



# IMPROVEMENT DREDGING NEW HAVEN HARBOR NEW HAVEN, CONNECTICUT



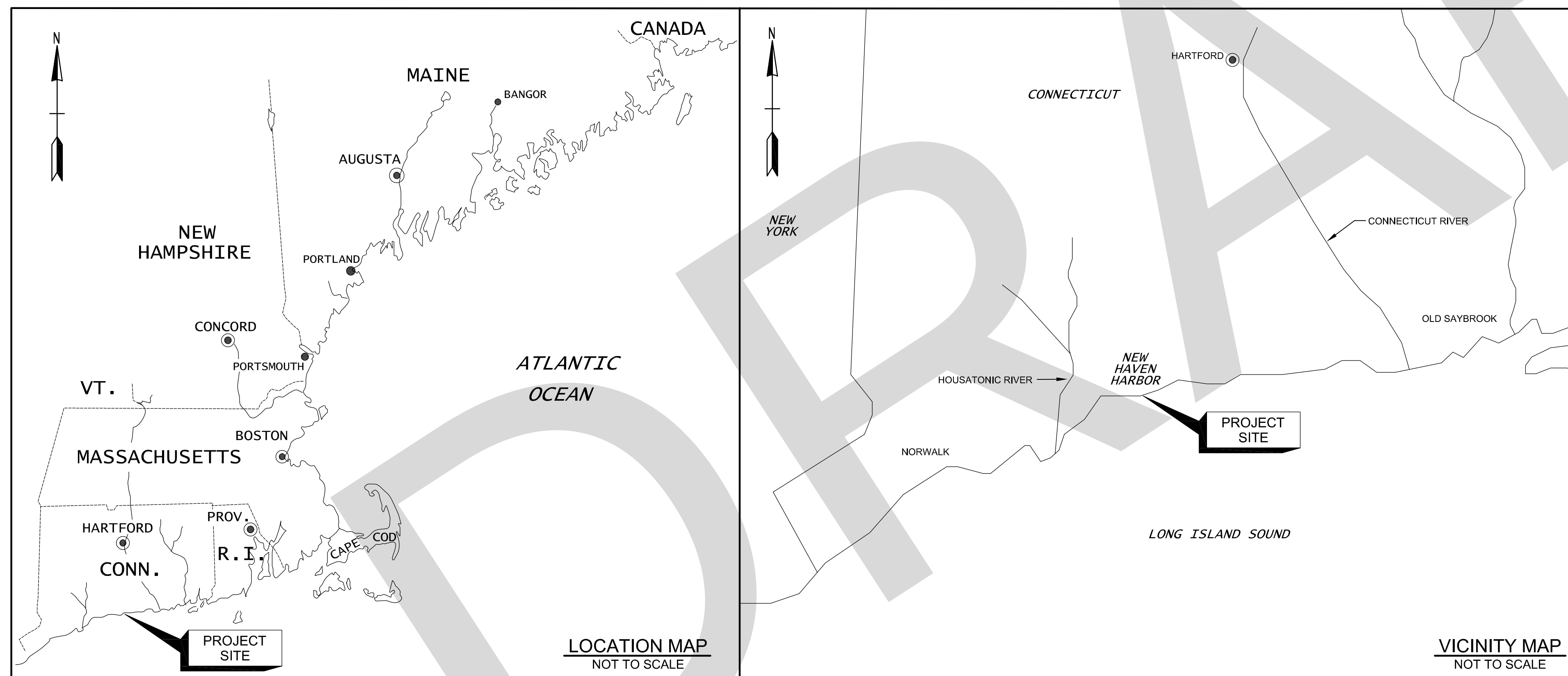
**S Army Corps  
f Engineers®**

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|                                                             |                          |                          |
|-------------------------------------------------------------|--------------------------|--------------------------|
| PROJECT NO.:<br>685 VIRGINIA ROAD<br>CONCORD, MA 01742-2751 | DRAWN BY:<br>B. SPRAGUE  | SOLICITATION NO.:<br>TBD |
| CHECKED BY:<br>TBD                                          | SUBMITTED BY:<br>TBD     | CONTRACT NO.:<br>TBD     |
| SCALE:<br>ANSI Y: 1:1                                       | DRAWING CODE:<br>NHH-001 | SHEET 1 OF 14            |

COVER SHEET AND INDEX TO DRAWINGS

SHEET ID  
G-001

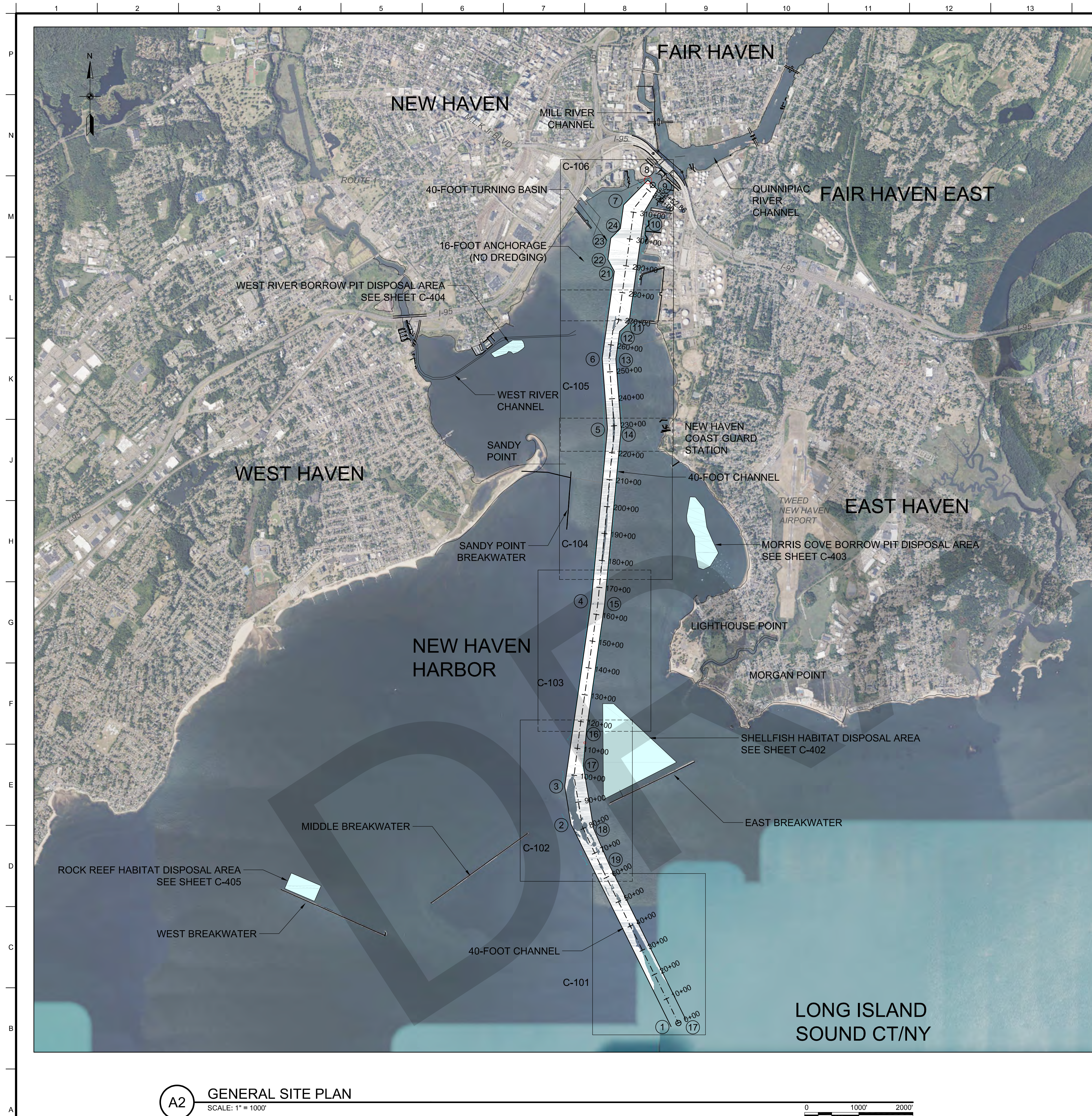


SOLICITATION NO.: TDB  
CONTRACT NO.:  
ISSUE DATE: JUNE 2025

|                                                                                                                                |               |
|--------------------------------------------------------------------------------------------------------------------------------|---------------|
| SIGNATURES AFFIXED BELOW INDICATE OFFICIAL RECOMMENDATION AND APPROVAL<br>OF ALL DRAWINGS IN THIS SET AS INDEXED ON THIS SHEET |               |
| APPROVED FOR TECHNICAL ADEQUACY BY:                                                                                            |               |
| _____<br>TECHNICAL LEAD ENGINEER                                                                                               | _____<br>DATE |
| REVIEWED BY:                                                                                                                   |               |
| _____<br>CHIEF, SURVEY SECTION                                                                                                 | _____<br>DATE |
| REVIEWED BY:                                                                                                                   |               |
| _____<br>CHIEF, GEOTECHNICAL/WATER RESOURCES BRANCH                                                                            | _____<br>DATE |
| REVIEWED BY:                                                                                                                   |               |
| _____<br>CHIEF, GEO-ENVIRONMENTAL ENGINEERING BRANCH                                                                           | _____<br>DATE |
| APPROVAL RECOMMENDED BY:                                                                                                       |               |
| _____<br>CHIEF, DESIGN BRANCH                                                                                                  | _____<br>DATE |
| APPROVED BY:                                                                                                                   |               |
| _____<br>CHIEF, ENGINEERING DIVISION                                                                                           | _____<br>DATE |

This project was designed by the U.S. Army Corps of Engineers. The initials or signatures and registration designations of individuals appear on these project documents, within the scope of their employment as required by ER 1110-1-8152.





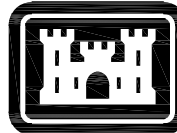
GENERAL NOTES:

1. SOUNDINGS ARE IN FEET AND TENTHS. THE REFERENCE PLANE IS MEAN LOWER LOW WATER (MLLW) AND IS BASED ON THE 1983-2001 TIDAL EPOCH. SOUNDINGS NOTED WITH A (+) ARE ABOVE THE REFERENCE PLANE OF MLLW. SOUNDINGS WITHOUT A SIGN ARE BELOW THE REFERENCE PLANE OF MLLW, AND SHOULD BE CONSIDERED NEGATIVE.
2. PLAN VIEW FEATURES SHOWN ARE FROM PREVIOUS SURVEYS, AERIAL IMAGERY AND/OR NOAA CHART NO. 12371. ALL PLAN VIEW FEATURES, INCLUDING SHORELINE, BRIDGES, PIERS, ETC., IS LOCATED APPROXIMATE UNLESS OTHERWISE NOTED AND SHOULD BE USED AS A GENERAL REFERENCE ONLY.
3. TIDES WERE RECORDED USING RTK GPS. THE MLLW TO NAVD88 CORRECTION FOR THIS PROJECT IS A STATIC CORRECTION OF 3.60 FEET. THIS CORRECTION IS PUBLISHED BY NOAA FOR BENCH MARKS AT NEW HAVEN, CONNECTICUT (STATION ID 8465748, 05/12/2004). NAVD88 IS ABOVE MLLW; THEREFORE THE CORRECTION SHOULD BE ADDED TO NAVD88 TO CONVERT TO MLLW. NO TIDE GAUGES WERE USED ON THIS PROJECT. THE MEAN RANGE OF TIDE IS 6.2 FEET
4. COORDINATES SHOWN ARE BASED ON THE TRANSVERSE MERCATOR GRID SYSTEM FOR THE STATE OF CONNECTICUT, NAD 1983 AND ARE BASED ON U.S. SURVEY FEET.
5. HYDROGRAPHIC SURVEY WAS PERFORMED USING A R2 SONIC 2022 MULTIBEAM SONAR SYSTEM OPERATING AT 300 KHZ. HORIZONTAL POSITIONING AND REAL TIME TIDE READINGS WERE RECORDED UTILIZING AN APPLANIX POS MV. RTK CORRECTIONS WERE OBTAINED FROM A BASE STATION OVER BENCHMARKS PYC(2023) AND LEDGE(2008). RTK CORRECTIONS WERE ALSO OBTAINED THROUGH VRS.
6. THE SOUNDING AND TOPOGRAPHIC INFORMATION SHOWN ON THESE MAPS REPRESENTS THE SHORLEST SOUNDINGS OF THOSE OBTAINED FROM HYDROGRAPHIC SURVEYS CONDUCTED DURING DECEMBER 2023 FOR THE 35-FOOT CHANNEL. THE DATA DEPICTED ON THESE MAPS SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
7. HARD/ROCK SURFACE INFORMATION SHOWN IN THIS DRAWING SET ARE THE RESULTS OF A GEOPHYSICAL INVESTIGATION AND ASSESSMENT PERFORMED OVER THE COURSE OF 2024. FOR MORE INFORMATION ON THE GEOPHYSICAL INVESTIGATION, INTERPRETATIONS, AND RESULTS, REFER TO SPECIFICATIONS SECTION 00 32 00.
8. THE INFORMATION DEPICTED ON THESE PLANS REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED, AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME.
9. AIDS TO NAVIGATION WERE LOCATED DURING SURVEY OPERATIONS AND ARE PLOTTED AT THE FIELD-DETERMINED POSITIONS AT THAT TIME. THE USCG IS THE AUTHORITATIVE SOURCE OF AIDS TO NAVIGATION. ADDITIONAL INFORMATION ON BUOY LOCATIONS AND DETAILS CAN BE FOUND IN THE USCG LIGHT LIST, VOLUME 1.
10. SURVEY FIELD BOOK INFORMATION:  
35-FOOT CHANNEL FIELD BOOK: R&H 4982; SURVEYED BY: MICHAEL VANDAIAS AND CREW; REFER TO SURVEY NO. CT\_19\_NNH\_20231206\_CS\_073.
11. DREDGE MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH SPECIFICATION SECTION 35 20 23.

NEW HAVEN HARBOR, MAIN SHIP CHANNEL  
40-FOOT CHANNEL & TURNING BASIN  
STATE PLANE NAD 1983 ZONE 0600

| #  | Easting   | Northing  |
|----|-----------|-----------|
| 1  | 956664.66 | 640175.57 |
| 2  | 956372.82 | 646071.35 |
| 3  | 956450.54 | 652522.55 |
| 4  | 955370.04 | 659678.62 |
| 5  | 955148.23 | 662625.31 |
| 6  | 955939.10 | 668305.31 |
| 7  | 956835.30 | 669217.63 |
| 8  | 957192.23 | 668687.01 |
| 9  | 957174.05 | 669395.95 |
| 10 | 956717.71 | 669339.69 |
| 11 | 955792.31 | 663625.41 |
| 12 | 955650.83 | 662609.31 |
| 13 | 955827.81 | 660244.53 |
| 14 | 955187.88 | 653575.68 |
| 15 | 954940.07 | 648009.09 |
| 16 | 95392.26  | 645890.60 |
| 17 | 957095.00 | 640397.11 |
| 18 | 955629.82 | 656804.05 |
| 19 | 955729.29 | 66467.08  |
| 20 | 955348.24 | 66962.30  |
| 21 | 95555.54  | 667322.11 |
| 22 | 955782.21 | 667538.43 |
| 23 | 955778.44 | 667234.59 |
| 24 | 955781.33 | 667230.87 |

| LEGEND                                                                                        |           |
|-----------------------------------------------------------------------------------------------|-----------|
| DESCRIPTION                                                                                   | SYMBOL    |
| REQUIRED DREDGING DEPTH, 40-FOOT CONTOUR<br>(ON SHEET C-101 THROUGH C-106 ONLY)               |           |
| REQUIRED DREDGING DEPTH, 20-FOOT CONTOUR<br>(ON SHEET C-101 THROUGH C-106 ONLY)               |           |
| HARD/ROCK SURFACE CONTOURING<br>(ON SHEET C-102 AND C-401 ONLY)                               |           |
| SAND MATERIAL REQUIRED TO BE DREDGED<br>(ON SHEETS C-101 TO C-102, AND SHEET C-301 ONLY)      |           |
| SILT MATERIAL REQUIRED TO BE DREDGED<br>(ON SHEETS C-102 THROUGH C-106, AND SHEET C-301 ONLY) |           |
| HARD/ROCK MATERIAL REQUIRED TO BE REMOVED<br>(ON SHEETS C-102 AND SHEET C-301 ONLY)           |           |
| DREDGE MATERIAL ALLOWABLE OVERDEPTH (ON SHEET C-301 ONLY)                                     |           |
| HARD/ROCK MATERIAL ALLOWABLE OVERDEPTH (ON SHEET C-301 ONLY)                                  |           |
| NO SPUD ZONE AREA (ON SHEETS C-101 TO C-106, AND C-402 ONLY)                                  |           |
| NAVIGATION (NAV) AIDS (ON SHEETS C-101 THROUGH C-106 ONLY)                                    |           |
| BORING LOCATIONS AND ID (ON SHEETS C-101 TO C-106, AND C-401 ONLY)                            | FD24-D-00 |
| CHANNEL CENTERLINE (ON SHEETS C-101 TO C-106 ONLY)                                            |           |
| EXISTING SANITARY SEWER MAIN (ON SHEETS C-104 & C-105 ONLY)                                   |           |
| EXISTING POWER CABLE (ON SHEETS C-101 TO C-106 ONLY)                                          |           |
| BORING LOCATION AND BORING NO.<br>(ON SHEETS C-101 TO C-106, AND C-401 ONLY)                  |           |
| LOCAL AND ROCK DISPOSAL AREAS<br>(ON SHEETS G-101 AND C-402 THROUGH C-405 ONLY)               |           |
| SECTION CALLOUT (ON SHEETS C-101 THROUGH C-106 ONLY)                                          |           |



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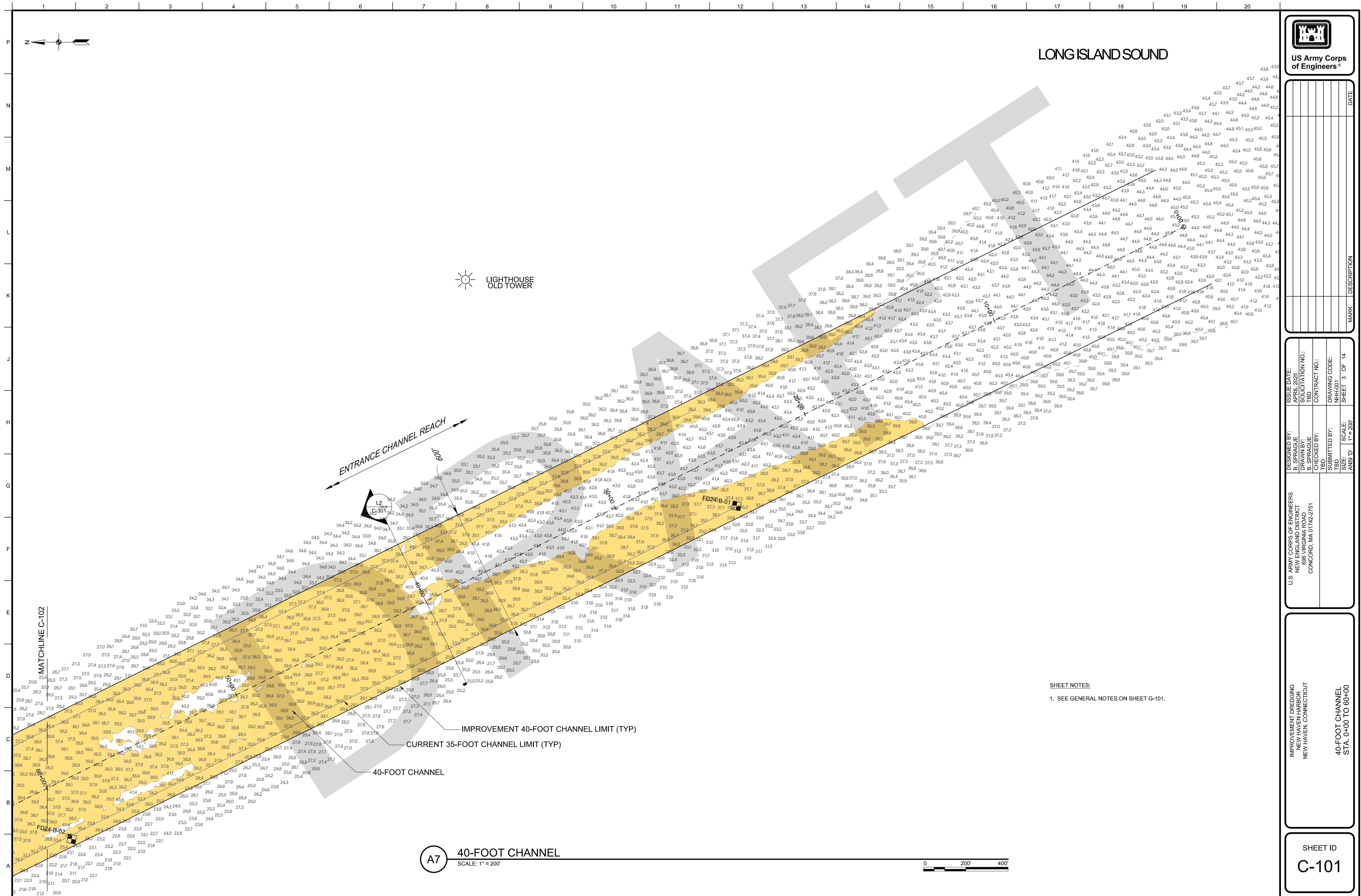
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|-----------------------------------------------------------------------------------------------------|---------------|----------------|
| U.S. ARMY CORPS OF ENGINEERS<br>NEW ENGLAND DISTRICT<br>686 VIRGINIA ROAD<br>CONCORD, MA 01742-2751 | DESIGNED BY:  | ISSUE DATE:    |
|                                                                                                     | DRAWN BY:     | DATE:          |
|                                                                                                     | CHECKED BY:   | QUOTATION NO.: |
|                                                                                                     | TBD           | CONTRACT NO.:  |
|                                                                                                     | SUBMITTED BY: | DRAWING CODE:  |
|                                                                                                     | TBD           | NHH-001        |
|                                                                                                     | SIZE:         | SHEET 2 OF 14  |
| ANSI D                                                                                              | SCALE:        |                |
|                                                                                                     | 1" = 100'     |                |

**IMPROVEMENT DREDGING  
NEW HAVEN HARBOR  
NEW HAVEN, CONNECTICUT**

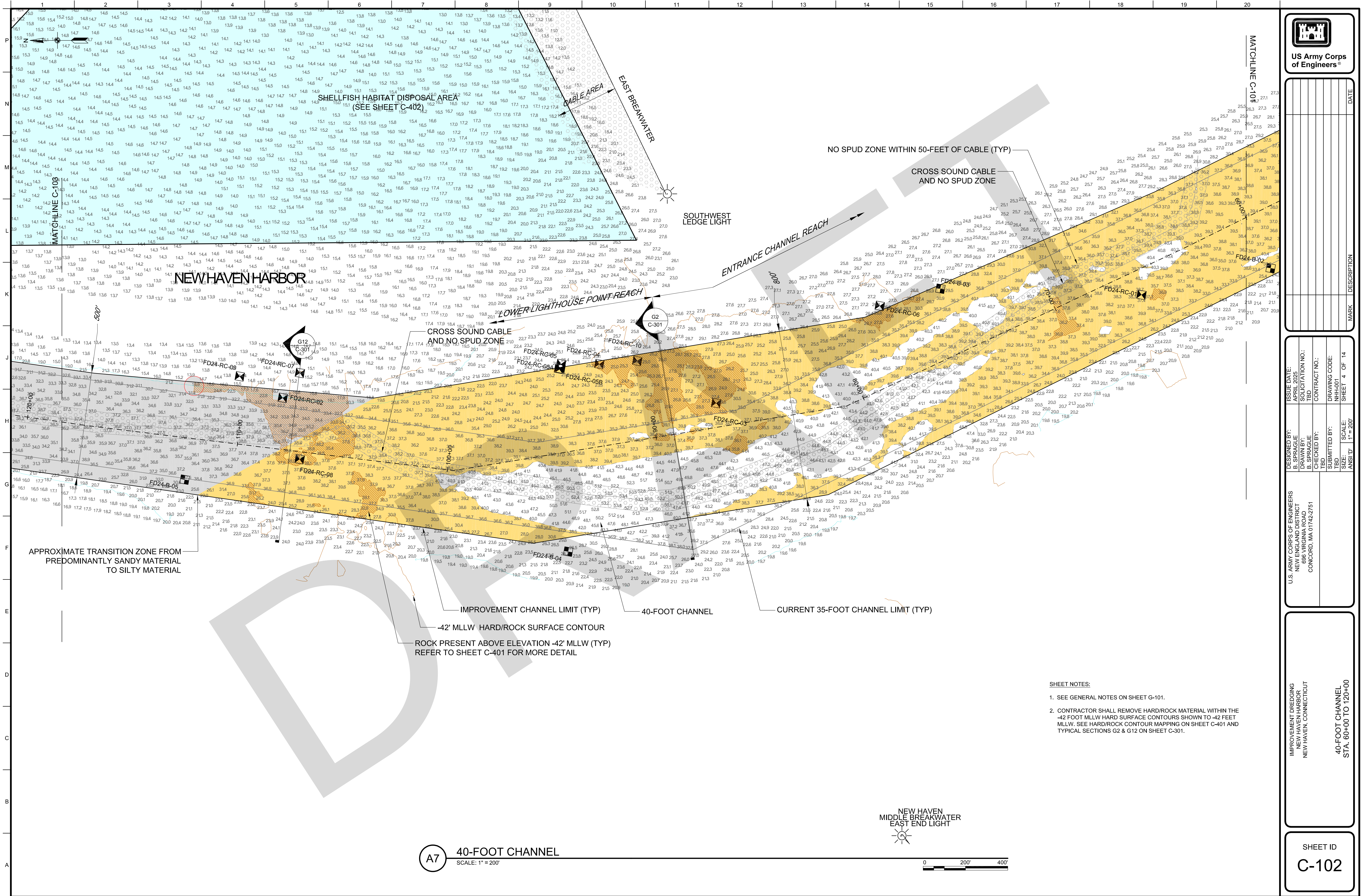
## GENERAL SITE PLAN

SHEET ID  
G-101









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| REVISION | DATE | DESCRIPTION | MARK |
|----------|------|-------------|------|
|          |      |             |      |
|          |      |             |      |
|          |      |             |      |
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|          |      |             |      |
|          |      |             |      |

DESIGNED BY: B. SPRAGUE  
DRAWN BY: B. SPRAGUE  
CHECKED BY: T.B.D.  
SUBMITTED BY: T.B.D.

ISSUE DATE: APRIL 2024  
SOLICITATION NO.: TBD  
CONTRACT NO.: TBD  
DRAWING CODE: NHH-001  
SCALE: 1" = 200'

U.S. ARMY CORPS OF ENGINEERS  
NEW ENGLAND DISTRICT  
686 VIRGINIA ROAD  
CONCORD, MA 01742-2511

IMPROVEMENT DREDGING  
NEW HAVEN HARBOR  
NEW HAVEN, CONNECTICUT

40-FOOT CHANNEL  
STA. 60+00 TO 120+00

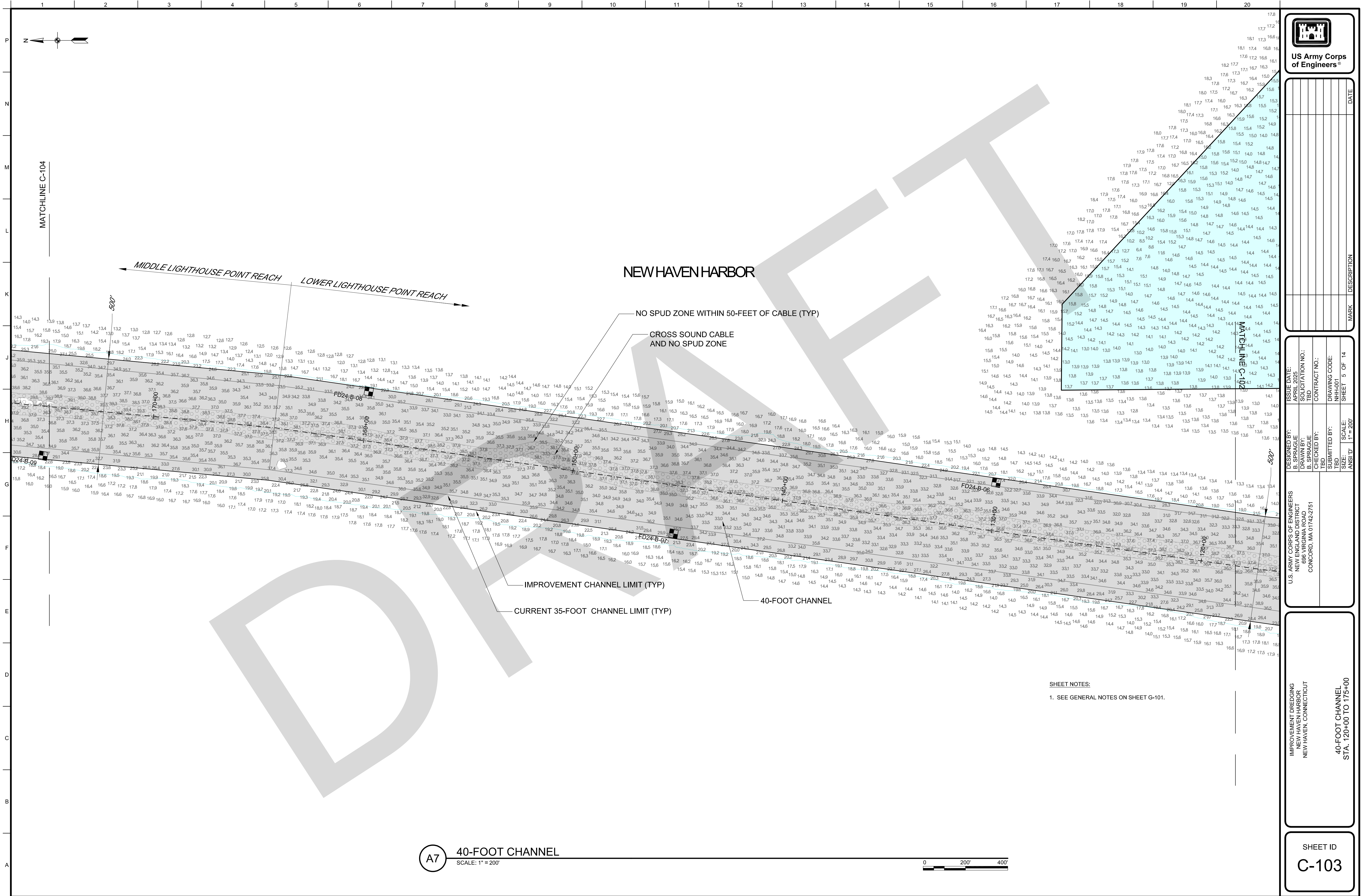
SHEET ID  
**C-102**

**SHEET NOTES:**

- SEE GENERAL NOTES ON SHEET G-101.
- CONTRACTOR SHALL REMOVE HARD/ROCK MATERIAL WITHIN THE -42 FOOT MLLW HARD SURFACE CONTOURS SHOWN TO -42 FEET MLLW. SEE HARD/ROCK CONTOUR MAPPING ON SHEET C-401 AND TYPICAL SECTIONS G2 & G12 ON SHEET C-301.



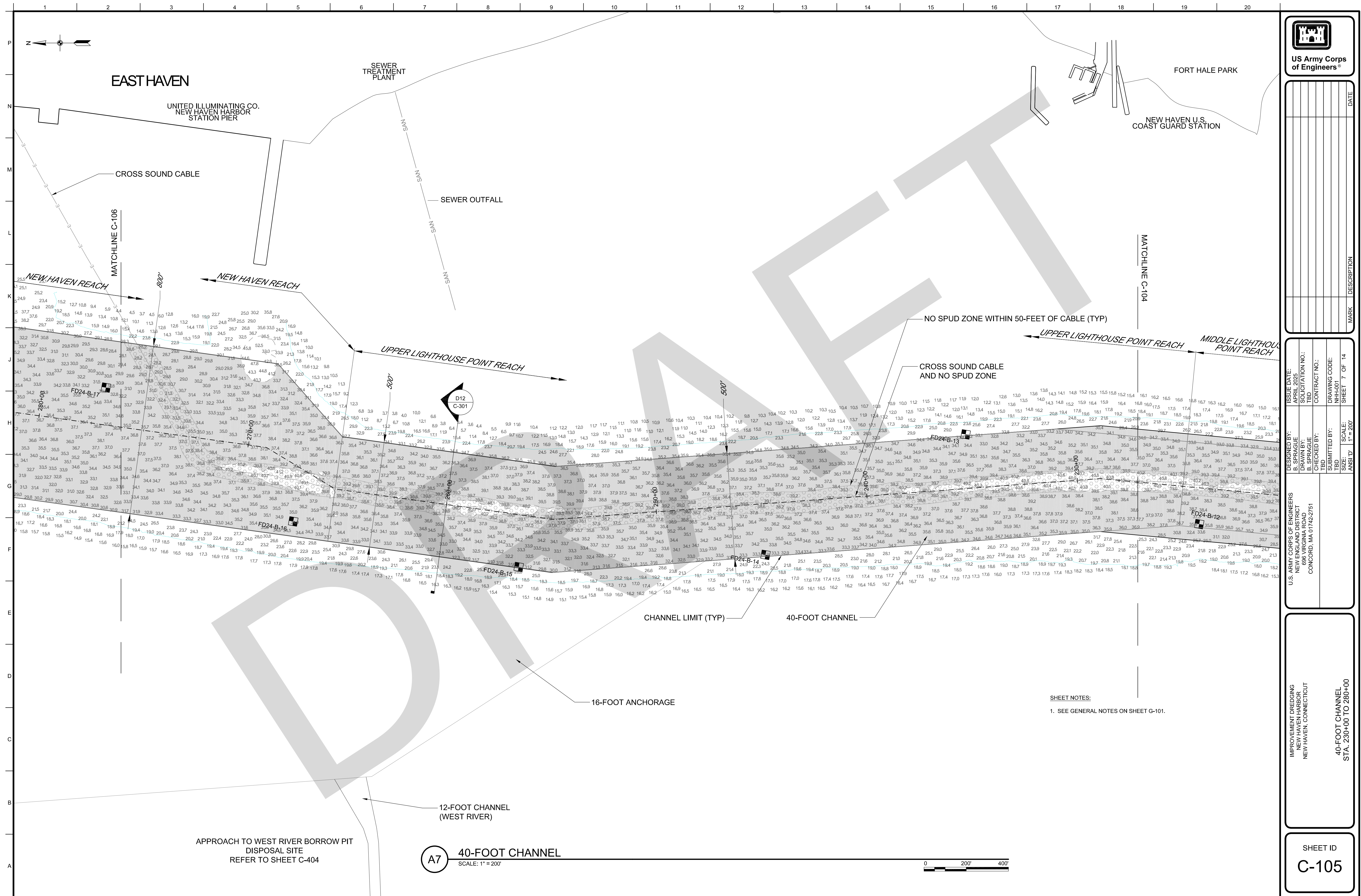




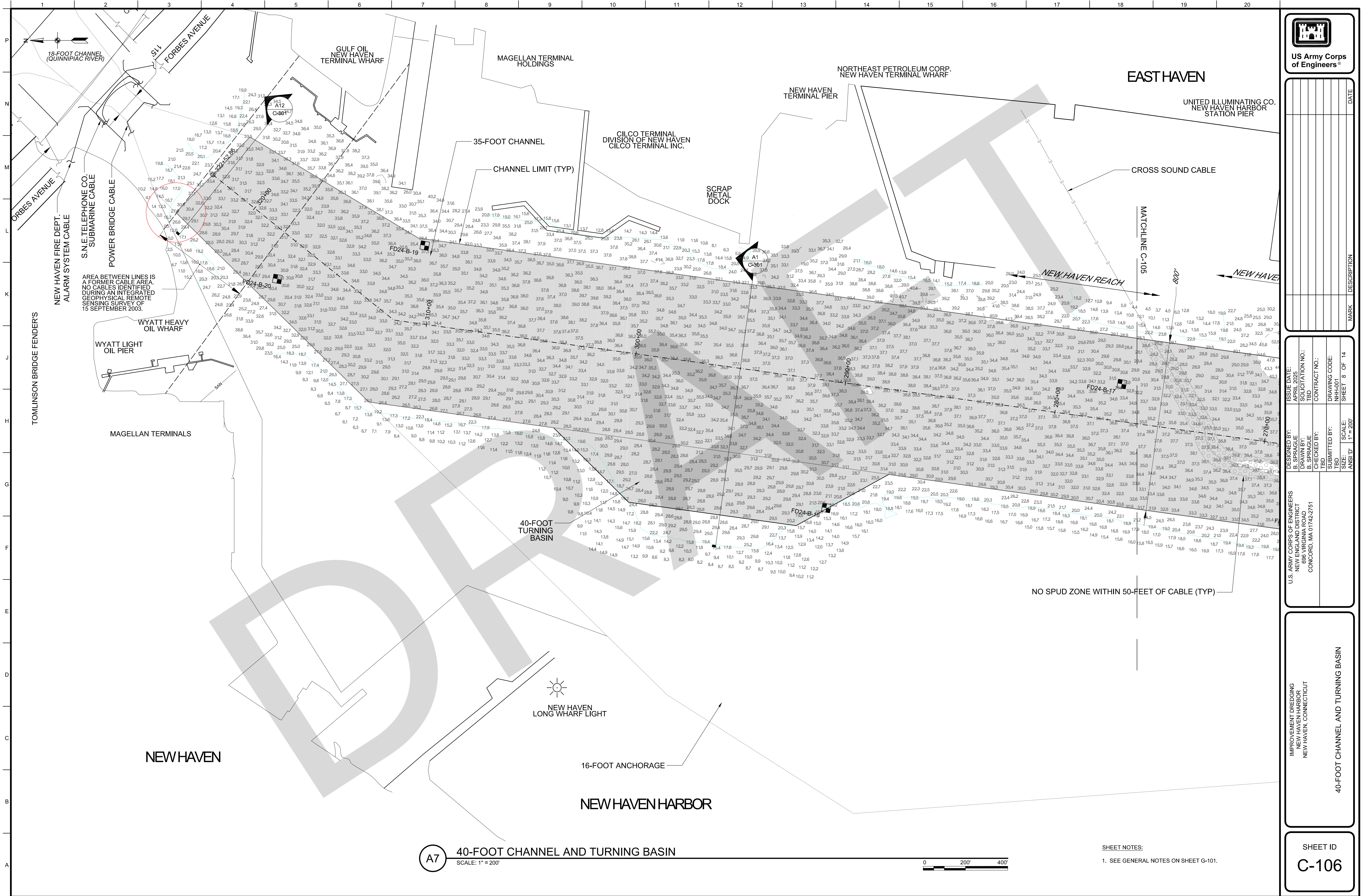




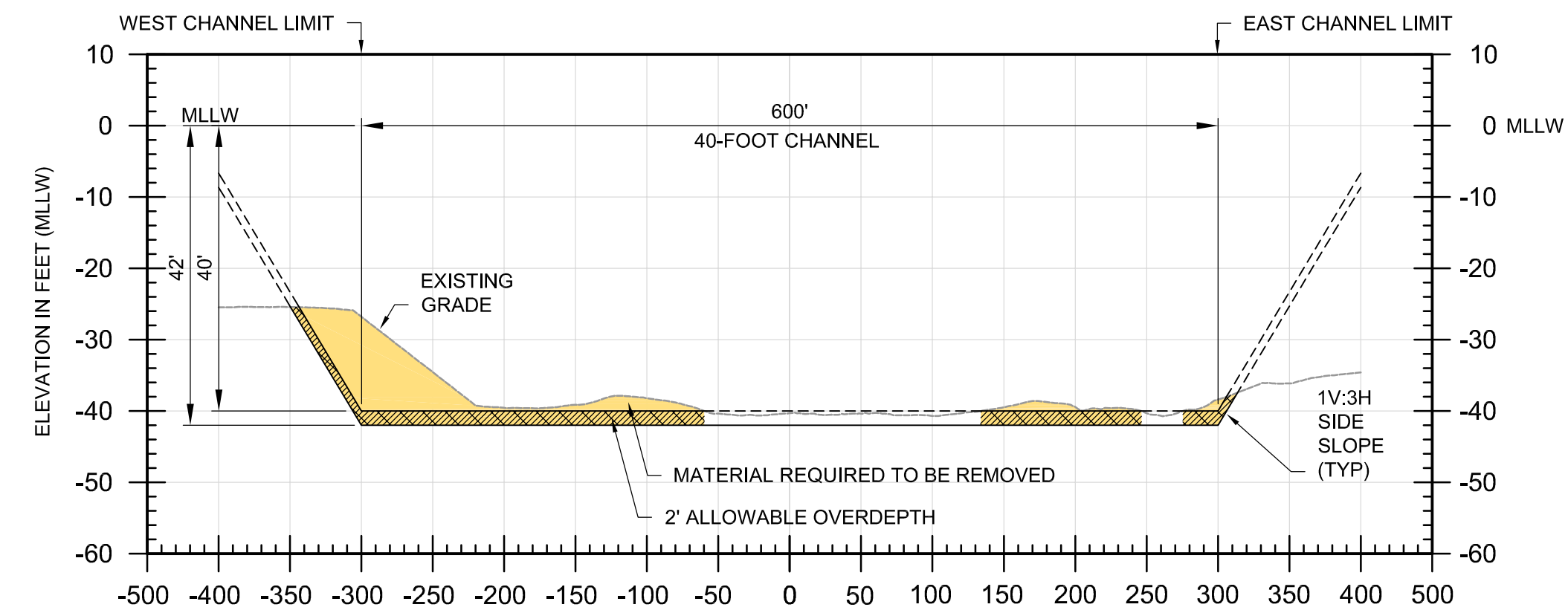




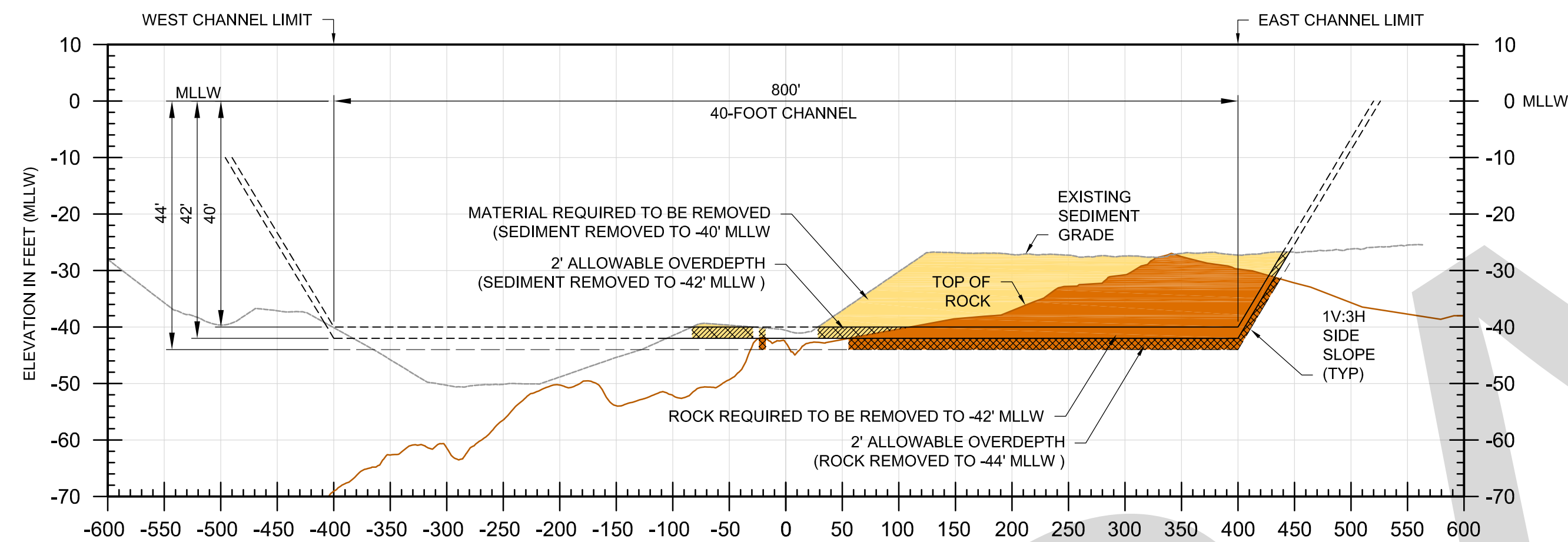




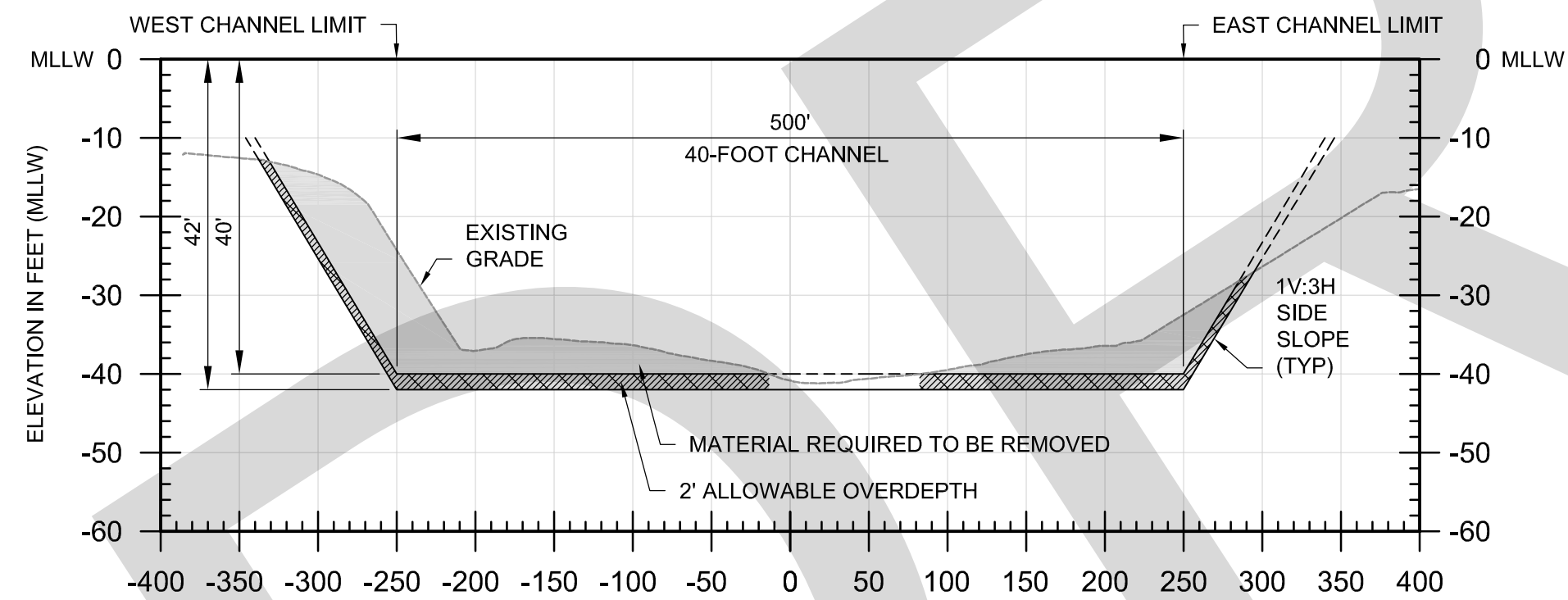




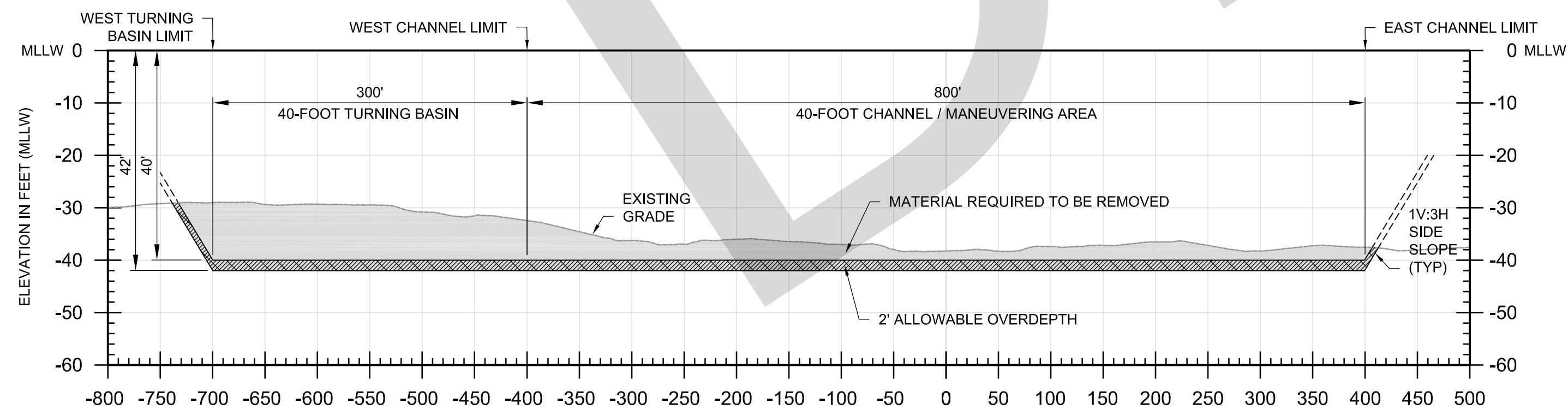
**L2 40-FOOT CHANNEL AT STA. 40+00**  
SCALE: HOR. 1" = 100' ; VERT. 1" = 20'



**G2 40-FOOT CHANNEL AT STA. 89+15 - ROCK MATERIAL**  
SCALE: HOR. 1" = 100' ; VERT. 1" = 20'



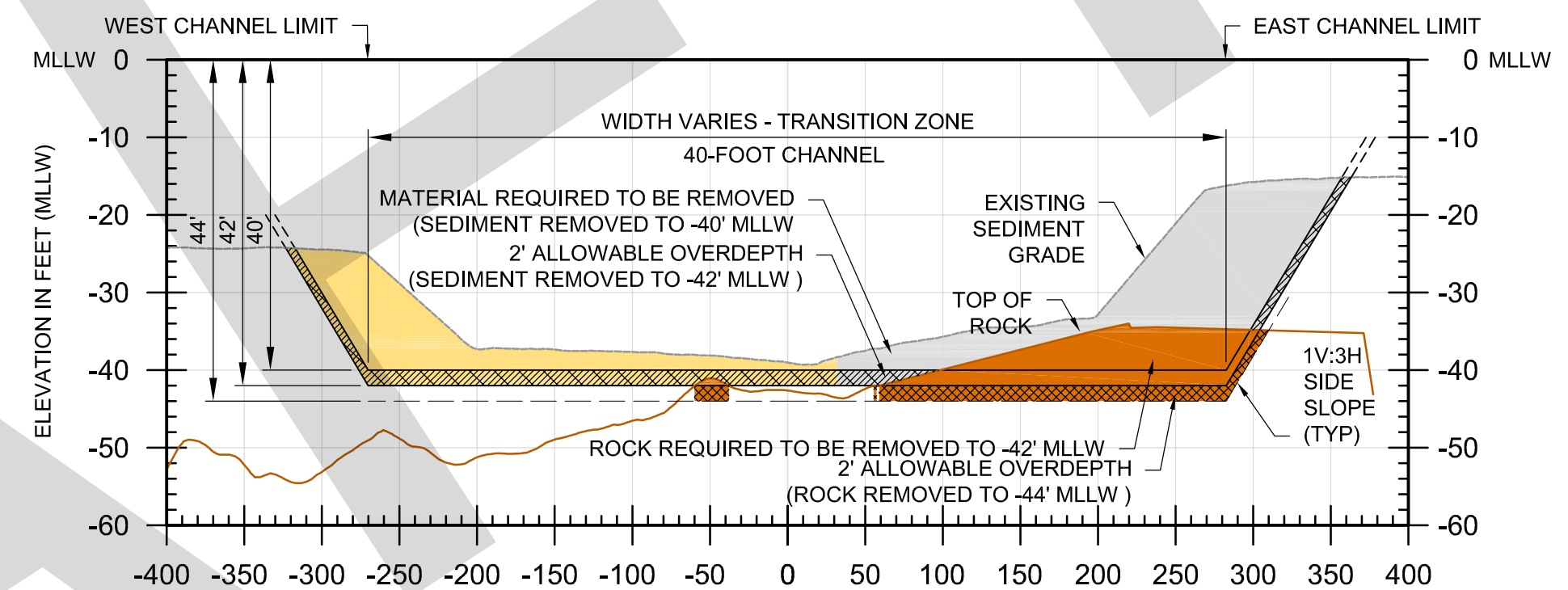
D2 40-FOOT CHANNEL AT STA. 190+00  
SCALE: HOR. 1" = 100' ; VERT. 1" = 20'



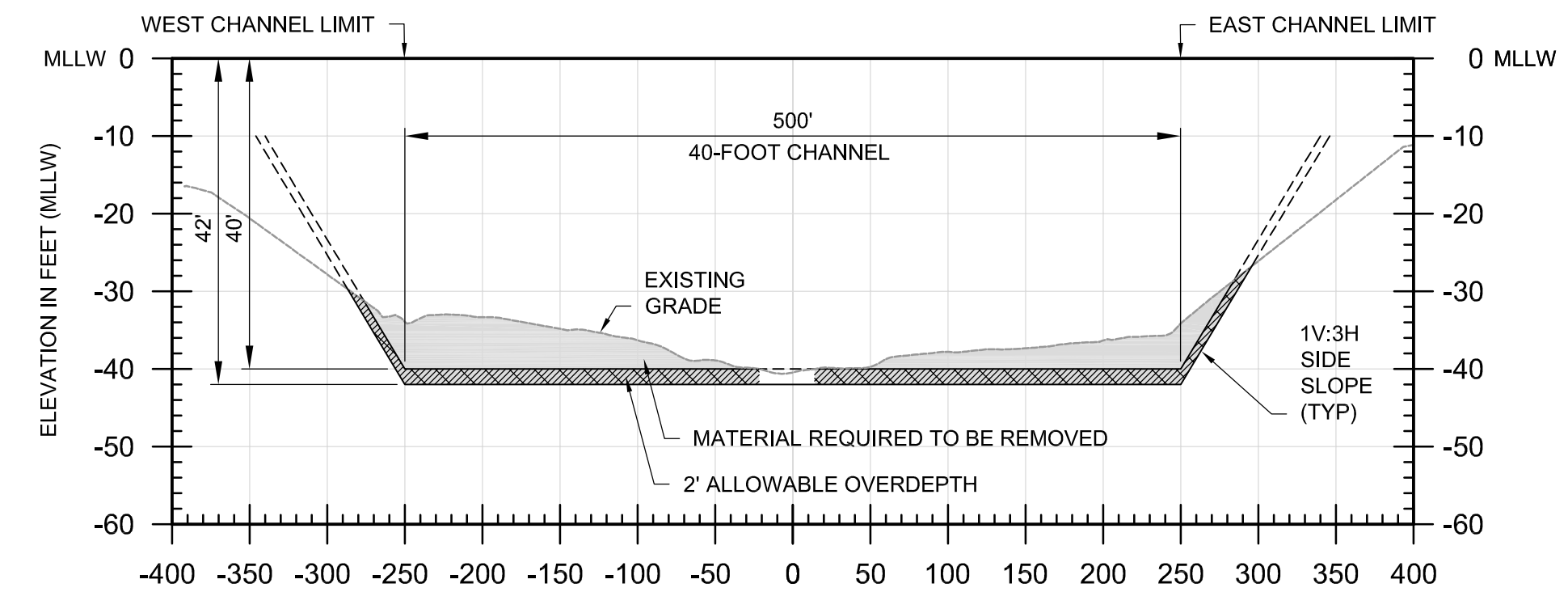
**A1** 40-FOOT CHANNEL AND TURNING BASIN AT STA. 295+00  
SCALE: HOR. 1" = 100' ; VERT. 1" = 20'

SHEET NOTES:

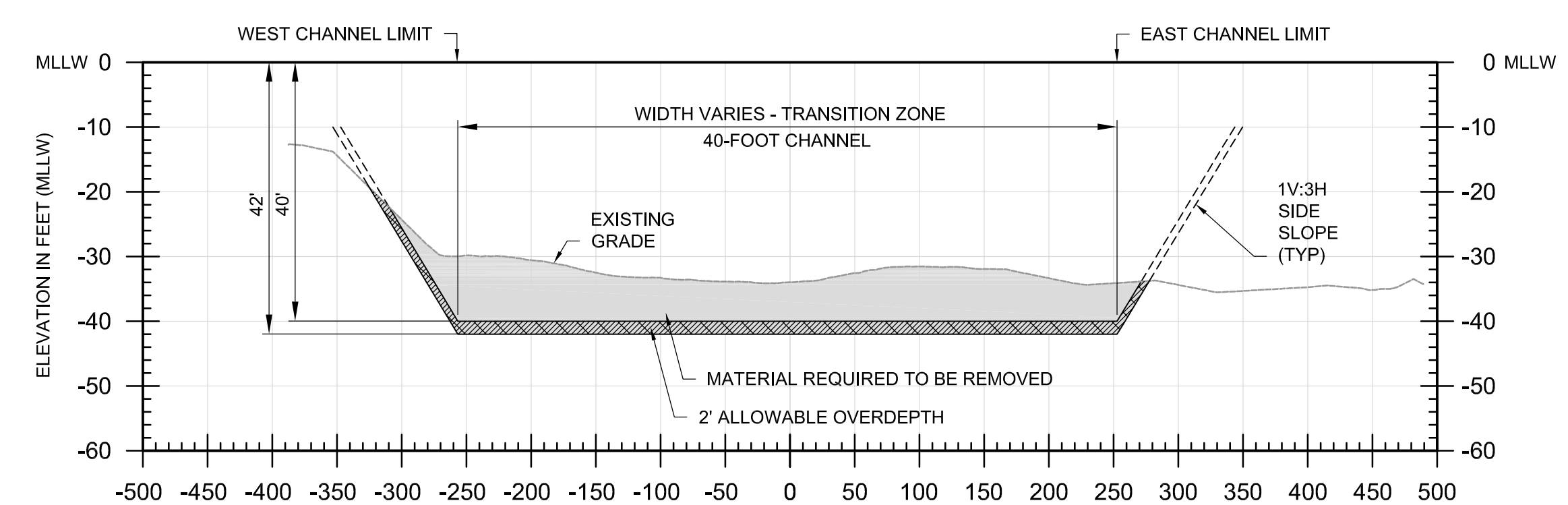
1. SECTIONS ON THIS SHEETS USE THE FOLLOWING SCALE FOR REFERENCE:
- HORIZONTAL SCALE: 1" = 100'
- VERTICAL SCALE: 1" = 20'
2. REFER TO GENERAL NOTES AND LEGEND ON SHEET G-101 FOR MORE INFORMATION ON WORK AND MATERIALS SHOWN IN THE SECTIONS.
3. THE AUTHORIZED CHANNEL DEPTHS FOR THE NEW HAVEN HARBOR FEDERAL NAVIGATION IMPROVEMENT PROJECT IS -40 FEET MLLW, BUT THE REQUIRED DEPTH OF HARD/ROCK MATERIAL TO BE REMOVED WITHIN THE CHANNEL LIMITS (UNDER BID SCHEDULE CLIN 0004) IS -42 FEET MLLW WITH AN ADDITIONAL 2-FOOT ALLOWABLE OVERDEPTH.



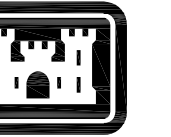
**G12** 40-FOOT CHANNEL AT STA. 107+50 - ROCK MATERIAL  
SCALE: HOR. 1" = 100' ; VERT. 1" = 20'



**D12** 40-FOOT CHANNEL AT STA. 260+00  
SCALE: HOR. 1" = 100' ; VERT. 1" = 20'



**A12** 40-FOOT CHANNEL AT STA. 322+00  
SCALE: HOR. 1" = 100'; VERT. 1" = 20'



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|                         |  |                          |  |
|-------------------------|--|--------------------------|--|
| DRAWN BY:<br>B. SPRAGUE |  | SOLICITATION NO.:<br>TBD |  |
| CHECKED BY:<br>TBD      |  | CONTRACT NO.:<br>TBD     |  |
| SUBMITTED BY:<br>TBD    |  | DRAWING CODE:<br>NHH-001 |  |
| SIZE:<br>1"=100'        |  | SCALE:<br>1"=20'         |  |
| ANS I'D                 |  | SHEET 9 OF 14            |  |

CROSS SECTIONS - IMPROVEMENT DREDGING

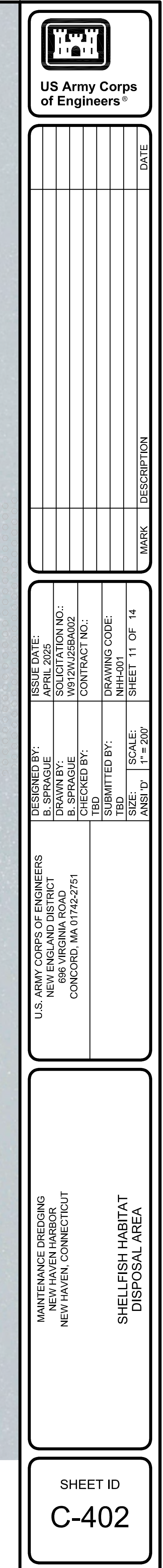
SHEET ID

C-301

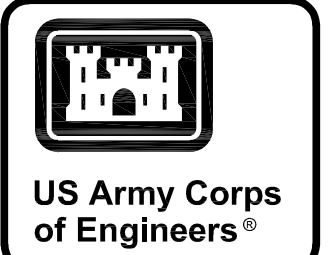
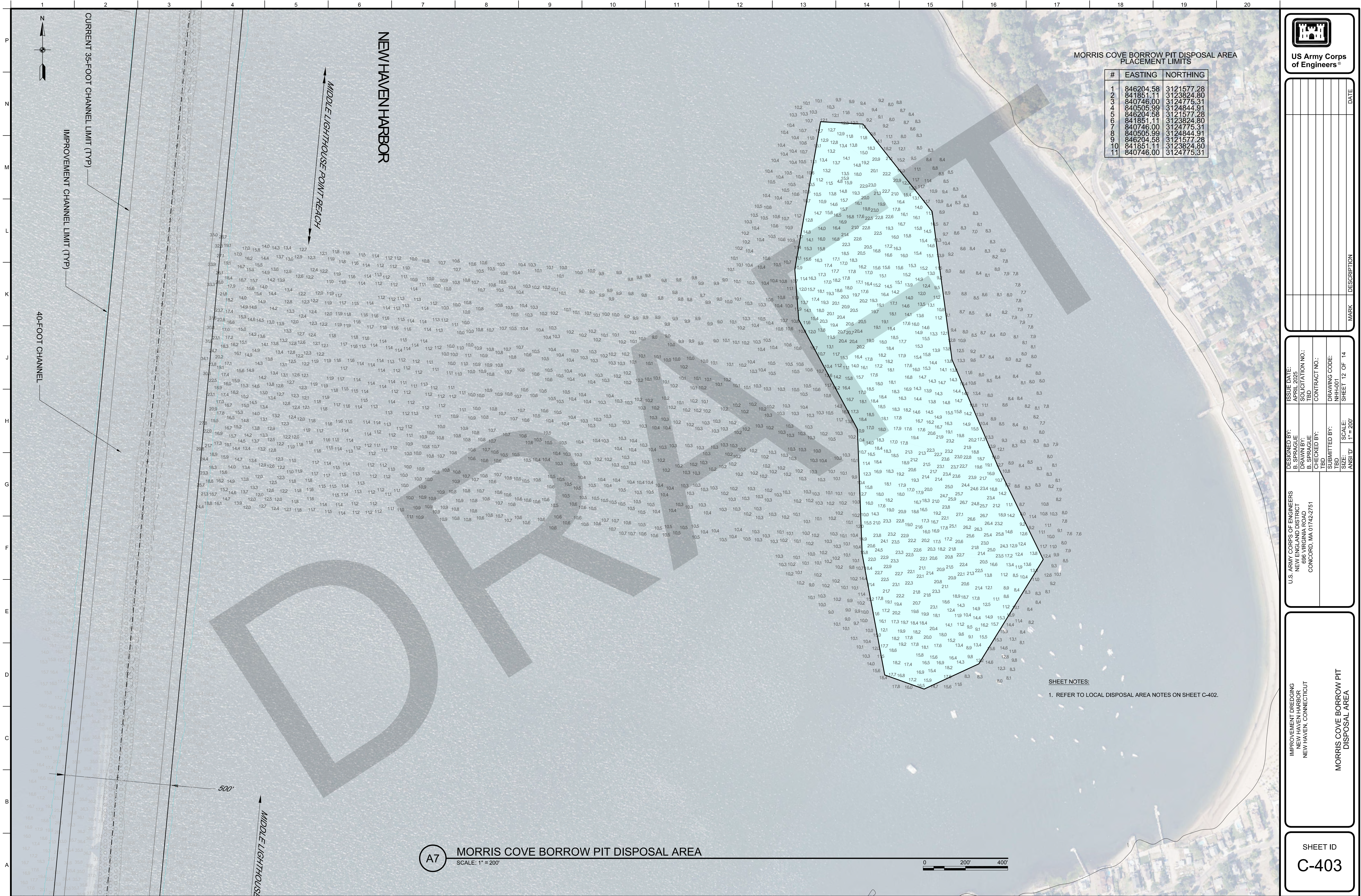












| #  | EASTING   | NORTHING   |
|----|-----------|------------|
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| 2  | 841851.11 | 3123824.80 |
| 3  | 840746.00 | 3124775.31 |
| 4  | 840505.99 | 3124844.91 |
| 5  | 846204.58 | 3121577.28 |
| 6  | 841851.11 | 3123824.80 |
| 7  | 840746.00 | 3124775.31 |
| 8  | 840505.99 | 3124844.91 |
| 9  | 846204.58 | 3121577.28 |
| 10 | 841851.11 | 3123824.80 |
| 11 | 840746.00 | 3124775.31 |

|                                                                                                     |                                 |
|-----------------------------------------------------------------------------------------------------|---------------------------------|
| DESIGNED BY:<br>B. SPRAGUE                                                                          | ISSUE DATE:<br>APRIL 2021       |
| DRAWN BY:<br>B. SPRAGUE                                                                             | SOLICITATION NO.:<br>TED        |
| CHECKED BY:<br>TBD                                                                                  | CONTRACT NO.:<br>NHH-001        |
| SUBMITTED BY:<br>TBD                                                                                | DRAWING CODE:<br>SHEET 12 OF 14 |
| U.S. ARMY CORPS OF ENGINEERS<br>NEW ENGLAND DISTRICT<br>886 VIRGINIA ROAD<br>CONCORD, MA 01742-2751 | SCALE:<br>1" = 200'             |

|                                                                    |                                         |
|--------------------------------------------------------------------|-----------------------------------------|
| IMPROVEMENT DREDGING<br>NEW HAVEN HARBOR<br>NEW HAVEN, CONNECTICUT | MORRIS COVE BORROW PIT<br>DISPOSAL AREA |
|--------------------------------------------------------------------|-----------------------------------------|

SHEET ID  
C-403







