**

The services performed will be accomplished using the Not-to-Exceed method of compensation. The total hourly rates payable by the CITY for each of CONSULTANT's employee categories, reimbursable expenses, if any, and sub-consultant fees, if any, are shown on "Exhibit 3" attached hereto and made a part hereof.

Sub consultant proposal is included in "Exhibit 4" (if required)

Billing shall be per the unit price negotiated in the contract with a not-to-exceed limit. Any change in project scope prior to an approved task order modification by the city commission shall not be accepted. A detailed breakdown of price will need to be included as an exhibit in this task order.

- *Updated project schedule, Timesheets and back up billing documentation shall be submitted with each invoice.*

Invoices shall be processed for work approved per percentage of task order completed. City Project manager shall review and approve all invoices prior to processing final pay request.

**TERMS OF COMPENSATION**

**Engineering**

Drainage Design	\$26,606.00
o Associate Engineer (\$176.00/hr)	
o Director (\$165.00/hr)	
o Project Manager IV (\$145.00/hr)	
o Project Engineer III (\$125.00/hr)	
o Senior CADD Tech Manager (\$90.00/hr)	
 Design Services	 \$26,171.00
o Associate Engineer (\$176.00/hr)	
o Director (\$165.00/hr)	
o Project Manager IV (\$145.00/hr)	
o Project Engineer III (\$125.00/hr)	
o Senior CADD Tech Manager (\$90.00/hr)	
o CADD Technician (\$65.00/hr)	
 Sub-Consultants	 \$59,132.00
 <b>Total Engineering</b>	 <b>\$111,909.00</b>

**Surveying**

Route Survey	\$21,320.00
o 3 Person Crew (\$130/hr)	
o Registered Surveyor (\$130/hr)	
o CADD Technician (\$65/hr)	
 <b>Total Surveying</b>	 <b>\$21,320.00</b>

<b>Proposal Total</b>	<b>\$133,229.00</b>
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**CITY CONTACTS**

Requests for payments should be directed to City of Fort Lauderdale Accounts Payable via e-mail to [AcctsPayable@FortLauderdale.gov](mailto:AcctsPayable@FortLauderdale.gov). All other correspondence and submittals should be directed to the attention of Daniel Rey, Project Manager, at the address shown below. **Please be sure that all correspondence refers to the City project number and title as stated above.**

Daniel Rey, E.I.  
Project Manager II  
City of Fort Lauderdale  
City Hall, 4<sup>th</sup> Floor Engineering  
100 North Andrews Avenue  
Fort Lauderdale, FL 33301  
954-828-7150  
[Drey@fortlauderdale.gov](mailto:Drey@fortlauderdale.gov)

Pedram Zohrevand, P.E.  
Assistant City Engineer  
City of Fort Lauderdale  
City Hall, 4<sup>th</sup> Floor Engineering  
100 North Andrews Avenue  
Fort Lauderdale, FL 33301  
[PZohrevand@fortlauderdale.gov](mailto:PZohrevand@fortlauderdale.gov)  
(954) 828-6134

Annalise Mannix, P.E., M.S.  
Senior Project Manager  
Design Section, Public Works  
City of Fort Lauderdale  
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[Amannix@Fortlauderdale.gov](mailto:Amannix@Fortlauderdale.gov)

**CONSULTANT CONTACTS**

Calvin, Giordano & Associates, Inc.  
Robert McSweeney, P.E.  
Senior Project Manager  
1800 Eller Drive, Suite 600  
Fort Lauderdale, FL 33316  
Phone: 954-921-7781  
Email: [bmcsweeney@cgasolutions.com](mailto:bmcsweeney@cgasolutions.com)

Calvin, Giordano & Associates, Inc.  
David Stambaugh, P.E.  
Senior Project Manager  
1800 Eller Drive, Suite 600  
Fort Lauderdale, FL 33316  
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Email: [dstambaugh@cgasolutions.com](mailto:dstambaugh@cgasolutions.com)

Calvin, Giordano & Associates, Inc.  
Nicholas Kanelidis, P.E.  
Project Engineer  
1800 Eller Drive, Suite 600  
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Phone: 954-921-7781  
Email: [nkanelidis@cgasolutions.com](mailto:nkanelidis@cgasolutions.com)





**CITY**

IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first above written.

CITY OF FORT LAUDERDALE, a municipal corporation of the State of Florida:

By \_\_\_\_\_  
LEE R. FELDMAN, City Manager

(CORPORATE SEAL)

ATTEST:

\_\_\_\_\_  
JONDA K. JOSEPH, City Clerk

Approved as to form:

\_\_\_\_\_  
RHONDA MONTOYA HASAN  
Assistant City Attorney

**CONSULTANT**

WITNESSES: (Need 2)

(Consultant Full Legal Name)

\_\_\_\_\_  
Signature

By: \_\_\_\_\_

\_\_\_\_\_  
Print Name

Name: \_\_\_\_\_

Title: \_\_\_\_\_  
(Must be authorized to sign for the Entity.  
Prefer President/Vice President.)

\_\_\_\_\_  
Print Name

ATTEST:

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

(CORPORATE SEAL)

STATE OF FLORIDA:  
COUNTY OF BROWARD:

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2015, by \_\_\_\_\_ as \_\_\_\_\_ of Calvin, Giordano & Associates, Inc., a Florida corporation, who is  personally known to me or  has produced \_\_\_\_\_ as identification.

(SEAL)

\_\_\_\_\_  
Notary Public, State of Florida  
(Signature of Notary taking Acknowledgement)

\_\_\_\_\_  
Name of Notary Typed, Printed or Stamped

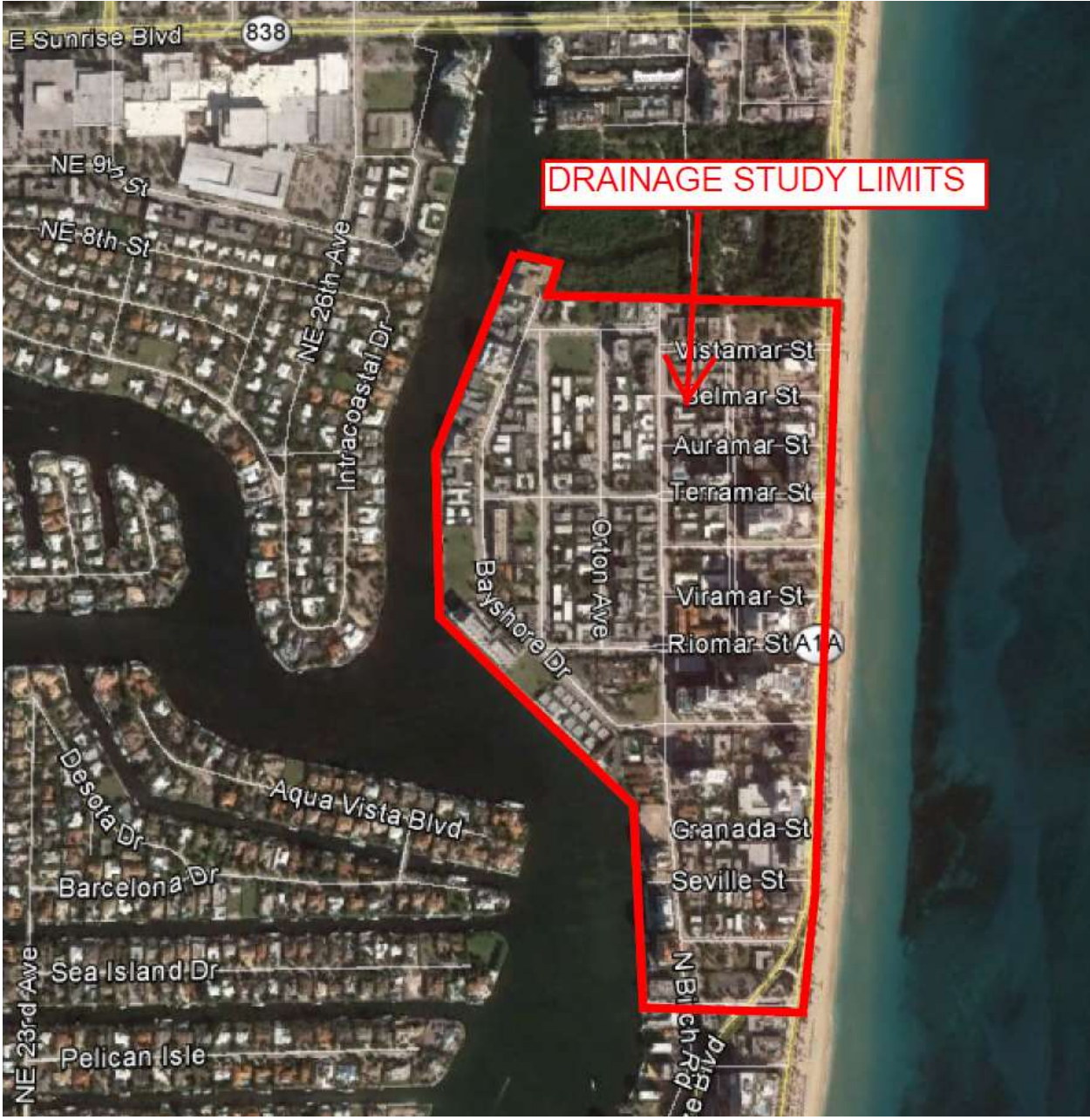
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My Commission Expires

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Commission No.

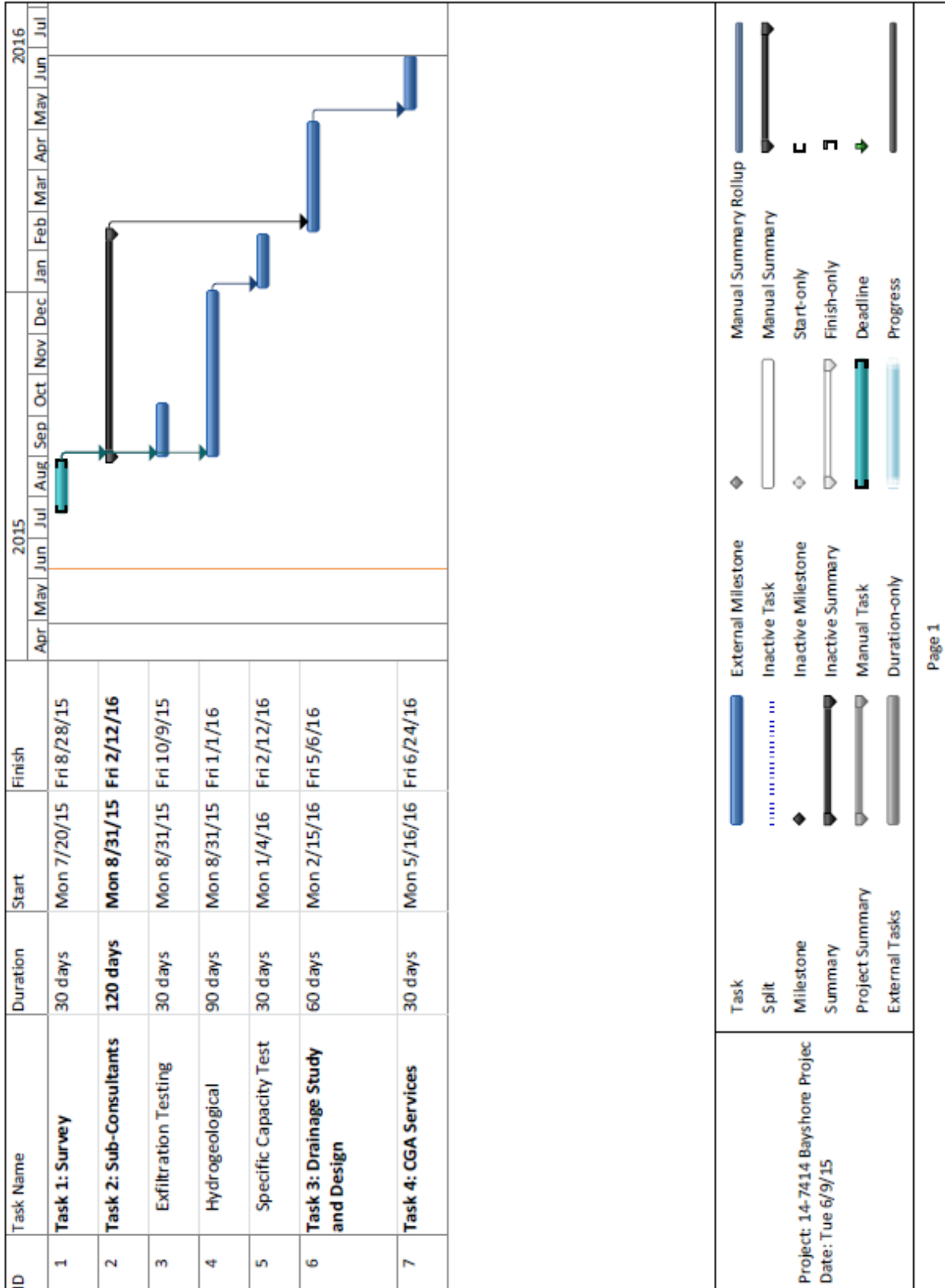
(Minimum of three original documents executed by the Consultant and delivered to the City Attorney's Office by deadline)

# **EXHIBITS**

**Exhibit 1 Location Map**



**Exhibit 2 Project Schedule**



**Exhibit 3 Work Break Down Fee Schedule**

SEE ATTACHED "TABLE A"

TABLE A

Labor Category		Engineering										Construction Administration								Survey						Total Hours (CGA)	Labor Cost
		Associate (IV)		Director (V)		Project Manager (IV)		Project Engineer (III)		Senior CADD Tech Manager		Construction Management Director		Construction Manager		Senior Inspector		Clerical		3 Person Survey Crew		Registered Surveyor		CADD Technician			
Percent Utilization (rounded)		0.5%		2.4%		16.4%		42.5%		9.4%		0.0%		0.0%		0.0%		0.0%		21.1%		2.1%		5.6%		196	\$21,320
Labor Rate (hourly)		\$176		\$165		\$145		\$125		\$90		\$135		\$100		\$90		\$50		\$130		\$130		\$65			
Task Number	Task Title	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	622	\$74,097
1	Survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	15,600	12	1,560	64	4,160		
2	Drainage Design	1	176	6	990	42	6,090	126	15,750	40	3,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215	\$26,606
3	Design Services	1	176	5	825	42	6,090	126	15,750	37	3,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211	\$26,171
TOTAL		2	352	11	1,815	84	12,180	252	31,500	77	6,930	0	0	0	0	0	0	0	0	120	15,600	12	1,560	64	4,160		



**Exhibit 4 Sub Consultant Work Break Down Fee Schedule**

TABLE A

Labor Category	Langan Fees																		Subcontractor	Total Hours (Langan)	Labor Cost
	Principal		Senior Associate		Senior Project Personnel II		Project Personnel I		Senior Staff Personnel III		Senior Staff Personnel I		Staff Personnel III		Staff Personnel I		Engineering Technician				
Percent Utilization (rounded)			3.3%		12.5%				20.6%										1.3%	62.3%	
Labor Rate (hourly)			\$190		\$175		\$160		\$125								\$70				
Task Title	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Hours	Sub-total (\$)	Subtotal (\$)	Subtotal (\$)	
SOW																					
HASP					1	175			1	125										2	\$300
Prep for Field Work					4	700			6	750										10	\$1,450
Field Work (3 SPTs)			1	190	14	2,450			32	4,000										47	\$6,640
Field Work (2 SCTs)			1	190	10	1,750			24	3,000										35	\$4,940
3 SPTs (J&R, \$2,110 each)																				6,963	\$6,963
2 SCTs (Jaffer, \$13,000 each)																				28,600	\$28,600
Laboratory (35 TDS)																				272.25	\$272
Equipment																			756.48		\$756
RAR			4	760	4	700			16	2,000										24	\$3,460
SCT			4	760	8	1,400			16	2,000										28	\$4,160
<b>TOTAL</b>			10	1,900	41	7,175			95	11,875								756	35,835	146	\$57,542

TABLE A

Labor Category		Nutting Fees										Labor Cost
		Technician Site Visit		Mobilization of Equipment/Crew		SFWMD Exfiltration Tests		Project Engineer		Clerical / Administration		
Percent Utilization (rounded)		9.4%		9.4%		70.8%		7.9%		2.5%		
Labor Rate		\$150		\$150		\$375		\$125		\$40		
Unit		EACH		EACH		EACH		HOURLY		HOURLY		
Task Number	Task Title	Quantity	Sub-total (\$)	Quantity	Sub-total (\$)	Quantity	Sub-total (\$)	Quantity	Sub-total (\$)	Quantity	Sub-total (\$)	
TOTAL		1	150	1	150	3	1,125	1	125	1	40	\$1,590