

REVISED MASTER TIDAL WETLAND IMPACTS EXHIBIT

MDE

ABBREVIATIONS WITH COLOR CODE
 ● TWA 485-08

TIDAL WETLANDS IMPACTS		
NO.	LOCATION	QUANTITIES PERMITTED
1	CUBA ISLAND <i>Revised from VLS</i>	35715
2	CUCKOLD CREEK PIER	2,660 sf
3	CUCKOLD CREEK PIER	1,296 sf
4	POTOMAC RIVER PIER	2,600 sf
5	SHORELINE STABILIZATION	3,200 lf & 14.41 ac OF WETLAND CREATION
6	POTOMAC RIVER PIER	5,100 sf
7	WEIR CREEK BRIDGE	39,600 sf
8	POTOMAC RIVER MARINA	125,601 sf & 5430 cu. ft. OF DREDGING
9	SHORELINE STABILIZATION	1,900 lf
10	POTOMAC RIVER PIER	1,400 sf

LEGEND

- TWA 485-08
- TWA 485-09
- TWA 485-10
- TWA 485-11
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Dewberry
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Attachment #443

MDE 13-WL-0704
 AI No. 64936
 Trailing No. 201361855
 Plan date 1/9/14 page 1 of 39

OVERALL SITE EXHIBIT
 LOCATION PLAN
 SCALE: 1"=100'



13-WL-0704

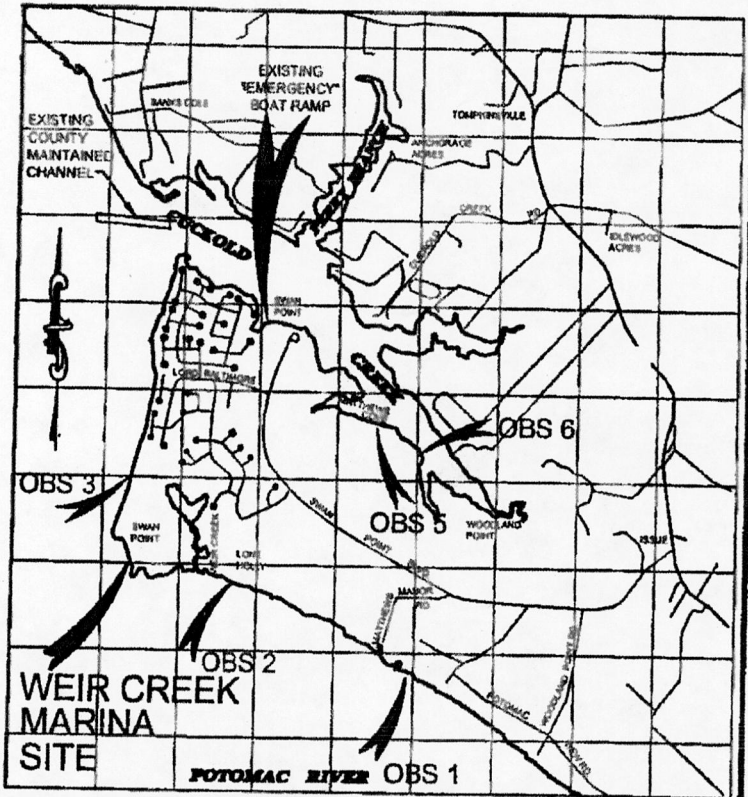
AI NO. 69936

Tracking No. 201361255

Plan Date 1/9/14 Page 2 of 39

SCOPE OF WORK (Cuckhold Creek)

REVETMENT, SILL AND TIDAL WETLAND CREATION



VICINITY MAP

Copyright ADC The Map People
Permitted Use No. 20710173

SCOPE OF WORK (Weir Creek Marina)

- "A" DOCK: 10'x 214', With 23'x 85' "T" Head
11-3'x20' Finger Piers
 - "B" DOCK: 8'x 227', With 10'x 98' "T" Head
11-3'x20' Finger Piers
 - "C" DOCK: 8'x 229', With 8'x58' "L" Head
5-3'x20' Finger Piers
 - "D" DOCK: 10'x 363', With 10'x 105' "T" Head
18-3'x20' Finger Piers
 - "E" DOCK: 8'x 314', With 10'x 96' "T" Head;
16-3'x20' Finger Piers
 - "F" DOCK: 8'x 226', With 8'x 58' "L" Head;
5-3'x20' Finger Piers
- Marina Access Pier 1088'x10', With 2-25'x25' Platforms
Breakwater Pier 10'x 1426', With
1210 sq.ft. Observation Deck
Mooring Piles 203
Dredging (Total) 5,430cy
Piles W/ Warning Signs - 11 / Navigation Markers-4
Stone Breakwater - ±50' x 480'

NOTES

1. TIDAL RANGE IS 1.6 FEET.
2. SOUNDINGS ARE IN FEET & REFER TO MLW DATUM.
3. APPROX. 5,430 C.Y. OF SAND, SILT AND CLAY TO BE MECHANICALLY/HYDRAULICALLY DREDGED AND DEPOSITED AT AN UPLAND AREA LOCATED ON-SITE. PROVIDE A MAINTENANCE DREDGING PROVISION IN THE APPROVED PERMITS.
4. SAV AND NON-TIDAL WETLANDS DELINEATIONS OBTAINED FROM DATA PROVIDED BY Mc CARTHY & ASSOC., INC.
5. THESE DRAWINGS ARE FOR OUTLINE PURPOSES ONLY. DESIGN DRAWINGS ARE TO BE PROVIDED SEPARATELY.

SCOPE OF WORK (Piers)

- OBS Pier 1 10'x260' max.
- OBS Pier 2 10'x440' max, with (20'x30') bumpout & (20'x40') "T" Head.
- OBS Pier 3 8'x170' max
- OBS Pier 5 8'x258' max with 10'x20' "L" Head
- OBS Pier 6 8'x162' max

**SHEET 1 OF 16
PROPOSED MARINAS
AND OBSERVATION PIERS**

IN: CUCKOLD CREEK/POTOMAC RIVER
AT: SWAN POINT
CHARLES COUNTY, MARYLAND
APPL. BY: U.S. STEEL CORP./
BROOKFIELD HOMES, LLC.

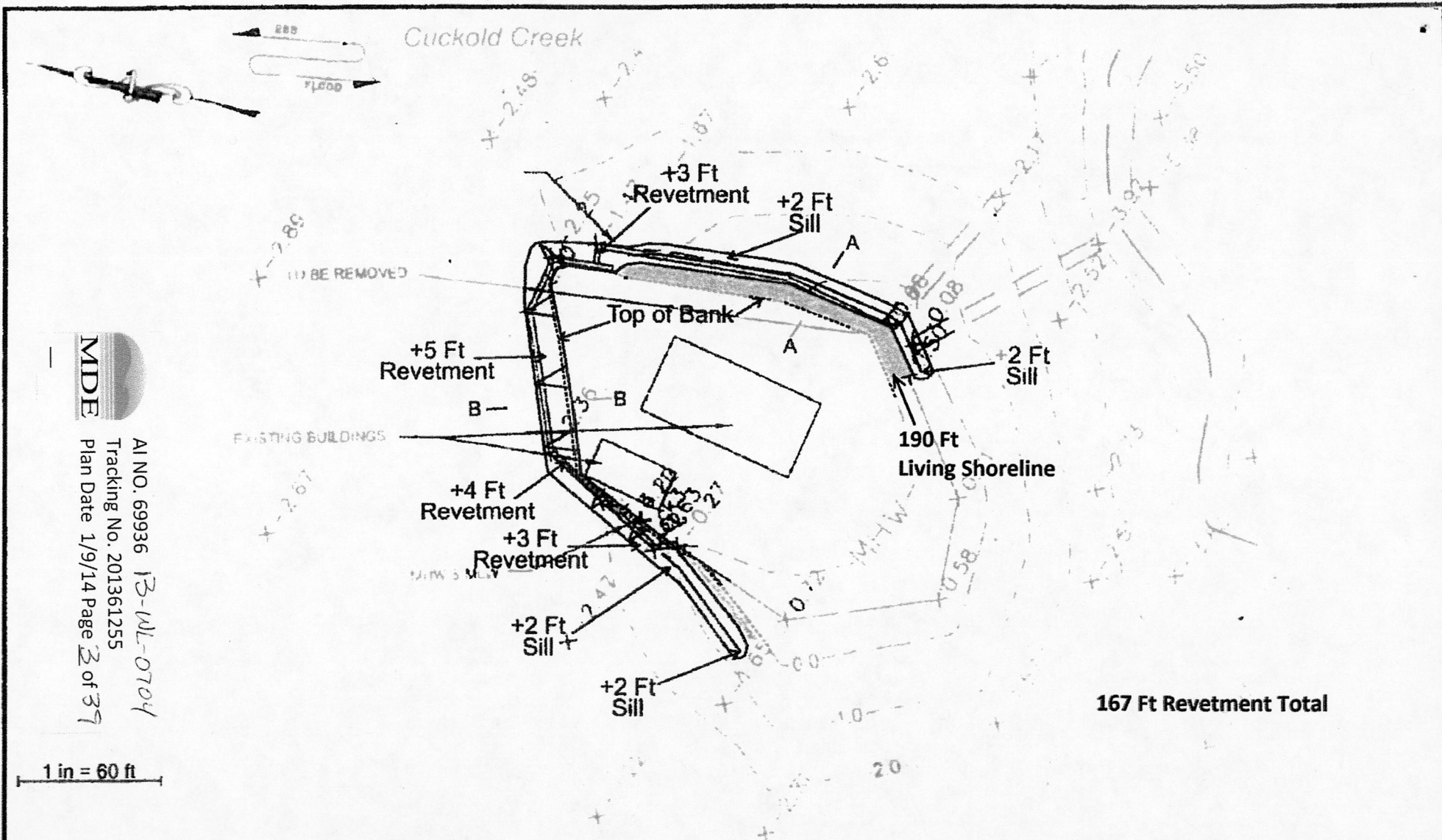
DATE: December 2013

SHEET INDEX

#01 - TITLE PAGE	#06 - SITE PLAN	#11 - SITE PLAN
#02 - SITE PLAN	#07 - SITE PLAN	#12 - DETAILS
#03 - KEY SHEET	#08 - SITE PLAN	#13 - DETAILS
#04 - SITE PLAN	#09 - SITE PLAN	#14 - DETAILS
#05 - SITE PLAN	#10 - SITE PLAN	#15 - DETAILS
		#16 - DETAILS


CONTRACTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.

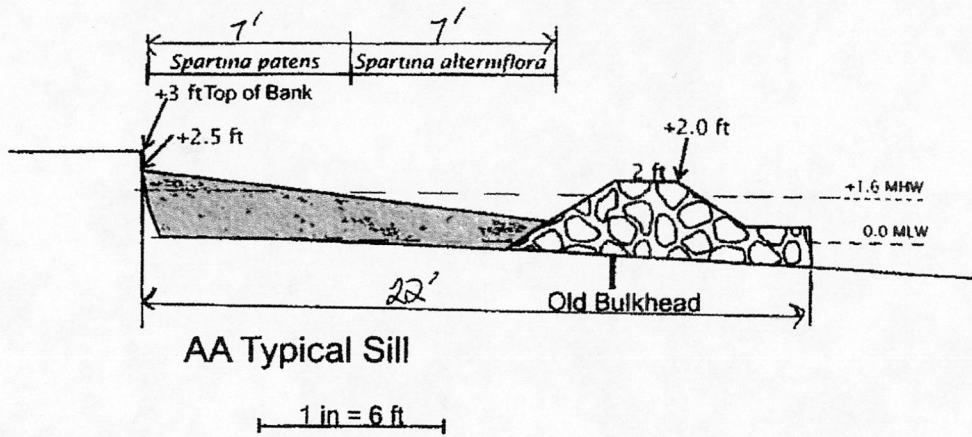
RAMS TRACKING # 200562503
TIDAL WETLANDS # 05-WL-1266



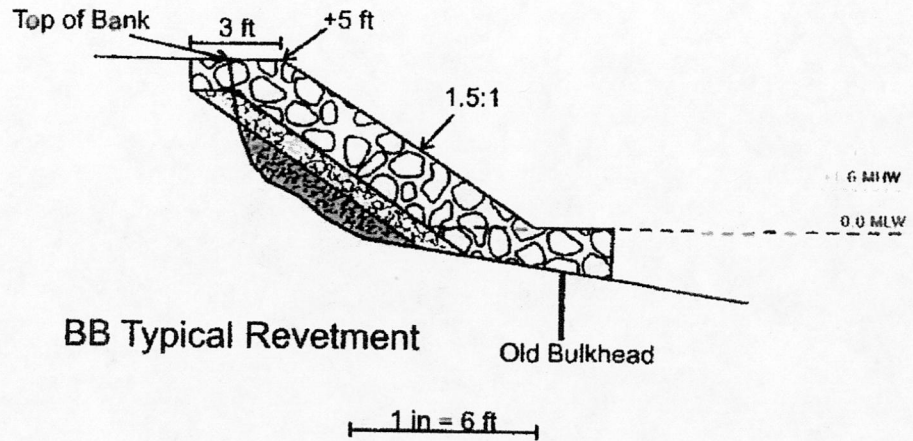
AI NO. 69936 13-WL-0704
 Tracking No. 201361255
 Plan Date 1/9/14 Page 2 of 37

Based on 2000 survey by Andrews Miller, Inc.


COASTLINE DESIGN, P.C. 	ADJACENT PROPERTY OWNERS: 	<h1>Cuba Island Shore Plan</h1>		APPLICATION BY:
	DATUM: 			AT IN:

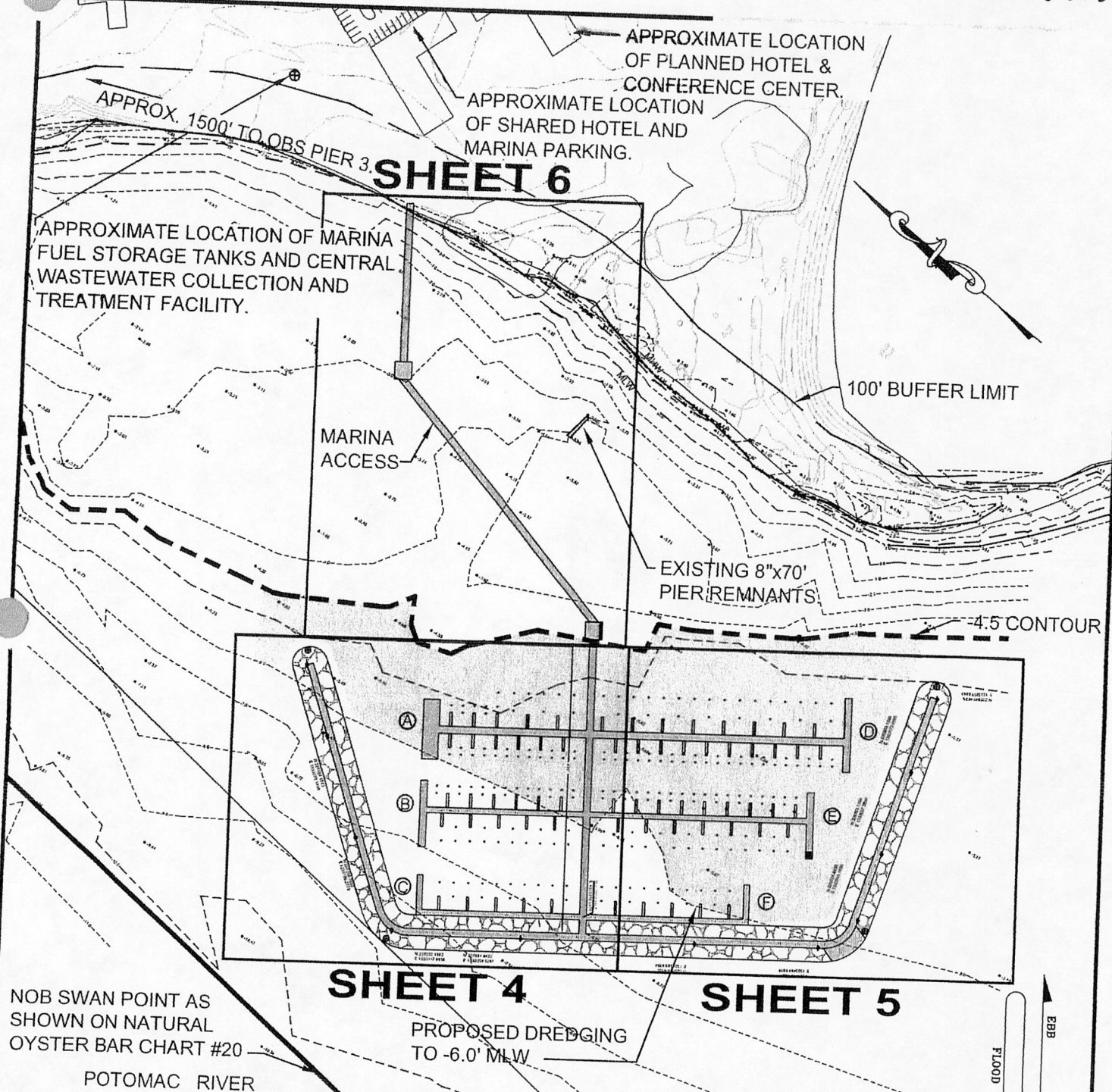


Corrected plans



MDE
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 Tracking No. 201361255
 -13-WL-0704

COASTLINE DESIGN, P.C. 	ADJACENT PROPERTY OWNERS.	Cuba Island Shore Plan		APPLICATION BY
	DATUM			AT IN
				SHEET



SHEET 6

SHEET 4

SHEET 5

SHEET 3 OF 16
KEY PLAN MARINA

Scale: 1" = 200'

Application By: U.S. Steel Corp./
 Brookfield Homes, LLC.
 Date: December 2013

CONSULTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.

WEIR CREEK SLIP SUMMARY

	30' Slips	40' Slips	50' Slips	TOTAL
A	18	—	6	24
B	14	11	—	25
C	—	11	—	11
D	22	—	16	38
E	19	15	—	34
F	—	11	—	11
TOTAL	73	48	22	143

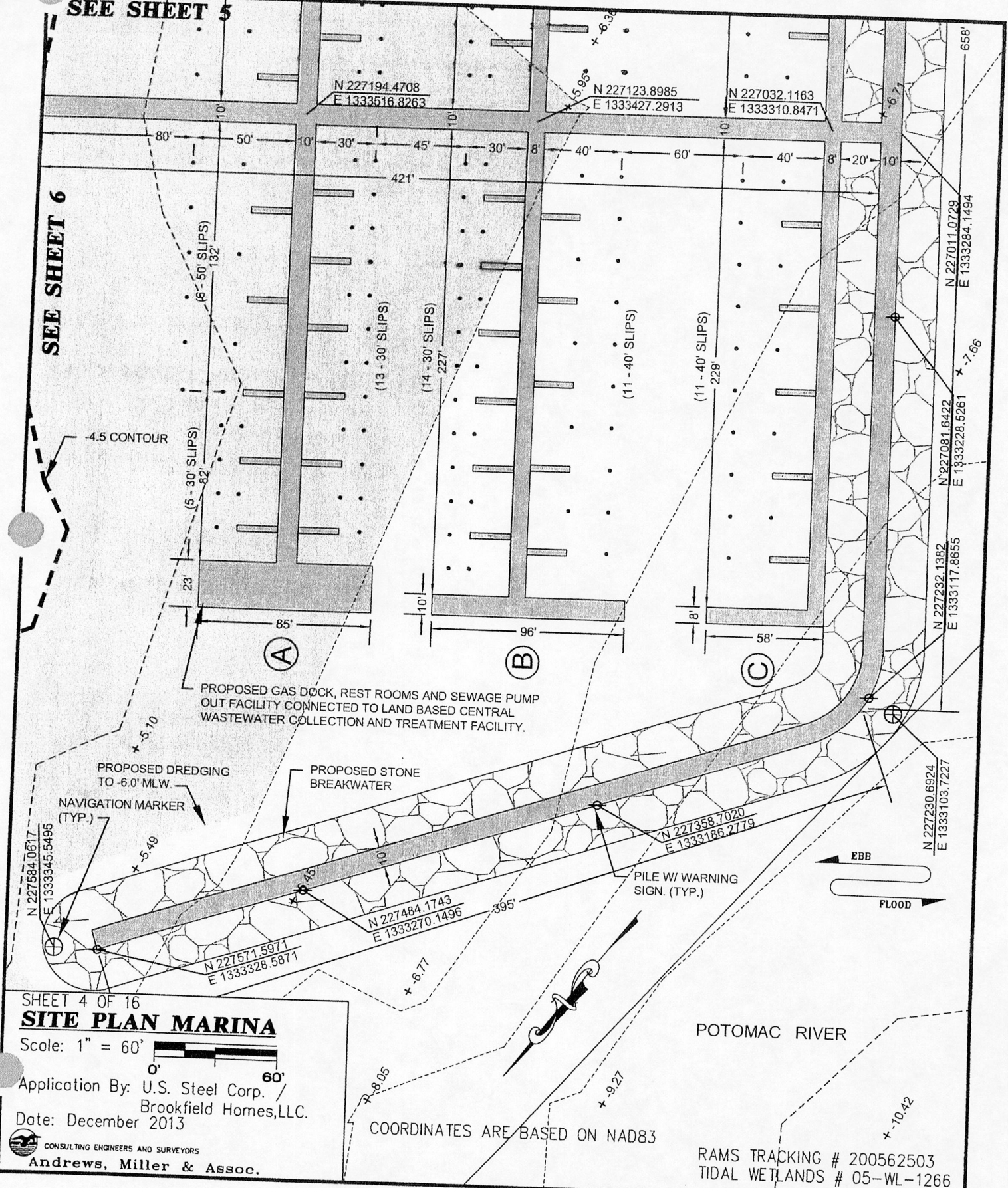
NOTE:
 LOCATION OF DRY HYDRANTS
 PER NEPA CODE 303 & FIRE
 MARSHALL'S OFFICE

RAMS TRACKING # 200562503
 TIDAL WETLANDS # 05-WL-1266



SEE SHEET 5

SEE SHEET 6



PROPOSED GAS DOCK, REST ROOMS AND SEWAGE PUMP OUT FACILITY CONNECTED TO LAND BASED CENTRAL WASTEWATER COLLECTION AND TREATMENT FACILITY.

PROPOSED DREDGING TO 6.0' MLW.

PROPOSED STONE BREAKWATER

PILE W/ WARNING SIGN. (TYP.)

SHEET 4 OF 16
SITE PLAN MARINA

Scale: 1" = 60'

Application By: U.S. Steel Corp. / Brookfield Homes, LLC.
Date: December 2013

CONSULTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.

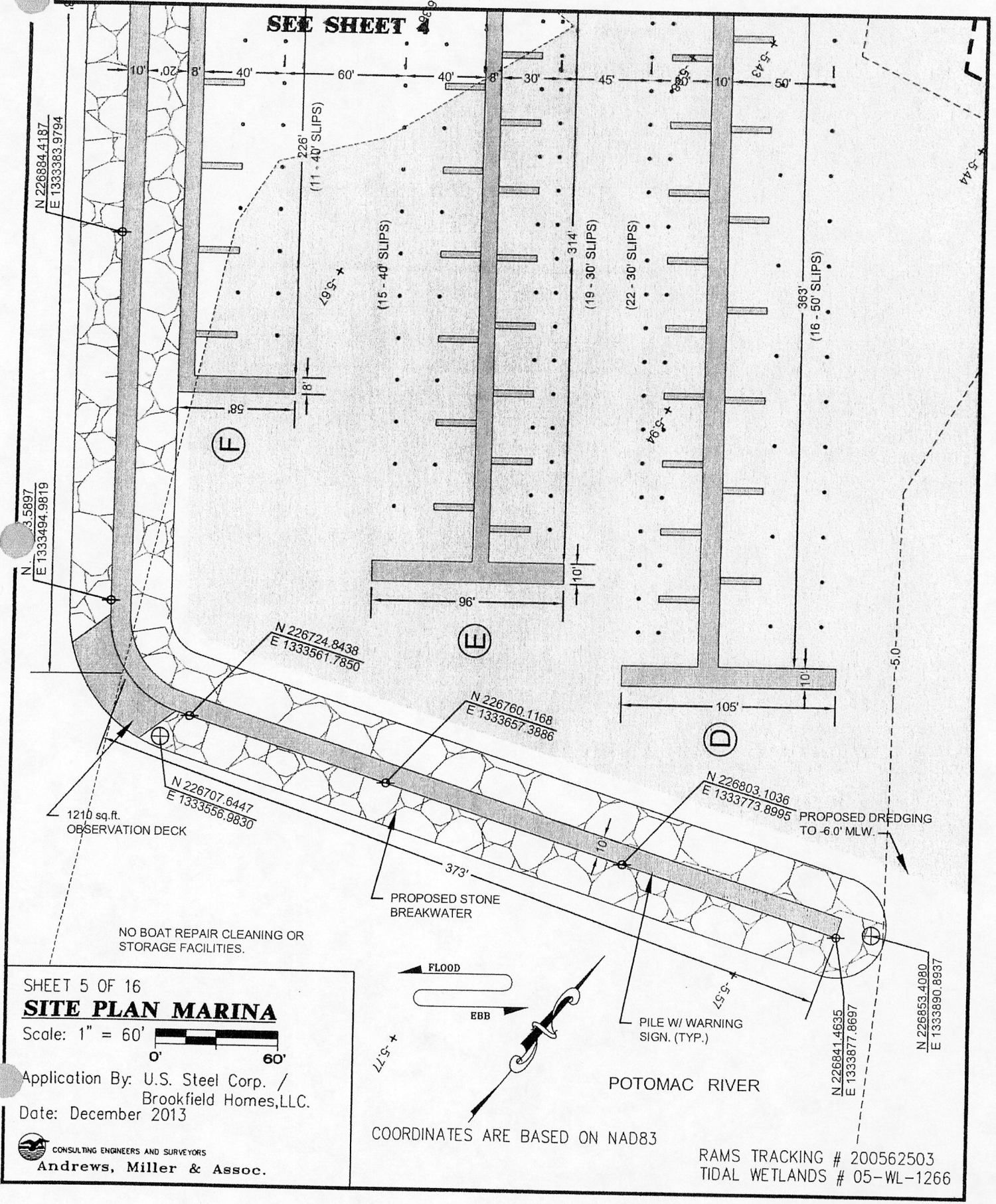
COORDINATES ARE BASED ON NAD83

POTOMAC RIVER

RAMS TRACKING # 200562503
TIDAL WETLANDS # 05-WL-1266



SEE SHEET 4



SHEET 5 OF 16

SITE PLAN MARINA

Scale: 1" = 60'



Application By: U.S. Steel Corp. / Brookfield Homes, LLC.
Date: December 2013

CONSULTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.

COORDINATES ARE BASED ON NAD83

RAMS TRACKING # 200562503
TIDAL WETLANDS # 05-WL-1266

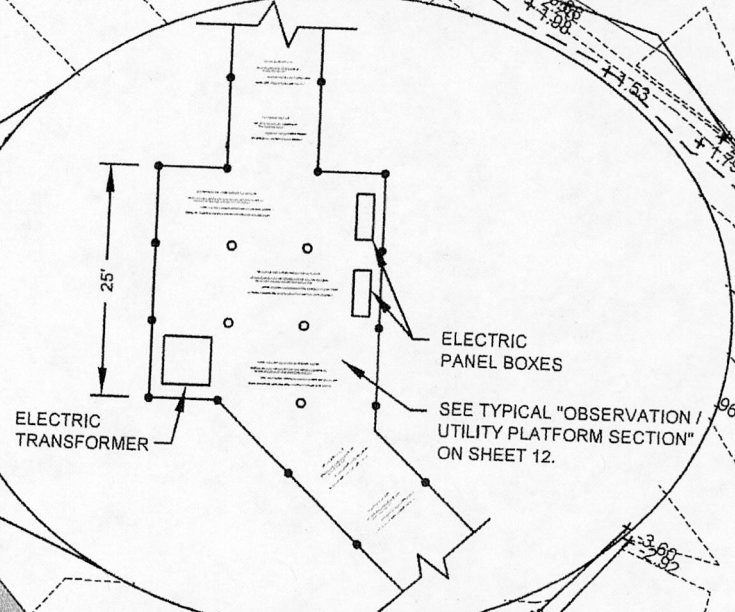


SWAN POINT

OBSERVATION /
UTILITY PLATFORM

N 227728.8605
E 1333723.9360

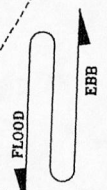
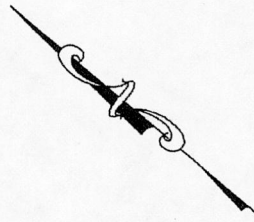
MARINA ACCESS
PIER



PLATFORM PLAN

Scale: 1" = 20'

EXISTING 8'x70'
PIER REMNANTS.



POTOMAC RIVER

SHEET 6 OF 16
SITE PLAN MARINA

Scale: 1" = 60'

Application By: U.S. Steel Corp. /
Brookfield Homes, LLC.
 Date: December 2013

CONSULTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.

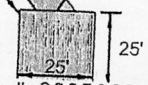
COORDINATES ARE BASED ON NAD83
 -4.5 CONTOUR

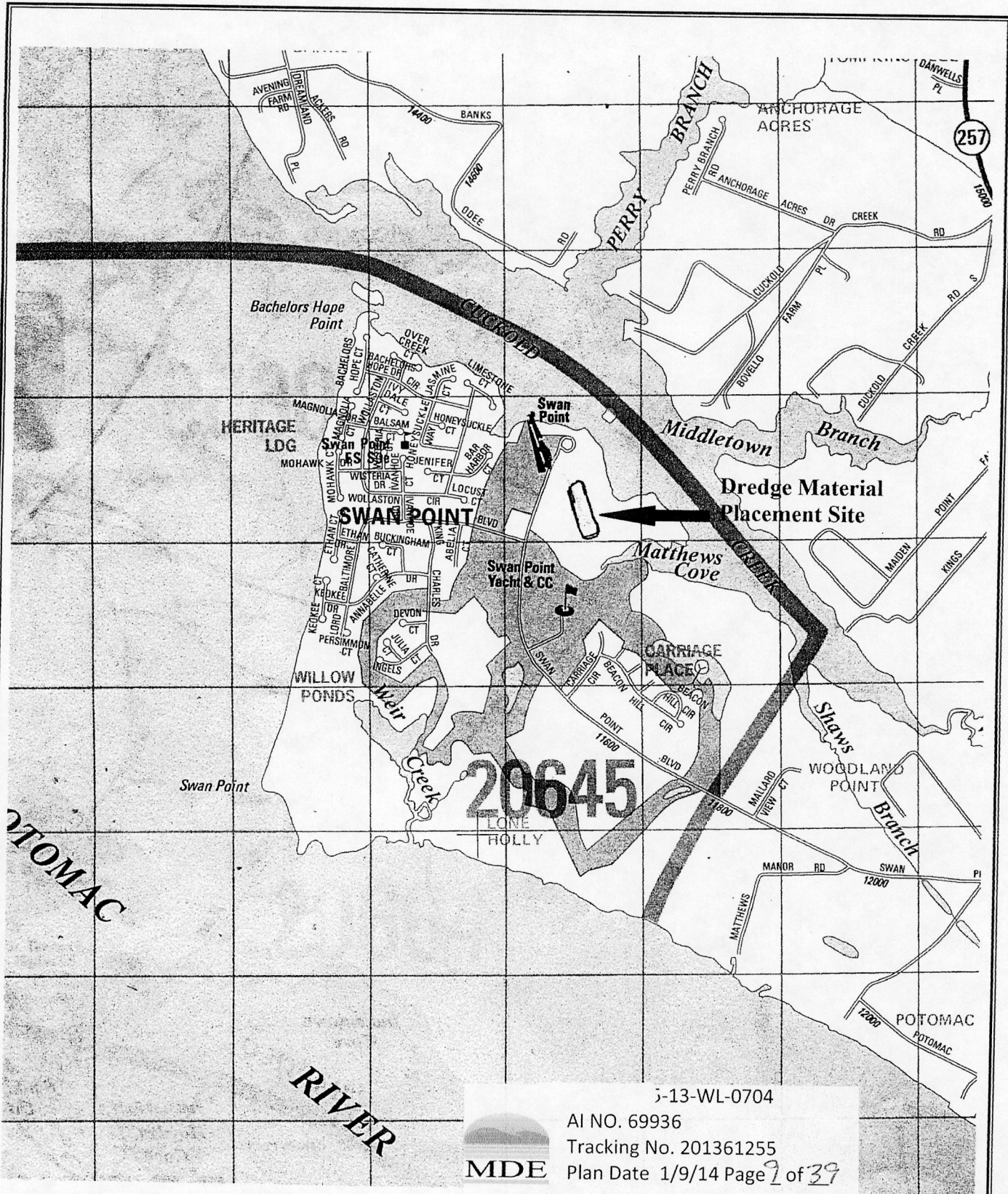
SEE SHEETS 4


PROPOSED DREDGING
 TO -6.0' MLW.

RAMS TRACKING # 200562503
 TIDAL WETLANDS # 05-WL-1266

N 227293.3522
E 1333642.2772

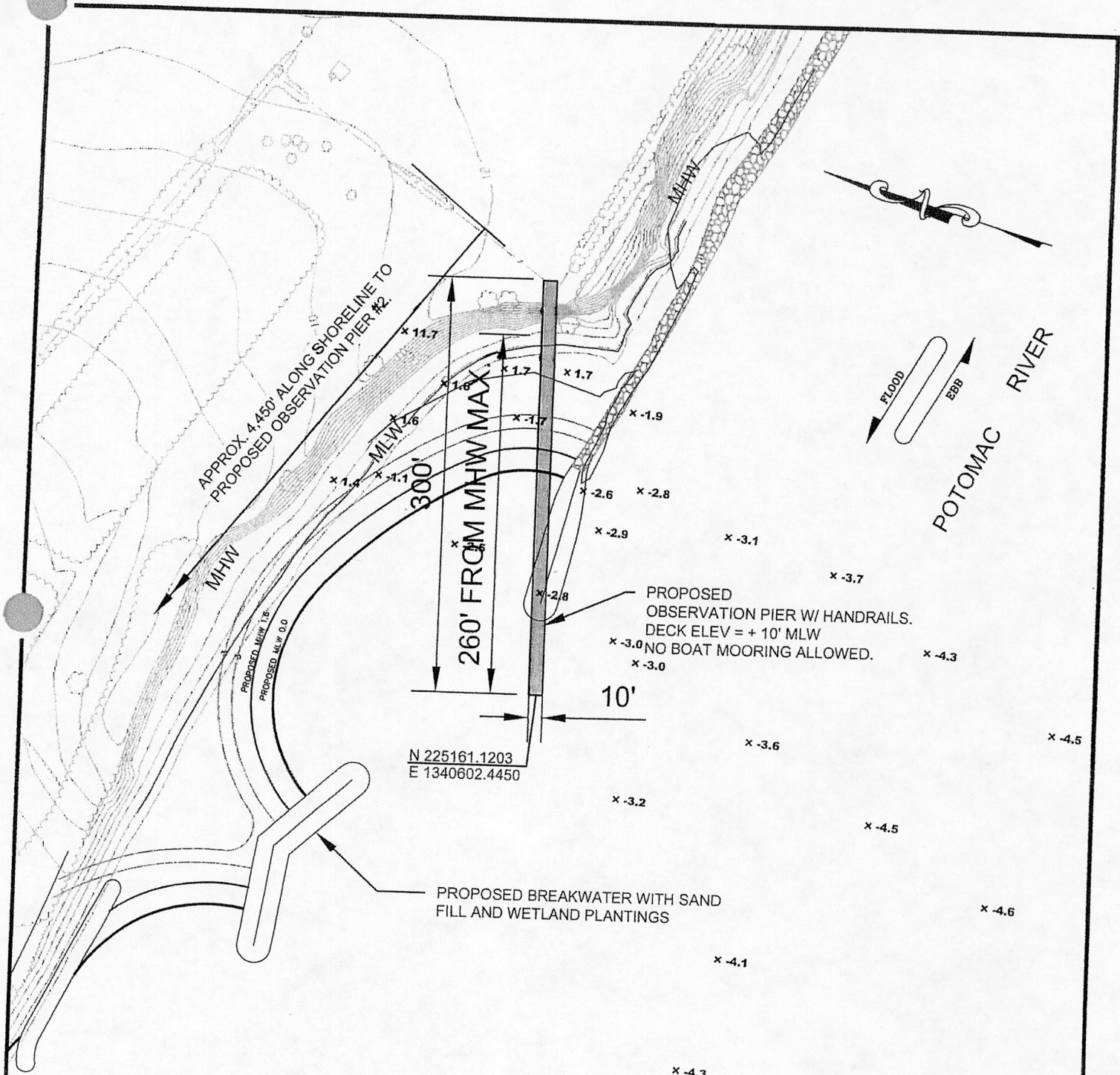





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 Plan Date 1/9/14 Page 7 of 39

CHARLES COUNTY ADC MAP
 (SCALE: 1"=2000')
 CREDIT ©ADC THE MAP PEOPLE - BY PERMISSION
 PUN# 2090616

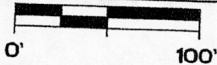
**SWAN POINT DREDGE
 MATERIAL PLACEMENT SITE
 ISSUE, MARYLAND**



SHEET 7 OF 16

SITE PLAN OBSERVATION PIER 1

Scale: 1" = 100'



Application By: U.S. Steel Corp. /
Brookfield Homes, LLC.

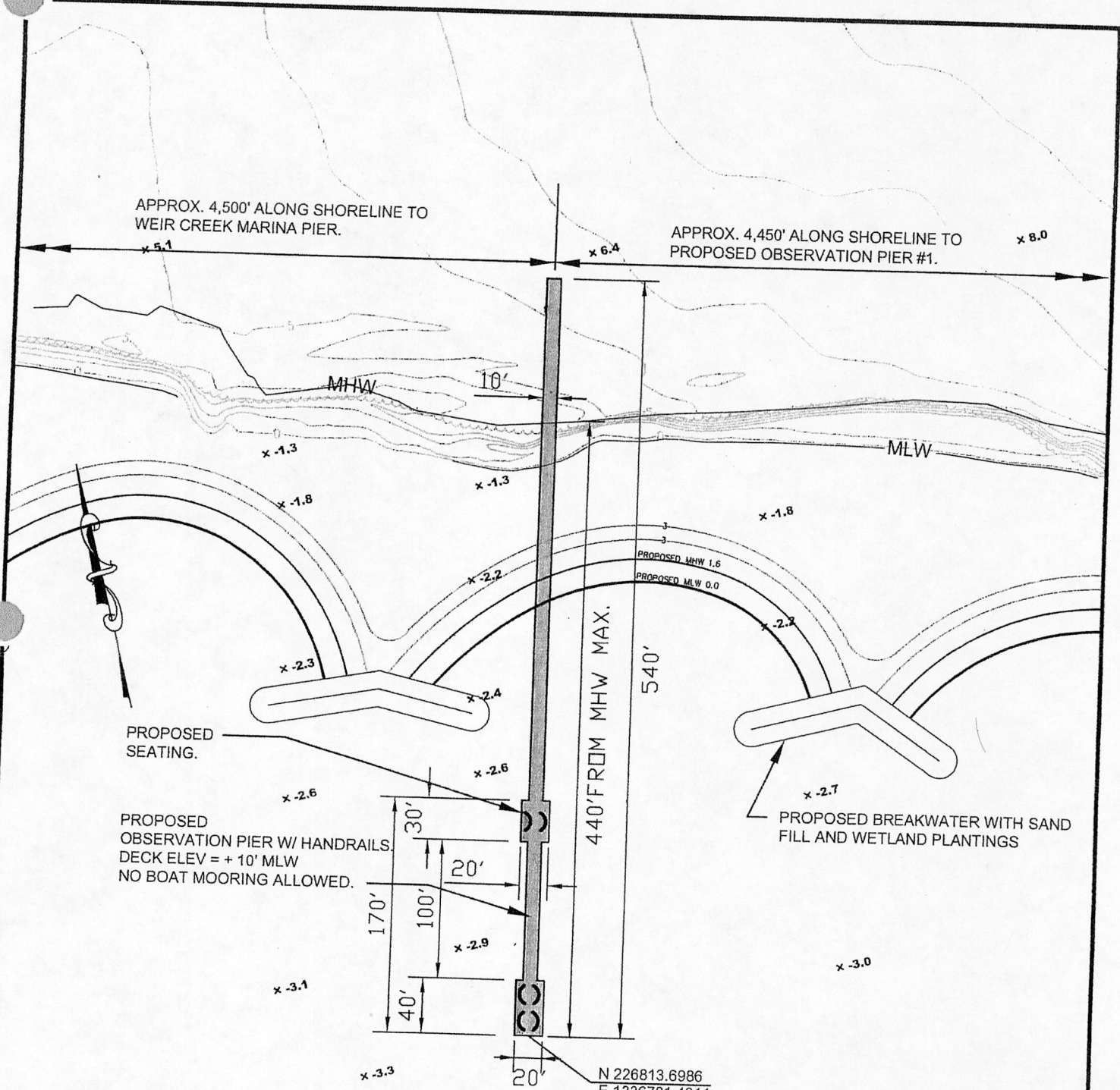
Date: December 2013



CONSULTING ENGINEERS AND SURVEYORS

Andrews, Miller & Assoc.

RAMS TRACKING # 200562503
TIDAL WETLANDS # 05-WL-1266



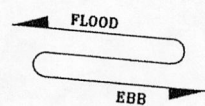
SHEET 8 OF 16
SITE PLAN OBSERVATION PIER 2

Scale: 1" = 100'

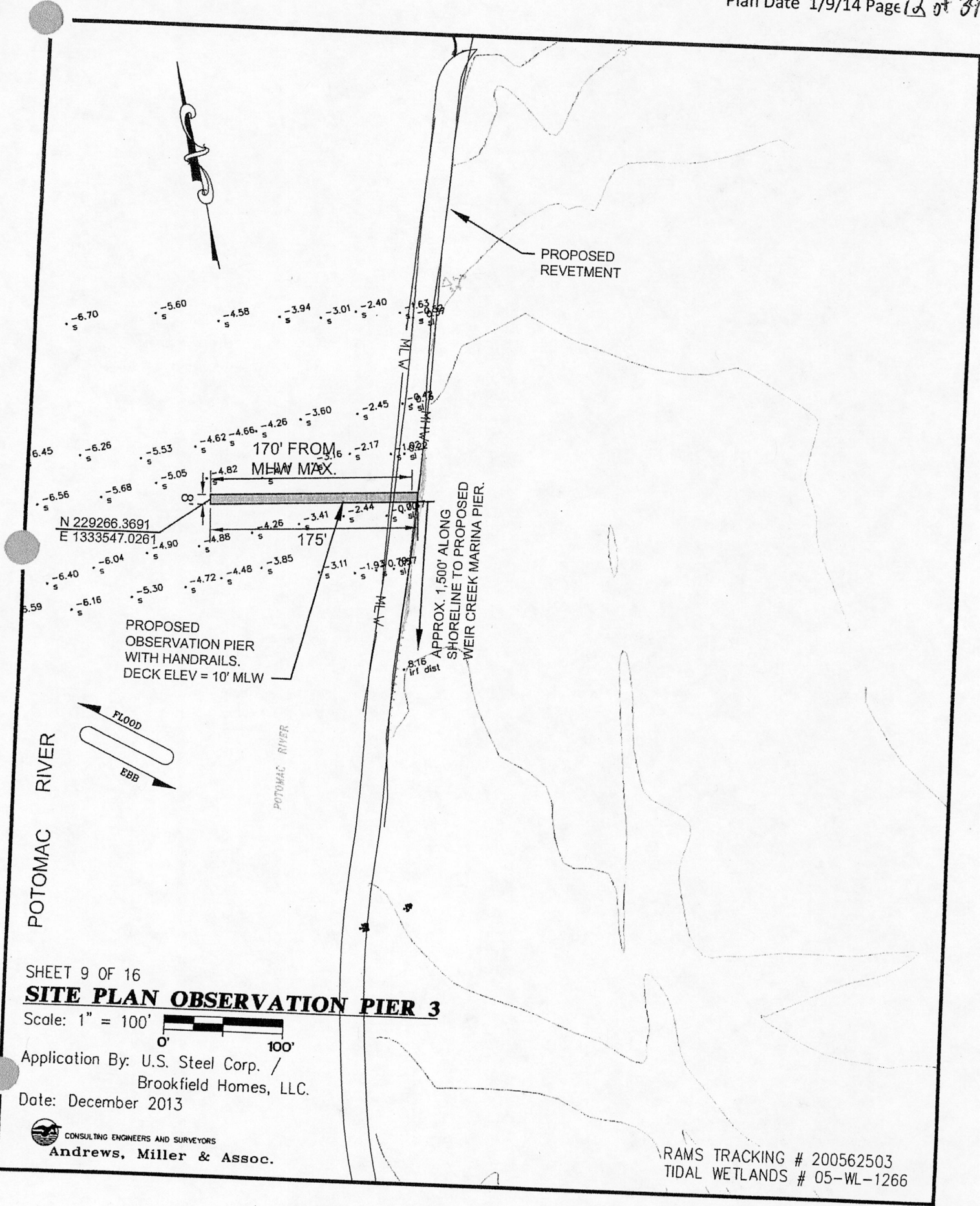
Application By: U.S. Steel Corp. /
 Brookfield Homes, LLC.
 Date: December 2013

CONSULTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.

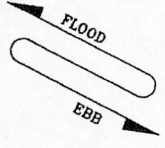
POTOMAC RIVER



RAMS TRACKING # 200562503
 TIDAL WETLANDS # 05-WL-1266



POTOMAC RIVER



SHEET 9 OF 16

SITE PLAN OBSERVATION PIER 3

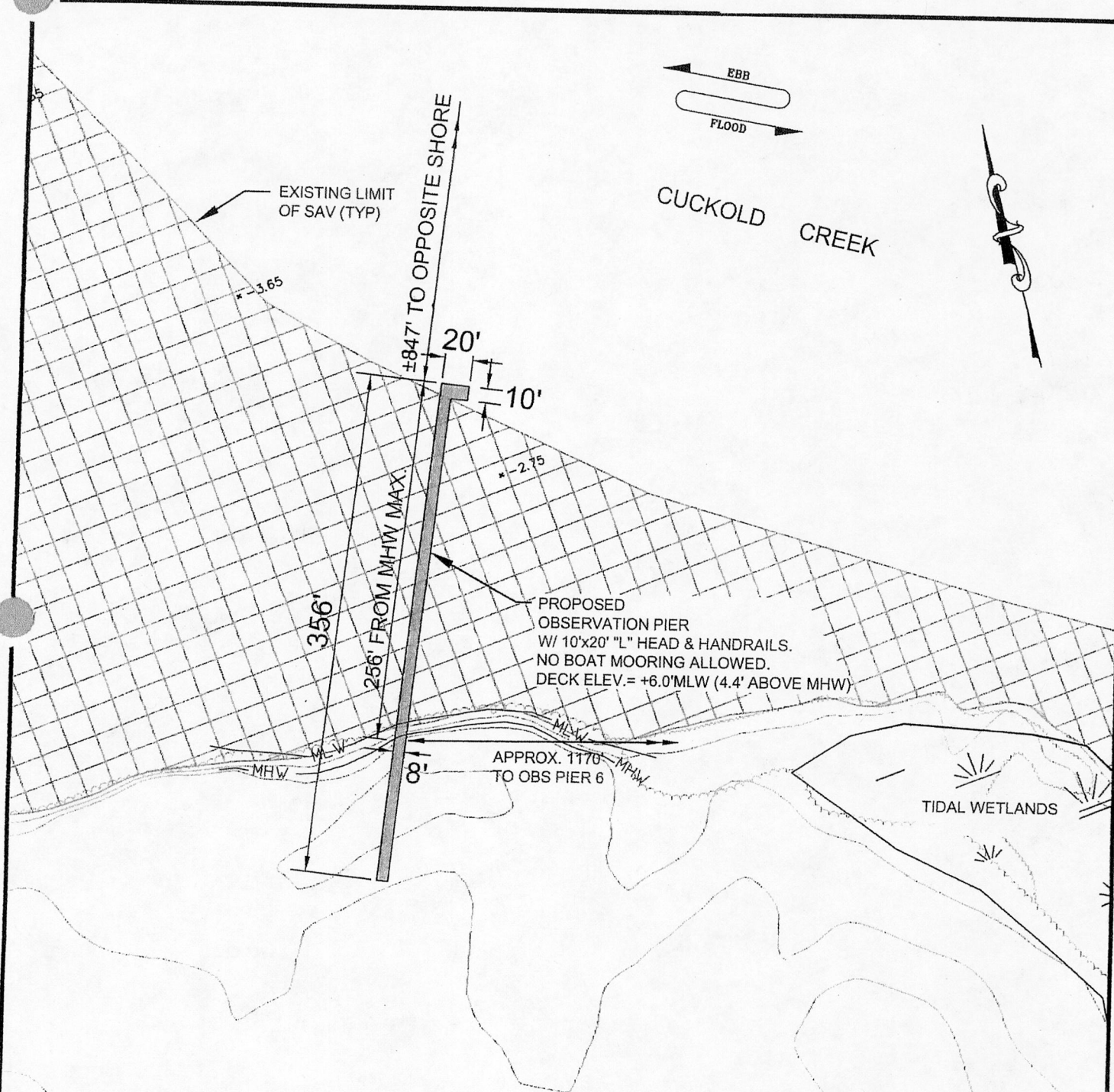
Scale: 1" = 100'

Application By: U.S. Steel Corp. /
 Brookfield Homes, LLC.

Date: December 2013

CONSULTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.

RAMS TRACKING # 200562503
 TIDAL WETLANDS # 05-WL-1266



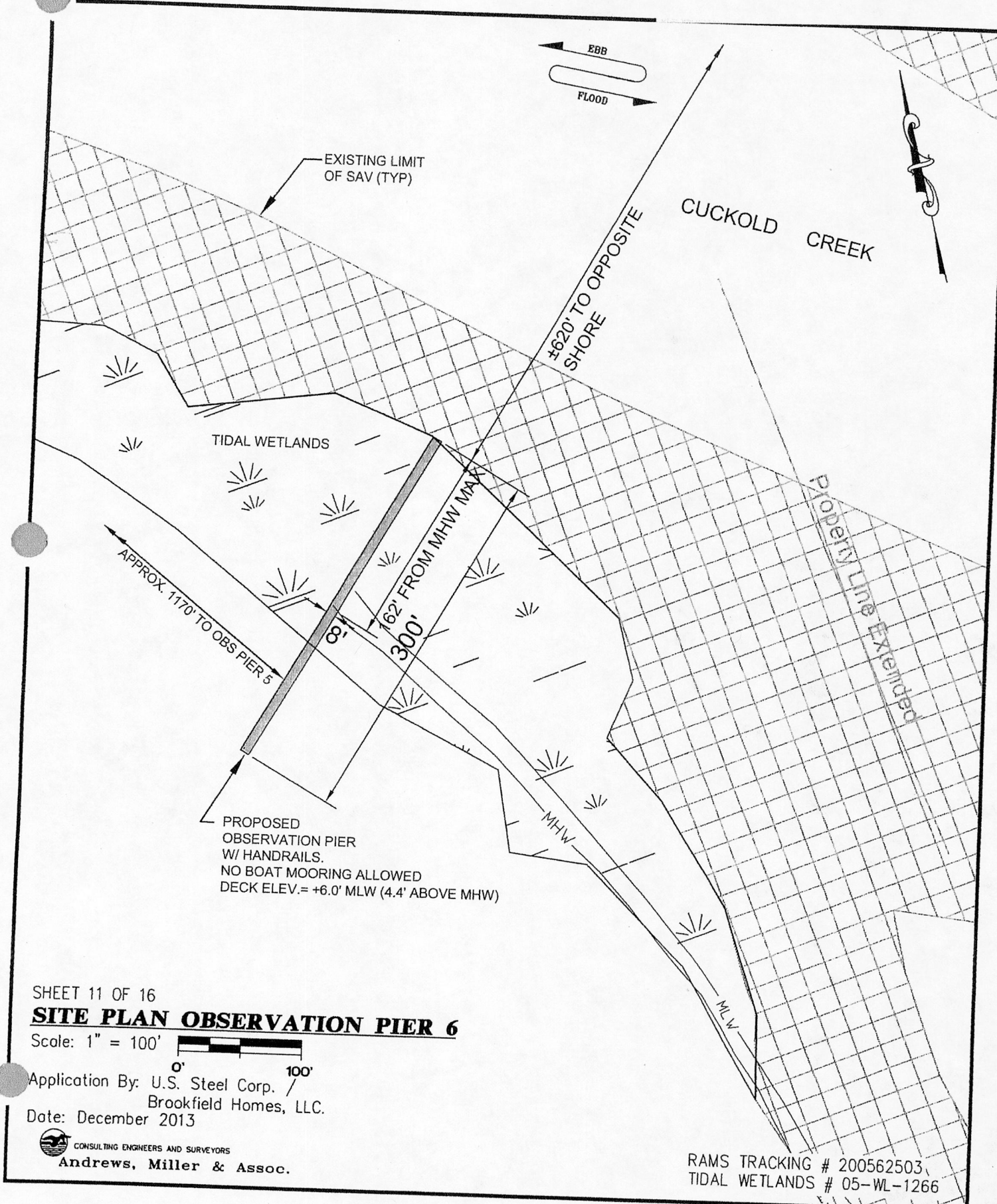
SHEET 10 OF 16
SITE PLAN OBSERVATION PIER 5

Scale: 1" = 100'

Application By: U.S. Steel Corp. /
 Brookfield Homes, LLC.
 Date: December 2013

CONSULTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.

RAMS TRACKING # 200562503
 TIDAL WETLANDS # 05-WL-1266



SHEET 11 OF 16

SITE PLAN OBSERVATION PIER 6

Scale: 1" = 100'

Application By: U.S. Steel Corp. /
Brookfield Homes, LLC.

Date: December 2013



CONSULTING ENGINEERS AND SURVEYORS

Andrews, Miller & Assoc.

RAMS TRACKING # 200562503,
TIDAL WETLANDS # 05-WL-1266

PIER DECK ELEV. = 10.0' MLW

VARIES (PIER 1: 10' WIDE; PIER 2: 10' WIDE WITH 20'x30' BUMPOUT & 20'x40' "T" HEAD)

PROPOSED 6' LONG BENCH
(AT 50' CENTERS & AT BUMPOUTS.)

12"x 12" PILE CAP.

8"x8" FILLER BLOCKS.

1.6' = MHW

0.0' = MLW

TIMBER HANDRAIL SYSTEM

3"x8" DECK (TYP.)

6"x6" CURB

4"x14" STRINGER (TYP.)

4"x14" FILLER BLOCKS, ON EACH SIDE OF BOLTS.

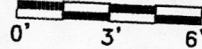
TIMBER PILE (TYP.), 14"-3' BUTT.

3"x10" CROSS BRACE.

EXISTING BOTTOM

TYPICAL OBSERVATION PIER 1 & 2 SECTION

SCALE: 1" = 6'



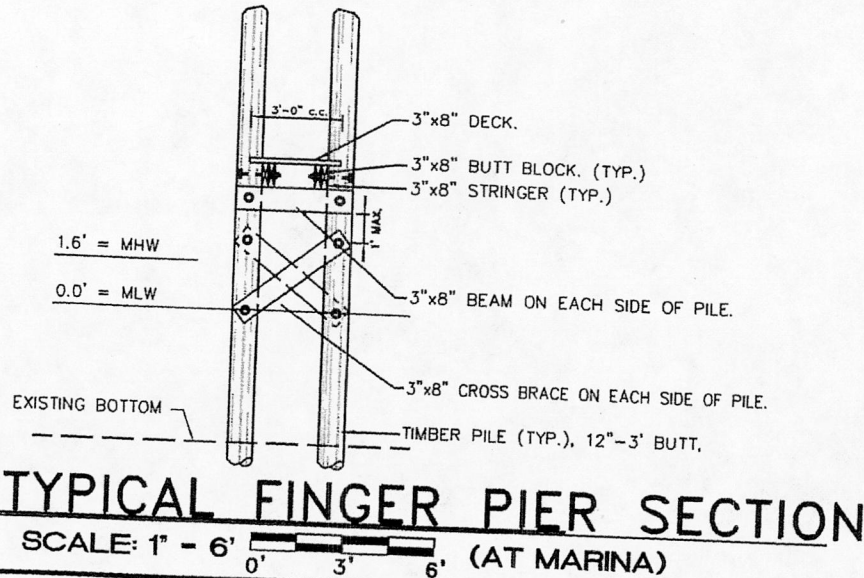
RAMS TRACKING # 200562503
TIDAL WETLANDS # 05-WL-1266

SHEET 12 OF 16
DETAILS

Scale: As Shown
Application By: U.S. Steel Corp.
Brookfield Homes, LLC.

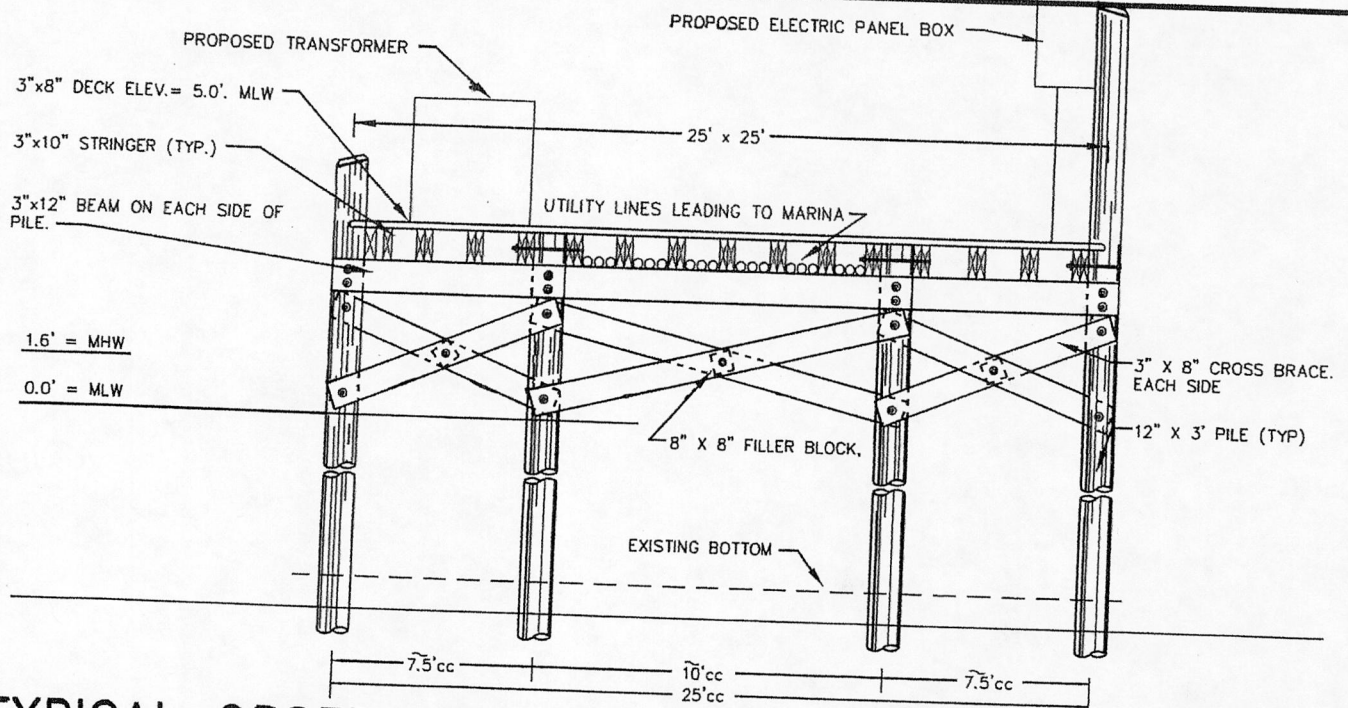
Date: December 2013

CONSULTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.



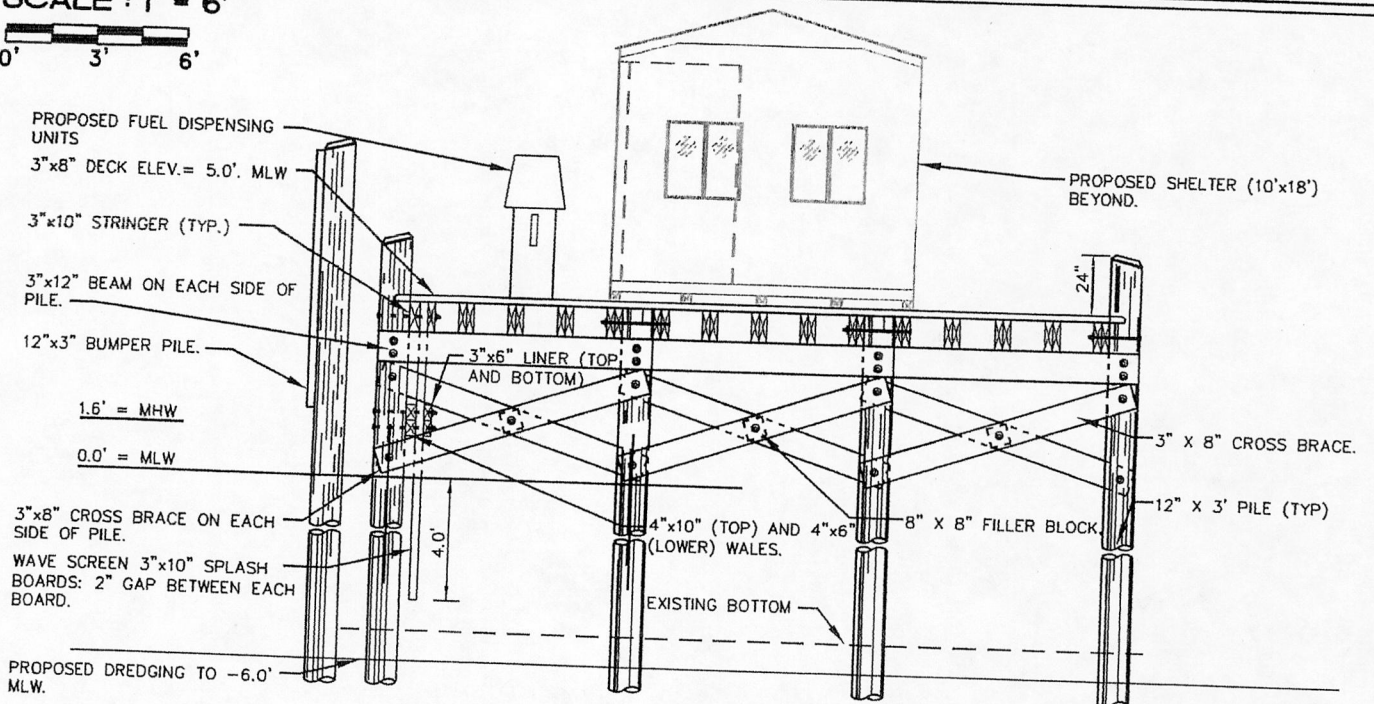
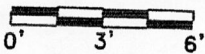
MDE
AI NO. 69936
Tracking No. 201361255
Plan Date 1/9/14 Page 15 of 39

13-WL-0704



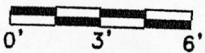
TYPICAL OBSERVATION / UTILITY PLATFORM SECTION

SCALE : 1" = 6'



TYPICAL FUEL DOCK PLATFORM SECTION

SCALE : 1" = 6' (AT MARINA)



SHEET 13 OF 16

DETAILS

Scale: As Shown

Application By: U.S. Steel Corp. / Brookfield Homes, LLC.

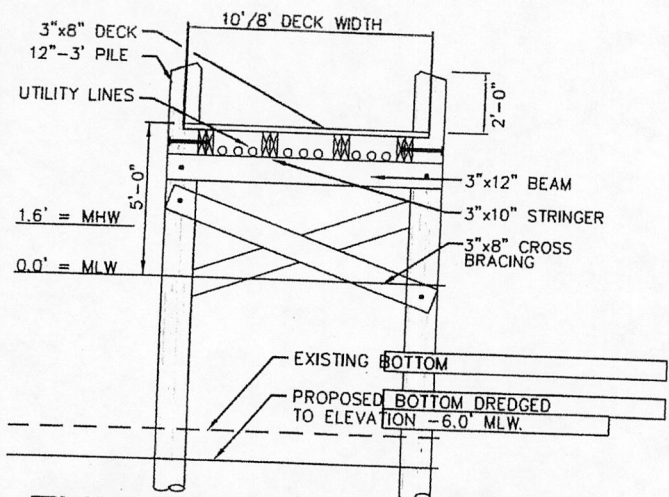
Date: December 2013

RAMS TRACKING # 200562503
TIDAL WETLANDS # 05-WL-1266



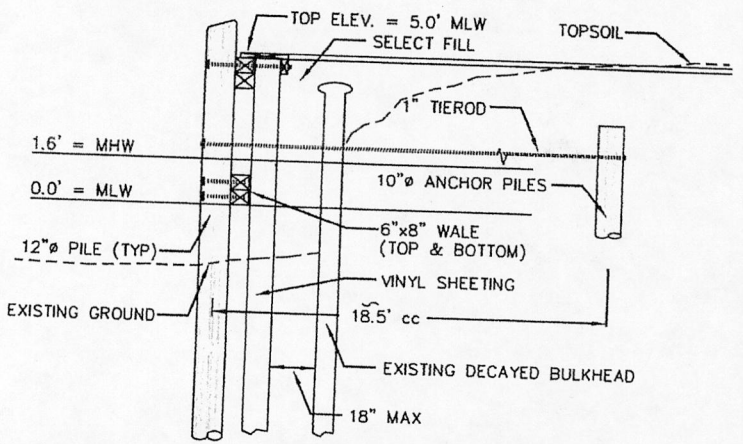
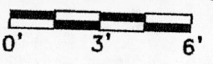
CONSULTING ENGINEERS AND SURVEYORS

Andrews, Miller & Assoc.



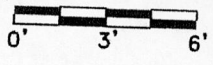
TYPICAL COLLECTOR PIER SECTION

SCALE : 1" = 6' (AT MARINA)



TYPICAL BULKHEAD REPLACEMENT SECTION

SCALE : 1" = 6' (AT ISLAND)



SHEET 14 OF 16

DETAILS

Scale: As Shown

Application By: U.S. Steel Corp. / Brookfield Homes, LLC.

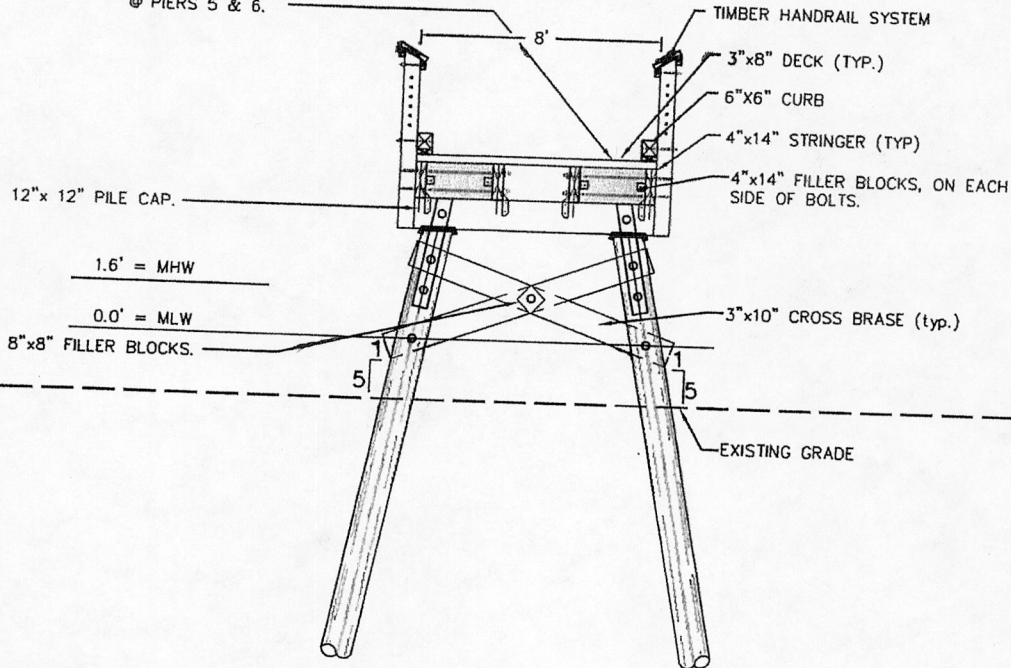
Date: December 2013

RAMS TRACKING # 200562503
TIDAL WETLANDS # 05-WL-1266

CONSULTING ENGINEERS AND SURVEYORS
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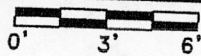


PIER DECK ELEV. = 10.0' MLW @ OBS PIER 3
PIER DECK ELEV. = 6.0' MLW
@ PIERS 5 & 6.



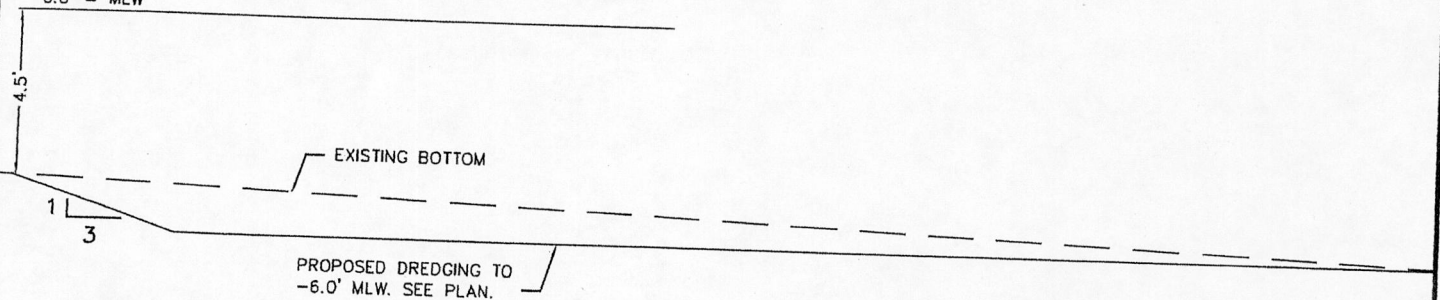
TYPICAL OBSERVATION PIER 3 thru 6 SECTION

SCALE: 1" = 6'



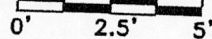
1.6' = MHW

0.0' = MLW



DREDGE SECTION

SCALE 1" = 5'



SHEET 15 OF 16

DETAILS

Scale: As Shown

Application By: U.S. Steel Corp. /
Brookfield Homes, LLC.

Date: December 2013

RAMS TRACKING # 200562503
TIDAL WETLANDS # 05-WL-1266



CONSULTING ENGINEERS AND SURVEYORS

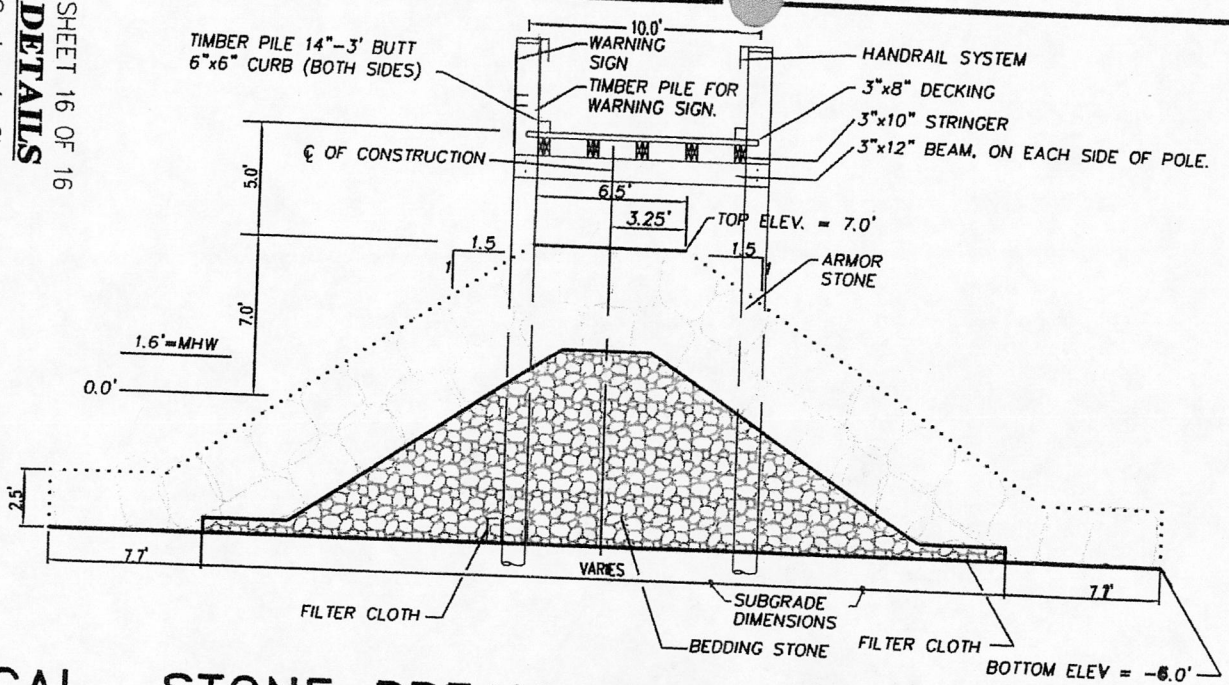
Andrews, Miller & Assoc.

CONSULTING ENGINEERS AND SURVEYORS
Andrews, Miller & Assoc.

Date: December 2013

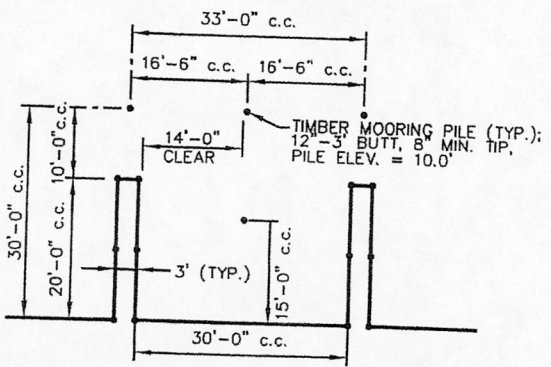
Application By: **U.S. Steel Corp.**
Brookfield Homes, LLC.

SHEET 16 OF 16
DETAILS
 Scale: As Shown

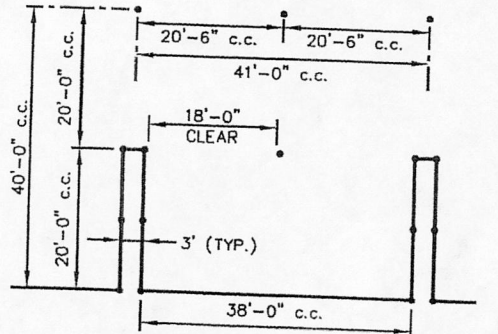


TYPICAL STONE BREAKWATER W/ WARNING SIGN & PIER

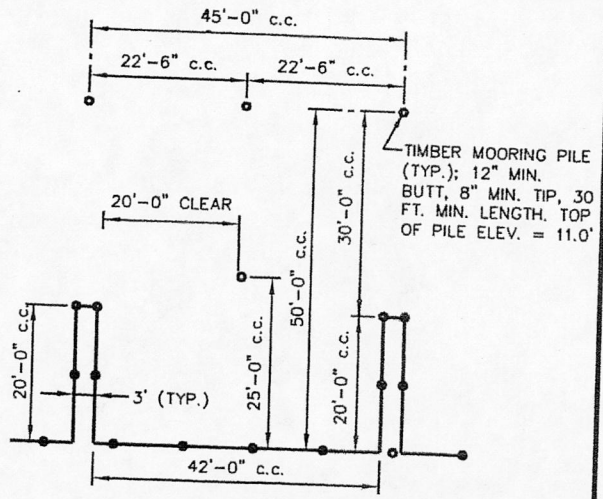
SCALE: 1" = 8'



30' LONG SLIPS



40' LONG SLIPS



50' LONG BOATS

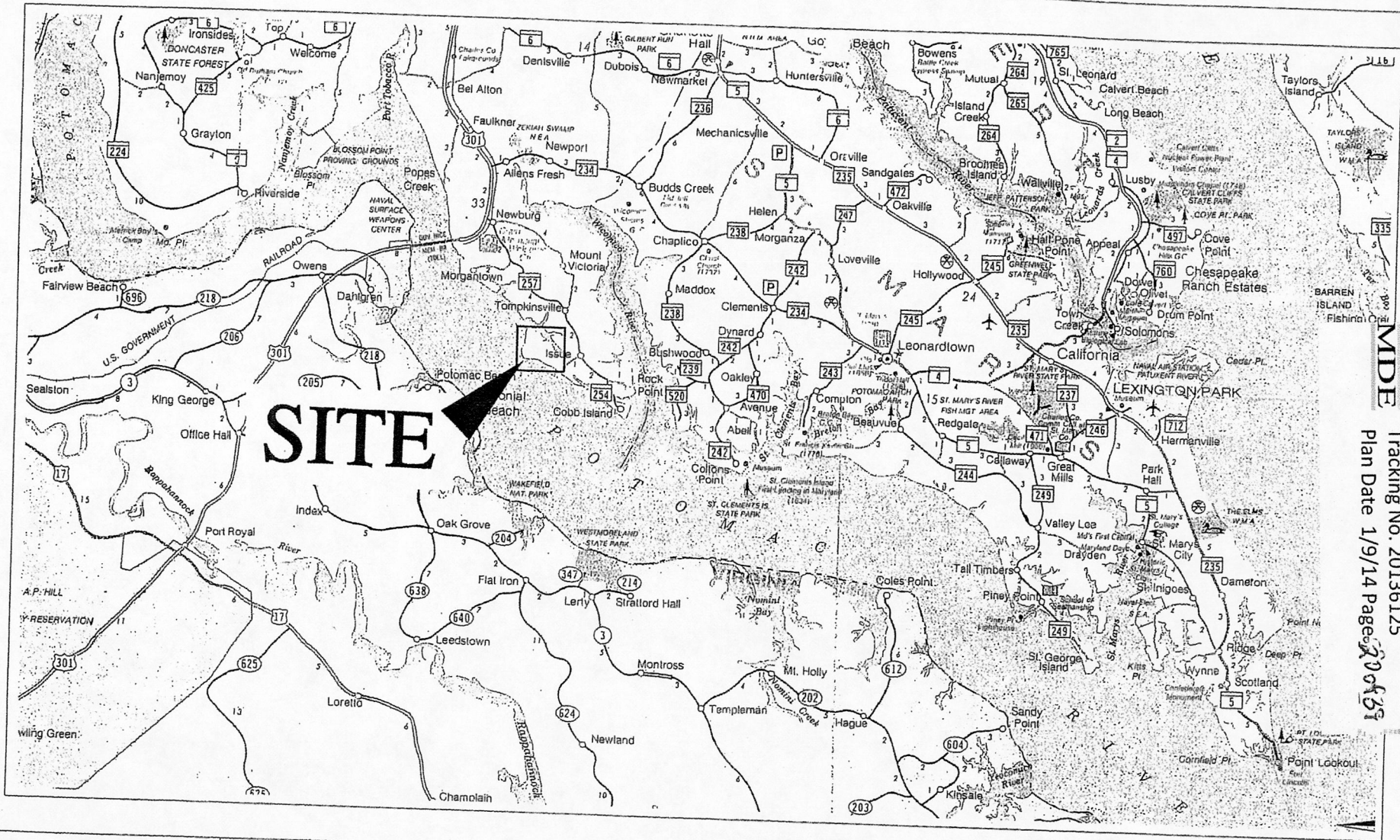
SCALE: 1" = 30'

TYPICAL SLIP LAYOUT



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 Tracking No. 201361255
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MDDE

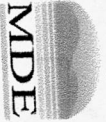
AI NO. 69936

13-WL-0704

Tracking No. 20136125

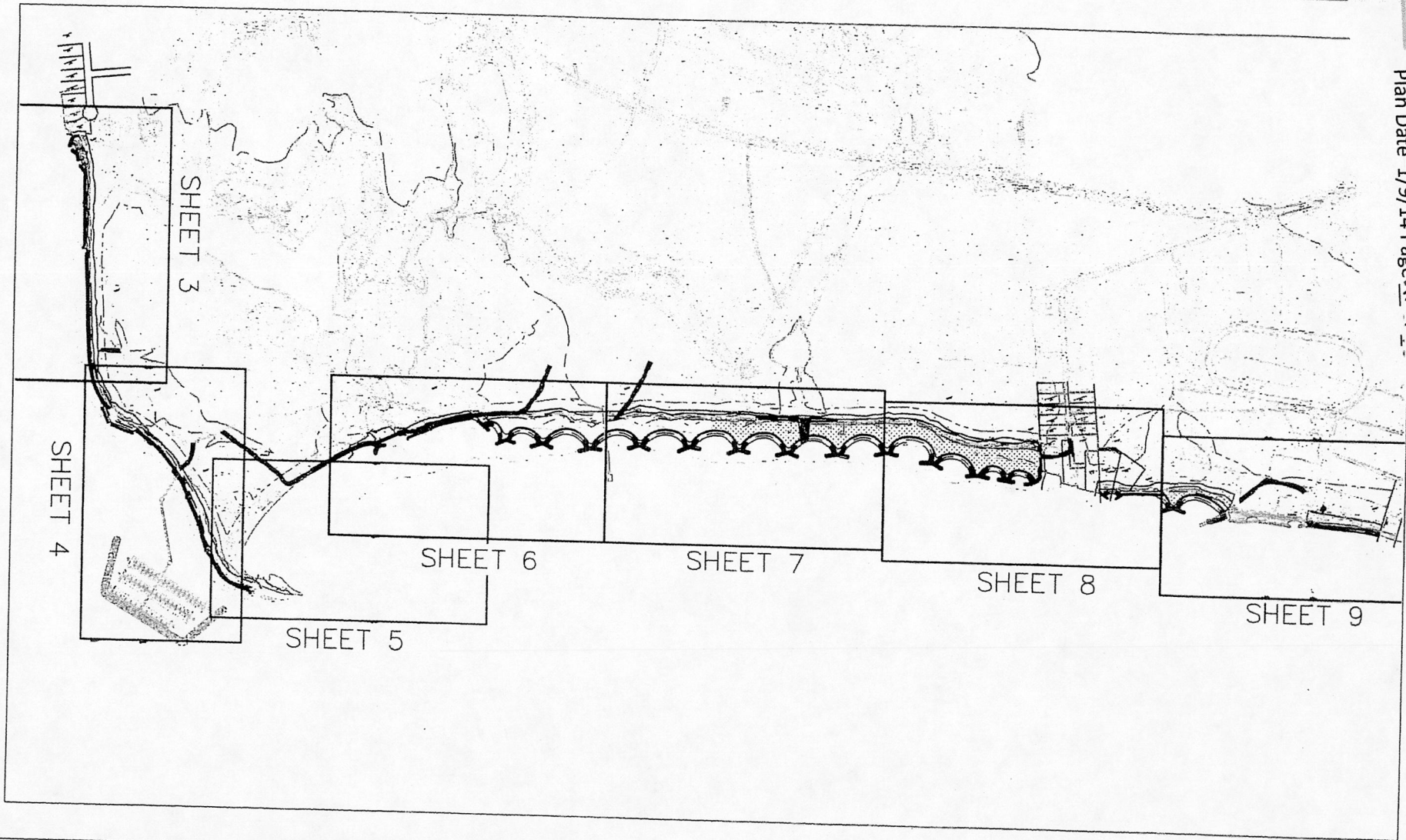
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COASTLINE DESIGN, P.C.  P.O. BOX 157 ACHILLES, VIRGINIA 23001 (804) 642-2158	ADJACENT PROPERTY OWNERS:	SWAN POINT SHORE PROTECTION PLAN VICINITY MAP		APPLICATION BY: BROOKFIELD SWAN POINT LLC. U.S. STEEL CORPORATION
	DATUM: MEAN LOW WATER	AT: SWAN POINT IN: CHARLES COUNTY, MARYLAND	PURPOSE: EROSION CONTROL RAMS TRACKING No. 200562503	DATE: JUNE 18, 2007 REVISED NOV. 2013 SHEET 1 OF 16



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 Tracking No. 20136125
 Plan Date 1/9/14 Page 21 of 39

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COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

**SWAN POINT SHORE PROTECTION PLAN
 INDEX SHEET**

AT: SWAN POINT

IN: CHARLES COUNTY, MARYLAND

PURPOSE: EROSION CONTROL

RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

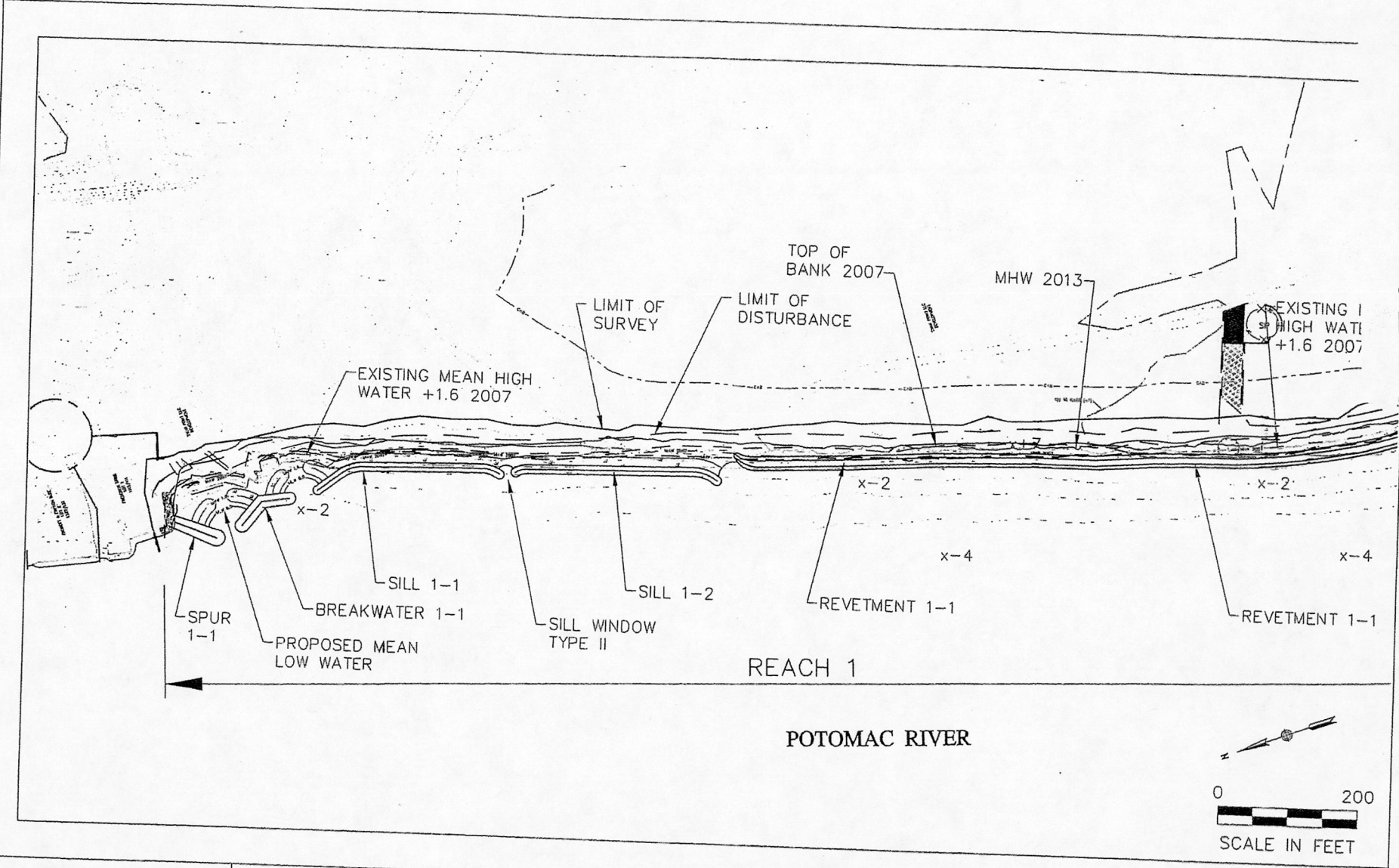
DATE: JUNE 18, 2007
 REVISED NOV. 2013

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31526-JPA



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 Tracking No. 20136125
 Plan Date 1/9/14 Page 02 of 31
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COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

**SWAN POINT SHORE PROTECTION PLAN
 PROTECTION PLAN**

AT: SWAN POINT

IN: CHARLES COUNTY, MARYLAND

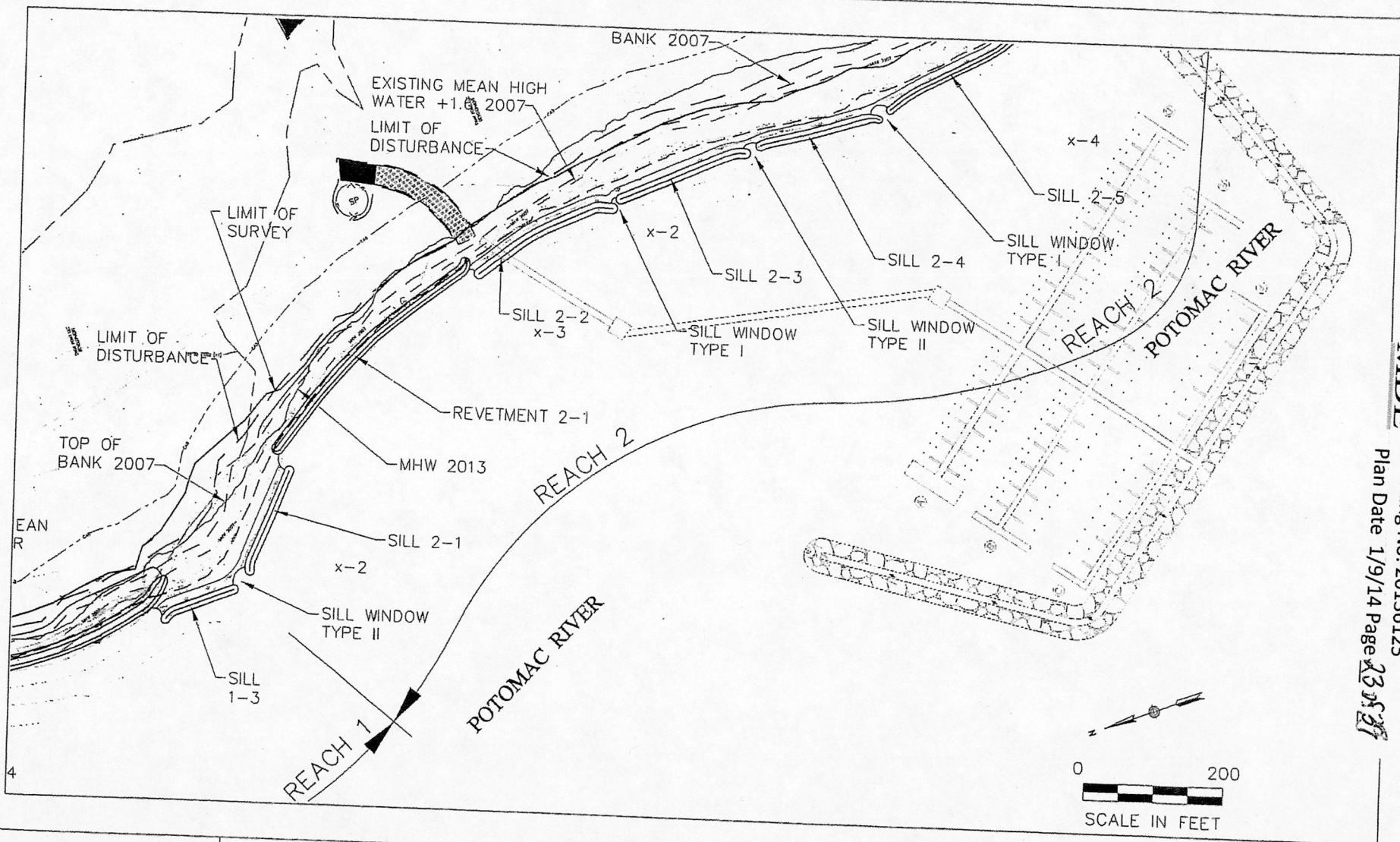
PURPOSE: EROSION CONTROL

RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

DATE: JUNE 18, 2007
 REVISED NOV. 2013

SHEET 3 OF 16




MDE

AI NO. 69936

Tracking No. 20136125

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COASTLINE DESIGN, P.C.

 P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

 DATUM: MEAN LOW WATER

SWAN POINT SHORE PROTECTION PLAN
PROTECTION PLAN

AT: SWAN POINT
 IN: CHARLES COUNTY, MARYLAND

PURPOSE: EROSION CONTROL
 RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

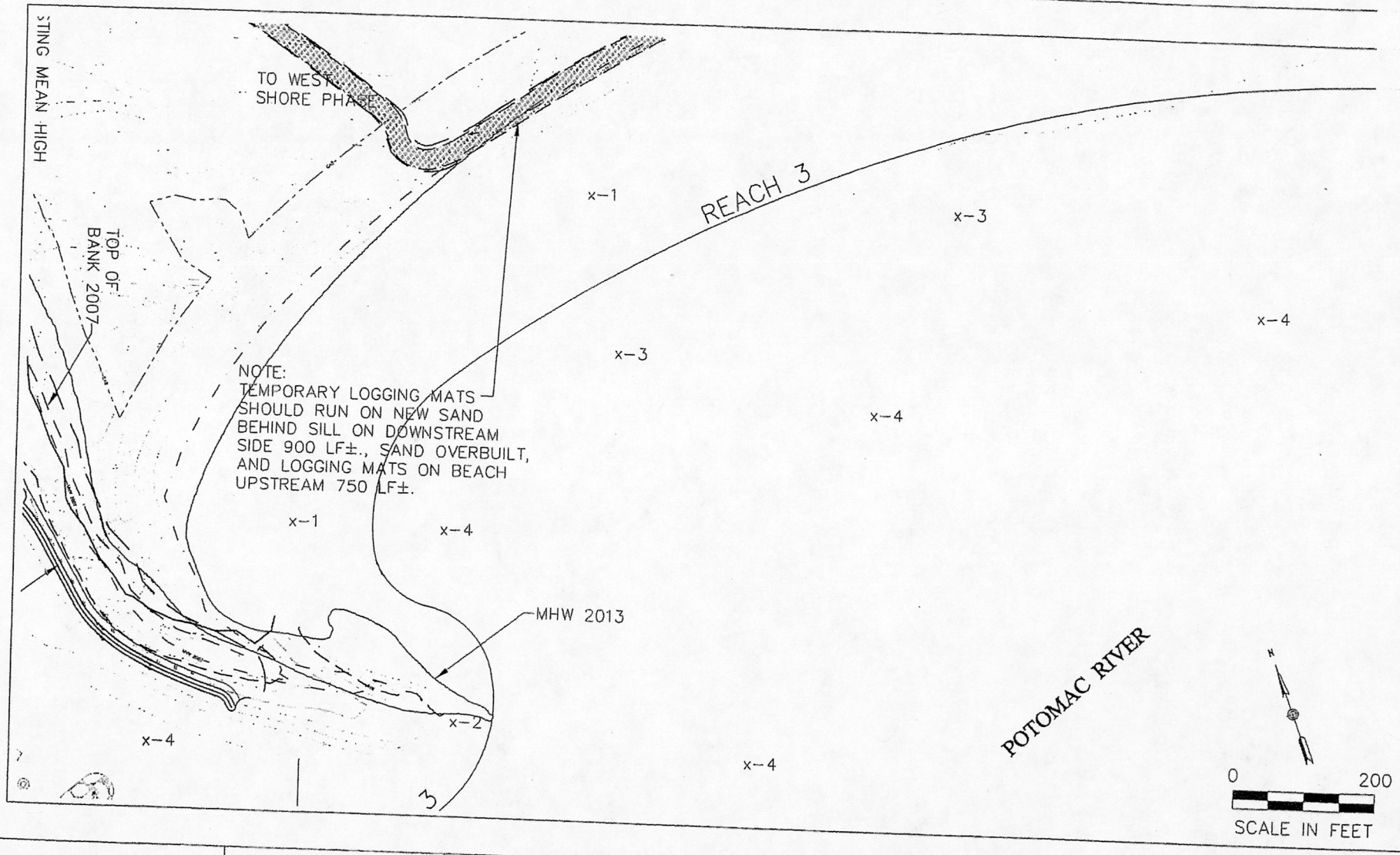
DATE: JUNE 18, 2007
 REVISED NOV. 2013

SHEET 4 OF 16



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 Tracking No. 20136125
 Plan Date 1/9/14 Page 24 of 31

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COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

SWAN POINT SHORE PROTECTION PLAN

AT: SWAN POINT

PURPOSE: EROSION CONTROL

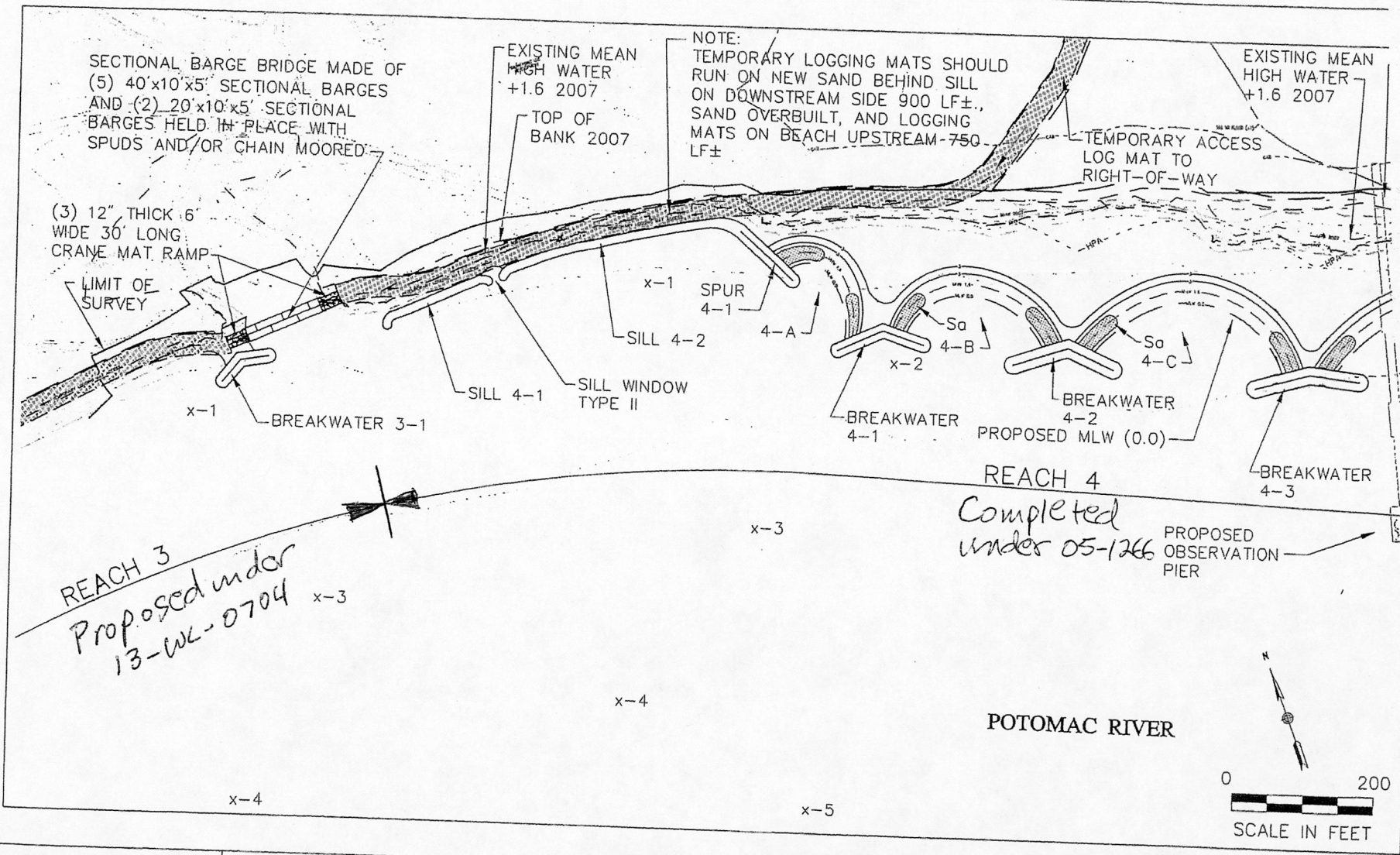
RAMS TRACKING No. 200562503

IN: CHARLES COUNTY, MARYLAND

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

DATE: JUNE 18, 2007
 REVISED NOV. 2013

SHEET 5 OF 16



COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

SWAN POINT SHORE PROTECTION PLAN
 PROTECTION PLAN

AT: SWAN POINT

IN: CHARLES COUNTY, MARYLAND

PURPOSE: EROSION CONTROL

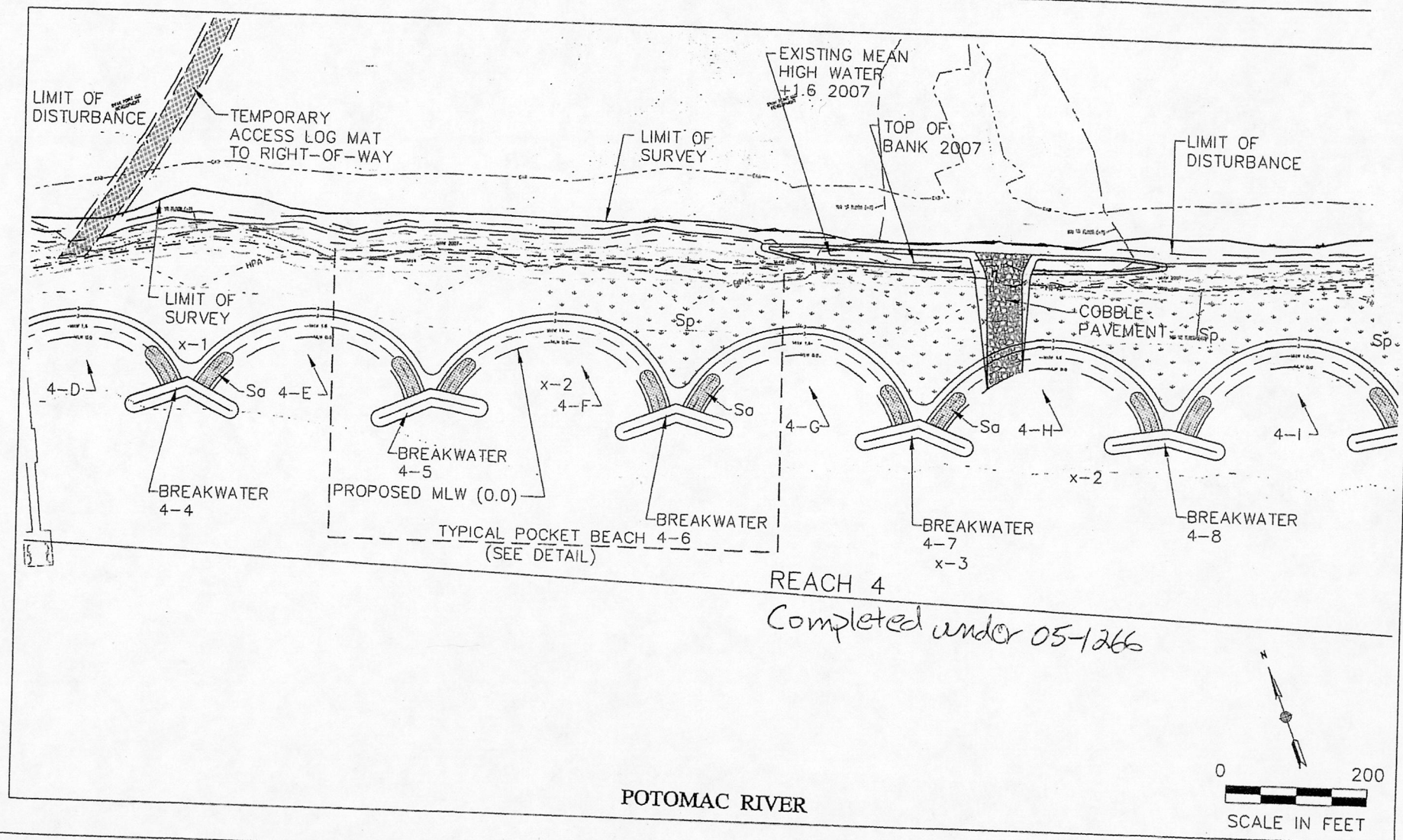
RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

DATE: JUNE 18, 2007
 REVISED NOV. 2013

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REACH 4
 Completed under 05-1266

POTOMAC RIVER

COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2168

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

SWAN POINT SHORE PROTECTION PLAN
PROTECTION PLAN

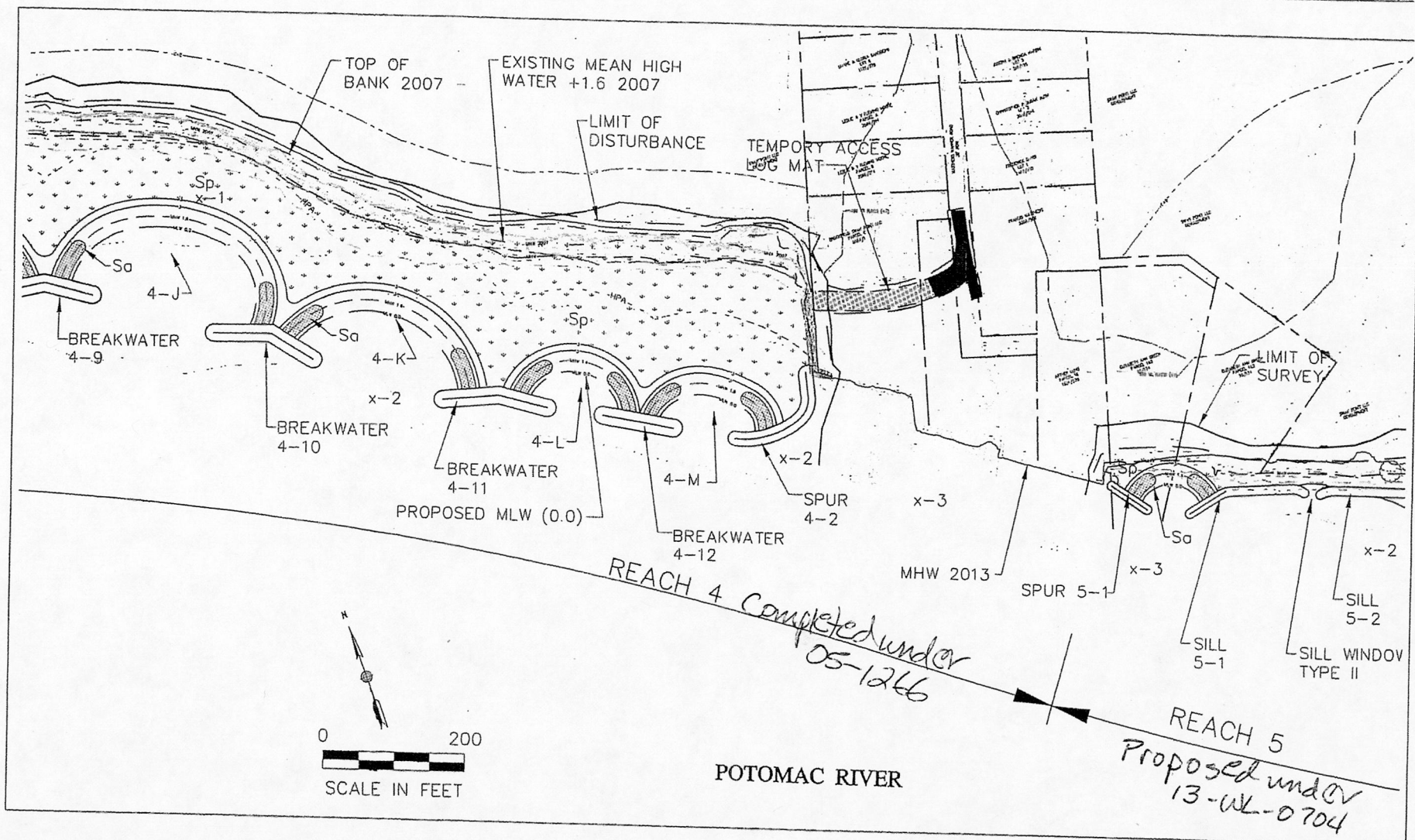
AT: SWAN POINT
 IN: CHARLES COUNTY, MARYLAND


PURPOSE: EROSION CONTROL
 RAMS TRACKING No. 200562503

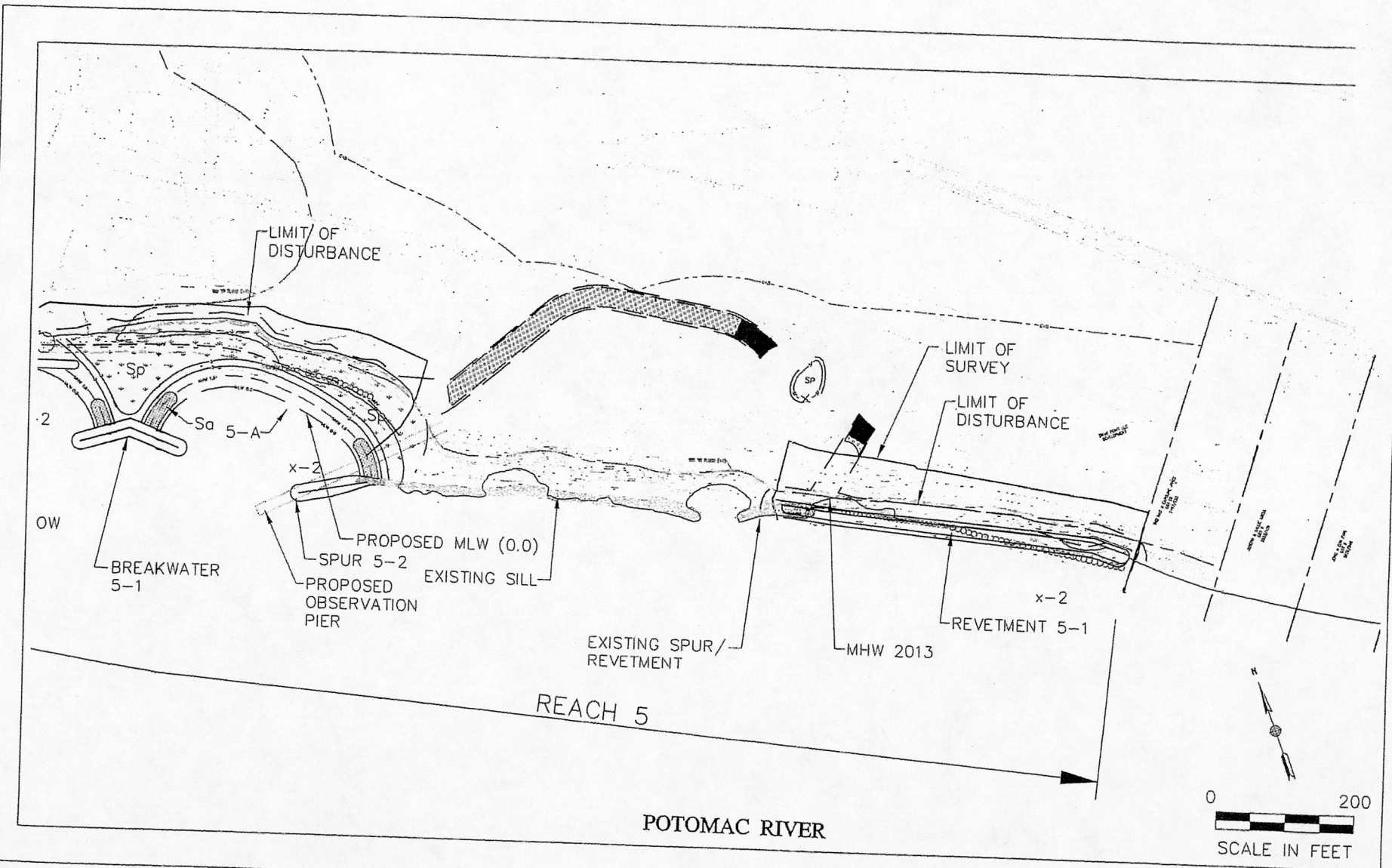
APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION


DATE: JUNE 18, 2007
 REVISED NOV. 2013

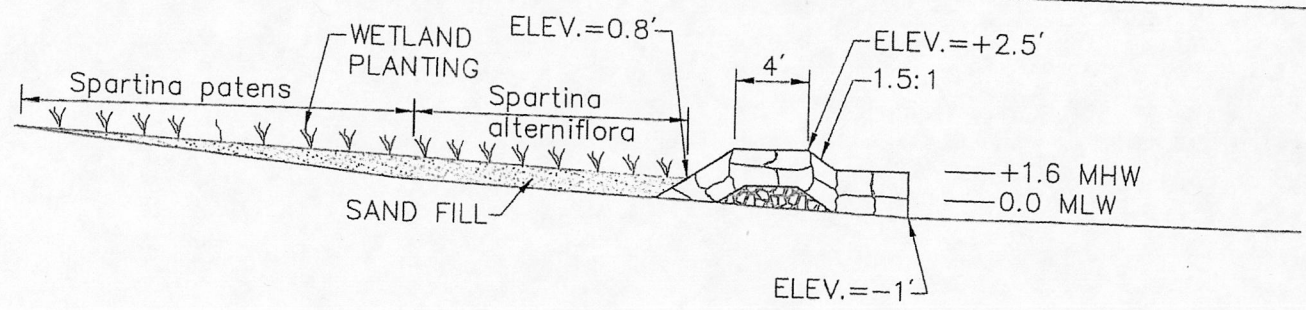
SHEET 7 OF 16



COASTLINE DESIGN, P.C.  P.O. BOX 157 ACHILLES, VIRGINIA 23001 (804) 642-2158	ADJACENT PROPERTY OWNERS:	SWAN POINT SHORE PROTECTION PLAN PROTECTION PLAN		APPLICATION BY: BROOKFIELD SWAN POINT LLC. U.S. STEEL CORPORATION
	DATUM: MEAN LOW WATER	AT: SWAN POINT IN: CHARLES COUNTY, MARYLAND	PURPOSE: EROSION CONTROL RAMS TRACKING No. 200562503	DATE: JUNE 18, 2007 REVISED NOV. 2013 SHEET 8 OF 16

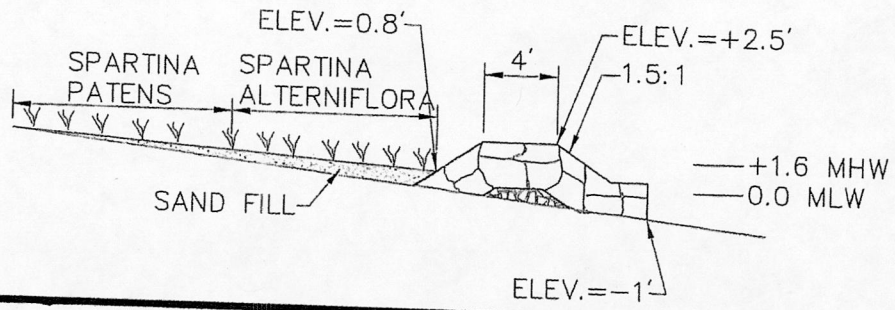


COASTLINE DESIGN, P.C.  P.O. BOX 157 ACHILLES, VIRGINIA 23001 (804) 642-2158	ADJACENT PROPERTY OWNERS:	SWAN POINT SHORE PROTECTION PLAN PROTECTION PLAN		APPLICATION BY: BROOKFIELD SWAN POINT LLC. U.S. STEEL CORPORATION
	DATUM: MEAN LOW WATER	AT: SWAN POINT IN: CHARLES COUNTY, MARYLAND	PURPOSE: EROSION CONTROL RAMS TRACKING No. 200562503	DATE: JUNE 18, 2007 REVISED NOV. 2013 SHEET 9 OF 16



Typical Sill Detail Reach 1

Scale: 1"=10'



Typical Sill Detail Reach 2

Scale: 1"=10'

COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2168

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

SWAN POINT SHORE PROTECTION PLAN DETAILS

AT: SWAN POINT

IN: CHARLES COUNTY, MARYLAND

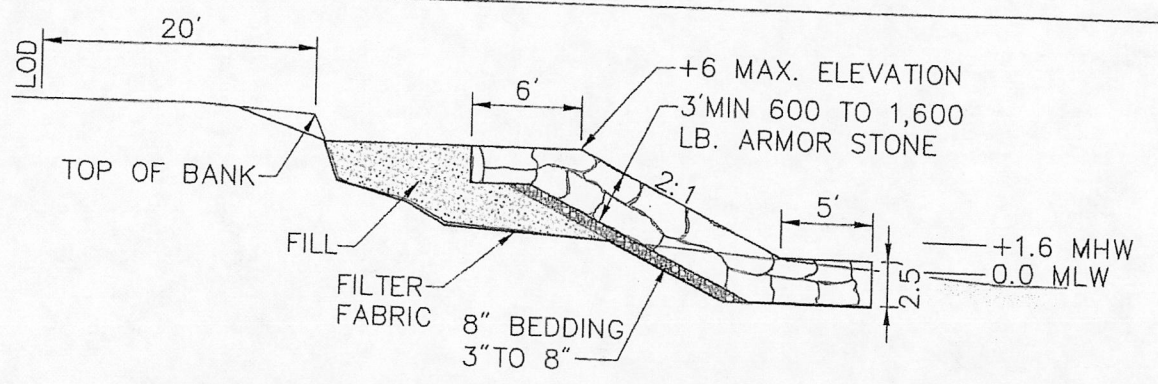
PURPOSE: EROSION CONTROL

RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

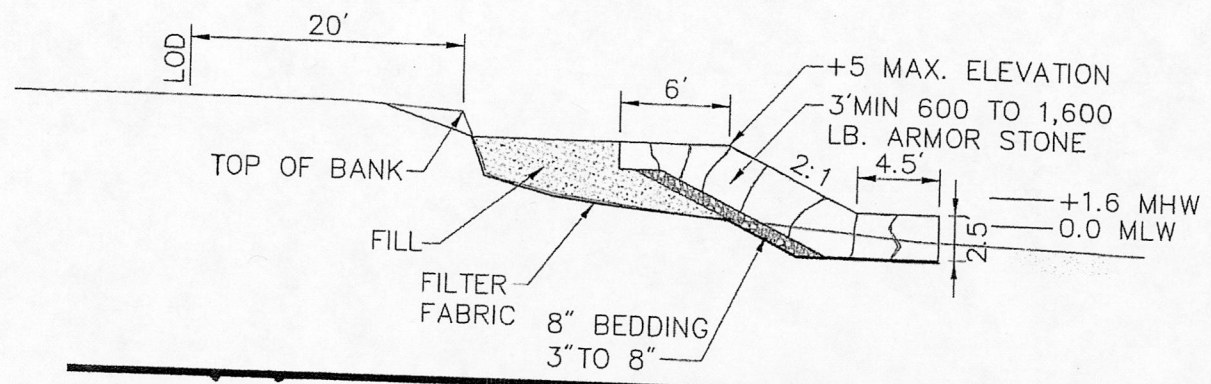
DATE: JUNE 18, 2007
 REVISED NOV. 2013

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Typical Revetment Detail Reach 1

Scale: 1"=10'



Typical Revetment Detail Reach 2

Scale: 1"=10'

COASTLINE DESIGN, P.C.

 P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

 DATUM: MEAN LOW WATER

**SWAN POINT SHORE PROTECTION PLAN
 DETAILS**

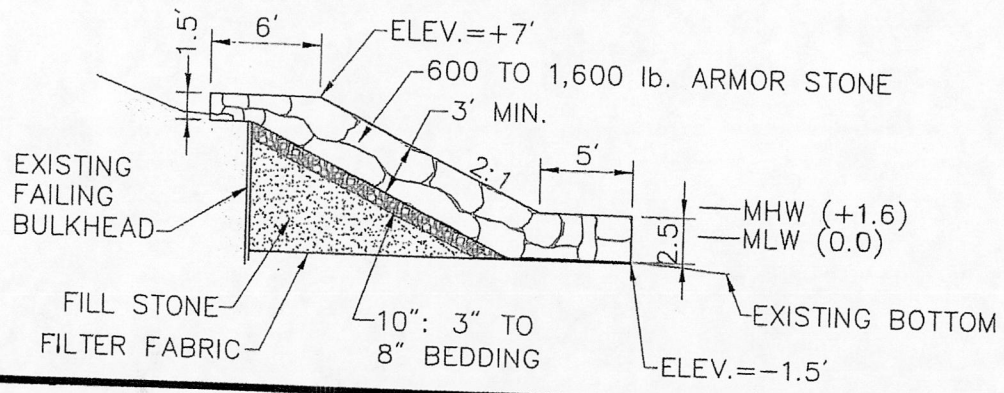
AT: SWAN POINT
 IN: CHARLES COUNTY, MARYLAND

PURPOSE: EROSION CONTROL
 RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

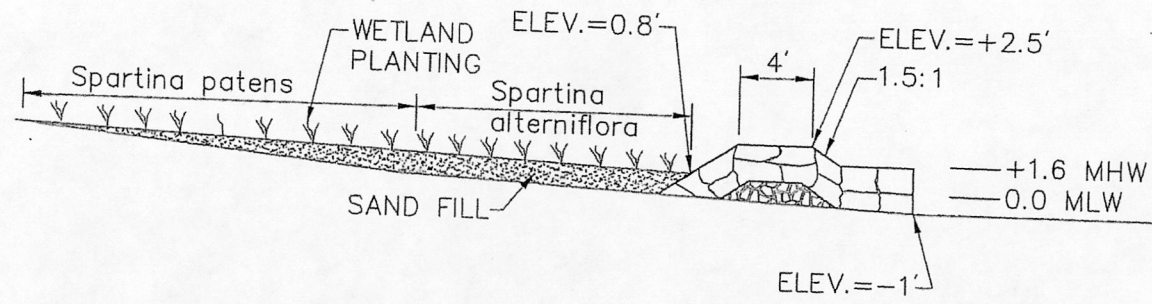
DATE: JUNE 18, 2007
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REVTMENT BULKHEAD REPAIR - REACH 5

Scale: 1"=10'



Typical Sill Detail Reach 4, Reach 5

Scale: 1"=10'

COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

**SWAN POINT SHORE PROTECTION PLAN
 DETAILS**

AT: SWAN POINT

IN: CHARLES COUNTY, MARYLAND

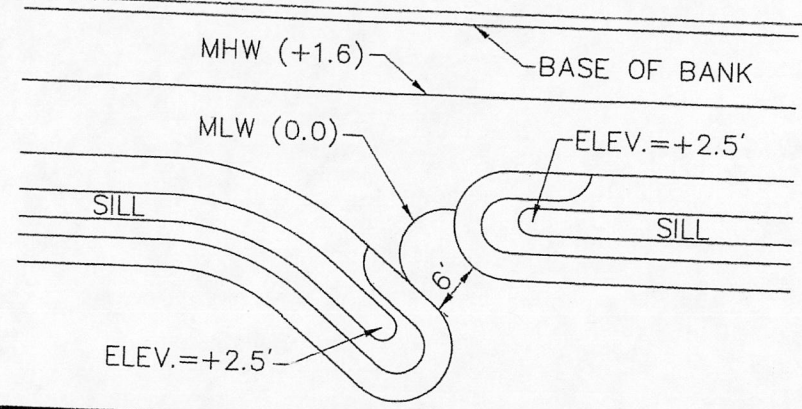
PURPOSE: EROSION CONTROL

RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

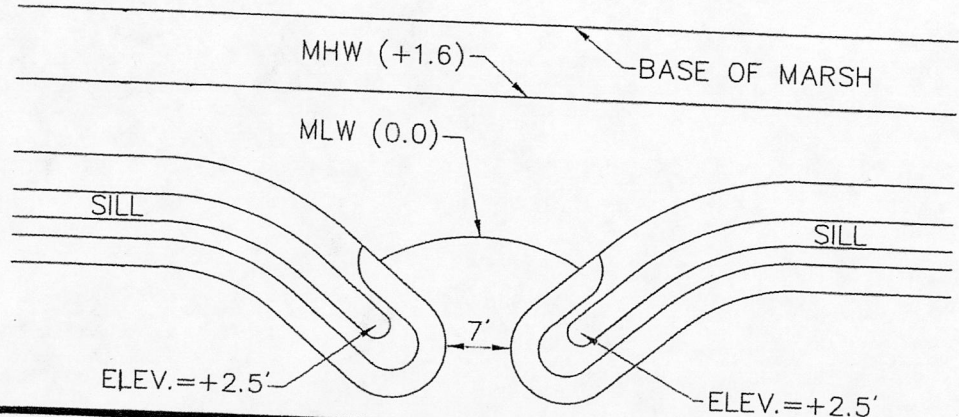
DATE: JUNE 18, 2007
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Sill Window Type I

Scale: 1"=20'



Sill Window Type II

Scale: 1"=20'

COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

**SWAN POINT SHORE PROTECTION PLAN
 DETAILS**

AT: SWAN POINT

IN: CHARLES COUNTY, MARYLAND

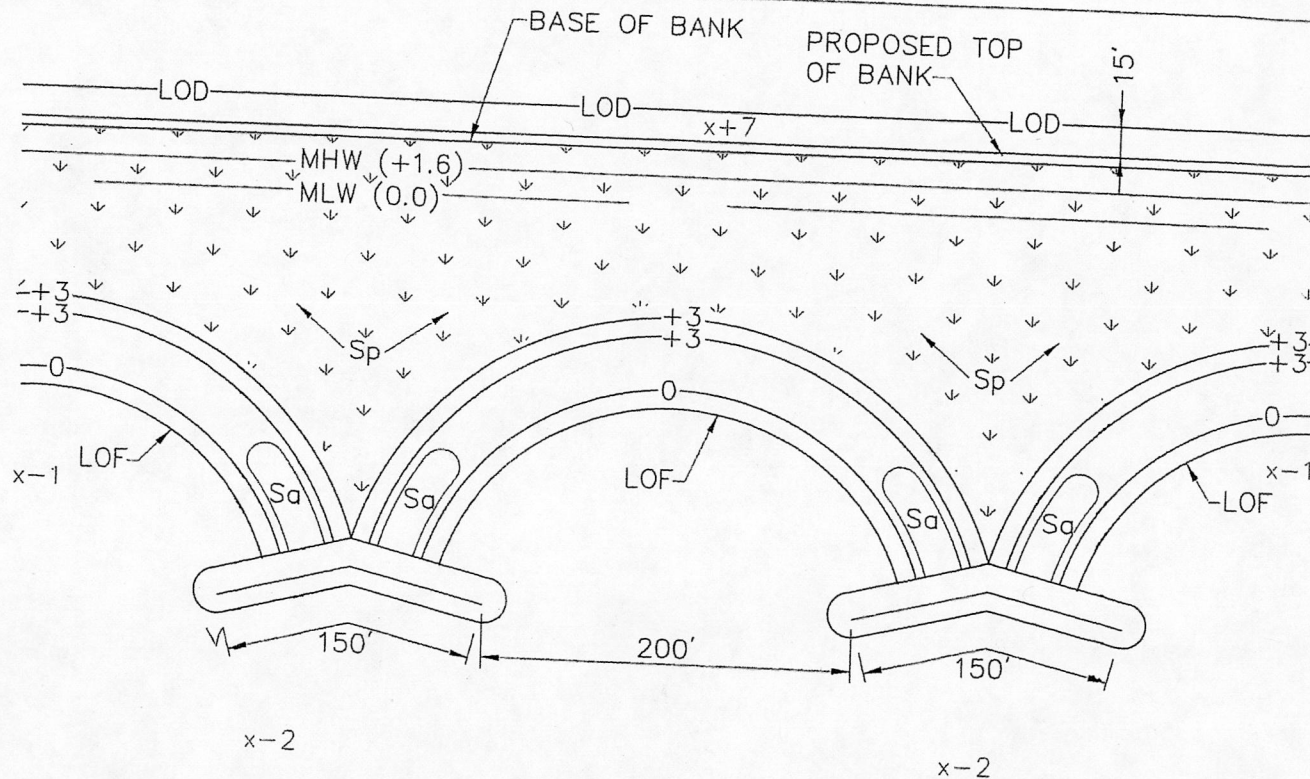
PURPOSE: EROSION CONTROL

RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

DATE: JUNE 18, 2007
 REVISED NOV. 2013

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TYPICAL POCKET BEACH

Scale: 1"=100'

COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

SWAN POINT SHORE PROTECTION PLAN DETAILS

AT: SWAN POINT

IN: CHARLES COUNTY, MARYLAND

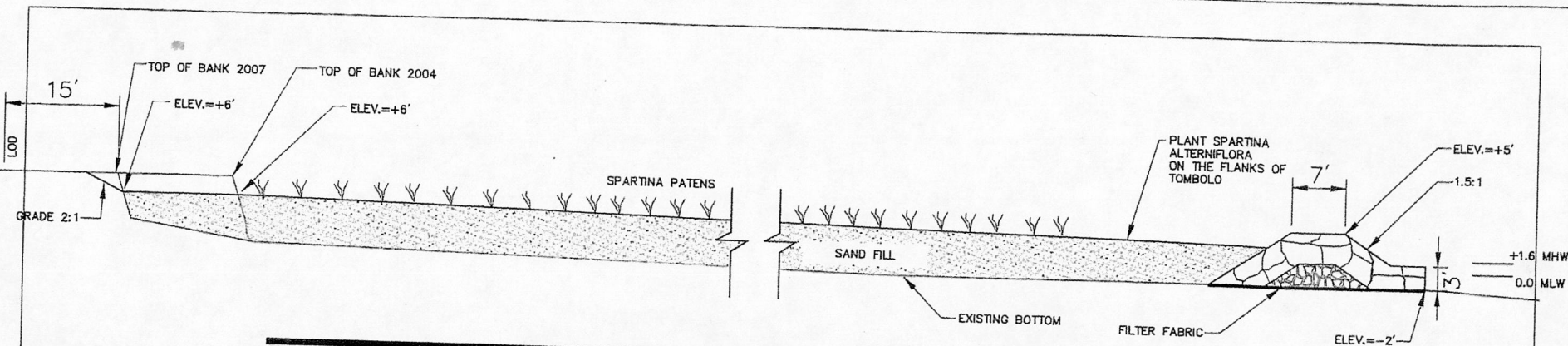
PURPOSE: EROSION CONTROL

RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

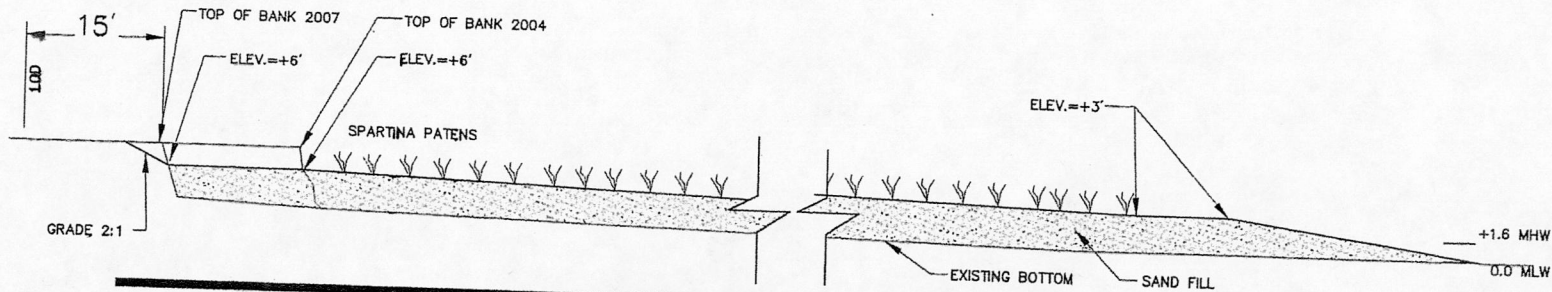
DATE: JUNE 18, 2007
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Typical Breakwater - Reach 4

Scale: 1"=20'



Typical Pocket Beach - Reach 4

Scale: 1"=20'

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COASTLINE DESIGN, P.C.

P.O. BOX 157
 ACHILLES, VIRGINIA 23001
 (804) 642-2158

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

SWAN POINT SHORE PROTECTION PLAN DETAILS

AT: SWAN POINT

IN: CHARLES COUNTY, MARYLAND

PURPOSE: EROSION CONTROL

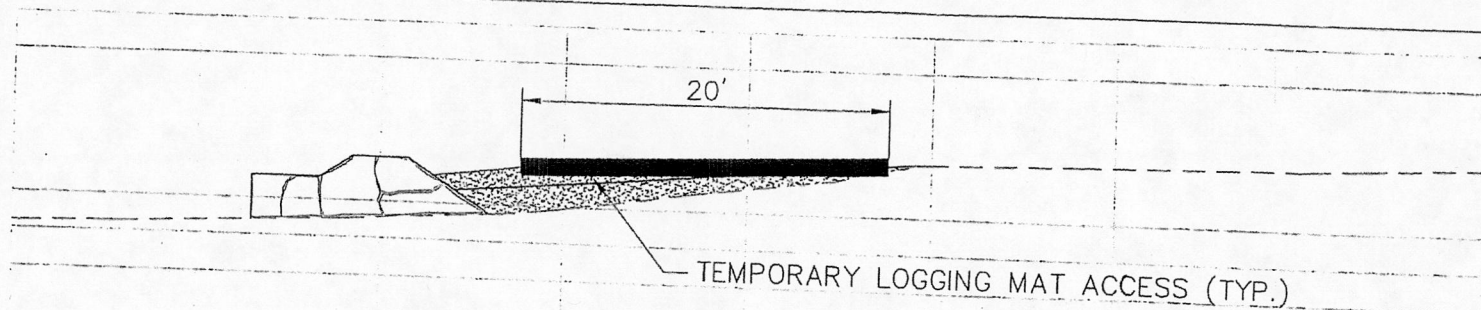
RAMS TRACKING No. 200562503

APPLICATION BY:
 BROOKFIELD SWAN POINT LLC.
 U.S. STEEL CORPORATION

DATE: JUNE 18, 2007
 REVISED NOV. 2013

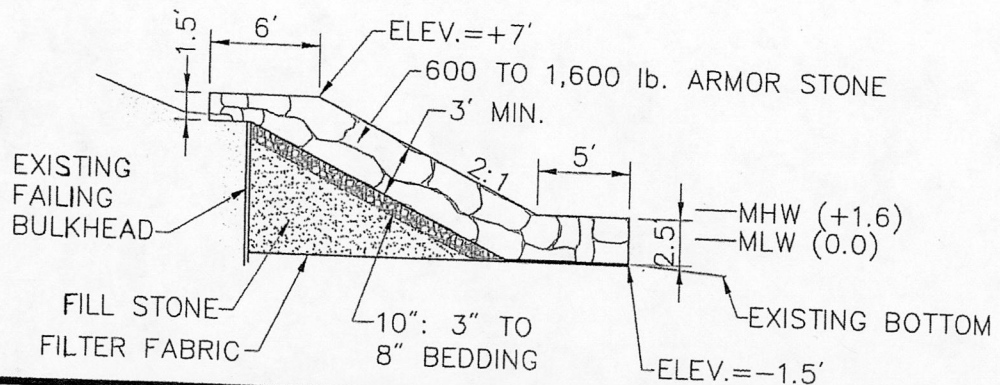
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Temporary Logging Mat Access

Scale: 1"=10'



REVETMENT BULKHEAD REPAIR - REACH 5

Scale: 1"=10'

MDE

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Tracking No. 201361255
Plan Date 1/9/14 Page 25 of 31

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COASTLINE DESIGN, P.C.

P.O. BOX 157
ACHILLES, VIRGINIA 23001
(804) 642-2158

ADJACENT PROPERTY OWNERS:

DATUM: MEAN LOW WATER

SWAN POINT SHORE PROTECTION PLAN DETAILS

AT: SWAN POINT

IN: CHARLES COUNTY, MARYLAND

PURPOSE: EROSION CONTROL

RAMS TRACKING No. 200562503

APPLICATION BY:
BROOKFIELD SWAN POINT LLC.
U.S. STEEL CORPORATION

DATE: JUNE 18, 2007
REVISED NOV. 2013

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31526-JPA



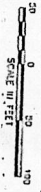
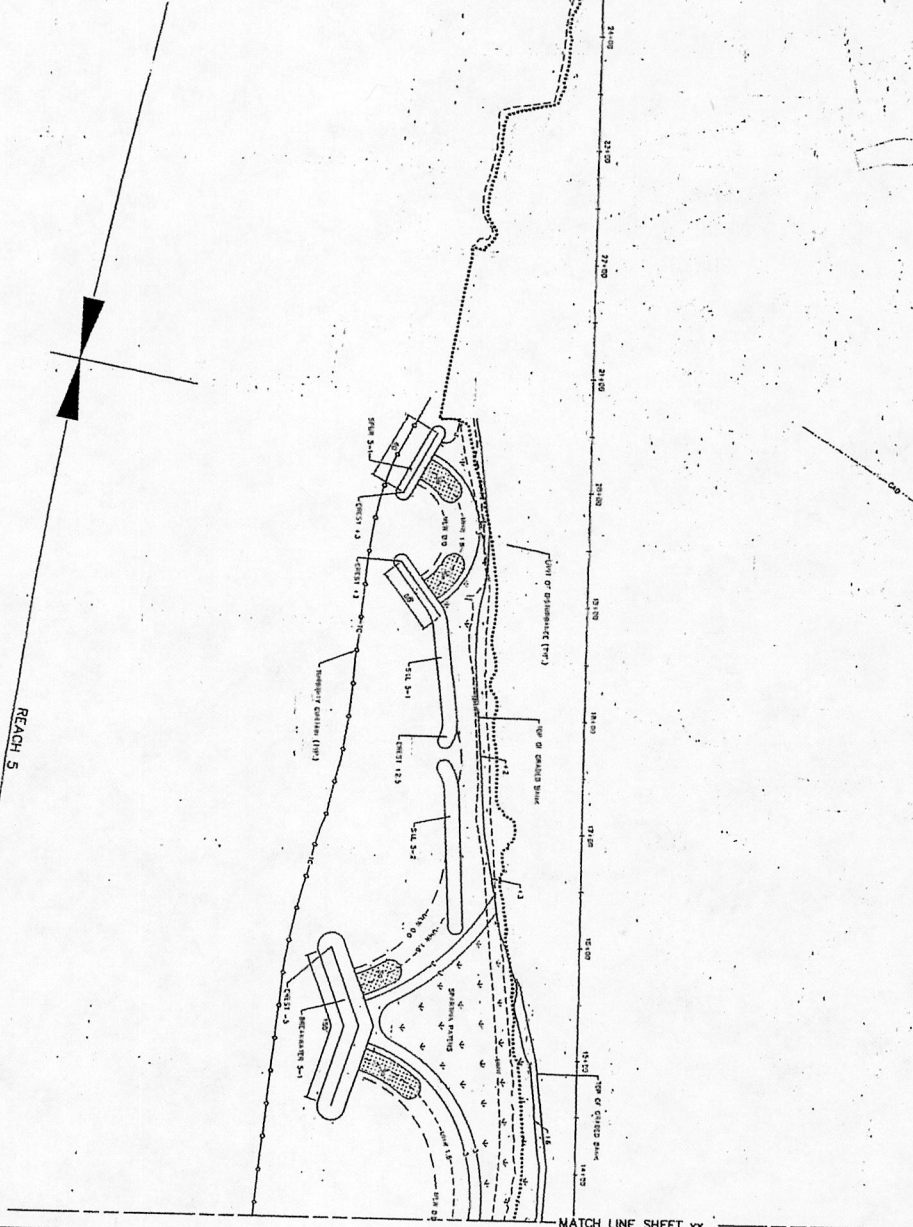
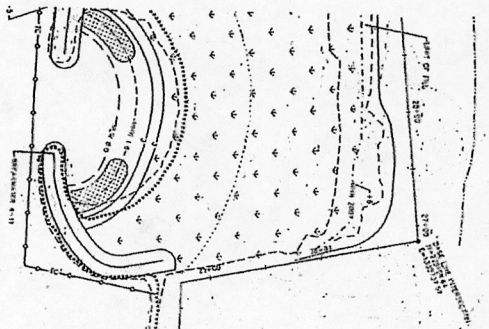
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AI NO. 69936

Tracking No. 20136125

Plan Date 1/9/14 Page *38 of 39*

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CHARLES COUNTY GOVERNMENT Department of Planning and Development Services		Approved for: _____ Remarks and Conditions: _____
Title: _____ Date: _____	Checked by: _____ Date: _____	Checked by: _____ Date: _____
Design: _____ Date: _____	Checked by: _____ Date: _____	Checked by: _____ Date: _____
Drawn: _____ Date: _____	Checked by: _____ Date: _____	Checked by: _____ Date: _____
Title: _____ Date: _____	Checked by: _____ Date: _____	Checked by: _____ Date: _____

**Layout, Materials, Grading
 and E&S Plans**
**Swan Point
 Shoreline Protection Plan**
 Charles County Maryland

COASTLINE DESIGN, P.C.
 P.O. BOX 157
 ACHILLES VIRGINIA, 23001
 (804) 642-2158

DESIGN BY: CCC/SH
 CHECKED BY: SH
 DRAWN BY: R/JW
 CHECKED BY: SH
 DATE: NOVEMBER 29, 2013
 DRAWING SCALE: 1"=50'

NO.	REVISION

