



**US Army Corps  
of Engineers**  
Philadelphia District  
1650 Arch Street  
Philadelphia, PA 19103-2004  
Attn: CENAP-OPR

# Public Notice

**Comment Period Begins:** March 20, 2025  
**Comment Period Ends:** April 19, 2025  
**File Number:** NAP-2025-00041-95  
**File Name:** Burlington County Bridge Commission – Tacony-Palmyra  
Bridge Submarine Cable Replacement Project  
**Contact:** Robert Youhas  
**Email:** robert.youhas@usace.army.mil

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This District has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).

The purpose of this notice is to solicit comments and recommendations from the public concerning issuance of a Department of the Army permit for the work described below.

**APPLICANT:** Burlington County Bridge Commission  
1300 Route 73 North, P.O. Box 6  
Palmyra, New Jersey 08065

**AGENT:** Pennoni Associates Inc.  
103 College Rd E, Third Floor  
Princeton, New Jersey 08540

**LOCATION:** Delaware River at the bascule span of the Tacony-Palmyra Bridge between Bridge Pier “E” and Bridge Pier “F” in the Borough of Palmyra, Burlington County, New Jersey; Approximate Center Coordinates: 40.011631, -75.042677

**PURPOSE:** The stated purpose of the project is to replace existing cables which are approaching their end-of-service life, as well as upgrade information technology and communications infrastructure for devices installed on the bridge.

## **PROJECT DESCRIPTION:**

The applicant, Burlington County Bridge Commission (BCBC), has requested Department of the Army (DA) authorization to install five (5) replacement submarine cables [i.e. two (2) power cables, two (2) control cables, and one (1) fiber optic cable] to -50.0-foot Mean Lower Low Water (MLLW) of the Delaware River within the footprint of the Delaware River’s Philadelphia to Trenton Federal Navigation Channel. The new cables will be installed within a single cable trough trenched using a water jet. Upon exiting the mudline, the cables will diverge and extend up Bridge Pier “E” and Bridge Pier “F” to splice points located above the 100-year flood line. The project, in its entirety, is located on New Jersey side of the Delaware River. The 0.370-acre cable trough will

be restored to pre-construction river bottom elevations, with no net increase in fill. The existing submarine cables will be cut at the existing mud line at Bridge Pier "E" and Bridge Pier "F" and abandoned-in-place.

The power cables are feeds for operating the bridge, specifically for powering the motors that raise and lower the bascule spans, as well as operating lane control signals, gates to close the bridge to traffic, and structural health monitoring systems inclusive of the fiber optic telecommunications systems. The control cables are for operating the Supervisory Control and Data Acquisition (SCADA) systems (i.e. traffic lights, gates, etc.). The fiber optic cable is for the bridge's telecommunications network.

The cable installation work is proposed to be undertaken on or after 01 July 2026, with an estimated completion date of 31 August 2026.

For additional project details, see the attached plans identified as: Project Plan Sheets 1 through 13.

## **MITIGATION**

The applicant has stated that the proposed project has been designed to avoid and minimize adverse effects on the aquatic environment to the maximum extent practicable. Information provided in the application and on the plans indicates that compensatory mitigation is neither practicable nor feasible for the amount of dredged or fill material to be discharged into waters of the United States.

Proposed discharges into Waters of the U.S. for the subject project are limited to water jet trenching installation activities and subsequent restoration of the cable trough to pre-construction river bottom elevations.

## **CORPS EVALUATION FACTORS**

The decision whether to issue a permit will be based on an evaluation of the activity's probable impact including its cumulative impacts on the public interest. The decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof. Among these factors are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and welfare of the people.

The evaluation of the impact of this project will also include application of the Clean Water Act Section 404(b)(1) Guidelines promulgated by the Administrator, U.S.

Environmental Protection Agency if the project includes a discharge of dredge or fill material pursuant to Section 404 of the Clean Water Act.

Evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, EPA, (40 CFR part 230) or of the criteria established under authority of section 102(a) of the Marine Protection, Research and Sanctuaries Act of 1972.

In cases involving construction of artificial islands, installation and other devices on the outer continental shelf lands, the decision as to whether a permit will be issued will be based on evaluation of the impact of the proposed work on navigation and national security.

### **ENDANGERED SPECIES**

A preliminary review of this application indicates that aquatic-based species and/or their critical habitat pursuant to Section 7 of the Endangered Species Act (ESA) may be present in the action area. This office will forward this Public Notice to the National Marine Fisheries Service (NMFS) with a request for technical assistance on whether any ESA-listed species or their critical habitat may be present in the area which would be affected by the proposed activity. This office will evaluate the potential effects of the proposed actions on ESA-listed species or their critical habitat and will consult with the NMFS, as appropriate. ESA Section 7 consultation for aquatic-based species would be concluded prior to the final decision on this permit application. Pursuant to Section 7 of the ESA, a preliminary review of this application indicates that the proposed work would not affect land-based species or their critical habitat. Given USACE's no effect determination, as per Section 7 of the ESA, no further consultation with the U.S. Fish & Wildlife Service is required.

### **CULTURAL RESOURCES AND TRIBAL TRUST**

The District's Cultural Resource Specialist and Tribal Liaison is currently reviewing the proposed permit action for potential impacts to Historic Properties eligible for or listed on the National Register of Historic Places and for potential issues concerning the Tribes. A determination of effects will be coordinated with the State Historic Preservation Office, the Tribes and other consulting parties as necessary.

### **ESSENTIAL FISH HABITAT**

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires all federal agencies to consult with the NMFS for all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH). A preliminary review of this application indicates that EFH is present within the project area. This office will evaluate the potential effects of the proposed actions on EFH and will consult with NMFS, as appropriate. Consultation would be concluded prior to the final decision on this permit application.

## **WATER QUALITY CERTIFICATE**

In accordance with Section 401 of the Clean Water Act, a Water Quality Certificate (WQC) is required from the State government in which the work is located. Any comments concerning the work described above which relate to Water Quality considerations should be sent to this office with a copy to the State.

## **COASTAL ZONE MANAGEMENT ACT**

In accordance with Section 307(c) of the Coastal Zone Management Act of 1972, applicants for Federal Licenses or Permits to conduct an activity affecting land or water uses in a State's coastal zone must provide certification that the activity complies with the State's Coastal Zone Management (CZM) Program. The applicant has stated that the proposed activity complies with and will be conducted in a manner that is consistent with the approved State CZM Program. No permit will be issued until the State has concurred with the applicant's certification or has waived its right to do so. Comments concerning the impact on the State's coastal zone should be sent to this office with a copy to the State's CZM office.

## **SUBMISSION OF COMMENTS AND PUBLIC HEARING REQUEST**

Any comments received will be considered by this office to determine whether to issue, modify, condition, or deny a permit for this proposed project. To make this decision, comments are used to assess the probable impact on the public interest. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Comments on the proposed work must be submitted, in writing, within the comment period indicated in the header above. Any person may request, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing must be in writing and state the reasons for holding a public hearing.

Please provide any comments, request for a public hearing, or requests for additional information to the Regulatory Project Manager indicated above. All Public Notices are posted on our website at:

<https://www.nap.usace.army.mil/Missions/Regulatory/Public-Notices/>

FOR: Todd A. Schaible  
Chief, Regulatory Branch

# BURLINGTON COUNTY BRIDGE COMMISSION

## TACONY–PALMYRA BRIDGE

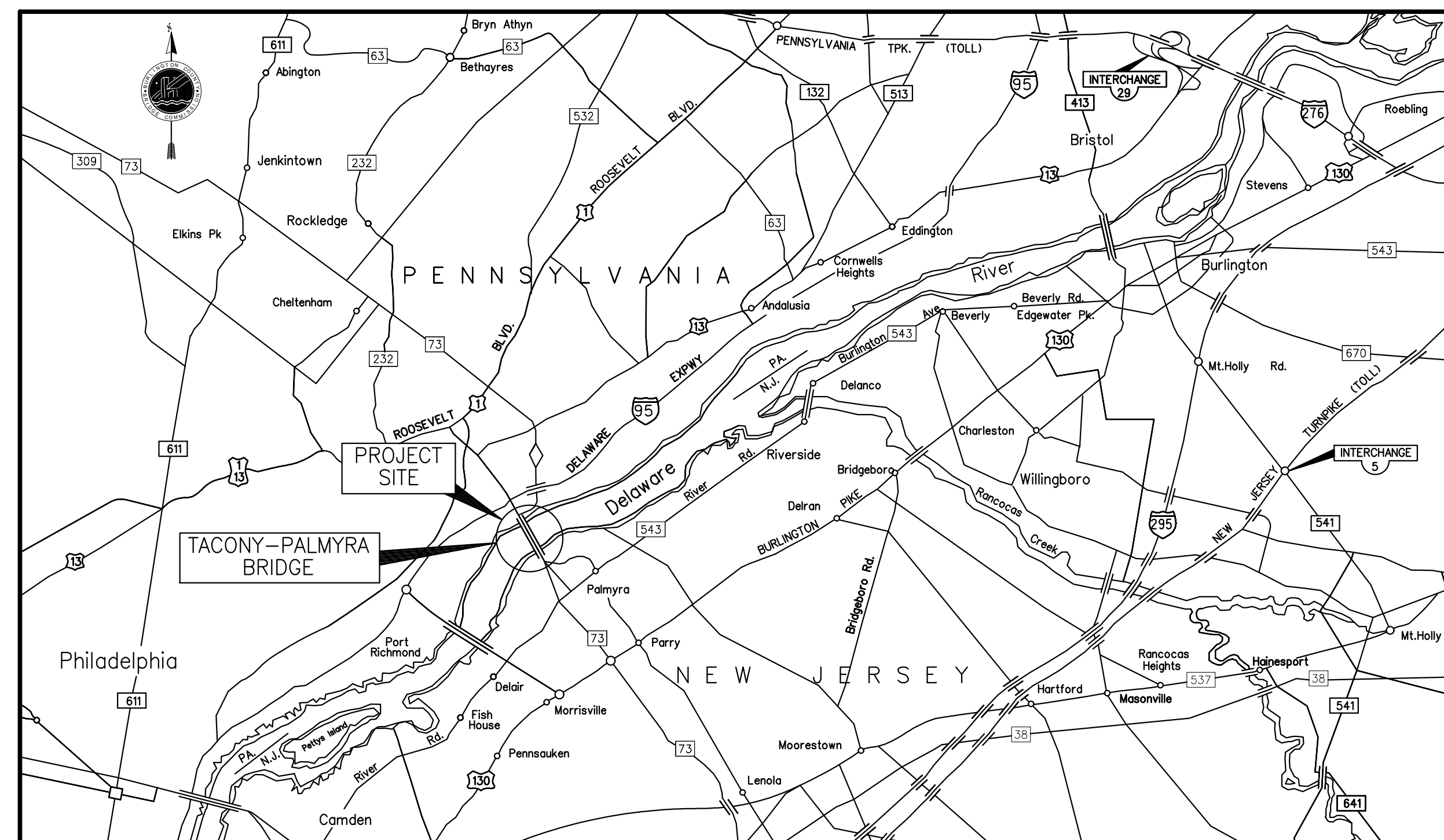
OVER THE DELAWARE RIVER

TACONY, PENNSYLVANIA PALMYRA, NEW JERSEY

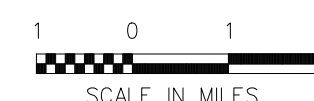
## SUBMARINE CABLE INSTALLATION

### BCBC2024XX

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SHEET NO.	DRAWING NO.	DESCRIPTION
1	USAC-001	TITLE SHEET
2	USAC-002	GENERAL NOTES
3	USAC-003	SEQUENCE OF CONSTRUCTION
4	USAC-004	QUANTITIES
5	USAC-005	BRIDGE LOCATION DETAILS
6	USAC-006	PC TROUGH PLAN AND PROFILE
7	USAC-007	FIBER TROUGH PLAN AND PROFILE
8	USAC-007	PIER E PROFILE REFERENCE
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10	USAC-010	POWER AND CONTROL CABLE PIER E CONSTRUCTION PLAN
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14	USAC-014	PIER E FIBER INSTALLATION PLAN
15	USAC-015	PIER F FIBER INSTALLATION PLAN
16	USAC-016	SERVER TOWER INTERNAL CONNECTION PLAN
17	USAC-017	PIER E DEMOLITION PLAN
18	USAC-018	PIER F DEMOLITION PLAN
19	USAC-019	JUNCTION BOX DETAIL
20	USAC-020	SUBMARINE CABLE SUPPORT DETAIL
21	USAC-021	JUNCTION BOX SERVICE PLATFORM



KEY MAP



BURLINGTON COUNTY BRIDGE COMMISSION

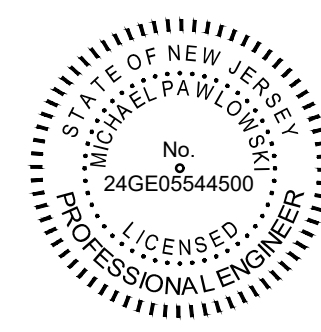
SANDRA NUNES  
JACLYN VEASY  
LATHAM TIVER

CHAIRWOMAN  
VICE CHAIRWOMAN  
COMMISSIONER



**PENNONI ASSOCIATES INC.**  
1900 Market Street, Suite 300  
Philadelphia, PA 19103  
T 215.222.3000 F 215.222.3588

RECOMMENDED  
FOR APPROVAL:



03/06/2025

MICHAEL PAWLOWSKI P.E. #24GE05544500

APPROVED:

JOSEPH ANDL, EXECUTIVE DIRECTOR DATE

BURLINGTON COUNTY BRIDGE COMMISSION



SEQUENCE OF CONSTRUCTION:

(RIGID CONDUIT INSTALLATION FOR POWER AND CONTROL)  
PIER E DOWSTREAM:

1. INSTALL TEMPORARY SHIELDING SUCH THAT NO DEBRIS OR OTHER MATERIAL IS DROPPED INTO THE DELAWARE RIVER.
2. COORDINATE WITH BURLINGTON COUNTY BRIDGE COMMISSION TO INSTALL TEMPORARY TRAFFIC CONTROL IN ACCORDANCE WITH THE PROJECT DOCUMENTS.
3. INSTALL ONE NEMA–RATED SUBMARINE CABLE TERMINATION BOX ON PIER E, ABOVE LOWER LEVEL OF CATWALK. BOTTOM OF TERMINATION BOX SHALL BE SET AT THE 100–YEAR FLOOD ELEVATION OF 10.0’ (NAD83). BOX SHALL PROVIDE FOUR PENETRATIONS IN THE BOTTOM OF THE BOX; TWO FOR SUBMARINE CABLE, AND TWO FOR 4” RIGID STEEL CONDUIT FOR RISER CONTROL. INSTALL TERMINAL BLOCKS FOR 60–CONDUCTOR CONTROL INSIDE BOX.
4. INSTALL ONE NEMA–RATED SUBMARINE CABLE POWER TERMINAL BOX ON PIER E, ABOVE LOWER LEVEL OF CATWALK. BOTTOM OF TERMINATION BOX SHALL BE SET AT THE 100–YEAR FLOOD ELEVATION OF 10.0’ (NAD83). BOX SHALL PROVIDE FOUR PENETRATIONS IN THE BOTTOM OF THE BOX; TWO FOR SUBMARINE CABLE, AND TWO FOR 5” RIGID STEEL CONDUIT FOR RISER POWER. POWER CABINET SHALL BE PREPARED FOR FUTURE INSTALLATION OF TWO 3–CONDUCTOR COPPER 600V CABLE STRAIGHT–SPliced TO RISER CABLE.
5. CHANNEL IRON AND SUBMARINE CABLE TERMINATION SUPPORTS FOR TWO POWER SUBMARINE CABLES (3.6” OD) AND TWO CONTROL SUBMARINE CABLES (3.2” OD) SHALL BE INSTALLED BELOW TERMINATION BOXES.
6. FROM BOTTOM OF CONTROL SUBMARINE CABLE BOX, INSTALL TWO RUNS OF 4” RIGID STEEL CONDUIT THROUGH THE ARCH SPAN (WEST FACE) TO THE DOWNSTREAM–SOUTH FACE OF PIER E. INSTALL PULL BOX AROUND CORNER. CONTINUE RIGID STEEL UP SOUTH FACE TOWER AND INSTALL NEW PULL BOX AT EDGE STREET LEVEL BELOW RAILING.
7. CORE THREE 6” PENETRATIONS THROUGH SOUTH FACE OF CONTROL TOWER E BELOW THE TOP OF MASONRY AND BOTTOM OF TOWER WINDOWS.
8. INSTALL PULL BOX AROUND CORNER. CONTINUE RIGID STEEL UP SOUTH FACE TOWER AND INSTALL NEW PULL BOX AT EDGE STREET LEVEL BELOW RAILING.
9. CONTINUE INSTALALTION OF 4” RIGID STEEL CONDUIT FROM STREET LEVEL PULL BOX TO PENETRATIONS AT CONTROL TOWER. FASTEN AND GROUT CONNECTIONS THROUGH TOWER WALL.
- 10.FROM BOTTOM OF CONTROL SUBMARINE CABLE BOX, INSTALL TWO RUNS OF 5” RIGID STEEL CONDUIT THROUGH THE ARCH SPAN (WEST FACE) TO THE DOWNSTREAM–SOUTH FACE OF PIER E.

- 11.DIVERT HIGHEST ATTACHED 5” RIGID STEEL CONDUIT UP SOUTH FACE OF TOWER ON INSIDE OF BASCULE SPAN IN–BETWEEN STEEL WORK.
- 12.AT REGULATOR ROOM, OUTSIDE WALL, CORE 6” PENETRATION. INSTALL PULL BOX ON INSIDE OF REGULATOR ROOM.
- 13.CONTINUE 5” RIGID STEEL THROUGH WALL PENETRATION TO PULL BOX.
- 14.CONTINUE INSTALLATION OF 5” RIGID STEEL AT BOTTOM OF PIER AROUND CORNER THROUGH EXISTING PULL BOX, UP WALL, THROUGH STREET LEVEL PULL BOX, TERMINATING AT OTHER 6” PENETRATION THROUGH TOWER.

(RIGID CONDUIT INSTALLATION FOR FIBER)  
PIER E UPSTREAM:

- 15.INSTALL ONE NEMA–RATED SUBMARINE CABLE TERMINATION BOX ON PIER E, ABOVE FENDER. BOTTOM OF TERMINATION BOX SHALL BE SET AT THE 100–YEAR FLOOD ELEVATION OF 10.0’ (NAD83). BOX SHALL PROVIDE ONE PENETRATION IN THE BOTTOM OF THE BOX AND ONE IN THE SIDE (ARCH SPAN SIDE); 4” RIGID STEEL CONDUIT FOR RISER CONTROL
- 16.CHANNEL IRON AND SUBMARINE CABLE TERMINATION SUPPORTS FOR FIBER SUBMARINE CONDUIT (3.6” OD) SHALL BE INSTALLED BELOW TERMINATION BOXES.

- 17.FROM SIDE OF CONTROL SUBMARINE CABLE BOX, INSTALL ONE RUN OF 4” RIGID STEEL CONDUIT TO THE UPSTREAM TOWER–NORTH FACE OF PIER E. CONTINUE RIGID STEEL UP NORTH FACE TOWER AND INSTALL NEW PULL BOX ADJACENT TO STREET LEVEL RAILING.
- 18.CORE ONE 4” PENETRATIONS THROUGH NORTH FACE OF CONTROL TOWER E AT THE METAL HOOD BELOW THE ROOF.

(RIGID CONDUIT INSTALLATION)  
PIER F DOWNSTREAM:

- 19.INSTALL ONE NEMA–RATED SUBMARINE CABLE TERMINATION BOX ON PIER F, ABOVE LOWER LEVEL OF CATWALK. BOTTOM OF TERMINATION BOX SHALL BE SET AT THE 100–YEAR FLOOD ELEVATION OF 10.00’ (NAD83). BOX SHALL PROVIDE FOUR PENETRATIONS IN THE BOTTOM OF THE BOX; TWO FOR SUBMARINE CABLE, AND TWO FOR 4” RIGID STEEL CONDUIT FOR RISER CONTROL. INSTALL TERMINAL BLOCKS FOR 60–CONDUCTOR CONTROL INSIDE BOX.
- 20.INSTALL ONE NEMA–RATED SUBMARINE CABLE POWER TERMINAL BOX ON PIER F, ABOVE LOWER LEVEL OF CATWALK. BOTTOM OF TERMINATION BOX SHALL BE SET AT THE 100–YEAR FLOOD ELEVATION OF 10.0’ (NAD83). BOX SHALL PROVIDE FOUR PENETRATIONS IN THE BOTTOM OF THE BOX; TWO FOR SUBMARINE CABLE, AND TWO FOR 5” RIGID STEEL CONDUIT FOR RISER POWER. POWER CABINET SHALL BE PREPARED FOR FUTURE INSTALLATION OF TWO 3–CONDUCTOR COPPER 600V CABLE STRAIGHT–SPliced TO RISER CABLE.
- 21.CHANNEL IRON AND SUBMARINE CABLE TERMINATION SUPPORTS FOR TWO POWER SUBMARINE CABLES (3.6” OD) AND TWO CONTROL SUBMARINE CABLES (3.2” OD) SHALL BE INSTALLED BELOW TERMINATION BOXES.
- 22.FROM BOTTOM OF CONTROL SUBMARINE CABLE BOX, INSTALL TWO RUNS OF 4” RIGID STEEL CONDUIT THROUGH THE ARCH SPAN (EAST FACE) TO THE UPSTREAM–NORTH FACE OF PIER F. INSTALL PULL BOX AROUND CORNER. CONTINUE RIGID STEEL UP NORTH FACE TOWER AND INSTALL NEW PULL BOX AT EDGE STREET LEVEL BELOW RAILING.
- 23.CORE THREE 6” PENETRATIONS THROUGH NORTH FACE OF CONTROL TOWER E BELOW THE TOP OF MASONRY AND BOTTOM OF TOWER WINDOWS.
- 24.INSTALL PULL BOX AROUND CORNER. CONTINUE RIGID STEEL UP NORTH FACE TOWER AND INSTALL NEW PULL BOX AT EDGE STREET LEVEL BELOW RAILING.
- 25.CONTINUE INSTALLATION OF 4” RIGID STEEL CONDUIT FROM STREET LEVEL PULL BOX TO PENETRATIONS AT CONTROL TOWER. FASTEN AND GROUT CONNECTIONS THROUGH TOWER WALL.
- 26.FROM BOTTOM OF CONTROL SUBMARINE CABLE BOX, INSTALL TWO RUNS OF 5” RIGID STEEL CONDUIT THROUGH THE ARCH SPAN (EAST FACE) TO THE UPSTREAM–NORTH FACE OF PIER F.
- 27.DIVERT HIGHEST ATTACHED 5” RIGID STEEL CONDUIT UP NORTH FACE OF TOWER ON INSIDE OF BASCULE SPAN IN–BETWEEN STEEL WORK.
- 28.AT REGULATOR ROOM, OUTSIDE WALL, CORE 6” PENETRATION. INSTALL PULL BOX ON INSIDE OF REGULATOR ROOM.
- 29.CONTINUE 5” RIGID STEEL THROUGH WALL PENETRATION TO PULL BOX.
- 30.CONTINUE INSTALLATION OF 5” RIGID STEEL AT BOTTOM OF PIER AROUND CORNER THROUGH EXISTING PULL BOX, UP WALL, THROUGH STREET LEVEL PULL BOX, TERMINATING AT OTHER 6” PENETRATION THROUGH TOWER.

(RIGID CONDUIT INSTALLATION FOR FIBER)  
PIER F UPSTREAM:

- 31.INSTALL ONE NEMA–RATED SUBMARINE CABLE TERMINATION BOX ON PIER F, ABOVE FENDER. BOTTOM OF TERMINATION BOX SHALL BE SET AT THE 100–YEAR FLOOD ELEVATION OF 10.0’ (NAD83). BOX SHALL PROVIDE ONE PENETRATION IN THE BOTTOM OF THE BOX AND ONE IN THE SIDE (BASCULE SIDE); 4” RIGID STEEL CONDUIT FOR RISER CONTROL
- 32.CHANNEL IRON AND SUBMARINE CABLE TERMINATION SUPPORTS FOR FIBER SUBMARINE CONDUIT (3.6” OD) SHALL BE INSTALLED BELOW TERMINATION BOXES.

- 33.FROM SIDE OF CONTROL SUBMARINE CABLE BOX, INSTALL ONE RUN OF 4” RIGID STEEL CONDUIT TO THE UPSTREAM TOWER–SOUTH FACE OF PIER E. CONTINUE RIGID STEEL UP NORTH FACE TOWER AND INSTALL NEW PULL BOX ADJACENT TO STREET LEVEL RAILING.
- 34.CORE ONE 4” PENETRATIONS THROUGH NORTH FACE OF CONTROL TOWER E AT THE METAL HOOD BELOW THE ROOF.

POWER AND CONTROL CABLE INSTALLATION  
PIER E:

- 35.AT PIER E, POWER SUBMARINE TERMINATION BOX, INSTALL APPROXIMATELY 100 LF OF 3–400 KCMIL CU CABLES FROM BOX THROUGH PULL BOXES TO REGULATOR ROOM. LEAVE AT LEAST 20’ OF CABLE SLACK IN REGULAR ROOM AND 4’ OF SLACK IN TERMINATION BOX FOR FUTURE STRAIGHT SPLICE.
- 36.AT PIER E, POWER SUBMARINE TERMINATION BOX, INSTALL APPROXIMATELY 210 LF OF 3–400 KCMIL CU CABLES FROM BOX THROUGH PULL BOXES TO PIER E CONTROL TOWER. LEAVE AT LEAST 50’ OF CABLE SLACK IN CONTROL ROOM AND 4’ OF SLACK IN SUBMARINE TERMINATION BOX FOR FUTURE STRAIGHT SPLICE. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ROUTING AND TERMINATING POWER IN THE CONTROL TOWER. SEE RVE STRAIGHT LINE DIAGRAMS (UNDER SEPARATE COVER) FOR INSTALL.
- 37.AT PIER E, CONTROL TERMINATION BOX, INSTALL APPROXIMATELY 220 LF OF 3–400 KCMIL CU CABLES FROM BOX THROUGH PULL BOXES TO PIER E CONTROL TOWER. LEAVE AT LEAST 50’ OF CABLE SLACK IN CONTROL ROOM AND 4’ OF SLACK IN SUBMARINE TERMINATION BOX FOR TERMINATIONS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR TERMINATION AT CONTROL BOARD IN TERMINATION BOX AND TOWER. ROUTING AND TERMINATING POWER IN THE CONTROL TOWER. SEE RVE STRAIGHT LINE DIAGRAMS (UNDER SEPARATE COVER) FOR INSTALL.

POWER AND CONTROL CABLE INSTALLATION  
PIER F:

- 38.AT PIER F, POWER SUBMARINE TERMINATION BOX, INSTALL APPROXIMATELY 100 LF OF 3–400 KCMIL CU CABLES FROM BOX THROUGH PULL BOXES TO REGULATOR ROOM. LEAVE AT LEAST 20’ OF CABLE SLACK IN REGULAR ROOM AND 4’ OF SLACK IN SUBMARINE TERMINATION BOX FOR FUTURE STRAIGHT SPLICE.
- 39.AT PIER F, POWER SUBMARINE TERMINATION BOX, INSTALL APPROXIMATELY 210 LF OF 3–400 KCMIL CU CABLES FROM BOX THROUGH PULL BOXES TO PIER F CONTROL TOWER. LEAVE AT LEAST 50’ OF CABLE SLACK IN CONTROL ROOM AND 4’ OF SLACK IN SUBMARINE TERMINATION BOX FOR FUTURE STRAIGHT SPLICE. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ROUTING AND TERMINATING POWER IN THE CONTROL TOWER. SEE RVE STRAIGHT LINE DIAGRAMS (UNDER SEPARATE COVER) FOR INSTALL.
- 40.AT PIER F, CONTROL TERMINATION BOX, INSTALL APPROXIMATELY 220 LF OF 3–400 KCMIL CU CABLES FROM BOX THROUGH PULL BOXES TO PIER F CONTROL TOWER. LEAVE AT LEAST 50’ OF CABLE SLACK IN CONTROL ROOM AND 4’ OF SLACK IN SUBMARINE BOX FOR TERMINATIONS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR TERMINATION AT CONTROL BOARD.

(SUBMARINE CABLE INSTALLATION FROM PIER E TO PIER F)

- 41.AT PIERS E AND F, INSTALL BRACKET FOR SUBMARINE CABLES BELOW TERMINATION BOXES.
- 42.AT PIERS E AND F, AT FOUNDATION UNDER WATER (SEE PLANS), INSTALL SUBMARINE CABLE SADDLE FOR 5 PROPOSED SUBMARINE CABLE/CONDUIT.
- 43.AT BARGES BY PIER E AND PIER F, UNSPOOL AND LAY ALL SUBMARINE CABLES (2–ARMORED POWER, 2–ARMORED CONTROL, 1–ARMORED FIBER CONDUIT) IN PROPOSED PATH AT BED OF CHANNEL.

- 44.AT PROPOSED PATH, UTILIZE JET TO CUT 4’ DEEP TROUGH IN PROPOSED ALIGNMENT AND PROFILE (SEE CABLE TROUGH SHEETS) FROM FOUNDATION OF PIER E TO FOUNDATION OF PIER F.
- 45.IN OPEN CUT TROUGH, ADD SLACK AND LAY PROPOSED SUBMARINE CABLES IN TROUGH.
- 46.BACKFILL TROUGH WITH APPROVED MEDIUM AND JET BED OVER TROUGH WHERE POSSIBLE.
- 47.AT SUBMARINE CABLE SADDLES ON PIERS E AND F, INSTALL SUBMARINE CABLE AND CONDUIT AND FASTEN TO COLLAR.
- 48.AT PIERS E AND F SUBMARINE BRACKETS UNDER TERMINATION BOXES, INSTALL AND SECURE SUBMARINE CABLES AND/OR CONDUITS.
- 49.CONTINUE SLACK OF SUBMARINE CABLES/CONDUIT THROUGH TERMINATION BRACKET AND SPLAY ARMOR TO FASTEN IN PLACE. CONTINUE CABLES INTO ALL TERMINATION BOXES AND PROVIDE 4 LF OF SLACK FOR FUTURE SPLICES OR CONTROL TERMINATIONS.

(TERMINATIONS AT SUBMARINE BOXES AND TOWERS)

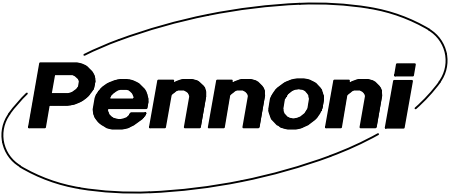
- 50.ELECTRICAL BLOCKING, SPlicing, TERMINATION WORK, AND OTHER ELECTRICAL WORK TO BE PERFORMED BY ELECTRICAL CONTRACTOR. MEANS AND METHODS SHALL BE DICTATED BY THE BURLINGTON COUNTY BRIDGE COMMISSION. SEE RVE STRAIGHT–LINE–DIAGRAM (UNDER SEPARATE COVER) FOR GUIDANCE.

FIBER OPTIC CABLE INSTALLATION

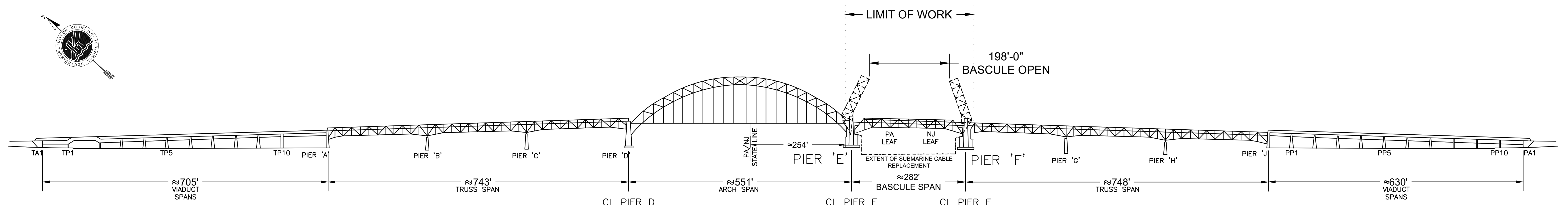
- 51.INSTALL RACK MOUNTED 72 PORT FIBER OPTIC TERMINATION PANEL IN THE RESPECTIVE EXISTING TERMINATION CABINETS OF THE PIER E AND PIER F COMMUNICATIONS ROOMS.
- 52.INSTALL HYBRID 72–STRAND FIBER OPTIC CABLE FROM THE PIER F COMMUNICATIONS ROOM TO THE PIER E COMMUNICATIONS ROOM IN A SINGLE RUN WITH NO SPlicing. SPOOL 20’ OF SLACK WITHIN THE CRAWLSPACE ABOVE BOTH COMMUNICATIONS ROOMS. NEATLY ATTACH DROPPED CABLE TO THE EXISTING CABLE RACEWAY.
- 53.TIP, TEST, AND TERMINATE THE 48 MULTIMODE AND 24 SINGLE MODE FIBERS OF THE HYBRID CABLE. SUBMIT TEST RESULTS TO THE ENGINEER.
- 54.TERMINATE USING SC STYLE CONNECTORS.

58.REMOVE TEMPORARY SHIELDING AND TRAFFIC CONTROL.

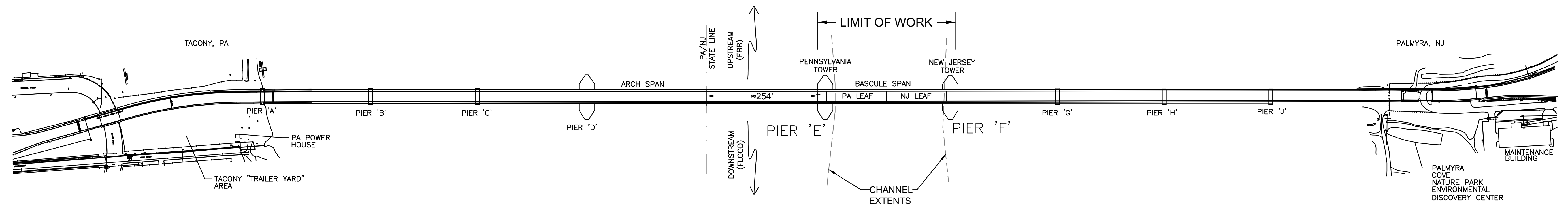
BURLINGTON COUNTY BRIDGE COMMISSION			
TACONY–PALMYRA OVER THE DELAWARE RIVER TACONY, PA                      PALMYRA, NJ			
SUBMARINE CABLE REPLACEMENT USACE INDIVIDUAL PERMIT PLANS			
SEQUENCE OF CONSTRUCTION			
PENNONI ASSOCIATES INC.			
DRAWING NO. USAC-003	SCALE N/A	DATE 3/6/25	SHEET NO. 3 OF 21



1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25
REV.	DATE	BY	DESCRIPTION
REVISIONS			



DELAWARE RIVER



FOR PIER & TOWER DETAILS, SEE SHEETS 5 & 13

TO TACONY, PA

PA UPSTREAM TOWER

BRIDGE

EXISTING SUBMARINE CABLE JUNCTION BOXES

PA DOWNSTREAM TOWER (ACTIVE CONTROL ROOM)

PIER E - PENNSYLVANIA TOWERS

UPSTREAM (EBB)

CHANNEL

RIVER

DOWNSTREAM (FLOOD)

TO PALMYRA, NJ

NJ UPSTREAM TOWER

BRIDGE

EXISTING SUBMARINE CABLE JUNCTION BOXES

NJ DOWNSTREAM TOWER (ACTIVE CONTROL ROOM)

PIER F - NEW JERSEY TOWERS

APPROXIMATE LOCATION OF EXISTING SUBMARINE CABLE TO BE REPLACED

COUNTY BRIDGE COMMISSION

***Pennoni***

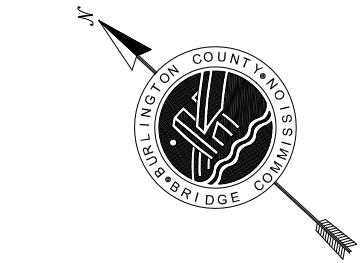
- (1) PROJECT AREA COMPRISES TIDAL WATER OF THE DELAWARE RIVER AND ITS CHANNEL BOTTOM. NO WETLANDS ARE PRESENT AND THERE IS NO NEED FOR A WETLAND DELINEATION.
- (2) DATUMS (ELEV):  
MLLW: +0.00 NAVD88 = 0.00 NGVD29 = 1.10  
MTL: +3.49  
MHW: +6.78  
MHHW: +7.15
- (3) TIDE LINES:  
(ABOVE MLLW) MIN TIDE: -3.52  
MAX TIDE: +11.09
- (4) PROJECT QUALIFIES FOR NATIONWIDE PERMIT #57 FOR INSTALLATION OF ELECTRIC AND TELECOMMUNICATION LINES IN THE BED OF THE RIVER.
- (5) CABLE WILL BE FASTENED INTO A SADDLE CONNECTED TO THE BRIDGE PIERS, AND INSTALLED 4 FEET BELOW THE RIVERBED IN A JETTED TROUGH. THE TROUGH WILL BE BACKFILLED WITH EPA AND/OR NJDEP-APPROVED MATERIALS.

1	03/06/25	MFP	PER USAGE COMMENTS DATED 2/19/25
REV.	DATE	BY	DESCRIPTION
REVISIONS			

BURLINGTON COUNTY BRIDGE COMMISSION			
TACONY-PALMYRA OVER THE DELAWARE RIVER TACONY, PA                      PALMYRA, NJ			
SUBMARINE CABLE REPLACEMENT USACE INDIVIDUAL PERMIT PLANS			
BRIDGE LOCATION DETAILS			
PENNONI ASSOCIATES INC.			
DRAWING NO. USAC-005	SCALE AS SHOWN	DATE 3/6/25	SHEET NO. 5 OF 21







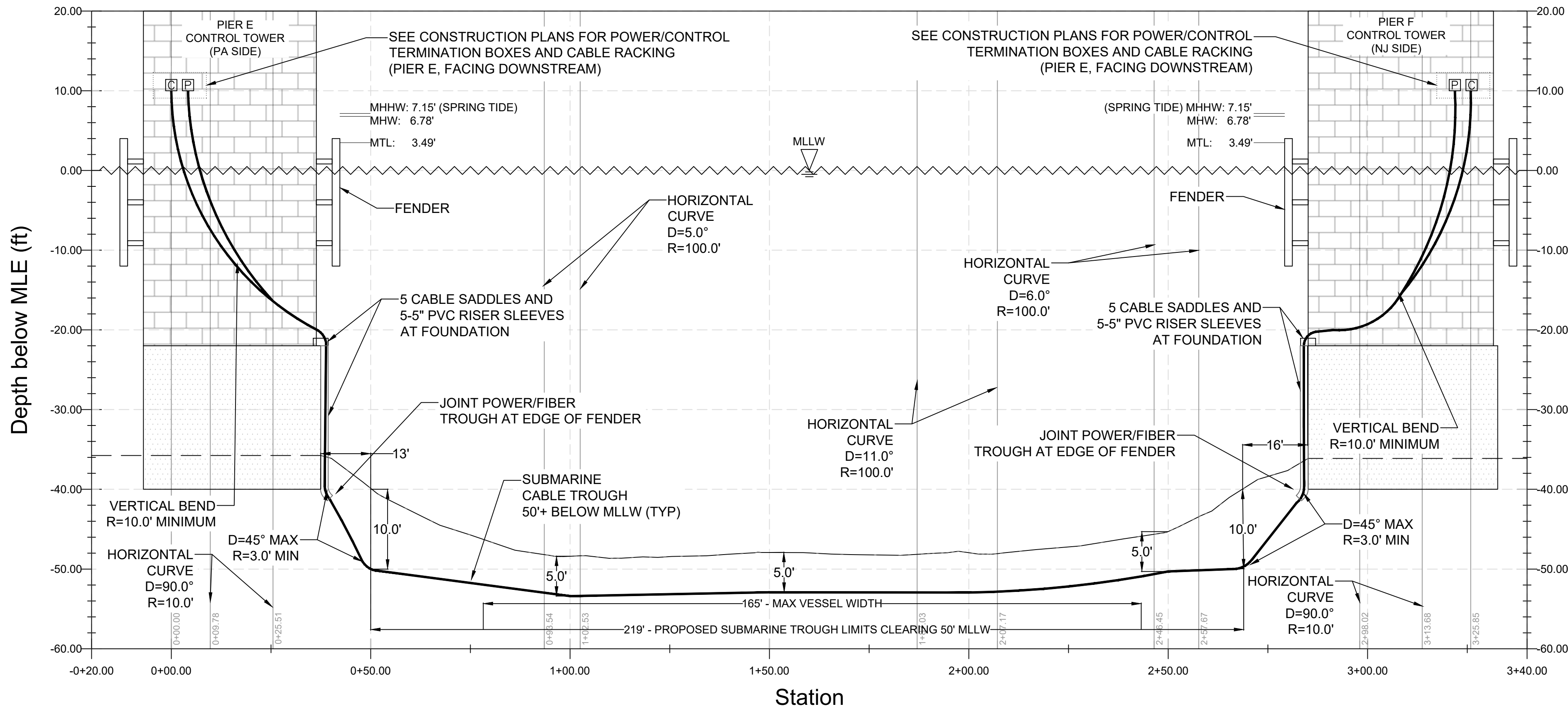
<<< TACONY, PA

PALMYRA, NJ >>>

**SURVEY NOTE:**  
SURVEY DATA FOR DEPTH BELOW M.L.E. IS BASED ON  
HYDROGRAPHIC SURVEY BY S.T. HUDSON ENGINEERS,  
INC. DATED 5/31/2024.

## POWER & CONTROL CABLE TROUGH

- AREA OF **TEMPORARY** IMPACT TO RIVER  
BED FOR INSTALLATION OF SUBMARINE  
CABLES IN TROUGH: 1611 SQFT / 0.370 AC
- AREA OF **PERMANENT** IMPACT TO RIVER  
BED FOR INSTALLATION OF SUBMARINE  
CABLES AT SADDLE SUPPORTS:  
≈20 SQFT AT EACH PIER



VERTICAL SCALE: 1" = 10'-0"  
HORIZONTAL SCALE: 1" = 20'-0"

### SUBMARINE CABLE INSTALL

CABLE	TYPE	CONDUIT	LENGTH (FT)	TERMINUS
POWER	(2) 3/c 400 kcmil	3.36" OD, ARMORED	2 * 470' (w/slack)	SUBMARINE JUNCTION BOX
CONTROL	(2) 60/c #10 AWG CU	3.18" OD, ARMORED	2 * 470' (w/slack)	SUBMARINE JUNCTION BOX

**Pennoni**



03/06/2025

REV.	DATE	BY	DESCRIPTION
1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25

### CONTRACTOR'S NOTE:

- THE SUBMARINE POWER CABLES, CONTROL CABLES AND FIBER OPTIC CABLE WILL BE INSTALLED IN A SINGLE CABLE TROUGH INSTALLED IN A TRENCH 5-FT BELOW THE MUD-LINE AND BACKFILLED WITH (ADD DETAIL) AS INDICATED IN THE PROJECT SPECIFICATIONS. UPON EXITING THE MUD-LINE, THESE SERVICES WILL DIVERGE AND EXTEND UP THE BRIDGE PIERS E AND F TO SPLICE POINTS LOCATED ABOVE THE 100-YEAR FLOOD LINE. REFER TO THE SHEET NUMBERS LISTED IN THE TABLE BELOW FOR DETAILS OF SERVICE ROUTING ALONG PIERS.
- PROPOSED APPROXIMATE ROUTING OF THE SUBMARINE CABLE. THE LOCATION OF THE EXISTING SUBMARINE CABLE IS NOT KNOWN. THE CONTRACTOR SHALL LOCATE THE EXISTING CABLE PRIOR TO INSTALLATION OF NEW AND PROTECT IT IN PLACE. THE NEW SUBMARINE CABLE ROUTING SHALL BE INSTALLED A MINIMUM DISTANCE OF 10-FT FROM THE EXISTING. UPON COMPLETION OF THE NEW SUBMARINE CABLE INSTALLATION AND ENERGIZATION OF NEW, THE EXISTING SUBMARINE CABLE (BELOW THE WATER LINE) SHALL BE ABANDONED IN PLACE. REFER TO SEQUENCE OF OPERATIONS FOR INSTALLATION SEQUENCE.
- MEANS AND METHODS OF ATTACHMENT OF THE PVC SLEEVE TO PIER, ALONG WITH THE DIAMETER OF THE SLEEVES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. 5" PVC SLEEVE SIZE IS A RECOMMENDATION AND CAN BE INCREASED TO ENSURE EASE OF CABLE PULL INTO THE TROUGH.
- AN ACCURATE AS-BUILT LOCATION (HORIZONTAL AND VERTICAL) OF THE SUBMARINE CABLE AND TRENCH EXTENTS SHALL BE PROVIDED BY THE CONTRACTOR UPON COMPLETION OF THE INSTALLATION.

BURLINGTON COUNTY BRIDGE COMMISSION

TACONY-PALMYRA  
OVER THE DELAWARE RIVER  
TACONY, PA PALMYRA, NJ

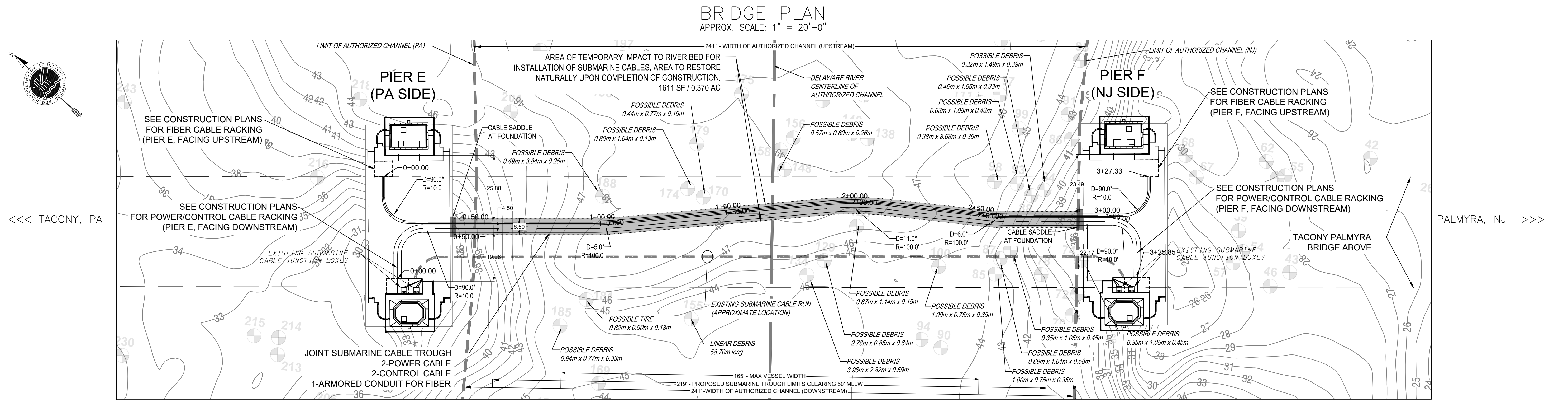
SUBMARINE CABLE REPLACEMENT  
USACE INDIVIDUAL PERMIT PLANS

PC TROUGH PLAN & PROFILE

PENNONI ASSOCIATES INC.

DRAWING NO.	SCALE	DATE	SHEET NO.
USAC-006	1" = 20'	3/6/25	6 OF 21

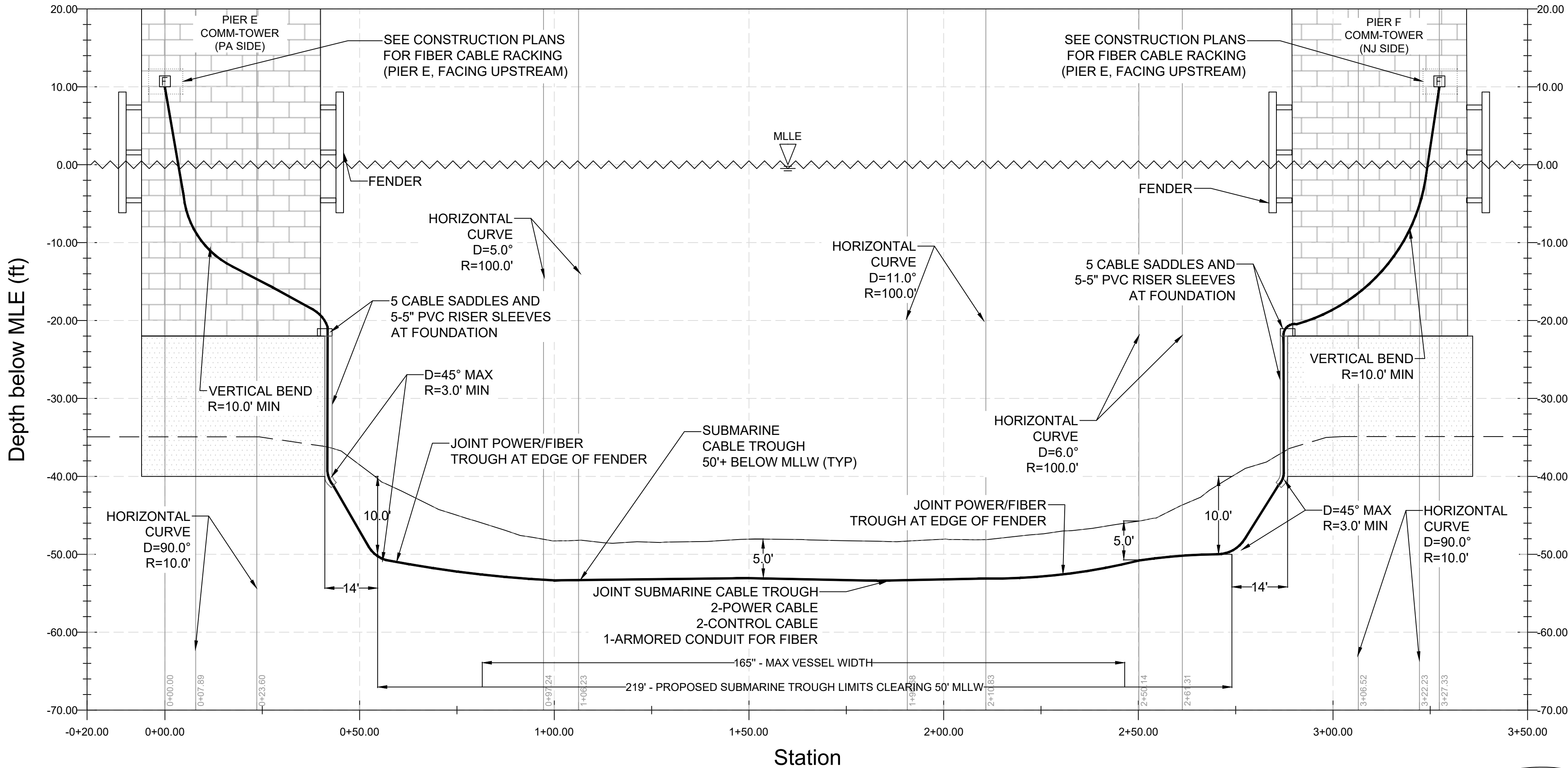




**SURVEY NOTE:**  
SURVEY DATA FOR DEPTH BELOW M.L.E. IS BASED ON HYDROGRAPHIC SURVEY BY S.T. HUDSON ENGINEERS, INC. DATED 5/31/2024.

**CONTRACTOR'S NOTE:**

- THE SUBMARINE POWER CABLES, CONTROL CABLES AND FIBER OPTIC CABLE WILL BE INSTALLED IN A SINGLE CABLE TROUGH INSTALLED IN A TRENCH 5'-FT BELOW THE MUD-LINE AND BACKFILLED WITH (ADD DETAIL) AS INDICATED IN THE PROJECT SPECIFICATIONS. UPON EXITING THE MUD-LINE, THESE SERVICES WILL DIVERGE AND EXTEND UP THE BRIDGE PIERS E AND F TO SPICE POINTS LOCATED ABOVE THE 100-YEAR FLOOD LINE. REFER TO THE SHEET NUMBERS LISTED IN THE TABLE BELOW FOR DETAILS OF SERVICE ROUTING ALONG PIERS.
- PROPOSED APPROXIMATE ROUTING OF THE SUBMARINE CABLE. THE LOCATION OF THE EXISTING SUBMARINE CABLE IS NOT KNOWN. THE CONTRACTOR SHALL LOCATE THE EXISTING CABLE PRIOR TO INSTALLATION OF NEW AND PROTECT IT IN PLACE. THE NEW SUBMARINE CABLE ROUTING SHALL BE INSTALLED A MINIMUM DISTANCE OF 10'-FT FROM THE EXISTING. UPON COMPLETION OF THE NEW SUBMARINE CABLE INSTALLATION AND ENERGIZATION OF NEW, THE EXISTING SUBMARINE CABLE (BELOW THE WATER LINE) SHALL BE ABANDONED IN PLACE. REFER TO SEQUENCE OF OPERATIONS FOR INSTALLATION SEQUENCE.
- MEANS AND METHODS OF ATTACHMENT OF THE PVC SLEEVE TO PIER, ALONG WITH THE DIAMETER OF THE SLEEVES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. 5" PVC SLEEVE SIZE IS A RECOMMENDATION AND CAN BE INCREASED TO ENSURE EASE OF CABLE PULL INTO THE TROUGH.
- AN ACCURATE AS-BUILT LOCATION (HORIZONTAL AND VERTICAL) OF THE SUBMARINE CABLE AND TRENCH EXTENTS SHALL BE PROVIDED BY THE CONTRACTOR UPON COMPLETION OF THE INSTALLATION.

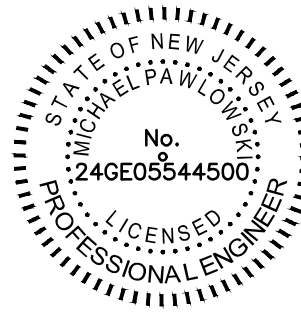


VERTICAL SCALE: 1" = 10'-0"  
HORIZONTAL SCALE: 1" = 20'-0"

**Pennoni**

SUBMARINE CABLE INSTALL				
CABLE	TYPE	CONDUIT	LENGTH (FT)	TERMINUS
FIBER DUCT	SUBMARINE CONDUIT	3.54" OD, ARMORED	470' (w/slack)	SUBMARINE JUNCTION BOX

DES:	CKD:	DWG:	CKD:
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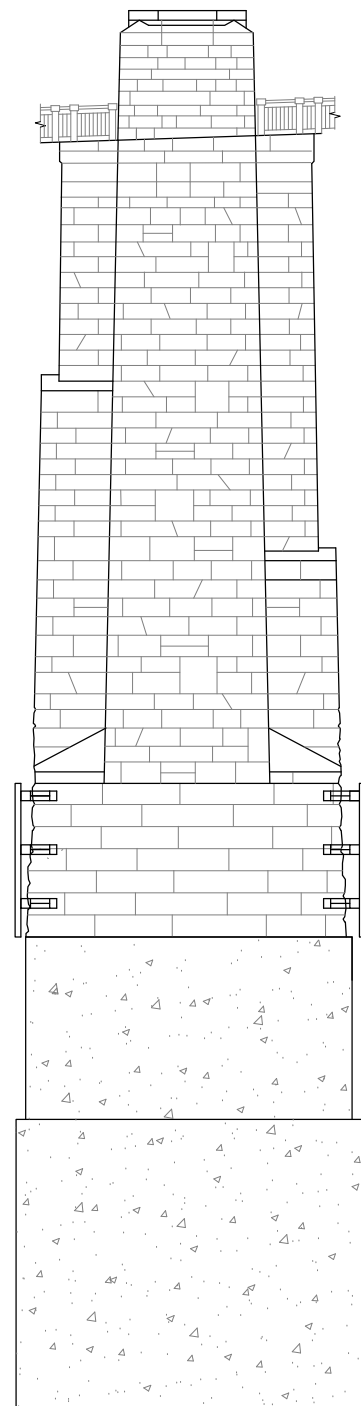


03/06/2025

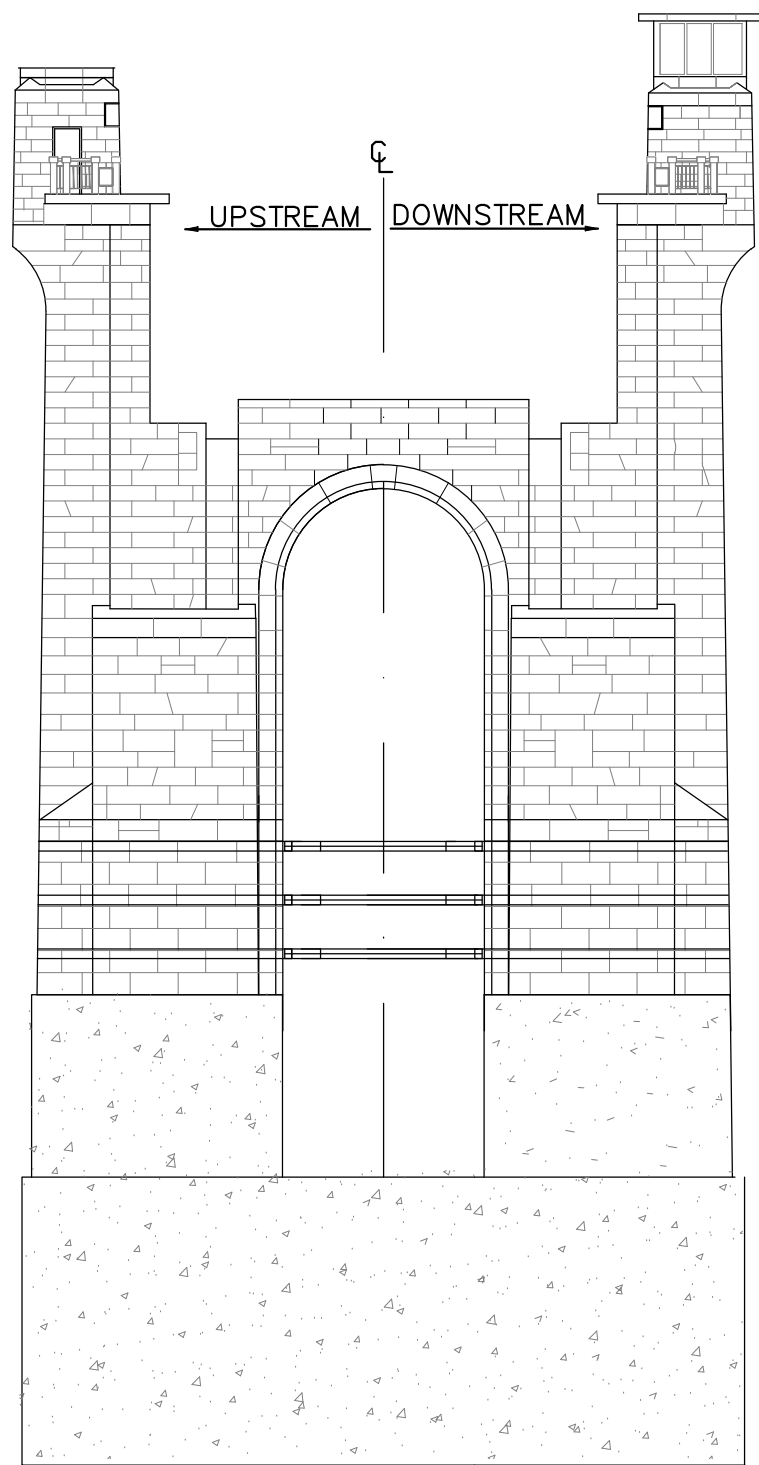
REV.	DATE	BY	DESCRIPTION
1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25
REVISIONS			

BURLINGTON COUNTY BRIDGE COMMISSION			
TACONY-PALMYRA OVER THE DELAWARE RIVER TACONY, PA PALMYRA, NJ			
SUBMARINE CABLE REPLACEMENT USACE INDIVIDUAL PERMIT PLANS			
FIBER TROUGH PLAN & PROFILE			
PENNONI ASSOCIATES INC.			
DRAWING NO. USAC-007	SCALE 1" = 20'	DATE 3/6/25	SHEET NO. 7 OF 21

--- BASCULE SPAN --- ARCH SPAN ---

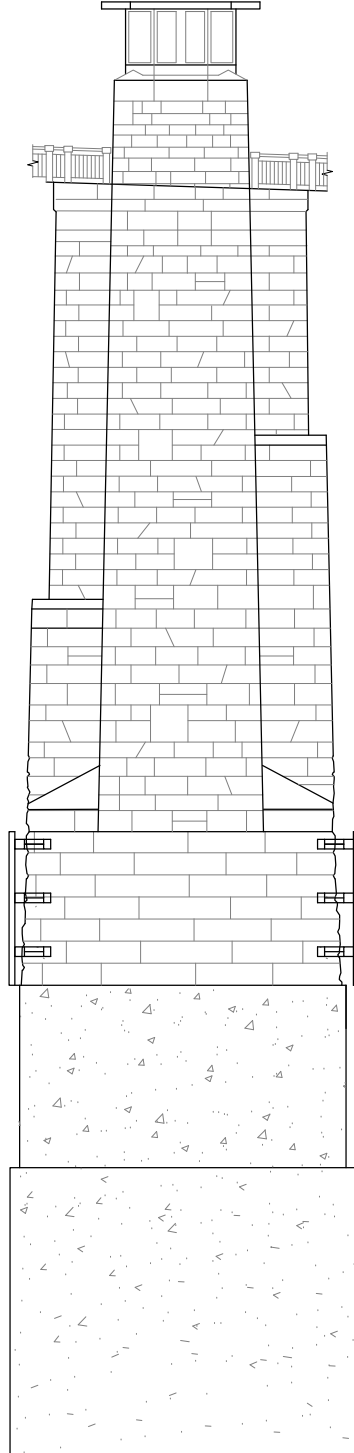


EAST FACE  
EAST PEDESTAL  
(LOOKING DOWNSTREAM) (A)



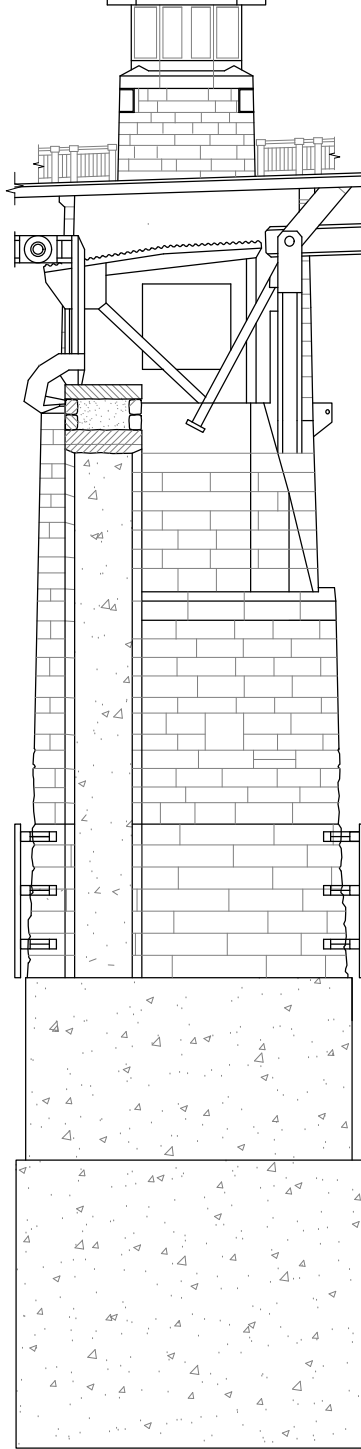
NORTH FACE  
(LOOKING SOUTH AT NJ) (E)

--- ARCH SPAN --- BASCULE SPAN ---

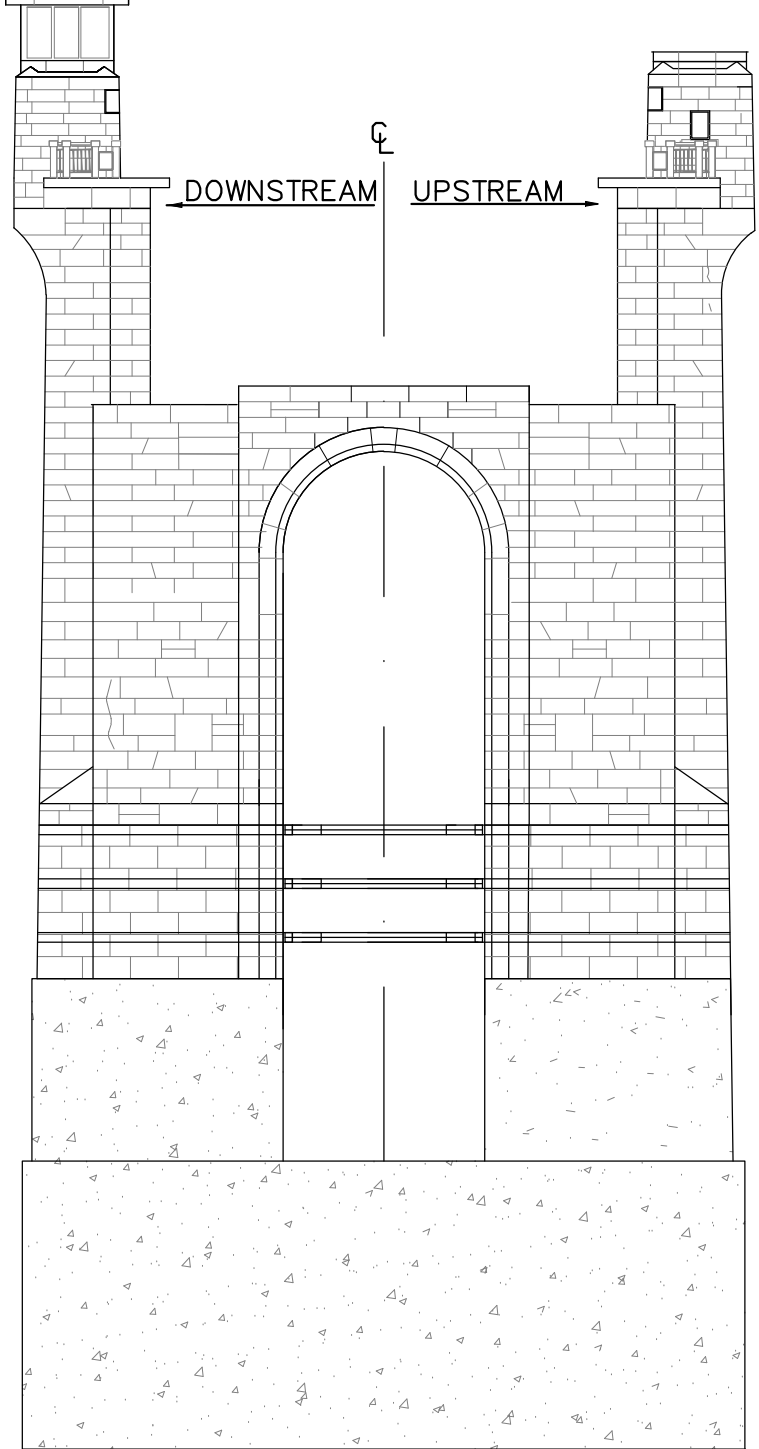


WEST FACE  
WEST PEDESTAL  
(LOOKING UPSTREAM) (B)

--- BASCULE SPAN --- ARCH SPAN ---

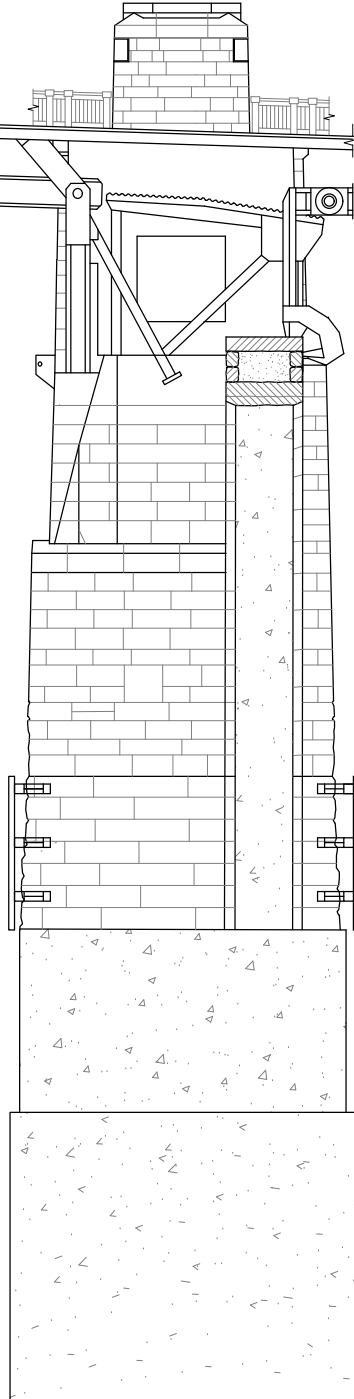


EAST FACE  
WEST PEDESTAL  
(LOOKING DOWNSTREAM) (C)

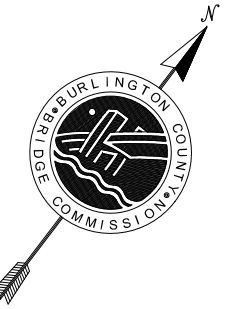


SOUTH FACE  
(LOOKING NORTH AT PA) (F)

--- ARCH SPAN --- BASCULE SPAN ---



WEST FACE  
EAST PEDESTAL  
(LOOKING UPSTREAM) (D)

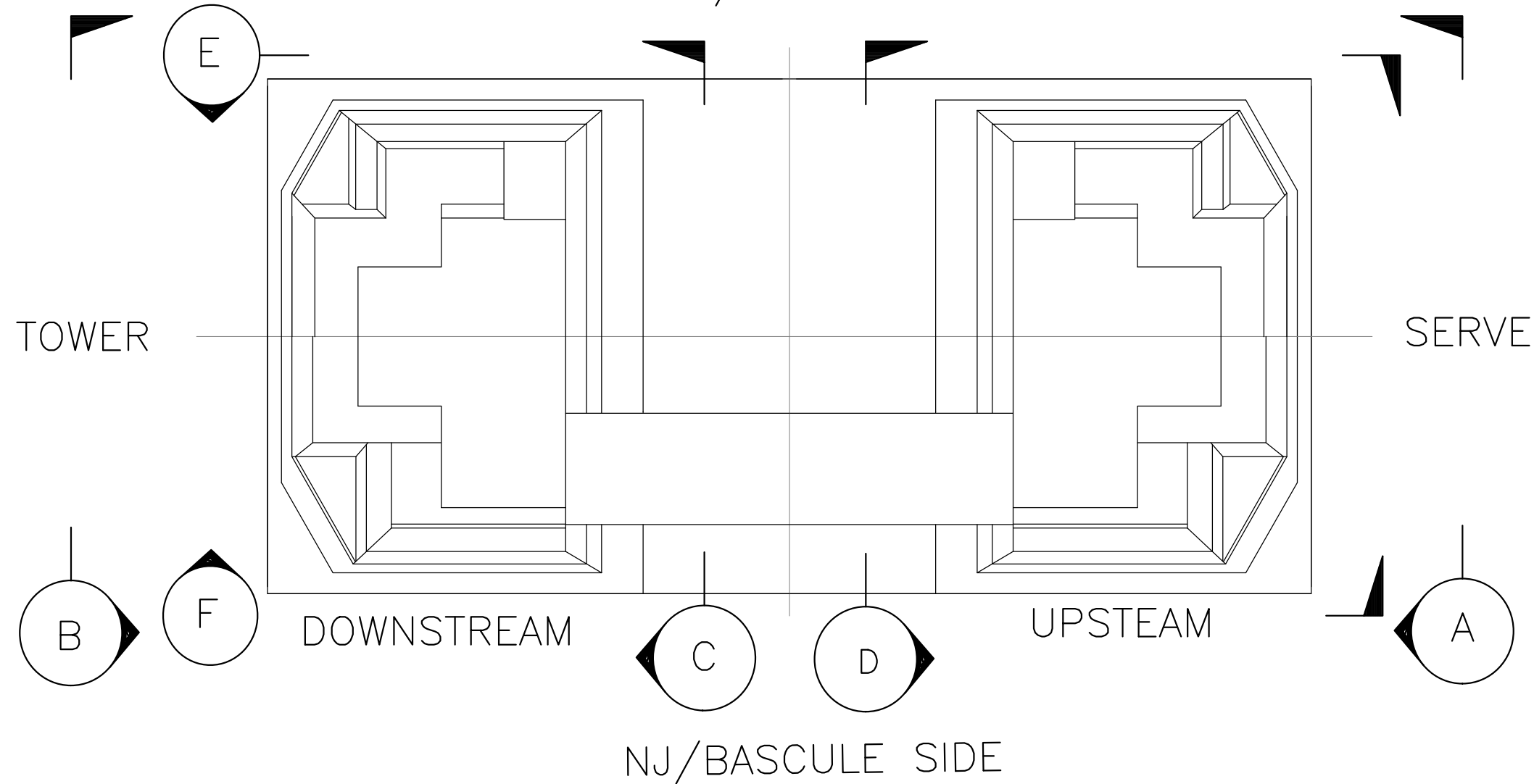


PIER E PROFILE KEY

PA/ARCH SIDE

CONTROL TOWER

SERVER TOWER



U:\Accounts\B\CB\B\CB2321064-1\TBS Submarine Cable\DESIGN SHEETS\USAC-SET\USAC-08-PIER E MAP.dwg PLOTTED: 3/7/2025 3:40 PM BY: Michael Pawlowski PLOTSTYLE: Pennoni NCS.ctb PROJECT STATUS: ---

DES:	CKD:	DWG:	CKD:
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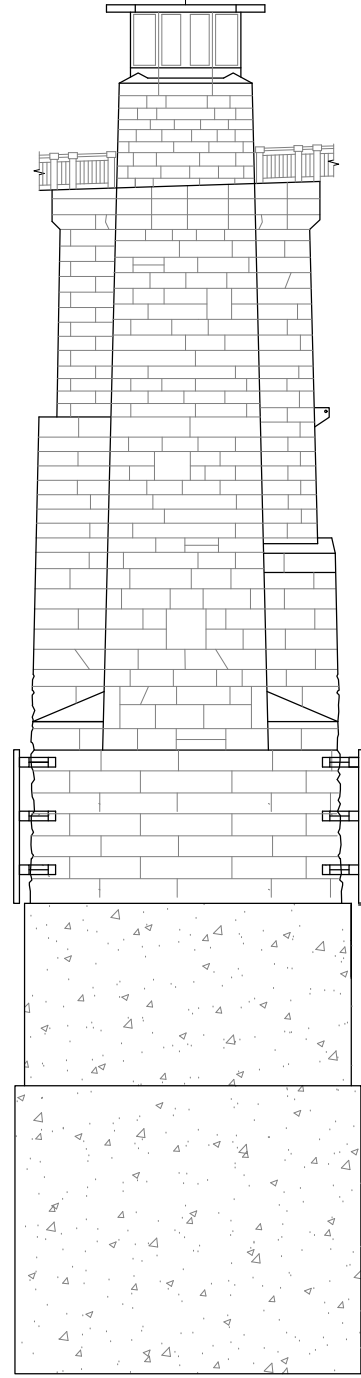
REV.	DATE	BY	DESCRIPTION
1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25
REVISIONS			



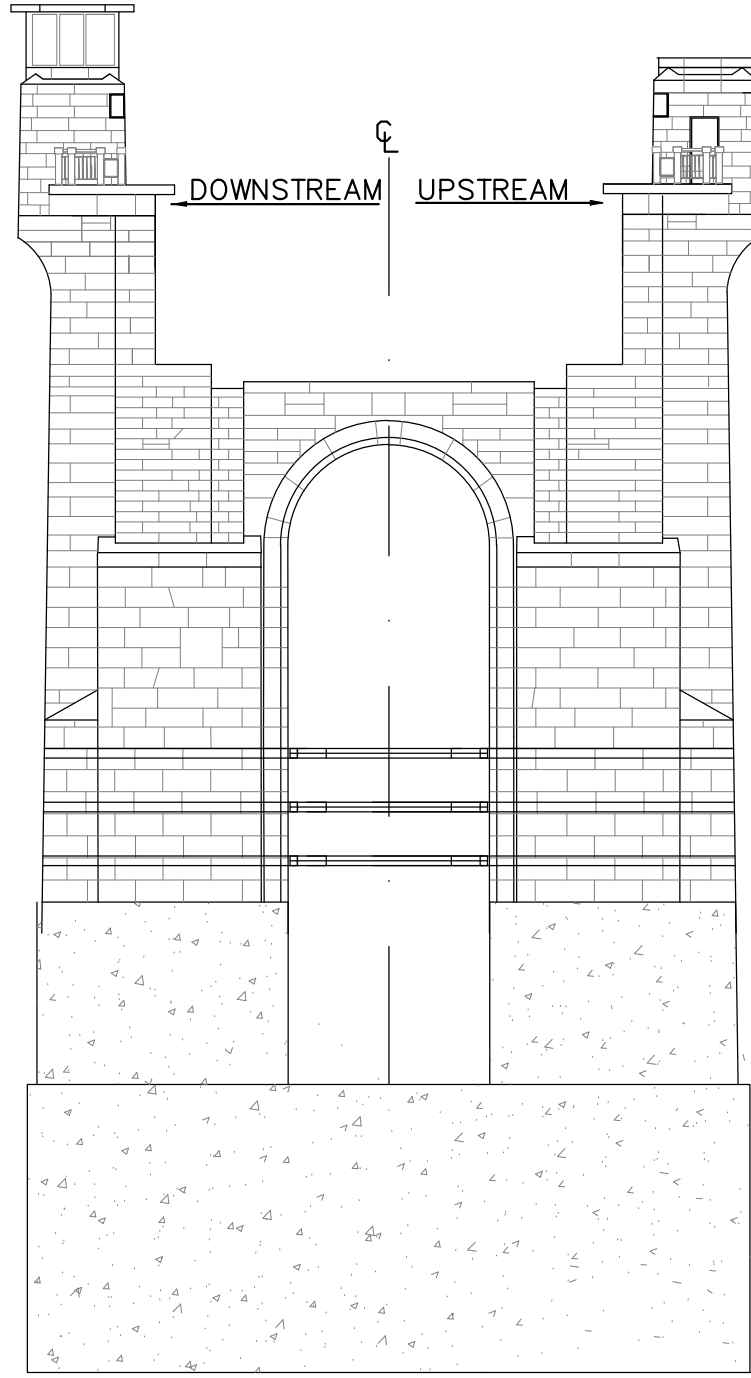
*Michael Pawlowski*  
03/06/2025

BURLINGTON COUNTY BRIDGE COMMISSION			
TACONY-PALMYRA OVER THE DELAWARE RIVER TACONY, PA PALMYRA, NJ			
SUBMARINE CABLE REPLACEMENT USACE INDIVIDUAL PERMIT PLANS			
PIER E PROFILE REFERENCE			
PENNONI ASSOCIATES INC.			
DRAWING NO. USAC-008	SCALE 1" = 20'	DATE 3/6/25	SHEET NO. 8 OF 21

--- BASCULE SPAN --- PALMYRA TRUSS SPANS ---

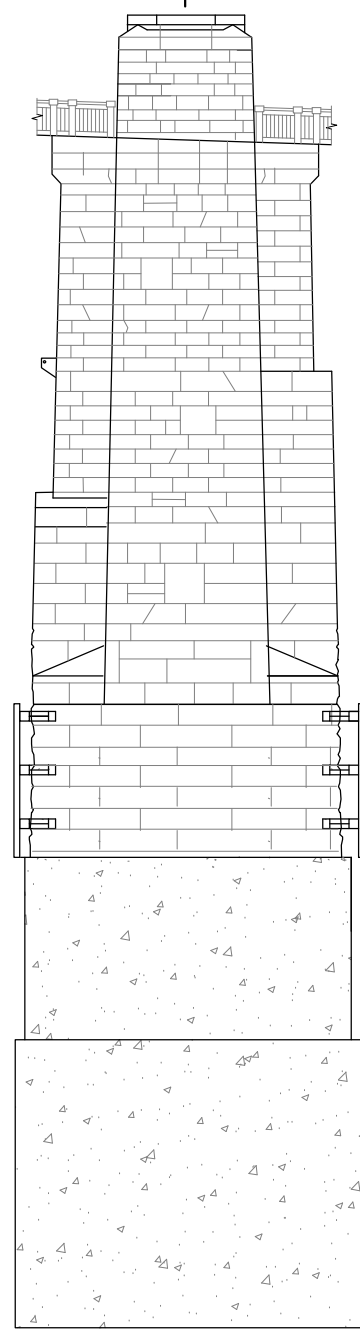


WEST FACE  
WEST PEDESTAL  
(LOOKING UPSTREAM) A



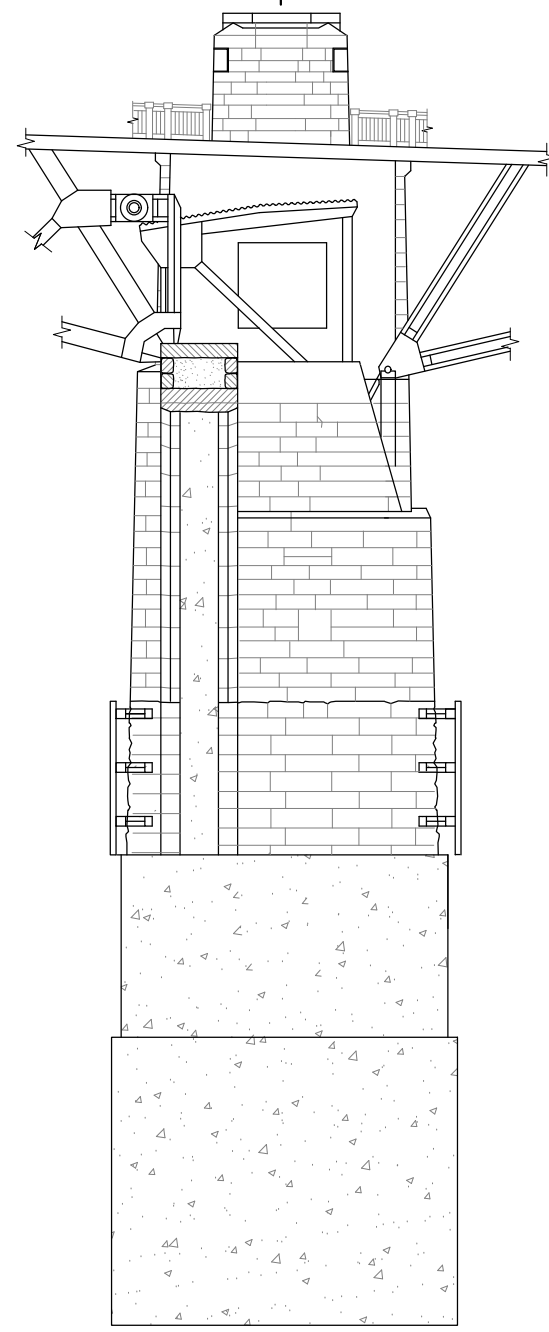
SOUTH FACE  
(LOOKING NORTH AT PA) F

--- PALMYRA TRUSS SPANS --- BASCULE SPAN ---

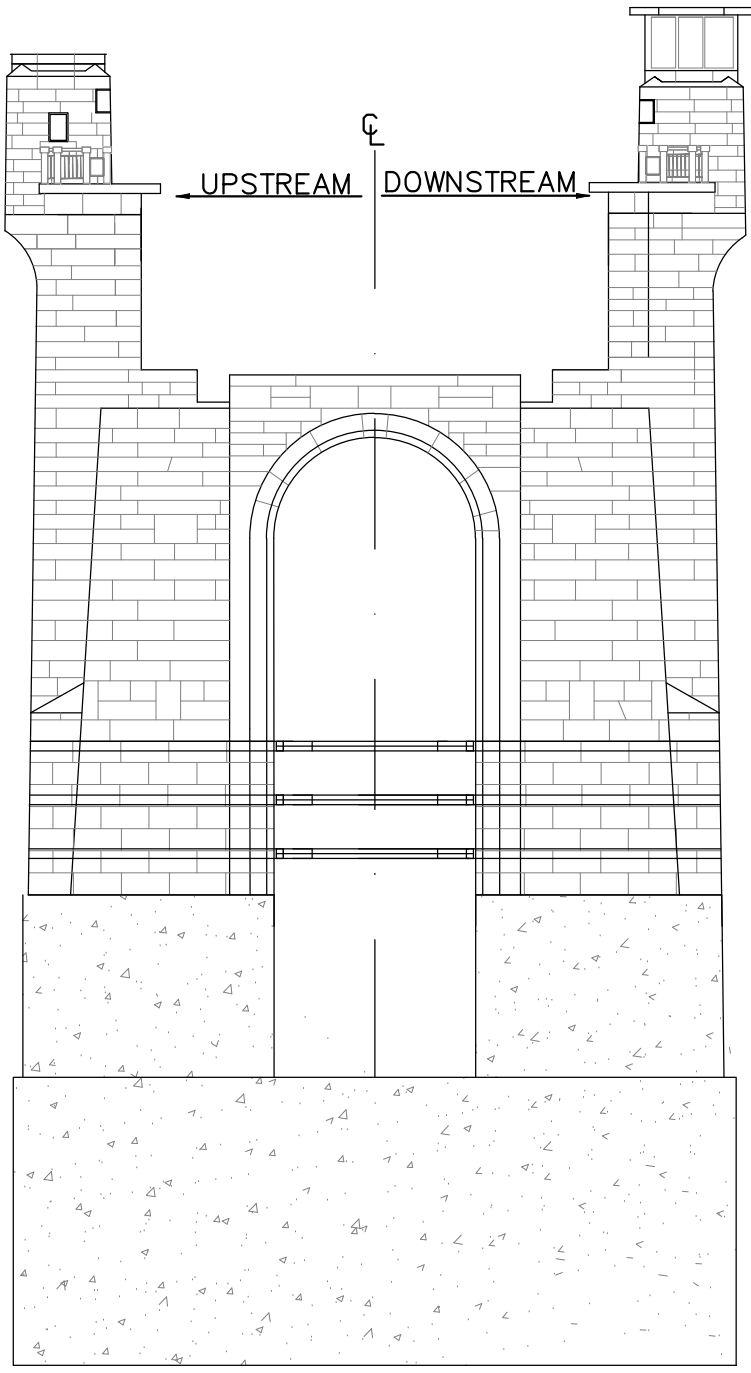


EAST FACE  
EAST PEDESTAL  
(LOOKING DOWNSTREAM) B

--- BASCULE SPAN --- PALMYRA TRUSS SPANS ---

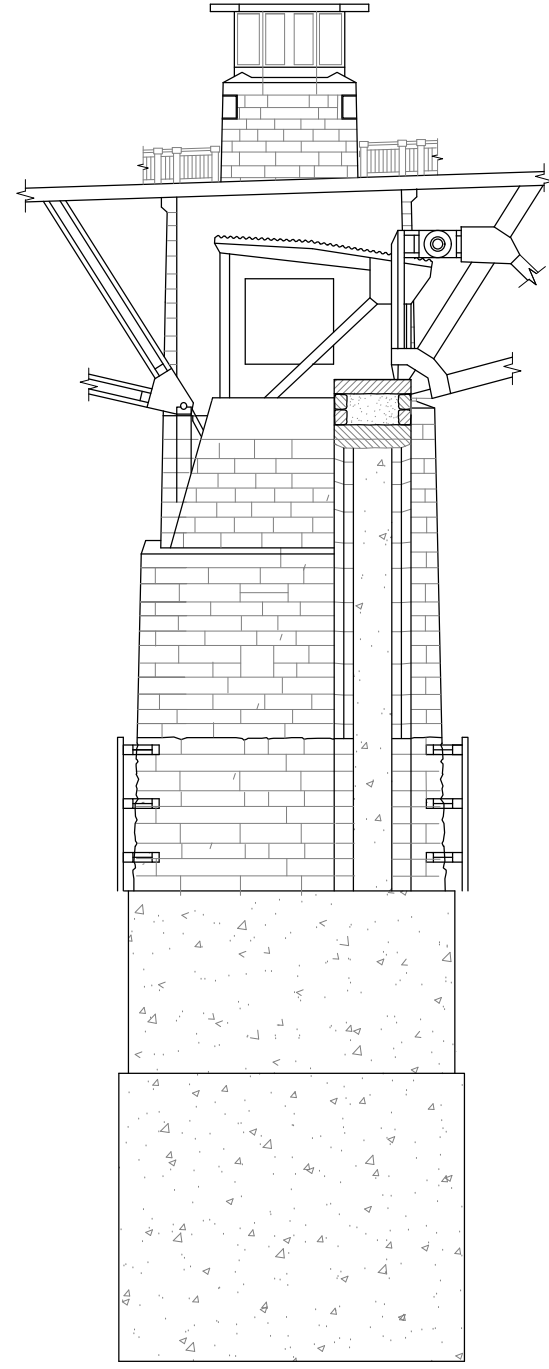


WEST FACE  
EAST PEDESTAL  
(LOOKING UPSTREAM) D



NORTH FACE  
(LOOKING SOUTH AT NJ) E

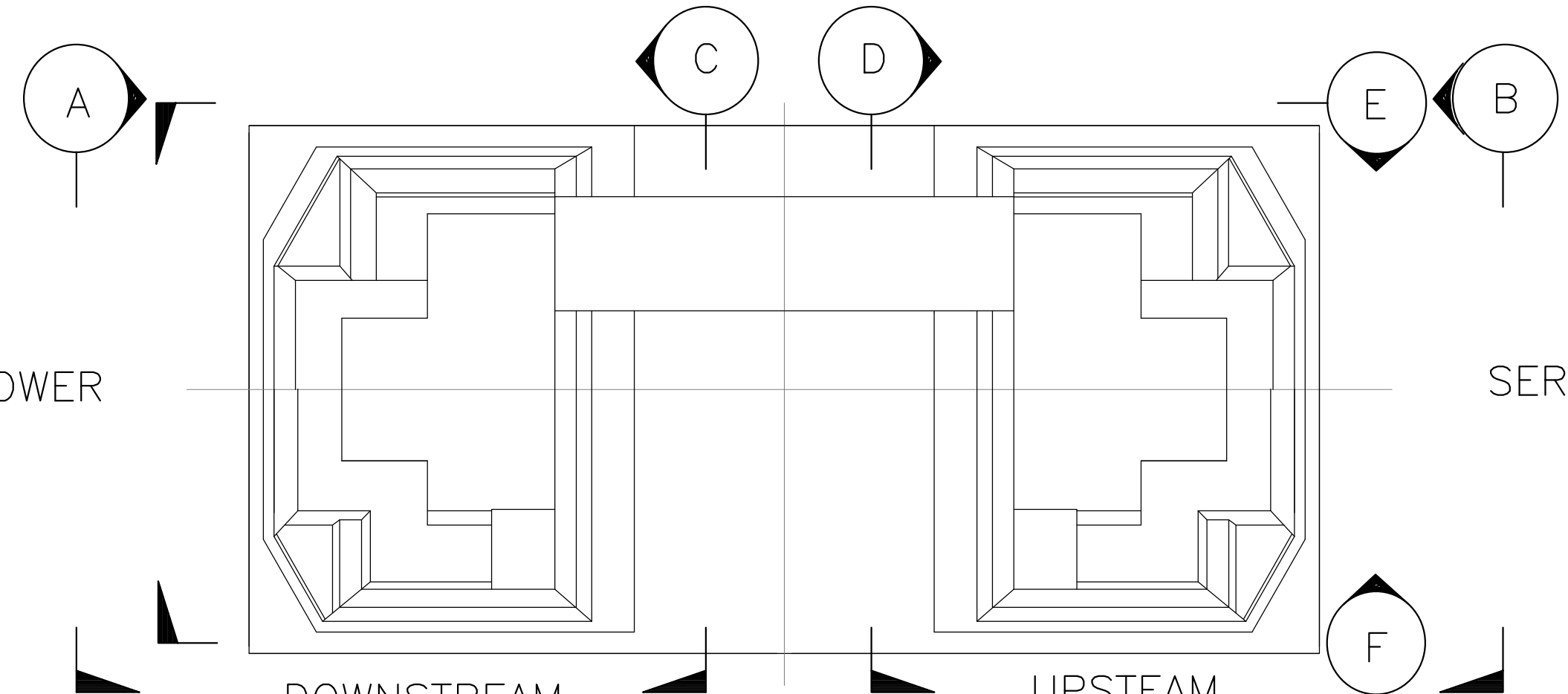
--- PALMYRA TRUSS SPANS --- BASCULE SPAN ---



EAST FACE  
WEST PEDESTAL  
(LOOKING DOWNSTREAM) C

PIER F PROFILE KEY

PA/BASCULE SIDE



NJ/TRUSS SIDE



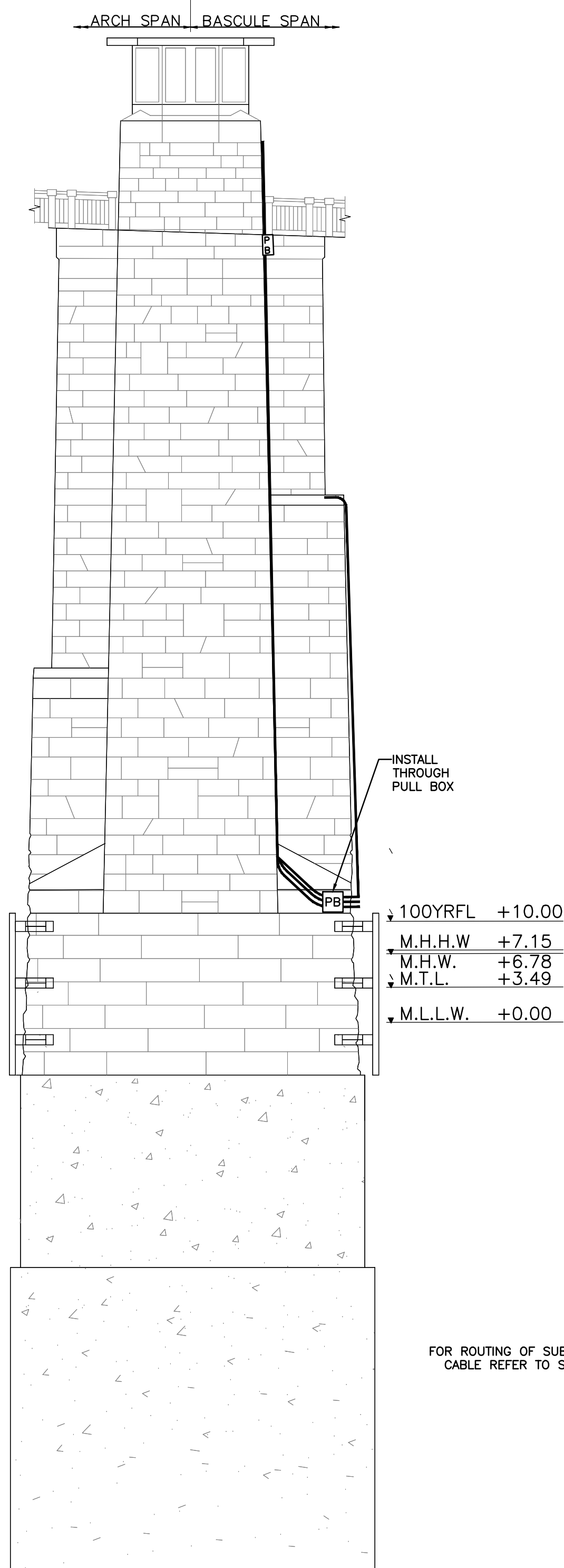
*Michael Pawlowski*  
03/06/2025

REV.	DATE	BY	DESCRIPTION
1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25
REVISIONS			

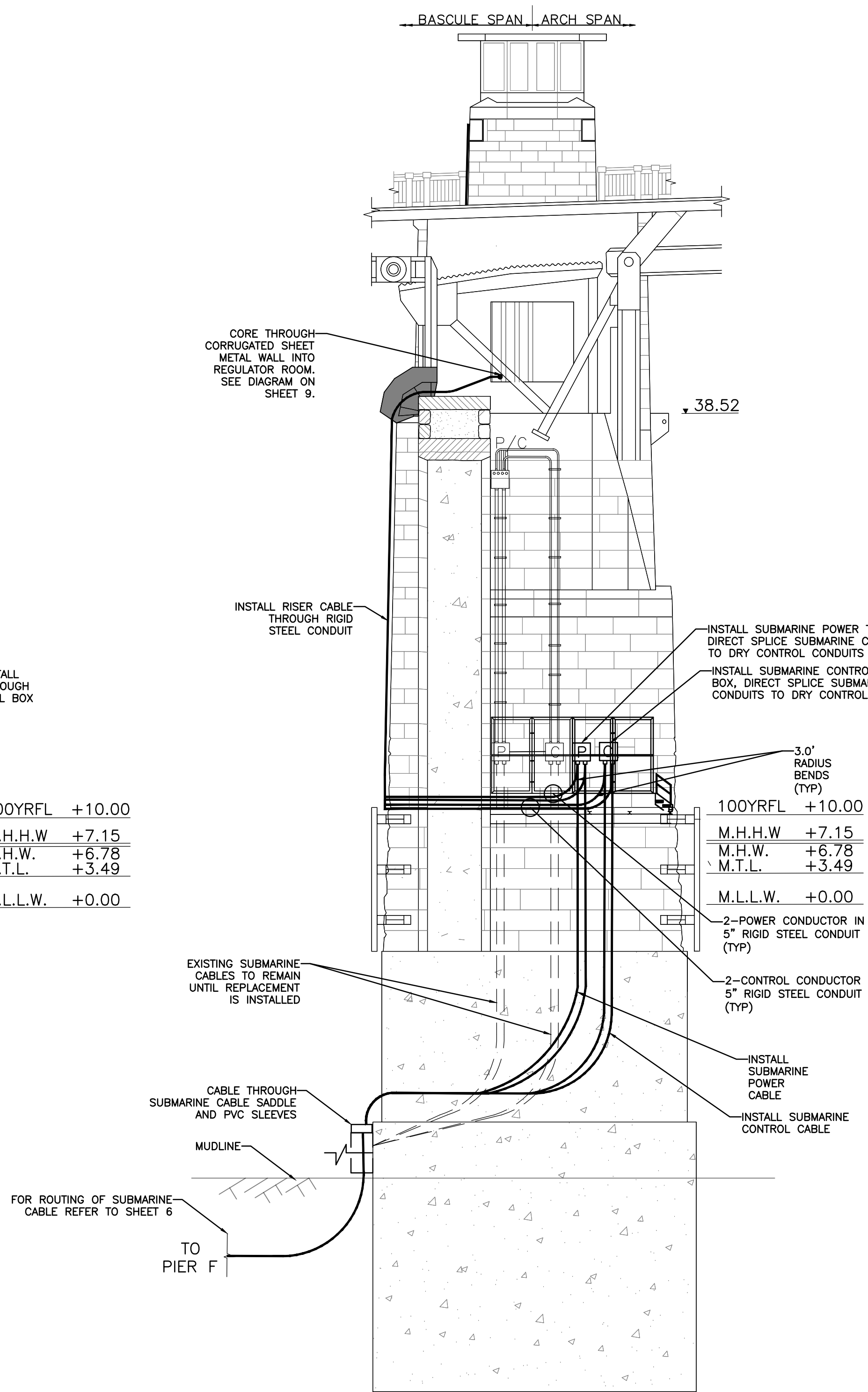
BURLINGTON COUNTY BRIDGE COMMISSION			
TACONY-PALMYRA OVER THE DELAWARE RIVER TACONY, PA PALMYRA, NJ			
SUBMARINE CABLE REPLACEMENT USACE INDIVIDUAL PERMIT PLANS			
PIER F PROFILE REFERENCE			
PENNONI ASSOCIATES INC.			
DRAWING NO. USAC-009	SCALE 1" = 20'	DATE 3/6/25	SHEET NO. 9 OF 21

DES:	CKD:	DWG:	CKD:
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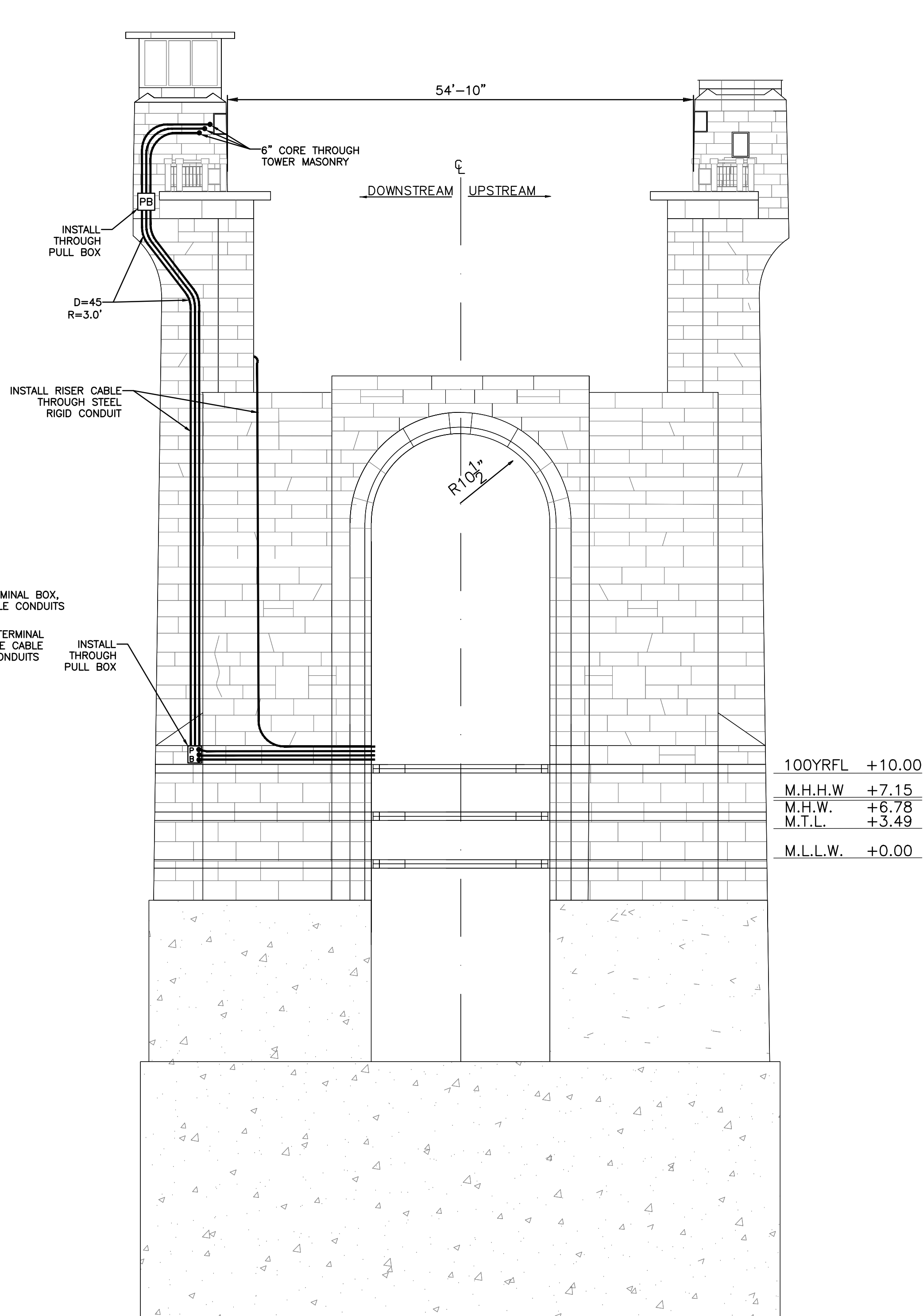
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WEST FACE (B)  
WEST PEDESTAL  
(LOOKING UPSTREAM)

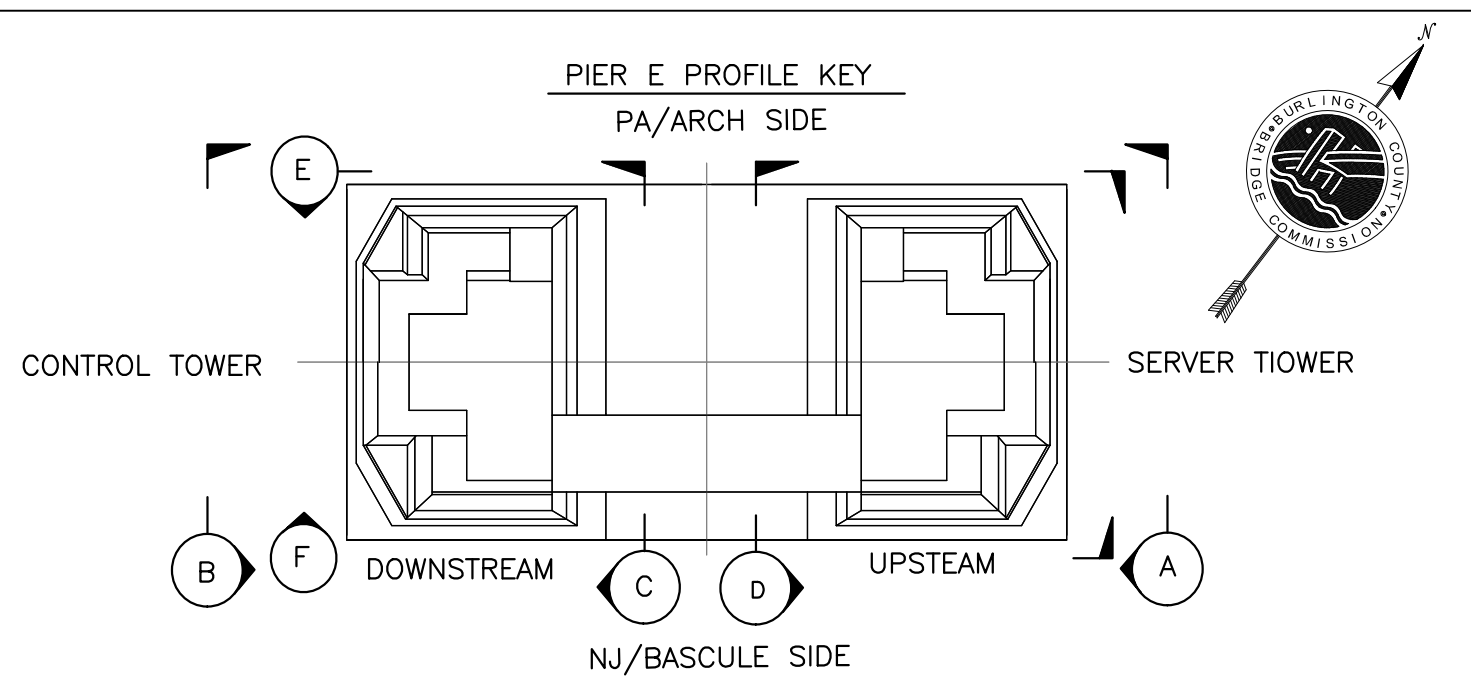


EAST FACE (C)  
WEST PEDESTAL  
(LOOKING DOWNSTREAM)



SOUTH FACE (F)  
(LOOKING NORTH AT PA)

CONNECTION TO EX STRUCTURE:  
THE CONTRACTOR SHALL SUBMIT DETAILS  
OF THE FOLLOWING ATTACHMENTS TO THE  
ENGINEER FOR REVIEW:  
-CONDUIT BOX ATTACHMENT TO PIER  
-CABLE SUPPORT FIXTURES INCLUDING  
SPACING AND LOCATION  
-RIGID CONDUIT BRACKETS



SEE PROJECT SPECIFICATIONS FOR FULL MATERIAL DETAILS

#### CABLE INSTALL SCHEDULE

CABLE	CABLE TYPE	CONDUIT	LENGTH (FT)	TOTAL CABLE LENGTH (FT)	TERMINUS
POWER 1	3-400 KCMIL CU, 600 V, 3.36" OD	5" STEEL	100	150	REGULATOR ROOM
POWER 2	3-400 KCMIL CU, 600 V, 3.36" OD	5" STEEL	210	300	CONTROL TOWER
CONTROL 1	60-#10 AWG, 600 V, 2.30" OD	4" STEEL	220	300	CONTROL TOWER
CONTROL 2	60-#10 AWG, 600 V, 2.30" OD	4" STEEL	220	300	CONTROL TOWER



*Michael Pawlowski*  
03/06/2025

REV.	DATE	BY	DESCRIPTION
1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25
REVISIONS			

**Pennoni**

BURLINGTON COUNTY BRIDGE COMMISSION

TACONY-PALMYRA  
OVER THE DELAWARE RIVER  
TACONY, PA PALMYRA, NJ

SUBMARINE CABLE REPLACEMENT  
USACE INDIVIDUAL PERMIT PLANS

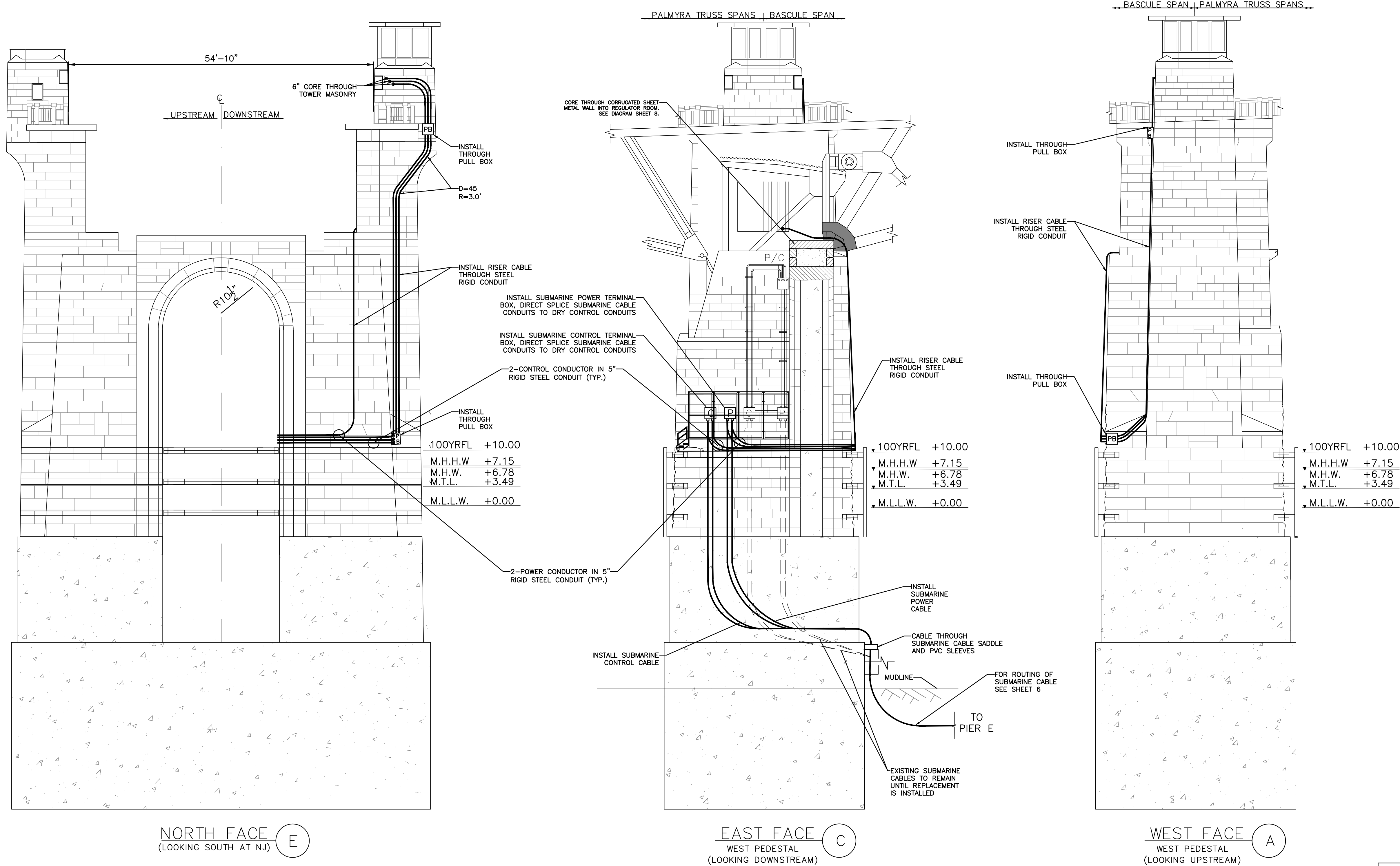
POWER AND CONTROL CABLE  
PIER E CONSTRUCTION PLAN

PENNONI ASSOCIATES INC.

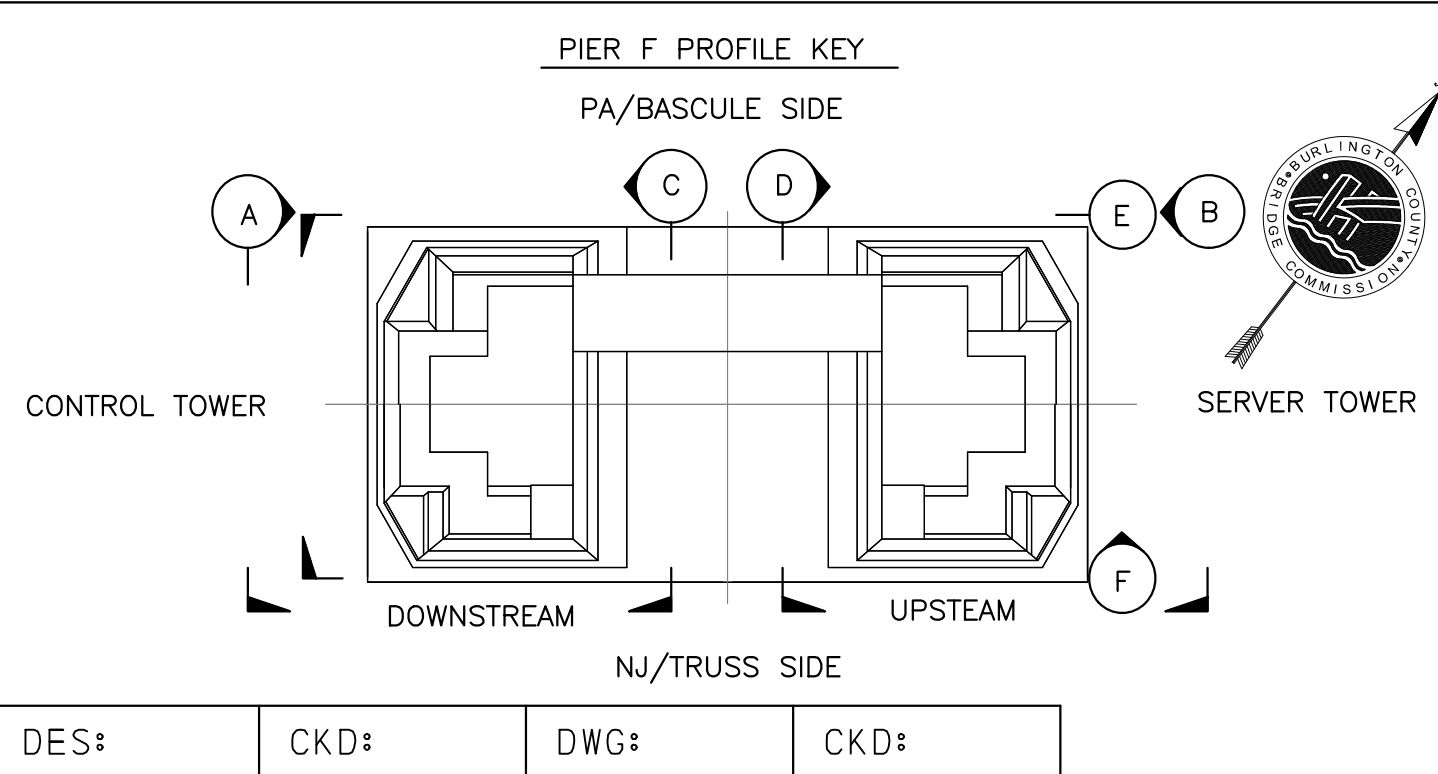
DRAWING NO. USAC-010	SCALE 1" = 10'	DATE 3/6/25	SHEET NO. 10 OF 21
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PLOTTED: 3/7/2025 3:41 PM BY: Michael Pawlowski  
PROJECT STATUS: ---  
PLOT STYLE: Pennoni NCS.ctb



CONNECTION TO EX STRUCTURE:  
THE CONTRACTOR SHALL SUBMIT DETAILS  
OF THE FOLLOWING ATTACHMENTS TO THE  
ENGINEER FOR REVIEW:  
-CONDUIT BOX ATTACHMENT TO PIER  
-CABLE SUPPORT FIXTURES INCLUDING  
SPACING AND LOCATION  
-RIGID CONDUIT BRACKETS



SEE PROJECT SPECIFICATIONS FOR FULL MATERIAL DETAILS

CABLE INSTALL SCHEDULE					
CABLE	CABLE TYPE	CONDUIT	LENGTH (FT)	TOTAL CABLE LENGTH (FT)	TERMINUS
POWER 1	3-400 KCMIL CU, 600 V, 3.36" OD	5" STEEL	120	150	REGULATOR ROOM
POWER 2	3-400 KCMIL CU, 600 V, 3.36" OD	5" STEEL	210	300	CONTROL TOWER
CONTROL 1	60-#10 AWG, 600 V, 2.30" OD	4" STEEL	220	300	CONTROL TOWER
CONTROL 2	60-#10 AWG, 600 V, 2.30" OD	4" STEEL	220	300	CONTROL TOWER

Professional Engineer Seal: STATE OF NEW JERSEY, No. 24GE0544500, MICHAEL PAWLOWSKI, LICENSED PROFESSIONAL ENGINEER, 03/06/2025.

1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25
REV.	DATE	BY	DESCRIPTION
REVISIONS			

BURLINGTON COUNTY BRIDGE COMMISSION

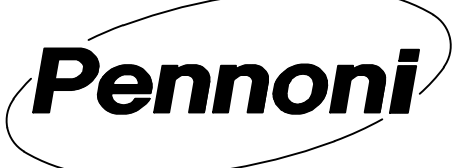
TACONY-PALMYRA  
OVER THE DELAWARE RIVER  
TACONY, PA PALMYRA, NJ

SUBMARINE CABLE REPLACEMENT  
USACE INDIVIDUAL PERMIT PLANS

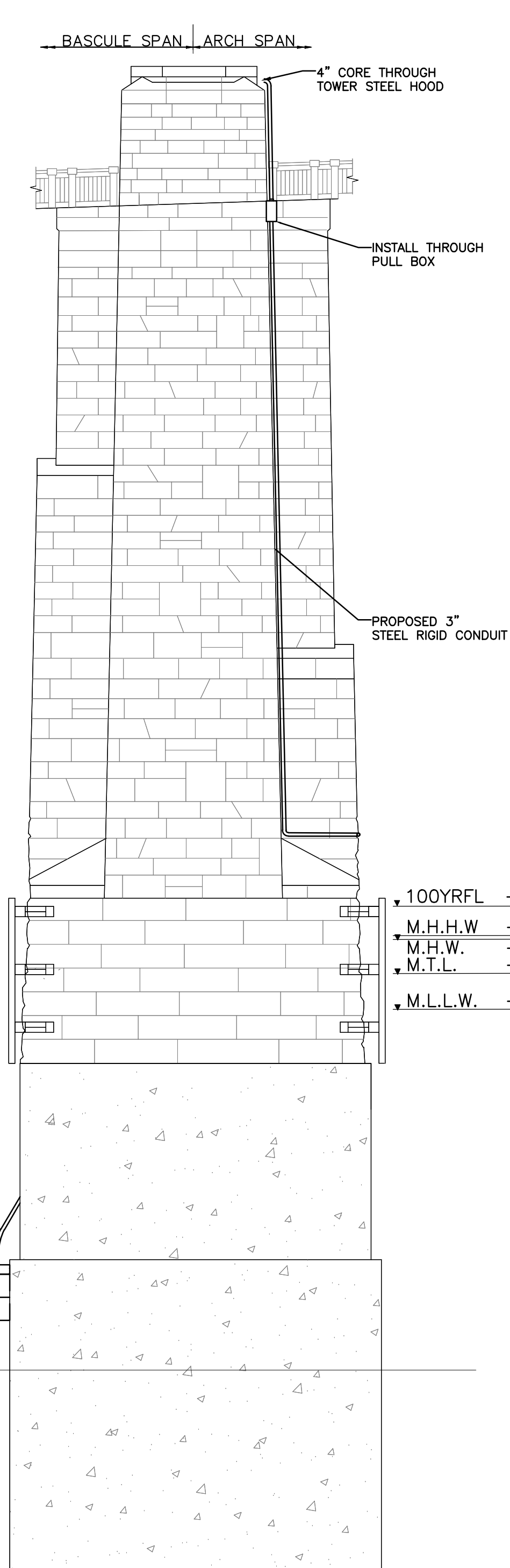
POWER AND CONTROL CABLE  
PIER F CONSTRUCTION PLAN

PENNONI ASSOCIATES INC.

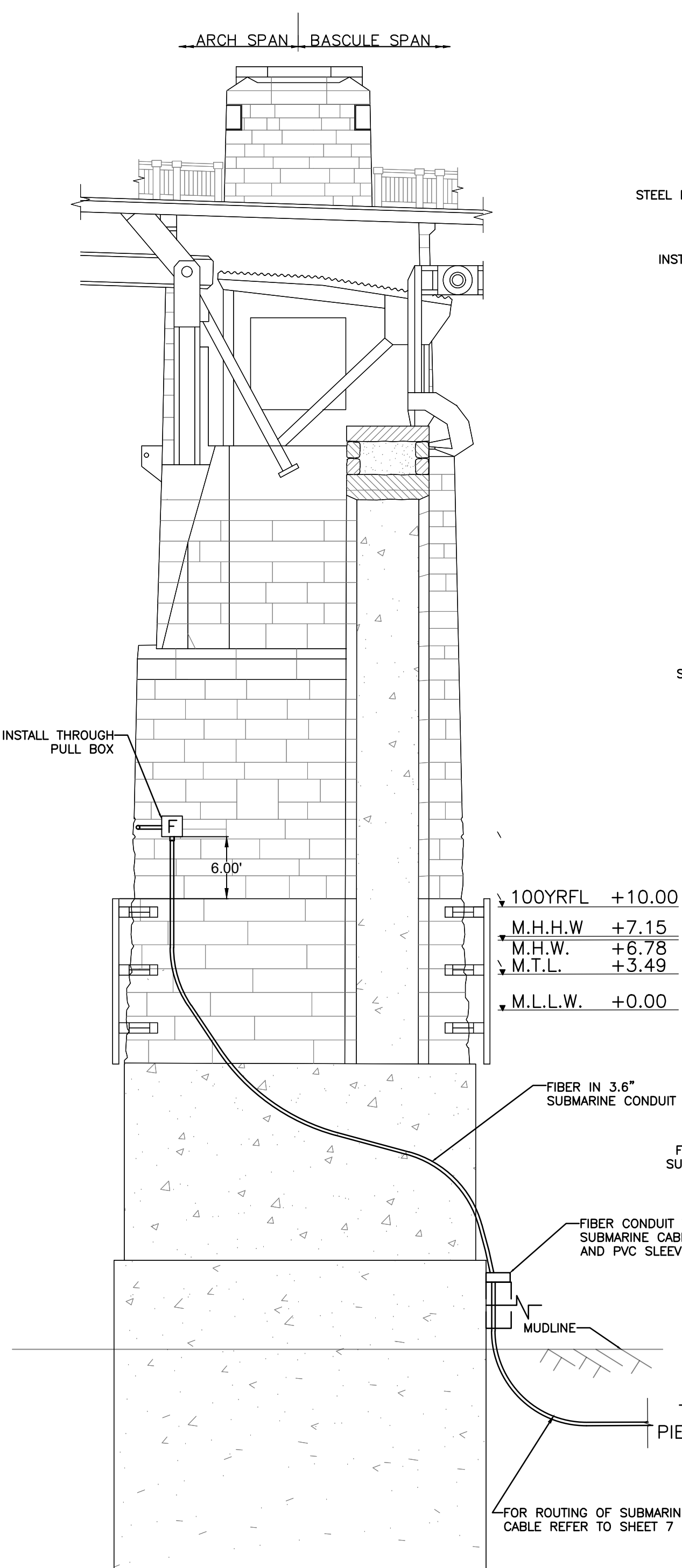
DRAWING NO. USAC-011	SCALE 1" = 10'	DATE 3/6/25	SHEET NO. 11 OF 21
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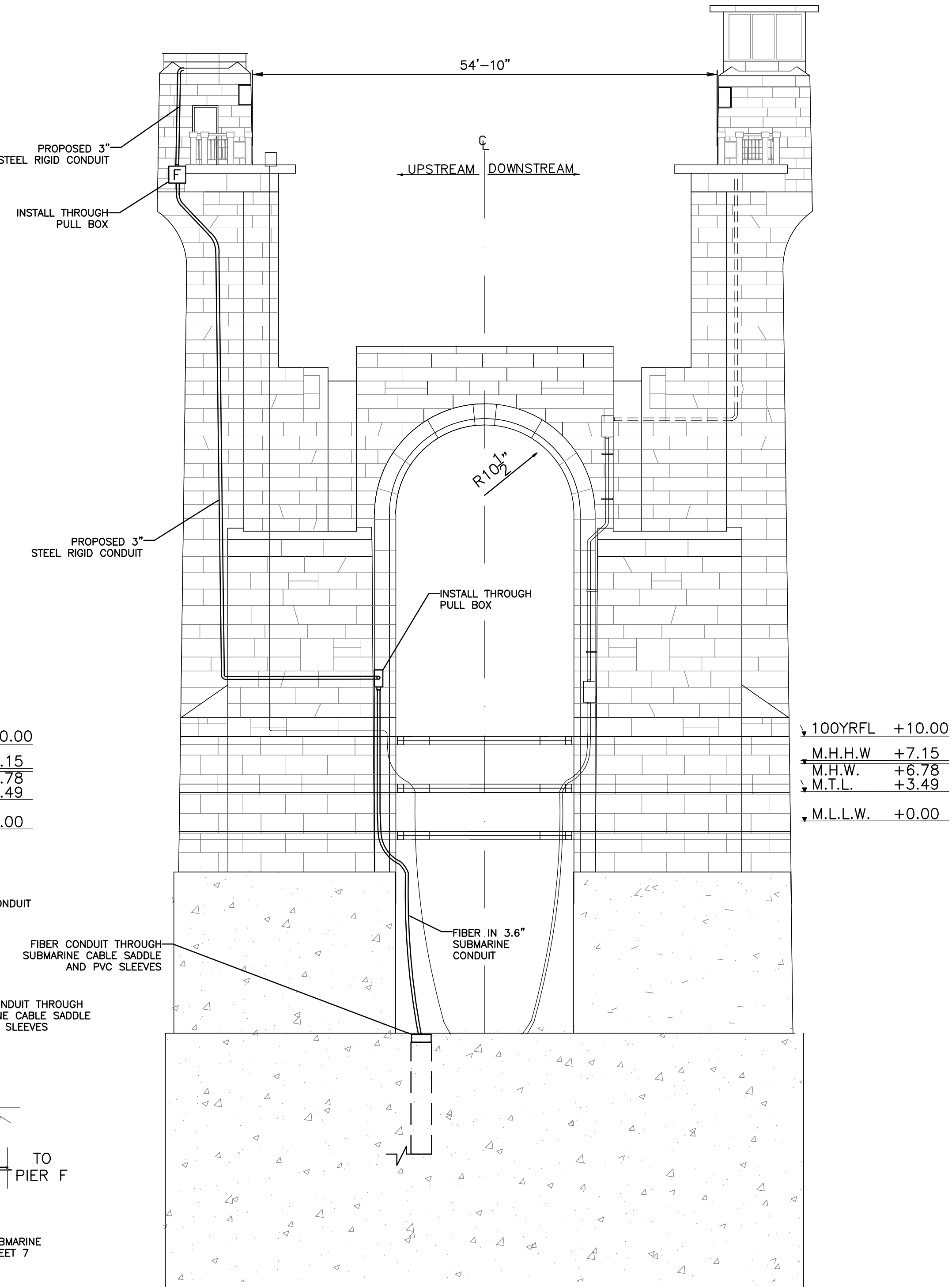
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PLOTTED: 3/7/2025 3:42 PM BY: Michael Pawlowski  
FLOTSTYLE: Pennoni NCS-IB  
PROJECT STATUS: —



EAST FACE (A)  
EAST PEDESTAL  
(LOOKING DOWNSTREAM)

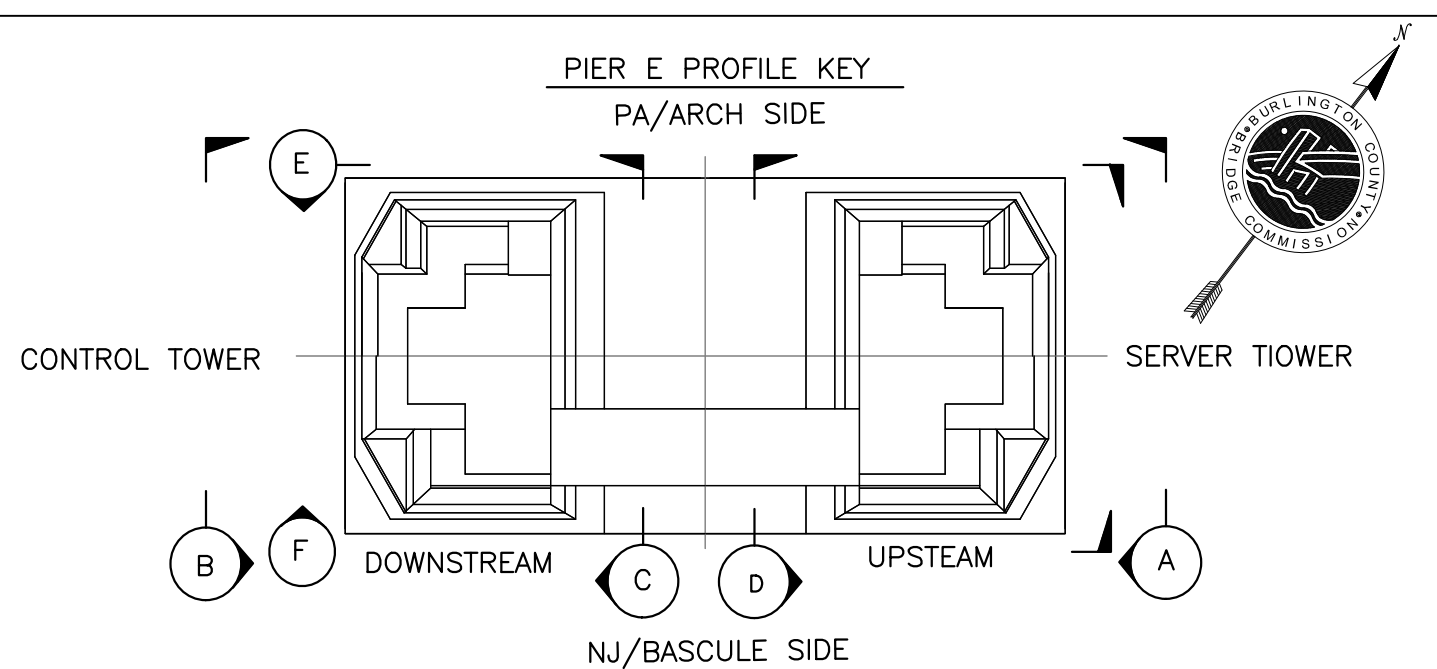


WEST FACE (D)  
EAST PEDESTAL  
(LOOKING UPSTREAM)



NORTH FACE (E)  
(LOOKING SOUTH AT NJ)

CONNECTION TO EX STRUCTURE:  
THE CONTRACTOR SHALL SUBMIT DETAILS  
OF THE FOLLOWING ATTACHMENTS TO THE  
ENGINEER FOR REVIEW:  
-CONDUIT BOX ATTACHMENT TO PIER  
-CABLE SUPPORT FIXTURES INCLUDING  
SPACING AND LOCATION  
-RIGID CONDUIT BRACKETS



\*TOTAL CABLE LENGTH INCLUDES SINGLE PULL OF FIBER FROM TOWER TO TOWER, THROUGH SUBMARINE AND RISER CONDUIT, ASSUMING NO SPLICING. SEE PROJECT SPECIFICATIONS FOR FULL MATERIAL DETAILS

#### CABLE INSTALL SCHEDULE

CABLE	CABLE TYPE	CONDUIT	CONDUIT LENGTH (FT)	TOTAL CABLE LENGTH (FT)	TERMINUS
FIBER	72-STRAND FIBER OPTIC,	3" RIGID STEEL	110	*860	COMMUNICATION TOWER



03/06/2025

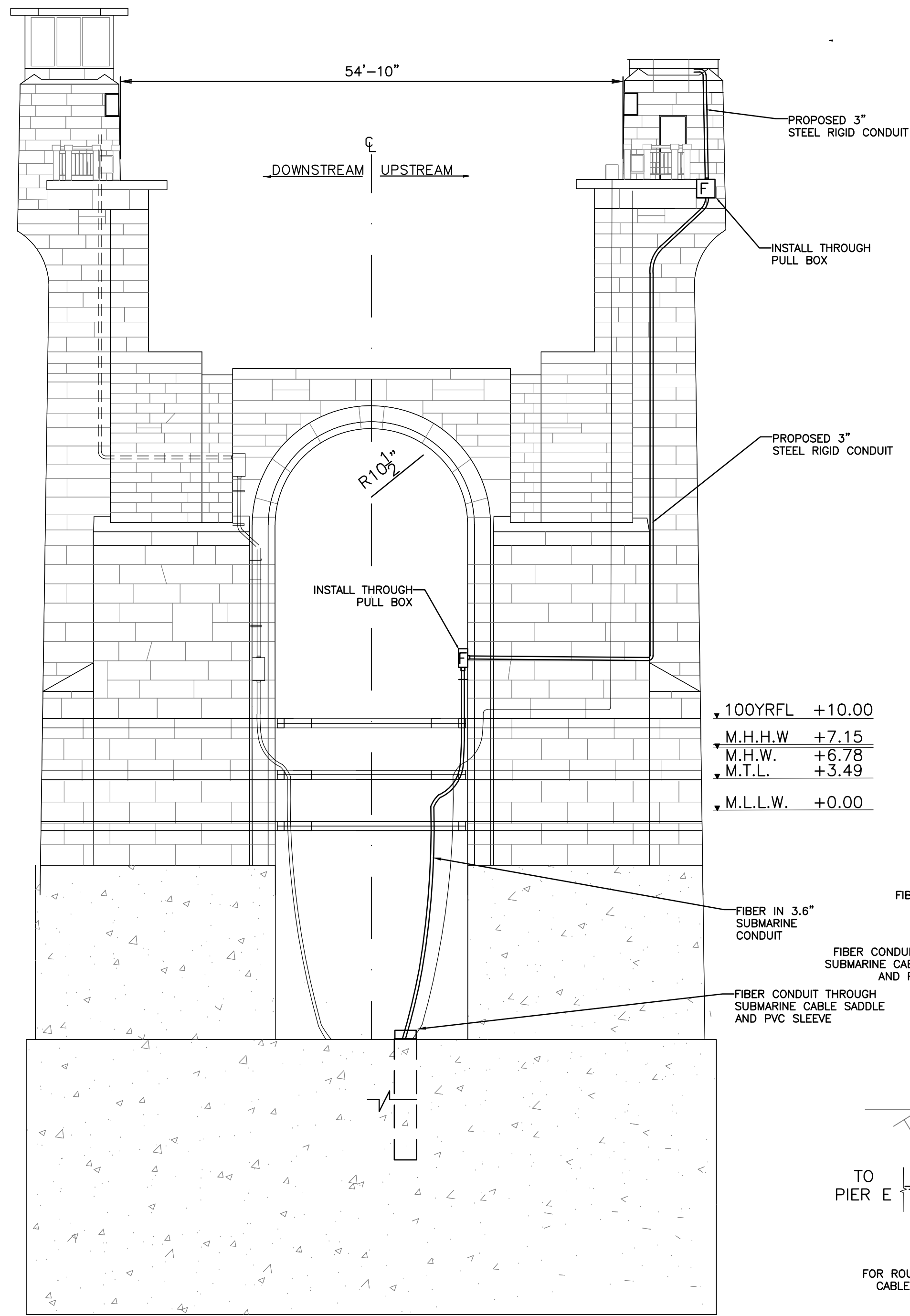
REV.	DATE	BY	DESCRIPTION
1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25
REVISIONS			

DES:	CKD:	DWG:	CKD:
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BURLINGTON COUNTY BRIDGE COMMISSION			
TACONY-PALMYRA OVER THE DELAWARE RIVER TACONY, PA PALMYRA, NJ			
SUBMARINE CABLE REPLACEMENT USACE INDIVIDUAL PERMIT PLANS			
PIER E FIBER INSTALLATION PROFILE			
PENNONI ASSOCIATES INC.			
DRAWING NO. USAC-014	SCALE 1" = 10'	DATE 3/6/25	SHEET NO. 14 OF 21

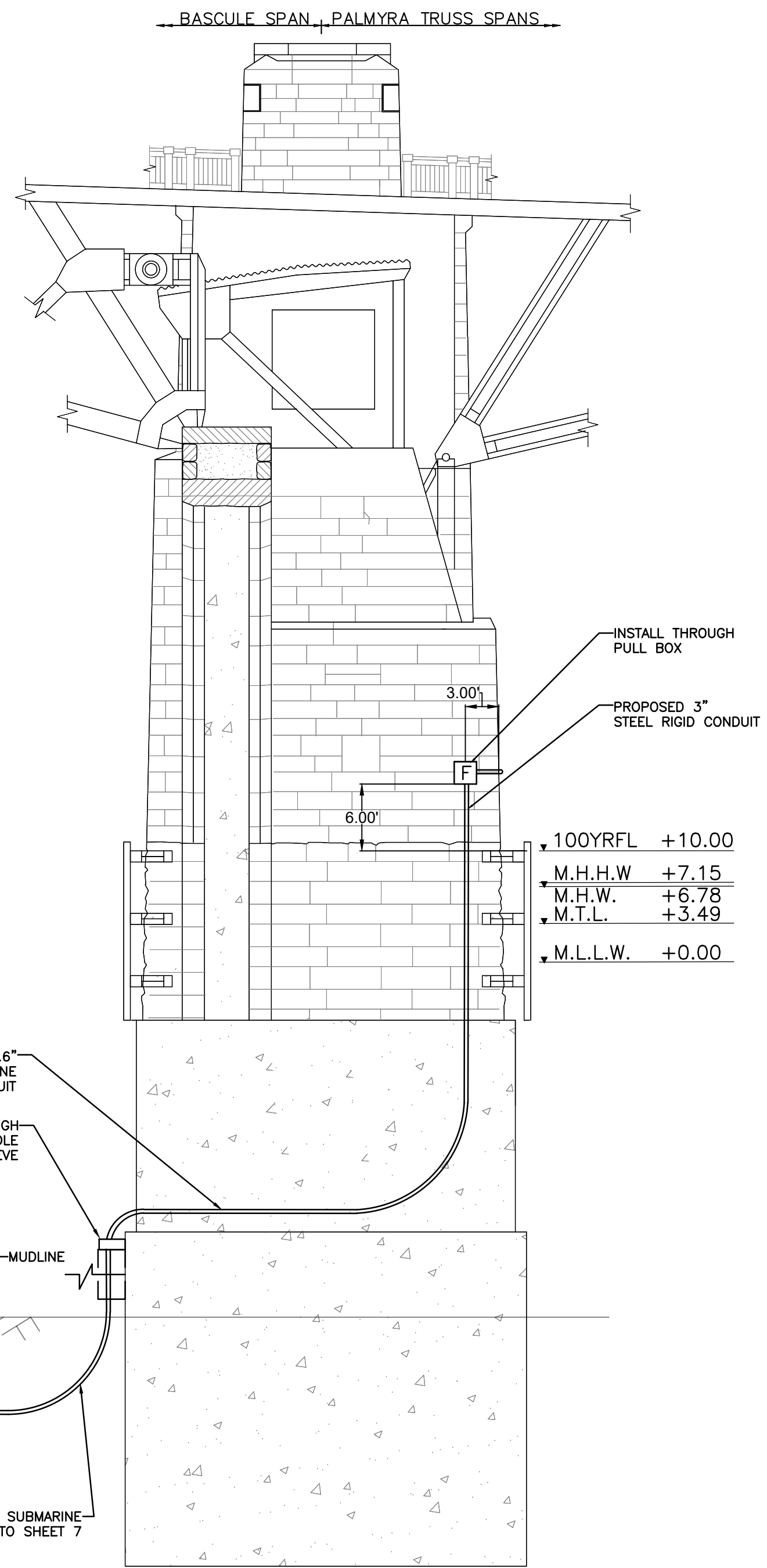


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PLOTTED: 3/7/2025 3:43 PM BY: Michael Pawlowski  
PLOTSTYLE: Pennoni NCS.ctb  
PROJECT STATUS: ---



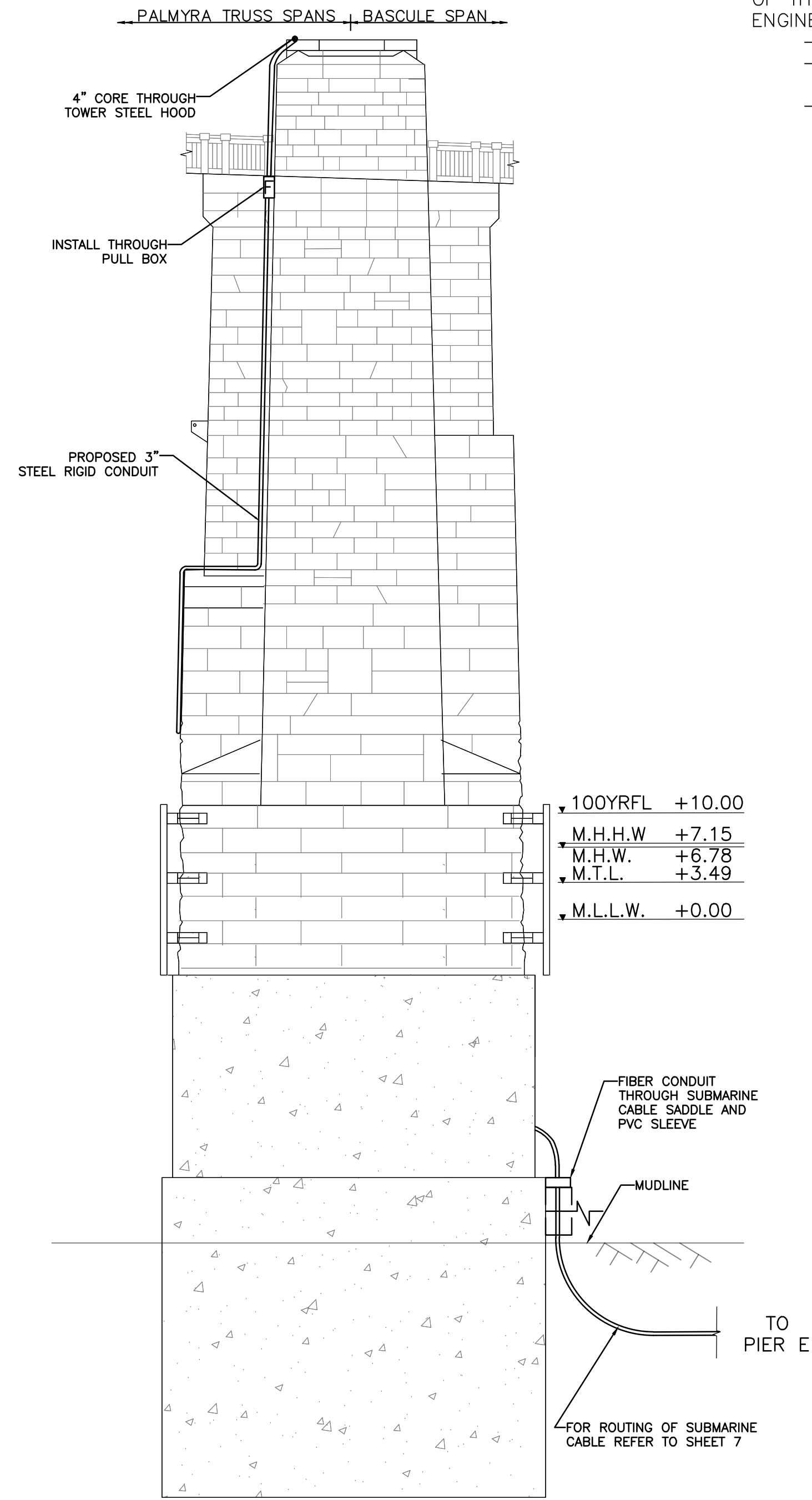
SOUTH FACE  
(LOOKING NORTH AT PA)

F



WEST FACE  
EAST PEDESTAL  
(LOOKING UPSTREAM)

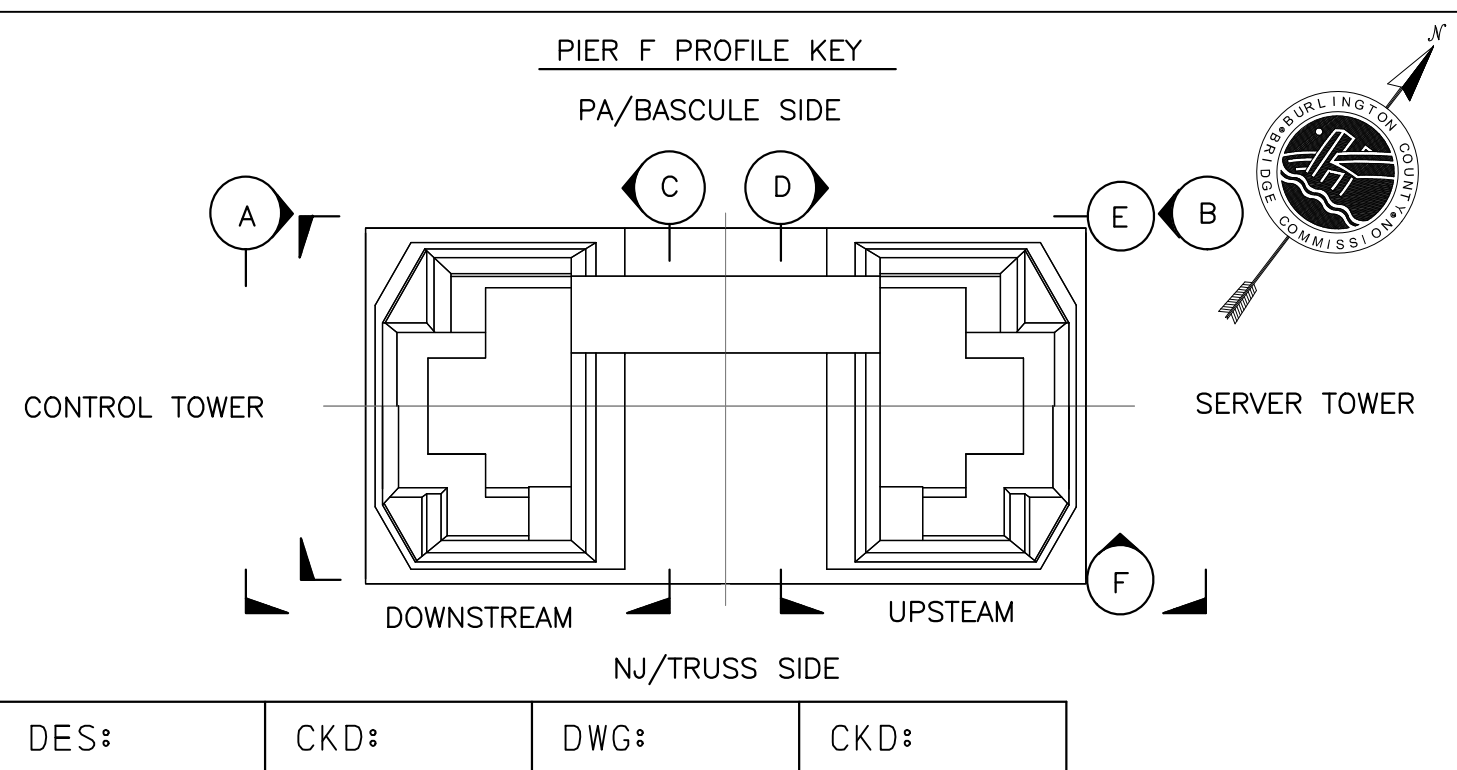
D



EAST FACE  
EAST PEDESTAL  
(LOOKING DOWNSTREAM)

B

CONNECTION TO EX STRUCTURE:  
THE CONTRACTOR SHALL SUBMIT DETAILS  
OF THE FOLLOWING ATTACHMENTS TO THE  
ENGINEER FOR REVIEW:  
-CONDUIT BOX ATTACHMENT TO PIER  
-CABLE SUPPORT FIXTURES INCLUDING  
SPACING AND LOCATION  
-RIGID CONDUIT BRACKETS



\*TOTAL CABLE LENGTH INCLUDES SINGLE PULL OF FIBER FROM TOWER TO TOWER, THROUGH SUBMARINE  
AND RISER CONDUIT, ASSUMING NO SPLICING. SEE PROJECT SPECIFICATIONS FOR FULL MATERIAL DETAILS

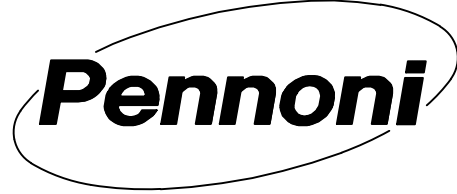
CABLE INSTALL SCHEDULE					
CABLE	CABLE TYPE	CONDUIT	CONDUIT LENGTH (FT)	TOTAL CABLE LENGTH (FT)	TERMINUS
FIBER	72-STRAND FIBER OPTIC,	3" RIGID STEEL	110	*860	COMMUNICATION TOWER



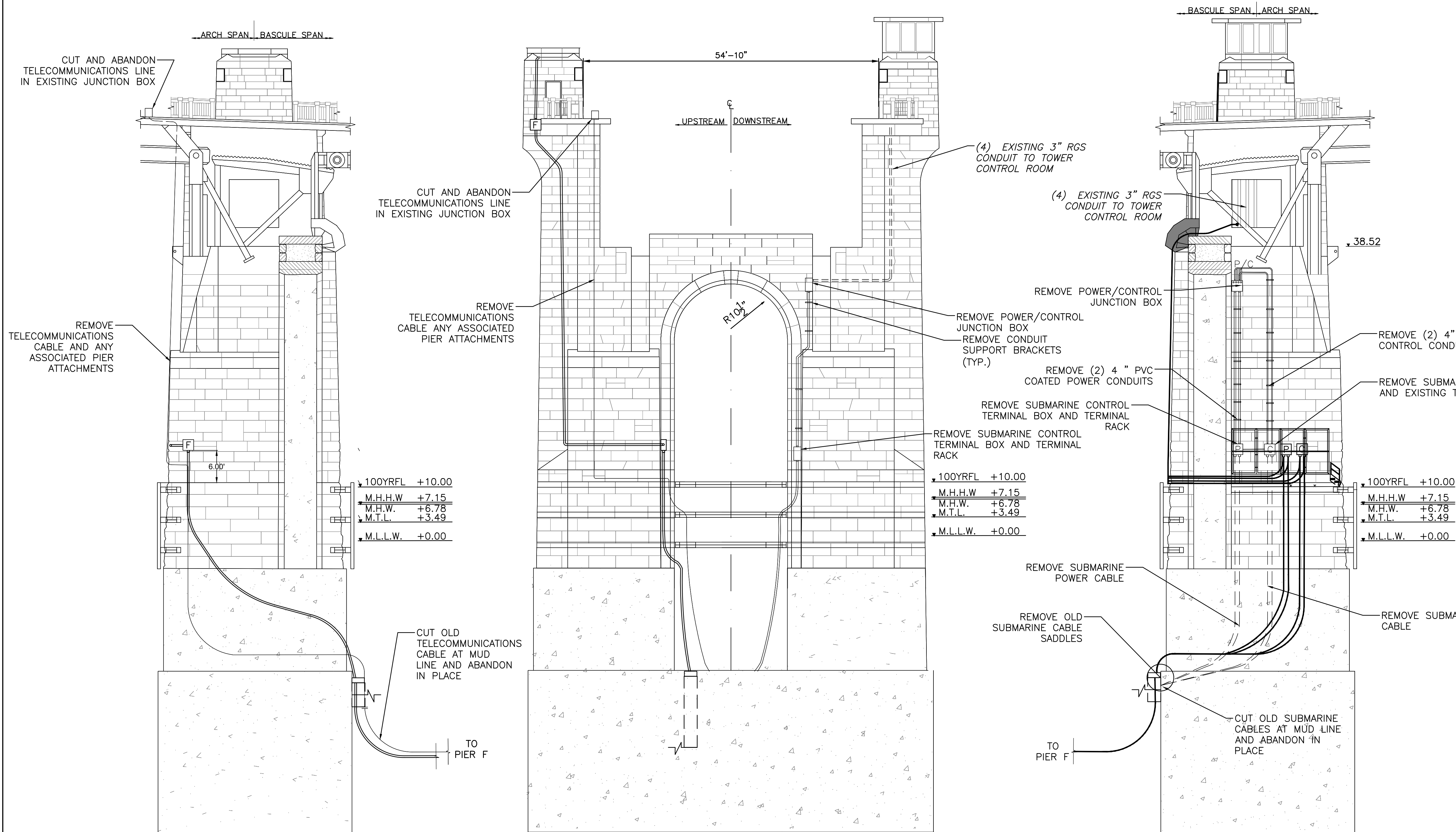
03/06/2025

REV.	DATE	BY	DESCRIPTION
1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25
REVISIONS			

BURLINGTON COUNTY BRIDGE COMMISSION			
TACONY-PALMYRA OVER THE DELAWARE RIVER TACONY, PA PALMYRA, NJ			
SUBMARINE CABLE REPLACEMENT USACE INDIVIDUAL PERMIT PLANS			
PIER F FIBER INSTALLATION PLAN			
PENNONI ASSOCIATES INC.			
DRAWING NO. USAC-015	SCALE 1" = 10'	DATE 3/6/25	SHEET NO. 15 OF 21



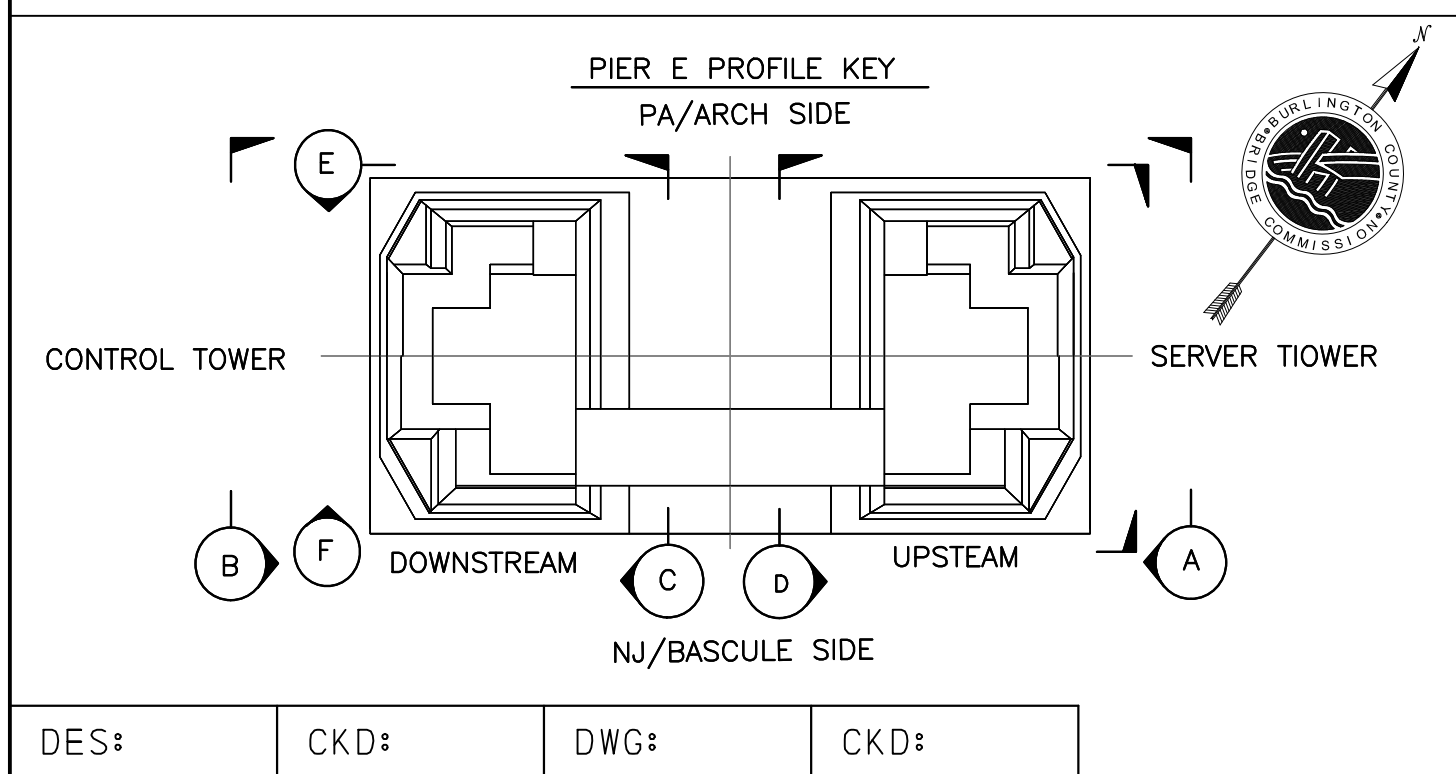
U:\Accounts\B\CB\B\CB237064-178 Submarine Cable\DESIGN SHEETS\USAC\SET\USAC-CITY PIER E DEMO.dwg PLOTTED: 3/7/2025 3:45 PM BY: Michael Pawlowski PLOTSTYLE: Pennoni.ncs Job: PROJECT STATUS: ---



WEST FACE (D)  
EAST PEDESTAL  
(LOOKING UPSTREAM)

NORTH FACE (E)  
(LOOKING SOUTH AT NJ)

EAST FACE (C)  
WEST PEDESTAL  
(LOOKING DOWNSTREAM)



*Michael Pawlowski*  
03/06/2025

REV.	DATE	BY	DESCRIPTION
1	03/06/25	MFP	PER USACE COMMENTS DATED 2/19/25
REVISIONS			

BURLINGTON COUNTY BRIDGE COMMISSION

TACONY-PALMYRA  
OVER THE DELAWARE RIVER  
TACONY, PA PALMYRA, NJ

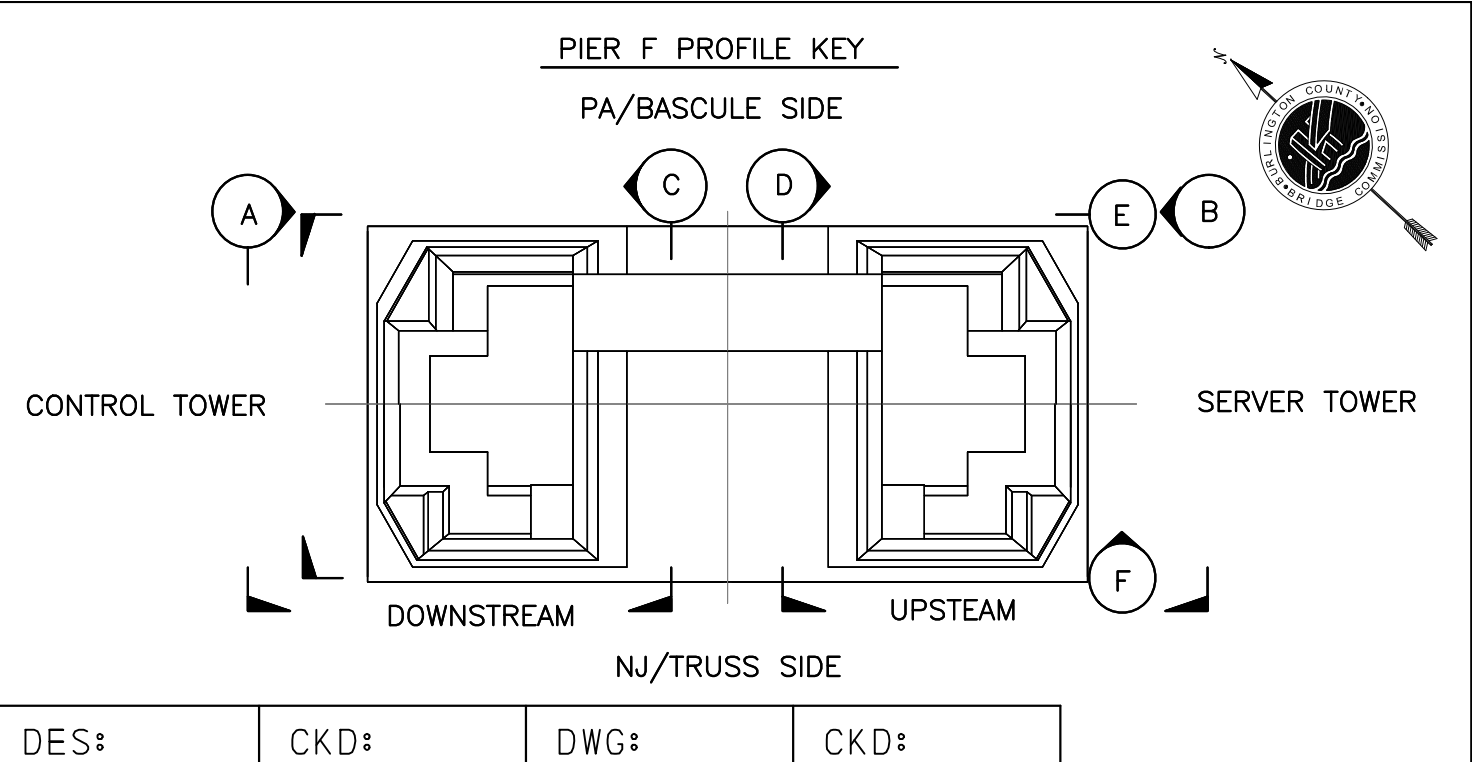
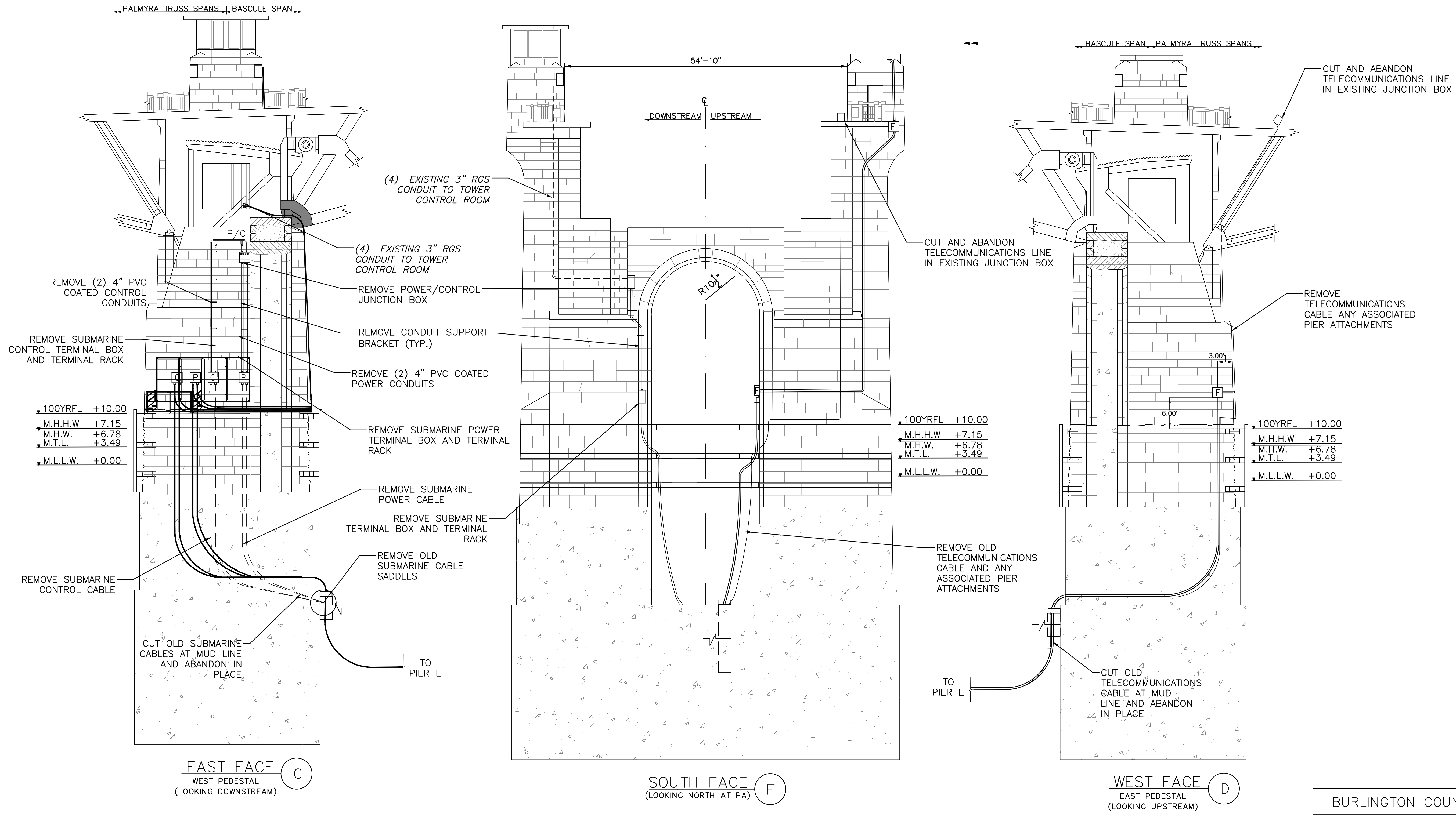
SUBMARINE CABLE REPLACEMENT  
USACE INDIVIDUAL PERMIT PLANS

PIER E DEMOLITION PLAN

PENNONI ASSOCIATES INC.

DRAWING NO. USAC-017	SCALE 1" = 20'	DATE 3/6/25	SHEET NO. 17 OF 21
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STATE OF NEW JERSEY  
MICHAEL PAWLOWSKI  
No. 24GE0544500  
LICENSED PROFESSIONAL ENGINEER  
03/06/2025

REV.	DATE	BY	DESCRIPTION
1	03/06/25	MFP	PER USAGE COMMENTS DATED 2/19/25
REVISIONS			

BURLINGTON COUNTY BRIDGE COMMISSION

TACONY-PALMYRA  
OVER THE DELAWARE RIVER  
TACONY, PA PALMYRA, NJ

SUBMARINE CABLE REPLACEMENT  
USACE INDIVIDUAL PERMIT PLANS

PIER F DEMOLITION PLAN

PENNONI ASSOCIATES INC.

DRAWING NO. USAC-018	SCALE 1" = 20'	DATE 3/6/25	SHEET NO. 18 OF 21
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