

Agmt
C

RESOLUTION NO. 2015-201

A RESOLUTION APPROVING AN AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES IN THE AMOUNT OF \$599,956.71 BETWEEN THE CITY OF TAMPA AND CUMBNEY & FAIR, INC. IN CONNECTION WITH CONTRACT NO. 14-D-00037; N. O'BRIEN STREET IMPROVEMENTS FROM W. CYPRESS STREET TO W. SPRUCE STREET; AUTHORIZING THE MAYOR OF THE CITY OF TAMPA TO EXECUTE SAME; PROVIDING AN EFFECTIVE DATE.

WHEREAS, via the competitive selection process in accordance with Florida Statutes Section 287.055, Consultants' Competitive Negotiation Act and consistent with Federal procurement policies, the City of Tampa (CITY) selected Cumbey & Fair, Inc. as CONSULTANT to provide Professional Engineering services in connection with Contract 14-D-00037; N. O'Brien Street Improvements from W. Cypress Street to W. Spruce Street, (PROJECT) as detailed in the Agreement for Consultant Services (AGREEMENT); and

WHEREAS, the CITY desires to enter into an agreement with the CONSULTANT to provide certain Professional Engineering services; and

WHEREAS, it is in the best interest of the City of Tampa to enter into this AGREEMENT.

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TAMPA, FLORIDA, THAT:

Section 1. The Agreement for Consultant Services between the City of Tampa and Cumbey & Fair, Inc. in connection with Contract 14-D-00037; N. O'Brien Street Improvements from W. Cypress Street to W. Spruce Street as detailed in said AGREEMENT, a copy of which is attached hereto and made part hereof, is authorized and approved in its entirety or in substantially similar form.

Section 2. The Mayor of the City of Tampa is authorized and empowered to execute, and the City Clerk to attest and affix the official seal of the City of Tampa to, said AGREEMENT on behalf of the City of Tampa.

Section 3. Award of a contract for Professional Engineering services is provided in the amount of \$599,956.71 for the N. O'Brien Street Improvements Project within the International Plaza DRI Fund.

Section 4. The other proper officers of the City of Tampa are authorized to do all things necessary and proper in order to carry out and make effective the provisions of this Resolution, which shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the City Council of the City of Tampa, Florida, on MAR 05 2015.



Chairman/Chairman Pro-Tem, City Council

ATTEST:



City Clerk/Deputy City Clerk

Approved as to Legal Sufficiency by
Justin R. Vaske, Assistant City Attorney

42015-9

AGREEMENT FOR CONSULTANT SERVICES

THIS AGREEMENT, made and entered into at Tampa, Florida, this ____ day of _____, 20__, by and between the CITY OF TAMPA, a municipal corporation of the State of Florida, hereinafter referred to as "CITY", the address of which is 315 East Kennedy Boulevard, Tampa, Florida 33602, and Cumbey & Fair, Inc., a corporation chartered and existing under the laws of the State of Florida, hereinafter referred to as "CONSULTANT", the address of which is 24463 Enterprise Road, Clearwater, FL, 33763.

WITNESSETH:

WHEREAS, the CITY desires to engage the CONSULTANT to perform certain Professional Engineering services pertinent to such work which shall be referred to as 14-D-00037; N. O'Brien Street Improvements from W. Cypress Street to W. Spruce Street "PROJECT" in accordance with this Agreement; and

WHEREAS, the CONSULTANT desires to provide such Professional Engineering services in accordance with this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, promises, representations and considerations to be kept, performed and paid, the parties hereto agree for themselves, their successors and assigns, as follows:

I. GENERAL SCOPE OF THIS AGREEMENT

A. The relationship of the CONSULTANT to the CITY will be that of an independent Professional Engineering Consultant for the PROJECT; and the CONSULTANT shall provide the professional and technical services required under this Agreement in accordance with acceptable architectural/consultant practices and ethical standards.

B. The scope of services to be provided is indicated in **Exhibit A**.

II. DATA AND SERVICES TO BE PROVIDED BY THE CITY

The CITY shall provide:

A. Available plans and specifications of existing construction.

III. PERIOD OF SERVICE

A. The CONSULTANT shall begin work promptly after receipt of a fully executed copy of the Agreement and a Notice to Proceed. The Agreement shall remain in force until the completion of all construction for the Project.

B. The CONSULTANT's services called for under this Agreement shall be completed provided that, if the CONSULTANT's services are delayed for reasons beyond the CONSULTANT's control, the time of performance shall be adjusted appropriately.

IV. GENERAL CONSIDERATIONS

A. All original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans that result from the CONSULTANT's services under this Agreement shall become and

remain the property of the CITY upon receipt of payment by the CONSULTANT from the CITY for services rendered in connection with the preparation of said sketches, tracings, etc. Where such documents are required to be filed with governmental agencies, the CONSULTANT will furnish copies to the CITY upon request.

B. The CITY acknowledges that the materials cited in Paragraph IV. A. above, which are provided by the CONSULTANT, are not intended for use in connection with any project or purpose other than the project and purpose for which such materials were prepared without prior written consent and adaptation by the CONSULTANT shall be at the CITY's sole risk, and the CONSULTANT shall have no responsibility or liability therefor.

C. Any use by the CITY of such materials in connection with a project or purpose other than that for which such materials are prepared without prior written consent and adaptation by the CONSULTANT shall be at the CITY's sole risk, and the CONSULTANT shall have no responsibility or liability therefore.

V. COMPENSATION

The CITY shall compensate the CONSULTANT for the services performed with this Agreement a lump sum (by task) of \$599,956.71 to be billed in accordance with **Exhibit B**.

VI. PAYMENT

Payments shall be made upon presentation of the CONSULTANT's approved invoice.

VII. RECORDS

Records for Personnel Expenses shall be kept on a generally recognized accounting basis and shall be available to the CITY or its authorized representative at mutually convenient times.

With respect to all matters covered by this Agreement, records will be made available for examination, audit, inspection, or copying purposes at any time during normal business hours at a location within Hillsborough County, Florida as often as the CITY, HUD, representatives of the Comptroller General of the United States or other federal agency may reasonably require. CONSULTANT will permit same to be examined and excerpts or transcriptions made or duplicated from such records, and audits made of all contracts, invoices, materials, records of personnel and of employment and other data relating to all matters covered by this Agreement. The CITY's right of inspection and audit shall obtain likewise with reference to any audits made by any other agency, whether local, state or federal. CONSULTANT shall retain all records and supporting documentation applicable to this Agreement for five (5) years from the date of submission of the annual performance report to HUD. If any litigation, claim, negotiation, audit, monitoring, inspection or other action has been started before the expiration of the required record retention period, records must be retained until completion of the action and resolution of all issues which arise from it, or the end of the required period, whichever is later.

VIII. PERSONNEL

The CONSULTANT represents that it has or will secure, at its own expense, all personnel required in performing the services under this Agreement. All personnel engaged in the work shall be fully qualified and shall be authorized or permitted under State and local law to perform such services. No person who is serving sentence in a penal or correctional institution shall be employed for work under this Agreement. The CONSULTANT further certifies that all of its employees assigned to serve the CITY have such knowledge and experience as required to perform the duties assigned to them. Any employee of the CONSULTANT who, in the opinion of the CITY, is incompetent, or whose conduct becomes detrimental to the work, shall immediately be removed from association with the certain professional engineering services under this Agreement.

IX. SUSPENSION, CANCELLATION OR ABANDONMENT

In the event the PROJECT is suspended, cancelled or abandoned, the CONSULTANT shall be given fifteen (15) days prior written notice of such action and shall be compensated for the professional services provided and reimbursable expenses incurred up to the date of suspension, cancellation or abandonment in an amount mutually agreed to by the CITY and CONSULTANT and supported by back-up documentation.

Upon suspension, cancellation or abandonment hereof, CONSULTANT shall immediately cease work hereunder and shall be compensated for its services rendered up to the time of such cancellation or termination on a quantum meruit basis; and the CITY shall have no further financial obligation to CONSULTANT.

In the event the PROJECT is suspended, cancelled or abandoned, the CONSULTANT shall deliver all original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans that result from the CONSULTANT's services under this Agreement. The aforementioned original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans shall be without restriction on future use by the CITY.

X. TERMINATION

A. Termination for Cause.

In the event that the CONSULTANT shall for any reason or through any cause not have completed performance within the time fixed for performance under this Agreement; or any representation or warranty made under Article XII of this Agreement shall prove to be untrue in any material respect; or the CONSULTANT shall otherwise be in default under this Agreement; or the CONSULTANT has subcontracted, assigned, delegated, transferred its rights, obligations or interests under this Agreement without the CITY's consent or approval; or the CONSULTANT has filed bankruptcy, become insolvent or made an assignment for the benefit of creditors, or a receiver, or similar officer has been appointed to take charge of all or part of CONSULTANT assets; or the CONSULTANT disclosed CITY confidential information, procedures or activities; or the CONSULTANT fails to aggressively, adequately, timely and appropriately perform the services required by this Agreement to the satisfaction of the CITY, or other similar cause, the City may terminate this Agreement for cause.

Then the CITY may provide five (5) days written notice that the conduct of the CONSULTANT is such that the interests of the CITY are likely to be impaired or prejudiced, stating the facts upon which the opinion is based. Then the CITY may upon fifteen (15) days written notice, and at the end of the (15) days terminate this Agreement for cause (herein "Termination Date"). Upon that termination for cause, the CONSULTANT shall be entitled to compensation for services properly and satisfactorily performed through the date of such termination for cause. However, no allowance shall be included for termination expenses. In the event of such termination for cause, the CONSULTANT shall be entitled to receive just and equitable compensation for any satisfactory work performed as of the Termination Date; however, CONSULTANT shall not be compensated for any anticipatory profits that have not been earned as of the date of the Termination Date. All work accomplished by CONSULTANT prior to the Termination Date shall be documented. In the event the project is terminated for cause pursuant to this Article, the CONSULTANT shall deliver all original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans that result from the CONSULTANT's services under this Agreement. The aforementioned original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans shall be without restriction on future use by the CITY. Notwithstanding the above or any section herein to the contrary, CONSULTANT shall not be relieved of liability to the CITY for damages sustained by the CITY by virtue of any breach of the Contract by CONSULTANT.

B. Termination for Convenience.

The CITY may reduce the scope of work or terminate work under this Agreement or amendment to this Agreement without cause; in the event of such scope reduction or termination other than for cause, the CITY shall

compensate the CONSULTANT for services properly performed through the date of such reduction in scope or termination, which date shall be fixed in written notice from the CITY and which date shall be not sooner than fifteen (15) days after notice. Notwithstanding such termination or reduction in scope, the CITY shall be entitled to receive from the CONSULTANT upon request any and all information related to the PROJECT and the CITY shall preserve and protect all such information and assure ready access thereto by the CONSULTANT in connection with resolution of the amount due to the Firm. The CITY, at its own discretion, shall be entitled to direct the CONSULTANT to terminate any or all the CONSULTANT's subcontracts or subconsulting agreements. In the event the project is terminated for convenience pursuant to this Article, the CONSULTANT shall deliver all original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans that result from the CONSULTANT's services under this Agreement. The aforementioned original sketches, tracings, drawings, computations, details, design calculations, specifications and other documents and plans shall be without restriction on future use by the CITY.

XI. INSURANCE

The CONSULTANT, at its own cost and expense, shall effect and maintain at all times during the life of this Agreement insurance, in accordance with that indicated in **Exhibit C**.

XII. INTERESTS OF MEMBERS OF THE CITY

No member of the governing body of the CITY and no other officer, employee, or agent of the CITY who exercise any functions or responsibilities in connection with the carrying out of the PROJECT to which this Agreement pertains shall have any personal interest, direct or indirect, in this Agreement.

XIII. INTEREST OF THE CONSULTANT

The CONSULTANT covenants that it presently has no interest and shall not acquire any interest, direct or indirect, in any project to which this Agreement pertains or any other interest which would conflict in any manner or degree with its performance of any contracted service hereunder. The CONSULTANT further covenants that in the performance of this Agreement no person having such interest shall be employed.

The CONSULTANT warrants that he or she has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Agreement and that he or she has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the CONSULTANT any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement.

The CONSULTANT shall disclose any clients that may either conflict with or affect its independent judgment when performing any work for the City of Tampa covered by this Agreement. Failure of the CONSULTANT to disclose the above professional conflict of interest may result in termination of this Agreement pursuant to Article X of this Agreement and may require the return of all payments, if any, made to the CONSULTANT from the City. If, in its sole discretion the CITY of Tampa determines that a professional conflict of interest is deemed to exist, the CONSULTANT shall be disqualified from participating in the proposed Project.

XIV. COMPLIANCE WITH LAWS

A. The CONSULTANT shall comply with the applicable requirements of State laws and all Codes and Ordinances of the City of Tampa as amended from time to time.

B. If the PROJECT involves E.P.A. Grant eligible work, the CITY and the CONSULTANT agree that the provisions of 40 CFR, Part 35, Appendix C-1, shall become a part of this Agreement and that such provisions shall supersede any conflicting provisions of this Agreement for work performed under said Agreement.

C. If the PROJECT involves work under other Federal or State Grantors or Approving Agencies, the CITY and the CONSULTANT shall review and approve the applicable required provisions or any other supplemental provisions as may be included in the Agreement.

D. Truth-In-Negotiation Certification: The CONSULTANT certifies that the wage rates and other factual unit costs supporting the compensation are accurate, complete, and current at the time of the execution of the Agreement of which this Certificate is a part. The original price and any additions thereto shall be adjusted to exclude any significant sums by which the City determines the Agreement amount was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs and that such original Agreement adjustments shall be made within one (1) year following the end of the Agreement.

XV. ASSIGNABILITY

The CONSULTANT shall not assign or transfer any interest in this Agreement without consent from the CITY; provided, however, that the claim for money due or to become due the CONSULTANT from the CITY under this Agreement may be assigned to a bank or other financial institution or to a Trustee in Bankruptcy. Notice of any such assignment shall be furnished promptly to the CITY.

XVI. EQUAL EMPLOYMENT

During the performance of this Agreement or any related Work Order, the CONSULTANT shall:

A. Not discriminate against any employee or applicant for employment because of race, color, religion, age, sex, handicap, or national origin. The CONSULTANT shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, age, sex, handicap, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The CONSULTANT shall post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

B. In all solicitations or advertisements for employees placed by or on behalf of the CONSULTANT, it must state that all qualified applicants will receive considerations for employment without regard to race, color, religion, age, sex, handicap, or national origin.

XVII. EQUAL BUSINESS OPPORTUNITY PROGRAM

A. The CONSULTANT shall demonstrate good faith effort toward the utilization of City of Certified Women/Minority Business Enterprise (W/MBE) and Small Local Business Enterprise (SLBE) subconsultants or suppliers.

B. The CITY shall make available a list of Certified W/MBEs and SLBEs.

C. The CONSULTANT shall report to the CITY its subcontractors/subconsultants/suppliers solicited or utilized (**Exhibit D**).

D. At the time of the submission of invoices, the CONSULTANT shall submit to the CITY a report (**Exhibit D**) of all subcontractors, subconsultants or suppliers utilized with their final contract amounts and any other reports or forms as may be required by the CITY.

XVIII. CITY CODE OF ETHICS

In connection with this Agreement, the CONSULTANT hereby covenants and agrees that it shall comply with all applicable governmental laws, statutes, rules and regulations including, without limitation, the City of Tampa's Code of Ethics. Pursuant to Section 2-522 of the City of Tampa Code, the CONSULTANT acknowledges that if it fails to comply with the City of Tampa's Code of Ethics, such a failure shall render this Agreement voidable by the CITY and subject the CONSULTANT to debarment from any future CITY contracts or agreements.

XIX. NEGATION OF AGENT OR EMPLOYEE STATUS

CONSULTANT shall perform this Agreement as an independent consultant and nothing contained herein shall in any way be construed to constitute CONSULTANT or the assistants of CONSULTANT to be representative, agent, subagent, or employee of CITY or any political subdivision of the State of Florida. CONSULTANT certifies CONSULTANT's understanding that CITY is not required to withhold any federal income tax, social security tax, state and local tax, to secure worker's compensation insurance or employer's liability insurance of any kind or to take any other action with respect to the insurance or taxes of CONSULTANT and assistants of CONSULTANT.

In no event and under no circumstances shall any provision of this Agreement make CITY or any political subdivision of the State of Florida liable to any person or entity that contracts with or that provides goods or services to CONSULTANT in connection with the Services the CONSULTANT has agreed to perform hereunder or otherwise, or for any debts or claims of any nature accruing to any person or entity against CONSULTANT; and there is no contractual relationship, either express or implied, between CITY or any political subdivision of the State of Florida any person or any political subdivision of the State of Florida any person or entity supplying any work, labor, services, goods or materials to CONSULTANT as a result of the provisions of the Services provided by Consultant hereunder or otherwise.

XX. SEVERABILITY

If any item or provision to this Agreement is held invalid or unenforceable by a court of competent jurisdiction, the remainder of the Agreement shall not be affected and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

XXI. CHOICE OF LAW

The laws of the State of Florida (without giving effect to its conflicts of law principles) govern all matters arising out of or relating to this Agreement, including, without limitation, its interpretation, construction, performance, and enforcement.

XXII. DESIGNATION OF FORUM

Any party bringing a legal action or proceeding against any other part arising out of or relating to this Agreement may bring the legal action or proceeding in the United States District Court for the Middle District of Florida, Tampa Division or in any court of the State of Florida sitting in Tampa.

XXIII. AUTHORIZATION

Each party represents to the other that such has authority under all applicable laws to enter into an agreement containing each covenants and provisions as are contained herein, that all of the procedural requirements imposed by law upon each party for the approval and authorization of this Agreement have been properly completed, and that the persons who have executed the Agreement on behalf of each party are authorized and empowered to execute said Agreement.

XXIV. ENTIRE AGREEMENT

This Agreement sets forth the entire agreement between the parties and there are no promises or understandings other than those stated herein. Exhibits to this Agreement shall be deemed to be incorporated by reference as though set forth in full herein. In the event of a conflict or inconsistency between this Agreement and the provisions in the incorporated Exhibits, and unless otherwise specified herein, then this Agreement will prevail.

XXV. INDEMNIFICATION

The CONSULTANT shall indemnify and hold harmless the CITY, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the CONSULTANT and other persons employed or utilized by the CONSULTANT in the performance of the Agreement.

XXVI. ESTOPPEL/WAIVER

No waiver of any provisions of this Agreement shall be effective unless it is in writing, signed by the party against whom it is asserted and any such waiver shall only be applicable to the specific instance in which it relates and shall not be deemed to be a continuing waiver.

The failure of the CITY to enforce any term or condition of this Agreement shall not constitute a waiver or estoppel of any subsequent violation of this Agreement.

XXVII. AUDIT REQUIREMENTS.

In the event, that during the period of this Agreement, CONSULTANT expends more than \$500,000.00 in federal funds in an operating year from this and other federal grants, CONSULTANT shall, at its own cost and expense, cause to be carried out an independent audit. The audit shall be completed and a copy furnished to the CITY, within the earlier of thirty (30) calendar days after receipt of the auditor's report(s) or nine (9) months after the end of the audit period, unless a longer period is agreed to in advance by the CITY. For purposes of this Agreement, an operating and/or audit year is the equivalent to the CONSULTANT's fiscal year. The determination of when Grant Funds are expended is based on when the activity related to the expenditure occurs.

The audit shall be conducted in compliance with the Office of Management and Budget Circular No. A-133, as amended and 24 CFR Parts 84 and 85, as applicable, which are made a part of this Agreement by reference thereto. In the event the audit shows that the entire funds disbursed hereunder, or any portion thereof, were not expended in accordance with the conditions of this Agreement, CONSULTANT shall be held liable for reimbursement to the City of all funds not expended in accordance with these applicable regulations and Agreement provisions within thirty (30) calendar days after the CITY has notified CONSULTANT of such non-compliance. Said reimbursement shall not preclude the CITY from taking any other action as provided herein.

If expenditure does not exceed \$500,000.00 during an operating year, CONSULTANT shall provide the CITY with its annual financial statement within ninety (90) days of the end of its operating year. Said financial statement shall be prepared by an actively licensed certified public accountant.

XXVIII. DEFAULT

In accordance with 24 CFR 85.43, a default shall consist of any use of Grant Funds for a purpose other than as authorized by this Agreement, noncompliance with any provision in all Articles herein, any material breach of the Agreement, failure to comply with the audit requirements as provided herein, or failure to expend Grant Funds in a timely or proper manner.

XXIX. BUDGET APPROPRIATIONS

The CITY is subject to Section 166.241, Florida Statutes, and is not authorized to contract for expenditures in any fiscal year except in pursuance of budgeted appropriations. With respect to this Agreement, the CITY has budgeted and appropriated sufficient monies to fund the CITY's obligations under this Agreement; however, all funding under this Agreement for subsequent years is subject to the availability of funds. The obligations of the CITY hereunder shall not constitute a general indebtedness of the CITY within the meaning of the Florida Constitution.

IN WITNESS WHEREOF, the CITY has caused these presents to be executed in its name by its Mayor, and attested and its official Seal to be hereunto affixed by its City Clerk, and the CONSULTANT has hereunto set its hand and Seal in TRIPLICATE, the day and year first written above.

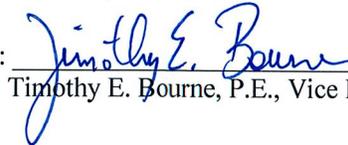
ATTEST:

By:


Corporate Secretary (SEAL)

CUMBEY & FAIR, INC.

By:


Timothy E. Bourne, P.E., Vice President

ATTEST:

City Clerk/Deputy City Clerk (SEAL)

CITY OF TAMPA

By:

Bob Buckhorn, Mayor

APPROVED AS TO LEGAL SUFFICIENCY

Justin R. Vaske, Assistant City Attorney

The execution of this document was authorized by
Resolution No. 2015-____



CUMBNEY & FAIR, INC.

2463 Enterprise Road, Clearwater, Florida 33762
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax www.cumbeyfair.com

February 2, 2015

Mr. Ben Money, P.E.
Project Manager
City of Tampa Public Works
Transportation Division
306 E. Jackson St., 4th Floor East
Tampa, FL 33602

RE: O'Brien Street Improvements Design – 14-D-00037

Dear Ben:

Cumbey & Fair, Inc. is pleased to provide you with one (1) copy of the final SCOPE OF SERVICES (Exhibit A) and FEE PROPOSAL (Exhibit B) to provide professional engineering services in support of the O'Brien Street improvements Design Project for the City of Tampa. All services identified under the Scope of Services shall be provided for a lump sum fee not to exceed \$599,956.71.

Should you have any questions with regards to our proposal and/or fees, please do not hesitate to give me a call.

Sincerely,

Matthew J. Fabrizio, PE
Senior Project Manager

MJF/sc

Attachments



CUMBEY & FAIR, INC.

2463 Enterprise Road, Clearwater, Florida 33762
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax www.cumbeyfair.com

February 2, 2015

EXHIBIT A



SCOPE OF SERVICES

FOR

RFQ 14-D-00037 NORTH O'BRIEN STREET ROADWAY
IMPROVEMENTS FROM W. CYPRESS STREET TO W. SPRUCE
STREET

CITY OF TAMPA

Table of Contents

- 1 PURPOSE8**
- 2 PROJECT DESCRIPTION8**
 - 2.1 *Project General and Roadway (Activities 3, 4, and 5)..... 8*
 - 2.2 *Drainage (Activity 6)..... 9*
 - 2.3 *Utilities Coordination (Activity 7)..... 9*
 - 2.4 *Environmental Permits, Compliances, and Clearances (Activity 8) 10*
 - 2.5 *Structures (Activities 9 – 18)..... 10*
 - 2.6 *Signing and Pavement Markings (Activities 19 & 20)..... 10*
 - 2.7 *Signalization (Activities 21 & 22)..... 11*
 - 2.8 *Lighting (Activities 23 & 24) 11*
 - 2.9 *Survey (Activity 27)..... 11*
 - 2.10 *Mapping (Activity 29)..... 12*
 - 2.13 *Project Schedule 12*
 - 2.14 *Submittals..... 13*
 - 2.15 *Provisions for Work 13*
 - 2.21 *Services to be Performed by the CITY When appropriate and /or available, the CITY will provide project data including:..... 17*
- 3 PROJECT COMMON AND PROJECT GENERAL TASKS19**
 - Project Common Tasks..... 19*
 - Project General Tasks 21*
 - 3.1 *Public Involvement 21*
 - 3.1.1 *Community Awareness Plan 21*
 - 3.1.2 *Notifications 22*
 - 3.1.3 *Public Meeting Preparations 22*
 - 3.1.4 *Public Meeting Attendance and Follow-up..... 22*
 - 3.1.5 *Other Agency Meetings 22*
 - 3.2 *Specifications Package Preparation 23*
 - 3.3 *Contract Maintenance..... 23*
 - 3.4 *Prime Consultant Project Manager Meetings 23*
 - 3.5 *Post Design Services 23*
 - 3.6 *Railroad, Transit and/or Airport Coordination 23*
 - 3.7 *Other Project General Tasks 24*
- 4 ROADWAY ANALYSIS25**
 - 4.1 *Typical Section Package 25*
 - 4.2 *Pavement Design Package 25*
 - 4.3 *Horizontal/Vertical Master Design Files 25*
 - 4.4 *Cross Section Design Files 25*
 - 4.5 *Traffic Control Analysis..... 25*
 - 4.7 *Master TCP Design Files 26*
 - 4.8 *Design Variations and Exceptions 26*
 - 4.9 *Design Report 26*
 - 4.10 *Quantities 27*
 - 4.11 *Cost Estimate..... 27*
 - 4.12 *Technical Special Provisions 27*
 - 4.13 *Other Roadway Analysis..... 27*
 - 4.14 *Field Reviews 27*

4.15	Technical Meetings.....	27
5	ROADWAY PLANS	28
5.1	Key Sheet	28
5.2	Typical Section Sheets.....	28
5.3	General Notes/Pay Item Notes.....	28
5.4	Plan/Profile Sheet.....	28
5.5	Special Profile-Curb Return profiles.....	28
5.6	Special Details.....	28
5.7	Drainage Structure Sheet (Per Structure).....	28
5.8	Miscellaneous Drainage Detail Sheets	28
5.9	Retention/Detention Ponds Detail Sheet.....	28
5.10	Roadway Soil Survey Sheet.....	28
5.11	Cross Sections.....	28
5.12	Temporary Traffic Control Plan Sheets.....	28
5.13	Temporary Traffic Control Detail Sheets	28
5.14	Utility Adjustment Sheets.....	28
5.15	Erosion Control Plan	28
5.16	SWPPP	28
5.17	Project Network Control Sheet	28
5.18	Environmental Detail Sheets	29
5.19	Utility Verification Sheet (SUE Data)	29
6	DRAINAGE ANALYSIS.....	30
6.1	Determine Base Clearance Water Elevation.....	30
6.2	Pond Siting Analysis and Report.....	30
6.3	Design of Cross Drains.....	30
6.4	Design of Ditches.....	30
6.5	Design of Stormwater Management Facility (Offsite or Infield Pond)	31
6.6	Design of Storm Drains.....	31
6.7	Drainage Design Documentation Report.....	31
6.8	Temporary Drainage Analysis.....	31
6.9	Cost Estimate.....	31
6.10	Technical Special Provisions	31
6.11	Other Drainage Analysis.....	31
6.12	Field Reviews.....	31
6.13	Technical Meetings.....	31
7	UTILITIES	32
7.1	Identify Existing UAO(s).....	32
7.2	Make Utility Contacts.....	32
7.3	Individual/Field Meetings.....	32
7.4	Collect and Review Plans and Data from UAO(s)	33
7.5	Subordination of Easements Coordination.....	33
7.6	Utility Design Meeting.....	33
7.7	Review Utility Markups & Work Schedules and Processing of Schedules & Agreements.....	34
7.8	Utility Coordination/Follow-up.....	34
7.9	Utility Constructability Review	34
7.10	Additional Utility Services.....	34
7.11	Contract Plans to UAO(s).....	35
7.12	Certification/Close-Out.....	35

8	ENVIRONMENTAL PERMITS, COMPLIANCE AND CLEARANCES.....	36
8.1	<i>Preliminary Project Research.....</i>	36
8.2	<i>Complete Permit Involvement Form.....</i>	36
8.3	<i>Field Work.....</i>	36
8.4	<i>Agency Verification of Wetland Data.....</i>	37
8.5	<i>Complete and Submit All Required Permit Applications.....</i>	37
8.6	<i>Prepare Dredge and Fill Sketches (as needed).....</i>	38
8.7	<i>Prepare USCG Permit Sketches (as needed).....</i>	38
8.8	<i>Prepare Water Management District Right of Way Occupancy Sketches.....</i>	38
8.9	<i>Prepare Coastal Construction Control Line (CCCL) Permit Application.....</i>	38
8.10	<i>Prepare Tree Permit Information.....</i>	38
8.11	<i>Mitigation Design.....</i>	38
8.12	<i>Mitigation Coordination and Meetings.....</i>	39
8.13	<i>Other Environmental Permits.....</i>	39
8.14	<i>Contamination Impact Analysis.....</i>	40
8.15	<i>Asbestos Survey.....</i>	40
8.16	<i>Technical Meetings.....</i>	40
9	STRUCTURES - SUMMARY AND MISCELLANEOUS TASKS AND DRAWINGS	41
9.1	<i>Key Sheet and Index of Drawings.....</i>	41
9.2	<i>Project Layout.....</i>	41
9.3	<i>General Notes and Bid Item Notes.....</i>	41
9.4	<i>Miscellaneous Common Details.....</i>	41
9.5	<i>Incorporate Report of Core Borings.....</i>	41
9.6	<i>Assemble Plan Summary Boxes and Quantities.....</i>	41
9.7	<i>Cost Estimate.....</i>	41
9.8	<i>Technical Special Provisions.....</i>	41
9.9	<i>Field Reviews.....</i>	41
9.10	<i>Technical Meetings.....</i>	42
10	STRUCTURES - MISCELLANEOUS	43
10.1	<i>Mast Arms.....</i>	43
11	SIGNING AND PAVEMENT MARKING ANALYSIS	44
11.1	<i>Traffic Data Analysis.....</i>	44
11.2	<i>Reference and Master Design File.....</i>	44
11.3	<i>Sign Panel Design Analysis.....</i>	44
11.4	<i>Quantities.....</i>	44
11.5	<i>Cost Estimate.....</i>	44
11.6	<i>Field Reviews.....</i>	44
11.7	<i>Technical Meetings.....</i>	44
12	SIGNING AND PAVEMENT MARKING PLANS	45
12.1	<i>Key Sheet.....</i>	45
12.2	<i>Tabulation of Quantities.....</i>	45
12.3	<i>General Notes/Pay Item Notes.....</i>	45
12.4	<i>Plan Sheet.....</i>	45
12.5	<i>Special Service Point Details.....</i>	45
12.6	<i>Special Details.....</i>	45

13	SIGNALIZATION ANALYSIS.....	46
13.1	Traffic Data Collection	46
13.2	Traffic Data Analysis.....	46
13.3	Systems Timings	46
13.4	Reference and Master Signalization Design File.....	46
13.5	Reference and Master Interconnect Communication Design File.....	46
13.6	Overhead Street Name Sign Design.....	46
13.7	Pole Elevation Analysis	46
13.8	Quantities	47
13.9	Cost Estimate.....	47
13.10	Technical Special Provisions	47
13.11	Field Reviews	47
13.12	Technical Meetings.....	47
14	SIGNALIZATION PLANS.....	48
14.1	Key Sheet	48
14.2	Tabulation of Quantities.....	48
14.3	General Notes/Pay Item Notes	48
14.4	Plan Sheet	48
14.5	Interconnect Plans	48
14.6	Guide Sign Worksheet	48
14.7	Special Details.....	48
14.8	Special Service Point Details	48
14.9	Mast Arm/Monotube Tabulation Sheet	48
14.10	Strain Pole Schedule	48
15	LIGHTING ANALYSIS.....	49
15.1	Technical Meetings-Coordination with TECO with the design of lighting.	49
16	SURVEY	50
16.1	Horizontal Project Control (HPC)	50
16.2	Vertical Project Control (VPC).....	50
16.3	Alignment and/or Existing Right of Way (R/W) Lines.....	50
16.4	Reference Points.....	51
16.5	Topography/Digital Terrain Model (DTM) (3D).....	51
16.6	Planimetric (2D).....	51
16.7	Roadway Cross Sections/Profiles.....	51
16.8	Side Street Surveys.....	51
16.9	Underground Utilities	51
16.10	Outfall Survey	52
16.11	Drainage Survey	52
16.12	Pond Site Survey	52
16.13	Jurisdiction Line Survey.....	52
16.14	Geotechnical Support	52
16.15	Sectional/Grant Survey.....	52
16.16	Subdivision Location	53
16.17	Right of Way Staking, Parcel / Right of Way Line.....	53
16.18	Line Cutting.....	53
16.19	Work Zone Safety	53
16.20	Miscellaneous Surveys.....	53
16.21	Supplemental Surveys.....	53

16.22	Document Research.....	53
16.23	Field Review.....	53
16.24	Technical Meetings.....	54
16.25	Quality Assurance/Quality Control (QA/QC)	54
16.26	Supervision	54
16.27	Coordination.....	54

17 MAPPING.....55

17.1	Alignment.....	55
17.2	Section and 1/4 Section Lines.....	55
17.3	Subdivisions / Property Lines.....	55
17.4	Existing Right of Way.....	55
17.5	Topography	55
17.6	Parent Tract Properties and Existing Easements.....	55
17.7	Proposed Right of Way Requirements.....	55
17.8	Limits of Construction.....	55
17.9	Jurisdictional/Agency Lines.....	56
17.10	Control Survey Cover Sheet.....	56
17.11	Control Survey Key Sheet.....	56
17.12	Control Survey Detail Sheet.....	56
17.13	Right of Way Map Cover Sheet.....	56
17.14	Right of Way Map Key Sheet.....	56
17.15	Right of Way Map Detail Sheet.....	56
17.16	Maintenance Map Cover Sheet.....	56
17.17	Maintenance Map Key Sheet.....	56
17.18	Maintenance Map Detail Sheet.....	56
17.19	Reference Point Sheet.....	56
17.20	Project Network Control Sheet.....	56
17.21	Table of Ownerships Sheet.....	57
17.22	Parcel Sketches.....	57
17.23	TIITF Sketches.....	57
17.24	Other Specific Purpose Survey(s).....	57
17.25	Boundary Survey(s) Map.....	57
17.26	Right of Way Monumentation Map.....	57
17.27	Title Search Map.....	57
17.28	Title Search Report.....	57
17.29	Legal Descriptions.....	57
17.30	Final Map/Plans Comparison.....	57
17.31	Field Reviews.....	57
17.32	Technical Meetings.....	57
17.33	Quality Assurance/Quality Control.....	57
17.34	Supervision.....	57
17.35	Coordination.....	57
17.36	Supplemental Mapping.....	58

18 GEOTECHNICAL.....59

18.1	Document Collection and Review.....	59
18.2	Develop Detailed Boring Location Plan.....	60
18.3	Stake Borings/Utility Clearance.....	60
18.4	Coordinate and Develop MOT Plans for Field Investigation.....	60
18.5	Drilling Access Permits.....	60
18.6	Property Clearances.....	60

18.7	<i>LBR / Resilient Modulus Sampling</i>	61
18.8	<i>Coordination of Field Work</i>	61
18.9	<i>Soil and Rock Classification - Roadway</i>	61
18.10	<i>Design LBR</i>	61
18.11	<i>Laboratory Data</i>	61
18.12	<i>Seasonal High Water Table</i>	61
18.13	<i>Parameters for Water Retention Areas</i>	61
18.14	<i>Delineate Limits of Unsuitable Material</i>	61
18.15	<i>Electronic Files for Cross-Sections</i>	62
18.16	<i>Embankment Settlement and Stability</i>	62
18.17	<i>Geotechnical Recommendations</i>	62
18.18	<i>Pavement Condition Survey and Pavement Evaluation Report</i>	62
18.19	<i>Preliminary Roadway Report</i>	62
18.20	<i>Final Report</i>	63
18.21	<i>Auger Boring Drafting</i>	63
18.22	<i>SPT Boring Drafting</i>	63
18.23	<i>Develop Detailed Boring Location Plan</i>	64
18.24	<i>Stake Borings/Utility Clearance</i>	64
18.25	<i>Coordinate and Develop MOT Plans for Field Investigation</i>	64
18.26	<i>Drilling Access Permits</i>	64
18.27	<i>Property Clearances</i>	65
18.28	<i>Collection of Corrosion Samples</i>	65
18.29	<i>Coordination of Field Work</i>	65
18.30	<i>Soil and Rock Classification - Structures</i>	65
18.31	<i>Tabulation of Laboratory Data</i>	65
18.32	<i>Estimate Design Groundwater Level for Structures</i>	65
18.33	<i>Walls</i>	65
18.34	<i>Sheet Pile Wall Analysis (Optional)</i>	66
18.35	<i>Design Soil Parameters for Signs, Signals, and Strain Poles and Geotechnical Recommendations</i>	66
18.36	<i>Final Reports - Signs, Signals, Box Culvert, Walls, and High Mast Lights</i>	66
18.37	<i>SPT Boring Drafting</i>	67
18.38	<i>Other Geotechnical</i>	67
18.39	<i>Technical Special Provisions</i>	67
18.40	<i>Field Reviews</i>	68
18.41	<i>Technical Meetings</i>	68
18.42	<i>Quality Assurance/Quality Control</i>	68
18.43	<i>Supervision</i>	68
18.44	<i>Coordination</i>	68
18.45	<i>Optional Preliminary Contamination Assessment</i>	68

19 PROJECT REQUIREMENTS69

19.1	<i>Liaison Office</i>	69
19.2	<i>Key Personnel</i>	69
19.3	<i>Progress Reporting</i>	69
19.4	<i>Correspondence</i>	69
19.5	<i>Professional Endorsement</i>	70
19.6	<i>Computer Automation</i>	70
19.7	<i>Coordination with Other Consultants</i>	70
19.8	<i>Optional Services</i>	70

20 INVOICING LIMITS71



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES

1 PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the CONSULTANT and the CITY in connection with the design and preparation of a complete set of construction contract documents and incidental engineering services, as necessary, for improvements to the transportation facility described herein.

2 PROJECT DESCRIPTION

The CONSULTANT shall investigate the status of the project and become familiar with concepts and commitments (typical sections, alignments, etc.) developed from prior studies and/or activities.

The project (North O'Brien Street Roadway Improvements from W. Cypress Street to W. Spruce Street), is planned to be constructed in two phases; therefore, will require two separate sets of construction documents.

The first Phase, from Laurel Street to Spruce Street consists of widening the 2-lane rural roadway to a 4-lane urban roadway with a two-way left-turn center lane. The roadway transition from 2 lanes to 4 lanes will occur south of Laurel Street.

The second Phase, from Cypress Street to Laurel Street consists of widening the 2-lane rural roadway to a 4-lane urban roadway with a two-way left-turn center lane.

2.1 Project General and Roadway (Activities 3, 4, and 5)

Public Involvement: There will be one (1) Public Involvement Meeting at a minimum after Phase II Plans are completed.

Other Agency Presentations/Meetings: *Tampa International Airport (HCAA) & Westshore Alliance & FDOT.*



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

Specification Package Preparation: *The CONSULTANT will prepare documents necessary to assist the CITY with the Specification package.*

Plan Type: *The roadway plans shall be prepared in a Plan format. Profile sheets shall be provided to show the vertical controls that are needed for the construction of these projects. The plan and profile sheets shall be plotted at a horizontal scale of 1" = 40'.*

Limits: O'Brien Street from Cypress Street to Spruce Street. Project Length = 0.51 miles.

Typical Section: *The proposed typical consists of a 4-lane urban with 4-11 ft. through lanes, 5 ft. sidewalks, curb and gutter with a two-way left-turn center lane.*

Pavement Design: *Three pavement designs expected for widening, overbuild and resurfacing.*

Access Management Classification: 7

Level of TCP Plans: *Level 2*

2.2 Drainage (Activity 6)

System Type: The proposed roadway will have an urban typical section consisting of curb inlets and storm sewer system.

Modify the existing pond.

An FDOT Drainage Connection Permit may be required. The CONSULTANT shall prepare the permit application.

2.3 Utilities Coordination (Activity 7)

The CONSULTANT is responsible to certify that all necessary arrangements for utility work on this project have been made and will not conflict with the physical construction schedule. The CONSULTANT should coordinate with CITY personnel to coordinate transmittals to Utility Companies and meet production schedules.



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

The Utility Coordination Manager shall be responsible for managing all utility coordination, including the following:

Assisting the engineer of record in identifying all existing utilities and coordinating any new installations. Assisting the Engineer of Record with resolving utility conflicts.

Scheduling and performing utility coordination meetings, keeping and distribution of minutes/action items of all utility meetings, and ensuring expedient follow-up on all unresolved issues.

Distributing all plans, conflict matrixes and changes to affected utility owners and making sure this information is properly coordinated and documented.

Review and certify to the CITY that all Utility Work Schedules are correct and in accordance with the CITY's standards, policies, and procedures.

Utilities anticipated on the project City of Tampa Waste Water, City of Tampa Water, AT&T Transmission, MCI Verizon Business, Bright House, Fiberlight, Verizon of Florida, TECO Peoples Gas, Level 3 Communications, XO Communications, Tampa Electric and Hillsborough County.

2.4 Environmental Permits, Compliances, and Clearances (Activity 8)

Permits COE, SWFWMD and EPC.

The CITY will provide compensatory wetland mitigation in accordance with Section 373.4137, Florida Statutes.

2.5 Structures (Activities 9 – 18)

Miscellaneous: *Miscellaneous structure services foundations, mast arms, conventional lighting, and special drainage structures.*

2.6 Signing and Pavement Markings (Activities 19 & 20)



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

2.7 Signalization (Activities 21 & 22)

Intersections: *Provide a new traffic signal system the type to be determined by the CITY with LED traffic signal heads with reflective back plates, vehicular detection (video, microwave or loop assembly), emergency vehicle preemption detectors if needed, LED internally illuminated overhead street name signs (servicing all applicable directions), full pedestrian features per ADA requirements, advanced traffic controller assembly and an uninterrupted power source (UPS) at the following signalized intersections:*

O'Brien St. at Cypress St.

O'Brien St. at Laurel St.

The Consultant shall coordinate with FDOT to provide additional signal heads as necessary for MUTCD compliance in the northbound direction at the intersection of Spruce Street and O'Brien Street.

2.8 Lighting (Activities 23 & 24)

Coordination of the proposed lighting design with TECO.

2.9 Survey (Activity 27)

Design Survey: The CONSULTANT shall utilize the existing survey provided by the City of Tampa utilizing Horizontal (NAD 83 adjustment of 1990) and Vertical (NAVD 1988) Project Control; recover/re-establish the historic alignment; reference the alignment control points; provide 3D topographic/DTM survey through the project limits (using design survey files provided by the City of Tampa) including void area densification and 25 feet beyond proposed R/W; provide check cross sections to verify the accuracy of the DTM; provide drainage survey; Locate Jurisdictional Line and Geotechnical Support from W. Cypress Street to W. Spruce Street.

Subsurface Utility: SUE shall be performed following the City of Tampa's Guideline for Utility Locates on Construction Projects in cut areas, for drainage structures, signals, light poles, CCTV, temporary walls, and permanent walls, or anywhere there is a proposed feature that



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

will extend more than two feet into the ground and there is the possibility of utility lines in the area. Proposed drainage repairs and single post cantilever signage may require SUE work to clear possible utility conflicts from W. Cypress Street to W. Spruce Street.

2.10 Mapping (Activity 29)

Right of Way Map: Provide Right of Way Map from W. Cypress Street to W. Spruce Street following the City of Tampa's procedures and guidelines for Right of Way Mapping utilizing existing City of Tampa Maps, Surveys and any other pertinent information.

Legal Descriptions: Provide Sketch and Legal Descriptions for all acquisition parcels and easements following the City Tampa's guidelines and procedures.

2.11 Intelligent Transportation Systems (Activities 33 & 34) – The CONSULTANT shall provide a CCTV camera assembly mounted on existing signal poles at the intersection of Spruce and O'Brien.

2.12 Geotechnical (Activity 35) - The CONSULTANT shall be responsible for a complete Geotechnical Investigation. See Section 35 for task effort.

2.13 Project Schedule

Within ten (10) days after the Notice-To-Proceed, and prior to the CONSULTANT beginning work, the CONSULTANT shall provide a detailed project activity/event schedule for CITY. The schedule shall be accompanied by an anticipated payout and fiscal progress curve. For the purpose of scheduling, the CONSULTANT shall allow for a four week review time for each phase submittal and any other submittals as appropriate.

The schedule shall indicate all required submittals.

All fees and price proposals are to be based on the negotiated schedule of 24 months for final construction contract documents



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

Periodically, throughout the life of the contract, the project schedule and payout and fiscal progress curves shall be reviewed and, with the approval of the CITY, adjusted as necessary to incorporate changes in the Scope of Services and progress to date.

2.14 Submittals

The CONSULTANT shall furnish construction contract documents as required by the CITY to adequately control, coordinate, and approve the work concepts. The CONSULTANT shall distribute submittals as *directed by the CITY. The CITY will determine the specific number of copies required prior to each submittal. Paper plan sets shall be in 11' x 17" format at 1"=40' plan scale.*

In addition to any required hard copies, the CONSULTANT shall provide PDF files for all plans phase submittals thru the Final Phase. At the Final Phase submittal, the CONSULTANT shall provide electronic "smart" files. CADD files shall be submitted in AutoCAD digital file format with .dwg seed files and level structure consistent with the FDOT2013 CADD Standards for AutoCAD and having master work files attached to the plan sheets. The submittal shall include an AutoCAD plot driver for creating PDF's.

2.15 Provisions for Work

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:

- General
 - Title 29, Part 1910, Standard 1910.1001, Code of Federal Regulations (29 C.F.R. 1910.1001) – Asbestos Standard for Industry, U.S. Occupational Safety and Health Administration (OSHA)
 - 29 C.F.R. 1926.1101 – Asbestos Standard for Construction, OSHA
 - 40 C.F.R. 61, Subpart M - National Emission Standard for Hazardous Air Pollutants (NESHAP), Environmental Protection Agency (EPA)
 - 40 C.F.R. 763, Subpart E – Asbestos-Containing Materials in



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

Schools, EPA

- 40 C.F.R. 763, Subpart G – Asbestos Worker Protection, EPA
- ADA Standards for Accessible Design
- AASHTO – A Policy for Geometric Design of Highways and Streets
- AASHTO – Highway Safety Manual
- Rule Chapter 5J-17, F.A.C., Minimum Technical Standards for Professional Surveyors and Mappers
- Chapter 469, Florida Statutes (F.S.) – Asbestos Abatement
- Rule Chapter 62-257, F.A.C., Asbestos Program
- Rule Chapter 62-302, F.A.C., Surface Water Quality Standards
- Code of Federal Regulations (C.F.R.)
- Florida Administrative Codes (F.A.C.)
- Chapters 20, 120, 215, 455, Florida Statutes (F.S.) – Florida CITY of Business & Professional Regulations Rules
- Florida CITY of Environmental Protection Rules
- FDOT Basis of Estimates Manual
- FDOT CADD Manual
- FDOT CADD Production Criteria Handbook
- FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System
- FDOT Flexible Pavement Design Manual
- FDOT Handbook for Preparation of Specifications Package
- FDOT Instructions for Design Standards
- FDOT Instructions for Structures Related Design Standards
- FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (“Florida Greenbook”)
- FDOT Materials Manual
- FDOT Pavement Type Selection Manual
- FDOT Plans Preparation Manual
- FDOT Procedures and Policies
- FDOT Project Development and Environmental Manual
- FDOT Project Traffic Forecasting Handbook
- FDOT Rigid Pavement Design Manual
- FDOT Standard Specifications for Road and Bridge Construction



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

- FDOT Utility Accommodation Manual
- FHWA - Manual on Uniform Traffic Control Devices (MUTCD)
- FHWA - NCHRP Report 672, Roundabouts: An Informational Guide
- FHWA Roadway Construction Noise Model (RCNM) and Guideline Handbook
- Florida Statutes (F.S.)
- Florida's Level of Service Standards and Guidelines Manual for Planning
- Model Guide Specifications – Asbestos Abatement and Management in Buildings, National Institute for Building Sciences (NIBS)
- Quality Assurance Guidelines
- Safety Standards
- Any special instructions from the CITY
- Roadway
 - City of Tampa Transportation Technical Manual
 - FDOT – Florida Intersection Design Guide
 - FDOT - Project Traffic Forecasting Handbook
 - FDOT - Quality/Level of Service Handbook
 - Florida's Level of Service Standards and Highway Capacity Analysis for the SHS
 - Transportation Research Board (TRB) - Highway Capacity Manual
- Permits
 - Chapter 373, F.S. – Water Resources
 - US Fish and Wildlife Service Endangered Species Programs
 - Florida Fish and Wildlife Conservation Commission Protected Wildlife Permits
 - Bridge Permit Application Guide, COMDTPUB P16591.3C
 - Building Permit
- Drainage
 - City of Tampa Stormwater Technical Standards Manual for Public Development Projects
 - City of Tampa Stormwater Standard Details
 - FDOT Bridge Hydraulics Handbook
 - FDOT Culvert Handbook



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

- FDOT Drainage Manual
- FDOT Erosion and Sediment Control Manual
- FDOT Exfiltration Handbook
- FDOT Hydrology Handbook
- FDOT Open Channel Handbook
- FDOT Optional Pipe Materials Handbook
- FDOT Storm Drain Handbook
- FDOT Stormwater Management Facility Handbook
- FDOT Temporary Drainage Handbook
- Survey and Mapping
 - All applicable Florida Statutes and Administrative Codes
 - Applicable Rules, Guidelines Codes and authorities of other Municipal, County, State and Federal Agencies.
 - FDOT Aerial Surveying Standards for Transportation Projects Topic 550-020-002
 - FDOT Right of Way Mapping Handbook
 - FDOT Surveying Procedure Topic 550-030-101
 - FDOT Transportation Right of Way Procedures Manual
 - FDOT Transportation Surveying Handbook
 - Right of Way Mapping Procedure 550-030-015
- Traffic Engineering and Operations and ITS
 - AASHTO - An Information Guide for Highway Lighting
 - AASHTO - Guide for Development of Bicycle Facilities
 - FHWA Standard Highway Signs Manual
 - FDOT - Florida Roundabout Guide
 - FDOT Manual on Uniform Traffic Studies (MUTS)
 - FDOT Median Handbook
 - FDOT Traffic Engineering Manual
 - Minimum Specifications for Traffic Control Signal Devices
 - National Electric Safety Code
 - National Electrical Code
- Traffic Monitoring
 - American Institute of Steel Construction (AISC) Manual of Steel Construction, referred to as “AISC Specifications”
 - American National Standards Institute (ANSI) RP-8-00 Recommended Practice for Roadway Lighting



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

- AASHTO AWS D1.1/ANSI Structural Welding Code – Steel
- AASHTO D1.5/AWS D1.5 Bridge Welding Code
- FHWA Traffic Detector Handbook
- FDOT General Interest Roadway Data Procedure
- FHWA Traffic Monitoring Guide
- FDOT’s Traffic/Polling Equipment Procedures
- Structures
 - AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, and Interims.
 - AASHTO/-AWS-D1. 5M/D1.5: An American National Standard Bridge Welding Code
 - FDOT Structures Manual
 - FDOT Structures Design Office Temporary Design Bulletins (available on FDOT Structures web site only)
 - FDOT Preferred Details (available on FDOT Structures web site only)
- Geotechnical
 - FHWA Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Specifications
 - Manual of Florida Sampling and Testing Methods
 - Soils and Foundation Handbook
- Landscape Architecture
 - Florida CITY of Agriculture and Consumer Services Grades and Standards for Nursery Plants

2.21 Services to be Performed by the CITY When appropriate and /or available, the CITY will provide project data including:

- Preliminary Horizontal Network Control.
- Access for the CONSULTANT to utilize the CITY’s Information Technology Resources.
- All CITY agreements with Utility Agency Owner (UAO).
- All certifications necessary for project letting.
- 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



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

the CONSULTANT's Agreement, which in the opinion of the CITY is necessary for the prosecution of the work.

- Available traffic and planning data.
- All approved utility relocations.
- Any necessary title searches.
- 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.
- All future information that may come to the CITY pertaining to subdivision plans so that the CONSULTANT may take advantage of additional areas that can be utilized as part of the existing right of way.
- Existing right of way maps.
- Existing cross slope data for all RRR projects.
- Existing pavement evaluation report for all RRR projects.
- PD&E Documents
- Design Reports
- Letters of authorization designating the CONSULTANT 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.



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

3 PROJECT COMMON AND PROJECT GENERAL TASKS

Project Common Tasks

Project Common Tasks, as listed below, are work efforts that are applicable to many project activities, 4 Roadway Analysis through 35 Geotechnical. These tasks are to be included in the project scope in each applicable activity when the described work is to be performed by the CONSULTANT.

Cost Estimates: The CONSULTANT shall be responsible for producing a construction cost estimate and reviewing and updating the cost estimate when scope changes occur and/or at milestones of the project.

By the end of the first Phase, a right of way cost estimate should be prepared for Cypress St. to Spruce St. to include such items as land, business damages, and other hard and soft cost items in the FDOT D-7 R/W cost estimate program.

Field Reviews: The CONSULTANT shall make as many trips to the project site as required to obtain necessary data for all elements of the project.

Technical Meetings: The CONSULTANT shall attend all technical meetings necessary to execute the Scope of Services of this contract. This includes meetings with CITY and/or Agency staff, between disciplines and subconsultants, such as access management meetings, pavement design meetings, local governments, railroads, airports,, progress review meetings (phase review), and miscellaneous meetings. The CONSULTANT shall prepare, and submit to the CITY's Project Manager for review, the meeting minutes for all meetings attended by them. The meeting minutes are due within five (5) days of attending the meeting.

Quality Assurance/Quality Control: It is the intention of the CITY that design CONSULTANTS, including their subconsultant(s), are held responsible for their work, including plans review. Detailed checking of CONSULTANT plans or assisting in designing portions of the project for the CONSULTANT is not the intent of having external design consultants. The purpose of CONSULTANT plan reviews is to ensure that CONSULTANT plans follow the plan preparation procedures outlined in the Plans Preparation Manual, that



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

state and federal design criteria are followed with the CITY concept, and that the CONSULTANT submittals are complete. All subconsultant document submittals shall be submitted by the subconsultant directly to the CONSULTANT for their independent Quality Assurance/Quality Control review and subsequent submittal to the CITY.

It is the CONSULTANT'S responsibility to independently and continually QC their plans and other deliverables. The CONSULTANT should regularly communicate with the CITY's Design Project Manager to discuss and resolve issues or solicit opinions from those within designated areas of expertise.

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications and other services furnished by the CONSULTANT and their subconsultant(s) under this contract.

The CONSULTANT shall provide a Quality Control Plan that describes the procedures to be utilized to verify, independently check, and review all maps, design drawings, specifications, and other documentation prepared as a part of the contract. The CONSULTANT shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The Quality Control Plan shall be one specifically designed for this project, and it may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project. The CONSULTANT shall submit a Quality Control Plan for approval within twenty (20) business days of the written Notice to Proceed and it shall be signed by the CONSULTANT's Project Manager and the CONSULTANT QC Manager. The Quality Control Plan shall include the names of the CONSULTANT's staff that will perform the quality control reviews. The Quality Control reviewer shall be a Florida Licensed Professional Engineer fully prequalified under F.A.C. 14-75 in the work type being reviewed. A marked up set of prints from a Quality Control Review indicating the reviewers for each component (structures, roadway, drainage, signals, geotechnical, signing and marking, lighting, surveys, etc.) and a written resolution of comments on a point-by-point basis will be required, if requested by the CITY, with each phase submittal. The responsible Professional Engineer, Landscape Architect, or Professional Surveyor & Mapper that performed the Quality



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

Control review will sign a statement certifying that the review was conducted and found to meet required specifications.

The CONSULTANT shall, without additional compensation, correct all errors or deficiencies in the designs, maps, drawings, specifications and/or other services.

Supervision: The CONSULTANT shall supervise all technical design activities.

Coordination: The CONSULTANT shall coordinate with all disciplines of the project to produce a final set of construction documents.

Project General Tasks

Project General Tasks, described in Sections 3.1 through 3.7 below, represent work efforts that are applicable to the project as a whole and not to any one or more specific project activity. The work described in these tasks shall be performed by the CONSULTANT when included in the project scope.

3.1 Public Involvement

Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the project. The CONSULTANT shall provide to the CITY drafts of all Public Involvement documents (i.e., newsletters, property owner letters, advertisements, etc.) associated with the following tasks for review and approval at least 5 business days prior to printing and / or distribution.

3.1.1 Community Awareness Plan

Prepare a Community Awareness Plan (CAP) for review and approval by the CITY within 30 calendar days after receiving Notice to Proceed. The objective of the plan is to notify local governments, affected property owners, tenants, and the public of the CITY'S proposed construction and the anticipated impact of that construction. The CAP shall address timeframes for each review and shall include tentative dates for each public involvement requirement for the project.



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

3.1.2 Notifications

In addition to public involvement data collection, the CONSULTANT shall assist the CITY or prepare notifications, flyers, and/or letters to elected officials and other public officials, private property owners, and tenants at intervals during plans production as identified by the CITY. All letters and notices shall be reviewed by the CITY to ensure that they are addressed to the correct and current public officials.

3.1.3 Public Meeting Preparations

The CONSULTANT shall prepare the necessary materials for use in public meetings.

The CONSULTANT will investigate potential meeting sites to advise the CITY on their suitability. The CITY will pay all costs for meeting site rents and insurance.

3.1.4 Public Meeting Attendance and Follow-up

The CONSULTANT shall attend public meeting(s), assist with meeting setup and take down. The CONSULTANT shall also prepare a summary of the public meeting that includes all copies of all materials shown or provided at the public meeting. The summary shall also include a listing of all written comments made during or after the meeting and responses to those written comments.

The CONSULTANT will attend the meetings with an appropriate number of personnel to assist the CITY'S Project Manager.

It is estimated for this project there will be One Public meeting during the design.

3.1.5 Other Agency Meetings

In addition to scheduled public meetings the CONSULTANT may be required to participate in meetings with the local governing authorities and/or Metropolitan Planning Organization (MPO). The



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

CONSULTANT's participation may include, but not limited to, presentations during the meeting, note taking, and summarizing the meeting in a memo to the file. It is estimated for this project there will be **Four** meetings with local governing authorities and/or MPOs during the design.

3.2 Specifications Package Preparation

The CONSULTANT shall prepare and provide a specifications package prepared in accordance with the CITY'S requirements. The specifications package shall address all items and areas of work and include any Mandatory Specifications, Modified Special Provisions, and Technical Special Provisions.

3.3 Contract Maintenance

Contract maintenance includes project management effort for complete setup and maintenance of files, developing monthly progress reports, schedule updates, work effort to develop and execute Subconsultant agreements, etc.

3.4 Prime Consultant Project Manager Meetings

Includes only the Prime Consultant Project Manager's time for travel and attendance at Activity Technical Meetings and other meetings listed in the meeting summary for Task 3.6 on tab 3 Project General Task of the staff hour forms. Staff hours for other personnel attending Activity Technical Meetings are included in the meeting task for that specific Activity.

3.5 Post Design Services

Post Design Services includes, attendance at pre-bid and pre-construction meetings, bidding and construction assistance, bid tab review, shop drawing review, attendance at the substantial completion field review, as-built review and permit closeout.

3.6 Railroad, Transit and/or Airport Coordination

- Consultant shall provide liaison services in coordinating,



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

Hillsborough County Aviation Authority, Westshore Alliance and the FDOT. This coordination includes but is not limited to:

- Obtaining comments and feedback at project milestones.
- Obtaining required use permits.

3.7 Other Project General Tasks

This includes all efforts for a project general task not covered by an existing defined task.



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

4 ROADWAY ANALYSIS

The CONSULTANT shall analyze and document Roadway Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

4.1 Typical Section Package

4.2 Pavement Design Package

4.3 Horizontal/Vertical Master Design Files

The CONSULTANT shall design the geometrics using the design 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, elder road user policy, access management, PD&E documents and scope of work.

4.4 Cross Section Design Files

The CONSULTANT shall establish and develop cross section design files in accordance with the CADD manual.

4.5 Traffic Control Analysis

The CONSULTANT shall design a safe and effective Traffic Control Plan to move vehicular and pedestrian traffic during all phases of construction. The design shall include construction phasing of roadways ingress and egress to existing property owners and businesses, routing, signing and pavement markings, and detour quantity tabulations, roadway pavement, drainage structures, ditches, front slopes, back slopes, drop offs within clear zone, and traffic monitoring sites. Special consideration shall be given to the construction of the drainage system when developing the construction phases. Positive drainage must be maintained at all times. The design shall include construction phasing of roadways to accommodate the construction or relocation of utilities when the contract includes Joint Project Agreements (JPAs).



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

The CONSULTANT shall investigate the need for temporary traffic signals, temporary lighting, alternate detour roads, and the use of materials such as sheet piling in the analysis. The Traffic Control Plan shall be prepared by a certified designer who has completed training as required by the CITY. Before proceeding with the Traffic Control Plan, the CONSULTANT shall meet with the appropriate CITY personnel. The purpose of this meeting is to provide information to the CONSULTANT that will better coordinate the Preliminary and Final Traffic Control Plan efforts.

The CONSULTANT shall consider the local impact of any lane closures or alternate routes. When the need to close a road is identified during this analysis, the CONSULTANT shall notify the CITY's Project Manager as soon as possible. Proposed road closings must be reviewed and approved by the CITY. Diligence shall be used to minimize negative impacts by appropriate specifications, recommendations or plans development. Local impacts to consider will be local events, holidays, peak seasons, detour route deterioration and other eventualities. CONSULTANT shall be responsible to obtain local authorities permission for use of detour routes not on state highways.

4.7 Master TCP Design Files

The CONSULTANT shall develop master Traffic Control Plan (TCP) files (for Level II and Level III only) showing each phase of the Traffic Control Plan.

4.8 Design Variations and Exceptions

If available, the CITY shall furnish the Variation/Exception Report. The CONSULTANT shall prepare the documentation necessary to gain CITY approval of all appropriate Design Variations and/or Design Exceptions before the Phase 1 submittal.

4.9 Design Report

The CONSULTANT shall prepare all applicable report(s) as listed in the Project Description section of this scope.

The CONSULTANT shall submit to the CITY design notes, data, and



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

calculations to document the design conclusions reached during the development of the contract plans.

The design notes, data, and computations shall be recorded on size 8½"x11" sheets, fully titled, numbered, dated, indexed and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to 8½"x11" size. The data shall be in a hardback folder for submittal to the CITY.

4.10 Quantities

The CONSULTANT shall prepare all required summary of quantities sheets. This includes all efforts required to develop accurate quantities and the supporting documentation, including construction days when required.

4.11 Cost Estimate

4.12 Technical Special Provisions

4.13 Other Roadway Analysis

4.14 Field Reviews

4.15 Technical Meetings



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

5 ROADWAY PLANS

The CONSULTANT shall prepare Roadway, Drainage, Traffic Control, Utility Adjustment Sheets, 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.

- 5.1 Key Sheet**
- 5.2 Typical Section Sheets**
- 5.3 General Notes/Pay Item Notes**
- 5.4 Plan/Profile Sheet**
- 5.5 Special Profile-Curb Return profiles**
- 5.6 Special Details**
- 5.7 Drainage Structure Sheet (Per Structure)**
- 5.8 Miscellaneous Drainage Detail Sheets**
- 5.9 Retention/Detention Ponds Detail Sheet**
- 5.10 Roadway Soil Survey Sheet**
- 5.11 Cross Sections**
- 5.12 Temporary Traffic Control Plan Sheets**
- 5.13 Temporary Traffic Control Detail Sheets**
- 5.14 Utility Adjustment Sheets**
- 5.15 Erosion Control Plan**
- 5.16 SWPPP**
- 5.17 Project Network Control Sheet**



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

5.18 Environmental Detail Sheets

5.19 Utility Verification Sheet (SUE Data)



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

6 DRAINAGE ANALYSIS

The CONSULTANT shall analyze and document Drainage Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

The CONSULTANT shall be responsible for designing a drainage and stormwater management system. All design work shall comply with the requirements of the appropriate regulatory agencies and the CITY's Drainage Manual.

The CONSULTANT shall coordinate fully with the appropriate permitting agencies and the CITY's staff. All activities and submittals should be coordinated through the CITY's Project Manager. The work will include the engineering analyses for any or all of the following:

6.1 Determine Base Clearance Water Elevation

Analyze, determine, and document high water elevations per basin which will be used to set roadway profile grade. Determine surface water elevations at cross drains, floodplains, outfalls and adjacent stormwater ponds. Determine groundwater elevations at intervals between the above-mentioned surface waters.

6.2 Pond Siting Analysis and Report

Evaluate pond sites using a preliminary hydrologic analysis. Document the results and coordination for all of the project's pond site analyses. The Drainage Manual provides specific documentation requirements.

6.3 Design of Cross Drains

Analyze the hydraulic design and performance of cross drains. Check existing cross drains to determine if they are structurally sound and can be extended. Document the design as required. Determine and provide flood data as required.

6.4 Design of Ditches

Design roadway conveyance and outfall ditches. This includes



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

determining ditch cross sections, grades, selecting suitable channel lining, designing the side drain pipes, and documentation. (Design of linear stormwater management facilities in separate task.)

6.5 Design of Stormwater Management Facility (Offsite or Infield Pond)

Design stormwater management facilities to meet requirements for stormwater quality treatment and attenuation. Develop proposed pond layout (shape, contours, slopes, volumes, etc.), perform routing, pollutant loading calculations, and design the outlet control structure.

6.6 Design of Storm Drains

Develop a “working drainage map”, determine runoff, inlet locations, and spread. Calculate hydraulic losses (friction, utility conflict and, if necessary, minor losses). Determine Design Tailwater and, if necessary, outlet scour protection.

6.7 Drainage Design Documentation Report

Compile drainage design documentation into report format. Include documentation for all the drainage design tasks and associated meetings and decisions, except for stand-alone reports, such as the Pond Siting Analysis Report and Bridge Hydraulics Report.

6.8 Temporary Drainage Analysis

Evaluate and address drainage to adequately drain the road and maintain existing offsite drainage during all construction phases. Provide documentation.

6.9 Cost Estimate

6.10 Technical Special Provisions

6.11 Other Drainage Analysis

6.12 Field Reviews

6.13 Technical Meetings



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

7 UTILITIES

The CONSULTANT shall identify utility facilities and secure agreements, utility work schedules, and plans from the Utility Agency Owners (UAO) ensuring all conflicts that exist between utility facilities and the CITY's construction project are addressed. The CONSULTANT shall certify all utility negotiations have been completed and that arrangements have been made for utility work to be undertaken.

7.1 Identify Existing UAO(s)

The Consultant shall identify all utilities within and adjacent to the project limits that may be impacted by the project.

7.2 Make Utility Contacts

The CONSULTANT shall send letters and two sets of plans to each utility, one set for the utility office, and one set to the CITY Offices. Includes contact by phone for meeting coordination. Request type, size, location, easements, and cost for relocation if reimbursement is claimed. Request the voltage level for power lines in the project area. Send UAO requests for reimbursement to CITY for a legal opinion. Include the meeting schedule (if applicable) and the design schedule. Include typical meeting agenda. If scheduling a meeting, give 4 weeks advance notice.

At a minimum of 4 weeks prior to the meeting, the CONSULTANT shall transmit two complete sets of Phase II plans and the Utility Conflict Matrix (when applicable) to each UAO having facilities located within the project limits, and one set to the CITY Offices.

Identify agreements and assemble packages. The Consultant shall send agreements, letters, the Utility Conflict Matrix (when applicable) and two sets of plans to the UAO(s) including all component sets, one set for the utility office, one set to construction and maintenance if required. Include the design schedule.

Not all projects will have all contacts as described above.

7.3 Individual/Field Meetings



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

The CONSULTANT shall meet with each UAO as necessary, separately or together, throughout the project design duration to provide guidance in the interpretation of plans, review changes to the plans and schedules, optional clearing and grubbing work, and assist in the development of the UAO(s) plans and work schedules. The CONSULTANT is responsible for motivating the UAO to complete and return the necessary documents after each Utility Contact or Meeting.

7.4 Collect and Review Plans and Data from UAO(s)

The CONSULTANT shall review utility marked plans and data individually as they are received for content. Ensure information from the UAO (utility type, material and size) is sent to the designer for inclusion in the plans. Forward all requests for utility reimbursement and supporting documentation to the DUO.

7.5 Subordination of Easements Coordination

The CONSULTANT, if requested by the CITY, shall transmit to and secure from the UAO the executed subordination agreements prepared by the appropriate CITY office. The CONSULTANT shall coordinate with the DUO the programming of the necessary work program funds to compensate the UAO.

7.6 Utility Design Meeting

The CONSULTANT shall schedule (time and place), notify participants, and conduct a Utility meeting with all affected UAO(s). The CONSULTANT shall be prepared to discuss drainage, traffic signalization, maintenance of traffic (construction phasing), review the current design schedule and letting date, evaluate the utility information collected, provide follow-up information on compensable property rights from FDOT Legal Office, discuss with each UAO the utility work by highway contractor option, discuss any future design issues that may impact utilities, etc., to the extent that they may have an effect on existing or proposed utility facilities with particular emphasis on drainage and maintenance of traffic with each UAO. The intent of this meeting shall be to assist the UAOs in identifying and resolving conflicts between utilities and proposed construction before completion



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

of the plans, including utility adjustment details. Also to work with the UAOs to recommend potential resolution between known utility conflicts with proposed construction plans as may deemed practical by the UAO. The CONSULTANT shall keep accurate minutes of all meetings and distribute a copy to all attendees within 3 days. See Task 4.7 (Cross Section Design Files) for utility conflict location identification and adjustments.

7.7 Review Utility Markups & Work Schedules and Processing of Schedules & Agreements

The CONSULTANT shall review utility marked up plans and work schedules as they are received for content and coordinate review with the designer. Send color markups and schedules to the appropriate CITY office(s) for review and comment if required by the District. Coordinate with the District for execution. Distribute Executed Final Documents. Prepare Work Order for UAO(s). The CONSULTANT shall coordinate with the DUO the programming of necessary Work Program funds.

7.8 Utility Coordination/Follow-up

The CONSULTANT shall provide utility coordination and follow up. This includes follow-up, interpreting plans, and assisting the UAOs with completion of their work schedules and agreements. Includes phone calls, face-to-face meetings, etc., to motivate and ensure the UAO(s) complete and return the required documents in accordance with the project schedule. Ensure the resolution of all known conflicts. The CONSULTANT shall keep accurate minutes of all meetings and distribute a copy to all attendees. This task can be applied to all phases of the project.

7.9 Utility Constructability Review

The CONSULTANT shall review utility schedules against construction contract time, and phasing for compatibility. Coordinate with and obtain written concurrence from the construction office. See Task 4.7 (Cross Section Design Files) for utility conflict identification and adjustments.

7.10 Additional Utility Services



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

The CONSULTANT shall provide additional utility services. Additional services will be determined when the services are required and requested. This item is not usually included in the scope at the time of negotiation. It is normally added as a supplemental agreement when the need is identified.

7.11 Contract Plans to UAO(s)

If requested by the District, the CONSULTANT shall transmit the contract plans as processed for letting to the UAO(s). Transmittals to UAO(s) may be by certified mail, return receipt requested.

7.12 Certification/Close-Out

This includes hours for transmitting utility files to the DUO and preparation of the Utility Certification Letter. The CONSULTANT shall certify to the appropriate CITY representative the following:

All utility negotiations (Full execution of each agreement, approved Utility Work Schedules, technical special provisions written, etc.) have been completed with arrangements made for utility work to be undertaken and completed as required for proper coordination with the physical construction schedule.

OR

An on-site inspection was made and no utility work will be involved.

OR

Plans were sent to the Utility Companies/Agencies and no utility work is required.



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

8 ENVIRONMENTAL PERMITS, COMPLIANCE AND CLEARANCES

The CONSULTANT shall notify the CITY Project Manager, Environmental Permit Coordinator and other appropriate personnel in advance of all scheduled meetings with the regulatory agencies to allow a CITY representative to attend. The CONSULTANT shall copy in the Project Manager and the Environmental Permit Coordinator on all permit related correspondence and meetings.

8.1 Preliminary Project Research

The CONSULTANT shall perform preliminary project research and shall be responsible for early identification of and coordination with the appropriate regulatory agencies to assure that design efforts are properly directed toward permit requirements.

8.2 Complete Permit Involvement Form

The CONSULTANT shall document permit involvement in coordination with the District Permit Coordinator and CITY Project Manager. This is to be done upon completion of preliminary project research.

8.3 Field Work

Establish Wetland Jurisdictional Lines and Assessments:

The CONSULTANT shall collect all data and information necessary to determine the boundaries of wetlands and surface waters defined by the rules or regulations of each agency processing or reviewing a permit application necessary to construct a CITY project.

The CONSULTANT shall be responsible for, but not limited to, the following activities:

- Determine landward extent of state waters as defined in Rule Chapter 62-340, F.A.C. as ratified in Section 373.4211, F.S.
- Determine the jurisdictional boundaries of wetlands and surface waters as defined by rules or regulations of any other permitting authority that is processing a CITY permit application.
- Prepare aerial maps showing the jurisdictional boundaries of



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

wetlands and surface waters. Aerial maps shall be reproducible, of a scale no greater than 1"=200' and be recent photography. The maps shall show the jurisdictional limits of each agency. Xerox copies of aeriels are not acceptable. All jurisdictional boundaries are to be tied to the project's baseline of survey. When necessary, a survey will be prepared by a registered surveyor and mapper.

- Prepare a written assessment of the current condition and relative value of the function being performed by wetlands and surface waters. Prepare data in tabular form which includes the ID number for each wetland impacted, size of wetland to be impacted, type of impact and identify any wetland within the project limits that will not be impacted by the project. Prepare appropriate Agency Forms.

Species Surveys:

The CONSULTANT shall conduct Wildlife surveys as defined by rules or regulations of any permitting authority that is processing a CITY permit.

8.4 Agency Verification of Wetland Data

The CONSULTANT shall be responsible for verification of wetland data identified in Section 8.3 and coordinating regulatory agency field reviews, including finalization of wetland assessments with applicable agencies.

8.5 Complete and Submit All Required Permit Applications

The CONSULTANT shall prepare permit packages as identified in the Project Description section.

The CONSULTANT shall collect all of the data and information necessary to obtain the environmental permits required to construct a project. The CONSULTANT will complete field survey or agency required forms (such as the US Army Corps of Engineers (USACE) "Wetland Determination Data Form – Atlantic and Gulf Coastal Plain Region"; the USACE "Approved Jurisdictional Determination Form"; UMAMs and/or project specific data forms, as required) for use in Permit Applications.



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

The CONSULTANT shall prepare each permit application for CITY approval in accordance with the rules and/or regulations of the environmental agency responsible for issuing a specific permit and/or authorization to perform work.

The CONSULTANT will submit all permit applications, as directed by the CITY, and be responsible for payment of all permit fees.

Local Permits:

- *Environmental Protection Commission of Hillsborough County (EPCHC)*

8.6 Prepare Dredge and Fill Sketches (as needed)

8.7 Prepare USCG Permit Sketches (as needed)

8.8 Prepare Water Management District Right of Way Occupancy Sketches

8.9 Prepare Coastal Construction Control Line (CCCL) Permit Application

8.10 Prepare Tree Permit Information

Conduct field survey for trees within project ROW and document species and size on plans as needed. Prepare County grand oak point system and condition evaluation form for any trees meeting the grand oak criteria. Tree Removal Permit from Hillsborough Department of Planning and Growth Management to be acquired by others prior to construction.

8.11 Mitigation Design

If wetland impacts cannot be avoided, the CONSULTANT shall prepare a mitigation plan to be included as a part of the Environmental Resource Permit and or Section 404 applications.

Prior to the development of alternatives, the CONSULTANT shall meet with the Project Manager to determine the CITY's policies in proposing



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

mitigation. The CONSULTANT shall proceed in the development of a mitigation plan based upon the general guidelines provided by the CITY.

The CONSULTANT will be directed by the CITY to investigate the following methods of mitigation:

- Payment to DEP/WMD per acre of wetlands impacted as defined in Section 373.4137, F.S.
- Monetary participation in offsite regional mitigation plans
- Monetary participation in a private mitigation bank
- Creation/restoration on public lands
- Creation/restoration on right of way purchased by the CITY
- Creation/restoration on existing CITY right of way

In the event that physical creation or restoration is the only feasible alternative to offset wetland impacts, the CONSULTANT shall collect all of the data and information necessary to prepare alternative mitigation plans that may be acceptable to all permitting agencies and commenting agencies who are processing or reviewing a permit application for a CITY project.

Prior to selection of a final mitigation site, the CONSULTANT will provide the following services in the development of alternative mitigation plans:

- Preliminary jurisdictional determination for each proposed site
- Selection of alternative sites
- Coordination of alternative sites with the CITY/all environmental agencies
- Written narrative listing potential sites with justifications for both recommended and non-recommended sites.

8.12 Mitigation Coordination and Meetings

The CONSULTANT shall coordinate with CITY personnel prior to approaching any environmental permitting or reviewing agencies. Once a mitigation plan has been reviewed and approved by the CITY, the CONSULTANT will be responsible for coordinating the proposed mitigation plan with the environmental agencies.

8.13 Other Environmental Permits



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

Environmental Clearances, Reevaluations and Technical Support

8.14 Contamination Impact Analysis

The CONSULTANT shall perform the necessary analysis to complete the Contamination Screening Evaluation for any changes to the project and complete the Contamination Screening Evaluation Report as described in Part 2, Chapter 22, of the PD&E Manual.

Level II Field Screening may be required to further evaluate potential contamination concerns. The CONSULTANT shall provide appropriate risk rankings for potential contamination sites that have potential to impact the proposed roadway improvements or pond sites. Sites that are risk ranked “Medium” or “High” based on preliminary review should include Level II field screening. A Level II site specific scope of work shall be prepared and reviewed with the CITY prior to implementing field services. Level II field screening results shall be incorporated into the final CSER and appropriate modifications to risk rankings should be included based on the findings of the Level II screening.

8.15 Asbestos Survey

The CONSULTANT shall secure the services of a Florida Licensed Asbestos Consultant to perform a comprehensive Asbestos Containing Materials (ACM) survey of all bridges on the project. The survey shall include sampling of all suspect ACM. In the event that ACM is found on the bridge, the CONSULTANT shall prepare (in coordination with the CITY’s District Asbestos Coordinator) plans, specifications, general notes, pay item notes and an Operation and Maintenance (O&M) plan for any asbestos to remain in place. The CONSULTANT shall submit four (4) hard copies and one (1) electronic copy of the final ACM survey, and the required copies of any additional supporting documents, to the CITY’s Project Manager and to the District Asbestos Coordinator at the time of the Phase I submittal.

8.16 Technical Meetings



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

9 STRUCTURES - SUMMARY AND MISCELLANEOUS TASKS AND DRAWINGS

The CONSULTANT shall analyze, design, and develop contract documents for all structures in accordance with applicable provisions as defined in Section 2.19, Provisions for Work. Individual tasks identified in Sections 9 through 18 are defined in the Staff Hour Estimation Handbook and within the provision defined in Section 2.19, Provisions for Work. Contract documents shall display economical solutions for the given conditions.

The CONSULTANT shall provide Design Documentation to the CITY with each submittal consisting of structural design calculations and other supporting documentation developed during the development of the plans. The design calculations submitted shall adequately address the complete design of all structural elements. These calculations shall be neatly and logically presented on digital media or, at the CITY's request, on 8 ½"x11" paper and all sheets shall be numbered. The final design calculations shall be signed and sealed by a Florida-licensed professional engineer. A cover sheet indexing the contents of the calculations shall be included and the engineer shall sign and seal that sheet. All computer programs and parameters used in the design calculations shall include sufficient backup information to facilitate the review task.

- 9.1 Key Sheet and Index of Drawings**
- 9.2 Project Layout**
- 9.3 General Notes and Bid Item Notes**
- 9.4 Miscellaneous Common Details**
- 9.5 Incorporate Report of Core Borings**
- 9.6 Assemble Plan Summary Boxes and Quantities**
- 9.7 Cost Estimate**
- 9.8 Technical Special Provisions**
- 9.9 Field Reviews**



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

9.10 Technical Meetings



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

10 STRUCTURES - MISCELLANEOUS

The CONSULTANT shall prepare plans for Miscellaneous Structure(s) as specified in Section 2.5.

Mast Arms

10.1 Mast Arms



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

11 SIGNING AND PAVEMENT MARKING ANALYSIS

The CONSULTANT shall analyze and document Signing and Pavement Markings Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

11.1 Traffic Data Analysis

The CONSULTANT shall review the approved preliminary engineering report, typical section package, traffic technical memorandum and proposed geometric design alignment to identify proposed sign placements and roadway markings. Perform queue analysis.

11.2 Reference and Master Design File

The CONSULTANT shall prepare the Signing & Marking Design file to include all necessary design elements and all associated reference files.

11.3 Sign Panel Design Analysis

Establish sign layout, letter size and series for non-standard signs.

11.4 Quantities

11.5 Cost Estimate

11.6 Field Reviews

11.7 Technical Meetings



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

12 SIGNING AND PAVEMENT MARKING PLANS

The CONSULTANT shall prepare a set of Signing and Pavement Marking Plans in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums that includes the following.

12.1 Key Sheet

12.2 Tabulation of Quantities

12.3 General Notes/Pay Item Notes

12.4 Plan Sheet

12.5 Special Service Point Details

12.6 Special Details



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

13 SIGNALIZATION ANALYSIS

The CONSULTANT shall analyze and document Signalization Analysis Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

13.1 Traffic Data Collection

The CONSULTANT shall perform all effort required for traffic data collection, including crash reports, 24 hr. machine counts, 8 hr. turning movement counts, 7 day machine counts, and speed & delay studies.

13.2 Traffic Data Analysis

The CONSULTANT shall determine signal operation plan, intersection geometry, local signal timings, pre-emption phasing & timings, forecasting traffic, and intersection analysis run.

13.3 Systems Timings

The CONSULTANT shall determine proper coordination timing plans including splits, force offs, offsets, and preparation of Time Space Diagram.

13.4 Reference and Master Signalization Design File

The CONSULTANT shall prepare the Signalization Design file to include all necessary design elements and all associated reference files.

13.5 Reference and Master Interconnect Communication Design File

The CONSULTANT shall prepare the Interconnect Communication Design file to include all necessary design elements and all associated reference files.

13.6 Overhead Street Name Sign Design

The CONSULTANT shall design Signal Mounted Overhead Street Name signs.

13.7 Pole Elevation Analysis



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

13.8 Quantities

13.9 Cost Estimate

13.10 Technical Special Provisions

13.11 Field Reviews

The CONSULTANT shall collect information from the maintaining agencies and conduct a field review. The review should include, but is not limited to, the following:

- Existing Signal and Pedestrian Phasing
- Controller Make, Model, Capabilities and Condition/Age
- Condition of Signal Structure(s)
- Type of Detection as Compared With Current District Standards
- Interconnect Media
- Controller Timing Data

13.12 Technical Meetings



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

14 SIGNALIZATION PLANS

The CONSULTANT shall prepare a set of Signalization Plans in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums, which includes the following:

14.1 Key Sheet

14.2 Tabulation of Quantities

14.3 General Notes/Pay Item Notes

14.4 Plan Sheet

14.5 Interconnect Plans

14.6 Guide Sign Worksheet

14.7 Special Details

14.8 Special Service Point Details

14.9 Mast Arm/Monotube Tabulation Sheet

14.10 Strain Pole Schedule



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

15 LIGHTING ANALYSIS

The CONSULTANT shall coordinate with TECO regarding their lighting design with respects to the proposed alignment and poles location.

The CONSULTANT shall prepare a Lighting Analysis Report to document the existing lighting conditions and propose alternatives to improve lighting conditions to match the proposed roadway improvements. Lighting design plans will not be provided.

15.1 Technical Meetings-Coordination with TECO with the design of lighting.



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

16 SURVEY

The CONSULTANT shall perform survey tasks in accordance with all applicable statutes, manuals, guidelines, standards, handbooks, procedures, and current design memoranda.

The CONSULTANT shall submit all survey notes and computations to document the surveys. All field survey work shall be recorded in approved media and submitted to the CITY. Field books submitted to the CITY must be of an approved type. The field books shall be certified by the surveyor in responsible charge of work being performed before the final product is submitted.

The survey notes shall include documentation of decisions reached from meetings, telephone conversations or site visits. All like work (such as bench lines, reference points, etc.) shall be recorded contiguously. The CITY accept field survey radial locations utilizing redundant measurements of section corners, platted subdivision lot and block corners, alignment control points, alignment control reference points and certified section corner references.

16.1 Horizontal Project Control (HPC)

Establish or recover HPC, for the purpose of establishing horizontal control on the Florida State Plane Coordinate System (NAD 83/90) approved by the CITY Surveyor; may include primary or secondary control points. Includes analysis and processing of all field collected data, and preparation of forms.

16.2 Vertical Project Control (VPC)

Establish or recover VPC, for the purpose of establishing vertical control on datum approved by the City Surveyor may include primary or secondary vertical control points. Includes analysis and processing of all field collected data, and preparation of forms. Datum will be NAVD 88-based on COT Vertical Control.

16.3 Alignment and/or Existing Right of Way (R/W) Lines

Establish, recover or re-establish project alignment. Also includes



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

analysis and processing of all field collected data, existing maps, and/or reports for identifying mainline, ramp, offset, or secondary alignments. Depict alignment and/or existing R/W lines (in required format) per CITY R/W Maps, platted or dedicated rights of way.

16.4 Reference Points

Reference Horizontal Project Network Control (HPNC) points, project alignment, vertical control points, section, ¼ section, center of section corners and General Land Office (G.L.O.) corners as required.

16.5 Topography/Digital Terrain Model (DTM) (3D)

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of creating a DTM with sufficient density. Shoot all break lines, high and low points. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

16.6 Planimetric (2D)

Locate all above ground features and improvements. Deliver in appropriate native AutoCAD Civil 3D electronic format. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

16.7 Roadway Cross Sections/Profiles

Perform cross sections or profiles. May include analysis and processing of all field-collected data for comparison with DTM.

16.8 Side Street Surveys

Refer to tasks of this document as applicable.

16.9 Underground Utilities

Designation includes 2-dimensional collection of existing utilities and selected 3-dimensional verification as needed for designation. Location includes non-destructive excavation to determine size, type and location



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

of existing utility, as necessary for final 3-dimensional verification. Survey includes collection of data on points as needed for designates and locates. Includes analysis and processing of all field collected data, and delivery of all appropriate electronic files.

16.10 Outfall Survey

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of a DTM. Survey with sufficient density of shots. Shoot all break lines, high and low points. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

16.11 Drainage Survey

Locate underground data (XYZ, pipe size, type, condition and flow line) that relates to above ground data. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

16.12 Pond Site Survey

Refer to tasks of this document as applicable.

27.13 Jurisdiction Line Survey

Perform field location (2-dimensional) of jurisdiction limits as defined by respective authorities, also includes field edits, analysis and processing of all field collected data, preparation of reports.

16.14 Geotechnical Support

Perform 3-dimensional (X,Y,Z) field location, or stakeout, of boring sites established by geotechnical engineer. Includes field edits, analysis and processing of all field collected data and/or reports.

16.15 Sectional/Grant Survey

Perform field location/placement of section corners, 1/4 section corners, and fractional corners where pertinent. Includes analysis and processing of all field-collected data and/or reports.



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

16.16 Subdivision Location

Survey all existing recorded subdivision/condominium boundaries, tracts, units, phases, blocks, street R/W lines, common areas. Includes analysis and processing of all field collected data and/or reports. If unrecorded subdivision is on file in the public records of the subject county, tie existing monumentation of the beginning and end of unrecorded subdivision.

16.17 Right of Way Staking, Parcel / Right of Way Line

Perform field staking and calculations of existing/proposed R/W lines for on-site review purposes.

16.18 Line Cutting

Perform all efforts required to clear vegetation from the line of sight.

16.19 Work Zone Safety

Provide work zone as required by CITY standards.

16.20 Miscellaneous Surveys

Refer to tasks of this document, as applicable, to perform surveys not described herein. The percent for Supplemental will be determined at negotiations. This item can only be used if authorized in writing by the CITY Surveyor or their representative.

16.21 Supplemental Surveys

Supplemental survey days and hours are to be approved in advance by the CITY Surveyor. Refer to tasks of this document, as applicable, to perform surveys not described herein.

16.22 Document Research

Perform research of documentation to support field and office efforts involving surveying and mapping.

16.23 Field Review



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

Perform verification of the field conditions as related to the collected survey data.

16.24 Technical Meetings

Attend meetings as required and negotiated by the Surveying and Mapping CITY.

16.25 Quality Assurance/Quality Control (QA/QC)

Establish and implement a QA/QC plan. Also includes subconsultant review, response to comments and any resolution meetings if required, preparation of submittals for review, etc.

16.26 Supervision

Perform all activities required to supervise and coordinate project. These activities must be performed by the project supervisor, a Florida P.S.M. or their delegate as approved by the CITY Surveying Office.

16.27 Coordination

Coordinate survey activities with other disciplines. These activities must be performed by the project supervisor, a Florida P.S.M. or their delegate as approved by the CITY Surveying Office.



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

17 MAPPING

The CONSULTANT will be responsible for the preparation of control survey maps, right of way maps, maintenance maps, sketches, other miscellaneous survey maps, and legal descriptions as required for this project in accordance with all applicable CITY Manuals, Procedures, Handbooks, District specific requirements, and Florida Statutes. All maps, surveys and legal descriptions will be prepared under the direction of a Florida Professional Surveyor and Mapper (PSM) to CITY size and format requirements utilizing ACAD Civil 3D, and will be designed to provide a high degree of uniformity and maximum readability. The CONSULTANT will submit maps, legal descriptions, quality assurance check prints, checklists, electronic media files and any other documents as required for this project to the CITY for review at stages of completion as negotiated.

Master CADD File

17.1 Alignment

17.2 Section and 1/4 Section Lines

17.3 Subdivisions / Property Lines

17.4 Existing Right of Way

17.5 Topography

17.6 Parent Tract Properties and Existing Easements

17.7 Proposed Right of Way Requirements

The ENGINEER OF RECORD (EOR) will provide the proposed requirements. The PSM is responsible for calculating the final geometry. Notification of Final Right of Way Requirements along with the purpose and duration of all easements will be specified in writing.

17.8 Limits of Construction

The limits of construction DWG file as provided by the EOR will be



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

imported or referenced to the master CADD file. Additional labeling will be added as required. The PSM is required to advise the EOR of any noted discrepancies between the limits of construction line and the existing/proposed right of way lines, and for making adjustments as needed when a resolution is determined.

17.9 Jurisdictional/Agency Lines

These lines may include, but are not limited to, jurisdictional, wetland, water boundaries, and city/county limit lines.

Sheet Files

17.10 Control Survey Cover Sheet

17.11 Control Survey Key Sheet

17.12 Control Survey Detail Sheet

17.13 Right of Way Map Cover Sheet

17.14 Right of Way Map Key Sheet

17.15 Right of Way Map Detail Sheet

17.16 Maintenance Map Cover Sheet

17.17 Maintenance Map Key Sheet

17.18 Maintenance Map Detail Sheet

17.19 Reference Point Sheet

This sheet(s) will be included with the Control Survey Map, Right of Way Map and Maintenance Map.

17.20 Project Network Control Sheet

This sheet depicts the baseline, the benchmarks, the primary and secondary control points and their reference points including the type of material used for each point, their XYZ coordinates, scale factors and



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

convergence angles. This sheet(s) may be included with the Control Survey Map, Right of Way Map and Maintenance Map.

17.21 Table of Ownerships Sheet

Miscellaneous Surveys and Sketches

17.22 Parcel Sketches

17.23 TITF Sketches

17.24 Other Specific Purpose Survey(s)

17.25 Boundary Survey(s) Map

17.26 Right of Way Monumentation Map

17.27 Title Search Map

17.28 Title Search Report

17.29 Legal Descriptions

17.30 Final Map/Plans Comparison

The PSM will perform a comparison of the final right of way maps with the available construction plans to review the correctness of the type of parcel to be acquired and the stations/offsets to the required right of way. The PSM will coordinate with the EOR to resolve any conflicts or discrepancies and provide documentation of the review.

17.31 Field Reviews

17.32 Technical Meetings

17.33 Quality Assurance/Quality Control

17.34 Supervision

17.35 Coordination



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

17.36 Supplemental Mapping

This task is to cover efforts resulting from major design and/or development changes after 60% map development that affect the right of way requirements/parent tract property lines and may include any number of tasks. Request and approval to utilize the Supplemental Mapping hours will be in writing and approved by the City Surveyor prior to any work being done under this task.



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

18 GEOTECHNICAL

The CONSULTANT shall, for each project, be responsible for a complete geotechnical investigation. All work performed by the CONSULTANT shall be in accordance with FDOT standards, or as otherwise directed by the CITY.

Before beginning each phase of investigation and after the Notice to Proceed is given, the CONSULTANT shall submit an investigation plan for approval. The investigation plan shall include, but not be limited to, the proposed boring locations and depths, and all existing geotechnical information from available sources to generally describe the surface and subsurface conditions of the project site. Additional meetings may be required to plan any additional field efforts, review plans, resolve plans/report comments, resolve responses to comments, and/or any other meetings necessary to facilitate the project.

The CONSULTANT shall notify the CITY in adequate time to schedule a representative to attend all related meetings and field activities.

18.1 Document Collection and Review

CONSULTANT will review printed literature including topographic maps, county agricultural maps, aerial photography (including historic photos), ground water resources, geology bulletins, potentiometric maps, pile driving records, historic construction records and other geotechnical related resources. Prior to field reconnaissance, CONSULTANT shall review U.S.G.S., S.C.S. and potentiometric maps, and identify areas with problematic soil and groundwater conditions.

Roadway

The CONSULTANT shall be responsible for coordination of all geotechnical related field work activities. The CONSULTANT shall retain all samples until acceptance of Phase IV plans. Rock cores shall be retained as directed in writing by the District Geotechnical Engineer.

Obtain pavement cores as directed in writing by the District Geotechnical Engineer.

If required by the CITY, a preliminary roadway exploration shall be



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

performed before the Phase I plans submittal. The preliminary roadway exploration will be performed and results provided to the Engineer of Record to assist in setting roadway grades and locating potential problem areas. The preliminary roadway exploration shall be performed as directed in writing by the CITY.

CONSULTANT shall perform specialized field-testing as required by project needs and as directed in writing by the CITY.

All laboratory testing and classification will be performed in accordance with applicable CITY standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

18.2 Develop Detailed Boring Location Plan

Develop a detailed boring location plan. Meet with CITY Geotechnical Project Manager for boring plan approval. If the drilling program expects to encounter artesian conditions, the CONSULTANT shall submit a methodology(s) for plugging the borehole to the CITY for approval prior to commencing with the boring program.

18.3 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

18.4 Coordinate and Develop MOT Plans for Field Investigation

Coordinate and develop Maintenance of Traffic (MOT) plan. All work zone traffic control will be performed in accordance with the FDOT's Roadway and Traffic Design Standards Index 600 series.

18.5 Drilling Access Permits

Obtain all State, County, City, and Water Management District permits for performing geotechnical borings, as needed.

18.6 Property Clearances

Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

responsibility of the CITY's Project Manager.

18.7 LBR / Resilient Modulus Sampling

Collect appropriate samples for Limerock Bearing Ratio (LBR) testing.

18.8 Coordination of Field Work

Coordinate all field work required to provide geotechnical data for the project.

18.9 Soil and Rock Classification - Roadway

Refine soil profiles recorded in the field, based on results of laboratory testing.

18.10 Design LBR

Determine design LBR values from the 90% and mean methods when LBR testing is required by the CITY.

18.11 Laboratory Data

Tabulate laboratory test results for inclusion in the geotechnical report, the report of tests sheet (Roadway Soil Survey Sheet), and for any necessary calculations and analyses.

18.12 Seasonal High Water Table

Review the encountered ground water levels and estimate normal seasonal high ground water levels. Estimate normal seasonal low ground water levels, if requested.

18.13 Parameters for Water Retention Areas

Provide parameters for water retention areas, exfiltration trenches, and/or swales.

18.14 Delineate Limits of Unsuitable Material

Delineate limits of unsuitable material(s) in both horizontal and vertical



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

directions. Assist the Engineer of Record with detailing these limits on the cross-sections. If requested, prepare a plan view of the limits of unsuitable material.

18.15 Electronic Files for Cross-Sections

Create electronic files of boring data for cross-sections.

18.16 Embankment Settlement and Stability

Estimate the total magnitude and time rate of embankment settlements. Calculate the factor of safety against slope stability failure.

18.17 Geotechnical Recommendations

Provide geotechnical recommendations regarding the proposed roadway construction project including the following: description of the site/alignment, design recommendations and discussion of any special considerations (i.e. removal of buried rubble/debris or other unsuitable material, consolidation of weak soils, estimated settlement time/amount, groundwater control, high groundwater conditions relative to pavement base, etc.) Evaluate and recommend types of geosynthetics and properties for various applications, as required.

18.18 Pavement Condition Survey and Pavement Evaluation Report

If a pavement evaluation is performed, submit the report in accordance with Section 3.2 of the Materials Manual: Flexible Pavement Coring and Evaluation. Enter all core information into the Pavement Coring and Reporting (PCR) system.

18.19 Preliminary Roadway Report

If a preliminary roadway investigation is performed, submit a preliminary roadway report before the Phase I plans submittal. The purpose of the preliminary roadway report will be to assist in setting road grades and locating potential problems.

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- A report of tests sheet that summarizes the laboratory test results, the



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505.

- The results of all tasks discussed in all previous sections regarding data interpretation and analysis.
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The CONSULTANT will respond in writing to any changes and/or comments from the CITY and submit any responses and revised reports.

18.20 Final Report

The Final Roadway Report shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505.
- The results of all tasks discussed in all previous sections regarding data interpretation and analysis.
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The CONSULTANT will respond in writing to any changes and/or comments from the CITY and submit any responses and revised reports.

18.21 Auger Boring Drafting

Draft auger borings as directed by the CITY.

18.22 SPT Boring Drafting

Draft SPT borings as directed by the CITY.



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

Structures

The CONSULTANT shall be responsible for coordination of all geotechnical related fieldwork activities. The CONSULTANT shall retain all samples until acceptance of Phase IV plans. Rock cores shall be retained as directed in writing by the CITY.

CONSULTANT shall perform specialized field-testing as required by needs of project and as directed in writing by the CITY.

All laboratory testing and classification will be performed in accordance with applicable CITY standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

The staff hour tasks for walls, overhead signs, mast arm signals, strain poles, and other structures include the following:

18.23 Develop Detailed Boring Location Plan

Develop a detailed boring location plan. Meet with CITY Geotechnical Project Manager for boring plan approval. If the drilling program expects to encounter artesian conditions, the CONSULTANT shall submit a methodology(s) for plugging the borehole to the CITY for approval prior to commencing with the boring program.

18.24 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

18.25 Coordinate and Develop MOT Plans for Field Investigation

Coordinate and develop MOT plan. All work zone traffic control will be performed in accordance with the CITY's Roadway and Traffic Design Standards Index 600 series.

18.26 Drilling Access Permits

Obtain all necessary State, County, City, and Water Management District permits for performing geotechnical borings, as needed.



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

18.27 Property Clearances

Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the responsibility of the CITY's Project Manager.

18.28 Collection of Corrosion Samples

Collect corrosion samples for determination of environmental classifications for soil and water, when appropriate.

18.29 Coordination of Field Work

Coordinate all field work required to provide geotechnical data for the project.

18.30 Soil and Rock Classification - Structures

Soil profiles recorded in the field should be refined based on the results of laboratory testing.

18.31 Tabulation of Laboratory Data

Laboratory test results should be tabulated for inclusion in the geotechnical report and for the necessary calculations and analyses.

18.32 Estimate Design Groundwater Level for Structures

Review encountered groundwater levels, estimate seasonal high groundwater levels, and evaluate groundwater levels for structure design.

18.33 Walls

Provide the design soil profile(s), which include the soil model/type of each layer and all soil engineering properties required by the Engineer of Record for conventional wall analyses and recommendations. Review wall design for geotechnical compatibility and constructability.

Evaluate the external stability of conventional retaining walls and retained earth wall systems. For retained earth wall systems, calculate



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

and provide minimum soil reinforcement lengths versus wall heights, and soil parameters assumed in analysis. Estimate differential and total (long term and short term) settlements.

Provide wall construction recommendations.

18.34 Sheet Pile Wall Analysis (Optional)

Analyze sheet pile walls as directed by the CITY.

18.35 Design Soil Parameters for Signs, Signals, and Strain Poles and Geotechnical Recommendations

- Provide the design soil profile(s) that include the soil model/type of each layer and all soil properties required by the Engineer of Record for foundation design. Review design for geotechnical compatibility and constructability.

18.36 Final Reports - Signs, Signals, Box Culvert, Walls, and High Mast Lights

The final reports shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- Summary of structure background data, S.C.S., U.S.G.S., geologic and potentiometric data.
- The results of all tasks discussed in all previous sections regarding data interpretation and analysis).
- Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
- Any special provisions required for construction that are not addressed in the CITY's Standard specification.
- An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts, a complete FHWA check list, pile driving records (if available), and any other



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

pertinent information.

Final reports will incorporate comments from the CITY and contain any additional field or laboratory test results, recommended foundation alternatives along with design parameters and special provisions for the contract plans. These reports will be submitted to the CITY for review prior to project completion. After review by the CITY, the reports will be submitted to the CITY in final form and will include the following:

- All original plan sheets (11" x 17")
- One set of all plan and specification documents, in electronic format, according to CITY requirements
- Two sets of record prints
- Six sets of any special provisions
- All reference and support documentation used in preparation of contract plans package

Additional final reports (up to four), aside from stated above, may be needed and requested for the CITY's Project Manager and other disciplines.

The final reports, special provisions, as well as record prints, will be signed and sealed by a Professional Engineer licensed in the State of Florida.

Draft the detailed boring/sounding standard sheet, including environmental classification, results of laboratory testing, and specialized construction requirements, for inclusion in final plans.

18.37 SPT Boring Drafting

Prepare a complete set of drawings to include all SPT borings, auger borings and other pertinent soils information in the plans. Include these drawings in the Final Geotechnical Report. Draft borings, location map, S.C.S. map and U.S.D.A. map as directed by the CITY. Soil symbols must be consistent with those presented in the latest Florida CITY of Transportation Soils and Foundations Handbook.

18.38 Other Geotechnical

18.39 Technical Special Provisions



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

18.40 Field Reviews

Identify and note surface soil and rock conditions, surface water conditions and locations, and preliminary utility conflicts. Observe and note nearby structures and foundation types.

18.41 Technical Meetings

18.42 Quality Assurance/Quality Control

18.43 Supervision

18.44 Coordination

18.45 Optional Preliminary Contamination Assessment

When required, all work shall be performed in accordance with current Florida CITY of Environmental Regulation (DER) and Federal OSHA and EPA standards. The following work shall be included, but not limited to:

- A minimum of four borings will be required per site.
- Soil gas analysis will be required by use of a flame ionization detector; e.g. Organic Vapor Analyzer (OVA).
- Installation of monitoring wells may be required.
- Water sampling and laboratory analysis may be required. The State of Florida CITY of Health shall certify the laboratory performing the analysis.
- Four copies of the draft PCA report will be required for review and comment by the CITY. After comments have been addressed, six signed and sealed copies of the final PCA report shall be submitted to the CITY. Copies of all documents will be additionally transmitted to the CITY in electronic format in accordance with the CITY's current standards.



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

19 PROJECT REQUIREMENTS

19.1 Liaison Office

The CITY and the CONSULTANT will designate a Liaison Office and a Project Manager who shall be the representative of their respective organizations for the Project. While it is expected the CONSULTANT shall seek and receive advice from various state, regional, and local agencies, the final direction on all matters of this project remain with the CITY Project Manager.

19.2 Key Personnel

The CONSULTANT's work shall be performed and directed by the key personnel identified in the proposal presentations by the CONSULTANT. Any changes in the indicated personnel shall be subject to review and approval by CITY.

19.3 Progress Reporting

The CONSULTANT shall meet with the CITY as required and shall provide a written monthly progress report with approved schedule, schedule status, and payout curve or by using the earned value method that describe the work performed on each task. The report will include assessing project risk through monthly documentation of identifying and updating the risk category and approach for monitoring those tasks. Invoices shall be submitted after the CITY approves the monthly progress report and the payout curve or with earned value analysis. The Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

19.4 Correspondence

Copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this contract shall be provided to the CITY for their records within one (1) week of the receipt or mailing of said correspondence.



CUMBEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

19.5 Professional Endorsement

The CONSULTANT shall have a Licensed Professional Engineer in the State of Florida sign and seal all reports, documents, technical special provisions, and plans as required by CITY standards.

19.6 Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The CITY makes available software to help assure quality and conformance with policy and procedures regarding CADD. It is the responsibility of the CONSULTANT to meet the requirements in the CITY's CADD Manual. The CONSULTANT shall submit final documents and files as described therein.

19.7 Coordination with Other Consultants

The CONSULTANT is to coordinate his work with any and all adjacent and integral consultants so as to effect complete and homogenous plans and specifications for the project(s) described herein.

19.8 Optional Services

At the CITY's option, the CONSULTANT may be requested to provide optional services. The fee for these services shall be negotiated in accordance with the terms detailed in Exhibit B, Method of Compensation, for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s). Additional services may be authorized by Letter of Authorization or supplemental amendment in accordance with paragraph 2.00 of the Standard Consultant Agreement. The additional services may include Construction Assistance, Review of Shop Drawings, Final Bridge Load Rating, update (Category II) bridge plans electronically (CADD) for the Final "As-Built" conditions, based on documents provided by the CITY (CADD Services Only) or other Services as required.



CUMBNEY & FAIR, INC.

2463 ENTERPRISE ROAD CLEARWATER, FLORIDA 33763-1790
(727) 797-8982 Clearwater (813) 223-4333 Tampa (727) 791-8752 Fax
www.cumbeyfair.com

20 INVOICING LIMITS

For performing the services identified within this Scope of Services, the City shall pay the Consultant the upset limit amount of \$599,956.71 in accordance with Exhibit "B" of this contract. The required DMI forms will also be submitted with each invoice.

The CONSULTANT shall provide a list of key events and the associated total percentage of work considered to be complete at each event. This list shall be used to control invoicing. Payments will not be made that exceed the percentage of work for any event until those events have actually occurred and the results are acceptable to the CITY.

We look forward to the opportunity to provide the City of Tampa with the professional engineering and consulting services for this project.

Sincerely,
Cumbey & Fair, Inc.

Matthew Fabrizio, P.E.

Senior Project Manager
FL Lic. No. 57348

END SCOPE OF SERVICE

ESTIMATE OF WORK EFFORT AND COST - EXHIBIT B

Name of Project: O'BRIEN STREET ROADWAY IMPROVEMENTS FROM W. CYPRESS STREET TO W. SPRUCE STREET
 County: Hillsborough
 FPN: 14-C-00037
 FAP No.: N/A

Consultant Name: Cumbe & Fair Inc.
 Consultant No.: 14-D-00037
 Date: 2/2/2015
 Estimator: MJF

Staff Classification	Hours From "SH Summary - Firm"	Project Manager	Chief Engineer	Senior Engineer	Project Engineer	Engineer	Designer	Senior Technician	Technician	Clerical	Sr. Suvey & Mapper	Survey & Mapper	Field Crew Supervisor	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$155.00	\$180.00	\$145.00	\$120.00	\$110.00	\$105.00	\$85.00	\$70.00	\$60.00	\$145.00	\$115.00	\$100.00			
3. Project General and Project Common Tasks	60	21	3	6	6	9	3	0	0	12	0	0	0	60	\$7,410	\$123.50
4. Roadway Analysis	664	33	33	66	86	133	133	100	66	14	0	0	0	664	\$73,500	\$110.69
5. Roadway Plans	622	31	31	62	81	124	124	93	62	14	0	0	0	622	\$68,840	\$110.68
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	176	18	0	53	26	0	0	35	0	44	0	0	0	176	\$19,210	\$109.15
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	96	0	5	14	24	0	0	32	19	2	0	0	0	96	\$9,980	\$103.96
20. Signing & Pavement Marking Plans	110	0	6	11	28	0	0	42	22	1	0	0	0	110	\$11,205	\$101.86
21. Signalization Analysis	165	0	8	25	41	0	0	54	34	3	0	0	0	165	\$17,135	\$103.85
22. Signalization Plans	252	0	13	25	63	0	0	96	50	5	0	0	0	252	\$25,485	\$101.13
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	167	0	0	0	0	0	0	50	53	1	13	27	23	167	\$15,310	\$91.68
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	144	0	0	0	0	0	0	52	36	0	14	29	13	144	\$13,605	\$94.48
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	2,456	103	99	262	355	266	260	554	342	96	27	56	36	2,456		
Total Staff Cost		\$15,965.00	\$17,820.00	\$37,990.00	\$42,600.00	\$29,260.00	\$27,300.00	\$47,090.00	\$23,940.00	\$5,760.00	\$3,915.00	\$6,440.00	\$3,600.00		\$261,680.00	\$106.55

Survey Field Days by Subconsultant
 4 - Person Crew:

SALARY RELATED COSTS:		\$261,680.00
OVERHEAD:	0%	\$0.00
OPERATING MARGIN:	0%	\$0.00
FCCM (Facilities Capital Cost Money):	0.00%	\$0.00
EXPENSES:	0.00%	\$0.00

Notes:
 1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.

2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

Survey (Field - if by Prime)	32	crew days @	\$ 1,184.00 / day	\$37,353.72
SUBTOTAL ESTIMATED FEE:				\$299,033.72
Subconsultant: Atkins Phase I				\$126,826.47
Subconsultant: Scheda Phase I				\$18,505.00
Subconsultant: Tierra Environmental Phase I				\$37,384.00
Subconsultant: Tierra Geotechnical Phase I				\$27,197.95
Subconsultant: RTD Group Estimates Phase I				\$11,678.49
Subconsultant: Atkins Phase II				\$57,195.08
Subconsultant: Tierra Geotechnical Phase II				\$22,136.00
Subconsultant: Sub 8				\$0.00
Subconsultant: Sub 9				\$0.00
Subconsultant: Sub 10				\$0.00
Subconsultant: Sub 11				\$0.00
Subconsultant: Sub 12				\$0.00
SUBTOTAL ESTIMATED FEE:				\$599,956.71
Geotechnical Field and Lab Testing				\$0.00
SUBTOTAL ESTIMATED FEE:				\$599,956.71
Optional Services				\$0.00
GRAND TOTAL ESTIMATED FEE:				\$599,956.71



CERTIFICATE OF LIABILITY INSURANCE

Exhibit C

DATE (MM/DD/YYYY)

8/12/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Wallace, Welch & Willingham P.O. Box 33020 St. Petersburg FL 33733	CONTACT NAME: Weyman Willingham	
	PHONE (A/C, No., Ext): 727-522-7777	FAX (A/C, No): 727-521-2902
E-MAIL ADDRESS: certificates@w3ins.com		
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A: Transportation Ins. Co.		20494
INSURER B: RetailFirst Insurance Co.		
INSURER C: Architects & Engineers Ins Co		44148
INSURER D: Continental Insurance Co./CNA		35289
INSURER E: Nat'l Fire Ins Co of Hartford		20478
INSURER F:		

COVERAGES **CERTIFICATE NUMBER:** 1119722879 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
D	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			C2086949437	3/16/2014	3/16/2015	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$100,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
E	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			C2088208783	3/16/2014	3/16/2015	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$0			C2086949471	3/16/2014	3/16/2015	EACH OCCURRENCE \$1,000,000 AGGREGATE \$1,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	52024651	3/16/2014	3/16/2015	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
C	Professional Liab Claims Made Retro Date 2/19/2000			AEICPG14	3/16/2014	3/17/2017	Each claim \$1,000,000 Aggregate \$1,000,000 Deductible \$25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: 14-C-00037 O'Brien Street Improvements Design
The City of Tampa is Additional Insured with respect to General Liability if required by written contract per form # G17957G and Additional Insured with respect to Auto Liability per Auto Coverage Form, and with respect to the Umbrella Policy subject to its underlying terms and conditions. A Waiver of Subrogation in favor of The City of Tampa applies to General Liability, Auto Liability and Workers Compensation if required by written contract. FL Retail Federation is a self insured fund with reinsurance through Munich RE America-AM Best Rate A XV, NAIC #10227 & Arch Inc Co-AM Best Rate A XV, NAIC #1150.

CERTIFICATE HOLDER

CANCELLATION

The City of Tampa Risk Management Department c/o Ebix BPO P.O. Box 257, Ref. #99-Z310853 Portland MI 48875-0257	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
--	--

© 1988-2010 ACORD CORPORATION. All rights reserved.



**Page 3 of 4DMI – Solicited/Utilized
City of Tampa –DMI Schedule of Sub-(Contractors/Consultants/Suppliers) to be Utilized
(FORM MBD-20)**

Contract No.: 14-D-00037 Contract Name: O'BRIEN STREET ROADWAY IMPROVEMENTS
 Contractor Name: CUMBNEY & FAIR, INC. Address: 2463 ENTERPRISE RD. CLEARWATER, FL 33763
 Federal ID: 59-1636137 Phone: 27-797-8982 Fax: 27-791-8752 Email: mfabrizio@cumbneyfair.com

See attached documents.
 No Subcontracting (of any kind) will be performed on this contract.

NIGP Code General Categories: Buildings = 909, General = 912, Heavy = 913, Trades = 914, Architects = 906, Engineers & Surveyors = 925, Supplier = 912-77

This DMI Schedule Must Be Submitted with the Bid or Proposal (Do Not Modify This Form)

Enter "S" for firms Certified as Small Local Business Enterprises, "W" for firms Certified as Women/Minority Business Enterprise

S = SLBE W=WMBE	Company Name Address Phone & Fax	Type of Ownership (F=Female M=Male) BF BM = African Am. HF HM = Hispanic Am. AF AM = Asian Am. NF NM = Native Am. CF CM = Caucasian	Trade, Services, or Materials NIGP Code Listed above	Amount of Quote. Letter of Intent if available.	Percent of Scope/Contract %
	ATKINS NORTH AMERICA 4030 W. BOYSCOUT BLVD. SUITE 700 TAMPA, FL 33607 T 813-282-7275 F 813-286-1207		925	\$184,026.55	30.7%
	RTD GROUP 1957 ARROWHEAD DR. N.E. 2nd FLOOR ST PETERSBURG, FL 33703 T 727-430-3552 F 727-521-3822		912	\$11,678.99	1.9%
W	SCHEDA ECOLOGICAL ASSOCIATES, INC 5892 E. FOWLER AVE. TAMPA, FL 33617 T 813-989-9600 F 813-989-9670	CF	912/925	\$18,505.00	3%
W	TIERRA, INC. 7351 TEMPLE TERRACE HWY TAMPA, FL 33637 T 813-989-1354 F 813-989-1355	HM	925	\$26,917.95	14.5%

Total Subcontract/Supplier Utilization \$ 300,922.99

Total SLBE Utilization \$ _____

Total WMBE Utilization \$ 165,222.95

Percent SLBE Utilization of Total Bid/Proposal Amt. _____% Percent WMBE Utilization of Total Bid/Proposal Amt. 17.5%

It is hereby certified that the following information is a true and accurate account of utilization for sub-contracting opportunities on this contract. This form must be completed and submitted with the bid or proposal. Modifying or failing to sign DMI forms may result in Non-Compliance and/or deemed non-responsive.

Signed: [Signature] Name/Title: MATTHEW FABRIZIO, V.P. Date: 1/23/15
 MBD 20 rev. 02/01/13 **Note: Detailed Instructions for completing this form are on the next page.**