



**Date:** July 7, 2015

**To:** Thomas J. Bonfield, City Manager  
**Through:** Keith Chadwell, Deputy City Manager  
**From:** Reginald J. Johnson, Director  
Department of Community Development  
**Subject:** Additional Architectural and Engineering Services for Southside Homeownership Phase 1

### **Executive Summary**

As part of the Southside West Phase 1 homeownership effort, the City contracted with O'Brien Architecture in the amount of \$171,035.00 to provide architectural and development services to include architecture, landscape architecture, civil engineering, surveying, bid preparation, site plan approval and geotechnical services associated with site preparation and public infrastructure improvements for the first phase. The scope of work included detailed planning and layout of the 48 lots along Hillside Avenue, E. Piedmont Avenue and South, Fargo and Chestnut Streets, the public bid process to include engineering and construction documents, a comprehensive and topographic survey of the property and the design of the single family units and construction administration for the first phase. Phase 1 of site preparation and infrastructure improvements is complete and construction of the single family units is underway. As phase 1 nears completion, additional services were required during the construction phase and additional tasks are needed that will enhance the phase 1 development which require an increase in the contract amount of \$57,660.00 and an extension of time from the original April 15, 2015 completion date.

### **Recommendation**

The Department of Community Development recommends that City Council authorize the City Manager to extend the contract date with O'Brien Architecture to include completed and additional Architectural and Engineering Services for the Southside Phase 1 Homeownership effort and increase the contract amount by \$57,660.00 for a total contract amount of \$228,695.00.

### **Background**

O'Brien Architecture was responsible for the primary design of the phase 1 homeownership effort at Southside. Along with their team of consultants and sub-consultants, they provided the architectural drawings and overall construction administration for the development effort. Additional tasks included the creation of the overall site plan and approval process, civil engineering to include, grading studies, earthwork calculations, stormwater assessments, demolition, grading and utility plans in preparation for the demolition of the existing and installation of the new infrastructure improvements to include new water and sewer services and streets in the defined area, landscape architecture to include the design of gateway entrances and lot layout for the development along. Through the public bid process, a site preparation and infrastructure contractor was selected for the preparation of 48

homeownership lots which is complete. Currently, a total of 44 of the 48 lots are sold, reserved or have construction activity. Of the 44 lots, 3 are spec units being constructed by the individual builder(s) with 24 units being sold to households at 80% or below of the area median income and 17 to market rate buyers. 22 of the 44 units have closed and are occupied with an additional 10 units in various stages of construction.

Due to changes in the original development plan to include programming, schematic design and design development, construction documents, requirement of an additional bid process, additional utility replacement and overall project development and administration, additional costs were added to the first phase of development. The additional activities associated with each task are below.

1. **Site Studies & Site Plan** – Based on the original development plan and coordination with City Departments, a site plan application was prepared to submit to the Planning Department for approval. As the detailed design moved forward and analyses were completed, it was determined that modifications to the design approach, programming, and permitting strategy would better benefit the community. The changes ultimately led to additional site studies and the preparation of two (2) separate site plan applications in order to expedite the turnover of lots and minimize construction costs, as well as perpetual fees, associated with stormwater management for the first phase. From the architectural side, as the project developed the architect was required to address the needs of the builders and the homeowners in reference to design and construction along with the additional design of a two bedroom unit for the smaller, less marketable lots on Hillside Avenue.
2. **Construction Documents** – In order to expedite the start of construction, the design team was asked to prepare an early site release bidding and construction package for earthwork only however, upon completion of the documents, it was determined that it would be advantageous to only have one contractor complete all of the site and infrastructure improvements. The design team then prepared two (2) separate construction document packages; one for permitting and approval through Public Works' prescribed process and the other to allow bidding to commence while the permitting plans were being approved. Ultimately these plans needed to be merged into one final set of plans to be used for construction, but the strategy proved to be effective as bidding, contractor negotiations, and construction contract execution were complete by the time Public Works approved the drawings and issued permits for construction. From the architectural side, as the new designs developed, new documents were required for permitting and construction. Additional requirements included the creation of drawings for the replacement housing for the existing homeowners in Southside and the submittal of the accompany documents.
3. **Cost Estimates** – Initially the design team was to prepare a cost estimate at the completion of each significant phase during the implementation of the Detailed Development Plan. These were to occur after schematic design, design development/site plan approval, and construction documentation. As the design and permitting strategies summarized above evolved, the design team was asked to prepare updated cost estimates so that the entire team could understand the financial impacts any relevant changes had on the overall project. These changes included numerous grading studies, earthwork calculations, and multiple lot layout revisions which resulted in the preparation of twelve different cost estimates during this phase of the project.

4. **Bidding** – In addition to the earthwork bidding package mentioned above, it was initially envisioned that the site drawings and building plans would be submitted together as one package. As the project progressed it became evident that these elements needed to move forward as separate processes; requiring an additional effort to prepare specifications and exhibits for the home builder RFQ. Further effort was also required during the infrastructure bidding process as the bid period was extended which necessitated supplemental responses to bidder questions, issuance of addenda, and coordination with the project team.
5. **Gateway Revisions** – Upon completion of the gateway designs and issuance of the construction drawings, the design team was asked to study alternative design options. These studies were done to address feedback received from stakeholders outside of the immediate Southside team, requests from the home builders pertaining to alternative location of the houses on the lots, and opportunities to reduce construction cost of the gateway elements.
6. **Utility Extension As-builts** – During the course of construction, the City of Durham Inspections and Public Works departments requested replacement of utilities that were not required during the permitting review process and were not included in the construction documents. As a result, additional work will be required to observe installation, inspect completed construction, certify the completion of these utilities and facilitate the as-built approval process.
7. **Meetings** – Accompanying the various additional work described above has been an increase in meetings required.

In addition to the above completed tasks, additional services are required to design and create a landscaping plan for the rear slopes of the units located along South Street and Hillside Avenue. Landscaping of this area will provide additional erosion control measures for the sloped areas and decrease the required maintenance for the homeowners. Also, as homes have become occupied and occupants begin to walk their neighborhood, the intersection of South Street and Lakewood Avenue provides a challenge to individuals attempting to cross. An additional task would include surveying of the existing intersection, design of a crosswalk and pedestrian signal, permitting, construction documentation, and construction administration. This enhancement would ensure that the Southside neighborhood could easily access the surrounding neighborhoods, the American Tobacco complex, the Durham Bulls Athletic Park and the downtown area.

### **Issues/Analysis**

A significant effort was required by the City and the consultant during the initial phase of development to begin transforming the homeownership effort in Southside. Some of this effort was not anticipated at the time the initial contract was executed and was the result of key decisions being made by staff and the development team for the betterment of the community and to ensure that a quality product would be delivered. As a result, additional work was required to address changes in design, permitting strategies, project schedule, and unforeseeable circumstances encountered during construction. Additionally as construction progressed, a few program elements were identified that were not included in the initial scope of services but were determined to be necessary components for the continued success of the neighborhood.

The continuance of the contract with O'Brien Architecture and its subconsultants allows the City to utilize the overall project knowledge of the development team and to continue to build

on the success of the development.

**Alternatives**

The City Council may elect not to extend the contract with O’Brien Architecture. It should be noted that O’Brien Architecture has experience in working in and with the Southside neighborhood and along with their subconsultants has been an excellent partner with the City and the community.

**Financial Impact**

Funding (Housing Bond) is available to pay for all tasks associated with the agenda item in the amount of \$57,660.00. The table below outlines the costs associated with the completed and additional tasks for phase 1.

<b>Engineering Costs (Completed)</b>	<b>\$24,650.00</b>
• Site Studies	\$3,600.00
• Site Plan	\$3,350.00
• Construction Documents	\$2,200.00
• Cost Estimate	\$1,450.00
• Bidding	\$2,100.00
• Gateway Revisions	\$2,500.00
• Meetings	\$3,200.00
• Utility Extension As Builts and Certification	\$6,250.00
<b>Architectural Costs (Completed)</b>	<b>\$13,900.00</b>
• New House Design Sketches	\$2,250.00
• Homeowner Replacement Housing Ramp and Deck Design	\$3,000.00
• Hillside Plan G	\$2,000.00
• Reversed Plans	\$1,000.00
• Additional Foundation/Roof Plans	\$750.00
• Design Review	\$2,250.00
• Assistance to Homebuilders	\$2,250.00
• Printing Costs	\$400.00
<b>Additional Phase 1 Tasks- Hillside Avenue and South Street Landscape Improvements</b>	<b>\$6,650.00</b>
• Conceptual Design and Cost Estimating	\$5,250.00
• Meetings, Coordination and Construction Observation	\$1,250.00
• Printing Costs	\$150.00
<b>Lakewood Ave. / South St. Crosswalk and Pedestrian Signal</b>	<b>\$12,460.00</b>
• Traffic Signal Design and Permitting	\$9,000.00
• Meetings, Coordination, and Construction Observation	\$1,500.00
• Subsurface Utility Engineering (SUE)	\$900.00
• Topographic Surveying	\$810.00
• Printing Costs	\$250.00
<b>Total Costs</b>	<b>\$57,660.00</b>

**SDBE Summary**

This item does not require review by the office of Equal Opportunity/Equity Assurance.