## **CITY OF TAMPA**



Bob Buckhorn, Mayor

#### CONTRACT ADMINISTRATION DEPARTMENT

Michael W. Chucran, Director

### **ADDENDUM**

DATE: November 19, 2018

Contract 19-D-00012; Southeast Seminole Heights Flooding Relief Project Design-Build

Item 1: Attached is a corrected Design Criteria Package. It corrects the name of the Design Criteria Professional.

All other provisions of the RFQ not in conflict with this Addendum remain in full force and effect. Questions are to be e-mailed to Contract Administration@tampagov.net.

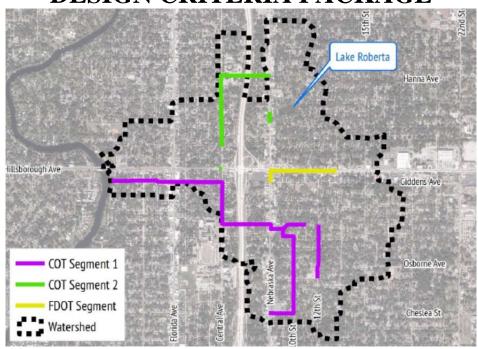
Jim Greiner, P.E., Contract Management Supervisor



# RFQ: 19-C-00012 DESIGN-BUILD SERVICES FOR THE

Southeast Seminole Heights Flooding Relief Project

### **DESIGN CRITERIA PACKAGE**



PREPARED BY:

KEVIN HENIKA, AIA, CITY ARCHITECT Contract Administration Department Design Criteria Professional

### CITY OF TAMPA November 2019

### **DESIGN CRITERIA:**

The City of Tampa has prepared the Design Criteria Package for RFQ: 19-C-00012 Design-Build Services related to the Southeast Seminole Heights Flooding Relief Project. The project includes but is not limited to the design, and construction of approximately 15,300 LF of box culvert, laterals, inlets, interconnections to the existing stormwater system, and associated utility construction and or relocation.

The scope shall include, but not be limited to the following:

- Design services will include:
  - Assessment and identification of economical treatment alternatives for stormwater quality improvements
  - Assessment of all trees in or immediately adjacent to the right-of-way within the project area
  - o Geotechnical investigation to assess soils for stability and unsuitable materials
  - o Completion of a hydrologic/hydraulic analysis for capacity in the proposed stormwater structures
  - o Analysis of roadway, signalization and signing & pavement markings for proposed cycle tracks/lanes, sidewalks, ramps, and other complete streets improvements, as necessary
  - o Development of plans for roadway, signalization and signing & pavement markings as requested by the City of Tampa Transportation Division
  - o Performance of subsurface utility excavation (SUE) and utility coordination
  - o Performance of topographical surveying
  - o Development of base drawings and proceed with formal design resulting in construction documents
- Comprehensive design services of selected improvements
- Detour route planning
- Coordinating, applying for and obtaining regulatory permits
- Preconstruction Services with Development of Guaranteed Maximum Price (GMP) for construction
- Construction of selected improvements, including any demolition and rehabilitation of existing stormwater structures and pipes, as well as water, wastewater and transportation facilities

- Public Relation activities to maintain a positive response to the project from affected residents
- Estimated design & construction Budget: \$23,500,000

In addition, the following pages contain the project overview and description of requirements.

### 1. Purpose

- 1.1 This document provides the criteria for the design and construction of approximately 15,300 LF of box culvert, and variously sized stormwater pipe network; in addition to the replacement of water distribution and transmission mains; associated utility construction and/or relocation; the construction of sidewalks and raised crosswalks, bicycle facilities including bike boxes, shared lane arrows, and bicycle boulevard facilities, and on-street parking. Pedestrian features are to be designed in accordance with Americans with Disabilities Act (ADA) requirements. The intent of this document is to list the minimum design-build criteria necessary for achieving the installation of the new stormwater, water and wastewater infrastructure and transportation improvements.
- 1.2 This package is not a specification or prescriptive checklist and is not intended to replace the professional judgment by a competent licensed professional engineer after coordination with the end-user and stakeholders of the City of Tampa.

### 2. Design Criteria

2.1 The design is based on providing facilities that will meet the needs of the Transportation & Stormwater Services Department (TSS) to effectively mitigate flooding and accommodate pedestrian and bicycle traffic in the area, as well as for the upsizing of some waterlines for the Water Department.

Construction of drainage improvement features will reduce flooding depth and duration within the Southeast Seminole Heights Drainage basin area. The design should consider existing conditions and the current and future demands on the stormwater conveyance system. It is imperative that the final designer and preparer of construction documents fully understand the system requirements (model results), permitting, site logistics (residential impacts) and all related requirements to design the stormwater facilities accordingly.

The design should also consider and include transportation improvements to enhance pedestrian safety and mobility.

The design team should include fire hydrant assemblies, meter sets and valves for a complete and functioning potable water system.

2.2 The feasibility study as prepared by Florida Design Consultants and referenced herein is attached for consideration.

The surrounding area is highly urbanized; therefore the impacts during construction would consist of: transportation, access for residences, trees in or near the right-of-way, and utility service relocations and/or adjustments. There is little or no vacant land in the region; however, the Design Build effort should consider the incorporation – to a practical extent – of green solutions as part of the proposed stormwater infrastructure. All proposed design features will be within the right-of-way.

2.3 The construction of <u>proposed drainage features</u> consist of two segments – Segment 1, is shown in purple; Segment 2, in green on the cover page of this Design Criteria Package.

The proposed <u>water features</u> will parallel the proposed box culverts along the majority of the project corridor.

Construction of <u>transportation features</u> will be for the following locations (see Project Development Criteria):

- ➤ In N. Central Avenue from E. Osborne Avenue to E. Hanna Avenue, restriping of the existing typical section to provide for either shared lane arrows and on-street parking or two (2) bike lanes.
- At the intersection of N. Central Avenue and E. Wilder Avenue, addition of curb extensions.
- At the intersections of N. Central Avenue and E. Osborne Avenue; N. Central Avenue and E. Hillsborough Avenue; N. Central Avenue and E. Hanna Avenue; and N. Nebraska Boulevard and E. Hanna Avenue, bike boxes.
- At the intersection of N. Florida Avenue and W. Giddens Avenue, realign east-west approaches and construct a raised intersection or add crosswalks.
- At the intersection of N. Nebraska Avenue and E. Caracas Street, add textured crosswalks.
- At the intersection of N. River Boulevard and W. Giddens Avenue, construct a bike boulevard ramp (a connection from the shared vehicle/bicycle lane) onto the sidewalk and widen sidewalk on N. River Boulevard from W. Giddens Avenue to W. Hillsborough Avenue.
- 2.4 Design build services shall include, but not be limited to, demolition, replacement of aging infrastructure, pavement, traffic analysis, maintenance of traffic, coordination with regulatory agencies, utility coordination, topographic survey, tree assessment, geotechnical investigation, hydrologic/hydraulic analysis, public relations, design plans and cost estimating.

It shall be the responsibility of the design team to perform topographic survey and create new base drawings for their design, which shall include the design of the local drainage systems, water mains and traffic features.

- 2.5 Existing drainage problems, as identified in the feasibility study, along the routes identified for Segments 1 and 2 are severe. Additional analysis may be necessary to ensure any local drainage connected to the proposed RCB culvert will function properly. It will be necessary to evaluate the proposed hydraulic grade line within the box culvert, to ensure it will be sufficient depth below the level of connecting inlets for the design storm of interest.
- **3. Project Development Criteria** (The purpose of the conceptual drawings was to attain feasibility for the construction of the box culverts. They do not include the design for the upgrade of the local drainage, water, wastewater facilities and other improvements within the limit of construction. The drawings were not prepared based on topographic survey, and the existing utilities were shown based on the best information available.)

The region considered for this project is east of the Hillsborough River, bounded by N. 15<sup>th</sup> Street to the west, E. Hanna Avenue to the north, and E. Chelsea Street to the south in Tampa, Florida. Transportation, Wastewater and water features will be incorporated in so far as they fall within the boundaries of the stormwater improvements.

This project is not a route study; however, the Design Build Team is to provide a topographic survey of the proposed route for the respective stormwater conduits and provide alignment for the sidewalks, paths and ramps. Conduct preliminary design services that will include the following:

- Utility coordination with the City and other utility owners to determine the existing facilities, which may include subsurface utility excavation (SUE).
- A tree assessment by a certified arborist for impacts to large diameter and protected trees within the public right-of-way.
- Traffic assessment for maintenance of traffic and detour route planning.
- Geotechnical assessment of soils within the impacted areas.
- Design of transportation facilities which will include:
  - o Roadway Analysis;
  - o Signalization Analysis;
  - o Signing & Pavement Marking Analysis.
- Environmental and right-of-way permitting.
- Coordination with FDOT on proposed work within their right of way.

The upstream connections and any conceivable route for the stormwater runoff to the downstream receiving waters will impact existing developed areas. The City will review the

proposed design for constructability and to ensure a complete working system. The final design for the stormwater, water, wastewater and transportation improvements will be during construction.

Create final plans to be provided in AutoCAD (.dwg) and PDF formats and provide pricing proposals developed into a Guaranteed Maximum Price (GMP) document with all associated exhibits (scope, pricing, qualifications, schedule, etc.).

Present final design, site plan, site preparation, build schedule, material purchases and placement, utility agreements, building permits and all required approvals from regulatory agencies and local authorities.

### 4. Environmental Criteria

The Design Build effort shall incorporate, to a practical extent, green solutions as part of the proposed stormwater infrastructure. Solutions include, but are not limited to, treatment systems appropriate for an urban area such as rain gardens, vortex separators, filters, baffle boxes, screens and skimmers, pocket ponds and wetlands to reduce pollutant loading on Hillsborough River.

Using typical approaches (for example, stormwater ponds) for treatment are not economical as enough vacant land is not available. Many of the existing treatment systems are to be used to retrofit existing systems or can be constructed with new features.

The Design Build team will be responsible for all required environmental testing and permitting needed to complete the project. The scope of these requirements will be determined by the Design Build team based on the selected improvements and construction requirements.

### 5. Construction Management & Oversight

The Design Build team will be responsible for primary construction management activities and general project oversight with consistent coordination with the City during the design and construction portions of the project. Construction management activities will include, but not be limited to:

• Identification of the designated staging location(s) with respect to project need. The Design Build Firm shall prepare an aerial map with the project boundaries and staging site(s) clearly delineated. The map shall include, at a minimum, distances (from property lines) of the staging lot(s) to adjacent residential parcels, in addition to the duration of occupancy of the location. Accompanying the aerial maps shall be a plan of the respective staging site(s) showing fencing, screening, and if necessary the location of trailers, parking areas and the driveway apron(s) for access.

- Preparation of a general Quality-Control Plan to be submitted in format(s) acceptable to the City, in which personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out the Design Build Firm's quality-assurance and quality-control responsibilities will be identified. Coordinate with Contractor's construction schedule.
- Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for project.
- Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- Include a comprehensive schedule of work requiring testing or inspection, including the following:
  - Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractorelected tests and inspections.
  - Owner-required tests include soil density, concrete for all structural or structurally related work and asphalt.
  - O Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- Maintain testing and inspection reports including log of approved and rejected results, including work the City has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

The Design Build team shall provide AutoCAD as-built drawings accurately depicting the asbuilt conditions of the proposed underground conveyance systems (stormwater and water); in addition to any pertinent design data (geotechnical reports, survey, hydraulic analysis). Hard copies of the as-built drawings will also be required as will be determined during the design phase.

#### 6. Public Relations

Mandatory public involvement meetings prior to and during construction are necessary to minimize impacts and reduce uncertainty for the residence, particularly with regards to transportation/traffic impacts. The Design Build firm, at a minimum: (1) should notice impacted residences and provide them an opportunity to meet with them one on one at their property; (2) provide as much access as safely possible; and (3) plan for short duration, high intensity construction for impact to more than four (4) residences.

Construction requirements may be imposed, with public involvement, to reduce the severity of the impacts. Inquiries and questions about design and construction will be handled by the Design Build Firm, after coordination of the responses with the City of Tampa.