

THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
Plans and Specifications for Bridge Painting Program

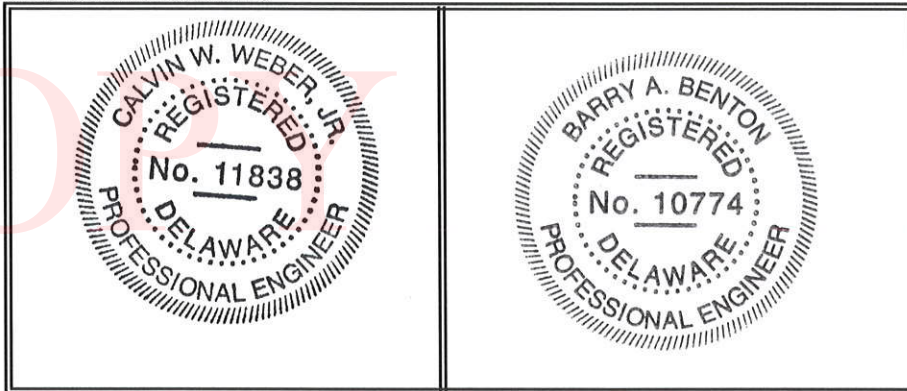
Contract No.: T201107803

F.A.P. No. EBHN-2012(20)
P3E No. 10-97003

Title: Bridge Painting, New Castle County, 2013
Location: Bridges 1-577, 1-775, 1-776
County: New Castle

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RECOMMENDED:



Calvin W. Weber
For Bridge Management Engineer
Date: 2/2/2012

Barry A. Benton
Assistant Director, Bridge
Date: 2/2/2012

GENERAL NOTES

1. This project is to be constructed in accordance with Delaware Department of Transportation “Standard Specifications”, dated August 2001 and the Delaware Department of Transportation “Standard Construction Details”, dated 2001, including all revisions up to the date of advertisement.
2. The contractor shall give two (2) weeks notice to the property owner when any fixture, shrub, or other object must be removed from the right of way or easement area. If the owner has not attempted to salvage this property, the contractor shall remove it without obligation. Compensation shall be incidental to the contract.
3. The ends of all curbs shall be depressed flush with the pavement at a ratio of twelve to one (12:1) unless otherwise directed by the Engineer.
4. The contractor shall provide and install PVC sleeves (4 inch inside diameter minimum, 6 inch inside diameter maximum) in proposed concrete sidewalks, islands and medians for future traffic sign posts as directed by the Engineer. The lower end of the sleeve shall sit on the top of the sub base material. The cost shall be incidental to the contract.
5. Site reviewer. An erosion control site reviewer shall be a person from the contractor’s staff assigned to Erosion and Sediment Control Implementation and Maintenance and shall be required on specific projects. The name and DNREC certification number of each site reviewer so required shall be submitted to the Department prior to award of the contract. The name of the Delaware registered professional engineer providing direction and supervision of the site reviewer, as required in Section 12.3 of the Delaware Sediment and Stormwater Regulations, shall also be submitted to the Department prior to award of the contract. The site reviewer requirements in effect on this project shall be as marked with an (x) below:

Erosion potential for this project	Site reviewer requirement
<input checked="" type="checkbox"/> Insignificant	None
<input type="checkbox"/> Minor	Contractor certification course training only. See 1 below.
<input type="checkbox"/> Medium	At the time of award of the contract, either the superintendent or a separate individual from the contractor’s staff shall be a certified construction reviewer (CCR). See 2 below.
<input type="checkbox"/> Major	Superintendent and individual from the contractor’s staff shall be CCR. See 3 below.

1. As defined in section 13 of the Delaware Sediment and Stormwater Regulations.
2. As defined in section 12 of the Delaware Sediment and Stormwater Regulations.
3. One individual from the contractor’s staff must be a CCR at the time of award of the contract. The superintendent must become a CCR within one year after the award of contract.

6. Staging areas - Proper erosion and sediment control measures as determined by the Engineer shall be installed in the staging areas. All areas used by the contractor for staging operations shall be fully restored by the contractor upon completion of the project. If the staging area is paved, it shall be restored to its original condition. If the staging area is unpaved, it shall be re-graded, top soiled, seeded and mulched in accordance with Delaware Standard Specifications 732 and 734, for topsoil, seed and mulch, to the satisfaction of the Engineer. The seed shall adhere to the specifications of Section 734 for Permanent Grass Seeding – Dry Ground. All costs associated with the restoration of the staging area shall be at the contractor’s expense. If the Engineer determines that a satisfactory stand of grass does not exist at the time of final inspection, all costs associated with re-establishing a satisfactory stand of grass shall be at the contractor’s expense. Staging and/or stockpiling shall not take place in wetland or archaeological sensitive upland areas.
7. Disturbed area: 0 acres
8. Electronic project files that will be made available to the contractor include: None.

PROJECT NOTES

1. The purpose of this contract is to clean, paint and repair the items listed on this contract. The paint system used for all steel shall be applied in a three (3) coat system application in all stripped and cleaned areas. After the top coat has been applied areas that exhibited pack rust, as directed by the Engineer, shall be sealed using a paintable caulk with silicone and painted with one coat of the topcoat color; payment incidental to Item # 605522 – Urethane Paint System.
2. All steel previously coated with a protective coating (including but not limited to railings, attachments, window frames, etc.) shall be cleaned, repaired and painted unless directed by Engineer.
3. Trash, rubbish, debris, or brush, which hampers contract operations (determined by the Engineer), shall be removed within the project limits and shall be incidental to Item no. 605533 – Cleaning Existing Steel Structures, Hazardous Base or 605532 – Cleaning Existing Steel Structures (Non-Hazardous Base). The Contractor, just prior to the start of the Contractor’s cleaning operation, shall remove all signs attached to the steel. The signs shall be reinstalled upon completion of the painting of the bridge as directed by the Engineer. Payment shall be incidental to the corresponding Item no. 605533 or 605532.
4. Bridges 1-577, 1-775, and 1-776 may have a lead based paint system on all or portions of the structural steel. The Contractor is to use Item no. 605533 – Cleaning Existing Steel Structures, Hazardous Base for the paint removal on the structures. All paint systems on the structural steel on these structures shall be removed and properly disposed of as per Item no. 605533.

For all bridges in this contract, any cleaning requiring pressure washing shall be incidental to Item no. 605533 or 605532. The Contractor shall be responsible to check and monitor the structure during the paint removal process to ensure that damage is not occurring to any part of the structure.

5. During the cleaning operation, the Contractor shall report to the Engineer any defects in the steel. These defects include, but are not limited to, loss of section, cracking, buckling, loose bolts, and loose rivets.
6. All work shall be performed in a manner that will reasonably provide the least practicable obstruction to all road users, including vehicular, pedestrian, and bicycle traffic, and shall conform to the requirements of the most recent, at time of bid including all revisions, Delaware Manual on Uniform Traffic Control Devices, Part 6, herein referred to as the Traffic Control Manual. There is NO TRAFFIC INVOLVEMENT for this contract.
7. Maintenance of traffic shall be as per the detour plans or traffic control case as provided for each bridge. All traffic control devices required shall be included in the lump sum bid price for Item No. 763643 – Maintenance of Traffic.
8. American Traffic Safety Association (ATSSA) Certified Traffic Control Supervisor Requirement for the project:

()	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
(X)	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR.
()	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE ATSSA SUPERVISOR'S SOLE JOB SHALL BE SUPERVISION OF THE INSTALLATION, OPERATION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES FOR THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT SHALL NOT BE THE ATSSA SUPERVISOR.

9. All traffic control devices shall be in new or refurbished condition, shall be in compliance with the Traffic Control Manual and with the NCHRP Report 350 as defined in Section ‘A’ of the Traffic Control Manual, and shall be approved by the Engineer before installation. Traffic control devices shall be maintained in good condition for duration of use.
10. Contract equipment can be stored adjacent to the roadway during appointed construction hours (as deemed by the Engineer). During non-construction hours, all construction equipment shall be removed from all shoulders and lanes. All equipment shall be stored in accordance with the Traffic Control Manual. All traffic control devices required for equipment storage shall be included in the lump sum bid price for Item No. 763643 – Maintenance of Traffic.
11. All work shall be performed within the existing right-of-way unless otherwise noted. Right-of-way information and existing plans shall be available upon request at the DelDOT Administration Office.
12. No equipment is allowed in any waterway or wetland.

13. There are no environmental permits (including but not limited to COE, DNREC Subaqueous Lands and Wetlands, Coast Guard, New Castle County Floodplain), or environmental construction restrictions associated with Bridges 1-775 and 1-776. As such, no Environmental Compliance sheet was prepared. Bridge 1-577 is a National Register eligible historic bridge; the contractor shall refer to the structure specific notes for further instructions. In addition, Bridge 1-577 is over navigable waters and any obstruction to the channel will require a Coast Guard 30-Day Advanced Notification/Approval.
14. The Contractor may store the equipment needed for this project at a pre-approved area or in the nearest State of Delaware maintenance yard. The Contractor must remove equipment from the jobsite if and when the district deems it necessary. Areas within the state right-of-way limits in which the soil and vegetation have been damaged from equipment during this contract, shall be repaired with topsoil, seed and mulch in accordance with the requirements for Sections 732 and 734 at the Contractor's own expense.
15. Containment systems are required for all abrasive blasting. The design of the containment system must be submitted and approved by the Department prior to any work being performed.
16. All downspouts shall be vacuum power tool cleaned or abrasive blast cleaned, and where necessary, galvanized downspouts shall be painted with a moisture cure aluminum paint system. If the downspouts are non-galvanized, then they shall be painted with the regular urethane paint system used to paint the bridge as indicated in Item no. 605522. All galvanized utility or lighting conduits shall be brush painted with moisture cure aluminum paint after receiving an S.S.P.C. SP-7 (Brush off blast cleaning) finish. All non-galvanized utility or lighting conduits shall be brush painted with the regular urethane paint system after receiving an S.S.P.C. SP-6 (Commercial blast cleaning) finish. If there are any dry standpipes, natural gas line conduits, or any plastic pipe conduits on the bridges, then they shall be left as is. All steel weep hole pipes that protrude from the abutments and wingwalls shall be cleaned and painted with the regular urethane paint system (Payment under Item no. 605522). Any gas mains and/or other utilities found on Bridges should be shielded during blasting operations. Payment for shielding shall be under Item no. 605533. Lights and conduit that are attached to the bridge should be painted as noted above. The fences attached to the parapet of any of the bridges should not be painted.
17. All bearings for these bridges shall be abrasive blast cleaned to an S.S.P.C. SP-10 finish. Care shall be taken when cleaning "frozen" bearings, because the abrasive blasting operation sometimes causes the bearings to "unfreeze". All pitted areas of the structural steel shall be brush painted along with spraying when applying every coat of paint of the three-coat system. Cleaning of bearing areas shall be included under Item no. 605533 or 605532. After all the bearings have been painted, and after the paint has cured, and after all concrete has been sealed, the contractor shall lubricate all the bearings with a NLGI grade 2 grease either Mobil Centaur Moly grease, Shell Rhodina SDX 2 grease, or an approved equal. Grease shall be black or clear in color. Payment shall be incidental to Item no. 605522.
18. Hazardous waste shall be removed immediately from the jobsite and disposed of at a licensed hazardous waste disposal facility. The waste shall be removed from the jobsite by a licensed hazardous waste hauling Contractor with the required permits and approvals by DNREC. All copies of hazardous waste manifests and tickets shall be submitted to the Department as per Item no. 605533.
19. The bidder will be required to provide a Warranty and Guarantee for all Paint Systems under this contract for a period of two (2) years as covered under Item no. 605690. The Warranty and Guarantee will not take effect until the date of final acceptance.
20. All concrete surfaces as directed in the Structure Specific Notes shall be prepared and sealed as indicated in Item no. 602707. All boundaries between sealed and unsealed concrete will be a straight horizontal or vertical line unless directed otherwise by the Engineer or Structure Specific Notes.
21. In regards to the air monitoring requirement in Item no. 605533-Cleaning Existing Steel Structures, Hazardous Base; paint removal shall include all blasting and clean up activities.
22. Two variable message boards shall be placed at each bridge location ten days prior to the start of construction to notify drivers of the lane/shoulder closure and impending construction activity. The message shall include the dates and times of the lane closures and how long the closures will be necessary, message shall be approved by the Safety Officer. For locations that have parallel structures, a total of two variable message boards shall be used for both bridges.
23. Unless otherwise noted on the plans, the Contractor shall, as part of his Project Schedule, submit to the Engineer an estimate of the monthly payments expected to be received on the contract. This will be referenced as the "Monthly Payment Chart".

A chart in Microsoft Excel, Microsoft Word, or hand written format will be acceptable for this purpose. The chart should include, as a minimum, columns for the month, year, and estimated monthly payments. The total of all estimated monthly payments should equal the awarded contract total bid price.

The Engineer may request an updated “Monthly Payment Chart” at his discretion, depending on the accuracy of the initial estimates and according to the overall needs of the Department.

The “Monthly Payment Chart” will not be considered a binding document by either the Contractor or the Department and is considered solely informational.

On projects requiring CPM Schedules, the Contractor may, but is not required to, “Cost Load” the CPM Schedule in order to generate the monthly payment estimates.

Costs to prepare and/or update the “Monthly Payment Chart” are addressed as follows:

- a. On Contracts requiring CPM Schedules and Updates, preparation of the initial chart shall be incidental to Item 763508. Updates shall be incidental to Item 763509
- b. On contracts not requiring CPM Schedules, the cost to prepare and update the “Monthly Payment Chart” shall be included in Item 763000, Initial Expense.\

UNOFFICIAL
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STRUCTURE SPECIFIC NOTES**1-577**

1. Bridge 1-577 carries NorthEast BLVD (Road #050) over Brandywine River, in Wilmington. Its location is 39°44'36.02"N latitude, 75°32'14.83"W longitude.
2. BR 1-577 shall be the first location to be painted under this contract.
3. The structural steel paint color shall be forest green (#24172) as per federal standard 595C. The color shall be submitted for approval.
4. All abutment back walls, abutment seats and bearing pedestals shall be prepared and sealed as indicated in Item no.602707.
5. The concrete sealer color shall be white (#37722) as per federal standard 595C. The color shall be submitted for approval.
6. All steel railings, window frames, doors, coverings to operator house, and/or any other steel previously coated (this includes steel within the bascule pit) shall be cleaned and painted in entirety using forest green (#24172) as per federal standard 595C.
7. Only single lane closures shall be permitted using Typical Application 33 of the Traffic Control Manual on NorthEast BLVD only for the placement and removal of containment systems and associated equipment and painting of railings and operators house. Lane closures only permitted between the hours of 9:00am and 3:00pm.
8. Access to one sidewalk on the bridge shall remain open at all times. If necessary, sidewalk closure shall be as per case Typical Application 28 of the Traffic Control Manual.
9. There are no environmental permits (including but not limited to COE, DNREC Subaqueous Lands and Wetlands, New Castle County Floodplain), or environmental construction restrictions.
10. U.S. Coast Guard 30-day Advanced Coordination/Approval: The waterways are used for recreational purposes. The contractor shall provide safe passage through the work areas for the waterway users and shall have the passageway clearly marked. Payment is included under pay item 763522, "Coast Guard Specific Conditions". Any contractor activity which will result in the short-term restriction of the waterways to those individuals is to be coordinated with the engineer and the U.S. Coast Guard one month in advance. The work with the water shall be limited to what appears on these plans. If any additional in-water/wetlands work is needed, it must be coordinated with the U.S. Coast Guard prior to beginning work and be in conformance with item 763522, "Coast Guard Specific Conditions". Contact Bill Brazier at (757) 398-6422, as well as submit a written notice (which includes a sketch depicting the location and duration of all restrictions) to the commanding officer (AWOB), 5th Coast Guard District, Federal Building 431 Crawford St., Portsmouth, VA 23704 for approval.
11. Current scope of work does not include any work in the water, including dewatering and/or access. If the scope of work changes, contact Environmental Studies for permit coordination/authorization.
12. **MIGRATORY BIRDS CONSTRUCTION RESTRICTION: APRIL 15 – AUGUST 1 (INCLUSIVE). EITHER BEGIN WORK ON THE UNDERSIDE OF THE STRUCTURE PRIOR TO APRIL 15 (TO PREVENT BIRDS FROM NESTING) OR WAIT UNTIL AFTER AUGUST 1 (AFTER HATCHLINGS HAVE LEFT) TO BEGIN WORK ON THE UNDERSIDE.**
13. The contractor should be aware that Bridge 1-577 is eligible for the National Register of Historic Places. Abrasive blasting shall be limited to the absolute minimum required to remove the paint system and corrosion. Any damage created by the work, or defects found after the steel has been cleaned that require further repairs will require consultation with Jon Schmidt of DelDOT Environmental Studies (760-2282) and the DE SHPO (736-7400).

1-775

1. Bridge 1-775 carries I-95 NB (Road #059) over Marsh Rd. near Wilmington. Its location is 39°46'46.05" N latitude, 75°30'23.13"W longitude.
2. The structural steel paint color shall be forest green (# 24172) as per federal standard 595C. The color shall be submitted for approval.
3. All abutment back walls, abutment seats, and bearing pedestals shall be prepared and sealed as indicated in Item no.602707.
4. The concrete sealer color shall be white (# 37722) as per federal standard 595C. The color shall be submitted for approval.
5. Only lane and/or shoulder closures of Marsh Rd. shall be permitted using Typical Applications 42 and 44 of the Traffic Control Manual as directed by the Engineer and/or the Safety Officer. The contractor must maintain one through lane in each direction at all times. Lane and/or shoulder closures are only permitted between the hours of 8:00pm and 6:00am due to high daytime volumes on Marsh Road.
6. Access to one sidewalk on the bridge shall remain open at all times. If necessary, sidewalk closure shall be as per case Typical Application 28 of the Traffic Control Manual.
7. The contractor's containment and scaffold system may remain in place during non-work hours provided that the minimum clearance above the lanes and shoulders is at least 16'-6". The Contractor shall contact the Transportation Management Center (TMC) and Dennis Blades (302-744-2717) of the Department of Motor Vehicles – Motor Fuel Tax – Oversize/Overweight Permits to notify them of the reduced vertical clearance. The contractor shall not have any of the containment and/or scaffold system extending beyond the work area provided by the lane/shoulder closure during cleaning and painting operations. The intent is that the containment/scaffold system does not extend into an open traffic lane when occupied by personnel.

1-776

1. Bridge 1-776 carries I-95 SB (Road #059) over Marsh Rd. near Wilmington. Its location is 39°46'47.33"N latitude, 75°30'23.03"W longitude.
2. The structural steel paint color shall be forest green (# 24172) as per federal standard 595C. The color shall be submitted for approval.
3. All abutment back walls, abutment seats, and bearing pedestals shall be prepared and sealed as indicated in Item no.602707.
4. The concrete sealer color shall be white (# 37722) as per federal standard 595C. The color shall be submitted for approval.
5. Only lane and/or shoulder closures of Marsh Rd. shall be permitted using Typical Applications 42 and 44 of the Traffic Control Manual as directed by the Engineer and/or the Safety Officer. The contractor must maintain one through lane in each direction at all times. Lane and/or shoulder closures are only permitted between the hours of 8:00pm and 6:00am due to high daytime volumes on Marsh Road.
6. Access to one sidewalk on the bridge shall remain open at all times. If necessary, sidewalk closure shall be as per case Typical Application 28 of the Traffic Control Manual.
7. The contractor's containment and scaffold system may remain in place during non-work hours provided that the minimum clearance above the lanes and shoulders is at least 16'-6". The Contractor shall contact the Transportation Management Center (TMC) and Dennis Blades (302-744-2717) of the Department of Motor Vehicles – Motor Fuel Tax – Oversize/Overweight Permits to notify them of the reduced vertical clearance. The contractor shall not have any of the containment and/or scaffold system extending beyond the work area provided by the lane/shoulder closure during cleaning and painting operations. The intent is that the containment/scaffold system does not extend into an open traffic lane when occupied by personnel.

QUANTITY SHEET

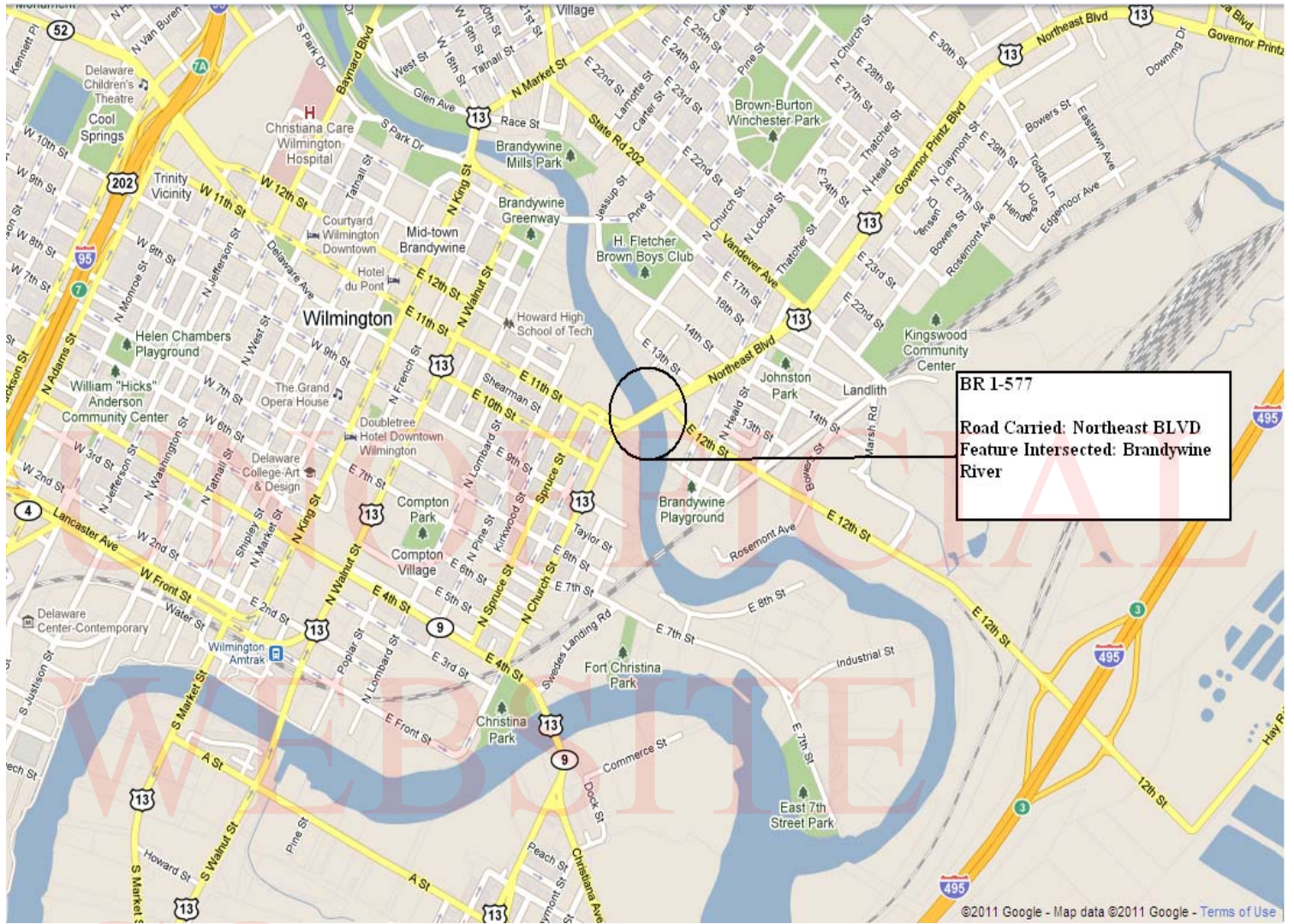
ITEM No.	DESCRIPTION	UNIT	1-577	1-775	1-776	Total
602707	Silicone Acrylic Concrete Sealer	L.S.	L.S.	L.S.	L.S.	L.S.
605522	Urethane Paint System, Existing Steel	L.S.	L.S.	L.S.	L.S.	L.S.
605533	Cleaning of Existing Steel Structures, Hazardous Base	L.S.	L.S.	L.S.	L.S.	L.S.
605690	Coating Warranty					
743004	Furnish and Maintain Portable Changeable Message Sign	EA-DY	30	20	20	70
743007	Traffic Officers	HR	80	80	80	240
* 743050	Flagger, New Castle County, State	HR	160	240	240	640
* 743062	Flagger, New Castle County, State, Overtime	HR	80	120	120	320
763000	Initial Expense		L.S.			
763522	Coast Guard Specific Conditions	L.S.	L.S.	-	-	L.S.
763643	Maintenance of Traffic	L.S.	L.S.	L.S.	L.S.	L.S.

*Fixed Price

Bridge No.	Area of Steel (ft ²)
1-577	11200
1-775	11800
1-776	12000

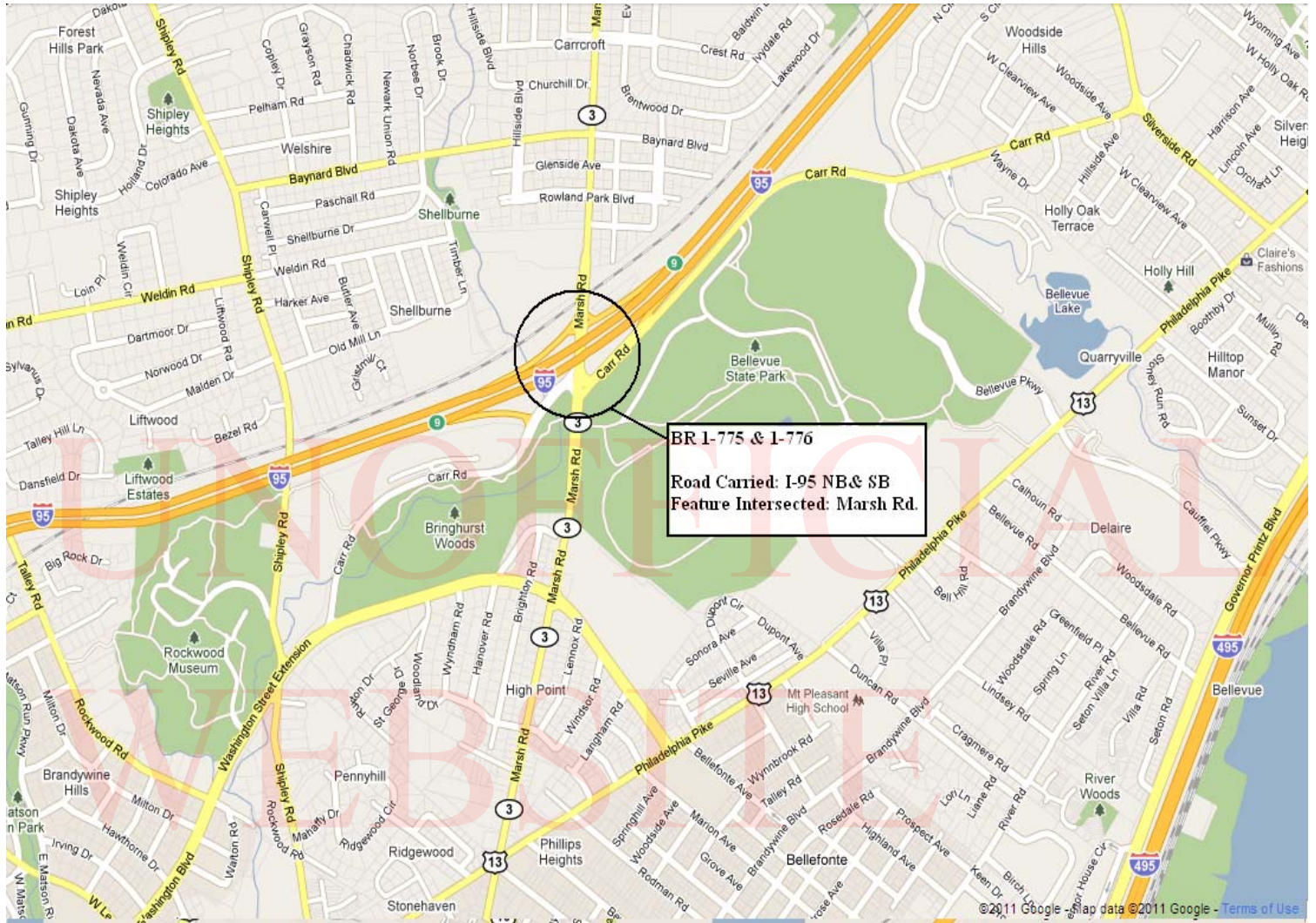
Bridge No.	Area of Concrete (ft ²)
1-577	1000
1-775	2000
1-776	2000

Areas given are estimates only; the contractor should verify all quantities before submitting bids.



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Bridge 1-577



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Bridges 1-775 & 776