



Date: April 5, 2016

To: Thomas J. Bonfield, City Manager

Through: W. Bowman Ferguson, Deputy City Manager

From: Steven Hicks, Director, General Services Department

Subject: Design and Construction Contract with Bobbitt Design-Build, Inc. for the Fire Station #17 Project

Executive Summary

In 2013, the City of Durham's Fire Department identified the need for a new fire station facility in east Durham in order to provide proper response times in support of past and current annexation and the rapid growth of residential development near the Leesville Road and Doc Nichols Road intersection. To expedite the project and shorten the new facility's design and construction time frame, the General Services Department investigated the use of design-build project delivery which was approved in 2013 for municipal use in North Carolina pursuant to General Statute Section 143-128.1A.

In May 2015, the General Services Department established in writing the criteria necessary for determining the appropriateness of the design-build method for Fire Station #17. The Request for Qualifications for Design-Build Services was subsequently advertised on November 12, 2015 utilizing the Fire Department's prototype facility design; a pre-proposal conference was conducted on November 23, 2015; and written submittals from three (3) design-build teams were received on December 30, 2015. Interviews were conducted on January 21, 2016 by an evaluation committee made up of City staff from the Fire Department, the Department of Equal Opportunity / Equity Assurance and General Services. Bobbitt Design-Build, Inc. was determined by the City's evaluation committee to be the top-ranked design-build firm for the project.

Recommendation

The General Services Department recommends that the City Council:

1. Adopt the resolution finding that the use of a Design-Build project delivery method for the Fire Station #17 project is in the best interest of the City;
2. Authorize the City Manager to negotiate and execute a Design-Build contract with Bobbitt Design-Build, Inc. for preliminary design and preconstruction services for the Fire Station #17 Project not to exceed a maximum cost of \$300,000;
3. Authorize the City Manager to negotiate and execute a Guaranteed Maximum Price (GMP) Amendment to the Design-Build contract for final design and construction services not to exceed \$2,868,600;
4. Establish a project contingency for of \$316,800; and

5. Authorize the City Manager to negotiate and execute change orders on the Fire Station #17 Design-Build contract, including the GMP Amendment, provided the total project cost does not exceed \$3,185,400, the total amount budgeted for Design-Build services, including design, preconstruction and construction services.

Background

In 2012, Pulte Home Corporation (Pulte), the developer of Del Webb Carolina Arbors, a 450 acre residential development in east Durham located on the south side of Leesville Road, east of Doc Nichols Road and north and west of Andrews Chapel Road, submitted a property for a new fire station as part of the zoning and annexation approved by Durham's City Council in June of that year. Currently the area is not served for either initial or fully effective Fire Department response force within established City of Durham response standards. The General Services Department (GSD) and the Fire Department worked with Pulte to identify and evaluate sites in the area that fulfilled the criteria for a new fire station including a proximity that provides adequate fire district response times and an achievable site configuration that can accommodate Fire Department operational requirements.

An acceptable site for the new Fire Station 17 was identified at 5503 Leesville Road (3.66 acres at the northwest corner of the intersection with Doc Nichols Road)) with the additional nearby property at 5650 Leesville Road (.384 acres) also included in order to satisfy the four acre area minimum site donation requirement. This site also provides access to the gravity sewer constructed within the Dell Webb community which Pulte communicated was in place on February 12, 2016. Currently there are no existing sewer services on the fire station site and construction of the new facility will require a sewer extension/ connection to the subject site in addition to land easements which may also be required. The City already has a construction document set of drawings prepared by Horvath Associates for this sewer connection and these documents have been submitted to and approved by Public Works.

In accordance with the General Statutes, the General Services Department prepared written criteria demonstrating why the design-build method is the most appropriate project delivery method for this project. The Design-Builder, as a part of its design and its preconstruction services, will assist with developing a strategy for the best approach for the successful completion of the project including guidance and assistance in the preparation of a schedule and a reliable, preliminary cost estimate along with evaluations of any value engineering measures. At an appropriate point during the project and prior to contracting for construction, the Owner will ask the Design-Builder to commit to a Lump Sum price for all its design and construction services. As part of the planning and design process for Fire Station #17, a minor special use permit will also be required since the property is currently zoned residential, is located in the County and will require annexation.

Issues/Analysis

The new Fire Station #17 is a critical public safety project, one that is necessary to provide proper Fire Department response times in an area of the City experiencing rapid growth. Utilizing the design-build approach streamlines project delivery in that the design-builder is obligated to provide both design (architectural and engineering) and construction services for the project under one contract. Establishing this single point of responsibility offers several advantages, including greater protection from design errors and omissions, the opportunity for a shortened project timeframe, reduction in the number of change orders and overall reduced cost.

The City of Durham intends to utilize best commercial practices to accomplish the goals of this project. The General Services Department expects the Design-Builder to proactively address risks and challenges in the process and participate in improvement activities to achieve project success. The City also expects to work with the Design-Builder to devise and implement appropriate processes for this project that will maximize efficiency, overall quality, cost savings and efficiencies. Ongoing consideration will be given to any maximum budget figures that must be adhered to in order to promote flexible, appropriate decision making as the project progresses. As the sole responsible source for total project compliance and design and construction performance the Design-Builder will hold all design professionals, testing services (with the exception of Special Inspections and LEED commissioning services by Owner), trade contractors and trade supplier contracts.

Specific advantages of using Design-Build project delivery for this fire station include:

- Expedited construction project delivery, keeping the project on time and within budget without sacrificing quality.
- Effective use of a prototype design which minimizes the scope for architectural services enabling more of the project's funds to be allocated directly to physical improvements in construction of the facility
- Having the architect and contractor closely working together as a team for the duration of the project which streamlines the project schedule and reduces coordination risk and cost estimation gaps
- Reducing the overall project time frame which minimizes the effect of price escalation that would occur during construction
- Within the General Services Department's Project Management Division, the City has professional and experienced personnel to ensure that the Design-Builder will provide a quality project within the budget constraints established by Council and in compliance with the North Carolina General Statutes for design-build project delivery.
- The City has an established and successful M/WBE program which ensures that the Design-Builder will comply with the M/WBE goals set by Council for both design and construction.

Approval of the Design-Build contract will permit the Design-Builder to proceed with preconstruction and concept design services with a 60 day duration, after which we will prepare a preliminary GMP for review and approval with the goal of bidding the project in early July 2016. Following bidding the Design-Builder will present a GMP for approval, in order to execute a final Design-Builder contract amendment. Construction is anticipated to begin in October 2016, with a duration of twelve months.

General Services was approached in late March, 2016 by Durham County EMS about the possibility of a co-shared facility. This would allow an economy of emergency response operations in the community by eliminating duplicate facilities in close proximity to one another due to similar response time and location requirements. The impact of a co-shared arrangement on the building program, budget and timeframe is currently being studied by the Project Management Division and the cost of any design and construction changes to the facility prototype due to EMS program additions will be borne by the County. As the station is in the early planning stage, minimal design fee impacts from the Design-Builder are expected. Further confirmation of the EMS program requirements is needed in order to determine proper allocation and sharing of these fees. Construction budget implications and contributions by the County will need to be deliberated as will the impact of a larger building footprint on site planning and development.

Alternatives

General Services staff recommends proceeding with the design-build project delivery approach as the only viable alternative. Contracting for design services separately and then bidding the project would add time and cost.

Financial Impacts

Amount	Munis Codes <i>Org - Object – Project</i>	Description
\$ 300,000.00	3501B900-731003-CB011	Professional Services - Bobbitt
\$ 83,000.00	3501B900-731003-CB011	Professional Services - Other
\$ 2,868,600.00	3501B900-731000-CB011	Construction in Progress
\$ 286,800.00	3501B900-731900-CB011	Construction Contingencies
\$ 30,000.00	3501B900-731900-CB011	Design Contingencies
\$ 1,650,000.00	3501B900-732300-CB011	Equipment, Furniture, Vehicles
\$ 180,400.00	3501B900-731000-CB011	Additional costs - other
\$ 5,398,800.00	TOTAL	

Design-Build Scope of work phases:

Feasibility Design \$ 8,207

1. Site investigations, survey and plat for annexation use. Geotech soil bearing tests.
2. Evaluating Owner’s Criteria and preparing written report summary/response
3. Sustainability Workshop / Plan for attaining LEED certification
4. Confirm programmatic uses and general requirements.
5. Early identification of potential challenges.

Conceptual Design \$ 41,808

1. Gather additional site information and further develop site plan. Coordinate any needed annexation submittal information and information for special use permit
2. Continue to develop/coordinate Sustainability Plan, LEED commissioning, energy modeling and credit review/identification
3. Recommend scheme with construction phasing and updated cost model information
4. Prepare a maximum of two design schemes for Owner’s review with construction phasing options and cost models
5. Review and confirm project cost estimate(s) and any proposed value engineering items
6. Follow-up site environmental assessment / subsurface / geotech to verify existing conditions as necessary. Review site utility and stormwater requirements
7. Identify building materials and appearance.
8. Initial exterior elevation drawing/sketch.
9. Conceptual/initial building code review.
10. Review, update and confirm project schedule

Preliminary Design

\$ 35,000

1. *Building information*: review and confirm plan configuration and elevation elements including exterior building materials, foundation, roof and structural systems, materials testing, basic layout of MEP design systems
2. *Site information*: demo/grading/drainage plans, sedimentation and erosion control, stormwater controls, basic site lighting and signage locations, planting schedule, sewer connection coordination. Review prior design phase and further refine site and building design information. Verify site topography and sub-surface conditions. Develop preliminary grades, stormwater and utilities plan.
3. Prepare schematic site, architectural, structural, mechanical, plumbing and electrical design drawings based on Criteria document
4. Develop Design-Builder's Proposal detailing estimated trade costs, proposed date of substantial completion, list of key personnel and suppliers
5. Preliminary finish schedule.
6. Preliminary building code review.
7. Review/present design concepts to Durham Planning Dept. and other agencies for necessary input
8. Coordinate any on-site privately owned utility work if necessary (off-site improvements and road widening not included)
9. Pre-submittal meetings with jurisdictions as needed.
10. Prepare Preliminary Design Report confirming design criteria and agreed upon program elements
11. Develop preliminary building plans with all elevations.
12. Prepare phases or packages of working documents if appropriate and evaluate/coordinate bidding with Owner
13. Prepare preliminary level cost estimate and updated project schedule
14. Review, update and confirm project schedule

Construction Documents, Permitting

\$ 105,000

1. Coordinate with Owner/conduct any community meetings necessary
2. Security, plumbing, mechanical, electrical & fire protection engineering for permitting and construction documents.
3. Resolve all prior review comments from earlier phases and prepare detailed finalized construction documents
4. Complete plans for permitting, subcontractor pricing and construction.
5. Coordinating and preparing bid document information and bidding requirements with Owner. Bidding specific phases of work. Provide detailed, disclosed information on received bids for Owner evaluation. Assist Owner in review and comparison of cost summary of submitted bids and any alternates
6. Lock in key subcontractors/suppliers as needed.
7. Comprehensive site design, including grading, stormwater, utilities and landscaping as needed for permitting and construction.
8. Review, update and confirm project schedule
9. Submit plans for approvals and coordinate any revisions/resubmittals required
10. Respond to comments and resubmit.
11. Obtain Permits

Construction Administration- \$ 37,000

1. Administration and observation associated with site improvements including a preconstruction conference, site observations and meetings
2. Provide shop drawing review and approval as well as preparation of change orders and construction change directives

Total LEED Design / Documentation \$ 57,500

1. Develop Sustainability Plan for attaining LEED certification in conjunction with Feasibility Design Phase
2. Assess, coordinate and refine targeted LEED certification items
3. Coordinate LEED activities in preparation for working drawings.
4. Finalize design phase LEED submittals.
5. Provide LEED construction submittals and documentation.

Construction - Guaranteed Maximum Price not to exceed \$2,868,600

1. Site work to include but not be limited to:
 - a. Clearing and rough grading with excess dirt and material removed from the site. Tree protection and erosion control measures to be immediately put into place.
 - b. Site utilities including fire line and domestic water, sewer, natural gas and electrical service and site lighting.
 - c. Concrete paving, walkways, utilities, landscaping and storm water site management / retention system.
 - d. Flag pole installation
2. Building construction to include but not be limited to:
 - a. Concrete slab on grade foundations with continuous spread reinforced concrete footings and thickened concrete floor slabs at apparatus bay areas.
 - b. Exterior bearing walls consisting of reinforced and grouted CMU walls and metal stud framing with brick veneer.
 - c. Roof structure consisting of cold formed steel roof trusses and corrugated structural metal deck, membrane or standing seam metal roof with matching fascia, rakes gutters and downspouts, flashings, copings and sealants.
 - d. Exterior building enclosure including insulated exterior wall cavities with appropriate thermal barriers, exterior window systems, hollow metal doors and frames and upward acting sectional doors.
 - e. Interior finishes including gypsum wall board on metal stud framed partitions, floor and ceiling finishes, interior doors, casework, painting, wall protection and window coverings.
 - f. Toilet, bath and kitchen fixtures and accessories.
 - g. Specialty equipment including lockers and marker boards.
 - h. Interior and exterior signage.
 - i. Mechanical, plumbing, electrical, alarm and communications systems and controls.

SDBE Summary

The Equal Opportunity/Equity Assurance Department reviewed the statement of qualifications submitted by Bobbitt Design Build, Inc. of Raleigh, North Carolina to determine compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting. It was determined that Bobbitt Design-Build, Inc. was in compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting. Bobbitt Design-Build, Inc.'s EBOP plan is attached.

SDBE REQUIREMENTS

The advertised Request for Qualifications for this project included SDBE participation goals for both design and construction as described below:

- Minority SDBE goals for design and professional services were set at 5%
- Women's SDBE goals for design and professional services were set at 5%
- Minority SDBE participation goals for construction were set at 15%
- Women's SDBE participation goals for construction were set at 5%

As final dollar amounts for construction cannot typically be determined at this initial stage of a design-build project, each submitter was required to provide an Equal Business Opportunity Plan (EBOP) document outlining the Design-Builder's proposed strategy for meeting SDBE goals and Good Faith Efforts for construction at the projected time of final negotiated contract price.

Bobbitt Design-Build, Inc. will subcontract to the following certified firms for design and professional services:

Firm	ID	City/State	Amount	% of Contract
CLH Design, PA (civil, landscape)	WSDBE	Cary, NC	\$ 7,500-	5%
Gen 2 Design (Electrical)	MSDBE	Durham, NC	\$ 15,000	10%

WORKFORCE STATISTICS

Workforce statistics for Bobbitt Design Build, Inc. are as follows:

Total Workforce	35
Total Females	4 (11%)
Total Males	31 (89%)
Black Males	0 (0%)
White Males	31 (89%)
Other Males	3 (9%)
Black Females	1 (3%)
White Females	3 (9%)
Other Females	0 (0%)