



Maryland

Department of the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Horacio Tablada, Secretary
Suzanne E. Dorsey, Deputy Secretary

June 10, 2022

Baltimore District
US Army Corps of Engineers
Navigation Branch
Attention: Kevin Brennan
2 Hopkins Plaza
Baltimore, MD 21203

Via email: Kevin.M.Brennan@usace.army.mil

Re: Agency Interest Number: 175046
Tracking Number: 202260727
Water Quality Certification Number: 22-WQC-0013

Dear Mr. Brennan:

Your project did not qualify as a type of project that is covered by the Maryland State Programmatic General Permit (MDSPGP) and its associated 401 Water Quality Certification (WQC), or any other General WQC. This project is an U.S. Army Corps of Engineers (USACE) Civil Works project and as such, there is no USACE regulatory program permit. However, an individual 401 WQC is necessary for this project in accordance with Section 401 of the Clean Water Act and USACE interpretation of Section 401 of the CWA with regard to its applicability to USACE civil works projects.

The individual Water Quality Certification WQC for this project issued by the Maryland Department of the Environment is attached. Please read and review the WQC for this project to ensure that you understand the limits of the certified project and all of the general and special conditions.

You should not begin any work until you have obtained all necessary State, local, and federal authorizations. Please do not hesitate to contact me at danielle.spendiff1@maryland.gov or 410-537-4023 with any questions.

Sincerely,

Danielle A. Spendiff, Chief
Regulatory and Customer Service Division



**STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER AND SCIENCE ADMINISTRATION**



WATER QUALITY CERTIFICATION

CERTIFICATION NUMBER: 22-WQC-0013

ISSUED TO: Baltimore District
US Army Corps of Engineers
Navigation Branch
2 Hopkins Plaza
Baltimore, Maryland, 21203
Attn: Kevin Brennan

EFFECTIVE DATE: June 9, 2022

PROJECT LOCATION: Fishing Creek Federal Navigation Channel
Chesapeake Beach, Calvert County, Maryland

DESCRIPTION OF CERTIFIED PROJECT: To hydraulically dredge the Fishing Creek Federal navigation channel to its authorized depth of 7 feet MLLW (plus at least one foot of overdepth) for a width of 100 feet, and to dredge a 75-foot long by 10-foot deep access channel parallel to the existing jetty, resulting in approximately 22,000 cubic yards of material consisting of clay, mud, sand, silt, and shell. Dredged material is proposed to be hydraulically pumped to a nearby existing upland placement site. The work also includes the rehabilitation of the southern jetty along Fishing Creek by placing 1.5 to 3 ton capstone to restore the jetty elevation 2.7 feet higher than originally constructed to reduce overtopping, and increase the jetty crest width to 16 feet.

WATER QUALITY CERTIFICATION

UNDER AUTHORITY OF SECTION 401 OF THE FEDERAL WATER POLLUTION CONTROL ACT AND ITS AMENDMENTS AND IN ACCORDANCE WITH § 9-313 THROUGH § 9-323, INCLUSIVE, OF THE ENVIRONMENT ARTICLE, ANNOTATED CODE OF MARYLAND, THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER AND SCIENCE ADMINISTRATION (DEPARTMENT) HAS DETERMINED THAT THE REGULATED ACTIVITIES DESCRIBED IN THE REQUEST FOR CERTIFICATION WILL NOT VIOLATE MARYLAND'S WATER QUALITY STANDARDS, IF CONDUCTED IN ACCORDANCE WITH THE CONDITIONS OF THIS CERTIFICATION.

This Water Quality Certification (Certification) is issued under authority of Section 401 of the Federal Water Pollution Control Act and its Amendments, Title 9, Subtitle 3 of the Environment Article, and Code of Maryland Regulations (COMAR) 26.08.02.10. The Maryland Department of the Environment (Department) has determined from a review of the request application file

that the project activities described in the above will not violate Maryland's water quality standards, provided that the following conditions are satisfied. This Certification does not relieve any person conducting activities under this Certification (Certification Holder) from the responsibility to obtain any other approvals, licenses, or permits in accordance with federal, State, or local requirements.

The Certification Holder subject to this Certification shall comply with the following conditions:

SPECIAL CONDITIONS

1. The Certification Holder shall not conduct any dredging from February 15th through June 15th of any year to protect spawning fish.
2. The Certification Holder shall not perform any dredging from November 15th through March 1st of any year to protect wintering waterfowl.
3. The dredged material placement site (DMP) shall be operated to limit turbidity in the discharge to waters of the State. A turbidity sample of the discharge water shall be performed every hour of active pumping to the DMP or when there is an observed change in the clarity of the water. Turbidity in the discharge may not exceed 150 units at any time or 50 units as a monthly average. Units shall be measured in Nephelometer Turbidity Units. A logbook of all turbidity monitoring shall be kept on site. The dredger shall have a person at the discharge point of the DMP in constant radio communication. If a problem is incurred, the dredging operation shall be immediately shut down until the reason for the problem can be ascertained and rectified.
4. The Certification Holder shall conduct maintenance dredging within the scope of this Certification in terms of authorized dredge area, volume of material, and authorized depths.
5. The Licensee shall conduct a post dredge bathymetric survey and forward to the Water and Science Administration, Tidal Wetlands Division within 45 days after the termination of maintenance dredging operations.
6. If work is not conducted by the Certification Holder, all work performed under this Water Quality Certification shall be conducted by a marine contractor licensed by the Marine Contractors Licensing Board (MCLB) in accordance with Title 17 of the Environment Article of Annotated Code of Maryland. Licensing by MCLB shall occur prior to the beginning of dredging activities. A list of licensed marine contractors may be obtained by contacting the MCLB at 410-537- 3249, by e-mail at MDE.MCLB@maryland.gov or by accessing the Maryland Department of the Environment, Environmental Boards webpage.
7. Dredged material pipelines shall be installed, marked and maintained in accordance with

all U.S. Coast Guard requirements for navigational safety. Dredge material pipelines and associated equipment shall be removed as soon as practicable, upon completion of activities authorized under this License.

8. The stone jetty shall be designed and constructed to prevent the loss of fill material to waters of the State of Maryland.
9. The DMP shall have an erosion and sediment control plan approved by the appropriate approval authority, including following the stabilization requirements set forth in COMAR 26.17.01.07 and “2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control,” as may be amended.
10. The Certification Holder shall cease operations in the event of any inadvertent returns resulting from failure of the dredge material pipeline and associated equipment and shall:
 - a) Notify the Department within 24 hours; and
 - b) Implement an inadvertent return contingency plan approved by the Department.

GENERAL CONDITIONS

1. All water quality-related performance standards and conditions required by the Department in any state issued authorization for activities in tidal wetlands, nontidal waterways, their 100-year floodplains, nontidal wetland buffers, or nontidal wetland expanded buffers to ensure that any discharges will not result in a failure to comply with water quality standards in COMAR 26.08.02. or other water quality requirements of state law or regulation shall be met.
2. This Certification does not obviate the need to obtain required authorizations or approvals from other State, federal or local agencies as required by law.
3. The Certification Holder shall obtain any and all additional authorizations or approvals, including self-certifying General Permits issued by the Department, and shall comply with all conditions of such authorizations.
4. The proposed project shall be constructed in accordance with the approved final plan by the Department, or, if Department approval is not required, the plan approved by the U.S. Army Corps of Engineers; and its approved revisions.
5. All fill and construction materials not used in the project shall be removed and disposed of in a manner which will prevent their entry into Waters of the U.S. and State.
6. This Certification does not authorize any injury to private property, any invasion of rights, or any infringement of federal, state, or local laws or regulations.
7. The Certification Holder shall allow authorized representatives of the Department access to the site of authorized activities during normal business hours to conduct inspections

and evaluations of the operations and records necessary to assure compliance with this Certification.

8. No stockpiles of any material shall be placed in Waters of the U.S. or state or private tidal wetlands.
9. This Certification is valid for the project identified herein and the associated federally-approved U.S. Army Corps of Engineers Civil Works Navigation Branch project, until such time that federal approval expires or is not administratively extended.

STATEMENTS OF NECESSITY AND CITATIONS

1. Statement of Necessity for Special Condition 1: The time of year restriction is necessary to maintain the designated use- support of estuarine and marine aquatic life and shellfish harvesting.

Citation: Federal and state laws which authorize this condition include but are not limited to: COMAR: 26.08.02.02B(1)(d); 26.08.02.02B(3); COMAR 26.08.02.02-1

2. Statement of Necessity for Special Condition 2: A time of year restriction is necessary to allow for wintering waterfowl to move from breeding areas to seasonally use suitable winter habitat. Breeding and wintering habitat are both essential to support waterfowl populations. Breeding habitat would not sustain waterfowl during winter. Disturbance during the closure period would interfere directly or indirectly with designated uses for growth and propagation of wildlife.

Citations: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.02.B.(3)

3. Statement of Necessity for Special Condition 3: Activities which result or may result in a discharge to regulated waters, including dredging and dredged material placement may require monitoring to ensure that water quality standards are met and designated uses are maintained, and to determine if remedial measures are needed to restore compliance with water quality standards if they are not met as a result of the discharge. The condition is necessary to ensure that dredged material does not increase turbidity in violation of general and numeric water quality standards and interfere with designated uses and to ensure that offsets to regulated waters are successfully implemented.

Citation: COMAR 26.08.02.03-3A(5); COMAR 26.08.02.03-3(C(5); COMAR 26.08.02.01B(2); COMAR 26.08.02.02B(1) COMAR 26.08.02.02B(3); COMAR 26.08.02.03B; COMAR 26.08.02.02B(1); 26.08.02.03B(1)(b); 26.08.02.03B(2)(e);

26.08.02; 26.08.01.02A; 26.08.02.09A; 26.08.02.02B(1)(d); COMAR 26.24;
26.08.02.03-3C(9)(a); COMAR 26.08.02.03B(2); COMAR 26.08.02.02B(1)(d);

4. Statement of Necessity for Special Condition 4: The limits on the scope of maintenance dredging are necessary to ensure that no discharges would violate water quality standards and designated uses for water clarify, turbidity, growth and propagation of fish, other aquatic life, and wildlife; and water contact recreation

Citations: COMAR 26.08.02.02B(1)(d); COMAR 26.08.02.02B(3); COMAR 26.08.02.03B

5. Statement of Necessity for Special Condition 5: The condition is necessary to ensure that discharges associated with dredging result in water depths which are appropriate to support designated uses of fishing and water contact recreation and propagation of fish, other aquatic life and wildlife; and ensure that no discharges are unsightly, create a nuisance, change to an objectionable color or interferes with designated uses.

Citations: COMAR 26.08.02.01B(2); COMAR 26.08.02.02B(1); 26.08.02.02B(3); COMAR 26.08.02.03B

6. Statement of Necessity for Special Condition 6: Expertise for conducting certain activities is required to ensure that there is no violation of water quality standards nor interference with designated uses. This condition is necessary to ensure that discharges will be conducted in a manner which does not violate water quality criteria nor interfere with designated uses.

Citation: COMAR 26.08.02.02B(2)- B(4); COMAR 26.08.02.03B(2)(d) – (e); COMAR 26.08.02.03B(1)(b); 26.08.02.03B(2); COMAR 23.02.04.04

7. Statement of Necessity for Special Condition 7: The condition is necessary to ensure that the discharge does not interfere with navigational safety and designated uses for water contact recreation and fishing, nor create a nuisance.

Citation: COMAR 26.08.02.01B(1) and B(2); COMAR 26.08.02.03B(1)(a); COMAR 26.08.02.03B(2)(d)

8. Statement of Necessity for Special Condition 8, 9 & General Condition 5, 8: Fill or construction material within or adjacent to regulated resources may cause discharges resulting in turbidity in excess of water quality standards and interfere with designated uses of growth and propagation of fish, other aquatic life, wildlife; and other designated uses; and fail to meet general water quality criteria that waters not be polluted by substances in amounts sufficient to be unsightly or create a nuisance.

Citation: 26.08.02.03B(1)-B(2); COMAR 26.23; COMAR 26.24; COMAR 26.17.04

9. Statement of Necessity for Special Condition 9: Erosion and sediment control plans are necessary to ensure that sediment discharges from construction activities will not enter waters of the United States. Sediment discharges from earth disturbance or discharges at

erosive rates within or adjacent to regulated resources may cause discharges resulting in turbidity in excess of water quality standards and interfere with designated uses of growth and propagation of fish, other aquatic life, wildlife; and other designated uses; and fail to meet general water quality criteria that waters not be polluted by substances in amounts sufficient to be unsightly or create a nuisance

Citation: Env. Article, Title 4, Subtitle 1 COMAR 26.17.01; 26.08.02.03B(1)-B(2)

10. Statement of Necessity for Special Condition 10: The condition is necessary to ensure that water quality standards are met under unique circumstances for inadvertent discharges and that designated uses of waters are maintained. Releases of significant amounts of sediment can impact aquatic environments and if unchecked can alter them to an uninhabitable state. .

Citation: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 & 4; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.10G(3); COMAR 26.17.04; COMAR 26.23; COMAR 26.24; COMAR 26.23.02.06, COMAR 26.08, COMAR 26.08.02.10E; COMAR 26.08.02.09C(3); COMAR 26.08.02.03B(1)(b); COMAR 26.08.02.03B(2); COMAR 26.08.02.03-3; COMAR 26.08.02.02B(2); COMAR 26.08.02.02B(4); COMAR 26.08.02.02B(6); COMAR 26.08.02.02B(8)

11. Statement of Necessity for General Condition 1, 2, 3, 4: The condition is necessary to ensure that water quality standards are met and designated uses are maintained.

Citations: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.08.02.10G(3); COMAR 26.23.02.06; COMAR 26.17.01; COMAR 26.23; COMAR 26.24

12. Statement of Necessity for General Condition 6: The condition is necessary to clarify the scope of this certification to ensure compliance with water quality regulations, without limiting restrictions through other requirements.

Citation: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08, COMAR 26.08.02.10E; COMAR 26.23.02.06; COMAR 26.17.04; COMAR 26.23; COMAR 26.24

13. Statement of Necessity for General Condition 7: Conditions of certification involve precise actions to comply with water quality standards. Site inspection may be necessary

to ensure that limits, methods, and other requirements are met to ensure that water quality standards are met and designated uses are maintained.

Citation: Federal and state laws that authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.23.02.06; COMAR 26.23; COMAR 26.24; COMAR 26.17.04

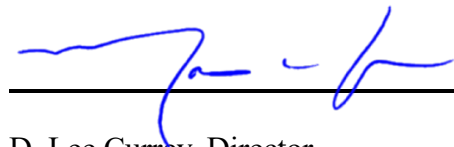
14. Statement of Necessity for General Condition 9: This condition is necessary to qualify the period of applicability of the terms and conditions of this Certification to be protective of Maryland water quality standards.

Citations: Federal and state laws which authorize this condition include but are not limited to: 33 U.S.C. § 1341(a), (b), & (d); 33 U.S.C. § 1251(b); 33 U.S.C. § 1370; 40 C.F.R. 121, 15 C.F.R. 930, Md. Ann. Code, Env. Article, Title 1, Subtitles 3 and 4; Md. Ann. Code, Env. Article, Title 5, Subtitles 5 and 9; Md. Ann. Code, Env. Article, Title 9, Subtitle 3; Md. Ann. Code, Env. Article, Title 16; COMAR 26.08; COMAR 26.17.04; COMAR 26.23; COMAR 26.24

Failure to comply with these conditions may subject the Certification Holder to criminal and/or civil penalties or other enforcement action in accordance with applicable law.

CERTIFICATION APPROVED:

DATE:



6/10/2022

D. Lee Currey, Director
Water and Science Administration

Tracking Number: 202260727
Agency Interest Number: 175046

Effective Date: June 9, 2022

Enclosure: Plan Sheets dated March 2022

cc: WSA Inspection & Compliance Program

MAINTENANCE DREDGING

FISHING CREEK
CALVERT COUNTY, MARYLAND

INDEX OF DRAWINGS FISHING CREEK DREDGING PLANS

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FISHING CREEK STATIONS 2+000 TO 4+223	FILE: 75 MAP: 22-003	3
FISHING CREEK PLACEMENT SITE	FILE: 75 MAP: 22-004	4
WIER BOX REPLACEMENT CONSTRUCTION DETAILS	FILE: 75 MAP: 22-005	5
DETAILS AND NOTES	FILE: 5 MAP: 22-006	6

INDEX OF DRAWINGS JETTY REPAIR PLANS

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CROSS SECTIONS-STA. 0+25 TO STA. 2+00	C-302
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CROSS SECTIONS-STA. 4+25 TO STA. 6+00	C-304
CROSS SECTIONS-STA. 6+25 TO STA. 8+00	C-305
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DETAILS-GROUTING	C-501

THIS PRODUCT WAS DESIGNED BY THE BALTIMORE DISTRICT, 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.

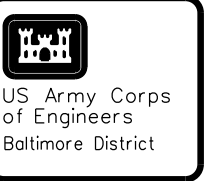
SUBMITTED: Danielle M. Szymanska
PROJECT MANAGER _____
RECOMMENDED _____

DI DIRECTOR, DEPT. OF NATURAL RESOURCES
RECOMMENDED:

CHIEF, NAVIGATION SECTION
RECOMMENDED:

CHIEF, NAVIGATION BRANCH
APPROVED: 1 2 8 1

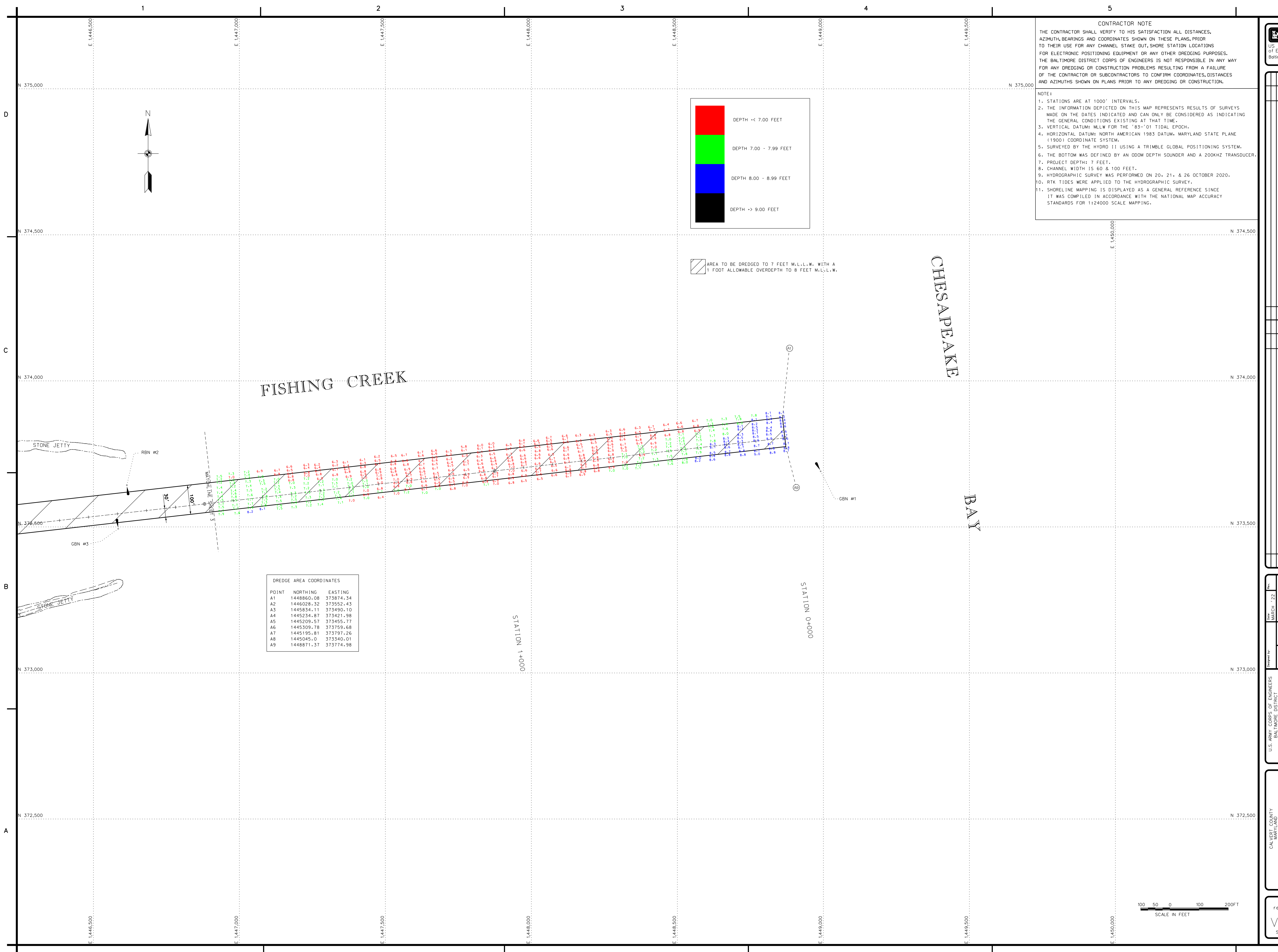
CHIEF, OPERATIONS DIVISION

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U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT	designed by:	Drawn by:	Check file no.	Rev.
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CALVERT COUNTY
MARYLAND

Sheet
reference
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V-101
Sheet 1 of



CONTRACTOR NOTE

THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

NOTE:

1. STATIONS ARE AT 1000' INTERVALS.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. VERTICAL DATUM: MLLW FOR THE '83-'01 TIDAL EPOCH.
4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE (1900) COORDINATE SYSTEM.
5. SURVEYED BY THE HYDRO 11 USING A TRIMBLE GLOBAL POSITIONING SYSTEM.
6. THE BOTTOM WAS DEFINED BY AN ODOM DEPTH SOUNDER AND A 200KHZ TRANSDUCER.
7. PROJECT DEPTH: 7 FEET.
8. CHANNEL WIDTH IS 60 & 100 FEET.
9. HYDROGRAPHIC SURVEY WAS PERFORMED ON 20, 21, & 26 OCTOBER 2020.
10. RTK TIDES WERE APPLIED TO THE HYDROGRAPHIC SURVEY.
11. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.

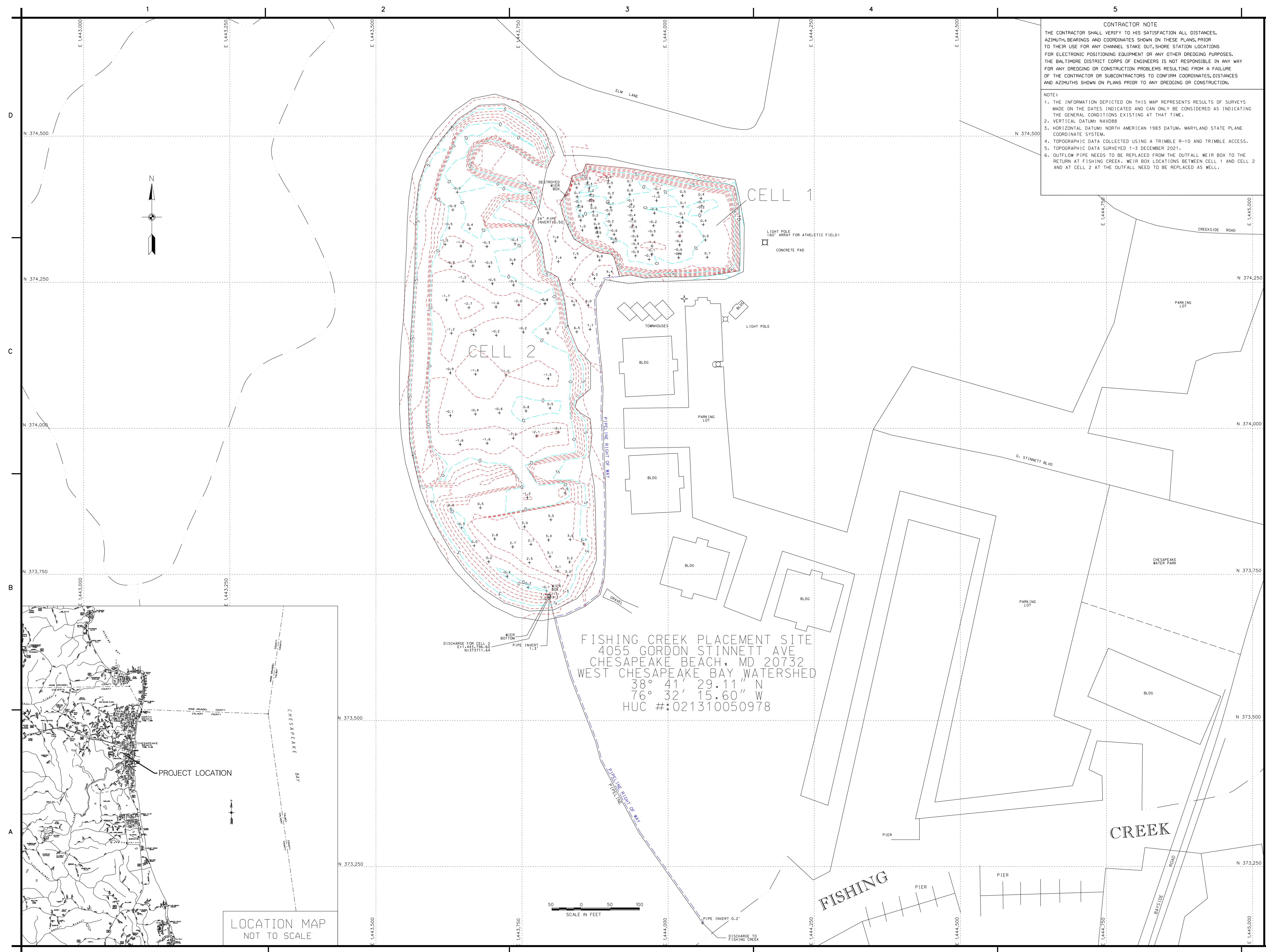
US Army Corps of Engineers
Baltimore District

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U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

MAINTENANCE DREDGING
FISHING CREEK
STATION 0+00 TO 1+00

Sheet
reference
number:
V-102
Sheet 2 of



US Army Corps
of Engineers
Baltimore District

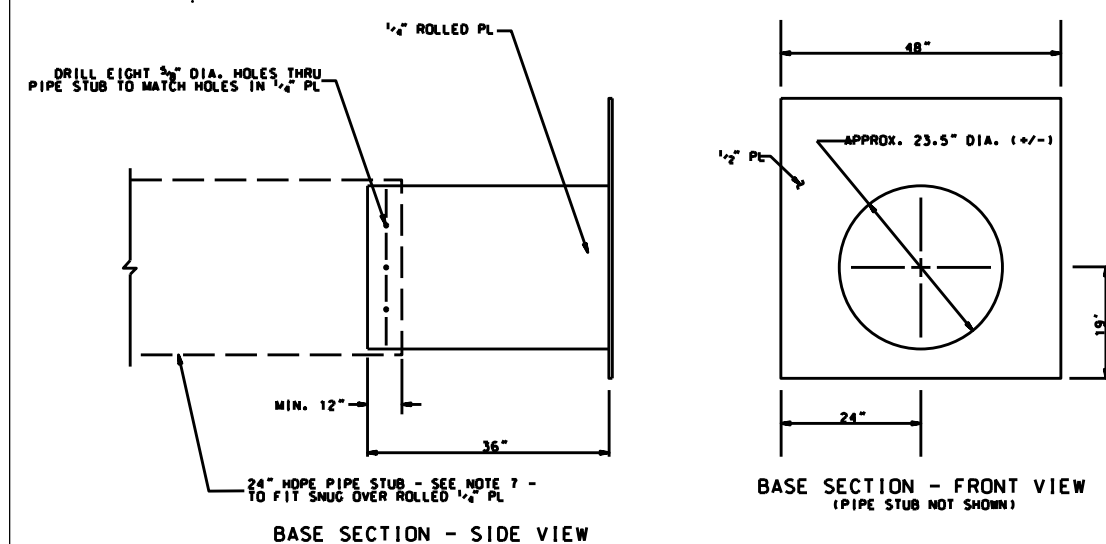
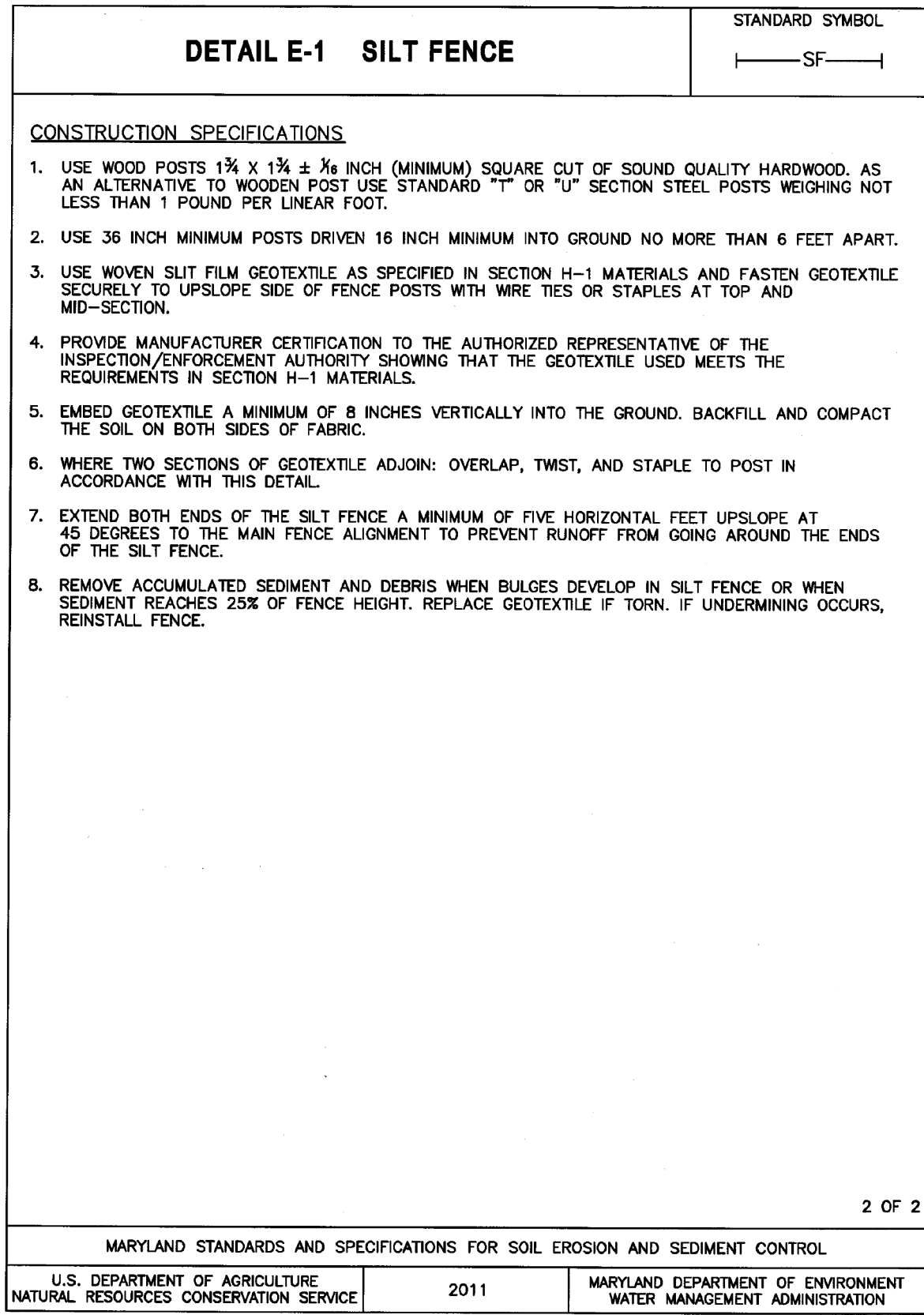
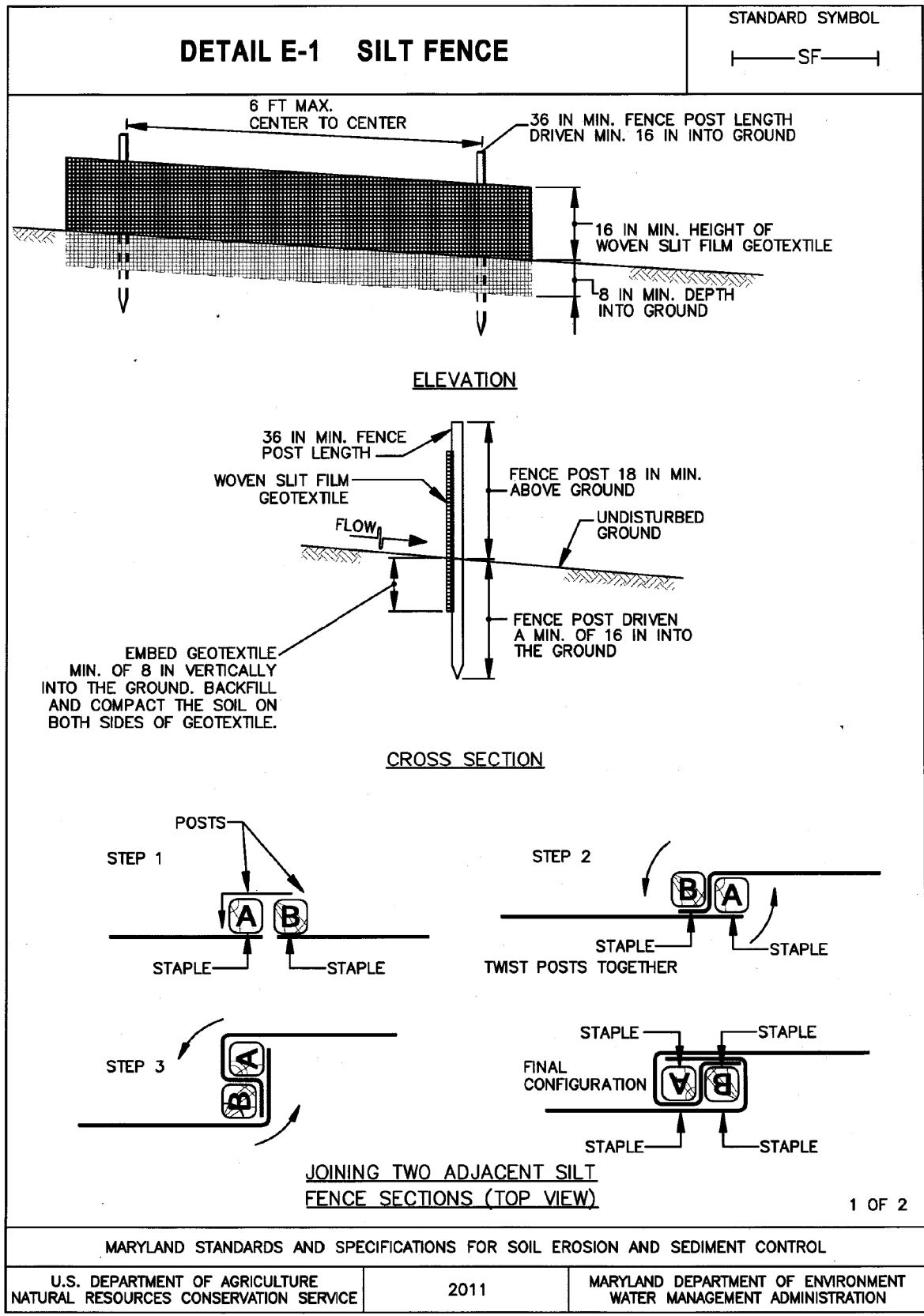
CONTRACTOR NOTE	
	<p>THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.</p>
	<p>NOTE:</p> <ol style="list-style-type: none"> 1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. 2. VERTICAL DATUM: NAVD83 3. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE COORDINATE SYSTEM. 4. TOPOGRAPHIC DATA COLLECTED USING A TRIMBLE R-10 AND TRIMBLE ACCESS. 5. TOPOGRAPHIC DATA SURVEYED 1-3 DECEMBER 2021. 6. OUTFLOW PIPE NEEDS TO BE REPLACED FROM THE OUTFLOW WEIR BOX TO THE RETURN AT FISHING CREEK. WEIR BOX LOCATIONS BETWEEN CELL 1 AND CELL 2 AT CELL 2 AT THE OUTFALL NEED TO BE REPLACED AS WELL.

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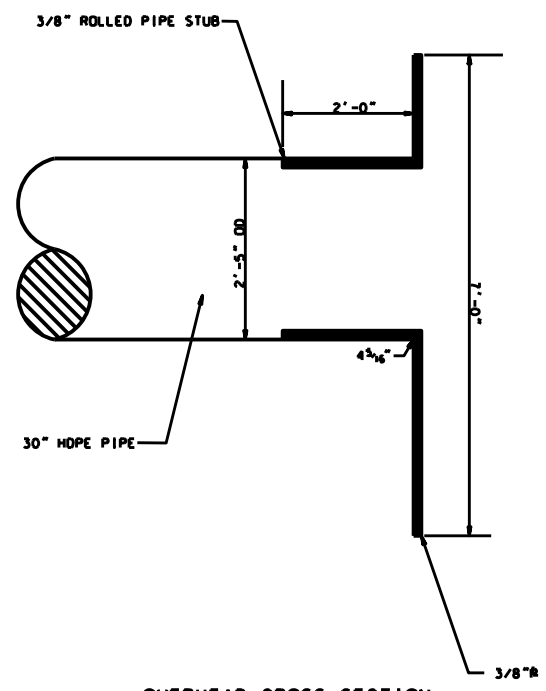
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT		Designed by:	Date: <u>MARCH '22</u>	Rev.
		Drawn by: JAW	Check by: AWP	FILED IN MAP: 22-004
		Reviewed by: AWP	Drawing code:	
		Submitted by:	File number: 25.066.2020203.48	
		Chief Engr. Branch:	6086	

CALVERT COUNTY
MARYLAND

Sheet
reference
number:
V-104
Sheet 4 of



- CONSTRUCTION NOTES:**
- 1) UNLESS OTHERWISE SHOWN, ALL MATERIAL IS TO BE CARBON STEEL CONFORMING TO ASTM A36.
 - 2) UNLESS OTHERWISE SHOWN ALL CONSTRUCTION IS TO BE WELDED. ALL WELDS ARE TO BE CONTINUOUS. VISUALLY INSPECT FOR CRACKS AND PINHOLES. NO CRACKS OR PINHOLES ARE ALLOWED.
 - 3) SEQUENCE WELDING WHERE APPLICABLE TO MINIMIZE DISTORTION.
 - 4) BREAK ANY SHARP CORNERS, REMOVE ALL WELD FLUX, SLAG, AND SPATTER, REMOVE ALL BURRS.
 - 5) ENSURE THAT ALL CONTACTING OR OVERLAPPING JOINT SURFACES ARE CLEAN AND FREE OF ALL RESIDUAL OIL AND GREASE PRIOR TO WELDING. COMPLETELY SEAL ALL JOINTS BY WELDING.
 - 6) AFTER FABRICATION, BLAST - CLEAN AND PAINT THE SECTIONS WITH TWO COATS OF A COAL TAR EPOXY - POLYAMIDE PAINT IN ACCORDANCE WITH THE SPECS.
 - 7) PIPE TO BE 24" DIA. HDPE, ATTACHED BY BOLTING, USING EIGHT (8) $\frac{1}{2}$ - 13UNC - 2A X 2" LONG BOLTS, NUTS, AND WASHERS (GALV.). PIPE STUB TO BE ATTACHED AT PLACE OF FABRICATION.
 - 8) SHOP DRAWINGS OF BOX DESIGN MUST BE SUBMITTED AND APPROVED BEFORE CONSTRUCTION.



NOTE: PROVIDE HOLES IN ROLLED PIPESTUB TO SECURE PIPE FOLLOWING INSTALLATION IN FIELD.

US Army Corps of Engineers Baltimore District	
Sheet reference number: V-105 Sheet 5 of	
CALVERT COUNTY MARYLAND MAINTENANCE DREDGING CONSTRUCTION DETAILS	
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT	
DATE MARCH 22 2011	DESIGNED BY J. L. B. / J. L. B.
APPROVED BY J. L. B. / J. L. B.	PROJECT NO. 61100-1-0000
PROJECT NAME CALVERT COUNTY MAINTENANCE DREDGING CONSTRUCTION DETAILS	PROJECT LOCATION CALVERT COUNTY MARYLAND

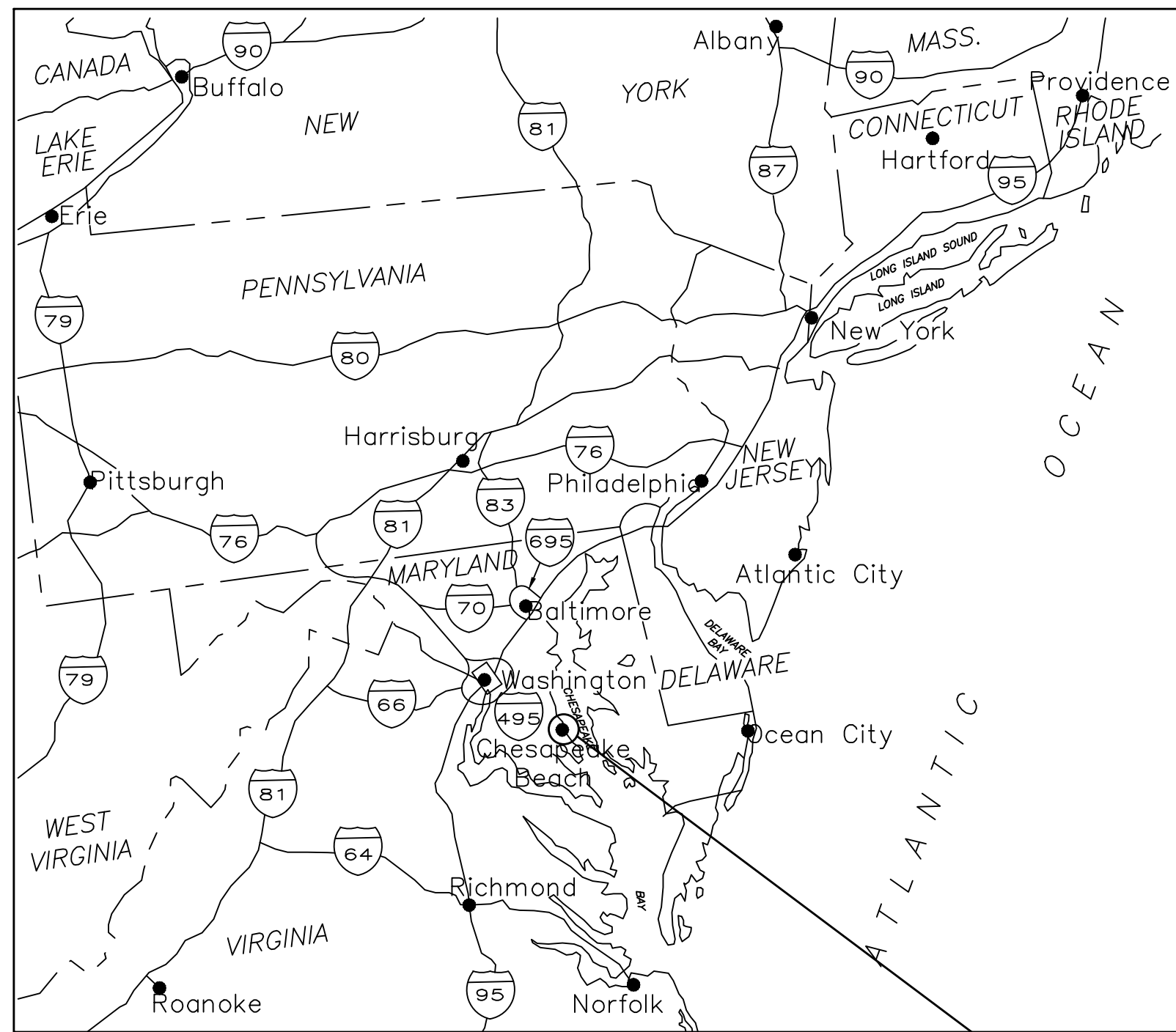


**US Army Corps [®]
of Engineers
BALTIMORE
DISTRICT**



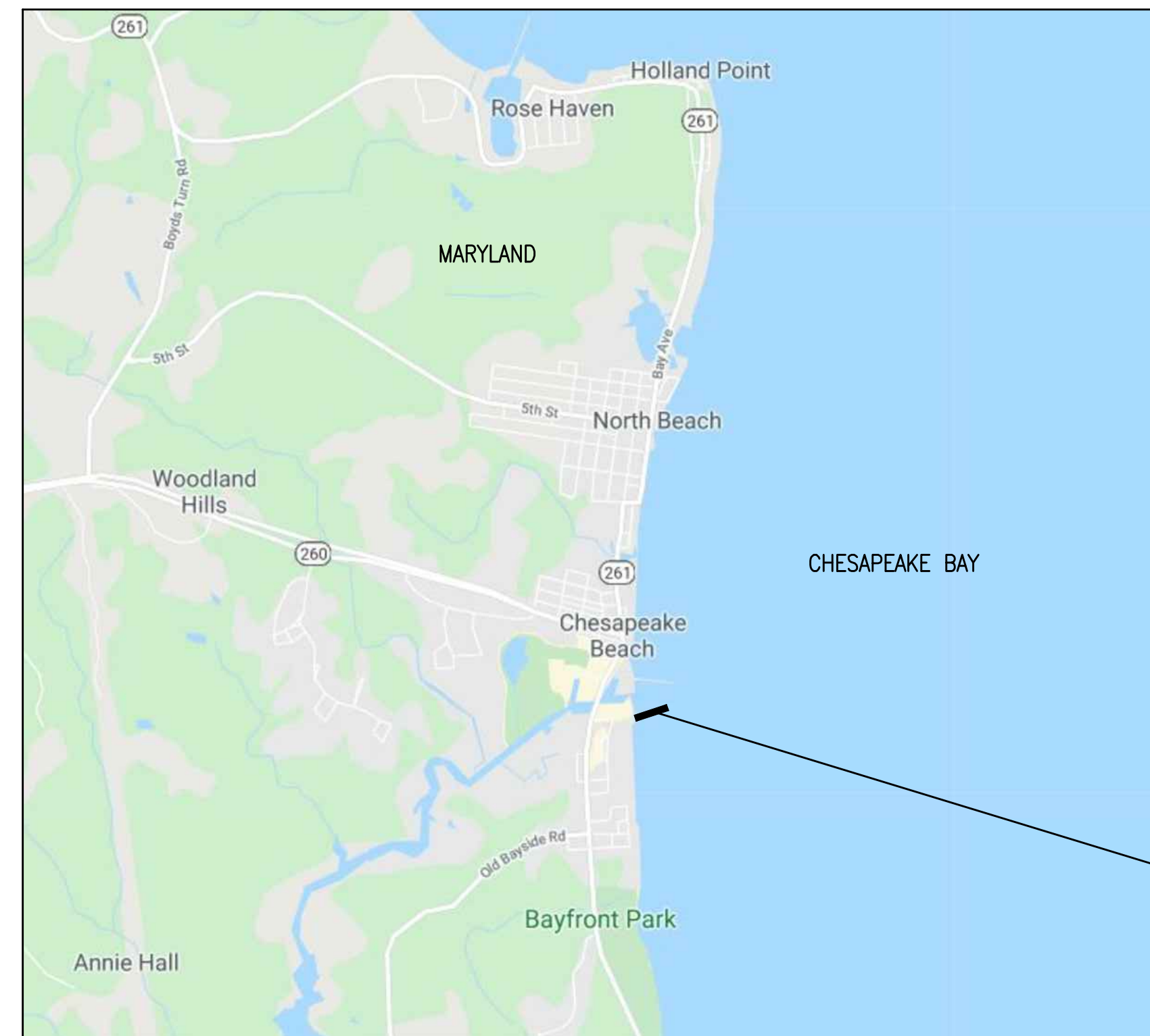
**US Army Corps **
of Engineers
PHILADELPHIA
DISTRICT

FISHING CREEK
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND



VICINITY MAP
N.T.S.

**LOCATION
OF PROJECT**



LOCATION MAP
N.T.S.

LOCATION OF WORK

DRAWING INDEX	
SHEET NUMBER	DESCRIPTION
G-001	COVER SHEET
C-001	GENERAL INFORMATION SHEET
C-101	GENERAL PLAN
C-102	PLAN -SOUTH JETTY EXISTING CONDITIONS
C-103	PLAN - JETTY REPAIR AREA
C-201	PROFILE - JETTY REPAIR AREA
C-301	TYPICAL SECTIONS
C-302	CROSS SECTIONS - STA. 0+25 TO 2+00
C-303	CROSS SECTIONS - STA. 2+25 TO STA. 4+00
C-304	CROSS SECTIONS - STA. 4+25 TO 6+00
C-305	CROSS SECTIONS - STA. 6+25 TO STA. 8+00
C-306	CROSS SECTIONS - STA. 8+25 TO 10+00
C-307	CROSS SECTIONS - STA. 10+25 TO STA. 12+00
C-308	CROSS SECTIONS - STA. 12+25 TO STA. 13+50
C-401	PLAN - CONFINED DISPOSAL FACILITY
C-501	DETAILS - GROUTING

[illegible]

U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA BALTIMORE DISTRICT	DWS. SIZE: 37.74Z FILE NAME: FN	CONTRACT NUMBER: SOLICITATION NUMBER: DATE: 28 MARCH 2001
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CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
FISHING CREEK
SOUTH JETTY REHABILITATION
COVER SHEET

SHEET NUMBER

G-001

SOLICITATION NO:-
CONTRACT NO:-
ISSUE/SUBMITTAL DATE:26 MARCH 2021

THIS PROJECT WAS DESIGNED BY THE PHILADELPHIA DISTRICT OF 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.

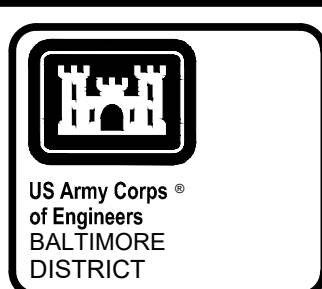
SUBMITTED:

ANDREW J. SCHWAIGER, P.E.
CHIEF, ENGINEERING BRANCH

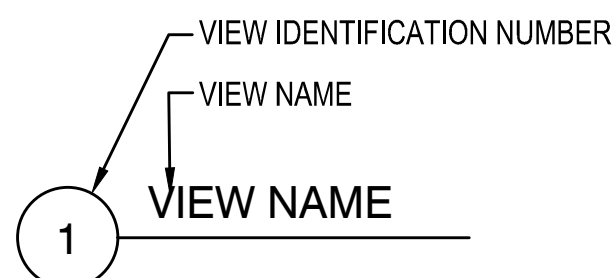
APPROVED:

PETER M. TRANCHIK, P.E.
CHIEF, ENGINEERING AND CONSTRUCTION DIVISION

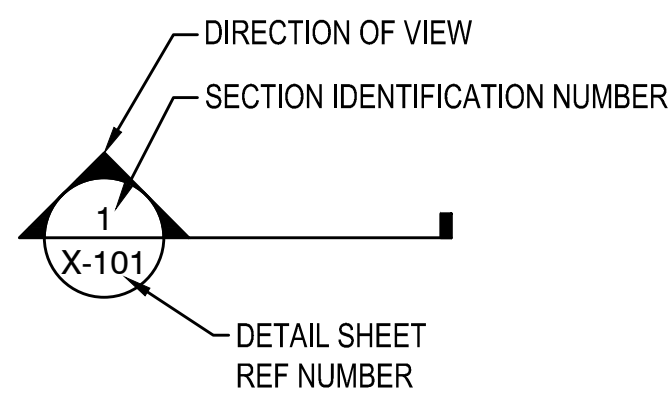
SYMBOLS, ABBREVIATIONS AND GENERAL NOTES



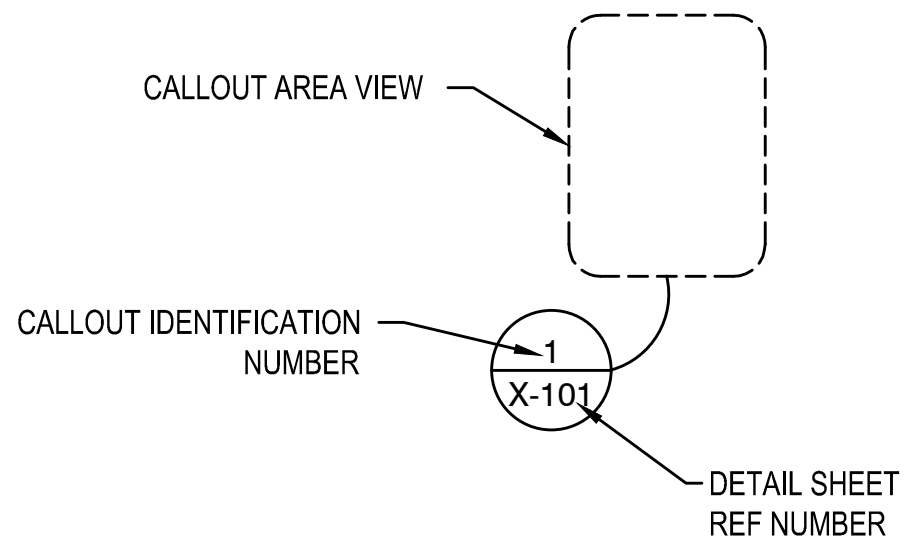
DRAWING SHEET SYMBOLS



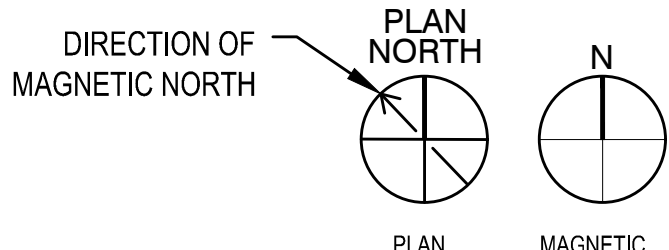
VIEW TITLE SYMBOL



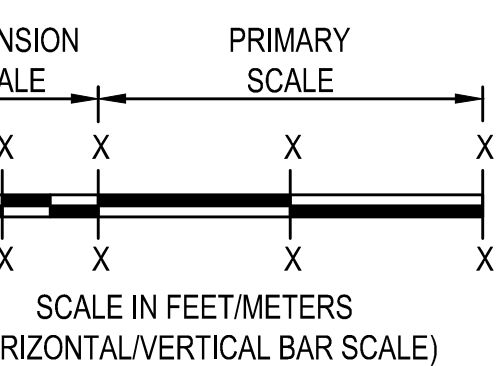
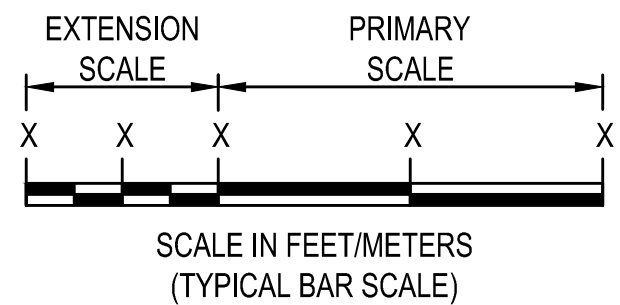
SECTION CUT SYMBOL



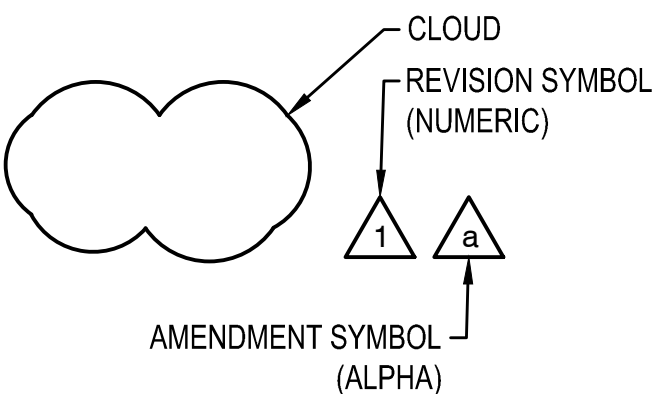
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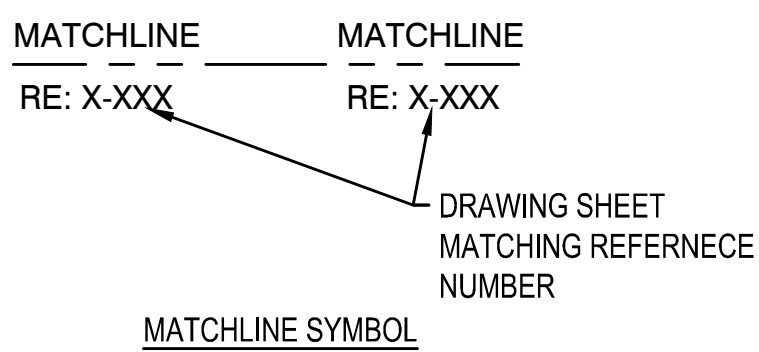
NORTH SYMBOLS



GRAPHIC BAR SCALE SYMBOLS

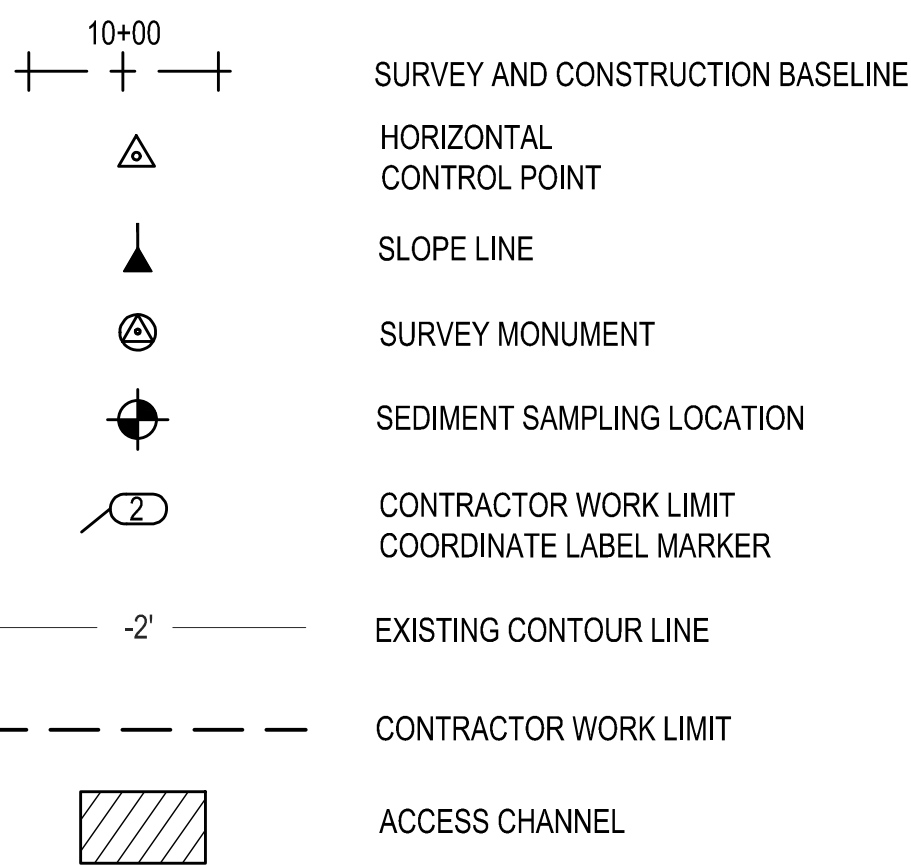


REVISION & AMENDMENT CLOUD AND SYMBOL



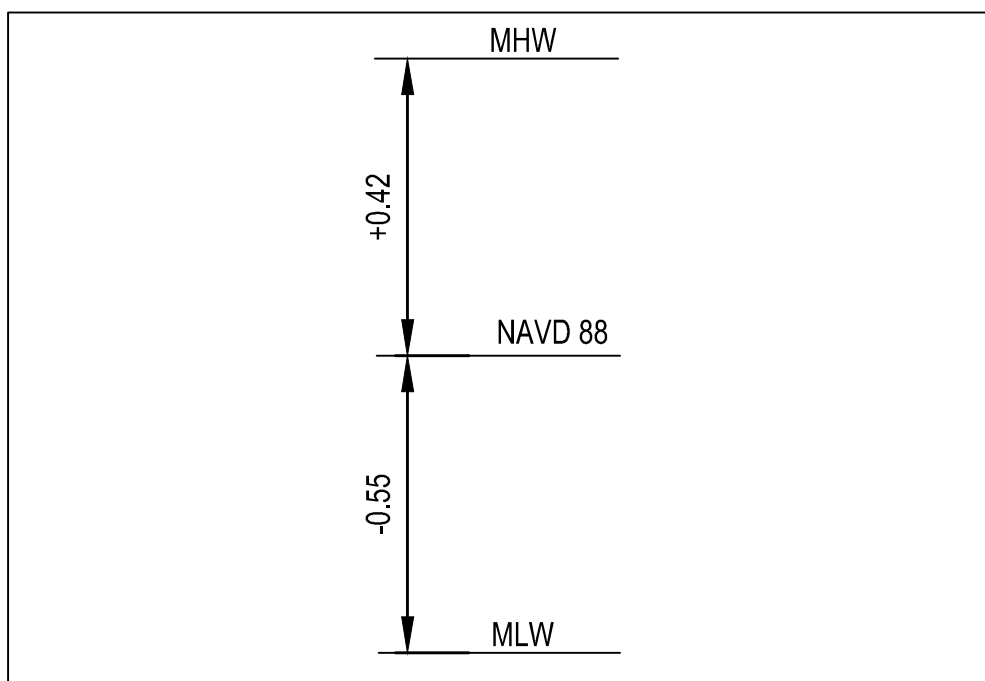
MATCHLINE SYMBOL

PLAN SYMBOLS LEGEND



GENERAL NOTES:

- THIS CONTRACT CONSISTS OF ONE BASE BID ACCESS CHANNEL DREDGING AREA AND THREE BASE BID JETTY REPAIR AREAS (SEE SHEETS C-101 THROUGH C-103).
- ELEVATIONS ARE EXPRESSED IN FEET AND TENTHS OF A FOOT AND REFER TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988.
- HORIZONTAL CONTROL AND COORDINATES ARE REFERENCED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM (NAD) 1983. COORDINATES ARE EXPRESSED IN U.S. SURVEY FEET.
- THE CONTRACTOR WORK LIMIT SHALL BE AS SHOWN ON SHEET C-101.
- MHW AND MLW TIDAL REFERENCE IS MEASURED FROM NOAA TIDE STATION ID: 8575512 (ANNAPOLIS, MD) AND SHOULD BE CONSIDERED APPROXIMATE FOR FISHING CREEK.
- EXISTING GROUND INFORMATION IS THE RESULT OF SURVEYS CONDUCTED BY USACE BALTIMORE DISTRICT IN MAY OF 2019 AND OCT OF 2020 AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF CONDITIONS OCCURRING AT THAT TIME. CONTRACTOR IS REQUIRED TO COMPLETE PRE-CONSTRUCTION SURVEY IN ACCORDANCE WITH SPECIFICATION SECTION 01 71 23.
- TOPOGRAPHIC AND SINGLE BEAM HYDROGRAPHIC SURVEYS SHALL BE TAKEN AT EVERY SURVEY ORIGIN POINT SHOWN ON THIS SHEET IN ACCORDANCE WITH SPECIFICATION SECTION 01 71 23. ALL PROFILE AZIMUTHS ARE FROM THE NORTH.
- EXISTING SITE FEATURES DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITIONS AT NO ADDITIONAL COST TO THE GOVERNMENT.
- APPROXIMATE EDGE OF EXISTING JETTY IS ESTIMATED FROM OCT 2020 USACE BALTIMORE DISTRICT TOPOGRAPHIC SURVEYS AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF CONDITIONS OCCURRING AT THAT TIME. APPROXIMATE EDGE OF EXISTING JETTY MAY BE REVISED AFTER RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.



TIDAL REFERENCE
(PROJECT AREA AVERAGE FOR REFERENCE ONLY)
SCALE = NTS

ABBREVIATIONS			
ABBRV	DESCRIPTION	ABBRV	DESCRIPTION
AD	AREA DRAIN	FDN	FOUNDATION
ADDL	ADDITIONAL	FF	FINISHED FLOOR
AFF	ABOVE FINISHED FLOOR	FIN	FINISH
BD	BOARD	FL	FLOOR
BIT	BITUMINOUS	FM	FORCE MAIN
BL or	BASE LINE	FT	FOOT, FEET
BLDG	BUILDING	FTG	FOOTING
BM	BEAM	G	GROUND
BMP	BEST MANAGEMENT PRACTICE	GOVT	GOVERNMENT
BOT	BOTTOM	GR	GRADE
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION	HORIZ	HORIZONTAL
BVCS	BEGINNING OF VERTICAL CURVE STATION	HS	HIGH STRENGTH
CL or	CENTERLINE	HT	HEIGHT
CMU	CONCRETE MASONRY UNIT	HVY	HEAVY
CO	CLEAN OUT	IN	INCH
COL	COLUMN	INSUL	INSULATION, INSULATED
CONC	CONCRETE	IINT	INTERIOR
CONSTR	CONSTRUCTION	INV	INVERT
CONT	CONTINUOUS	LL	LIVE LOAD
CTRL	CONTROL	LP	LOW POINT
CWL	CONTRACTOR WORK LIMITS	LT	LIGHT
DET	DETAIL	LVC	LENGTH OF VERTICAL CURVE
DGA	DENSE GRADED AGGREGATE	JCT	JUNCTION
DIA	DIAMETER	MATL	MATERIAL
DIM	DIMENSION	MAX	MAXIMUM
DL	DEAD LOAD	MIN	MINIMUM
DWG	DRAWING	MISC	MISCELLANEOUS
E	EAST	N	NORTH
EA	EACH	NLT	NOT LESS THAN
ECM	EROSION CONTROL MAT	NTS	NOT TO SCALE
EJ	EXPANSION JOINT	OC	ORIGINAL CONSTRUCTION
EL	ELEVATION	OD	OUTSIDE DIAMETER
ELEC	ELECTRIC	OH	OVERHEAD
EOP	EDGE OF PAVEMENT	OPG	OPENING
EOS	EDGE OF SHOULDER	OPP	OPPOSITE
EQ	EQUAL	PC	POINT OF CURVE
EQUIP	EQUIPMENT	PD	PAVEMENT DRAIN
EXH	EXHAUST	PI	POINT OF INFLECTION
EXIST or (E)	EXISTING	PIV	POST INDICATOR VALVE
EXP	EXPANSION, EXPOSED	POT	POINT OF TANGENT
EXP JT	EXPANSION JOINT	PMP	PROBABLE MAXIMUM PRECIPITATION
EXT	EXTERIOR	PNL	PANEL
FIG	FIGURE SINGLE	PSF	POUNDS PER SQUARE FOOT

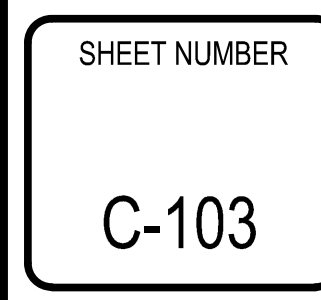
SURVEY ORIGIN POINTS				
STATION	EASTING	NORTHING	AZIMUTH	DISTANCE (FT)*
0+00	1445700.66	373032.50	162.61	200 -100
0+00	1445700.66	373032.50	72.61	1000*
0+25	1445724.51	373039.97	162.61	200 -100
0+50	1445748.37	373047.45	162.61	200 -100
0+75	1445772.23	373054.92	162.61	200 -100
1+00	1445796.09	373062.39	162.61	200 -100
1+25	1445819.94	373069.86	162.61	200 -100
1+50	1445843.80	373077.33	162.61	200 -100
1+75	1445867.66	373084.80	162.61	200 -100
2+00	1445891.52	373092.28	162.61	200 -100
2+25	1445915.37	373099.75	162.61	200 -100
2+50	1445939.23	373107.22	162.61	200 -100
2+75	1445963.09	373114.69	162.61	200 -100
3+00	1445986.94	373122.16	162.61	200 -100
3+25	1446010.80	373129.63	162.61	200 -100
3+50	1446034.66	373137.11	162.61	200 -100
3+75	1446058.52	373144.58	162.61	200 -100
4+00	1446082.37	373152.05	162.61	200 -100
4+25	1446106.23	373159.52	162.61	200 -100
4+50	1446130.09	373166.99	162.61	200 -100
4+75	1446153.95	373174.47	162.61	200 -100
5+00	1446177.80	373181.94	162.61	200 -100
5+25	1446201.66	373189.41	162.61	200 -100
5+50	1446225.52	373196.88	162.61	200 -100
5+75	1446249.38	373204.35	162.61	200 -100
6+00	1446273.23	373211.82	162.61	200 -100
6+25	1446297.09	373219.3	162.61	200 -100
6+50	1446320.95	373226.77	162.61	200 -100
6+75	1446344.81	373234.24	162.61	200 -100
7+00	1446368.66	373241.71	162.61	200 -100
7+25	1446392.52	373249.18	162.61	200 -100
7+50	1446416.38	373256.65	162.61	200 -100
7+75	1446440.23	373264.13	162.61	200 -100
8+00	1446464.09	373271.60	162.61	200 -100
8+25	1446487.95	373279.07	162.61	200 -100
8+50	1446511.81	373286.54	162.61	200 -100
8+75	1446535.66	373294.01	162.61	200 -100
9+00	1446559.52	373301.49	162.61	200 -100
9+25	1446583.38	373308.96	162.61	200 -100
9+50	1446607.24	373316.43	162.61	200 -100
9+75	1446631.10	373323.90	162.61	200 -100
10+00	1446654.95	373331.37	162.61	200 -100
10+25	1446678.80	373338.84	131.19	200 -100
10+50	1446702.66	373346.31	99.76	200 -100
10+75	1446726.52	373353.78	99.76	200 -100
11+00	1446750.38	373361.25	99.76	200 -100
11+25	1446774.24	373368.72	99.76	200 -100
11+50	1446798.10	373376.19	99.76	200 -100
11+75	1446821.96	373383.66	99.76	200 -100
12+00	1446845.82	373391.13	99.76	200 -100
12+25	1446869.68	373398.60	99.76	200 -100
12+50	1446893.54	373406.07	99.76	200 -100
12+75	1446917.40	373413.54	99.76	200 -100
13+00	1446941.26	373421.01	99.76	200 -100
13+25	1446965.12	373428.48	99.76	200 -100
13+50	1446988.98	373435.95	99.76	200 -100

* POSITIVE DISTANCES SOUTH OF BASELINE, NEGATIVE DISTANCES NORTH OF BASELINE.
* 1000 FT SURVEY DISTANCE IS ALONG THE BASELINE FROM STA. 0+00 TO STA. 10+00

REVISIONS											
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1. SEE SHEET C-001 FOR GENERAL INFORMATION.
2. SEE SHEET C-301 FOR TYPICAL SECTIONS AND SHEETS C-302 THROUGH C-308 FOR CROSS SECTIONS.
3. SEE SPECIFICATION SECTION 31 05 19 FOR GEOTEXTILE REQUIREMENTS.
4. TIE OF CAPSTONE AND EXTENTS OF GEOTEXTILE ARE SUBJECT TO CHANGE FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS DUE TO THE DYNAMIC CONDITIONS OF THE SITE.

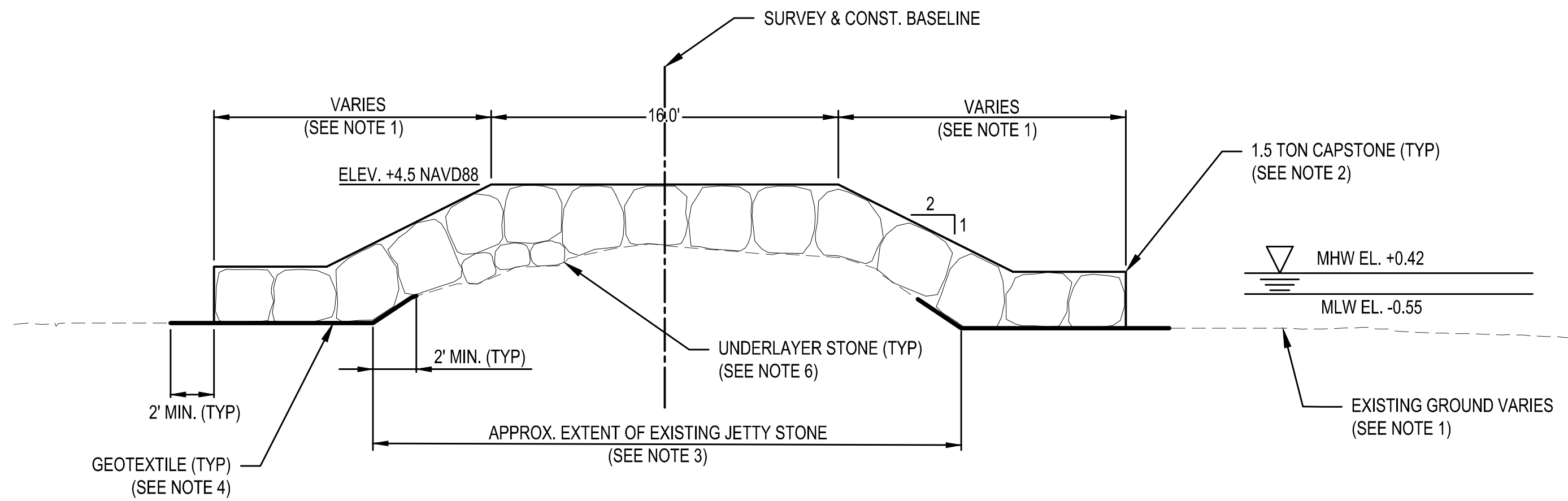


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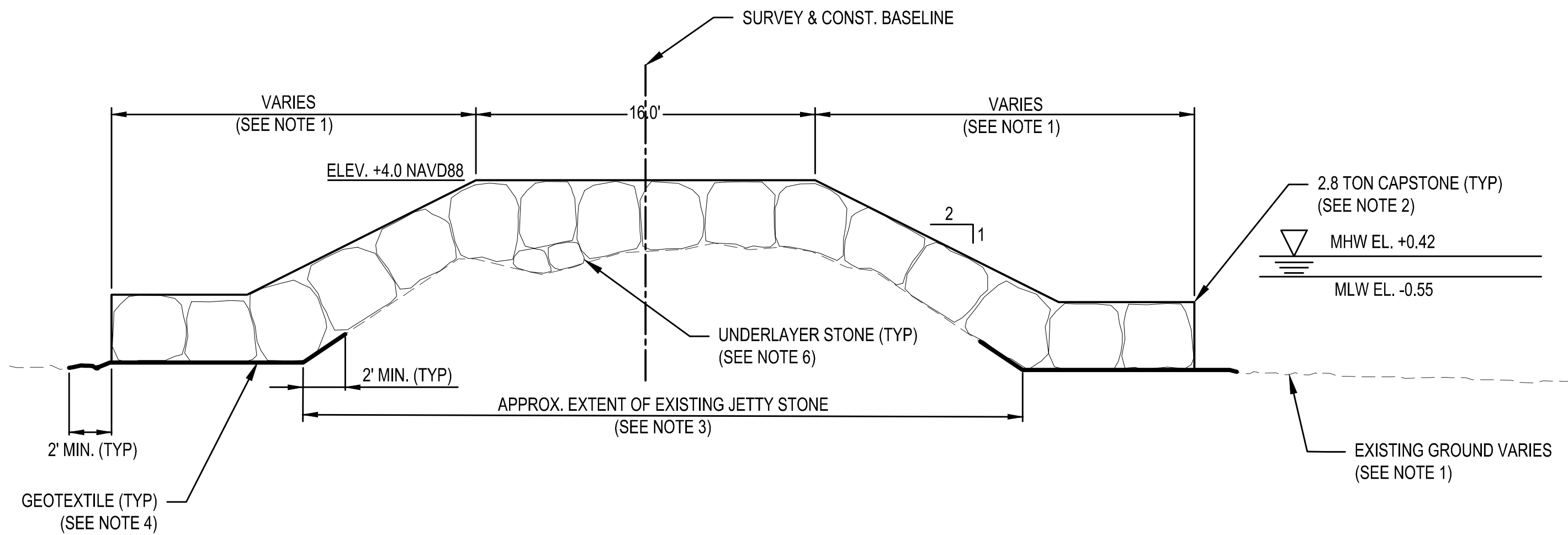
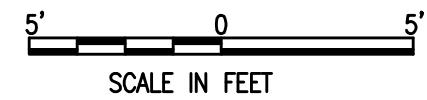
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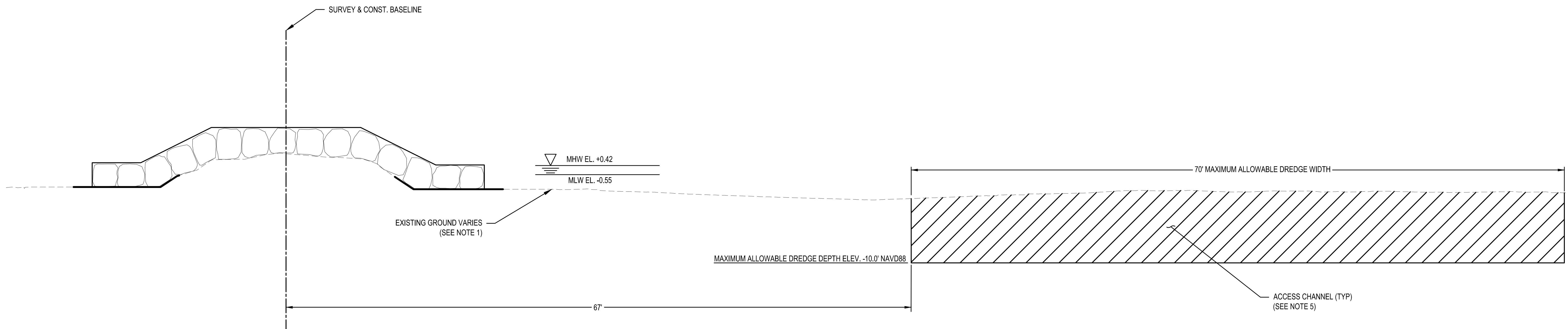
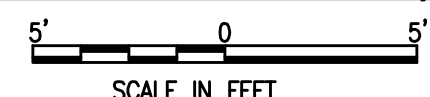
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1 TYPICAL SECTION - JETTY REPAIR FOR AREA 1 (STA. 0+25 TO 7+00)



2 TYPICAL SECTION - JETTY REPAIR FOR AREAS 2 & 3 (STA. 7+00 TO 9+30)



3 TYPICAL SECTION - ACCESS CHANNEL (STA. 0+25 TO 10+00)



NOTES:

- SEE SHEETS C-302 THROUGH C-308 FOR CROSS SECTIONS.
- CAPSTONE SHALL BE PLACED TO THE TOLERANCES DESCRIBED IN SPECIFICATION SECTION 31 37 00. INDIVIDUAL CAPSTONES SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT REPRESENT ACTUAL CAPSTONE SHAPE/SIZE. MINIMUM OF TWO CAPSTONES SHALL BE PLACED AT THE PROPOSED JETTY TOE. CAPSTONE EXTENTS ARE SUBJECT TO CHANGE FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS. CAPSTONES AND EXISTING JETTY STONES SHALL BE GROUTED AS SHOWN ON SHEET C-501 AND IN ACCORDANCE WITH SPECIFICATION SECTION 31 37 00.
- EXISTING JETTY STONE APPROXIMATED FROM 2020 NAB USACE TOPOGRAPHIC SURVEYS AND ARE ONLY REPRESENTATIVE OF CONDITIONS OCCURRING AT THAT TIME. EXISTING JETTY STONE EXTENTS ARE SUBJECT TO CHANGE FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- GEOTEXTILE SHALL EXTEND A MINIMUM OF 2' FROM THE TOE OF THE PROPOSED CAPSTONE AND SHALL OVERLAP A MINIMUM OF 2' WITH THE EXISTING JETTY STONE. GEOTEXTILE EXTENTS ARE SUBJECT TO CHANGE FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
- MAXIMUM ALLOWABLE DREDGE DEPTH IS -10.0' NAVD88 FOR THE ENTIRE ACCESS CHANNEL. MAXIMUM ALLOWABLE DREDGE WIDTH IS 70' FROM STA. 0+25 TO STA. 10+00. SEE SHEETS C-101, C-307 AND C-308 FOR ACCESS CHANNEL LOCATION AND WIDTH FROM STA. 10+00 TO THE AUTHORIZED FEDERAL NAVIGATION CHANNEL. CONTRACTOR SHALL ONLY DREDGE AS NEEDED TO ACCESS THE REPAIR AREAS. DREDGING TO THE TEMPLATE SHOWN MAY CAUSE SLOUGHING FAILURE RESULTING IN SIDE SLOPES THAT EXTEND OUTSIDE OF THE TEMPLATE. HOWEVER, AT NO POINT DURING THE CONTRACT SHOULD DREDGING OCCUR OUTSIDE OF THE ACCESS CHANNEL SHOWN.
- INDIVIDUAL UNDERLAYER STONES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND DO NOT REPRESENT ACTUAL UNDERLAYER STONE SHAPE/SIZE. PLACE UNDERLAYER STONE AS NECESSARY TO PLACE CAPSTONE TO THE TOLERANCES DESCRIBED IN SPECIFICATION SECTION 31 37 00.



US Army Corps of Engineers
BALTIMORE DISTRICT

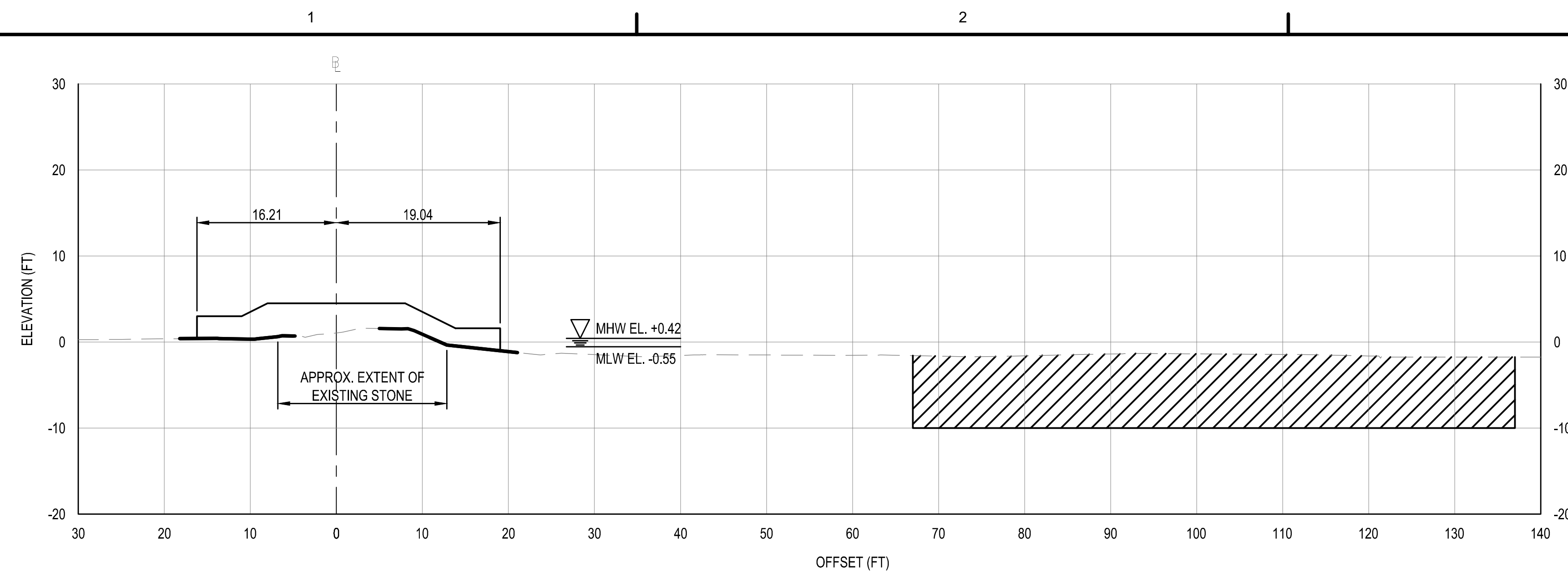
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U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT	U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT
ISSUED BY: SW CHECKED BY: DH DATE: 28 MARCH 2021	ISSUED BY: SW CHECKED BY: DH DATE: 28 MARCH 2021
CONTRACT NUMBER: 31 37 00	CONTRACT NUMBER: 31 37 00
PILOT SCALE: AS SHOWN	PILOT SCALE: AS SHOWN
DWG. SIZE: 11x17	DWG. SIZE: 11x17

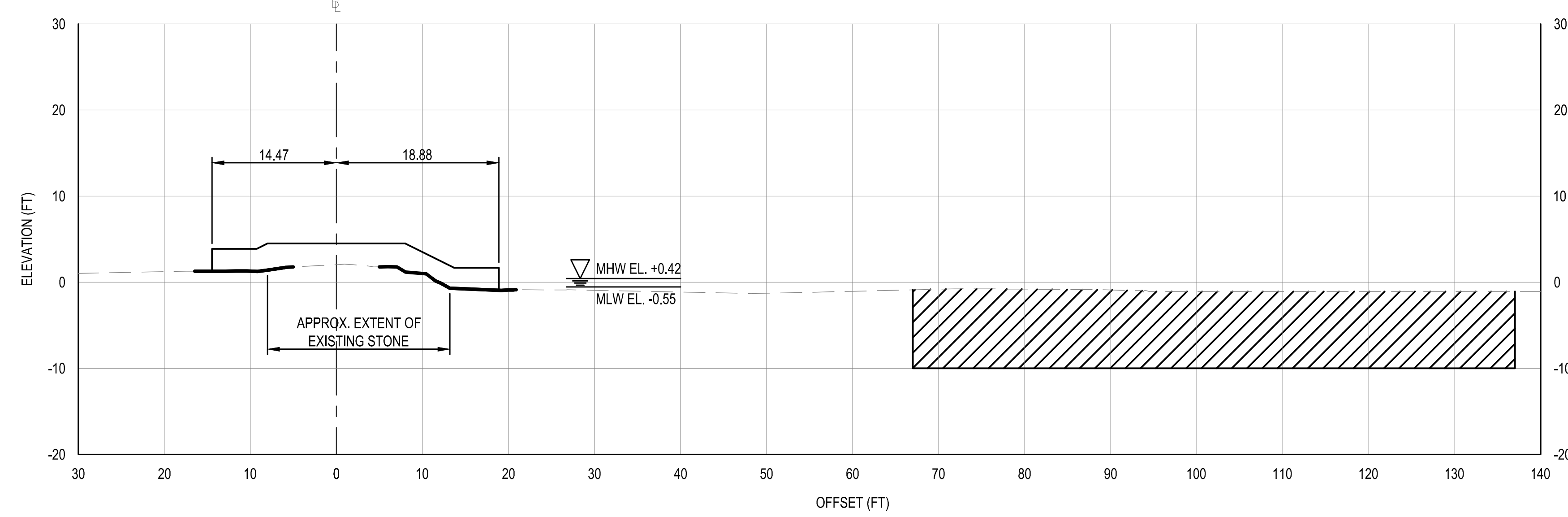
FISHING CREEK
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
TYPICAL SECTIONS

SHEET NUMBER

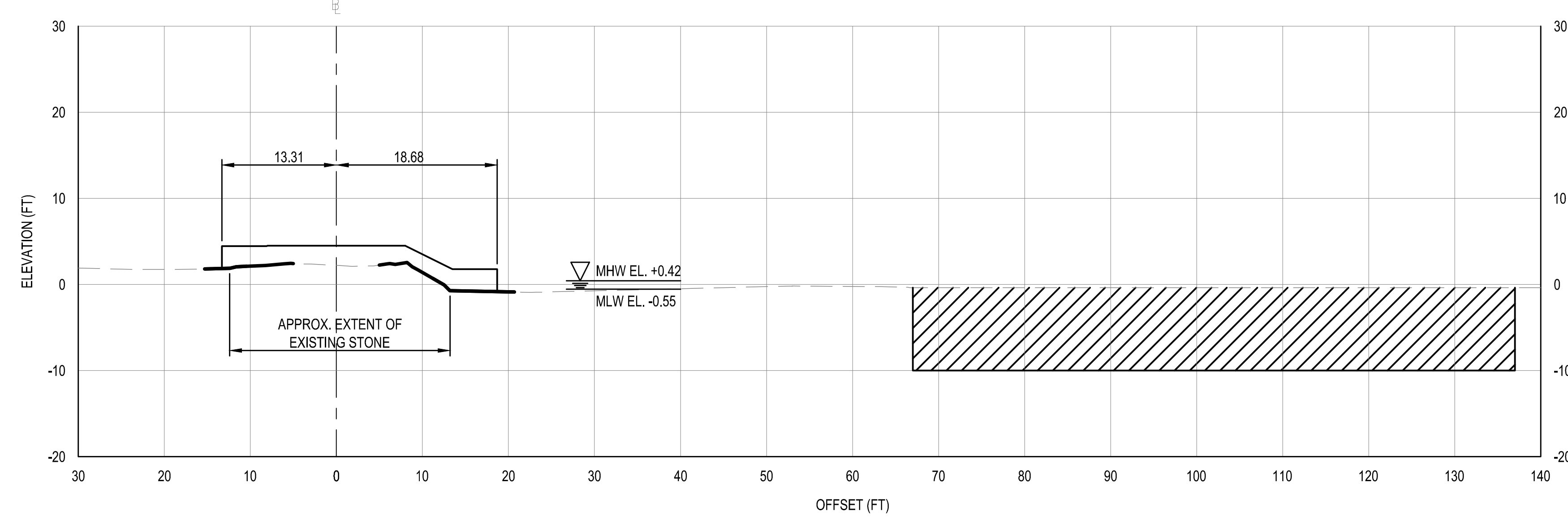
C-301



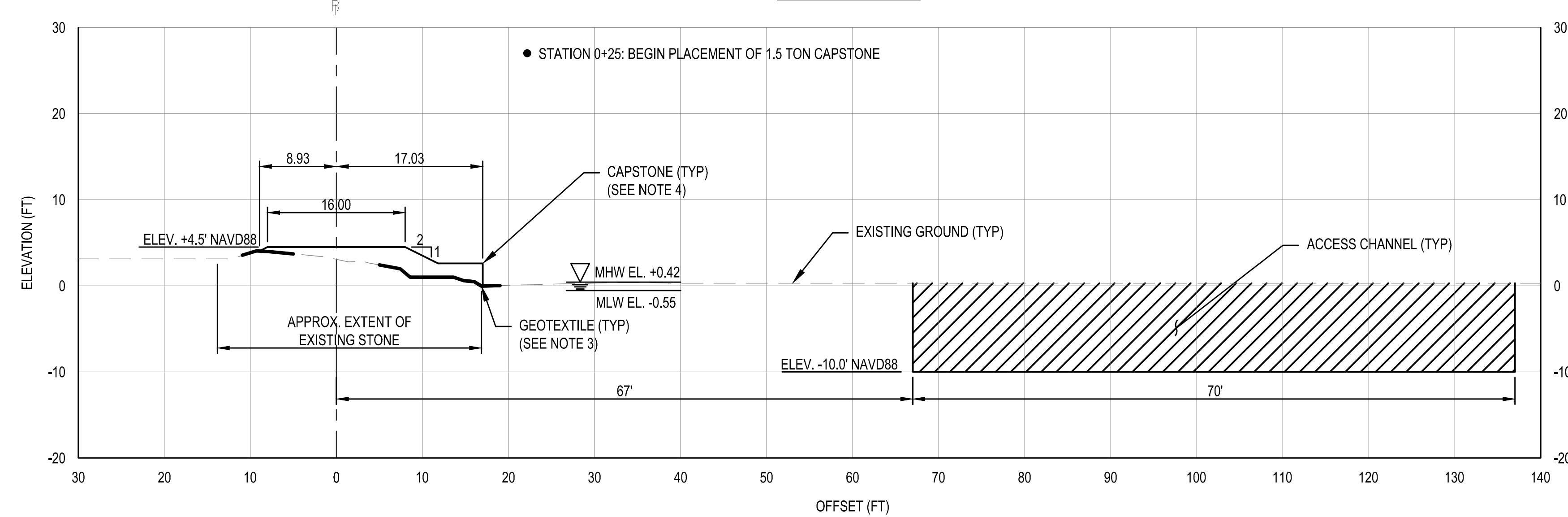
STA. 1+00



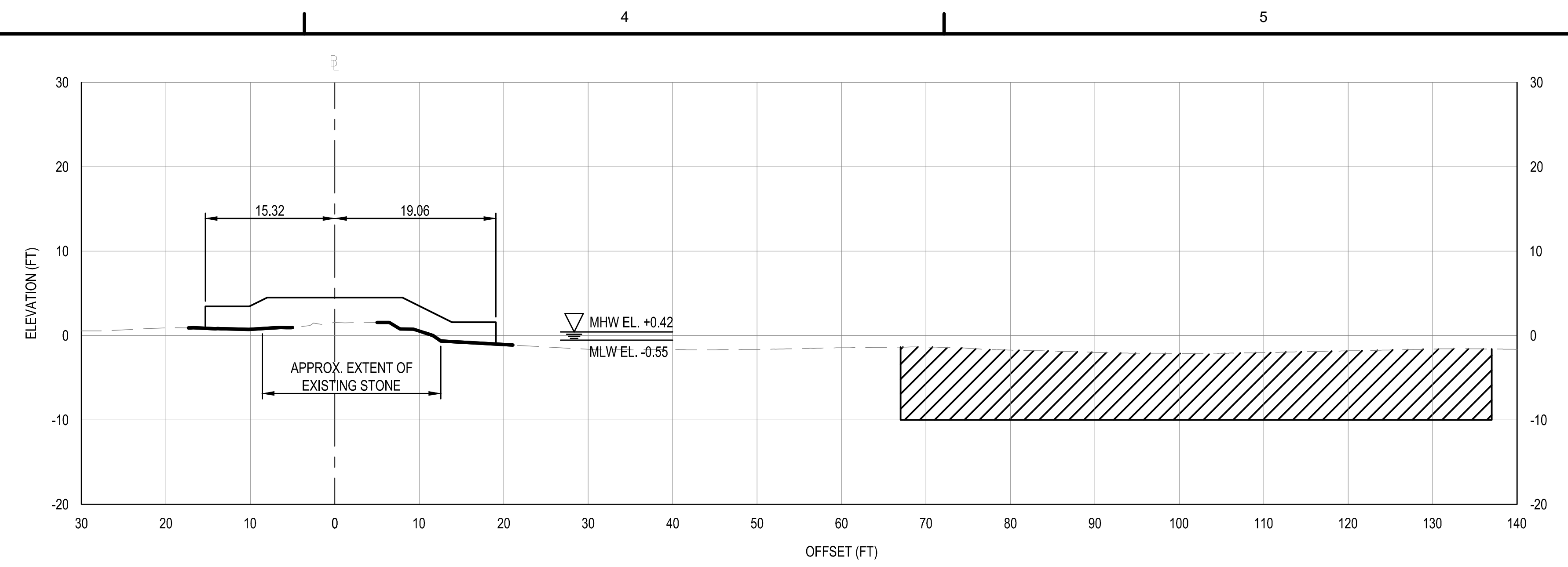
STA. 0+75



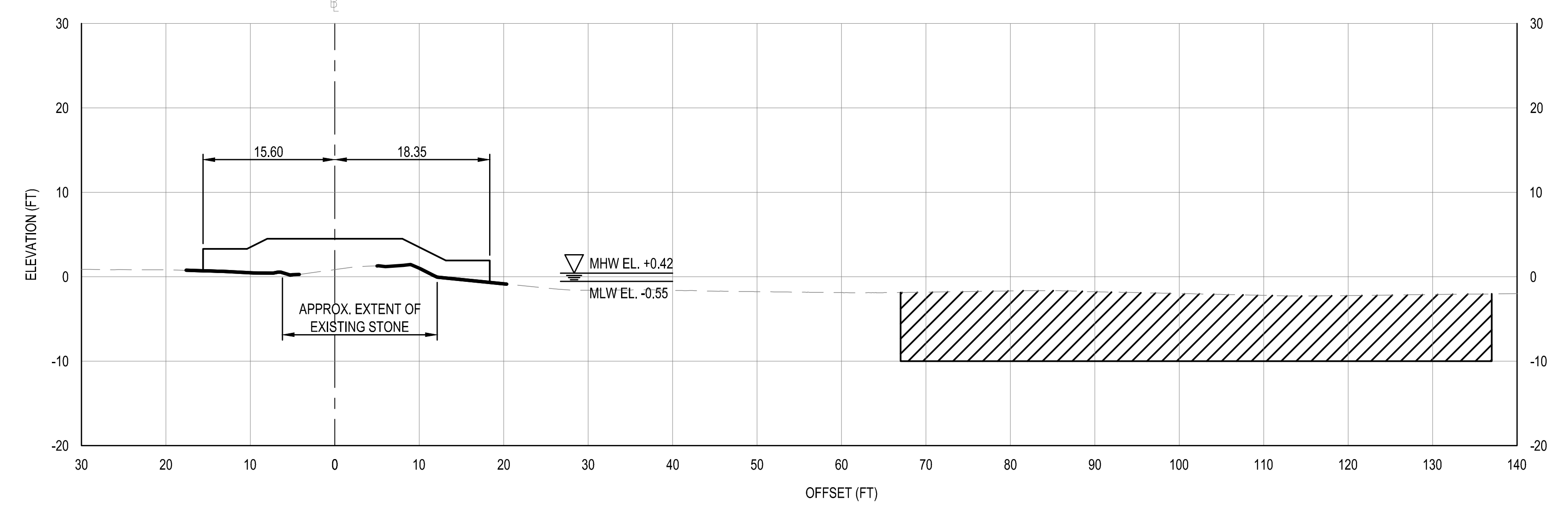
STA. 0+50



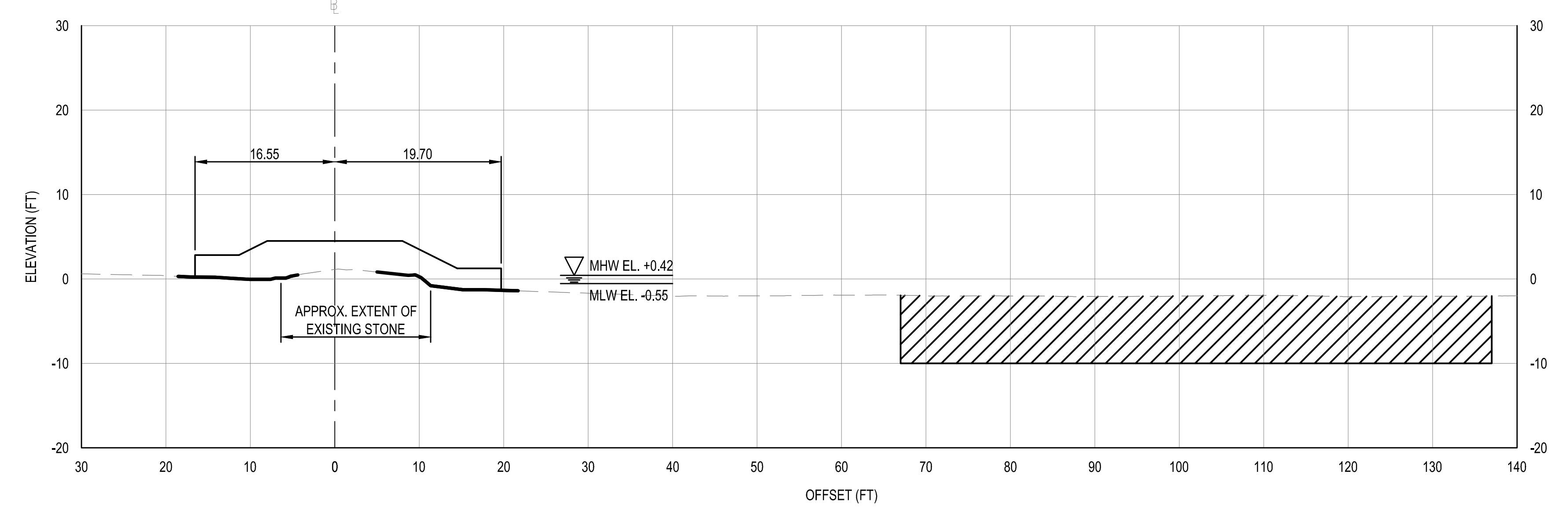
STA. 0+25



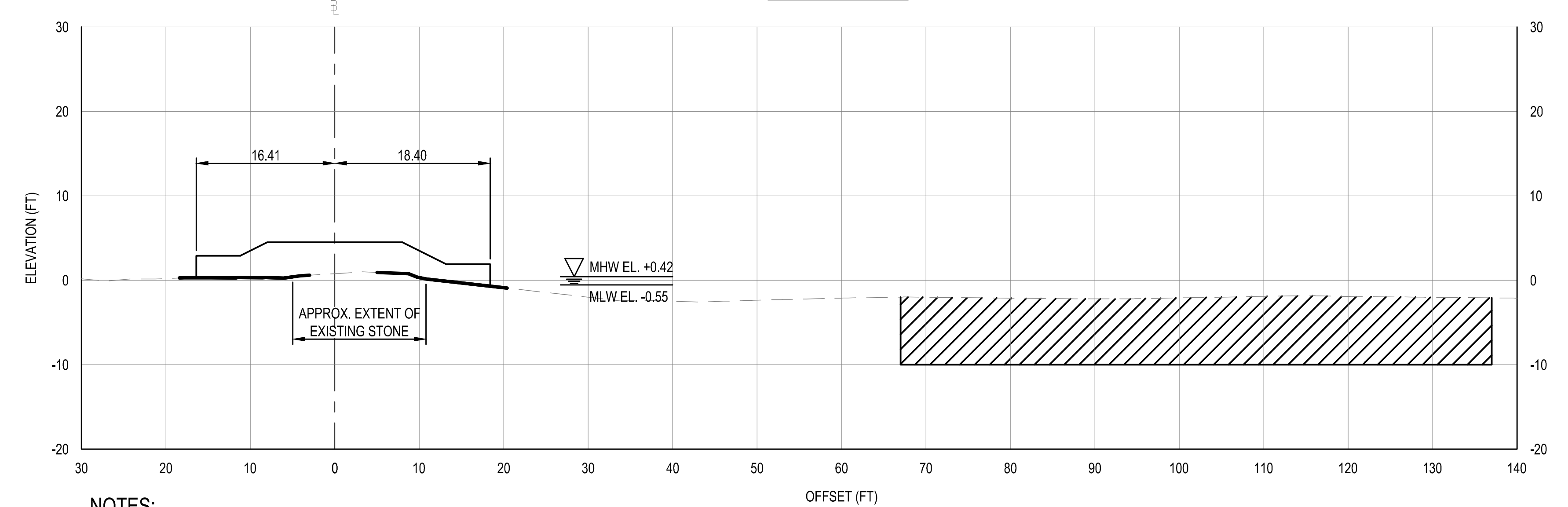
STA. 2+00



STA. 1+75



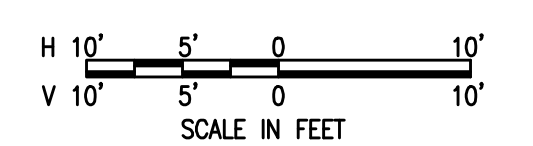
STA. 1+50



STA. 1+25

NOTES:

1. SEE SHEET C-001 FOR GENERAL INFORMATION.
2. SEE SHEET C-301 FOR TYPICAL SECTIONS.
3. GEOTEXTILE EXTENTS ARE APPROXIMATED FROM OCT 2020 NAB USAGE SURVEYS AND MAY BE EXTENDED OR REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
4. CAPSTONE TEMPLATE MAY BE REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
5. SEE SHEET C-501 FOR GROUTING DETAILS.

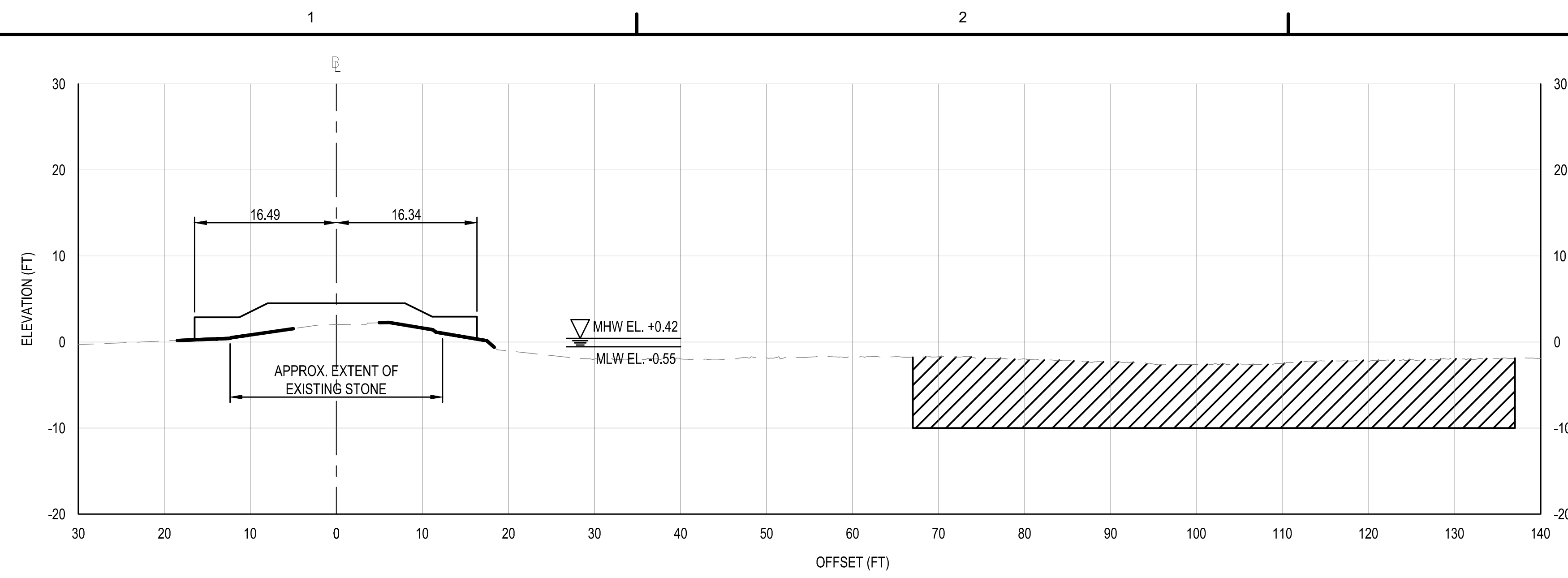
[illegible]

U.S. ARMY CORPS OF ENGINEERS AS SHOWN PHILADELPHIA DISTRICT	PLOT SCALE	AS SHOWN	FILE NAME	26 MARCH 2020
				30"X42"
BALTIMORE DISTRICT	DAN	TEH	CONTRACT NUMBER	30"X42"

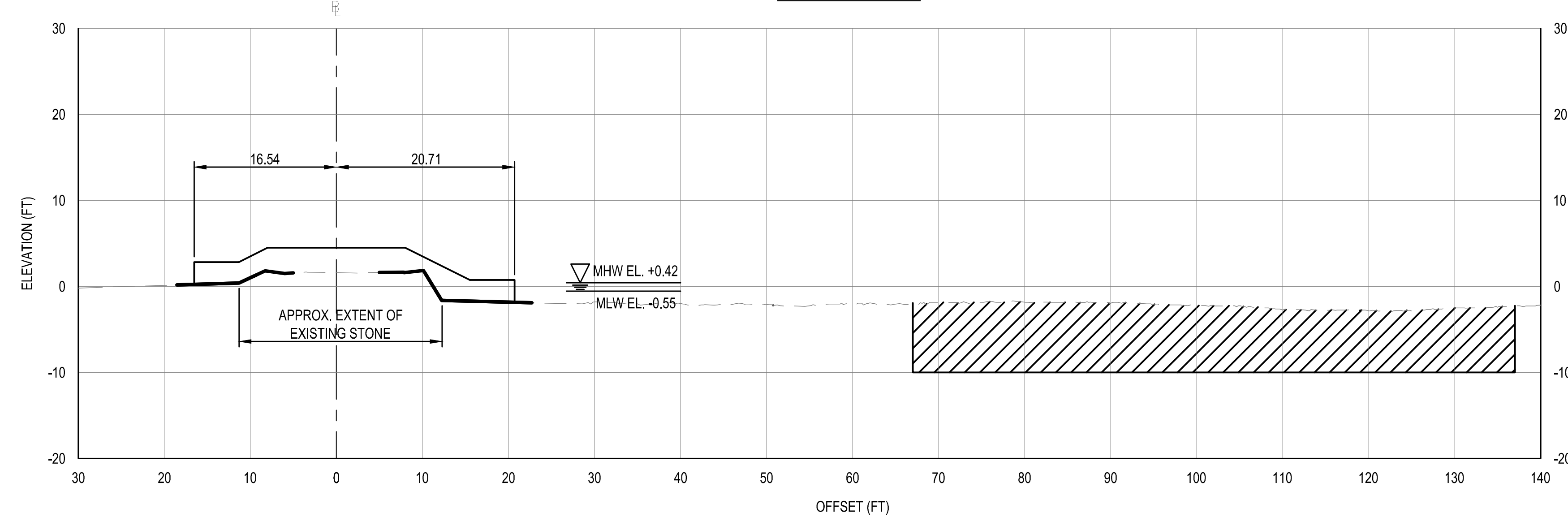
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 0+25 TO 2+00

SHEET NUMBER

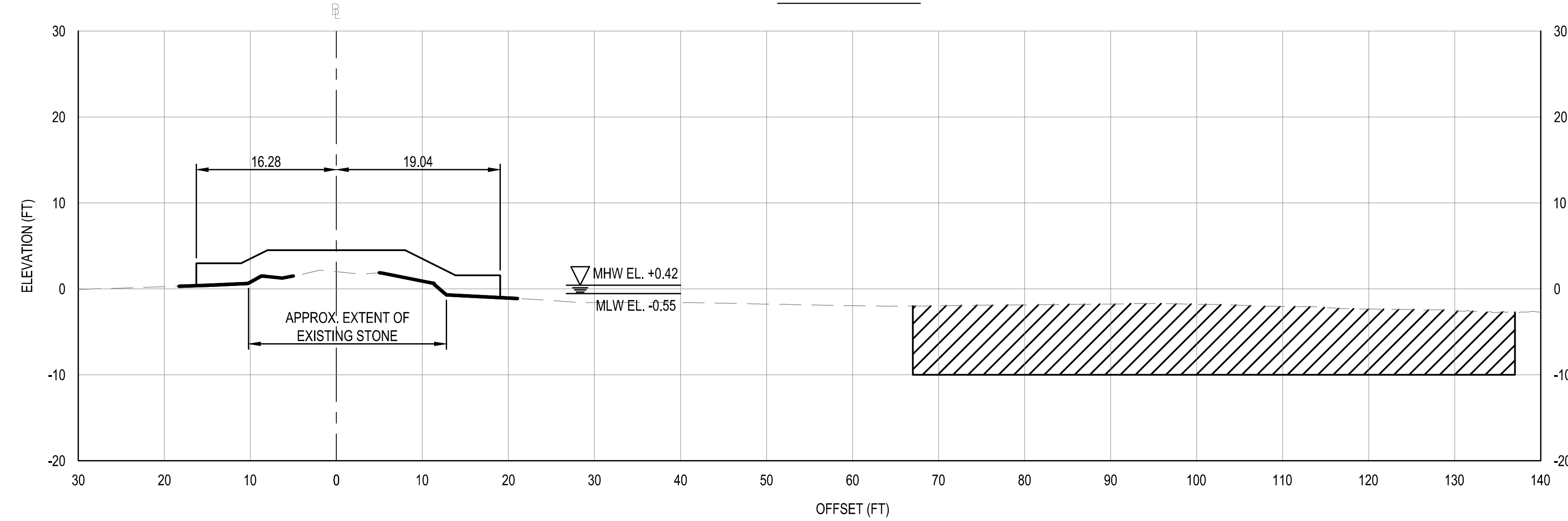
C-302



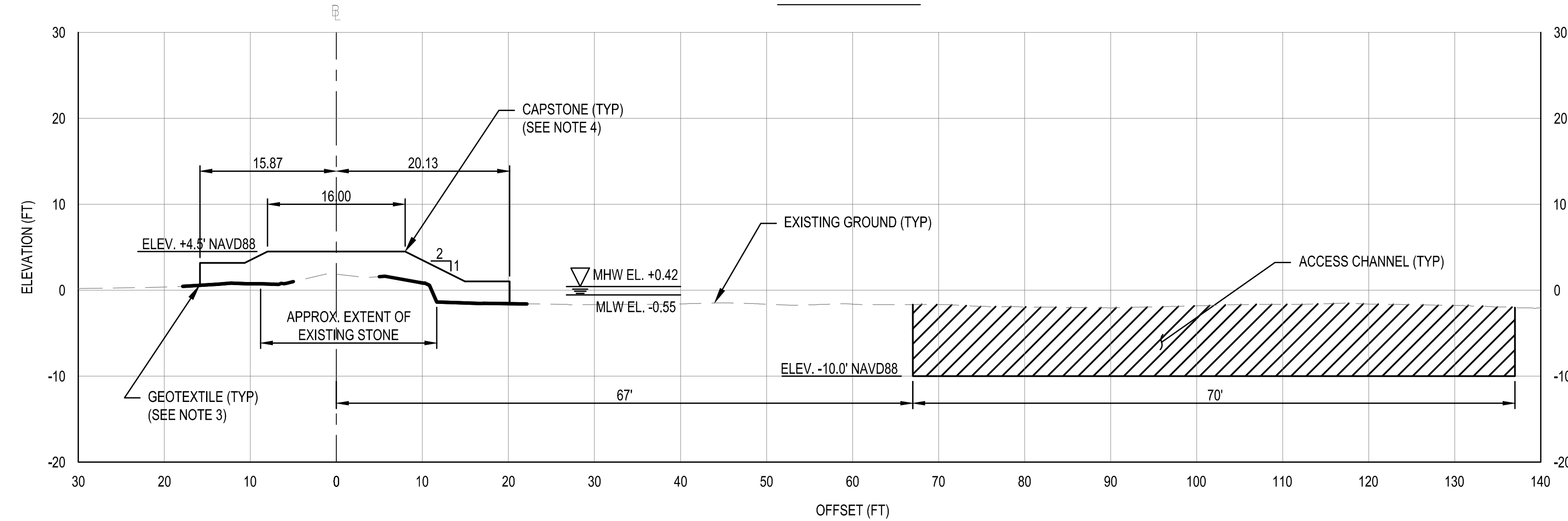
STA. 3+00



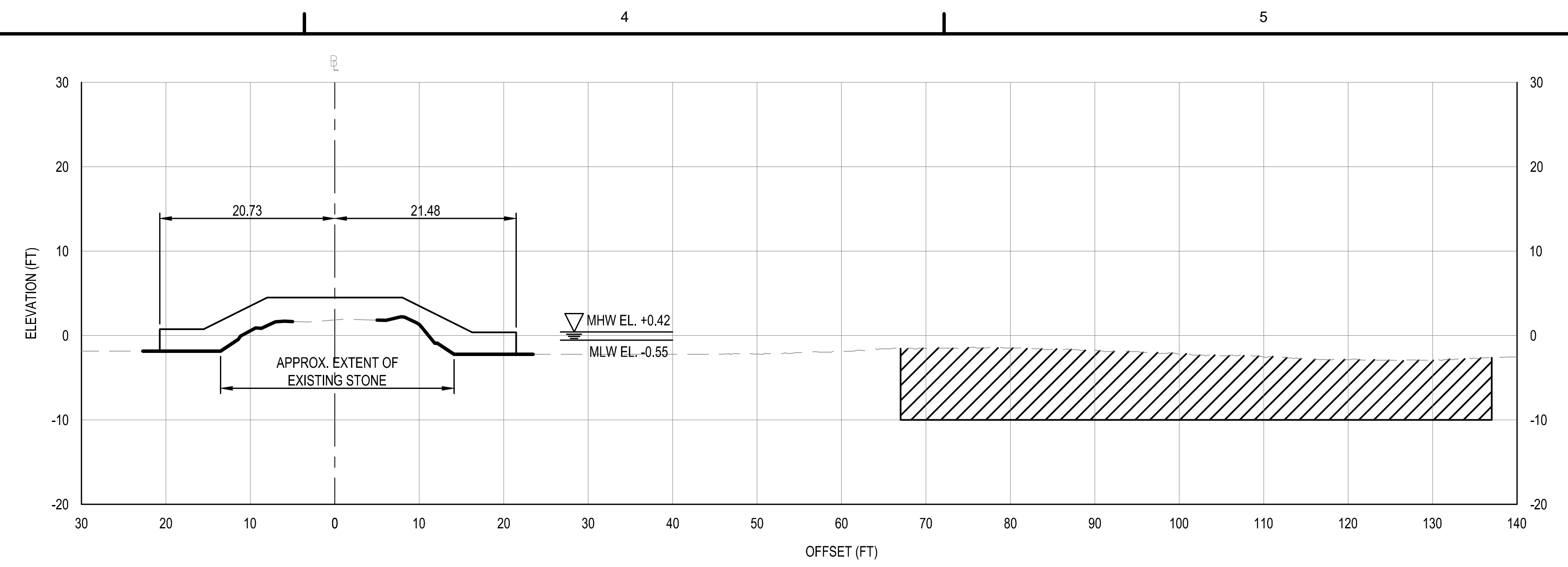
STA. 2+75



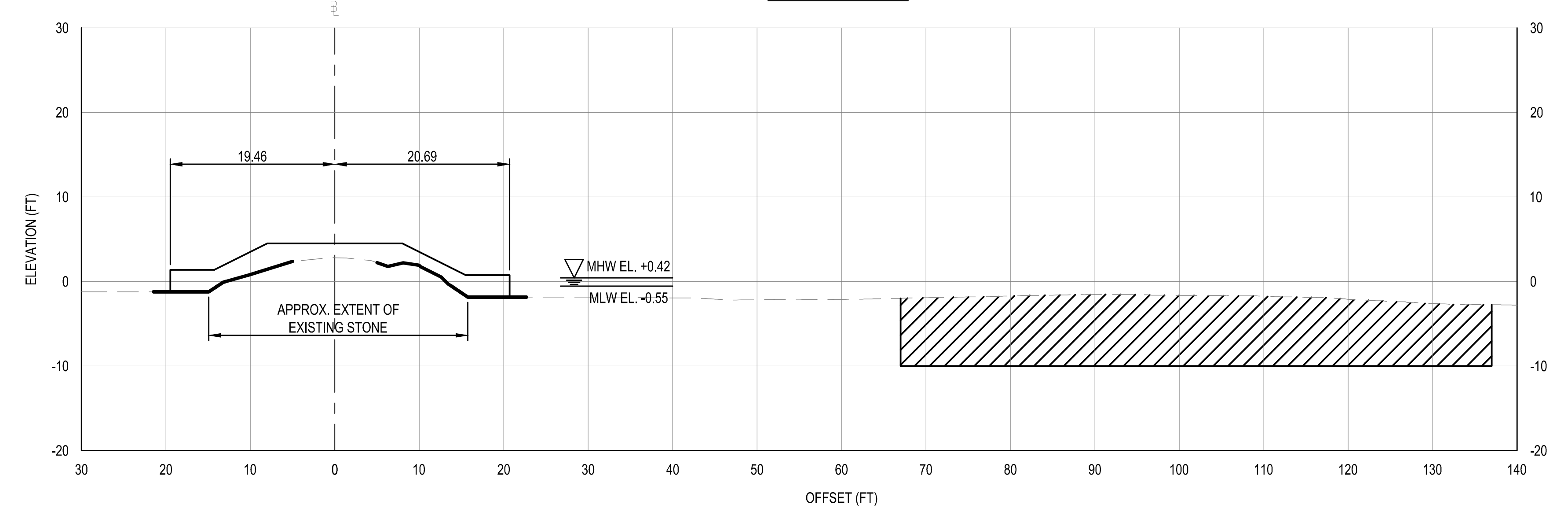
STA. 2+50



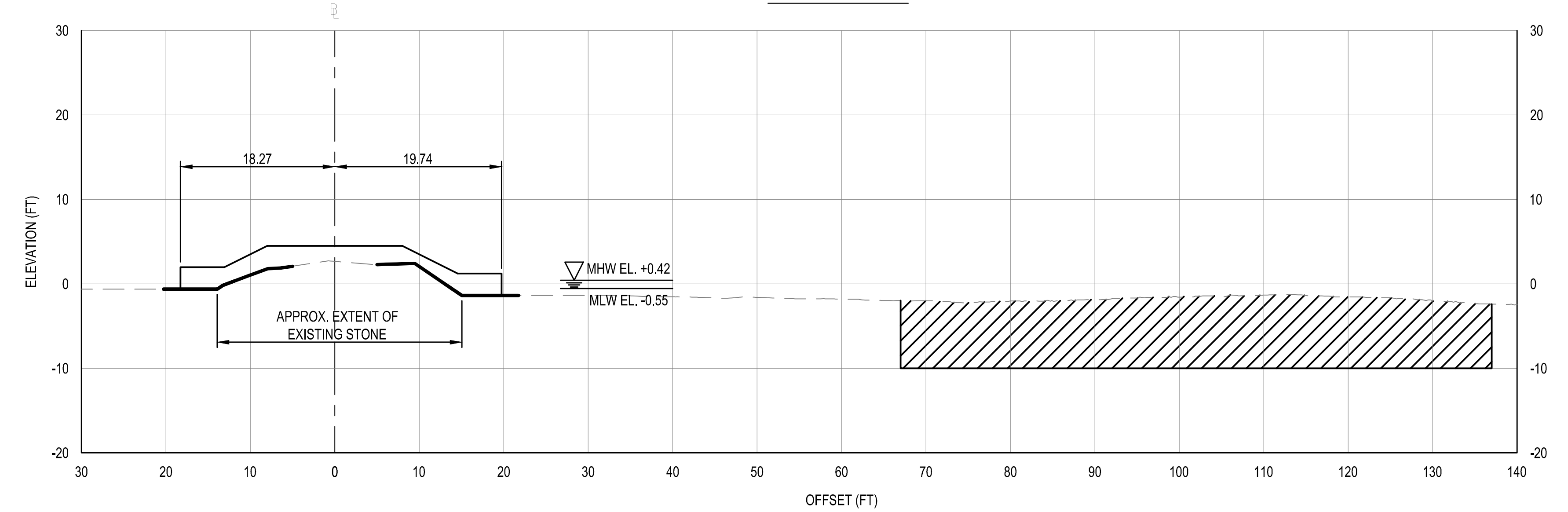
STA. 2+25



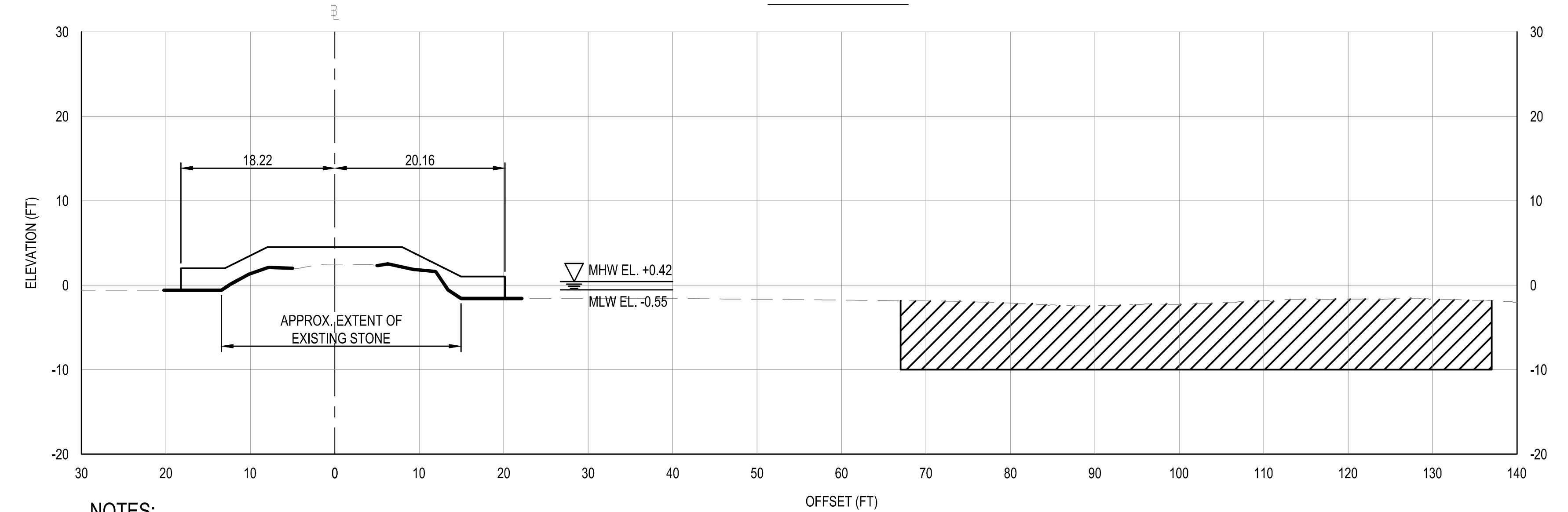
STA. 4+00



STA. 3+75



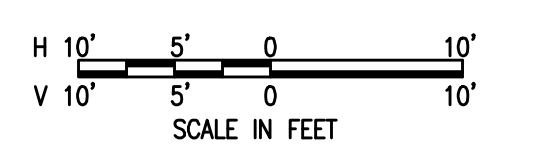
STA. 3+50



STA. 3+25

NOTES:

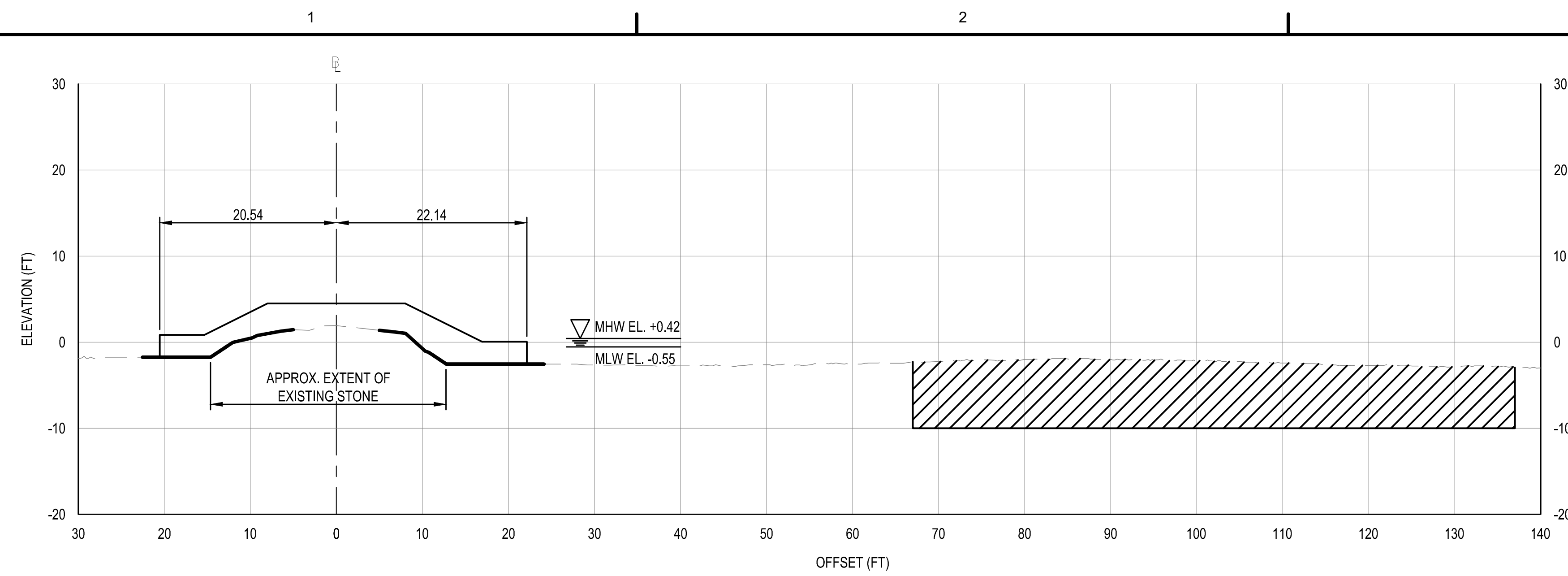
1. SEE SHEET C-001 FOR GENERAL INFORMATION.
2. SEE SHEET C-301 FOR TYPICAL SECTIONS.
3. GEOTEXTILE EXTENTS ARE APPROXIMATED FROM OCT 2020 NAB USAGE SURVEYS AND MAY BE EXTENDED OR REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
4. CAPSTONE TEMPLATE MAY BE REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
5. SEE SHEET C-501 FOR GROUTING DETAILS.

[illegible][illegible]

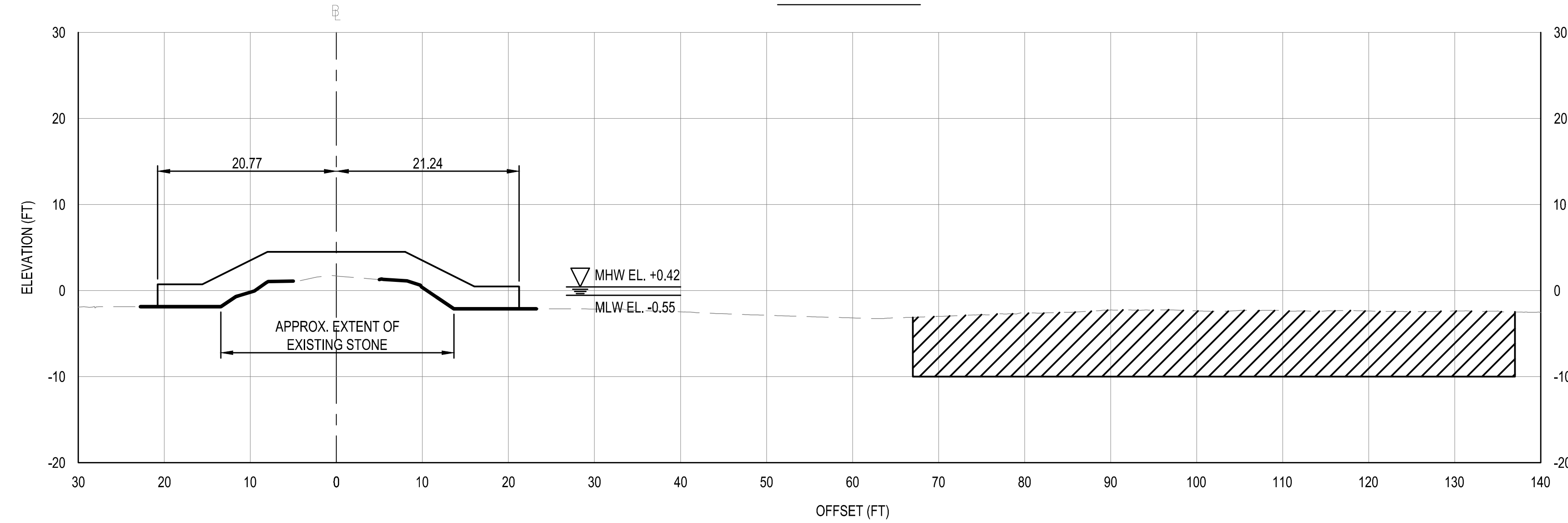
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 2+25 TO STA. 4+00

SHEET NUMBER

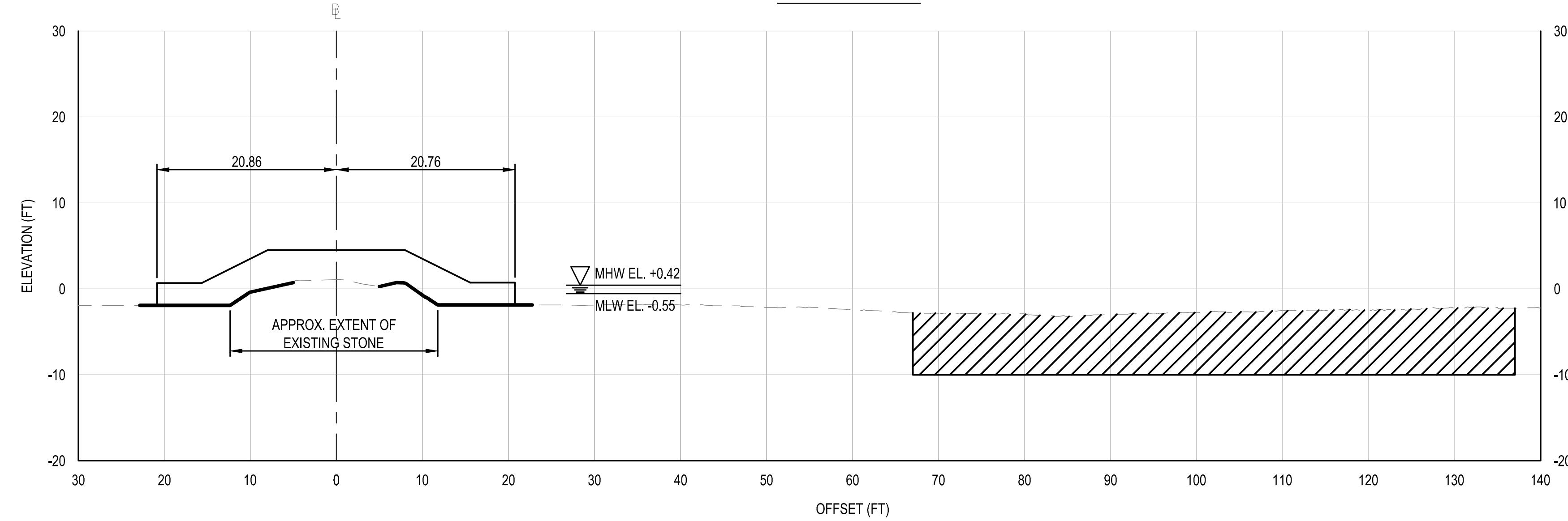
C-303



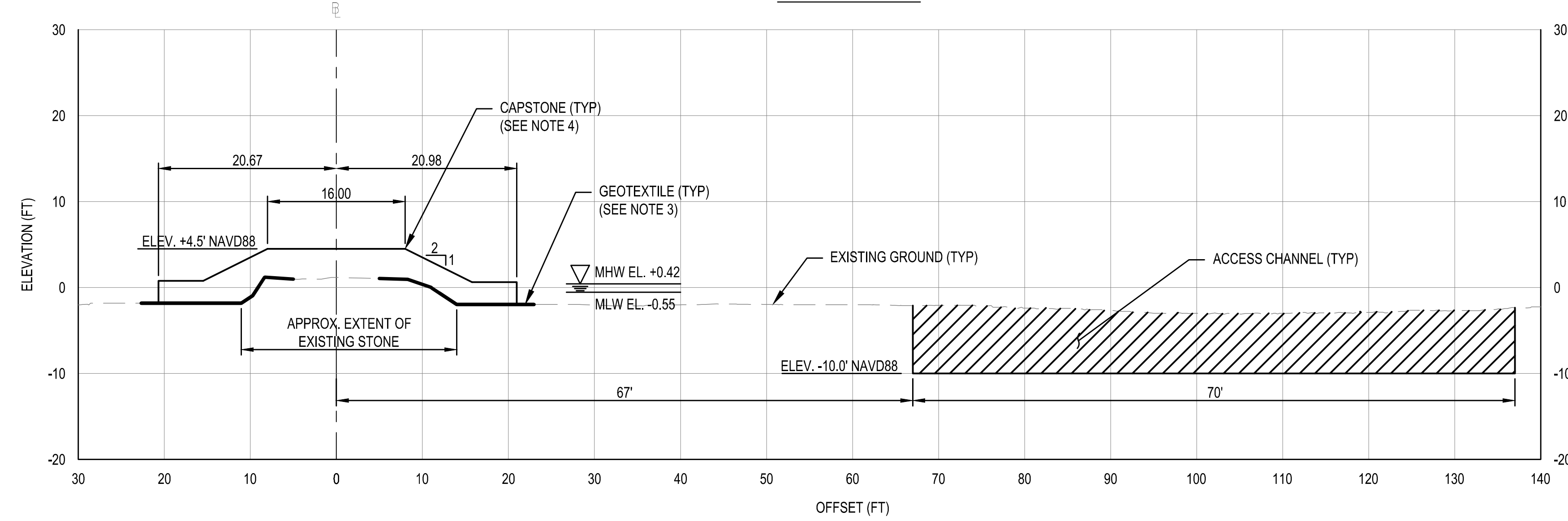
STA. 5+00



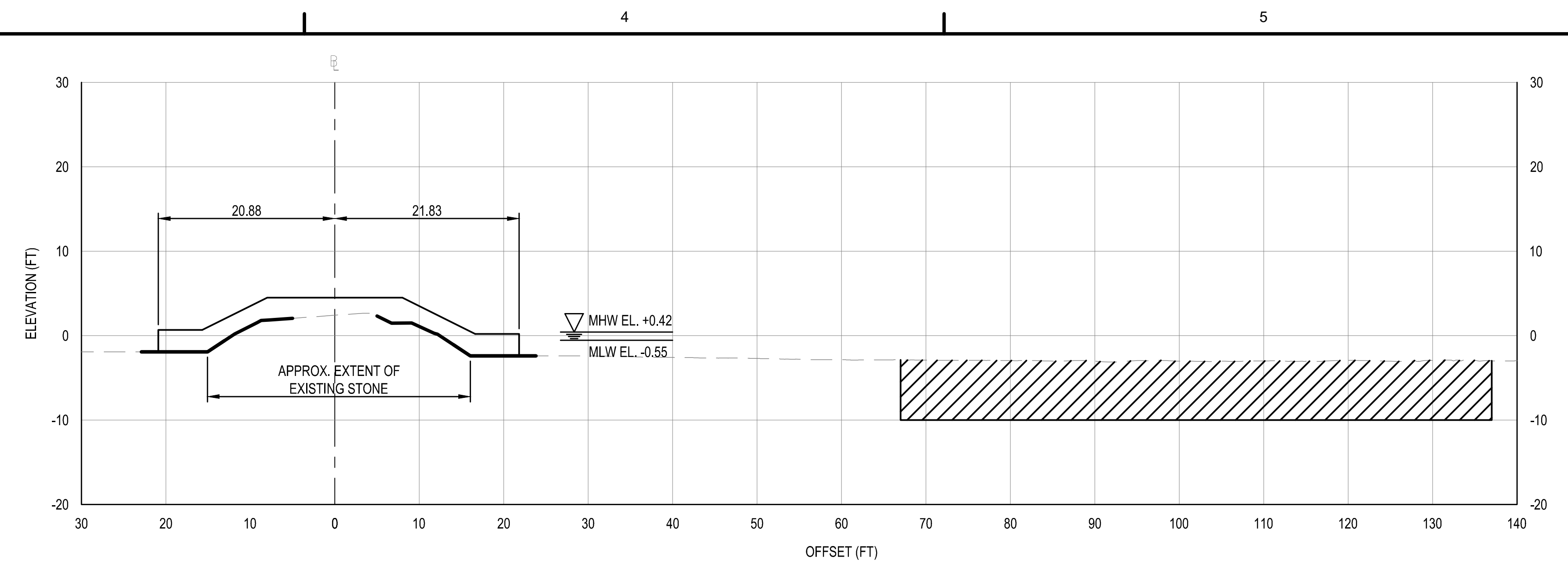
STA. 4+75



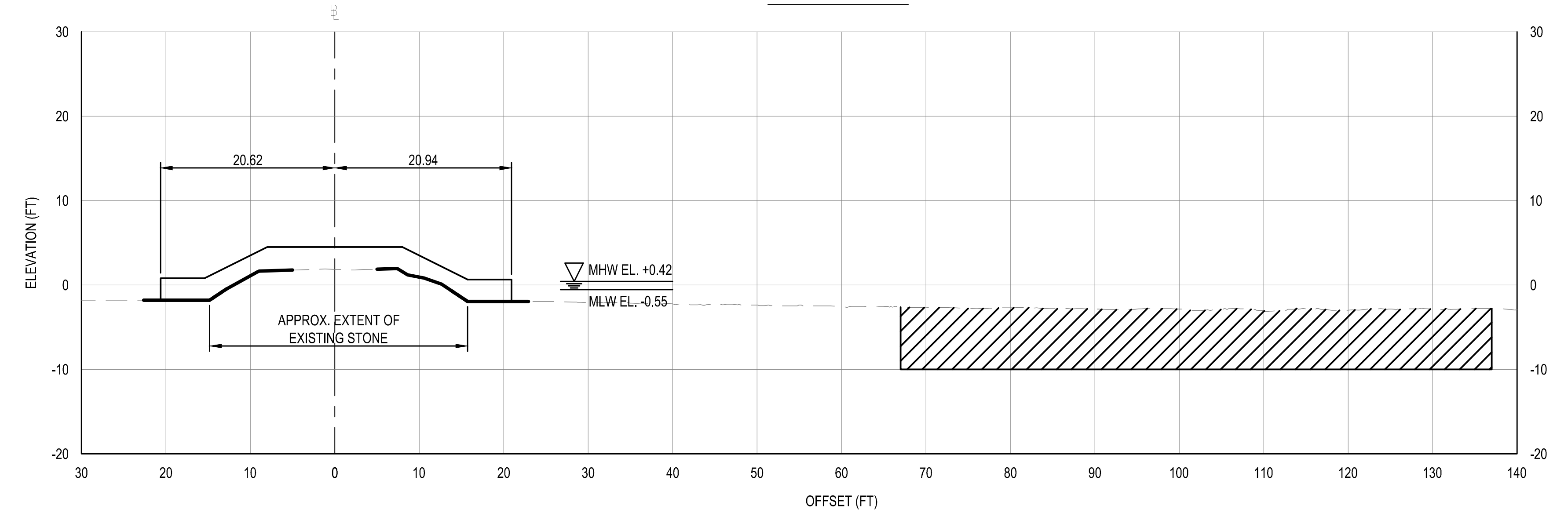
STA. 4+50



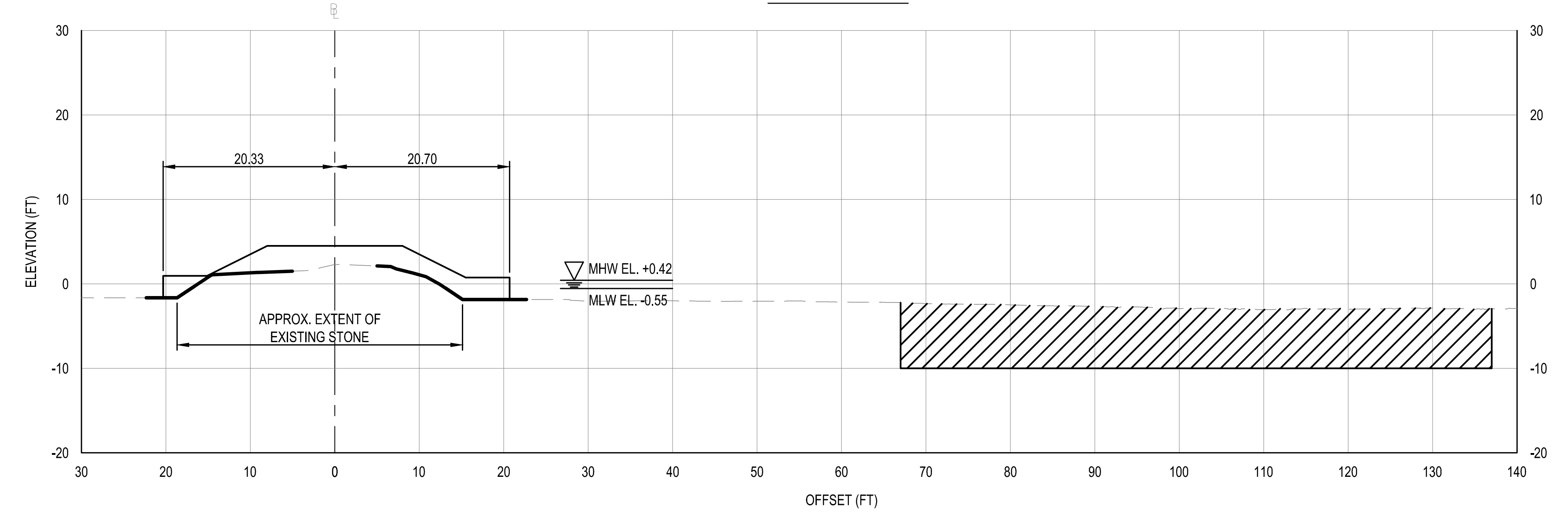
STA. 4+25



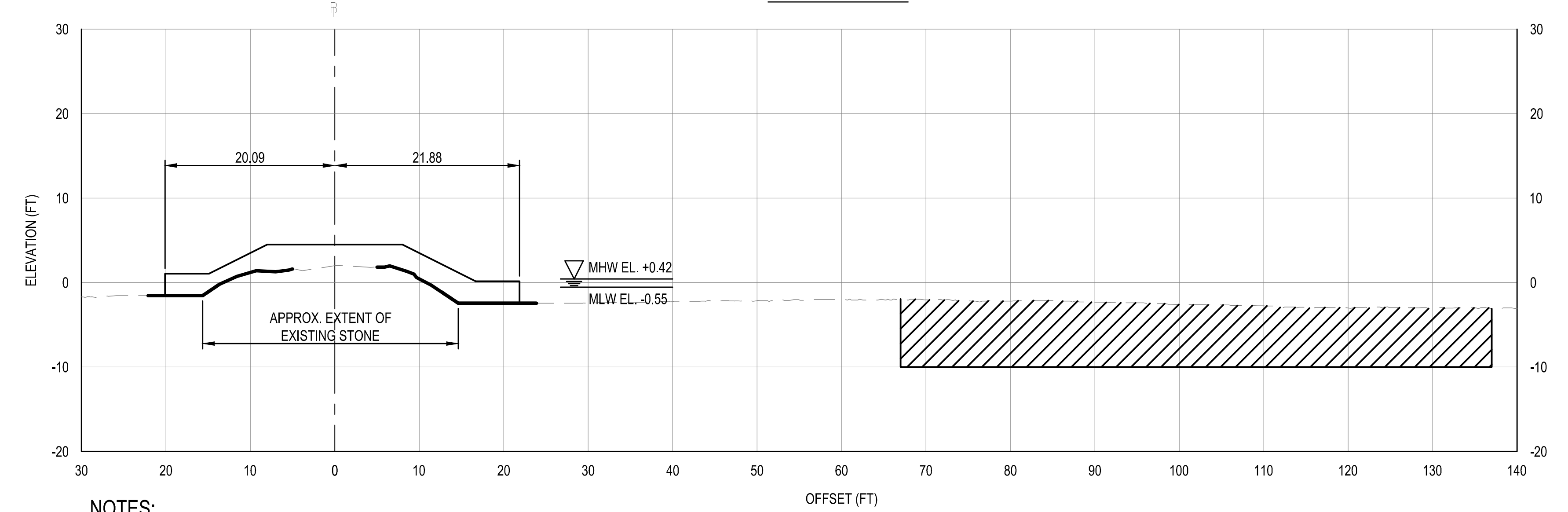
STA. 6+00



STA. 5+75



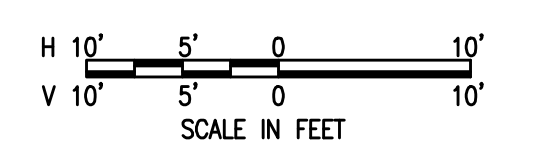
STA. 5+50



STA. 5+25

NOTES:

1. SEE SHEET C-001 FOR GENERAL INFORMATION.
2. SEE SHEET C-301 FOR TYPICAL SECTIONS.
3. GEOTEXTILE EXTENTS ARE APPROXIMATED FROM OCT 2020 NAB USAGE SURVEYS AND MAY BE EXTENDED OR REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
4. CAPSTONE TEMPLATE MAY BE REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
5. SEE SHEET C-501 FOR GROUTING DETAILS.

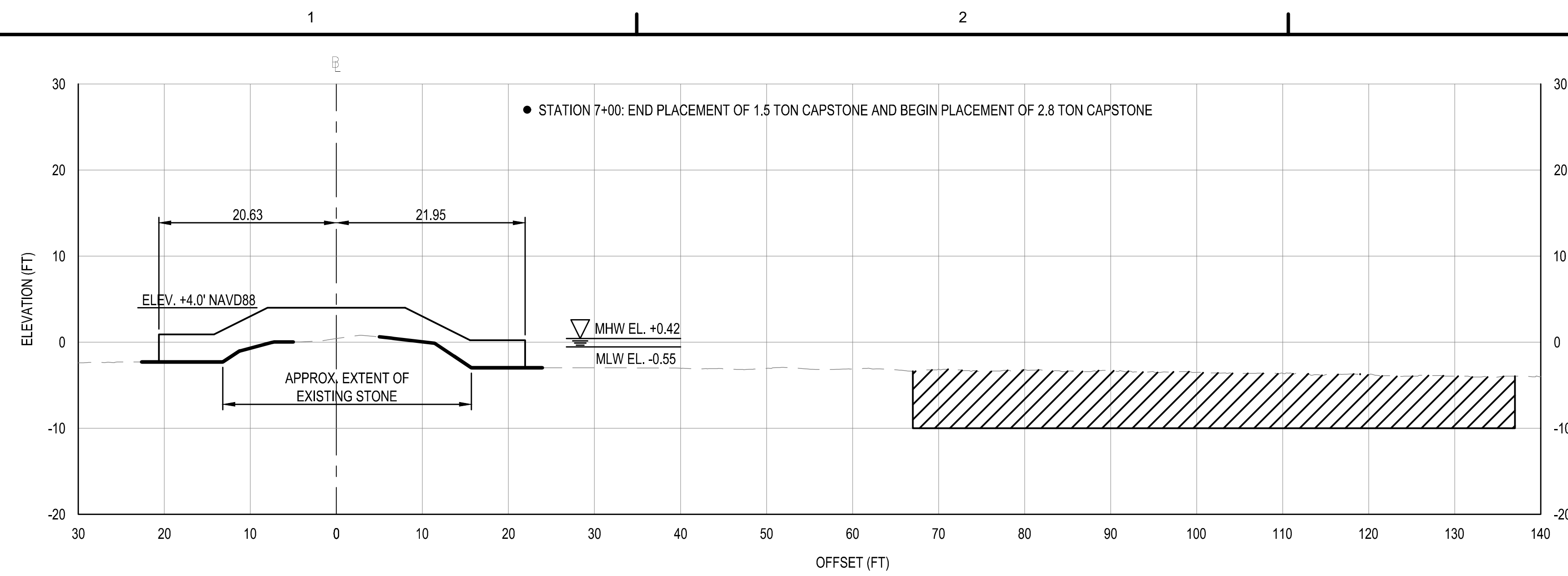
[illegible]

U.S. ARMY CORPS OF ENGINEERS AS SHOWN PHILADELPHIA DISTRICT	PLOT SCALE	AS SHOWN	FILE NAME	CONTRACT NUMBER	26 MARCH 2020
BALTIMORE DISTRICT	DAN	BY: JET	REVIEWED BY: JET	CALCULATION NUMBER:	3704
CROSS SECTIONS: STA. 4+25 TO 6+00 .dwg				30"x42"	

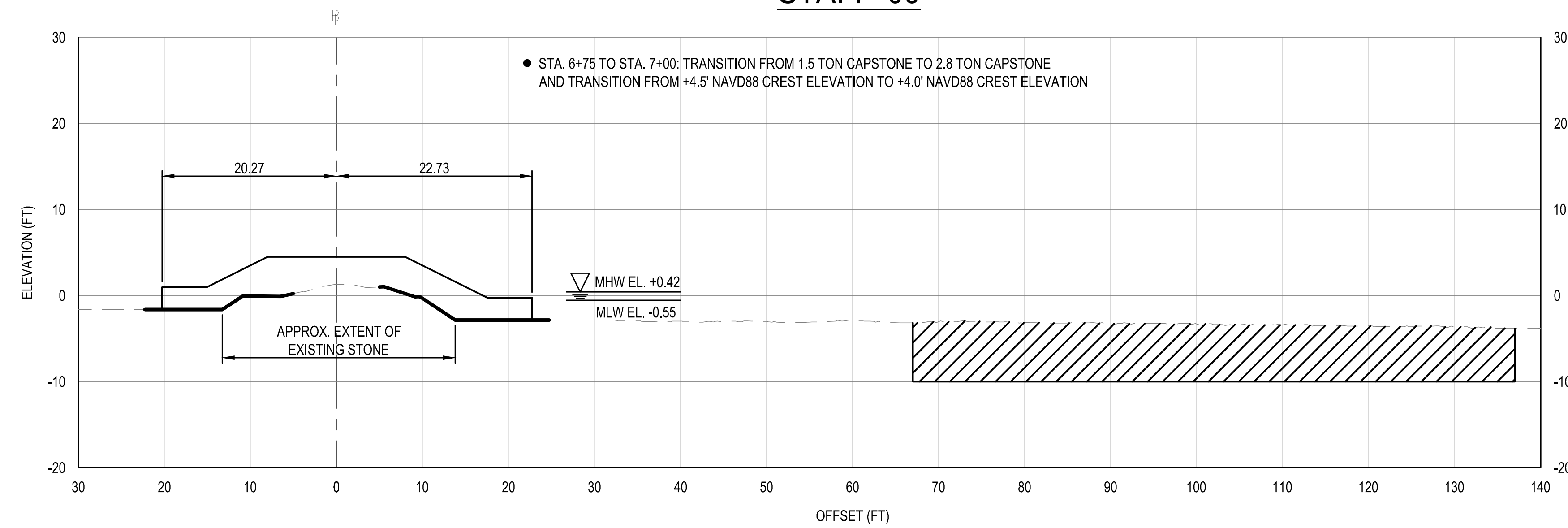
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 4+25 TO 6+00

SHEET NUMBER

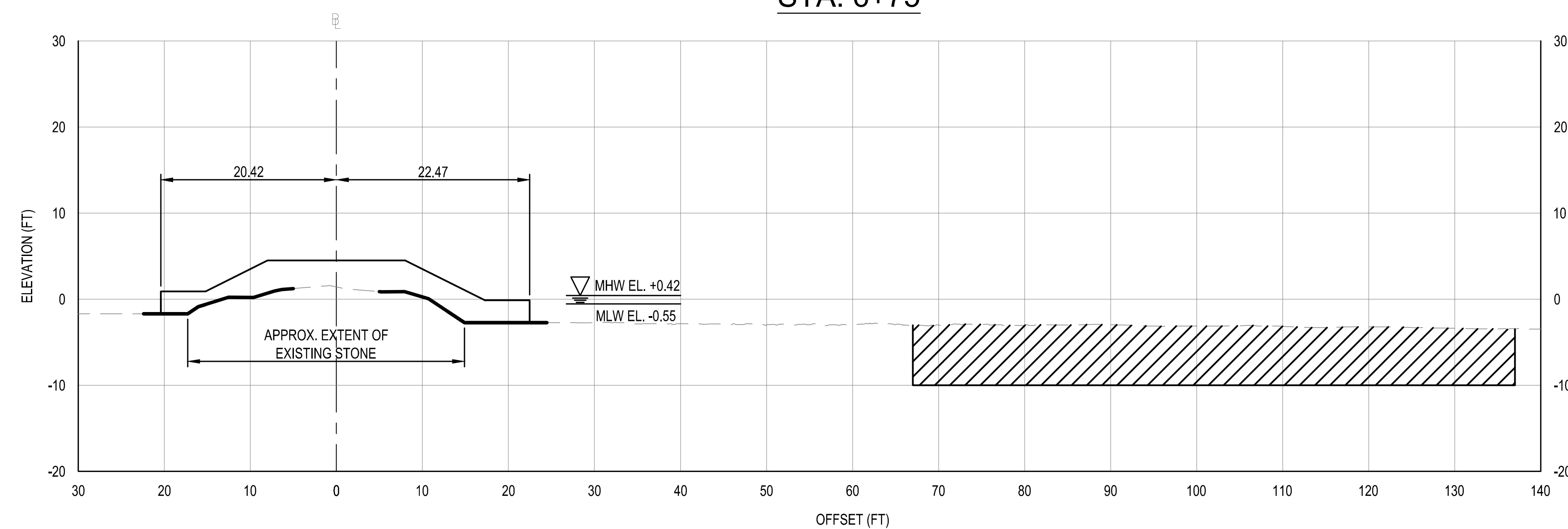
C-304



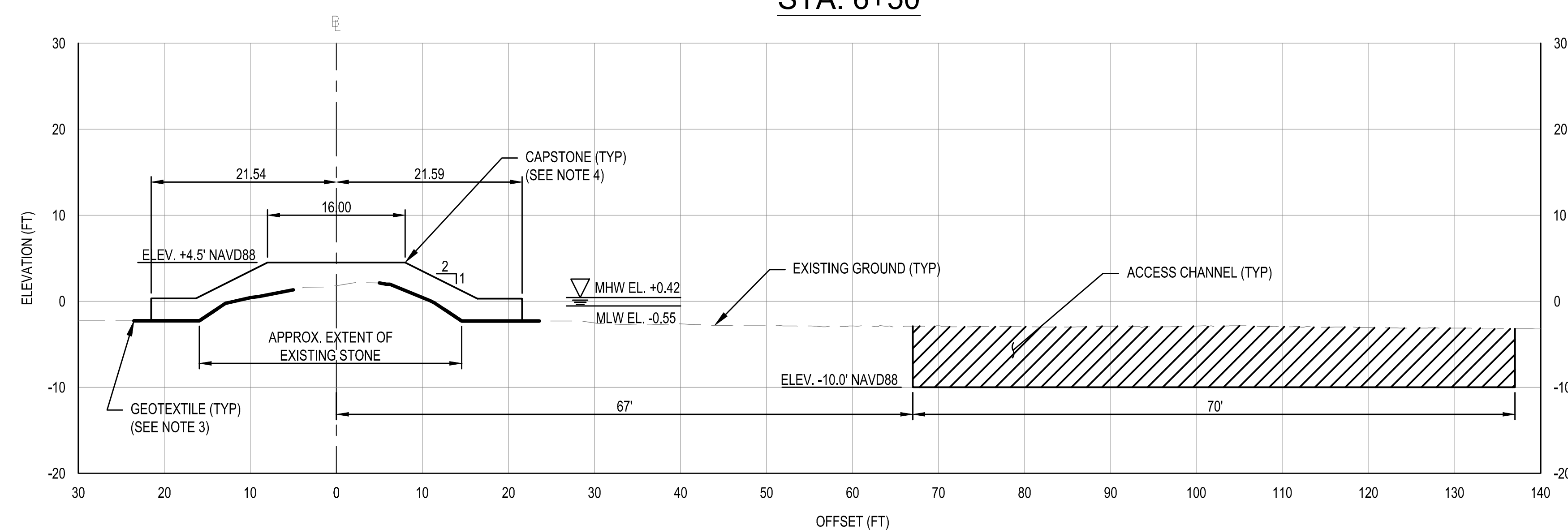
STA. 7+00



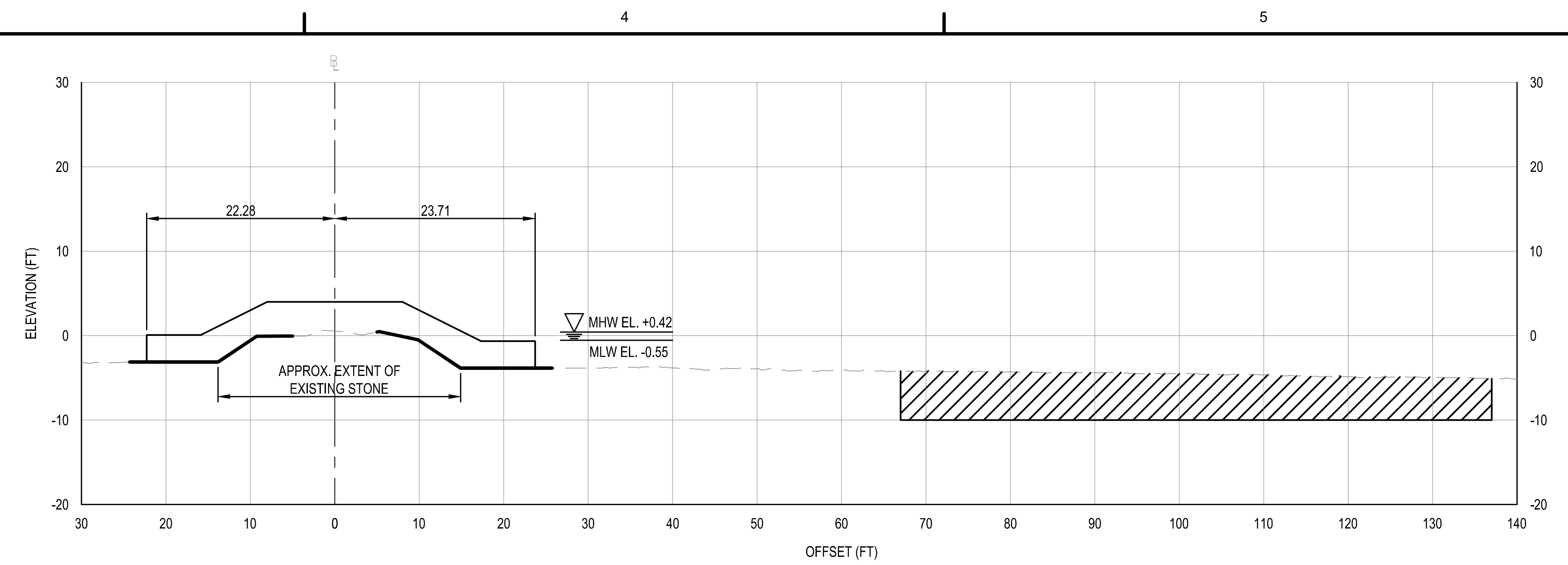
STA. 6+75



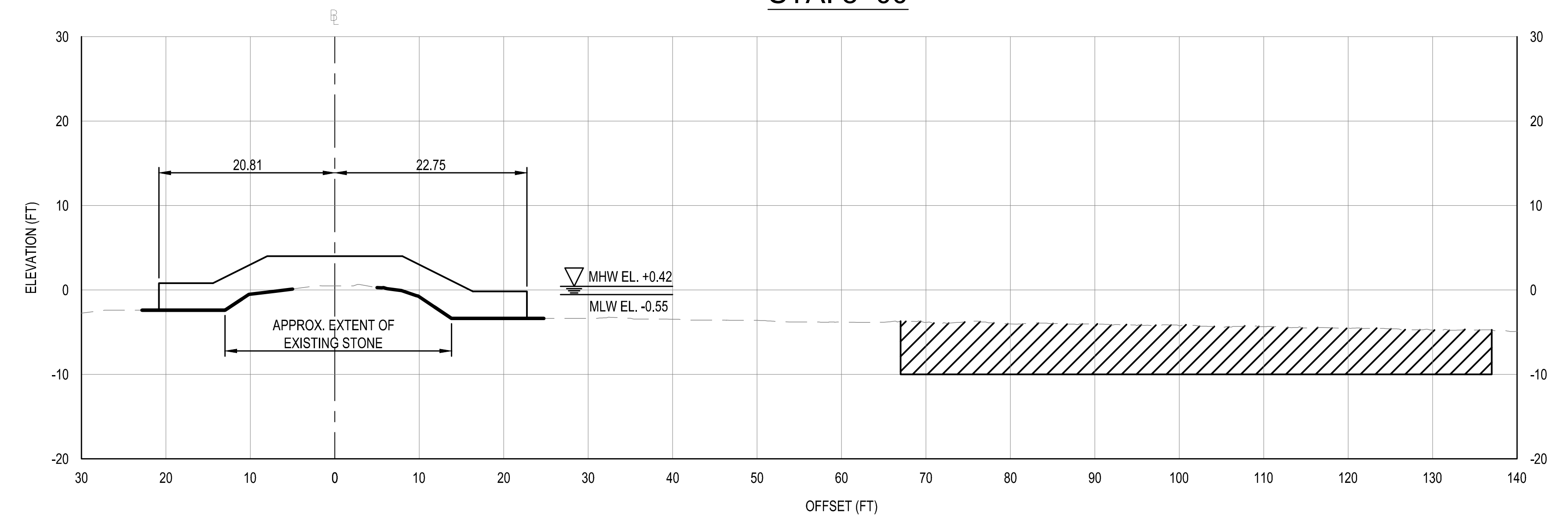
STA. 6+50



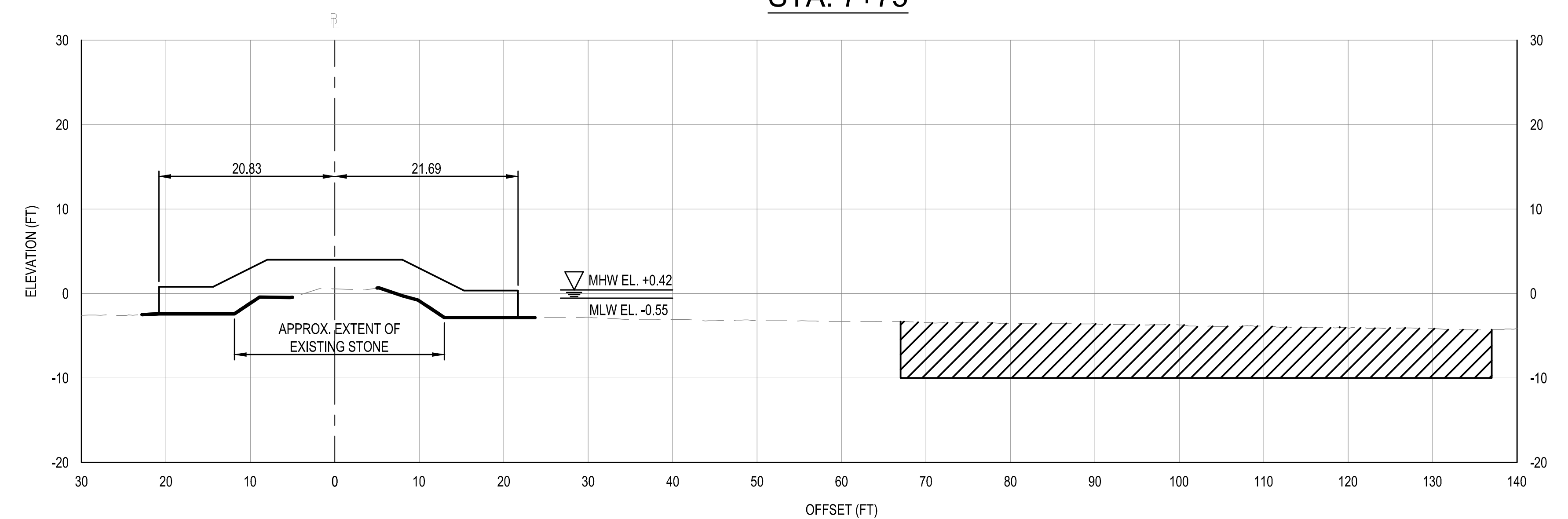
STA. 6+25



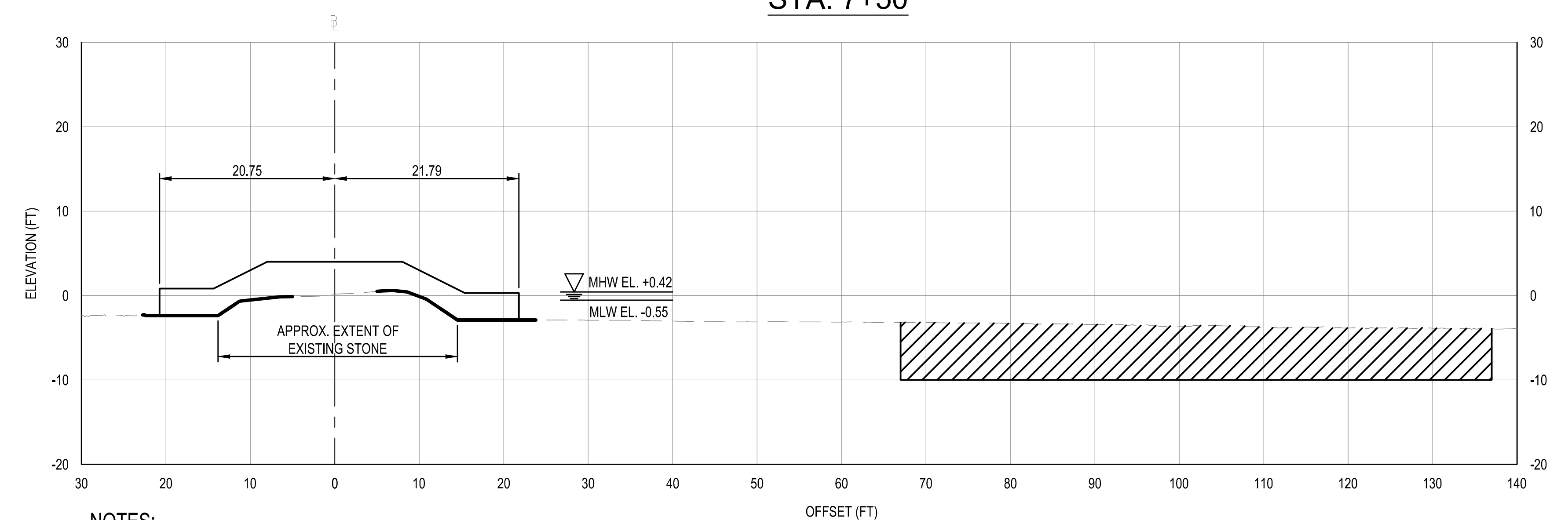
STA. 8+00



STA. 7+75



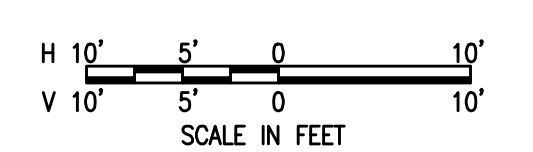
STA. 7+50



STA. 7+25

NOTES:

1. SEE SHEET C-001 FOR GENERAL INFORMATION.
2. SEE SHEET C-301 FOR TYPICAL SECTIONS.
3. GEOTEXTILE EXTENTS ARE APPROXIMATED FROM OCT 2020 NAB USAGE SURVEYS AND MAY BE EXTENDED OR REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
4. CAPSTONE TEMPLATE MAY BE REVISED FOLLOWING RECEIPT AND ACCEPTANCE OF PRE-CONSTRUCTION SURVEYS.
5. SEE SHEET C-501 FOR GROUTING DETAILS.

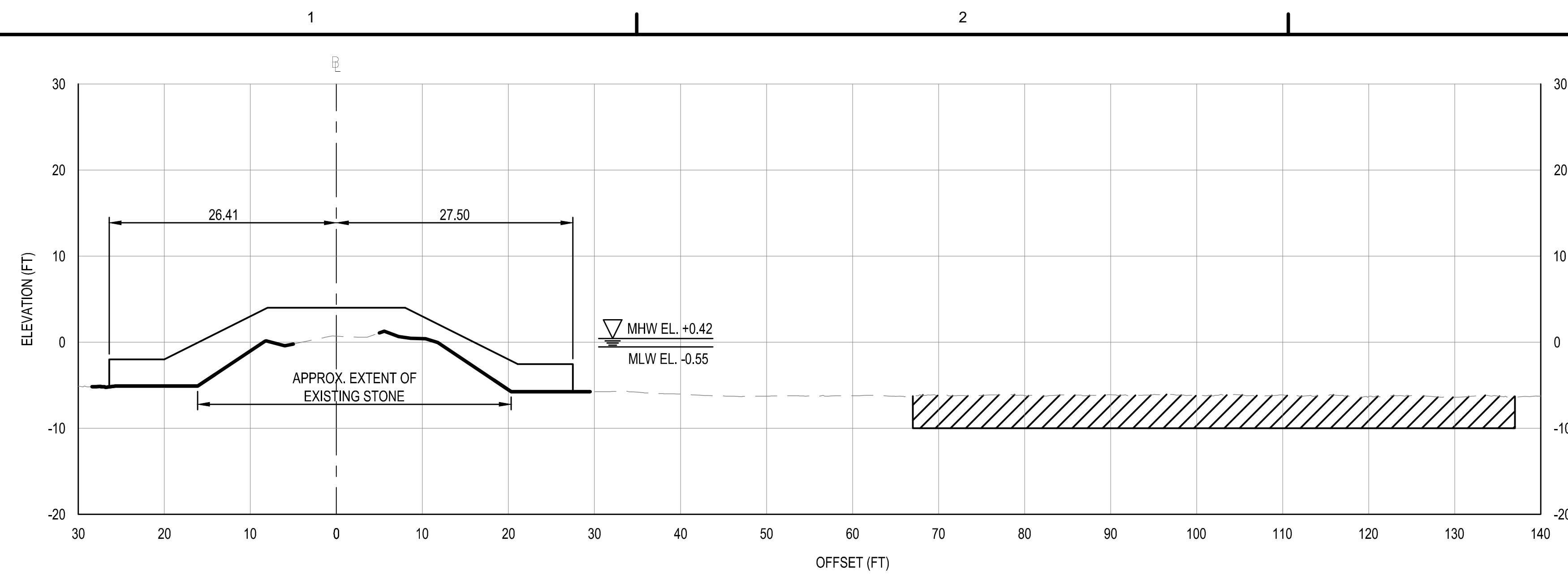
[illegible]

20 MARCH 2021	REVIEWED BY:	CONTRACT NUMBER:
STA 6+25 TO STA 6+50	DATE:	
BALTIMORE DISTRICT	TEH	
U.S. ARMY CORPS OF ENGINEERS	PLLOT SCALE:	
PHILADELPHIA DISTRICT	AS SHOWN	
	DATE:	
	3/9/22	
	CROSS SECTIONS: STA 6+25 TO STA 6+50	

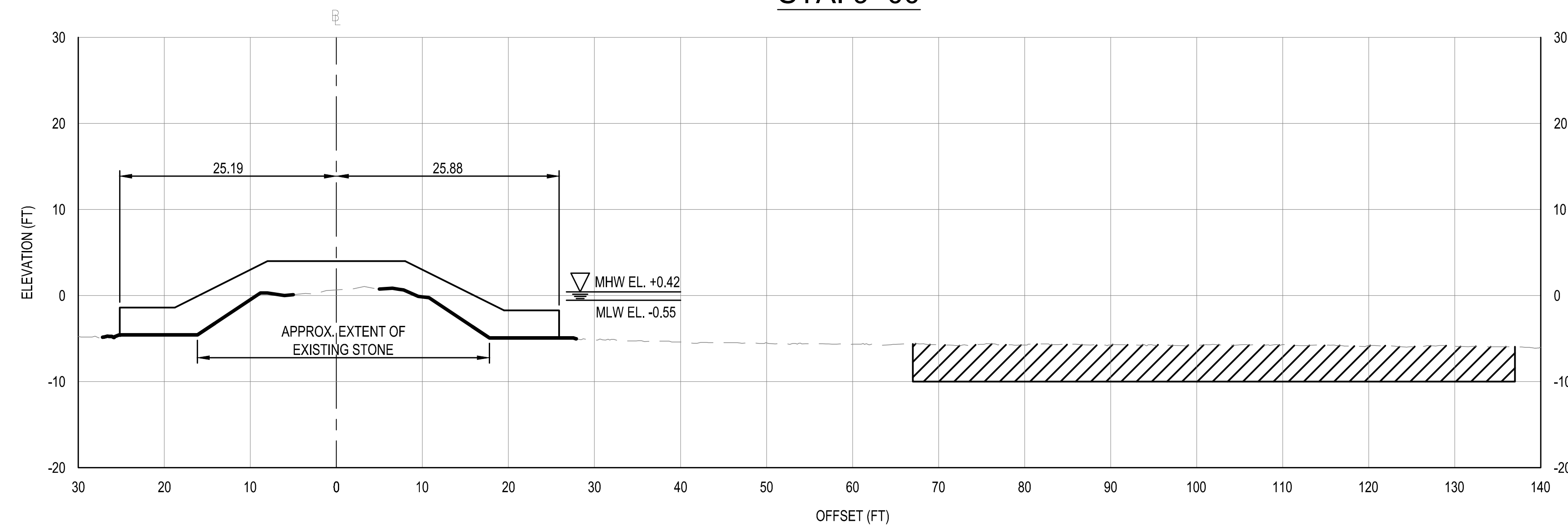
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 6+25 TO STA. 8+00

SHEET NUMBER

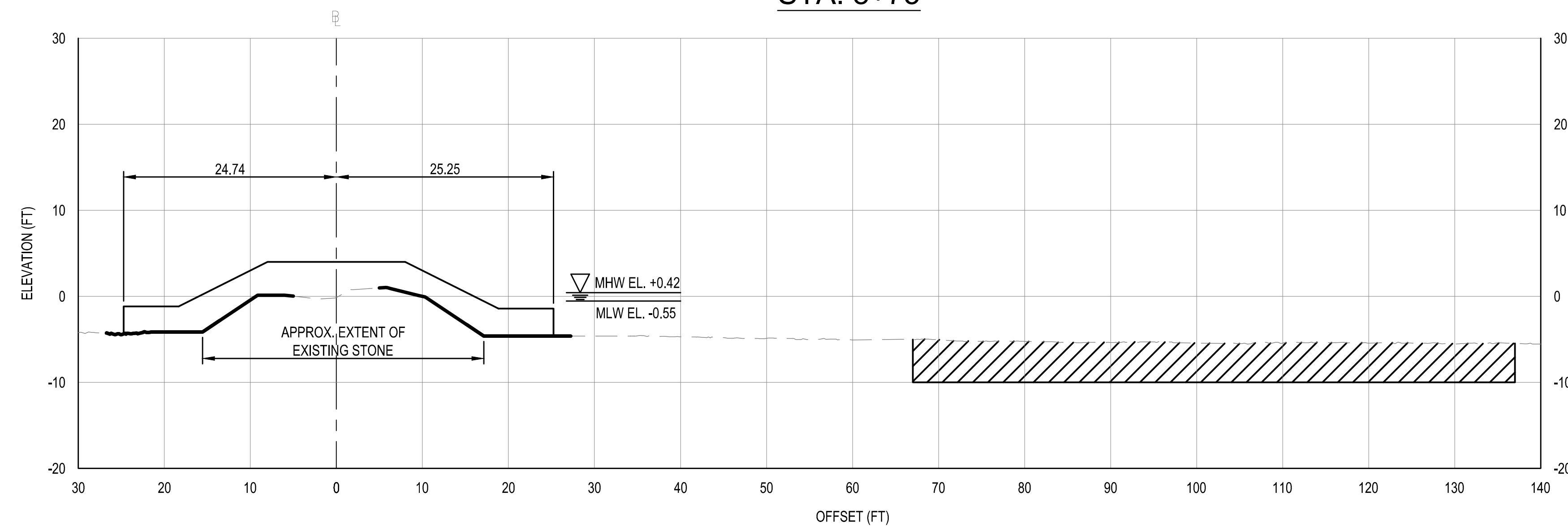
C-305



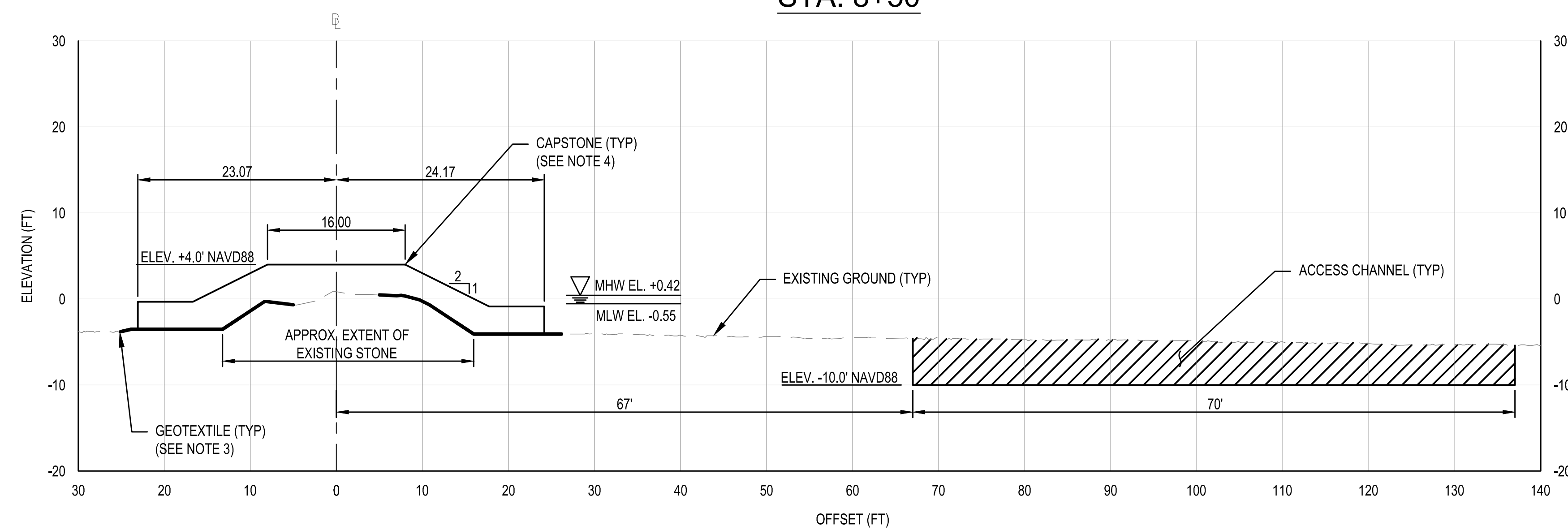
STA. 9+00



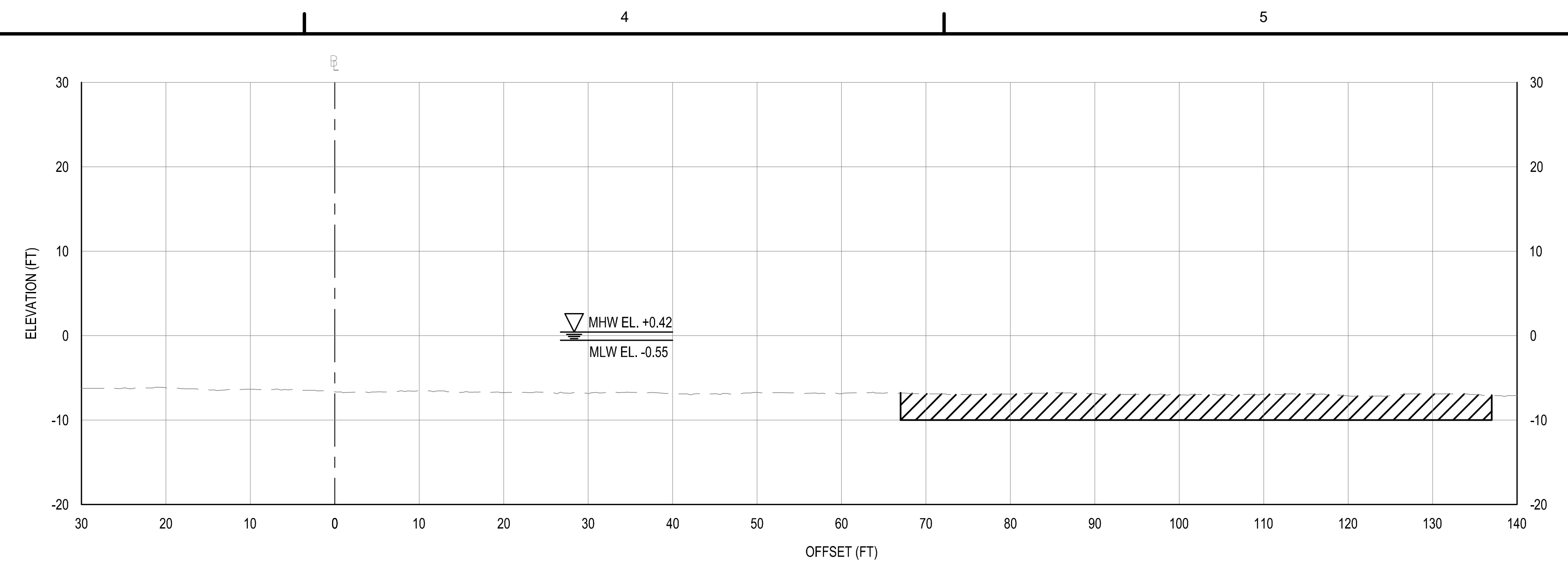
STA. 8+75



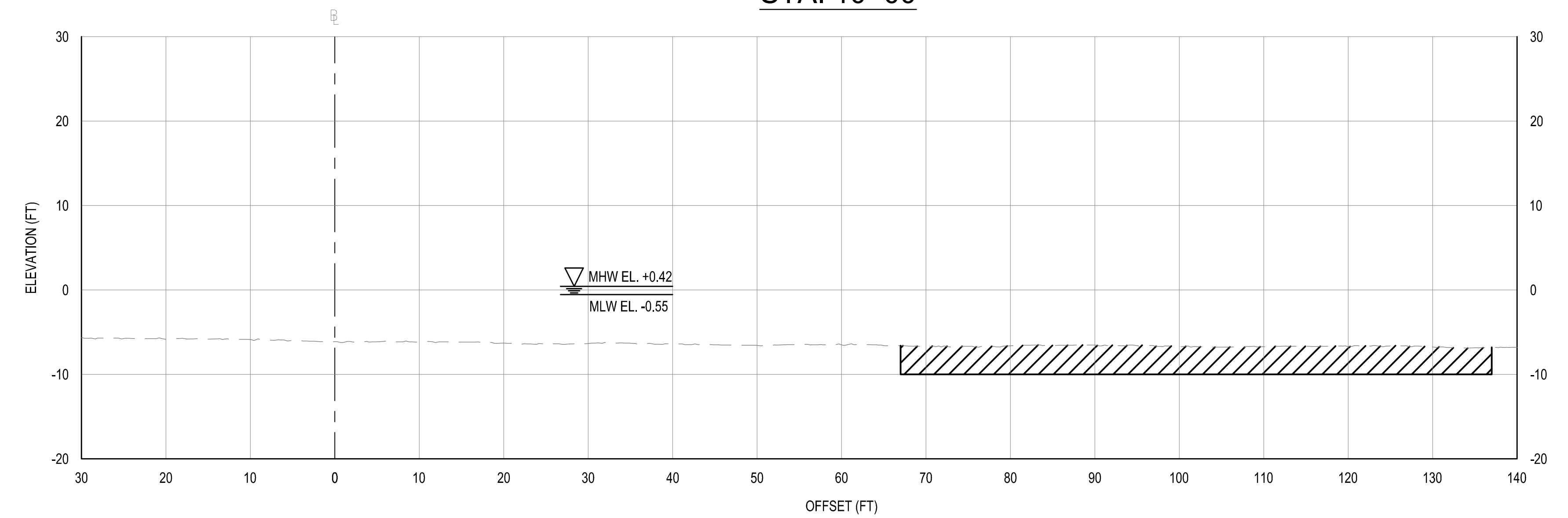
STA. 8+50



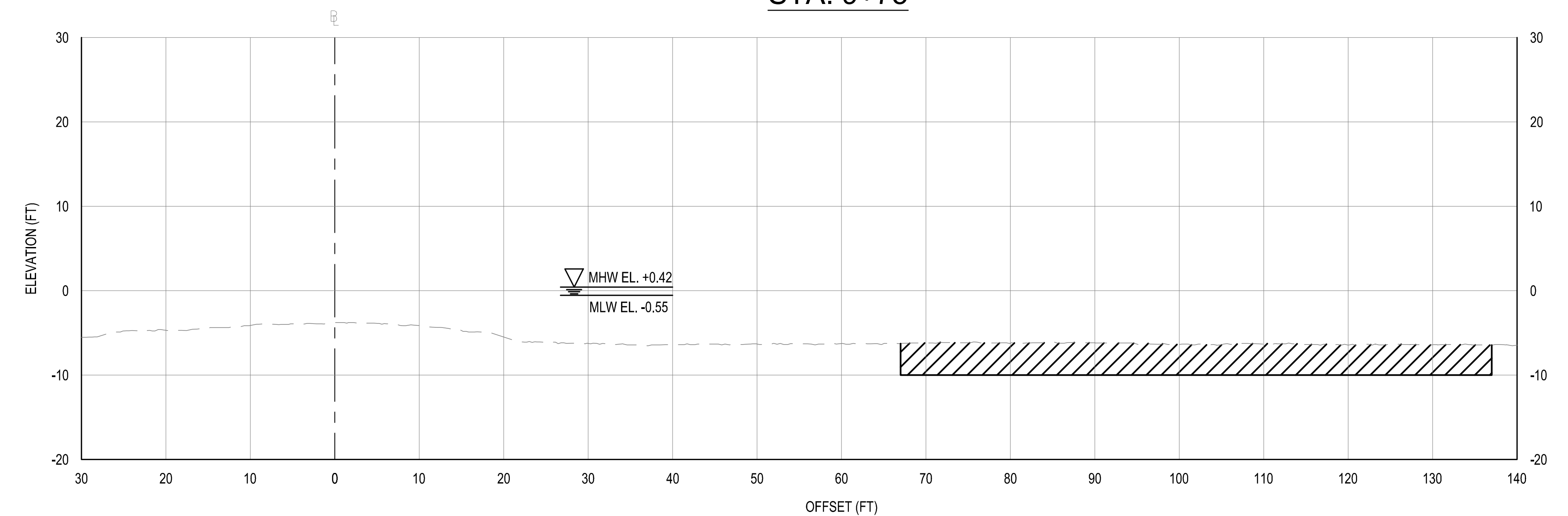
STA. 8+25



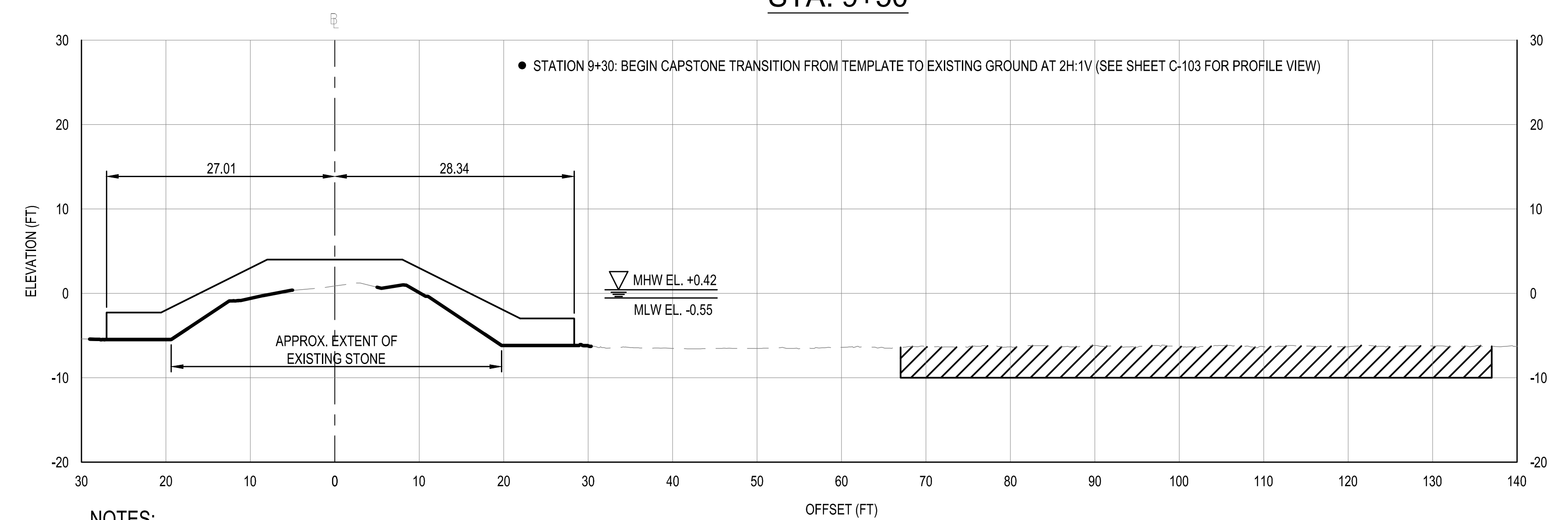
STA. 10+00



STA. 9+75



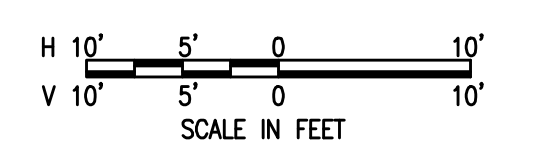
STA. 9+50



STA. 9+25

NOTES:

1. SEE SHEET C-001 FOR GENERAL INFORMATION.
2. SEE SHEET C-301 FOR TYPICAL SECTIONS.
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5. SEE SHEET C-501 FOR GROUTING DETAILS.

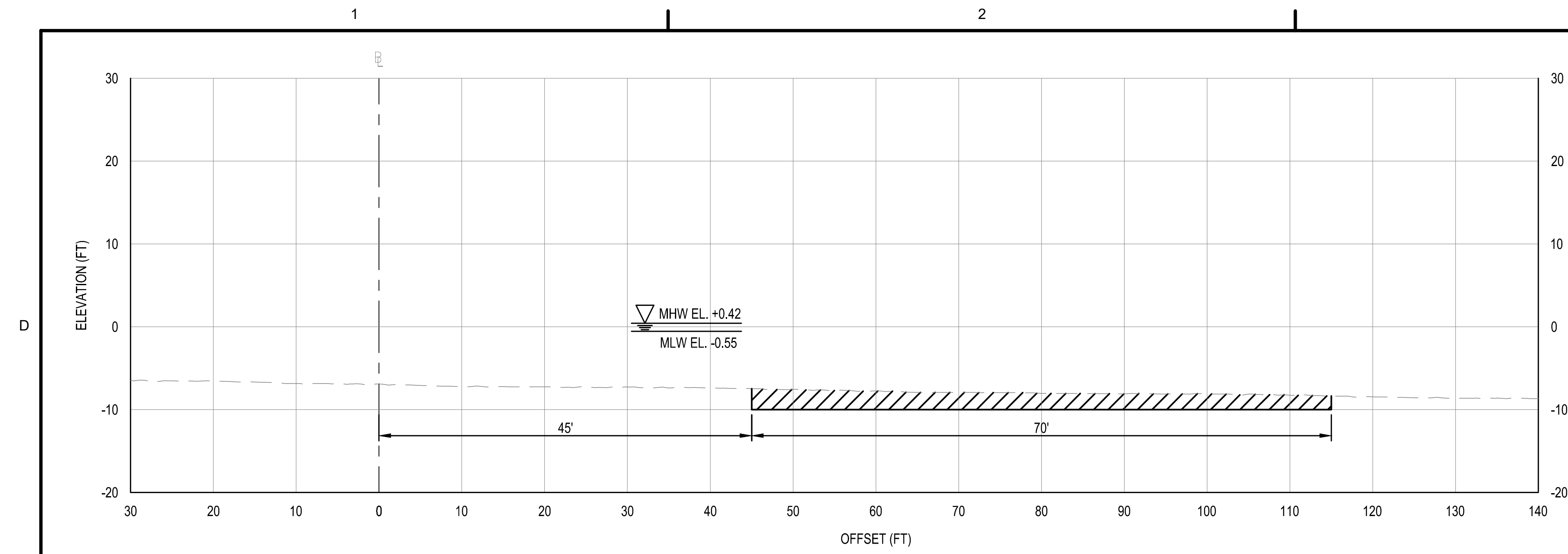
[illegible]

U.S. ARMY CORPS OF ENGINEERS		26 MARCH 2020	
AS SHOWN	AS SHOWN	REVIEWED BY:	
PHILADELPHIA	PHILADELPHIA	CALCULATION NUMBER:	
DISTRICT	DISTRICT	DATE:	
CROSS SECTIONS: STA. 8+25 TO 10+00.00w		CONTRACT NUMBER:	
30'x42'		30'x42'	

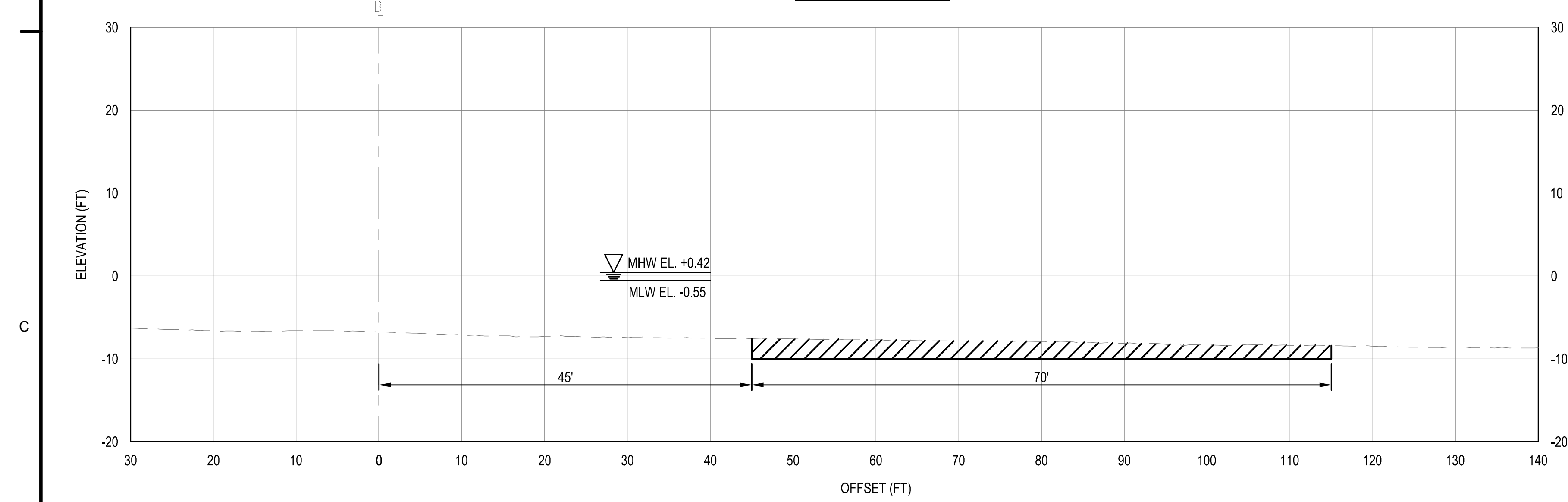
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 8+25 TO 10+00

SHEET NUMBER

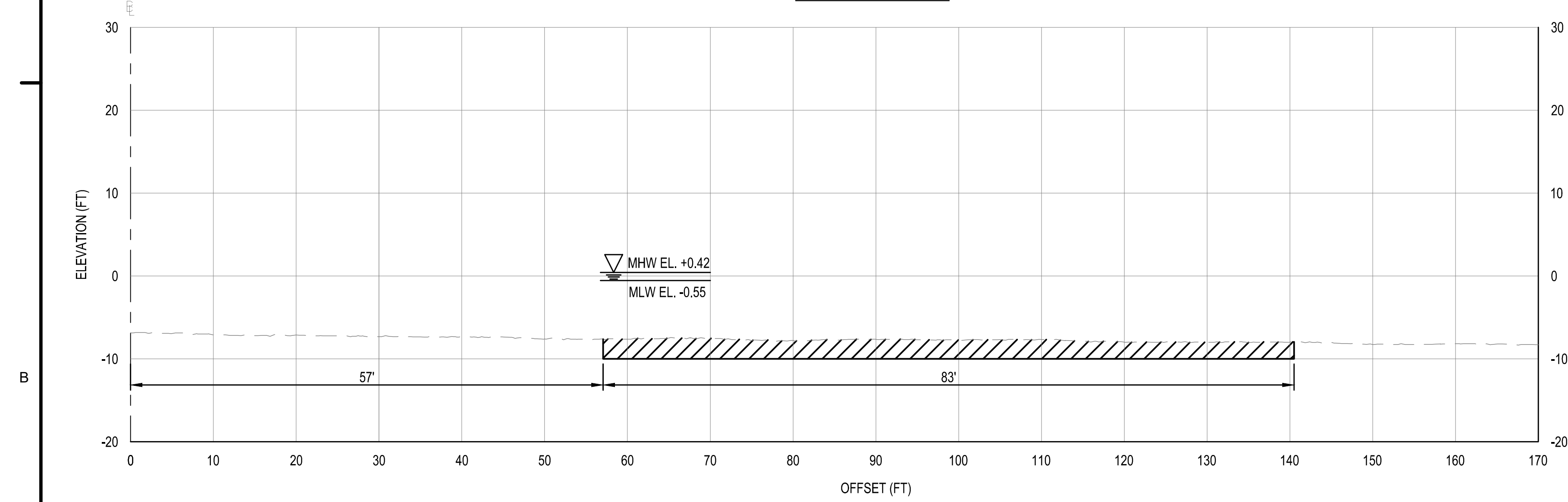
C-306



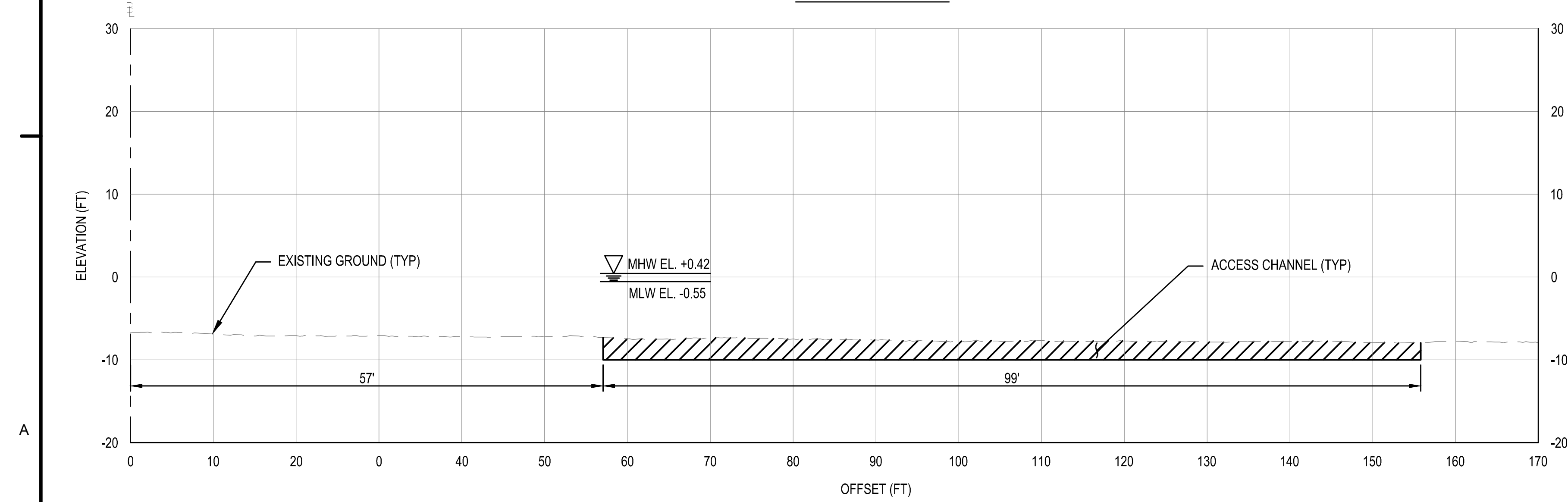
STA. 11+00



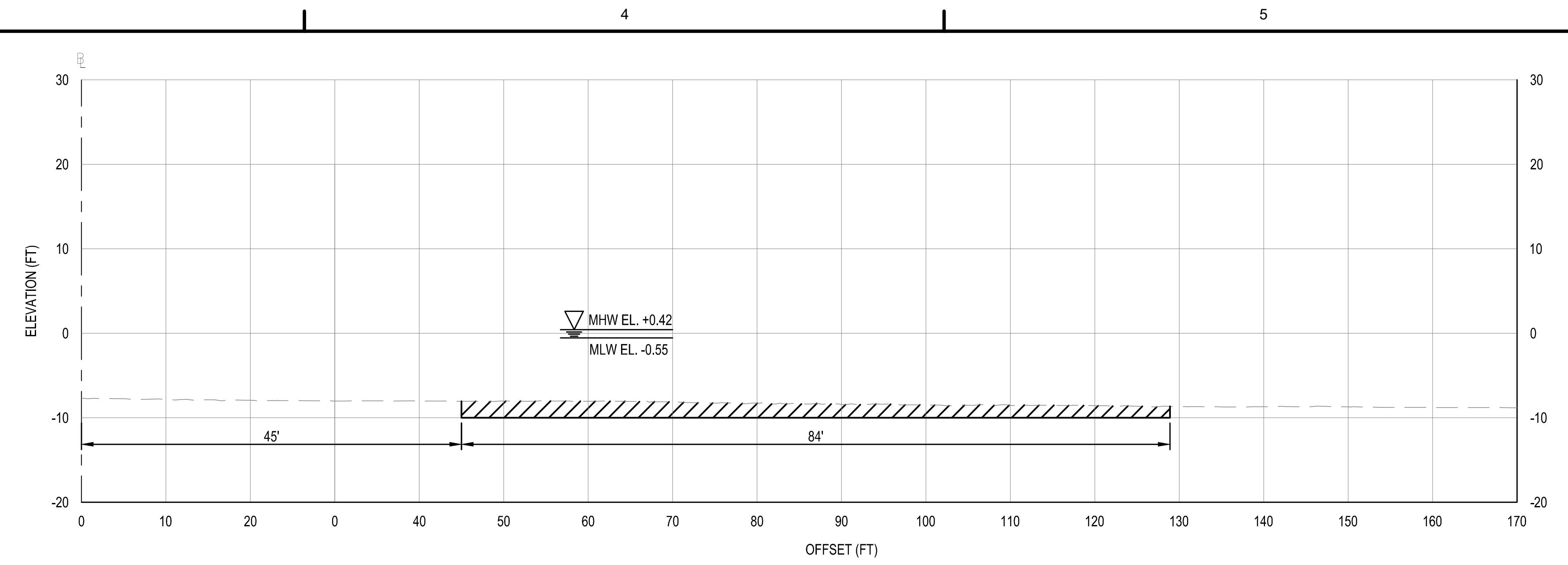
STA. 10+75



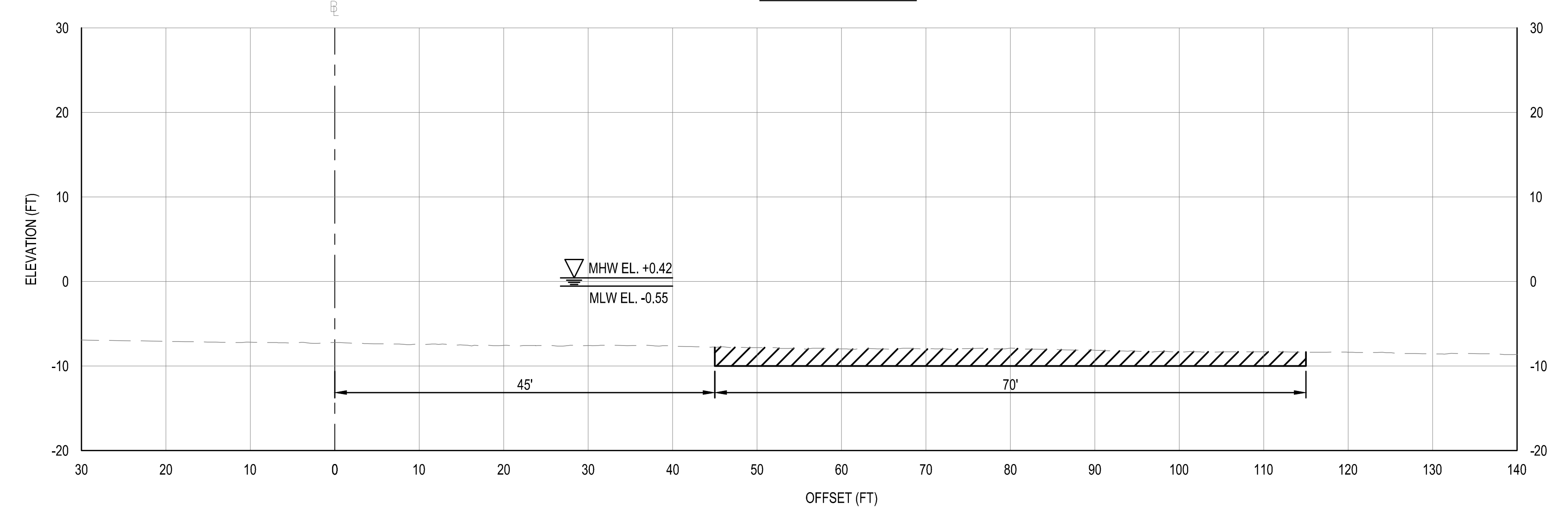
STA. 10+50



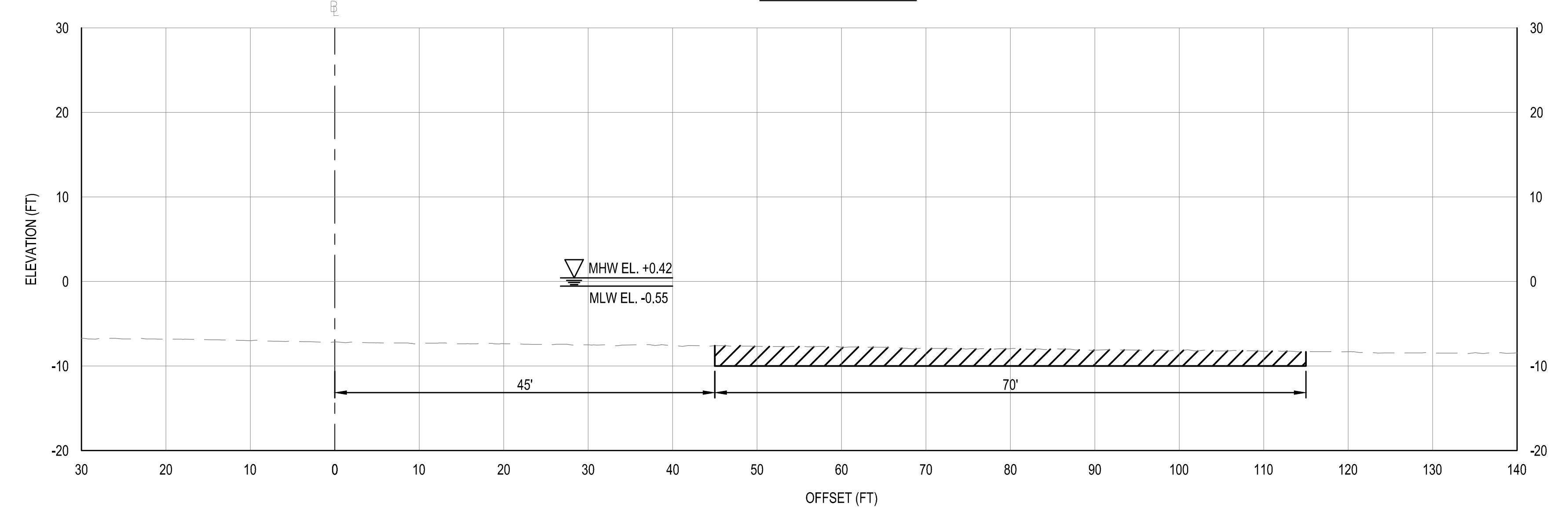
STA. 10+25



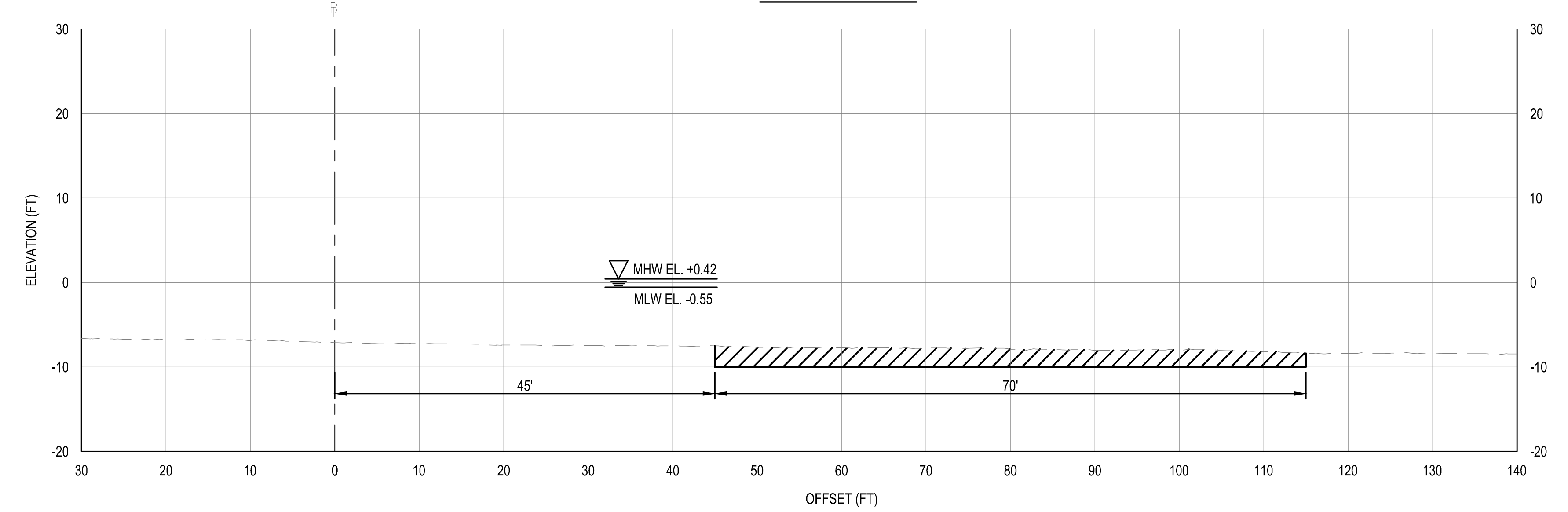
STA. 12+00



STA. 11+75

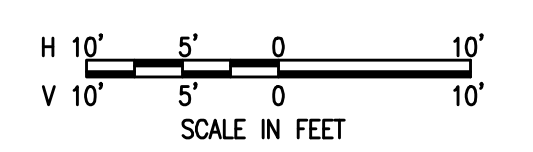


STA. 11+50

STA. 11+25

NOTES:

1. SEE SHEET C-001 FOR GENERAL INFORMATION.



Army Corps •
Engineers
BALTIMORE
DISTRICT

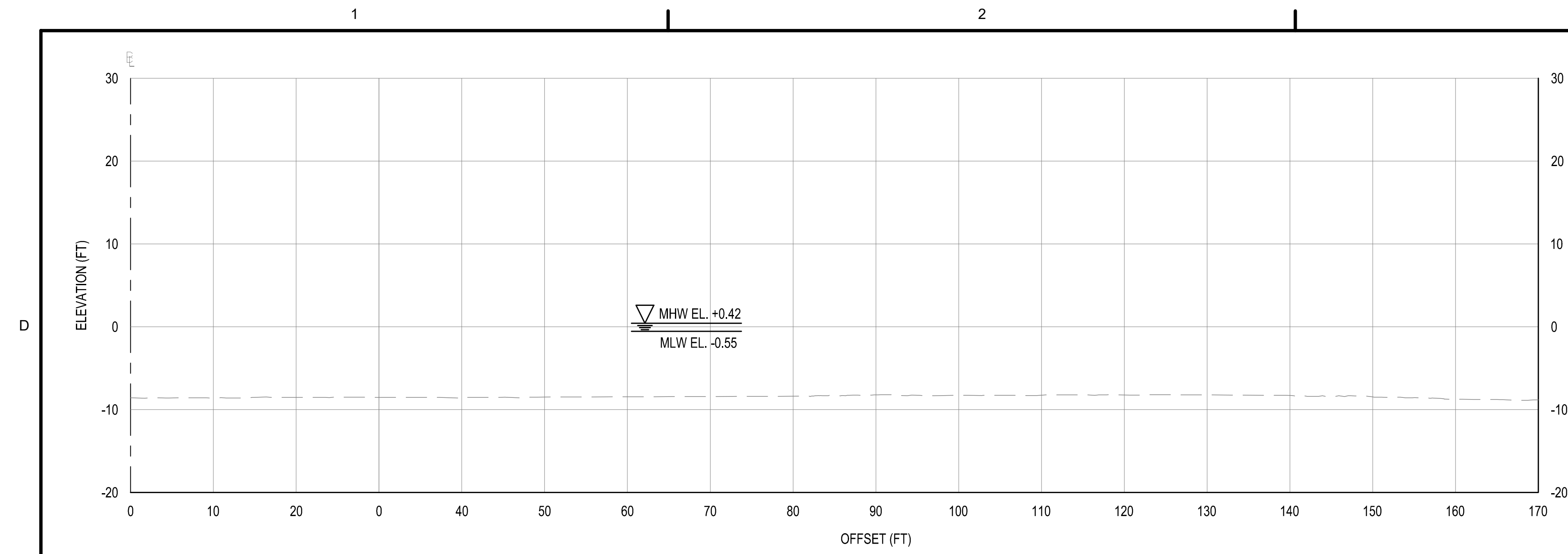
[illegible]

BALTIMORE DISTRICT	U.S. ARMY CORPS OF ENGINEERS		END BY	REVIEWED BY	SOLICITATION NUMBER
	PHILADELPHIA				
	PLOT SCALE	FILE NAME			
	DWG. SIZE: 37"X47"	C-307 CROSS SECTIONS: STA. 10+25 TO STA. 12+00			

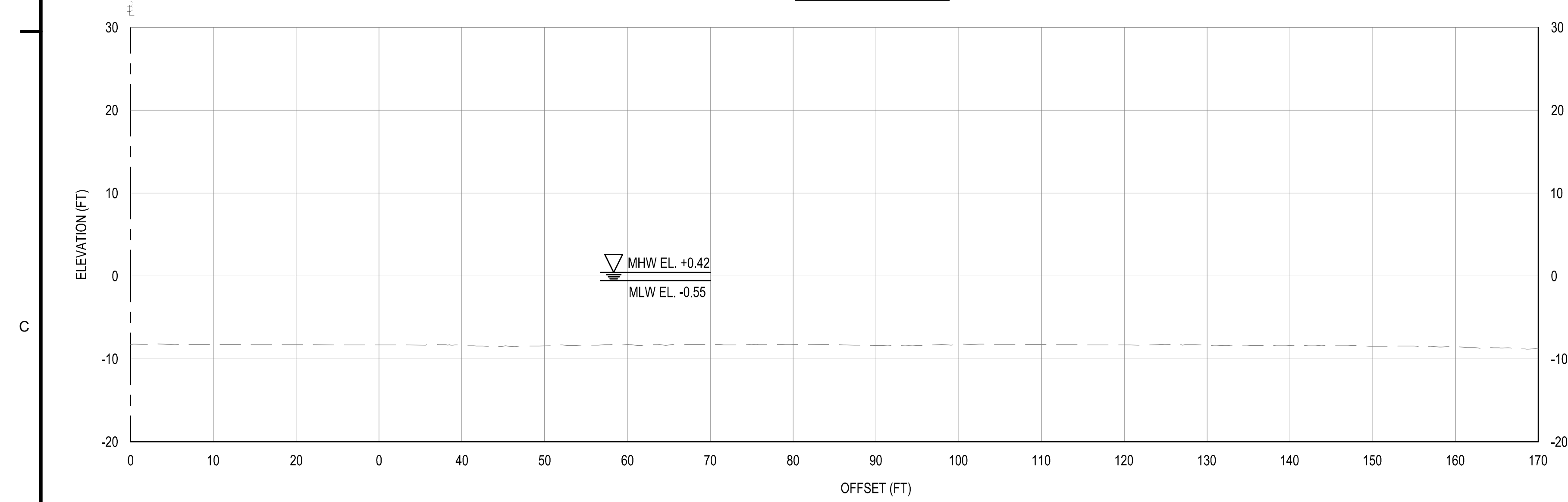
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 10+25 TO STA. 12+00

SHEET NUMBER

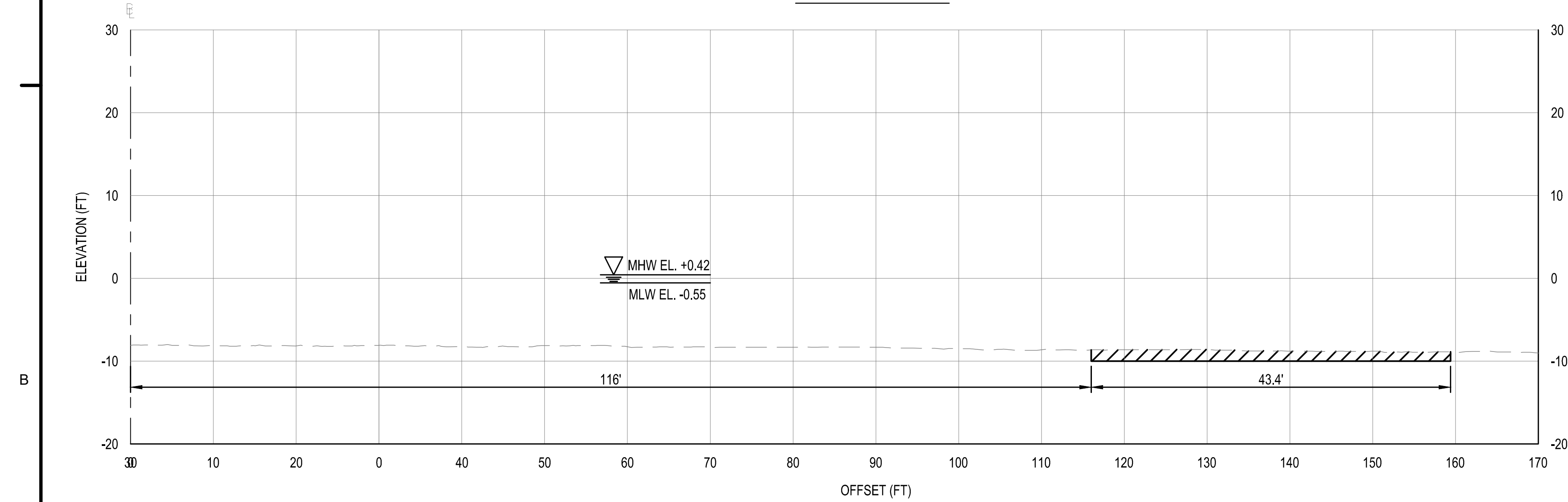
C-307



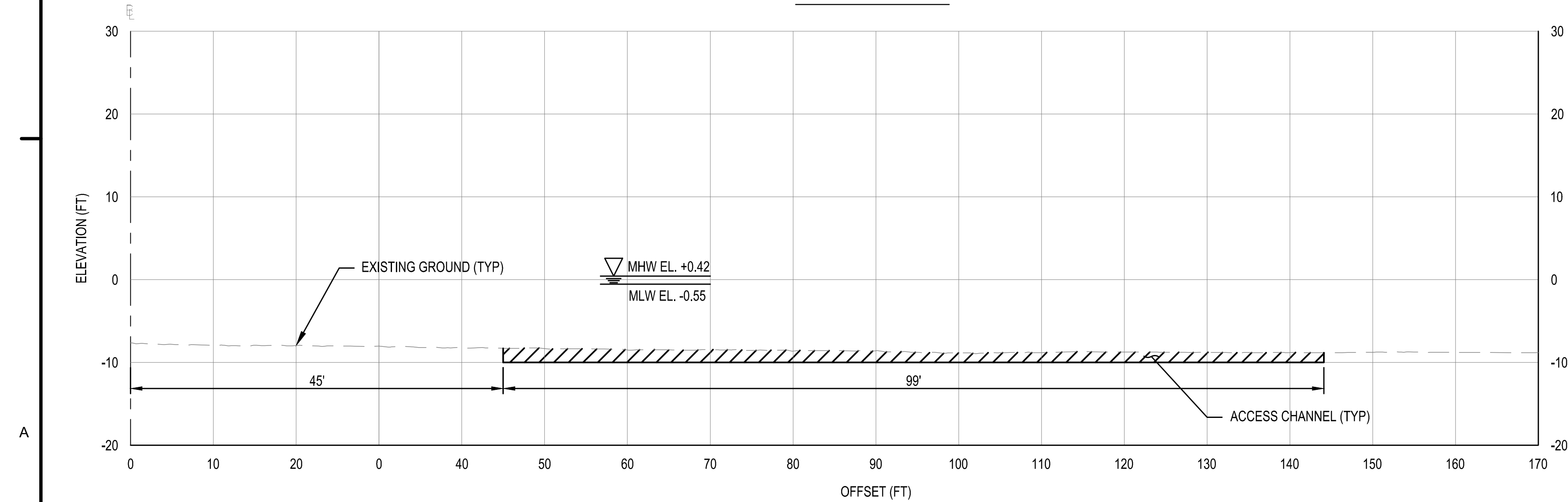
STA. 13+00



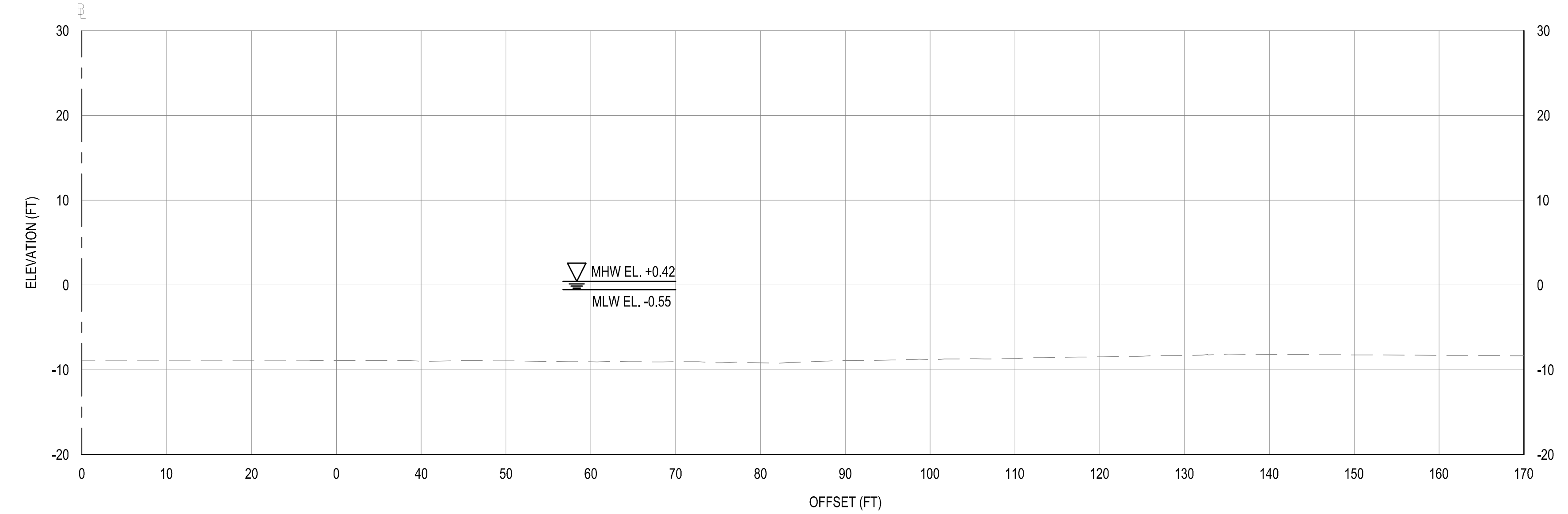
STA. 12+75



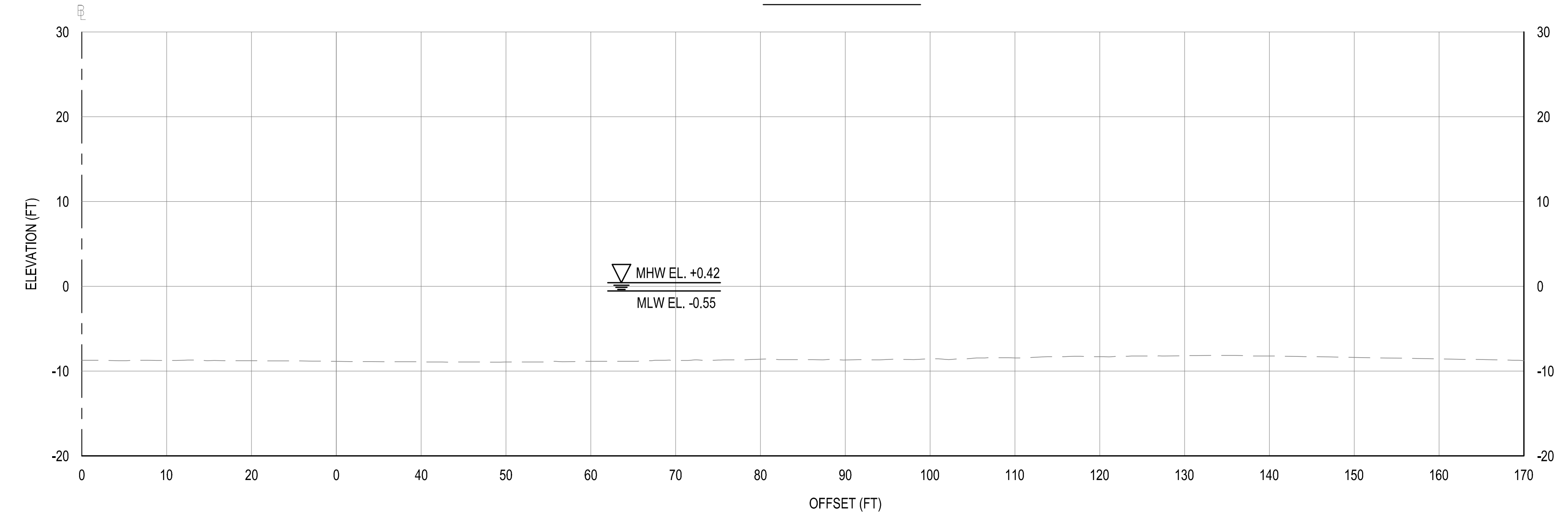
STA. 12+50



STA. 12+25



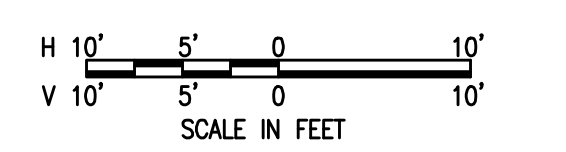
STA. 13+50



STA. 13+25

NOTES:

1. SEE SHEET C-001 FOR GENERAL INFORMATION.



Army Corps *
Engineers
BALTIMORE
DISTRICT

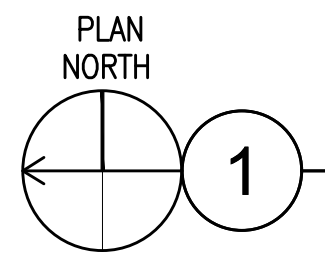
[illegible]

BALTIMORE DISTRICT	U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT	PROJECT SCALE	FILE NAME	DRAWING SIZE: 30"x42"	CROSS SECTIONS: STA. 12+25 TO STA. 13+00
		CONTRACT NUMBER	REVIEWED BY: SOLICITATION NUMBER:		

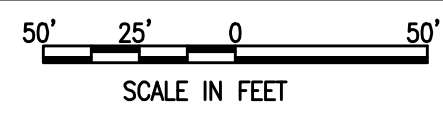
SOUTH JETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
CROSS SECTIONS - STA. 12+25 TO STA. 13+50

SHEET NUMBER

C-308

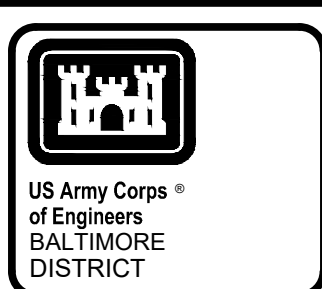


1 PLAN - CONFINED DISPOSAL FACILITY



NOTES:

1. CONFINED DISPOSAL FACILITY INFORMATION WILL BE COVERED IN UPCOMING FISHING CREEK FEDERAL NAVIGATION CHANNEL MAINTENANCE DREDGING CONTRACT.

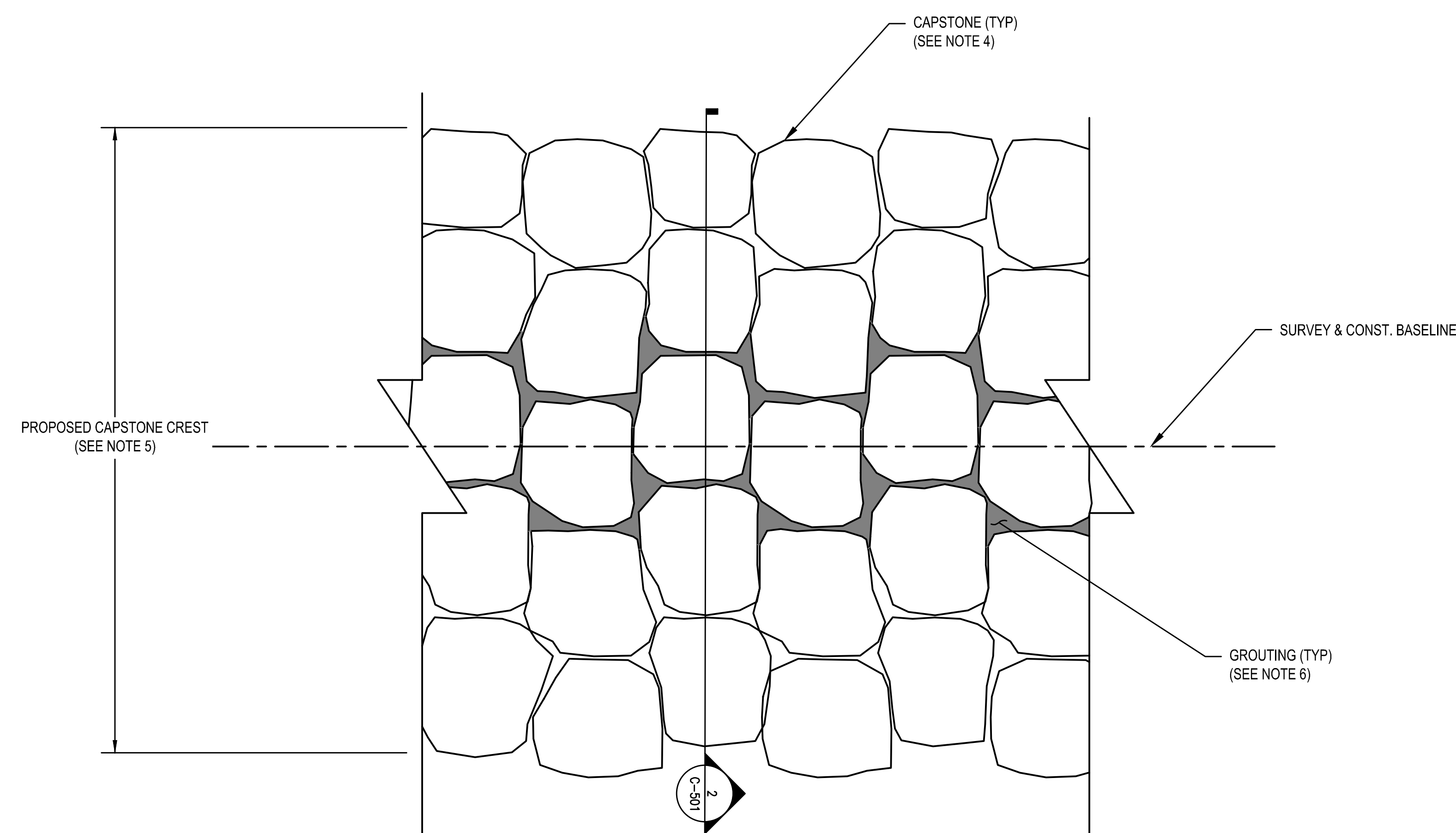


ISSUED BY	ISSUED DATE	ISSUED BY	ISSUED DATE	ISSUED BY	ISSUED DATE	ISSUED BY	ISSUED DATE
SW	26 MARCH 2021	SW	26 MARCH 2021	SW	26 MARCH 2021	SW	26 MARCH 2021
BY	BY	BY	BY	BY	BY	BY	BY
DN	DN	DN	DN	DN	DN	DN	DN
CONTRACT NUMBER	CONTRACT NUMBER	CONTRACT NUMBER	CONTRACT NUMBER	CONTRACT NUMBER	CONTRACT NUMBER	CONTRACT NUMBER	CONTRACT NUMBER
FILE NAME	FILE NAME	FILE NAME	FILE NAME	FILE NAME	FILE NAME	FILE NAME	FILE NAME
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE

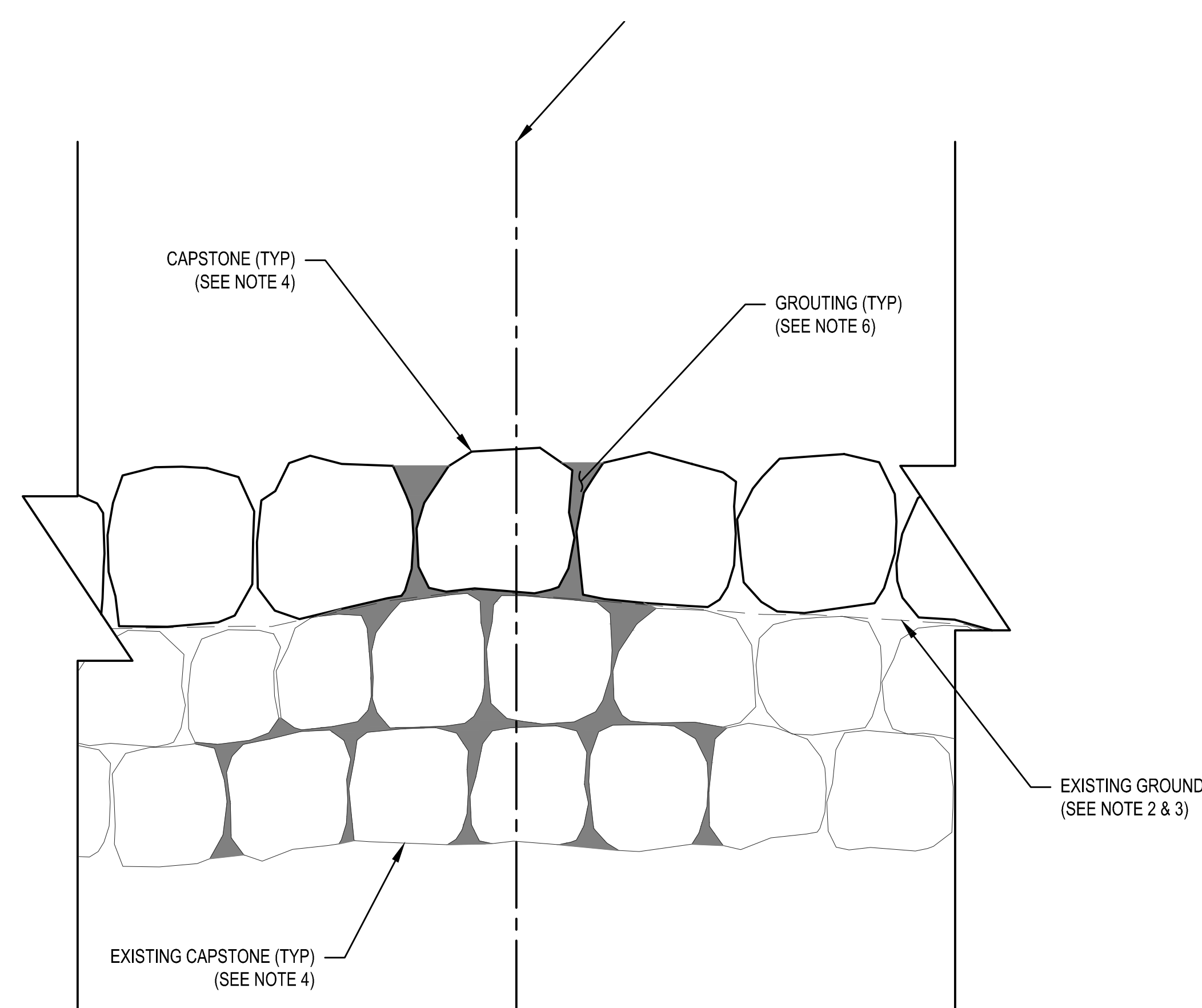
U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT	U.S. ARMY CORPS OF ENGINEERS PHILADELPHIA DISTRICT
ISSUED BY SW BY DN	ISSUED BY SW BY DN
ISSUED DATE 26 MARCH 2021	ISSUED DATE 26 MARCH 2021
CONTRACT NUMBER	CONTRACT NUMBER
FILE NAME	FILE NAME
DATE	DATE

FISHING CREEK
SOUTH-LETTY REHABILITATION
CALVERT COUNTY
CHESAPEAKE BEACH, MARYLAND
PLAN - CONFINED DISPOSAL FACILITY

SHEET NUMBER
C-401



1 DETAIL - GROUTING (STA. 0+25 TO 9+00)
NTS



2 SECTION - GROUTING

- NOTES:

1. SEE SHEET C-001 FOR GENERAL INFORMATION
2. SEE SHEET C-301 FOR TYPICAL SECTIONS
3. SEE SHEETS C-302 THROUGH C-308 FOR CROSS SECTIONS.
4. INDIVIDUAL CAPSTONES SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
5. PROPOSED CAPSTONE SIDE SLOPES AND PROPOSED CAPSTONE TOE NOT SHOWN FOR CLARITY
6. VOIDS BETWEEN PROPOSED CAPSTONES SHALL BE GROUTED THROUGHOUT TWO CONTINUOUS ROWS IN ACCORDANCE WITH SPECIFICATION SECTION 31 37.0D. THE TWO ROWS WITHIN THE PROPOSED CAPSTONE LAYER, CLOSEST TO THE BASELINE, SHALL BE GROUTED. GROUT SHALL EXTEND INTO THE VOIDS OF THE EXISTING JETTY STONE. GROUTING SHALL ONLY OCCUR THROUGHOUT REPAIR AREAS 1 AND 2. NO GROUTING SHALL TAKE PLACE THROUGHOUT REPAIR AREA 3.