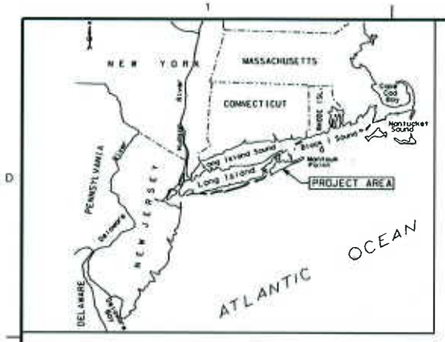
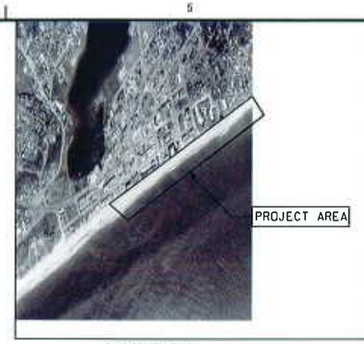


VICINITY PLAN
N.T.S.

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EASTHAMPTON
SUFFOLK COUNTY, NY



LOCATION PLAN
N.T.S.

INDEX TO DRAWINGS

DRAWING NO.	TITLE	SHEET NO.
G-001	COVER SHEET AND INDEX TO DRAWINGS	1 OF 13
G-101	GENERAL PLAN	2 OF 13
C-101	PLAN SHEET STA.0+00 TO 5+09	3 OF 13
C-102	PLAN SHEET STA.5+09 TO 10+79	4 OF 13
C-103	PLAN SHEET STA.10+79 TO 16+54	5 OF 13
C-104	PLAN SHEET STA.16+54 TO 22+33	6 OF 13
C-105	PLAN SHEET STA.22+33 TO 28+09	7 OF 13
C-106	PLAN SHEET STA.28+09 TO 31+82	8 OF 13
C-301	CROSS SECTIONS STA.0+00 TO 17+15	9 OF 13
C-302	CROSS SECTIONS STA.18+00 TO 31+82	10 OF 13
C-501	VEHICULAR CROSSOVER AND TYPICAL DETAILS SHEET	11 OF 13
C-502	PEDESTRIAN CROSSOVER PLAN, SECTION AND DETAILS	12 OF 13
C-503	GSC FRONT VIEW AND DETAILS SHEET	13 OF 13

GENERAL NOTES:

1. COORDINATES REFER TO THE LONG ISLAND LAMBERT SYSTEM NAD 1983.
2. VERTICAL DATUM FOR THIS PROJECT IS NAVD88.
3. CROSS SECTIONS ARE TAKEN PERPENDICULAR TO THE REFERENCE LINE.
4. EXISTING UTILITIES SHALL BE PROTECTED DURING THE CONSTRUCTION BY THE CONTRACTOR.
5. FOR SURVEY DATA SEE SPECIFICATIONS IN NORTHING, EASTING AND ELEVATION FORMAT (MICROSTATION FORMAT IS NOT AVAILABLE)
6. IF STRUCTURE IS SEAWARD OF EL.15.5 THE LIMIT OF BACK FILL OF THE PROJECT TIES INTO THE STRUCTURE. WHEN EL.15.5 IS SEAWARD OF A STRUCTURE THE LIMIT OF BACK FILL OF THE PROJECT TIES IN TO EL.15.5.

LEGEND

- PROPOSED SAND FILL BERM.
- 1FT TOLERANCE
- EXISTING GROUND
- ESTIMATED EXISTING GROUND
- FOOT PRINT OF GEOTEXTILE SAND CONTAINER(GSC)
- TOP OF FILL
- BOTTOM OF FILL

SIGNATURES AFFIXED BELOW INDICATE OFFICIAL RECOMMENDATION AND APPROVAL OF ALL DRAWINGS IN THIS SET AS INDEXED IN THIS SET

APPROVAL RECOMMENDED BY:
John M. Wang, P.E.
CHIEF, CIVIL ENGINEERING DESIGN SECTION — DATE

APPROVAL RECOMMENDED BY:
Thomas A. Bornemann, P.E.
CHIEF, DESIGN BRANCH — DATE

APPROVAL RECOMMENDED BY:
Lynn M. Boccuzzo, P.E., D.CE
CHIEF, HURRICANE SANDY RELIEF BRANCH — DATE

APPROVED BY:
Arthur J. Connolly, P.E.
CHIEF, ENGINEERING DIVISION — 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.

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.

US Army Corps of Engineers

REVISED INDEX TO DRAWINGS AND NOTE #4 | 4/4/2015 | GA

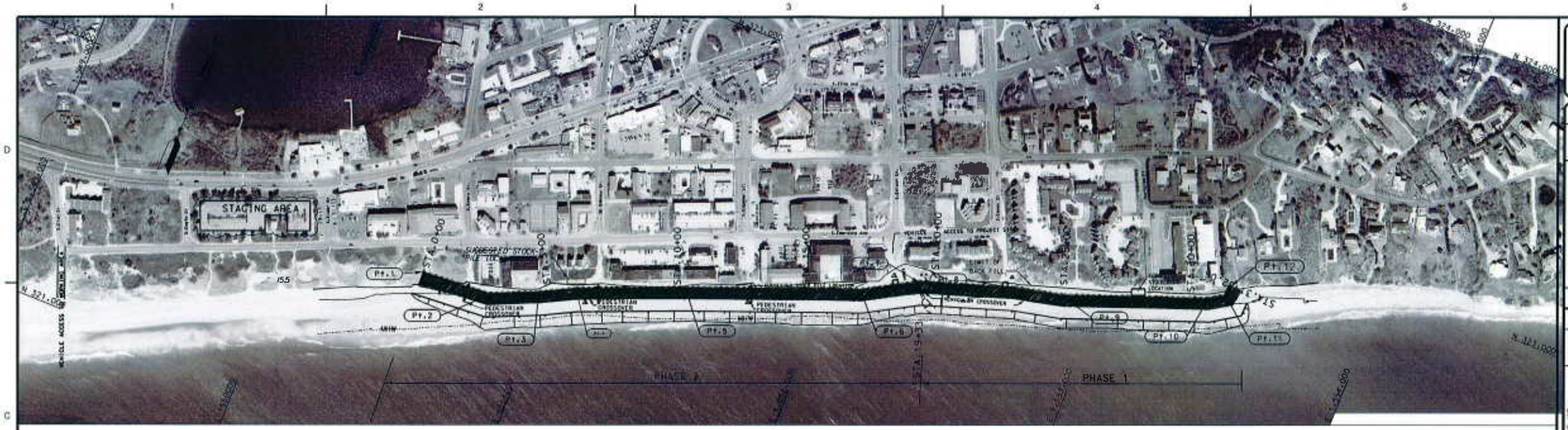
DESIGNED BY: Gazzaniga, Kanaga
DWN BY:
CKD BY:
SUBMITTED BY: Gazzaniga, Kanaga
PLOT SCALE: 1=1
PLOT BY: ANSLD
ISSUE DATE: FEBRUARY 2014
FILE NAME: ANSLD pwd\pw_gr

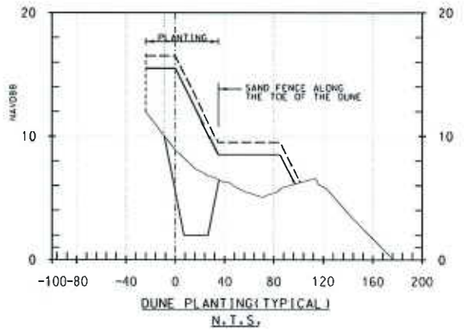
DATE: 2014/09/29
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS NEW YORK DISTRICT NY, NY
SANDY BRANCH CENAN-ENS

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EASTHAMPTON
SUFFOLK COUNTY, NY
COVER SHEET AND INDEX TO DRAWINGS

SHEET IDENTIFICATION
G-001
SHEET 1 OF 13





DUNE PLANTING(TYPICAL)
N.T.S.

NOTE:
THE DUNE WILL BE PLANTED WITH DUNE GRASS ON 18" CENTER ON THE DUNE CREST AND FACE. SAND FENCING WILL BE INSTALLED AT THE SEAWARD TOE OF THE DUNE TO RETAIN WIND-BLOWN SAND "REFERENCE SPECIFICATIONS FOR UPLAND SAND SOURCE REQUIREMENTS"

⚠

REFERENCE LINE DATA

PT	COORDINATES		COURCE	DISTANCE	BEARINGS
	EASTING	NORTHING			
Pt. 1.	1,550,513.7	321,651.0	1-2	268.36	N 85°52'17.40"E
Pt. 2.	1,550,781.4	321,670.3	2-3	193.50	N 66°02'29.76"E
Pt. 3.	1,550,958.2	321,748.9	3-4	149.00	N 64°59'04.92"E
Pt. 4.	1,551,087.3	321,815.5	4-5	425.41	N 67°40'36.84"E
Pt. 5.	1,551,480.6	321,977.0	5-6	682.95	N 68°39'31.68"E
Pt. 6.	1,552,116.7	322,225.5	6-7	231.30	N 60°38'47.76"E
Pt. 7.	1,552,318.3	322,338.9	7-8	368.48	N 71°21'00.36"E
Pt. 8.	1,552,667.4	322,456.7	8-9	189.47	N 77°15'16.92"E
Pt. 9.	1,552,852.2	322,498.5	9-10	560.92	N 69°23'03.12"E
Pt.10.	1,553,377.2	322,696.0	10-11	74.30	N 56°58'22.44"E
Pt.11.	1,553,439.5	322,736.5	11-12	42.43	N 2°17'45.60"E
Pt.12.	1,553,441.2	322,778.9	----	---	----

200 100 0 200 400FT
SCALE: 1''= 200'

US Army Corps of Engineers

NO	REVISIONS SPOILING AND PEDESTRIAN CROSSOVERS	1/30/15	G.A.
2	ENLARGED VEHICULAR CROSSOVERS	2/19/15	GA
1	DIMENSIONS AND ADDED NOTES	3/02/15	GA
A	FOREMOST STAGING AREA		

U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

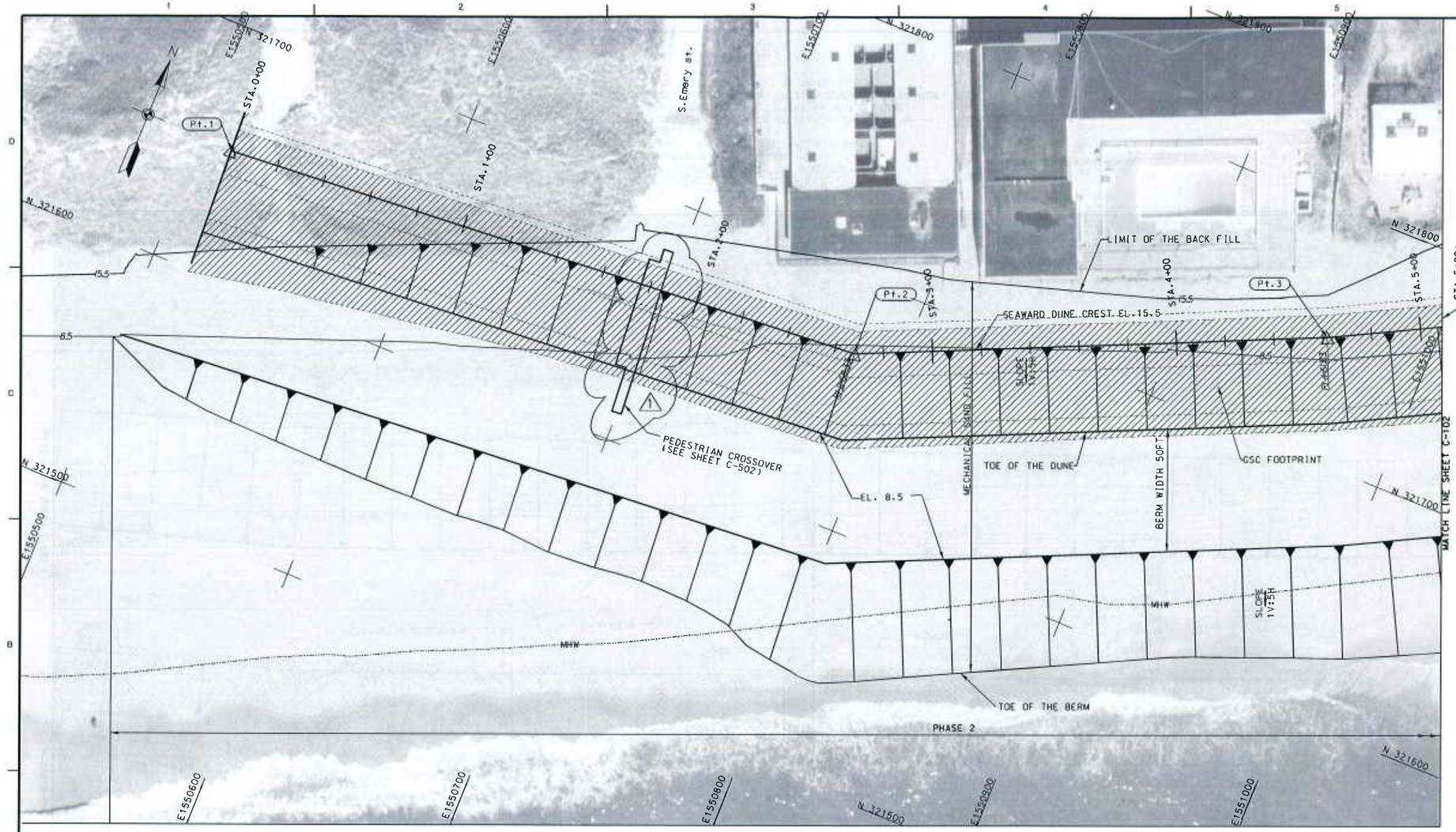
DESIGNED BY: Gaurang V. Amin
DRAWN BY:
CHECKED BY:
TRACED BY: Rosemarie Vargas
PLOT SCALE: 1:1
PLOT DATE: 3/16/15
DATE: SEPTEMBER 2014
SOLICITATION NO.:
CONTRACT NO.:
I.D. NUMBER:
FILE NAME: FIRE ISLAND TO MONTAUK POINT

SANDY BRANCH
DEHAMENIS

FIRE ISLAND INLET TO MONTAUK POINT
DOWNDRIFT MONTAUK STABILIZATION PROJECT
TOWN OF EAST HAMPTON
SUFFOLK COUNTY, NY

GENERAL PLAN

SHEET IDENTIFICATION
G-101
SHEET 6 OF 19



NOTES:
1. FOR CROSS SECTIONS SEE SHEET C-301.
2. FOR REFERENCE LINE DATA SEE SHEET G-101
3. FOR LEGEND SEE SHEET G-001.
4. FOR VEHICULAR ACCESS AND GSC TYPICAL DETAILS SEE SHEET C-501.
5. IF STRUCTURE IS SEAWARD OF EL.15.5 THE LIMIT OF BACKFILL OF THE PROJECT IS TIES IN TO STRUCTURE. WHEN EL.15.5 IS SEAWARD OF STRUCTURE THE BACK FILL LIMIT OF THE PROJECT TIES IN TO EL.15.5.

20 10 0 20 40FT
SCALE:1"= 20'

US Army Corps of Engineers

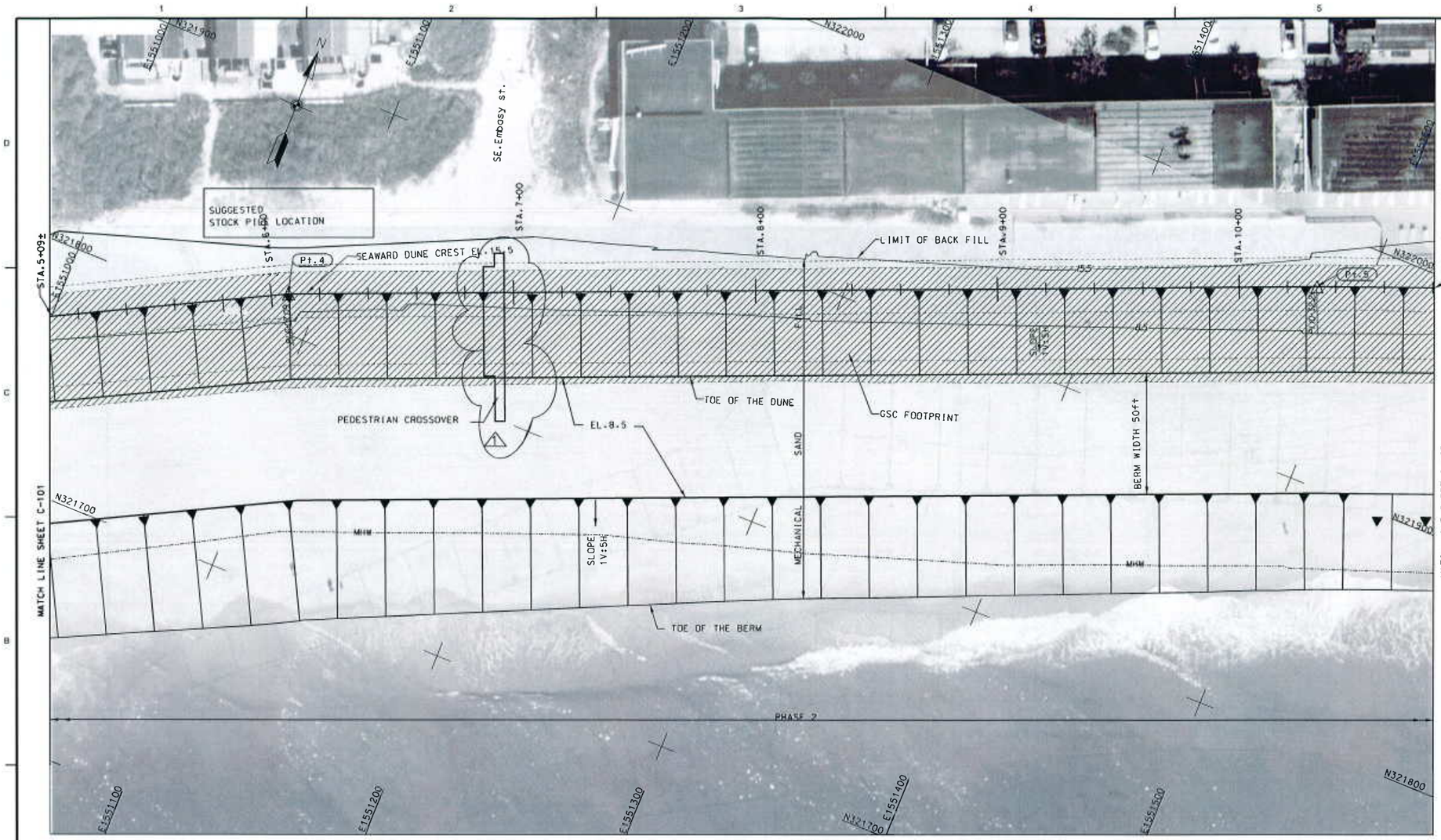
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

SANDY BRANCH
CERVANTES

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EAST HAMPTON
SUFFOLK COUNTY, NY

PLAN SHEET STA.0+00 TO 5+09

SHEET IDENTIFICATION
C-101



NOTES:
1. FOR CROSS SECTIONS SEE SHEET C-301.
2. FOR REFERENCE LINE DATA SEE SHEET G-101.
3. FOR LEGEND SEE SHEET G-001.
4. FOR VEHICULAR ACCESS AND TYPICAL DETAILS SEE SHEET C-501.
5. IF STRUCTURE IS SEAWARD OF EL.15.5 THE LIMIT OF BACK FILL OF THE PROJECT TIES IN TO STRUCTURE. WHEN EL.15.5 IS SEAWARD OF STRUCTURE, LIMIT OF BACK FILL OF THE PROJECT TIES IN TO EL.15.5.

20 10 0 20 40FT
SCALE: 1'' = 20'

US Army Corps of Engineers

REVISED PEDESTRIAN CROSSOVER AND NOTE No.1

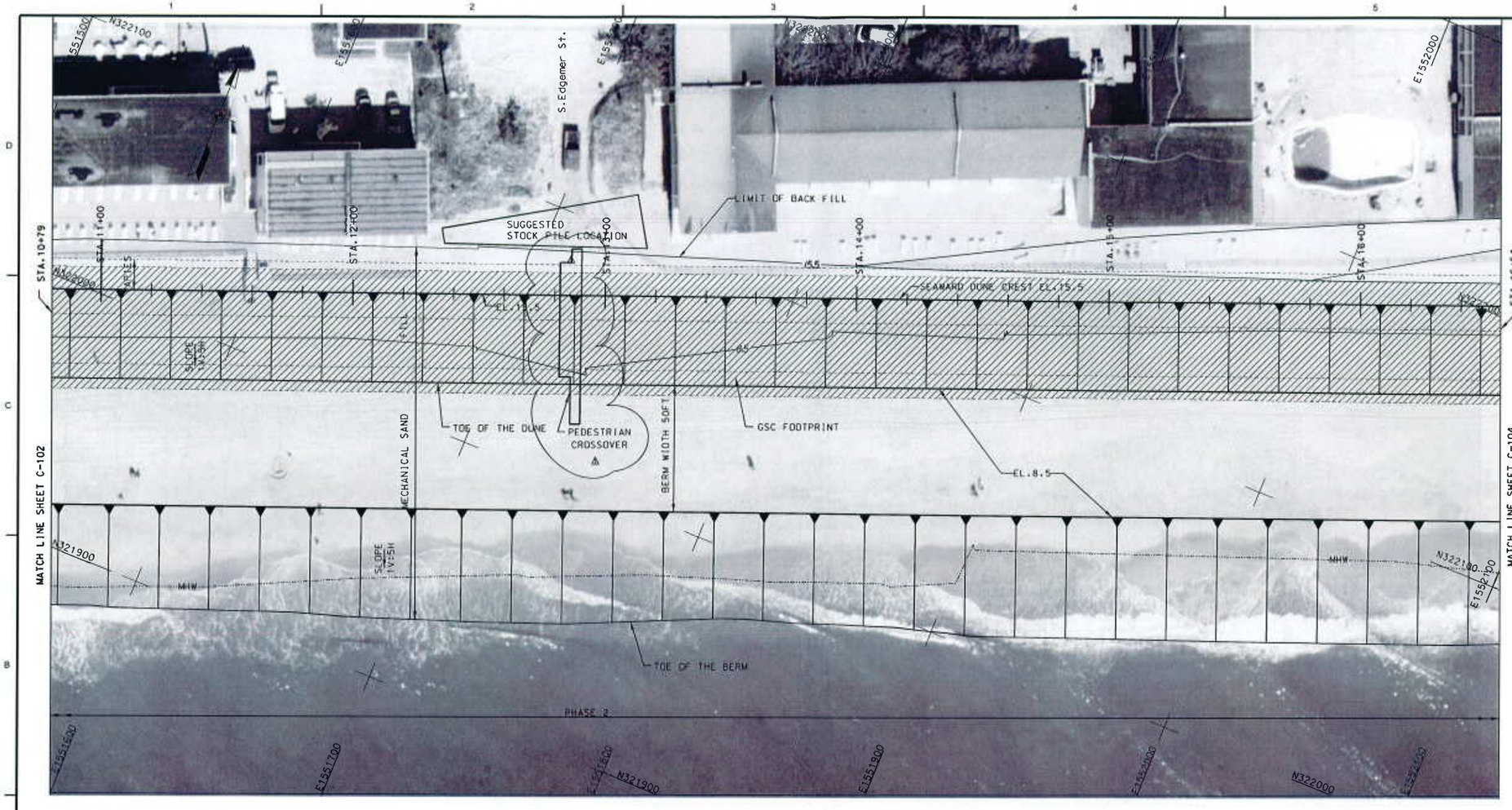
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

SANDY BRANCH
CENAN-EN-S

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EASTHAMPTON
SUFFOLK COUNTY, NY

PLAN SHEET STA.5+09 TO 10+78.99

SHEET IDENTIFICATION
C-102



NOTES:
1. FOR CROSS SECTIONS SEE SHEET C-301.
2. FOR REFERENCE LINE DATA SEE SHEET G-101.
3. FOR LEGEND SEE SHEET G-001.
4. FOR VEHICULAR ACCESS AND TYPICAL DETAILS SEE SHEET C-501.
5. IF STRUCTURE IS SEAWARD OF EL.15.5 THE LIMIT OF BACK FILL OF THE PROJECT TIES IN TO STRUCTURE. WHEN EL.15.5 IS SEAWARD OF STRUCTURE LIMIT OF BACK FILL OF THE PROJECT TIES IN TO EL.15.5.

20 10 0 20 40FT
SCALE: 1''= 20'

US Army Corps of Engineers

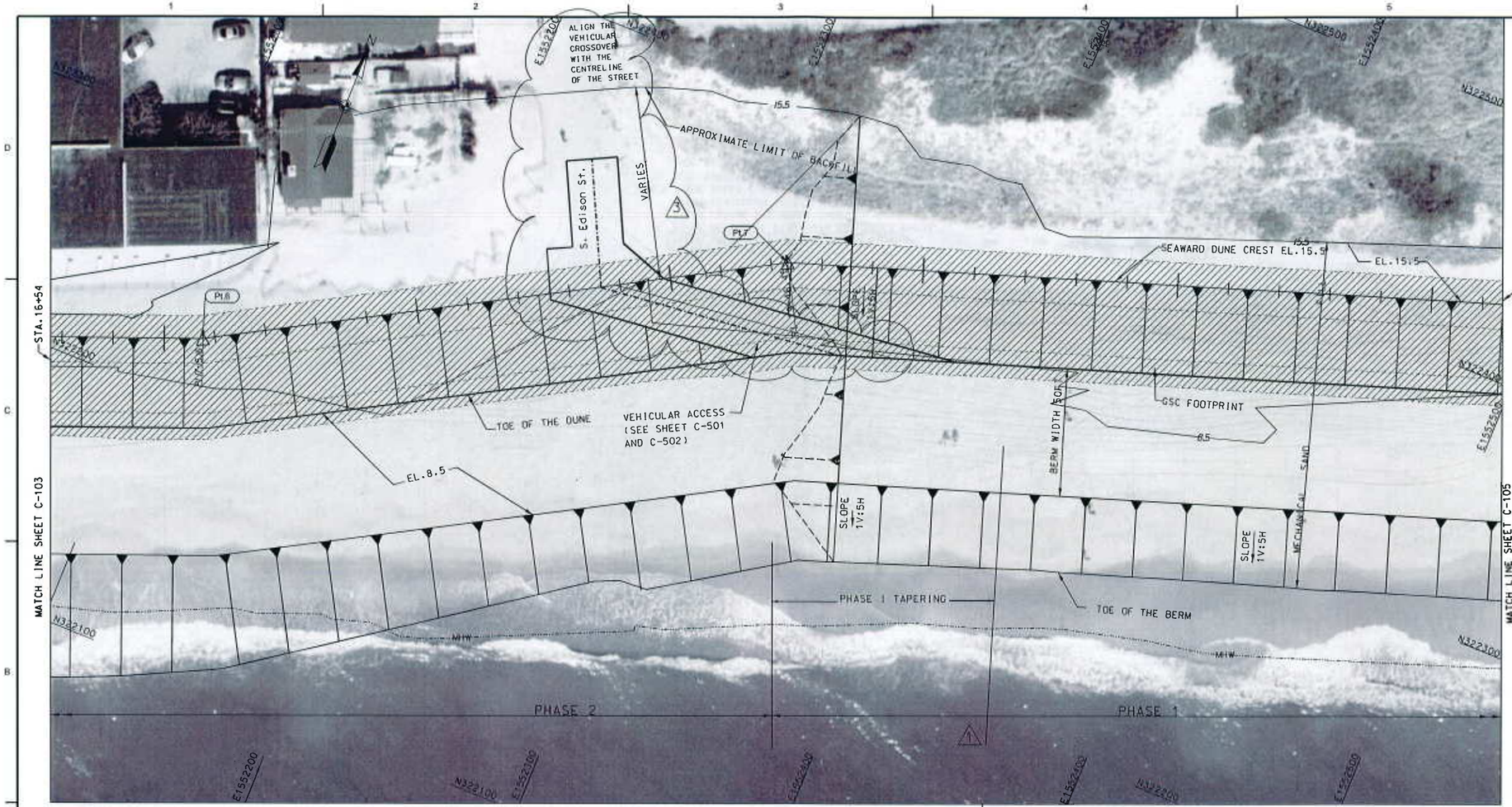
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

SANDY BRANCH
CENAN-EN-S

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EAST HAMPTON
SUFFOLK COUNTY, NY

PLAN SHEET STA.10+79 TO 16+54

SHEET IDENTIFICATION
C-103



NOTES:
1. FOR CROSS SECTIONS SEE SHEET C-301 AND C-302.
2. FOR REFERENCE LINE DATA SEE SHEET G-101.
3. FOR LEGEND SEE SHEET G-001.
4. FOR VEHICULAR ACCESS AND TYPICAL DETAILS SEE SHEET C-501.
5. IF STRUCTURE IS SEAWARD OF EL.15.5. BACK FILL LIMIT OF THE PROJECT TIES IN TO STRUCTURE. WHEN EL.15.5 IS SEAWARD OF STRUCTURE THE LIMIT OF BACK FILL OF THE PROJECT TIES IN TO EL.15.5.
1. 6. PHASE 2 SAND FILL STARTS AT STA.20+33.5. PHASE 1 TAPERING IS ONLY FOR SAND FILL. NO TAPERING FOR GSC (SEE SHEET C-503).

20 10 0 20 40FT
SCALE:1"=20'

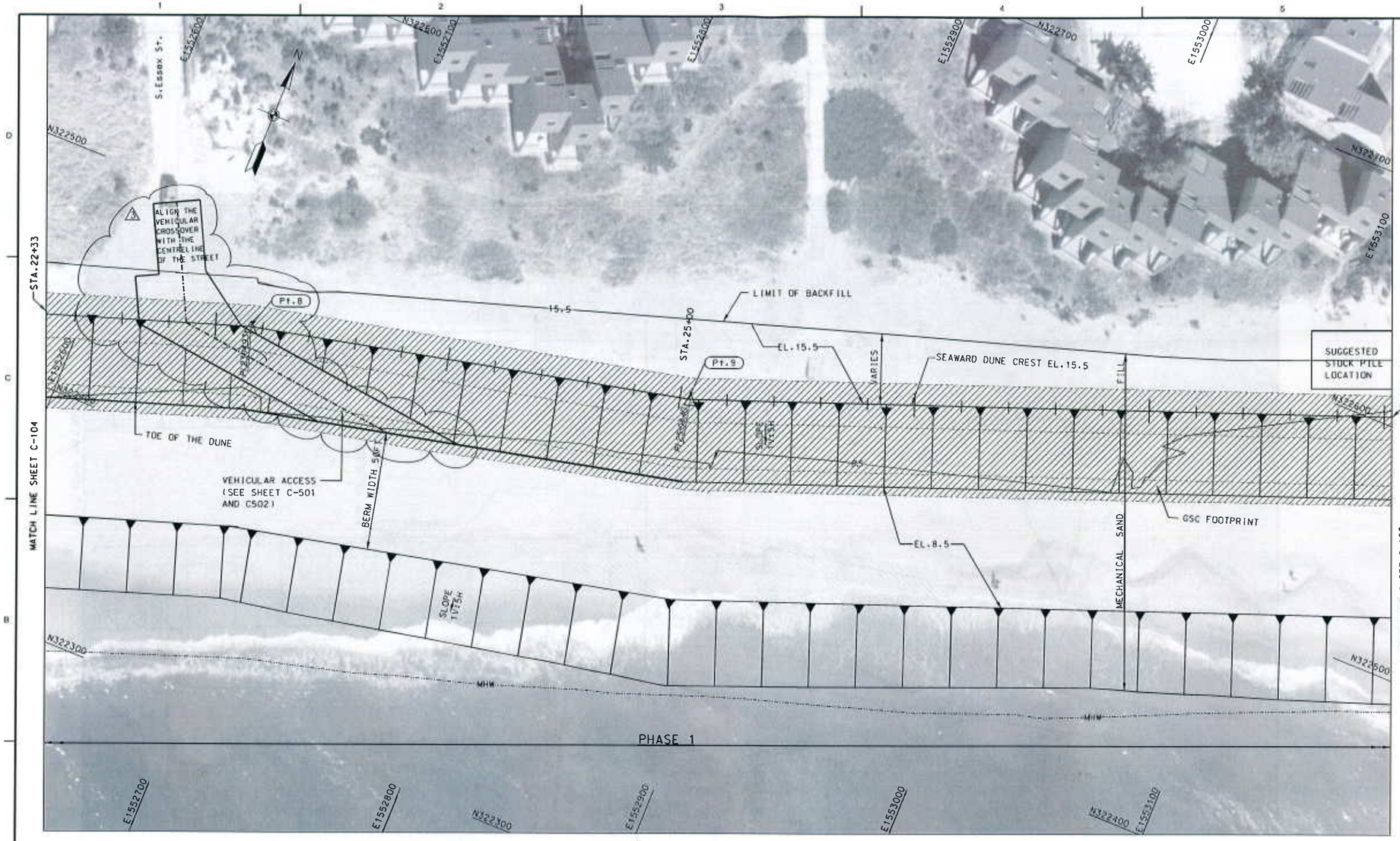
US Army Corps of Engineers

MARK	DESCRIPTION	DATE	APPD
A	REVISED PROPOSED DUNE AND TAPERING ADDED NOTE NO.6	7/30/15	EA
B	REARRANGED VEGETATION CROSSSHADES ORIENTATION AND ADDED NOTES	2/19/15	EA

U.S. ARMY CORPS OF ENGINEERS NEW YORK DISTRICT NY, NY
SANDY BRANCH CENAN-BSAS

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EASTHAMPTON
SUFFOLK COUNTY, NY
PLAN SHEET STA.16+54 TO STA.22+33

SHEET IDENTIFICATION
C-104
SHEET 4 OF 12



NOTES:
1. FOR CROSS SECTIONS SEE SHEET C-302.
2. FOR REFERENCE LINE DATA SEE SHEET G-101.
3. FOR LEGEND SEE SHEET G-001.
4. FOR VEHICULAR ACCESS AND TYPICAL DETAILS SEE SHEET C-501.
5. IF STRUCTURE COMES BEFOR EL.15.5, BACK FILL LIMIT OF THE PROJECT TIES IN TO IS AT STRUCTURE. WHEN EL.15.5 IS SEAWARD OF STRUCTURE, THE LIMIT OF BACK FILL OF THE PROJECT TIES IN TO EL.15.5.

US Army Corps of Engineers

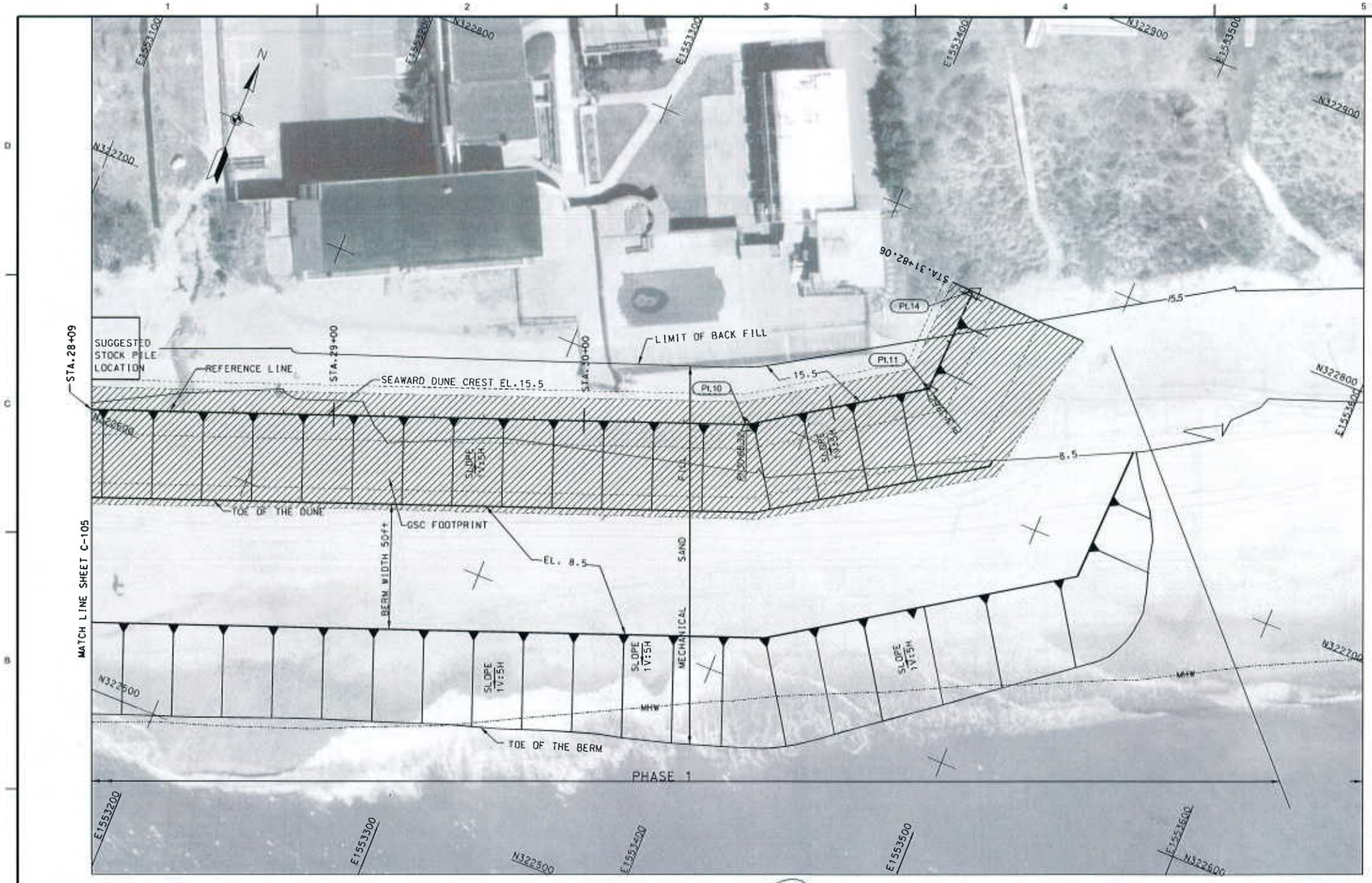
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

SANDY BRANCH
CENAN-EN-S

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EASTHAMPTON
SUFFOLK COUNTY, NY

PLAN SHEET STA.22+33 TO STA.28+09

SHEET IDENTIFICATION
C-105



NOTES:
1. FOR CROSS SECTIONS SEE SHEET C-302
2. FOR REFERENCE LINE DATA SEE SHEET G-101.
3. FOR LEGEND SEE SHEET G-001.
4. FOR VEHICULAR ACCESS AND TYPICAL DETAILS SEE SHEET C-501.
5. IF STRUCTURE IS SEAWARD OF EL.15.5.BACK FILL LIMIT OF THE PROJECT TIES IN TO STRUCTURE. WHEN EL.15.5 IS SEAWARD OF STRUCTURE THE LIMIT OF BACK FILL OF THE PROJECT TIES IN TO EL.15.5.

20 10 0 20 40FT
SCALE: 1"=20'

US Army Corps of Engineers

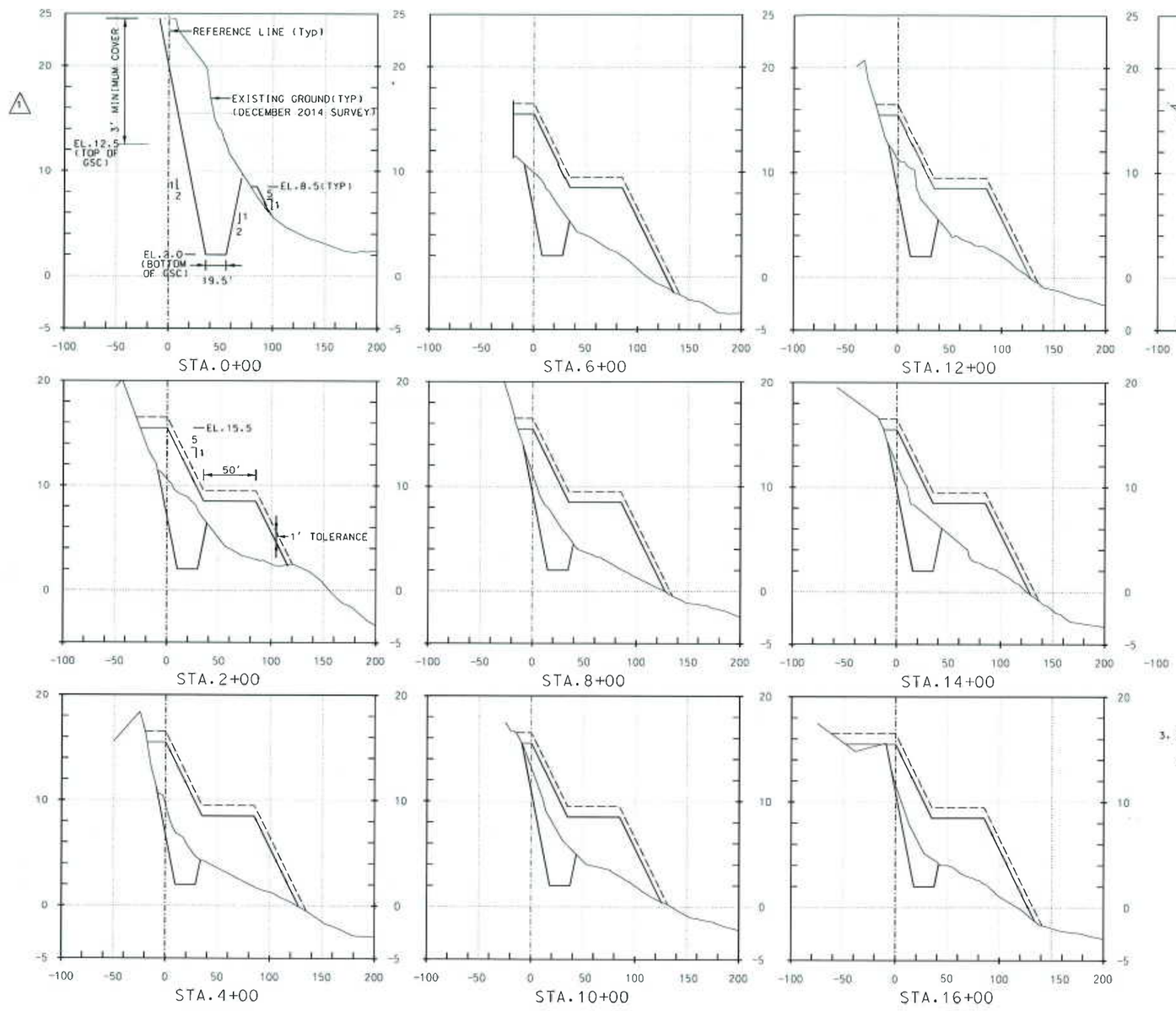
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

SANDY BRANCH
CEN/AM-EN-S

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EASTHAMPTON
SUFFOLK COUNTY, NY

PLAN SHEET STA.28+09 TO 31+87

SHEET IDENTIFICATION
C-106



3. EXTEND THE LANDWARD LIMIT OF BEACHFILL TO MEET THE EXISTING ELEVATION 15.5', TO ENSURE NO LOW POINTS ARE CREATED.

LEGEND

- TABULATED EXISTING GROUND
- 1 FT TOLERANCE
- EXISTING GROUND (DECEMBER 2014 SURVEY)
- PROPOSED

50 25 0 50 100FT
HORIZONTAL SCALE: 1"= 50'

5 2.5 0 5 10FT
VERTICAL SCALE: 1"= 5'

US Army Corps of Engineers

MARK	DESCRIPTION	DATE	APPR.
2	REVISED CROSS SECTION STA.0+00 AND STA.17+15	10/01/15	GA
1	REVISED VERTICAL SCALE MAX	07/01/15	GA

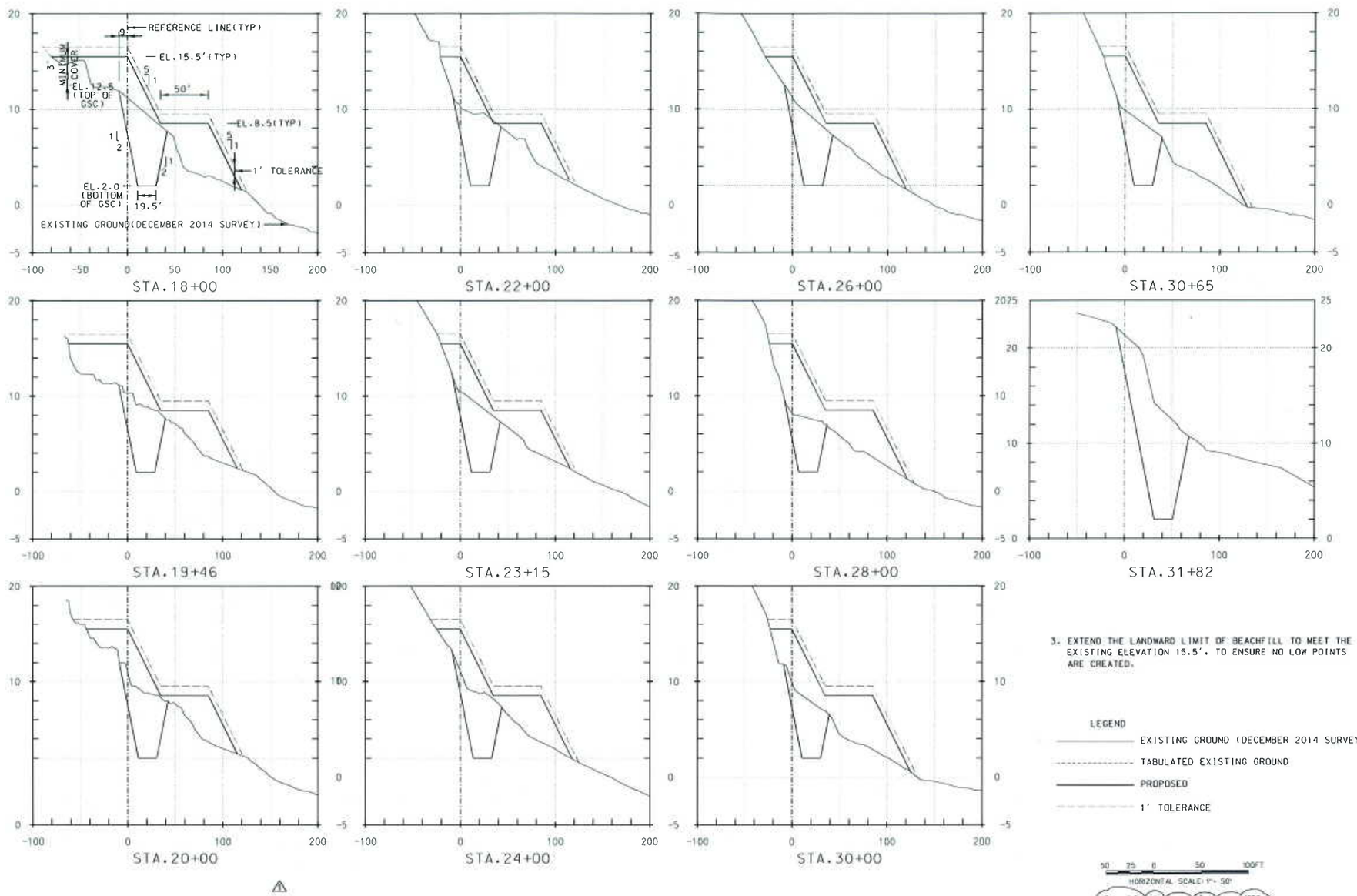
DESIGNED BY: Geoffrey A. Allegri
DWN BY: GA
CHK BY:
SUBMITTED BY: Geoffrey A. Allegri
PLOT SCALE:
ISSUE DATE:
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:
CODE: AA60
FILE NAME: AA60-C-PA.dgn

U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

SANDY BRANCH
CENAN-EN-S

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EASTHAMPTON
SUFFOLK COUNTY, NY
CROSS SECTIONS STA.0+00 TO STA.16+00

SHEET IDENTIFICATION
C-301
SHEET 5 OF 11



3. EXTEND THE LANDWARD LIMIT OF BEACHFILL TO MEET THE EXISTING ELEVATION 15.5', TO ENSURE NO LOW POINTS ARE CREATED.

LEGEND

- EXISTING GROUND (DECEMBER 2014 SURVEY)
- TABULATED EXISTING GROUND
- PROPOSED
- 1' TOLERANCE

50 25 0 50 100FT
HORIZONTAL SCALE: 1"= 50'

5 2.5 0 5 10FT
VERTICAL SCALE: 1"= 5'

US Army Corps of Engineers

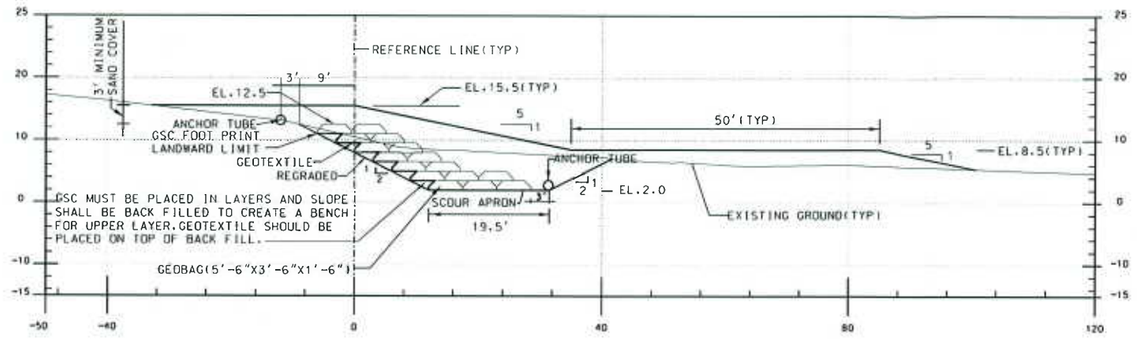
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

SANDY BRANCH
CENVN-EN-S

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EASTHAMPTON
SUFFOLK COUNTY, NY

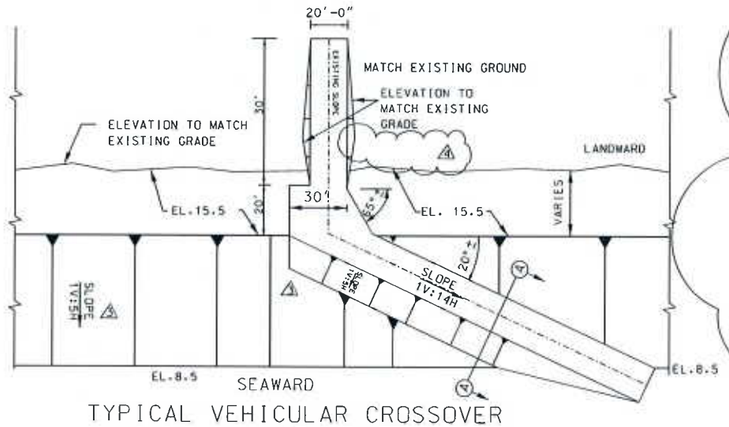
CROSS SECTIONS STA.18+00 TO STA.31+82

SHEET IDENTIFICATION
C-302

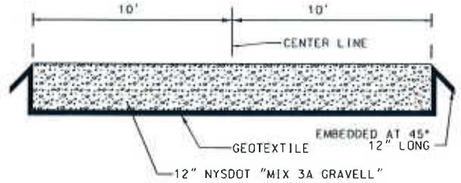


TYPICAL

10 5 0 10 20FT
HORIZONTAL SCALE: 1"= 10'
1 .5 0 1 2FT
VERTICAL SCALE: 1"= 1'



TYPICAL VEHICULAR CROSSOVER
N.T.S.



SECTION A-A
N.T.S.

US Army Corps of Engineers

REVISED LABELING	7/30/15	GA
REMOVED GSC TYPICAL	2/11/15	GA
ADDED DIMENSIONS AND DETAILS		
ANGLES TO 15° AND 20°, CHANGED		
SIDE SLOPE TO 1V:3H AND LABELED	2/19/15	GA
VEHICULAR CROSSOVER SIDE SLOPE	DATE	APPR.
DESCRIPTION		

DESIGNED BY: Gianluca Azzaro	DATE: 2015	DESCRIPTION:
DRAWN BY: LA	DWG BY:	SOLICITATION NO.:
SUBMITTED BY: Gianluca Azzaro		CONTRACT NO.:
PLOTTED:	ISSUE DATE:	FILE NUMBER:
SCALE: AS NOTED	FILE NAME: MSD1Dtl05.dgn	

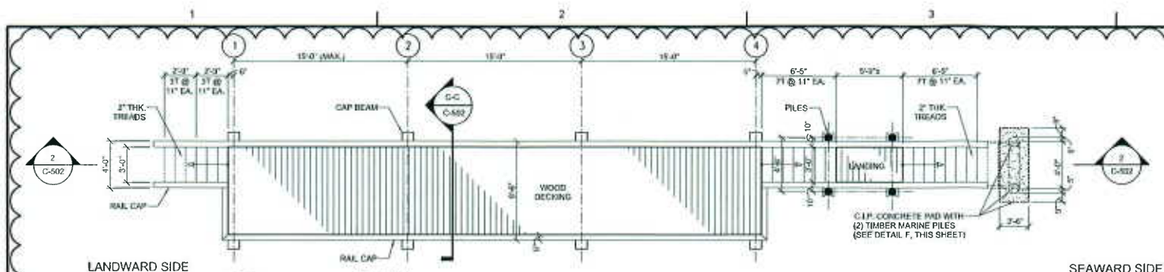
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

SANDY BRANCH
CENNAR/NYAS

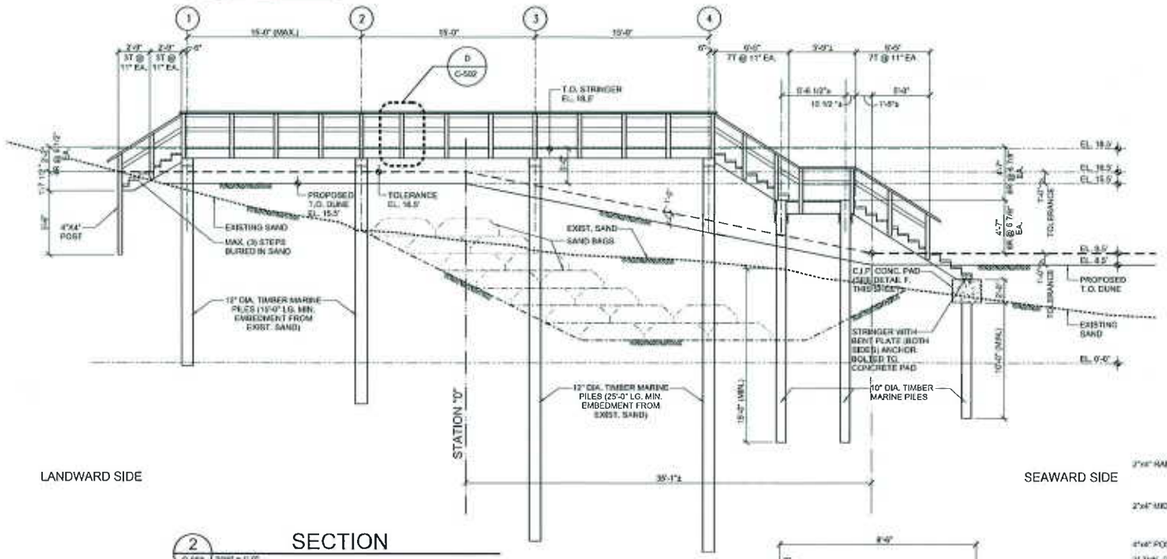
FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EASTHAMPTON
SUFFOLK COUNTY, NY

VEHICULAR CROSSOVER
AND TYPICAL DETAILS SHEET

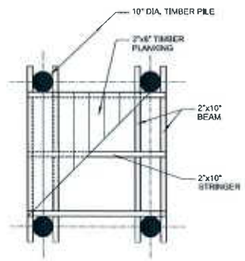
SHEET IDENTIFICATION
C-501



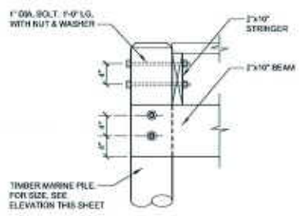
1 C-502 PLAN



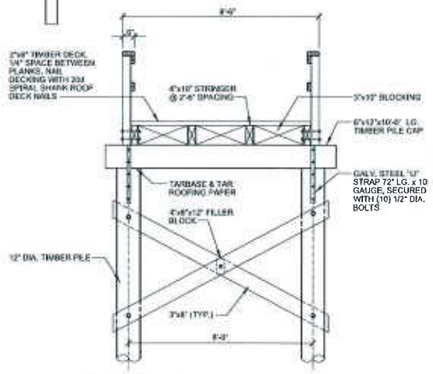
2 C-502 SECTION



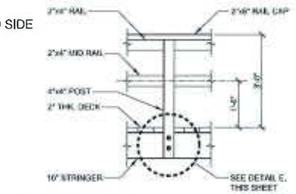
A C-502 LANDING PLAN (SIM.)



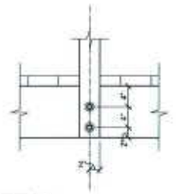
B C-502 CONN. DETAIL @ LANDING



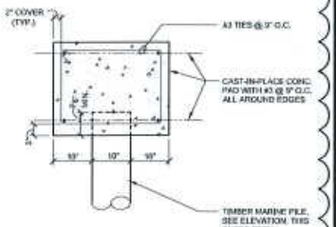
C C-502 SECTION C-C



D C-502 DETAIL



E C-502 DETAIL



F C-502 DETAIL

GENERAL NOTES:

1. THESE TYPICAL DETAILS ARE INFORMATION ONLY. PLANS AND SPECIFICATIONS FOR STAIR CONSTRUCTION SHALL BE PREPARED BY A QUALIFIED PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF NEW YORK, AND SUBMITTED TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
2. EXACT LOCATION ARE TO BE SET IN THE FIELD.
3. CONFORM TO IBC 2012 WITH NY ADOPTED TECH AMENDMENTS, AND ALL OTHER APPLICABLE LOCAL AND STATE CODES, ORDINANCE AND REGULATIONS, LATEST EDITIONS.
4. ALL LUMBER FOR THE STAIRS WILL BE TREATED IN ACCORDANCE WITH AWPA U1, INTENDED FOR ABOVE GROUND USE, INTENDED FOR GROUND CONTACT, ALL LUMBER FOR PILES WILL BE TREATED USING CATEGORY UC5A.
5. ALL NAILS, BOLTS, NUTS, WASHERS AND ALL OTHER FASTENERS SHALL BE HOT DIPPED GALVANIZED.
6. DECKING SHALL BE NAILED TO JOISTS USING 20d GALVANIZED COMMON NAILS, PROVIDE THREE (3) NAILS PER JOIST CROSSING, ALSO TYPICAL FOR STAIRS.
7. ALL PILE BENTS INCLUDING TWO (2) BENTS UNDER THE STAIRWAY LANDING SHALL BE BRACED, EXCEPT ALONG COL. LINES 1 & 2.
8. ALL RAILINGS SHALL BE SECURED TO POSTS USING HOT-DIPPED GALVANIZED SCREWS 5" IN LENGTH.
9. THE CONTRACTOR CAN USE JETTING OR VIBRATORY HAMMER TO PLACE THE PILES.
10. ALL TIMBER PILES SHALL SATISFY THE REQUIREMENTS AS SPECIFIED IN ASTM D25.

US Army Corps of Engineers® New York District

NO.	DESCRIPTION	DATE	APP'D
1	AMENDMENT 1, REVISED SHEET C502	03/30/15	

ENGINEERS	DATE
DESIGNED BY: J.R.N.	DATE: 02/20/2015
DRAWN BY: J.R.N.	CAD WS: S.S.A.N.X.C.
SUBMITTED BY:	SCALE: AS NOTED
RECOMMENDED BY:	
APPROVED BY:	

SOLICITATION NO.:
CONTRACT NO.:
PLOT NUMBER:
PLOT TONER:

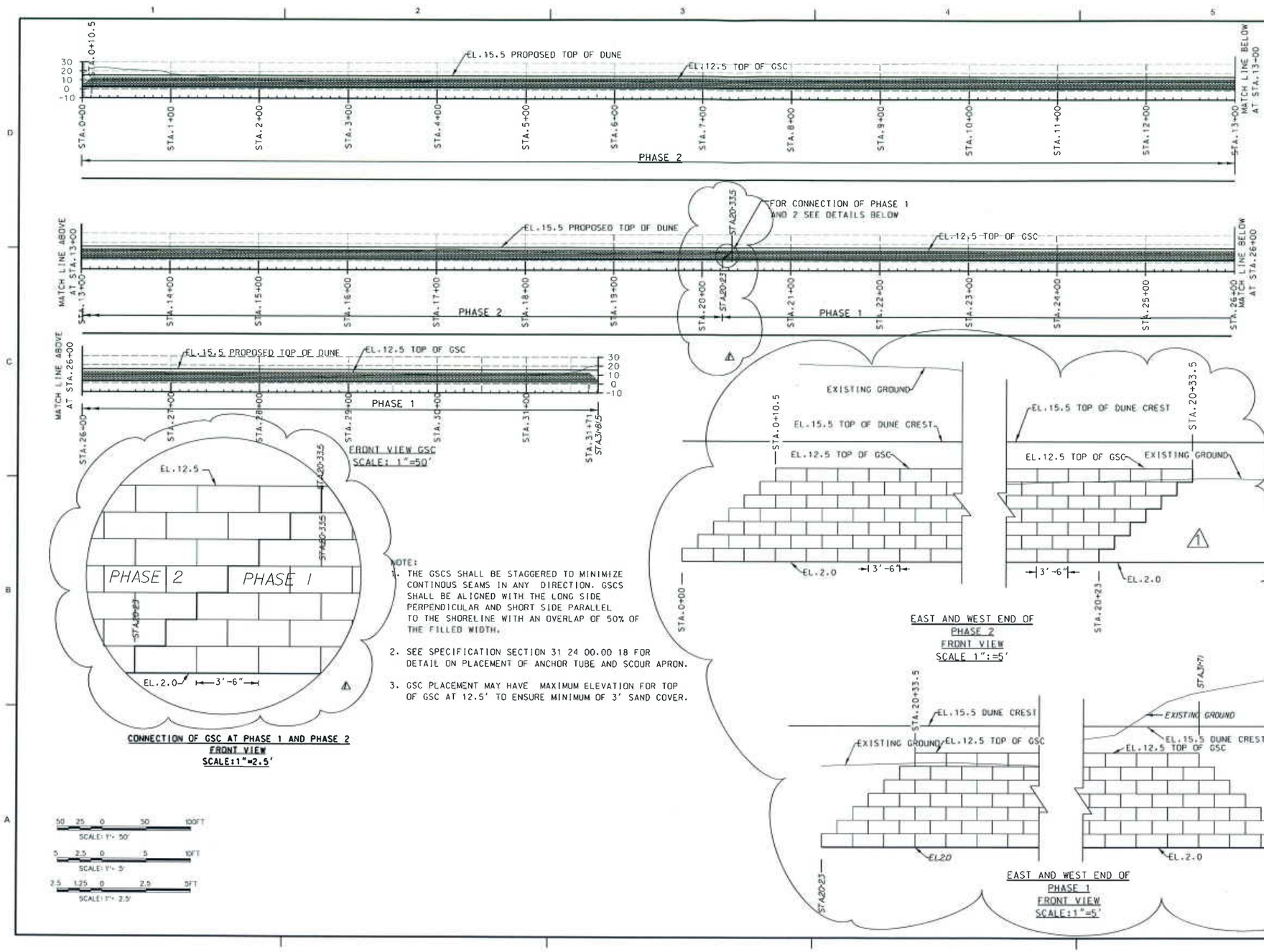
U.S. ARMY ENGINEER DISTRICT NEW YORK http://www.nan.usace.army.mil

SANDY BRANCH CENAN-EN-S

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EAST HAMPTON
SUFFOLK COUNTY, NY

PEDESTRIAN DUNE CROSS OVER PLAN, SECTIONS & DETAILS

SHEET IDENTIFICATION
C-502
SHEET 12 OF 13



NOTE:

1. THE GSCS SHALL BE STAGGERED TO MINIMIZE CONTINOUS SEAMS IN ANY DIRECTION. GSCS SHALL BE ALIGNED WITH THE LONG SIDE PERPENDICULAR AND SHORT SIDE PARALLEL TO THE SHORELINE WITH AN OVERLAP OF 50% OF THE FILLED WIDTH.
2. SEE SPECIFICATION SECTION 31 24 00.00 18 FOR DETAIL ON PLACEMENT OF ANCHOR TUBE AND SCOUR APRON.
3. GSC PLACEMENT MAY HAVE MAXIMUM ELEVATION FOR TOP OF GSC AT 12.5' TO ENSURE MINIMUM OF 3' SAND COVER.

US Army Corps of Engineers

U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NY, NY

SANDY BRANCH
CEDARHENGE

FIRE ISLAND INLET TO MONTAUK POINT
DOWNTOWN MONTAUK STABILIZATION PROJECT
TOWN OF EAST HAMPTON
SUFFOLK COUNTY, NY

GSC FRONT VIEW AND DETAILS

SHEET IDENTIFICATION
C-503