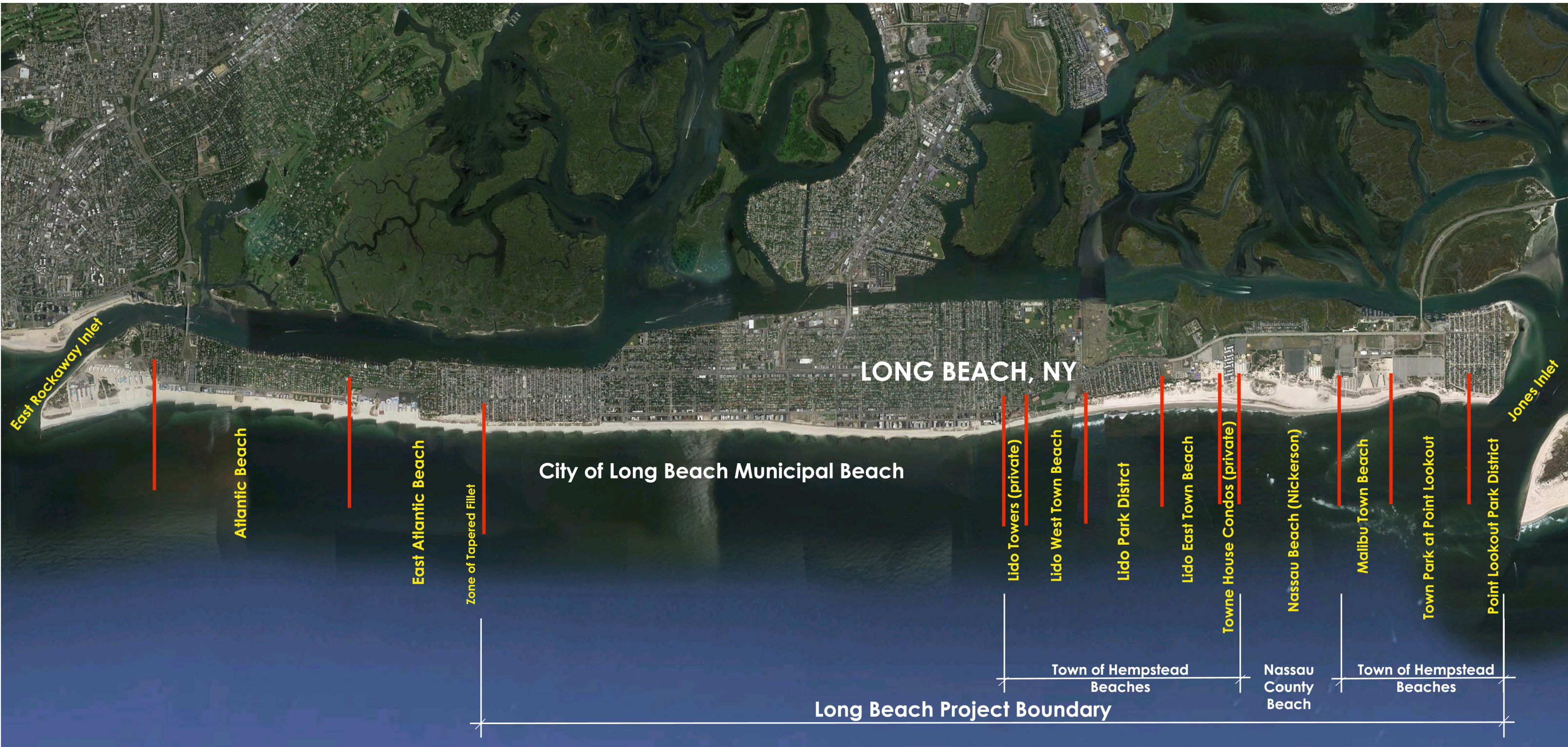
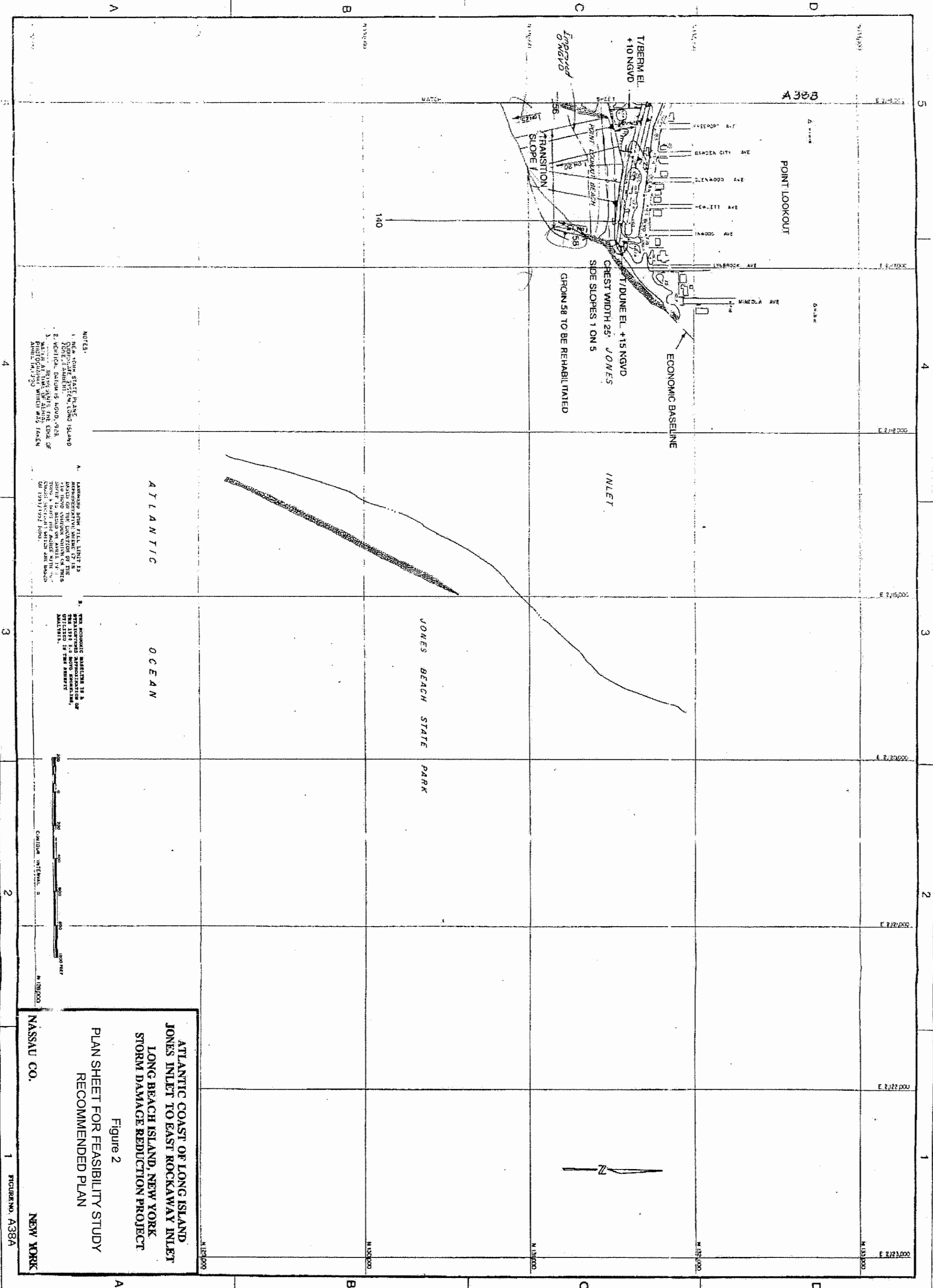
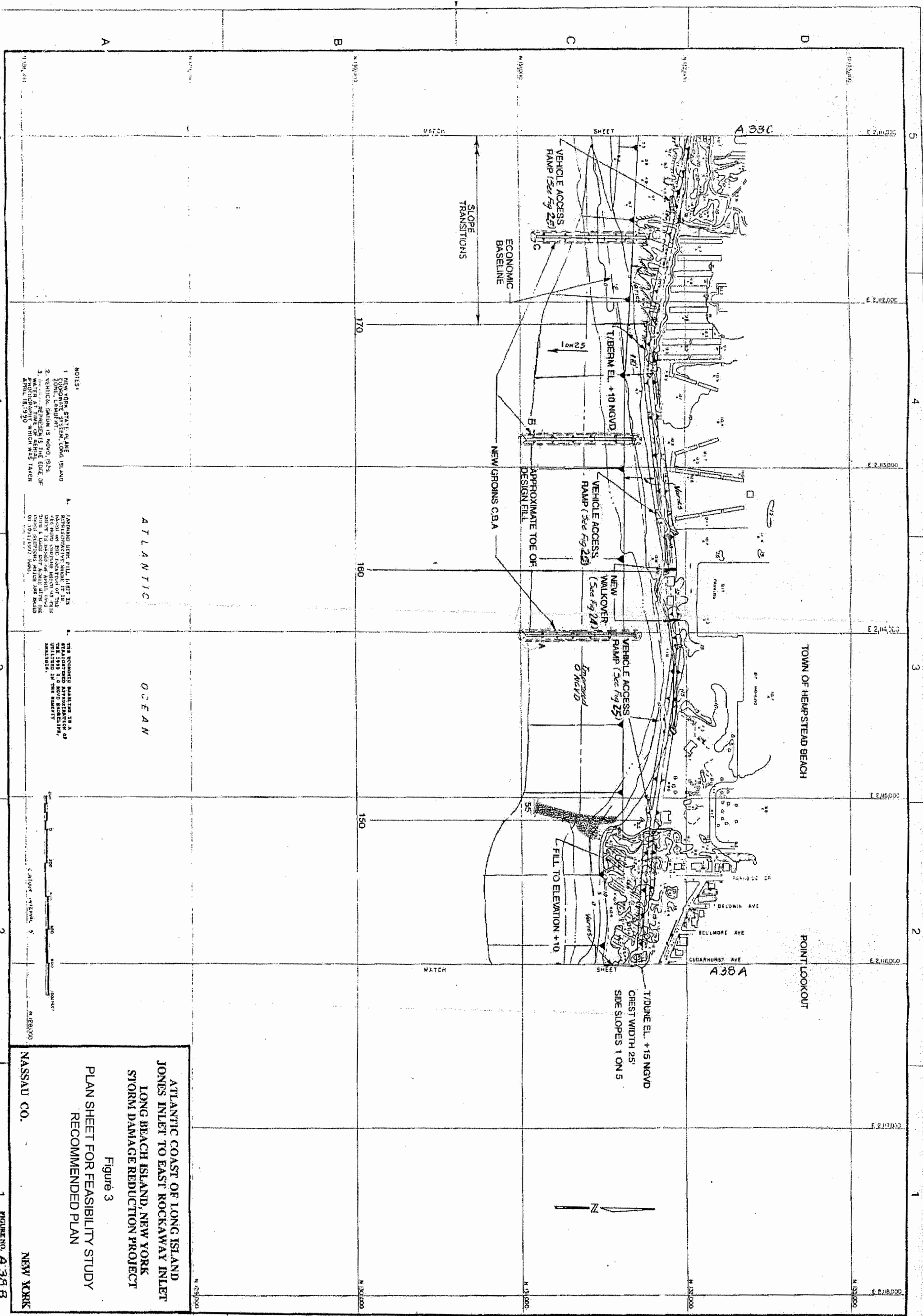




LONG BEACH: Project Location Map
Figure 1

Scale: NTS





NOTES:
1. NEW YORK STATE PLANE
COORDINATE SYSTEM, LONG ISLAND
ZONE, LAMBERT.
2. VERTICAL DATUM IS MGD, 1929.
3. BENCHMARK IS THE EDGE OF
MASONRY WHICH WAS TAKEN
APRIL 15, 1930.

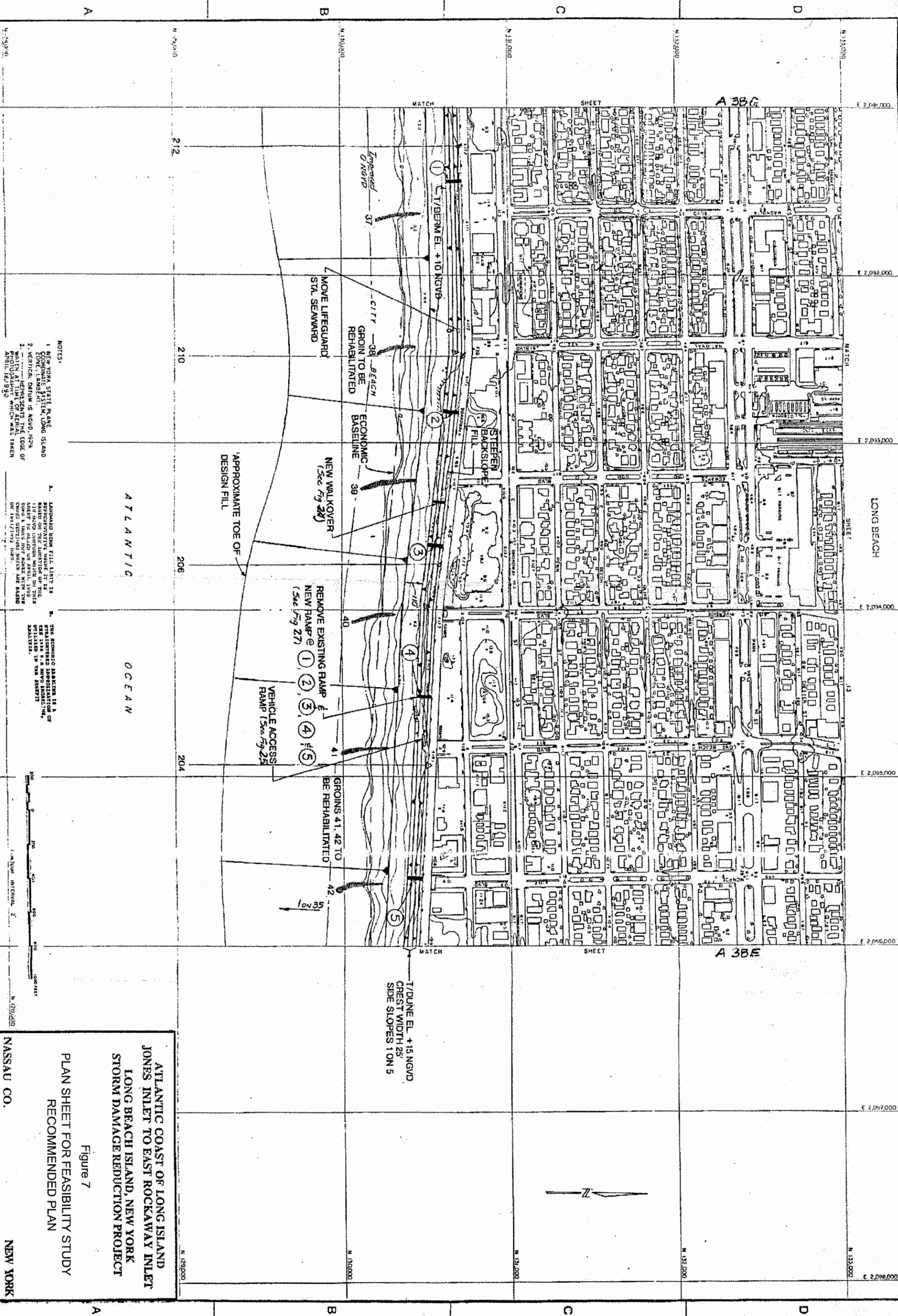
A. LANDWARD FILL LIMIT IS
REPRESENTATIVE OF THE
DESIGN OF THE FILL. THE
FILL IS BASED ON THE
DESIGN OF THE FILL. THE
DESIGN OF THE FILL IS
BASED ON THE DESIGN OF
THE FILL. THE DESIGN OF
THE FILL IS BASED ON THE
DESIGN OF THE FILL.

B. THE ECONOMIC BARRIER IS A
STRAIGHTENED APPROXIMATION OF
THE ECONOMIC BARRIER,
UTILIZED IN THE DESIGN
BARRIER.

SCALE: HORIZONTAL 1" = 100'
VERTICAL 1" = 10'

NASSAU CO. NEW YORK

ATLANTIC COAST OF LONG ISLAND
JONES INLET TO EAST ROCKAWAY INLET
LONG BEACH ISLAND, NEW YORK
STORM DAMAGE REDUCTION PROJECT
Figure 3
PLAN SHEET FOR FEASIBILITY STUDY
RECOMMENDED PLAN



NOTES:

1. NEW YORK STATE PLANE
2. VERTICAL DATUM IS NGVD, 1929
3. WATER AT TIME OF AERIAL PHOTOGRAPHY WHICH WAS TAKEN APRIL 18, 1930

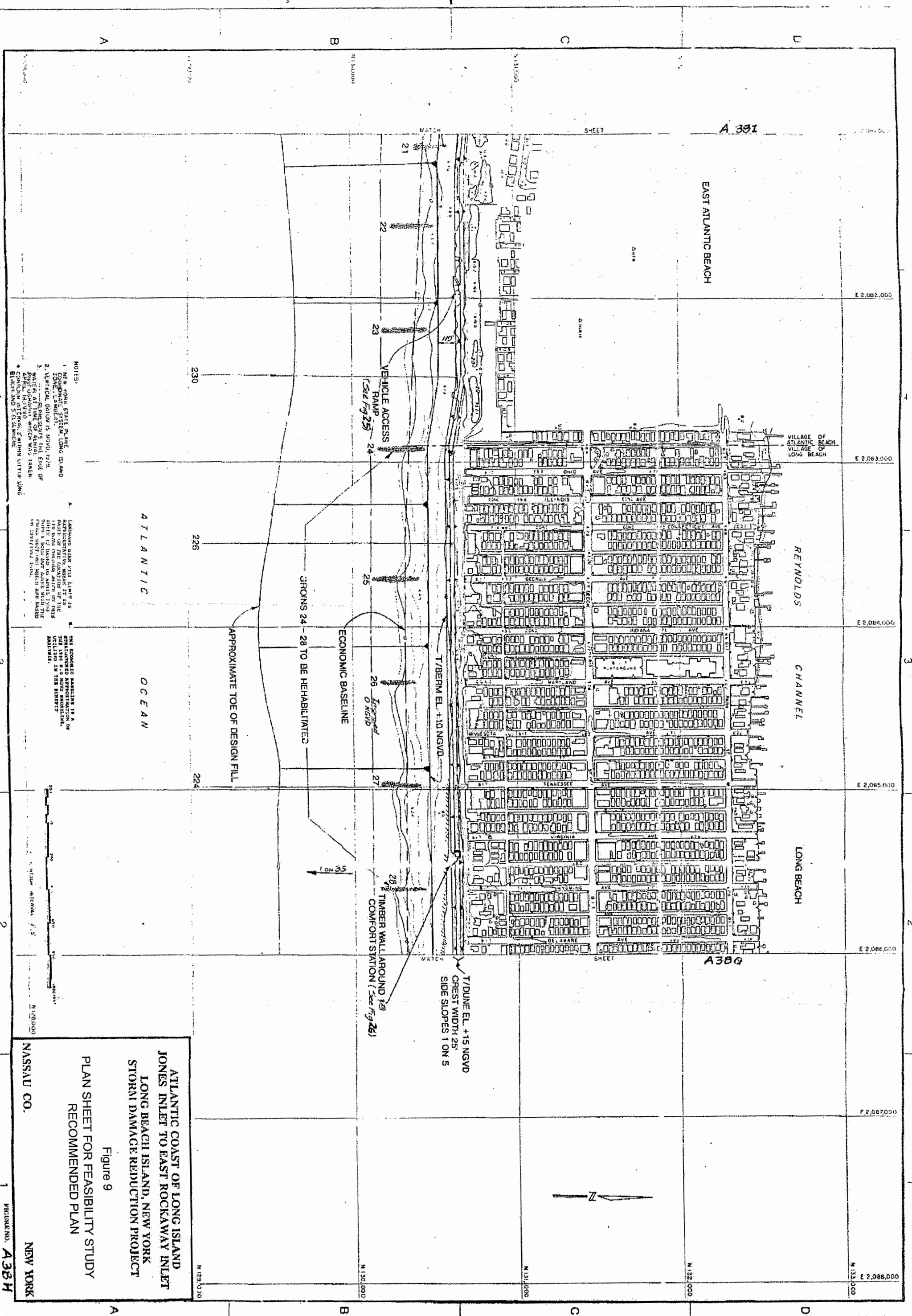
A. LANDWARD NEW FILL LIMIT IS REPRESENTATIVE OF THE LIMIT BASED ON THE LOCATION OF THE 100' FLOOD SURROUND WHICH ON THIS DATE WAS THE FLOOD SURROUND. THE CHANGING SECTION SHOWN ARE BASED ON 1931/1932 DATA.

B. THE ECONOMIC BASELINE IS A REPRESENTATIVE APPROPRIATION OF THE 1938 F.O. NEW PROJECT, BASED ON THE 1938 F.O. NEW PROJECT. THE ECONOMIC BASELINE IS A REPRESENTATIVE APPROPRIATION OF THE 1938 F.O. NEW PROJECT.

ATLANTIC COAST OF LONG ISLAND
JONES INLET TO EAST ROCKAWAY INLET
LONG BEACH ISLAND, NEW YORK
STORM DAMAGE REDUCTION PROJECT

Figure 7
PLAN SHEET FOR FEASIBILITY STUDY
RECOMMENDED PLAN

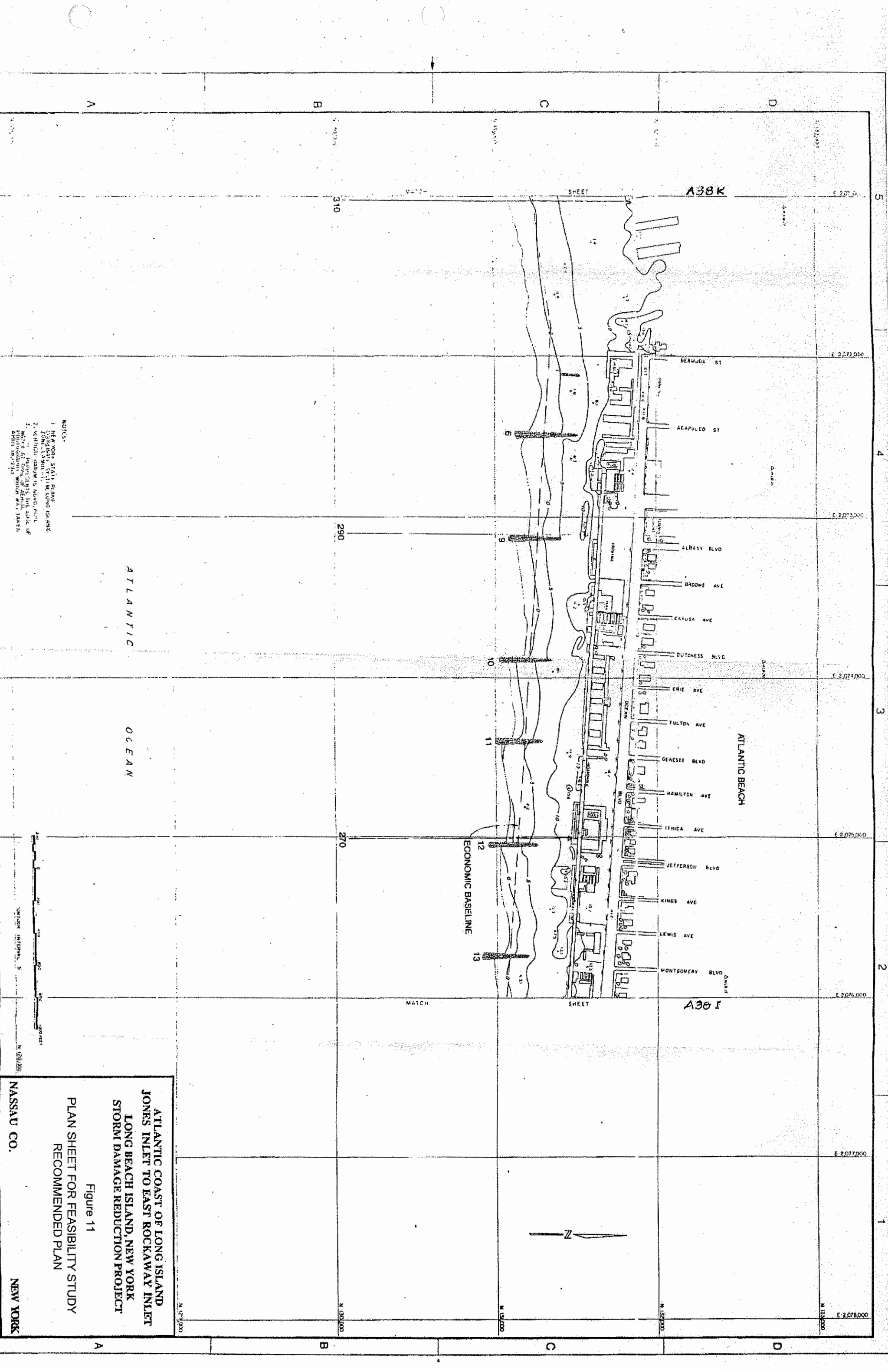
NASSAU CO.
NEW YORK



NOTES:
1. NEW YORK STATE PLANE COORDINATE SYSTEM, LONG ISLAND ZONE, LAMBERT.
2. VERTICAL DATUM IS NAVD, 1929.
3. ALL DIMENSIONS ARE THE END OF APRIL, 1970.
4. CONTOUR INTERVAL, 2' WITH CULTURE LONG BEACH AND 5' ELSEWHERE.

LANDING BEACH AREA LIMIT IS BASED ON THE ASSUMPTION OF THE 1700 BOW FRONTAGE AFTER THE SHIP IS LAID ON APRIL, 1970. THE BEACH AREA IS BASED ON THE ASSUMPTION OF THE 1700 BOW FRONTAGE AFTER THE SHIP IS LAID ON APRIL, 1970. THE BEACH AREA IS BASED ON THE ASSUMPTION OF THE 1700 BOW FRONTAGE AFTER THE SHIP IS LAID ON APRIL, 1970.

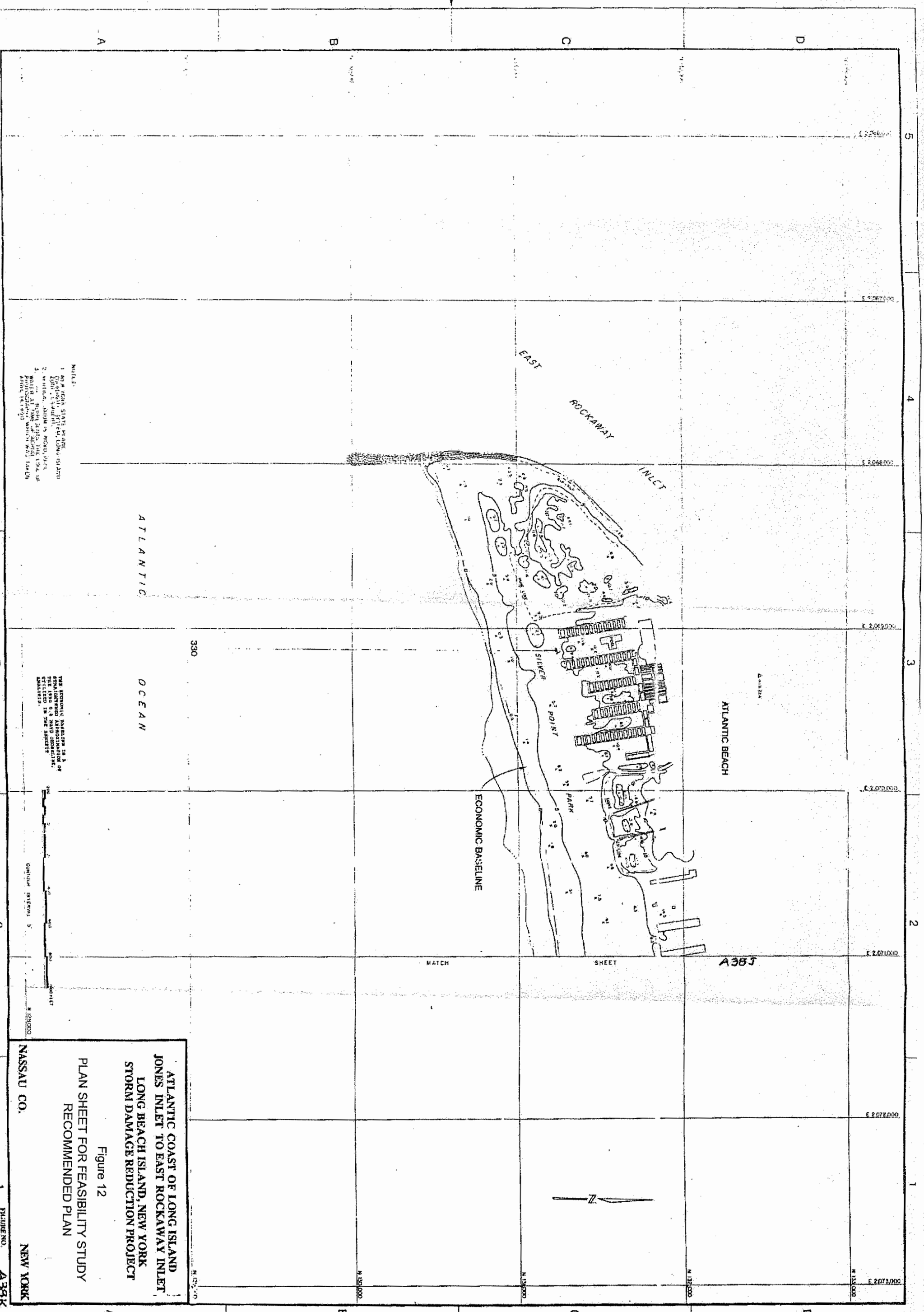
ATLANTIC COAST OF LONG ISLAND
JONES INLET TO EAST ROCKAWAY INLET
LONG BEACH ISLAND, NEW YORK
STORM DAMAGE REDUCTION PROJECT
PLAN SHEET FOR FEASIBILITY STUDY
RECOMMENDED PLAN
Figure 9
NASSAU CO.
NEW YORK



ATLANTIC COAST OF LONG ISLAND
 JONES INLET TO EAST ROCKAWAY INLET
 LONG BEACH ISLAND, NEW YORK
 STORM DAMAGE REDUCTION PROJECT

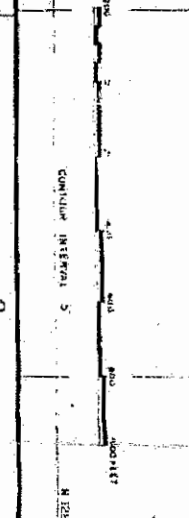
Figure 11
 PLAN SHEET FOR FEASIBILITY STUDY
 RECOMMENDED PLAN

NASSAU CO. NEW YORK

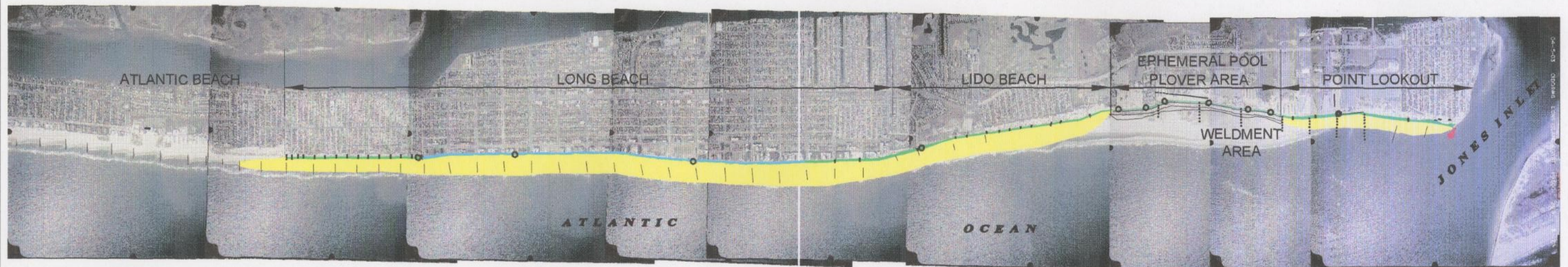


NOTES:
1. NEW YORK STATE PRINT
2. WORKING DRAWING
3. WORKING DRAWING
4. WORKING DRAWING
5. WORKING DRAWING

THE ECONOMIC BASELINE IS A
GENERALIZED APPROXIMATION
OF THE ECONOMIC BASELINE
AND IS NOT TO BE USED
FOR DESIGN PURPOSES.



ATLANTIC COAST OF LONG ISLAND
JONES INLET TO EAST ROCKAWAY INLET
LONG BEACH ISLAND, NEW YORK
STORM DAMAGE REDUCTION PROJECT
Figure 12
PLAN SHEET FOR FEASIBILITY STUDY
RECOMMENDED PLAN
NASSAU CO. NEW YORK



NOTE: WELDMENT AREA IS A PART OF A SAND SHOAL THAT WILL CHANGE IN POSITION FROM YEAR TO YEAR

* GROIN COVERAGE IS NOT REPRESENTATIVE OF THE PROPOSED CONDITION (SEE FIGURES 14 TO 25 FOR AN ACCURATE DEPICTION OF THE GROIN COVERAGE).

LEGEND

- DUNE (WITH GRASS AND PROTECTIVE FENCING)
- SAND BARRIER
- BEACH FILL*
- NEW GROINS
- EXISTING GROINS
- DUNE WALKOVERS
- VEHICULAR ACCESS RAMPS
- TERMINAL GROIN EXTENSION



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OFFSHORE AND COASTAL TECHNOLOGIES, INC.
AND
ANDREWS, MILLER & ASSOCIATES, INC.
(JOINT VENTURE)

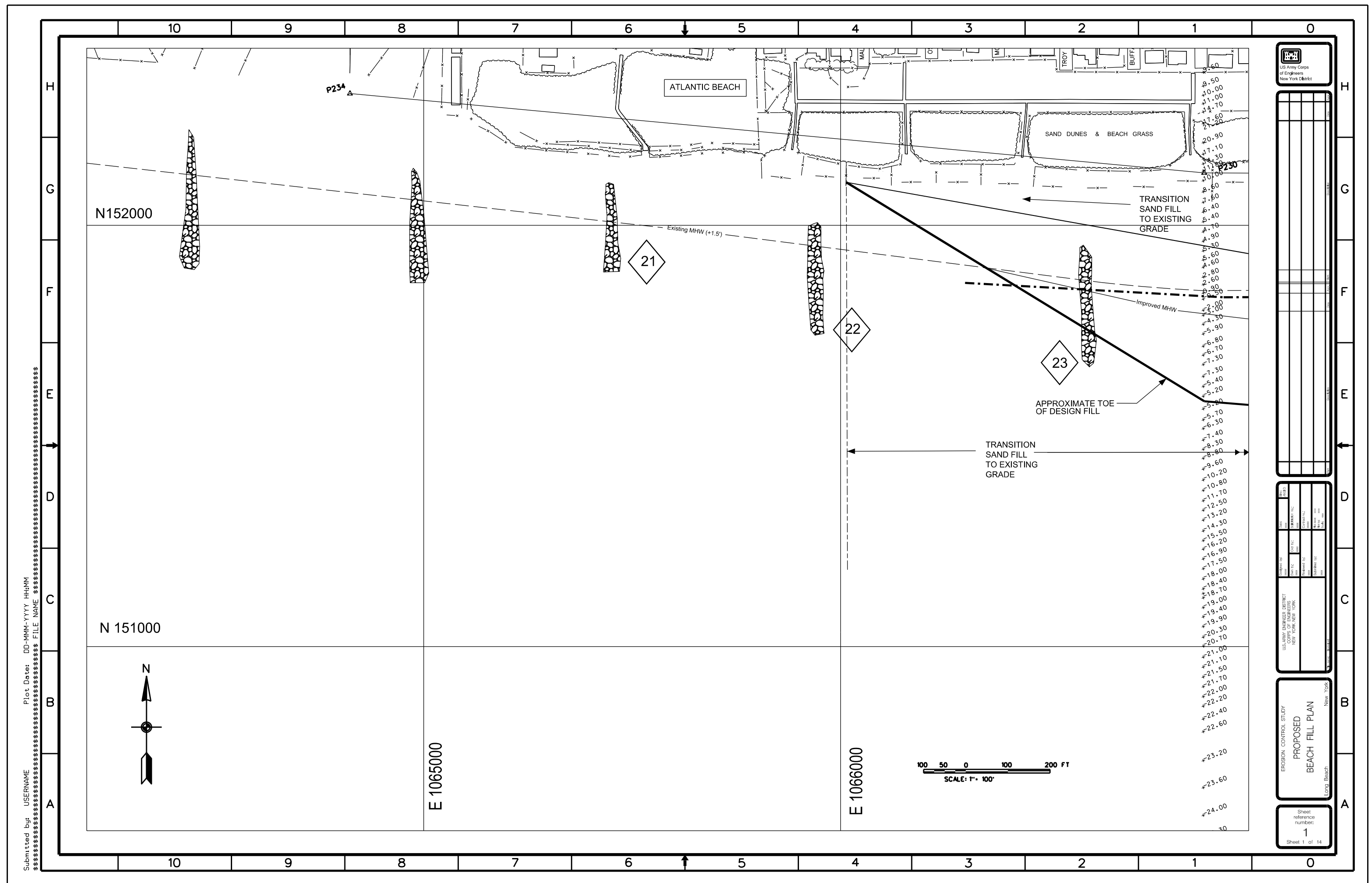
LONG BEACH ISLAND, NEW YORK
STORM DAMAGE REDUCTION PROJECT
LRR RECOMMENDED PLAN
STUDY AREA

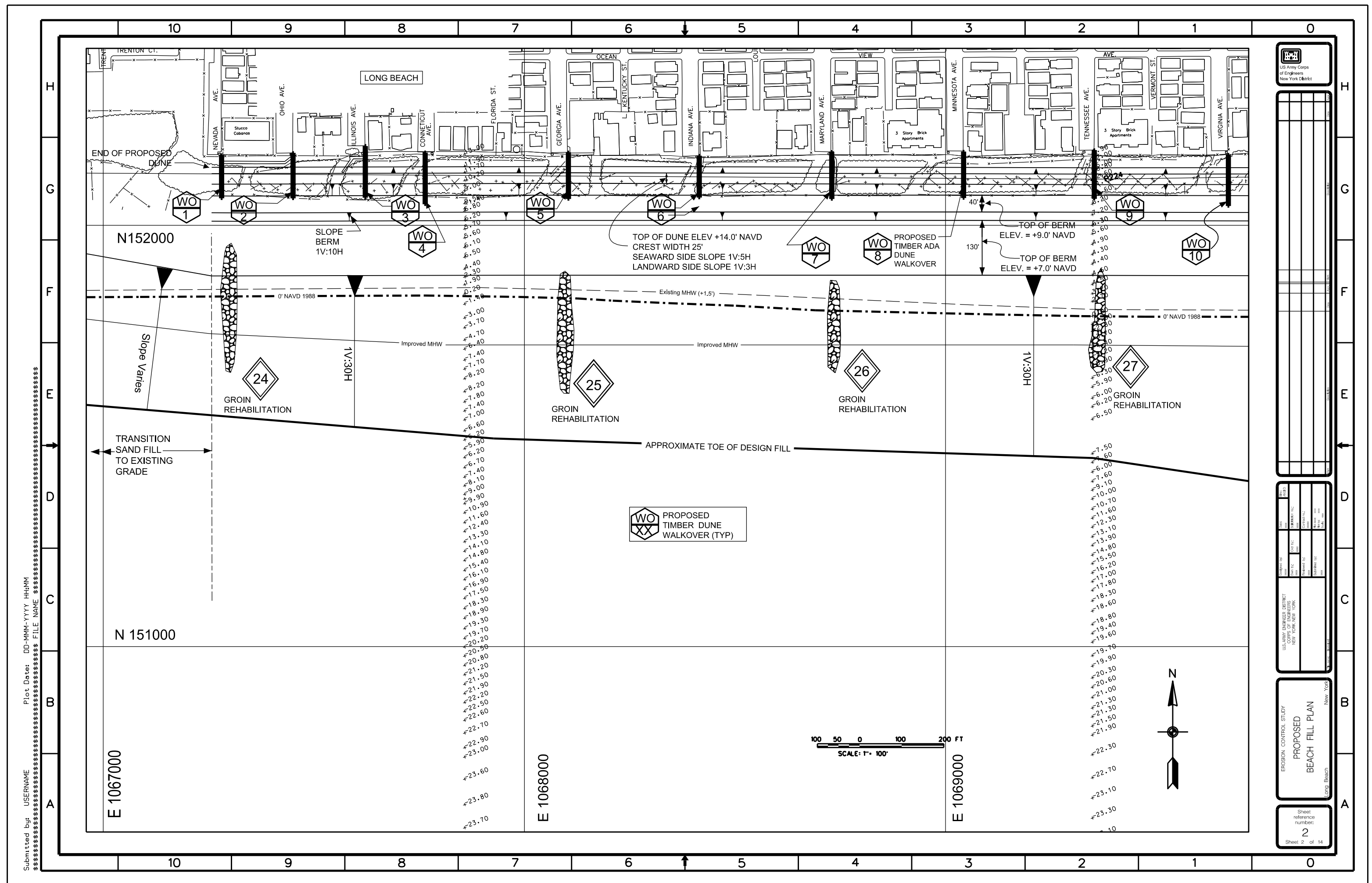
SCALE 1" = 3000'

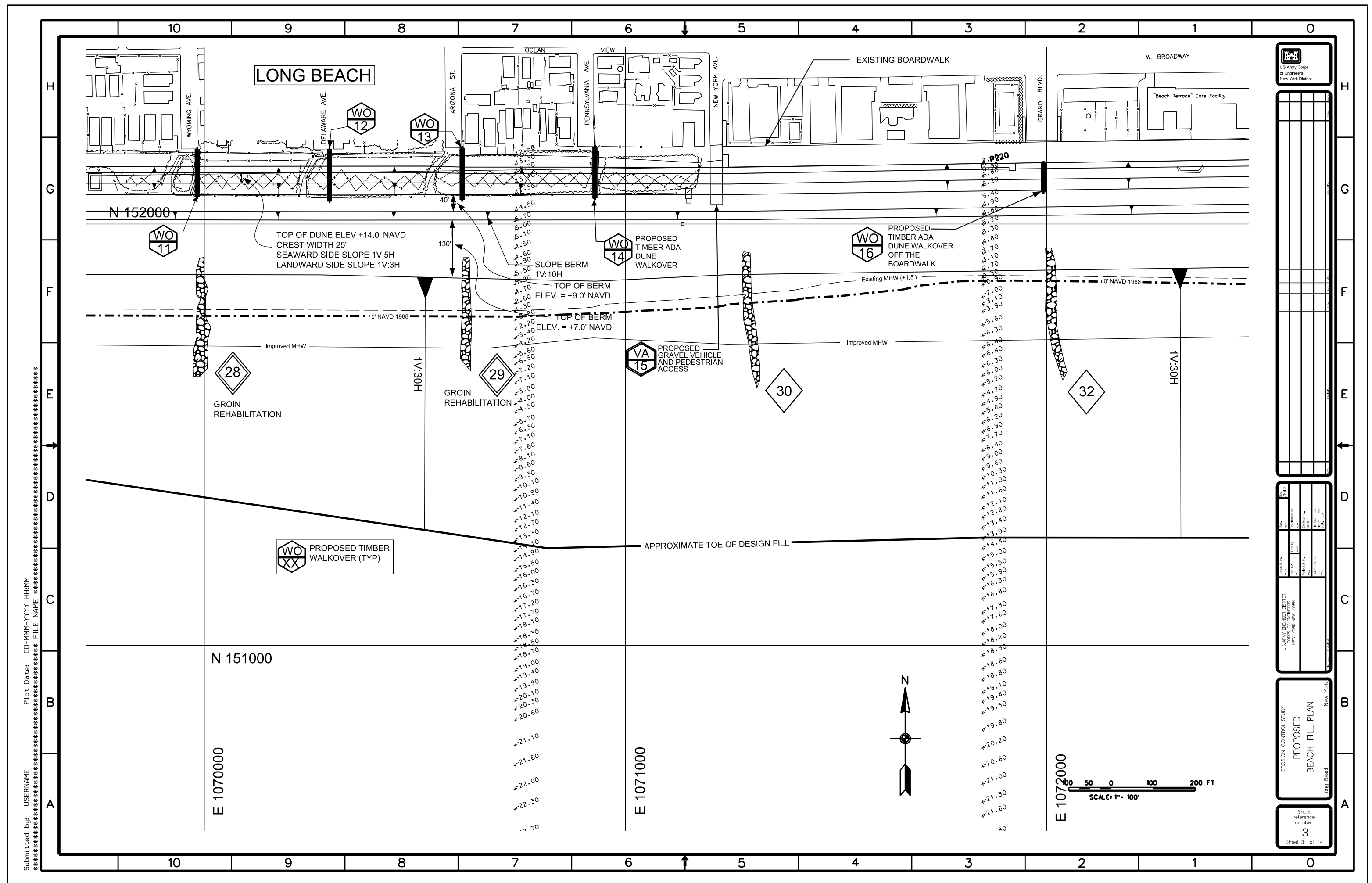
Figure No. 13

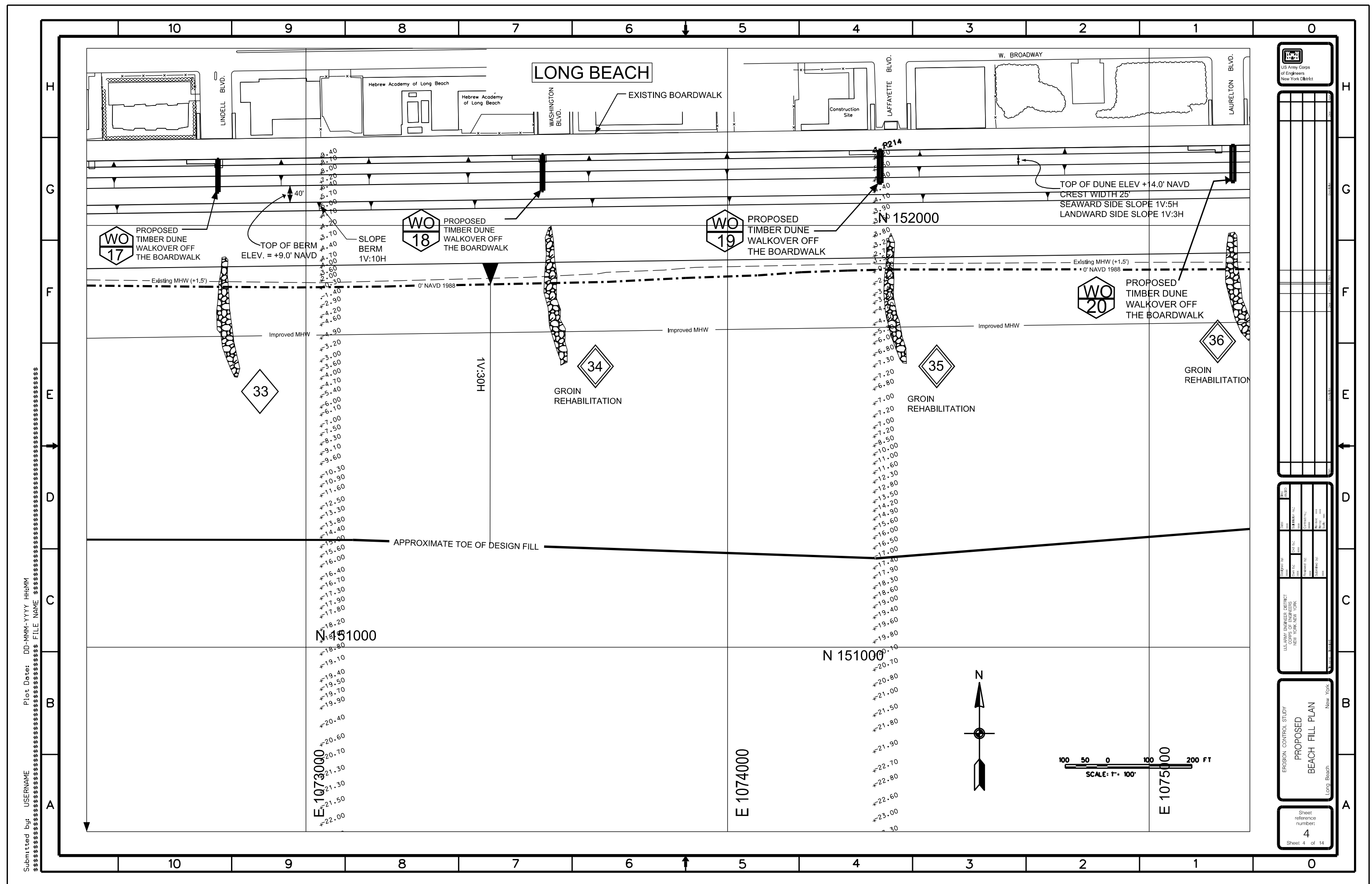
NASSAU COUNTY

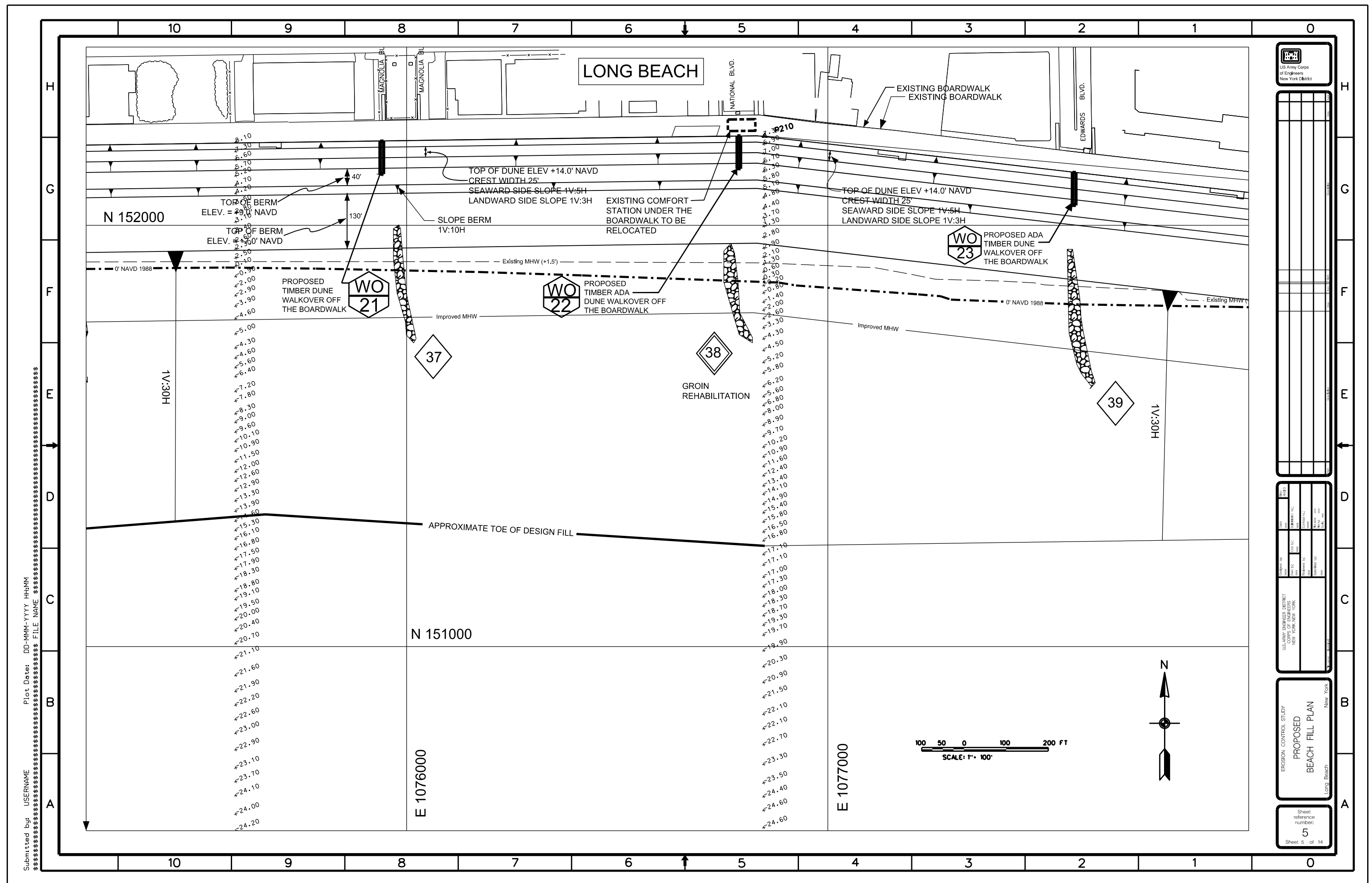
NEW YORK

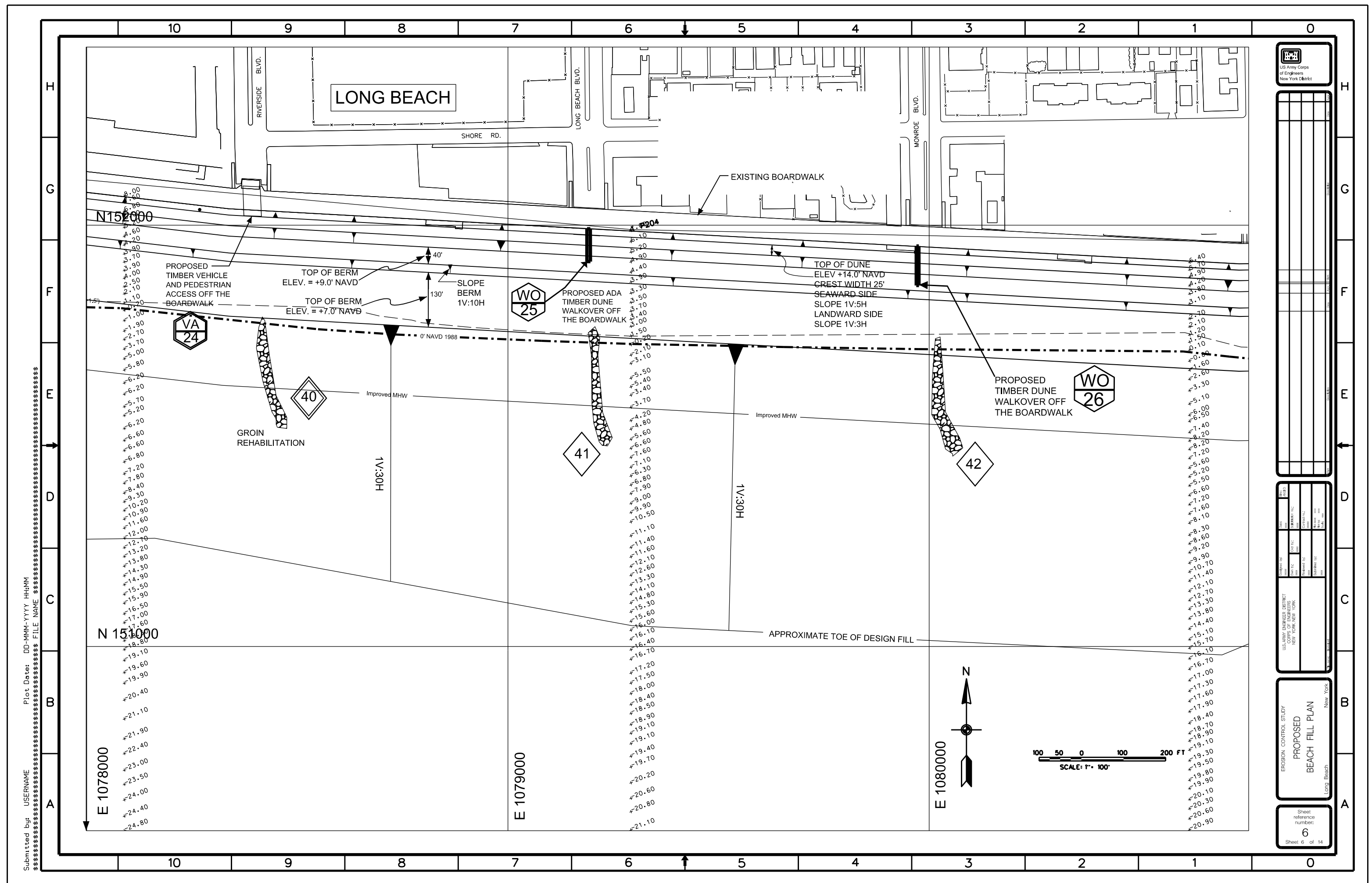


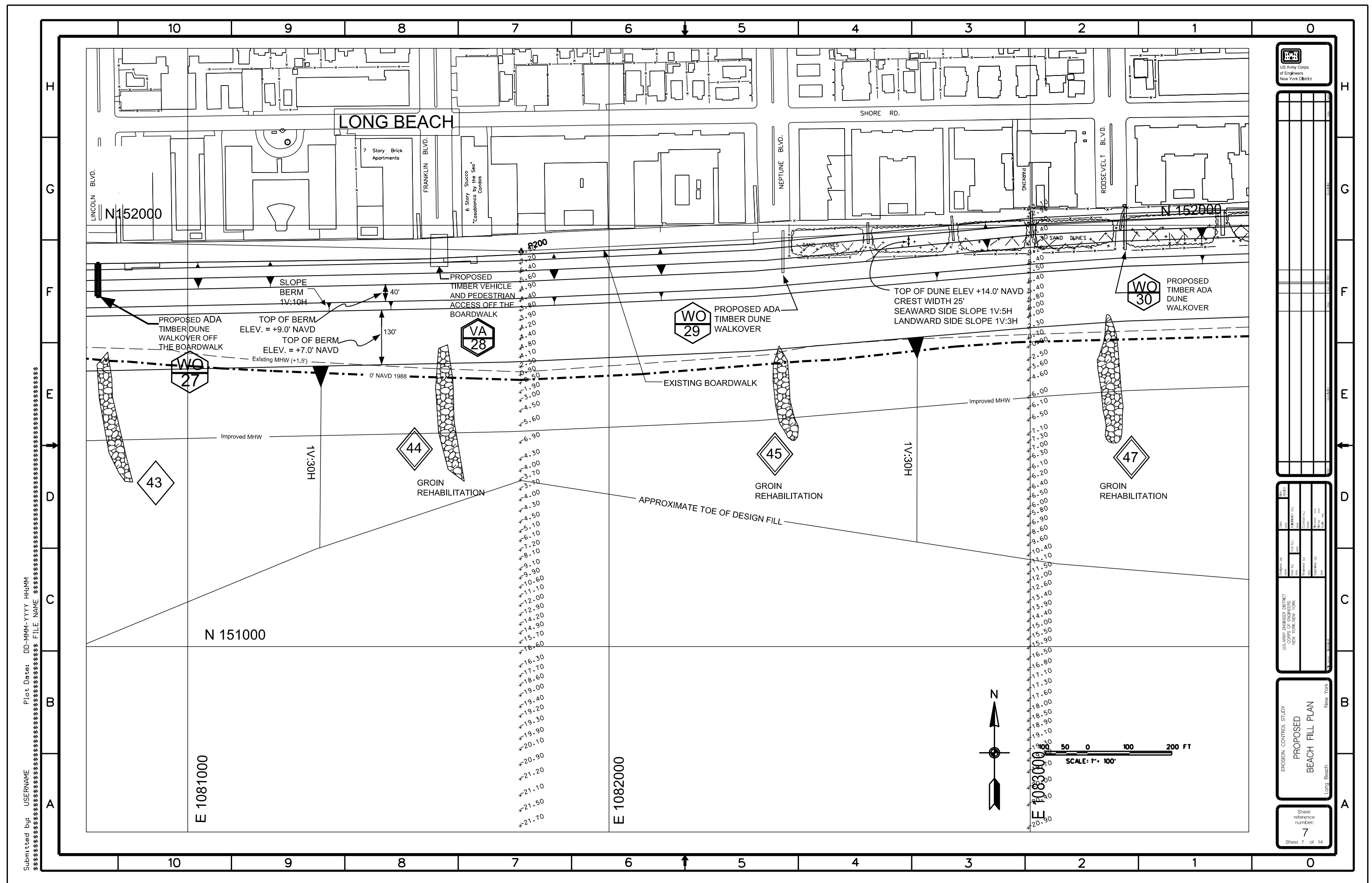


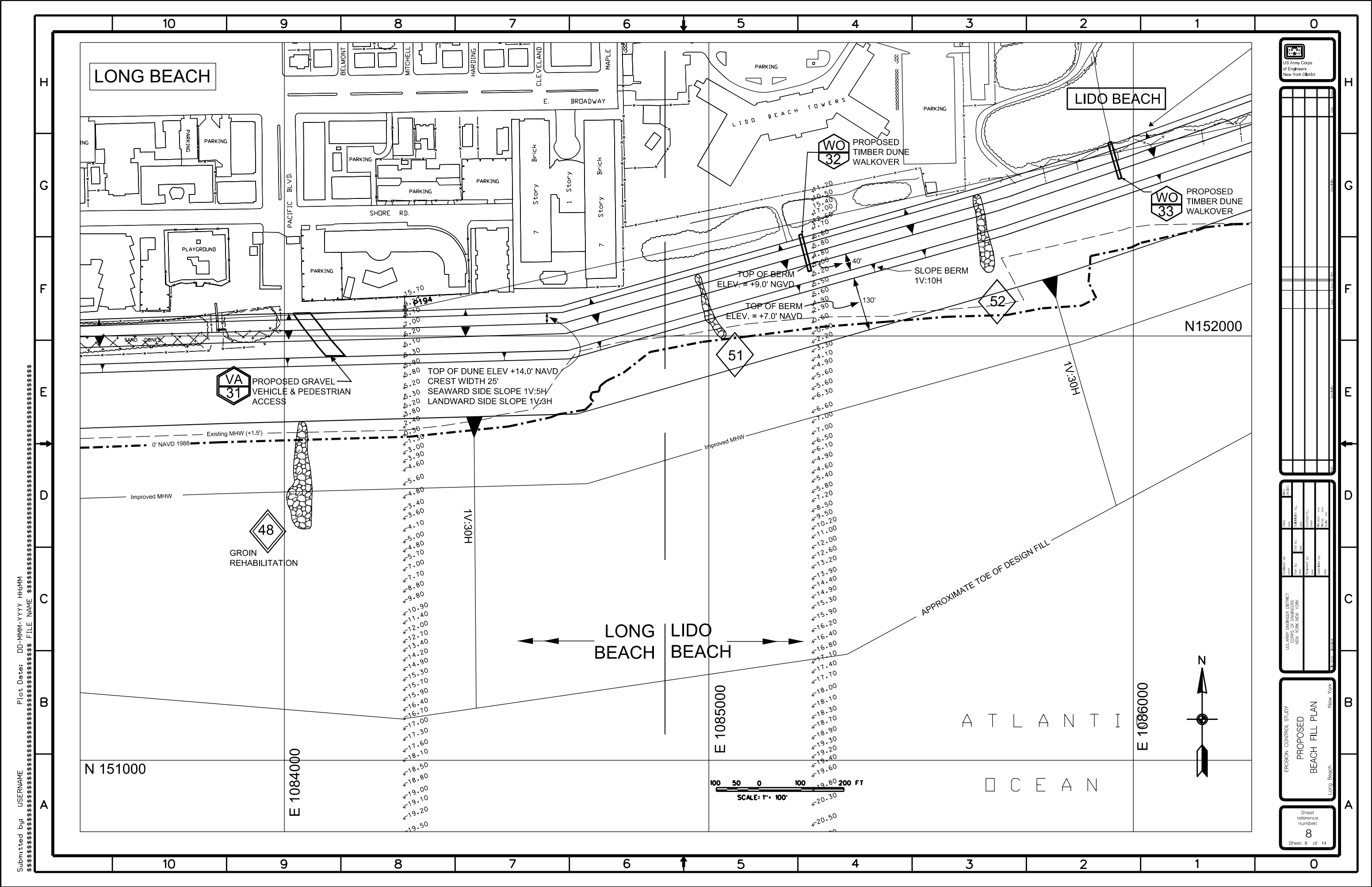


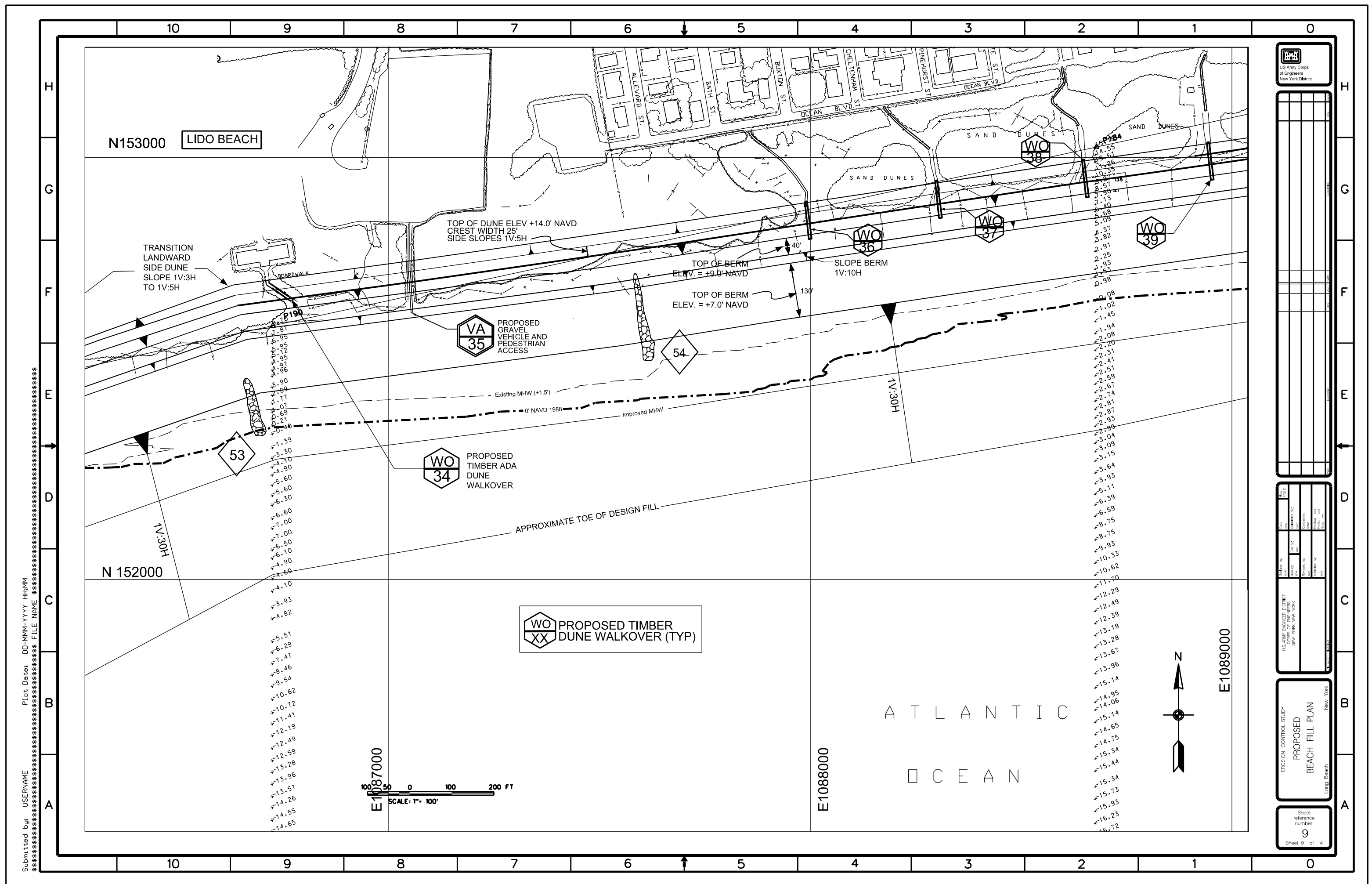


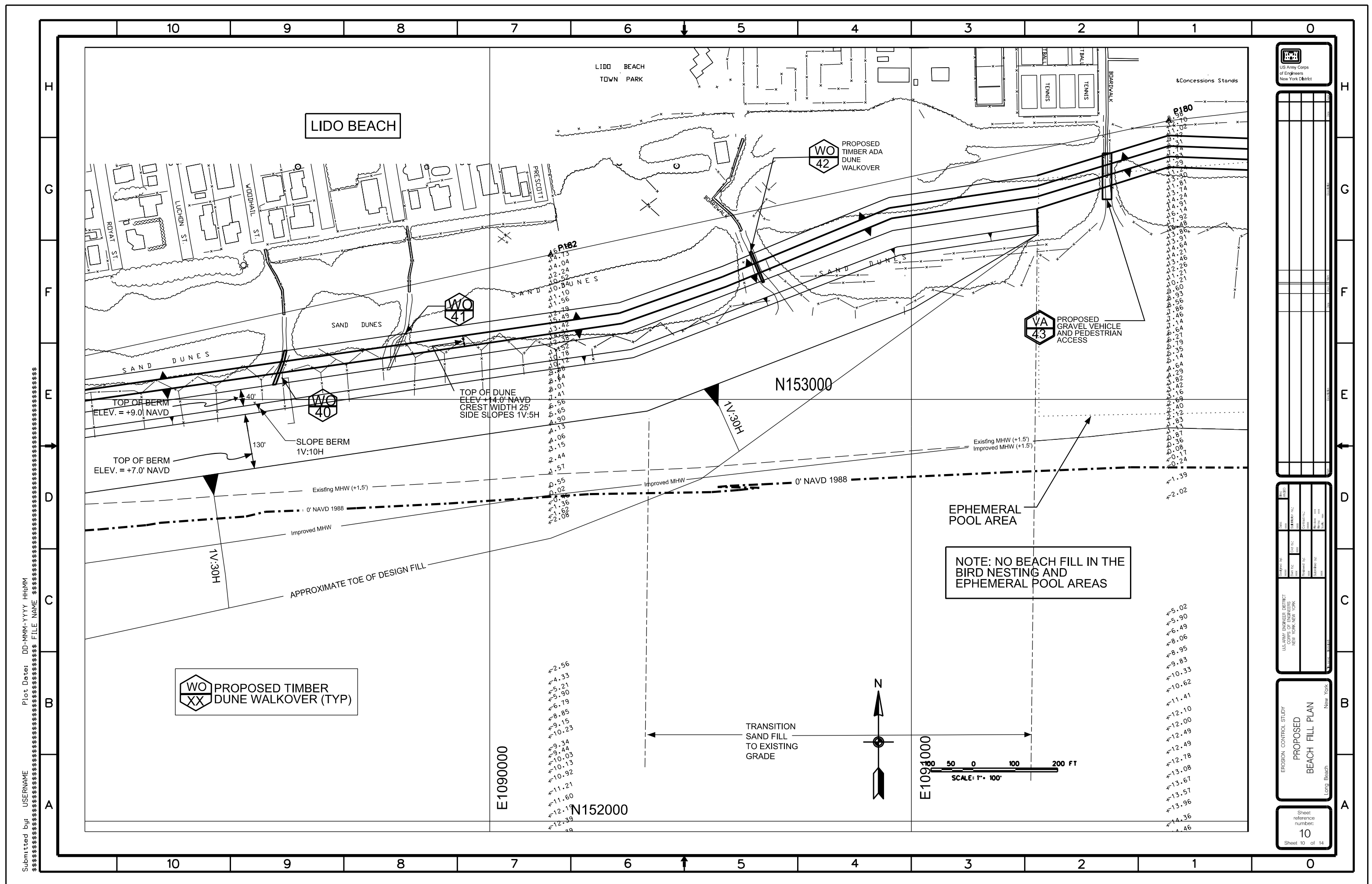


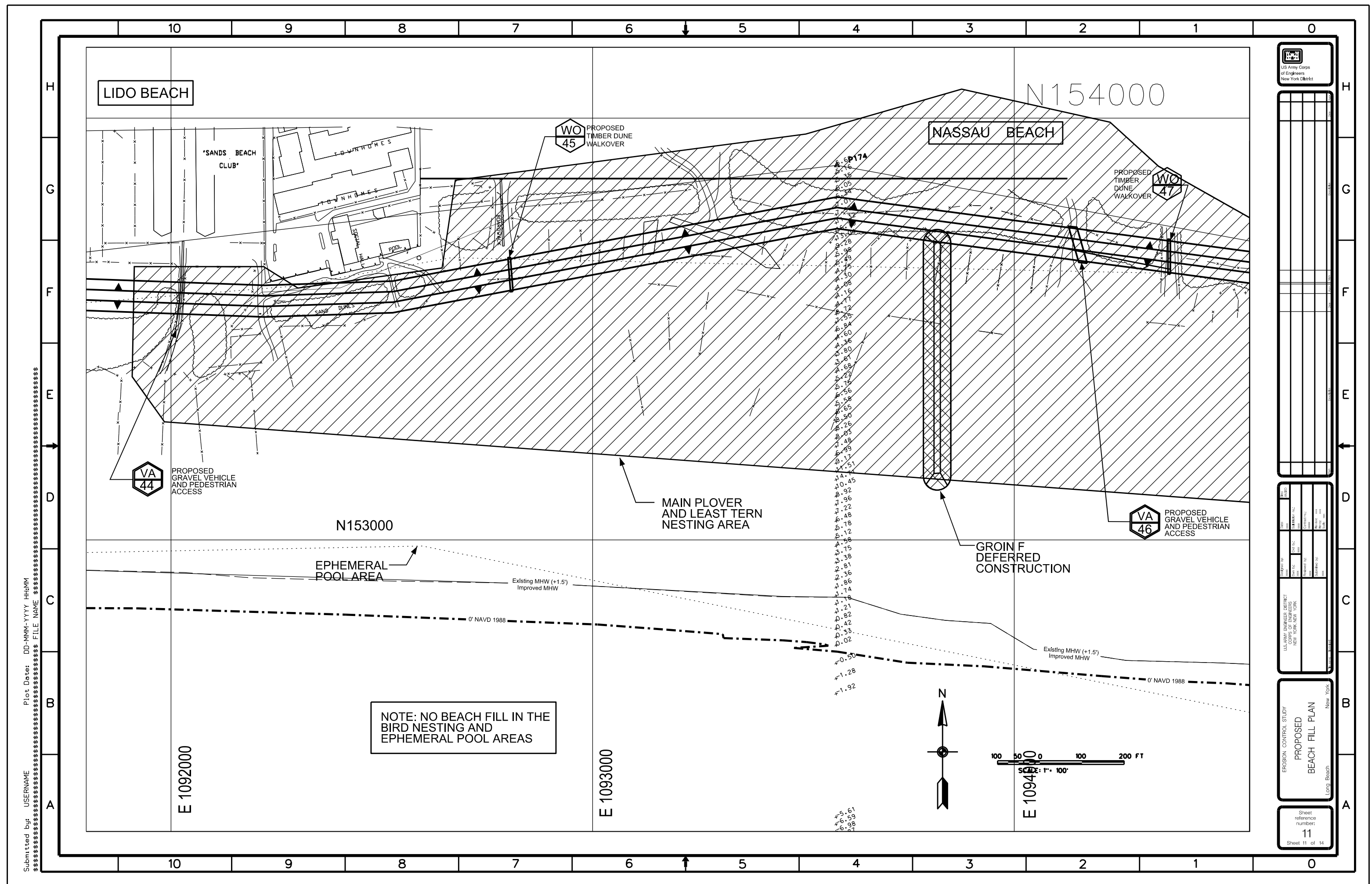


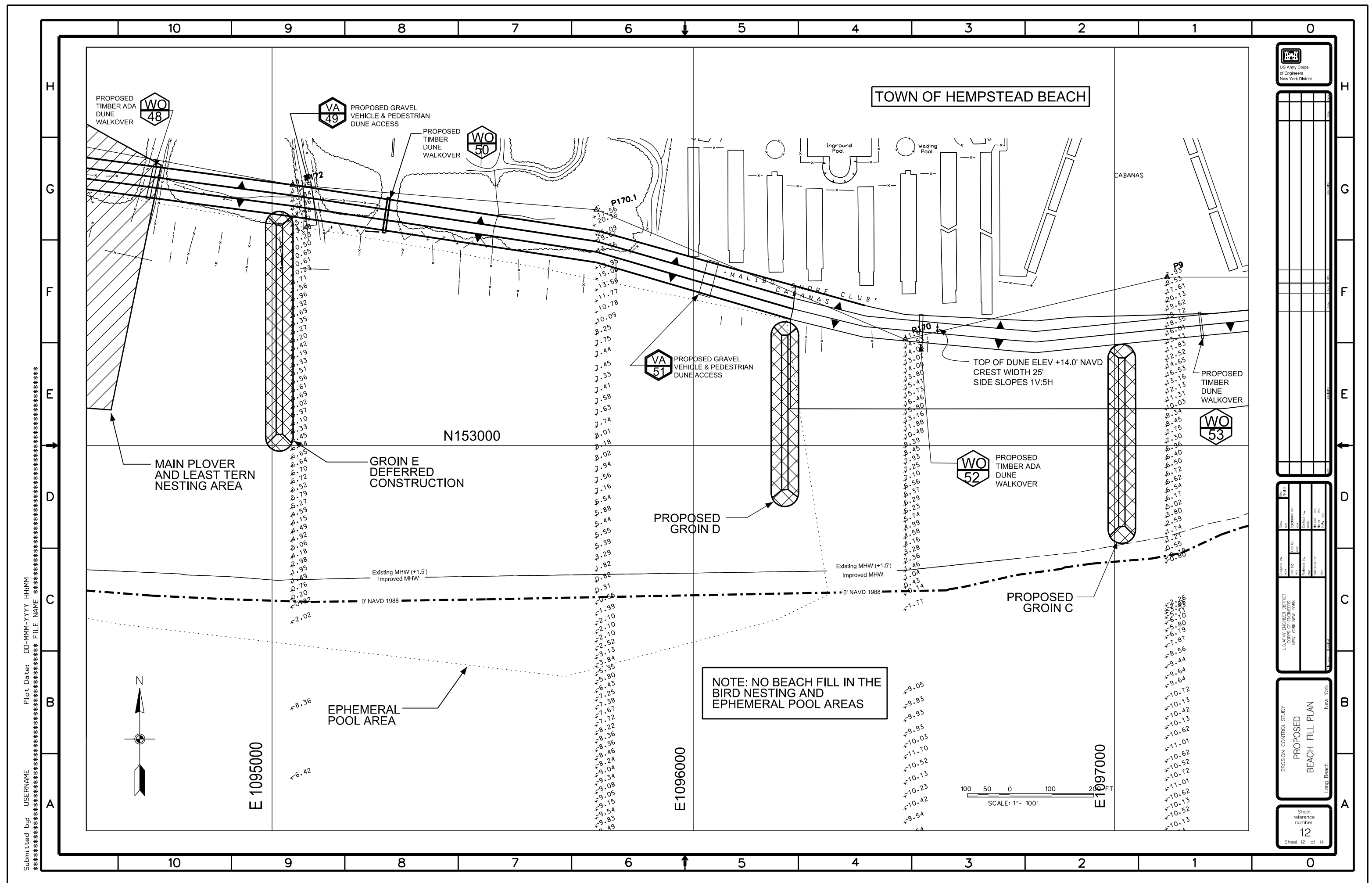












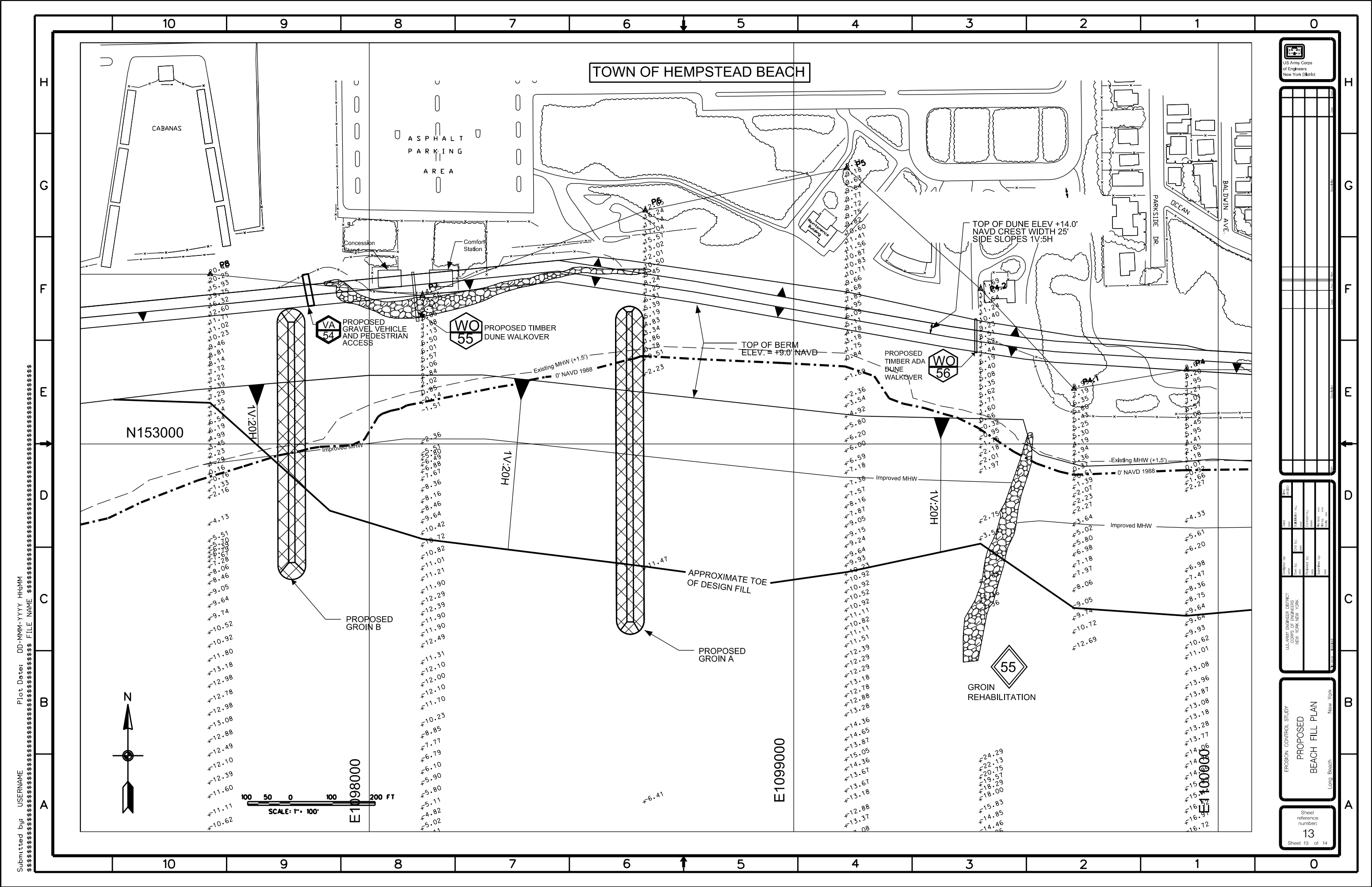


Figure 26

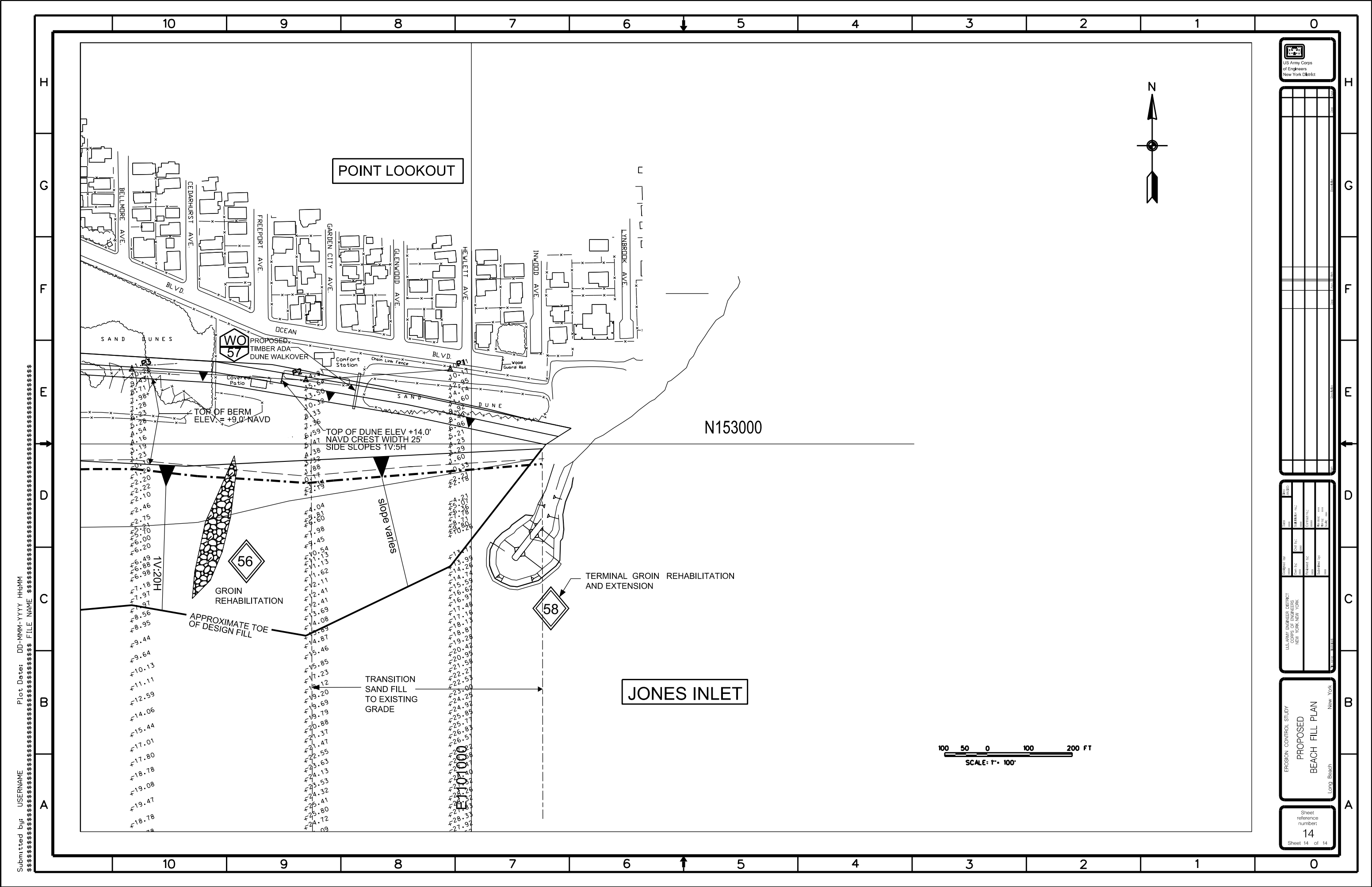
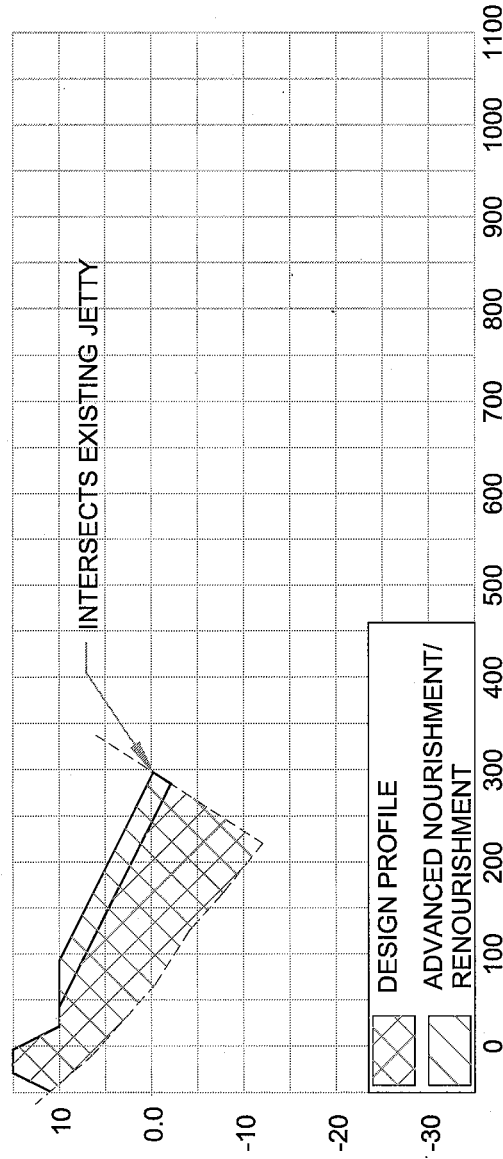


Figure 27

PROFILE No. 140

15' NGVD DUNE
110' BERM @ 10' NGVD



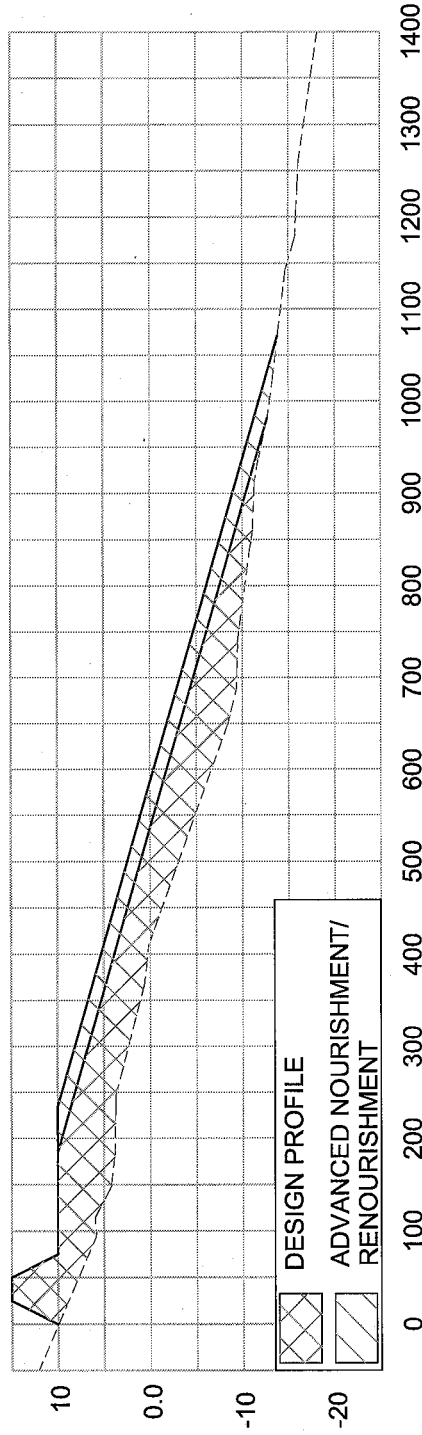
EXISTING DESIGN AND NOURISHMENT PROFILES FOR
RECOMMENDED PLAN

SCALE: HORZ. 1" = 200'
VERT. 1" = 20'

ATLANTIC COAST OF LONG ISLAND
JONES INLET TO EAST ROCKAWAY INLET
LONG BEACH ISLAND, NEW YORK
STORM DAMAGE REDUCTION PROJECT
LRR RECOMMENDED PLAN
CROSS SECTION
NASSAU CO. NEW YORK
FIGURE No. 28

PROFILE No. 192

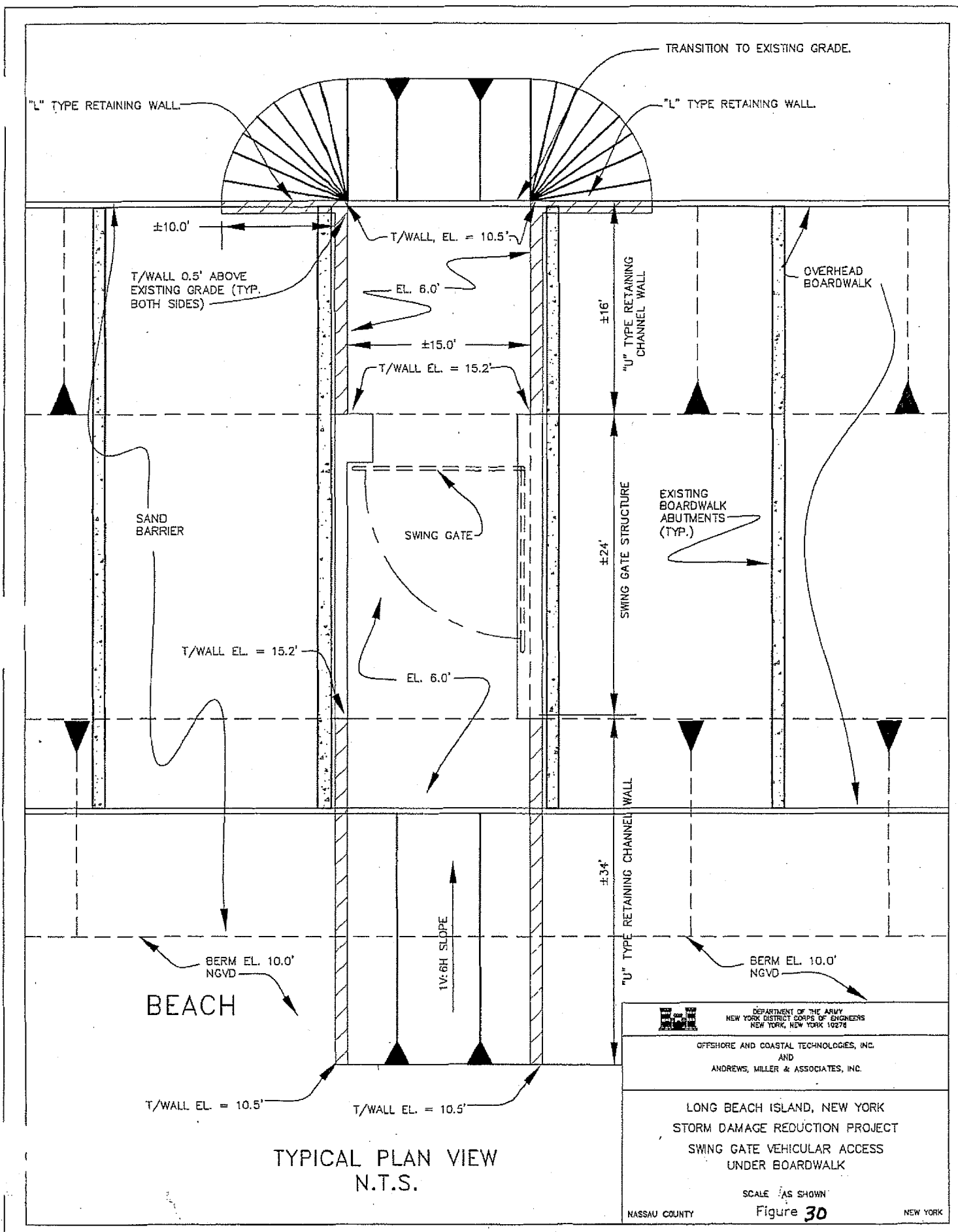
15' NGVD DUNE
110' BERM @ 10' NGVD



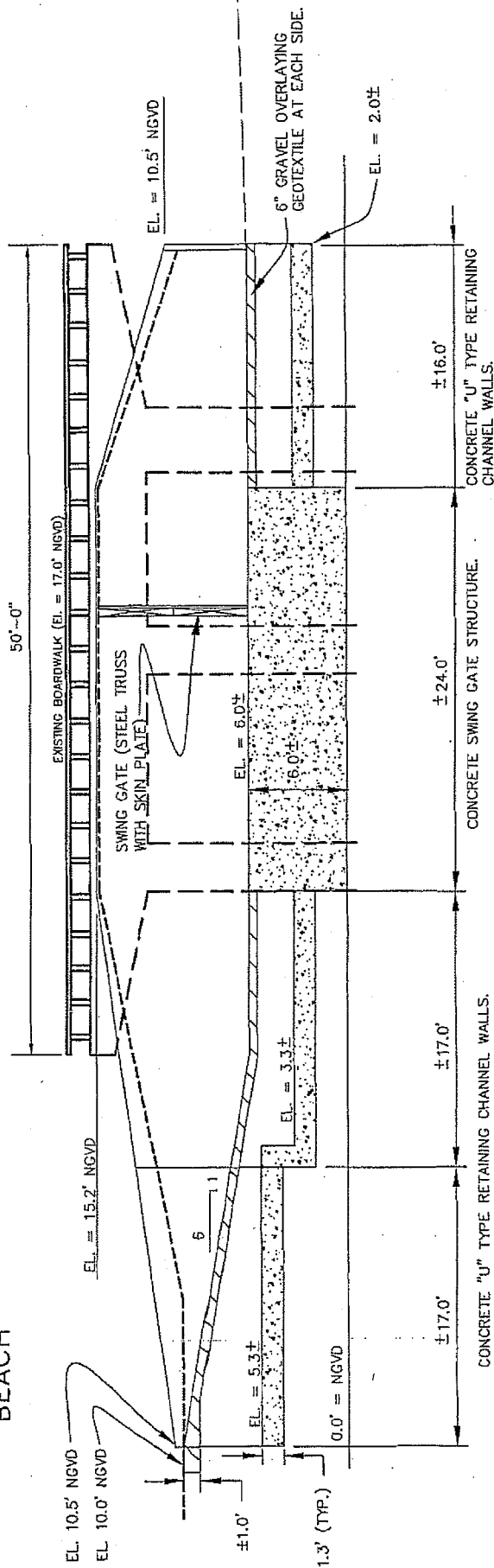
EXISTING DESIGN AND NOURISHMENT PROFILES FOR
RECOMMENDED PLAN

SCALE: HORZ. 1" = 200'
VERT. 1" = 20'

ATLANTIC COAST OF LONG ISLAND
JONES INLET TO EAST ROCKAWAY INLET
LONG BEACH ISLAND, NEW YORK
STORM DAMAGE REDUCTION PROJECT
LRR RECOMMENDED PLAN
CROSS SECTION
NASSAU CO. NEW YORK

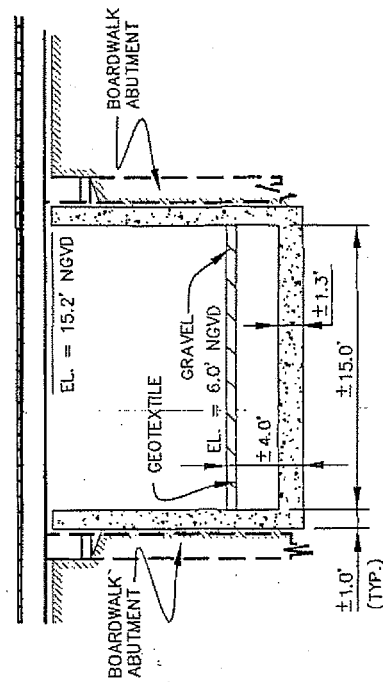


BEACH

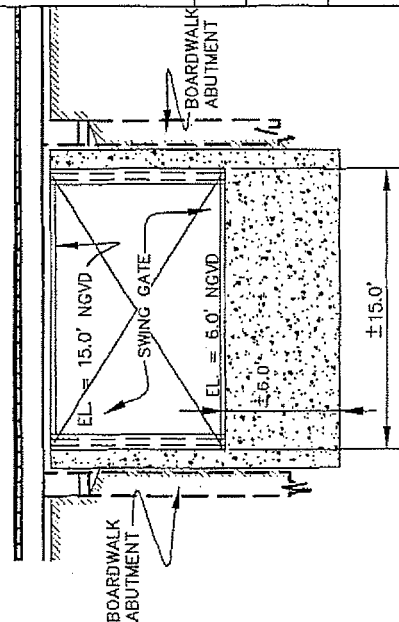


TYPICAL CROSS-SECTION
N.T.S.

NOTE: PILE SUPPORT OF RETAINING WALLS AND SWING GATE STRUCTURE IS NOT ANTICIPATED



SECTION THRU RETAINING WALLS
("U" TYPE CHANNEL)
N.T.S.



SECTION THRU SWING GATE
STRUCTURE
N.T.S.

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
NEW YORK, NEW YORK 10273

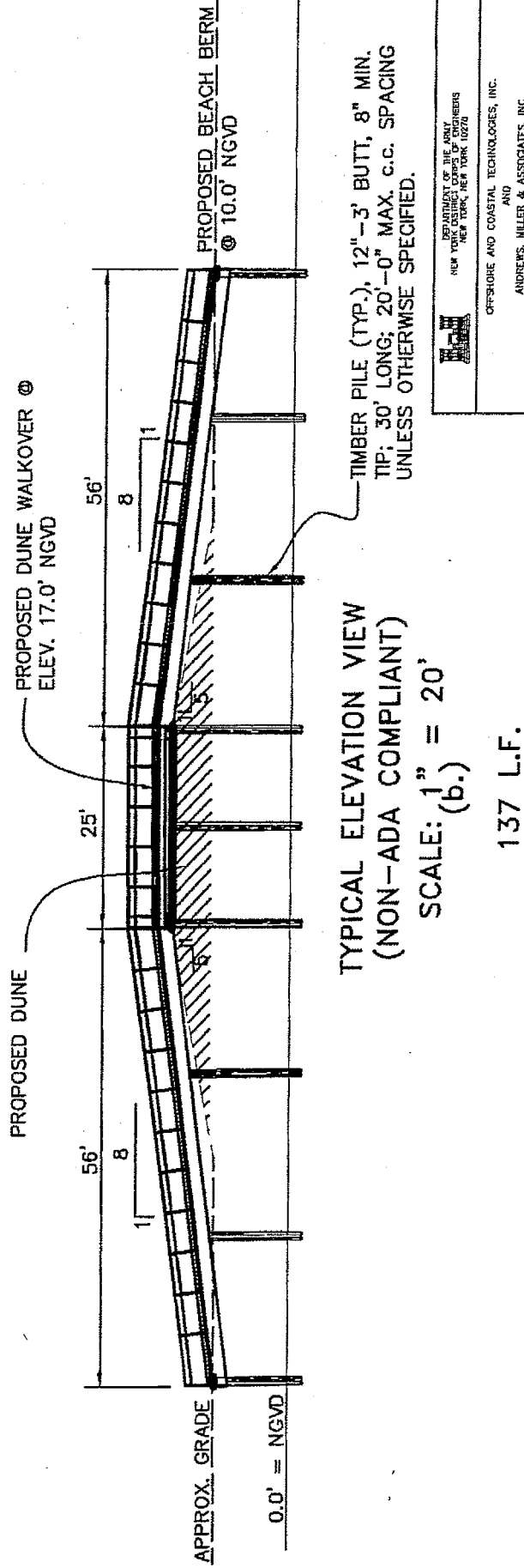
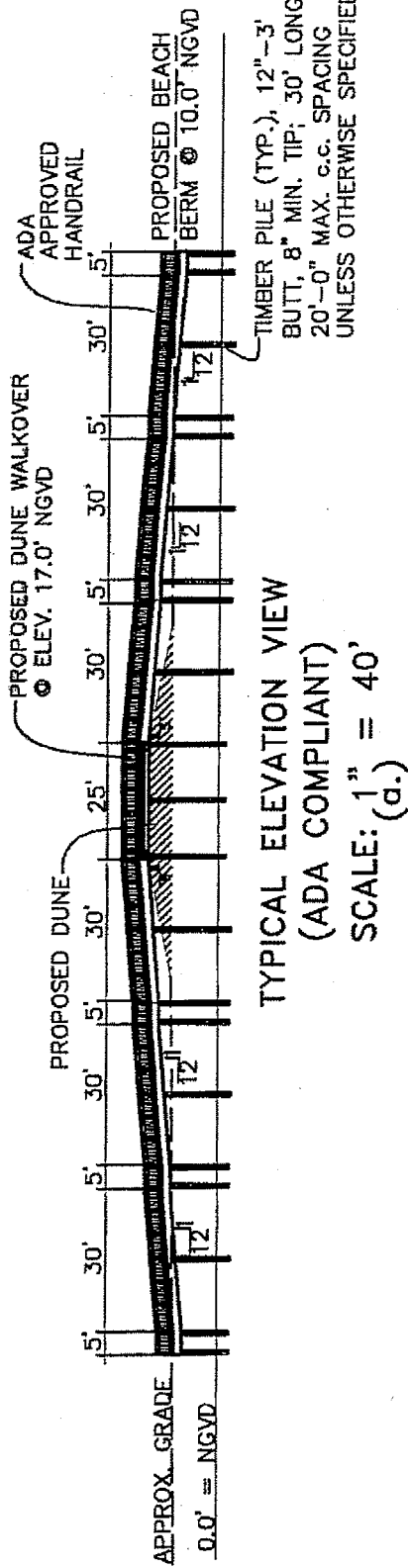
OFFSHORE AND COASTAL TECHNOLOGIES, INC.
AND
ANDREWS, MILLER & ASSOCIATES, INC.

LONG BEACH ISLAND, NEW YORK
STORM DAMAGE REDUCTION PROJECT
SWING GATE VEHICULAR ACCESS
CROSS SECTIONS

SCALE AS SHOWN
Figure 31

NAASSAU COUNTY

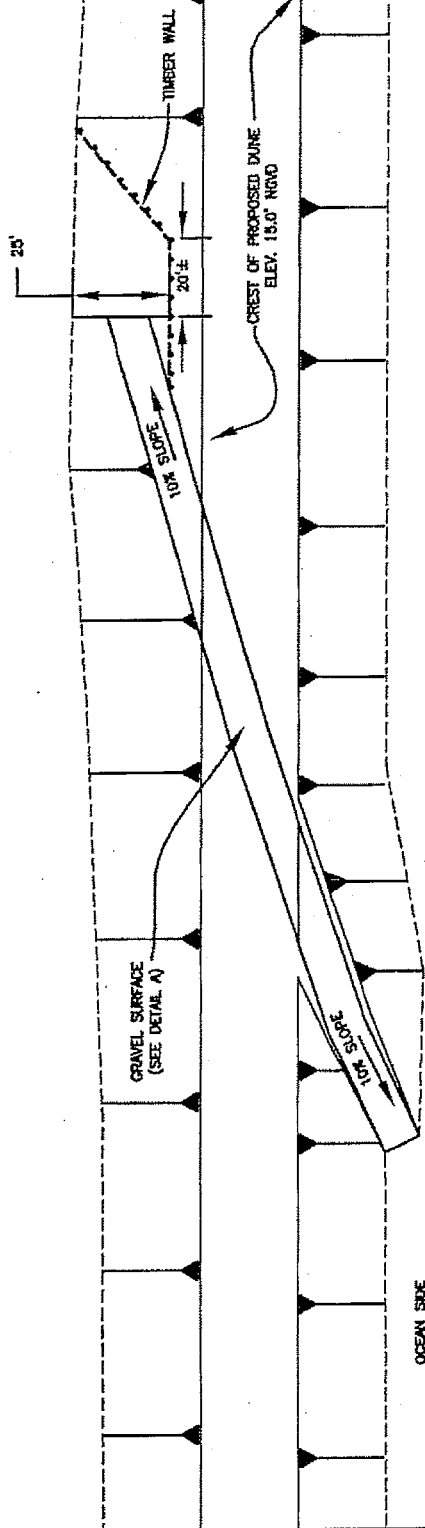
NEW YORK



DESIGNED BY THE NEW YORK
STATE OFFICE OF ENGINEERS
NEW YORK, NEW YORK 10270

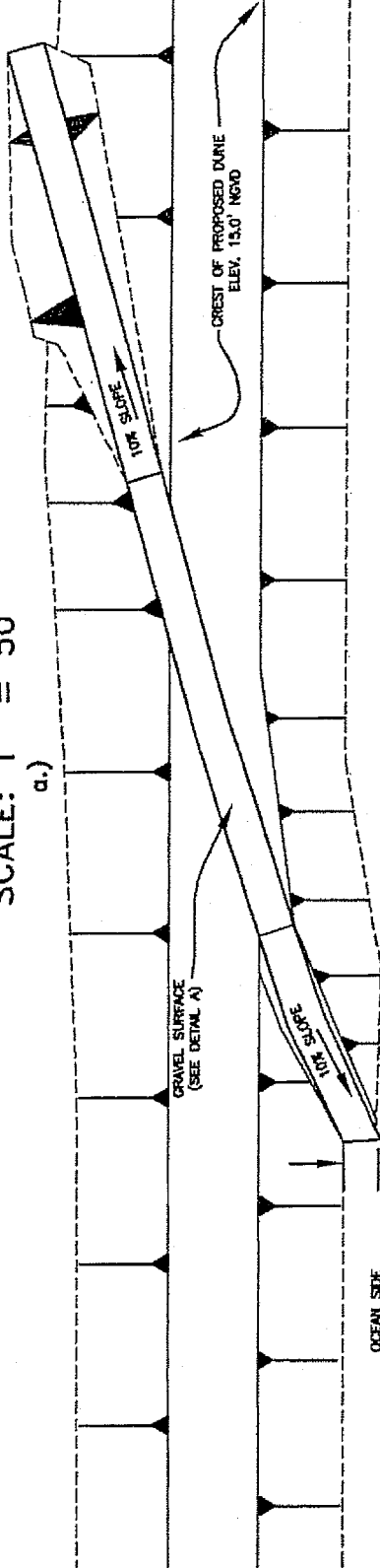
OFFSHORE AND COASTAL TECHNOLOGIES, INC.
AND
ANDREWS, MILLER & ASSOCIATES, INC.

LONG BEACH ISLAND, NEW YORK
STORM DAMAGE REDUCTION PROJECT
TYPICAL TIMBER PEDESTRIAN
DUNE WALKOVER



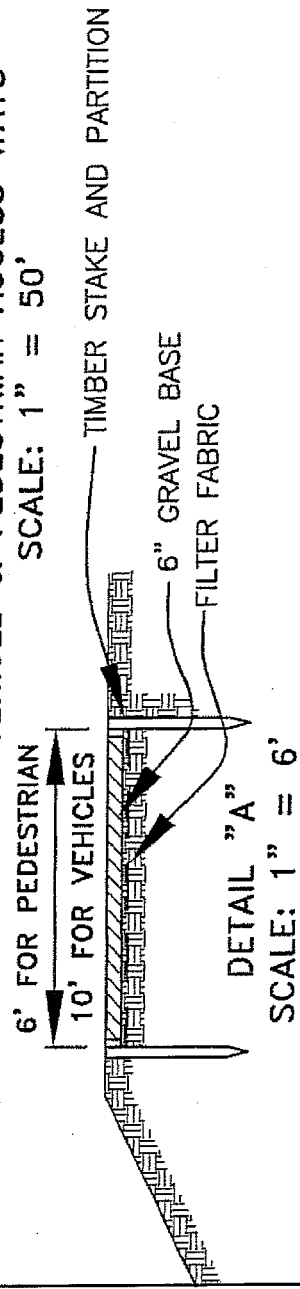
TYPICAL PLAN VIEW @ LONG BEACH GRAVEL
VEHICLE & PEDESTRIAN ACCESS WAYS
SCALE: 1" = 50'

a.)



b.)

TYPICAL PLAN VIEW @ LIDO BEACH GRAVEL
VEHICLE & PEDESTRIAN ACCESS WAYS
SCALE: 1" = 50'



DEPARTMENT OF THE ARMY NEW YORK DISTRICT NEW YORK, NEW YORK 10078	OFFSHORE AND COASTAL TECHNOLOGIES, INC. AND ANDREWS, MILLER & ASSOCIATES, INC.	LONG BEACH ISLAND, NEW YORK STORM DAMAGE REDUCTION PROJECT GRAVEL VEHICLE & PEDESTRIAN ACCESS	NEW YORK
---	--	--	----------



50 500 Feet



100 200 300 Meters



= Main plover and least tern nesting area



= Ephemeral Pool Area
Avoid Sand Placement in this Area.
Reassess during nourishment cycles.

Long Beach Ephemeral Pool
Figure 34

**LONG BEACH ISLAND
STORM REDUCTION PROJECT
REAL ESTATE REQUIREMENTS**



Figure 35: Lido Towers Property

LONG BEACH ISLAND
STORM REDUCTION PROJECT
REAL ESTATE REQUIREMENTS

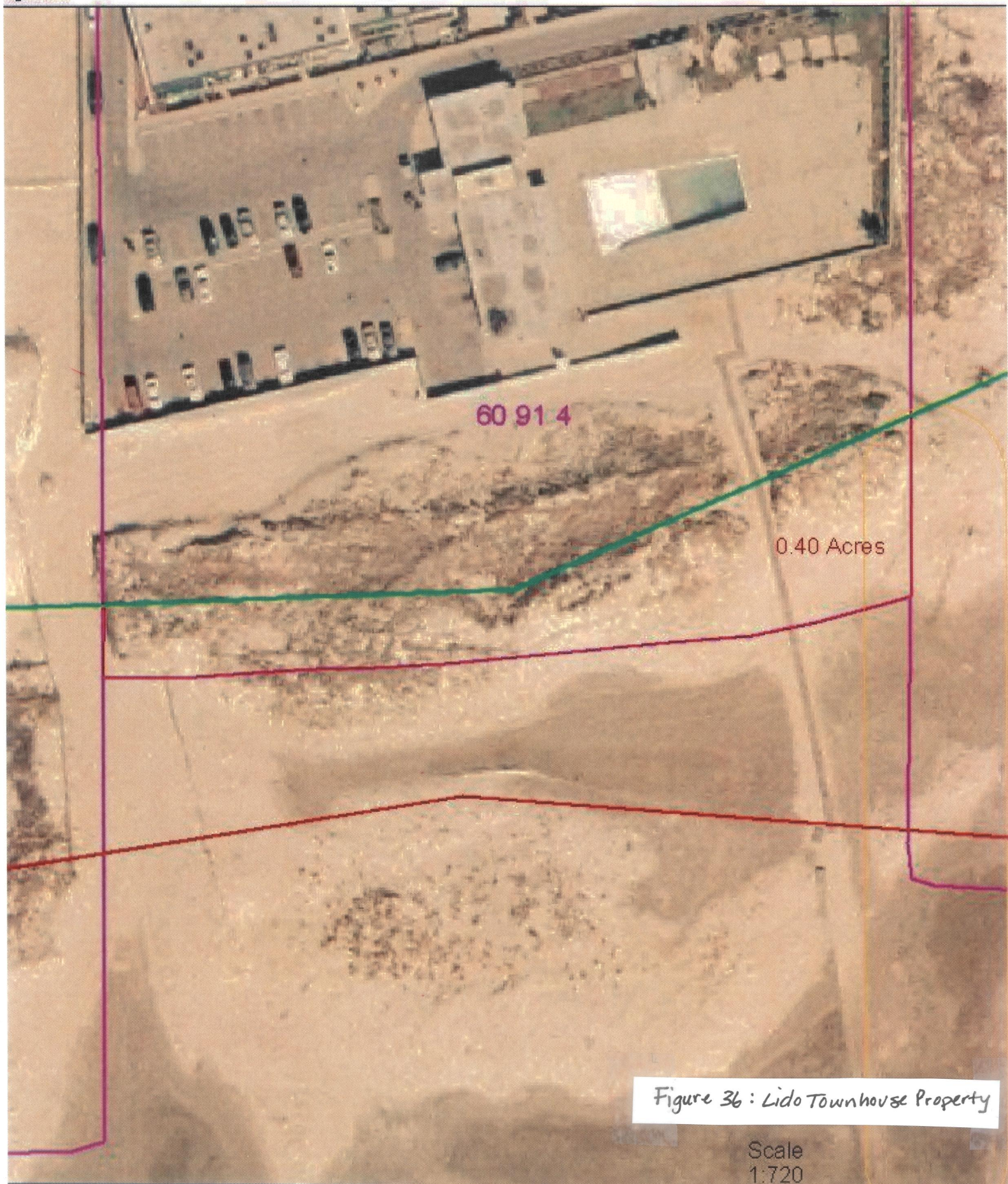
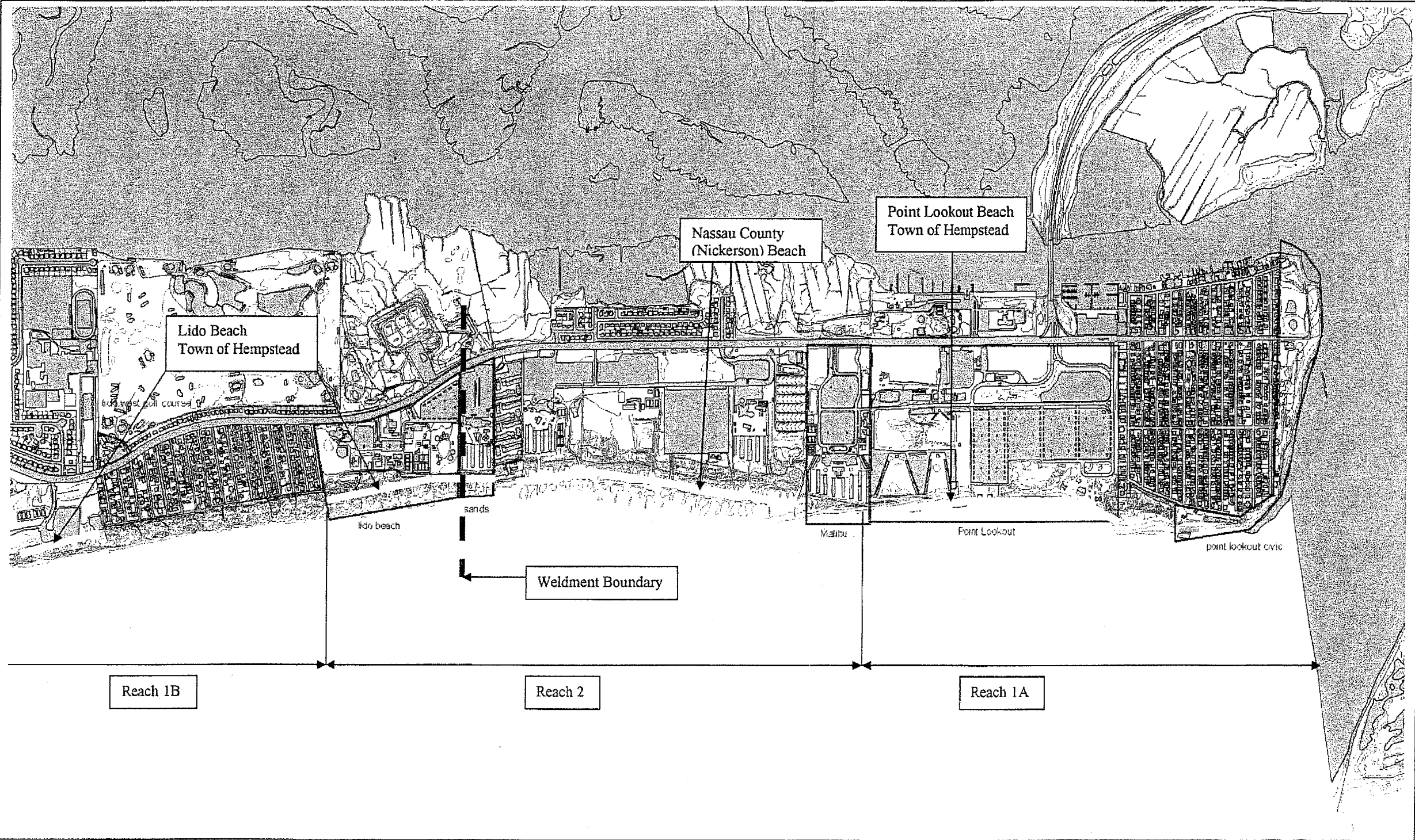
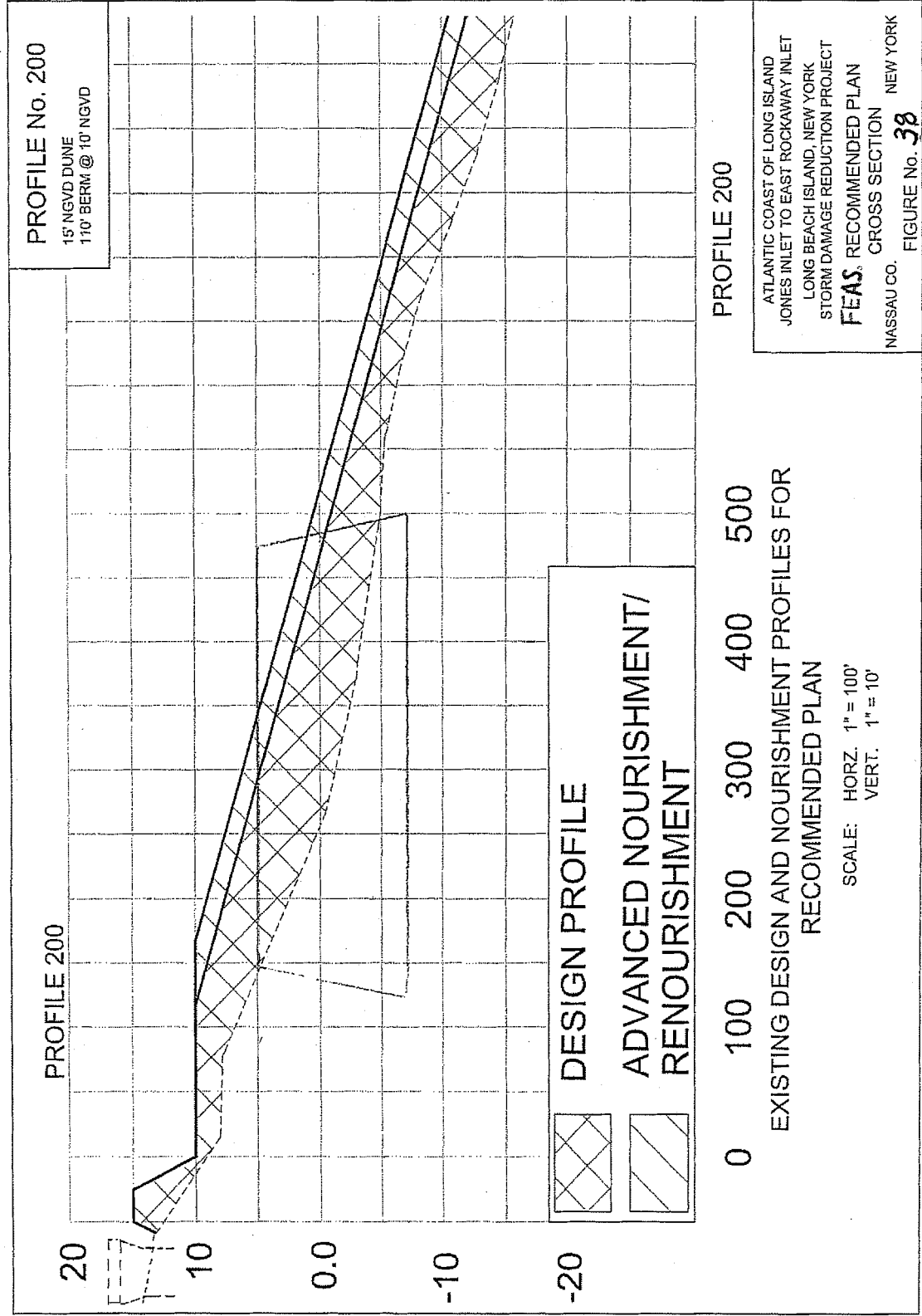


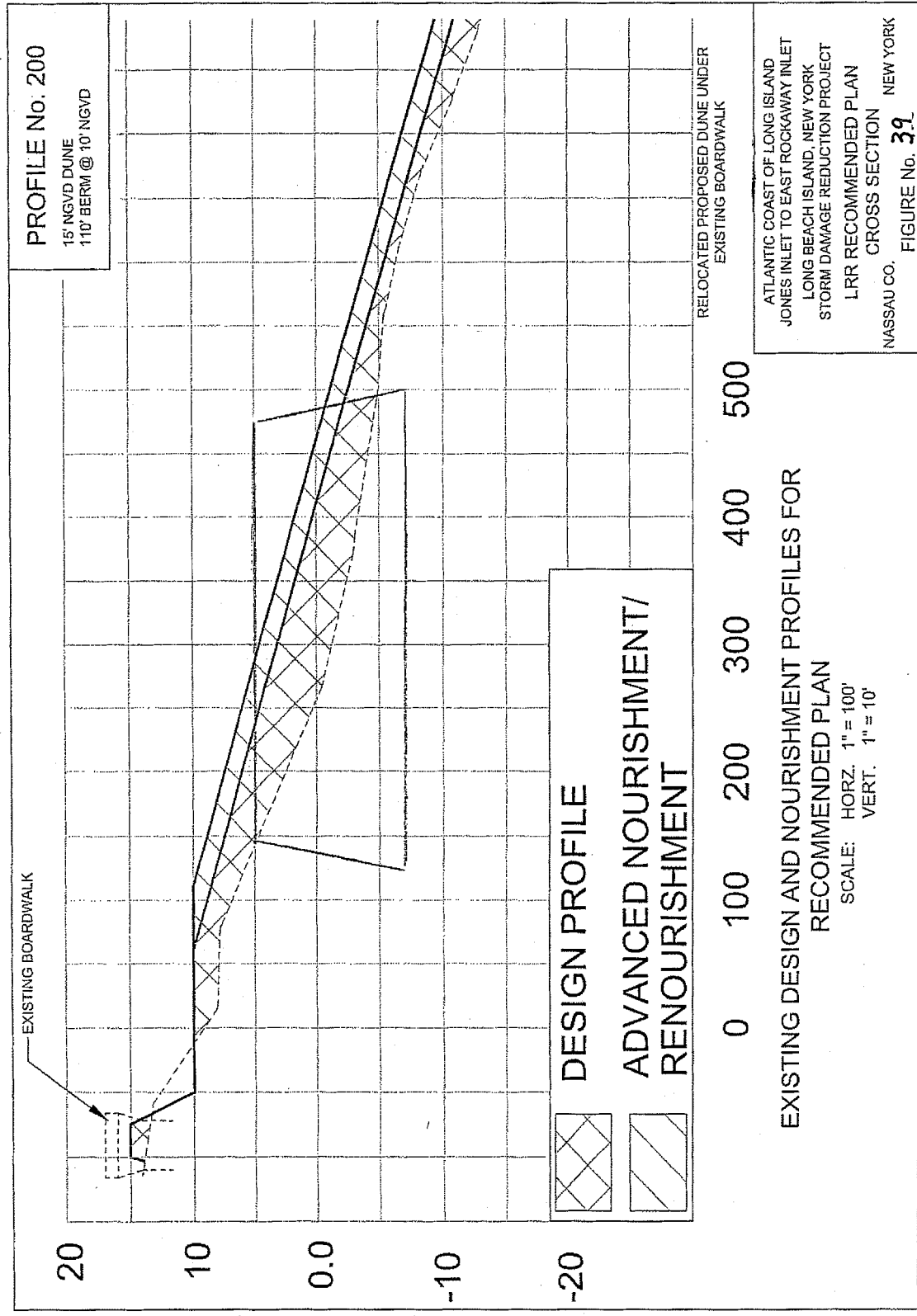
Figure 36 : Lido Townhouse Property

Scale
1:720

Figure 37 Long Beach Island East – Nassau County & Town of Hempstead Beach Areas
Original map image provided by USACE NAN







Long Beach Storm Erosion Reduction Project

Prepared by
Department of Conservation and Waterways
Town of Hempstead

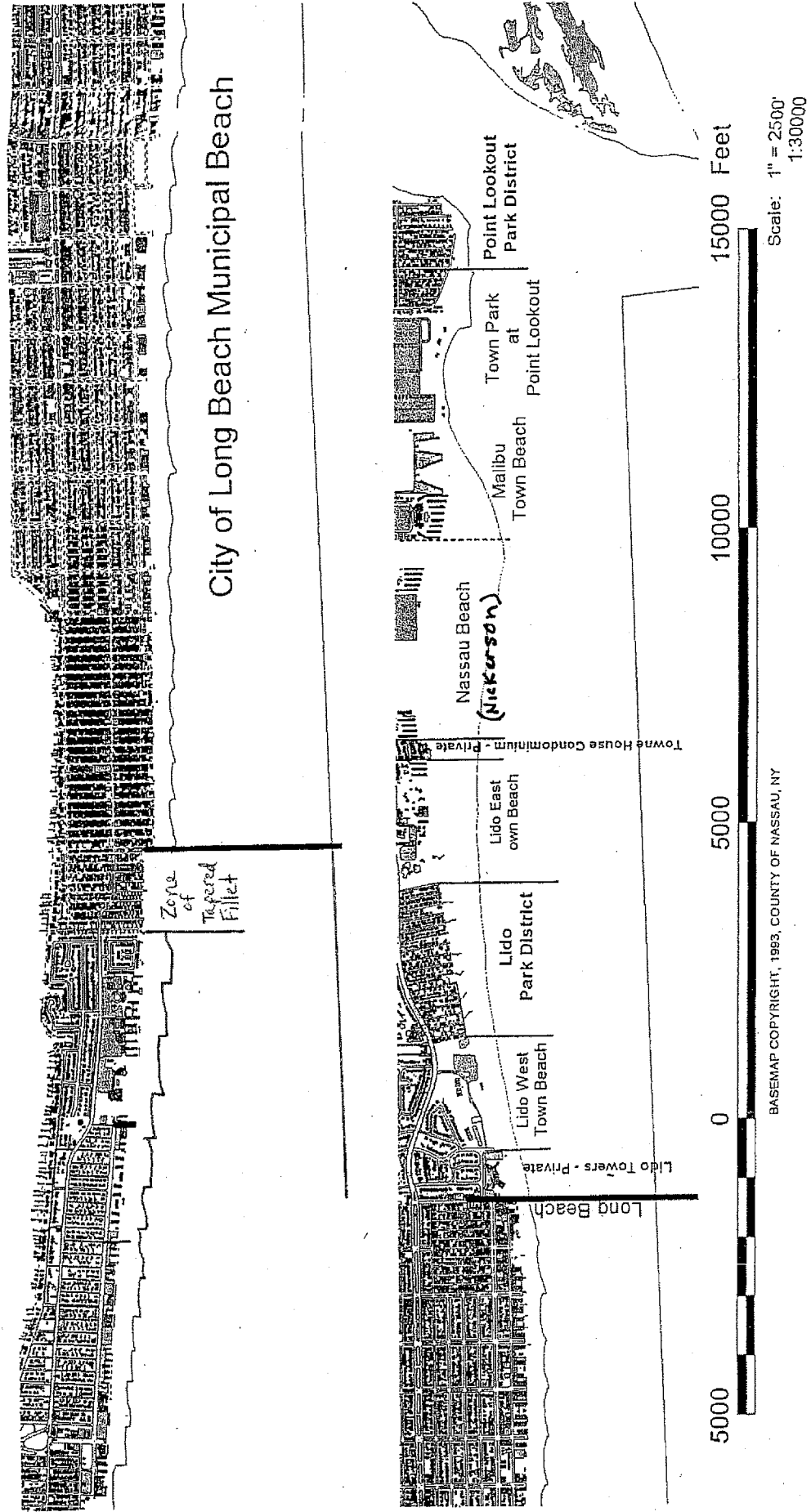


Figure 40

Activity ID	Activity Name	Remaining Duration	Start	Finish	2014				2015				2016				2017				2018			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Long Beach Island		851	31-Jul-14	03-Nov-17																				
Contract 1		633	31-Jul-14	02-Jan-17																				
Contracting Phase		26	31-Jul-14	05-Sep-14																				
Preconstruction Phase		21	05-Sep-14	05-Oct-14																				
Construction Phase		586	06-Oct-14	02-Jan-17																				
Mobilization		14	06-Oct-14	23-Oct-14																				
Groin A Construction		290	24-Oct-14	12-Dec-16																				
Groin B Construction		234	24-Oct-14	23-Sep-16																				
Point Lookout Terminal Groin Rehab		220	24-Oct-14	05-Sep-16																				
Point Lookout Groin Rehab		33	06-Sep-16	20-Oct-16																				
Long Beach Groin Rehab		133	02-Mar-15	02-Mar-16																				
Demobilization		5	12-Dec-16	19-Dec-16																				
Contract Closeout		10	19-Dec-16	02-Jan-17																				
Contract 2		416	29-Oct-14	02-Jun-16																				
Contracting Phase		26	29-Oct-14	04-Dec-14																				
Contracting Phase		26	29-Oct-14	04-Dec-14																				
Preconstruction Phase		22	04-Dec-14	03-Jan-15																				
Preconstruction Phase		22	04-Dec-14	03-Jan-15																				
Construction Phase		368	05-Jan-15	02-Jun-16																				
Mobilization		14	05-Jan-15	22-Jan-15																				
Groin C Construction		128	23-Jan-15	22-Jan-16																				
Groin D Construction		119	23-Jan-15	11-Jan-16																				
Long Beach Groin Rehab		183	02-Mar-15	11-May-16																				
Demobilization		5	12-May-16	18-May-16																				
Contract Closeout		10	19-May-16	02-Jun-16																				
Contract 3		545	01-Oct-15	03-Nov-17																				
Contracting Phase		25	01-Oct-15	06-Nov-15																				
Contracting Phase		25	01-Oct-15	06-Nov-15																				
Preconstruction Phase		21	06-Nov-15	06-Dec-15																				
Preconstruction Phase		21	06-Nov-15	06-Dec-15																				
Construction Phase		499	07-Dec-15	03-Nov-17																				
Mobilization		14	07-Dec-15	24-Dec-15																				
Dredging		334	13-Apr-16	13-Mar-17																				
Shoreline Structures		360	27-May-16	12-Oct-17																				
Dune Grass		60	01-Feb-17	25-Apr-17																				
Sand Fencing		78	27-Jun-17	12-Oct-17																				
Demobilization		5	13-Oct-17	19-Oct-17																				
Contract Closeout		10	20-Oct-17	03-Nov-17																				
Project Complete		851	31-Jul-14	03-Nov-17																				