



# AGENDA ITEM REQUEST FORM

Item No. 11c

**Municipal Services**

Department Submitting Request

**Don Prince**

Department Director

**REGULAR**  
**COMMISSION MTG**  
**Meeting Dates - 7:00 PM**

**DEADLINE TO**  
**Town Clerk**

**ROUNDTABLE/**  
**SPECIAL MEETING**  
**Meeting Dates / TIME**

**DEADLINE TO**  
**Town Clerk**  
**7 Days Prior (noon)**

Sept 13, 2011

Sept 02 (5:00 pm)

Insert Date/Time

\*Subject to Change

Presentation

Reports

**Consent**

Ordinance

Resolution

Quasi Judicial

Old Business

New Business

**FY2011 DESIGNATED HIGH PRIORITY ITEM PRIORITY TOPIC:**

**SUBJECT TITLE: Harbor Drive Drainage Design Improvements**

**EXPLANATION:** In the Town's Stormwater Master Plan, Harbor Drive is a priority project because it experiences flooding during heavy rains and the extensive ponding in the swale area stays for days after heavy rainfall.

Staff has obtained proposals from the Town Engineer and two firms on the continuing services list. Chen Moore & Associates submitted the proposal (**exhibit 1**) that is in the Town's best interest. Their not-to-exceed \$26,593 price for the design and construction inspection was also the lowest of the three proposals. The exfiltration drainage system would cover the entire length of Harbor Drive between West Tradewinds Avenue and Seagrave Drive.

The FY12 Recommended Budget includes \$195,000 in the Capital Project fund for the construction and design. The Town contract with Chen Moore & Associates for FY12 has a cap of \$58,427 and the \$26,593 design fee would count against the annual total leaving a balance of \$31,834.

**EXPECTED OUTCOME:**

We recommend the Town Manager be authorized to execute a Task Order with Chen Moore & Associates for the Harbor Drive Drainage Improvements in the amount of \$26,593.

**EXHIBITS: Exhibit 1: Chen Moore and Associates Proposal**

Reviewed by Town Attorney

Yes  No

Town Manager Initials CA



## **HARBOR DRIVE STORMWATER IMPROVEMENTS**

### **PROJECT BACKGROUND:**

As defined within the Town of Lauderdale By The Sea's (TOWN) Stormwater Master Plan, the stormwater improvements are necessary along Harbor Drive to meet the level of service criteria for flood protection. The project area includes Harbor Drive between West Tradewinds Avenue and Sea Grape Drive along with East Tradewinds Avenue between Commercial Boulevard and Harbor Drive. The existing conditions model identified the public right-of-way areas along Harbor Drive to be prone to extensive ponding during heavy rainfall events. The ponding issues along Harbor Drive were confirmed based on our observations during heavy rainfall along with the historical knowledge of the Town staff. The ponding issues along Harbor Drive are due to a chiefly impervious ground surface within the right of way areas which receives stormwater runoff from the adjacent private properties. Due to the existing conditions of the ground surface, it is not feasible to completely prevent the flow of stormwater runoff from adjacent properties. The proposed stormwater improvements for this project include the installation of underground exfiltration trench which will be interconnected with existing and proposed catch basin inlets in order to provide additional flood protection within the public right of way areas. A preliminary layout of the proposed stormwater improvements are displayed on the attached Exhibit 4.16 Proposed Alternative – Harbor Drive. The TOWN has requested a fee proposal from Chen Moore and Associates (CMA) to prepare the construction documents for the Harbor Drive Stormwater Improvements. CMA shall be responsible for providing engineering services for the proposed stormwater improvements according to the scope of services defined below.

### **SCOPE OF SERVICES:**

The following is a detailed breakdown of the above described scope of services which had been broken down into deliverable based tasks:

#### **Task 1: Site Investigation**

In order to complete the stormwater calculations and develop preliminary design plans, CMA will collect and review information related to the project area, which includes but is not limited to the following items:

##### **1.1 Document Review**

CMA will review all available surveys, atlases, design drawings, and/or record drawings for the existing utilities within the project area to determine the configuration of existing underground utilities and to avoid any conflicts with any proposed stormwater improvements. CMA shall contact the Sunshine State One Call Service to determine the existing utilities which are located in the project area. CMA will perform necessary site visits to the project area for verification purposes. The approximate location of all existing underground utilities will be incorporated into the preliminary design plans based on any available drawings. CMA shall complete this task within 30 calendar days from the issuance of a notice to proceed (NTP) by the TOWN.

##### **1.2 Topographic Survey**

CMA shall coordinate with a surveyor in order obtain the required topographic data for project



areas. The limits of the survey shall include Harbor Drive between West Tradewinds Avenue and Sea Grape Drive, which is approximately 1,100 LF of 40' wide ROW and East Tradewinds Avenue between Commercial Boulevard and Harbor Drive, which approximately 220 LF of 50' wide ROW. CMA shall retain a licensed land surveyor to complete the topographic survey as follows:

(a) Establish a control traverse and bench marks (North American Vertical Datum) at sufficient intervals to support the topographic survey to be utilized on the design plans.

(b) Locate all above ground features within the right-of-way of the existing roads according to the following schedule, including pavement, paved swales, sidewalks, fences, light poles, handrails, storm manholes, catch basins, electric boxes, handholes, curbs, valve boxes, sanitary sewer manholes, driveway types, edges and corners, trees, overhanging trees in the right-of-way, meter boxes, centerline and crown of the roads, irrigation systems, fire hydrants and valves, overhead utilities.

(c) Locate underground features of sanitary manholes, storm manholes, and catch basins. Measure the invert elevations of pipes and determine the pipe materials and size when possible.

(d) Tie in any subdivision corners, lot corners and plat corners which can be located along the right-of-way lines. This will not constitute a boundary or right-of-way survey as defined in the Minimum Technical Standards for Land Surveying and Mapping. Ownership and title searches are not included. Easements will be based on information obtained from record plats.

CMA shall review topographic data upon completion of the survey to all appropriate information was included within the topographic survey. CMA shall complete this task within 30 calendar days from the issuance of a notice to proceed (NTP) by the TOWN.

### 1.3 Geotechnical Investigation

CMA shall enter into an agreement with a local geotechnical engineering firm to acquire the soils information required to estimate soil permeability which is necessary to design the proposed stormwater improvements. This task includes the completion of two FDOT Standard Exfiltration Tests within the project area to verify the soil permeability. CMA shall complete this task within 15 calendar days from the issuance of a NTP by the TOWN.

### 1.4 Subsurface Utility Verification

Since there are extensive existing utilities within the project area, the location of existing underground utilities is necessary to avoid conflict with any proposed stormwater improvements. CMA shall enter into an agreement with a local Subsurface Utility Engineering (SUE) firm to acquire the size, material, depth and horizontal location of existing underground utilities. This task includes the completion of 12 utility testholes within the project area to verify the configuration of the existing utilities. CMA shall complete this task within 15 calendar days from completion of Task 1.1 and Task 1.2.

### 1.5 Stormwater Calculations

CMA shall utilize the information acquired to complete the stormwater calculations required to properly configure the proposed drainage improvements. CMA shall utilize Streamline Technologies Interconnected Channel and Pond Routing (ICPR) Software to complete a stormwater



model of this area. CMA shall provide a copy of the model results to the TOWN. CMA shall complete this task within 30 calendar days from the completion of Task 1.1, Task 1.2, and Task 1.3.

**Task 2: Progress Submittals**

2.1 90% Design Submittal

CMA will prepare and submit required sets of design drawings to TOWN. These drawings will consist of the existing conditions, horizontal layout, profiles, and engineering details for review by the City. CMA will prepare and submit required sets of technical specifications to TOWN. CMA will utilize the 90% design plans to prepare a construction cost estimate. CMA will attend one review meeting with City staff to discuss comments after the 60% submittal. CMA shall complete this task within 30 calendar days from completion of Task 1.

2.2 Regulatory Permit Submittal

CMA will obtain, review, and complete permit applications and will prepared backup documentation required by the regulatory permitting agencies. CMA will be responsible for coordination with all regulatory agencies during the permitting process. CMA will then send applications to CMA for review, signature and check(s) for all permit and application fees. Regulatory agencies anticipated to be involved are as follows:

- South Florida Water Management District (SFWMD)
- Broward County Environmental Protection and Growth Management (BCEPGM)

CMA will revise applications, plans, and technical specifications as per comments from these regulatory agencies. CMA shall assemble permit application packages within 15 calendar days after the receipt of review comments from the TOWN on the 90% design submittal. The regulatory agencies typically complete their review within 30 calendar days after the permit submittal.

2.3 Final Design Submittal

CMA will utilize the 90% plan and specification review to prepare the bid set of construction documents. ENGINEER will produce required sets of design drawing and technical specifications for bidding. CMA shall complete this task within 15 calendar days after the receipt of review comments from the TOWN on the 90% design submittal.

**Task 3: Construction Administration**

3.1 Bidding Assistance

CMA will attend the Pre-Bid Meeting and will answer all questions and clarifications that are technical in nature. CMA will respond to all written questions requesting clarification of the technical documents for this project. CMA will review the bid results and make a recommendation for bid award. TOWN shall be responsible for bid advertisement, distribution of bid documents to interested bidders, processing all bid submittals, and verification that each bid submittal meets all Purchasing related requirements. CMA shall complete this task according to the schedule defined by the TOWN for the bidding process.

3.2 Document Review



CMA will review shop drawings submitted by the contractor prior to commencement of construction and respond to Requests For Information (RFI) from the contractor during construction operations with an estimated duration of 4 months. As necessary, CMA shall prepare any documentation required to clarify issues included within a RFI from the contractor. CMA will review all pay applications from the contractor to verify the accuracy of their progress.

### 3.3 Construction Oversight

CMA will prepare for and attend one preconstruction meeting with the contractor, City staff, and other project stakeholders upon issuance of a notice to proceed. TOWN shall be responsible for daily inspection of the construction operations. CMA shall assist the TOWN with the administration and inspection of the project during the construction phase on an as requested by TOWN staff. CMA will be available to conduct periodic site inspections of the work during construction operations throughout the construction duration. The budget for this task was developed based on the assumption of 16 total inspection hours over the estimated construction duration of 4 months. Any construction inspection services required in excess of this amount will be billed at the hourly rate. CMA will meet with TOWN staff to prepare a punch list. CMA will walk the site with the contractor to go over the punch list until completion for final acceptance. CMA will certify the project at completion to the TOWN staff and jurisdictional agencies.

## **Task 4: Reimbursable Expenses**

### 4.1 Document Reproduction

CMA shall provide all document reproduction required for each project deliverable to the TOWN and regulatory agencies as defined within the scope. All printing costs for deliverable will be reimbursed by the TOWN at cost. A budget of \$250 for document reproduction was estimated for this task.

## **SCOPE ASSUMPTIONS:**

- TOWN will provide timely responses to information included within each deliverable.
- TOWN will provide all required permit fees.
- TOWN will provide the standard front end contract documents to CMA to incorporate into the bid documents.
- TOWN shall be responsible for bid advertisement, distribution of bid documents to interested bidders, processing all bid submittals, and verification that each bid submittal meets all Purchasing related requirements.
- TOWN shall be responsible for daily inspection of the construction operations.



**FEE AND PAYMENT:**

All work will be billed monthly on a lump sum basis and will not exceed the contract amounts. The total fee for the above scope of service comes to a total of **\$26,593**. A breakdown of the contract costs is listed below by task:

<b>Task</b>	<b>Amount</b>
Task 1 – Site Investigation	\$14,753
Task 2 – Progress Submittals	\$8,080
Task 3 – Construction Administration	\$3,510
Task 4 – Reimbursable Expenses	\$250
<b>Total</b>	<b>\$26,593</b>

**INSURANCE:**

CMA maintains general liability and professional liability insurance coverage of \$1,000,000. The TOWN is named as a certificate holder.

**TERMINATION:**

This Agreement and the relationship between TOWN and CMA shall terminate upon the occurrence of any of the following events:

- Both parties mutually agree to terminate the Agreement and execute a written document evidencing such intent;
- TOWN terminates the Agreement, with or without cause, by providing 30 days written notice to CMA; or
- CMA terminates the agreement, with cause, by providing 30 days written notice to the OWNER during which time OWNER has the opportunity to cure any alleged breach of the terms of the agreement.

**MISCELLANEOUS PROVISIONS:**

- CMA does hereby indemnify and hold the TOWN harmless of and from any claim(s) in tort for damages to person(s) or tangible property that arise out of any acts of omission, commission or negligence by CMA its agents or employees relating to the Scope of Services of this Agreement.
- This Agreement contains the entire understanding of the parties and may only be amended by a written document signed by both parties.
- This Agreement shall be governed by the laws of the State of Florida and venue shall lie in Broward County, Florida.
- In the event of litigation arising out of this Agreement, the prevailing party shall be entitled to recover its reasonable attorney's fees and costs, including appellate fees and costs, from the non-prevailing party.
- Services requested outside the scope of work will be subject to additional fees and will be billed at the unit rates presented in this proposal.



If the former is acceptable to you, this letter can serve as a notice to proceed by affixing your signature in the space below and return one copy of the letter to this office.

**Approved By:**  
**The Town of Lauderdale By The Sea**

**By:** \_\_\_\_\_  
**Town Manager**

\_\_\_\_\_  
**Date**

**Submitted By:**  
**Chen Moore and Associates**

**By:** \_\_\_\_\_  
**Jason McClair, P.E., LEED AP, Project Manager**

\_\_\_\_\_  
**Date**