

57457

TO: Board of Acquisition and Contract

FROM: Vincent F. Kopicki, PE
Commissioner of Public Works and Transportation

DATE: June 6, 2017

SUBJECT: Second Amendment to Agreement No. 10-910 in the matter of Engineering Services in connection with the Rehabilitation of Fulton Avenue Bridge over Hutchinson River (BIN 3348220), Mount Vernon and Pelham Manor, New York

Consultant: Henningson, Durham & Richardson
Architecture and Engineering, PC

Amendment Amount: \$950,000.00

Pursuant to a Resolution approved on April 29, 2010, the County of Westchester ("County") entered into Agreement Number 10-910 (the "Agreement") with Henningson, Durham & Richardson Architecture and Engineering, PC ("Consultant"), 711 Westchester Avenue, White Plains, New York 10604, wherein the Consultant was to provide engineering services in connection with the Rehabilitation of Fulton Avenue Bridge over Hutchinson River (BIN 3348220) in Mount Vernon and Pelham Manor, New York. The Agreement was thereafter amended by Resolution approved on April 10, 2014, to provide design and construction administration services associated with the upgrade of the span drives, power and control systems as well as to extend the completion date of the Agreement to December 31, 2017.

The project was originally conceived to be constructed under multiple phases during several construction seasons. However, upon consultation with local municipal officials, it was determined that a better course of action was to completely close the structure for a shorter but far more intense period of construction (between holiday shopping seasons). This resulted in an initial construction bid that came in significantly over budget, due to the conflict between the reduced construction window and the lengthy time required to fabricate and supply long lead time specialty items. Many of these items are custom made electrical and mechanical components supplied only by a shrinking industrial base for a limited market (movable bridges). In order to minimize the excessive costs resulting from this conflict, the project was significantly redesigned to eliminate some long lead manufacture items while still achieving the required goals. This resulted in the successful rebid and award of a construction contract in May 2016. Additional compensation is necessary for this redesign work as well as the more intensive construction and manufacturing inspection required as a result.

Although the project is currently in construction, additional design and construction administration services were required to keep this movable bridge operational until the major construction project commenced, including: replacement of the main drive for the east span, separate replacement of the main drive for the west span, control system repair, limit switch replacement plus the preparation of two separate contracts for the replacement of steel beams necessitated by the issuance of Red Structural Flags. Each of these conditions, which are outside of the scope of work included in the existing Agreement, resulted in the bridge being closed to vehicular traffic for significant periods of time.

In addition, during construction, additional items have been uncovered that were unforeseen at the time of design, including a crack in a main girder, the further deterioration of the west floor beam, deterioration to the east abutment and bridge house foundation as well as the top of west abutment and water stop. Each of these items, which are outside of the scope of work included in the existing Agreement, resulted in the need for additional design and construction administration time. At this time, construction costs associated with these additional items should be able to be covered within the Miscellaneous Additional Work Item included in the construction contract.

It is therefore requested that the existing Agreement be amended to provide for additional engineering services in connection with the Rehabilitation of Fulton Avenue Bridge. The consultant provided additional design and construction administration services which were outside of the scope of work of the existing Agreement. These additional services involved the following during the design phase: replacement of the main drive for the east span, separate replacement of the main drive for the west span, control system repair, limit switch replacement, replacement of steel beams necessitated by the issuance of Red Structural Flags uncovered in two New York State Department of Transportation (“NYSDOT”) bridge inspection cycles, along with the redesign work necessary to rebid to insure components could be manufactured, provided, and installed during the compressed construction time frame. Additional design and construction administration services were also required to address the crack in the main girder, further deterioration of the west floor beam, deterioration to the east abutment and bridge house foundation as well as the top of west abutment and water stop.

The objective of this project will be to upgrade the structure, span drives, power and control systems of the Fulton Avenue Bridge over Hutchinson River in Mount Vernon and Pelham Manor. This work is necessary due to extensive deterioration of the bridge. The project is being advanced so as to minimize the disruption caused by construction. This agreement will benefit the public as it will enhance the functionality of this structure ensuring its safe use by the public, thus addressing the County Executive’s priority area of Safety and Security.

The engineering discipline encompassed in this Amendment is not new, but rather, it is an integral part of the project that involves the same degree of skill, experience and complexity as the expertise generally described in the original project. Accordingly, this type of engineering discipline was originally contemplated in the Professional Prequalification Board and Professional Selection Board process.

The fee for the above services is for an amount of \$950,000.00 pursuant to an approved budget, bringing the total Agreement plus Amendments to \$3,095,411.00. The completion date of the Agreement shall be extended to December 31, 2018.

The Department of Public Works and Transportation will track scheduling and accomplishments by the Consultant and perform on-site inspections to ensure the successful completion of this project.

Proposed form of Resolution to accomplish the foregoing is attached hereto.

VFK/RSD/KMR/AS

RESOLUTION

Upon communication from the Commissioner of Public Works and Transportation, be it hereby

RESOLVED, that the existing Agreement No. 10-910 (the "Agreement"), between the County of Westchester ("County") and Henningson, Durham & Richardson Architecture and Engineering, PC ("Consultant"), 711 Westchester Avenue, White Plains, New York 10604, be amended to provide for additional engineering services in connection with the Rehabilitation of Fulton Avenue Bridge over Hutchinson River (BIN 3348220), Mount Vernon and Pelham Manor, New York. The consultant provided additional design and construction administration services which were outside of the scope of work of the existing Agreement. These additional services involved the following during the design phase: replacement of the main drive for the east span, separate replacement of the main drive for the west span, control system repair, limit switch replacement, replacement of steel beams necessitated by the issuance of Red Structural Flags uncovered in two New York State Department of Transportation ("NYSDOT") bridge inspection cycles, along with the redesign work necessary to rebid to insure components could be manufactured, provided, and installed during the compressed construction time frame. Additional design and construction administration services were also required to address the crack in the main girder, further deterioration of the west floor beam, deterioration to the east abutment and bridge house foundation as well as the top of west abutment and water stop; and be it further

RESOLVED, that for the additional services rendered in accordance with the consultant's proposal, Henningson, Durham & Richardson Architecture and Engineering, PC, shall be paid a fee of \$950,000.00 pursuant to an approved budget, increasing the total maximum fee to \$3,095,411.00; and be it further

RESOLVED, that the completion date of the Agreement shall be extended to December 31, 2018; and be it further

RESOLVED, that all other provisions of the existing Agreement shall remain in full force and effect; and be it further

RESOLVED, that the County Executive or his duly authorized designee is hereby authorized and empowered to execute any and all documents necessary or appropriate to effectuate the purposes hereof.

Original Agreement	\$ 748,774.00	(Design & Constr. Admin. Services – Structural Rehabilitation)
First Amendment	1,396,637.00	(Design & Constr. Admin. Services – Span Drives, Power & Control Systems Upgrades)
This Amendment	<u>950,000.00</u>	(Design & Constr. Admin. Services – Red Flags, Main Girder, Floor Beam, Foundation)
TOTAL	\$ 3,095,411.00	

Agreement No. 10-910

Account to be Charged/Credited	Fund	Dept	Major Program, Program & Phase or Unit	Object/ Sub Object	Bond Act No.	Dollars
	366	46	RB03S01E	6120-03	BA #254-2015	\$ 300,000.00
	366	46	RB03S01I	6120-05	BA #254-2015	\$ 210,000.00
	366	46	RB2UU00E	6120-03	BA #252-2015	\$ 240,000.00
	366	46	RB2UU00I	6120-05	BA #252-2015	\$ 200,000.00

Budget Funding Year(s): 2017 Start Date: 04/29/10 End Date: 12/31/18
(must match resolution)

Funding Source: Tax Dollars: 100% County Contractor Federal I.D. No./
State Aid: _____ Social Security No.: _____
\$950,000.00 Federal Aid: _____ Vendor No.: _____
(must match resolution) Other: _____ Encumbrance No.: _____