

SWG-2018-00490

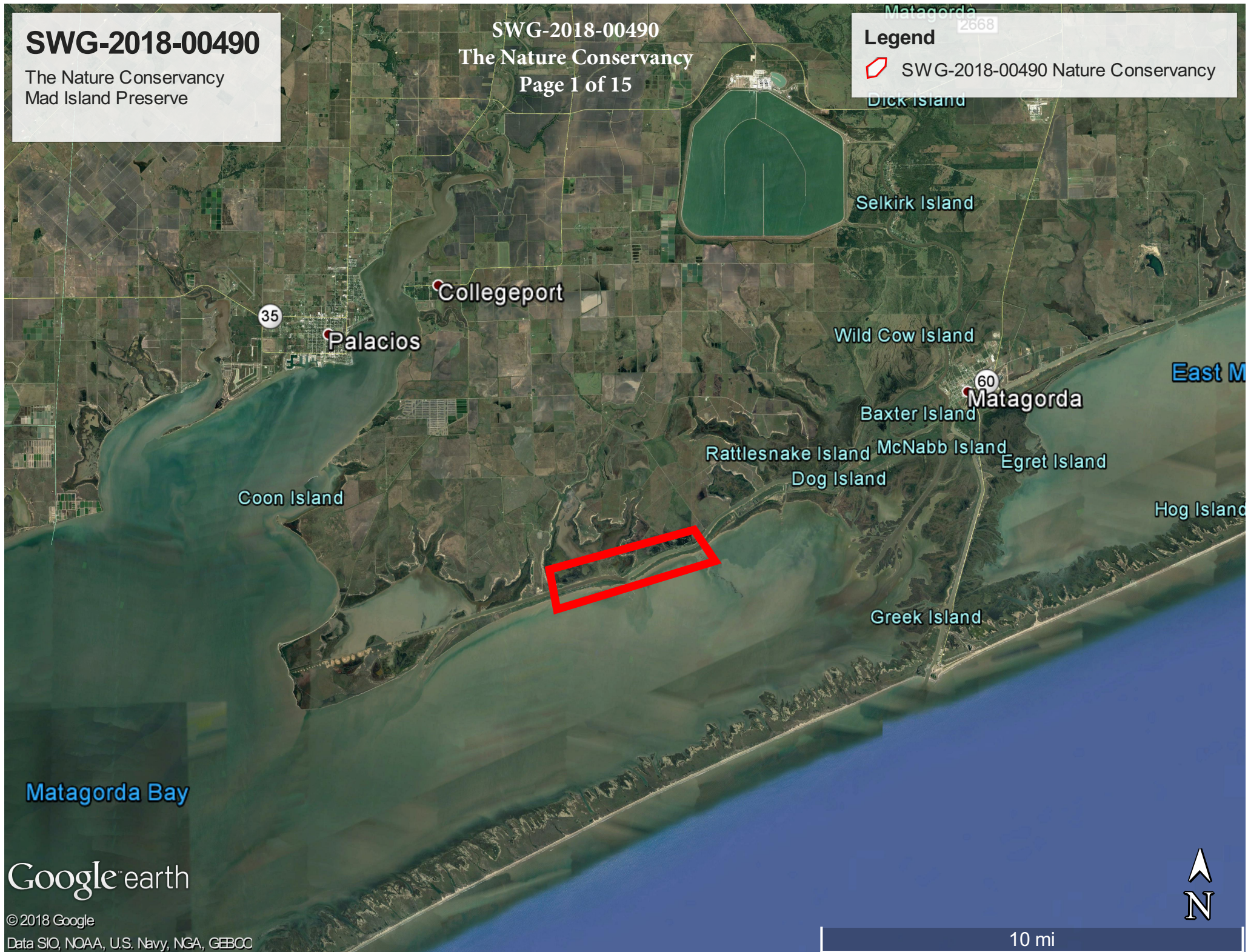
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Mad Island Preserve

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Page 1 of 15

Matagorda 2668

Legend

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Matagorda Bay

Google™ earth

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Data SIO, NOAA, U.S. Navy, NGA, GEBCO



10 mi

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Legend

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MAD ISLAND BANK STABILIZATION AND SHORELINE PROTECTION

THE NATURE CONSERVANCY

SWG 2018-00490

SWG-2018-00490

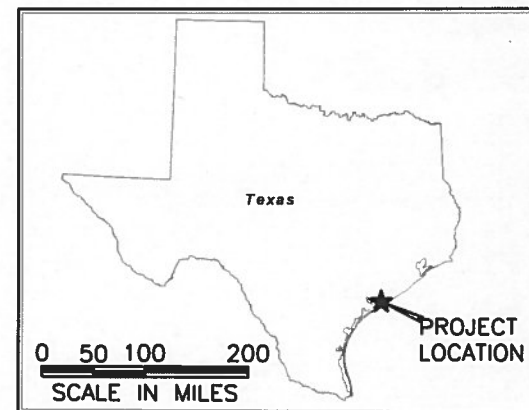
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Protecting nature. Preserving life.™

FUNDING PROVIDED THROUGH GULF
ENVIRONMENTAL FUND PROJECT ID
#54073 (NATIONAL FISH AND WILDLIFE FOUNDATION)



10431 Morado Circle, Suite 300
Austin, Texas 78759
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Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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Last Saved: 9/26/2018 11:34 AM Saved By: 02736

DRAWING LIST:

- 1 COVER
- 2 SITE MAP
- 3-8 BREAKWATER ALIGNMENT
- 9 SIGNAGE PLAN
- 10 TYPICAL SECTIONS

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PROJECT SITE MAP
0 1500' 3000'
SCALE IN FEET

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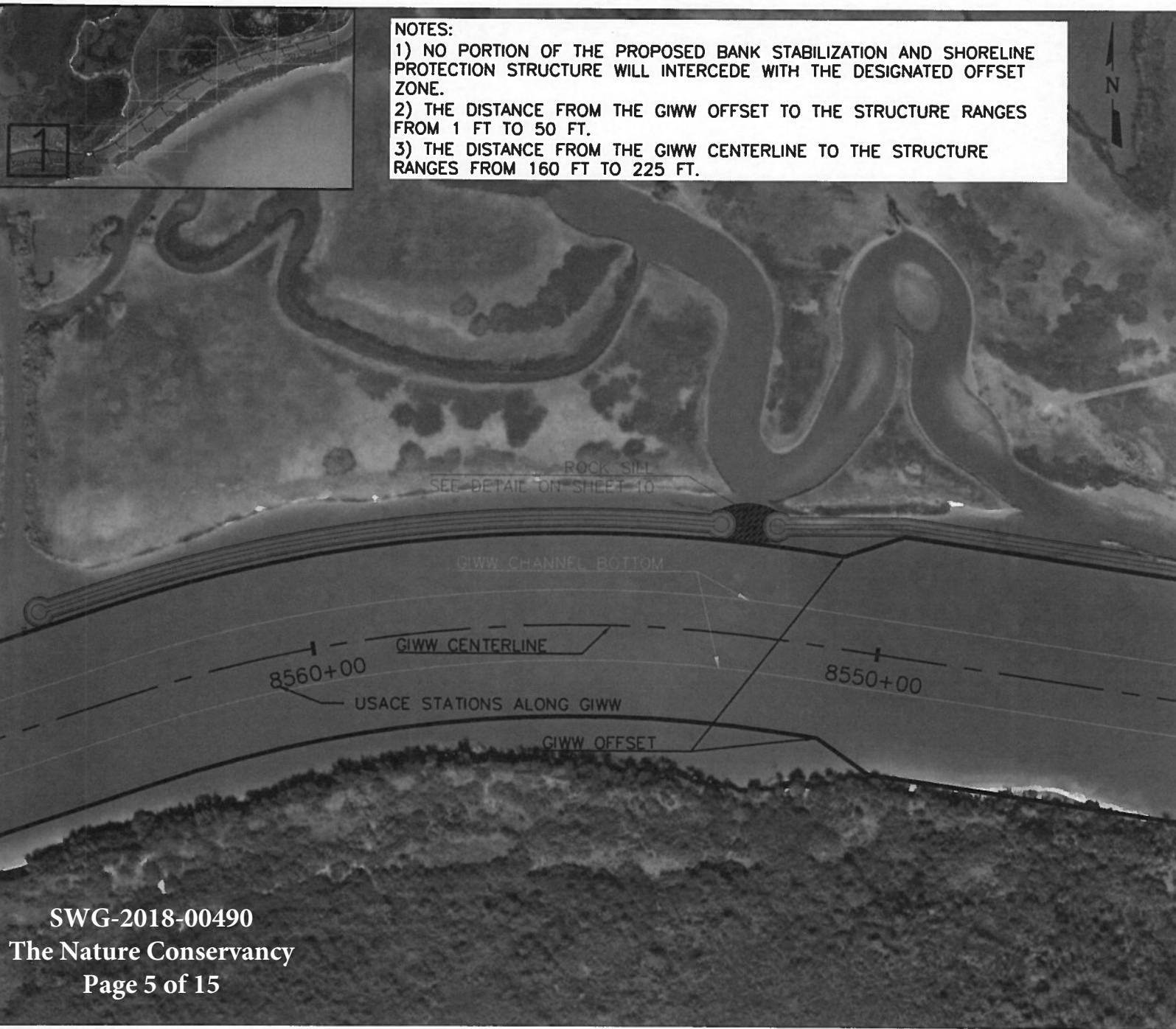
SITE MAP

REVISION 1

PLAN JOB NO.	TN17469
DATE	MAY 2018
SCALE	AS SHOWN
DESIGNED	CKW
DRAFTED	NJK
FILE	ModIs_PrefAlt_v04.dwg

SHEET 2/10

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NOTES:

- 1) NO PORTION OF THE PROPOSED BANK STABILIZATION AND SHORELINE PROTECTION STRUCTURE WILL INTERCEDE WITH THE DESIGNATED OFFSET ZONE.
- 2) THE DISTANCE FROM THE GIWW OFFSET TO THE STRUCTURE RANGES FROM 1 FT TO 50 FT.
- 3) THE DISTANCE FROM THE GIWW CENTERLINE TO THE STRUCTURE RANGES FROM 160 FT TO 225 FT.

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MATCH LINE STA 8544+56.88 SEE SHEET 4

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BREAKWATER ALIGNMENT

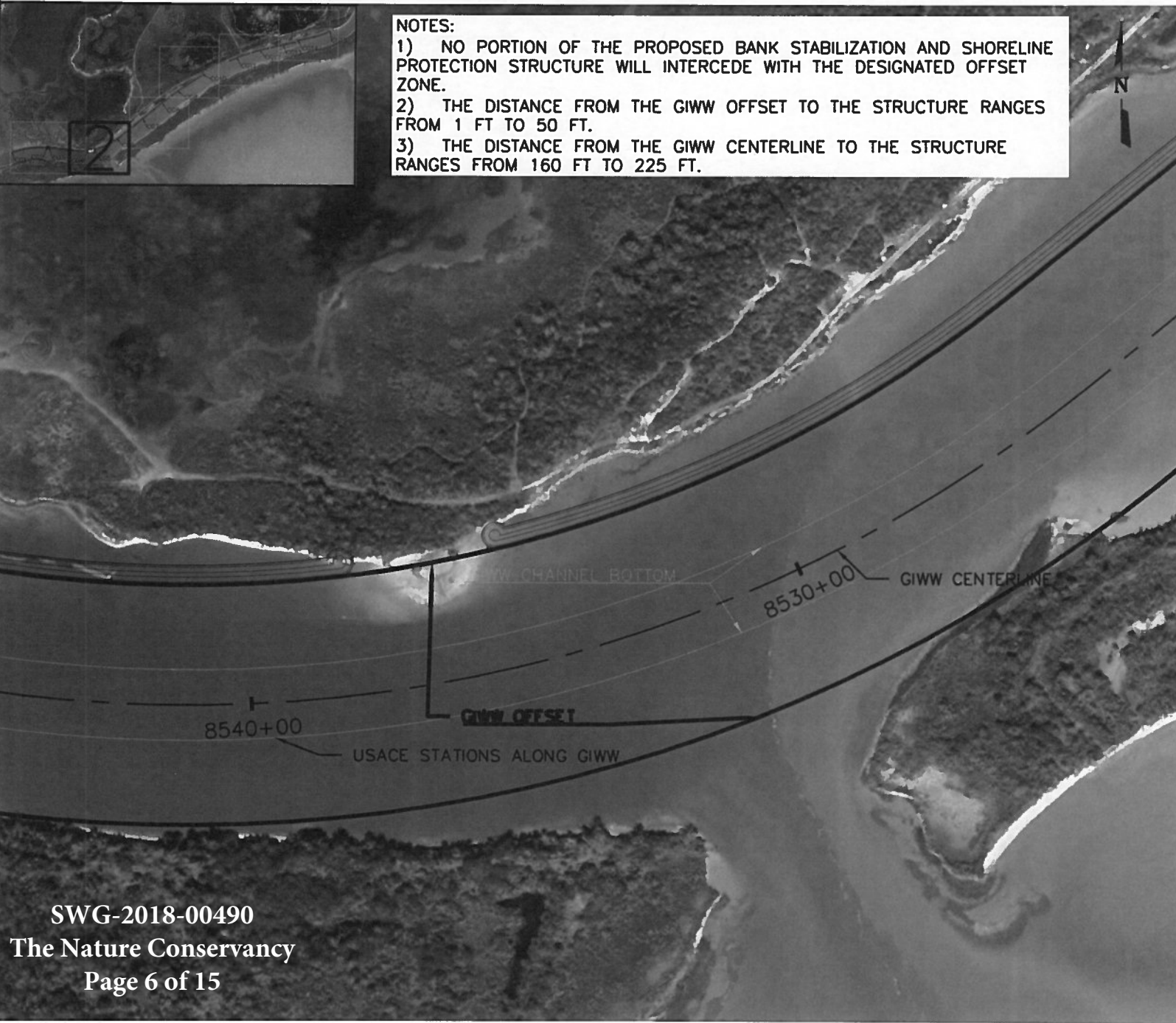
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DATE	MAY 2018
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DESIGNED	CKW
DRAFTED	NJK
FILE	ModIs_PrefAlt_v04.dwg

SHEET 3/10

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MATCH LINE STA 8544+56.88 SEE SHEET 3



MATCH LINE STA 8521+73.20 SEE SHEET 5

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MAD ISLAND SHORELINE PROTECTION
BREAKWATER ALIGNMENT

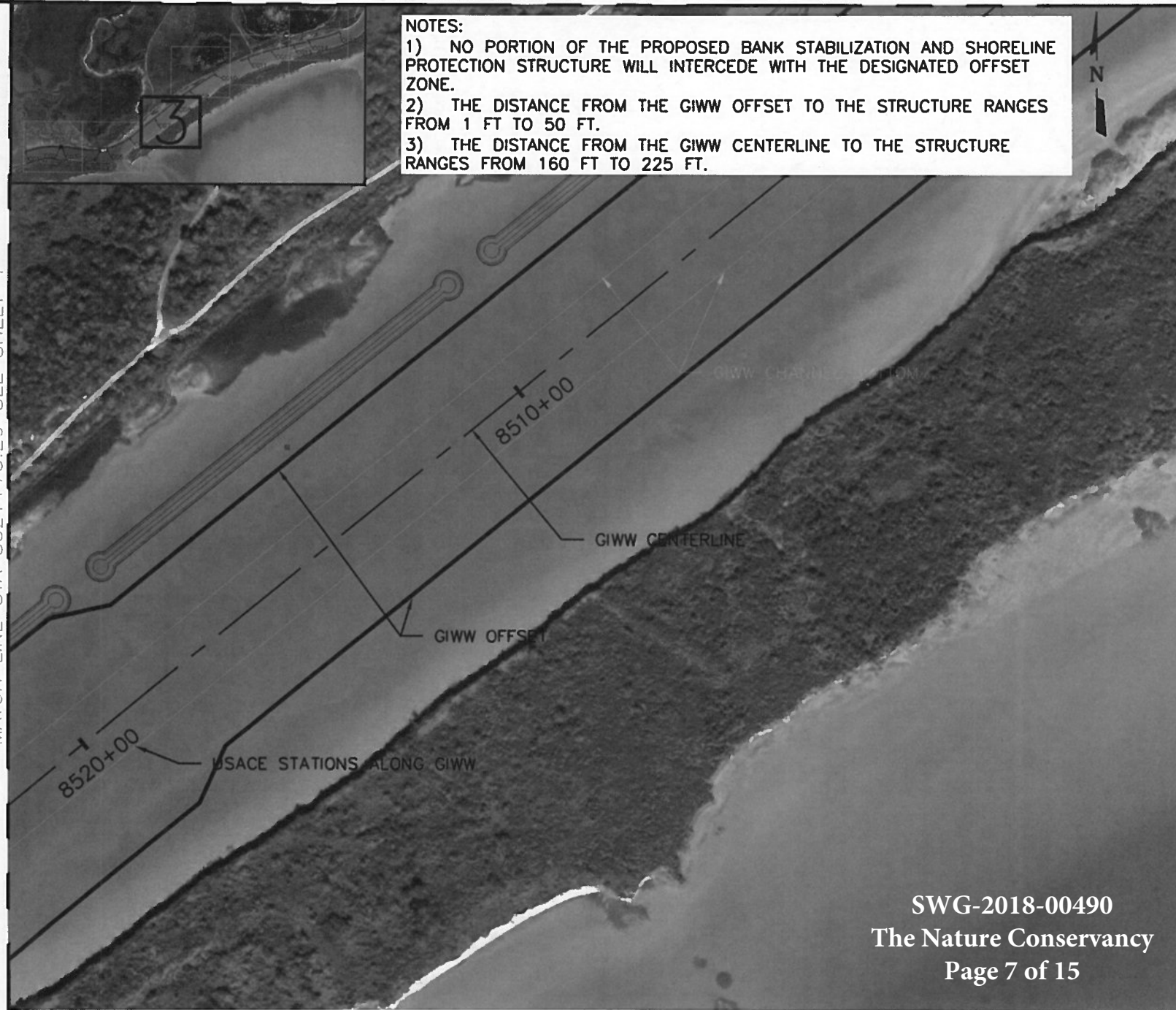
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DATE	MAY 2018
SCALE	AS SHOWN
DESIGNED	CKW
DRAFTED	NJK
FILE	ModIs_PrefAIL_v04.dwg

SHEET 4/10

NOTES:

- 1) NO PORTION OF THE PROPOSED BANK STABILIZATION AND SHORELINE PROTECTION STRUCTURE WILL INTERCEDE WITH THE DESIGNATED OFFSET ZONE.
- 2) THE DISTANCE FROM THE GIWW OFFSET TO THE STRUCTURE RANGES FROM 1 FT TO 50 FT.
- 3) THE DISTANCE FROM THE GIWW CENTERLINE TO THE STRUCTURE RANGES FROM 160 FT TO 225 FT.



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MAD ISLAND SHORELINE PROTECTION

BREAKWATER ALIGNMENT

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- NOTES:
- 1) NO PORTION OF THE PROPOSED BANK STABILIZATION AND SHORELINE PROTECTION STRUCTURE WILL INTERCEDE WITH THE DESIGNATED OFFSET ZONE.
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 10431 Marado Circle, Suite 300 Austin, Texas 78759 Phone - (512) 617-3100 Web - www.freese.com		MAD ISLAND SHORELINE PROTECTION		F&N JOB NO.	TNW17459
		BREAKWATER ALIGNMENT		DATE	MAY 2018
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				DESIGNED	CKW
				DRAFTED	NJK
				FILE	ModIs_PrefAlt_v04.dwg
				SHEET 6/10	

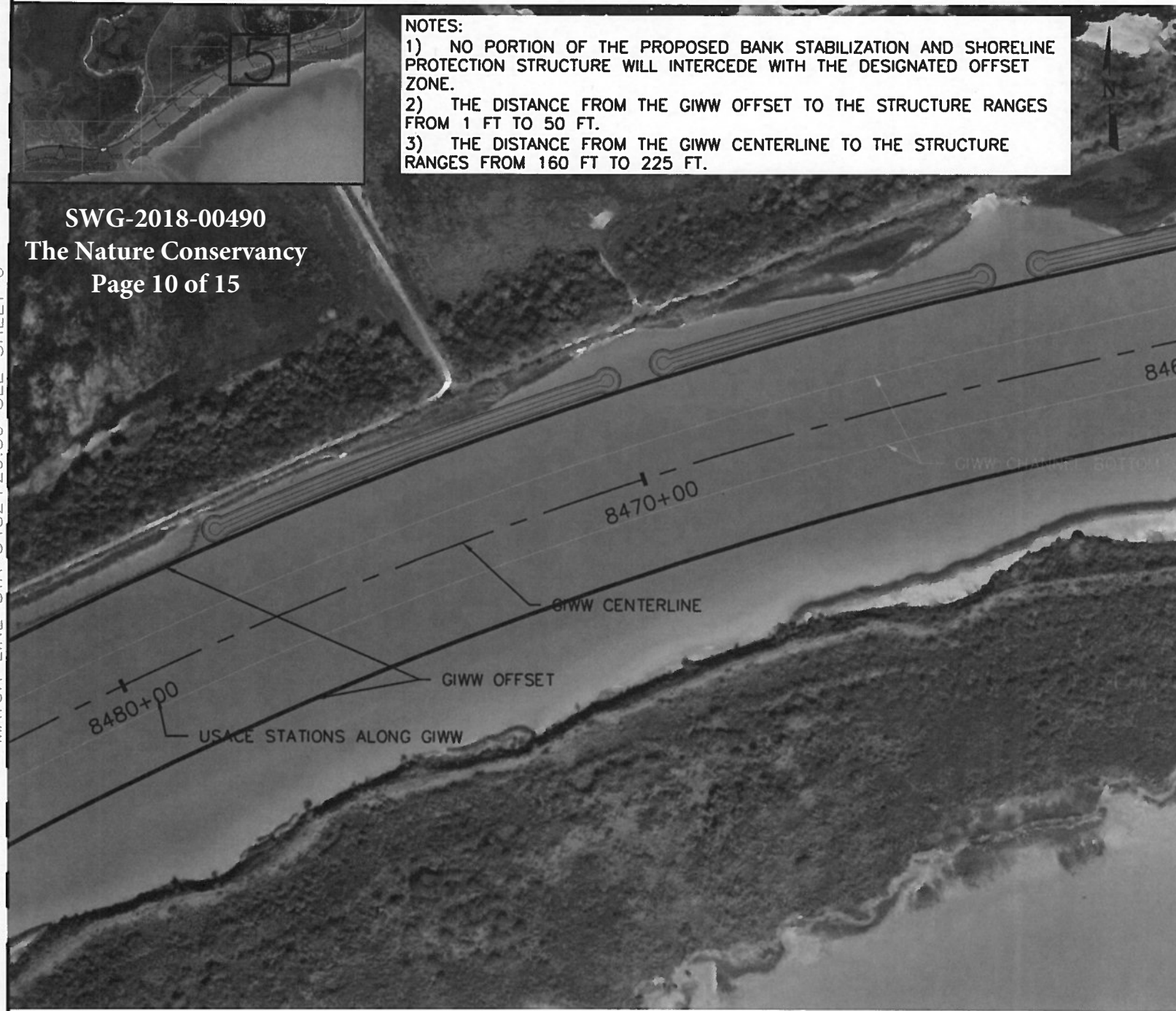
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MATCH LINE STA 8482+29.80 SEE SHEET 6

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NOTES:

- 1) NO PORTION OF THE PROPOSED BANK STABILIZATION AND SHORELINE PROTECTION STRUCTURE WILL INTERCEDE WITH THE DESIGNATED OFFSET ZONE.
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MATCH LINE STA 8459+99.53 SEE SHEET 8

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BREAKWATER ALIGNMENT

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DATE	MAY 2018
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DRAFTED	NJK
FILE	ModIs_PrefAlt_v04.dwg

SHEET 7/10

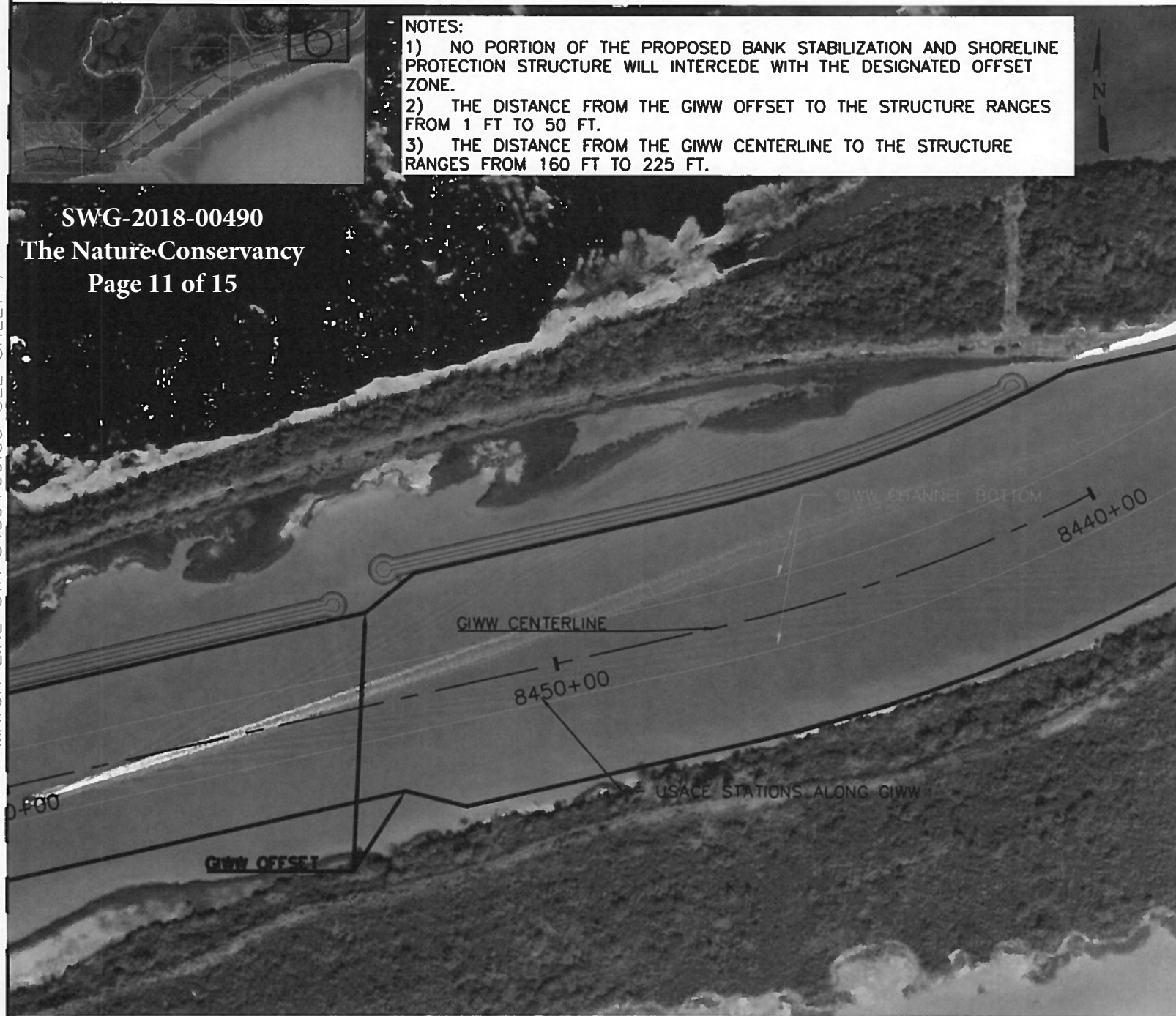
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MATCH LINE STA 8459+99.53 SEE SHEET 7

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NOTES:

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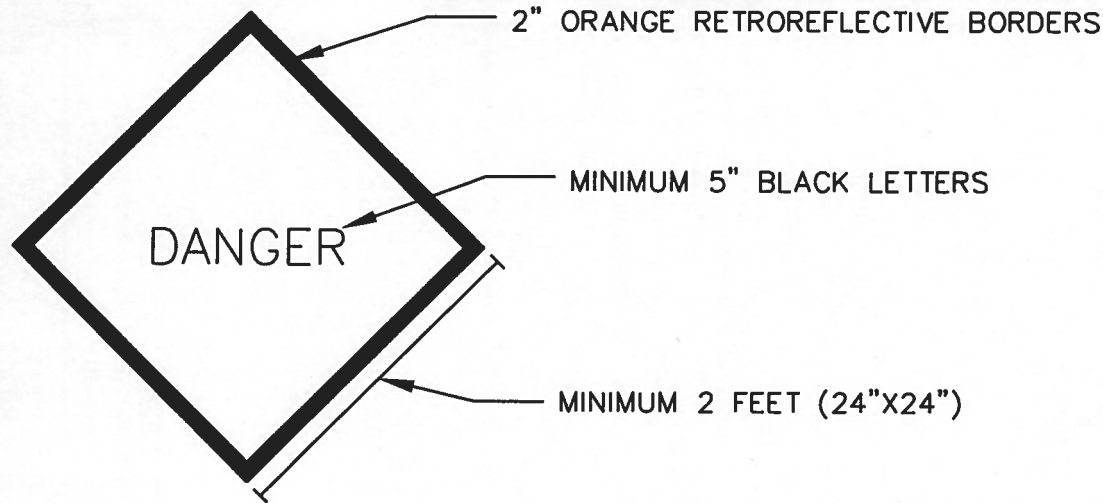
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BREAKWATER ALIGNMENT

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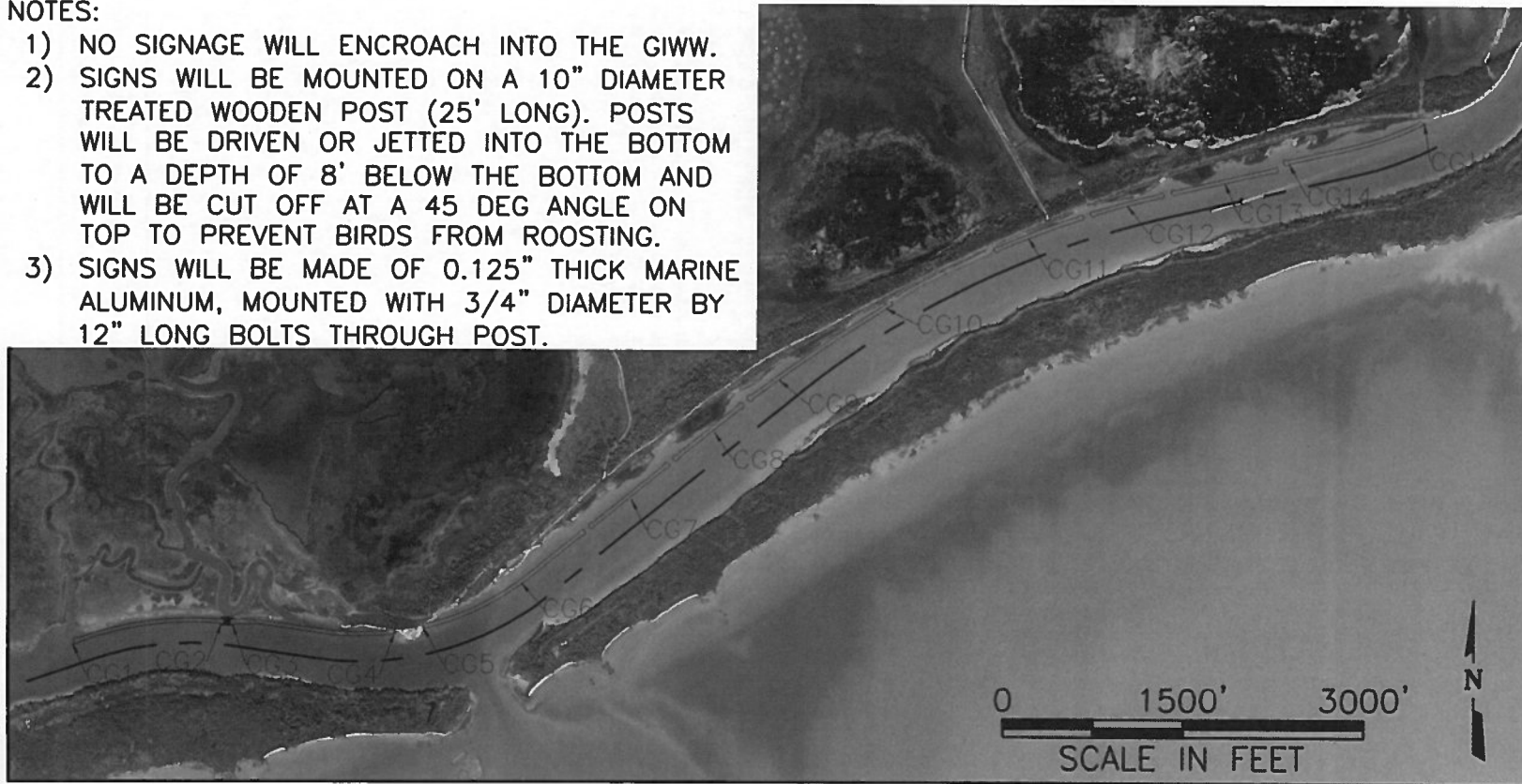
SHEET 8/10

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NOTES:

- 1) NO SIGNAGE WILL ENCROACH INTO THE GIWW.
- 2) SIGNS WILL BE MOUNTED ON A 10" DIAMETER TREATED WOODEN POST (25' LONG). POSTS WILL BE DRIVEN OR JETTED INTO THE BOTTOM TO A DEPTH OF 8' BELOW THE BOTTOM AND WILL BE CUT OFF AT A 45 DEG ANGLE ON TOP TO PREVENT BIRDS FROM ROOSTING.
- 3) SIGNS WILL BE MADE OF 0.125" THICK MARINE ALUMINUM, MOUNTED WITH 3/4" DIAMETER BY 12" LONG BOLTS THROUGH POST.



PROJECT SIGNAGE PLAN

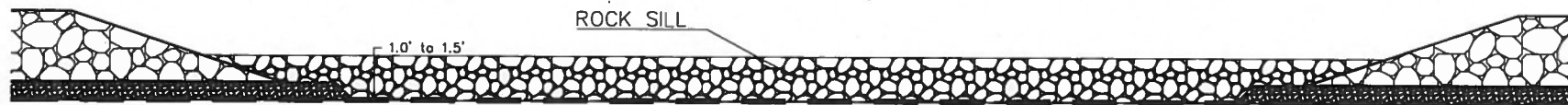
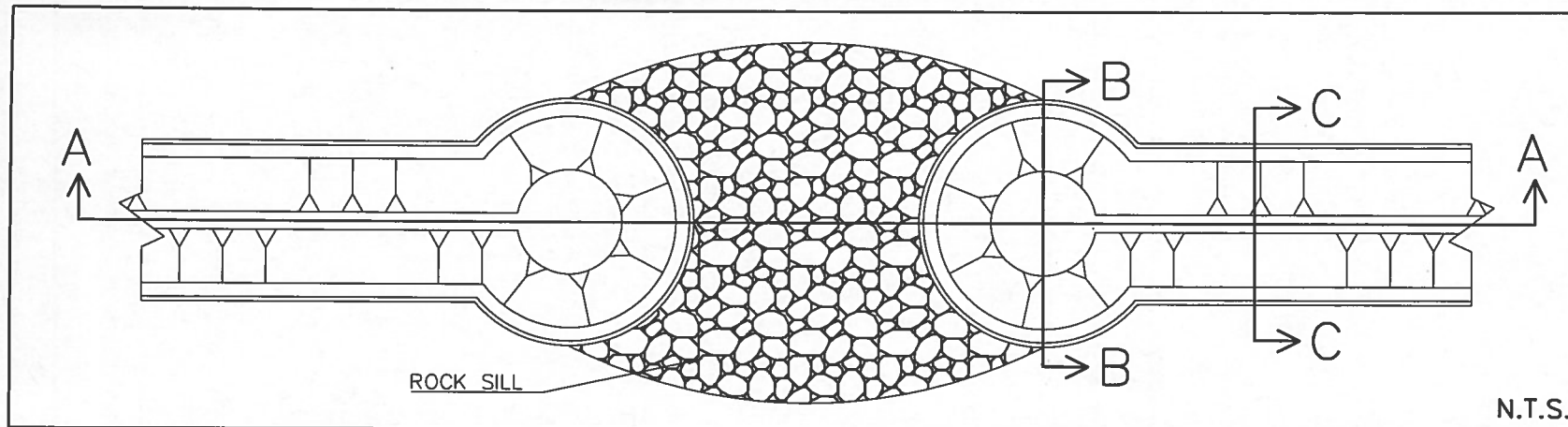
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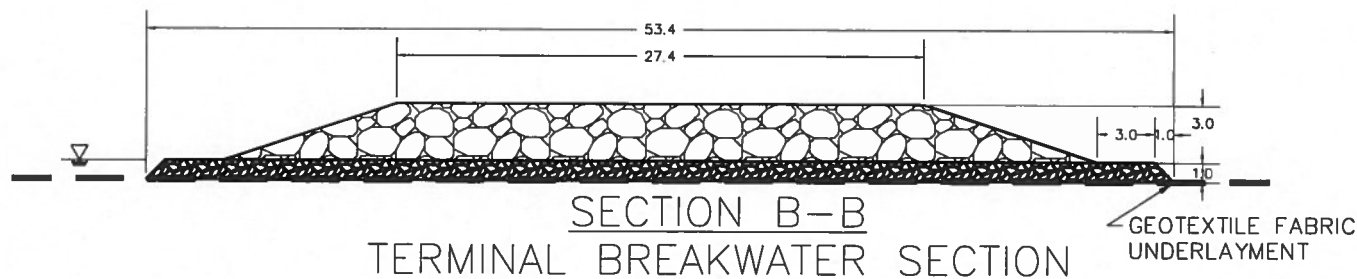
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MAD ISLAND SHORELINE PROTECTION
SIGNAGE PLAN

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		TNV17469	MAY 2018	AS SHOWN	CKW	NJK	SHEET 9/10

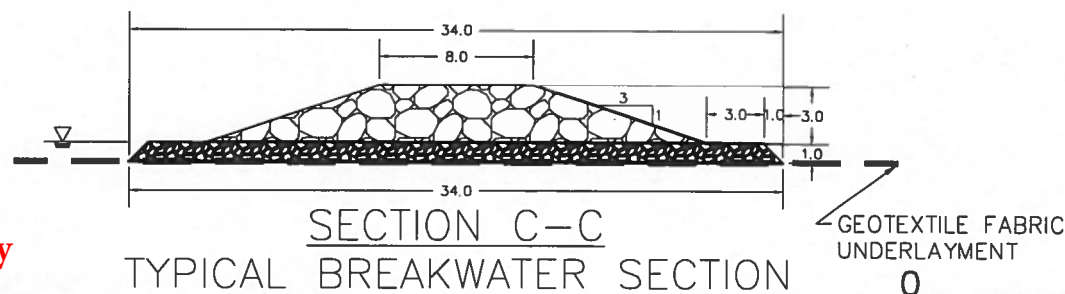
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SECTION A-A
ROCK SILL SECTION



SECTION B-B
TERMINAL BREAKWATER SECTION



SECTION C-C
TYPICAL BREAKWATER SECTION

0 10' 20'
SCALE IN FEET

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THE NATURE CONSERVANCY
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TYPICAL BREAKWATER SECTION

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West end of TNC's Mad Island Marsh Preserve property on the GIWW. View towards north from the GIWW. Photo taken January 4, 2018 by Freese and Nichols, Inc. Very low tide.



Mad Island Marsh Preserve GIWW shoreline on January 4, 2018. View towards the west with the old mouth of Mad Island Bayou in the background. Very low tide. Photo by Freese and Nichols, Inc.



East end of the 1,000 feet of Reefblk installed in 2007 along Mad Island Marsh Preserve shore. This 1,000-feet of Reefblk will remain in place, unaltered. TNC observations are that marsh and oyster clumps have established behind the Reefblk. View towards the east from the GIWW. Photo by Freese and Nichols, Inc. on January 4, 2018 during very low tide.



West end of the 1,000 feet of Reefblk installed in 2007 along Mad Island Marsh Preserve shore. This 1,000-feet of Reefblk will remain in place, unaltered. View towards the east. Photo by Freese and Nichols, Inc. on March 20, 2018.



East end of the 1,000 feet of Reefblk installed in 2007 along Mad Island Marsh Preserve shore. This 1,000-foot of Reefblk will remain in place, unaltered. View towards the west from the GIWW. Photo by Freese and Nichols, Inc. on August 24, 2018 during high tide.



Damaged and fragmented Reefblk in front of the old mouth of Mad Island Bayou on Mad Island Marsh Preserve. View towards north from the GIWW. Photo by Freese and Nichols, Inc. on March 20, 2018.