

**Replacement of the 31<sup>ST</sup> Street, NW  
Bridge over C&O Canal  
(Bridge No. 3)  
DCKA-2018-C-0056  
FAP No:2017(037)**



31<sup>st</sup> Street Bridge over C&O Canal

**Construction Management Weekly Report**

**4/18/2020 – 4/24/2020**

**Project Website: [www.31stStreetBridge.com](http://www.31stStreetBridge.com)**

## 1. EXECUTIVE SUMMARY

### Project Description

Work under this contract consists of the replacement of the 31st Street Bridge over the C&O Canal in Georgetown. The existing two-span bridge superstructure is to be removed in its entirety and replaced by a new single-span, steel, multi-girder superstructure on new independent abutments constructed behind the existing canal walls. The proposed bridge will have a reinforced concrete deck. The existing canal walls are to remain in place with minor wall maintenance. The existing historic pier is to be removed, salvaged, rehabilitated, and reset in its original location, but will no longer support the bridge. Minor approach roadway reconstruction and sidewalk improvements are also part of the project. Service via existing utilities that currently hang on the bridge must be maintained throughout construction.

### Proposed work will include but not be limited to:

- Installation of a temporary pedestrian bridge prior to construction in order to maintain pedestrian access across the C&O Canal at all times
- Installation of temporary structures required to laterally support existing Canal Walls
- Removal, salvage and restoration of the historic pier
- Installation of temporary utility supports during construction, protection of existing utilities, and coordination with utility companies for relocation prior to bridge replacement
- Removal, relocation and installation of various utility components, manholes, and related items
- Installation and removal of a portable dam system within the canal
- Removal, storage and reinstallation of existing streetlight poles and sign posts
- Removal, storage and reinstallation of the stone monument, wooden sign posts, and Canal Wall elements
- Removal and disposal of the existing bridge superstructure in its entirety, and construction of new abutments and superstructure
- Construction of
  - Granite curb
  - Brick gutter
  - PCC base with brick/tile sidewalk
  - Wheelchair/bicycle ramps
- Installation of pedestrian railing

## 2. STATUS OF CONSTRUCTION / PROGRESS SUMMARY

### Progress Summary:

- Fort Myer Construction Company (FMCC) implemented the project detour on June 11, 2019 and set up the construction zone perimeter.
- The pedestrian bridge was delivered, assembled, and set on the abutments; and opened for use on June 28, 2019.
- NPS continues to maintain water flow in the canal, and the cofferdams are working properly.
- The pier footing investigation was completed, and the pier assessment/restoration plan has been submitted for review and comment.
- The water main relocation and installation of the Canal wall support is completed.
- Demolition of existing bridge deck has been completed.
- Demolition of Verizon wood conduits (by Verizon) was completed.
- Removal of the beams located in the middle of Verizon conduits completed.
- Micropile drilling on the south and north sides of the bridge was completed on December 21, 2019.
- Placement of reinforcement and grout started on December 9, 2019 at the north side of the bridge and was completed on December 11, 2019.
- Cleaning and priming of the historic pier completed; UT and MT investigations were completed, and results distributed; pier assessment meeting held in the field January 21, 2020
- Pier assessment/rehabilitation report provided February 3, 2020 and distributed to stakeholders for review and comment. AECOM comments submitted February 14, 2020
- Pier footing meeting held on February 24, 2020; pier rehab meeting held on February 24, 2020. Both meetings to discuss path forward for all items related to the pier. Revised Pier Report (Rev 1) submitted on March 5, 2020 for review and comment. DDOT suspended stakeholder review on March 12, 2020; DDOT recommended using the spreadsheet to compile the defects and repairs in a tabular format, for clarity and tracking purposes. DDOT sent comments on March 17, 2020 and FMCC to resubmit accordingly.
- Pepco outage completed March 17, 2020.
- Verizon asbestos removal completed w/e March 20, 2020; split-duct work completed April 8, 2020.
- Excavation of north and south abutments continue towards completion.
- Placement of formwork for abutment foundation complete.
- Placement of reinforcing steel for abutment complete.
- Placement of concrete at north abutment complete.

**Ongoing Issues / Items:** FMCC advancing placement of abutment concrete at north and south abutments.

**New Issues / Items:** None at this time.

**Action Items:** None at this time.

**New Action Items:** None at this time.

## 3. MEETINGS / PROJECT COORDINATION

- Progress Meeting #23 will be held Wednesday, April 29, 2020 at 10:00 AM via ZOOM Telecon.

#### 4. DAILY WORK PERFORMED

##### Field construction activities performed during this period:

##### **Saturday – 4/18/2020**

- The 31<sup>st</sup> Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- The contractor started the placement of reinforcing steel for the north abutment foundation.

##### **Sunday – 4/19/2020**

- The 31<sup>st</sup> Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- The contractor did not work on this date.

##### **Monday – 4/20/2020**

- The 31<sup>st</sup> Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- The contractor continued the placement of reinforcing steel for the north abutment footing.
- The contractor continued the excavation for back-wall and removal of stone wall at the south abutment.
- The contractor lowered and stored the removed canal wall stones inside the Canal.

##### **Tuesday – 4/21/2020**

- The 31<sup>st</sup> Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- The contractor completed the placement of reinforcing steel for the north abutment footing.
- The contractor continued the excavation for back-wall and removal of stone wall at the south abutment.
- The contractor cut the micropiles to the required height and continued the installation of formwork at the south abutment.

##### **Wednesday – 04/22/2020**

- The 31<sup>st</sup> Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- The contractor placed 4500 psi structural concrete for the bridge's north abutment foundation. The placement of concrete was observed and tested for temperature, slump, air contents, and batch to placement time. One set of 12 cylinders was cast for compressive strength testing at DDOT Material Lab.
- DDOT QA/QC was onsite; observed the placement, tested the concrete and cast a comparative set of cylinders.
- The contractor continued the stone wall cutting to the bottom elevation and continued the installation of formwork at the south abutment.

##### **Thursday – 04/23/2020**

- The 31<sup>st</sup> Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- The contractor completed the excavation around the Verizon Manhole at the south abutment. Excavation was performed in the presence of a Verizon representative.
- The contractor completed the erection of formwork for the bridge's south abutment foundation.
- The contractor started the placement of reinforcing steel for the south abutment foundation.



**Friday – 04/24/2020**

- The 31<sup>st</sup> Street detour remained in effect and FMCC continued providing local and business traffic access at M and K Streets.
- The contractor cancelled today's activities due to the weather conditions.

**4. PUBLIC OUTREACH**

Public Outreach performed during this period:

- Responded to citizen and business inquiries; notified stakeholders of weekend work.

**5. INSPECTION & MATERIAL TESTS PERFORMED**

- None at this time

**6. CHANGE ORDERS / TASK ORDER**

- Change Order No. 1 submitted to DDOT (Bedrock excavation, Pepco conduit demo, beam removal) March 12, 2020.
- Change Order No. 2 to include micropile VE package, load testing and grout over drill, being prepared.

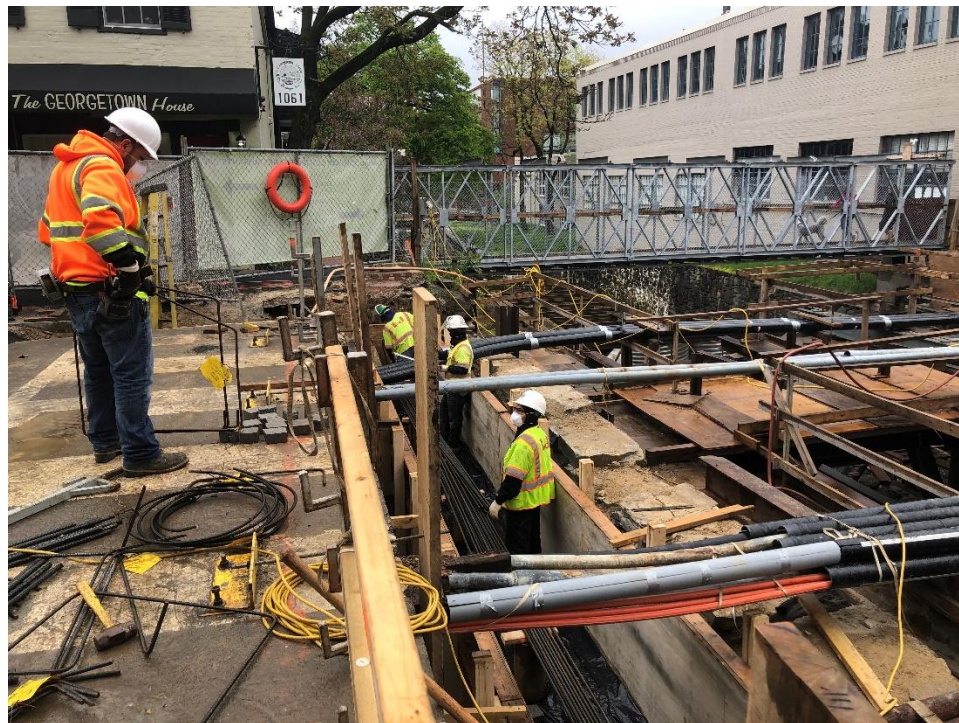
**7. DBE PARTICIPATION SUMMARIES**

- None at this time.

**8. ACCIDENTS / INCIDENTS**

- There were no reported accidents within the project limits this week.

**9. PHOTOS OF WORK PERFORMED THIS PERIOD**



Placement of Reinforcing Steel at the North Abutment Foundation





Network: Apr 20, 2020 at 12:30:38 PM EDT

Storing Removed Canal Wall Stones Inside the Canal



Network: Apr 20, 2020 at 8:13:45 AM EDT

Back Wall Excavation and Stone wall Removal at South Abutment





Network: Apr 20, 2020 at 2:28:37 PM EDT  
Reinforcing Steel at North Abutment Foundation



Network: Apr 21, 2020 at 9:47:34 AM EDT  
Excavation at the South Abutment Foundation





Network: Apr 21, 2020 at 2:35:44 PM EDT

Placement of Reinforcing Steel at North Abutment Foundation



Network: Apr 21, 2020 at 3:57:46 PM EDT

Formwork Placement at the East Section of South Abutment Foundation





Network Apr 22, 2020 at 12:10:57 PM EDT

Placement of Concrete at North Abutment Foundation



Network Apr 22, 2020 at 1:40:59 PM EDT

Placement of Concrete at North Abutment Foundation





Network: Apr 23, 2020 at 2:41:27 PM EDT

Concrete Curing – North Abutment Foundation



Network: Apr 23, 2020 at 10:47:12 AM EDT

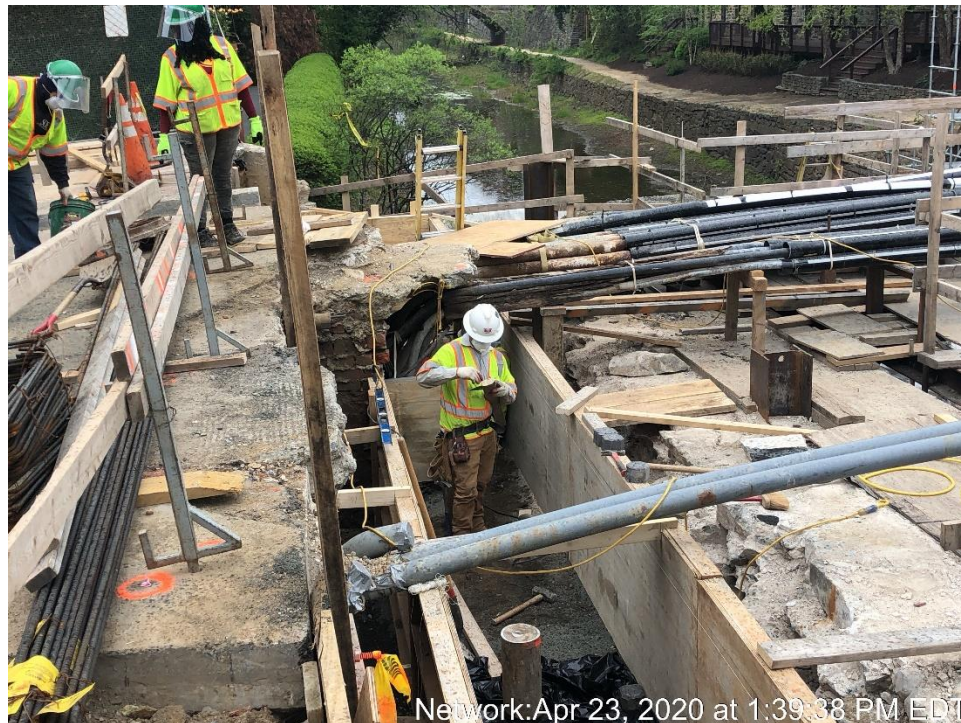
Excavation Around Verizon Manhole – South Abutment





Network: Apr 23, 2020 at 11:59:29 AM EDT

Excavation around Verizon Manhole – South abutment



Network: Apr 23, 2020 at 1:39:38 PM EDT

Formwork Placement at the South Abutment