

2013-2014 Annual Report,

Alternative Contracting Special Experimental Project No. 14 (SEP-14) Best Value Contract selection

Introduction

On April 24, 2012, FHWA accepted NYSDOT's proposed work-plan for the use of Best-Value selection of design-bid-build construction contracts through the Federal "Alternative Contracting" SEP-14 program. As part of the work-plan, NYSDOT will provide interim and final reports for projects that use Best-Value. In addition, FHWA requested annual reports be provided for the three year program. The following is the annual report for 2013-2014, from May 1, 2013 to April 30, 2014 which provides information on how NYSDOT used Best-Value selection and on future Best-Value candidate projects.

Projects Selection for use of Best-Value

The NYSDOT workplan detailed key reasons why the use of Best-Value selection helps minimize risks on certain projects. Below is a list of the three measures outlined in the workplan that were used to determine whether a project will be a good candidate and to measure the success of the project if Best-Value selection is deemed appropriate:

- Cost savings: Minimize change orders by including in the criteria for selection items such as experience with similar projects and conditions, understanding and approach, schedule and quality control.
- Quality: The Best-Value selection process allows quality criteria to be used to help score each contractor based on past experience, quality control, and understanding and approach.
- Time: A candidate for Best-Value will typically have time constraints due to factors like traffic volumes or environmental restrictions. The selection criteria can include items like durations for portions of the project and/or substantial completion. The durations chosen by the Contractor will become contractual.

All candidates for using Best-Value selection are pre-approved by the Commissioner.

Results of use of Best-Value in 2013-2014

To date, three D-B-B projects has been awarded using Best-Value selection.

Project	Region	Brief Description	Stage of construction
PIN 1528.68	1	I-90 over the Hudson River, also referred to as "Patroon Island Bridge"	Under construction
PIN SABP.00	1	I-87 SB & NB over Mohawk River, also referred as "Twin Bridges"	Complete
PIN 8106.28	8	Sprain Brook Parkway Bridges over Route 119, also referred as "Sprain Brook Pkwy"	Under Construction

Of the three projects, PIN 1528.68 and PIN SABP.00 required reports during the 2013-2014 reporting period. Project PIN 8106.28 is still under construction with an expected completion date of 6/30/15. Below is a summary for the two projects that reports were completed for during this reporting period.

PIN: **1528.68**
Reporting Stage: Interim
Contract: D262091
Location: I-90 over the Hudson River
County: Albany and Rensselaer
Region: 1
Brief description: Rehabilitation of I-90 Bridge over the Hudson River commonly referred to as 'Patroon Island Bridge.'
Awarded to: Halmar International and Servidone B. Anthony Construction Corp. Joint Venture
Bid: \$145.8M
Key information: Final Completion – July 31, 2016

The project included bridge rehabilitation on I-90 and the I-787/I-90 interchange including pier reconstruction, pier rehabilitation, deck replacement with pre-fabricated elements and repairs to the steel under truss for I-90 Bridge over the Hudson River.

PIN 1528.68 had similar characteristics to previous D-B-B projects that utilized Best-Value selection.

- The project dealt with bridge work on roadways with over 100,000 AADT and impact to traffic that needed to be minimized.
- The project required contactors with experience in the type of work required to minimize costs and impact to traffic.
- The project required time constraints to minimize the impact to traffic following the Driver's First Initiative.

The contract required an experienced bridge contractor that has a proven record in high volume corridors, with complicated maintenance and protection of traffic staging, accelerated bridge construction and experience with pre-fabricated deck elements.

This was the first D-B-B project to require pre-qualification and a total of twelve contractors/joint ventures were pre-qualified. The Department received a total of five bid/proposal packages and on April 26, 2013, the contract was awarded to Halmar International - A. Servidone/B. Anthony Construction Corp. JV.

Previous projects that utilized Best-Value had a 70/30 cost to technical scoring ratio. For this project, a 50/50 cost to technical scoring ration was approved. Also, this would be the first Best-Value project to include the oral presentation as part of the technical scoring.

Final combined scores:

Contractor	Weighted Technical (max of 50)	Weighted Cost (max of 50)	Overall combined score	Final Ranking
D. A. Collins	na	na	na (1)	na
Ecco III	31.61	na	na (2)	na
Halmar/Servidone/B. Anthony	43.7	50.00	93.77	1
Lancaster/Tully	31.54	47.83	79.37	na (3)
Lane Construction	35.05	49.93	84.98	2

- (1) D.A. Collins technical score didn't meet the minimum criteria and were not included in the final selection.
- (2) Ecco III withdrew their bid stating that they made an error in their bid package and the reasoning was accepted the reasoning for withdrawing their bid proposal.
- (3) Lancaster/Tully did not participate in the Oral Presentation.

The project is currently in its second season of construction and is scheduled to be completed July 31, 2016. After completion of the project a Final Report will be completed providing detail on the three key measures listed above for cost, quality and time.

PIN: SABP.00

Reporting stage: Final

Contract: D262025

Location: I-87 SB & NB over Mohawk River

County: Albany and Saratoga

Towns: Colonie and Halfmoon

Region: 1

Brief description: Replacement of decks and approaches on I-87 SB and NB bridges, including upgrade of bridge rail and replacement of all scuppers.

Awarded to: Lane Construction Corp.

Bid: \$29.00M

Other bidders:.... Halmar International and Kubricky Construction

Key information: Final Completion – July 31, 2016

Final number of weekend closures needed – 8 total.

The project included replacement of the decks and approach slabs for both I-87 NB and SB bridges over the Mohawk River, also known as the Thaddeus Kosciuszko twin bridges. In addition, the project also includes replacement of the existing bridge rail with single face concrete barrier and replacement of all scuppers and the drainage system. The deck replacement work was completed by use of pre-fabricated deck elements.

Crossovers were required to complete the deck replacement reducing traffic to one bridge. To minimize impacts to traffic, a bridge could only be closed on weekends and part of the technical scoring process the contractors had to decide if 4, 5 or 6 weekends per bridge would be sufficient to complete the deck replacement work.

The Final Report provided a summary of how the cost of the project, quality and time needed. After the project was completed, a questionnaire was developed to help determine if the use of Best-Value as part of the selection process for a D-B-B provided a cost savings, higher quality and minimized the time needed. Below is a brief summary of the results.

Project Cost:

The original EE was \$25M, the winning bid was \$29M with just under \$0.9M of change orders. Lane Construction Corp had the lowest bid of the three bidders. The EE was 14% lower than the winning bid, but due to the limited bid history using pre-fabricated deck elements the bid amount was acceptable. The additional change orders accounted for less than 5% added cost to the bid amount and were related to maintenance of traffic needs and changes related to deck replacement work.

Overall, the use of Best-Value selection didn't seem to provide a notable difference in costs if Best-Value was used at all.

Quality:

Of the three bidders, Lane had the highest overall technical score. The technical scoring criteria included several items that related to quality of the bidders experience with work on high speed corridors, with similar or complex types of projects, experience with rapid hardening concrete and with projects that included bridge and/or superstructure replacement. Lane either led or shared the highest scores for all of these items. After the project was completed by construction staff and additional comments were provided. In short, the use of Best-Value didn't seem to have an effect on the quality of the project and in some of the comments, construction questioned on whether Lane Construction had the necessary experience compared to the higher scores they received compared to the other bidders

Time:

The technical score criteria contained two categories related to time and both were related to the number of weekends required to complete the deck replacements. All three bidders selected 5 weekends per

bridge would be needed to replace the decks. But Lane Construction required 7 weekend closures per deck replacement. Since all three bidders had the same duration for the weekends needed, it's not possible to tell if the other bidders would have met the number of weekends proposed. Construction also noted that it seemed that the number of weekends chosen wasn't contractual; therefore the Dept. had no recourse to penalize the contractor for not meeting the expectations.

After review of the three measures, the use of Best-Value didn't meet the expectations the Department had, but without the use of Best-Value, Lane Construction could still have been awarded the project since they had the lowest bid. Therefore, the use of Best-Value didn't seem to have a positive or negative effect on the project. The data gained from the questionnaire and comments will be very useful for selecting future Best-Value projects and the criteria to include in the special note.

Analysis and Lessons Learned with the Selection Process

Below is a list of key areas that were included the 2012/2013 Annual report with updates on what the Department has done to improve upon them.

- 1) From the 2012/2013 report, the selection committees felt that some of the technical evaluation factors were too strictly defined in terms of what criteria should result in a given score.
 - a. For the Patroon Island Bridge project, the scoring criteria were revised to allow the evaluation team flexibility in determining the scoring for each category.
- 2) The first two Best-Value projects utilized a 70/30 weight of cost vs. technical qualifications which seem to limit the ability for a higher technical score to overcome a lower bid price.
 - a. PIN 1528.68, I-90 over the Hudson River and I-90/I787 interchange bridges, had a 50/50 ratio to determine final selection.
 - b. Although a 50/50 ratio was used for PIN 1528.68, the cost to technical score ratio will be determined on a project by project basis and ultimately require the Commissioner's approval.
- 3) Oral presentations provided limited benefit for the selection team.
 - a. For PIN 1528.68, the oral presentations were included as part of the technical scoring process. The contractors had to follow requirements included in the BV special note. Also, Oral presentations were not scheduled until the technical and cost scoring was complete and were limited to contractors that were still in contention to be awarded the project. This minimized the time needed by all parties for having to attend oral presentations.
 - b. The NYSDOT will decide on a project by project basis whether they will be required on future best value projects.

The Department has used Best-Value on three D-B-B projects and changes have been made based on the feedback we received to improve the Best-Value selection process. The Department will continue to evaluate the use of Best-Value selection on future projects. The Interim and Final reports provide the Department with key information to make the necessary adjustments.

Future Best-Value Projects

At this time no other projects have been identified to use the Best-Value selection method.

Future Reports

At this time the following reports are expected and will be provided as follows:

- 1.) Annual Report for 2014/2015 should be provided by May 30, 2015.
- 2.) For PIN 8106.28, Sprain Brook Parkway, the completion date is June 30, 2015 and the final report should be provided by December 30, 2015.
- 3.) For PIN 1528.68, Patroon Island Bridge, the completion date is July 31, 2016 and the final report will be provided by January 31, 2017.