



MEMO

Date: 12/15/2016
RE: Binney/Galileo/Broadway Streetscape Design Project: Survey Change Order
To: CRA Board
From: CRA Staff

BACKGROUND

CRA issued an RFP for streetscape design services on 7/1/2016 and the CRA Board approved the consultant selection at the 8/24/2016 CRA Board meeting. At the time the RFP was released, the CRA was in possession of some surveys of the project corridor covered by the RFP scope, but not all. At the time, CRA Staff anticipated that the winning consultant would likely need to do some surveying fieldwork to fill in the gaps. In the RFP, the scope for additional surveying of the un-surveyed gaps in the project area was represented by Add/Alternate #2. Including the survey work as a separate Add/Alternate would clearly separate the price for that work and allow for that part of the scope to be executed only as necessary.

During July, CRA received five proposals. The selection committee deliberated without knowledge of the total price of any proposal and selected a clear winner based on evaluation criteria. The unanimous selection was the Alta team, which included sub-consultants McMahon and HDR. Alta had partnered with SMC Surveying for their surveying services in their proposal.

Add/Alternate #2 budgets ranged from \$7,300 to \$19,720 in the five RFP responses.

ORIGINAL SURVEY SCOPE

The scope for Add/Alternate #2 was written as follows in the RFP:

Existing Surveys and As-Builts

- *CRA will provide original paper design drawings from the 1980s for the original construction of the roadways in the area, however the accuracy may be limited. These are not as-built drawings.*
- *In May 2016, CDD (through a contract with Stantec/Feldman) performed a survey of Galileo Galilei Way from just east of the Fulkerson/Galileo/Binney intersection to just south of the Broadway/Galileo intersection, which can be provided to the project team.*
- *CRA (through a contract with Stantec/Feldman) performed a survey of Galileo Galilei Way in May 2014 as part of the recent Grand Junction Park project, which can be provided to the project team.*
- *BP recently performed survey work along Galileo Galilei Way and Broadway in association with their development project currently under design and projected to submit permitting approvals later in 2016. More information about this project can be found at courbanize.com. This can be provided to the project team.*

Additional Survey Work

- *It is anticipated that the project team can assemble a survey for the entire area labeled in the scope map with the exception of Binney Street between 6th Street and 3rd Street. The team should utilize any and all known existing surveys to reduce the time period and level of effort necessary for this work. Therefore a*

survey of Binney Street from 6th Street to 3rd Street should be priced separately in the RFP response as Add/Alt #2. The survey level of effort should be informed by DPW's standard survey requirements as described in Appendix B.

- Appendix B: Cambridge DPW standards for survey and design. By submitting a proposal for this RFP, the consultant is acknowledging having read and understood DPW's general standards for survey and design. This is included as an informational exhibit only. Most of the language this document contains applies to this scope of work, but it is possible some items may not be directly applicable.

The following documents were provided to those interested in the RFP:

- First draft of Binney Street Park survey (covering Binney/Galileo curve, Fulkerson intersection, Broadway/Galileo intersection) by Feldman
- Old survey for CRA's Grand Junction Park property by Feldman done in 2012 and updated in 2014

The following documents were obtained by CRA after the RFP selection process was completed:

- Boston Properties survey of the entire North Parcel (Broadway, Galileo/Binney curve, 6th Street Walkway) by VHB
- As-built drawings from Mattuchio Construction for the CRA's Grand Junction Park
- BioMed Realty Civil Engineering as-built for 301 Binney Street building dated during the early 2000's
- 88 Ames Street final construction drawings for the Ames/Broadway intersection by VHB
- Final draft of Binney Street Park survey (covering Binney/Galileo curve, Fulkerson intersection, Broadway/Galileo intersection) by Feldman

REQUIRED SCOPE CHANGE

After receiving new survey documents described above, the gaps in the existing survey data were clarified, and found to be more extensive than originally thought. After assembling all of the survey documents, the following survey needs were found by the Alta team upon commencing the project:

- Almost all the plans overlay onto NAD 83 (only the 301 Binney Street plan does not.) Some plans are on NAVD 88 and some are on Cambridge City Datum. Plans would need to be converted to a consistent datum.
- Due to surveys originating from so many different surveying companies, additional time would be required to compile, convert and translate the plans to be one seamless plan and to make it unified (symbols, layering, etc) with no overlaps.
- Additional utility current research will be needed in portions where there is a gap in information.
- Missing Areas:
 - Vassar Street - from Main St. intersection to the first pedestrian mid-block crossing (roughly 450 L.F.)
 - Broadway - South side between Galileo Galilei Way and Ames Street (500 L.F – face of curb to building face/back of sidewalk) (existing survey is incomplete)
 - Binney Street - North side from Fifth to Fulkerson (1000 L.F. face of curb to building face/back of sidewalk)
 - Binney Street - Intersections at Third, Fifth and Sixth (need updates)
 - Binney Street - Third to Fifth, HDR has walked the area and identified a number of items that are not recorded on the existing survey - trees, fences, underground structures, etc.

This updated scope of work is significantly greater than the initial scope described in the RFP, which stated simply "...a survey of Binney Street from 6th Street to 3rd Street." Due to this substantial change in scope for this item, Alta's surveying sub-contractor SMC Surveying updated their price to provide services to \$37,960. This is

\$23,108 higher than the original proposal estimate of \$14,852. Due to this substantial price increase, CRA Staff reached out to two other surveying contractors in the area, each of whom had done at least one of the existing surveys the team was working to fill in gaps for. VHB responded to the request with a detailed cost estimate of \$31,500 and Feldman responded with a less detailed rounded number of about \$25,000. (Note: Because the Feldman number was provided in an informal email and not provided in a formal itemized proposal format, the price may not reflect a true cost of the full scope of services.) Both VHB and Feldman had been sub-contractors providing survey services on two of the RFP responses that were not selected, and in both cases had allocated significantly less money to Add/Alternate #2 in their July RFP responses – similar to the Alta/SMC team in their original RFP response.

PROPOSED BUDGET REVISION

Estimates from survey competitors VHB and Feldman came in very similar to SMC's updated price quote, confirming the legitimacy and reasonableness of SMC's price increase. Given that SMC is already under agreement as a sub-contractor to Alta and has already begun some very preliminary work, CRA Staff recommends authorizing an increase to the contract with Alta to cover the unexpected increase in survey scope and costs. It is regrettable that some of the survey materials were not yet available at the time of the RFP release. If these materials had been included, this situation may have been avoided. For future RFP releases where surveying is one of many scope items, either all existing surveys should be available at the time of the RFP release, or the RFP language should ask for a price to re-survey the entire project area in order to obtain a worst-case price for surveying services.

Authorized Contract Amount (8/24/2016):	\$295,000
Change to Add/Alternate #2:	\$23,108
New Authorized Contract Total Amount:	\$318,108