



Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS™

Building Code Services
Civil Engineering / Roadway
& Highway Design
Coastal Engineering
Code Enforcement
Construction Engineering &
Inspection (CEI)
Construction Services
Data Technologies &
Development
Electrical Engineering
Engineering
Environmental Services
Facilities Management
Geographic Information
Systems (GIS)
Governmental Services
Indoor Air Quality
Landscape Architecture
Planning
Project Management
Redevelopment
& Urban Design
Surveying & Mapping
Traffic Engineering
Transportation Planning
Water / Utilities Engineering
Website Development

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

www.cgasolutions.com

June 4, 2021

Ms. Patti McLauchlin
City Manager
City of Key West
1300 White Street
Key West, FL 33040

**RE: Key West Wicker Sports Complex Transportation Improvements and
Design Services**
CGA Proposal No. 19-3329

Dear Ms. McLauchlin,

Calvin, Giordano & Associates, Inc. is pleased to submit this task order proposal for professional engineering services related to the Key West Wicker Sports Complex Traffic Improvements located near Poinciana Elementary School and Wicker Sports Complex in the City of Key West. The specific traffic engineering services offered herein are outlined below.

I. Professional Engineering Services

A. Traffic Engineering & Civil Engineering Services

1. The City of Key West has adopted the City of Key West Bicycle and Pedestrian Master Plan in February of 2019. One of the multimodal projects identified is the Crosstown Connector. The Crosstown Connector Project included connection of the bike lanes on Duck Avenue with the Bike Boulevard on Staples Avenue through the Wicker Sports Complex. City leaders and residents are seeking to make Key West a world-class location for bicycling and walking. The Bicycle and Pedestrian Master Plan equips the City with a practical vision of a safe, connected, and comfortable network to serve residents, workers, and tourists.

2. Design Option Review

- a) **Conceptual Design Review-** CGA traffic engineers will evaluate the proposed concept design contemplated in the City of Key West Bicycle and Pedestrian Master Plan. CGA traffic engineers will complete a field review during a normal weekday to evaluate pedestrian, bicycle and vehicular movement at the Kennedy Drive and Wicker Sports Complex Driveway and 14th Street and Duck Avenue signalized intersection.
- b) **Alternatives Evaluation-** CGA traffic engineers will evaluate two design alternatives that differ from the Wicker Park Sports Complex portion of the Crosstown Connector concept plan identified in the City of Key West Bicycle and Pedestrian Master Plan. CGA traffic engineers will review the traffic and parking utilization counts to determine the feasibility of removal of any of the existing parking stalls within the park. The alternatives analyses will be summarized in a technical memorandum using figures and tables as necessary.
- c) **Traffic Analysis-** CGA traffic engineers will complete an intersection capacity analysis during the peak hours from the traffic data collection at the two subject intersections. The intersection capacity analysis will be performed in Synchro software. CGA traffic engineers will research the most recent three years of crash data for the two subject intersections using Signal Four Analytics or local law enforcement/agency crash data. CGA traffic engineers will evaluate if any safety improvements are required at either of the two subject intersections. The traffic analysis will be summarized in a technical memorandum using figures and tables as necessary.
- **Traffic Data Collection-** CGA traffic engineers will collect pedestrian, bicycle and vehicular traffic data at two intersection locations in the City of Key West during a normal weekday. The traffic data will be collected at the Wicker Park Sports Complex and Kennedy Drive intersection and the Duck Avenue and 14th Street signalized intersection.

- Manual turning movement counts will be collected during the peak arrival and dismissal hours for the nearby Poinciana Elementary School (7:00-9:00 a.m. and 2:30-4:30 p.m.) and during the midday peak period (11:00 a.m. to 1:00 p.m.). Turning movement counts will also be collected on a regular Tuesday during the evening p.m. peak period of the park (6:00 p.m. to 8:00 p.m.) and on a Saturday from (10:00 a.m. to 12:00 p.m.)
 - Parking Utilization counts- CGA traffic engineers will collect parking utilization counts for the existing three parking lots during the post arrival, midday, pre-dismissal, evening and weekend periods. Parking data will be collected on a Tuesday of a normal week every 30 minutes from 8:00 a.m. to 2:00 p.m. and between 6:00 p.m. and 10:00 p.m. In addition to it, parking data will be collected on a regular Saturday from 10.00 a.m. to 2:00 p.m. The last three digits of the license plate numbers will also be recorded in order to determine the turnover within the parking spaces.
- d) Drainage Evaluation:** CGA civil engineers will conduct a drainage evaluation of the existing conditions of the WickerPark Sports Complex east parking- lot. CGA will research available electronic public documents pertaining to the site and will coordinate with City staff to obtain historical feedback, existing permits and as-built drawings that will assist in the development of the drainage evaluation. Two conceptual design options will be provided to the City for review and consideration. This scope of work includes one site visit and up to one revision of the two conceptual design alternatives based on City's comments.

- e) **Public Outreach Meetings-** CGA will facilitate up to two public outreach meetings with the City of Key West and other key stakeholders including the Monroe County School District and the Key West Housing Authority. CGA will prepare a presentation of the proposed improvements for distribution to the public and to City Staff. It is expected that all graphic contents of this presentation will be comprised of already-produced imagery and not through detailed and specific visualizations. CGA Traffic/Civil Engineering Staff, will present the planned improvements to the residents at the time and location to be determined by the City, as well as moderate discussions and solicit feedback from the attendees. Notification of the public outreach meetings to residents within the project limits will be handled by City staff.

3. Final Design

- a) **Design Plans and Permitting-** Once the City has notified CGA in writing of the chosen design alternative, CGA civil engineers will prepare Roadway, Pavement Marking and Signage and Signalization Plans for the proposed bike trail connection between the bike boulevard on Staples Avenue and the bike lanes on Duck Avenue in the City of Key West. The plans shall include the following plan sheets: One Key Sheet, One Typical Section Sheet (Section and Details), One General Notes/Pay Items Sheet, Plan Sheets (Roadway, Pavement Marking and Signage, Traffic Signal Plans). CGA shall develop quantities per phase for use in preparation of an engineer's opinion of probable costs for the project using historical data from FDOT, FDOT's Long Range Estimate, and/or other Industry sources. CGA shall update these cost estimates as necessary based on project milestones (60%, 90%, and 100% submittals).

- **Utility Coordination:** A preliminary investigation of the utilities within the project area. This task shall provide information on the project conceptual plans meeting Subsurface Utility Engineering Quality Level D as described by ASCE "Standard Guidelines for Depiction and Collection of Existing Subsurface Utility Data". Data Acquisition is limited to available records and as-built information. These services include creating an 811 Design Ticket, submitting Initial Utility Request Letters to applicable utility owners, creating a utility matrix for tracking, logging and inputting utility information into AutoCAD. If there are conflicts between existing utilities and proposed drainage which require utility soft digs an additional services agreement shall be required.
- **Geotechnical Engineering Services (by sub-consultant)** include Two (2) Exfiltration Tests and Two (2) SPT Borings and provide a Geotechnical Engineering Report with recommendations.
- **Horizontal Master Design File-** CGA engineers shall design the geometrics using the design standards that are most appropriate with proper consideration given to the design traffic volumes, design speed, capacity, levels of service, functional classification, adjacent land use, City of Key West Land Development Regulations, design consistency, driver expectancy, aesthetics, existing vegetation to be preserved, pedestrian and bicycle concerns, ADA requirements, access management, and scope of work. CGA engineers shall establish the pavement marking and signage master design file to include reference files of topo, R/W, and roadway. CGA engineers shall design and layout all signs, lane lines, pavement markings and RPM's in accordance with the MUTCD and Florida Greenbook.
- **60% Design Submittal-** CGA engineers will prepare 60% plans for roadway improvements including Paving, Grading & Drainage Plans; Pavement Marking and Signage Plans; Signalization Plans, Details and General Notes. CGA engineers will provide design plans and 60% Design Phase Opinion of Probable Cost. Plans will be submitted to the City of Key West for review and comment. Fees include reviewing, responding and addressing one set of comprehensive review comments from the City

- 90% Design and Permitting Submittal- CGA engineers will prepare Paving, Grading & Drainage Plans; Pavement Marking and Signage Plans; Signalization Plans; Details and General Notes; updates to the Opinion of Probable Cost for the 90% Design Phase Submittal. Plans will be submitted to the City of Key West for review and comment. Fees include reviewing, responding and addressing one set of comprehensive review comments from the City.
 - 100% Design and Permitting Submittal- CGA engineers will prepare 100% plans for roadway improvements including Paving, Grading & Drainage Plans; Pavement Marking and Signage Plans; Signalization Plans; Details and General Notes; update of the Opinion of Probable Cost for the 100% Design Phase Submittal. Plans will be submitted to the City of Key West for review and comment. Fees include reviewing, responding and addressing one set of comprehensive review comments from the City as well as providing final signed and sealed construction plans for the City.
 - Preparation of technical specifications.
4. Note: This scope of services includes travel expenses for one site visit/ kickoff meeting with all of the agency stakeholders, two public outreach meetings. Any additional meeting attendance necessary for this scope of services will be billed hourly,
 5. Note: This scope of services references the information outlined in the City of Key West Bicycle and Pedestrian Master Plan dated February 2019.
 6. Note: This scope of services does not include services related to Site Plan Approval of the conceptual designs evaluated as part of this task order. If these services are needed, an additional service will be provided.
 7. Note: This scope of work does not include landscape architecture, subsurface utility exploration (SUE) services, structural engineering, environmental services, bidding assistance and post design services. If these services are required an additional service will be provided.

8. Note: Work will be performed in accordance with the Professional Traffic Engineering Services Agreement between the City of Key West and CGA as outlined in the Professional Services Agreement dated 05/29/2018 and per the City of Key West Resolution 18-143.

II. Professional Surveying Services

- A. Survey work will comply with the Standards and Practice for Surveying and Mapping, according to Chapter 51-17.052 of Florida Administrative Code, as adopted by the Board of Professional Surveyors, Chapter 472, Florida Statutes and comply with any City of Key West standards and/or requirements.
 1. Topographic survey for the Wickers Sports Complex parking lot and adjacent lands, intersection of Duck Avenue and Glynn R. Archer Drive, intersection of the bicycle path from 12th Street and Kennedy Drive together with the space leading up to it.
 2. Data collection of all above ground improvements within the design corridor to include asphalt pavement, sidewalks, trees, pavement, parking lot striping, fences and above ground evidence of underground utilities.
 3. Recover right-of-way and property corners along route survey to establish property and right-of-way lines throughout limits of project.
 4. Horizontal control will be referenced to the State Plane Coordinate System, Florida East Zone North American Datum NAD83/90. Vertical Datum 1988 (NAVD88).
 5. Survey deliverable will consist of a Map of Route Survey prepared on full size sheets (24"x36") at an applicable scale together with an electronic data file in an Autocad format.

BASIS OF PROPOSAL

- Any opinion of the construction cost prepared by Calvin, Giordano & Associates, Inc. represents its judgment as a design professional and is supplied for the general guidance of the CLIENT since Calvin, Giordano & Associates, Inc. has no control over the cost of labor and material, or over competitive bidding or market conditions. Calvin, Giordano & Associates, Inc. does not guarantee the accuracy of such opinions as compared to contractor bids or actual cost to the CLIENT.

- Any outside engineering services, studies, or laboratory testing not specifically mentioned in the Scope of Services will be the responsibility of the CLIENT. All municipal, permit, and agency fees as well as Title Certificates will be paid by the CLIENT.
- Basic services outlined within this proposal shall be considered complete when all comments have been addressed and the project plans are submitted to the regulatory agencies for Certification.
- Calvin, Giordano & Associates, Inc. is performing the consultant services set forth in this Agreement strictly as a professional consultant to CLIENT. Nothing contained in this Agreement shall create any contractual relationship between Calvin, Giordano & Associates, Inc. and any contractor or subcontractor performing construction activities on the project, or any of CLIENT's other professional consultants.
- Calvin, Giordano & Associates, Inc. is performing the surveying services set forth in this Agreement strictly as a professional consultant to CLIENT. Nothing contained in this Agreement shall create any contractual relationship between Calvin, Giordano & Associates and any contractor or subcontractor performing construction activities on the project, or any of CLIENT's other professional consultants.
- Calvin, Giordano & Associates, Inc. shall not be responsible for the contractor's schedules or failure to carry out the construction in accordance with the construction documents. Calvin, Giordano & Associates, Inc. shall not have control over or charge of acts or omissions of the contractor, subcontractors, or their agents or employees, or of any other persons performing portions of the construction.
- Calvin, Giordano & Associates, Inc. will require that all consultants carry proper insurance, including professional liability insurance, if appropriate.
- Permit construction certification will include one partial and one final inspection.

ADDITIONAL FEES

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

- Services related to Site Plan Approval of the evaluated design alternatives as part of this task order.
- Landscape architecture, structural engineering, environmental services, bidding assistance and post design services.
- Architectural, structural (i.e., retaining walls, bridges, docks), mechanical (i.e., fire pumps), fire protection, environmental assessment, power, gas, telephone, cable television, site lighting services.
- Calculations of off-site flood stages.
- Construction quality control inspections.

- Off-site engineering and negotiations for off-site easements, if required (other than as specified in the Scope of Services).
- Permit application or negotiation with permitting authorities other than those specifically listed herein.
- Preparation of construction contract documents, other than drawings and technical specifications (e.g., bid schedule, project manual);
- Professional land surveying not included in the scope of services (i.e., buried utility investigation, easement research, condominium documents, project stake-out and as-built drawings).
- Professional services required due to conditions different from those itemized under the Scope of Services or due to events beyond the control of Calvin, Giordano & Associates, Inc.
- Professional services required, due to changes in the site plan initiated by the CLIENT, their representatives or other consultants (e.g., architects, landscape architects, etc.) after either design or preparation of the construction drawings has commenced.
- Re-review of rejected shop drawings.
- Review and approval of Contractor pay requests.
- Review of Data supplied by the CLIENT (i.e. GIS data sets, databases, aerial images, etc.) required for integration into this project.
- Review of shop drawings for contractor or Client selected alternatives, materials, products, etc.
- Special shop drawing annotation and modification to expedite shop drawing approval process.
- Updated boundary survey, site evaluation or closing assistance work, unless specified above.

REIMBURSABLE EXPENSES

Calvin, Giordano & Associates, Inc. and its consultants will be reimbursed for the printing of drawings and specifications, deliveries, Federal Express services, required travel time and travel expenses, long distance telephone calls, fax transmittals, postage, fees paid for securing approval of authorities having jurisdiction over the project, renderings, models and mock-ups required by CLIENT, as required. Reimbursable expenses and sub-consultant invoices will be billed directly to the CLIENT at actual cost, as outlined in the Traffic Engineering Services Agreement dated 5/29/2018.

MEETING ATTENDANCE

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

SCHEDULE OF FEES

Calvin, Giordano & Associates, Inc. will perform the Scope of Services for a lump sum fee as shown in the proposed Schedule of Fees:

PROPOSED SCHEDULE OF FEES		
I	Professional Engineering Services	
	Professional Civil Engineering Services	\$111,150.00
	Other Engineering Work Activity	
	Public Outreach - Two Meetings	\$3,040.00
	Design Plans - Data Collection	\$7,510.00
	Design Plans - 60% PG&D	\$10,200.00
	Design Plans - 90%PG&D / Permits	\$11,720.00
	Design Plans - 90% S&PM	\$3,200.00
	Design Plans - 90% Details	\$1,140.00
	Design Plans - 90% Cost Estimate	\$2,820.00
	Design Plans - 60% S&PM	\$3,960.00
	Design Plans - 60% Details	\$1,520.00
	Design Plans - 60% cost estimate	\$3,660.00
	Design Plans - 100% Plans	\$5,480.00
	Design Plans - 100% cost estimate	\$2,280.00
	Final Drainage Calculations and Report - one concept	\$6,560.00
	Meetings - per the scope	\$3,040.00
	Civil Engineering Project Management	\$4,560.00
	Assist Traffic Engineers with review of design alternatives	\$2,280.00
	Existing Drainage Evaluation	\$7,480.00
	Drainage Evaluation - two concepts	\$12,360.00
	Utility Coordination - QL D	\$3,340.00
	Sub-Consultant	
	Geotech Consultant	\$15,000.00

A	Professional Traffic Engineering Services	\$32,960.00
	Corridor Planning Studies	
	Project Management/General Tasks	\$2,520.00
	Existing Conditions Analysis	\$4,940.00
	Preliminary Modeling	\$2,700.00
	Preliminary Alternatives Development	\$4,600.00
	Draft Report Preparation	\$5,700.00
	Final Alternative Selection/Recommendation	\$1,940.00
	Final Report Preparation	\$3,800.00
	Public Hearings	\$1,520.00
	Other Traffic Work Activity	
	Travel Expenses	\$3,040.00
	Sub-Consultant	
	Traffic Count Consultant	\$2,200.00
II	Professional Surveying Services	\$6,100.00
	Route Survey	
	Horizontal control	\$270.00
	Vertical control	\$270.00
	Cross sections @ 100 ft. intervals	\$1,620.00
	Locate improvements	\$1,620.00
	Research records	\$165.00
	Set up calculations	\$165.00
	Process field data	\$665.00
	Field crew supervision	\$165.00
	Drafting	\$665.00
	Check final drawing	\$330.00
	Project Management	\$165.00
III	Meetings not included in I thru II	Hourly
	TOTAL Lump Sum (Plus Hourly Services)	\$150,210.00

TERMS OF THE AGREEMENT

- Work will be performed in accordance with the Professional Traffic Engineering Services Agreement between the City of Key West and CGA as outlined in the Professional Services Agreement dated 05/29/2018 and per the City of Key West Resolution 18-143.

MISCELLANEOUS PROVISIONS

- CLIENT and Calvin, Giordano & Associates, Inc., respectively, bind themselves, their partners, successors, assigns, and legal representatives to the other party to this Agreement and to the partners, successors, assigns, and legal representatives of such other party with respect to all covenants of this Agreement. Neither CLIENT nor Calvin, Giordano & Associates, Inc. shall assign this Agreement without written consent of the other.
- This Agreement represents the entire and integrated agreement between the CLIENT and Calvin, Giordano & Associates, Inc. and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both Calvin, Giordano & Associates, Inc. and the CLIENT.
- Unless otherwise provided, this Agreement shall be governed by the law of the place where the project is located.

TERMINATION OF THE AGREEMENT

- This Agreement may be terminated by either party upon not less than seven (7) days written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination. Failure of CLIENT to make payments to Calvin, Giordano & Associates, Inc., in accordance with this Agreement, shall be considered substantial nonperformance and cause for termination.
- In the event of termination in accordance with this Agreement or termination not the fault of Calvin, Giordano & Associates, Inc., Calvin, Giordano & Associates, Inc. shall be compensated for services properly performed prior to receipt of notice of termination, together with Reimbursable Expenses then due.

We appreciate the opportunity to submit this proposal. Calvin, Giordano & Associates, Inc. is prepared with the necessary manpower to proceed with the proposed scope of services upon receipt of the executed authorization. Our personnel are committed to completing the project in a timely manner. Please indicate your acceptance of this proposal by signing below and returning one executed copy of the contract to this office. We look forward to working with you in making this project a success.

Sincerely,

CALVIN, GIORDANO & ASSOCIATES, INC.

**Christopher B
Giordano**

Digitally signed by
Christopher B Giordano
Date: 2021.06.04 13:55:39
-04'00'

Chris Giordano
President

Cost of these services are \$150,210.00 plus hourly as noted in fee breakdown.

ACCEPTANCE OF CONTRACT

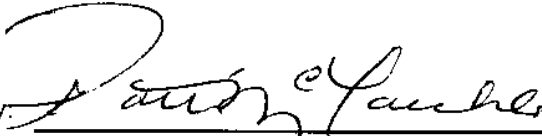
CALVIN, GIORDANO & ASSOCIATES, INC.

By: Christopher B
Giordano

Digitally signed by Christopher B
Giordano
Date: 2021.06.04 13:55:56 -0400

Date: _____

Name: Chris Giordano
Title: President

By: 

Date: 7/21/2021

Name: Ms. Patti McLauchlin
Title: City Manager

Design Concept

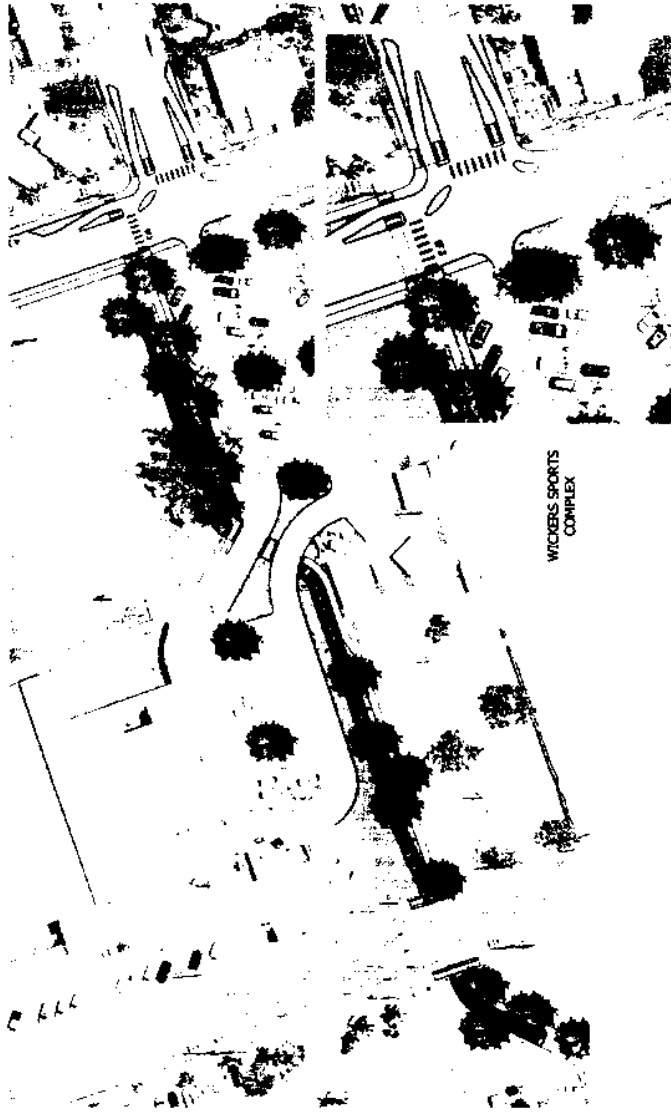
A critical segment of the Crosstown Connector is the route through the Wickers Sports Complex, connecting the bike lanes on Duck Avenue to the bike boulevard on Staples Avenue. Currently, bicyclists must navigate through off-set intersections and parking lots to make the connection. The scenario used in the Complete Streets Resource Guide for the multi-use trail was the Wickers Sports Complex. A formal trail through the complex is a high priority project so the conceptual design presented in the Complete Streets Resource Guide was taken to the next level of design here.

Design Recommendations:

- Build 10-foot wide trail through the Wickers Sports Complex parking lot.
- Install 6-foot wide sidewalk adjacent to the trail.
- Provide a minimum 2-foot paved or planted buffer between the proposed sidewalk and trail through the Wickers Sports Complex parking lot.
- Install 15-foot wide crossings at Kennedy Drive, 14th Street, and Duck Avenue with stamped asphalt to accommodate the trail and sidewalk.
- Connect existing planting islands in the Wickers Sports Complex parking lot to create a more predictable traffic pattern and provide a refuge for crossing pedestrians and bicyclists.
- Use refuge islands, curb extensions, stamped asphalt crossings, and bike boxes to create more predictable traffic patterns and shorten pedestrian and bicyclist crossing distances.

Cost Estimate

- \$829,884



14th St and Duck Ave intersection detail

