

DEPARTMENT OF THE ARMY

US ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT 696 VIRGINIA ROAD CONCORD MA 01742-2751

March 9, 2023

Regulatory Division

File Number: NAE-2015-625

Kimberly Lesay
Connecticut Department of Transportation
2800 New Berlin Turnpike
Newington, Connecticut 06131
(via email: Kimberly.Lesay@ct.gov)

Dear Ms. Lesay:

Enclosed is your fully executed Department of the Army permit for the Walk Bridge replacement project and related activities located in the Norwalk River, near Norwalk, Connecticut. We have assigned the file number provided above to this project. Please refer to this number in all communication concerning this matter.

This permit is a limited authorization containing a specific set of conditions. Please read the permit thoroughly to familiarize yourself with the conditions, including any conditions contained in the enclosed State Section 401 water quality certification. If a contractor performs any authorized work for you, both you and the contractor are responsible for ensuring that the work is performed in compliance with the permit's terms and conditions, as any violations could result in civil or criminal penalties.

This permit and the enclosed permission letter also constitute your approval under Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408) as it has also been determined that the activities authorized do not impair the usefulness of the USACE Navigation project and are not injurious to the public interest.

Please contact us immediately if you change the plans or construction methods for work within our jurisdiction. We must approve any changes before you undertake them. This authorization does not obviate the need to obtain other Federal, state, or local authorizations required by law.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at https://regulatory.ops.usace.army.mil/customer-service-survey.

WALK BRIDGE REPLACEMENT INDEX OF SECTION 408 PERMIT PLATES

| | | | | • | | | |
|-------------------|---|-------------------|---|-------------------|--------------------------------------|-------------------|------------------------------------|
| DRAWING NUMBER | DRAWING TITLE | DRAWING NUMBER | DRAWING TITLE | DRAWING NUMBER | DRAWING TITLE | DRAWING NUMBER | DRAWING TITLE |
| GEN-1 | INDEX OF PERMIT PLATES (SHEET 1 OF 2) | PP-1 | PROPOSED CONDITIONS (SHEET 1 OF 14) | FP-1 | FLOODPLAIN IMPACTS (SHEET 1 OF 12) | CA4-1 | MARINE STAGING YARD (SHEET 1 OF 6) |
| GEN-1A | INDEX OF PERMIT PLATES (SHEET 2 OF 2) | PP-2 | PROPOSED CONDITIONS (SHEET 2 OF 14) | FP-1A | FLOODPLAIN IMPACTS (SHEET 2 OF 12) | CA4-2 | MARINE STAGING YARD (SHEET 2 OF 6) |
| GEN-2 | GENERAL NOTES AND LEGEND | PP-3 | PROPOSED CONDITIONS (SHEET 3 OF 14) | FP-2 | FLOODPLAIN IMPACTS (SHEET 3 OF 12) | CA4-3 | MARINE STAGING YARD (SHEET 3 OF 6) |
| GEN-3 | LOCATION PLAN | PP=4 | PROPOSED CONDITIONS (SHEET 4 OF 14) | FP-3 | FLOODPLAIN IMPACTS (SHEET 4 OF 12) | CA4-4 | MARINE STAGING YARD (SHEET 4 OF 6) |
| GEN-4 | RESOURCE MAP (SHEET 1 OF 4) | PP-5 | PROPOSED CONDITIONS (SHEET 5 OF 14) | FP-4 | FLOODPLAIN IMPACTS (SHEET 5 OF 12) | CA4-5 | MARINE STAGING YARD (SHEET 5 OF 6) |
| GEN-4A | RESOURCE MAP (SHEET 2 OF 4) | PP-6 | PROPOSED CONDITIONS (SHEET 6 OF 14) | FP-5 | FLOODPLAIN IMPACTS (SHEET 6 OF 12) | CA4-6 | MARINE STAGING YARD (SHEET 6 OF 6) |
| GEN-5 | RESOURCE MAP (SHEET 3 OF 4) | PP-7 | PROPOSED CONDITIONS (SHEET 7 OF 14) | FP-6 | FLOODPLAIN IMPACTS (SHEET 7 OF 12) | | |
| GEN-5A | RESOURCE MAP (SHEET 4 OF 4) | PP-8 | PROPOSED CONDITIONS (SHEET 8 OF 14) | FP-7 | FLOODPLAIN IMPACTS (SHEET 8 OF 12) | CA5-1 | NORTHWEST TRESTLE (SHEET 1 OF 5) |
| GEN-6 | FLOOD ZONE MAP (SHEET 1 OF 2) | PP-8A | PROPOSED CONDITIONS (SHEET 9 OF 14) | FP - 8 | FLOODPLAIN IMPACTS (SHEET 9 OF 12) | CA5-2 | NORTHWEST TRESTLE (SHEET 2 OF 5) |
| GEN-6A | FLOOD ZONE MAP (SHEET 2 OF 2) | PP-8B | PROPOSED CONDITIONS (SHEET 10 OF 14) | FP-9 | FLOODPLAIN IMPACTS (SHEET 10 OF 12) | CA5-3 | NORTHWEST TRESTLE (SHEET 3 OF 5) |
| GEN-6B | SITE PLAN/KEY MAP (SHEET 1 OF 3) | PP-8C | PROPOSED CONDITIONS (SHEET 11 OF 14) | FP-10 | FLOODPLAIN IMPACTS (SHEET 11 OF 12) | CA5-4 | NORTHWEST TRESTLE (SHEET 4 OF 5) |
| GEN-7 | SITE PLAN/KEY MAP (SHEET 2 OF 3) | PP-8D | PROPOSED CONDITIONS (SHEET 12 OF 14) | FP-11 | FLOODPLAIN IMPACTS (SHEET 12 OF 12) | CA5-5 | NORTHWEST TRESTLE (SHEET 5 OF 5) |
| GEN-7A | SITE PLAN/KEY MAP (SHEET 3 OF 3) | PP-8E | PROPOSED CONDITIONS (SHEET 13 OF 14) | | | | |
| GEN-8 | VESSEL BERTHING PLAN OVERALL (SHEET 1 OF 4) | PP-9 | PROPOSED CONDITIONS (SHEET 14 OF 14) | CA1-1 | IMAX REMOVAL (SHEET 1 OF 7) | CA6-1 | SOUTHWEST TRESTLE (SHEET 1 OF 5) |
| GEN-9 | VESSEL BERTHING PLAN WALK BRIDGE (SHEET 2 OF 4) | | | CA1-2 | IMAX REMOVAL (SHEET 2 OF 7) | CA6-2 | SOUTHWEST TRESTLE (SHEET 2 OF 5) |
| GEN-10 | VESSEL BERTHING PLAN MARINE STAGING YARD (SHEET 3 OF 4) | SUM-1 | SUMMARY OF IMPACTS (SHEET 1 OF 17) | CA1-3 | IMAX REMOVAL (SHEET 3 OF 7) | CA6-3 | SOUTHWEST TRESTLE (SHEET 3 OF 5) |
| GEN-10A | VESSEL BERTHING PLAN MANRESA ISLAND (SHEET 4 OF 4) | SUM-1A | SUMMARY OF IMPACTS (SHEET 2 OF 17) | CA1-4 | IMAX REMOVAL (SHEET 4 OF 7) | CA6-4 | SOUTHWEST TRESTLE (SHEET 4 OF 5) |
| GEN-11 | PARCEL MAP (SHEET 1 OF 3) | SUM-2 | SUMMARY OF IMPACTS (SHEET (3 OF 17) | CA1-5 | IMAX REMOVAL (SHEET 5 OF 7) | CA6-5 | SOUTHWEST TRESTLE (SHEET 5 OF 5) |
| GEN-12 | PARCEL MAP (SHEET 2 OF 3) | SUM-3 | SITES 1, 2 & 3 STATE (SHEET 4 OF 17) | CA1-6 | IMAX REMOVAL (SHEET 6 OF 7) | | |
| GEN-13 | PARCEL MAP (SHEET 3 OF 3) | SUM-4 | SITE 4 STATE (SHEET 5 OF 17) | CA1-7 | IMAX REMOVAL (SHEET 7 OF 7) | CA7-1 | NORTHEAST TRESTLE (SHEET 1 OF 6) |
| GEN-14 | BUILDING DEMOLITION MAP | SUM-5 | SITE 5 STATE (SHEET 6 OF 17) | | | CA7-2 | NORTHEAST TRESTLE (SHEET 2 OF 6) |
| | | SUM-5A | SITE 7 STATE (SHEET 7 OF 17) | CA2-1 | DUCTBANK INSTALLATION (SHEET 1 OF 4) | CA7-3 | NORTHEAST TRESTLE (SHEET 3 OF 6) |
| EP-1 | EXISTING CONDITIONS (SHEET 1 OF 14) | SUM-5B | SITE 8 STATE (SHEET 8 OF 17) | CA2-2 | DUCTBANK INSTALLATION (SHEET 2 OF 4) | CA7-4 | NORTHEAST TRESTLE (SHEET 4 OF 6) |
| EP-2 | EXISTING CONDITIONS (SHEET 2 OF 14) | SUM-5C | SITE 9 STATE (SHEET 9 OF 17) | CA2-3 | DUCTBANK INSTALLATION (SHEET 3 OF 4) | CA7-5 | NORTHEAST TRESTLE (SHEET 5 OF 6) |
| EP-3 | EXISTING CONDITIONS (SHEET 3 OF 14) | SUM-5D | SITE 10 STATE (SHEET 10 OF 17) | CA2-4 | DUCTBANK INSTALLATION (SHEET 4 OF 4) | CA7-6 | NORTHEAST TRESTLE (SHEET 6 OF 6) |
| EP-4 | EXISTING CONDITIONS (SHEET 4 OF 14) | SUM-6 | SITES 1, 2 & 3 FEDERAL (SHEET 11 OF 17) | | | | |
| EP-5 | EXISTING CONDITIONS (SHEET 5 OF 14) | SUM-7 | SITE 4 FEDERAL (SHEET 12 OF 17) | CA3-1 | VESSEL RELOCATION (SHEET 1 OF 4) | CA8-1 | SOUTHEAST TRESTLE (SHEET 1 OF 5) |
| EP-6 | EXISTING CONDITIONS (SHEET 6 OF 14) | SUM-8 | SITE 5 FEDERAL (SHEET 13 OF 17) | CA3-2 | VESSEL RELOCATION (SHEET 2 OF 4) | CA8-2 | SOUTHEAST TRESTLE (SHEET 2 OF 5) |
| EP-7 | EXISTING CONDITIONS (SHEET 7 OF 14) | SUM-9 | SITE 7 FEDERAL (SHEET 14 OF 17) | CA3-3 | VESSEL RELOCATION (SHEET 3 OF 4) | CA8-3 | SOUTHEAST TRESTLE (SHEET 3 OF 5) |
| EP-8 | EXISTING CONDITIONS (SHEET 8 OF 14) | SUM-10 | SITE 8 FEDERAL (SHEET 15 OF 17) | CA3-4 | VESSEL RELOCATION (SHEET 4 OF 4) | CA8-4 | SOUTHEAST TRESTLE (SHEET 4 OF 5) |
| EP-8A | EXISTING CONDITIONS (SHEET 9 OF 14) | SUM-11 | SITE 9 FEDERAL (SHEET 16 OF 17) | | | CA8-5 | SOUTHEAST TRESTLE (SHEET 5 OF 5) |
| EP-8B | EXISTING CONDITIONS (SHEET 10 OF 14) | SUM-12 | SITE 10 FEDERAL (SHEET 17 OF 17) | | | | |
| EP-8C | EXISTING CONDITIONS (SHEET 11 OF 14) | | | | | | |
| EP-8D | EXISTING CONDITIONS (SHEET 12 OF 14) | | | | | | |
| EP-8E | EXISTING CONDITIONS (SHEET 13 OF 14) | | | | | | |
| EP-9 | EXISTING CONDITIONS (SHEET 14 OF 14) | | | | | | |
| | | | | | | | |

T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

SIGNATURE BLOCK:

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER**

BRIDGE NO. 04288R/MP 41.5

NORWALK

DRAWING TITLE:

0301-0176

INDEX OF PERMIT PLATES (SHEET 1 OF 2)

WALK BRIDGE REPLACEMENT INDEX OF SECTION 408 PERMIT PLATES

| DRAWING NUMBER | DRAWING TITLE | DRAWING NUMBER | DRAWING TITLE | DRAWING NUMBER | DRAWING TITLE | DRAWING NUMBER | DRAWING TITLE |
|-------------------|--|-------------------|------------------------------------|-------------------|---------------------------------------|-------------------|---------------|
| CA9-1 | PIER 2 CONSTRUCTION (SHEET 1 OF 7) | CA14-1 | PIER REMOVAL (SHEET 1 OF 8) | CA17-1 | DREDGING OPERATIONS (SHEET 1 OF 7) | | |
| CA9-2 | PIER 2 CONSTRUCTION (SHEET 2 OF 7) | CA14-2 | PIER REMOVAL (SHEET 2 OF 8) | CA17-2 | DREDGING OPERATIONS (SHEET 2 OF 7) | | |
| CA9-3 | PIER 2 CONSTRUCTION (SHEET 3 OF 7) | CA14-3 | PIER REMOVAL (SHEET 3 OF 8) | CA17-3 | DREDGING OPERATIONS (SHEET 3 OF 7) | | |
| CA9-4 | PIER 2 CONSTRUCTION (SHEET 4 OF 7) | CA14-4 | PIER REMOVAL (SHEET 4 OF 8) | CA17-4 | DREDGING OPERATIONS (SHEET 4 OF 7) | | |
| CA9-5 | PIER 2 CONSTRUCTION (SHEET 5 OF 7) | CA14-5 | PIER REMOVAL (SHEET 5 OF 8) | CA17-5 | DREDGING OPERATIONS (SHEET 5 OF 7) | | |
| CA9-6 | PIER 2 CONSTRUCTION (SHEET 6 OF 7) | CA14-6 | PIER REMOVAL (SHEET 6 OF 8) | CA17-6 | DREDGING OPERATIONS (SHEET 6 OF 7) | | |
| CA9-7 | PIER 2 CONSTRUCTION (SHEET 7 OF 7) | CA14-7 | PIER REMOVAL (SHEET 7 OF 8) | CA17-7 | DREDGING OPERATIONS (SHEET 7 OF 7) | | |
| | | CA14-8 | PIER REMOVAL (SHEET 8 OF 8) | | | | |
| CA10-1 | PIER 3 CONSTRUCTION (SHEET 1 OF 7) | | | CA18-1 | LIFT SPAN INSTALLATION (SHEET 1 OF 6) | | |
| CA10-2 | PIER 3 CONSTRUCTION (SHEET 2 OF 7) | CA15-1 | FENDER INSTALLATION (SHEET 1 OF 5) | CA18-2 | LIFT SPAN INSTALLATION (SHEET 2 OF 6) | | |
| CA10-3 | PIER 3 CONSTRUCTION (SHEET 3 OF 7) | CA15-2 | FENDER INSTALLATION (SHEET 2 OF 5) | CA18-3 | LIFT SPAN INSTALLATION (SHEET 3 OF 6) | | |
| CA10-4 | PIER 3 CONSTRUCTION (SHEET 4 OF 7) | CA15-3 | FENDER INSTALLATION (SHEET 3 OF 5) | CA18-4 | LIFT SPAN INSTALLATION (SHEET 4 OF 6) | | |
| CA10-5 | PIER 3 CONSTRUCTION (SHEET 5 OF 7) | CA15-4 | FENDER INSTALLATION (SHEET 4 OF 5) | CA18-5 | LIFT SPAN INSTALLATION (SHEET 5 OF 6) | | |
| CA10-6 | PIER 3 CONSTRUCTION (SHEET 6 OF 7) | CA15-5 | FENDER INSTALLATION (SHEET 5 OF 5) | CA18-6 | LIFT SPAN INSTALLATION (SHEET 6 OF 6) | | |
| CA10-7 | PIER 3 CONSTRUCTION (SHEET 7 OF 7) | | | | | | |
| | | CA16-1 | WETLAND MITIGATION (MIT-001) | CA19-1 | MANRESA ISLAND (SHEET 1 OF 3) | | |
| CA11-1 | BARGE MOORING (SHEET 1 OF 5) | CA16-2 | WETLAND MITIGATION (MIT-002) | CA19-2 | MANRESA ISLAND (SHEET 2 OF 3) | | |
| CA11-2 | BARGE MOORING (SHEET 2 OF 5) | CA16-3 | WETLAND MITIGATION (MIT-003) | CA19-3 | MANRESA ISLAND (SHEET 3 OF 3) | | |
| CA11-3 | BARGE MOORING (SHEET 3 OF 5) | CA16-4 | WETLAND MITIGATION (MIT-004) | | | | |
| CA11-4 | BARGE MOORING (SHEET 4 OF 5) | CA16-5 | WETLAND MITIGATION (MIT-005) | | | | |
| CA11-5 | BARGE MOORING (SHEET 5 OF 5) | CA16-6 | WETLAND MITIGATION (MIT-006) | | | | |
| CA11-6 | BARGE MOORING (SHEET 6 OF 6) | CA16-7 | WETLAND MITIGATION (MIT-007) | | | | |
| | | CA16-8 | WETLAND MITIGATION (MIT-008) | | | | |
| CA12-1 | SUBMARINE CABLE REMOVAL (SHEET 1 OF 4) | CA16-9 | WETLAND MITIGATION (MIT-009) | | | | |
| CA12-2 | SUBMARINE CABLE REMOVAL (SHEET 2 OF 4) | CA16-10 | WETLAND MITIGATION (MIT-010) | | | | |
| CA12-3 | SUBMARINE CABLE REMOVAL (SHEET 3 OF 4) | CA16-11 | WETLAND MITIGATION (MIT-011) | | | | |
| CA12-4 | SUBMARINE CABLE REMOVAL (SHEET 4 OF 4) | CA16-12 | WETLAND MITIGATION (MIT-012) | | | | |
| | | CA16-13 | WETLAND MITIGATION (MIT-013) | | | | |
| CA13-1 | SWING SPAN REMOVAL (SHEET 1 OF 7) | CA16-14 | WETLAND MITIGATION (MIT-014) | | | | |
| CA13-2 | SWING SPAN REMOVAL (SHEET 2 OF 7) | CA16-15 | WETLAND MITIGATION (MIT-015) | | | | |
| CA13-3 | SWING SPAN REMOVAL (SHEET 3 OF 7) | CA16-16 | WETLAND MITIGATION (MIT-016) | | | | |
| CA13-4 | SWING SPAN REMOVAL (SHEET 4 OF 7) | CA16-17 | WETLAND MITIGATION (MIT-017) | | | | |
| CA13-5 | SWING SPAN REMOVAL (SHEET 5 OF 7) | CA16-18 | WETLAND MITIGATION (MIT-018) | | | | |
| CA13-6 | SWING SPAN REMOVAL (SHEET 6 OF 7) | CA16-19 | WETLAND MITIGATION (MIT-019) | | | | |
| CA13-7 | SWING SPAN REMOVAL (SHEET 7 OF 7) | CA16-20 | WETLAND MITIGATION (MIT-020) | | | | |
| | | | | | | | |

T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

SIGNATURE BLOCK:



WALK BRIDGE REPLACEMENT DRAWING TITLE: OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

| TOWN: | |
|--------|---|
| NORWAL | K |

0301-0176

INDEX OF

REV 02-23-21 DRAWING NO.:

PERMIT PLATES (SHEET 2 OF 2) GEN-1A

GENERAL NOTES:

- A SOFT START WILL BE REQUIRED BETWEEN MARCH 16TH AND OCTOBER 31ST. A SOFT START WILL BE USED AT THE BEGINNING OF EACH SHIFT THAT REQUIRES PILE DRIVING AND EXTRACTION (INCLUDING SHEETPILES) ACTIVITIES, AS WELL AS FOLLOWING CESSATION OF ACTIVITY FOR A PERIOD OF 30 MINUTES OR LONGER.
- ALL PILE DRIVING AND EXTRACTION (INCLUDING SHEETPILES) ACTIVITY WILL BE ENCLOSED WITHIN TURBIDITY CURTAINS.
- ALL PILE DRIVING AND EXTRACTION (INCLUDING SHEETPILES) ACTIVITIES CONDUCTED BETWEEN APRIL 1 AND JUNE 30 WILL ONLY OCCUR BETWEEN ONE HOUR AFTER SUNRISE TO ONE HOUR BEFORE SUNSET.
- 4. ALL PILE DRIVING AND EXTRACTION (INCLUDING SHEETPILES), SHAFT DRILLING, AND MICROPILE DRILLING ACTIVITIES WILL BE COORDINATED TO ENSURE THAT THE NAVIGATION CHANNEL IS AVAILABLE FOR MARINE TRAFFIC AND FISH PASSAGE. ACTIVITIES WILL OCCUPY LESS THAN 50% WHEN WORKING IN THE MIDDLE OF THE NAVIGATION CHANNEL.
- UNCONFINED DREDGING WILL BE CONDUCTED WITHIN TURBIDITY CURTAINS BETWEEN DECEMBER 1 AND JANUARY 31. IF NECESSARY TO DREDGE BETWEEN FEBRUARY 1 AND NOVEMBER 30, DREDGING WILL OCCUR WITHIN A MARINE ENCLOSURE SURROUNDED BY A TURBIDITY CURTAIN.
- 6. ALL BARGE MOVEMENTS WILL TAKE PLACE SUCH THAT THERE WILL BE NO IMPACT TO THE RIVER BOTTOM OR INCREASE TURBIDITY.
- 7. HORIZONTAL DATUM IS CT STATE PLANE COORDINATE SYSTEM BASED ON NAD83.
- VERTICAL DATUM IS NAVD88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- AUTHORIZED DREDGE ELEVATION FOR THE FEDERAL NAVIGATION CHANNEL IS EL. -13.98 NAVD88 (-10.00 MLLW) ,10 FEET BELOW MEAN LOWER LOW WATER.
- 10. EXISTING BRIDGE FOUNDATION ELEMENTS WITHIN THE NAVIGATION CHANNEL OR CHANNEL DREDGING SIDE SLOPE ARE TO BE REMOVED TO THE BOTTOM OF THE TIMBER MAT PER COORDINATION WITH THE UNITED STATES ARMY CORPS OF ENGINEERS AND THE UNITED STATES COAST GUARD.
- 11. THE FLOOD ZONE MAP ON DRAWING NO. GEN-6 AND GEN-6A ARE BASED ON FLOOD INSURANCE RATE MAP PANEL 0531 (REVISED JULY 8, 2013).
- THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE SEE FLOOD ZONE MAP (DWG. GEN-6 AND GEN-6A) FOR ADDITIONAL INFORMATION.

SIGNATURE BLOCK:

13. TURBIDITY CURTAINS SHALL BE TYPE III AND COMPLY WITH ITEM #0210306A - TURBIDITY CONTROL CURTAINS.

LEGEND:

CALE:

EROSION AND SEDIMENTATION CONTROL

&&&&&&&&& LIMITS OF RIPRAP

H. UPSHAW

T. ADINOLFI

C. BROWN

CHECKED

APPROVED:

DETAILED CONSTRUCTION ACTIVITIES:

THESE DRAWINGS INCLUDE SUBSETS THAT DESCRIBE THE SEQUENCE REQUIRED TO PERFORM VARIOUS ACTIVITIES THAT IMPACT REGULATED AREAS WITHIN THE PROJECT LIMITS. THE ORDER IN WHICH THEY ARE PRESENTED IS INTENDED TO CONVEY LOGICAL DEPENDENCIES BETWEEN ACTIVITIES, HOWEVER, IT DOES NOT NECESSARILY INDICATE THE SEQUENCE OF CONSTRUCTION, AS MANY OF THESE ACTIVITIES WILL OVERLAP THROUGHOUT THE COURSE OF THE PROJECT. SITE CONDITIONS AND BRIDGE PROGRESS ON EACH DRAWING ARE DEPICTED AS THEY WILL LIKELY EXIST AT THE TIME, BUT THEY ARE SUBJECT TO DIFFER BASED ON ACTUAL THINING OF NOTICE TO PROCEED AND THE OVERALL CONSTRUCTION SCHEDULE, PARTCULARLY FOR ACTIVITIES DIRECTLY TIED TO THE DREDING WINDOW (SEE GENERAL NOTE 5).

| NO. | NAME | DESCRIPTION | | |
|-----|-------------------------|---|--|--|
| 1 | IMAX REMOVAL | REMOVAL OF THE EXISTING IMAX THEATER, SITE IMPROVEMENTS FOR CONSTRUCTION, AND RESTORATION UPON PROJECT COMPLETION | | |
| 2 | DUCTBANK INSTALLATION | MICRO-TUNNEL OPERATION TO BURY CONDUITS FOR FUTURE PULLING OF CONDUCTORS FOR RAIL AND BRIDGE SYSTEMS | | |
| 3 | VESSEL RELOCATION | RECONFIGURATION OF THE VESSEL DOCKS ON THE WEST BANK OF THE RIVER BETWEEN WALK BRIDGE AND STROFFOLINO BRIDGE DURING CONSTRUCTION AND POST-CONSTRUCTION | | |
| 4 | MARINE STAGING YARD | PERMANENT IMPROVEMENTS TO PROPERTIES ON THE WEST BANK OF THE RIVER SOUTH OF STROFFOLINO BRIDGE INTENDED FOR STAGING ACTIVITIES THROUGHOUT CONSTRUCTION OF WALK BRIDGE | | |
| 5 | NORTHWEST TRESTLE | | | |
| 6 | SOUTHWEST TRESTLE | INSTALLATION AND REMOVAL OF WORK PLATFORMS IN EACH QUADRANT TO BE USED | | |
| 7 | NORTHEAST TRESTLE | FOR PRIMARY ACCESS TO THE BRIDGE THROUGHOUT CONSTRUCTION | | |
| 8 | SOUTHEAST TRESTLE | THROUGHOUT CONSTRUCTION | | |
| 9 | PIER 2 CONSTRUCTION | MEANS AND METHODS FOR CONSTRUCTION OF | | |
| 10 | PIER 3 CONSTRUCTION | THE LIFT SPAN TOWER FOUNDATIONS | | |
| 11 | BARGE MOORING | MOORING LOCATION IN NORWALK RIVER AND LONG ISLAND SOUND USED FOR CONSTRUCTION BARGES | | |
| 12 | SUBMARINE CABLE REMOVAL | REMOVAL OF THREE EXISTING SUBMARINE CABLES THAT WILL NO LONGER BE USED UPON COMPLETION OF WALK BRIDGE | | |
| 13 | SWING SPAN REMOVAL | SLIDE RAIL SYSTEM INSTALLATION, REMOVAL AND DISASSEMBLY OF THE EXISTING SWING SPAN | | |
| 14 | PIER REMOVAL | REMOVAL OF EXISTING PIERS IN THE RIVER AFTER REMOVAL OF THE SWING SPAN | | |
| 15 | FENDER INSTALLATION | INSTALLATION OF THE PROPOSED FENDER SYSTEM AFTER REMOVAL OF THE EXISTING FENDERS AND REST PIERS | | |
| 16 | WETLAND MITIGATION | TREATMENT AND REMOVAL OF INVASIVE SPECIES, SHORELINE AND SALT MARSH RESTORATION, AND ACCESS REQUIREMENTS | | |
| 17 | DREDGING OPERATIONS | DREDGING PLANS AT THE BRIDGE, VESSEL DOCKS, AND MARINE STAGING YARD. | | |
| 18 | LIFT SPAN INSTALLATION | SLIDE-IN AND FLOAT-IN OPERATIONS FOR INSTALLATION OF THE PROPOSED LIFT SPANS. | | |
| 19 | MANRESA ISLAND | IMPROVEMENTS TO PROPERTIES AT MANRESA ISLAND INTENDED FOR LIFT SPAN ERECTION AND OTHER STAGING ACTIVITIES. | | |



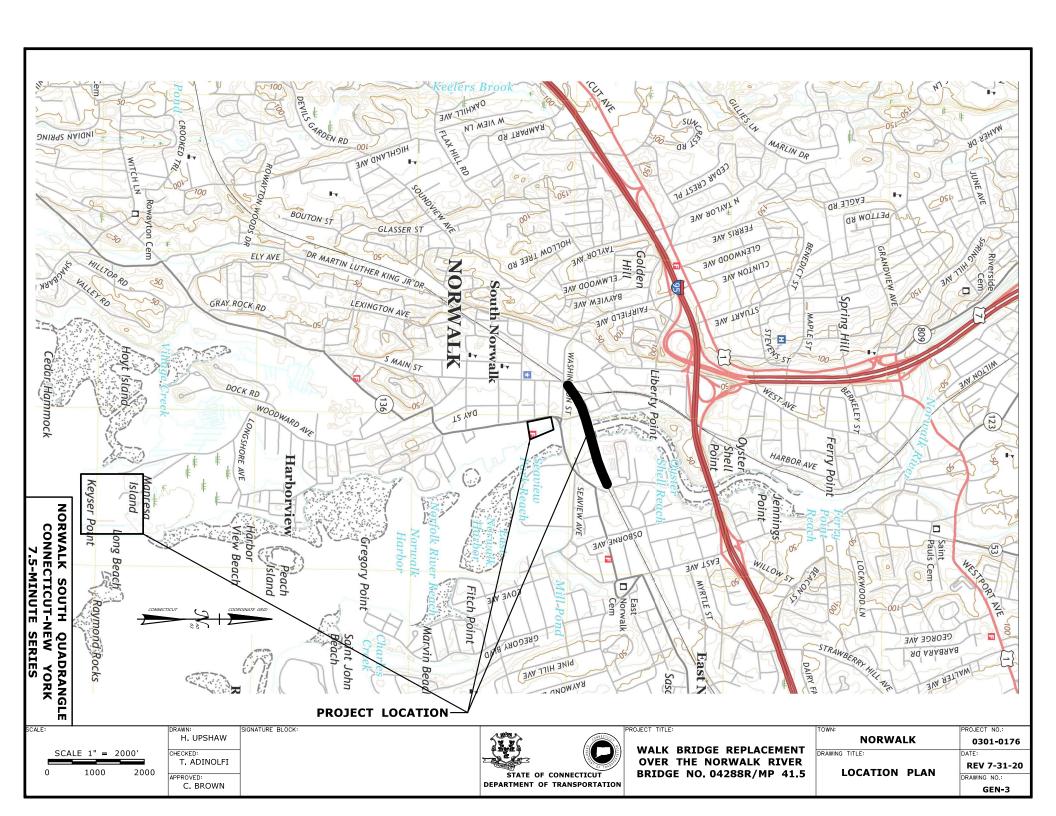
WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

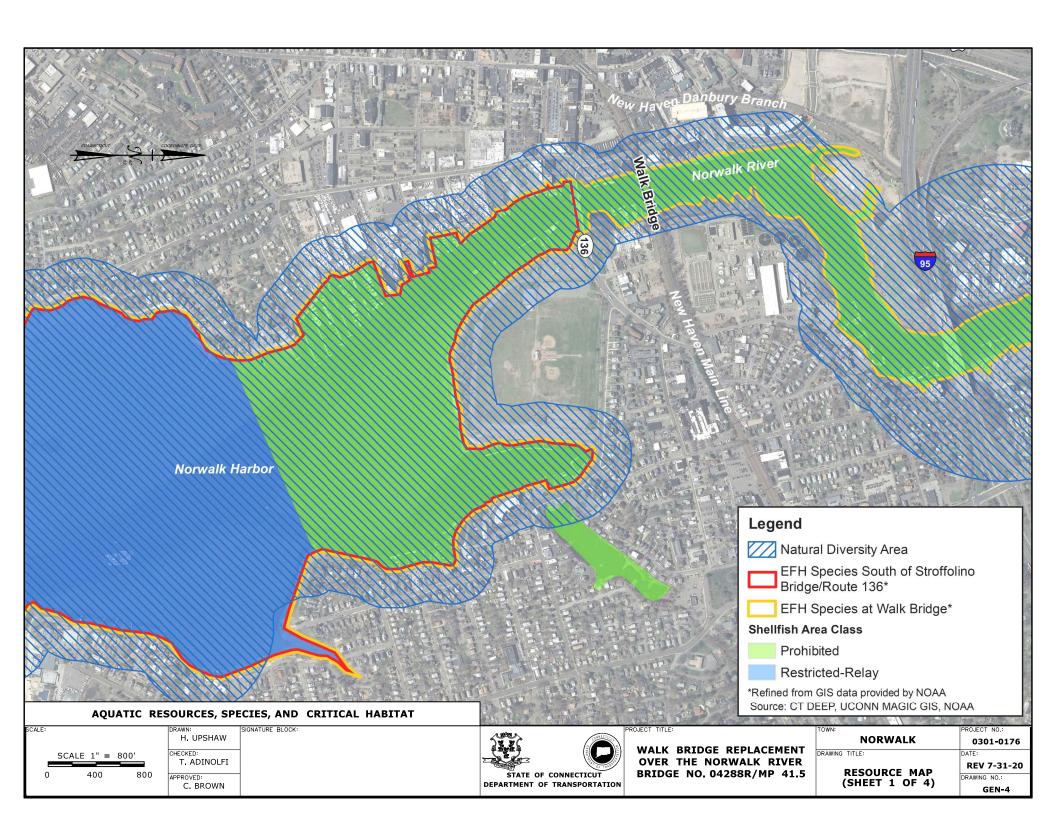
NORWALK
DRAWING TITLE:

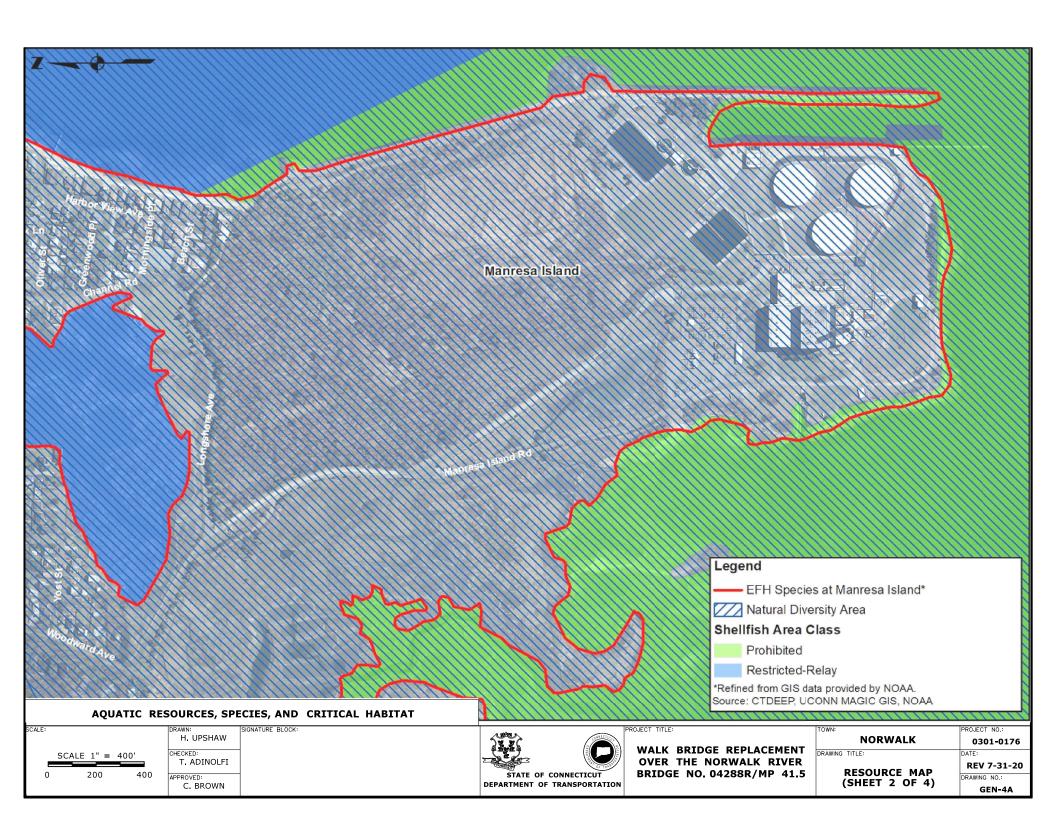
GENERAL NOTES AND LEGEND REV 7-31-20 DRAWING NO.:

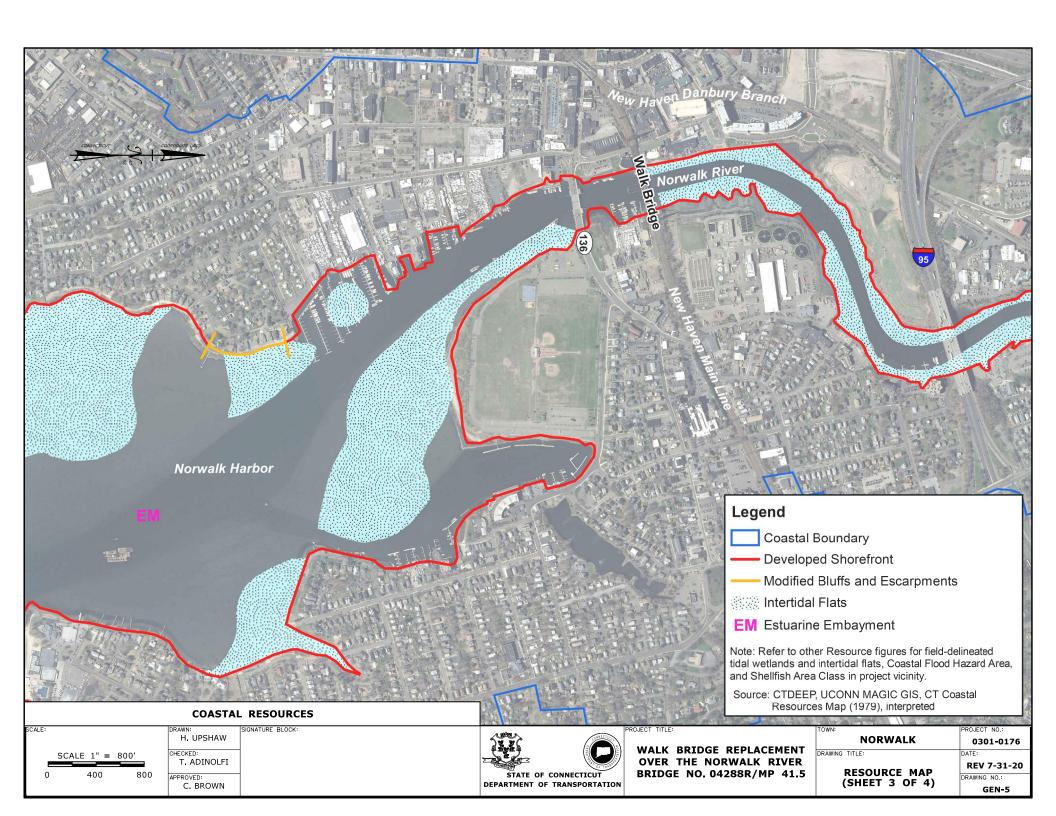
GEN-2

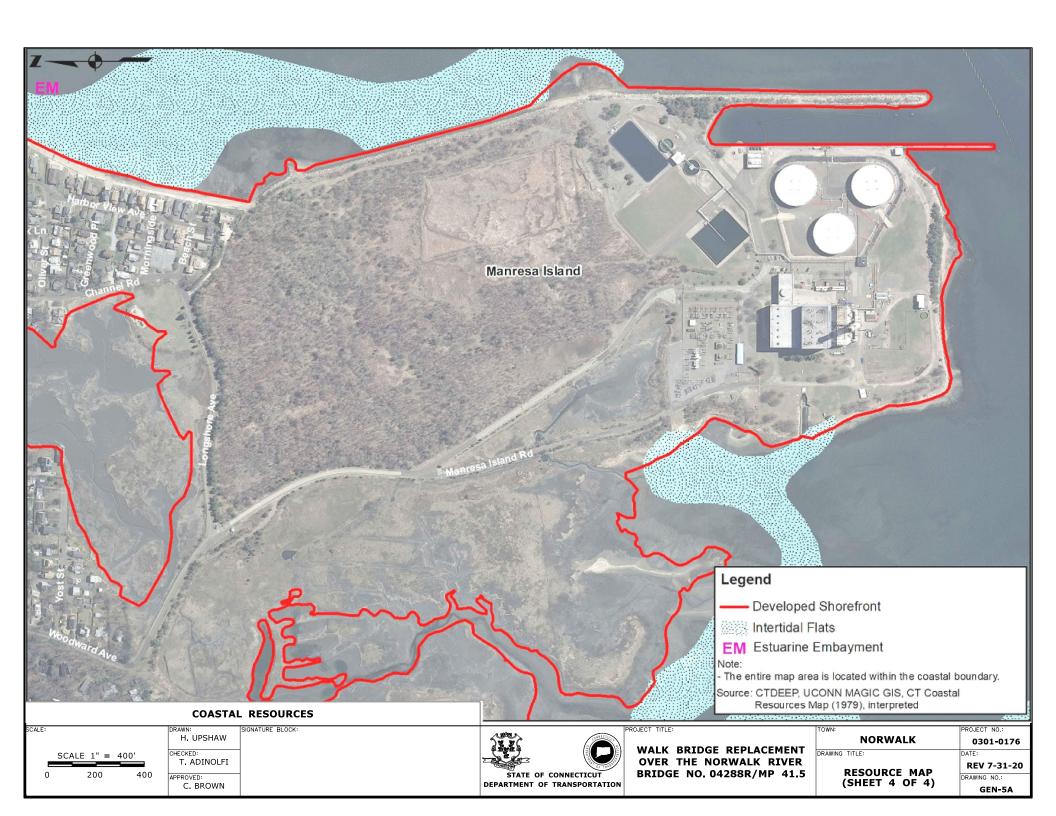
0301-0176

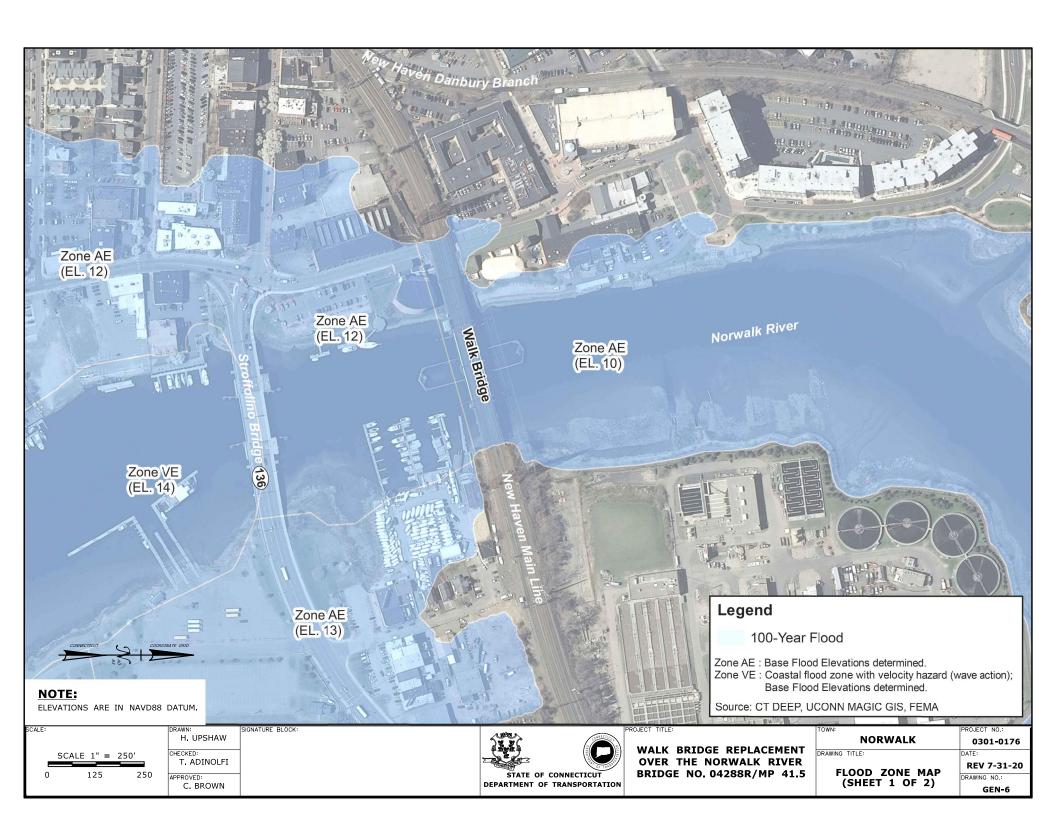


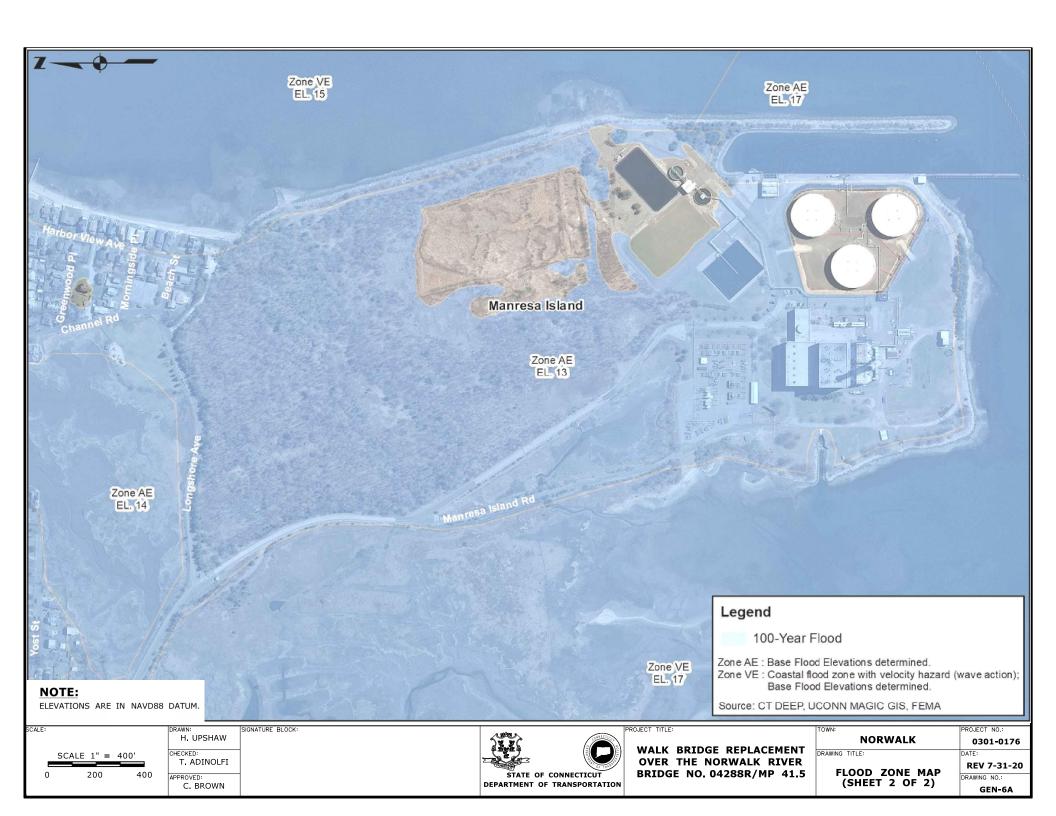


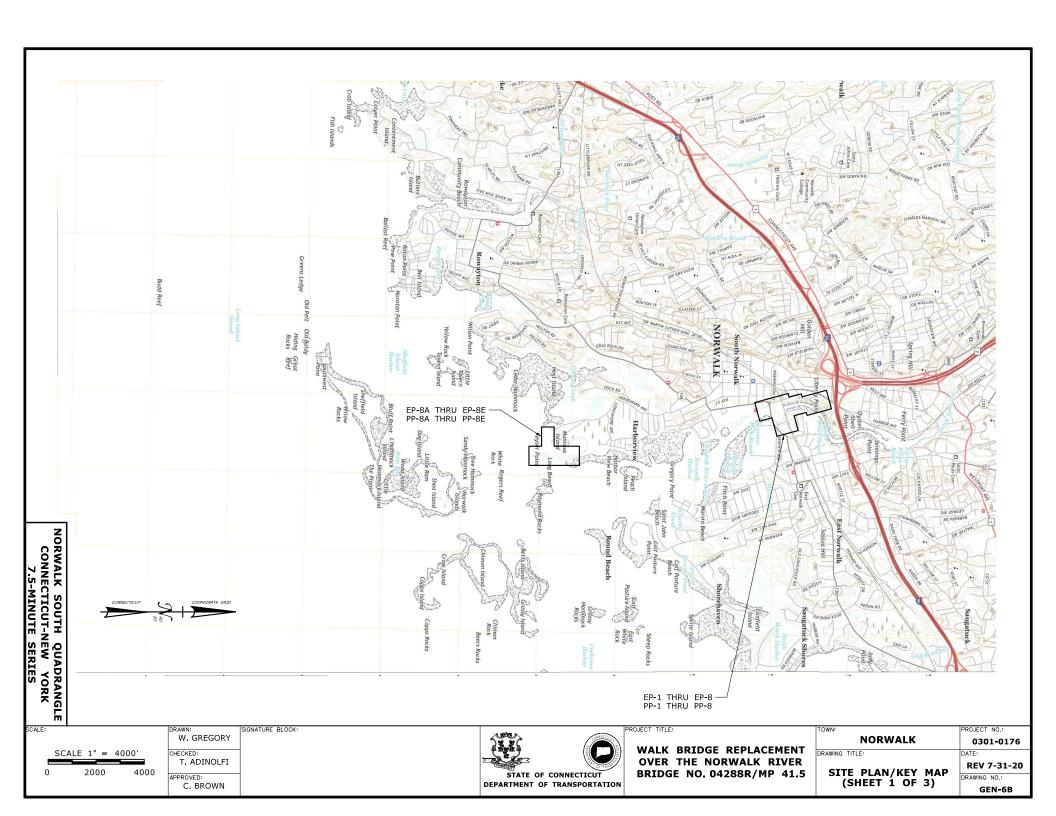


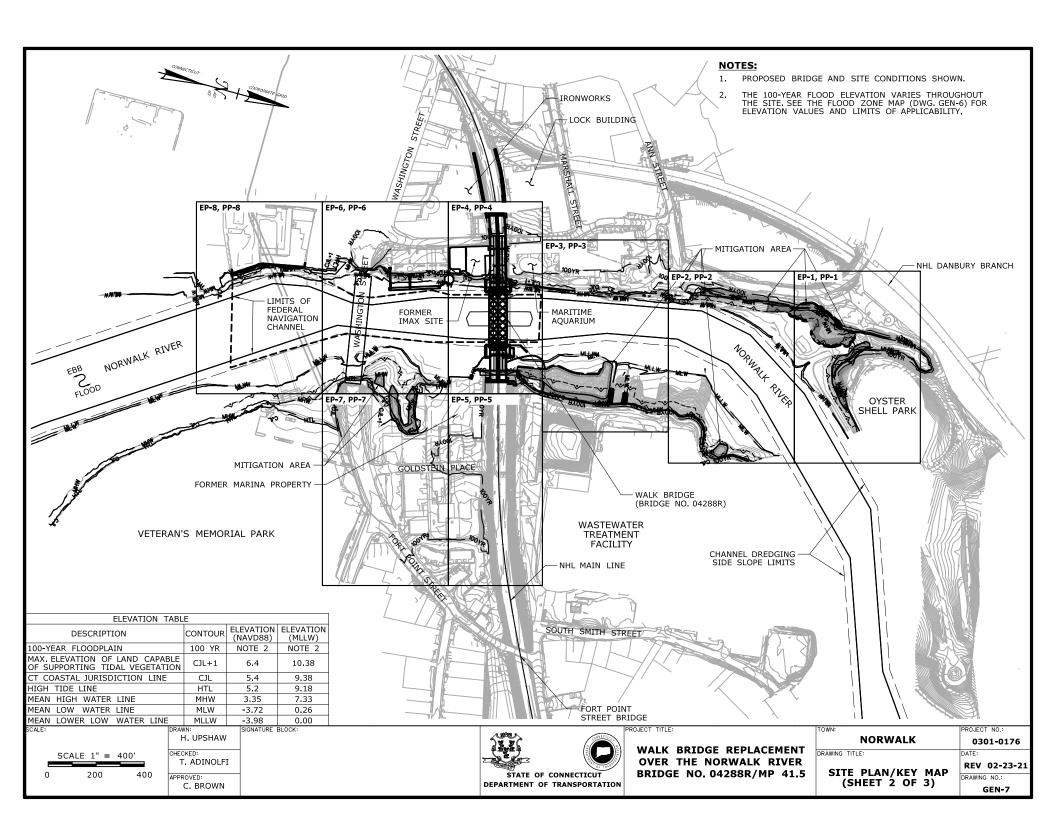


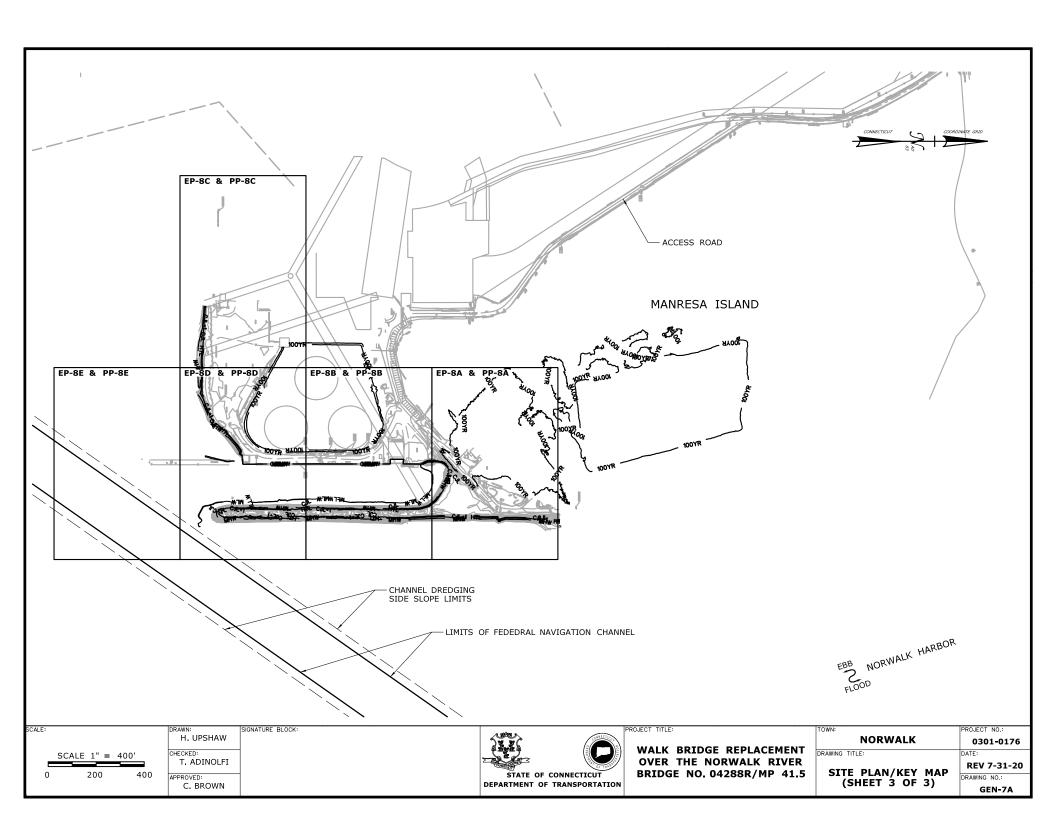


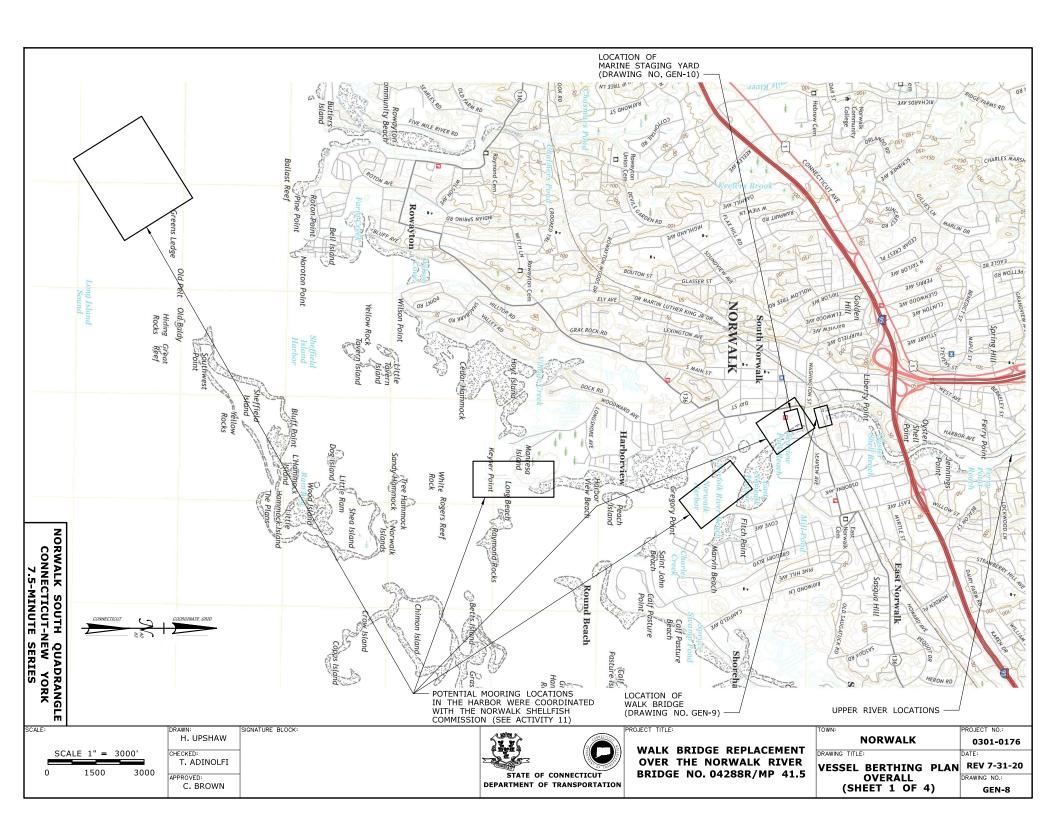


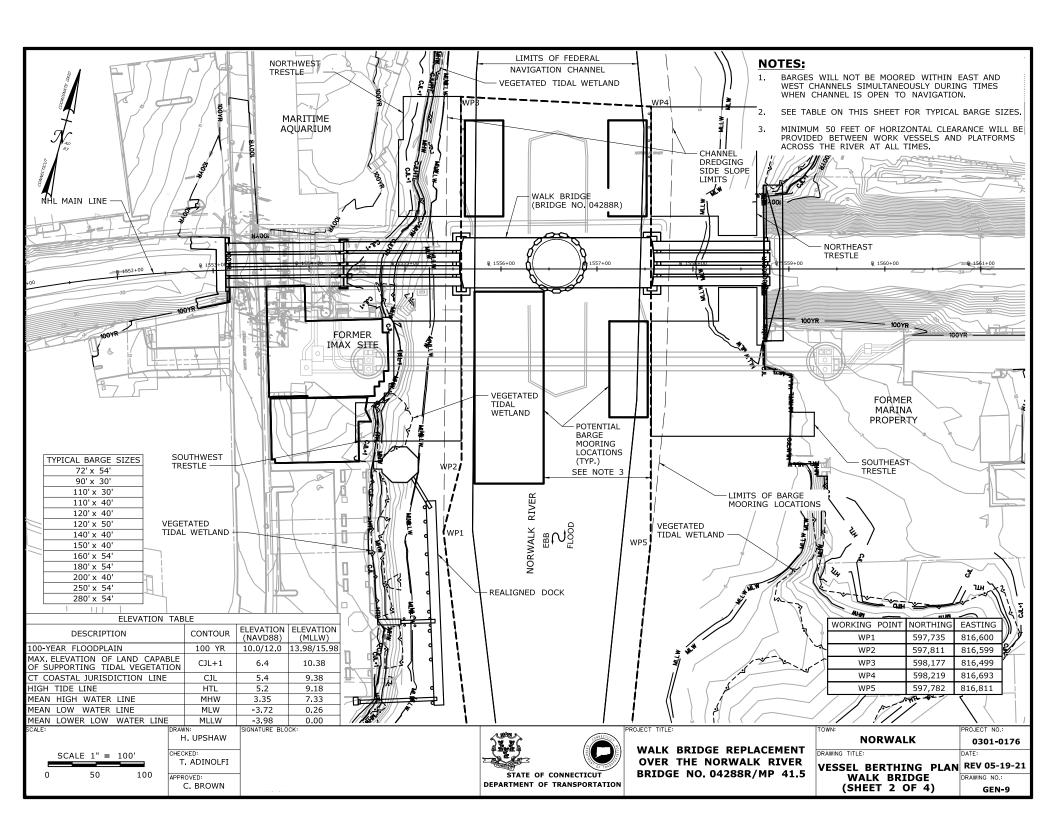


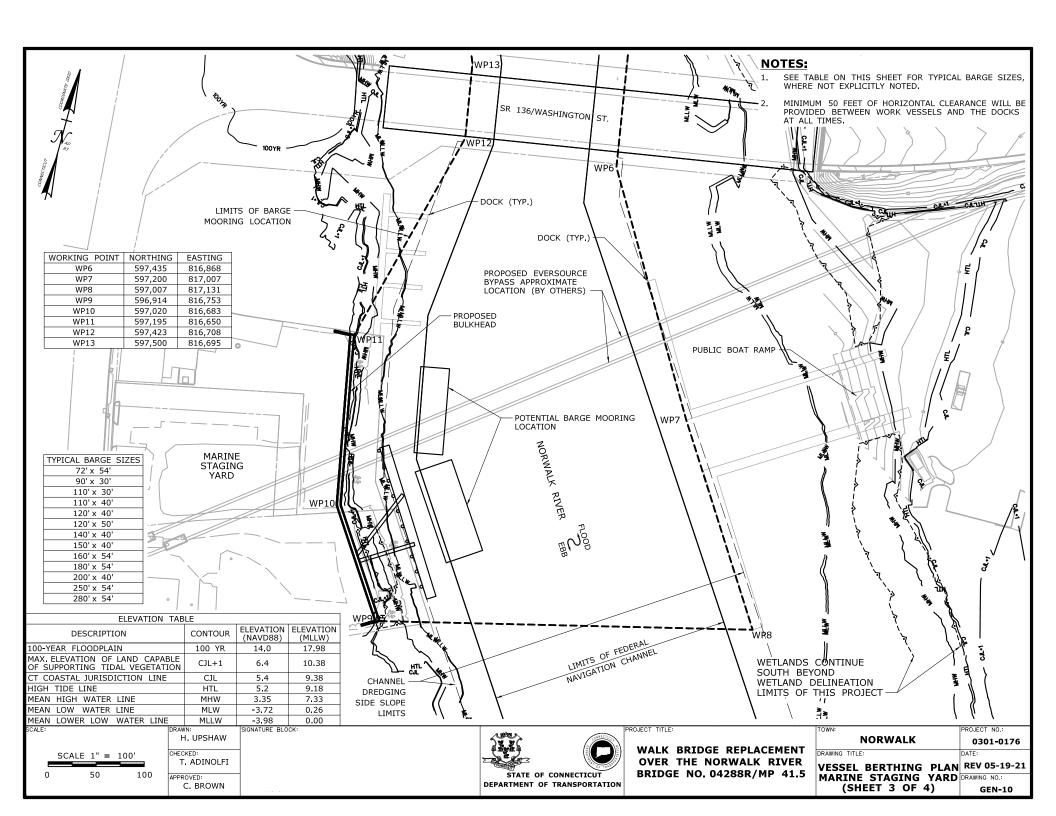


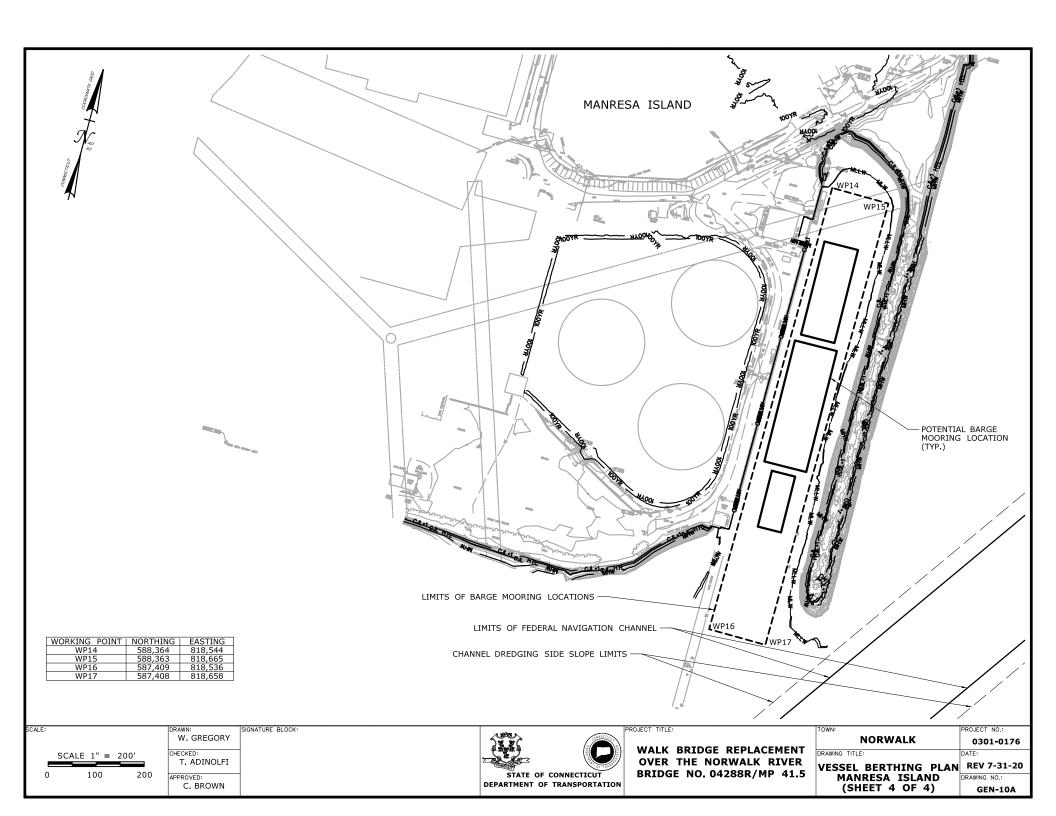


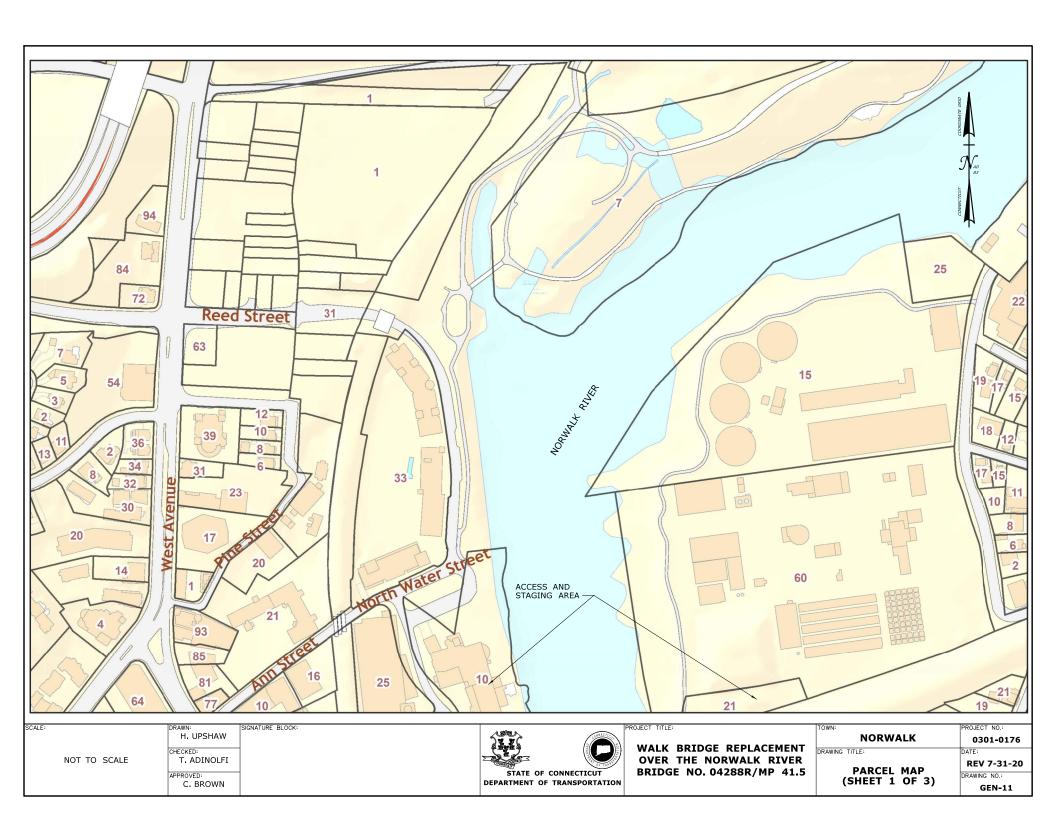


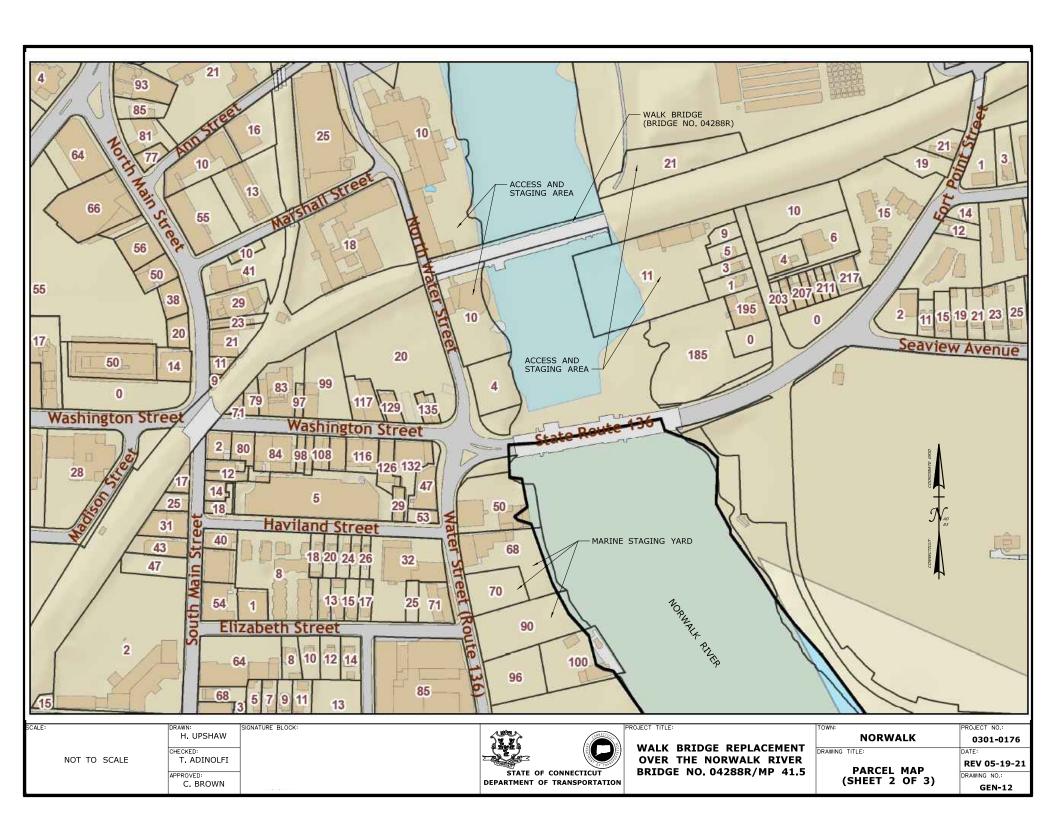


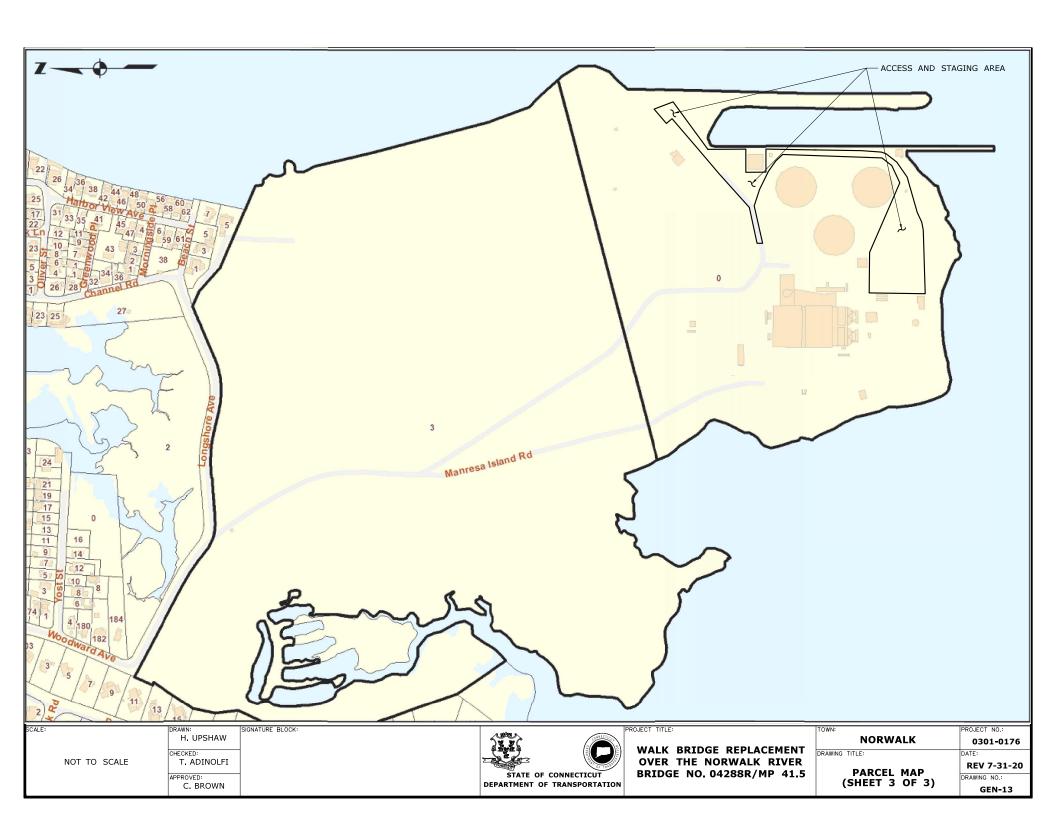


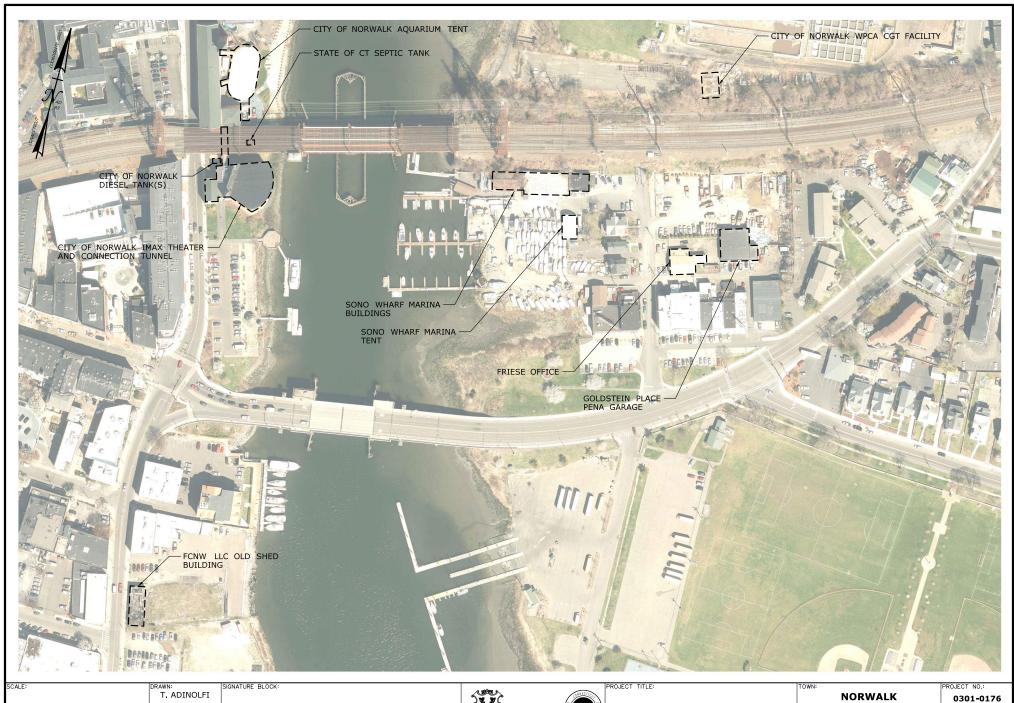












SCALE 1'' = 400'

CHECKED: L. COLES

C. BROWN

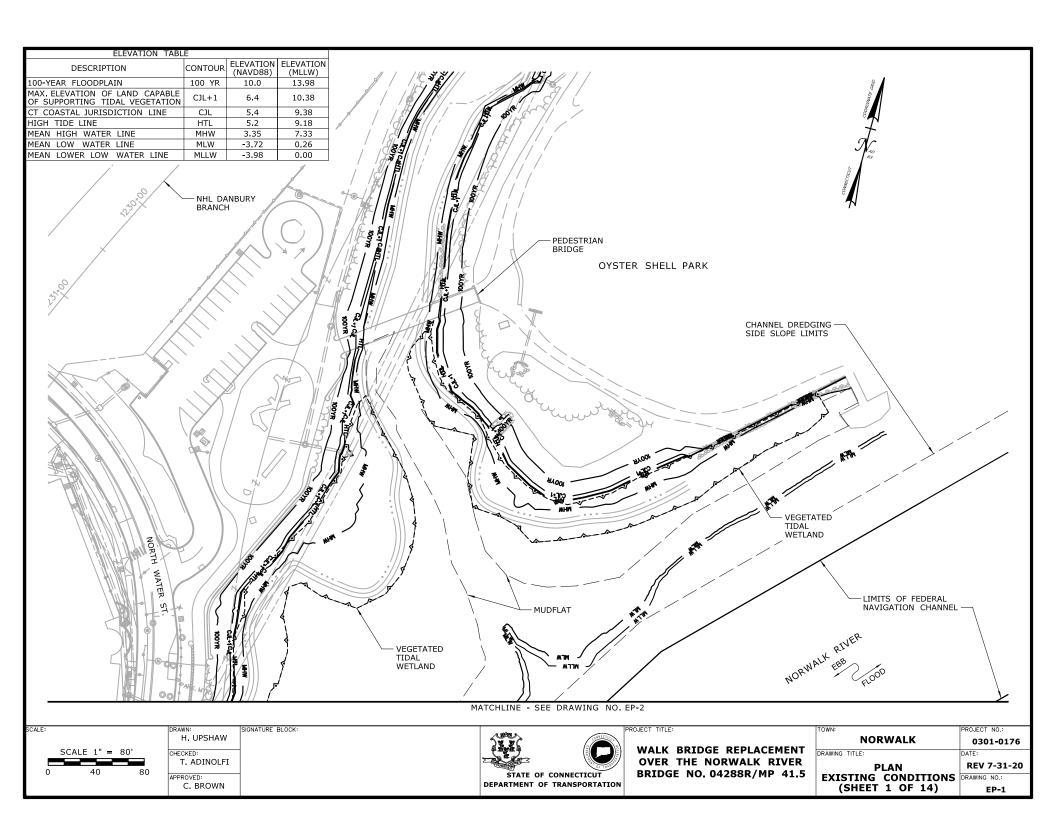
APPROVED:

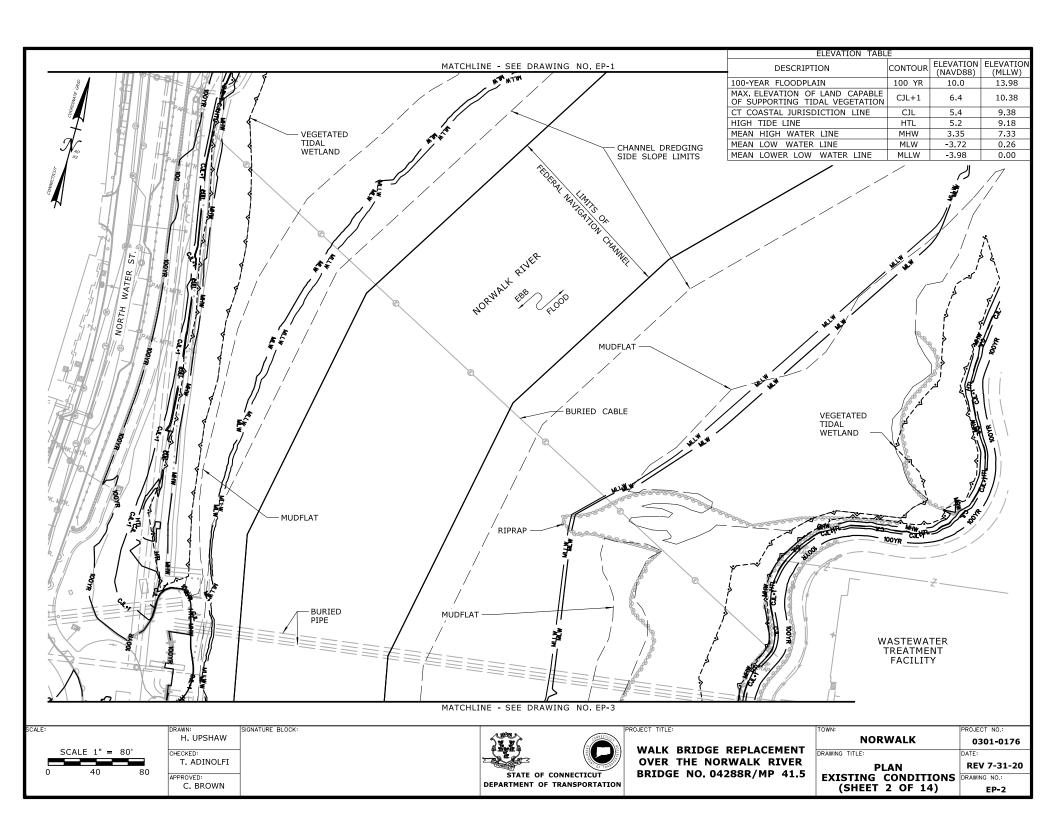
STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

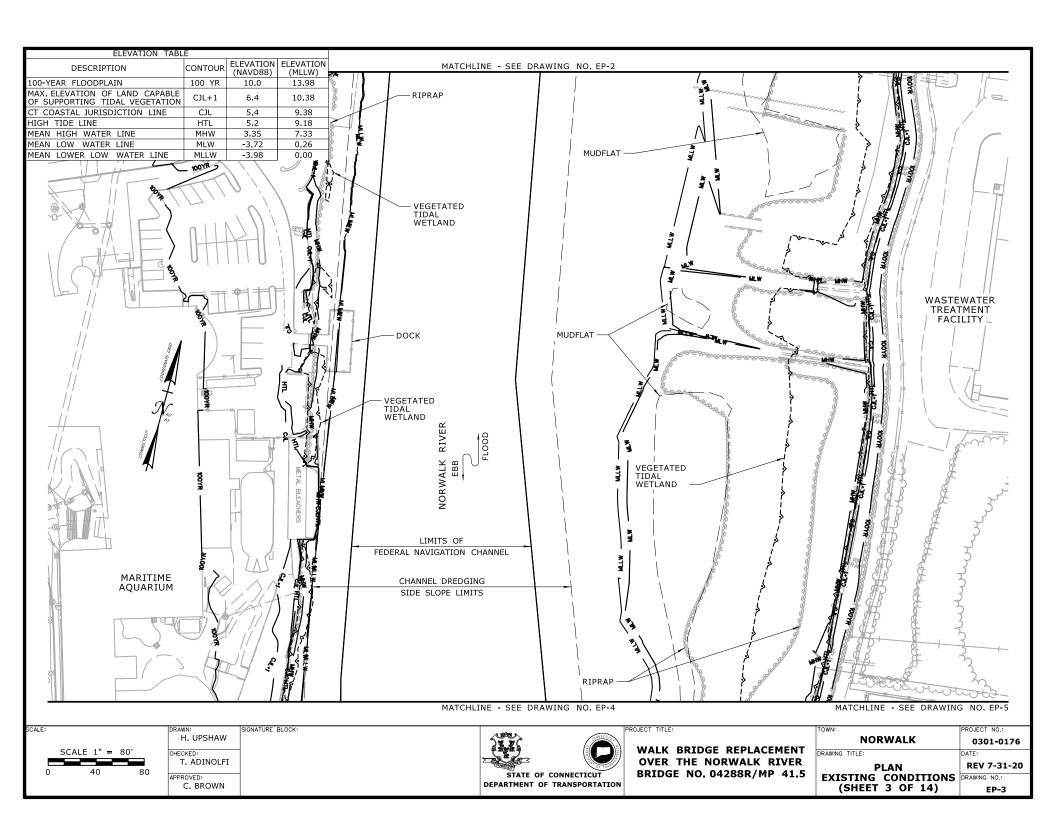
WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5 DRAWING TITLE:

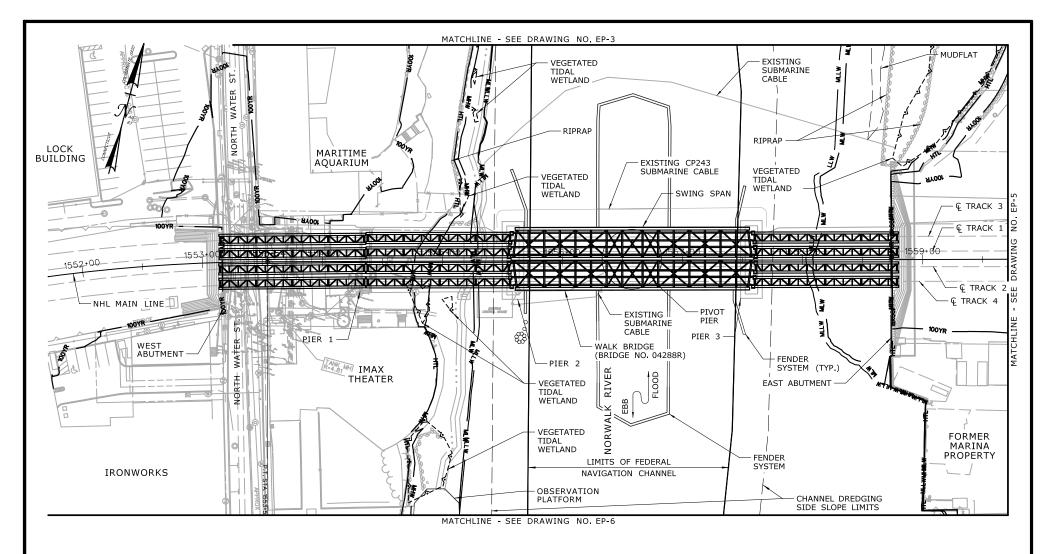
BUILDING DEMOLITION
MAP
REV 02-2
DRAWING NO.:

REV 02-23-21 **GEN-14**









| ELEVATION TABLE | | | | | | |
|--|---------|-----------------------|---------------------|--|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | | | |
| MAX.ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | | | |
| SCALE: DRAV | VN: | SIGNATURE | BLOCK: | | | |

C. BROWN

NOTES:

 THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. WITHIN THE RIVER, IT IS DEFINED AS EL. 12 (15.98 MLLW) AND EL. 10 (13.98 MLLW) DOWNSTREAM AND UPSTREAM OF THE BRIDGE, RESPECTIVELY. SEE FLOOD ZONE MAP (DWG. NO. GEN-6) FOR ADDITIONAL INFORMATION.

SCALE 1" = 80'

0 40 80

DRAWN:
H. UPSHAW

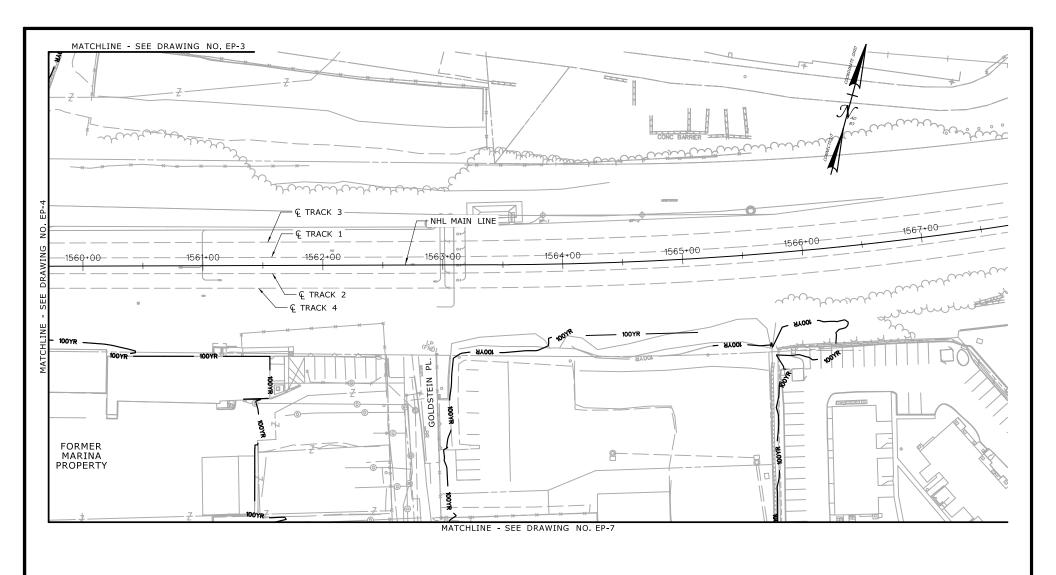
CHECKED:
T. ADINOLFI

APPROVED:



WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

| TOWN: | PROJECT NO.: |
|---------------------|--------------|
| NORWALK | 0301-0176 |
| DRAWING TITLE: | DATE: |
| PLAN | REV 7-31-20 |
| EXISTING CONDITIONS | DRAWING NO.: |
| (SHEET 4 OF 14) | EP-4 |



| ELEVATION TABLE | | | | | | | |
|--|---------|-----------------------|---------------------|--|--|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | | | |
| 100-YEAR FLOODPLAIN | 100 YR | 13.0 | 16.98 | | | | |
| MAX.ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | | | | |
| SCALE: DRAV | VN: | SIGNATURE | BLOCK: | | | | |

SCALE 1" = 80'

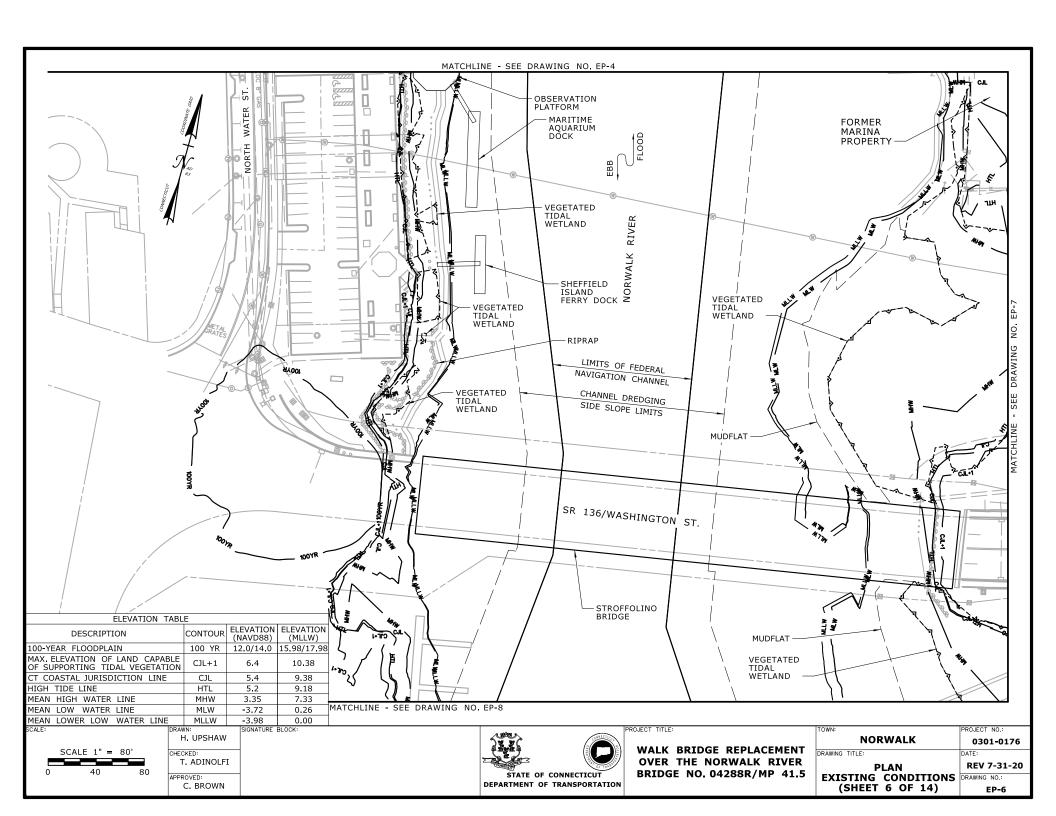
H. UPSHAW CHECKED: T. ADINOLFI APPROVED: C. BROWN

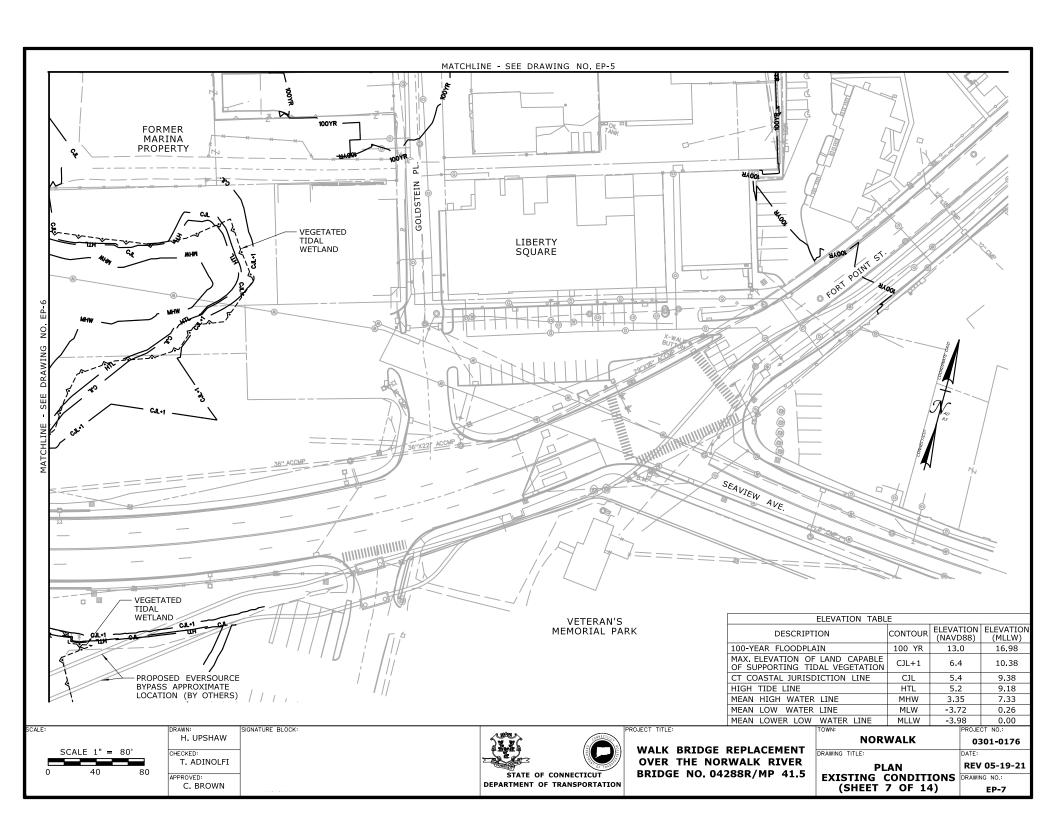


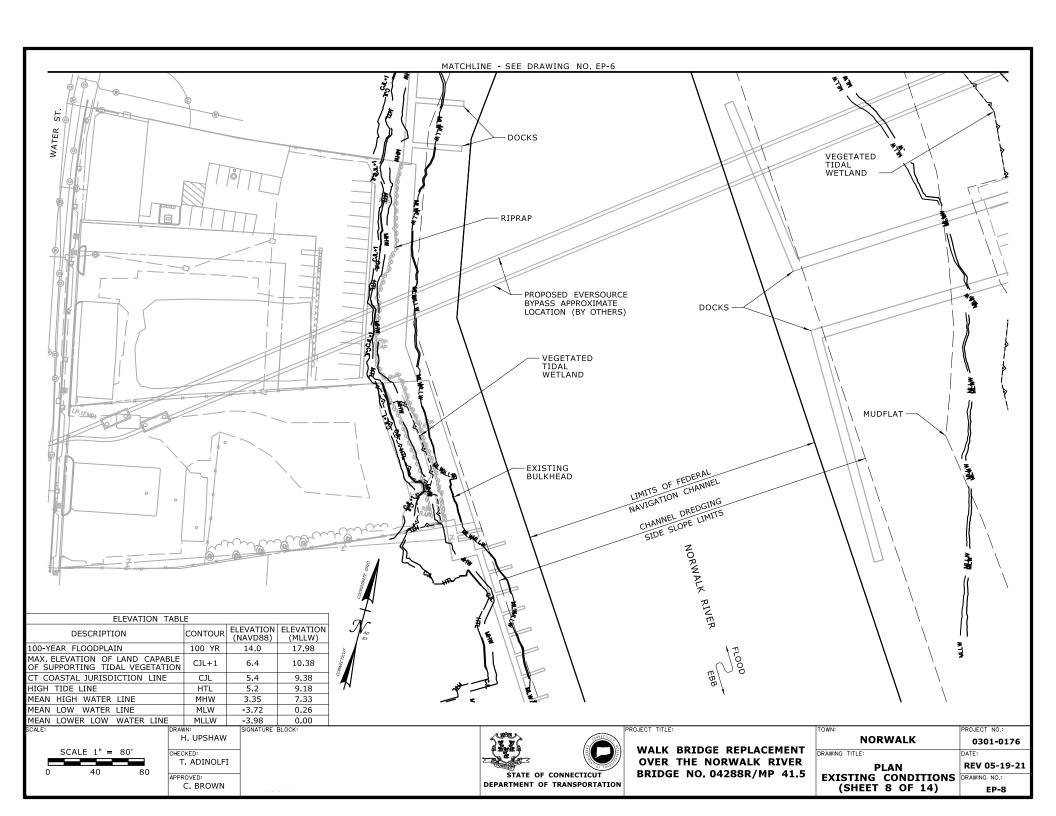
WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

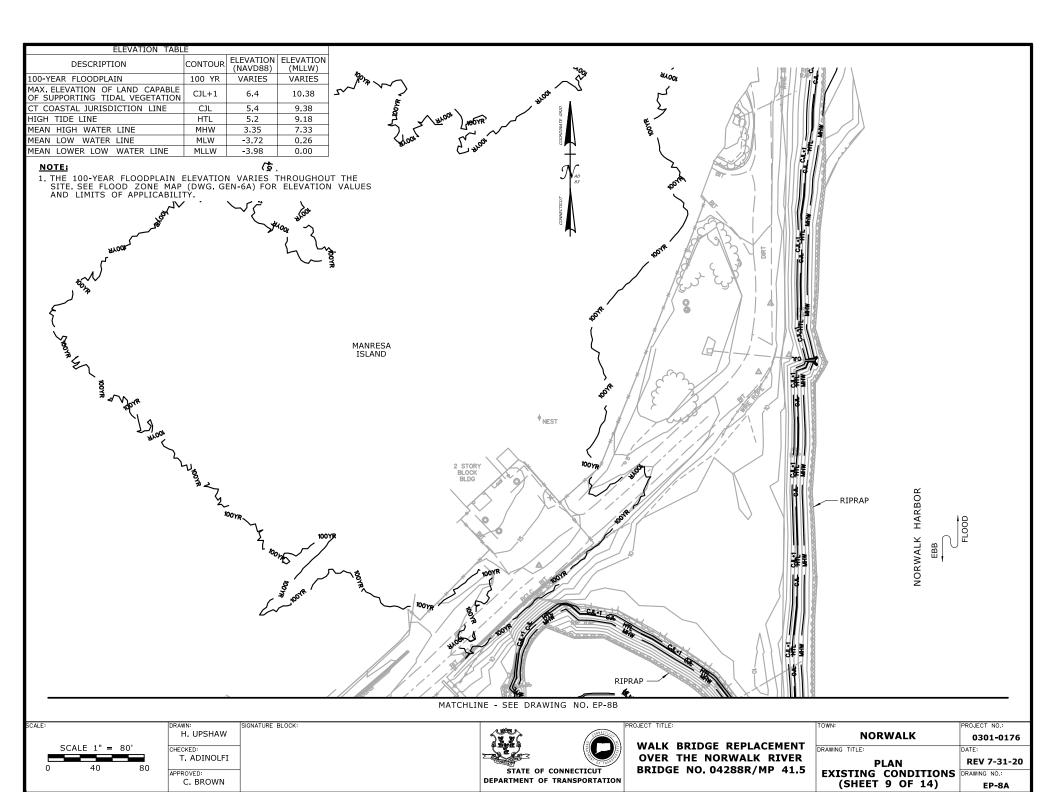
| NORWALK | | | | | | |
|---------|--------|-----------------|---|--|--|--|
| DRAWING | TITLE: | | | | | |
| EXIS | - | LAN CONDITIO | N | | | |

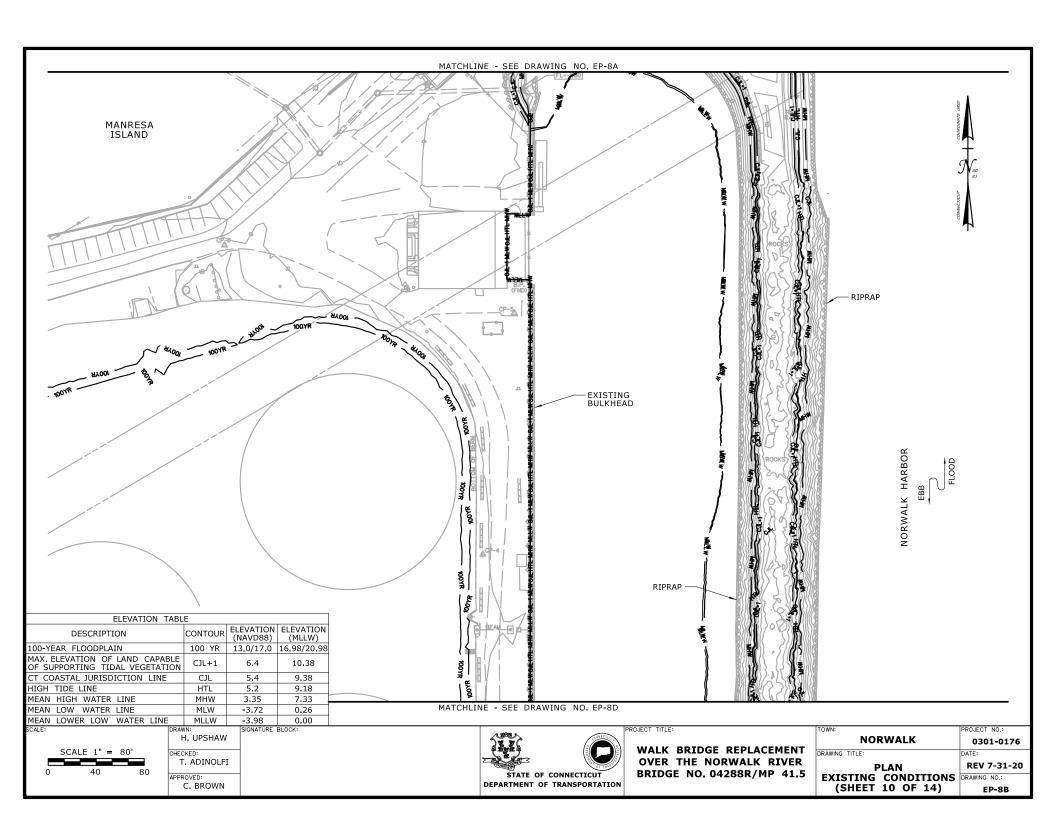
0301-0176 **REV 7-31-20** S DRAWING NO.: (SHEET 5 OF 14) EP-5



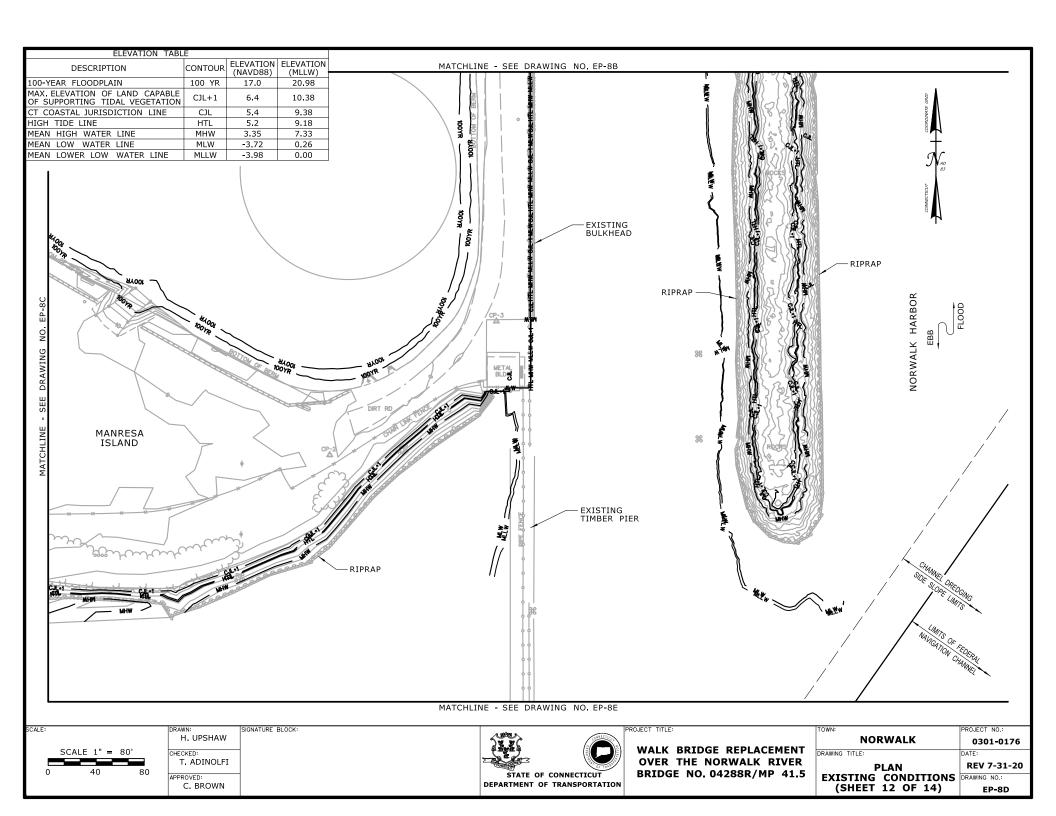


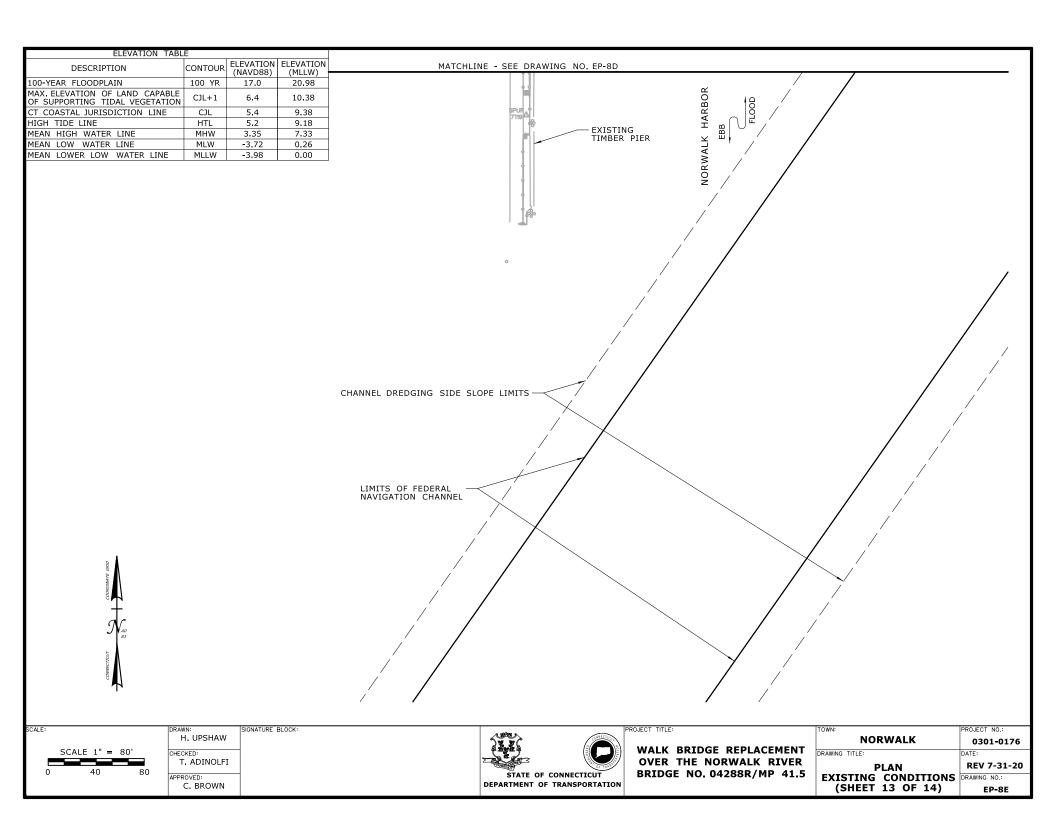


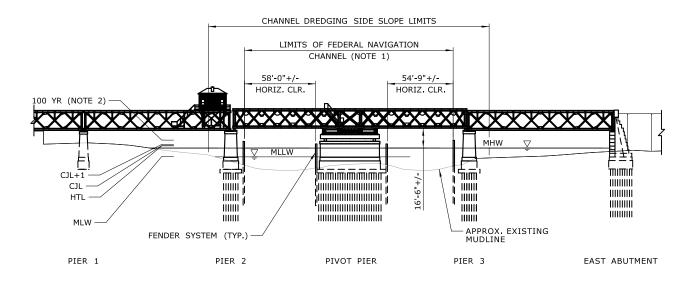




| ELEVATION TAI DESCRIPTION 100-YEAR FLOODPLAIN MAX, ELEVATION OF LAND CAPABL OF SUPPORTING TIDAL VEGETATIO CT COASTAL JURISDICTION LINE HIGH TIDE LINE MEAN HIGH WATER LINE MEAN LOW WATER LINE MEAN LOWER LOW WATER LINE | CONTOUR ELE (N/) 100 YR 13. CJL +1 CJL + HTL MHW MLW MLLW | EVATION ELEVATION (MLLW) | TOWERS LINUX SWICE FALCO | I MEST OSPREY NEST | | MANRE ISLAN CHAIN LINK FENCE CHAIN LINK FENCE RIPRAP EBB FLOOD | MATCHLINE - SEE DE |
|---|---|----------------------------|--------------------------|---|--|---|------------------------|
| SCALE 1" = 80' | H. UPSHAW HECKED: T. ADINOLFI PPROVED: C. BROWN | SIGNATURE BLOCK: | | STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION | WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5 | NORWALK DRAWING TITLE: PLAN EXISTING CONDITIONS (SHEET 11 OF 14) | 0301-0176 DATE: |







ELEVATION

(VIEW LOOKING NORTH)

NOTES:

- LIMITS OF FEDERAL NAVIGATION CHANNEL PROVIDED BY THE U.S. ARMY CORPS OF ENGINEERS FEDERAL NAVIGATION PROJECT FOR NORWALK HARBOR, U.S. ARMY CORPS OF ENGINEERS, AFTER DREDGE SURVEY, SUPPLEMENTAL PROJECT DRAWING 4/11/2014.
- THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. WITHIN THE RIVER, IT IS DEFINED AS EL. 12 (15.98 MLLW) AND EL. 10 (13.98 MLLW) DOWNSTREAM AND UPSTREAM OF THE BRIDGE, RESPECTIVELY. SEE FLOOD ZONE MAP (DWG. NO. GEN-6) FOR ADDITIONAL INFORMATION.

| ELEVATION TABLE | | | | | | | |
|---|---------|-----------------------|---------------------|--|--|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | | | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | | | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | | | | |

SCALE 1" = 80'
0 40 80

H. UPSHAW
CHECKED:
T. ADINOLFI
APPROVED:
C. BROWN

SIGNATURE BLOCK:



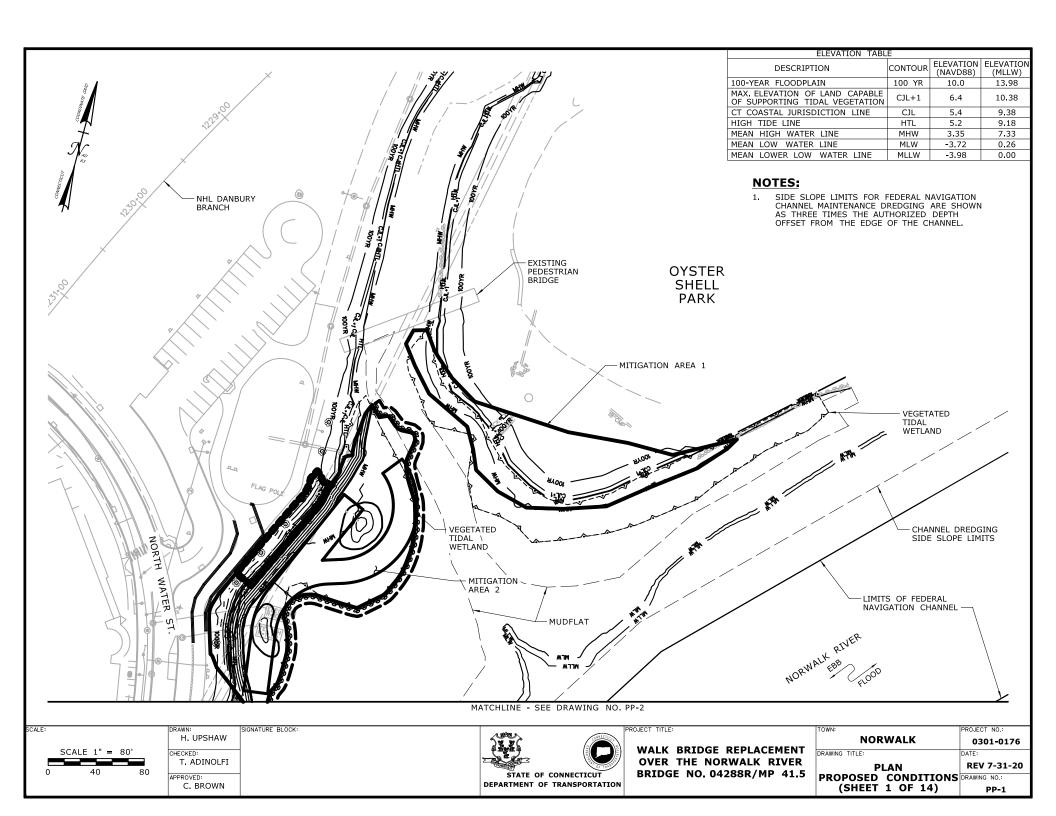
WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

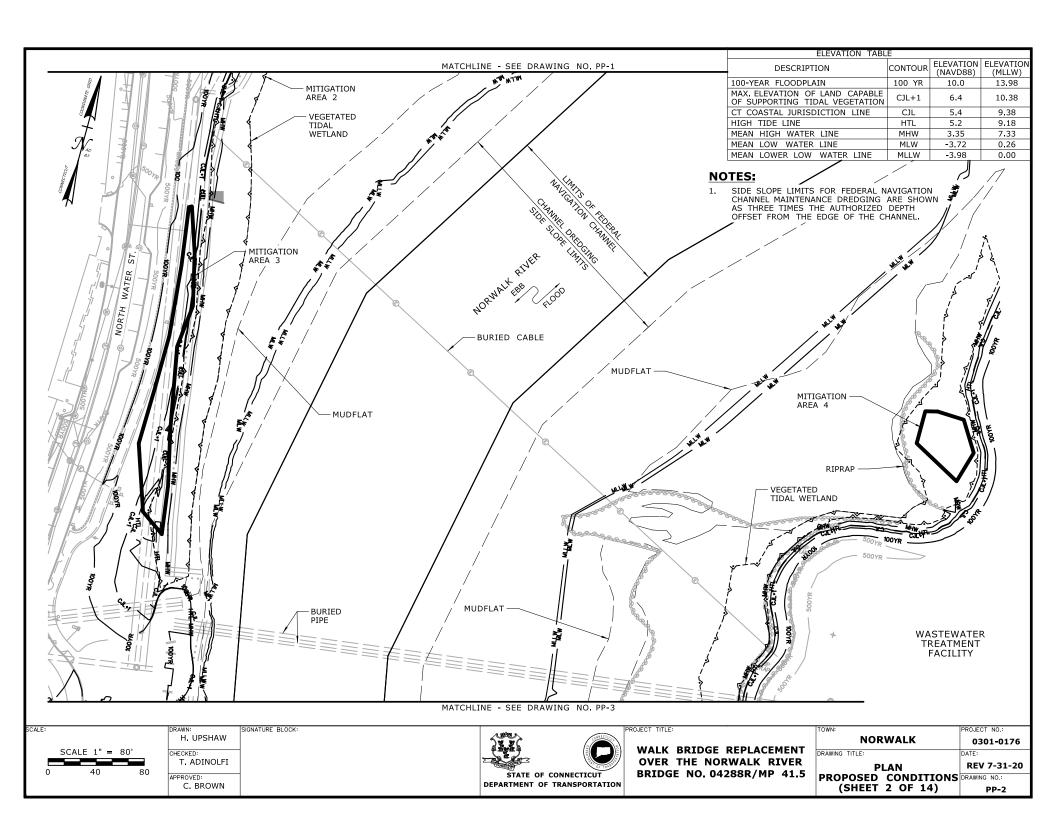
| | BRIDGE ELEVATION | REV 7-31-20 |
|---|------------------|--------------|
| | DRAWING TITLE: | DATE: |
| | NORWALK | 0301-0176 |
| | TOWN: | PROJECT NO.: |
| _ | ITOWN: | PROJECT NO: |

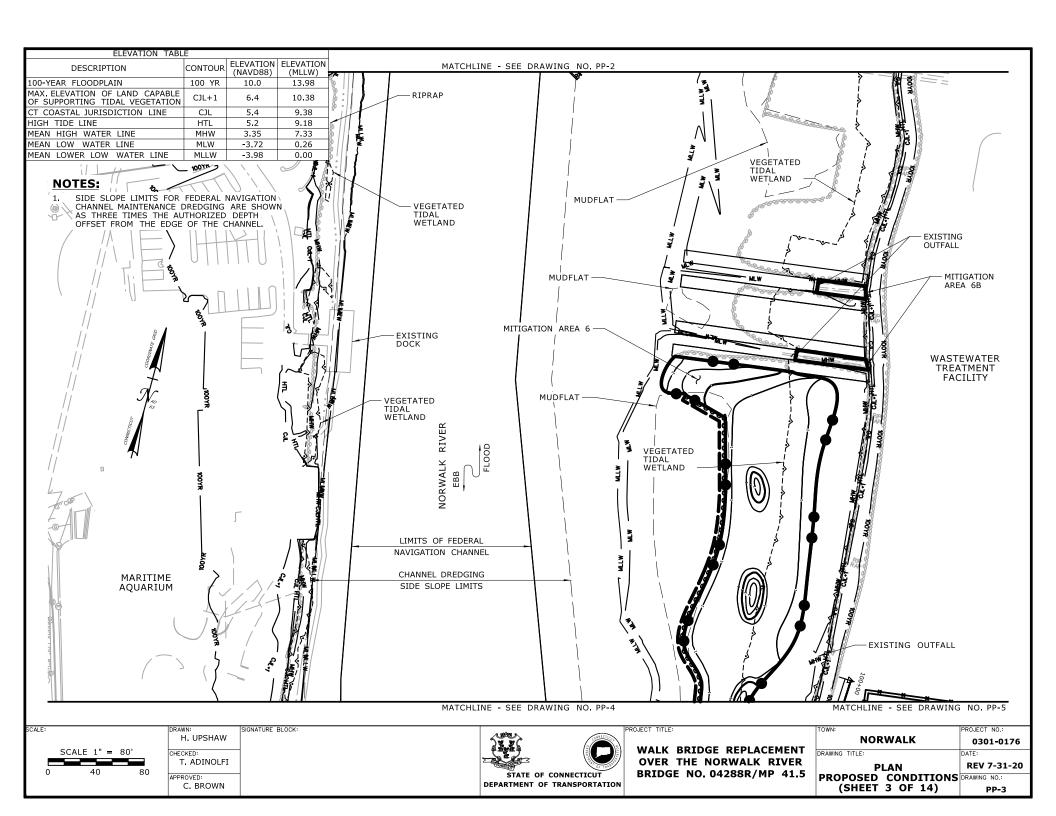
EXISTING CONDITIONS DRAWING NO.

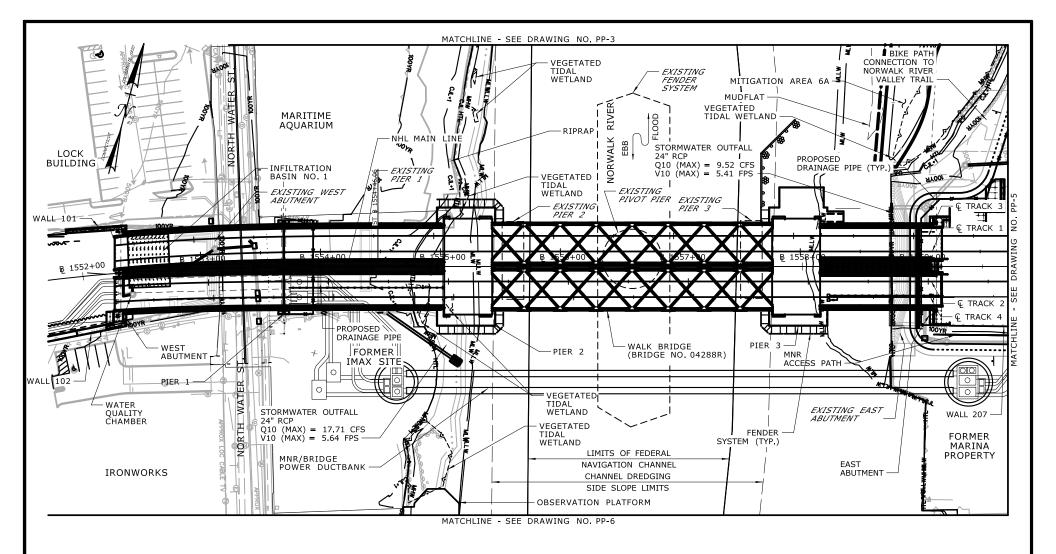
EP-9

(SHEET 14 OF 14)









| ELEVATION TABLE | | | | | | | |
|--|---------|-----------------------|---------------------|--|--|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | | | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | | | | |
| MAX.ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | | | | |
| SCALE: DRAWN: SIGNATURE BLOCK: | | | | | | | |

NOTES:

- SIDE SLOPE LIMITS FOR FEDERAL NAVIGATION CHANNEL MAINTENANCE DREDGING ARE SHOWN AS THREE TIMES THE AUTHORIZED DEPTH OFFSET FROM THE EDGE OF THE CHANNEL,
- THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. WITHIN THE RIVER, IT IS DEFINED AS EL. 12 (15,98 MLLW) AND EL. 10 (13,98 MLLW) DOWNSTREAM AND UPSTREAM OF THE BRIDGE, RESPECTIVELY. SEE FLOOD ZONE MAP (DWG. NO. GEN-6) FOR ADDITIONAL INFORMATION.



IECTICUT

WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

| TOWN: | PROJECT NO.: |
|---------------------|--------------|
| NORWALK | 0301-0176 |
| DRAWING TITLE: | DATE: |
| PLAN | REV 05-19-21 |
| PROPOSED CONDITIONS | DRAWING NO.: |
| (SHEET 4 OF 14) | PP-4 |

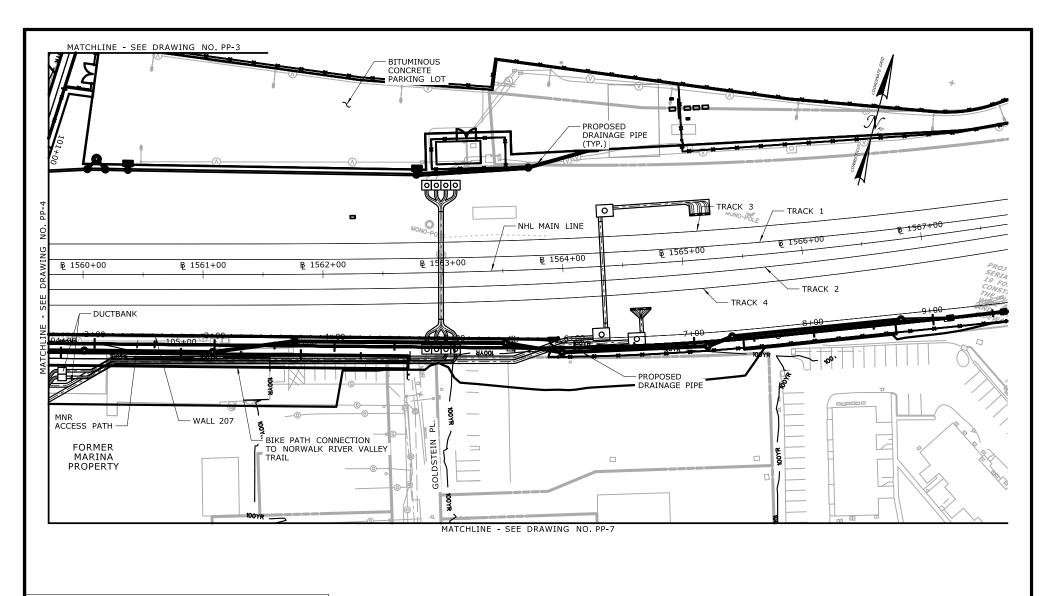
| | SCALE | 1" = | 80' | |
|---|-------|------|-----|----|
| | | | | |
| 0 | | 40 | | 80 |

H. UPSHAW

CHECKED:
T. ADINOLFI

APPROVED:
C. BROWN

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



| ELEVATION TABLE | | | | | | | |
|---|---------|-----------------------|---------------------|--|--|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | | | |
| 100-YEAR FLOODPLAIN | 100 YR | 13.0 | 16.98 | | | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | | | | |
| SCALE: DRAWN: SIGNATURE BLOCK: | | | | | | | |

SCALE 1" = 80'

H. UPSHAW CHECKED: T. ADINOLFI APPROVED: C. BROWN

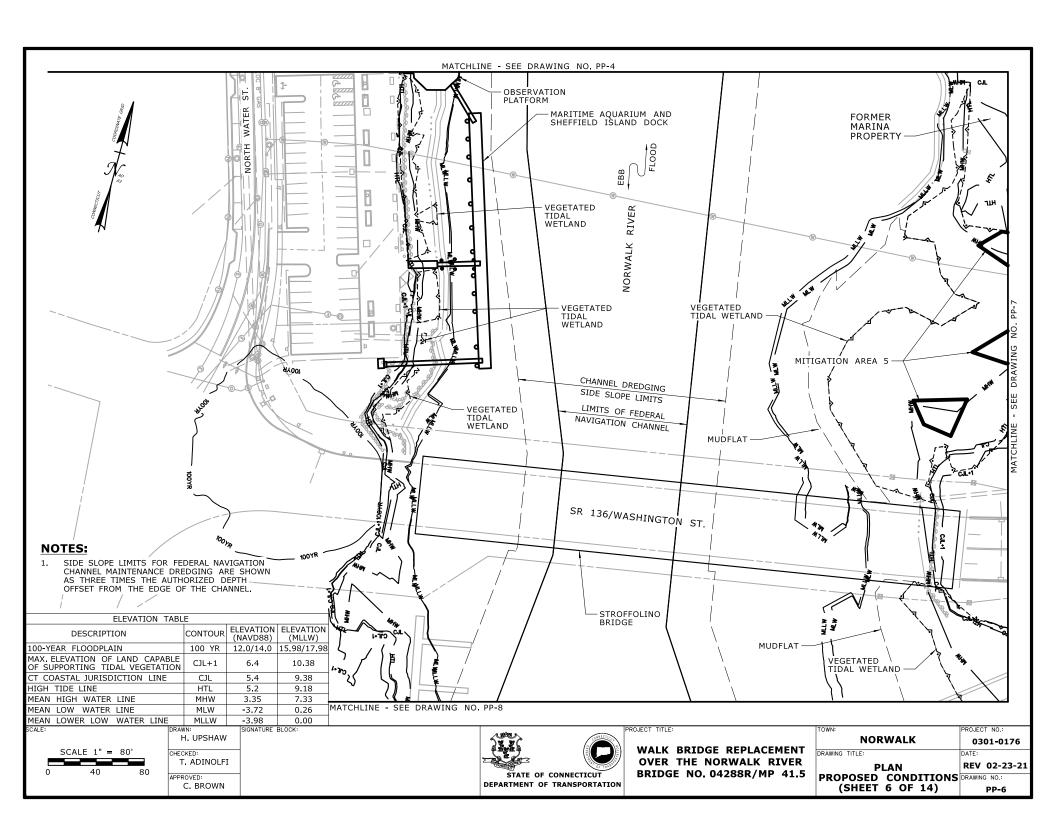


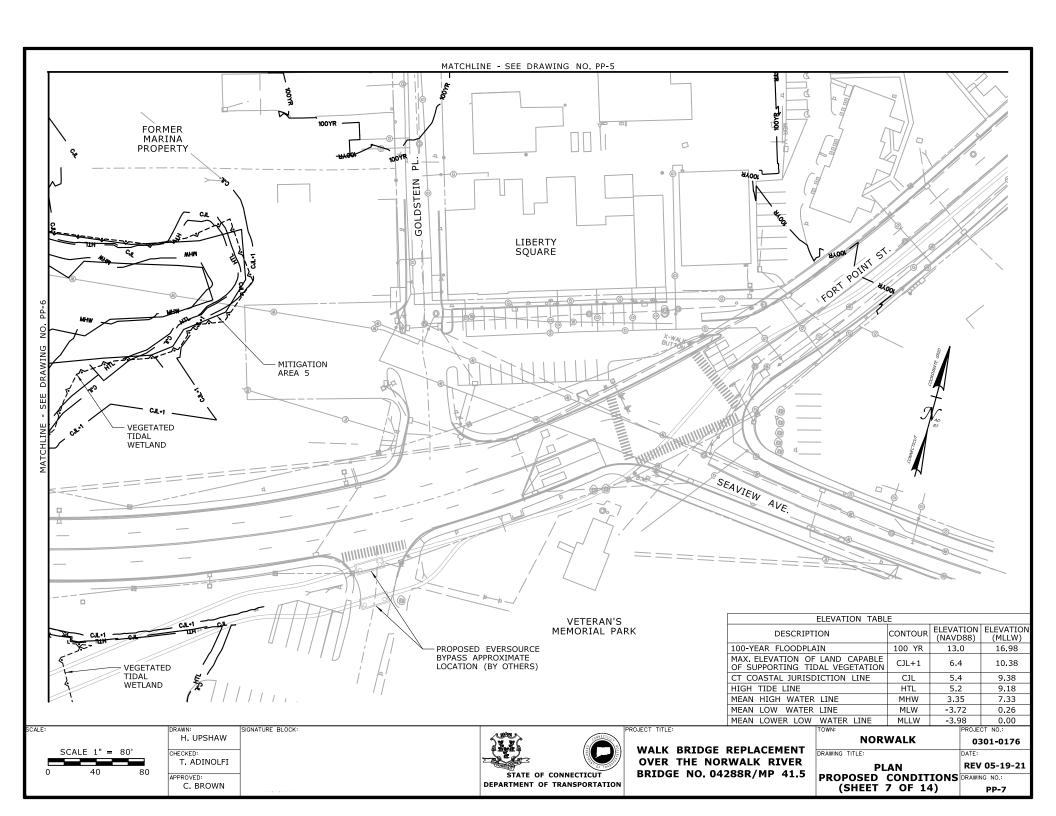
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

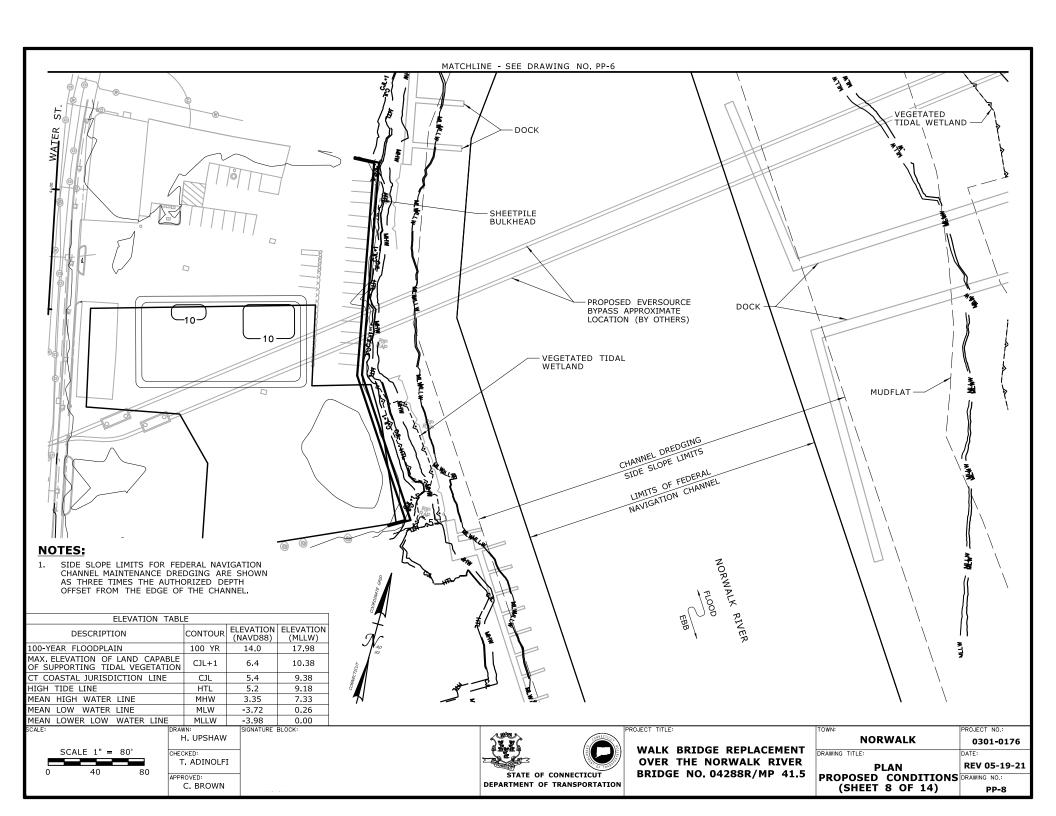
| TOWN: | PROJECT NO.: |
|---------------------|--------------|
| NORWALK | 0301-0176 |
| DRAWING TITLE: | DATE: |
| PLAN | REV 05-19-21 |
| PROPOSED CONDITIONS | DRAWING NO.: |

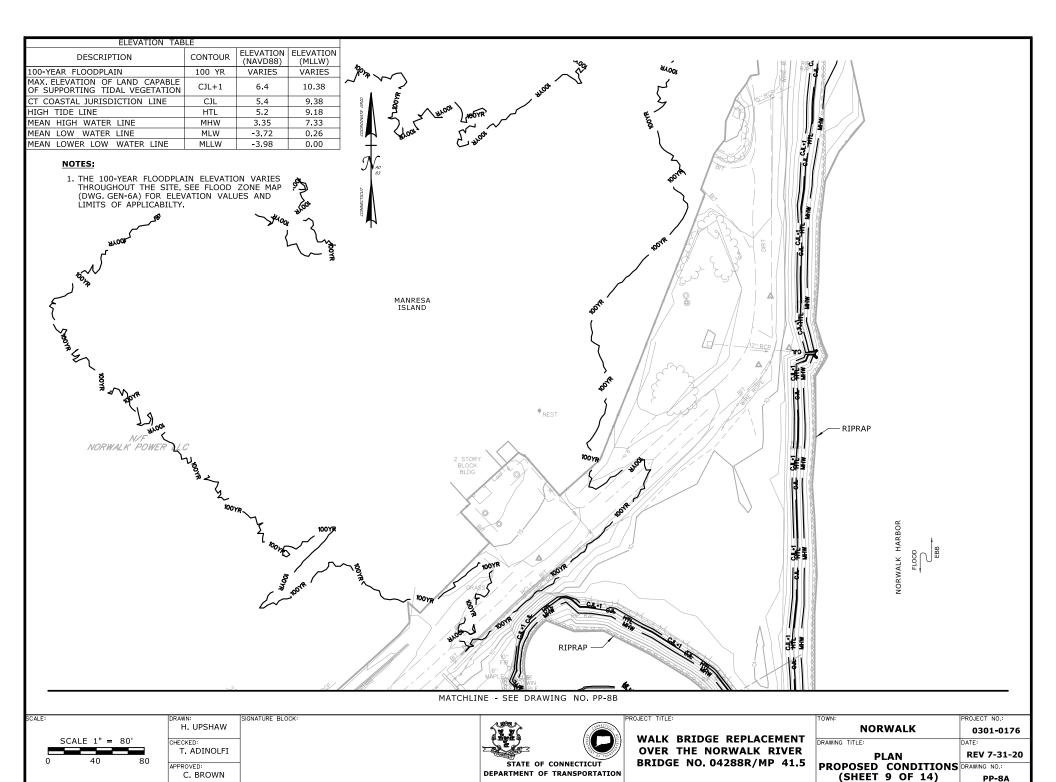
PP-5

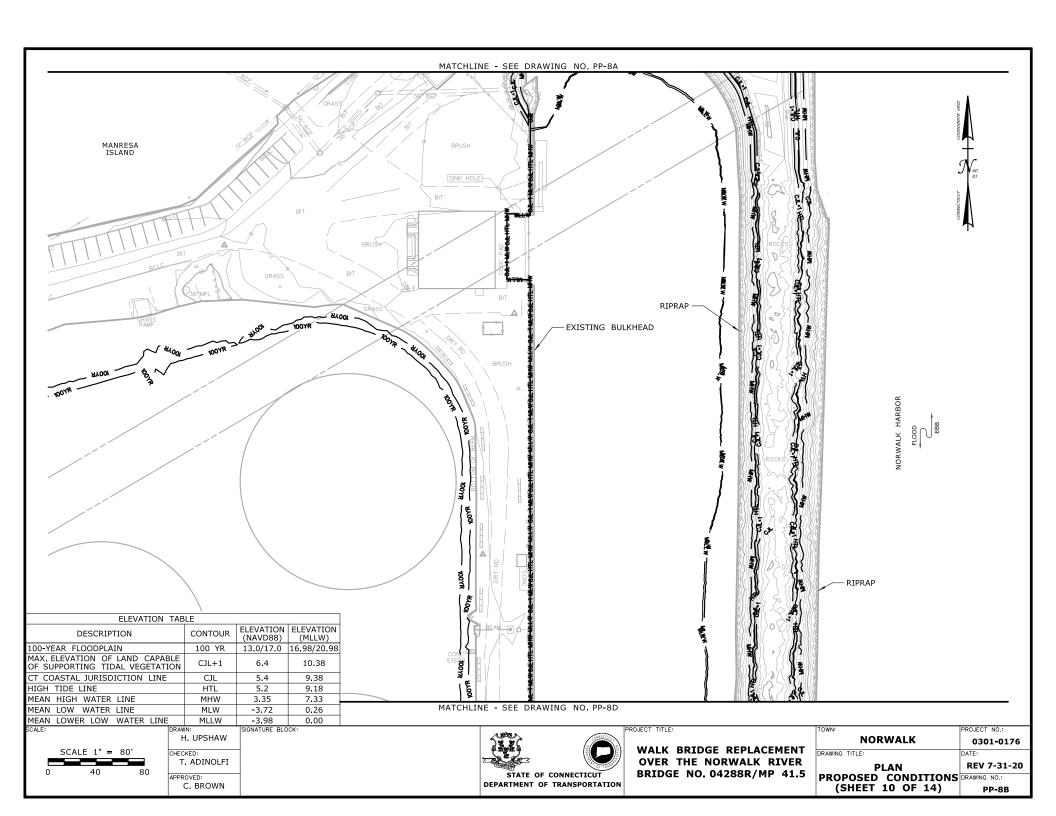
(SHEET 5 OF 14)



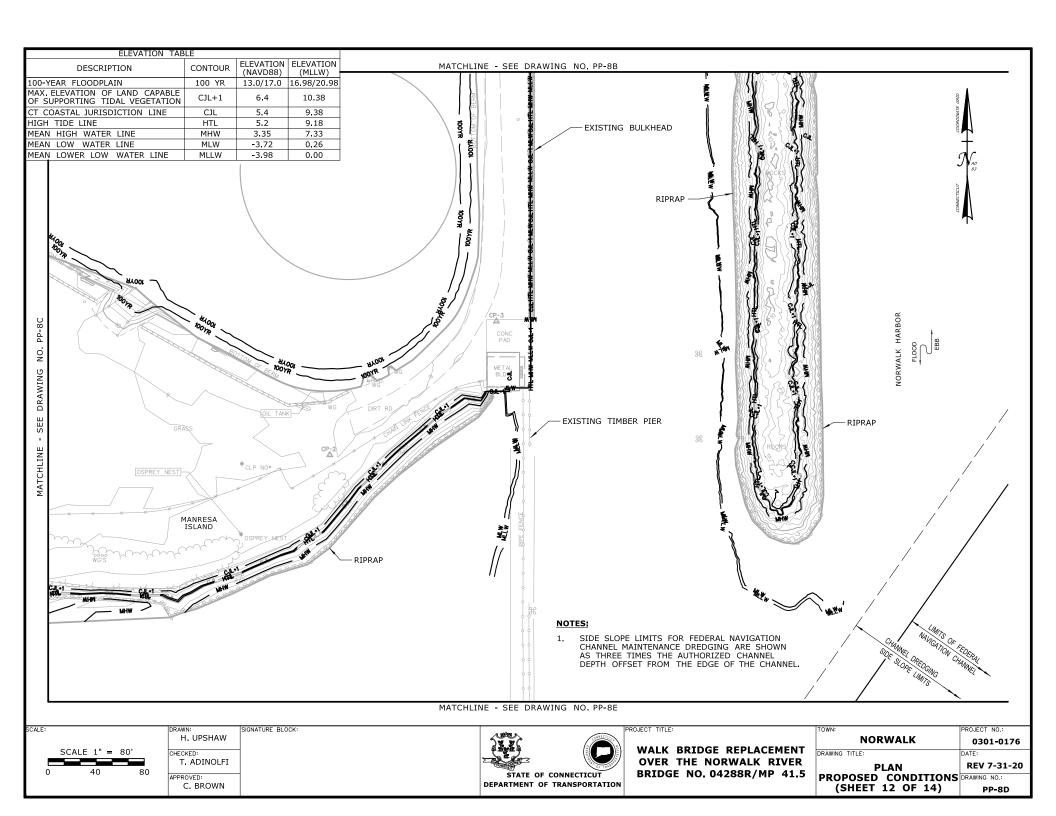








| FI EVATION TABLE | |
|--|--|
| DESCRIPTION DESCRIPTION CONTOUR (NAVD88) (MLW) 100-YEAR FLOODPLAIN 100 YR 13.0/17.0 16.98/20-98 MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION CT COASTAL JURISDICTION LINE HIGH TIDE LINE MEAN HIGH WATER LINE MEAN LOW WATER LINE MEAN LOW WATER LINE MEAN LOWER LOW WATER LINE MILW -3.72 0.26 MEAN LOWER LOW WATER LINE MILW -3.98 0.00 OSPREY NEST | SERECT TO AN AFRICA SERECT TO |
| SCALE: DRAWN: | PROJECT TITLE: WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5 PROJECT NO.: NORWALK 0301-0176 DATE: REV 7-31-20 PROPOSED CONDITIONS (SHEET 11 OF 14) PP-8C |



| ELEVATION TABLE | | | | | |
|--|---------|-----------------------|---------------------|---|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | L | |
| 100-YEAR FLOODPLAIN | 100 YR | 17.0 | 20.98 | | |
| MAX.ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | | |





MATCHLINE - SEE DRAWING NO. PP-8D

NOTES:

1. SIDE SLOPE LIMITS FOR FEDERAL NAVIGATION CHANNEL MAINTENANCE DREDGING ARE SHOWN AS THREE TIMES THE AUTHORIZED CHANNEL DEPTH OFFSET FROM THE EDGE OF THE CHANNEL.





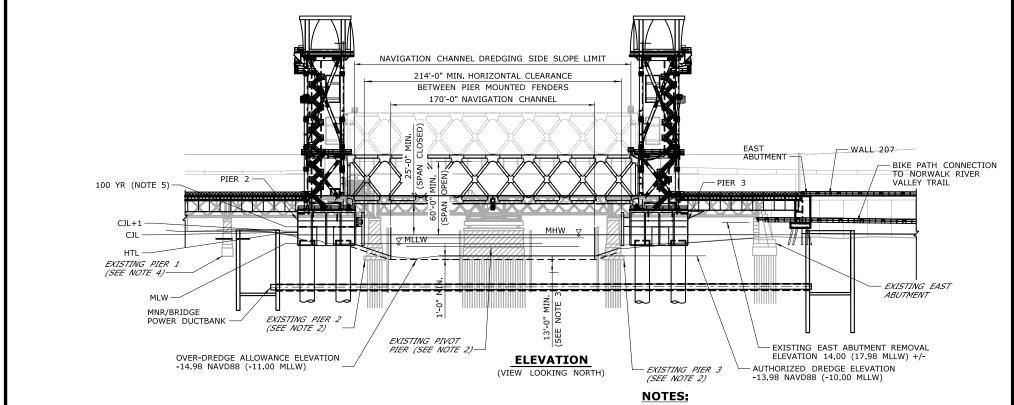
WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

| Ī | TOWN: | PROJECT NO.: |
|---|---------------------|--------------|
| | NORWALK | 0301-0176 |
| | DRAWING TITLE: | DATE: |
| | PLAN | REV 7-31-20 |
| | PROPOSED CONDITIONS | DRAWING NO.: |
| | (SHEET 13 OF 14) | PP-8E |

SCALE 1" = 80'

SIGNATURE BLOCK: H. UPSHAW CHECKED: T. ADINOLFI APPROVED: C. BROWN

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION



- VERTICAL DATUM IS NAVD88, ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARAENTHESES.
- AUTHORIZED DREDGE ELEVATION FOR THE FEDERAL NAVIGATION CHANNEL IS 10 FEET BELOW MLLW (-13.98 NAVD88, -10.00 MLLW).
- EXISTING BRIDGE FOUNDATIONS WILL BE REMOVED TO THE BOTTOM OF THE TIMBER MAT, PER COORDINATION WITH THE UNITED STATES ARMY CORPS OF ENGINEERS AND THE UNITED STATES COAST GUARD,
- MNR AND BRIDGE POWER DUCTBANK CROSSINGS WILL BE INSTALLED AT LEAST 13 FEET BELOW THE AUTHORIZED DREDGE ELEVATION WITHIN LIMITS OF FEDERAL NAVIGATION
- EXISTING FOUNDATIONS AT PIER 1 AND WEST ABUTMENT WILL BE REMOVED TO AT LEAST 2 FEET BELOW SURROUNDING GRADE.
- THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. WITHIN THE RIVER, IT IS DEFINED AS EL. 12 (15.98 MLLW) AND EL. 10 (13.98 MLLW) DOWNSTREAM AND UPSTREAM OF THE BRIDGE, RESPECTIVELY, SEE FLOOD ZONE MAP (DWG, NO. GEN-6) FOR ADDITIONAL INFORMATION.
- SIDE SLOPE LIMITS FOR FEDERAL NAVIGATION CHANNEL MAINTENANCE DREDGING ARE SHOWN AS THREE TIMES THE AUTHORIZED DEPTH OFFSET FROM THE EDGE OF THE CHANNEL.

| ELEVATION TABLE | | | | | | | |
|---|---------|-----------------------|---------------------|--|--|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | | | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | | | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | | | | |
| | | | | | | | |

SCALE 1" = 80'

SIGNATURE BLOCK: H. UPSHAW CHECKED: T. ADINOLFI APPROVED: C. BROWN

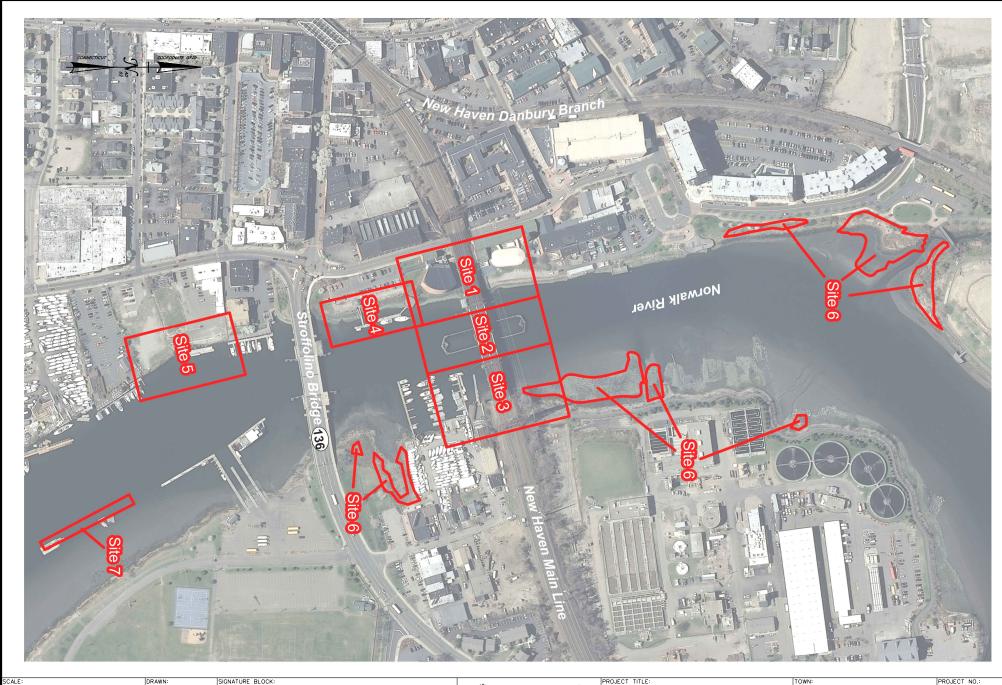


WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

| TOWN: | PROJECT NO.: |
|----------------|--------------|
| NORWALK | 0301-0176 |
| DRAWING TITLE: | DATE: |

BRIDGE ELEVATION PROPOSED CONDITIONS DRAWING NO.: (SHEET 14 OF 14)

REV 05-19-21



SCALE 1" = 300'

T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

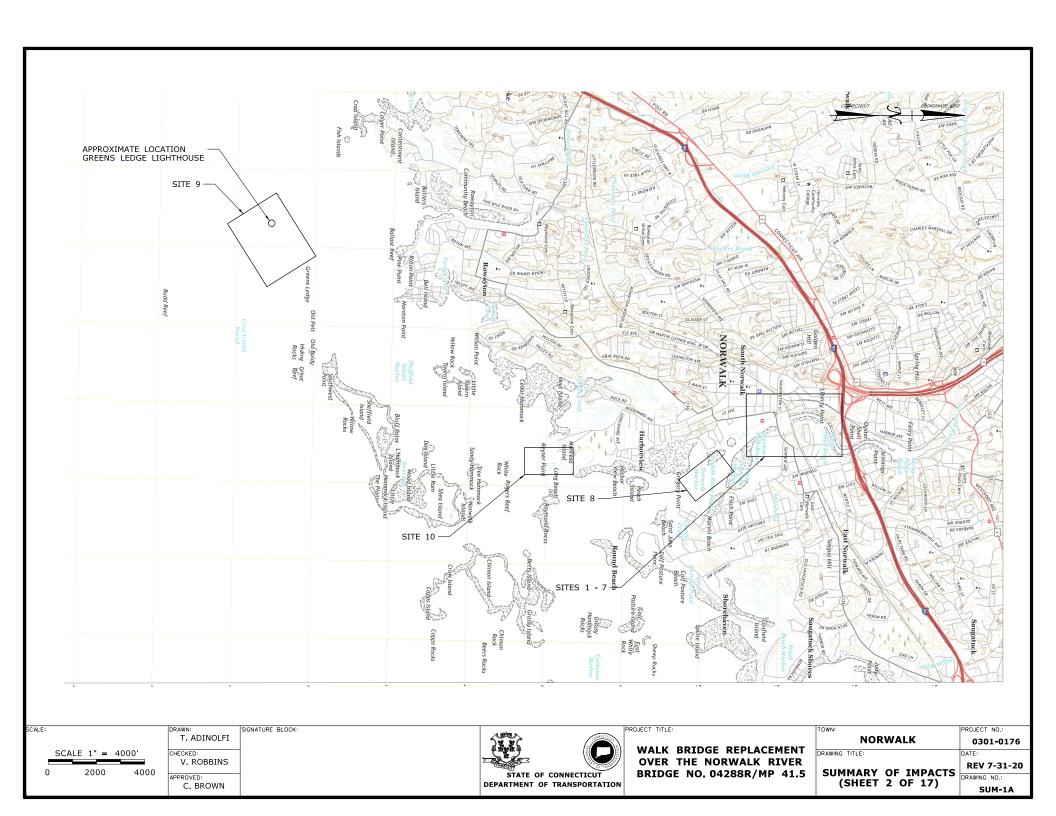
WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

NORWALK DRAWING TITLE:

REV 7-31-20

0301-0176

SUMMARY OF IMPACTS REV 7-31
(SHEET 1 OF 17) SUM-1



| SUMMARY OF TEMPORARY IMPACTS (SF) | | | | | | | |
|-----------------------------------|-------------------------------|--------------------|--------------------|--------------|--------------|----------------------------------|--|
| | | STA | FEDI | ERAL | | | |
| SITE | VEGETATED TIDAL WETLAND | INTERTIDAL FLAT | INTERTIDAL ZONE | BELOW CJL | BELOW HTL | FEDERAL NAVIGATION CHANNEL | |
| 1 | 0 | 0 | 100 | 0 | 100 | 0 | |
| 2 | 0 | 0 | 0 | 200 | 200 | 200 | |
| 3 | 0 | 0 | 100 | 0 | 100 | 0 | |
| 4 | 0 | 0 | 200 | 6,400 | 6,600 | 0 | |
| 5 | 0 | 0 | 100 | 200 | 300 | 0 | |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL | 0 | 0 | 500 | 6,800 | 7,300 | 200 | |

| SUMMARY OF PERMANENT IMPACTS (SF) | | | | | | |
|-----------------------------------|-------------------------------|--------------------|--------------------|--------------|--------------|----------------------------------|
| | STATE | | | | | ERAL |
| SITE | VEGETATED TIDAL WETLAND | INTERTIDAL FLAT | INTERTIDAL ZONE | BELOW CJL | BELOW HTL | FEDERAL NAVIGATION CHANNEL |
| 1 | 2,800 | 0 | 7,100 | 9,100 | 17,200 | 0 |
| 2 | 0 | 0 | 0 | 50,500 | 50,500 | 50,500 |
| 3 | 3,700 | 200 | 10,200 | 17,000 | 29,600 | 0 |
| 4 | 100 | 0 | 0 | 4,800 | 4,900 | 0 |
| 5 | 1,900 | 0 | 8,100 | 9,900 | 19,500 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 0 | 0 | 0 | 100 | 100 | 0 |
| 8 | 0 | 0 | 0 | 300 | 300 | 0 |
| 9 | 0 | 0 | 0 | 400 | 400 | 0 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 8,500 | 200 | 25,400 | 92,100 | 122,500 | 50,500 |

| SUMMARY OF DREDGING QUANTITIES | | | | | | | | |
|--------------------------------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| | MAINTENANCE/NAVIGATION CHANNEL | | | | NEW | | | |
| SITE | REMO | OVAL | FILL | NET | REMO | OVAL | FILL | NET |
| | (SF) | (CY) | (CY) | (CY) | (SF) | (CY) | (CY) | (CY) |
| 1 | 4,900 | 330 | 0 | 330 | 19,100 | 4,350 | 4,290 | 60 |
| 2 | 40,800 | 4,210 | 0 | 4,210 | 21,600 | 3,670 | 4,110 | -440 |
| 3 | 7,500 | 770 | 0 | 770 | 25,100 | 3,460 | 3,670 | -210 |
| 4 | 0 | 0 | 0 | 0 | 4,600 | 300 | 0 | 300 |
| 5 | 0 | 0 | 0 | 0 | 21,600 | 6,400 | 0 | 6,400 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 53,200 | 5,310 | 0 | 5,310 | 92,000 | 18,180 | 12,070 | 6,110 |

NOTES:

- VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES
- FOR PLAN LIMITS OF SITES USED FOR IMPACT SUMMARIES, SEE DWG. SUM-1.
- ACTIVITIES AND IMPACTS IN/AROUND THE BRIDGE ARE LOCATED IN SITES 1,2, AND 3, DELINEATED BY THE LIMITS OF THE FEDERAL NAVIGATION CHANNEL, SITE 1 IS WEST OF THE CHANNEL, SITE 2 IS WITHIN THE CHANNEL, AND SITE 3 IS EAST OF THE CHANNEL.
- SITE 4 INCLUDES IMPACTS ASSOCIATED WITH DREDGING, TEMPORARY DOCK RELOCATION AND PERMANENT DOCK CONSTRUCTION AT THE VESSEL DOCKS ON THE WEST SIDE OF THE RIVER SOUTH OF WALK BRIDGE,
- SITE 5 INCLUDES IMPACTS ASSOCIATED WITH DREDGING, BULKHEAD CONSTRUCTION AND TEMPORARY DOCK CONSTRUCTION AT THE MARINE STAGING YARD.
- SITE 6 CONSIST OF SIX INDIVIDUAL WETLAND MITIGATION SITES ALONG THE NORWALK RIVER, THERE ARE NO IMPACTS ASSOCIATED WITH SITE 6.
- SITES 7, 8 AND 9 INCLUDES IMPACTS ASSOCIATED WITH BARGE MOORING IN THE NORWALK RIVER AND LONG ISLAND SOUND REQUIRED FOR CONSTRUCTION.
- SITE 10 IS A TEMPORARY STAGING YARD AT MANRESA ISLAND, THERE ARE NO IMPACTS ASSOCIATED WITH SITE 10.
- IMPACTS WITH DURATION'S LESS THAN 24 MONTHS ARE CONSIDERED TEMPORARY. IMPACTS DUE TO TEMPORARY FILL AND/OR STRUCTURES THAT ARE EXPECTED TO BE IN PLACE MORE THAN 24 MONTHS ARE CONSIDERED PERMANENT.
- 10. INTERTIDAL ZONE IMPACTS INCLUDE AREAS BETWEEN MLW AND HTL THAT ARE NOT WITHIN A VEGETATED TIDAL WETLAND OR INTERTIDAL FLAT.
- 11. IMPACTS BELOW THE CJL INCLUDE AREAS BELOW THE CJL ELEVATION, SHORE TO SHORE, THAT ARE NOT INCLUDED AS VEGETATED TIDAL WETLAND, INTERTIDAL FLAT, OR INTERTIDAL ZONE IMPACTS
- 12. IMPACTS BELOW THE HTL INCLUDE ALL AREAS BELOW THE HTL ELEVATION, SHORE TO SHORE, INCLUDING THOSE DESIGNATED AS VEGETATED TIDAL WETLAND, INTERTIDAL FLAT, OR
- 13. FEDERAL NAVIGATION CHANNEL IMPACTS INCLUDE TEMPORARY AND PERMANENT IMPACTS TO NAVIGABILITY OF THE RIVER WITHIN THE LIMITS OF THE FEDERAL NAVIGATION CHANNEL.
- 14. PERMANENT VEGETATED TIDAL WETLAND IMPACT IN SITE 1 AND 3 INCLUDE IMPACTS DUE TO SHADING, IN THE EVENT THAT VEGETATION IS LOST DURING CONSTRUCTION, THIS AREA IS CONSERVATIVELY INCLUDED AS A PERMANENT IMPACT IN THE DETERMINATION OF MITIGATION REQUIREMENTS.
- 15. THE AUTHORIZED CHANNEL DEPTH WITHIN THE LIMITS OF MAINTENANCE DREDGING IS 10 FT, MEASURED FROM MLLW, WITH CORRESPONDING SIDE SLOPE LIMITS EXTENDING 30 FT (AT 3H; 1V SLOPE) LANDWARD OF THE FEDERAL NAVIGATION CHANNEL LIMITS,
- 16. MAINTENANCE DREDGING INCLUDES ALL MATERIAL WITHIN THE NAVIGATION CHANNEL AND CHANNEL DREDGING SIDE SLOPE LIMITS, NEW DREDGING INCLUDES ALL MATERIAL THAT IS NOT DEFINED AS MAINTENANCE DREDGING. NET DREDGING IS EQUAL TO THE VOLUME OF MATERIAL REMOVED LESS FILL PLACED WITHIN THE DREDGED AREA.
- 17, FOR SUMMARY OF FLOODPLAIN IMPACTS, SEE DWGS, FP-1 TO FP-11,
- 18. THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. SEE FLOOD ZONE MAP (DWG. GEN-6) FOR ELEVATION VALUES AND LIMITS OF APPLICABILITY.

| ELEVATIO | N TABLE | | |
|---|---------|-----------------------|---------------------|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) |
| 100-YEAR FLOODPLAIN | 100 YR | SEE NOTE 18 | SEE NOTE 18 |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 |

CALE:

T. ADINOLFI CHECKED V. ROBBINS APPROVED

C. BROWN

SIGNATURE BLOCK:

STATE OF CONNECTICUT

WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5 DEPARTMENT OF TRANSPORTATION

NORWALK

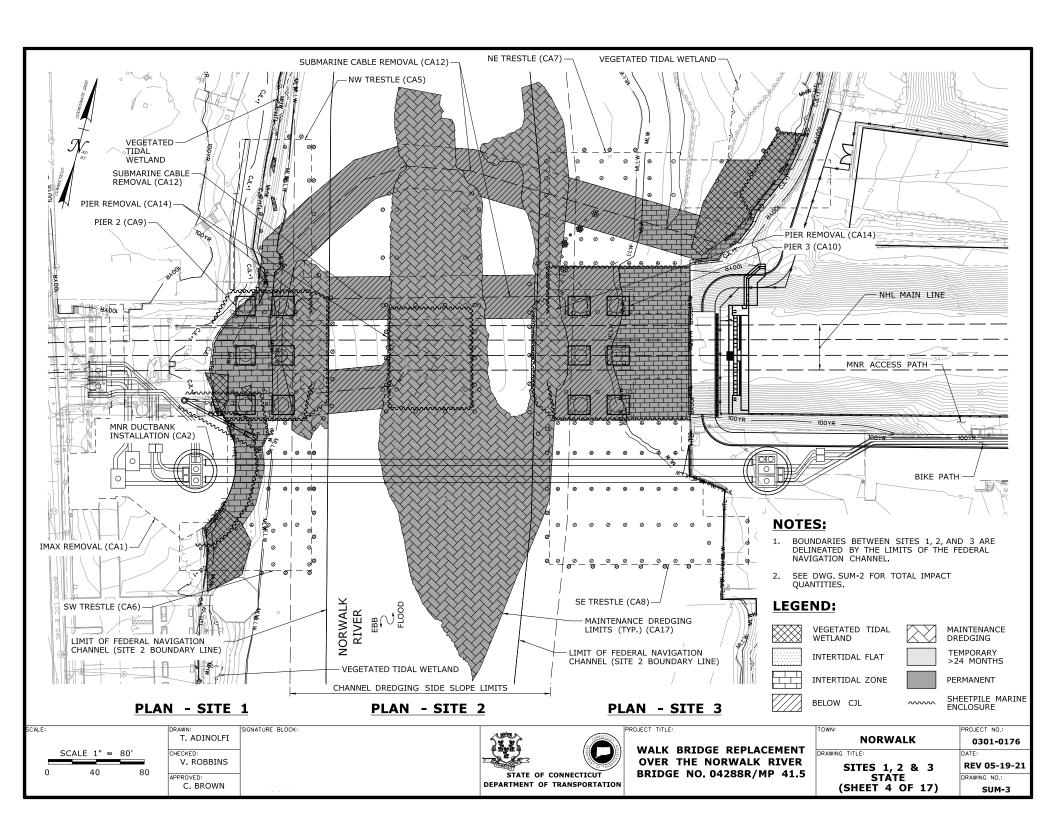
DRAWING TITLE:

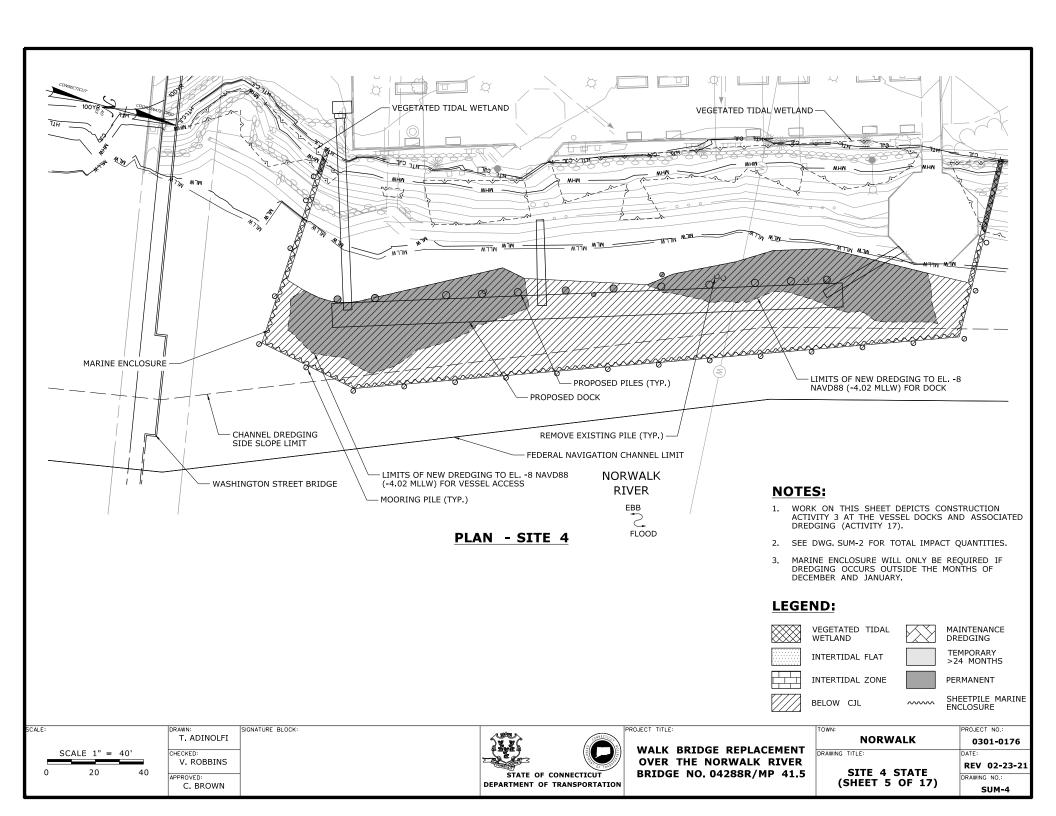
0301-0176

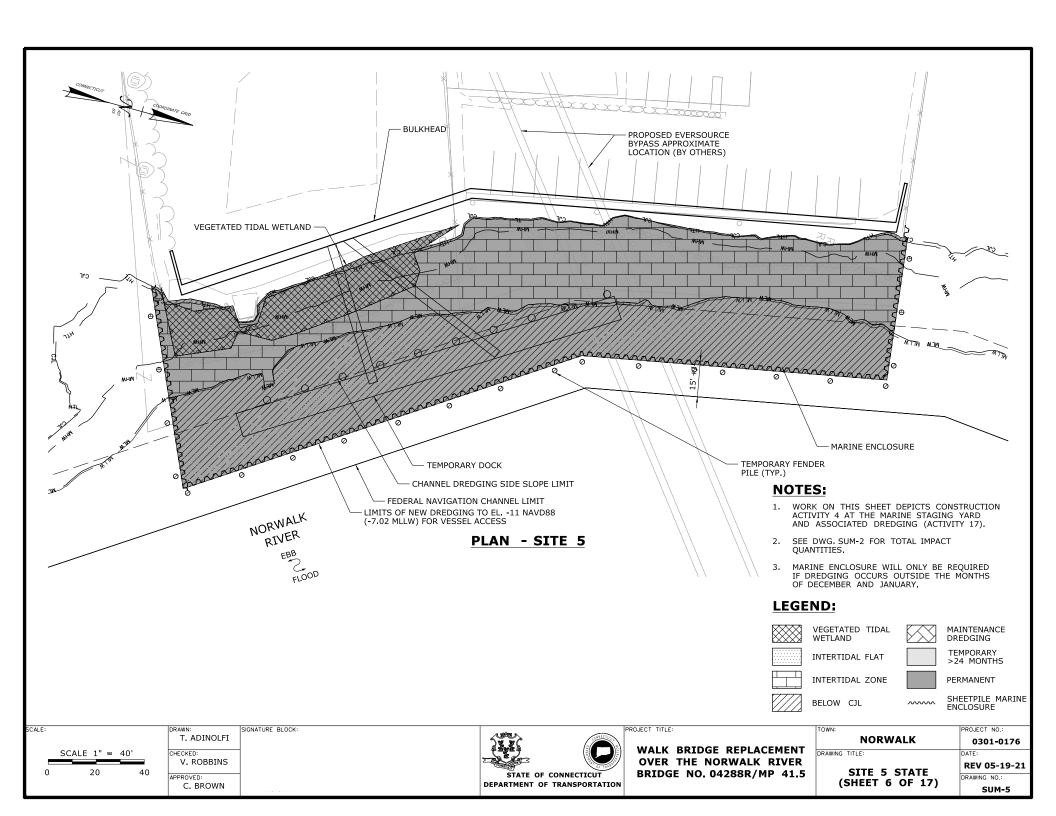
SUMMARY OF IMPACTS (SHEET 3 OF 17)

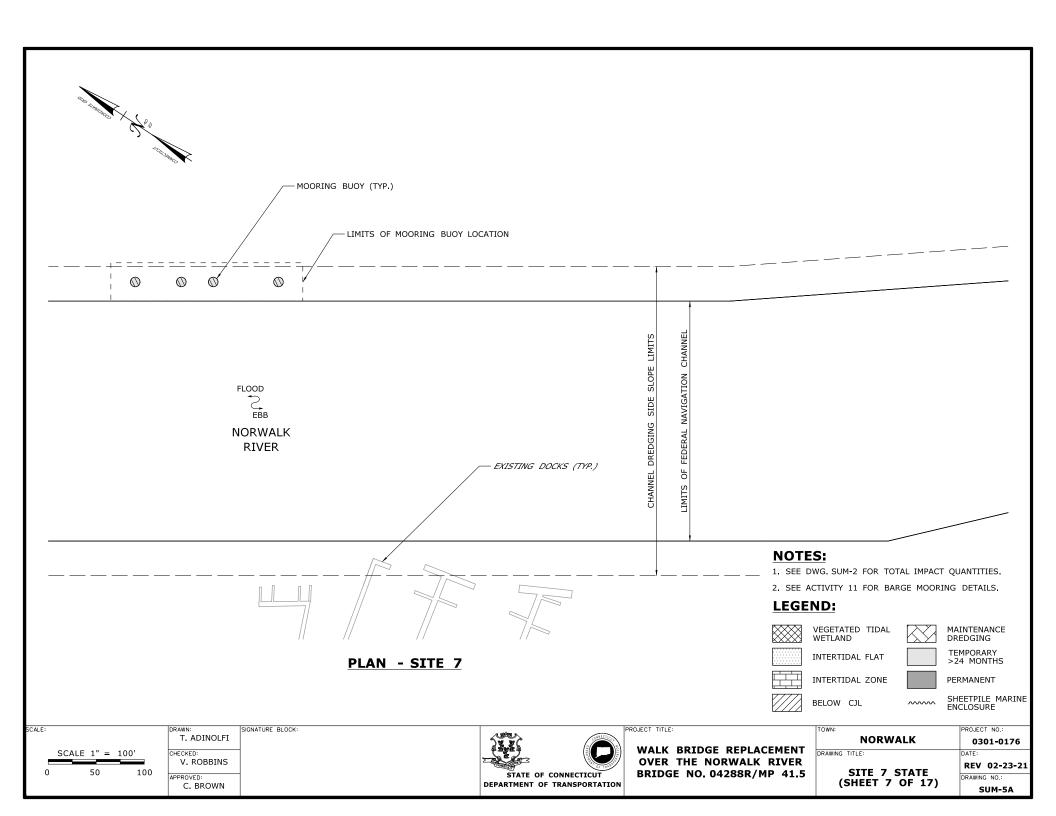
REV 02-23-21 DRAWING NO.:

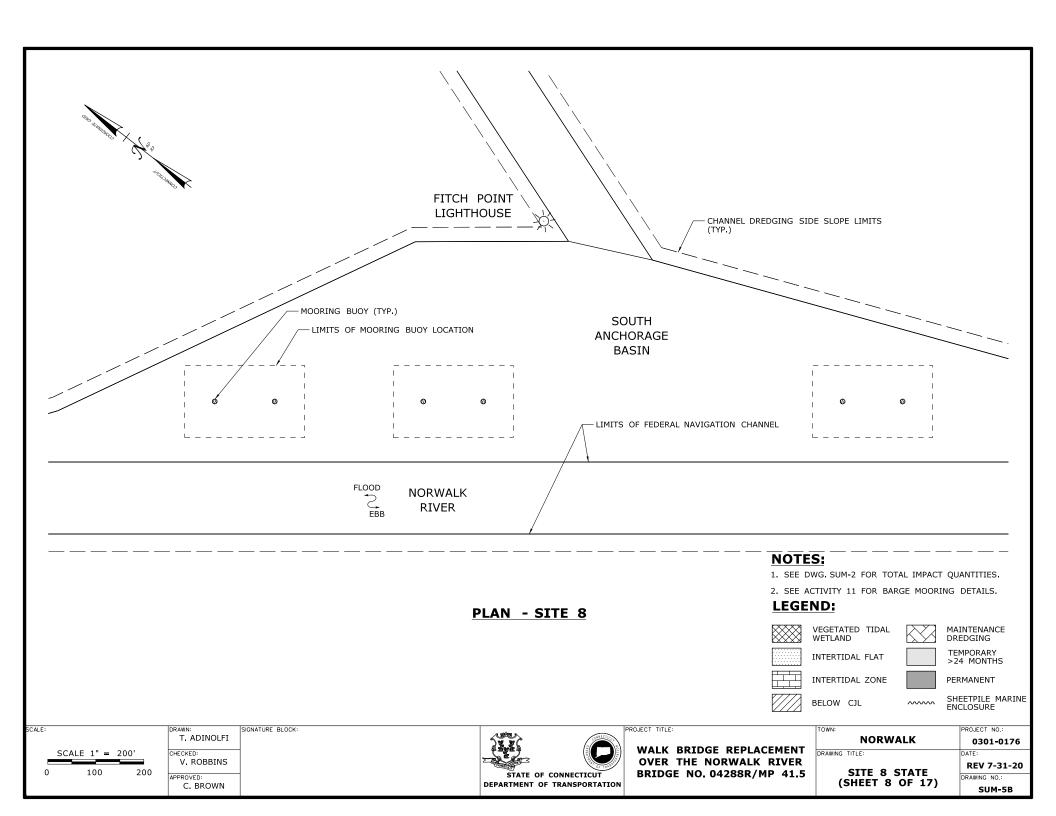
SUM-2







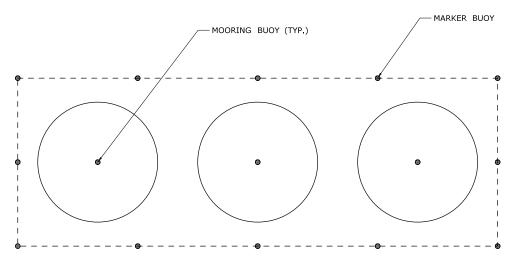






LONG ISLAND SOUND





PLAN - SITE 9

NOTES:

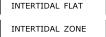
- 1. SEE DWG. SUM-2 FOR TOTAL IMPACT QUANTITIES.
- 2. SEE ACTIVITY 11 FOR BARGE MOORING DETAILS.

LEGEND:













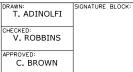
BELOW CJL

SHEETPILE MARINE ENCLOSURE

PROJECT NO.: 0301-0176

| | SCALE | 1" = | 400' | |
|---|-------|------|------|-----|
| | | | | |
| 0 | | 200 | | 400 |

SCALE:







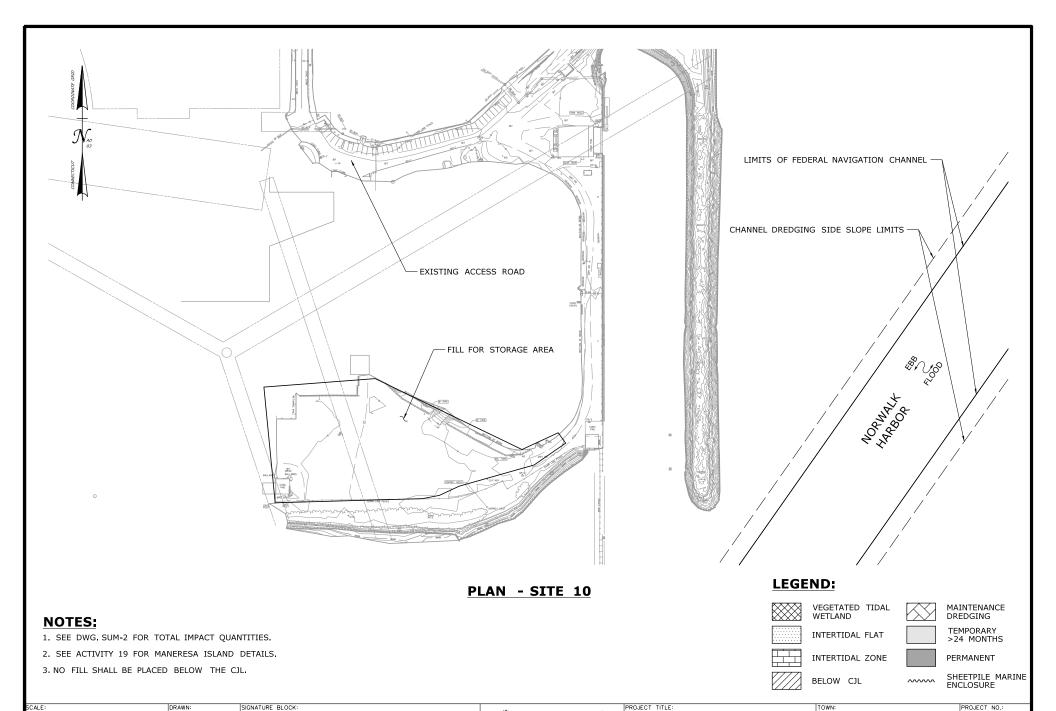
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

| | NORWALK |
|---------|---------|
| DRAWING | TITLE: |

REV 02-23-21

SITE 9 STATE (SHEET 9 OF 17)

DRAWING NO.: SUM-5C



SCALE 1'' = 200'





STATE OF CONNECTICUT

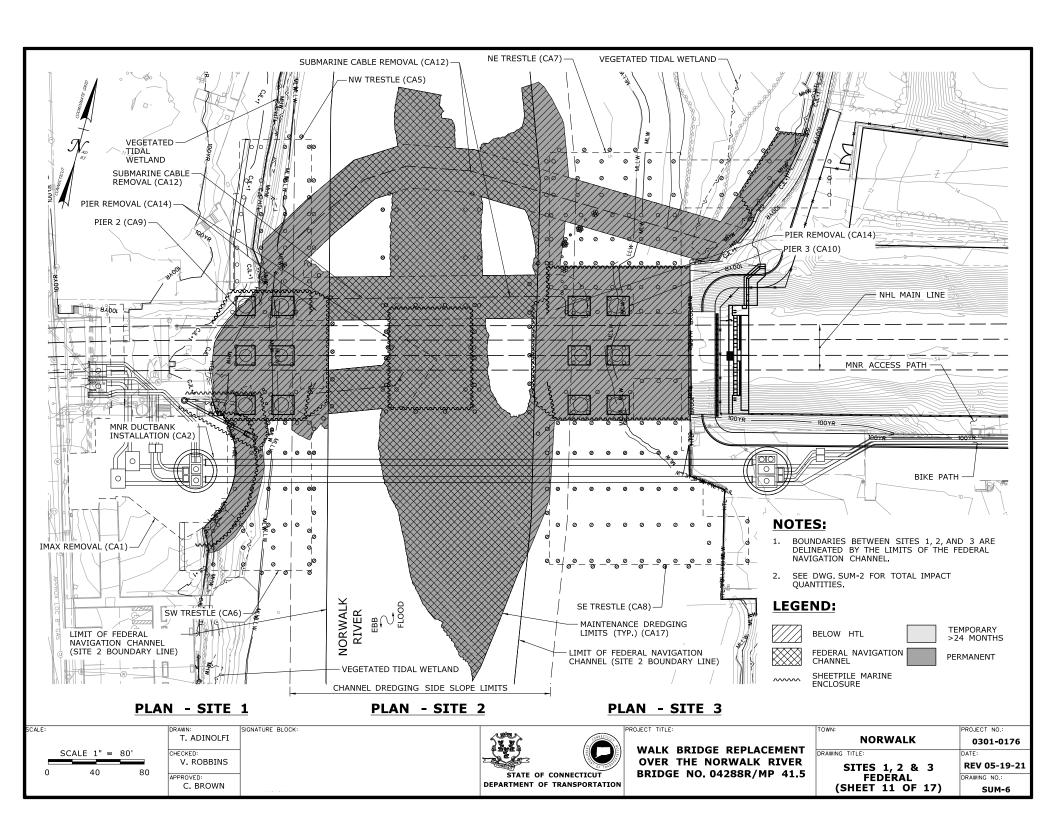
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

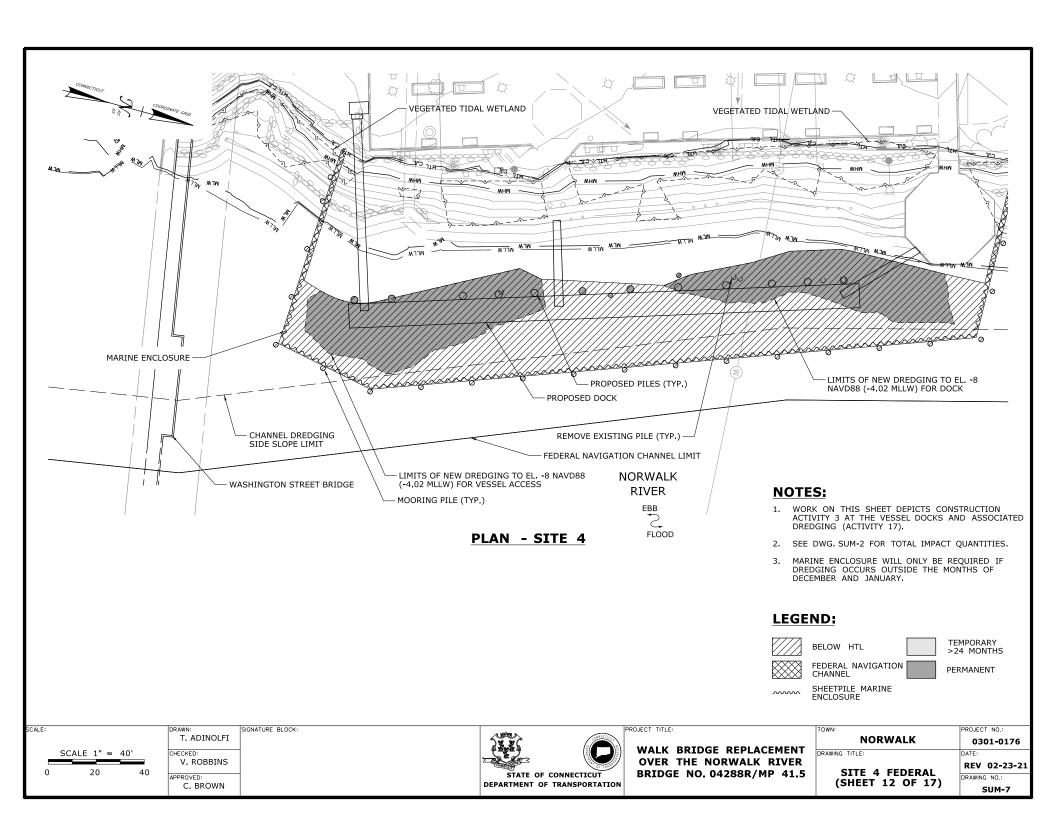
TOWN: NORWALK DRAWING TITLE:

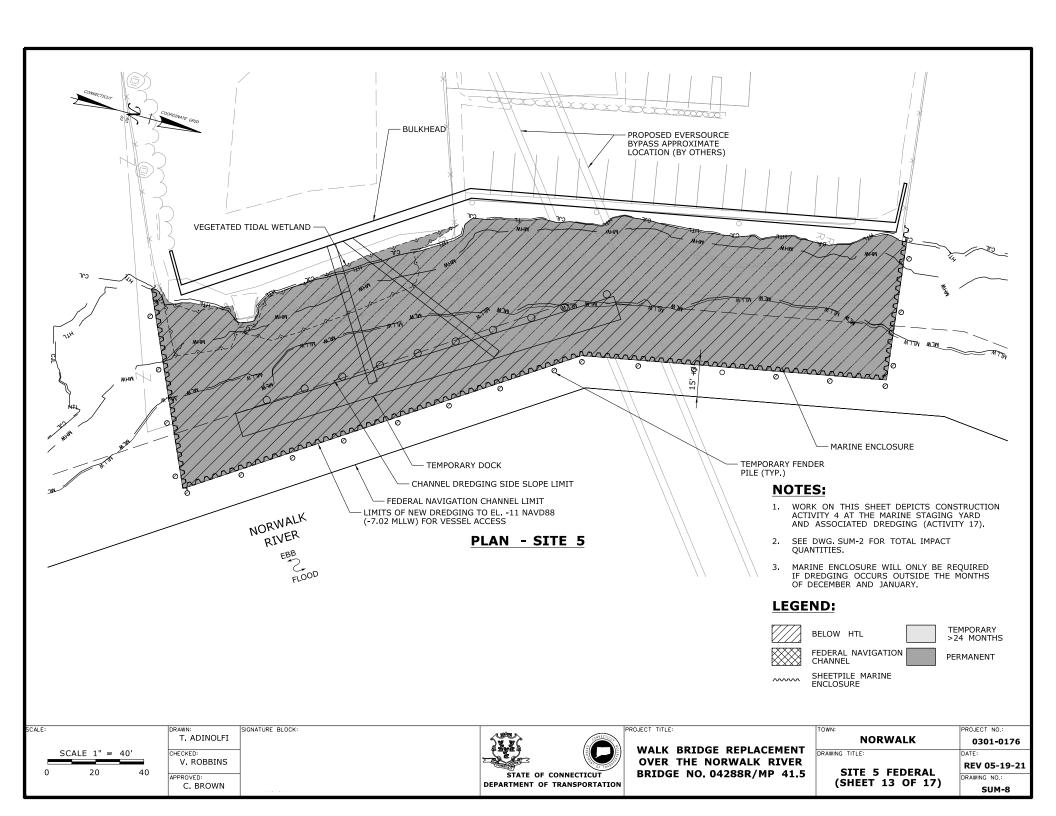
SITE 10 STATE (SHEET 10 OF 17)

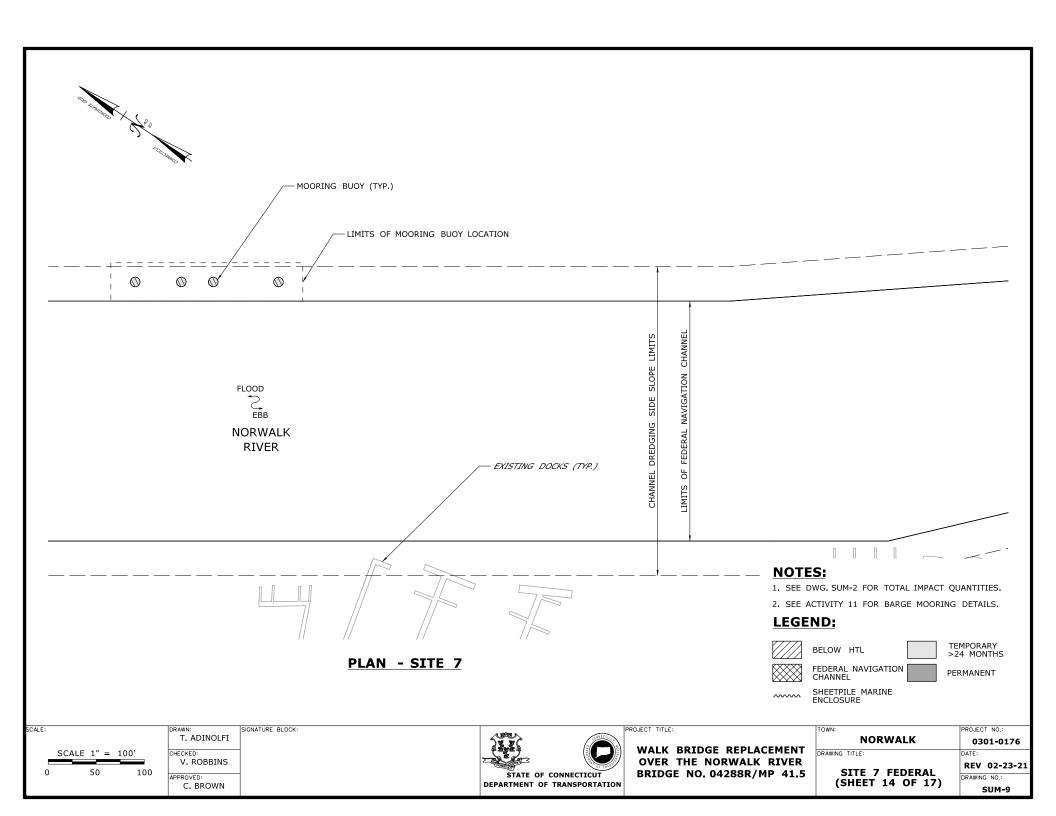
REV 7-31-20 DRAWING NO.: SUM-5D

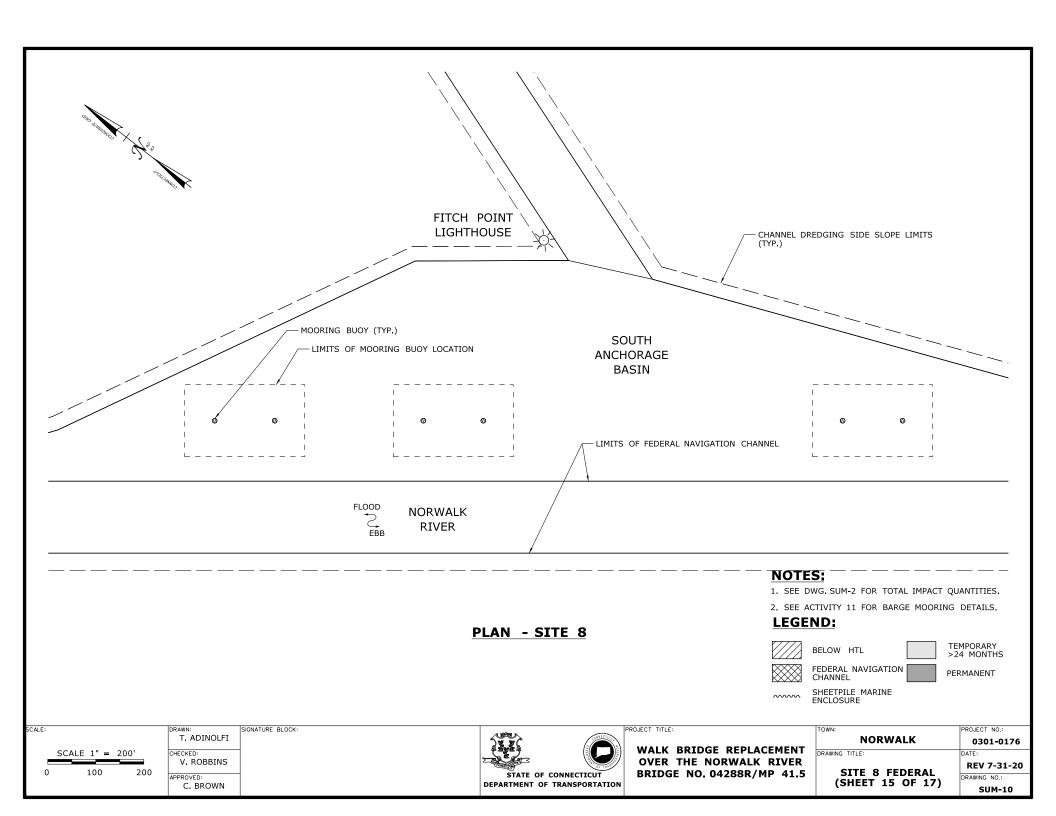
0301-0176







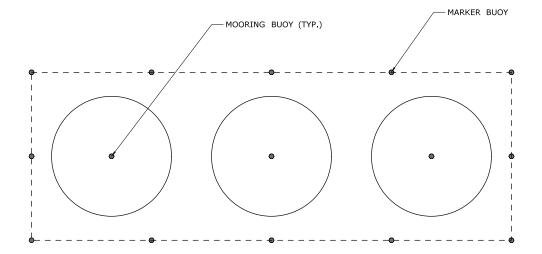






GREENS LEDGE LIGHTHOUSE

LONG ISLAND SOUND



PLAN - SITE 9

NOTES:

- 1. SEE DWG. SUM-2 FOR TOTAL IMPACT QUANTITIES.
- 2. SEE ACTIVITY 11 FOR BARGE MOORING DETAILS.

LEGEND:

BELOW HTL

TEMPORARY >24 MONTHS

FEDERAL NAVIGATION CHANNEL

PERMANENT

SHEETPILE MARINE ENCLOSURE

| SCALE: | | | | |
|--------|-------|------|------|---|
| _ | SCALE | 1" = | 400' | |
| _ | | | | _ |
| 0 | | 200 | 40 | 0 |

SIGNATURE BLOCK: T. ADINOLFI V. ROBBINS APPROVED: C. BROWN





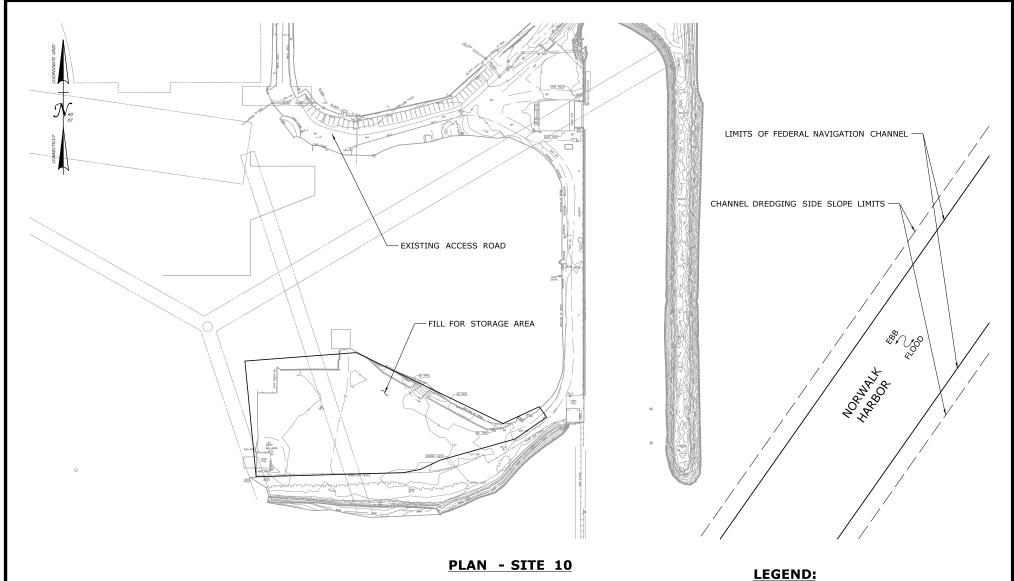
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

| | NORWALK |
|-------|---------|
| TOWN: | |

PROJECT NO.: 0301-0176

SITE 9 FEDERAL (SHEET 16 OF 17)

REV 02-23-21 DRAWING NO.: SUM-11



NOTES:

- 1. SEE DWG. SUM-2 FOR TOTAL IMPACT QUANTITIES.
- 2. SEE ACTIVITY 19 FOR MANERESA ISLAND DETAILS.
- 3. NO FILL SHALL BE PLACED BELOW THE HTL.



BELOW HTL



FEDERAL NAVIGATION CHANNEL



SHEETPILE MARINE ENCLOSURE

SCALE 1'' = 200'

SIGNATURE BLOCK: T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN





WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

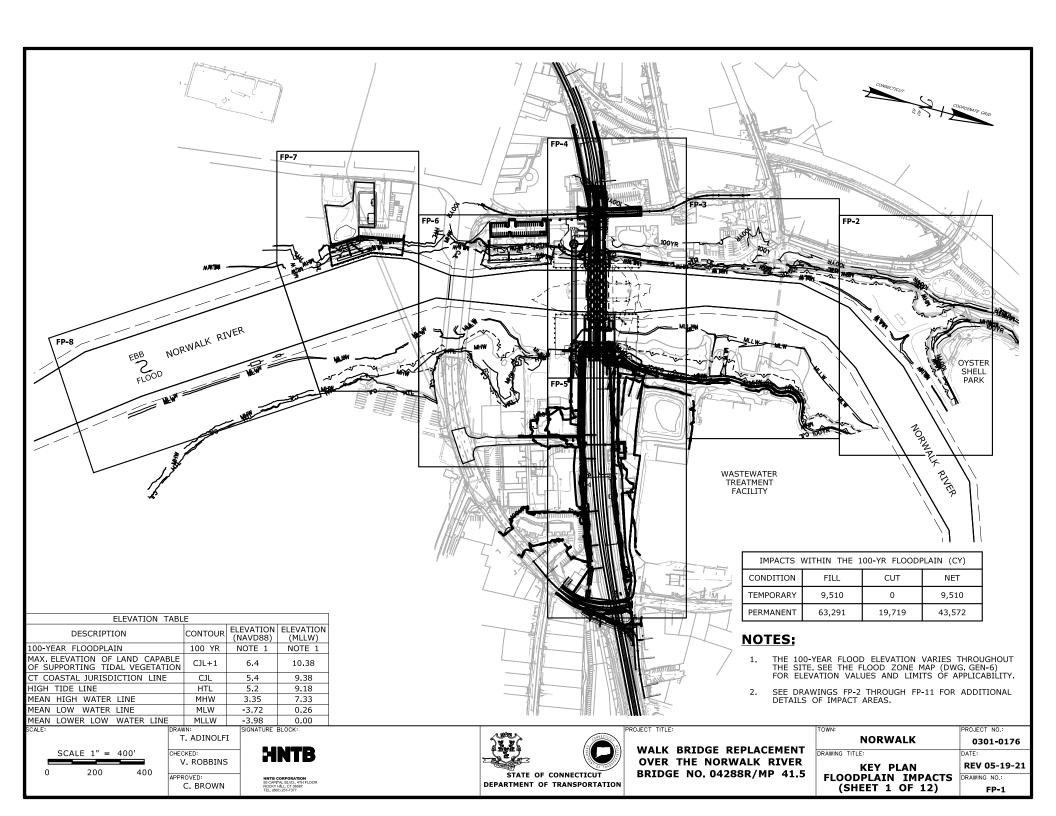
| TOWN. | NORWALK |
|---------|---------|
| DRAWING | TITLE: |

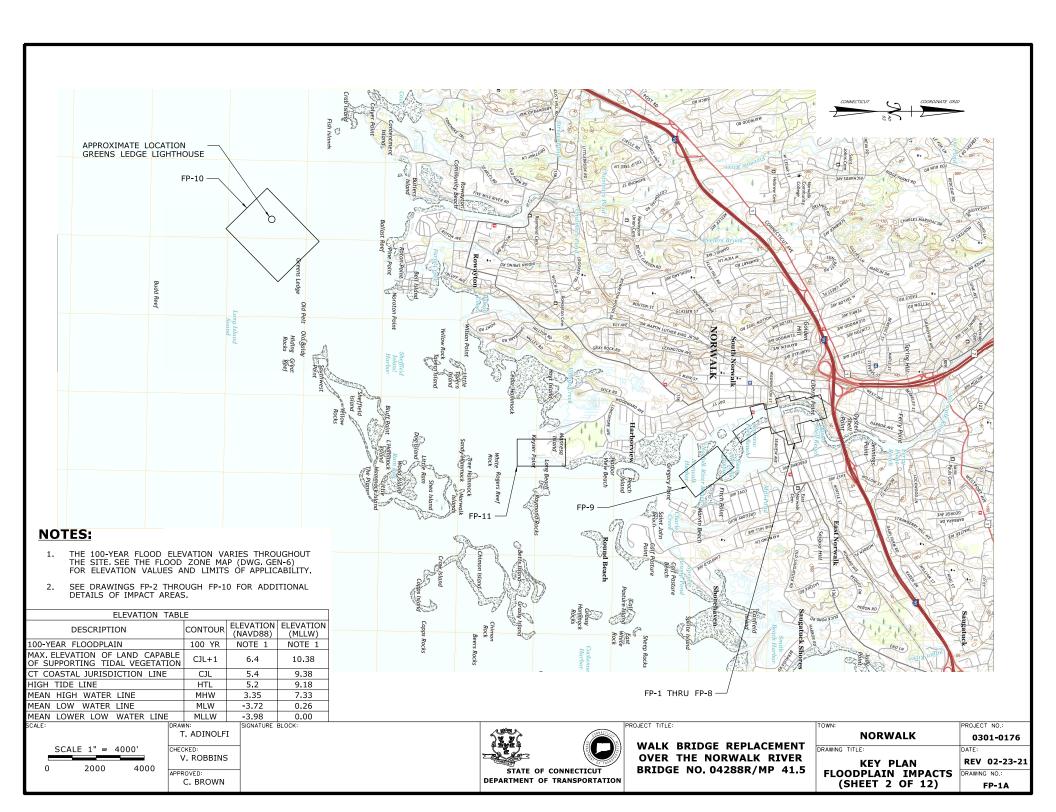
0301-0176

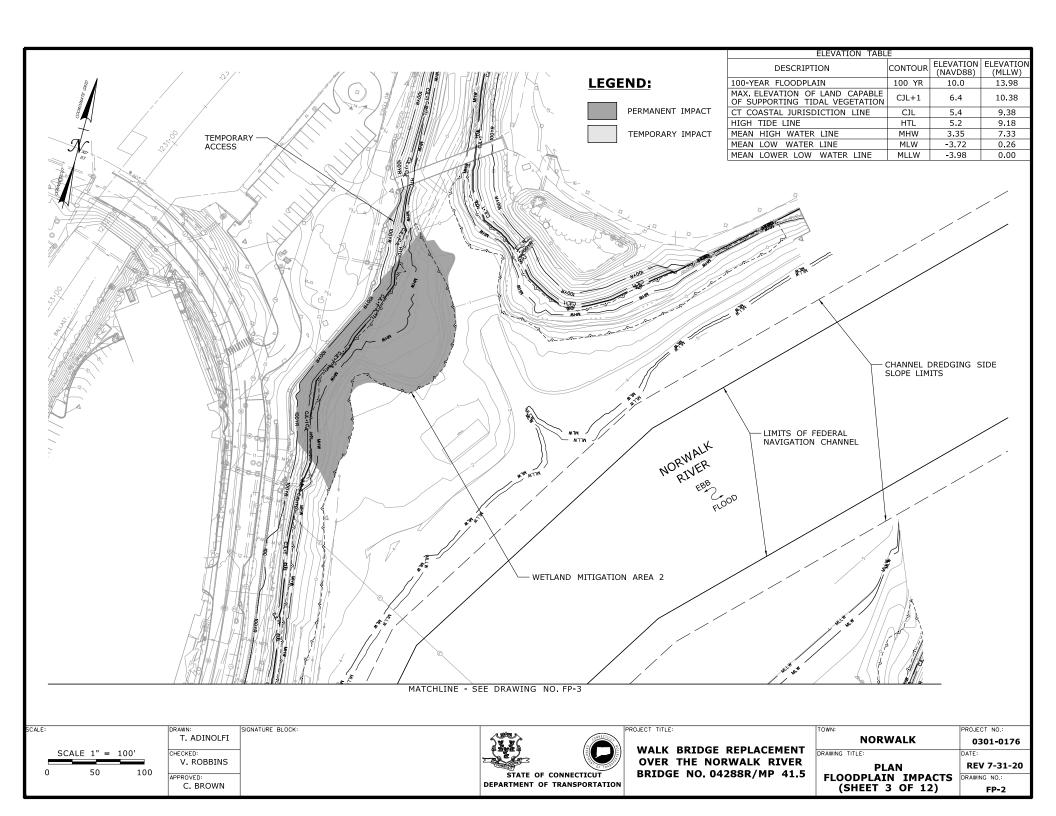
SITE 10 FEDERAL (SHEET 17 OF 17)

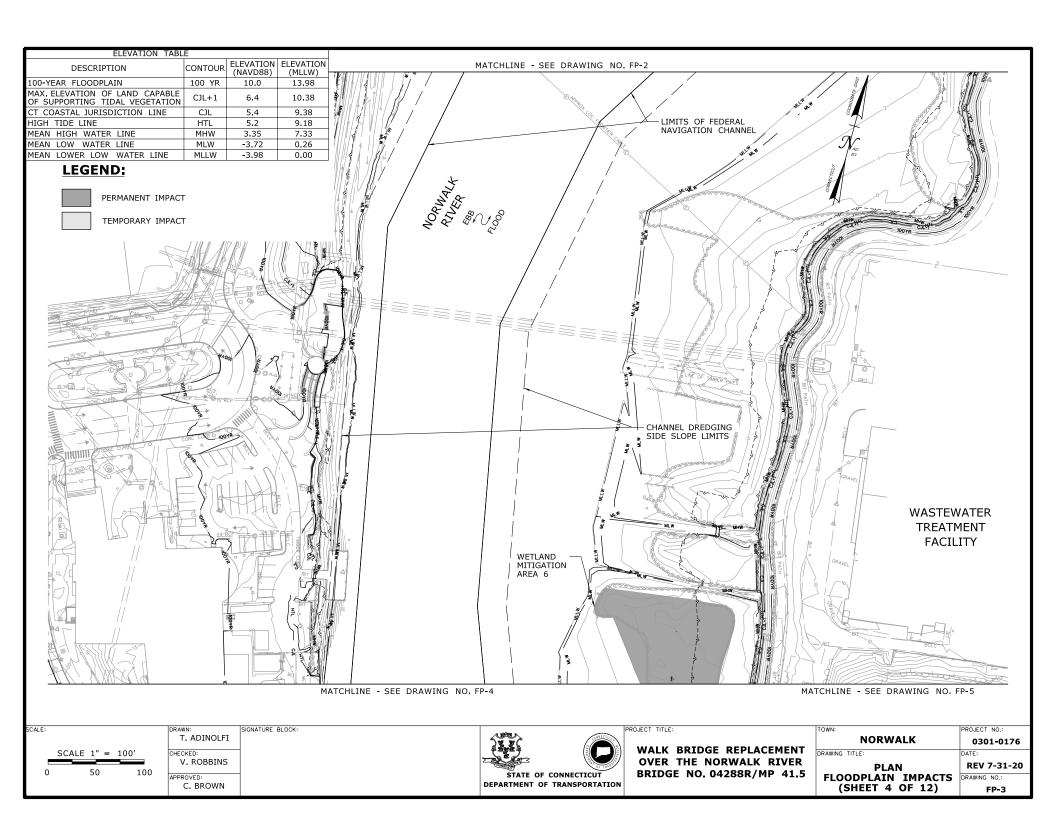
REV 7-31-20 SUM-12

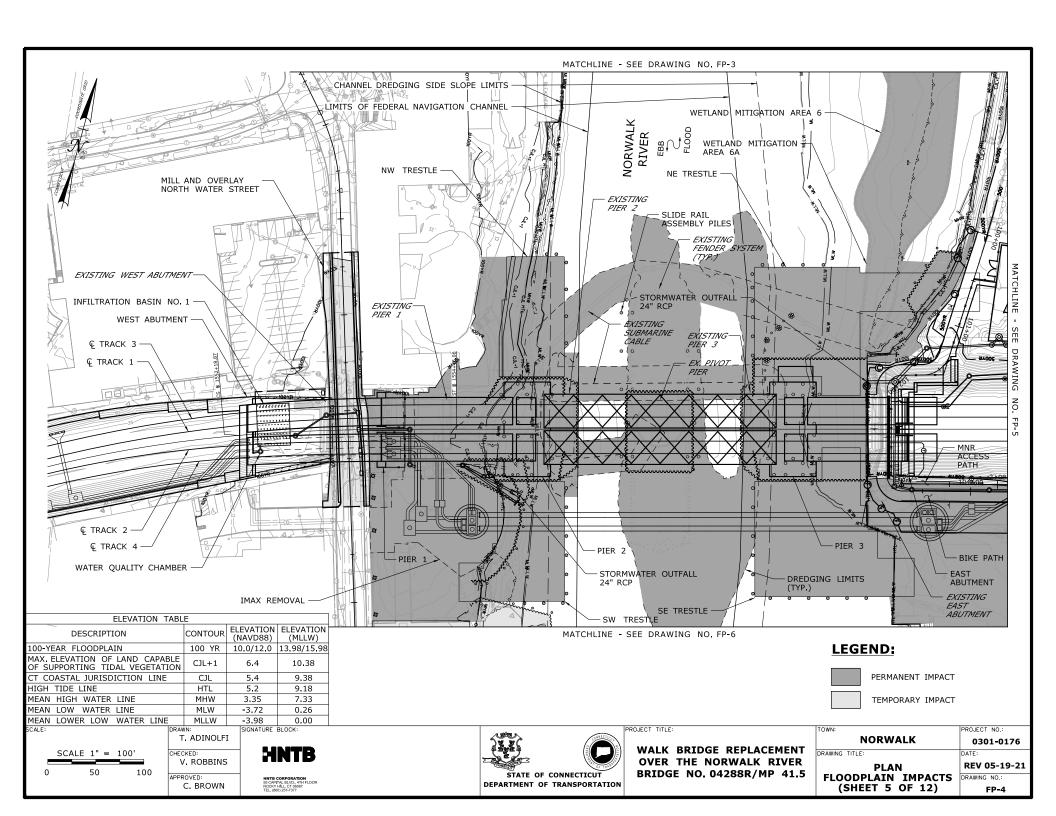
PROJECT NO.:

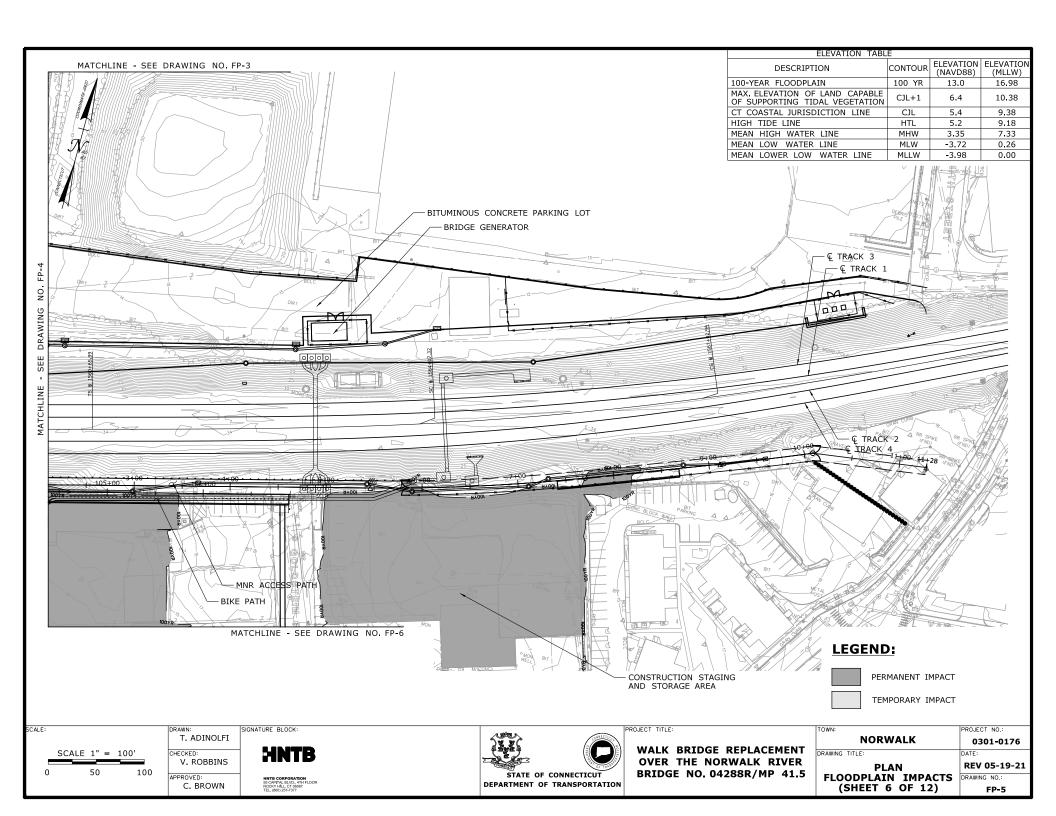


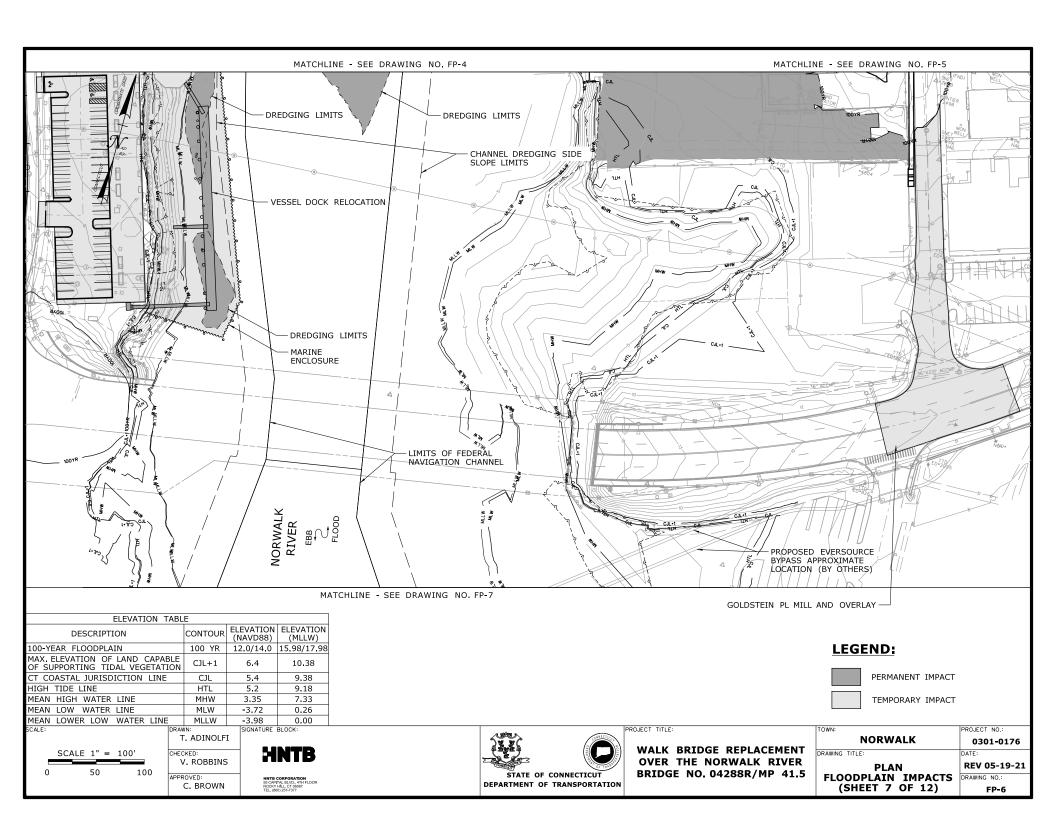


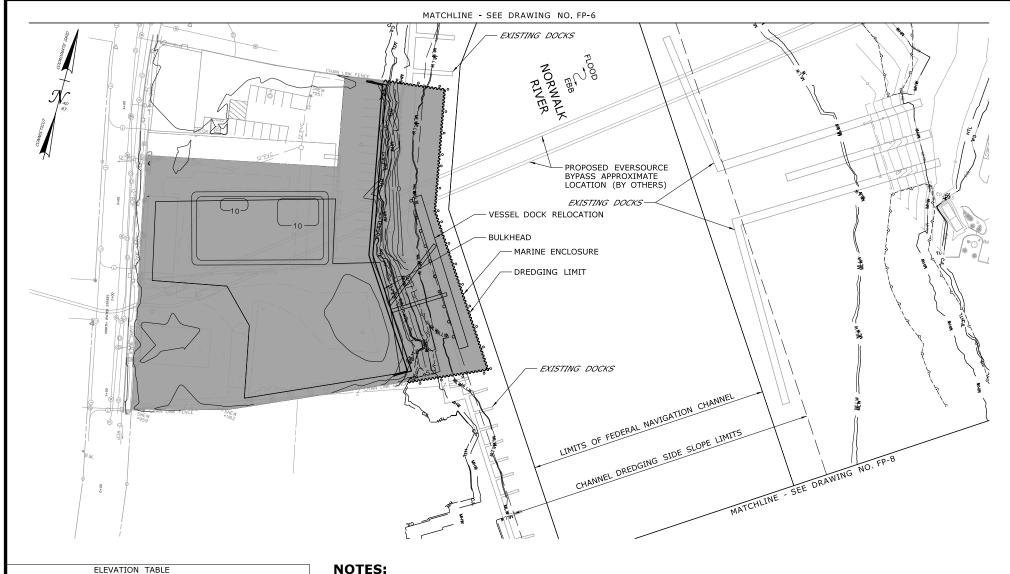












| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 14.0 | 17.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | |
| SCALE: DRAY | WN: | SIGNATURE | BLOCK: | |

SCALE 1'' = 100'

T. ADINOLFI CHECKED: V. ROBBINS

C. BROWN

APPROVED:

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

LIMITS OF THIS SHEET ARE ENTIRELY WITHIN THE 100-YEAR FLOODPLAIN.

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

PROJECT TITLE:

| | PLAN | REV 05-19-21 |
|---|-----------------|--------------|
| ı | DRAWING TITLE: | DATE: |
| _ | NORWALK | 0301-0176 |
| | TOWN: | PROJECT NO.: |
| | TEMPORARY IMPAG | - ' |

FP-7

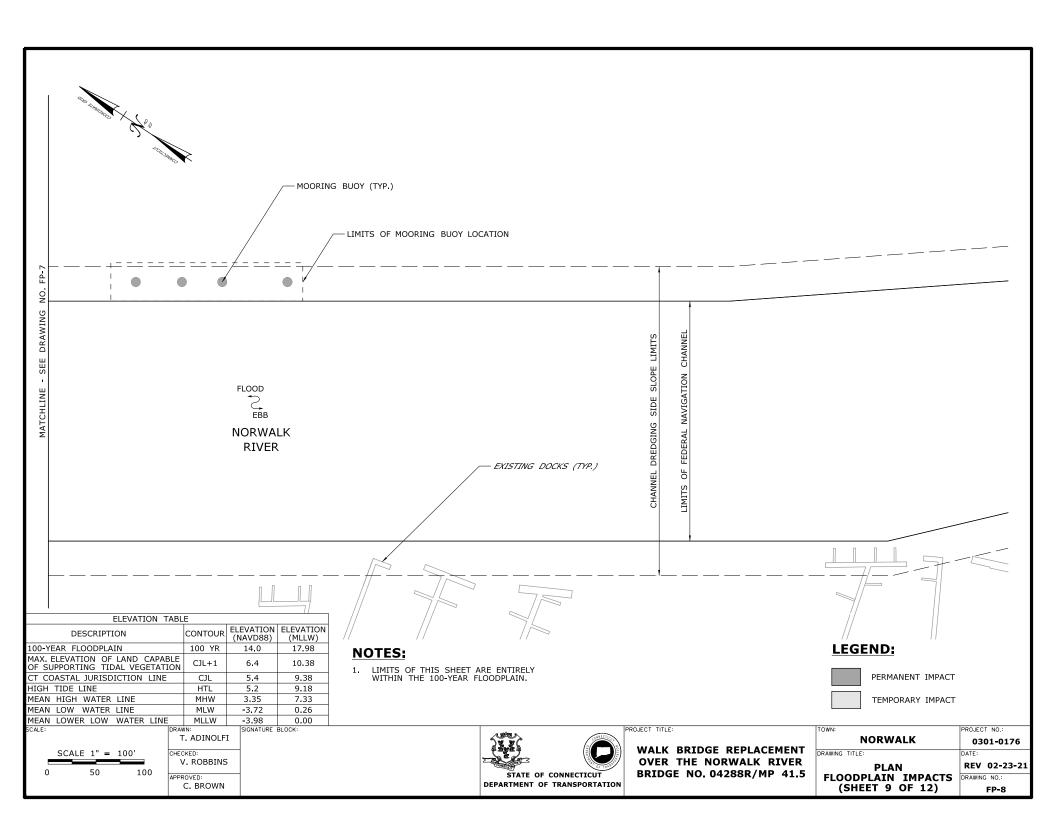
PERMANENT IMPACT

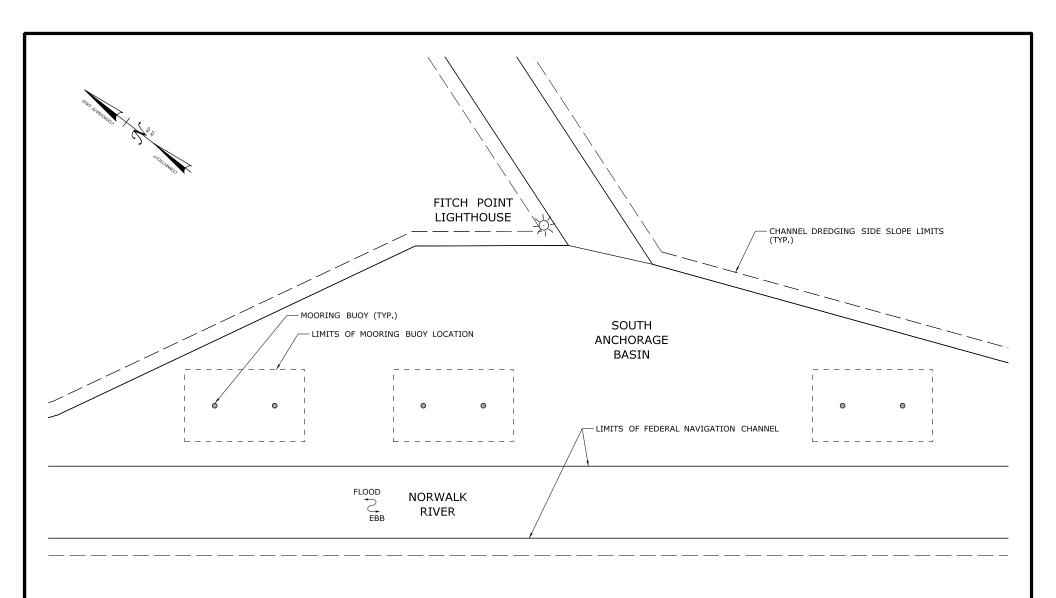
PLAN
FLOODPLAIN IMPACTS
(SHEET 8 OF 12)

REV 05-1

DRAWING NO.:
FP-7

LEGEND:





| ELEVATION TABLE | | | | |
|--|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 14.0 | 17.98 | |
| MAX.ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | |

SCALE 1'' = 200'

NOTES:

1. LIMITS OF THIS SHEET ARE ENTIRELY WITHIN THE 100-YEAR FLOODPLAIN.

LEGEND:



SIGNATURE BLOCK: T. ADINOLFI V. ROBBINS APPROVED: C. BROWN



WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

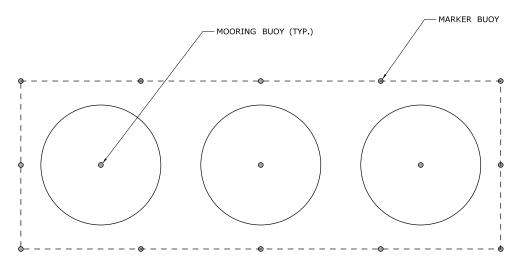
| NORWALK | 0301-0176 |
|--------------------|--------------|
| DRAWING TITLE: | DATE: |
| PLAN | REV 7-31-20 |
| FLOODPLAIN IMPACTS | DRAWING NO.: |
| (SHEET 10 OF 12) | FP-9 |



GREENS LEDGE LIGHTHOUSE

LONG ISLAND SOUND





| ELEVATION TABLE | | | |
|--|---------|-----------------------|---------------------|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) |
| 100-YEAR FLOODPLAIN | 100 YR | 14.0 | 17.98 |
| MAX. ELEVATION OF LAND CAPAB OF SUPPORTING TIDAL VEGETATION | | 6.4 | 10.38 |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 |
| SCALE: | ORAWN: | SIGNATURE | BLOCK: |

T. ADINOLFI SCALE 1'' = 400'V. ROBBINS APPROVED: C. BROWN

NOTES:

1. LIMITS OF THIS SHEET ARE ENTIRELY WITHIN THE 100-YEAR FLOODPLAIN.

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

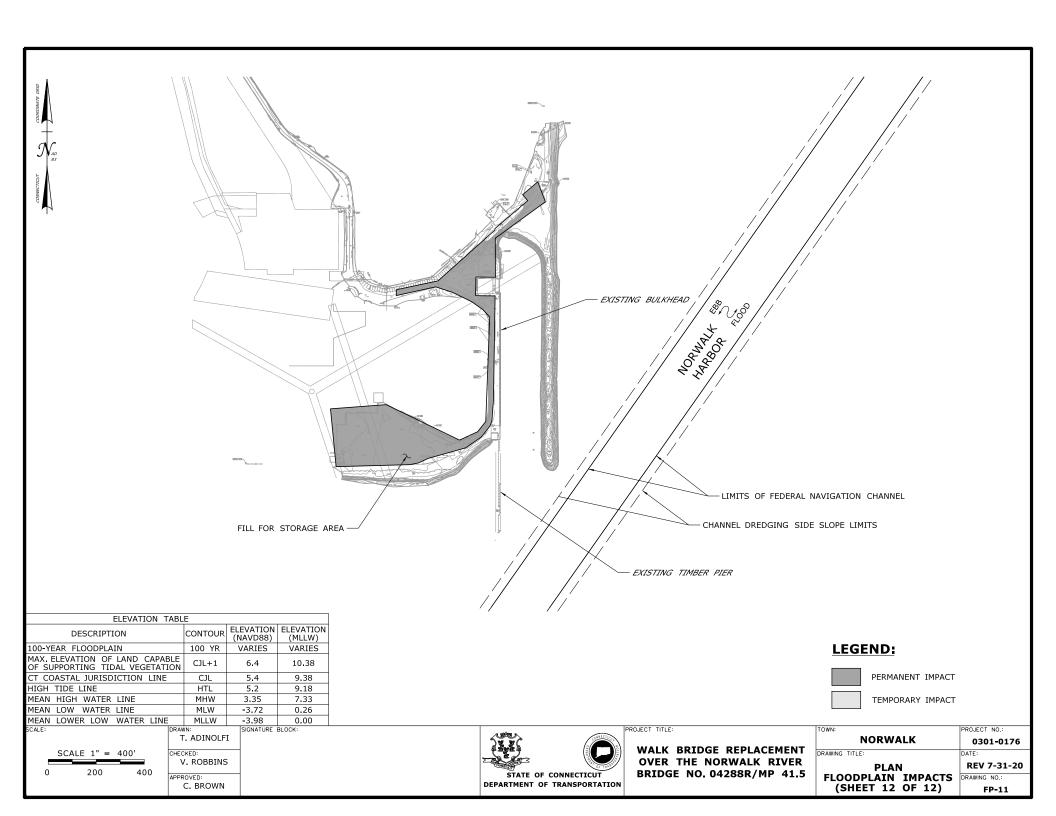
LEGEND:

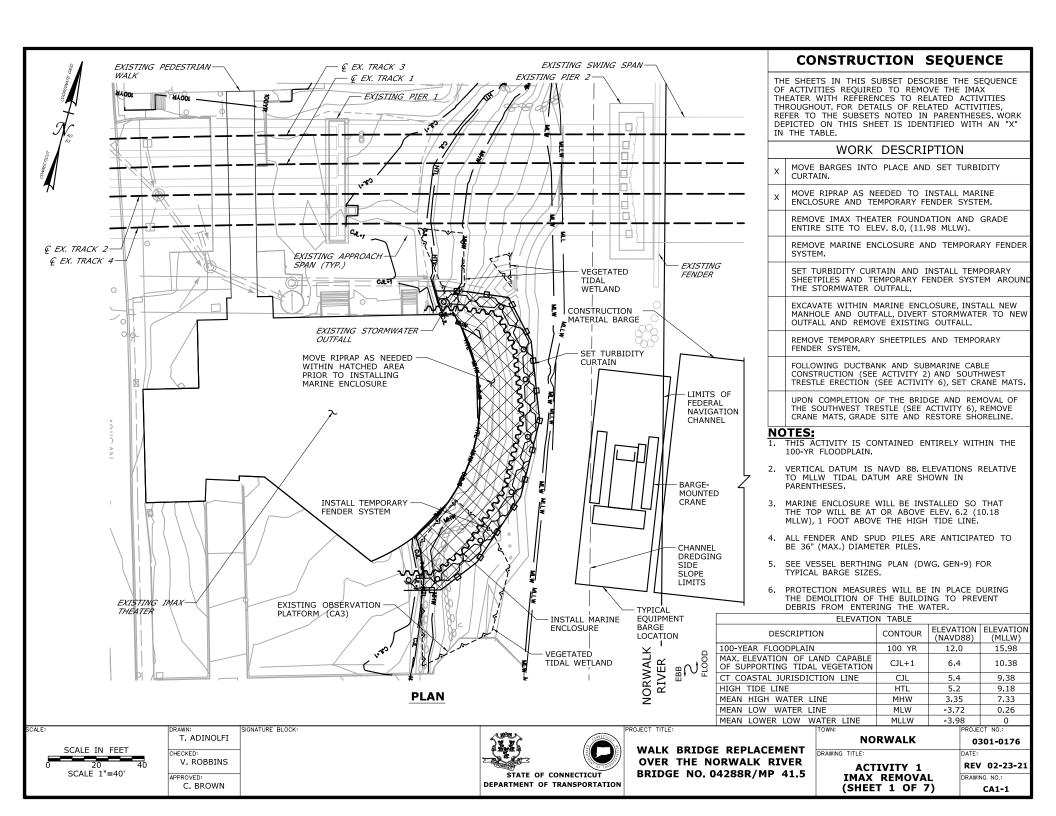
PERMANENT IMPACT TEMPORARY IMPACT

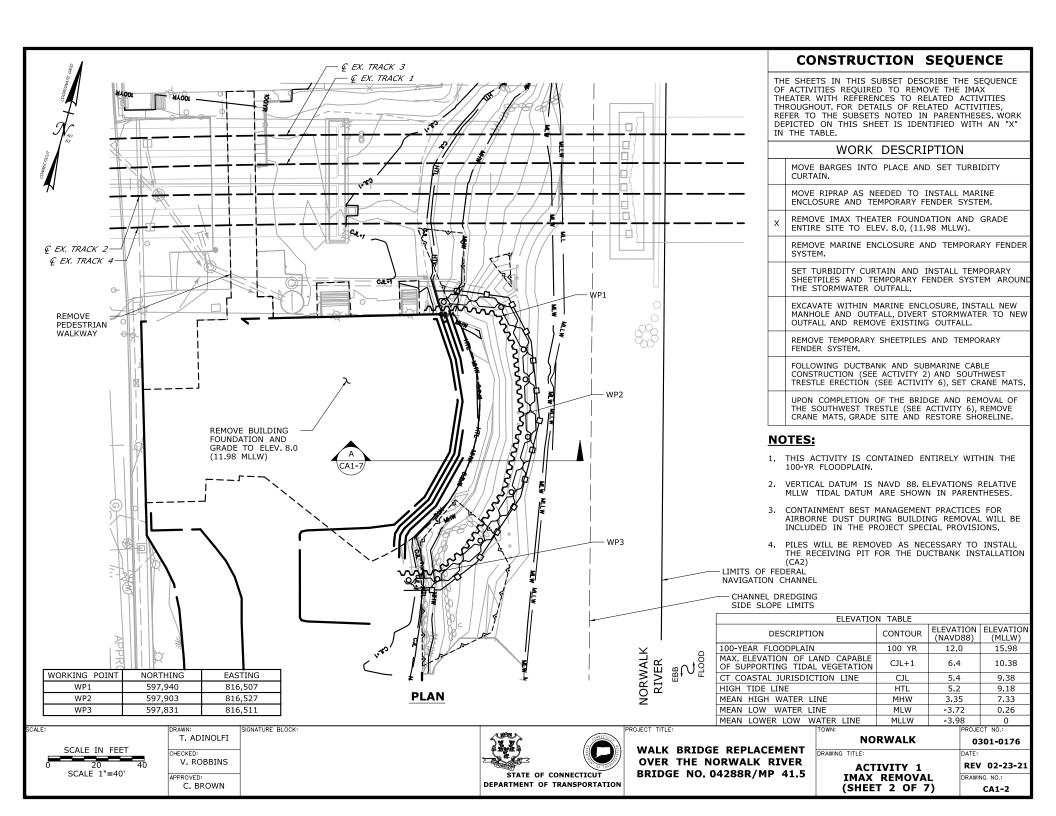
| PROJECT TITLE: | | | |
|----------------|--------|-------|--------|
| WALK | BRIDGE | REPLA | CEMENT |

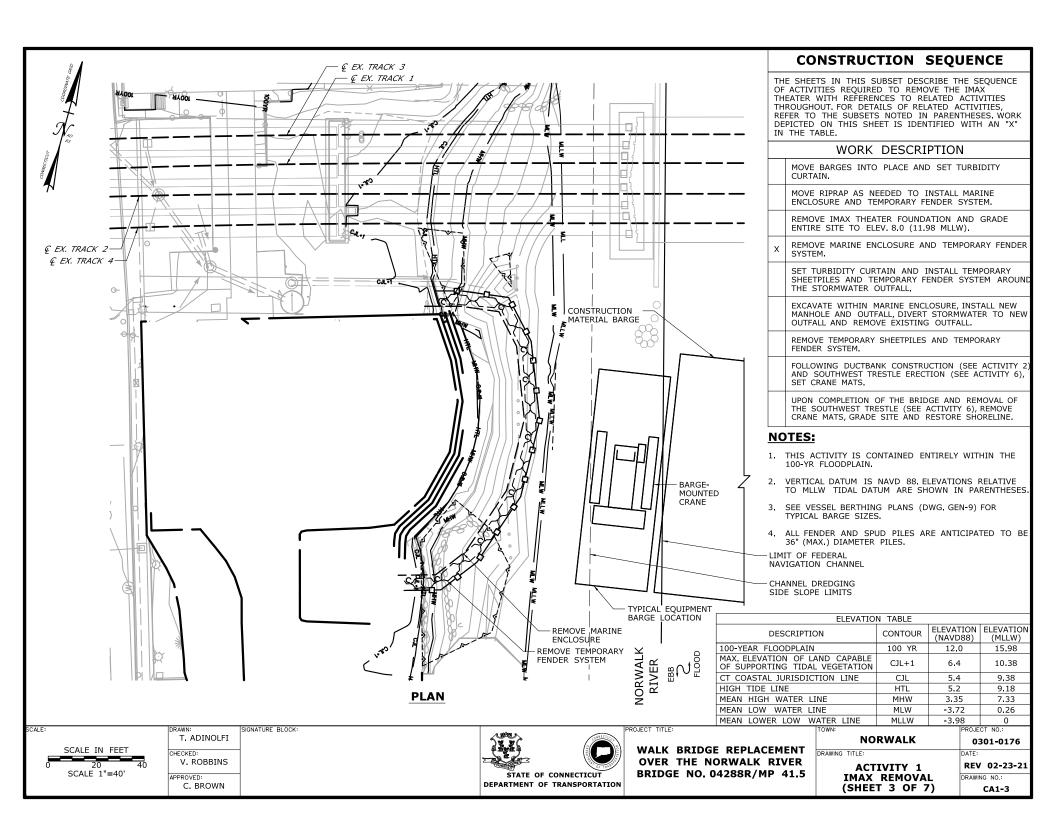
OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

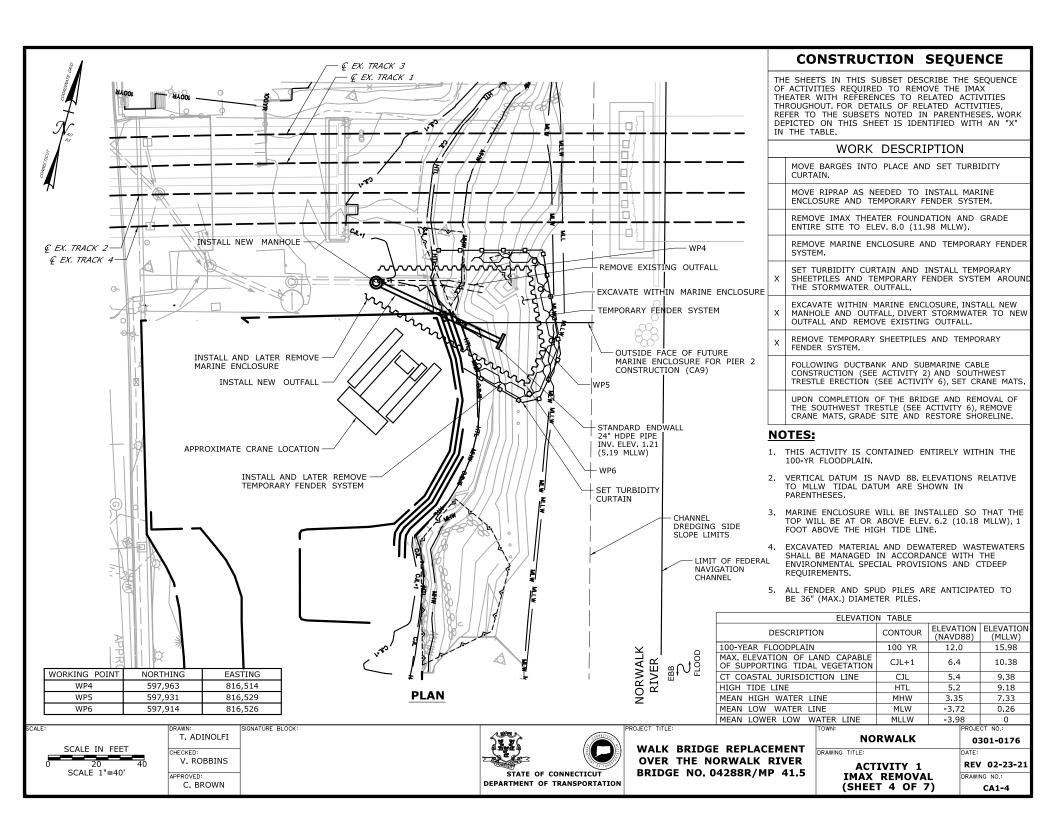
| NORWALK | PROJECT NO.: 0301-0176 |
|---------------------|---------------------------|
| DRAWING TITLE: | DATE: |
| PLAN | REV 02-23-21 |
| LEGGE EATH THE ACTO | DRAWING NO.: |
| (SHEET 11 OF 12) | FP-10 |

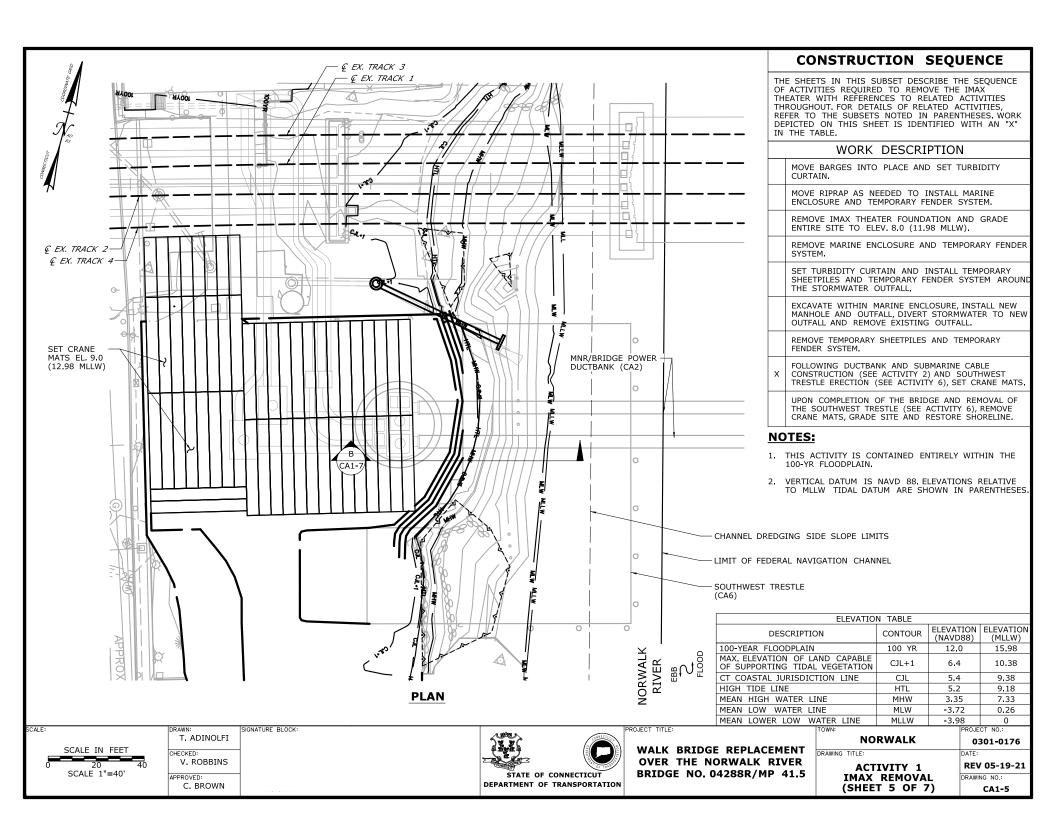


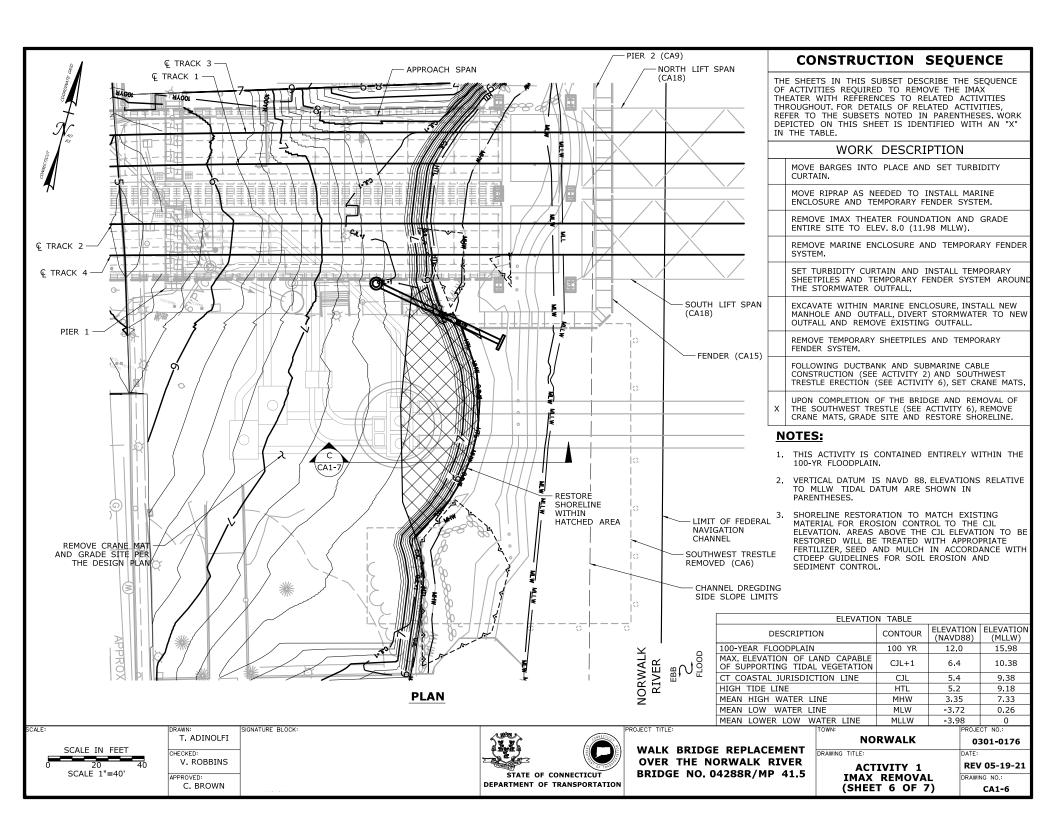


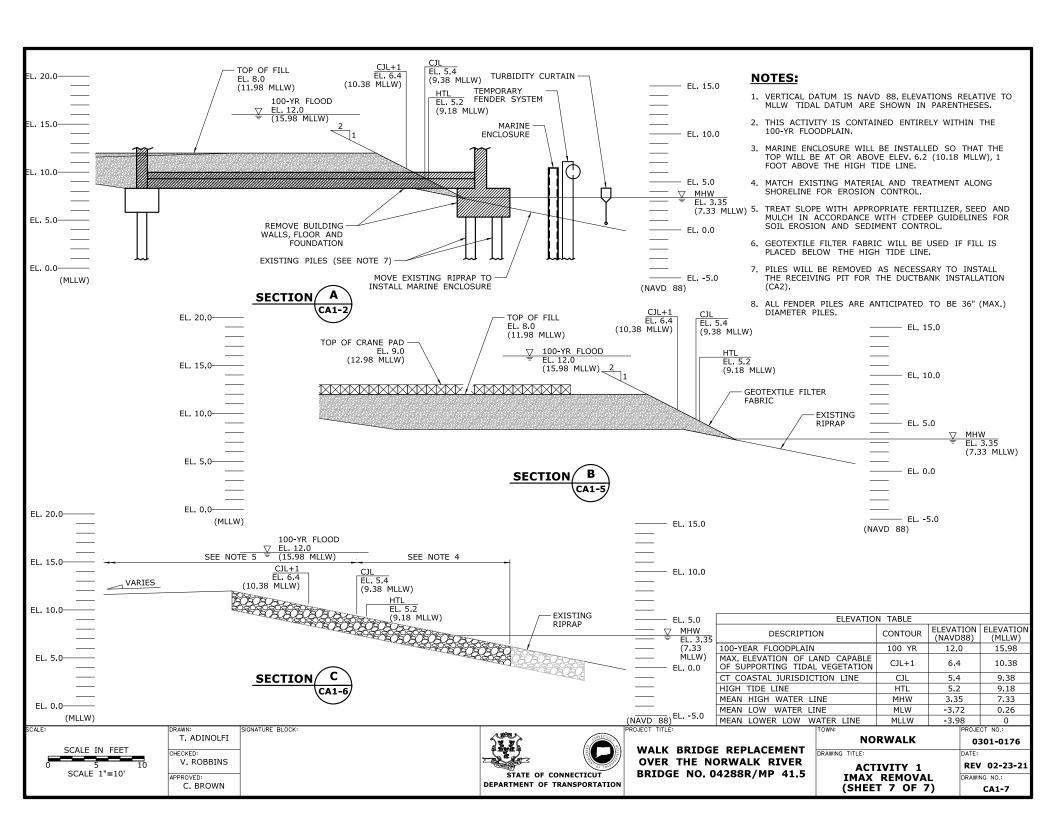


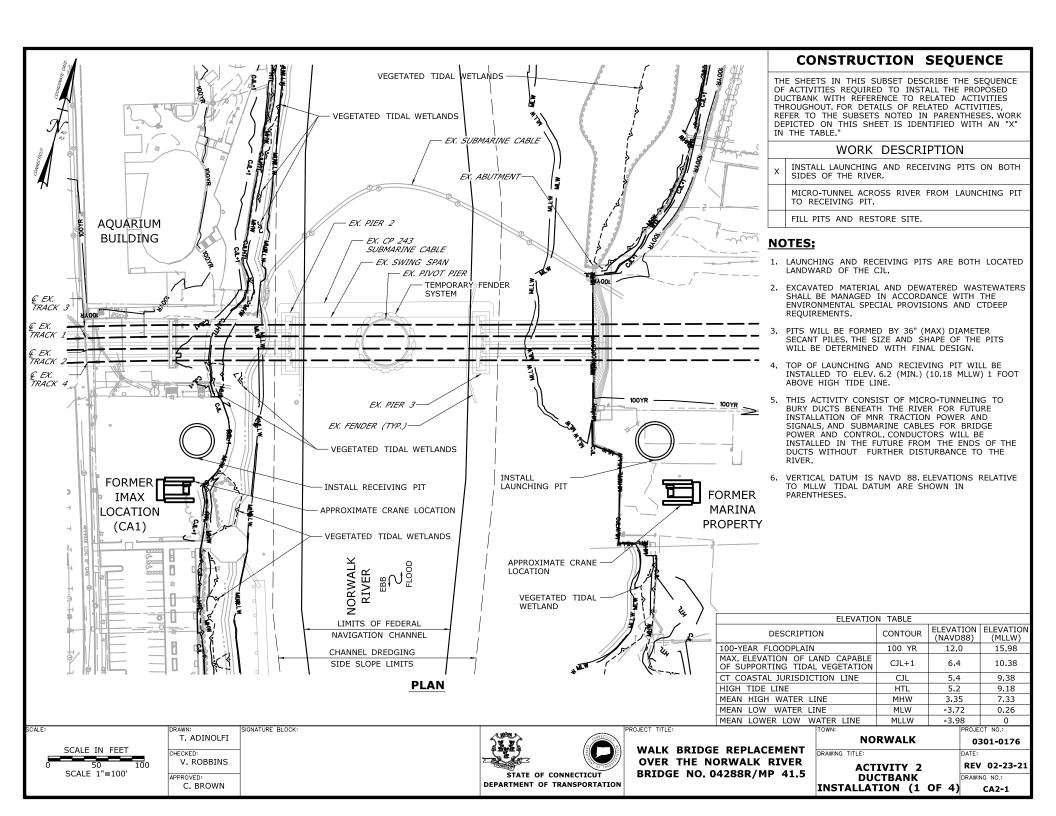


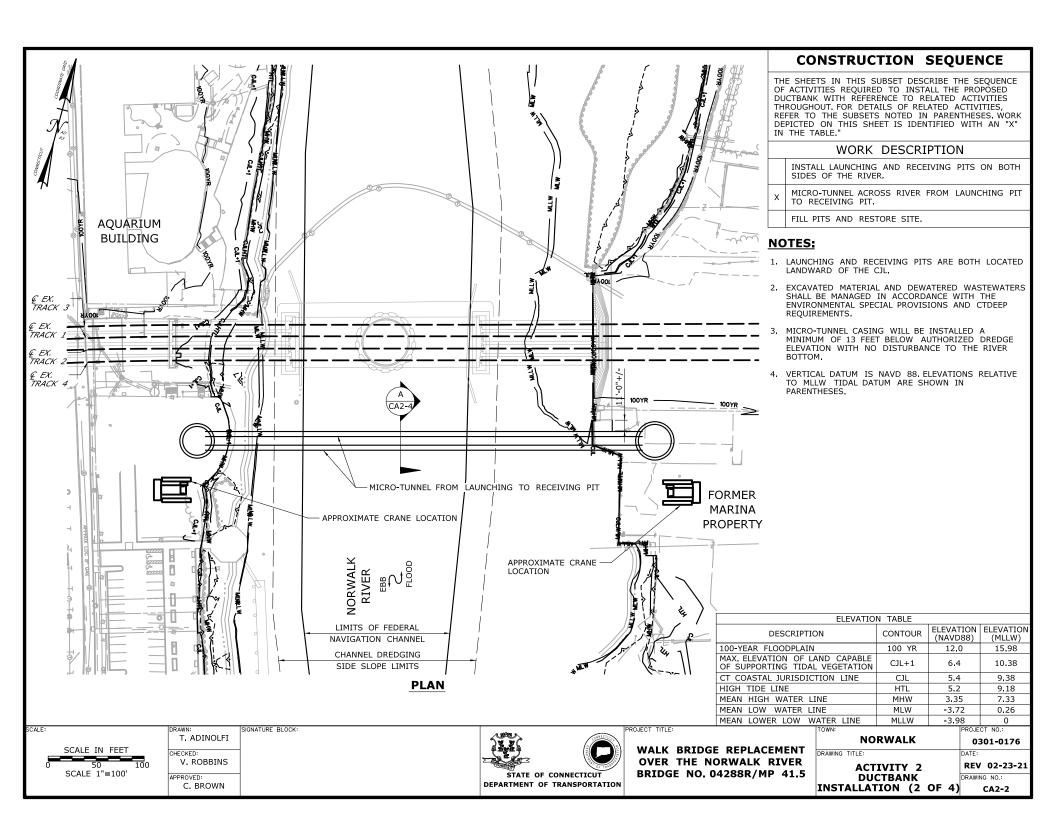


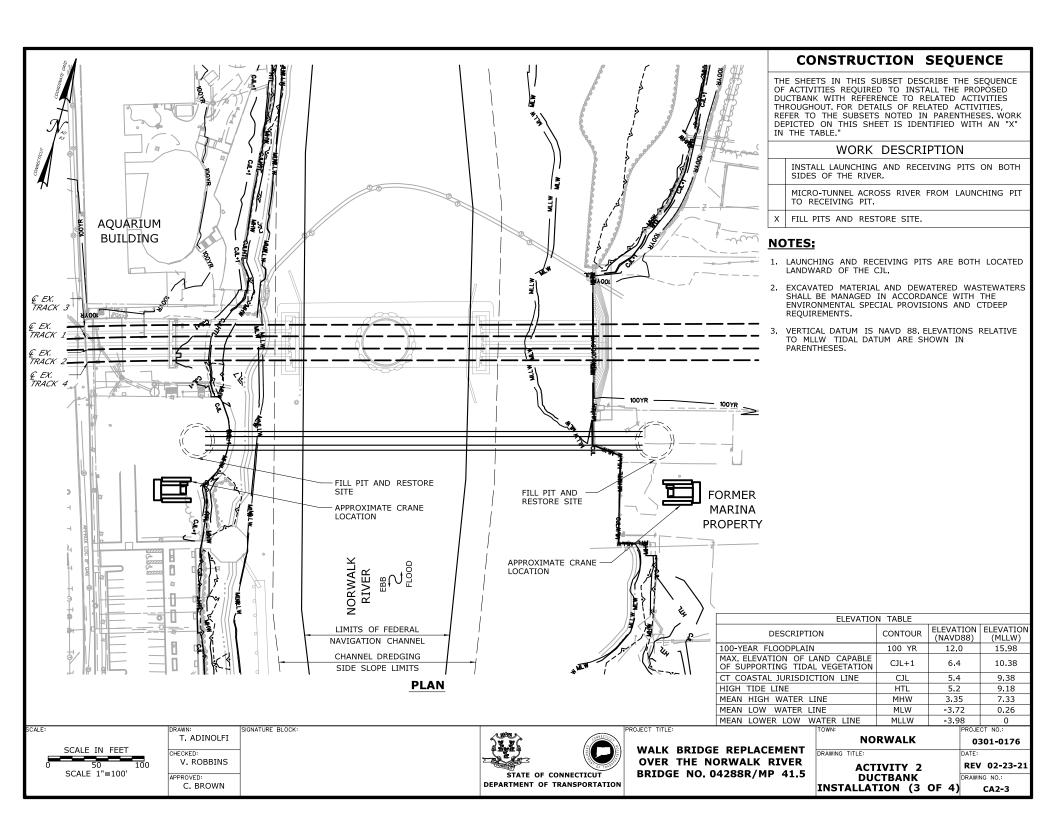


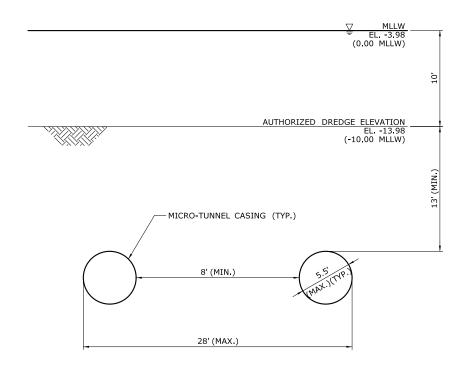












CA2-2

SECTION

NOTES:

- 1. LAUNCHING AND RECEIVING PITS ARE BOTH LOCATED LANDWARD OF THE CJL.
- 2. EXCAVATED MATERIAL AND DEWATERED WASTEWATERS SHALL BE MANAGED IN ACCORDANCE WITH THE ENVIRONMENTAL SPECIAL PROVISIONS AND CTDEEP REQUIREMENTS.
- 3. MICRO-TUNNEL CASING WILL BE INSTALLED A MINIMUM OF 13 FEET BELOW AUTHORIZED DREDGE ELEVATION WITH NO DISTURBANCE TO THE RIVER
- 4. VERTICAL DATUM IS NAVD 88 ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN

| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 12.0 | 15.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |
| TOWN: | | PROJE | CT NO.: | |

SCALE IN FEET SCALE 1"=10'

SIGNATURE BLOCK: T, ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN



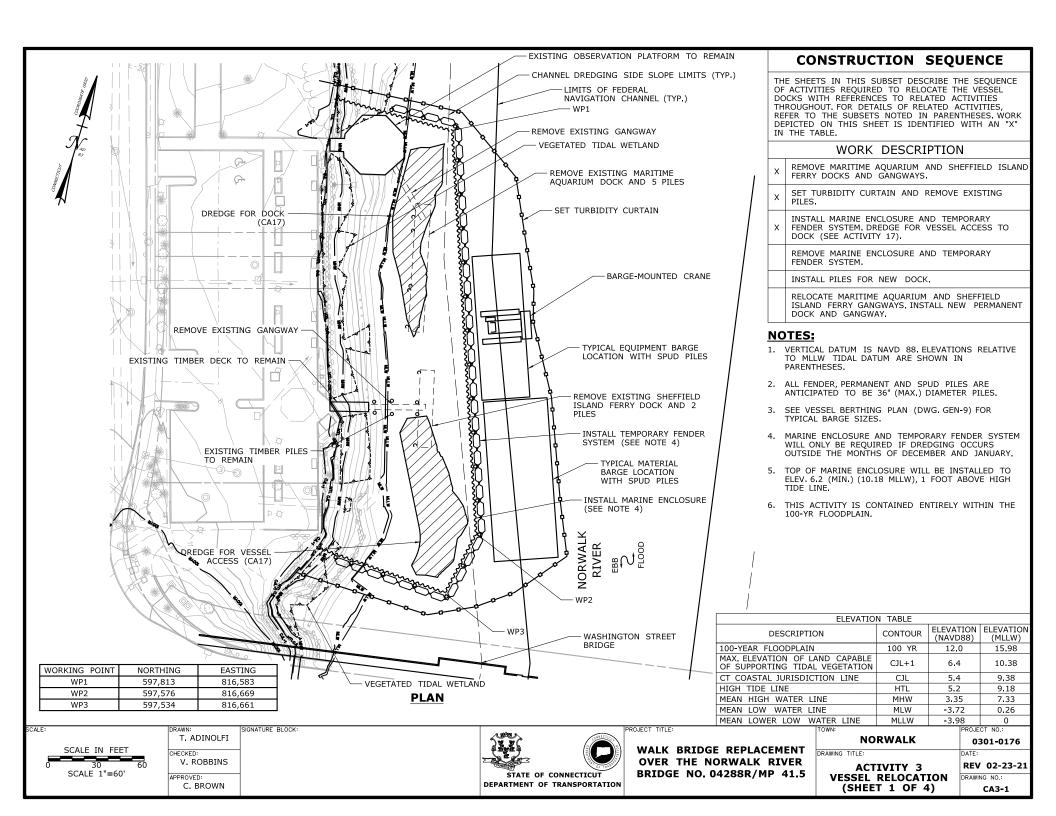
STATE OF CONNECTICUT

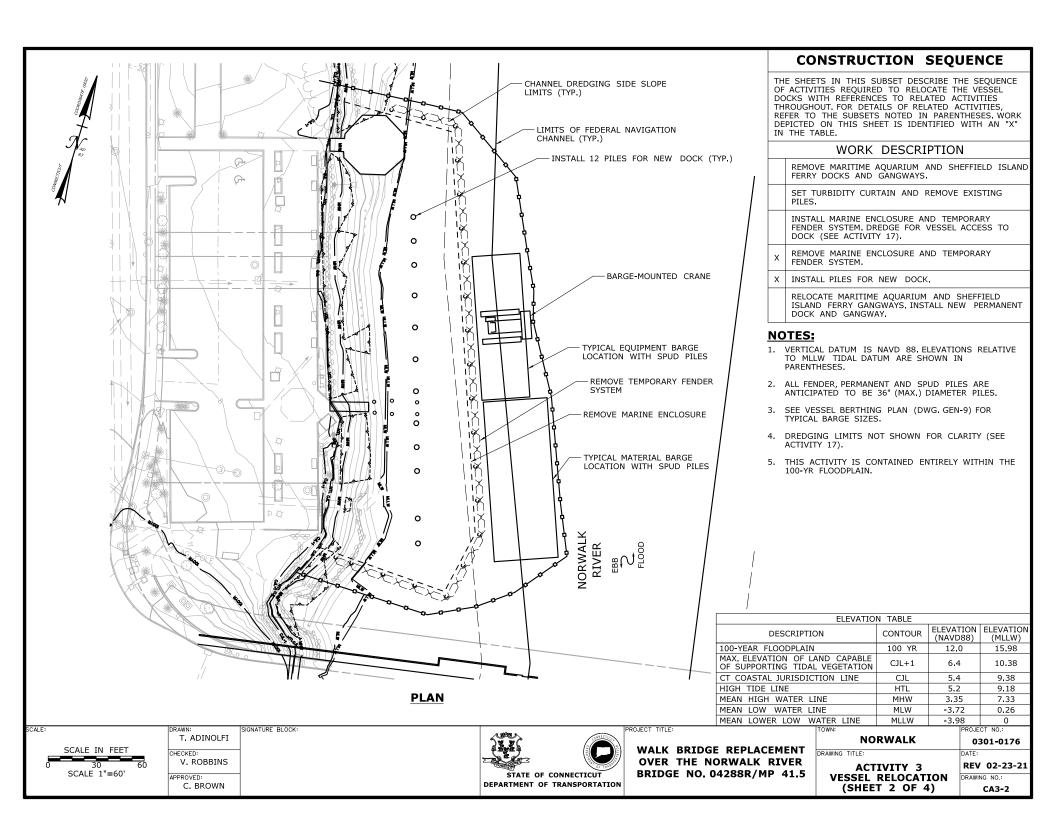
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

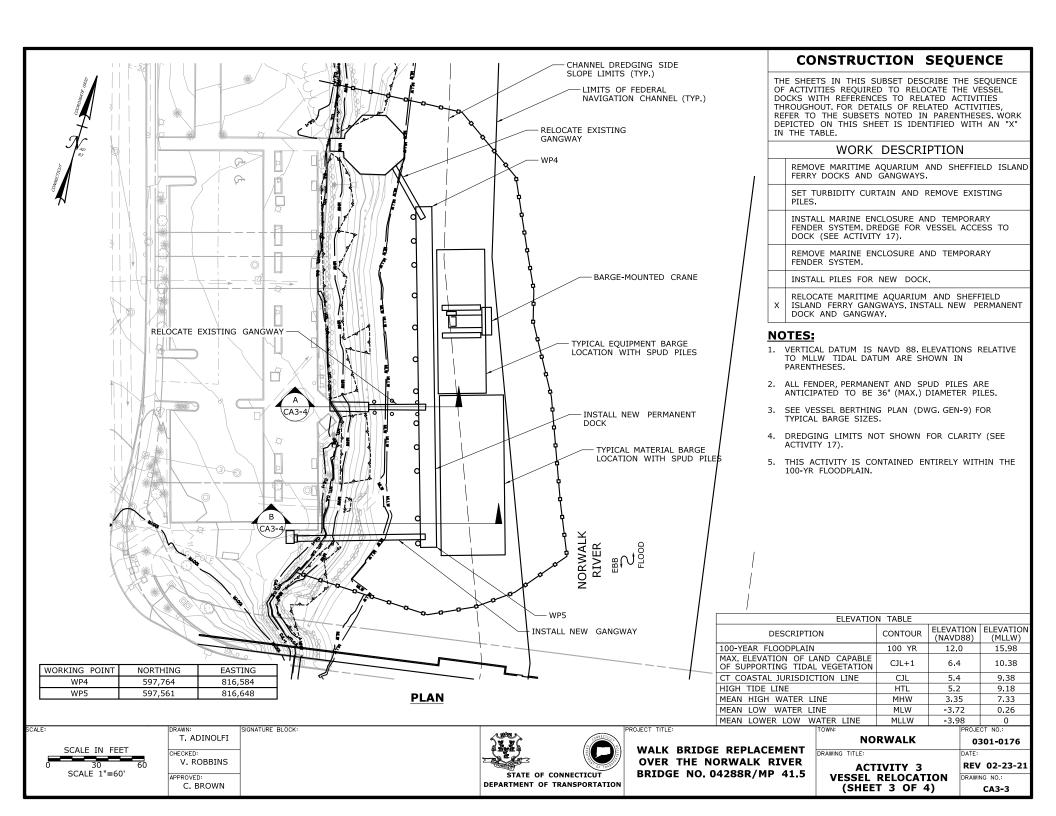
NORWALK DRAWING TITLE:

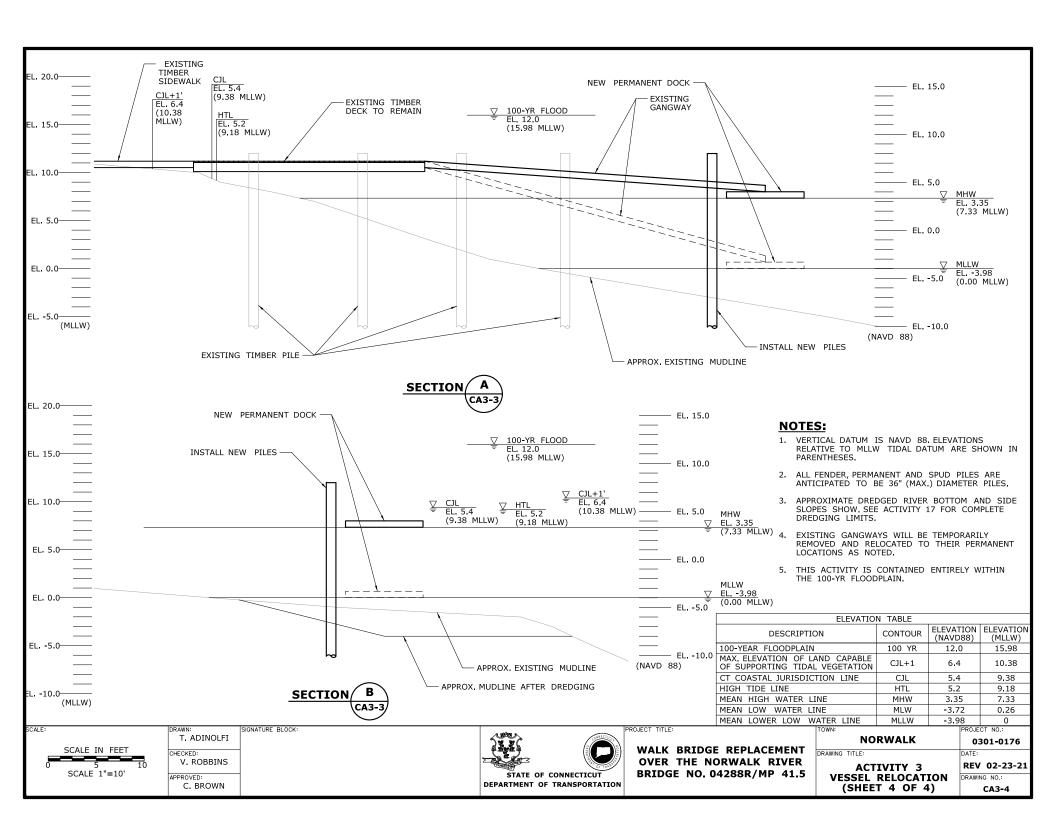
ACTIVITY 2 DUCTBANK INSTALLATION (4 OF 4)

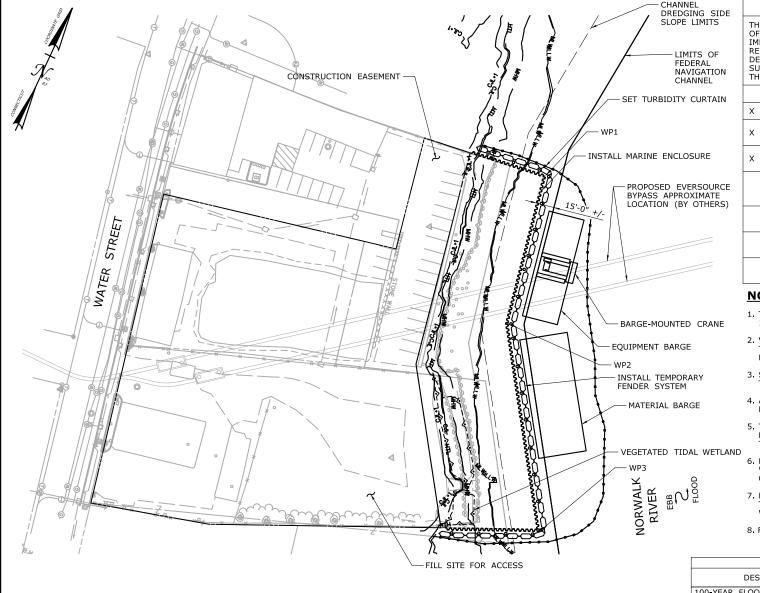
REV 02-23-21 DRAWING NO.: CA2-4











PLAN

CONSTRUCTION SEQUENCE

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES RELATED TO TEMPORARY AND PERMANENT IMPROVEMENTS AT THE MARINE STAGING YARD WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES. WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE,

WORK DESCRIPTION

- FILL SITE FOR ACCESS.
- MOVE BARGES INTO PLACE AND SET TURBIDITY Χ CURTAIN.
- INSTALL MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM.

INSTALL BULKHEAD, REMOVE DERELICT PILES AND DREDGE TO EL -11 (MIN.) (-7.02 MLLW) (SEE ACTIVITY 17).

REMOVE MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM DRIVE PILES FOR DOCKS.

REMOVE TURBIDITY CURTAIN, SET DOCKS AND GANGWAYS.

SET TURBIDITY CURTAIN, REMOVE DOCKS, GANGWAYS AND PILES.

NOTES:

- 1. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE 100-YR FLOODPLAIN.
- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN
- 3. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- 4. ALL PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER PIPE PILES.
- 5. TOP OF MARINE ENCLOSURE WILL BE INSTALLED TO ELEV. 6.2 (MIN.) (10.18 MLLW), 1 FOOT ABOVE HIGH TIDE LINE.
- 6. MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM WILL ONLY BE REQUIRED IF DREDGING OCCURS OUTSIDE THE MONTHS OF DECEMBER AND JANUARY.
- 7. LIMITS OF TEMPORARY FENDER SYSTEM AND TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTING) WILL BE COORDINATED WITH THE USCG.
- 8. FOR TYPICAL FILL SECTION, SEE DWG. CA4-6.

| ELEVATION TABLE | | | |
|---|---------|-----------------------|---------------------|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) |
| 100-YEAR FLOODPLAIN | 100 YR | 14.0 | 17.98 |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 |
| TOWN: PROJECT NO.: | | | |

SCALE IN FEET SCALE 1"=80'

WORKING POINT

WP1

WP2

WP3

SIGNATURE BLOCK: T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

EASTING

816,710

816,734

816,831

NORTHING

597,207

597,082

596,936

DEPARTMENT OF TRANSPORTATION

STATE OF CONNECTICUT

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

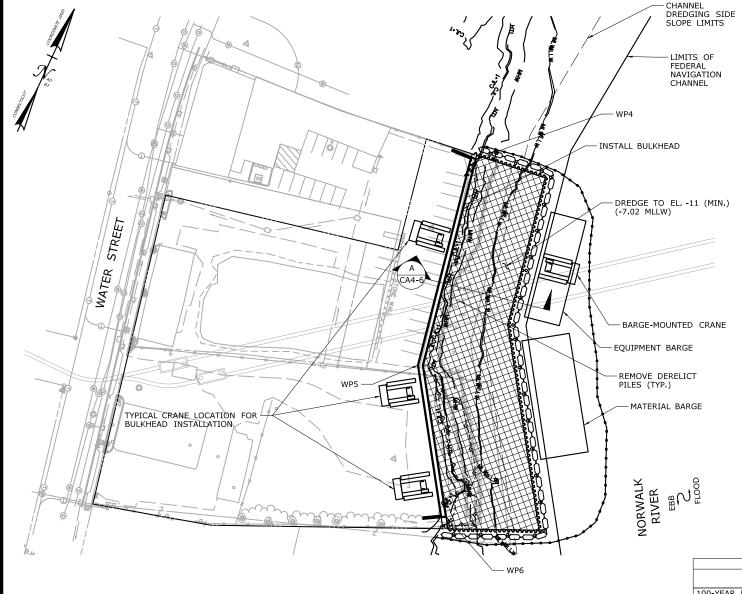
NORWALK

DRAWING TITLE:

0301-0176

ACTIVITY 4 MARINE STAGING YARD DRAWING NO.: (SHEET 1 OF 6)

REV 05-19-21 CA4-1



CONSTRUCTION SEQUENCE

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES RELATED TO TEMPORARY AND PERMANENT IMPROVEMENTS AT THE MARINE STAGING YARD WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES. WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE,

WORK DESCRIPTION

FILL SITE FOR ACCESS. MOVE BARGES INTO PLACE AND SET TURBIDITY CURTAIN.

INSTALL MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM,

INSTALL BULKHEAD, REMOVE DERELICT PILES AND DREDGE TO ÉL -11 (MIN.) (-7.02 MLLW) (SEE ACTIVITY 17).

REMOVE MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM DRIVE PILES FOR DOCKS.

REMOVE TURBIDITY CURTAIN, SET DOCKS AND GANGWAYS.

SET TURBIDITY CURTAIN, REMOVE DOCKS, GANGWAYS AND PILES.

NOTES:

- 1. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE 100-YR FLOODPLAIN.
- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN
- 3. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- 4. ALL PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER PIPE PILES.
- 5. TOP OF MARINE ENCLOSURE WILL BE INSTALLED TO ELEV. 6.2 (MIN.) (10.18 MLLW), 1 FOOT ABOVE HIGH TIDE LINE.
- 6. MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM WILL ONLY BE REQUIRED IF DREDGING OCCURS OUTSIDE THE MONTHS OF DECEMBER AND JANUARY.
- 7. LIMITS OF TEMPORARY FENDER SYSTEM AND TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTING) WILL BE COORDINATED WITH THE USCG.

| PLAN |
|-------------|
|-------------|

| WORKING POINT | | NORTHING | EASTING | |
|---------------|--|---------------|---------|--|
| WP4 | | 597,195 816,6 | | |
| WP5 | | 597,020 | 816,683 | |
| WP6 | | 596,914 | 816,753 | |

ELEVATION ELEVATION DESCRIPTION CONTOUR (NAVD88) (MLLW) 100-YEAR FLOODPLAIN 100 YR 14.0 17.98 MAX, ELEVATION OF LAND CAPABLE CJL+1 6.4 10.38 OF SUPPORTING TIDAL VEGETATION CT COASTAL JURISDICTION LINE CJL 5,4 9,38 HIGH TIDE LINE HTL 5.2 9.18 MEAN HIGH WATER LINE 3.35 MHW 7.33 MEAN LOW WATER LINE MLW -3.72 0.26 MEAN LOWER LOW WATER LINE MLLW -3.98 0

ELEVATION TABLE

SCALE IN FEET SCALE 1"=80'

SIGNATURE BLOCK: T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

DEPARTMENT OF TRANSPORTATION

STATE OF CONNECTICUT

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

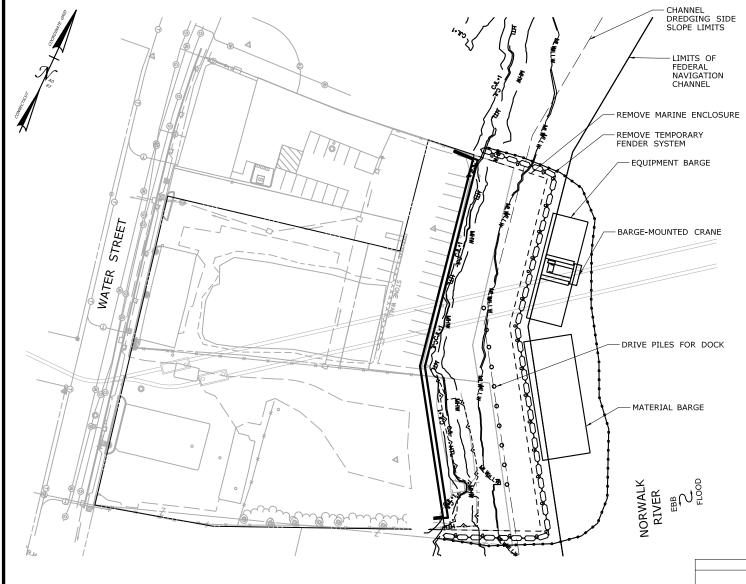
NORWALK

DRAWING TITLE:

0301-0176

ACTIVITY 4 MARINE STAGING YARD DRAWING NO.: (SHEET 2 OF 6)

REV 02-23-21 CA4-2



CONSTRUCTION SEQUENCE

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES RELATED TO TEMPORARY AND PERMANENT IMPROVEMENTS AT THE MARINE STAGING YARD WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES. WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE,

WORK DESCRIPTION

FILL SITE FOR ACCESS.

MOVE BARGES INTO PLACE AND SET TURBIDITY CURTAIN.

INSTALL MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM,

INSTALL BULKHEAD, REMOVE DERELICT PILES AND DREDGE TO ÉL -11 (MIN.) (-7.02 MLLW) (SEE ACTIVITY 17).

REMOVE MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM, DRIVE PILES FOR DOCKS,

REMOVE TURBIDITY CURTAIN, SET DOCKS AND GANGWAYS.

SET TURBIDITY CURTAIN, REMOVE DOCKS, GANGWAYS AND PILES.

NOTES:

- 1, THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE 100-YR FLOODPLAIN.
- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN
- 3. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- 4. ALL PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER PIPE PILES.
- 5. MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM WILL ONLY BE REQUIRED IF DREDGING OCCURS OUTSIDE THE MONTHS OF DECEMBER AND JANUARY.

PLAN

| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 14.0 | 17.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |

SCALE IN FEET SCALE 1"=80'

SCALE:

SIGNATURE BLOCK: T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

DEPARTMENT OF TRANSPORTATION

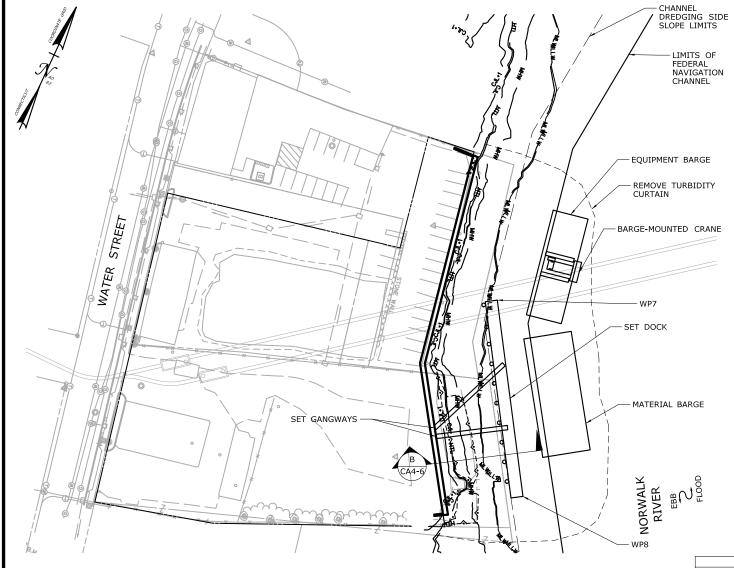
STATE OF CONNECTICUT

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

NORWALK DRAWING TITLE:

ACTIVITY 4 MARINE STAGING YARD DRAWING NO.: (SHEET 3 OF 6)

REV 02-23-21 CA4-3



PLAN

CONSTRUCTION SEQUENCE

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES RELATED TO TEMPORARY AND PERMANENT IMPROVEMENTS AT THE MARINE STAGING YARD WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES. WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE,

WORK DESCRIPTION

FILL SITE FOR ACCESS. MOVE BARGES INTO PLACE AND SET TURBIDITY

INSTALL MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM,

INSTALL BULKHEAD, REMOVE DERELICT PILES, AND DREDGE TO ÉL -11 (MIN.) (-7.02 MLLW) (SEE ACTIVITY 17).

REMOVE MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM DRIVE PILES FOR DOCKS.

REMOVE TURBIDITY CURTAIN, SET DOCKS AND GANGWAYS.

SET TURBIDITY CURTAIN, REMOVE DOCKS, GANGWAYS AND PILES.

NOTES:

CURTAIN.

- 1. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE 100-YR FLOODPLAIN.
- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN
- 3. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- 4. TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTING) WILL BE COORDINATED WITH THE USCG.

MLLW **NORWALK**

0301-0176

REV 02-23-21

CA4-4

DRAWING TITLE: **ACTIVITY 4**

MARINE STAGING YARD DRAWING NO.: (SHEET 4 OF 6)

ELEVATION ELEVATION (NAVD88) (MLLW) DESCRIPTION CONTOUR 100-YEAR FLOODPLAIN 100 YR 14.0 17.98 MAX, ELEVATION OF LAND CAPABLE CJL+1 6.4 10.38 OF SUPPORTING TIDAL VEGETATION CT COASTAL JURISDICTION LINE CJL 5,4 9,38 HIGH TIDE LINE HTL 5.2 9.18 MEAN HIGH WATER LINE MHW 3.35 7.33 MEAN LOW WATER LINE MLW -3.72 0.26 MEAN LOWER LOW WATER LINE -3.98 0

ELEVATION TABLE

| WORKING POINT | NORTHING | EASTING |
|---------------|----------|---------|
| WP7 | 597,094 | 816,715 |
| WP8 | 596,954 | 816,803 |
| | | |

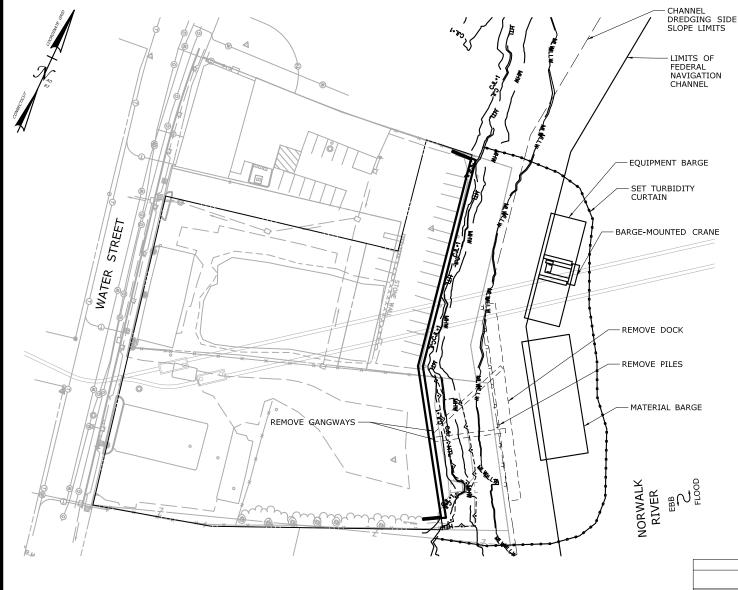
SCALE IN FEET CHECKED: SCALE 1"=80' APPROVED:

T. ADINOLFI V. ROBBINS C. BROWN

SIGNATURE BLOCK:

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5



PLAN

CONSTRUCTION SEQUENCE

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES RELATED TO TEMPORARY AND PERMANENT IMPROVEMENTS AT THE MARINE STAGING YARD WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES. WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE,

WORK DESCRIPTION

FILL SITE FOR ACCESS.

MOVE BARGES INTO PLACE AND SET TURBIDITY CURTAIN.

INSTALL MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM.

INSTALL BULKHEAD, REMOVE DERELICT PILES, AND DREDGE TO ÉL -11 (MIN.) (-7.02 MLLW) (SEE ACTIVITY 17).

REMOVE MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM. DRIVE PILES FOR DOCKS.

REMOVE TURBIDITY CURTAIN, SET DOCKS AND GANGWAYS.

SET TURBIDITY CURTAIN, REMOVE DOCKS, GANGWAYS AND PILES.

NOTES:

- 1. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE 100-YR FLOODPLAIN.
- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN
- 3. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- 4. ALL PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER PIPE PILES.

| ELEVATION TABLE | | | | | |
|---|---------|-----------------------|---------------------|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | |
| 100-YEAR FLOODPLAIN | 100 YR | 14.0 | 17.98 | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | | |

SCALE IN FEET SCALE 1"=80'

SCALE:

T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

SIGNATURE BLOCK:

DEPARTMENT OF TRANSPORTATION

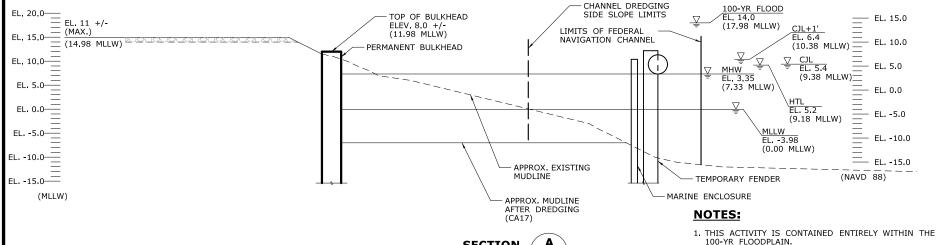
STATE OF CONNECTICUT

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

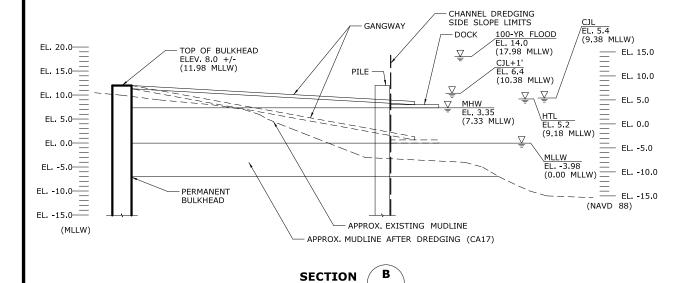
NORWALK DRAWING TITLE:

ACTIVITY 4 MARINE STAGING YARD DRAWING NO.: (SHEET 5 OF 6)

REV 02-23-21 CA4-5

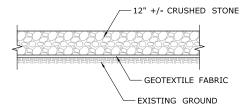






CA4-4

- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 3. TOP OF MARINE ENCLOSURE WILL BE INSTALLED TO ELEV. 6.2 (MIN.) (10.18 MLLW), 1 FOOT ABOVE HIGH TIDE LINE.
- 4. MARINE ENCLOSURE WILL ONLY BE REQUIRED IF DREDGING OCCURS OUTSIDE THE MONTHS OF DECEMBER AND JANUARY.
- 5. SITE TO BE RESTORED UPON COMPLETION. PERVIOUS SURFACES WILL BE TREATED WITH APPROPRIATE FERTILIZERS AND MULCH IN ACCORDANCE WITH THE CTDEEP GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
- 6. SEE ACTIVITY 17 FOR COMPLETE DREDGING LIMITS.



TYPICAL FILL SECTION

NOT TO SCALE

| ELEVATION TABLE | | | | | |
|---|---------|-----------------------|---------------------|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | |
| 100-YEAR FLOODPLAIN | 100 YR | 14.0 | 17.98 | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | | |

CALE: SCALE IN FEET SCALE 1"=20'

T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

SIGNATURE BLOCK:

DEPARTMENT OF TRANSPORTATION

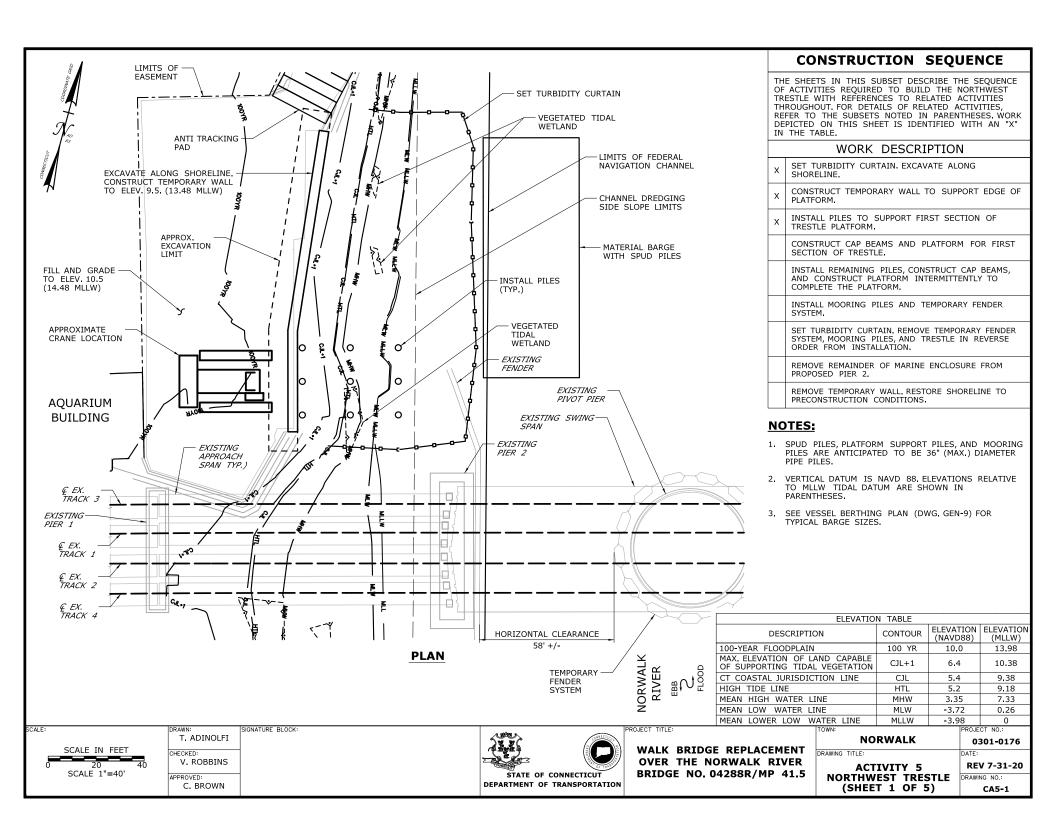
STATE OF CONNECTICUT

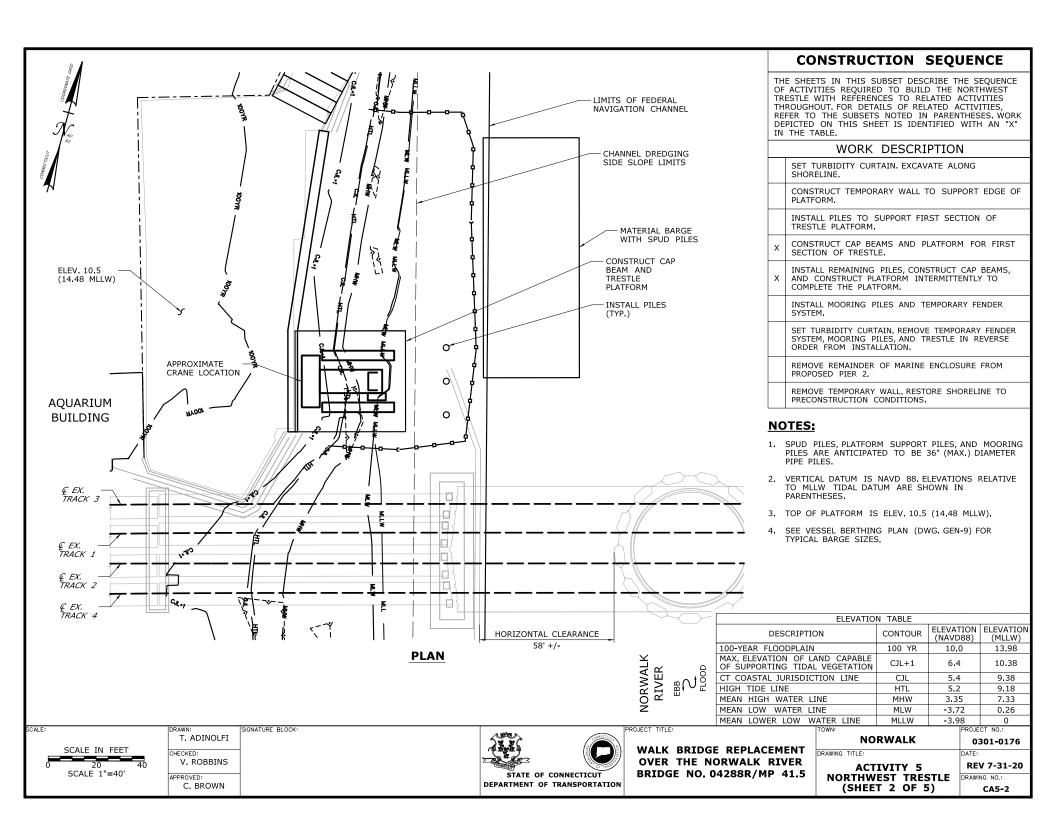
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

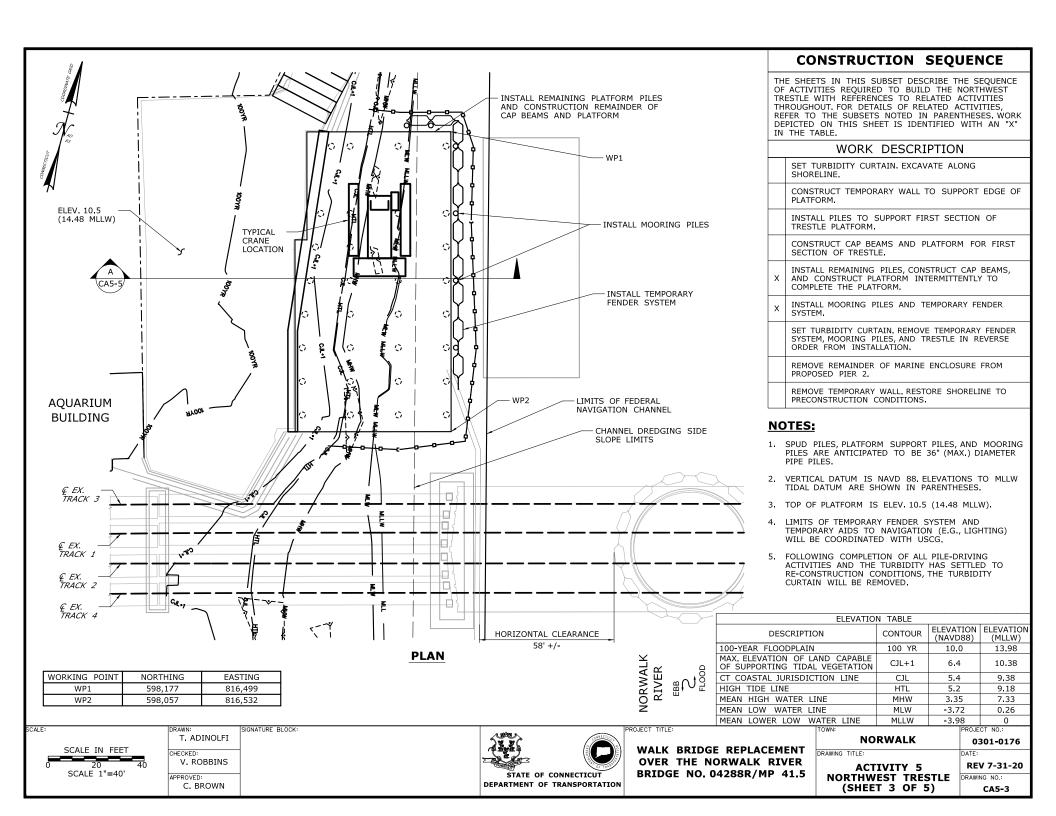
NORWALK DRAWING TITLE:

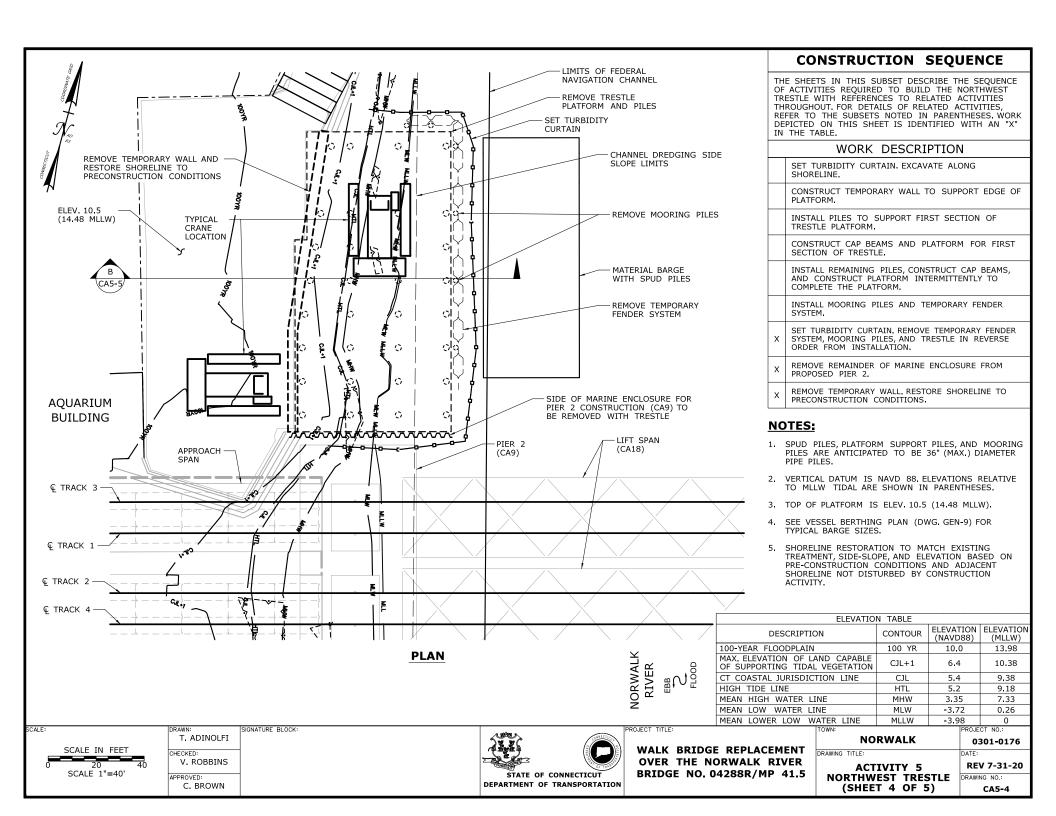
ACTIVITY 4

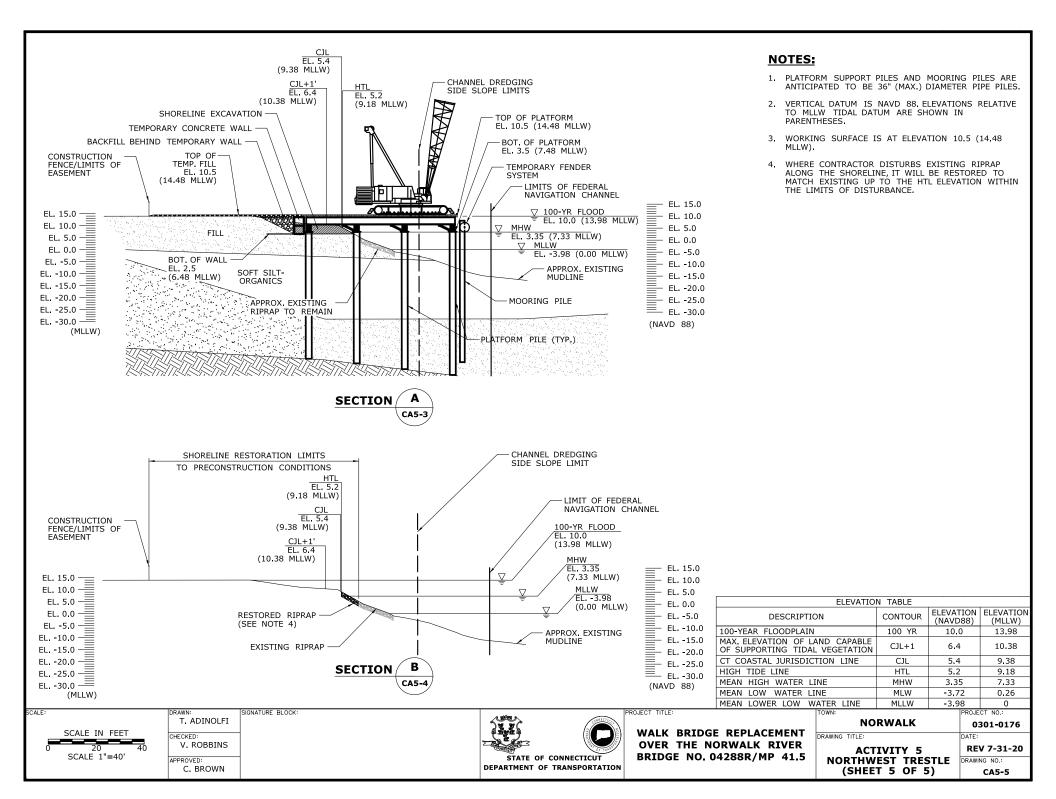
REV 02-23-21 MARINE STAGING YARD DRAWING NO.: (SHEET 6 OF 6) CA4-6

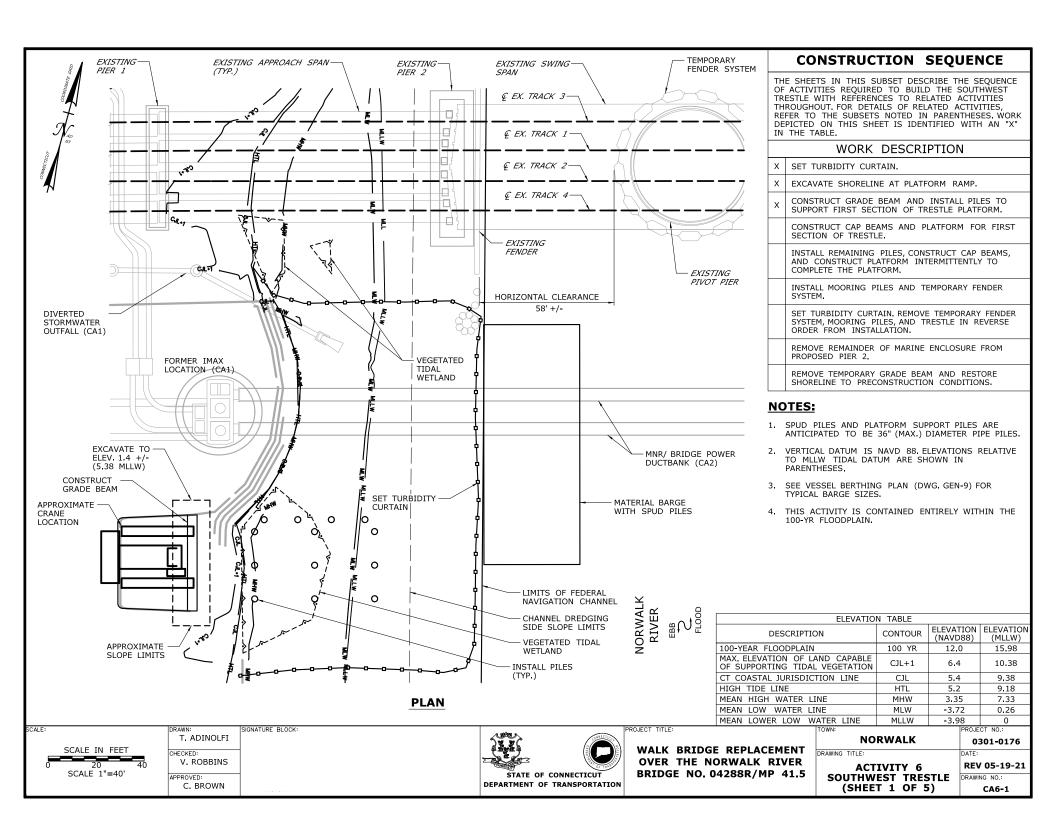


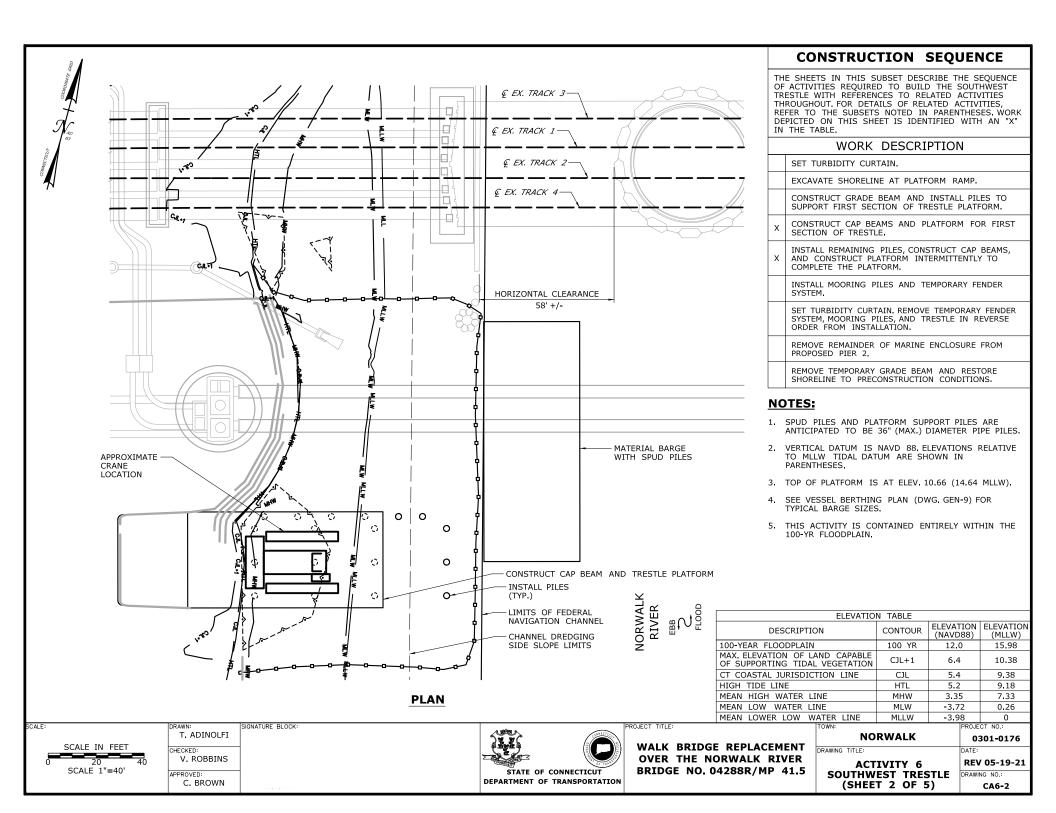


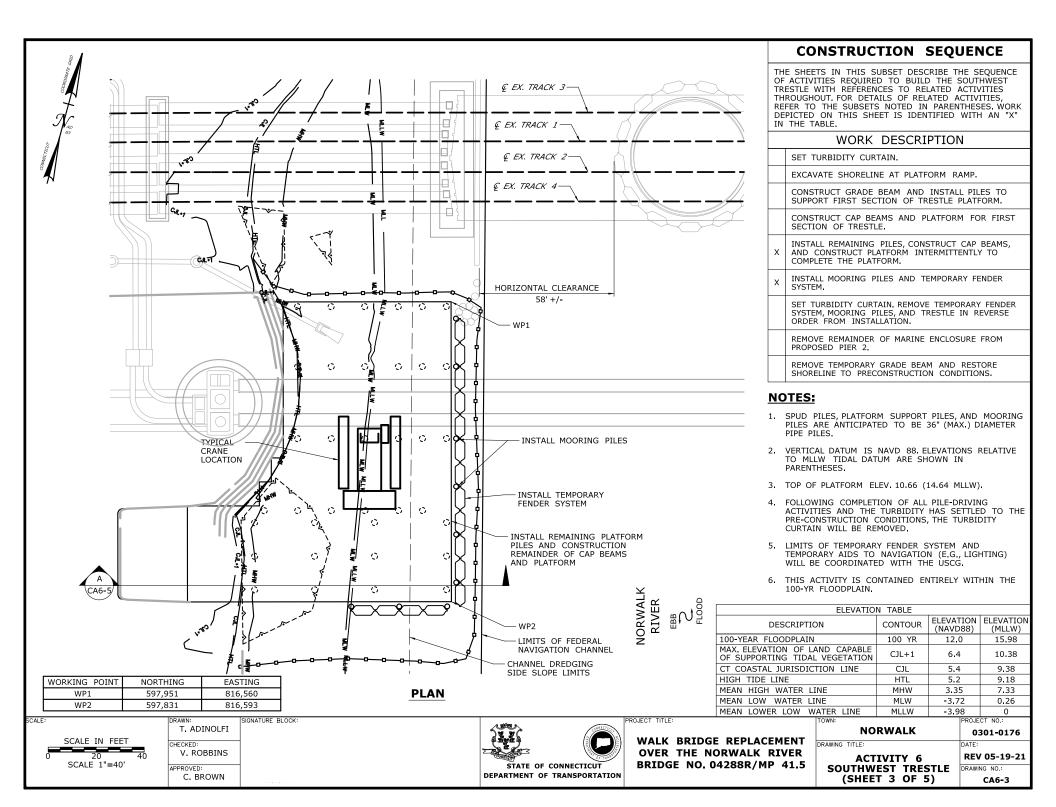


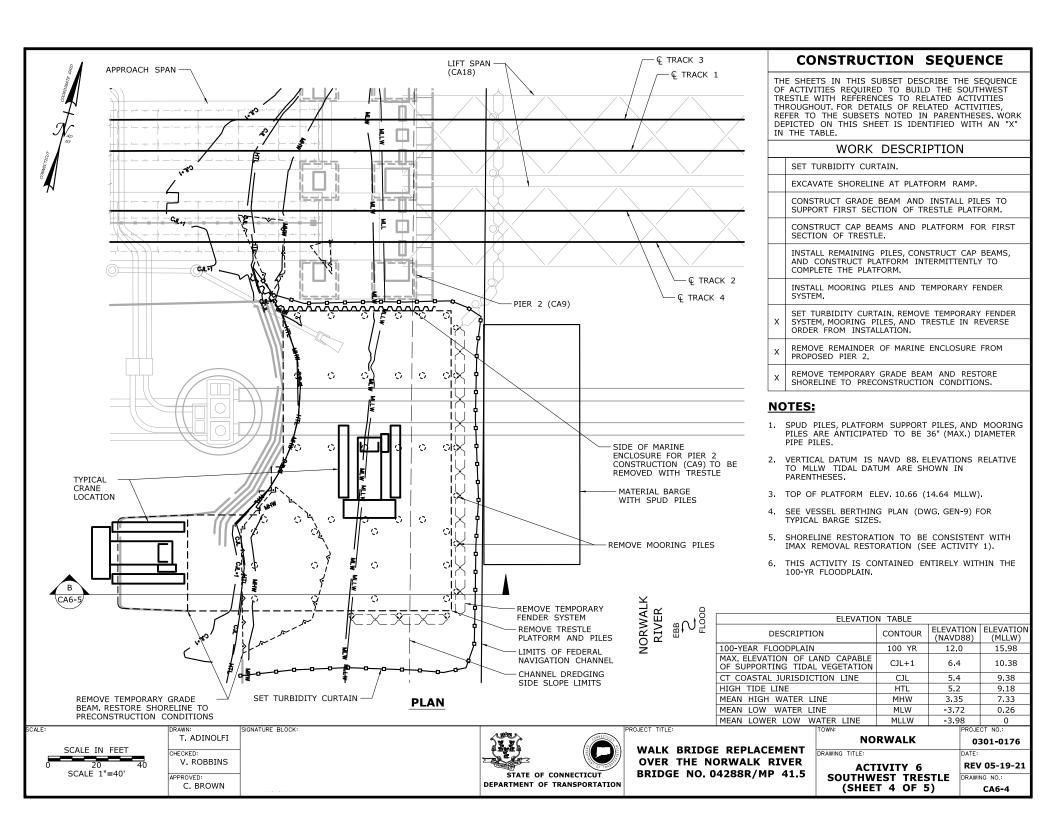


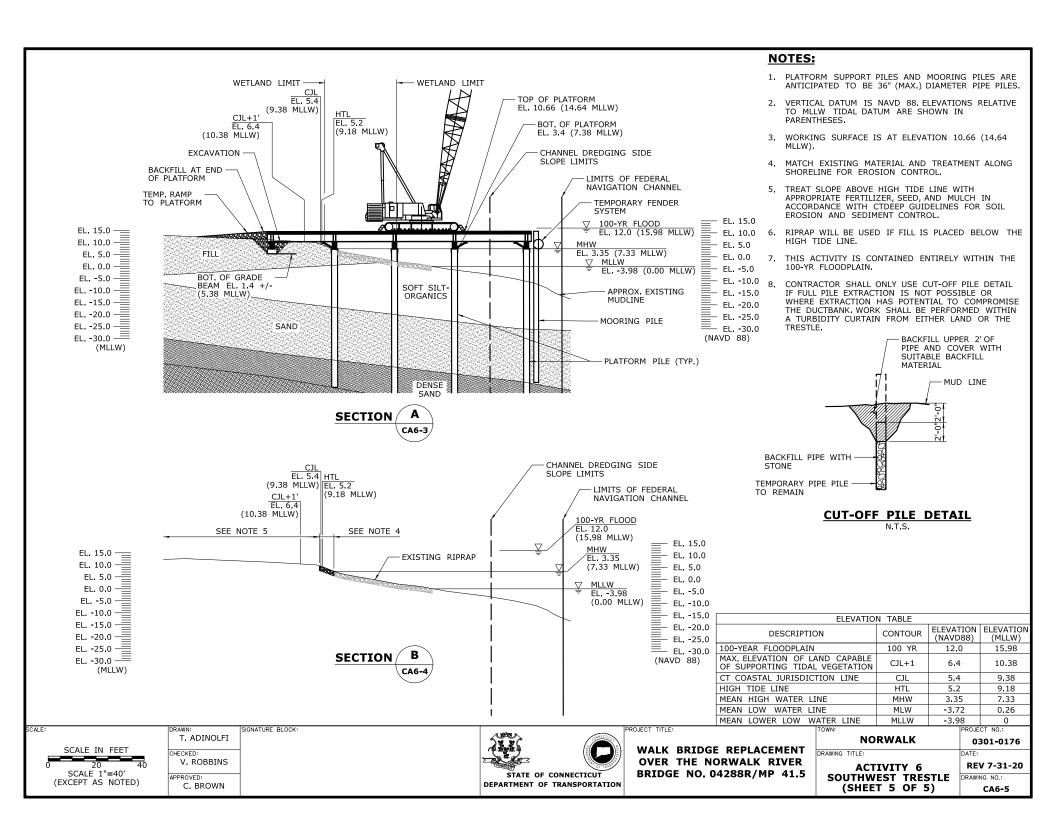


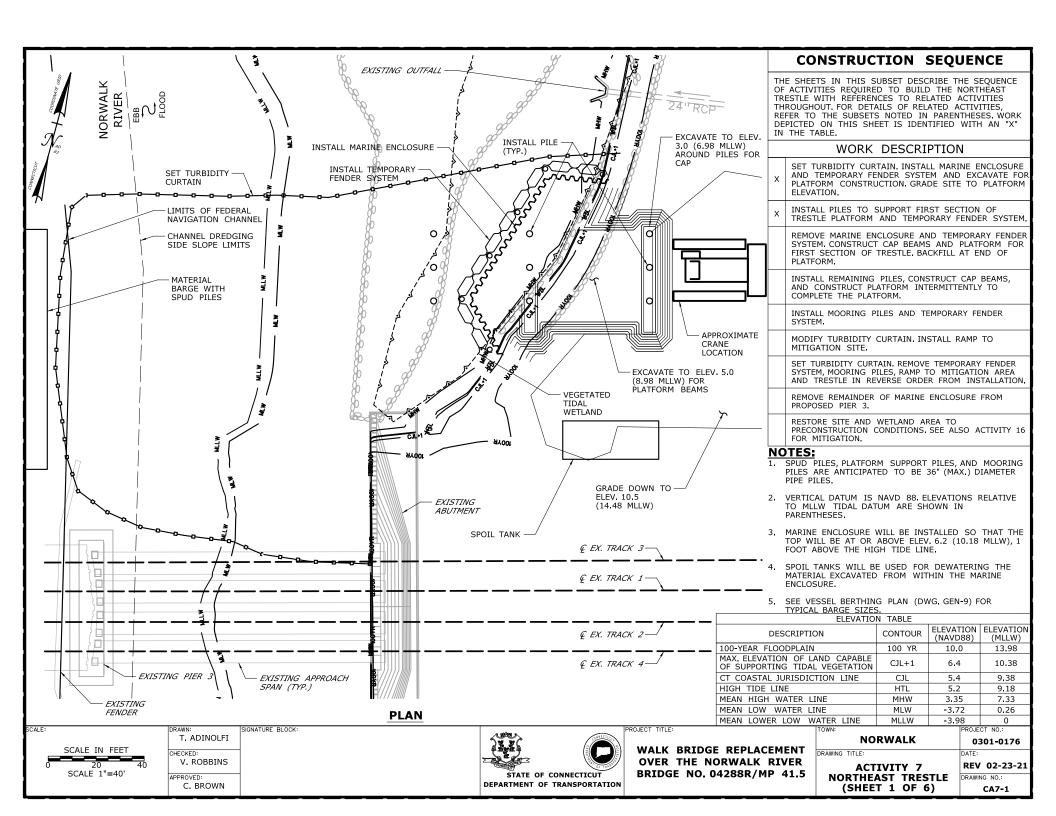


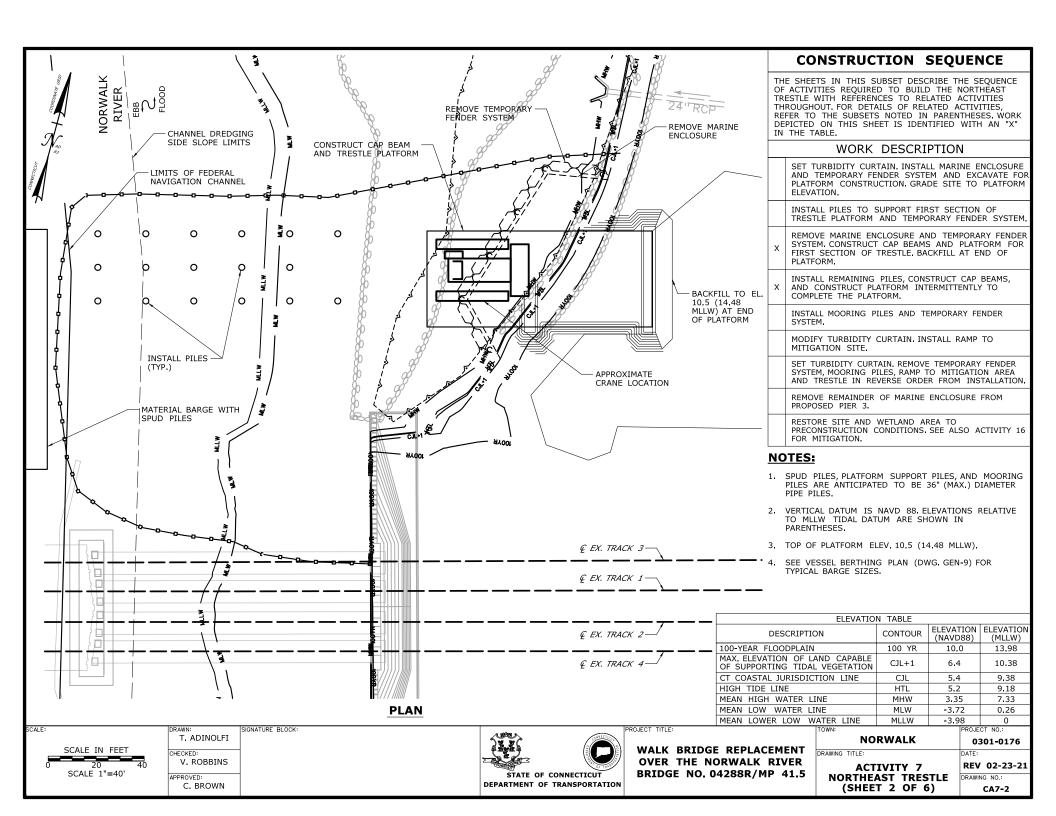


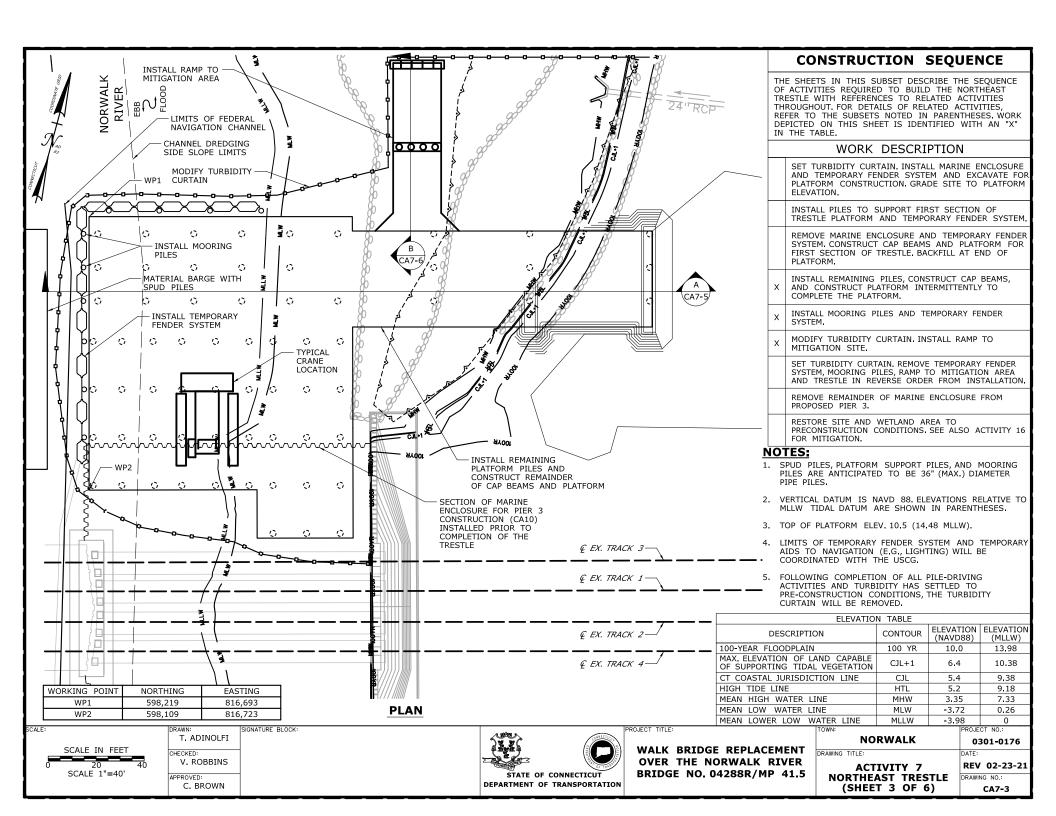


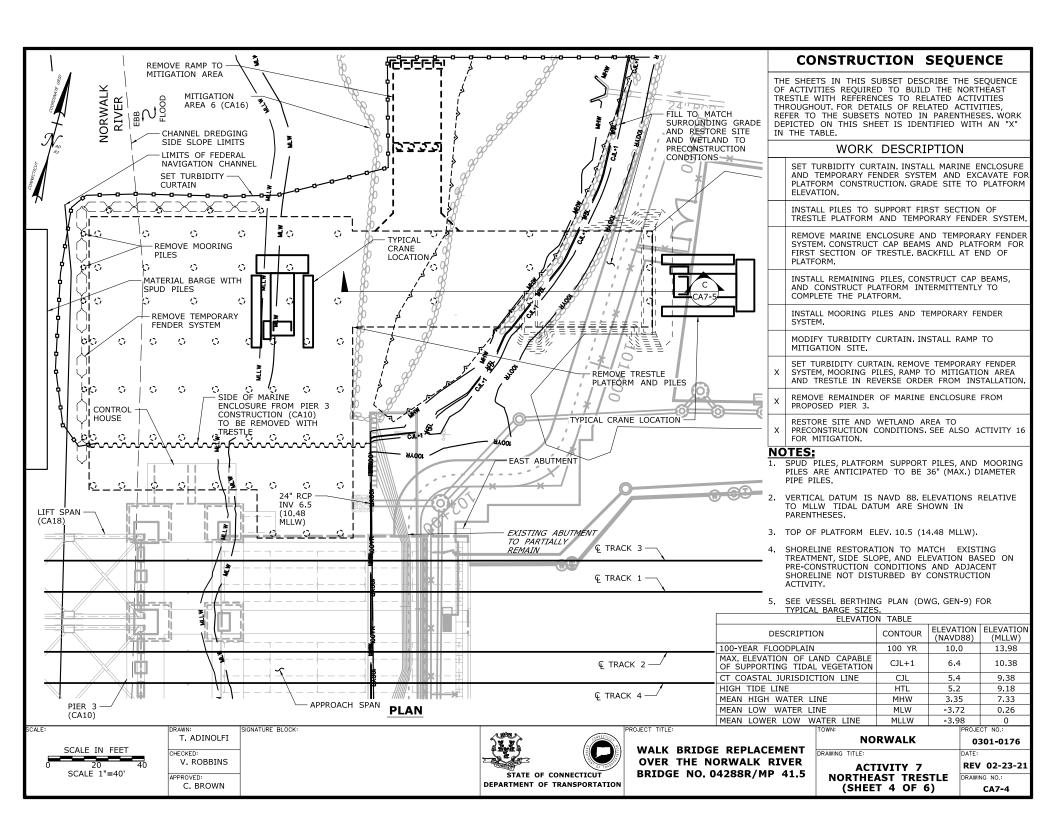


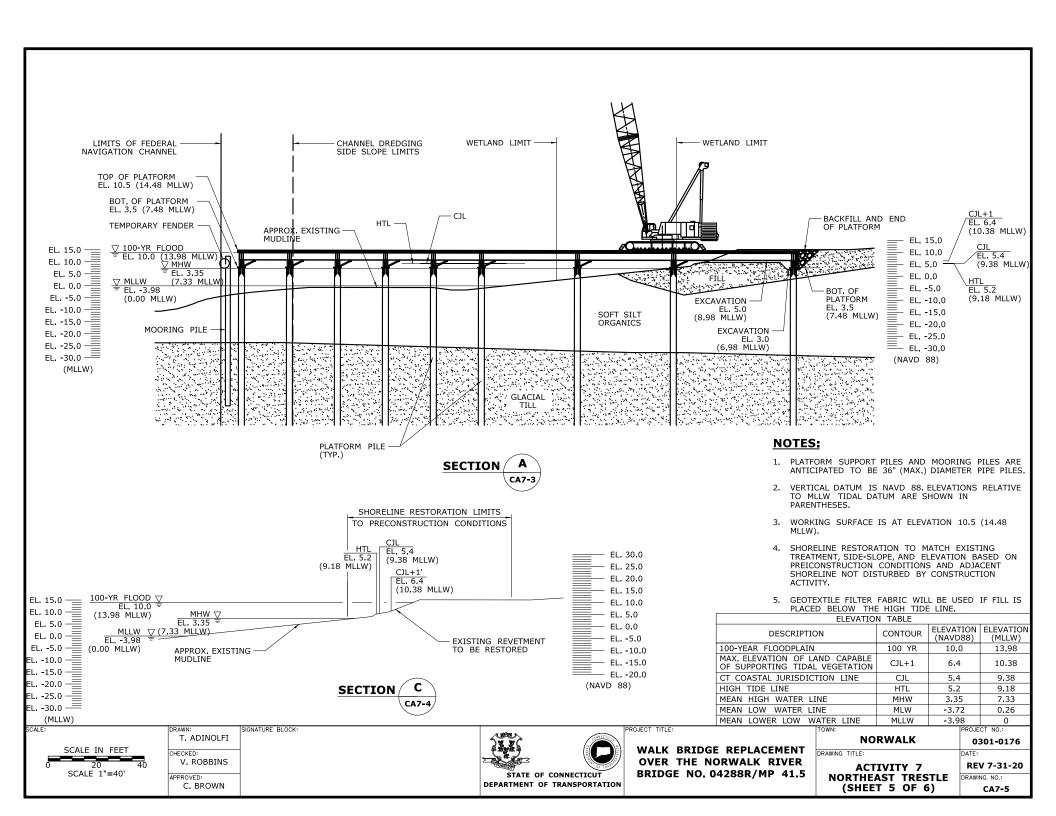


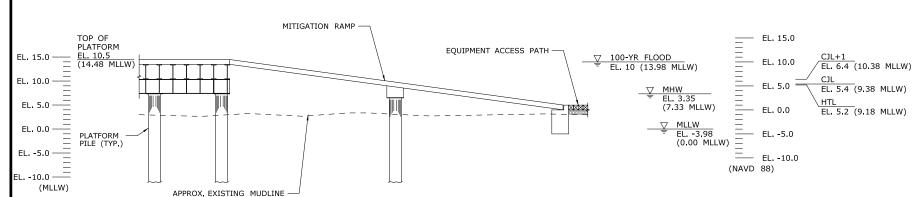












SECTION

NOTES:

- 1. PLATFORM SUPPORT PILES AND MOORING PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER PIPE PILES.
- VERTICAL DATUM IS NAVD 88 ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.

| ELEVATION TABLE | | | | | | | |
|---|---------|-----------------------|---------------------|--|--|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | | | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0 | 13.98 | | | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | | | | |

SCALE IN FEET SCALE 1"=20'

SIGNATURE BLOCK: T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN



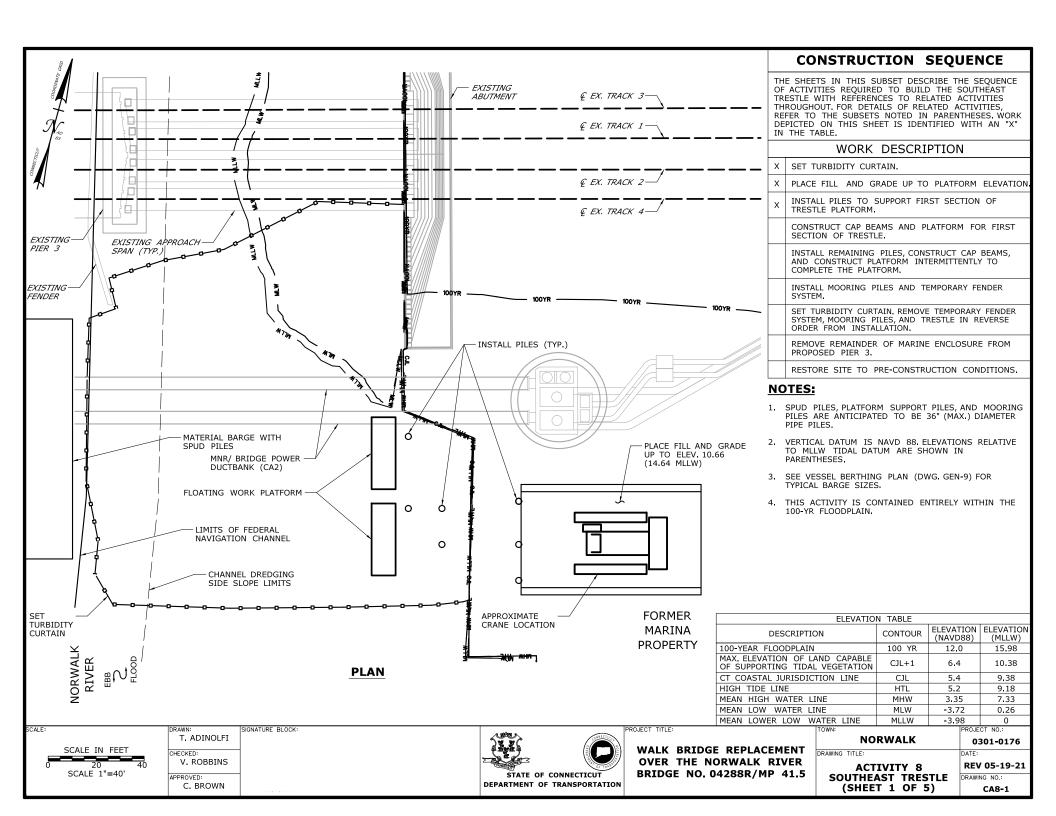
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5 NORWALK

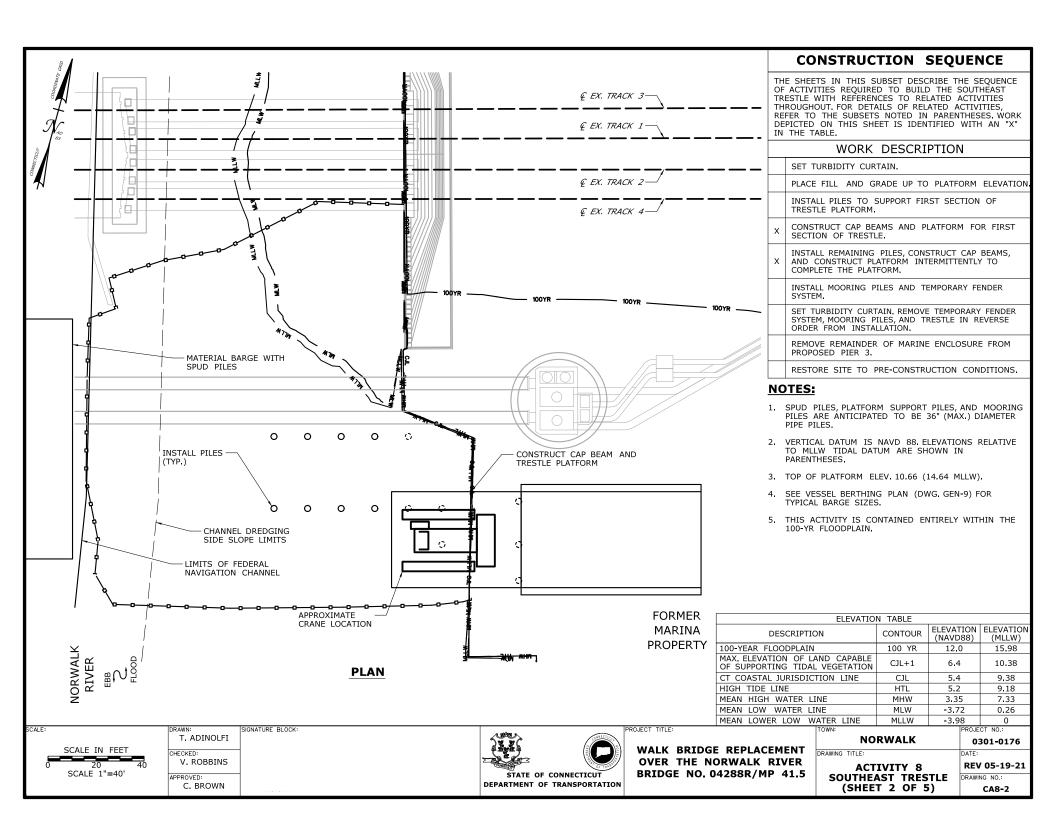
DRAWING TITLE:

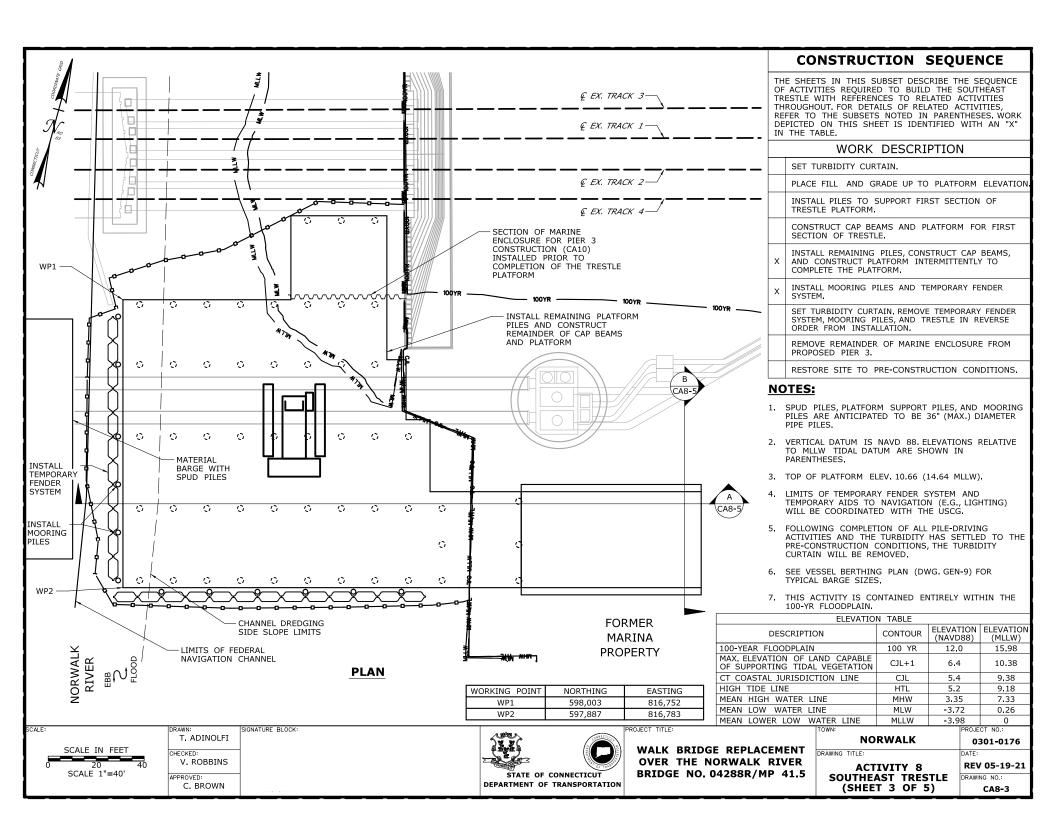
0301-0176

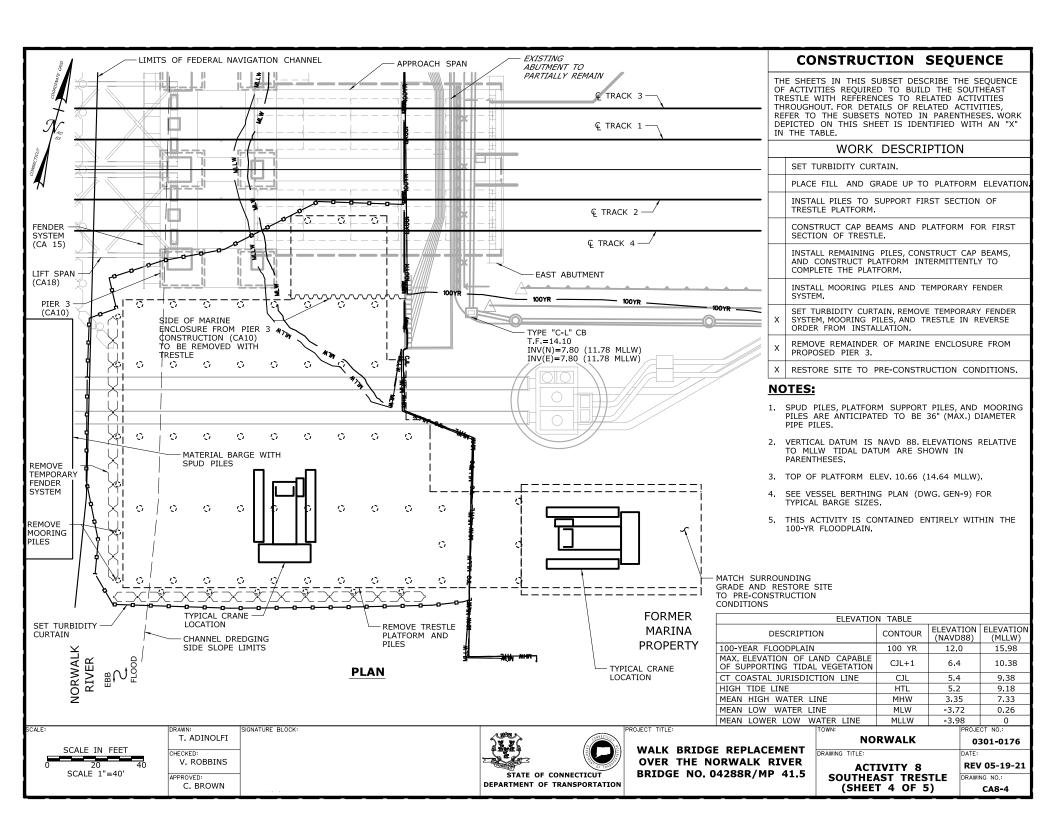
ACTIVITY 7 NORTHEAST TRESTLE (SHEET 6 OF 6)

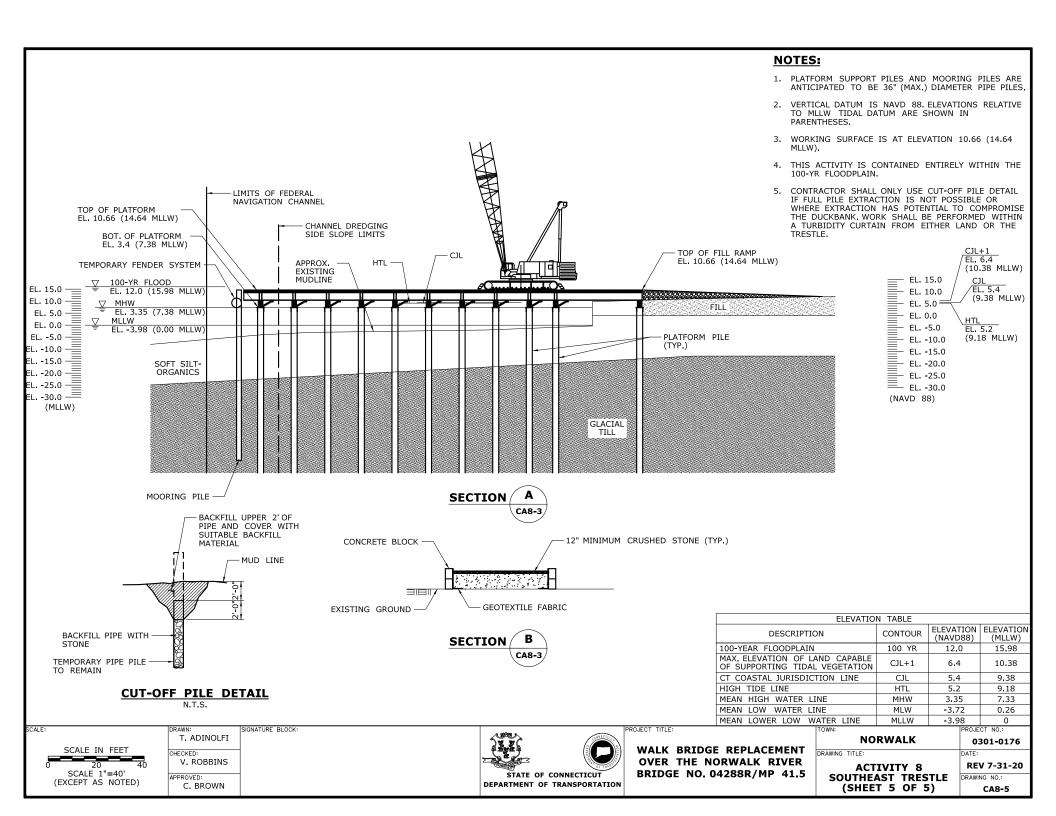
REV 7-31-20 DRAWING NO.: CA7-6

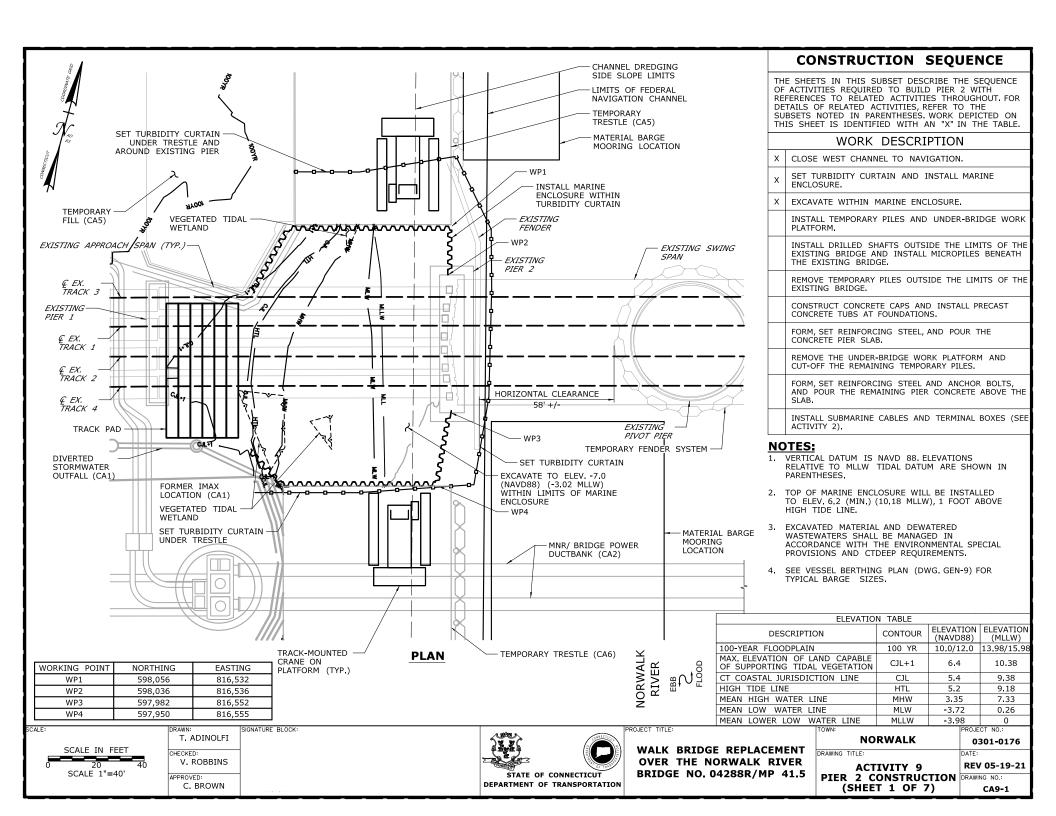


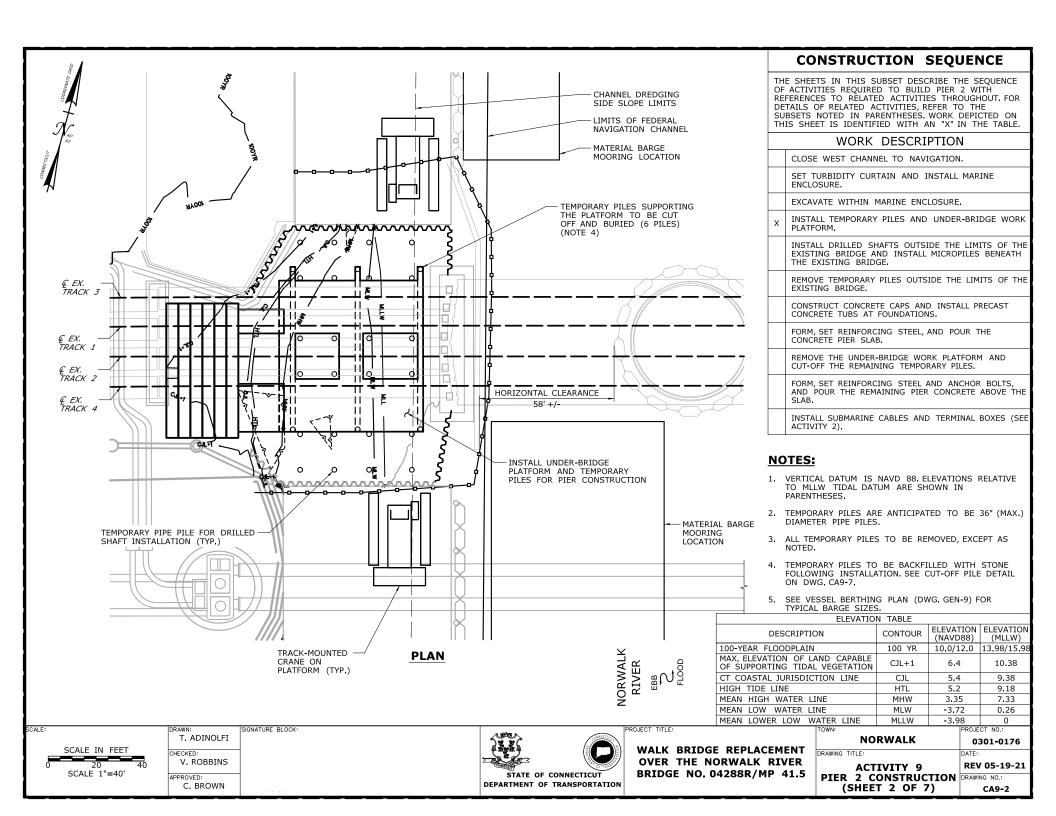


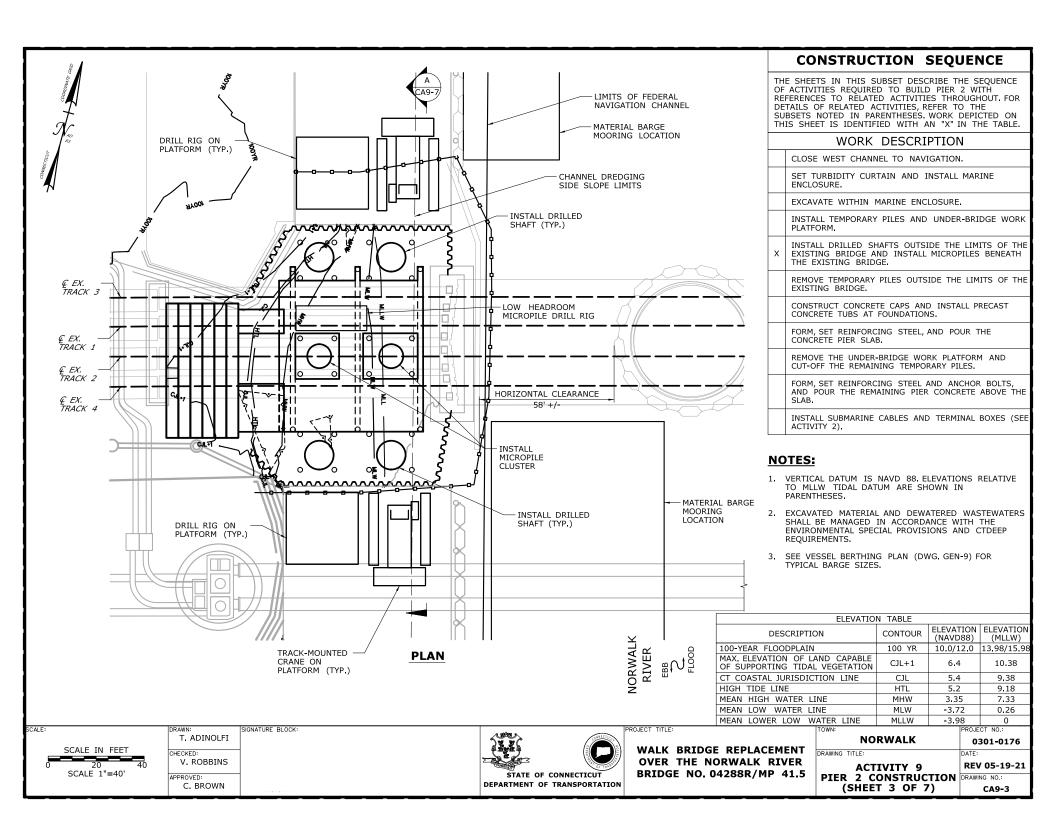


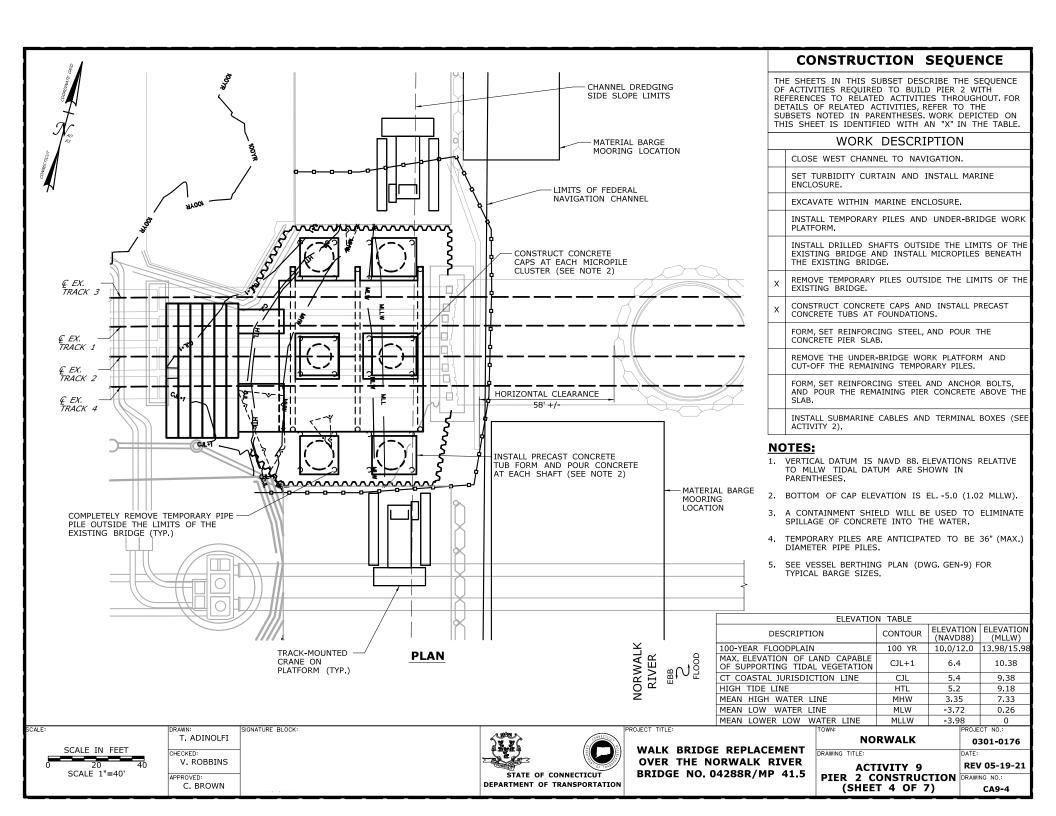


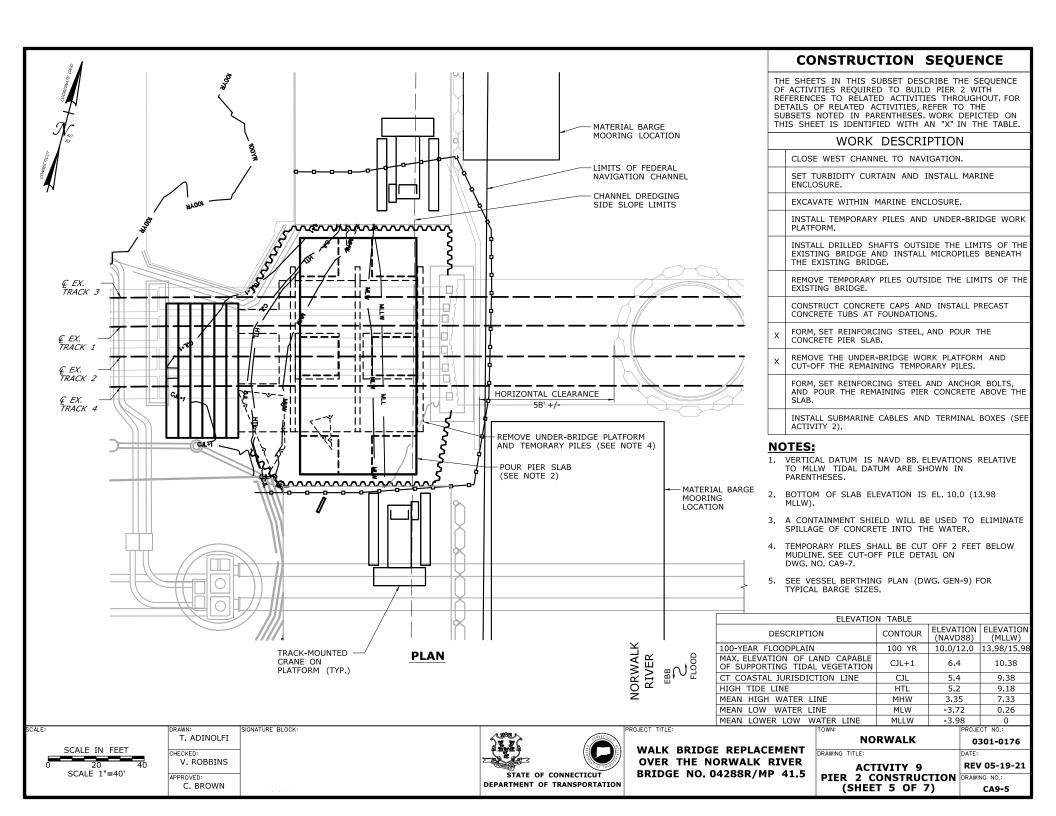


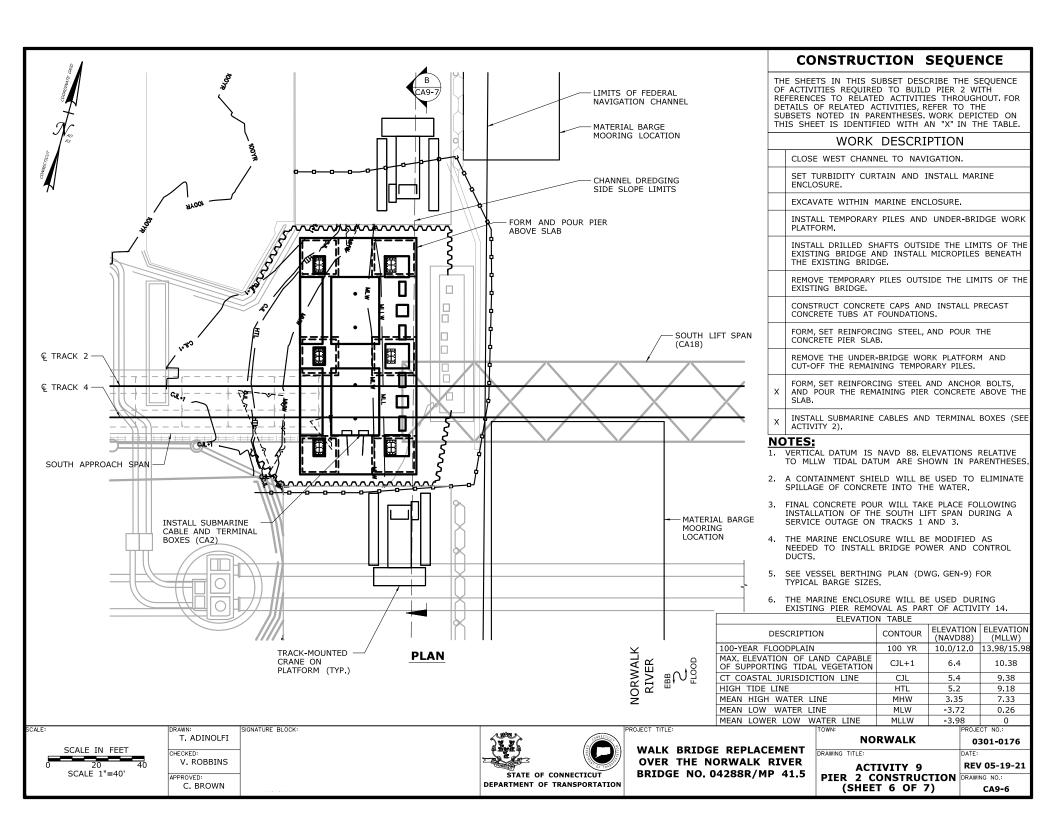


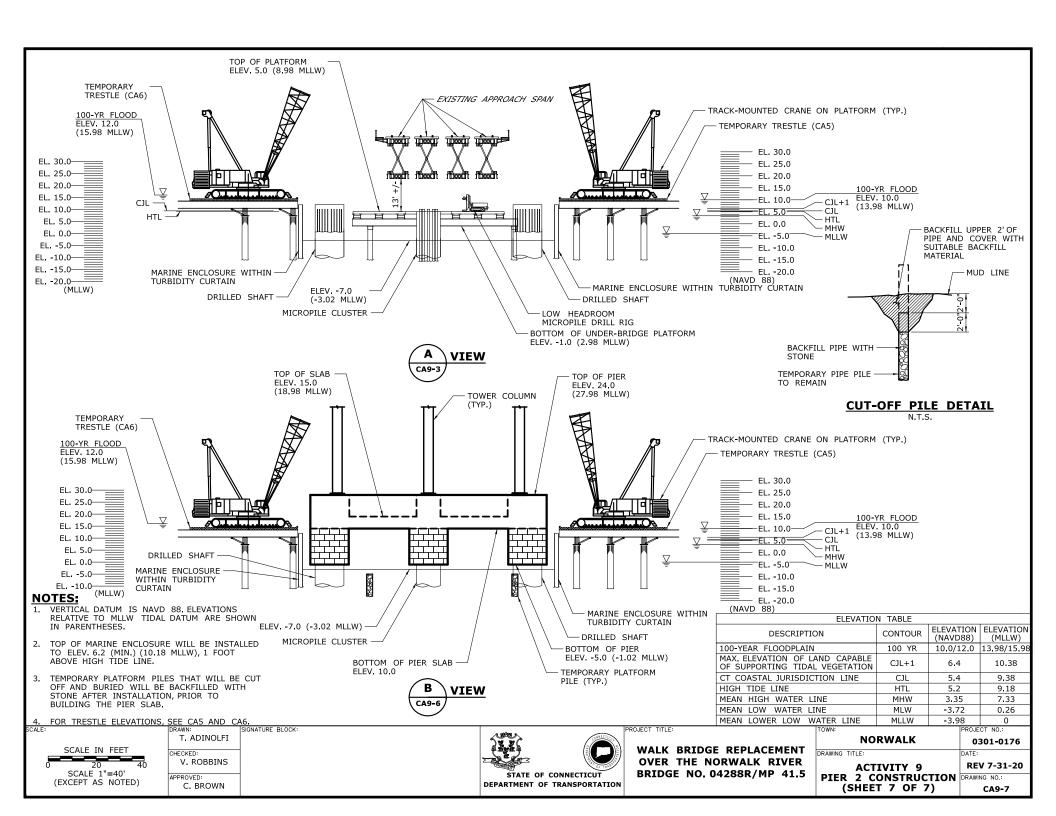


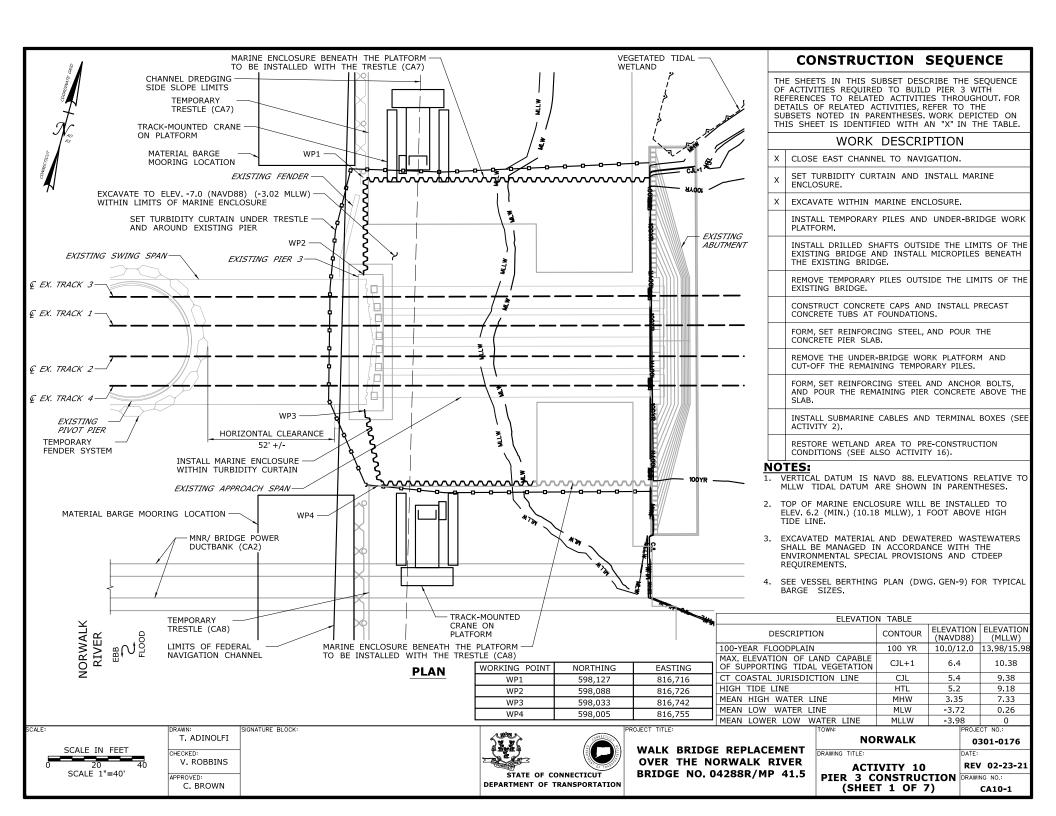


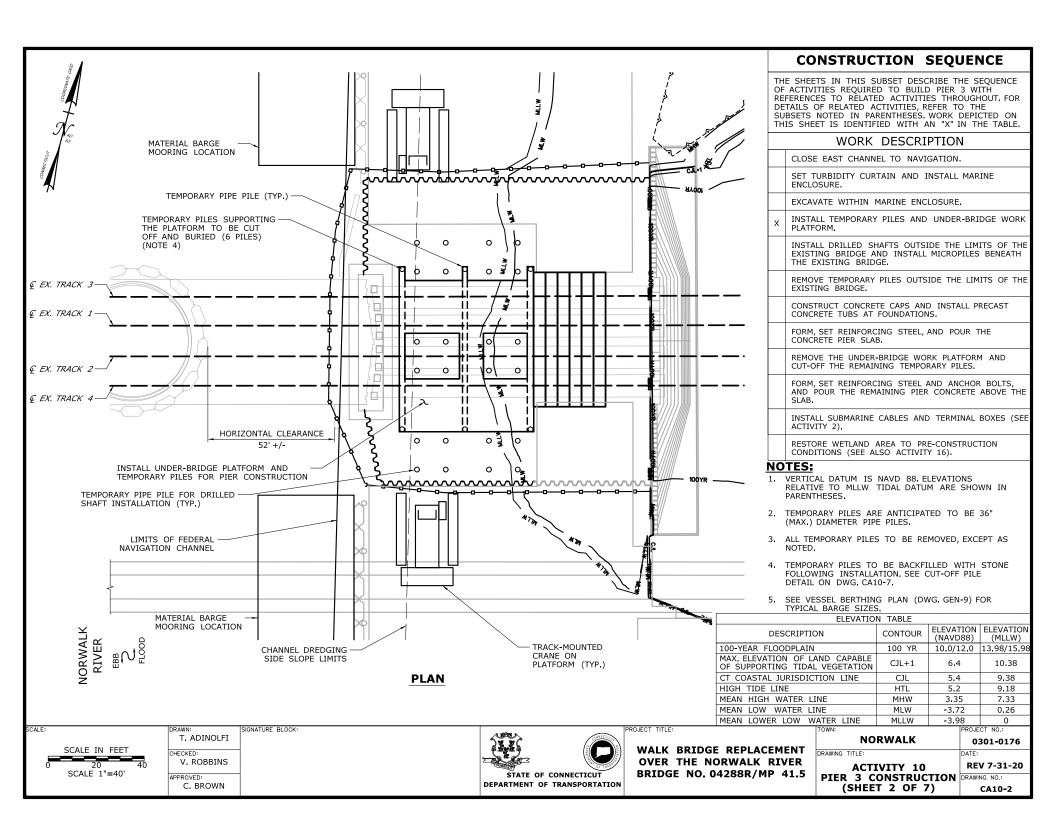


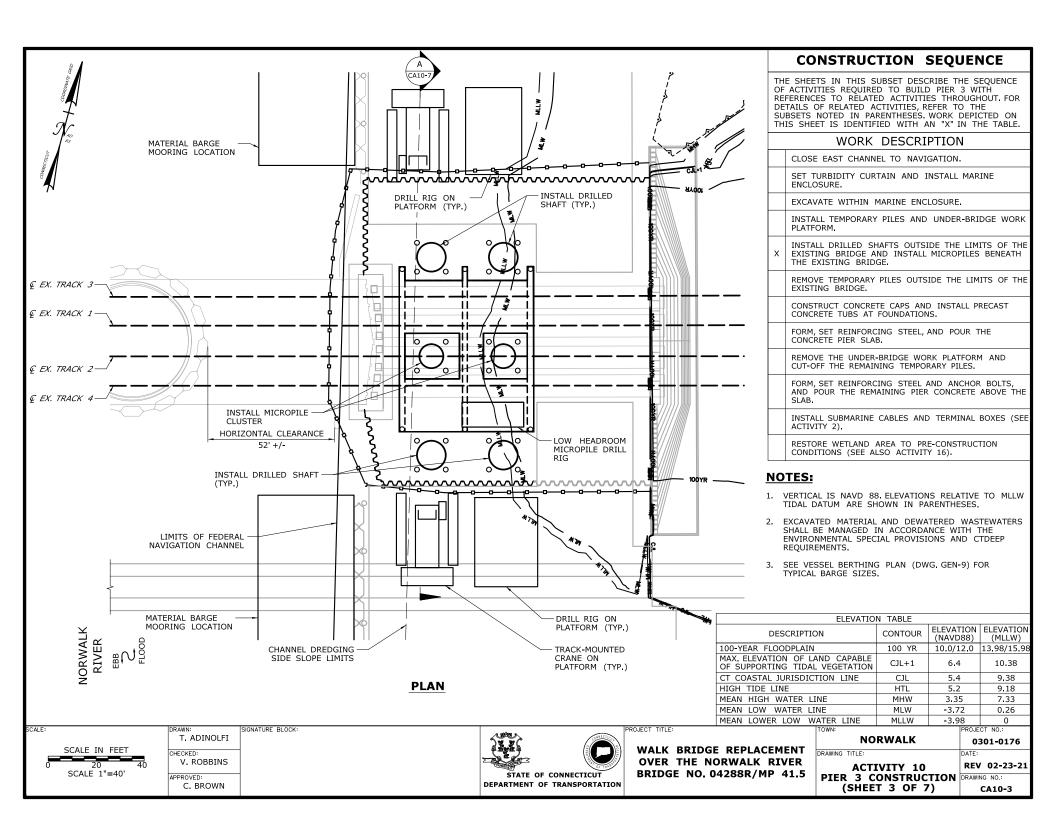


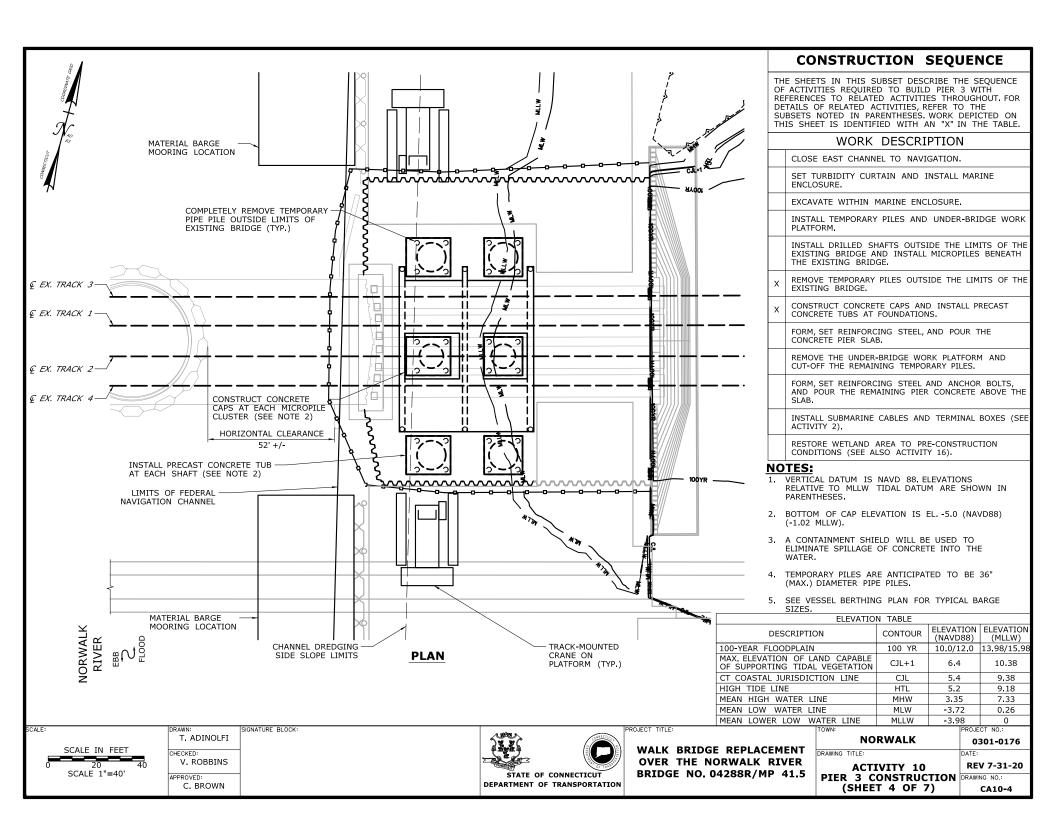


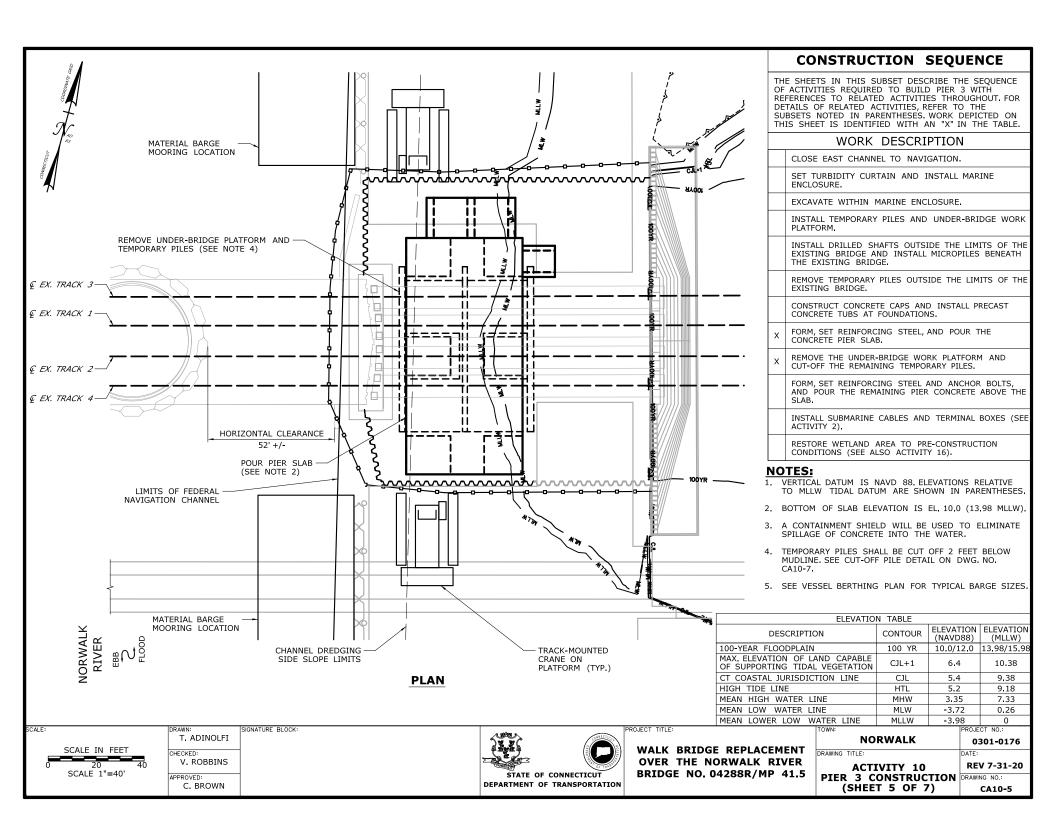


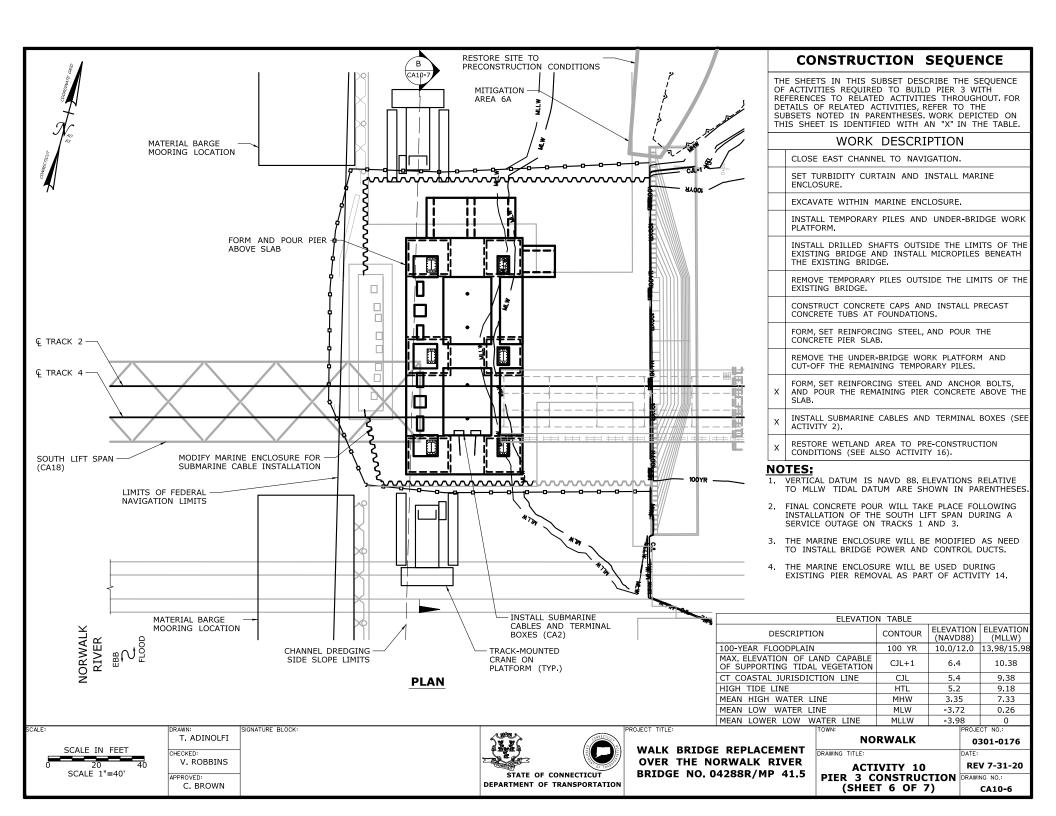


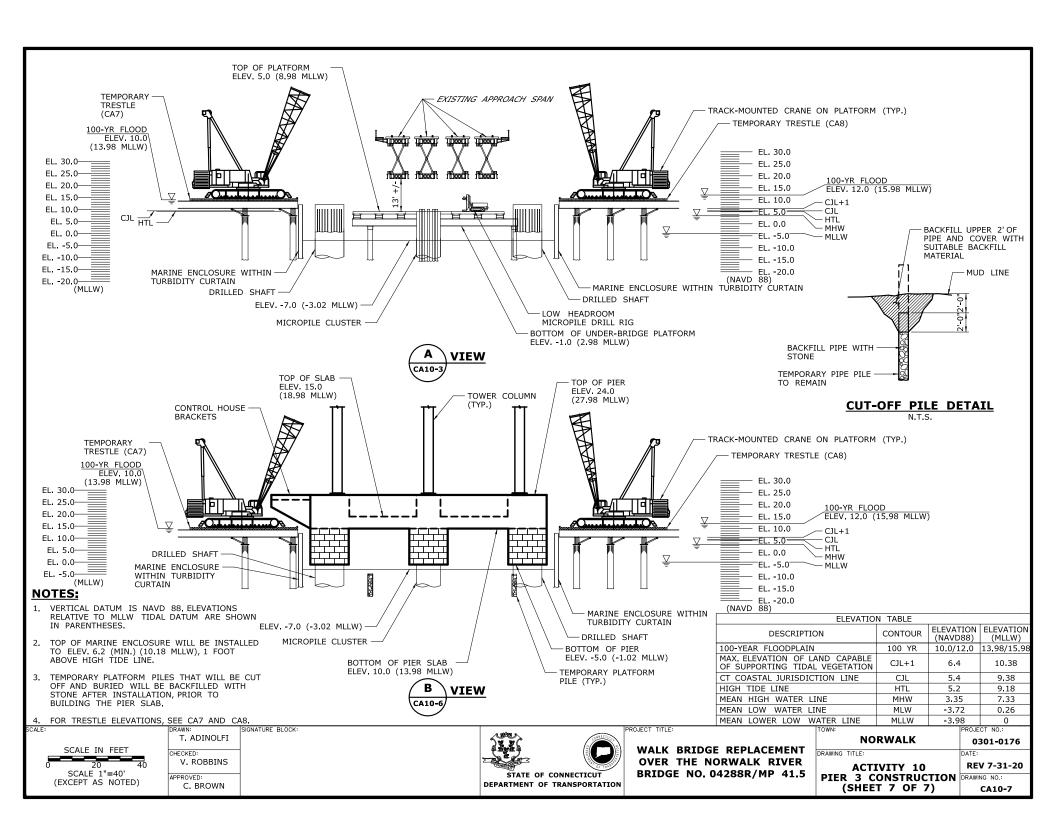


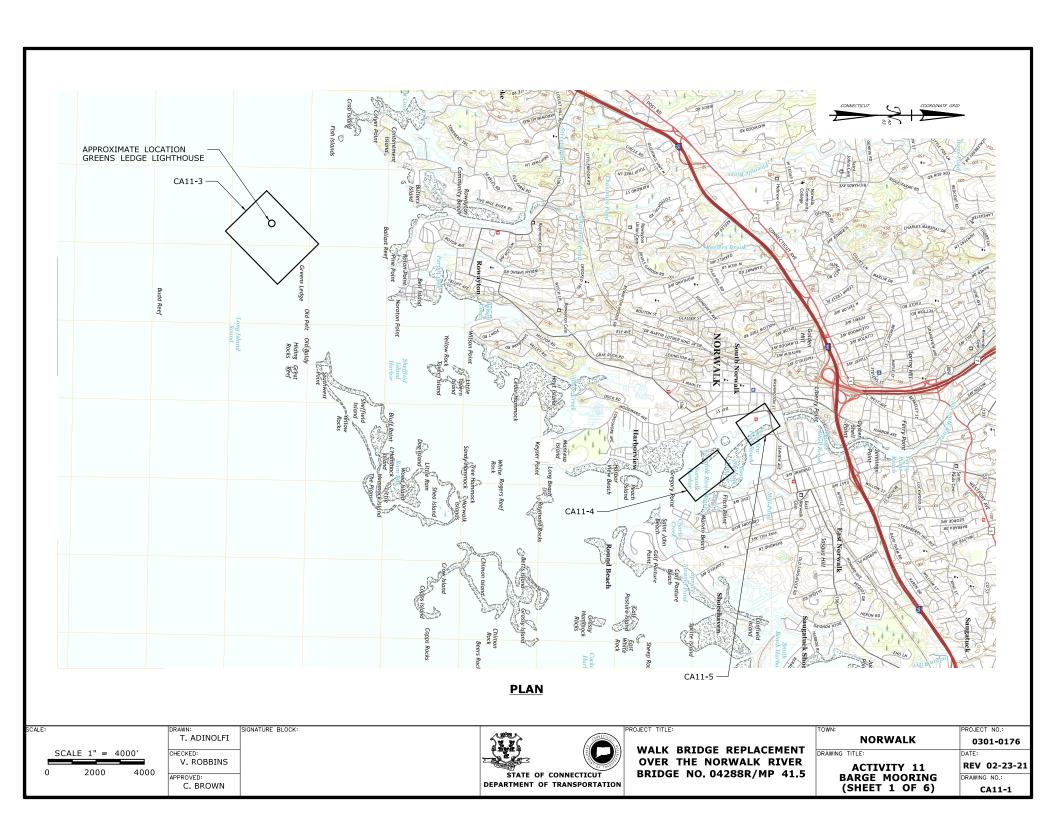


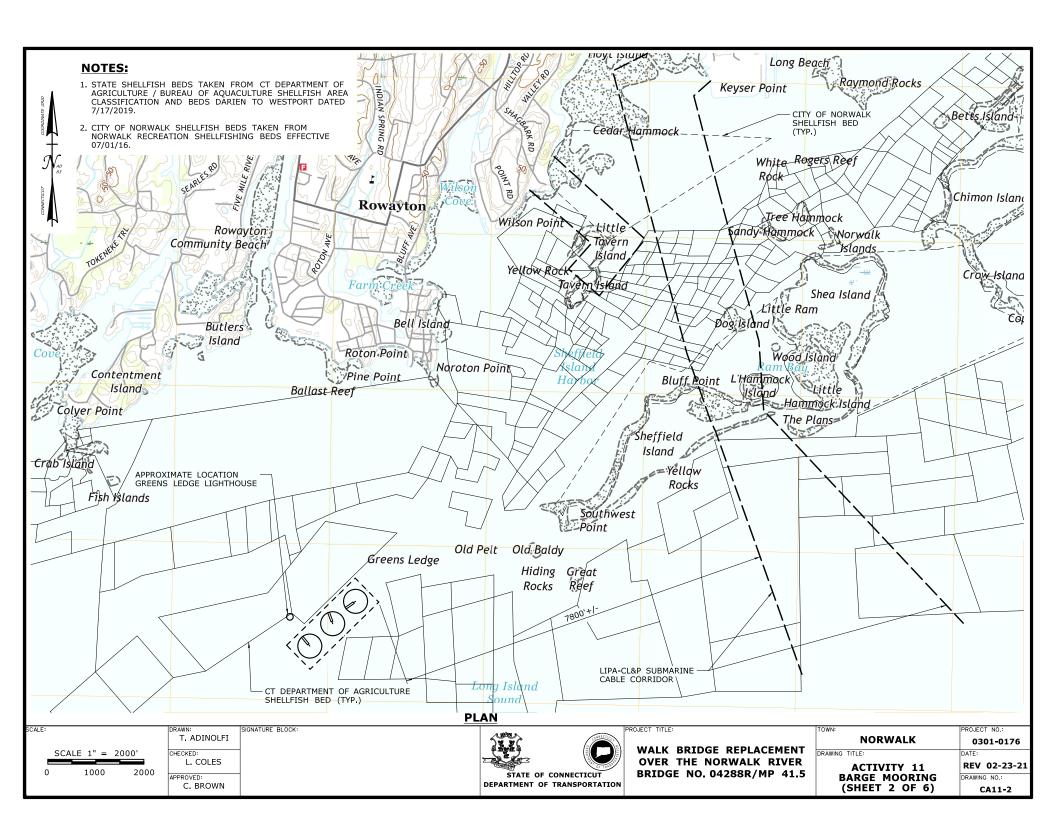


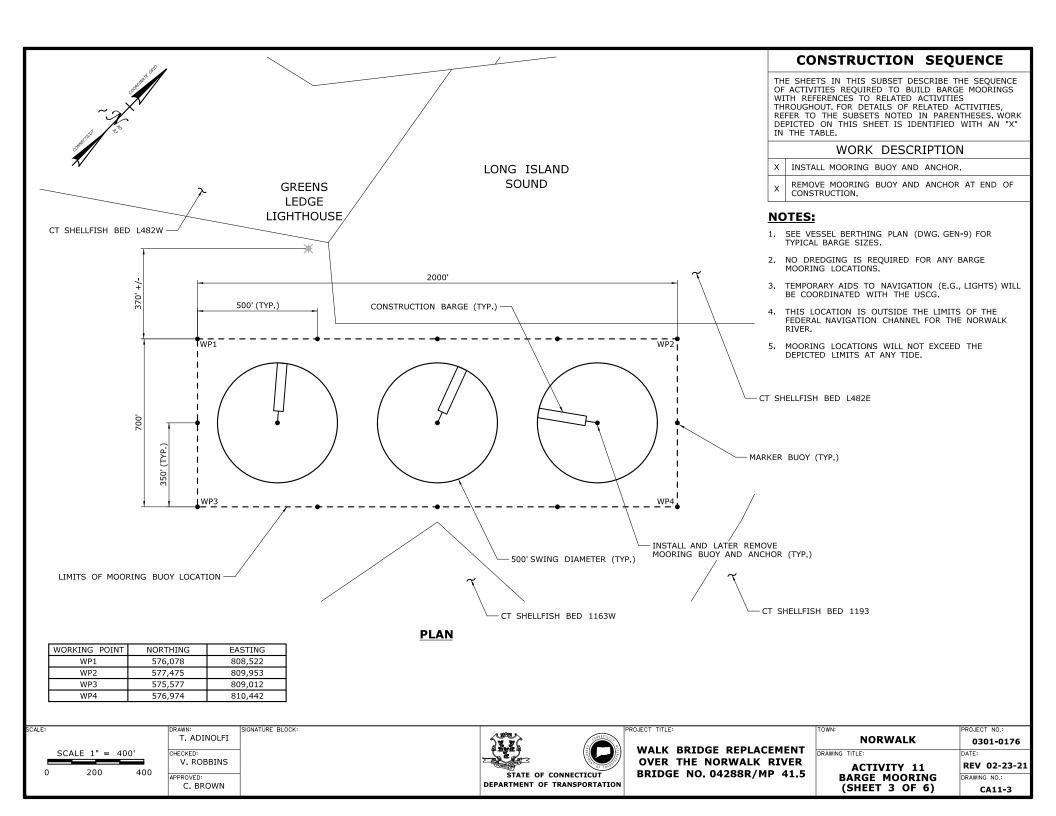


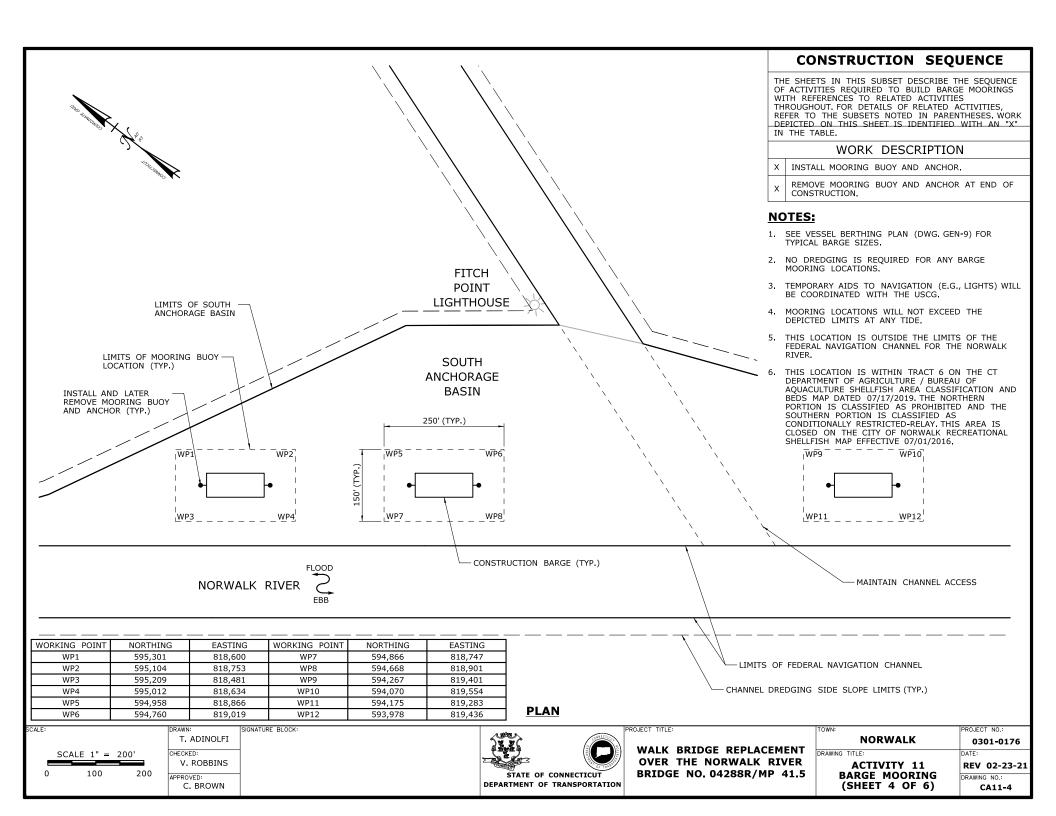


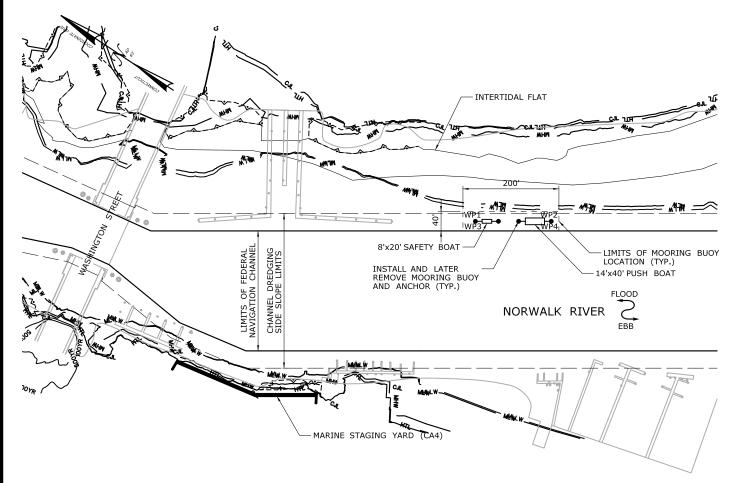












CONSTRUCTION SEQUENCE

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO BUILD BARGE MOORINGS WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE,

WORK DESCRIPTION

- Χ INSTALL MOORING BUOY AND ANCHOR.
- REMOVE MOORING BUOY AND ANCHOR AT END OF Χ CONSTRUCTION.

NOTES:

- 1. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- NO DREDGING IS REQUIRED FOR ANY BARGE MOORING LOCATIONS.
- 3. TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTS) WILL BE COORDINATED WITH THE USCG.
- MOORING LOCATIONS WILL NOT EXCEED THE DEPICTED LIMITS AT ANY TIDE.
- THIS LOCATION WILL BE USED TO MOOR SMALLER WORK BOATS AND CONSTRUCTION VESSELS.
- THIS LOCATION IS OUTSIDE THE LIMITS FOR THE FEDERAL NAVIGATION CHANNEL FOR THE NORWALK

PLAN

| WORKING POINT WP1 | | NORTHING | EASTING | |
|-------------------|-----|----------|---------|--|
| | | 596,871 | 817,238 | |
| | WP2 | 596,704 | 817,349 | |
| | WP3 | 596,849 | 817,205 | |
| | WP4 | 596,682 | 817,316 | |

SCALE 1" = 200' 100

SIGNATURE BLOCK: T, ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN



STATE OF CONNECTICUT

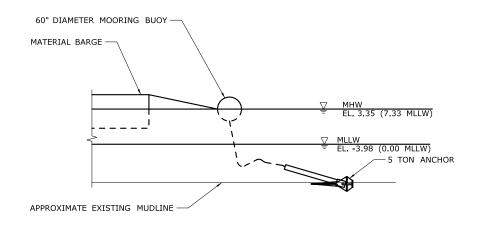
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

NORWALK DRAWING TITLE:

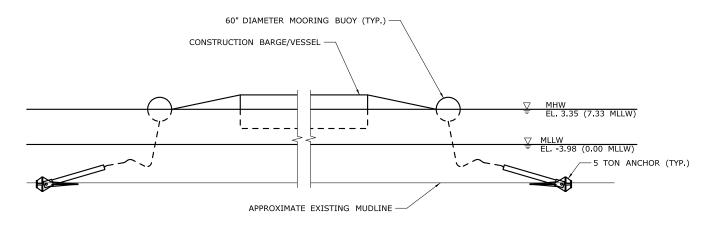
0301-0176

ACTIVITY 11 BARGE MOORING (SHEET 5 OF 6)

REV 02-23-21 DRAWING NO.: CA11-5



SWING MOORING DETAIL



FIXED MOORING DETAIL

NOTES:

1. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.

| ELEVATION TABLE | | | | | |
|---|---------|-----------------------|---------------------|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | |
| 100-YEAR FLOODPLAIN | 100 YR | 14.0 | 17.98 | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0.00 | | |

SCALE 1" = 20'

SIGNATURE BLOCK: T. ADINOLFI V. ROBBINS APPROVED: C. BROWN



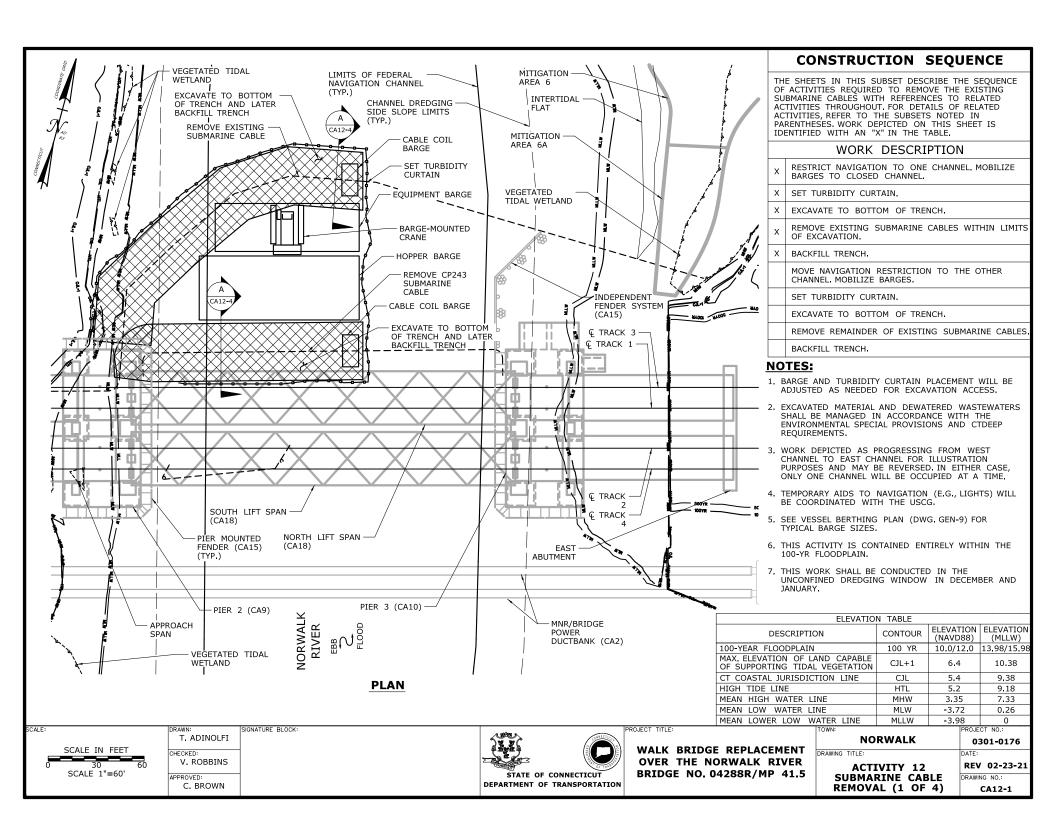
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

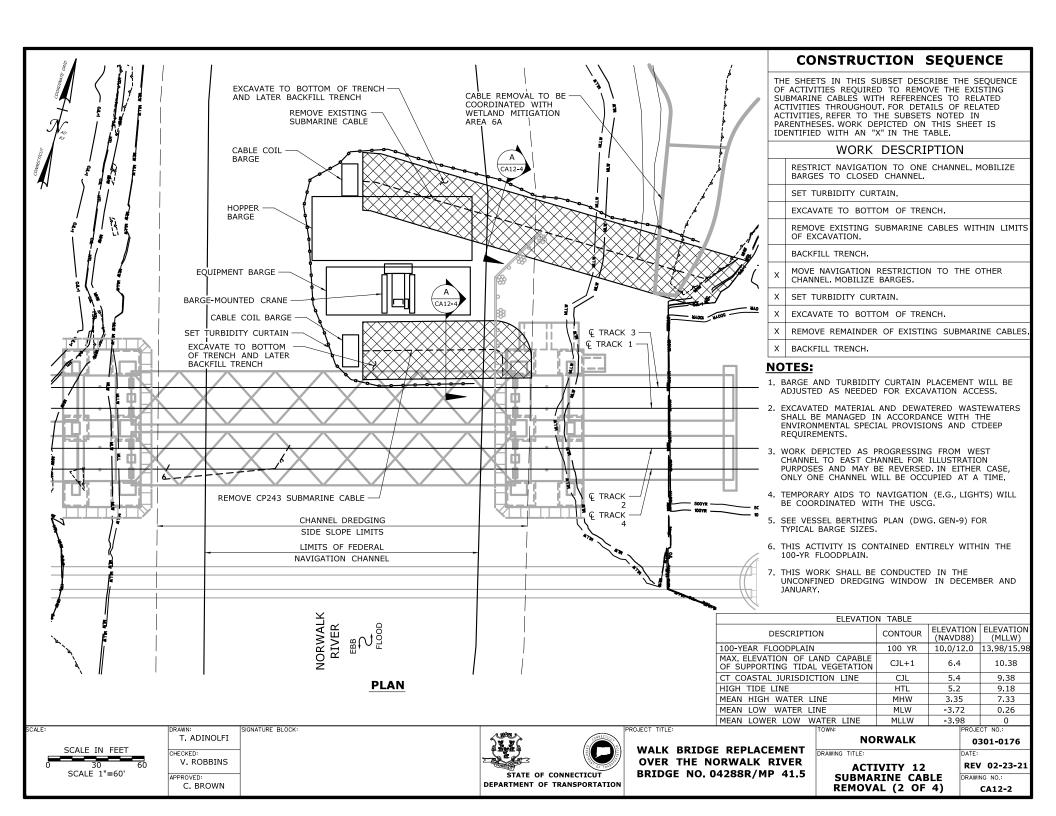
NORWALK

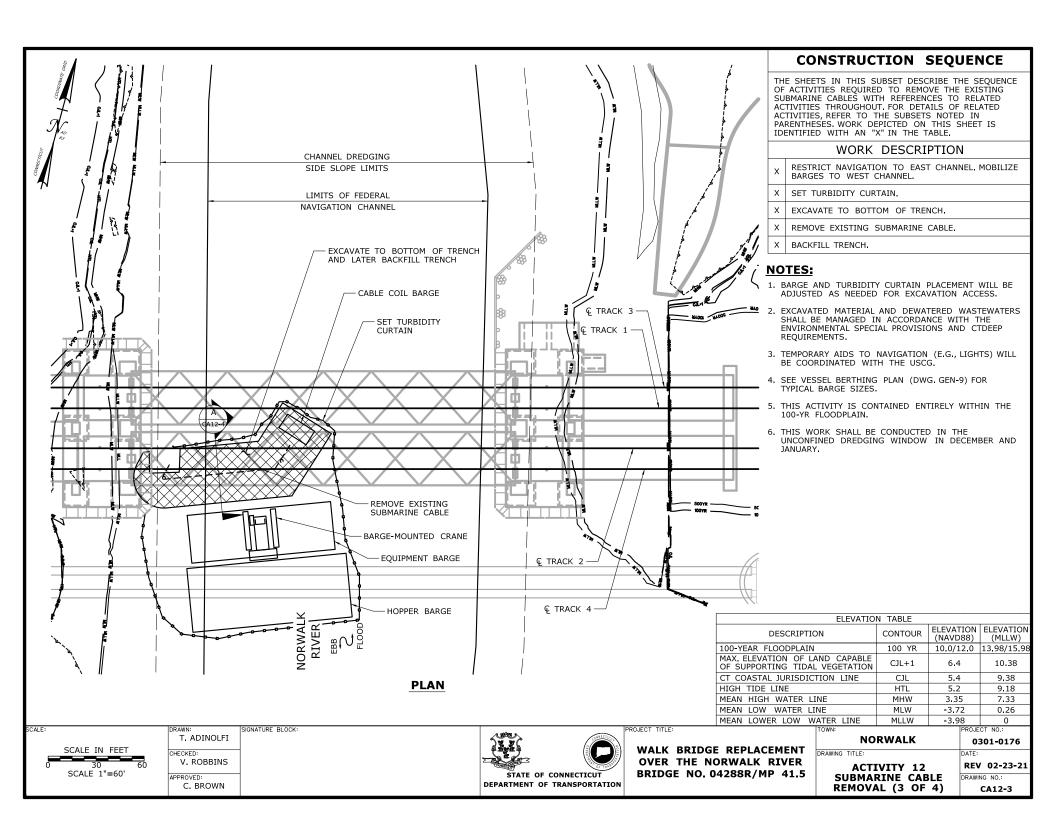
0301-0176 DRAWING TITLE:

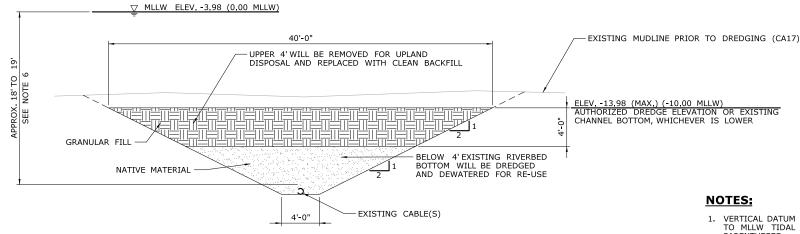
ACTIVITY 11 BARGE MOORING (SHEET 6 OF 6)

REV 02-23-21 DRAWING NO.: CA11-6











- 1. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 2. BACKFILL WILL CONSIST OF SOILS CONTAINING NO MORE THAN 25% SAND BY WEIGHT AND AN ORGANIC CONTENT NO LESS THAN 25% AND NO MORE THAN 40% BY WEIGHT.
- 3. UPPER 4' OF EXCAVATED MATERIAL TO BE TREATED AS CONTAMINATED AND DISPOSED OF AT AN APPROVED OFF-SITE LOCATION, REGARDLESS OF WHETHER DREDGING (SEE ACTIVITY 17) HAS OCCURRED AT THE EXCAVATION.
- 4. UPPER 4'OF EXCAVATED MATERIAL ALONG THE CP243 CABLE ROUTE WILL HAVE BEEN RECENTLY PLACED AND MAY BE TESTED FOR CONTAMINATION TO DETERMINE SUITABILITY FOR RE-USE AS BACKFILL.
- 5. IF MATERIAL BELOW 4'IS FOUND TO BE CONTAMINATED OR OTHERWISE DETERMINED UNSUITABLE FOR RE-USE, IT WILL BE REPLACED WITH CLEAN BACKFILL.
- 6. EXISTING CABLE DEPTH BELOW RIVER BOTTOM VARIES, AVAILABLE AS-BUILT INFORMATION INDICATES CABLE DEPTHS APPROXIMATELY 8'TO 9'BELOW THE AUTHORIZED DREDGE ELEVATION.
- 7. TRENCH DIMENSIONS SHOWN ARE BASED ON ASSUMED CABLE DEPTHS AND MAY VARY WITH ACTUALLY FIELD CONDITIONS.
- 8. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE 100-YR FLOODPLAIN.

| ELEVATIO | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |
| TOWN: PROJECT NO.: | | | | |

SCALE IN FEET SCALE 1"=10'

CALE:

SIGNATURE BLOCK: T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

DEPARTMENT OF TRANSPORTATION

STATE OF CONNECTICUT

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

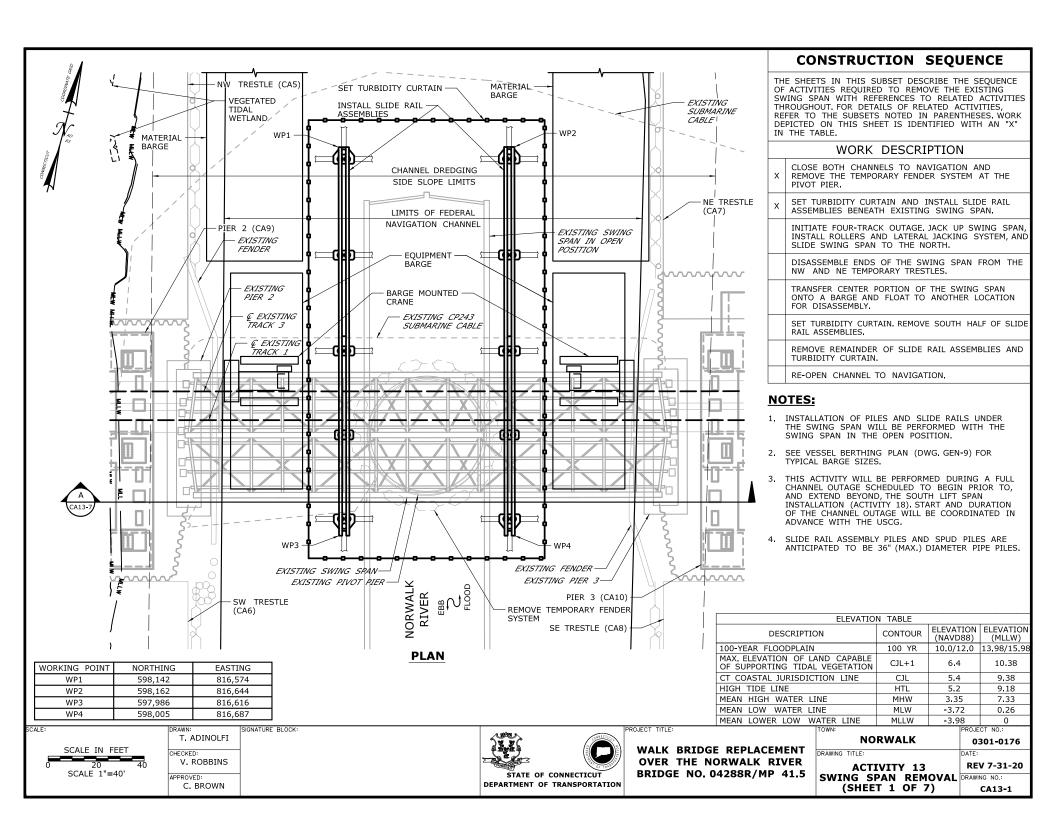
NORWALK

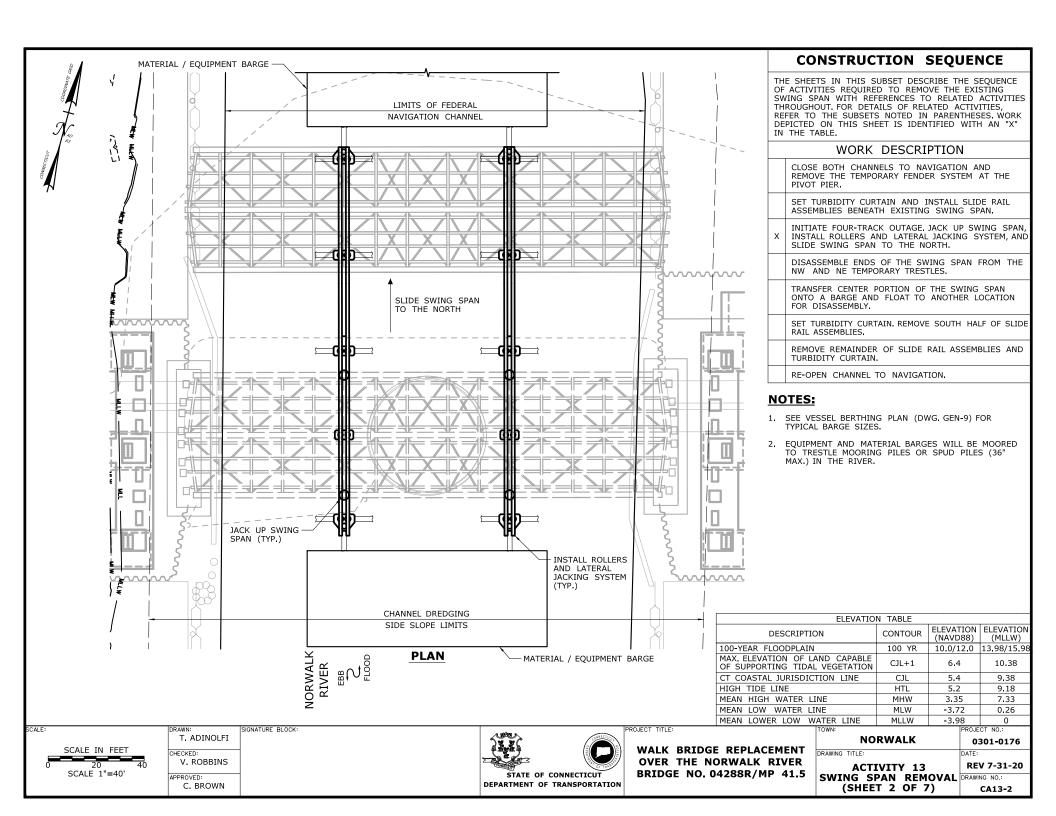
0301-0176

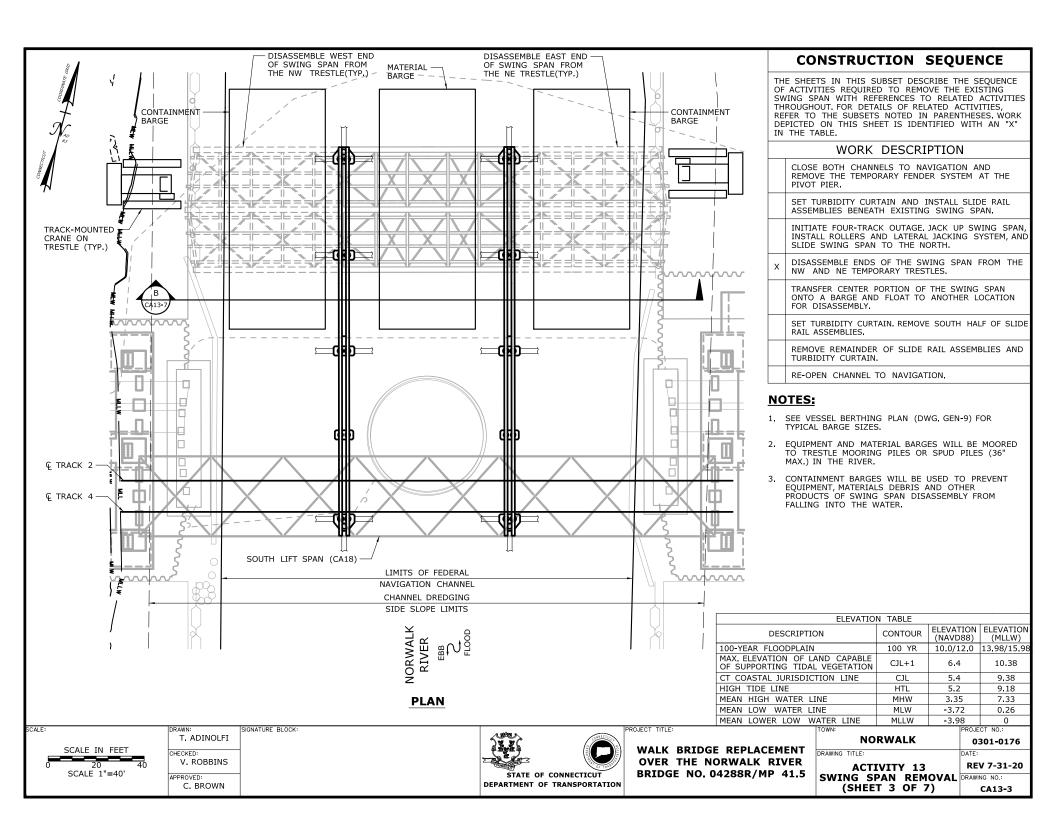
DRAWING TITLE:

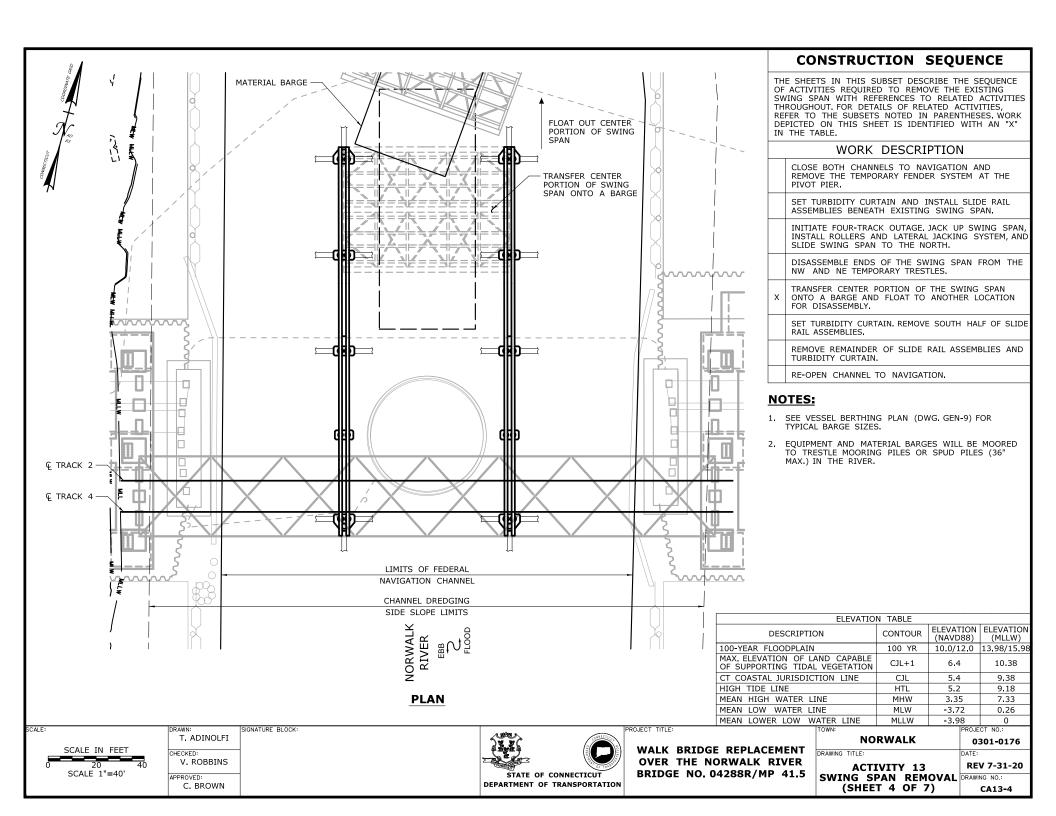
ACTIVITY 12 SUBMARINE CABLE REMOVAL (4 OF 4)

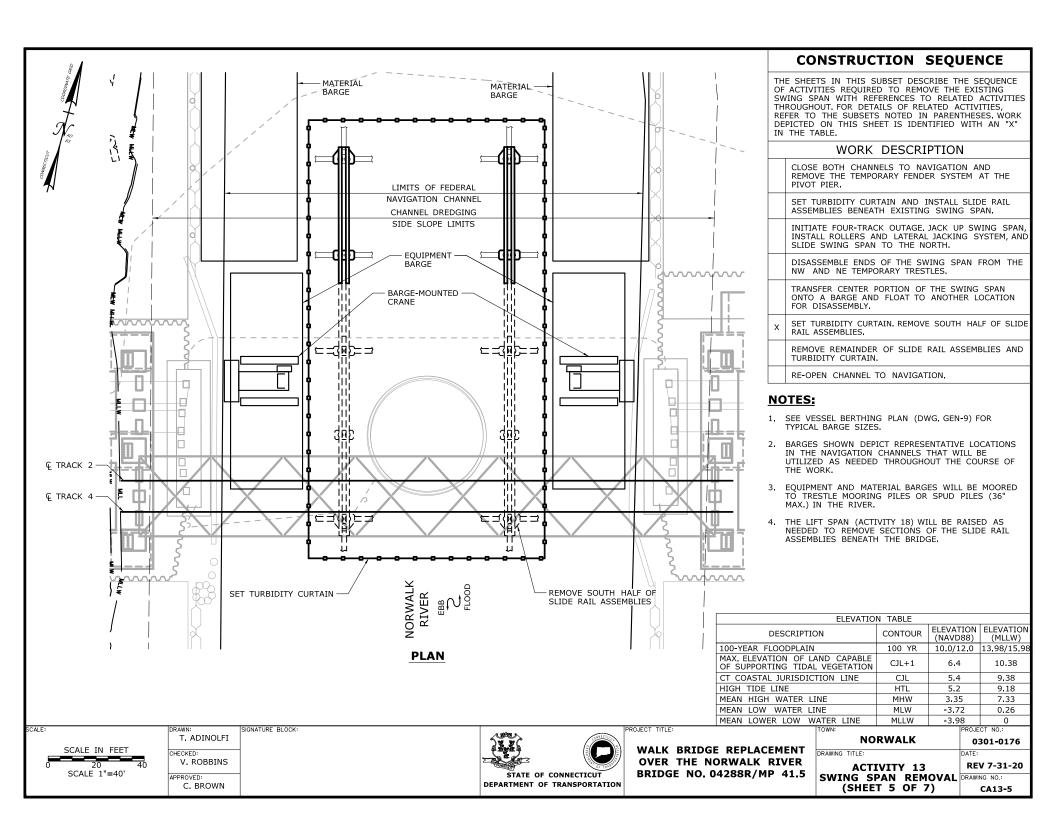
REV 7-31-20 DRAWING NO.: CA12-4

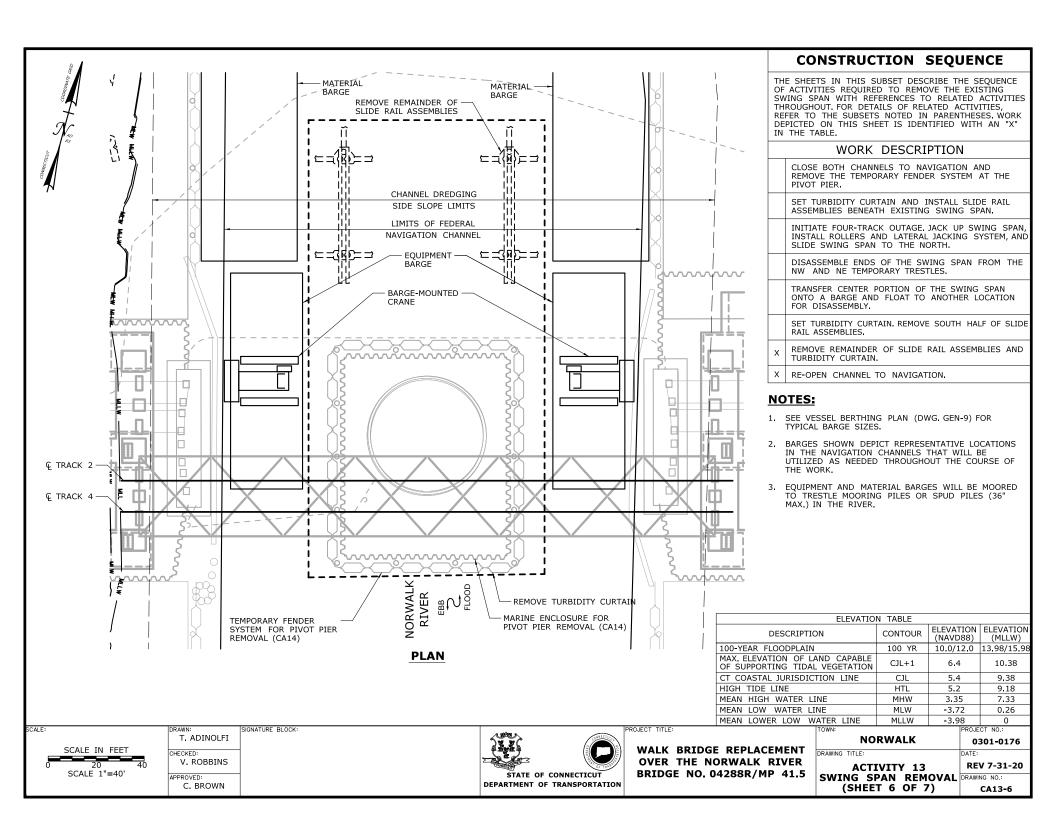


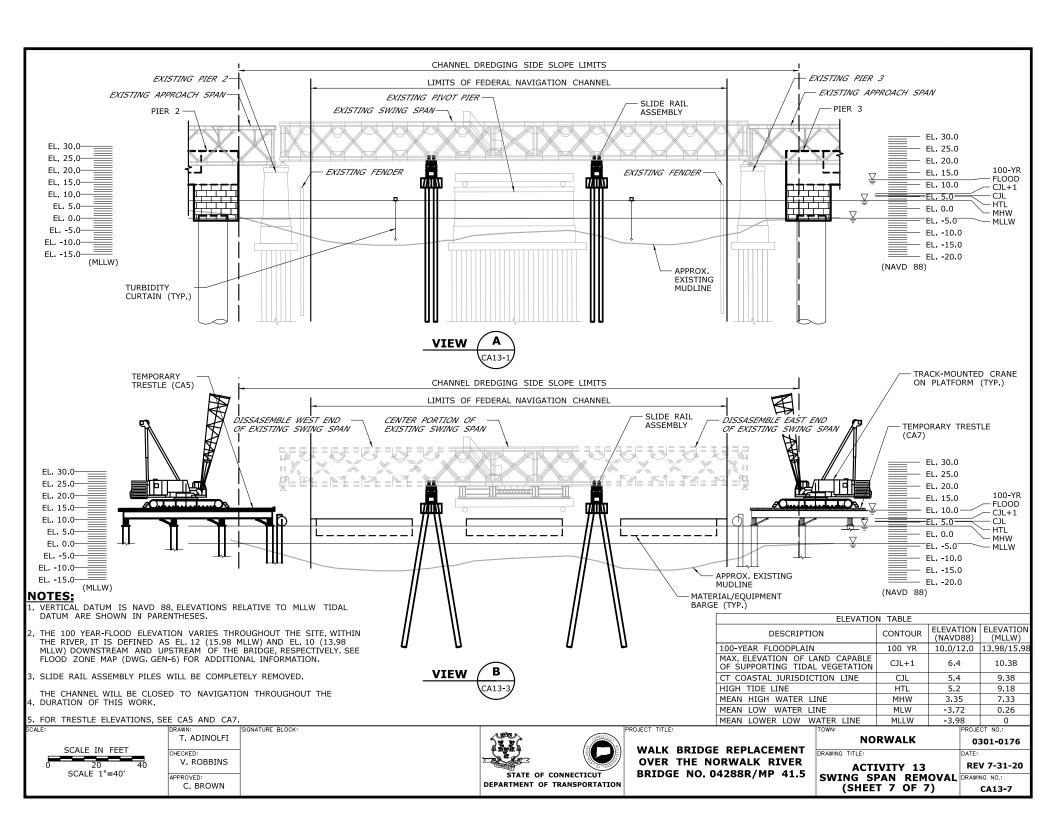


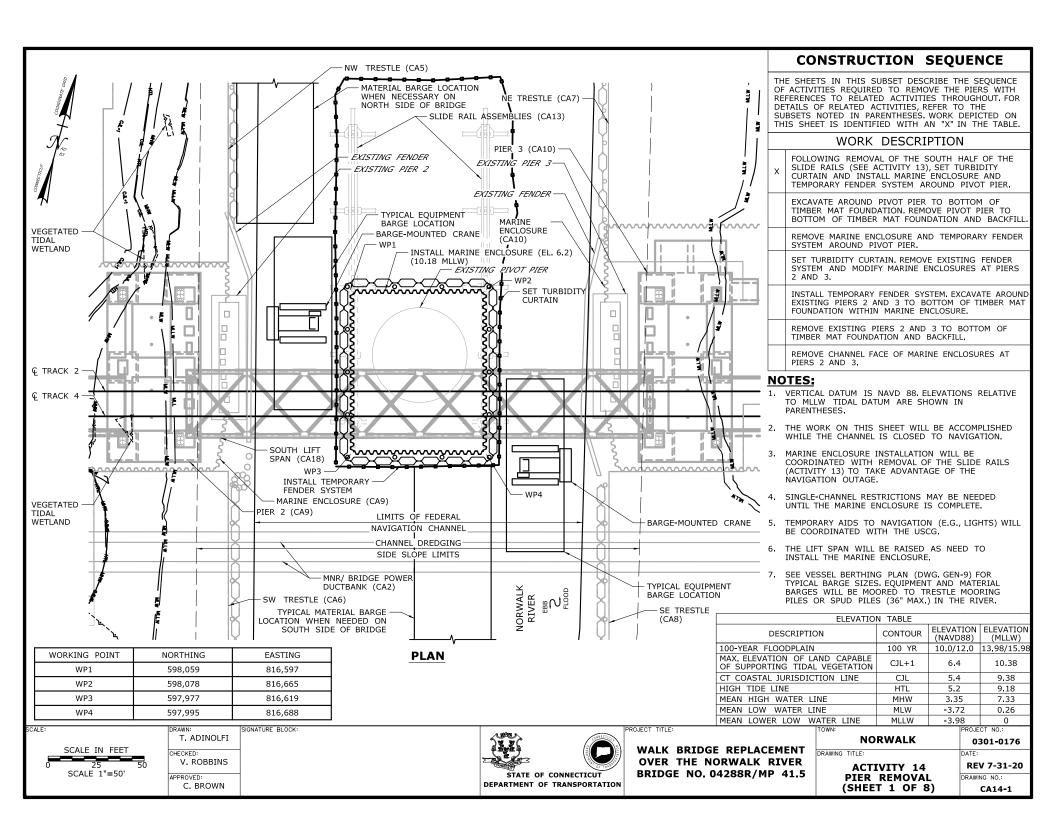


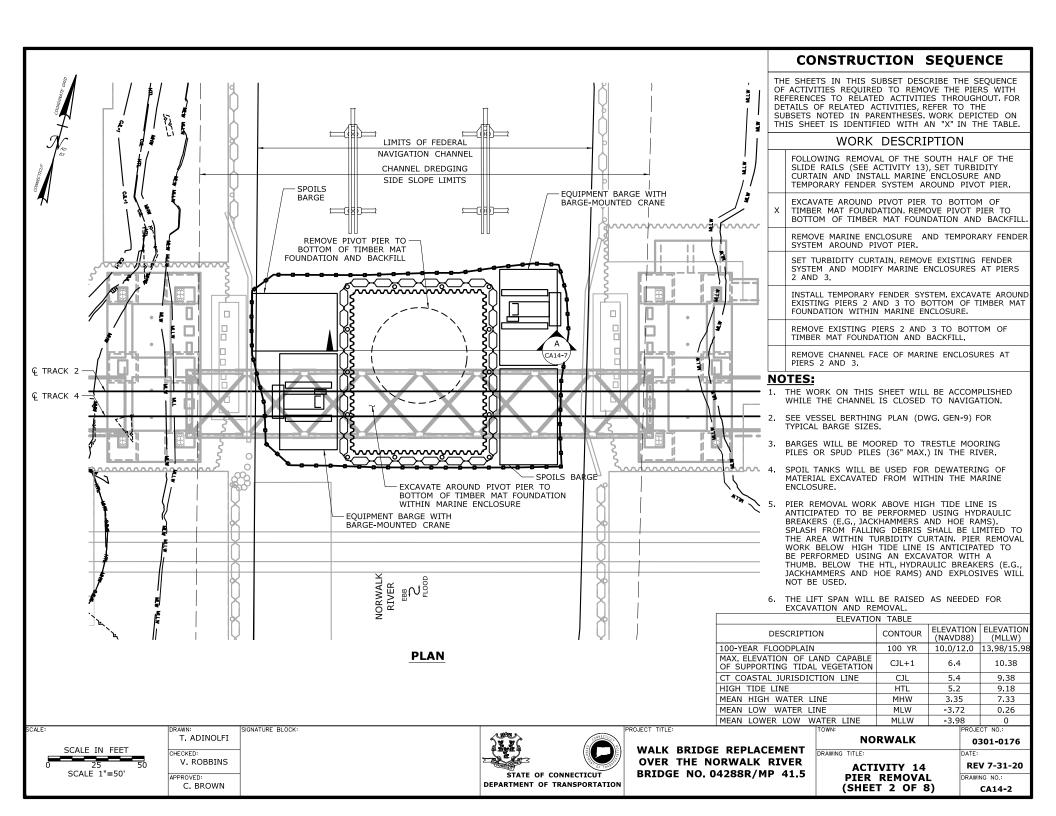


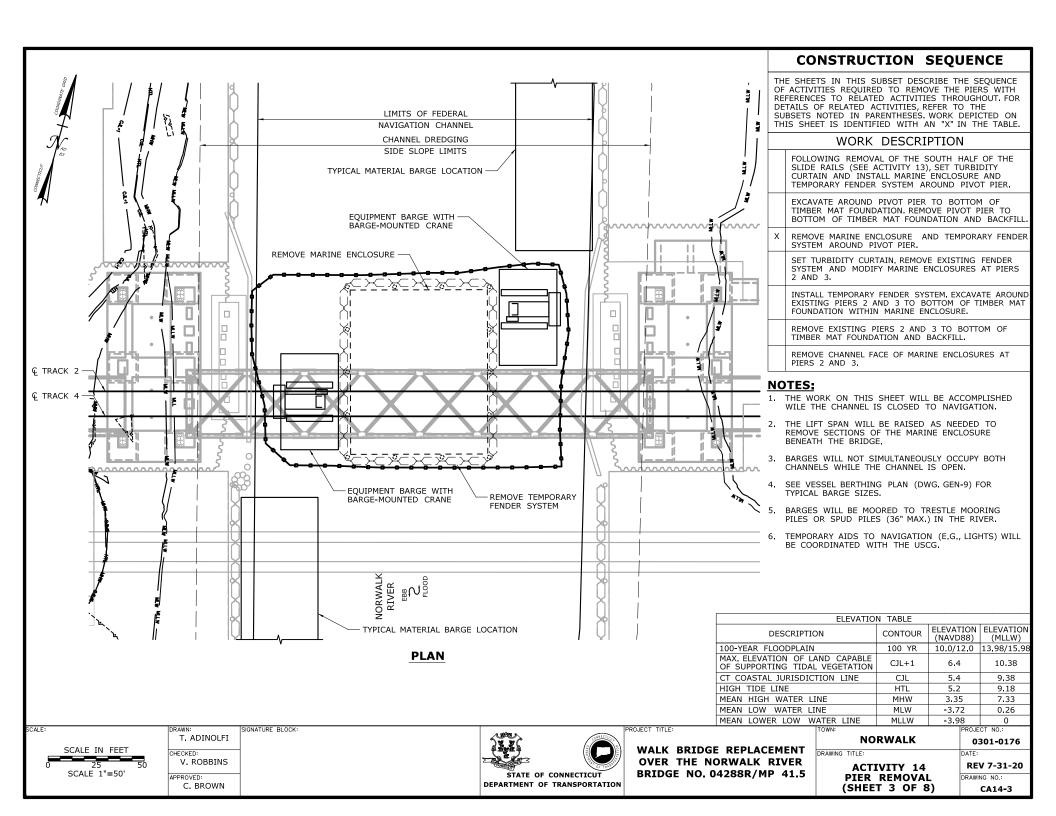


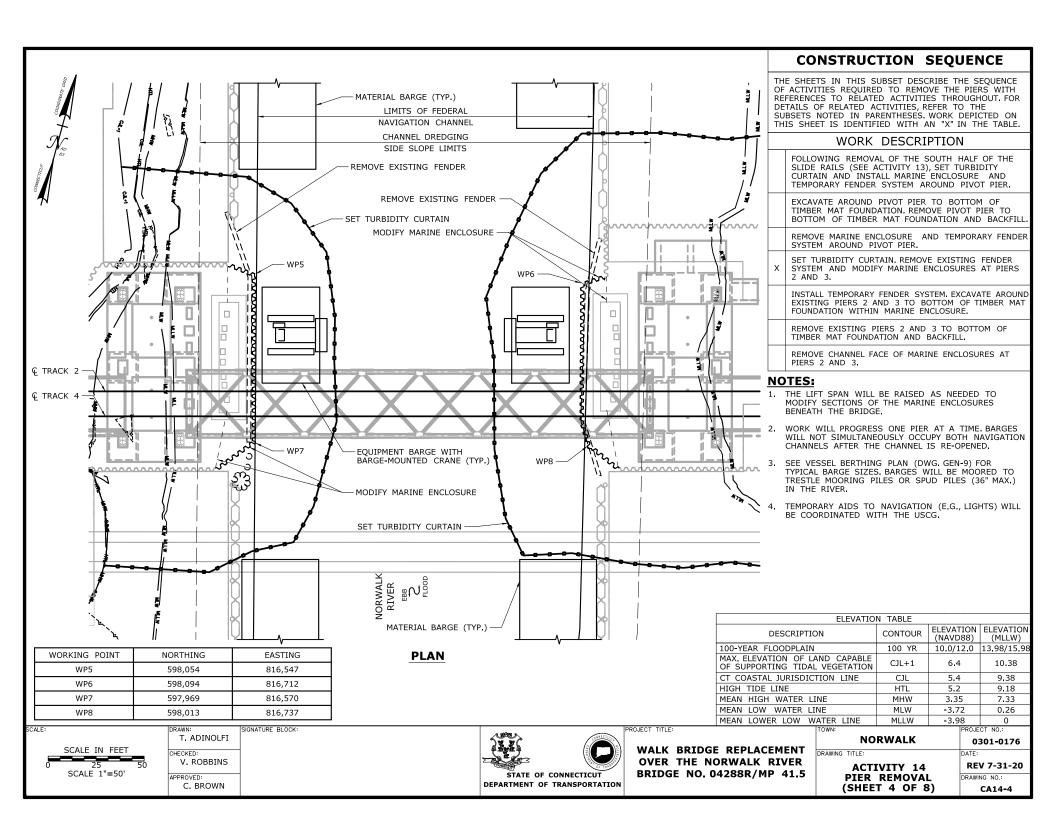


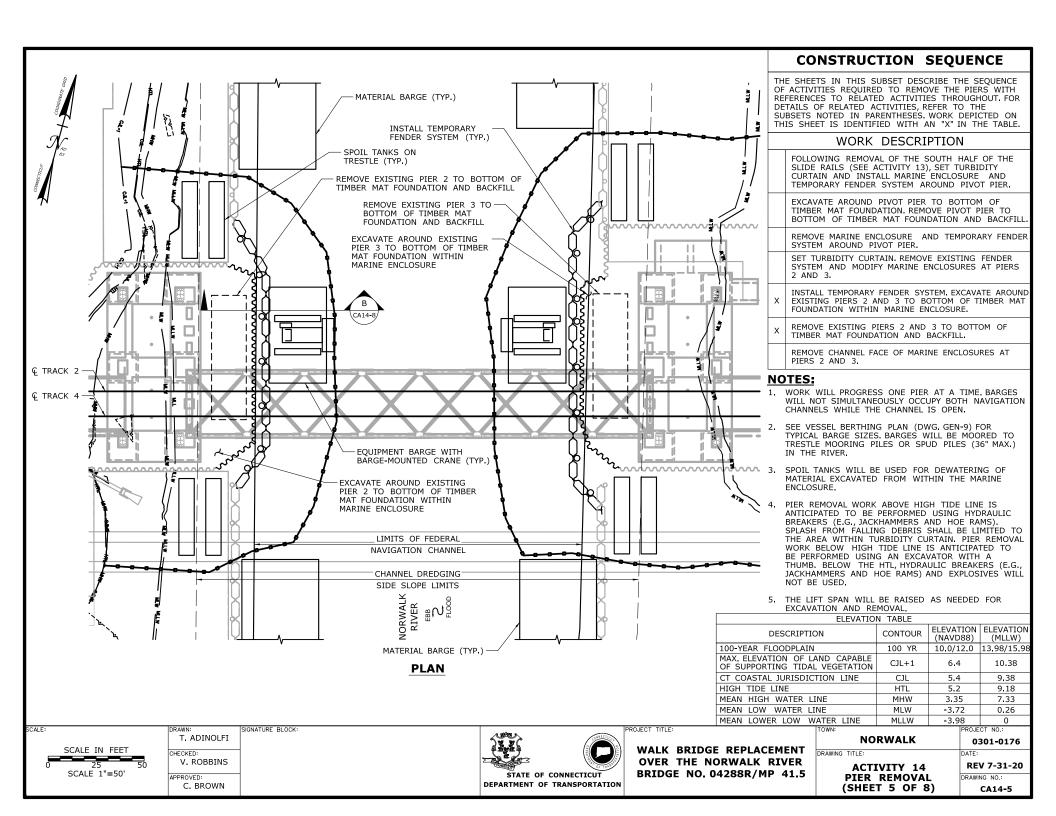


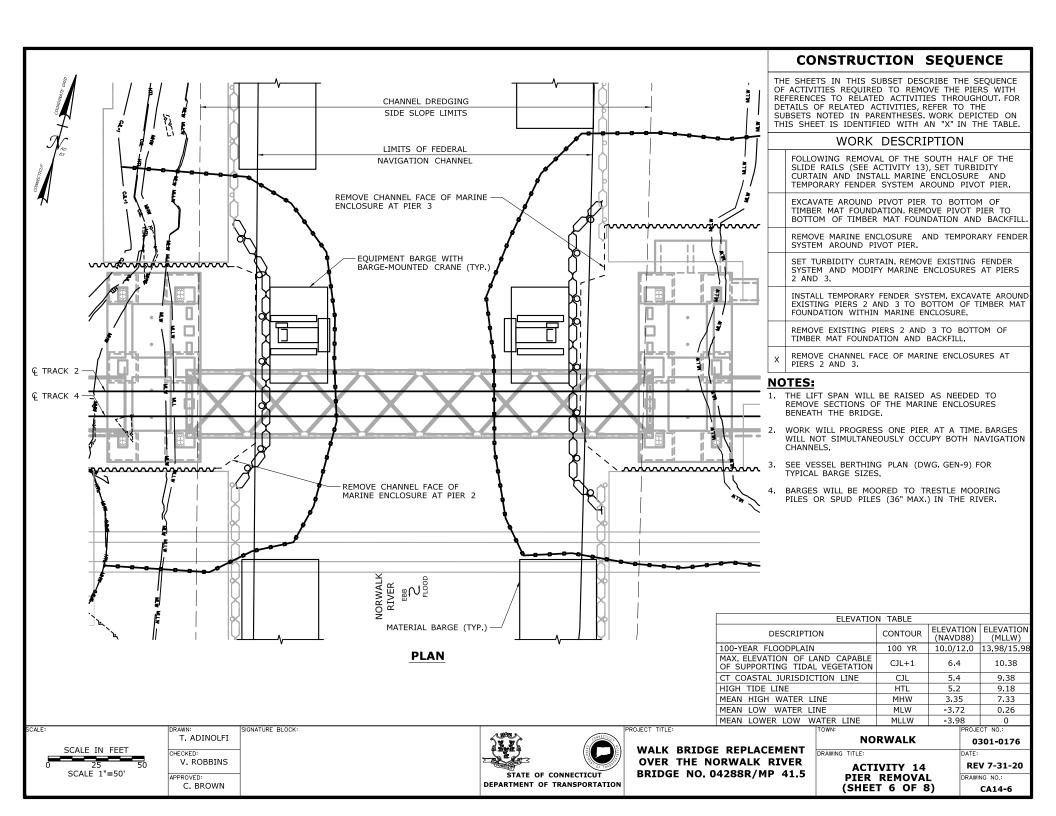


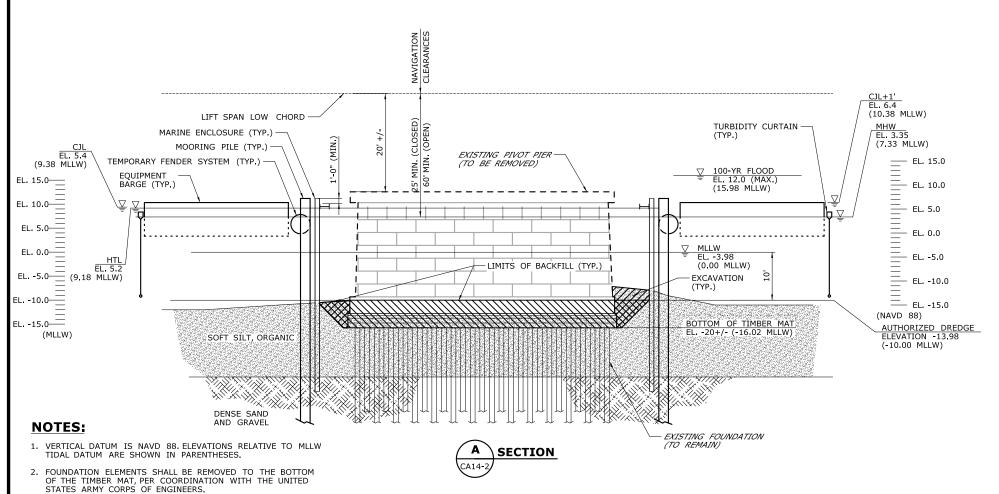












- 3. THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. WITHIN THE RIVER, IT IS DEFINED AS EL. 12 (15.98 MLLW) AND EL. 10 (13.98 MLLW) DOWNSTREAM AND UPSTREAM OF THE BRIDGE, RESPECTIVELY. SEE FLOOD ZONE MAP (DWG. GEN-6) FOR ADDITIONAL INFORMATION
- 4. THE WATER LEVEL WITHIN THE MARINE ENCLOSURE WILL BE MAINTAINED AT OR BELOW THE WATER ELEVATION IN THE
- 5. MARINE ENCLOSURE WILL BE INSTALLED SO THAT THE TOP WILL BE AT OR ABOVE ELEV. 6.2 (10.18 MLLW), 1 FOOT ABOVE THE HIGH TIDE LINE.
- 6. BACKFILL WILL CONSIST OF SOILS CONTAINING NO MORE THAN 25% SAND BY WEIGHT AND AN ORGANIC CONTENT NO LESS THAN 25% AND NO MORE THAN 40% BY WEIGHT.

| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |
| TOWN: PROJECT NO.: | | | | |

SCALE IN FEET SCALE 1"=20'

SIGNATURE BLOCK: T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN



STATE OF CONNECTICUT

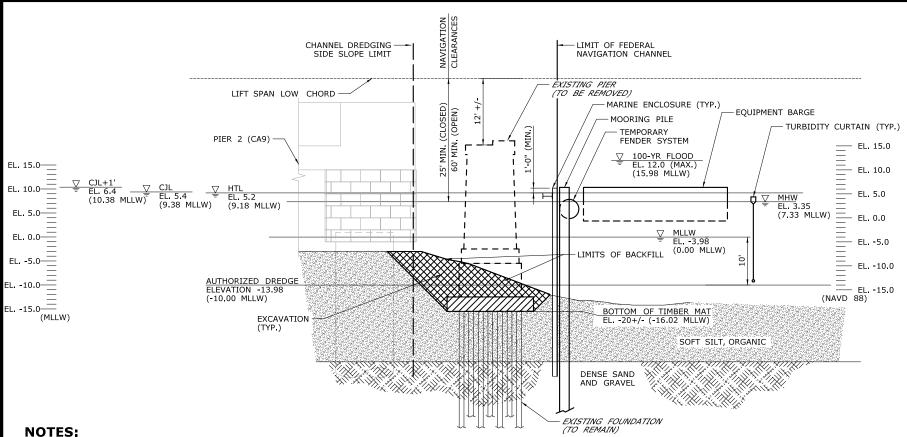
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

NORWALK

0301-0176

ACTIVITY 14 PIER REMOVAL (SHEET 7 OF 8)

REV 7-31-20 DRAWING NO.: CA14-7



- 1. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 2. FOUNDATION ELEMENTS SHALL BE REMOVED TO THE BOTTOM OF THE TIMBER MAT, PER COORDINATION WITH THE UNITED STATES ARMY CORPS OF ENGINEERS.
- 3. THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. WITHIN THE RIVER, IT IS DEFINED AS EL. 12 (15.98 MLLW) AND EL, 10 (13,98 MLLW) DOWNSTREAM AND UPSTREAM OF THE BRIDGE, RESPECTIVELY SEE FLOOD ZONE MAP (DWG. GEN-6) FOR ADDITIONAL INFORMATION.
- 4. THE WATER LEVEL WITHIN THE MARINE ENCLOSURE WILL BE MAINTAINED AT OR BELOW THE WATER ELEVATION IN THE
- 5. MARINE ENCLOSURE WILL BE INSTALLED SO THAT THE TOP WILL BE AT OR ABOVE ELEV. 6.2 (10.18 MLLW), 1 FOOT ABOVE THE HIGH TIDE LINE.
- 6. BACKFILL WILL CONSIST OF SOILS CONTAINING NO MORE THAN 25% SAND BY WEIGHT AND AN ORGANIC CONTENT NO LESS THAN 25% AND NO MORE THAN 40% BY WEIGHT.



(EXISTING PIER 2 SHOW, EXISTING PIER 3 SIMILAR)

| ELEVATION TABLE | | | | | |
|---|---------|-----------------------|---------------------|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | | |

SCALE IN FEET SCALE 1"=20'

CALE:

SIGNATURE BLOCK: T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN

DEPARTMENT OF TRANSPORTATION

STATE OF CONNECTICUT

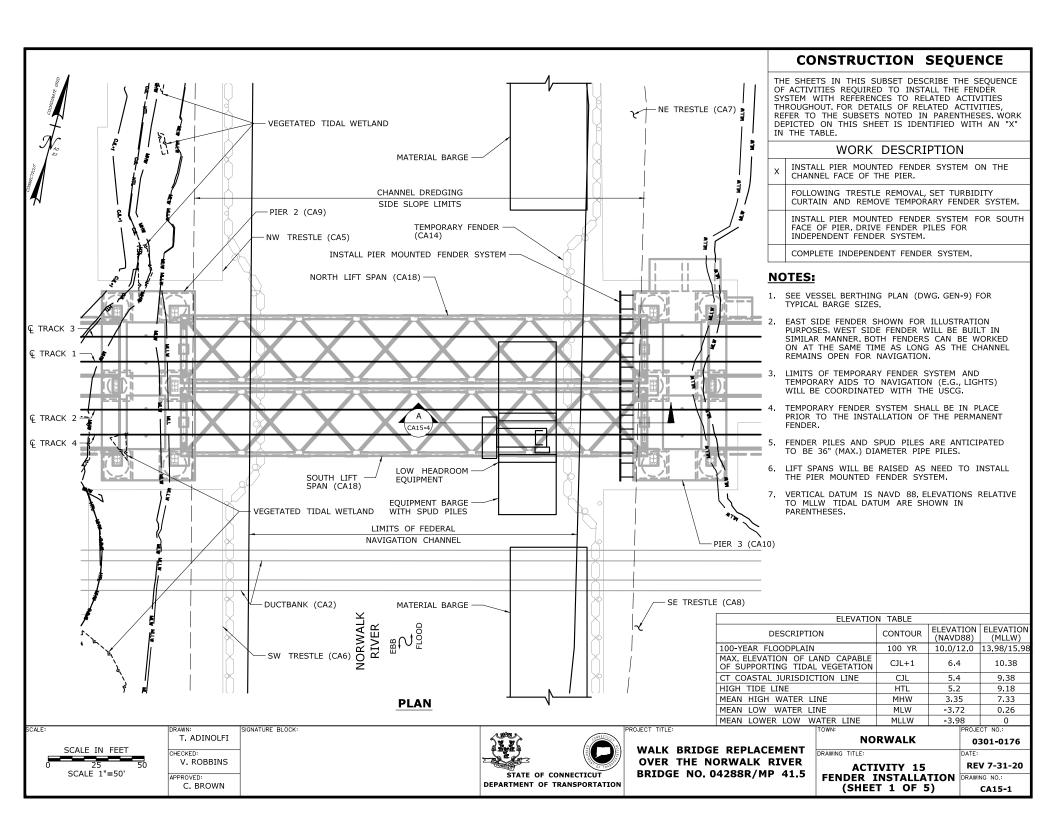
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

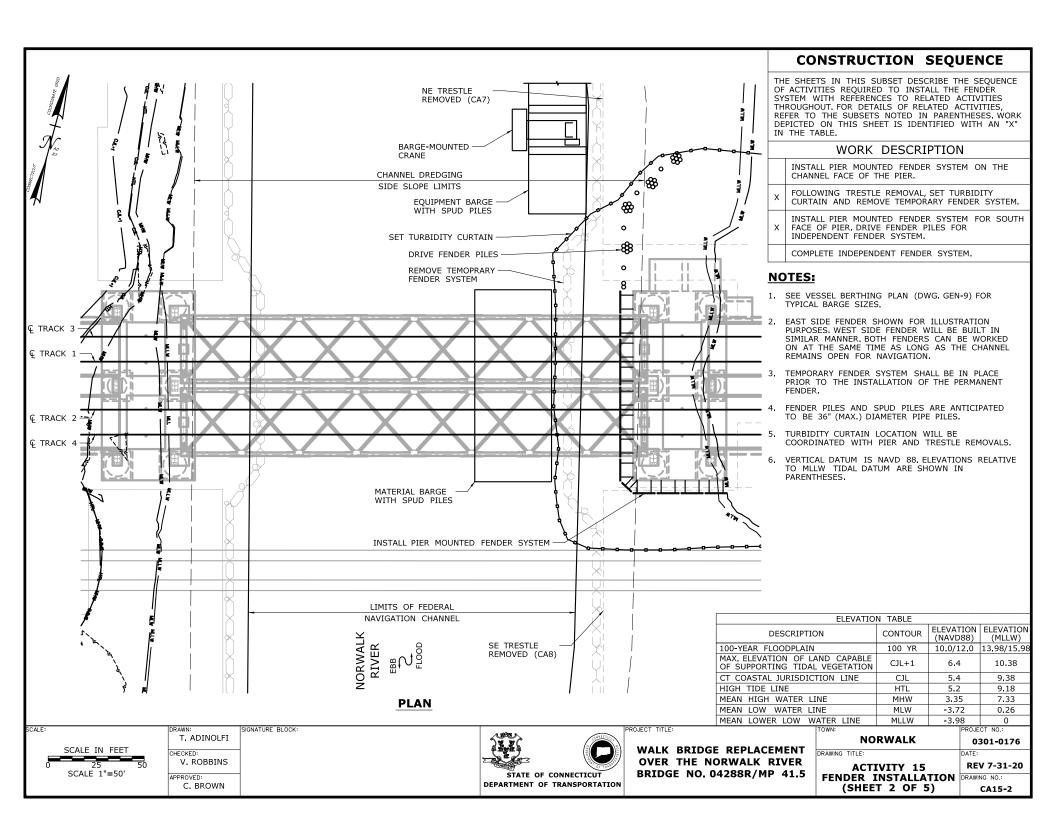
NORWALK

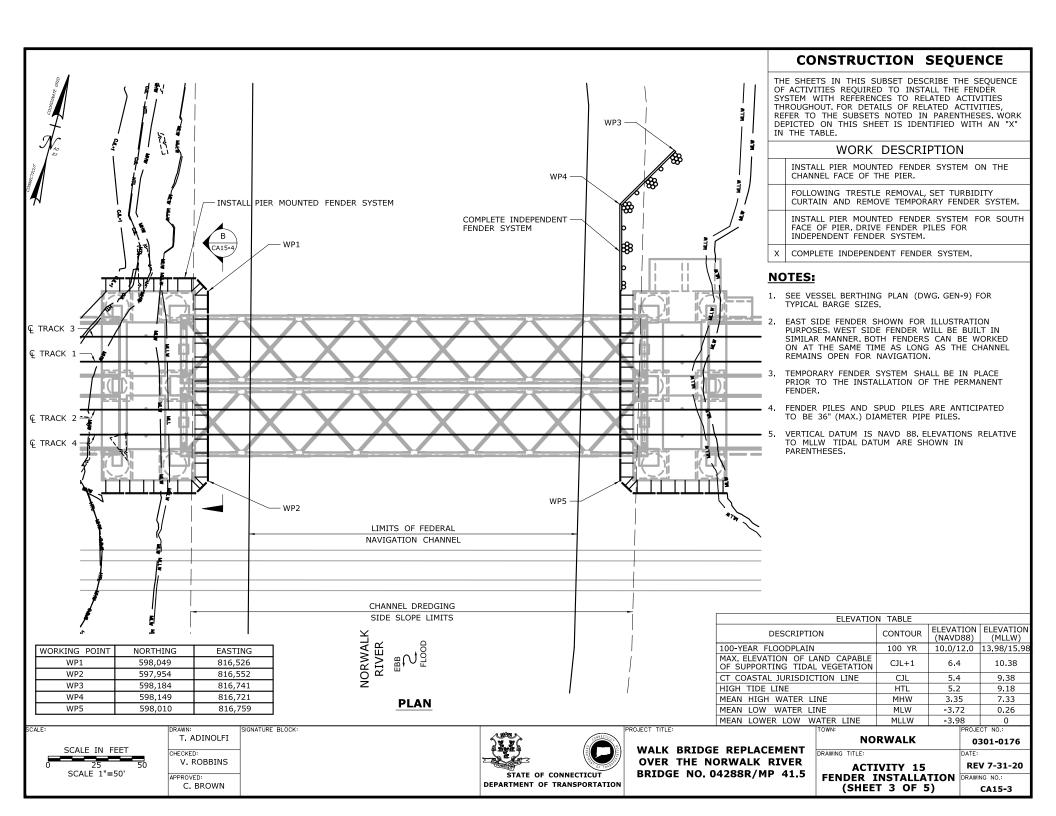
0301-0176

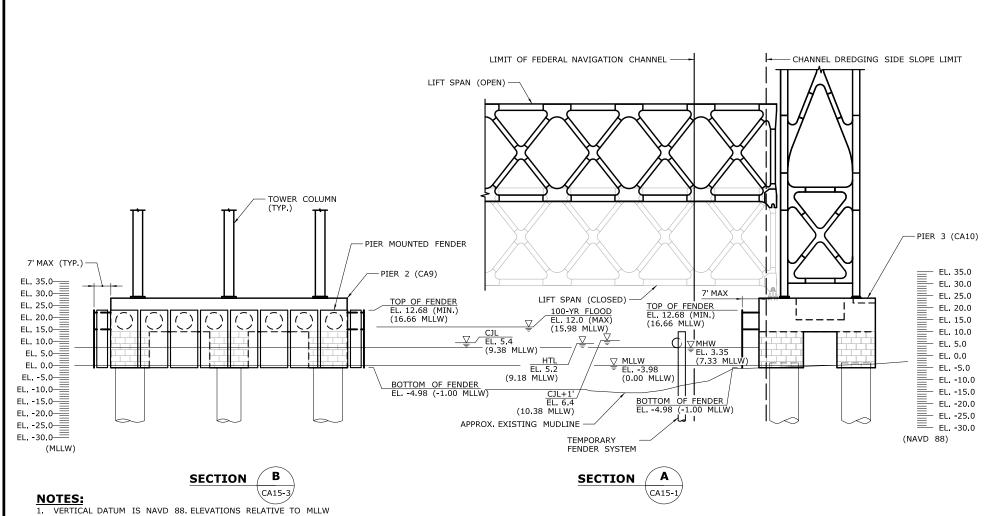
ACTIVITY 14 PIER REMOVAL (SHEET 8 OF 8)

REV 7-31-20 DRAWING NO.: CA14-8









- TIDAL DATUM ARE SHOWN IN PARENTHESES.
- THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE WITHIN THE RIVER, IT IS DEFINED AS EL. 12 (15.98 MLLW) AND EL, 10 (13,98 MLLW) DOWNSTREAM AND UPSTREAM OF THE BRIDGE, RESPECTIVELY SEE FLOOD ZONE MAP (DWG. GEN-6) FOR ADDITIONAL INFORMATION.
- LIFT SPANS WILL BE RAISED AS NEEDED TO INSTALL THE PIER MOUNTED FENDER SYSTEM.
- NAVIGATION LIGHTS WILL BE USED TO DEFINE THE LIMITS OF THE FEDERAL NAVIGATION CHANNEL.
- 5. LIMITS OF TEMPORARY FENDER SYSTEM AND TEMPORARY AIDS TO NAVIGATION (E.G. LIGHTS) WILL BE COORDINATED WITH THE USCG.

| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |

SCALE IN FEET SCALE 1"=40'

SCALE:

SIGNATURE BLOCK: T, ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN



STATE OF CONNECTICUT

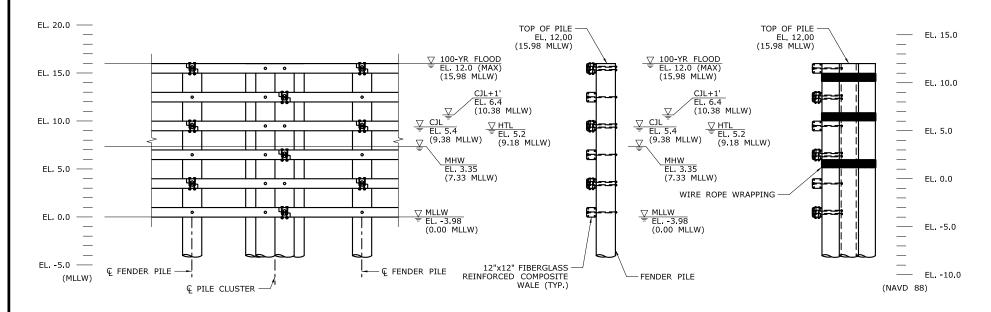
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

NORWALK DRAWING TITLE:

ACTIVITY 15 FENDER INSTALLATION DRAWING NO.: (SHEET 4 OF 5)

REV 7-31-20 CA15-4

0301-0176



TYPICAL INDEPENDENT FENDER SYSTEM ELEVATION

TYPICAL SECTION

TYPICAL PILE CLUSTER ELEVATION

NOTES:

- VERTICAL DATUM IS NAVD 88, ELEVATIONS TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. WITHIN THE RIVER, IT IS DEFINED AS EL. 12 (15.98 MLLW) AND EL. 10 (13.98 MLLW) DOWNSTREAM AND UPSTREAM OF THE BRIDGE, RESPECTIVELY. SEE FLOOD ZONE MAP (DWG. GEN-6) FOR ADDITIONAL INFORMATION.
- FENDER PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER PIPE PILES.
- 4. NAVIGATION LIGHTS WILL BE USED TO DEFINE THE LIMITS OF THE FEDERAL NAVIGATION CHANNEL.

| ELEVATION TABLE | | | | | | |
|---|---------|-----------------------|---------------------|--|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | | | |
| | | | | | | |

SCALE: SCALE IN FEET SCALE 1"=10'

SIGNATURE BLOCK: T. ADINOLFI CHECKED: V. ROBBINS APPROVED: C. BROWN



STATE OF CONNECTICUT

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

TOWN: PROJECT NO.: NORWALK 0301-0176 DRAWING TITLE:

ACTIVITY 15 FENDER INSTALLATION DRAWING NO.: (SHEET 5 OF 5)

REV 7-31-20 CA15-5

ACTIVITY 16 - WETLAND MITIGATION INDEX OF DRAWINGS

| DRAWING NUMBER | DRAWING TITLE |
|-------------------|--|
| MIT-001 | DRAWING INDEX |
| MIT-002 | MITIGATION INDEX PLAN |
| MIT-003 | MITIGATION AREA 1 PHRAGMITES TREATMENT |
| MIT-004 | MITIGATION AREA 2 GRADING PLAN |
| MIT-005 | MITIGATION AREA 2 GRADING SECTIONS 1 |
| MIT-006 | MITIGATION AREA 2 GRADING SECTIONS 2 |
| MIT-007 | MITIGATION AREA 2 PLANTING PLAN |
| MIT-008 | MITIGATION AREA 2 PLANTING SECTIONS 1 |
| MIT-009 | MITIGATION AREA 2 PLANTING SECTIONS 2 |
| MIT-010 | MITIGATION AREA 3 PHRAGMITES TREATMENT |
| MIT-011 | MITIGATION AREA 4 PHRAGMITES TREATMENT |
| MIT-012 | MITIGATION AREA 4 PLANTING PLAN |
| MIT-013 | MITIGATION AREA 5 PHRAGMITES TREATMENT |
| MIT-014 | MITIGATION AREA 5 PLANTING PLAN |
| MIT-015 | MITIGATION AREA 6 GRADING PLAN |
| MIT-016 | MITIGATION AREA 6 GRADING SECTIONS 1 |
| MIT-017 | MITIGATION AREA 6 GRADING SECTIONS 2 |
| MIT-018 | MITIGATION AREA 6 PLANTING PLAN |
| MIT-019 | MITIGATION AREA 6 PLANTING SECTIONS 1 |
| MIT-020 | MITIGATION AREA 6 PLANTING SECTIONS 2 |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

DATE: 06/26/2019

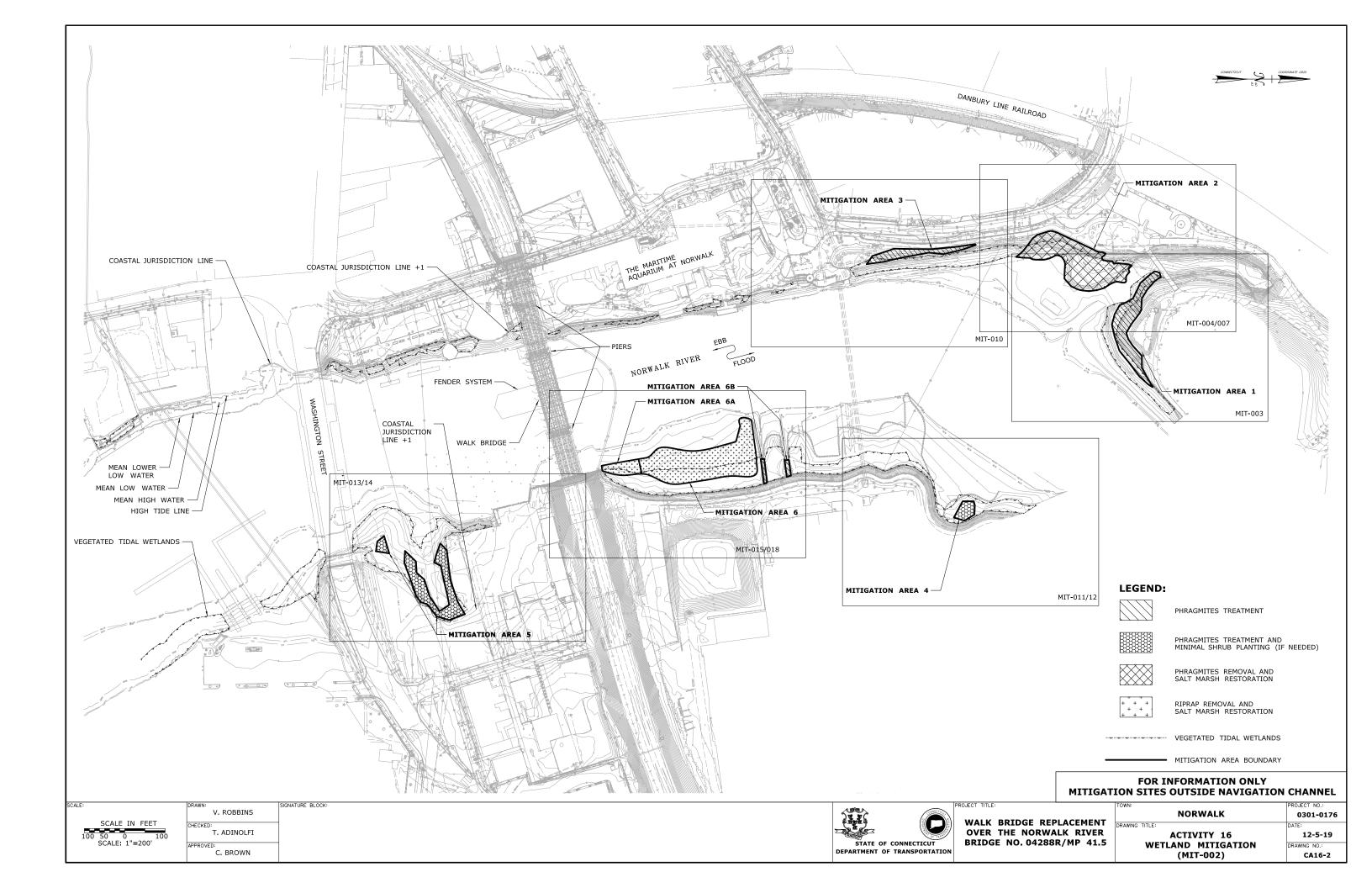
FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL

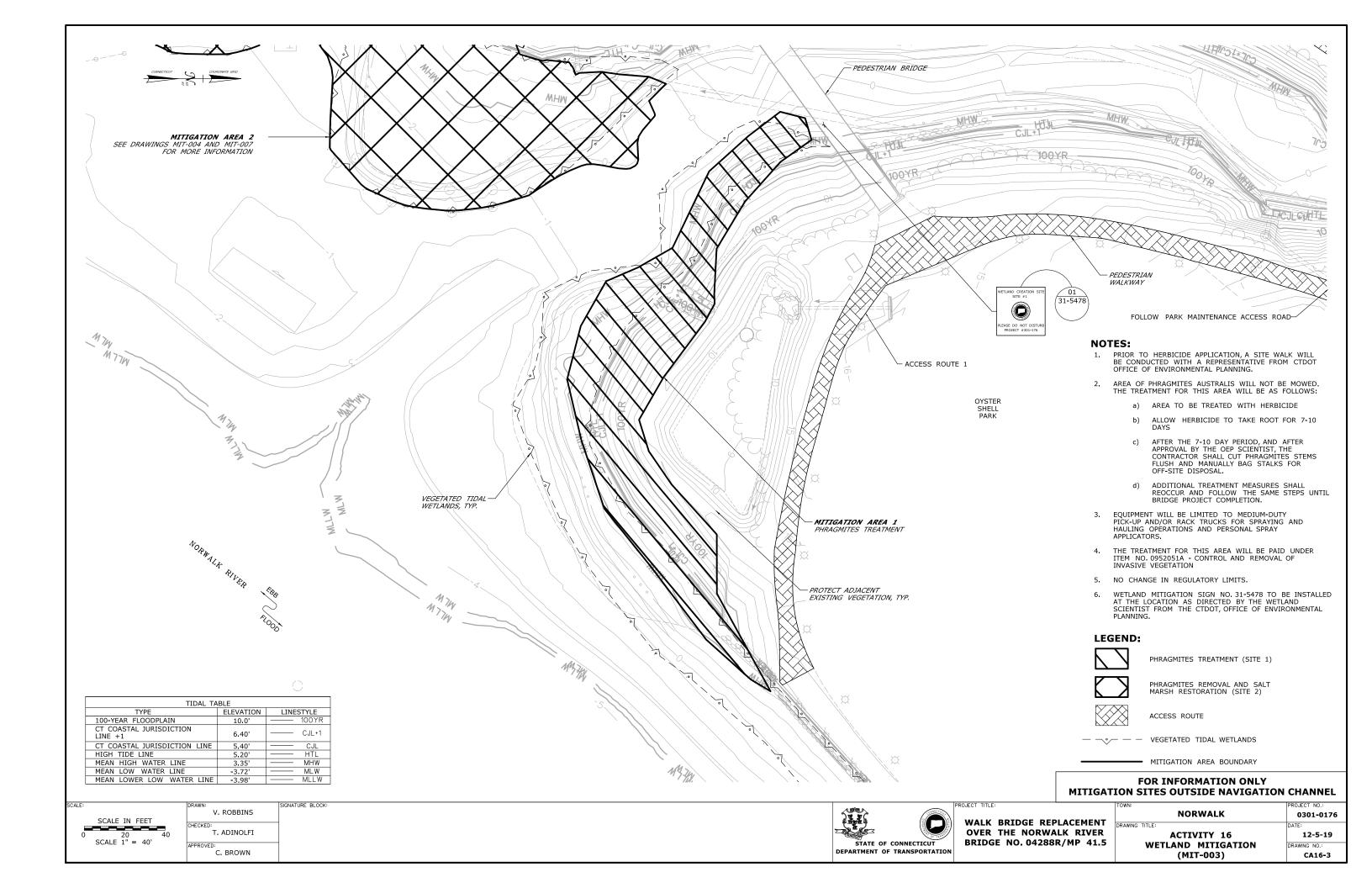


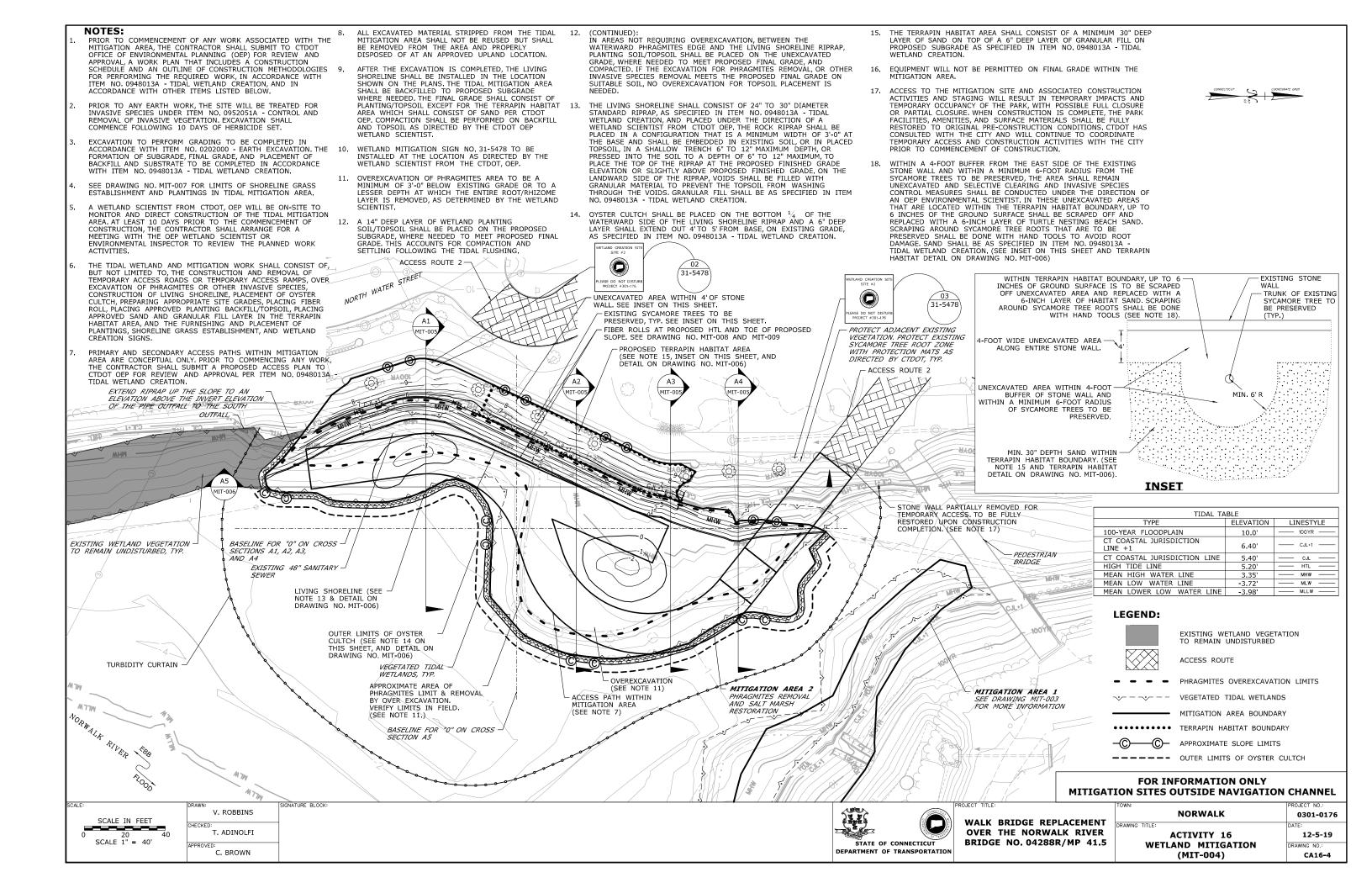
0301-0176

12-5-19

RAWING NO.:







- 1. SEE SECTIONS FOR TOPSOIL DEPTHS.
- 2. OVEREXCAVATION TO BE SEQUENCED AS FOLLOWS:

i. EXCAVATE PHRAGMITES AREA TO A MINIMUM OF 3'-0" BELOW EXISTING GRADE OR TO A LESSER DEPTH AT WHICH THE ENTIRE ROOT/ RHIZOME LAYER IS REMOVED, AS DETERMINED BY THE OEP WETLAND SCIENTIST.

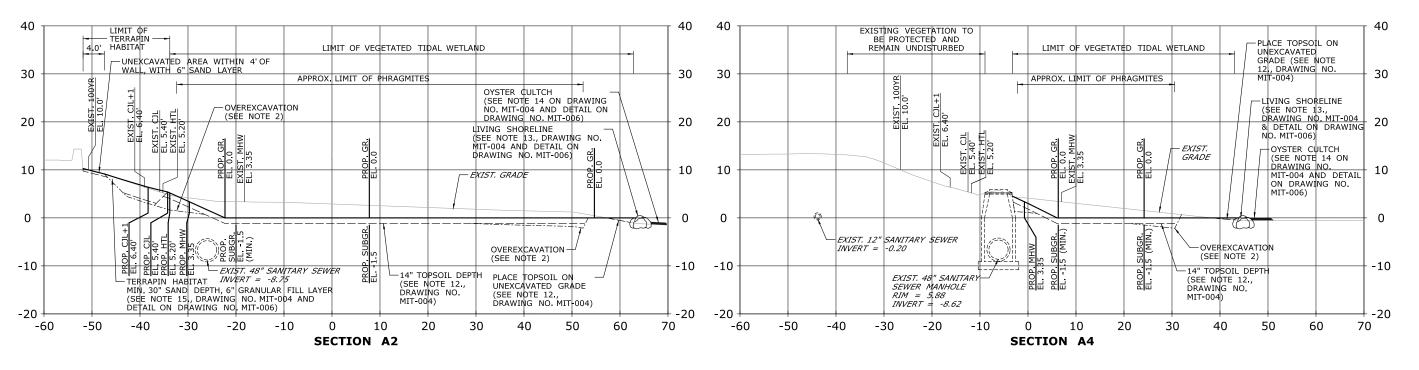
ii. GRADE MITIGATION AREA 2 TO MATCH PROPOSED GRADE

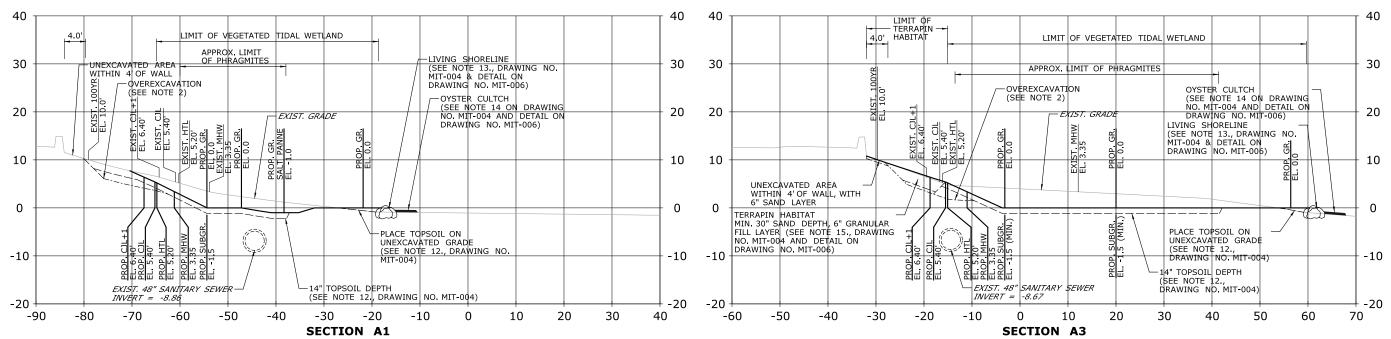
LEGEND:

CJL+1 = CT COASTAL JURISDICTION LINE +1
CJL = CT COASTAL JURISDICTION LINE
HTL = HIGH TIDE LINE
MHW = MEAN HIGH WATER LINE
EL = ELEVATION

EL = ELEVATION EXIST. = EXISTING PROP. = PROPOSED YR = YEAR

GR. = GRADE SUBGR. = SUBGRADE MIN. = MINIMUM MAX. = MAXIMUM





FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL



WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5
 NORWALK
 0301-0176

 WING TITLE:
 DATE:

 ACTIVITY 16
 12-5-19

 WETLAND MITIGATION (MIT-005)
 DRAWING NO.:

 CA16-5
 CA16-5

V. ROBBINS

CHECKED:

T. ADINOLFI

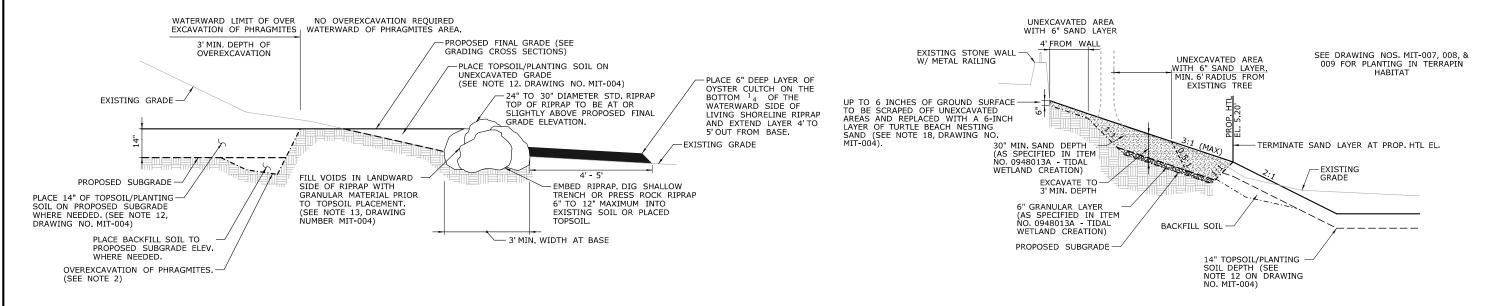
APPROVED:

C. BROWN



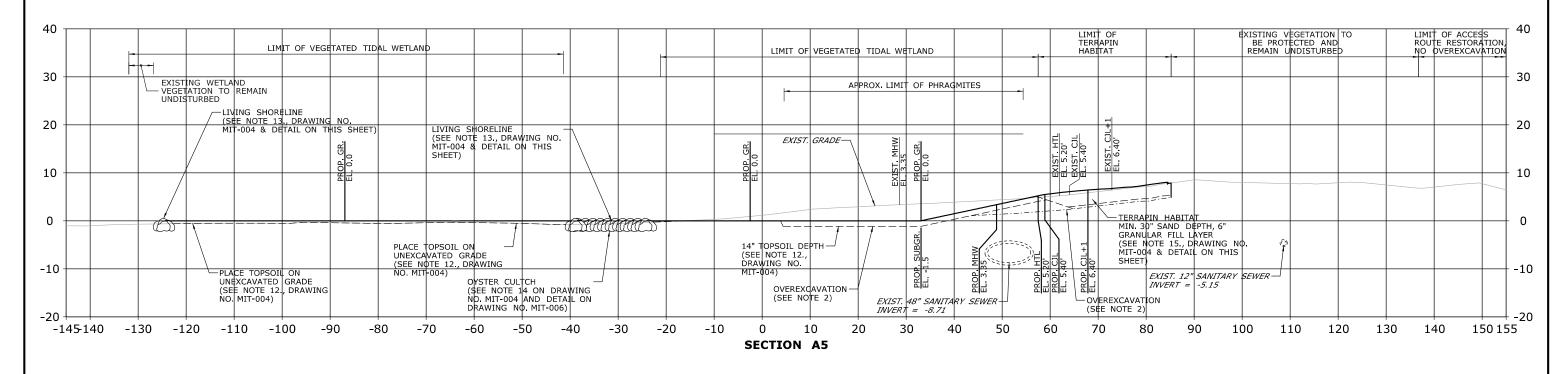
MHW = MEAN HIGH WATER LINE DEPTH AT WHICH THE ENTIRE ROOT/RHIZOME LAYER IS REMOVED, AS DETERMINED BY THE OEP GR. = GRADE SUBGR. = SUBGRADE WETLAND SCIENTIST MIN. = MINIMUM MAX. = MAXIMUM

ii. GRADE MITIGATION AREA 2 TO MATCH PROPOSED GRADE.



LIVING SHORELINE DETAIL

TERRAPIN HABITAT DETAIL



FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL



WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

NORWALK 0301-0176 **ACTIVITY 16** 12-5-19 WETLAND MITIGATION AWING NO: (MIT-006) CA16-6

| | SCALE IN FEET | |
|---|-------------------------|--|
| 0 | 10 20 SCALE 1" = 20' | |

V. ROBBINS CHECKED T. ADINOLFI APPROVED: C. BROWN

- SLOPE SEEDING AREA MIX BASED ON ITEM NO. 0950202A - SHORELINE GRASS ESTABLISHMENT.
- 2. BEFORE ANY WORK IS TO PROCEED IN THE WETLAND MITIGATION AREAS THE CONTRACTOR SHALL ARRANGE THROUGH THE ENGINEER FOR A MEETING WITH AN ENVIRONMENTAL INSPECTOR FROM THE CONNDOT OFFICE OF ENVIRONMENTAL PLANNING (CTDOT OEP). THIS MEETING WILL BE SCHEDULED AT LEAST 10 DAYS PRIOR TO COMMENCEMENT OF WORK ACTIVITY DESCRIBED IN THE SPECIAL PROVISION "TIDAL WETLAND CREATION".
- 3. REFER TO THE WETLAND MITIGATION AREA PLANS, DRAWING NO. MIT-004 FOR PROPOSED GRADING IN THE WETLAND CREATION SITE.
- 4. AFTER COMPLETION OF FINAL GRADE, A 7-14 DAY TIDAL FLOW CYCLE SHALL OCCUR PRIOR TO PLANTING. PLANTING IN THE WETLAND CREATION SITES SHALL BE DONE BETWEEN APRIL 15 AND OCTOBER 15.
- 5. SEEDING FOR SHORELINE GRASS ESTABLISHMENT SHALL COMMENCE UPON COMPLETION OF GRADING AND PLACEMENT OF PLANTING SUBSTRATE/TOPSOIL, AND AFTER INITIAL INSTALLATION OF ALL PLANTS. THE GRADING AND SEEDING MUST BE PERFORMED WITHIN THE SAME CONSTRUCTION SEASON WITH NO SCHEDULED INACTIVE PERIOD OF MORE THAN 10 WORKDAYS. SEED SHALL BE APPLIED BY BROADCAST SPREADING.

- 6. AN ENVIRONMENTAL INSPECTOR FROM THE CTDOT OEP SHALL INSPECT THE WETLAND CREATION SITES PRIOR TO PLANTING TO DETERMINE THE SITES ARE SUITABLE FOR PLANTING. THE ENVIRONMENTAL INSPECTOR MAY MODIFY THE PLANT LAYOUT FROM THE PLANTING PLAN IF AS-BUILT CONDITIONS POSE A THREAT TO THE SURVIVAL OF
- . AUGER OR DIG TO MAKE PLANTING HOLES FOR SHRUBS, AND TRANSPLANT. DO NOT REMOVE PLANTS FROM CONTAINERS UNTIL IMMEDIATELY BEFORE PLANTING. SEPARATE ANY POT-BOUND OR CRAMPED ROOTS AND SPREAD THEM WHEN PLACING THE PLANTS. MACHINERY WILL NOT BE ALLOWED WITHIN THE MITIGATION SITE AT ANY TIME FOR PLANTING.
- B. PAYMENT FOR THE WORK OF CONSTRUCTING WETLAND MITIGATION AREAS WILL BE MADE UNDER THE FOLLOWING ITEMS:

DISPOSAL OF DEBRIS WILL BE PAID UNDER ITEM #0101135A - DISPOSAL OF DEBRIS.

EXCAVATION TO PERFORM GRADING WILL BE PAID UNDER ITEM #0202000 - EARTH EXCAVATION.

FURNISHING, PLACING, MAINTAINING AND REMOVING SEDIMENTATION CONTROL SYSTEMS WILL BE PAID UNDER ITEM #0219001 - SEDIMENTATION CONTROL SYSTEM.

REMOVAL OF INVASIVE PLANT SPECIES WILL BE PAID UNDER #0952051A - CONTROL AND REMOVAL OF INVASIVE VEGETATION.

(CONTINUED):

FORMATION OF SUBGRADE IN WETLAND CREATION SITES AND TERRAPIN HABITAT AREA, PROVIDING AND PLACING PLANTING SUBSTRATE/TOPSOIL, PROVIDING AND PLACING SAND AND GRANULAR FILL IN THE TERRAPIN HABITAT AREA, FURNISHING AND PLACING RIPRAP AND GRANULAR FILL FOR THE LIVING SHORELINE, PLACEMENT OF OYSTER CULTCH AND FINISH GRADING WILL BE PAID UNDER ITEM #0948013A - TIDAL WETLAND CREATION.

FURNISHING, PLACING AND ESTABLISHING SHORELINE GRASS WILL BE PAID UNDER ITEM #0950202A - SHORELINE GRASS ESTABLISHMENT.

FURNISHING AND PLACING SHRUBS AND HERBACEOUS PLANTINGS IN THE WETLAND MITIGATION AREAS WILL BE PAID UNDER ITEM #0949875A - WETLAND PLANTINGS. REPLACEMENT OF PLANTINGS IN MITIGATION AREA 2 SHALL BE INCLUDED IN THIS ITEM.

FIBER ROLL SHALL BE PAID FOR UNDER ITEM #0949315A - FIBER ROLL.

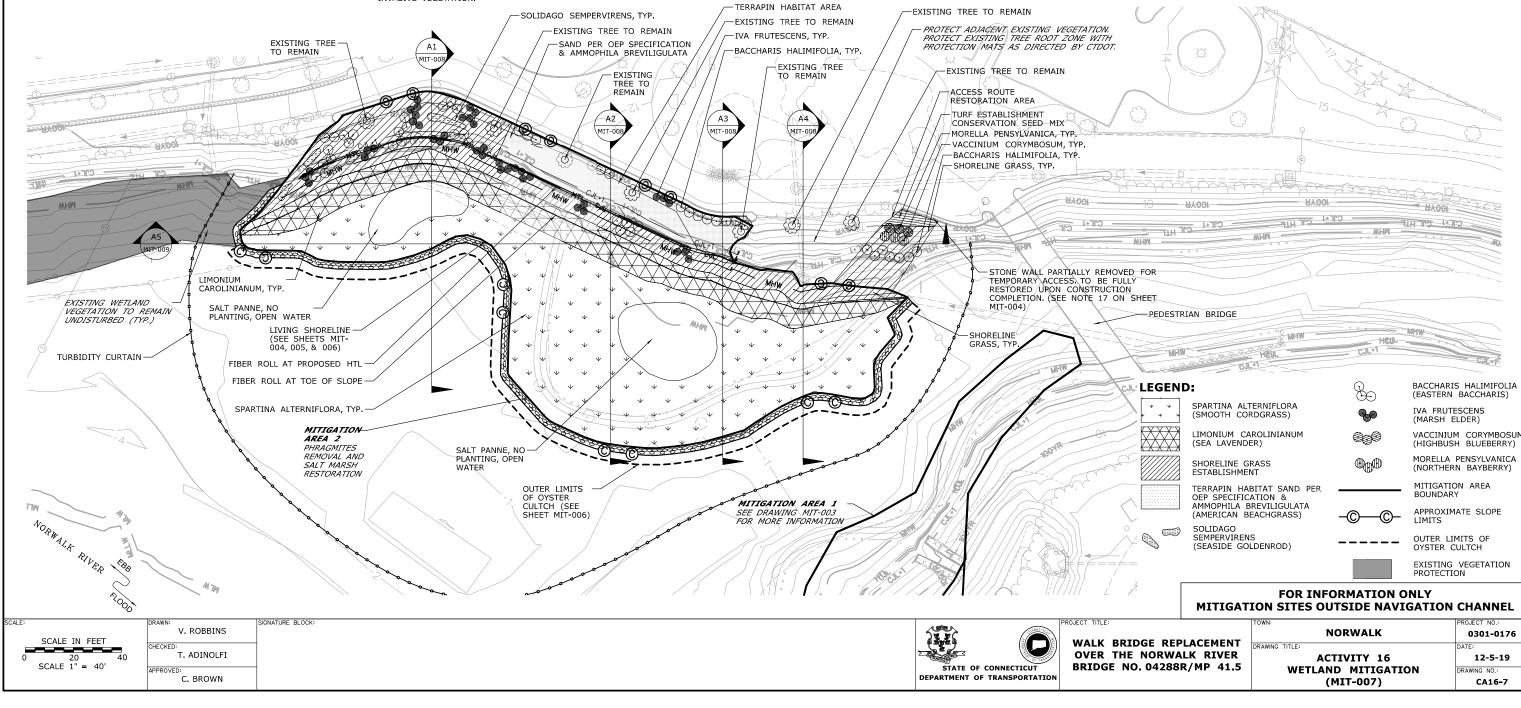
THE COST OF INSTALLING WETLAND CREATION SIGNS (31-5478) WILL BE PAID FOR UNDER ITEM #1208932A - SIGN FACE - SHEET ALUMINUM (TYPE IV RETROREFLECTIVE SHEETING).

COMMECTICUT COORDINATE GRID

| | PLANTING SCHEDULE | | | | | | | |
|------|-------------------|-------------------------|---------------------|--------|----------|--|--|--|
| CODE | QTY. | SCIENTIFIC NAME | COMMON NAME | SIZE | SPACING | NOTES | | |
| | | | | | | | | |
| SA | 4,666 | SPARTINA ALTERNIFLORA | SMOOTH CORDGRASS | PLUG | 18" O.C. | | | |
| LC | 1,600 | LIMONIUM CAROLINIANUM | SEA LAVENDER | PLUG | 18" O.C. | | | |
| BH | 47 | BACCHARIS HALIMIFOLIA | EASTERN BACCHARIS | 2 GAL. | 48" O.C. | | | |
| IF | 39 | IVA FRUTESCENS | MARSH ELDER | 2 GAL. | 36" O.C. | | | |
| SS | 95 | SOLIDAGO SEMPERVIRENS | SEASIDE GOLDENROD | 1 GAL. | 12" O.C. | | | |
| AB | 920 | AMMOPHILA BREVILIGULATA | AMERICAN BEACHGRASS | PLUG | 18" O.C. | | | |
| MP | 3 | MORELLA PENSYLVANICA | NORTHERN BAYBERRY | 2 GAL. | 48" O.C. | 2 FEMALE PLANTS NEAR PATH, 1 MALE PLANT BEHIND | | |
| VC | 3 | VACCINIUM CORYMBOSUM | HIGHBUSH BLUEBERRY | 2 GAL. | 48" O.C. | | | |

| NOTES: GAL. = | GALLON; O.C. = | ON CENTER |
|---------------|----------------|-----------|
|---------------|----------------|-----------|

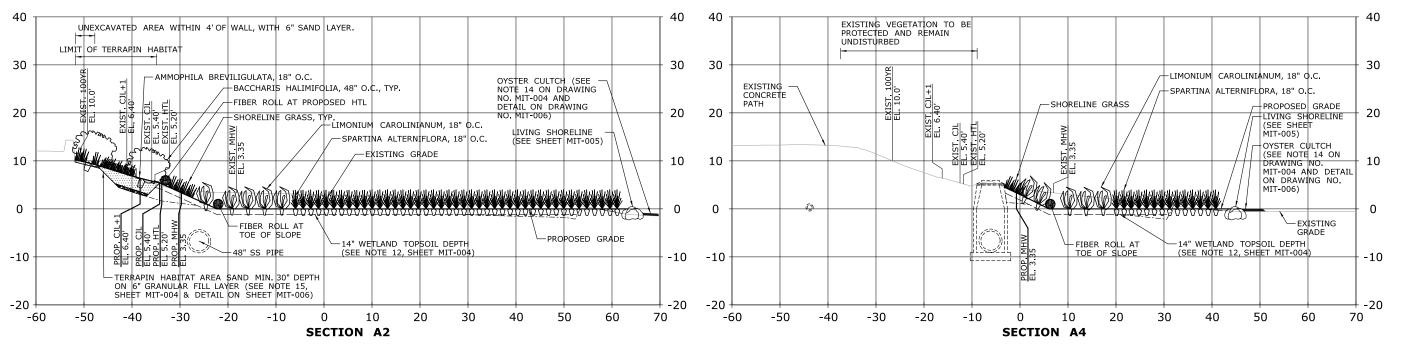
| TIDAL TABLE | | | | | |
|------------------------------------|-----------|-------------|--|--|--|
| TYPE | ELEVATION | LINESTYLE | | | |
| 100-YEAR FLOODPLAIN | 10.0' | 100YR | | | |
| CT COASTAL JURISDICTION LINE +1 | 6.40' | —— CJL+1 —— | | | |
| CT COASTAL JURISDICTION LINE | 5.40' | CJL | | | |
| HIGH TIDE LINE | 5.20' | — нть — | | | |
| MEAN HIGH WATER LINE | 3.35' | — мнw — | | | |
| MEAN LOW WATER LINE | -3.72' | MLW | | | |
| MEAN LOWER LOW WATER LINE | -3 98' | MLLW | | | |

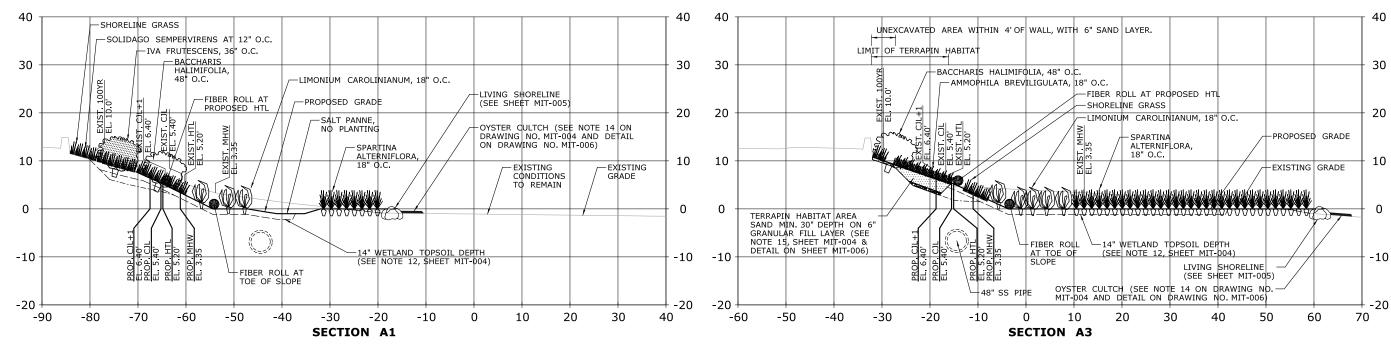


- 1. SEE MIT-007 MITIGATION AREA 2 PLANTING PLAN FOR LAYOUT OF IVA FRUTESCENS, BACCHARIS HALIMIFOLIA, SPARTINA ALTERNIFLORA, LIMONIUM CAROLINIANUM AND SOLIDAGO SEMPERVIRENS.
- 2. SEE GRADING DRAWING (MIT-004) AND SECTIONS (MIT-005 & 006) FOR OVEREXCAVATION DEPTHS AND LIMITS.
- 3. SEE GRADING DRAWING (MIT-004) FOR SECTION BASELINE,

LEGEND:

CJL+1= CT COASTAL JURISDICTION LINE +1 CJL = CT COSTAL JURISDICTION LINE HTL = HIGH TIDE LINE MHW = MEAN HIGH WATER LINE EL = ELEVATION O.C. = ON CENTER YR = YEAR





FOR INFORMATION ONLY **MITIGATION SITES OUTSIDE NAVIGATION CHANNEL**

(MIT-008)



WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

NORWALK 0301-0176 **ACTIVITY 16** 12-5-19 WETLAND MITIGATION AWING NO:

CA16-8

| | SCALE IN FEET | |
|---|----------------------|----|
| 0 | 10 SCALE 1" = 20' | 20 |

CHECKED T. ADINOLFI APPROVED: C. BROWN

V. ROBBINS

- 1. SEE MIT-007 MITIGATION AREA 2
 PLANTING PLAN FOR LAYOUT OF IVA
 FRUTESCENS, BACCHARIS HALIMIFOLIA,
 MORELLA PENSYLVANICA, SPARTINA
 ALTERNIFLORA, LIMONIUM
 CAROLINIANUM, VACCINIUM
 CORYMBOSUM, AND SOLIDAGO
 SEMPERVIRENS.
- 2. SEE GRADING DRAWING (MIT-004) AND SECTIONS (MIT-005 & 006) FOR OVEREXCAVATION DEPTHS AND LIMITS.
- 3. SEE GRADING DRAWING (MIT-004) FOR SECTION BASELINE.

LEGEND:

CJL+1= CT COASTAL JURISDICTION LINE +1
CJL = CT COSTAL JURISDICTION LINE
HTL = HIGH TIDE LINE
MHW = MEAN HIGH WATER LINE
EL = ELEVATION
O.C. = ON CENTER
YR = YEAR

FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL

NORWALK

ACTIVITY 16

WETLAND MITIGATION

(MIT-009)

WALK BRIDGE REPLACEMENT

OVER THE NORWALK RIVER

BRIDGE NO. 04288R/MP 41.5

STATE OF CONNECTICUT

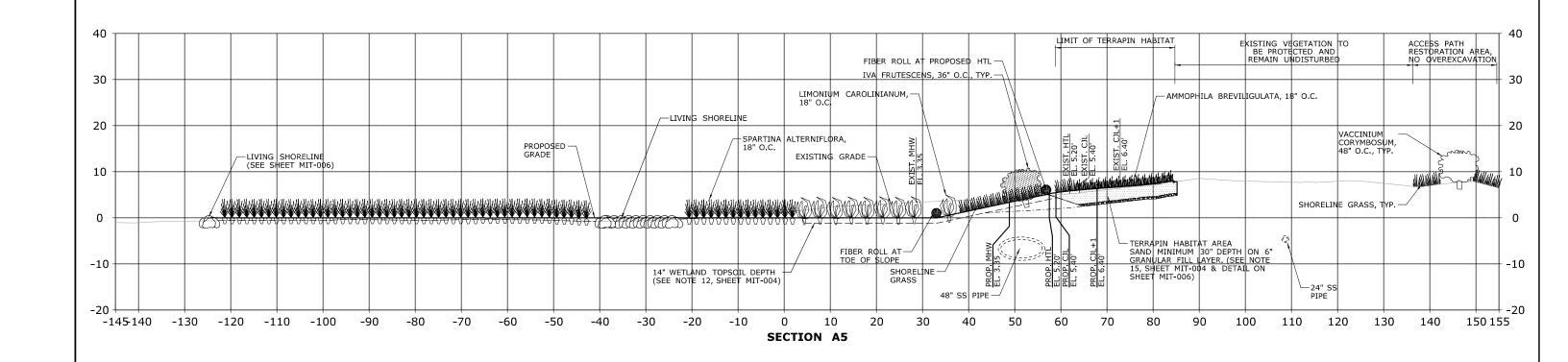
DEPARTMENT OF TRANSPORTATION

0301-0176

12-5-19

CA16-9

RAWING NO:



V. ROBBINS

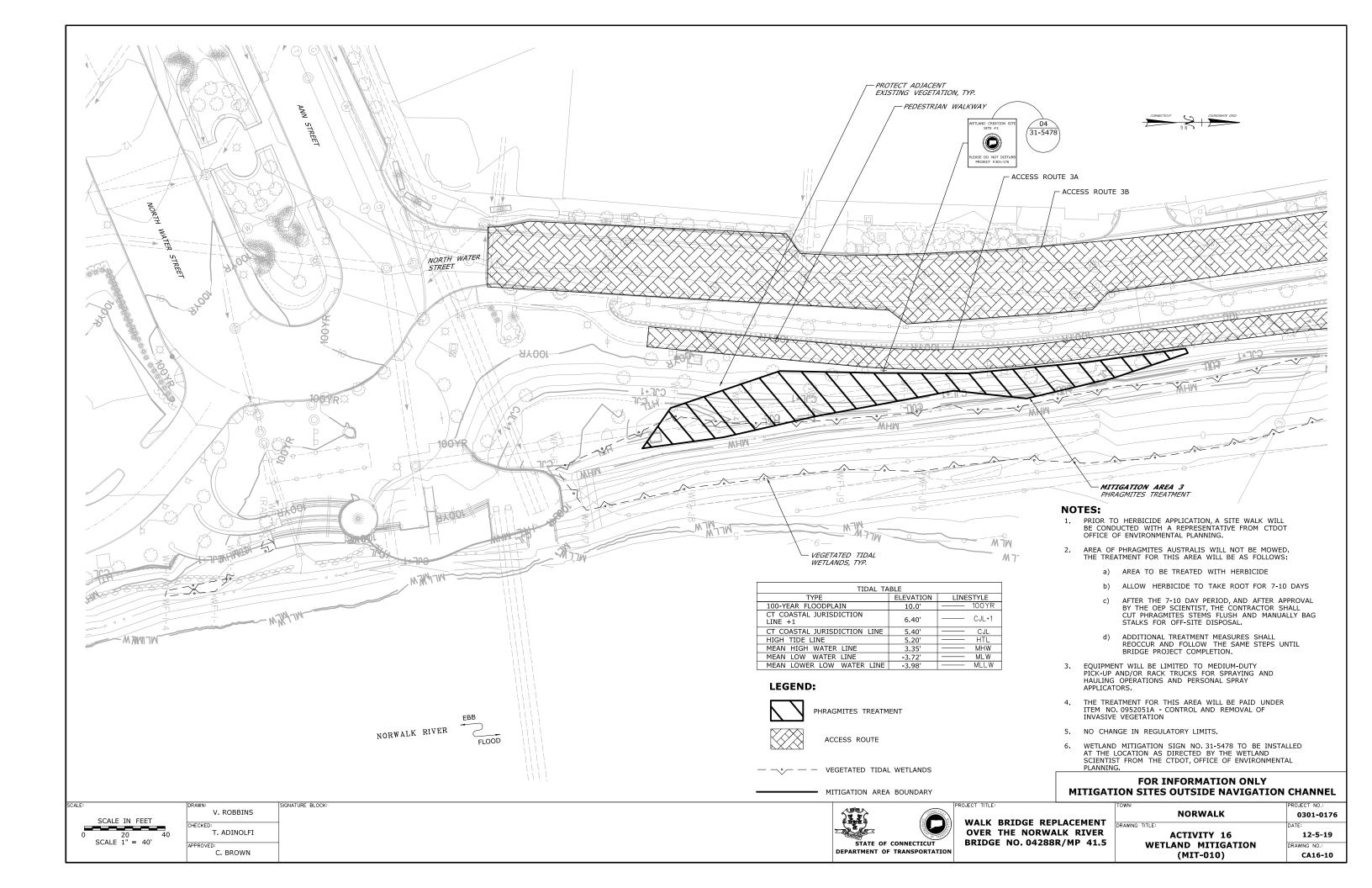
T. ADINOLFI

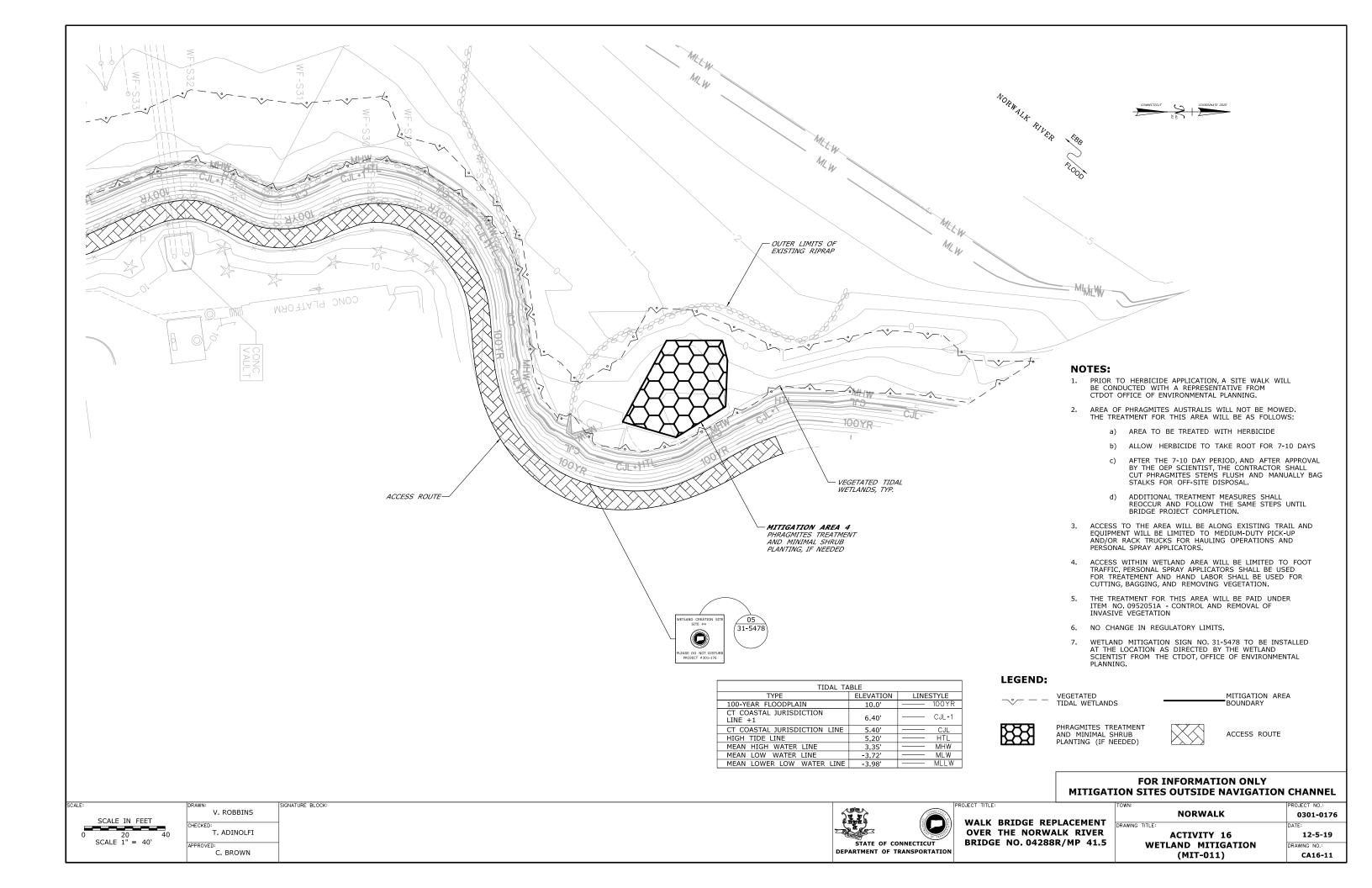
C. BROWN

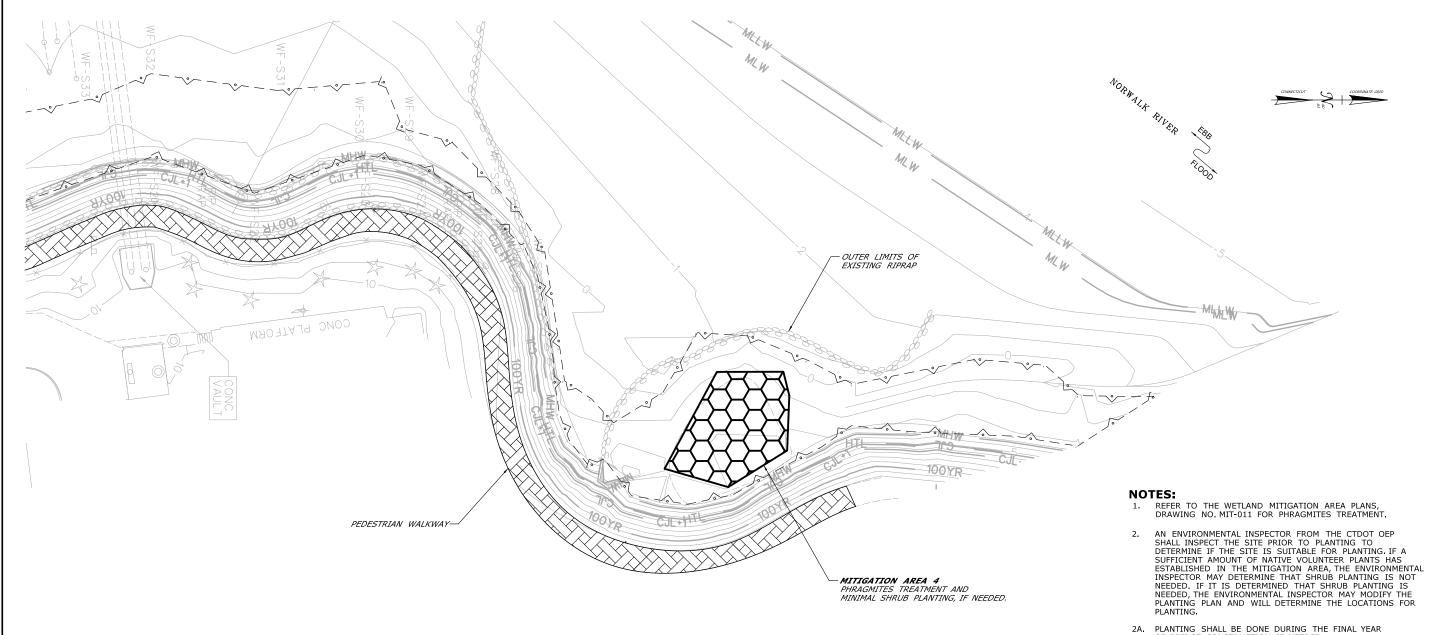
APPROVED:

SCALE IN FEET

10 20 SCALE 1" = 20'







| | PLANTING SCHEDULE (AS NEEDED SEE NOTE 2) | | | | | | |
|---|--|------|-----------------------|-------------------|--------|----------|-------|
| С | ODE | QTY. | SCIENTIFIC NAME | COMMON NAME | SIZE | SPACING | NOTES |
| П | вн | 13 | BACCHARIS HALIMIFOLIA | EASTERN BACCHARIS | 2 GAL. | 36" O.C. | |
| | [F | 12 | IVA FRUTESCENS | MARSH ELDER | 2 GAL. | 36" O.C. | |

LEGEND:



MITIGATION AREA BOUNDARY





SHRUB PLANTING

| TIDAL TABLE | | |
|------------------------------------|-----------|-----------|
| TYPE | ELEVATION | LINESTYLE |
| 100-YEAR FLOODPLAIN | 13.0' | —— 100YR |
| CT COASTAL JURISDICTION LINE +1 | 6.40' | —— CJL+1 |
| CT COASTAL JURISDICTION LINE | 5.40' | —— CJL |
| HIGH TIDE LINE | 5,20' | HTL |
| MEAN HIGH WATER LINE | 3.35' | MHW |
| MEAN LOW WATER LINE | -3.72' | MLW |
| MEAN LOWER LOW WATER LINE | -3 98' | MIIW |

- PLANTING SHALL BE DONE DURING THE FINAL YEAR OF BRIDGE CONSTRUCTION, IF NEEDED.
- IF SHRUB PLANTING IS NEEDED, AUGER OR DIG TO MAKE PLANTING HOLES FOR SHRUBS, AND TRANSPLANT. DO NOT REMOVE PLANTS FROM CONTAINERS UNTIL IMMEDIATELY BEFORE PLANTING. SEPARATE ANY POT-BOUND OR CRAMPED ROOTS AND SPREAD THEM WHEN PLACING THE PLANTS. MACHINERY WILL NOT BE ALLOWED WITHIN THE MITIGATION SITE AT ANY TIME FOR PLANTING.
- PAYMENT FOR THE WORK WILL BE MADE UNDER THE FOLLOWING ITEMS:

DISPOSAL OF DEBRIS WILL BE PAID UNDER ITEM #0101135A - DISPOSAL OF DEBRIS.

FURNISHING AND PLACING SHRUBS AND HERBACEOUS PLANTINGS IN THE WETLAND MITIGATION AREAS WILL BE PAID UNDER ITEM #0949875A - WETLAND PLANTINGS.

THE COST OF INSTALLING WETLAND CREATION SIGNS (31-5478) WILL BE PAID FOR UNDER ITEM #1208932A - SIGN FACE - SHEET ALUMINUM (TYPE IV RETROREFLECTIVE SHEETING).

FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL

SCALE IN FEET 20 SCALE 1" = 40'

V. ROBBINS T. ADINOLFI APPROVED: C. BROWN

DEPARTMENT OF TRANSPORTATION

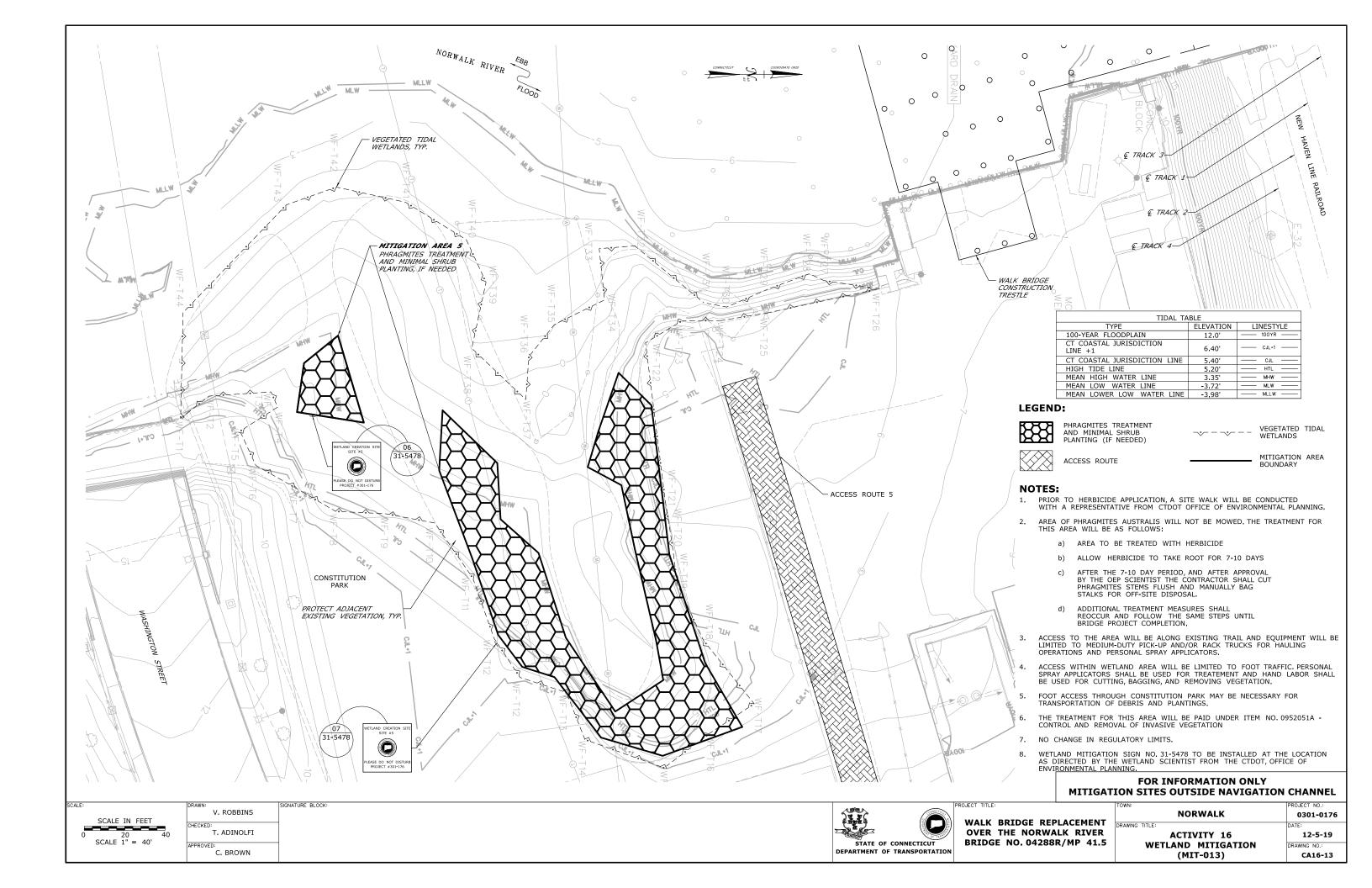


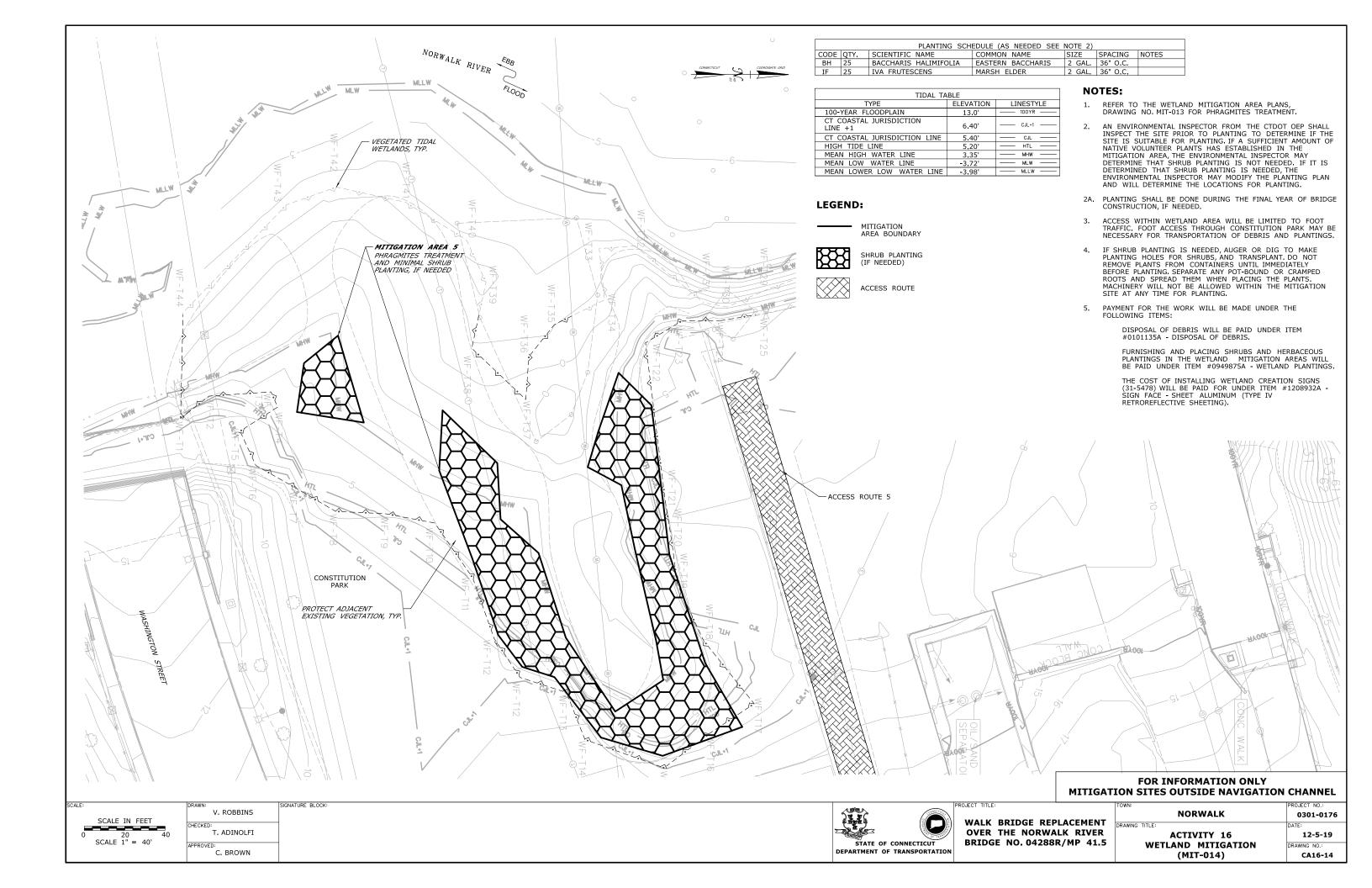
WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

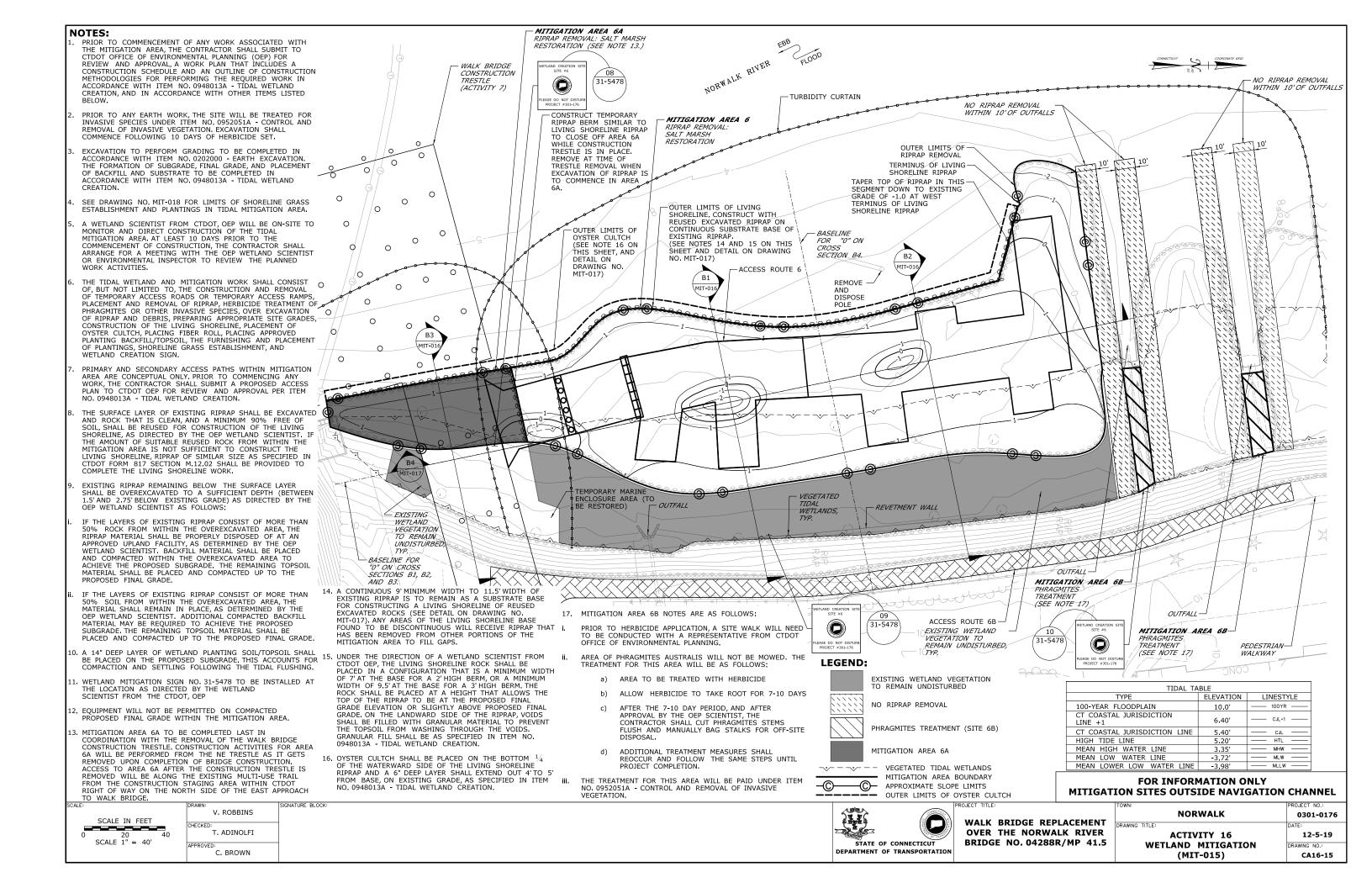
NORWALK 0301-0176

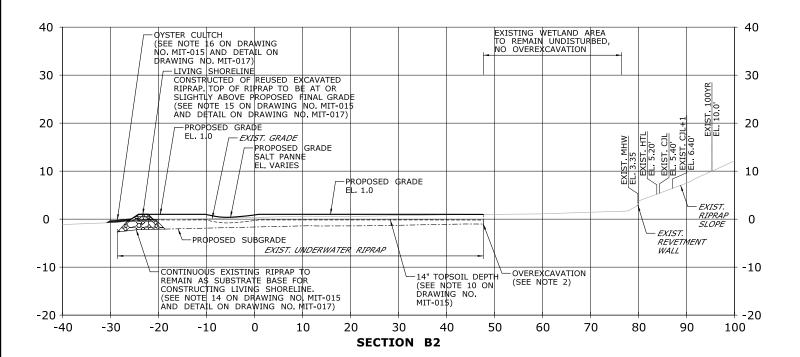
ACTIVITY 16 WETLAND MITIGATION (MIT-012)

12-5-19 RAWING NO: CA16-12









NOTES:

- 1. SEE SECTIONS FOR TOPSOIL DEPTHS.
- 2. OVEREXCAVATION TO BE SEQUENCED AS FOLLOWS:

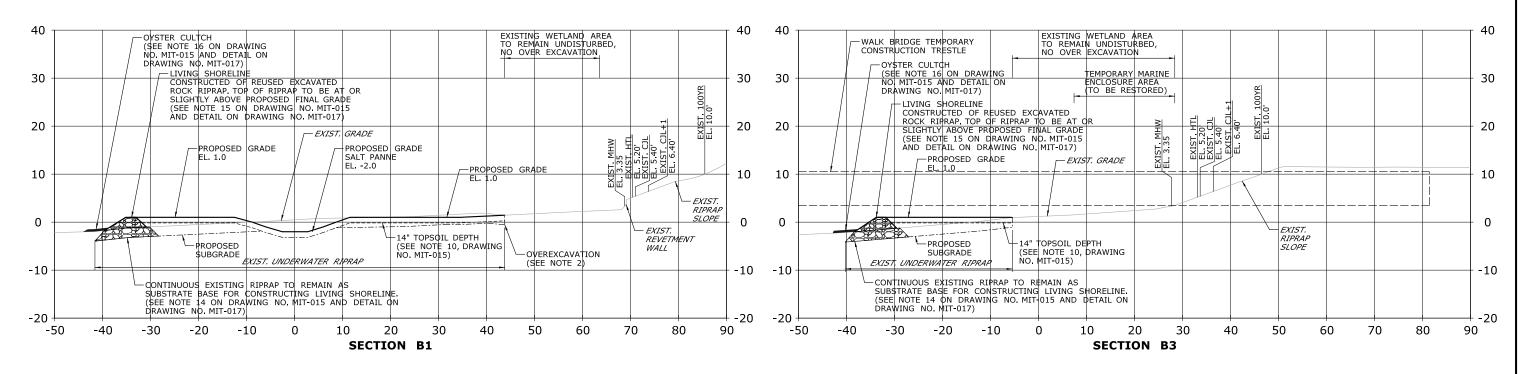
I. EXCAVATE SURFACE LAYER OF EXISTING RIPRAP TO REMOVE AND REUSE ROCK THAT IS CLEAN AND A MINIMUM 90% FREE OF SOIL FOR CONSTRUCTION OF LIVING SHORELINE.

II. OVEREXCAVATE REMAINING RIPRAP LAYERS TO A SUFFICIENT DEPTH (BETWEEN 1.5' AND 2.75') BELOW EXISTING GRADE TO REMOVE ANY LAYERS OF RIPRAP THAT CONSIST OF MORE THAN 50% ROCK, LAYERS OF RIPRAP WITH MORE THAN 50% SOIL CAN REMAIN IN PLACE ONCE PROPOSED SUBGRADE IS ACHIEVED AS DETERMINED BY THE OEP WETLAND SCIENTIST.

iii. GRADE MITIGATION AREA 6 TO MATCH PROPOSED GRADE.

LEGEND:

CJL+1= CT COASTAL JURISDICTION LINE +1
CJL = CT COASTAL JURISDICTION LINE
HTL = HIGH TIDE LINE
MHW = MEAN HIGH WATER LINE
EL = ELEVATION
EXIST. = EXISTING
YR = YEAR



FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL



WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

| SCALE. | SCALE IN FEET | | V. ROBBINS |
|--------|----------------------|----|-------------------------|
| 0 | 10 SCALE 1" = 20' | 20 | CHECKED: T. ADINOLFI |
| | SCALL I = 20 | | APPROVED: C. BROWN |

WIDTH OF CONSTRUCTED LIVING SHORELINE BASE (VARIES) FILL VOIDS ON LANDWARD SIDE OF RIPRAP BERM WITH GRANULAR MATERIAL 7' MIN. @ 2' HT. (AS SPECIFIED IN ITEM NO. 0948013A - TIDAL WETLAND CREATION) 9.5' MIN. @ 3' HT. TOP OF BERM HEIGHT OF RIPRAP BERM VARIES APPROX. 2' TO 3' ABOVE EXISTING PLACE TOP OF RIPRAP -AT OR SLIGHTLY ABOVE PROPOSED FINAL GRADE 2' MIN, WIDTH GRADE (EXCEPT WHERE TAPERING OCCURS) PLACE 6" DEEP LAYER OF OYSTER CULTCH ON THE BOTTOM $^{1}\!\!/_{4}$ OF THE WATERWARD SIDE OF PROPOSED FINAL -14" TOPSOIL--EXISTING GRADE LIVING SHORELINE RIPRAP AND EXTEND LAYER 4'TO 5'OUT GRADE FROM BASE. EXISTING -GRADE EDGE OF EXISTING -RIPRAP AT PERIMETER WIDTH OF EXIST. RIPRAP BASE -EXCAVATE SURFACE LAYER OF EXISTING RIPRAP AND REUSE CLEAN ROCK FOR CONSTRUCTION OF LIVING SHORELINE BY PLACING ROCKS ON EXISTING RIPRAP BASE. OVEREXCAVATE REMAINING RIPRAP LAYERS AS DIRECTED BY THE OEP WETLAND SCIENTIST (SEE NOTE 2 ON THIS SHEET AND NOTES 8 AND 9 ON DRAWING UNDISTURBED EXISTING RIPRAP TO REMAIN AS SUBSTRATE BASE FOR LIVING SHORELINE RIPRAP (VARIES) 9' MIN. @ 2' HT. 11.5' MIN @ 3' HT. -PLACE BACKFILL MATERIAL WHERE NEEDED TO BRING SUBGRADE TO 14" BELOW PROPOSED FINAL GRADE FOR TOPSOIL PLACEMENT (SEE NOTE 9 ON DRAWING NO. MIT-015)

LIVING SHORELINE DETAIL WITH REUSED RIPRAP

NOTES:

- 1. SEE SECTIONS FOR TOPSOIL DEPTHS.
- 2. OVEREXCAVATION TO BE SEQUENCED AS FOLLOWS:

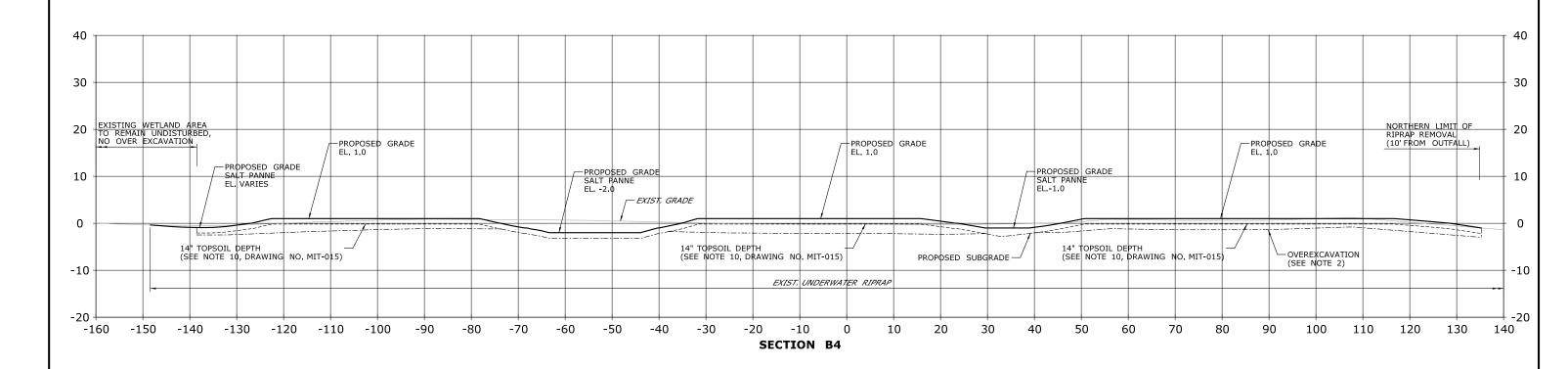
i, EXCAVATE SURFACE LAYER OF EXISTING RIPRAP TO REMOVE AND REUSE ROCK THAT IS CLEAN AND A MINIMUM 90% FREE OF SOIL FOR CONSTRUCTION OF LIVING SHORELINE.

ii. OVEREXCAVATE REMAINING RIPRAP LAYERS TO A SUFFICIENT DEPTH (BETWEEN 1.5'AND 2.75')
BELOW EXISTING GRADE TO REMOVE ANY LAYERS
OF RIPRAP THAT CONSIST OF MORE THAN 50% ROCK. LAYERS OF RIPRAP WITH MORE THAN 50% SOIL CAN REMAIN IN PLACE ONCE PROPOSED SUBGRADE IS ACHIEVED AS DETERMINED BY THE OEP WETLAND SCIENTIST.

iii. GRADE MITIGATION AREA 6 TO MATCH PROPOSED GRADE.

LEGEND:

EXIST. = EXISTING



FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL

NORWALK

0301-0176

12-5-19

CA16-17

RAWING NO:

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

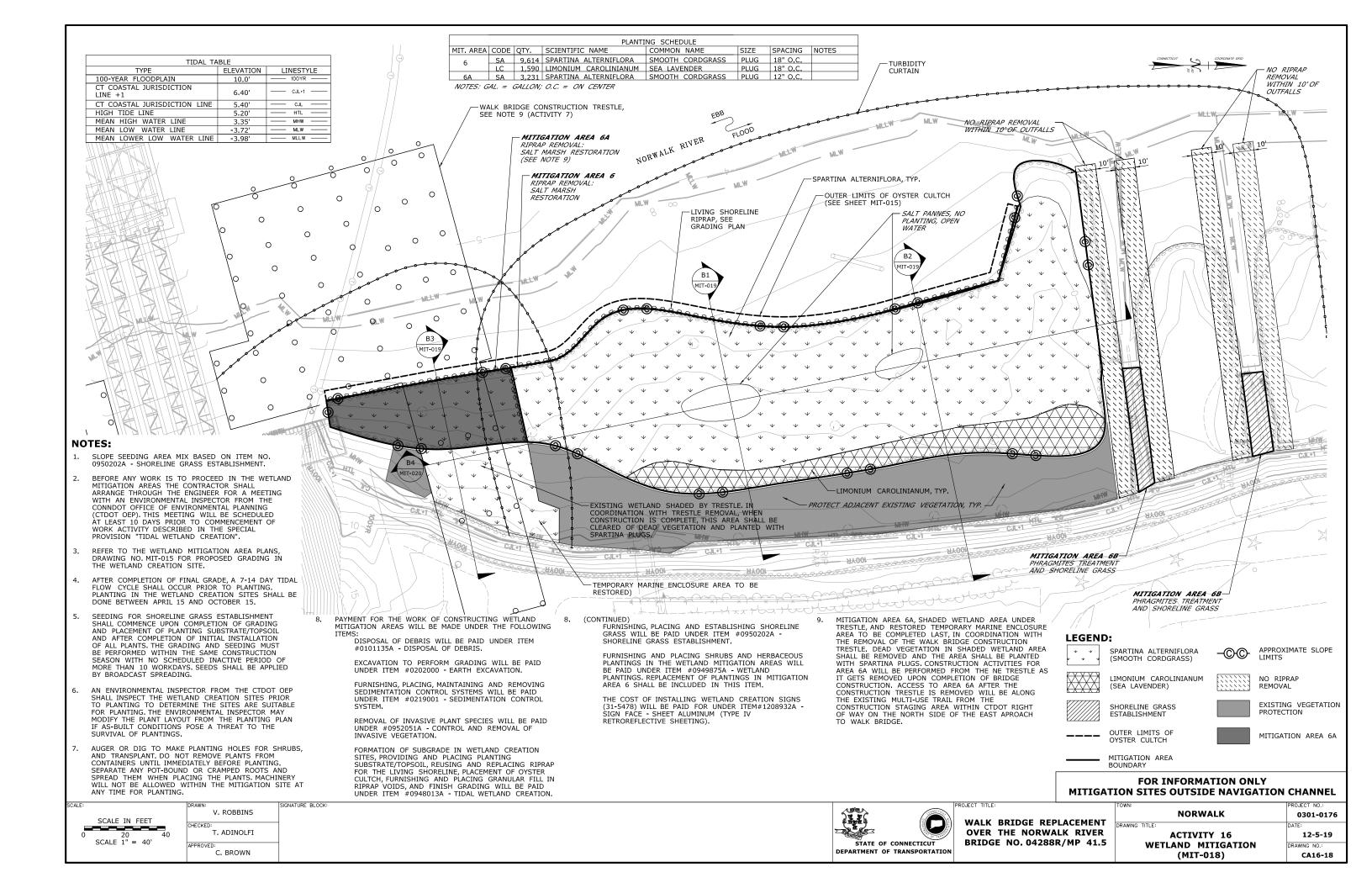
ACTIVITY 16 WETLAND MITIGATION (MIT-017)

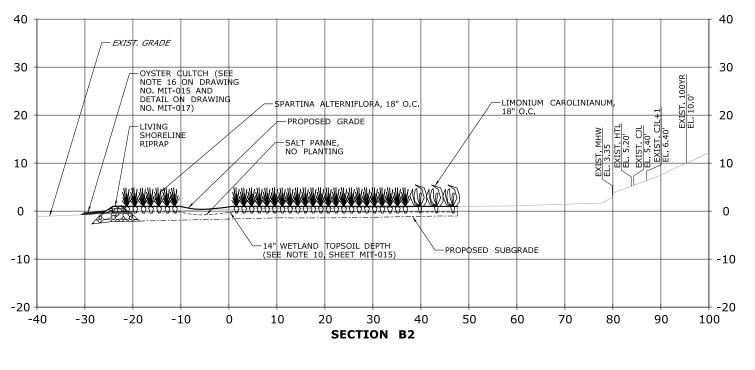
SCALE IN FEET SCALE 1" = 20' V. ROBBINS

T. ADINOLFI

C. BROWN

APPROVED:



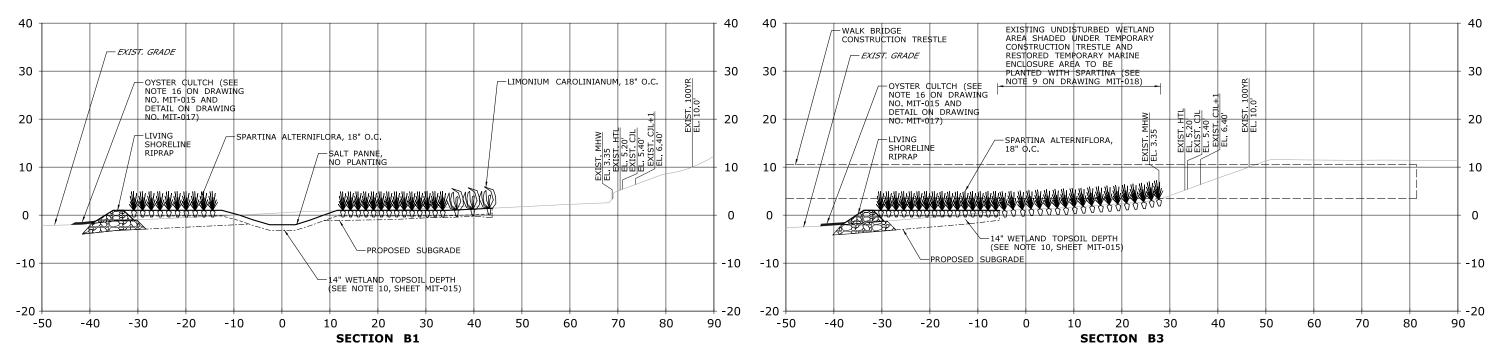


NOTES:

- 1. SEE MIT-018 MITIGATION AREA 6 PLANTING PLAN
- 2. SEE GRADING DRAWING (MIT-015) AND SECTIONS (MIT-016 AND MIT-017) FOR OVEREXCAVATION DEPTHS AND LIMITS.

LEGEND:

CJL+1= CT COASTAL JURISDICTION LINE +1
CJL = CT COSTAL JURISDICTION LINE
HTL = HIGH TIDE LINE
MHW = MEAN HIGH WATER LINE
EL = ELEVATION
O.C. = ON CENTER
YR = YEAR



FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL

SCALE IN FEET

O 10 20

SCALE 1" = 20'

DRAWN:
V. ROBBINS

CHECKED:
T. ADINOLFI

APPROVED:
C. BROWN

| STATE OF CONNECTICU | T |
|-------------------------|-------|
| DEPARTMENT OF TRANSPORT | ATION |

WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO.04288R/MP 41.5

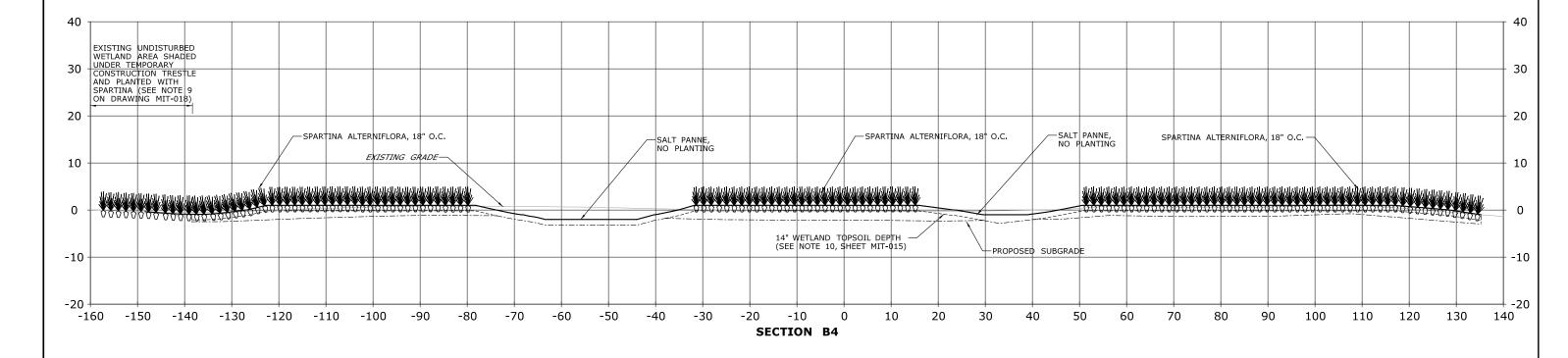
NOTES:

LEGEND:

1. SEE MIT-018 MITIGATION AREA 6 PLANTING PLAN

O.C. = ON CENTER

2. SEE GRADING DRAWING (MIT-015) AND SECTIONS (MIT-016 AND MIT-017) FOR OVEREXCAVATION DEPTHS AND LIMITS.



FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL

SCALE IN FEET

0 10 20

SCALE 1" = 20'

APPROVED:

C. BROWN

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

NORWALK

DRAWING TITLE:

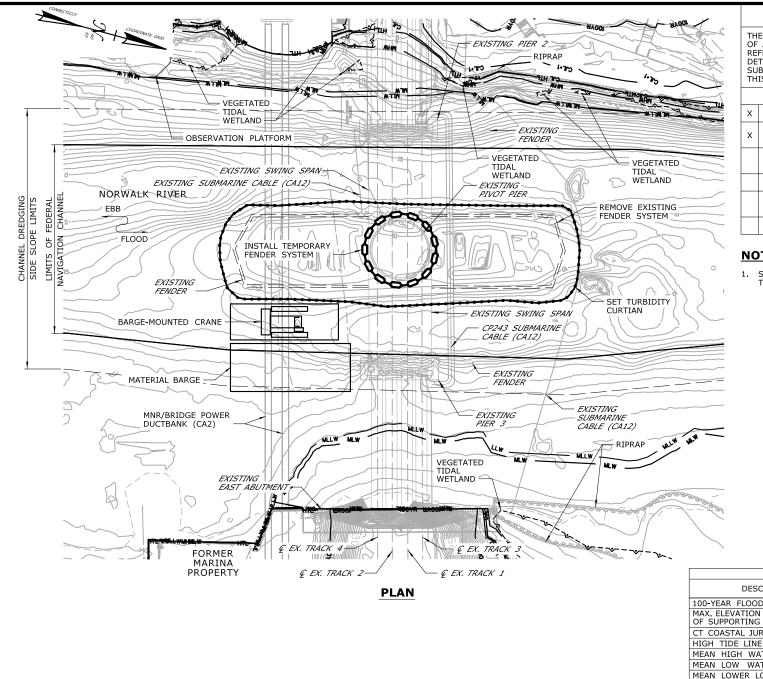
ACTIVITY 16

WETLAND MITIGATION
(MIT-020)

0301-0176

DATE:
12-5-19

DRAWING NO.:
CA16-20



THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO DREDGE THE RIVER WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES, WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE.

WORK DESCRIPTION

- SET TURBIDITY CURTAIN.
- REMOVE EXISTING FENDER SYSTEM, INSTALL TEMPORARY FENDER SYSTEM.

MOBILIZE BARGES AND EQUIPMENT TO SOUTH SIDE OF BRIDGE SET TURBIDITY CURTAIN.

DREDGE CHANNEL ON SOUTH SIDE OF BRIDGE,

MOBILIZE BARGES AND EQUIPMENT TO NORTH SIDE OF BRIDGE, SET TURBIDITY CURTAIN.

DREDGE CHANNEL ON NORTH SIDE OF BRIDGE.

NOTES:

SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.

| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |

SCALE 1" = 80'

W. GREGORY CHECKED: T. ADINOLFI APPROVED: C. BROWN

SIGNATURE BLOCK:

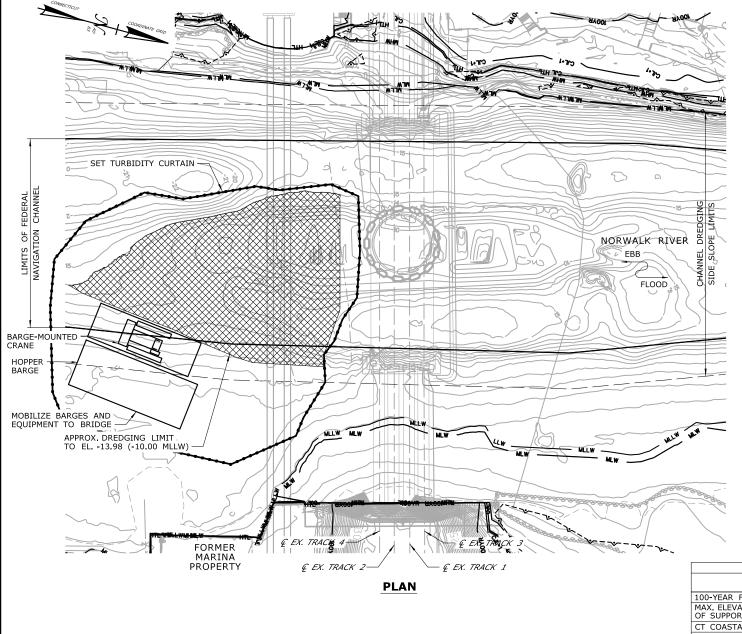
STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

NORWALK 0301-0176 DRAWING TITLE:

ACTIVITY 17 DREDGING OPERATIONS DRAWING NO.: (SHEET 1 OF 7)

REV 02-23-21 CA17-1



THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO DREDGE THE RIVER WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES, WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE.

WORK DESCRIPTION

SET TURBIDITY CURTAIN.

REMOVE EXISTING FENDER SYSTEM, INSTALL TEMPORARY FENDER SYSTEM.

- MOBILIZE BARGES AND EQUIPMENT TO SOUTH SIDE OF BRIDGE SET TURBIDITY CURTAIN.
- DREDGE CHANNEL ON SOUTH SIDE OF BRIDGE,

MOBILIZE BARGES AND EQUIPMENT TO NORTH SIDE OF BRIDGE, SET TURBIDITY CURTAIN.

DREDGE CHANNEL ON NORTH SIDE OF BRIDGE.

NOTES:

- 1. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 2. EXCAVATED MATERIAL AND DEWATERED WASTEWATERS SHALL BE MANAGED IN ACCORDANCE WITH THE ENVIRONMENTAL SPECIAL PROVISIONS AND CTDEEP REQUIREMENTS
- 3. WEST CHANNEL MAY BE PARTIALLY RESTRICTED FOR A PERIOD OF TIME BUT WILL OTHERWISE REMAIN OPEN DURING THIS WORK, TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTS) WILL BE COORDINATED WITH THE USCG.
- 4. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.

| ELEVATION TABLE | | | | | |
|---|---------|-----------------------|---------------------|--|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | CJL+1 6.4 | | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | | |
| TOWN: PROJECT NO.: | | | | | |

SCALE 1" = 80'

W. GREGORY CHECKED: T. ADINOLFI APPROVED: C. BROWN

SIGNATURE BLOCK:

DEPARTMENT OF TRANSPORTATION

STATE OF CONNECTICUT

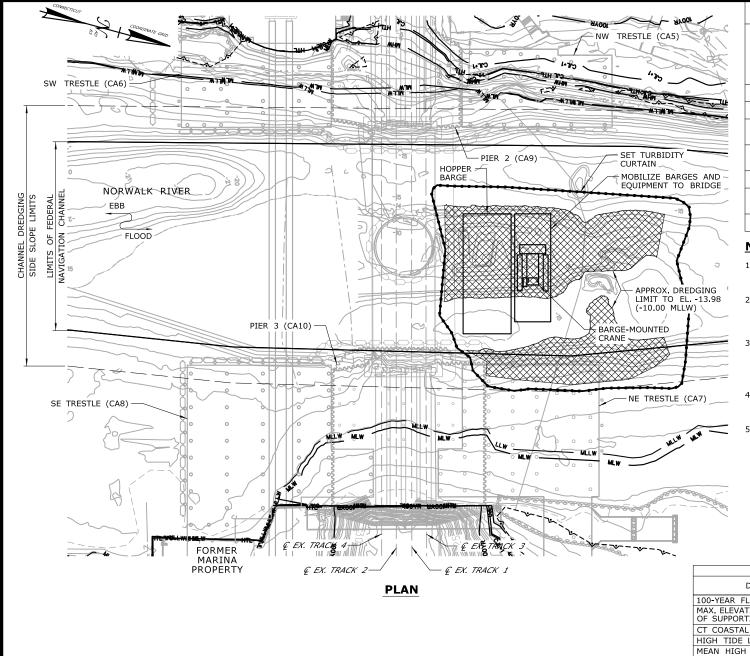
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

NORWALK DRAWING TITLE:

ACTIVITY 17 DREDGING OPERATIONS DRAWING NO.: (SHEET 2 OF 7)

REV 02-23-21 CA17-2

0301-0176



THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO DREDGE THE RIVER WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES, WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE.

WORK DESCRIPTION

SET TURBIDITY CURTAIN.

REMOVE EXISTING FENDER SYSTEM, INSTALL TEMPORARY FENDER SYSTEM.

MOBILIZE BARGES AND EQUIPMENT TO SOUTH SIDE OF BRIDGE SET TURBIDITY CURTAIN.

DREDGE CHANNEL ON SOUTH SIDE OF BRIDGE,

- MOBILIZE BARGES AND EQUIPMENT TO NORTH SIDE OF BRIDGE, SET TURBIDITY CURTAIN.
- DREDGE CHANNEL ON NORTH SIDE OF BRIDGE.

NOTES:

- 1. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 2. EXCAVATED MATERIAL AND DEWATERED WASTEWATERS SHALL BE MANAGED IN ACCORDANCE WITH THE ENVIRONMENTAL SPECIAL PROVISIONS AND CTDEEP REQUIREMENTS.
- 3. WEST CHANNEL MAY BE PARTIALLY RESTRICTED FOR A PERIOD OF TIME BUT WILL OTHERWISE REMAIN OPEN DURING THIS WORK, TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTS) WILL BE COORDINATED WITH THE USCG.
- 4. DREDGING REQUIRED AROUND THE EXISTING PIERS WILL TAKE PLACE WITHIN MARINE ENCLOSURES IN CONJUNCTION WITH PIER REMOVAL, SEE ACTIVITY 14,
- 5. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.

| ELEVATION TABLE | | | | |
|---|----------------------------|-----------|---------------------|--|
| DESCRIPTION | CONTOUR ELEVATION (NAVD88) | | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |

SCALE 1" = 80'

W. GREGORY CHECKED: T. ADINOLFI APPROVED: C. BROWN

SIGNATURE BLOCK:

DEPARTMENT OF TRANSPORTATION

STATE OF CONNECTICUT

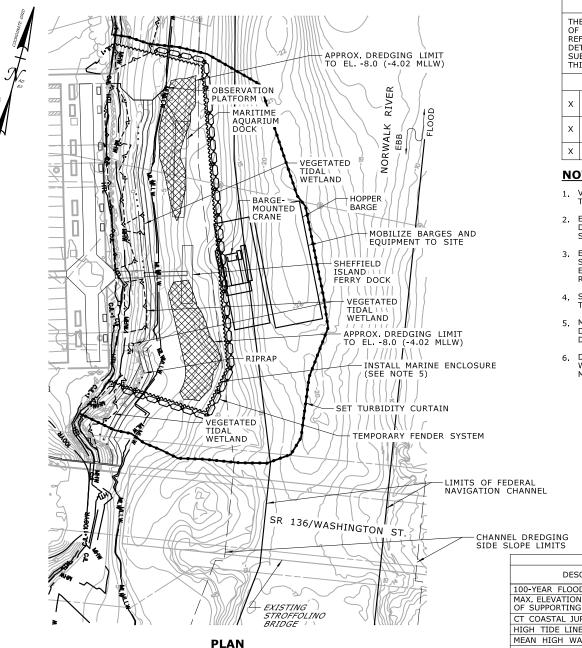
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

NORWALK DRAWING TITLE:

ACTIVITY 17 DREDGING OPERATIONS DRAWING NO.: (SHEET 3 OF 7)

REV 02-23-21 CA17-3

0301-0176



THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO DREDGE THE RIVER WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES, WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE,

WORK DESCRIPTION

- MOBILIZE BARGES AND EQUIPMENT TO VESSEL DOCKS.
- SET TURBIDITY CURTAIN AND INSTALL MARINE ENCLOSURE.
- DREDGE ALONG SHORELINE.

NOTES:

- VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES
- 2. EXISTING DOCK LOCATIONS SHOWN FOR REFERENCE. DOCKS WILL BE REMOVED PRIOR TO DREDGING. SEE ACTIVITY 3.
- EXCAVATED MATERIAL AND DEWATERED WASTEWATERS SHALL BE MANAGED IN ACCORDANCE WITH THE ENVIRONMENTAL SPECIAL PROVISIONS AND CTDEEP REQUIREMENTS.
- SEE VESSEL BERTHING PLAN (DWG, GEN-9) FOR TYPICAL BARGE SIZES.
- MARINE ENCLOSURE WILL ONLY BE REQUIRED IF DREDGING OCCURS OUTSIDE THE MONTHS OF DECEMBER AND JANUARY.
- 6. DREDGING WILL NOT OCCUR AT THIS LOCATION WHILE THE SHEFFIELD ISLAND FERRY AND MARITIME AQUARIUM DOCK ARE IN USE.

ELEVATION TABLE ELEVATION ELEVATION DESCRIPTION CONTOUR (NAVD88) (MLLW) 100-YEAR FLOODPLAIN 100 YR 12.0 15.98 MAX, ELEVATION OF LAND CAPABLE CJL+1 10.38 OF SUPPORTING TIDAL VEGETATION CT COASTAL JURISDICTION LINE CJL 5,4 9,38 HIGH TIDE LINE HTL 5.2 9.18 MEAN HIGH WATER LINE 3.35 MHW 7.33 MEAN LOW WATER LINE -3.72 MLW 0.26 MEAN LOWER LOW WATER LINE MLLW -3.98 0

WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

NORWALK 0301-0176 DRAWING TITLE:

ACTIVITY 17 DREDGING OPERATIONS DRAWING NO.: (SHEET 4 OF 7)

REV 02-23-21 CA17-4

SCALE 1" = 80'

W. GREGORY CHECKED: T. ADINOLFI APPROVED: C. BROWN

SIGNATURE BLOCK:

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

DOCKS INSTALL MARINE **ENCLOSURE** TEMPORARY FENDER SYSTEM PERMANENT BULKHEAD (CA4) RIPRAP PROPOSED EVERSOURCE BYPASS APPROXIMATE LOCATION (BY OTHERS) MOBILIZE BARGES AND EQUIPMENT TO SITE **HOPPER BARGE** BARGE-MOUNTED CRANE VEGETATED TIDAL APPROX. DREDGING LIMIT WETLAND TO EL -11.0 (-7.02 MLLW) MARINE STAGING SET TURBIDITY CURTAIN YARD LIMITS OF FEDERAL NAVIGATION CHANNEL CHANNEL DREDGING SIDE SLOPE LIMIT **PLAN**

CONSTRUCTION SEQUENCE

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO DREDGE THE RIVER WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE.

WORK DESCRIPTION

- MOBILIZE BARGES AND EQUIPMENT TO MARINE STAGING YARD,
- SET TURBIDITY CURTAIN AND INSTALL MARINE ENCLOSURE.
- DREDGE ALONG IN FRONT OF BULKHEAD.

NOTES:

- 1. VERTICAL DATUM IS NAVD 88, ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 2. EXCAVATED MATERIAL AND DEWATERED WASTEWATERS SHALL BE MANAGED IN ACCORDANCE WITH THE ENVIRONMENTAL SPECIAL PROVISIONS AND CTDEEP REQUIREMENTS.
- 3. EXISTING TIMBER PILES, RIPRAP, AND DEBRIS ALONG SHORELINE WILL BE REMOVED PRIOR TO DREDGING, PERMANENT SHEETPILE BULKHEAD WILL BE INSTALLED PRIOR TO DREDGING, SEE ACTIVITY 4.
- 4. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- 5. MARINE ENCLOSURE WILL ONLY BE REQUIRED IF DREDGING OCCURS OUTSIDE THE MONTHS OF DECEMBER AND JANUARY.

| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 14.0 | 17.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | CJL+1 6.4 | | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |
| TOWN: PROJECT NO.: | | | | |

SCALE 1" = 80'

SIGNATURE BLOCK: W. GREGORY CHECKED: T. ADINOLFI APPROVED: C. BROWN

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION

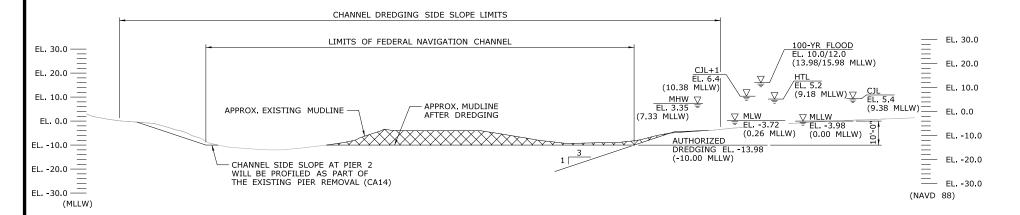
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

NORWALK DRAWING TITLE:

0301-0176

REV 05-19-21 ACTIVITY 17 DREDGING OPERATIONS DRAWING NO.: (SHEET 5 OF 7)

CA17-5



TYPICAL SECTION AT BRIDGE

NOTES:

- 1. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 2. EXCAVATED MATERIAL AND DEWATERED WASTEWATERS SHALL BE MANAGED IN ACCORDANCE WITH THE ENVIRONMENTAL SPECIAL PROVISIONS AND CTDEEP REQUIREMENTS.

| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 10.0/12.0 | 13.98/15.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |

SCALE 1" = 40'

CHECKED:

APPROVED:

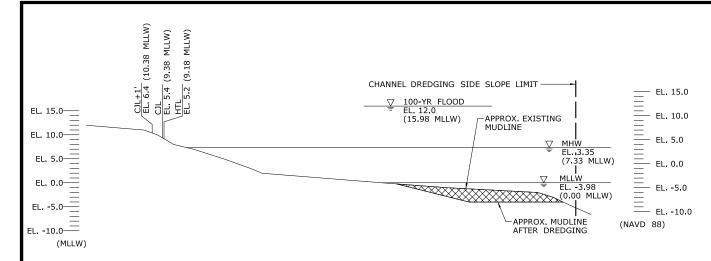
SIGNATURE BLOCK: W. GREGORY T. ADFINOLFI C. BROWN



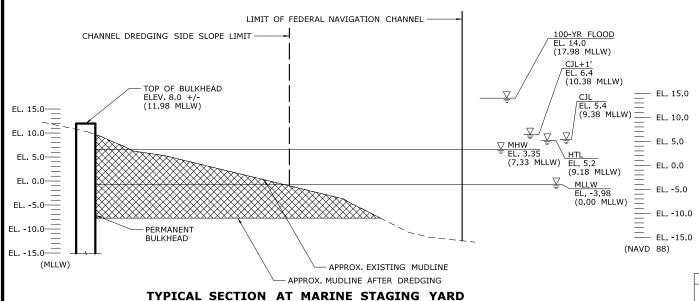
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

PROJECT NO.: NORWALK 0301-0176 DRAWING TITLE: REV 02-23-21

ACTIVITY 17 DREDGING OPERATIONS DRAWING NO.: (SHEET 6 OF 7) CA17-6



TYPICAL SECTION AT VESSEL DOCKS



NOTES:

- 1. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 2. EXCAVATED MATERIAL AND DEWATERED WASTEWATERS SHALL BE MANAGED IN ACCORDANCE WITH THE ENVIRONMENTAL SPECIAL PROVISIONS AND CTDEEP REQUIREMENTS.

| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | 12.0/14.0 | 15.98/17.98 | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |

SCALE 1" = 20'

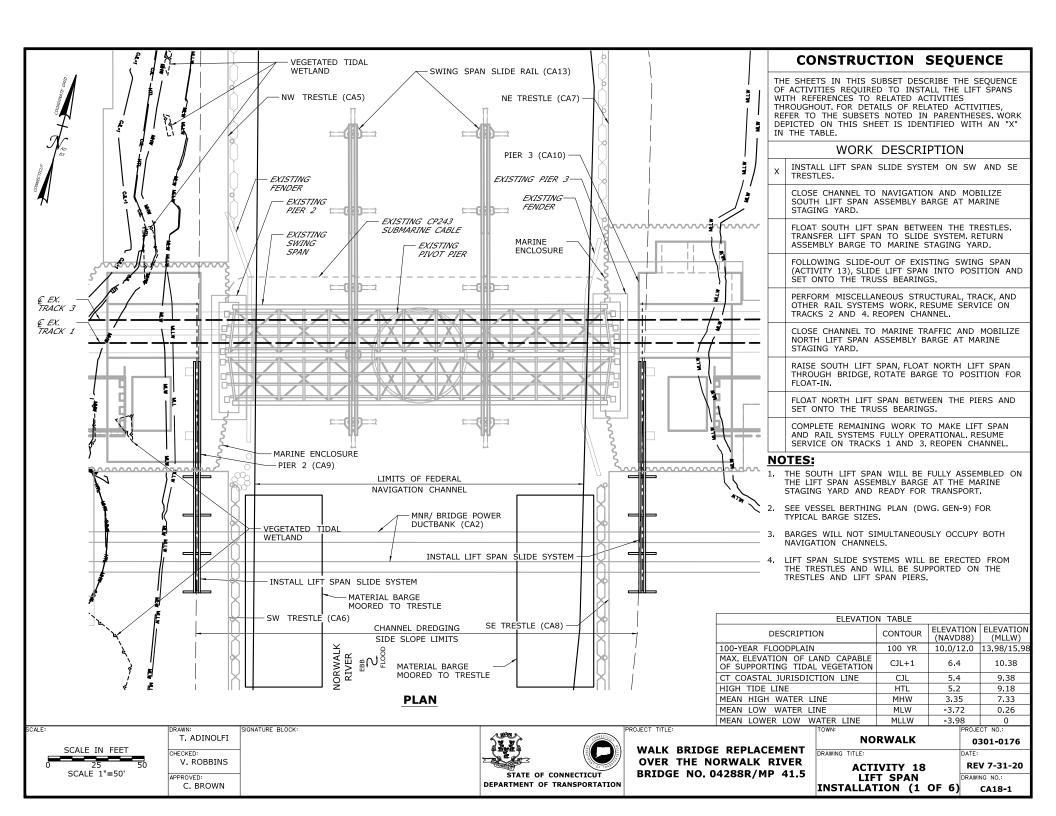
SIGNATURE BLOCK: W. GREGORY CHECKED: T. ADINOLFI APPROVED: C. BROWN

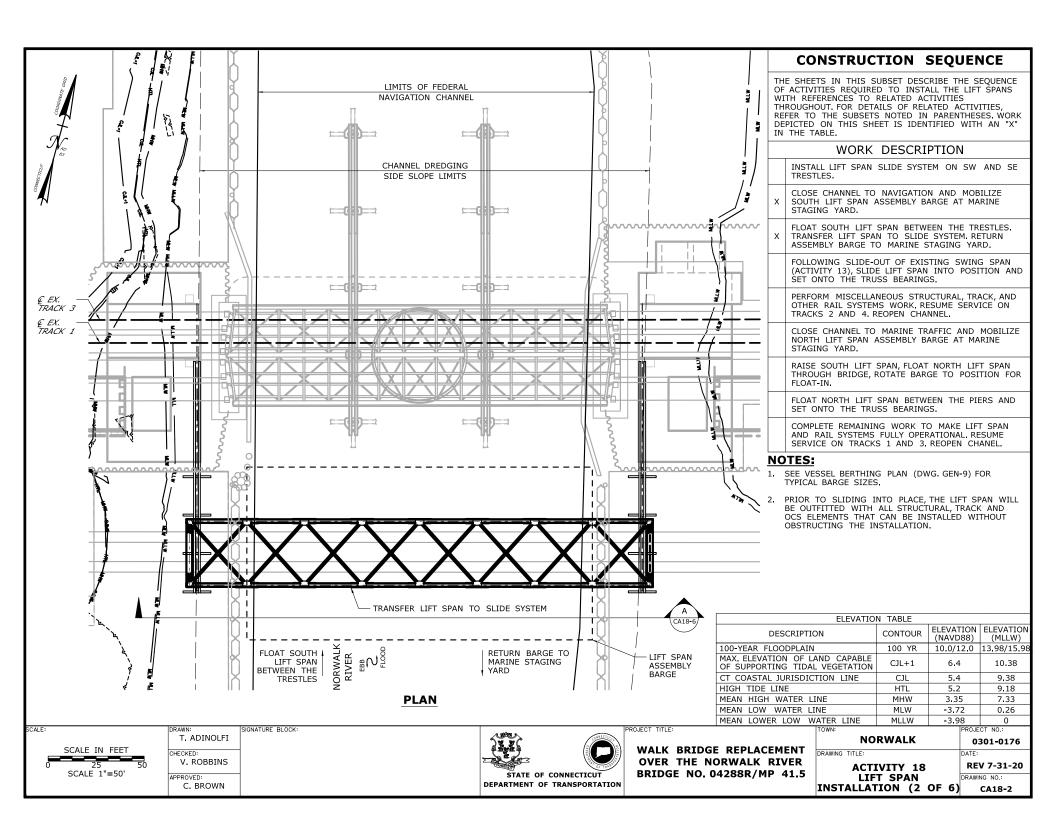


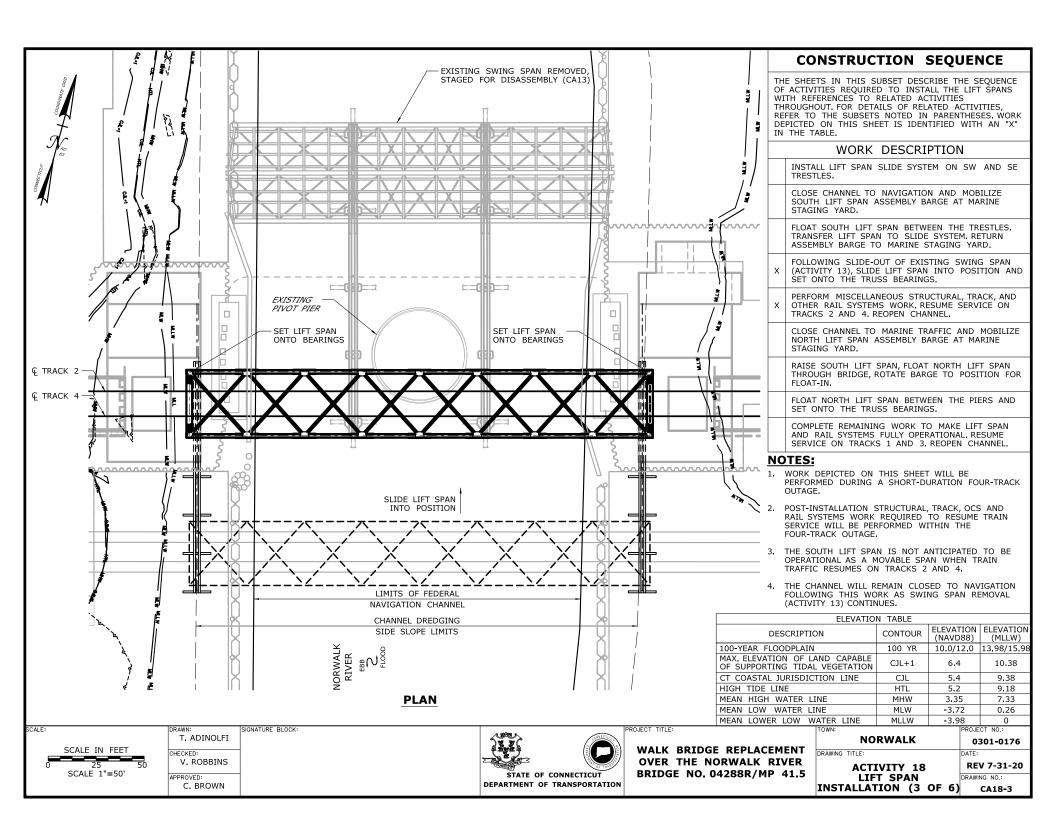
WALK BRIDGE REPLACEMENT **OVER THE NORWALK RIVER** BRIDGE NO. 04288R/MP 41.5

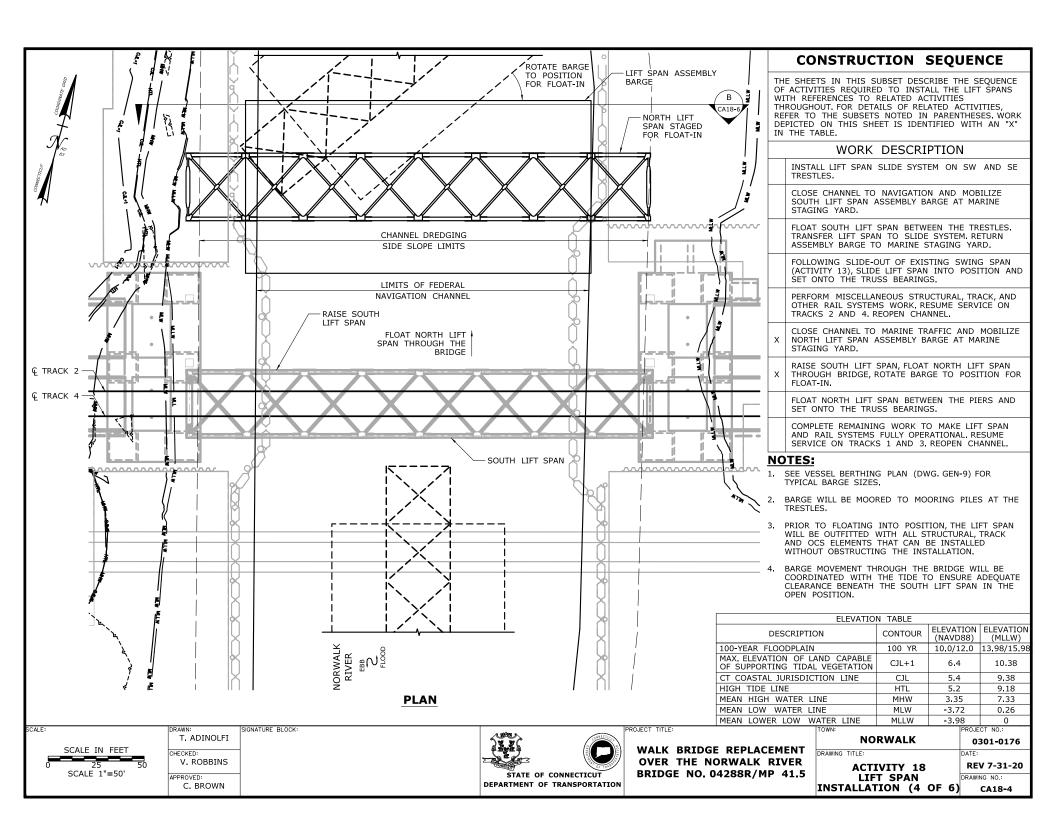
PROJECT NO.: NORWALK 0301-0176 DRAWING TITLE:

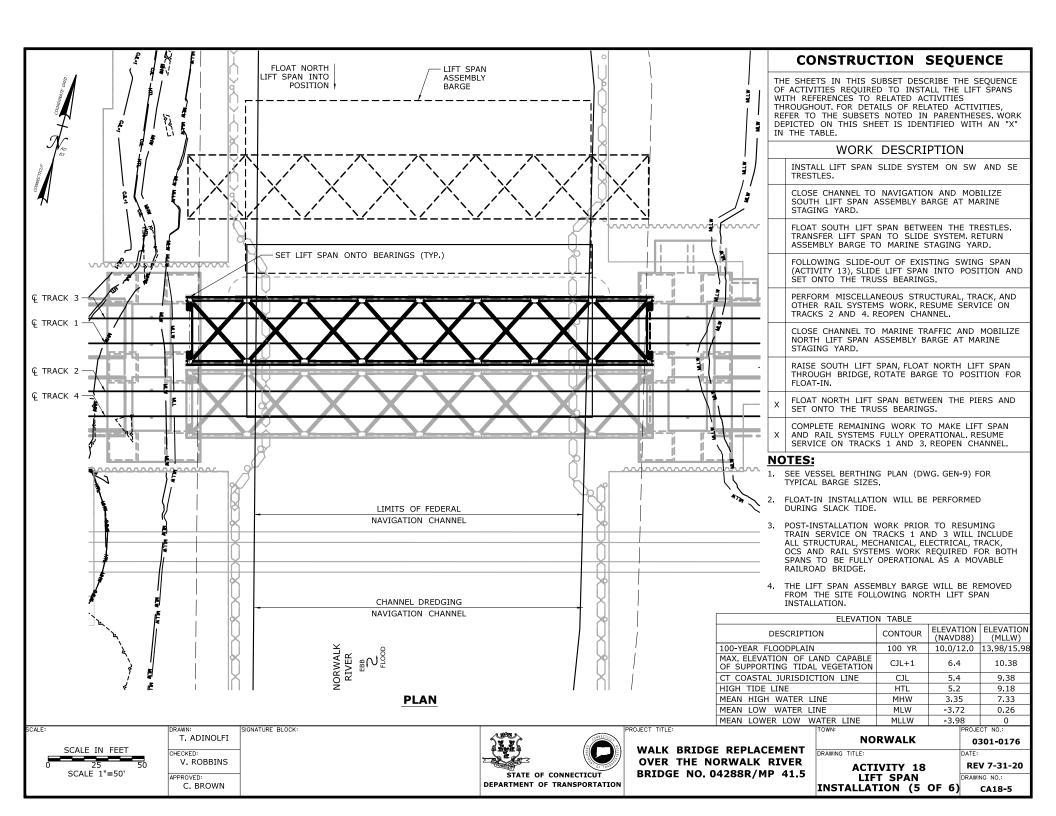
REV 02-23-21 **ACTIVITY 17** DREDGING OPERATIONS DRAWING NO.: (SHEET 7 OF 7) CA17-7

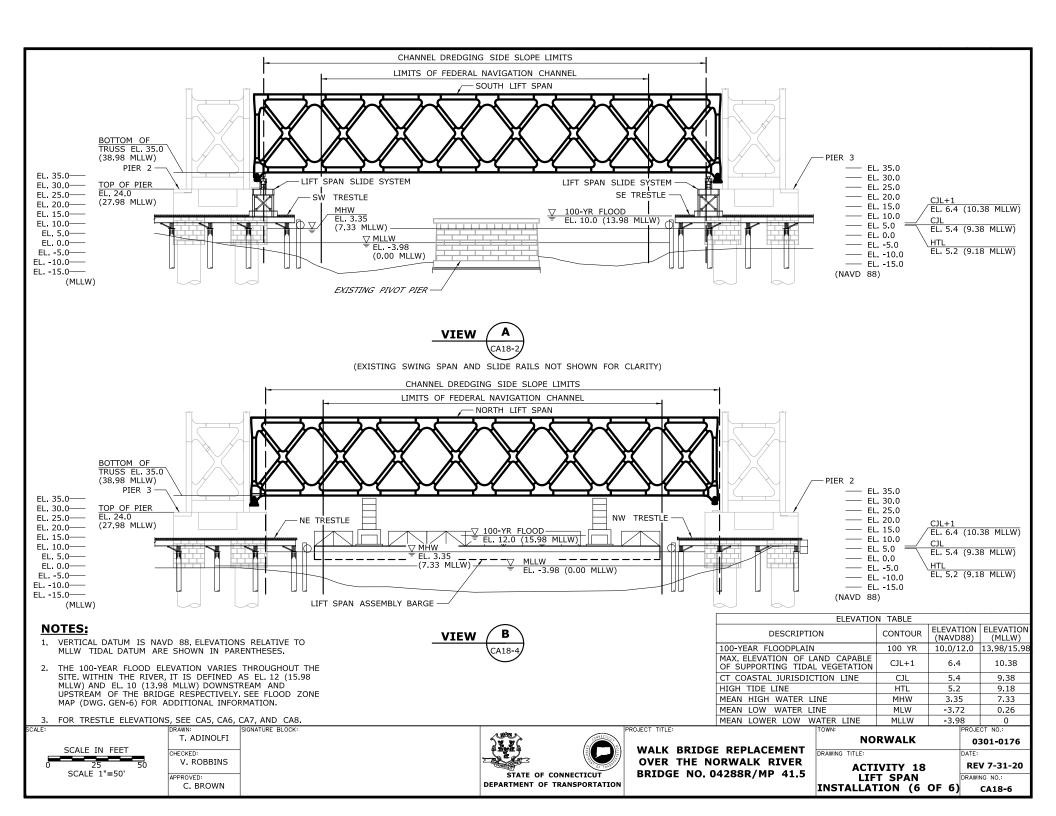


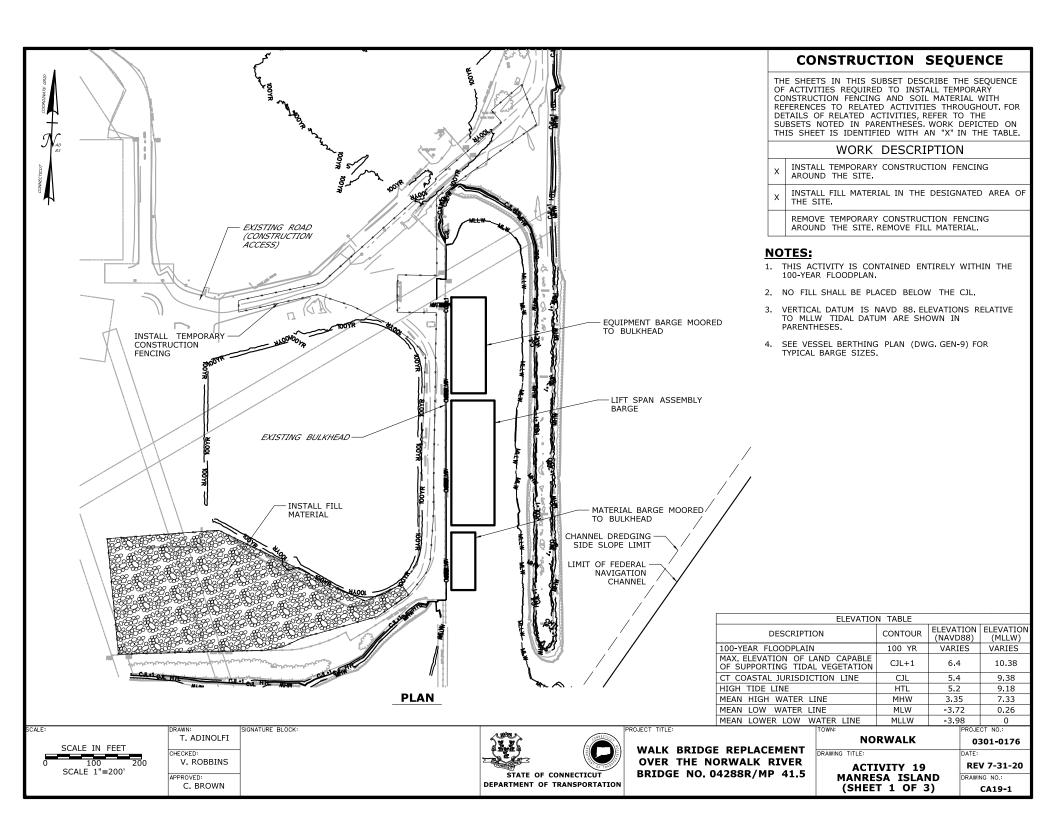


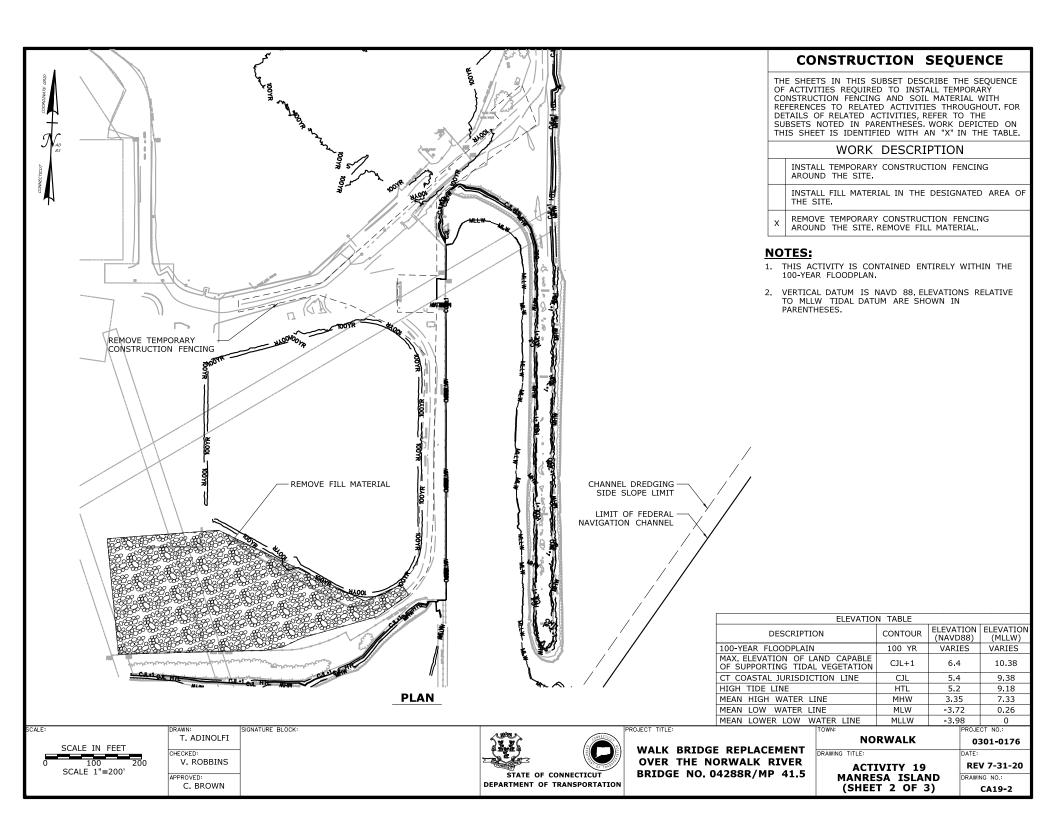






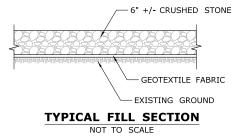






NOTES:

- 1. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 2. THE 100-YEAR FLOODPLAIN ELEVATION VARIES THROUGHOUT THE SITE. SEE FLOOD ZONE MAP (DWG. GEN-6A FOR ELEVATION VALUES AND LIMITS OF APPLICABILITY.



| ELEVATION TABLE | | | | |
|---|---------|-----------------------|---------------------|--|
| DESCRIPTION | CONTOUR | ELEVATION (NAVD88) | ELEVATION (MLLW) | |
| 100-YEAR FLOODPLAIN | 100 YR | VARIES | VARIES | |
| MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION | CJL+1 | 6.4 | 10.38 | |
| CT COASTAL JURISDICTION LINE | CJL | 5.4 | 9.38 | |
| HIGH TIDE LINE | HTL | 5.2 | 9.18 | |
| MEAN HIGH WATER LINE | MHW | 3.35 | 7.33 | |
| MEAN LOW WATER LINE | MLW | -3.72 | 0.26 | |
| MEAN LOWER LOW WATER LINE | MLLW | -3.98 | 0 | |



WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5 NORWALK
DRAWING TITLE:

0301-0176

ACTIVITY 19 MANRESA ISLAND (SHEET 3 OF 3) REV 7-31-20
DRAWING NO.:
CA19-3

Enclosure III

Required Statement,
General Conditions,
and
Special Conditions
For Inclusion in the
S408 Authorization Letter & DOA Permit

Section 408 (S408) Permission Request for CDOT to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

In accordance with EC 1165-2-220 part 16.e and appendices G & K, the following statement, general conditions, and any additional special conditions are required to be in the S408 authorization.

I. STATEMENT:

In accordance with EC 1165-2-220 part 16.e and appendices G & K and the Summary of Findings prepared for this permission request, Enclosure 3 provides general conditions, and additional special conditions required to be included in the S408 permission letter and DoA permit respectively. These conditions must be adhered to by the Requester to assure the proposed alteration does not impact the usefulness of the project nor is injurious to the public interest. Concurrent with issuing the final Department of Army (DoA) permit for the proposed action, a (S408) letter including Appendix K authorizing the entire action including the new span and support structures, the temporary occupation of the channel during demolition and construction and for the in-water work also covered by S10 and S404 will be issued to the Requester. For consistency, special conditions specifically related to the in-water work will be included in the final DoA permit.

EC 1165-2-220, appendix G, part G-4.d. requires that that Regulatory staff include in the Section 10 permit document being provided to the applicant the following statement:

"....It has been determined that the activities authorized do not impair the usefulness of the USACE Navigation project and is not injurious to the Public Interest...."

II. STANDARD TERMS AND CONDITIONS:

In this instance, concurrent with issuing the final Department of Army (DoA) permit for the proposed action, a (S408) letter including Appendix K authorizing the entire action including the new span and support structures, the temporary occupation of the channel during demolition and construction and for the in-water work also covered by S10 and S404 will be issued to the Requester. For consistency, special conditions specifically related to the in-water work will be included in the final DoA permit. The standard terms and conditions contained in appendix K of the EC are as follows:

LIMITS OF THE AUTHORIZATION

1. This permission only authorizes you, the requester, to undertake the activity described herein under the authority provided in Section 14 of the Rivers and Harbors Act of 1899, as amended (33 USC 408). This permission does not obviate the need to obtain other federal, state, or local authorizations required

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

by law. This permission does not grant any property rights or exclusive privileges, and you must have appropriate real estate instruments in place prior to construction and/or installation.

- 2. The time limit for completing the authorized S408 work ends concurrently with the expiration of the Department of the Army Permit # NAE-2015-625 or in accordance with any extensions to Department of Army Permit # NAE-2015-625. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
- 3. Without prior written approval of the USACE, you must neither transfer nor assign this permission nor sublet the premises or any part thereof, nor grant any interest, privilege or license whatsoever in connection with this permission. Failure to comply with this condition will constitute noncompliance for which the permission may be revoked immediately by USACE.
- 4. The requester understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the work herein authorized, or if, in the opinion of the Secretary of the Army or an authorized representative, said work will cause unreasonable conditions and/or obstruction of USACE project authorized design, the requester will be required upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim can be made against the United States on account of any such removal or alteration.

INDEMNIFICATION AND HOLD HARMLESS

- 5. The United States will in no case be liable for:
 - a. any damage or injury to the structures or work authorized by this permission that may be caused or result from future operations undertaken by the United States, and no claim or right to compensation will accrue from any damage; or
 - b. damage claims associated with any future modification, suspension, or revocation of this permission.
- 6. The United States will not be responsible for damages or injuries which may arise from or be incident to the construction, maintenance, and use of the project requested by you, nor for damages to the property or injuries to your officers, agents, servants, or employees, or others who may be on your premises or project work areas or the federal project(s) rights-of-way. By accepting this permission, you hereby agree to fully defend, indemnify, and hold harmless the

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

United States and USACE from any and all such claims, subject to any limitations in law.

 Any damage to the water resources development project or other portions of any federal project(s) resulting from your activities must be repaired at your expense.

REEVALUATION OF PERMISSION

- 8. The determination that the activity authorized by this permission would not impair the usefulness of the federal project and would not be injurious to the public interest was made in reliance on the information you provided.
- 9. This office, at its sole discretion, may reevaluate its decision to issue this permission at any time circumstances warrant, which may result in a determination that it is appropriate or necessary to modify or revoke this permission. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. you fail to comply with the terms and conditions of this permission;
 - b. the information provided in support of your application for permission proves to have been inaccurate or incomplete; or
 - c. significant new information surfaces which this office did not consider in reaching the original decision that the activity would not impair the usefulness of the water resources development project and would not be injurious to the public interest

CONDUCT OF WORK UNDER THIS PERMISSION

- 10. You are responsible for implementing any requirements for mitigation, reasonable and prudent alternatives, or other conditions or requirements imposed as a result of environmental compliance.
- 11. Work/usage allowed under this permission must proceed in a manner that avoids interference with the inspection, operation, and maintenance of the federal project.
- 12. In the event of any deficiency in the design or construction of the requested activity, you are solely responsible for taking remedial action to correct the deficiency.
- 13. The right is reserved to the USACE to enter upon the premises at any time and for any purpose necessary or convenient in connection with government purposes, to make inspections, to operate and/or to make any

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

other use of the lands as may be necessary in connection with government purposes, and you will have no claim for damages on account thereof against the United States or any officer, agent or employee thereof.

- 14. You must provide copies of pertinent design, construction, and/or usage submittals/documents. USACE may request that survey and photographic documentation of the alteration work and the impacted project area be provided before, during, and after construction and/or installation.
- 15. You may be required to perform an inspection of the federal project with the USACE, prior to your use of the structure, to document existing conditions.
- 16. USACE shall not be responsible for the technical sufficiency of the alteration design nor for the construction and/or installation work.

III. SPECIAL CONDITIONS:

NOTE: The following conditions contain specific elevations and other minimum requirements to be met to meet the requirements of this permit. All elevations refer to the plane of Mean Lower Low Water (MLLW)

17. Submittals and Notifications

Except where stated otherwise, reports, drawings, correspondence and any other submittals required by this permit shall be marked with the words "Permit No. NAE-2015-625" and submitted via the following:

1. Regulatory Division

a. MAIL: PATS Branch – Regulatory Division Corps of Engineers, New England District 696 Virginia Road, Concord, MA 01742-2751

b. EMAIL: cenae-r@usace.army.mil

c. FAX: (978) 318-8303

and

2. Navigation Section

a. MAIL: Navigation Division – Programs and Project Management Division

Corps of Engineers, New England District 696 Virginia Road, Concord, MA 01742-2751

b. EMAIL: jenifer.e.thalhauser@usace.army.mil

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit. Requirements for immediate notification to the Corps shall be done by telephone to (978) 318-8338.

18. We have sent a copy of this authorization to the National Ocean Service (NOS). You must notify NOS and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Your notification of completion must include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used).

All submittals to the Corps and NOS shall be marked with the words "Permit No. NAE-2015-625."

Send NOS submittals to:

Department of Commerce, NOAA National Ocean Service Nautical Data Branch; N/CS26; 1315 East-West Highway Silver Spring, MD 20910 *or email: ocs.ndb@noaa.gov

Send Corps submittals to:

PATS Branch - Regulatory Division Corps of Engineers New England District 696 Virginia Road Concord, MA 01742-2751 *or email: cenae-r@usace.army.mil

And

Navigation Section – Programs and Project Management Division Corps of Engineers, New England District 696 Virginia Road, Concord, MA 01742-2751 *or email: jenifer.e.thalhauser@usace.army.mil

- a. Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit. The Corps may note the location on future survey drawings and NOAA may use the information for charting purposes.
- b. The notification of completion shall be done within 60 days of completing an activity that involves an aerial transmission line, submerged cable, or submerged pipeline across a tidal or non-tidal navigable water of the U.S.

- (i.e., Section 10 waters). The permittee shall furnish the NOS and this office with certified (professional engineer or land surveyor registered in the state the work is being performed) as-built drawings, to scale, with control points (i.e., latitude/longitude, state plane coordinates), depicting the alignment and minimum clearance of the aerial wires above the MHW/OHW line at the time of survey or depicting the elevations and alignment of the buried cable or pipeline across the tidal or non-tidal navigable waterway. Authorization in writing and as-built documentation is required when: a) a new cable or pipeline (overhead or submerged) is installed; b) an existing pipeline or cable is moved to another location or is completely removed; c) an overhead cable or overhead pipeline clearance above the MHW line is changed; d) there is a change in the type of cables (power, telephone, etc.) at a water crossing; or e) there is a change in elevation of the submerged pipeline or cable.
- 19. Construction Schedule: A detailed schedule of work shall be provided to the Corps Regulatory and Navigation Project Managers a minimum of 30 days prior to the start of construction (see par 25, m. for addresses). The permittee shall submit a standard USACE work-start notification form a minimum of two weeks prior to the start of actual construction work and then weekly schedule updates shall be prepared by the permittee or their contractor shall be sent to the aforementioned project managers after start of work.
- 20. The work shall not interfere with USACE personnel or its contractors engaged in hydrographic surveys, maintenance or improvement of the existing FNP. If, in the opinion of the USACE, the permittee's structures or vessels attached to them must be moved to allow for the maintenance or improvement of the existing FNP, the permittee shall move the structures or vessels as directed by the USACE.
- 21. Work associated with this permit shall not affect the depth or width of the existing Federal Navigation Project (FNP). Any material, machinery or equipment lost, dumped, thrown into, or otherwise entering the waterway shall be removed immediately. The Norwalk Harbormaster shall be informed about the nature of the object and location of the object entering the waterway at (203) 849-8823. If immediate removal is impractical and the object entering the waterway is, or could become, an obstruction or hazard to navigation, the object shall be suitably marked to protect navigation and the U.S. Coast Guard, Waterways Management Section, First Coast Guard District, Sector Long Island Sound, shall be notified immediately at (203) 468-4432.

- 22. The existing submarine cables that power the existing bridge shall be removed in their entirety. No remnants of these cables are allowed to remain or abandoned in place. If before or during construction it is determined that the submarine cables cannot be removed entirely, then a meeting between the permittee, the construction contractor and the USACE New England District Navigation Section and Regulatory Division must be scheduled by the permittee and held before the contractor may proceed any further with work on this construction element.
- 23. The project shall remove the existing bridge piers (i.e., piers 2, 3 and the center pivot pier). All foundation elements shall be removed to the bottom of the timber mat, approximately at elevation -16.02 feet below MLLW. The existing fender system piles around Pier 2 and 3 will be fully removed. Existing piles within the navigation channel will be completely removed, unless the removal may compromise the integrity of adjoining structures, where they shall be cut off at a depth of 2 feet below mudline. If before or during construction it is determined that the foundation elements cannot be removed to these elevations, then a meeting between the permittee, the construction contractor and the USACE New England District Navigation Section and Regulatory Division must be scheduled by the permittee and held before the contractor may proceed any further with work on this construction element.
- 24. Any dredging occurring within the limits of the authorized 10 feet deep channel (incl. 1V:3H side-slopes) shall achieve a minimum dredge elevation of -10 feet below Mean Lower Low Water (MLLW). If before or during construction it is determined that this minimum elevation cannot be realized, the location(s) where the minimum dredge elevation cannot be achieved will be documented and a meeting between the permittee, the construction contractor and the USACE, New England District Navigation Section and Regulatory Division must be scheduled by the permittee and held before the contractor may proceed any further with work on this construction element.
- 25. The proposed top of pipe elevation for the micro-tunnel is -38.02 below MLLW. To meet the minimum required 13-foot setback from the authorized 10-feet deep channel and minimum bottom cover requirement, the submarine cables (top of cable/conduit) shall be installed such that the minimum top of pipe elevation is no higher than -23.0 feet below MLLW. A minimum of 7 feet of bottom cover over the top of the utility shall be maintained over the entire utility crossing. If before or during construction it is determined that the minimum top of pipe elevation or minimum cover requirement cannot be realized, a meeting between the permittee, the construction contractor and the USACE, New England District Navigation Section and Regulatory Division must be scheduled by the permittee and held before the contractor may proceed any further with work on this construction element.

- 26. Pre- Construction and Post-Construction Surveys: Electronic sweep surveys shall be conducted to collect pre-construction existing conditions and post-construction conditions of the submarine cables that will be removed as a part of this project. Pre-construction and post-construction sweep surveys shall cover the entire area of river bottom disturbed by the submarine cable work and at least 200 feet upstream and downstream from the upper and lower limits of the bottom disturbance areas; the sweep survey shall also cover the full width of the FNP (both the east and west channels) within the areas of in-river construction disturbance and also include an additional distance of 50.0 feet to the east and west of the FNP limits.
 - a. To ensure that the proposed method of surveying is acceptable, a detailed description of the method and the equipment to be employed shall be furnished to the Corps (see address below in 3.d) at least 30 days prior to the start of each survey. The multi-beam swath method or multi-transducer sweep method are required. For hydrographic surveying techniques and information, refer to the Corps of Engineers Hydrographic Manual (EM 1110-2-1003), which can be viewed at: http://www.nae.usace.army.mil/Missions/Regulatory/Useful-Documents-Forms-and-Publications/
 - b. Sweep surveys shall be done only during daylight hours.
 - c. Survey data shall be submitted to the Corps in a format that will allow verification of survey results.
 - d. The Corps may assign a government representative to accompany the survey party during performance of the sweep surveys. The permittee shall notify the Corps Survey Section Chief a minimum of ten working days prior to the start of each survey at (978) 318-8783 or "Survey Section Chief, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751."
 - e. Plans adequately showing the results of the pre-construction and post-construction sweep surveys along with a written description of how they were performed, and copies of all field books and notes shall be submitted to the Corps (see address above in 24.d) for review and acceptance no later than 30 days after completion of the authorized work.
- 27. Post Construction As-Builts: The permittee shall submit as-built drawing(s) of the installed submarine cables, the newly constructed bridge piers, and the condition of the channel post-removal of all piers and existing cables. As-built drawings submitted to the Corps shall include:

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

- At least one plan view showing the utility's horizontal alignment and a profile view showing the utility's vertical alignment for the cable crossing's entire length that is below the mean high water (MHW)
- b. The authorized channel limits of the Norwalk Harbor FNP on both the plan and profile views and the theoretical side-slopes on the profile view
- c. The elevation(s) of the top of the utility and all associated installation materials (such as anchoring systems) measured below MLLW. Elevations of the top of utility and installation materials as well as finished grade of the bottom of river shall be reported at a frequency of not less than 25' along the length of the utility.
- d. Construction details of the proposed utility to include all associated installation materials (such as anchoring systems) shall be included.
- e. Material cut sheets of all installed materials (to include cable, conduit, anchoring system, backfill, etc.).
- f. A bar (graphic) scale on drawings
- g. The date(s) of the survey and drawings.
- h. On the plan view drawing: north arrow, horizontal grid, and shoreline features
- On the profile view drawing: the actual elevation(s) of the top of cables in the datum of MLLW with a note regarding conversion to NAVD 88 vertical datum.
- j. The submarine cable's horizontal state plane coordinates and vertical elevations(s) at:
 - i. each horizontal and vertical turning point or point of inflection
 - ii. the points of curvature and tangency
 - iii. each location where the cables intersect the bridge fender system at the Walk Bridge
 - iv. each location where the cables intersects the limits of the Norwalk Harbor FNP

Show the cable's horizontal state plane coordinates in U.S. survey feet based on the Lambert Grid System for the State of Connecticut Zone 0600 NAD 83. Show the elevation(s) at the top of cable referenced to NAVD 88 vertical datum and MLLW datum with the correction factor detailing how MLLW was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.

- k. A stamp by a professional engineer or land surveyor registered in the state the work is being performed.
- I. The permittee shall provide the as-builts showing that the utility was installed in compliance with the requirements of this permit <u>prior to</u> allowing the cable to be connected to the system.

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

m. As-built drawing(s) shall be submitted electronically to the following:

cenae-r@usace.army.mil jenifer.e.thalhauser@usace.army.mil christina.m.comeau@usace.army.mil

CONNECTICUT IN-LIEU FEE (ILF) PROJECT IMPACT WORKSHEET

| 1. | Corps file number: NAE-2015-00625 |
|-----|--|
| 2. | Date permit issued: March 3, 2023 |
| 3. | Corps project manager: Peter Olmstead |
| 4. | Permittee(s): Kevin F. Carifa |
| 5. | Project location/address: Walk Bridge, Bridge No. 04288R over the Norwalk River, Norwalk, CT |
| 6. | Lat/long of impact: North 41 degrees, 06' 02"/West 73 degrees, 24' 55" |
| | (choose the midpoint within each service area if the project is linear) |
| 7. | 8-digit hydrologic unit code(s): <u>HUC8 01100006</u> and <u>HUC8 01100007</u> |
| 8. | Service area: Southwest Coastal |
| 9. | Service area rate/square foot: \$9.12 |
| 10. | Number of credits to be purchased (impacts (SF)/43,560)*(0.75): 0.12 |

11. Resource(s) impacted:

| Resource Type (list all that apply) | Type of Impact (by resource type) | SF of Aquatic Resources or Linear FT of Streams Impacted and Subject to Compensation | % of the Standard Amount | Credit Cost Per SF or LF | Cost |
|-------------------------------------|-----------------------------------|--|--------------------------------|--------------------------------|-------------|
| | Excavation/ | _ | | | |
| E2US | Disturbance ^a | 400 SF | 100% | \$9.12 | \$2,736.00 |
| | Excavation/ | | | | |
| E2EM1 | Disturbance a | 6,200 SF | 100% | \$9.12 | \$42,408.00 |
| E1UB | Excavation ^a | 200 SF | 100 % | \$9.12 | \$1,368.00 |
| R | N/A b | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| L | 1 | Total: | | \$9.12 | \$46,512.00 |
| | | | | | |

Notes:

- a. Per coordination with USACE New England Division, 25 percent credit to be applied due to CTDEEP-required wetland mitigation.
- b. Per coordination with USCE New England Division, watercourse impacts to be waived.

<u>Resource Type</u>: Wetlands by NWI type (PFO, PSS, PEM, M1, M2, E2, etc.), vernal pool (VP), VP critical terrestrial habitat (CTH), and/or river, stream, or brook (R).

<u>Type of impact</u>: May include one or more of the following: fill, conversion (e.g., forested to shrub/scrub), excavation with associated discharge, etc.

Should you have any questions regarding this project please contact Peter Olmstead, of my staff, at (978) 318-8211 or by email at peter.d.olmstead@usace.army.mil.

Sincerely,

Tammy R. Turley

Chief, Regulatory Division

Tammy R. Turley

Enclosures

CC:

Nathan Margason, U.S. EPA Region 1, margason.nathan@epa.gov
Bill Sigmund, CT DEEP Transportation, William.Sigmund@ct.gov
Jenifer Thalhauser, USACE Navigation, jenifer.e.thalhauser@usace.army.mil