



CRAIG A. SMITH & ASSOCIATES

7777 Glades Road • Suite 410 • Boca Raton, Florida 33434

CONSULTING ENGINEERS • SURVEYORS • UTILITY LOCATORS • GRANT SPECIALISTS

W W W . C R A I G A S M I T H . C O M

March 26, 2018

Ms. Tammy Good
City of Pompano Beach
1201 NE 5th avenue
Pompano Beach, FL 33060

(via email)

**RE: POMPANO BEACH SW 2ND STREET DRAINAGE IMPROVEMENTS
PROFESSIONAL ENGINEERING & SURVEYING SERVICES
CAS PROPOSAL NO. P3646**

Dear Ms. Good:

Craig A. Smith & Associates (CAS) is pleased to submit this proposal to provide professional engineering and surveying services for proposed drainage improvements within the project limits (see attached) of SW 2nd Street between Dixie Highway and Cypress Road, SW 1st Avenue between SW 2nd Street and Atlantic Blvd, SW 1st Terrace and SW 1st Court between SW 2nd Street and S. Cypress Road, located in Pompano Beach, FL. CAS met with City of Pompano Beach (CLIENT) staff on December 1, 2017 and January 9, 2018 to discuss City concerns with flooding at the described project limits and also potential solutions CAS could propose to alleviate the flooding concerns. As discussed in the meeting with the City, it is anticipated the proposed drainage improvements could include a combination of new swale systems and new exfiltration trenches where feasible. The project scope in this proposal is limited to implementation of new stormwater management systems and does not include major roadway re-grading or full reconstruction. CAS will also investigate the possibilities of providing an offsite discharge connection as part of this proposal but the scope of work in this proposal will be limited to improvements on SW 2nd street as described.

The anticipated CAS services include Surveying, Utility Locates services, Geotechnical Engineering services (By others), Engineering Design, Permitting, Bidding and Negotiating services, Construction Services and Final Certifications. Please note that Contractor permits: dewatering permits or NPDES permits are not included in this proposal.

<u>TASK</u>	<u>DESCRIPTION</u>
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S86	MAP OF SPECIFIC PURPOSE SURVEY
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CAS is pleased to present this proposal for Professional Surveying Services in connection with the above referenced project. The limits of the survey will be within SW 2nd St. (Dixie Highway to S. Cypress Rd.), SW 1st Ave. (SW 2nd St. to E. Atlantic Ave.), SW 1st Ct (SW 1st Terr. To S. Cypress Rd.) and SW 1st Terr. (SW 2nd St. to SW 1st Ct.) corridors (10 feet beyond each right of way line). And totaling approximately 2,200 LF. Survey will physically locate all above ground, visible improvements and utilities within the existing right of way corridor recited above, as well as utility surface markings performed by Craig A. Smith & associates Utility Locating Department. Up to twenty (20) utility test holes will be located and the information for each shown per Test Hole Reports provided to the Surveyor. Rims, pipe inverts, sizes and material information will be shown at all sanitary and drainage structures, as available. A base line will be established, and cross sections taken every 50 feet. All elevations shown will be relative to North American Vertical Datum of 1988 (NAVD '88). A Map of Specific Purpose Survey will be created. A base map will be provided to the Client, as well as said Map of Specific Purpose Survey for submittal to entities of interest in .PDF format.

CAS'S Lump Sum (LS) Fee for Task S86 shall be.....\$16,060.00

Note: 1.CAS will coordinate with the City to have the City clean out the existing drainage structures within the project limits prior to CAS's commencement of surveying activities.2. See attached Project Schedule.

S01 UTILITY LOCATES – GPR/EM SERVICES

Provide utility location and verification services within the area requested per task S86 above. Using AWPAs standards for marking, a sub-surface ground penetrating radar (GPR) unit shall be used in addition to electromagnetic induction (EM) to perform/verify horizontal locations of existing utilities. Lines will be painted on the ground or pin flags set to show said lines on the surface.

CAS’S Lump Sum (LS) Fee for Task S01 shall be.....\$6,300.00

Note: 1. See attached Project Schedule.

S90 UTILITY TEST HOLES (“SOFT DIGS”)

Utility test holes (soft digs) will be performed and reports provided for each with utility depth, elevation, size, material and type. The test holes will be performed based on the direction of the Consultant and limited to a maximum of Twenty (20) test holes per this request.

CAS’S Fee for Task S90 shall be on a per hole basis at \$300.00 per hole not to exceedNTE \$6,000.00

Note: 1. See attached Project Schedule.

E07 ENGINEERING DRAINAGE ANALYSIS

CAS will perform a preliminary drainage analysis to determine the feasibility of the proposed site improvements for conformance with established drainage criteria and for providing the CLIENT with a sufficient level of understanding related to the level of service that can be anticipated with the proposed drainage improvements in place. CAS will also research and review existing permits and the City’s Master Drainage Plan to identify general requirements for compliance.

CAS’S Lump Sum (LS) Fee for Task E07 shall be.....\$7,408.00

Note: 1. CAS’s scope and budget under Task E07 is limited to a drainage analysis of the project limits only and does not consider offsite improvements. 2. See attached Project Schedule.

E50 PRELIMINARY ENGINEERING DESIGN

Subsequent to completion of Task E07 (Engineering Drainage Analysis) above and in conformance with the requirements of the City of Pompano Beach, City Master Drainage plan and applicable minimum design standards, CAS shall prepare preliminary engineering plans. The Preliminary Engineering plans are to include the level of detail necessary to show paving, grading and drainage for the proposed improvements. Preliminary design shall comply with the rules and regulations of the City of Pompano Beach, Broward County (Surface Water Management Licensing Division) and other jurisdictional requirements as applicable.

CAS’S Lump Sum (LS) Fee for Task E50 shall be.....\$20,320.00

Note: 1. The Preliminary Engineering Design Task will include one (1) submittal of 50% level design plans to the CLIENT for review and comment prior to commencement of the Final Engineering design task (See Attached Project Schedule. Task E-50 schedule includes 10 calendar day review time for the CLIENT). 2. Offsite improvements beyond the project limits described are not included in this proposal.

E53 FINAL ENGINEERING DESIGN

Based upon CLIENT approval of the Preliminary Engineering Plans provided and described under Task E-50 above, CAS shall prepare Final Engineering Plans sufficient for permitting and construction of the proposed improvements. Plans are to include paving, grading and drainage improvements.

CAS'S Lump Sum (LS) Fee for Task E53 shall be.....\$20,320.00

Note: 1. The Final Engineering Design Task will include one (1) submittal of 90% level design plans to the CLIENT for review and comment (See Attached Project Schedule. Task E-53 schedule includes 10 calendar day review time for the CLIENT).. 2. Once the 90% design plans are approved by the CLIENT, CAS will use the Final Engineering Design plans to submit for Permits as outlined in Task E61 below. 3. Offsite improvements beyond the project limits described are not included in this proposal.

E61 PERMITTING SERVICES

CAS will provide technical criteria, written description and design data for use in filing applications for permits relative to CAS's scope of services with the governmental agencies having jurisdiction to review the design of the project. CAS will use the Final Engineering plans as detailed in Task E53 to file for applications with the permitting agencies listed below. Application and permit fees are the responsibility of the CLIENT and are not included within this agreement. The following regulatory agency permit application submittals are anticipated:

- City of Pompano Beach - Engineering
- Broward County-- Surface Water Management License and SFWMD ERP Permits

CAS'S Lump Sum (LS) Fee for Task E61 shall be.....\$9,308.00

Note: 1. Permit fees will be billed under Reimbursable Task E99 below. 2. Construction dewatering (if proposed) or FDEP Notice of Intent - National Pollution Discharge Elimination Systems permitting are considered by CAS as contractor-type permits and are made part of the construction contract and the responsibility of the contractor. 3. See attached Project Schedule

E15A CONTRACT DOCUMENTS AND ASSISTANCE DURING BIDDING

Services will include preparation of technical specifications, bid form and construction estimate. CAS will assist the City during bidding as follows: CAS will attend pre-bid meeting, respond to questions during bidding and prepare final bid tabulation once the bids are received.

CAS'S Lump Sum (LS) Fee for Task E15A shall be.....\$5,376.00

Note: 1. See attached Project Schedule.

E10 CONSTRUCTION OBSERVATION SERVICES

CAS will act as the CLIENT's representative, monitoring construction on a weekly basis as needed (to a maximum of 6 hrs/week) , to ensure the project is being constructed substantially in accordance to the Civil Engineering plans. As the CLIENT's representative, CAS will oversee required testing, review test results (i.e., densities, proctors, and LBR test), provide weekly construction reports, and coordinate between engineers and contractor to resolve civil engineering related construction issues in preparation for a final project certification. Minimum observations shall include:

- Periodic storm sewer installation;

- Periodic subgrade, limerock, asphalt installation; and
- Final paving and grading inspection.

This fee is based on a 6-month (27 week) construction period (Budget 6 Hrs/wk).

CAS'S Fee for Task E10 shall be billed on a time and materials (T&M) at the hourly rates of Consultant's staff assigned to provide services requested by CityNTE \$18,144.00

NOTE: 1. It is the contractor's responsibility to schedule regulatory authorities for inspections and to notify CAS of all inspections and testing with 48 hours minimum notice. The CLIENT and contractor shall process and prepare documents (as-builts) for dedication of improvements to regulatory authorities. 2. Review of contractor pay request is not included in task. 3. See attached Project Schedule

E10A SHOP DRAWING REVIEWS

CAS will review civil engineering related shop drawings, samples, other data and reports which the selected contractor is required to submit to the City for review, but only for the conformance with design concept of the project and compliance with the information given on the design drawings. Such review shall not extend to means, methods, techniques, sequence or procedures of construction or to safety precautions and programs incident thereto.

CAS'S Lump Sum (LS) Fee for Task E10A shall be\$1,344.00

Note: 1. Shop drawing review by CAS is anticipated to not exceed two (2) reviews of the shop drawings submitted prior to approval. Additional required CAS reviews due to unsatisfactory submittals by Contractor of the required shop drawings will be considered additional services. 2. See attached Project Schedule

E10C ENGINEERING SERVICES DURING CONSTRUCTION

CAS's Engineer of Record will act as the CLIENT's Engineer and visit the site at intervals appropriate to the stages of construction to provide construction observation as necessary for certifications to the appropriate agencies. CAS will conduct construction progress meetings as necessary, review pay request applications, negotiate change orders as necessary, conduct a final inspection with the appropriate agencies to determine if the work is acceptable, and assist the Owner with project close-out procedures.

CAS will prepare the final certification documents for submittal to the appropriate permitting agencies and process record drawings (asbuilts) provided by the contractor or by other means agreed upon by both CAS and CLIENT.

Task E1 0C fee is based on a 6-month (27 week) construction period (Budget 3 Hrs/wk).

CAS'S Fee for Task E10C shall be billed on a time and materials (T&M) at the hourly rates of Consultant's staff assigned to provide services requested by CityNTE \$13,608.00

Note: 1. See attached Project Schedule

E65 GEOTECHNICAL ENGINEERING SERVICES

Geotechnical engineering services will be provided by CAS Subconsultant. Subconsultant agreement is enclosed with this proposal.

Subconsultant Lump Sum (LS) Fee for Task E65 shall be.....\$7,395.00

Note: 1. See attached Project Schedule

E99 MISCELLANEOUS SERVICES

Services under this task will include include miscellaneous reimbursable expenses as authorized by the CLIENT, payment of permit fees as described under Task E61, miscellaneous required plan revisions as requested and authorized by the CLIENT and meetings and coordination items.

CAS'S Fee for Task E99 shall be billed on a time and materials (T&M) at the hourly rates of Consultant's staff assigned to provide services requested by City ...NTE \$12,250.00

SUMMARY OF COSTS

CAS proposes to accomplish the professional engineering services listed for the following total lump sum fee, which is the sum of the fees for each phase and its specific work tasks:

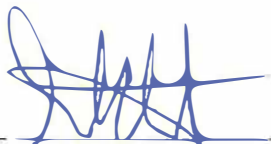
SURVEYING	\$16,060.00
UTILITY LOCATES	\$6,300.00
SOFT DIGS @ \$300/hole	NTE \$6,000.00
ENG. DRAINAGE ANALYSIS	\$7,408.00
PRELIMINARY ENGINEERING DESIGN	\$20,320.00
FINAL ENGINEERING DESIGN	\$20,320.00
PERMITTING SERVICES	\$9,308.00
CONTRACT DOCUMENTS AND ASSISTANCE DURING BIDDING	\$5,376.00
CONSTRUCTION OBSERVATION SERVICES (T&M)	NTE \$18,144.00
SHOP DRAWINGS	\$1,344.00
ENGINEERING SERVICES DURING CONSTRUCTION (T&M)	NTE \$13,608.00
GEOTECHNICAL ENGINEERING SERVICES (SUBCONSULTANT)	\$7,395.00
MISCELLANEOUS SERVICES (T&M)	NTE \$12,250.00
TOTAL	\$143,833.00

TOTAL CAS SERVICES (LS): \$93,831.00
TOTAL CAS SERVICES (T&M): NTE \$44,002.00
TOTAL CAS SERVICES SOFT Digs: NTE \$6000.00
GRAND TOTAL (LS and T&M and SOFT Digs): \$143,833.00

Pompano Beach SW 2ND Street Drainage Improvements
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Thank you for your time and effort in supporting this project and your business is appreciated. Your endorsement of this letter will be understood as CAS's Notice to Proceed with the project. If there are any questions please feel free to contact Frank Vilar at (954) 815-8898 (email: fvilar@craigasmith.com).

AGREED TO AND ACCEPTED BY:



Stephen C. Smith, P.E.
Vice President

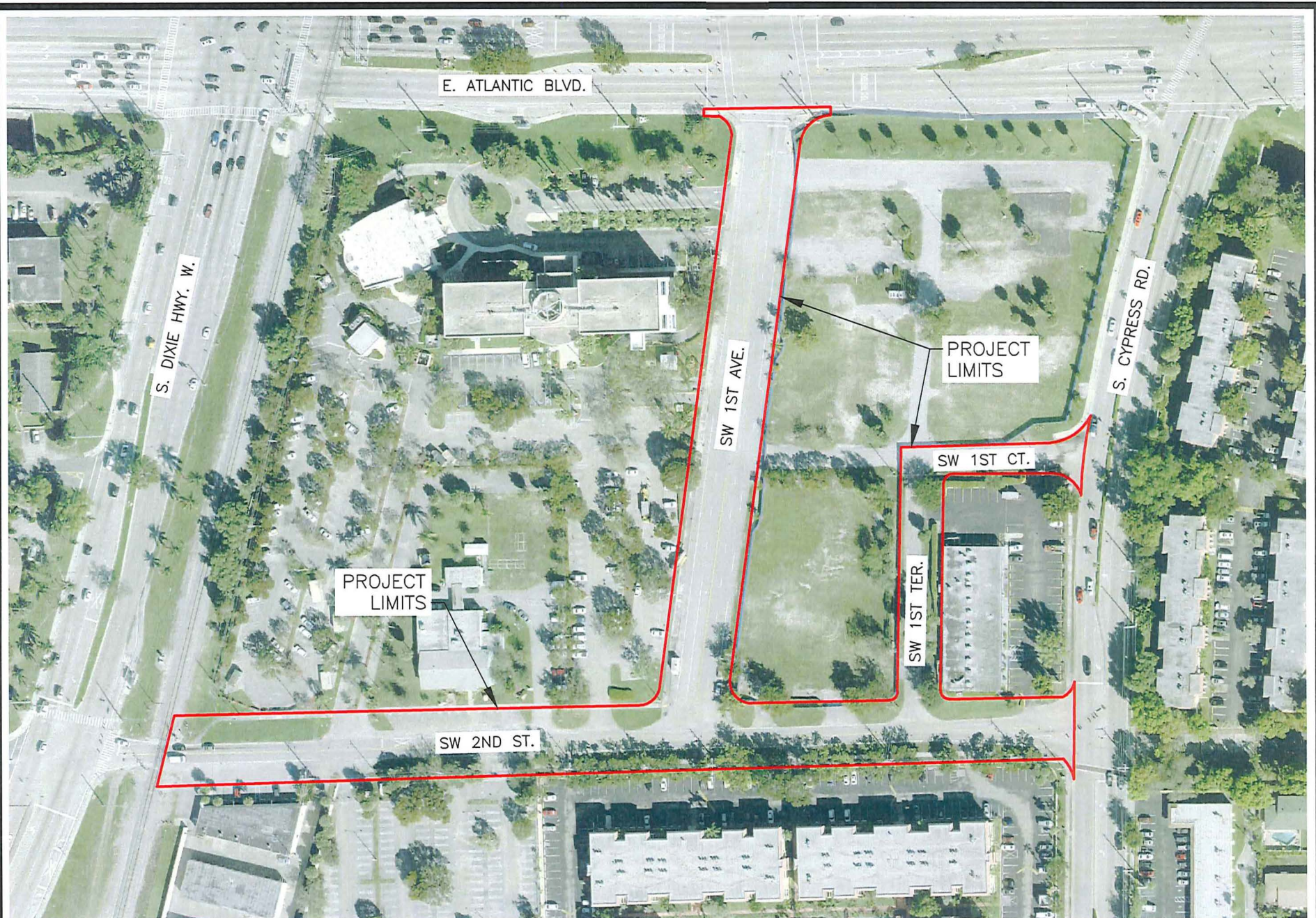
City of Pompano Beach

Signature - Authorized Representative

Printed Name

Date

cc: File



CITY OF POMPANO BEACH SW 2ND
STREET DRAINAGE IMPROVEMENTS

