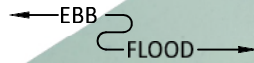


M.B. 188 PG. 08

BROAD BAY



MEAN LOW WATER

DEY COVE

MEAN HIGH WATER

APO #1
NOW OR FORMERLY
DAVID S CULPEPPER
2381 HAVERSHAM CLOSE
GPIN: 2409-15-7057

APO #2
NOW OR FORMERLY
ANDREW J DOWNING
2401 HAVERSHAM CLOSE
GPIN: 2409-14-4512

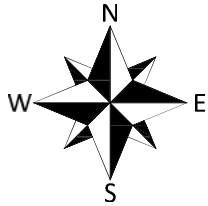
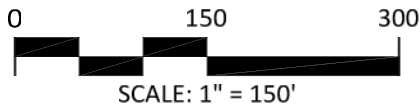


R = 326.74'
L = 44.21'

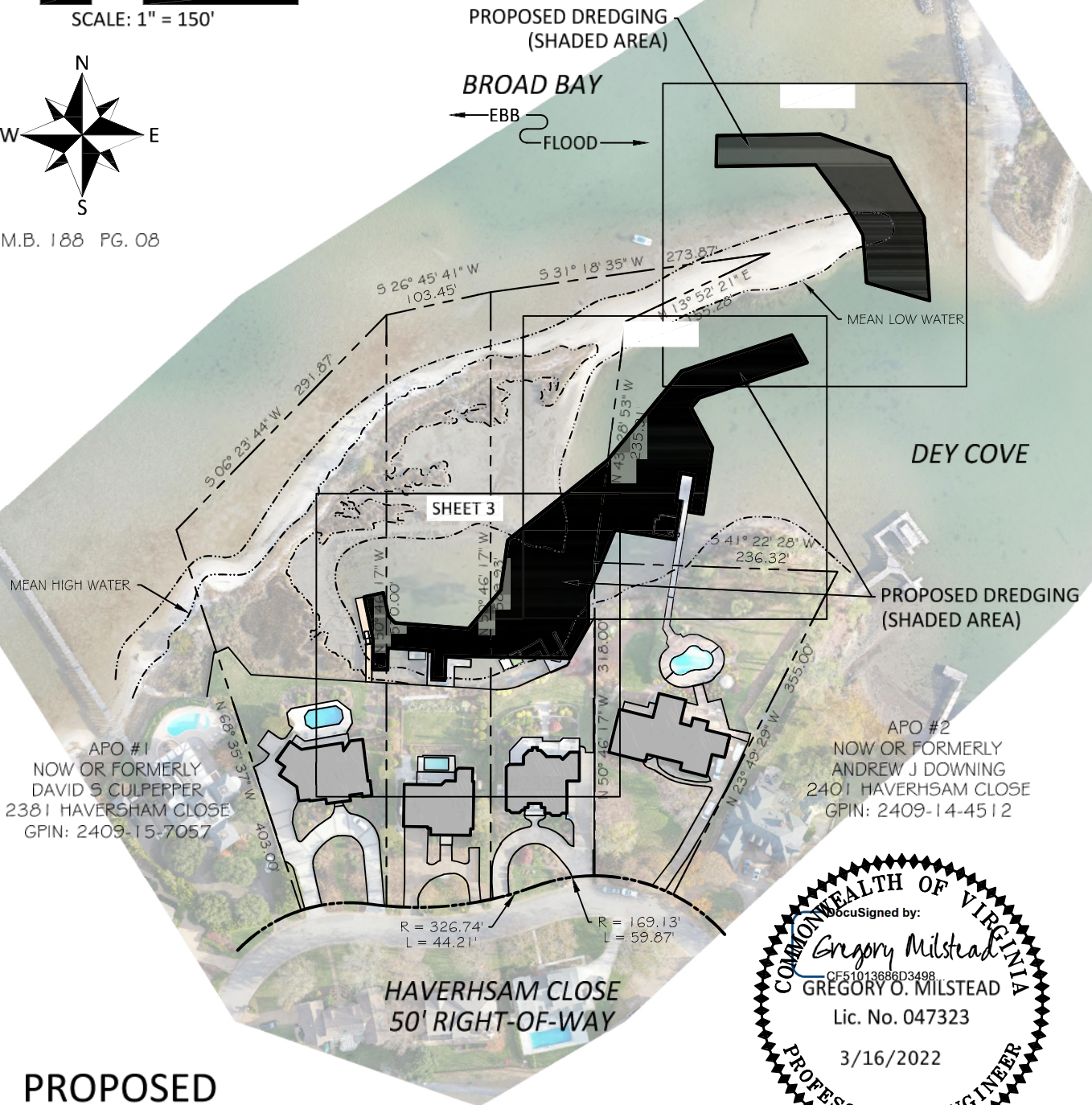
R = 169.13'
L = 59.87'

HAVERSHAM CLOSE
50' RIGHT-OF-WAY

EXISTING
CONDITIONS

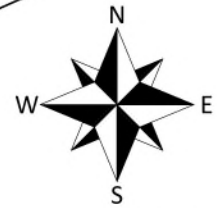
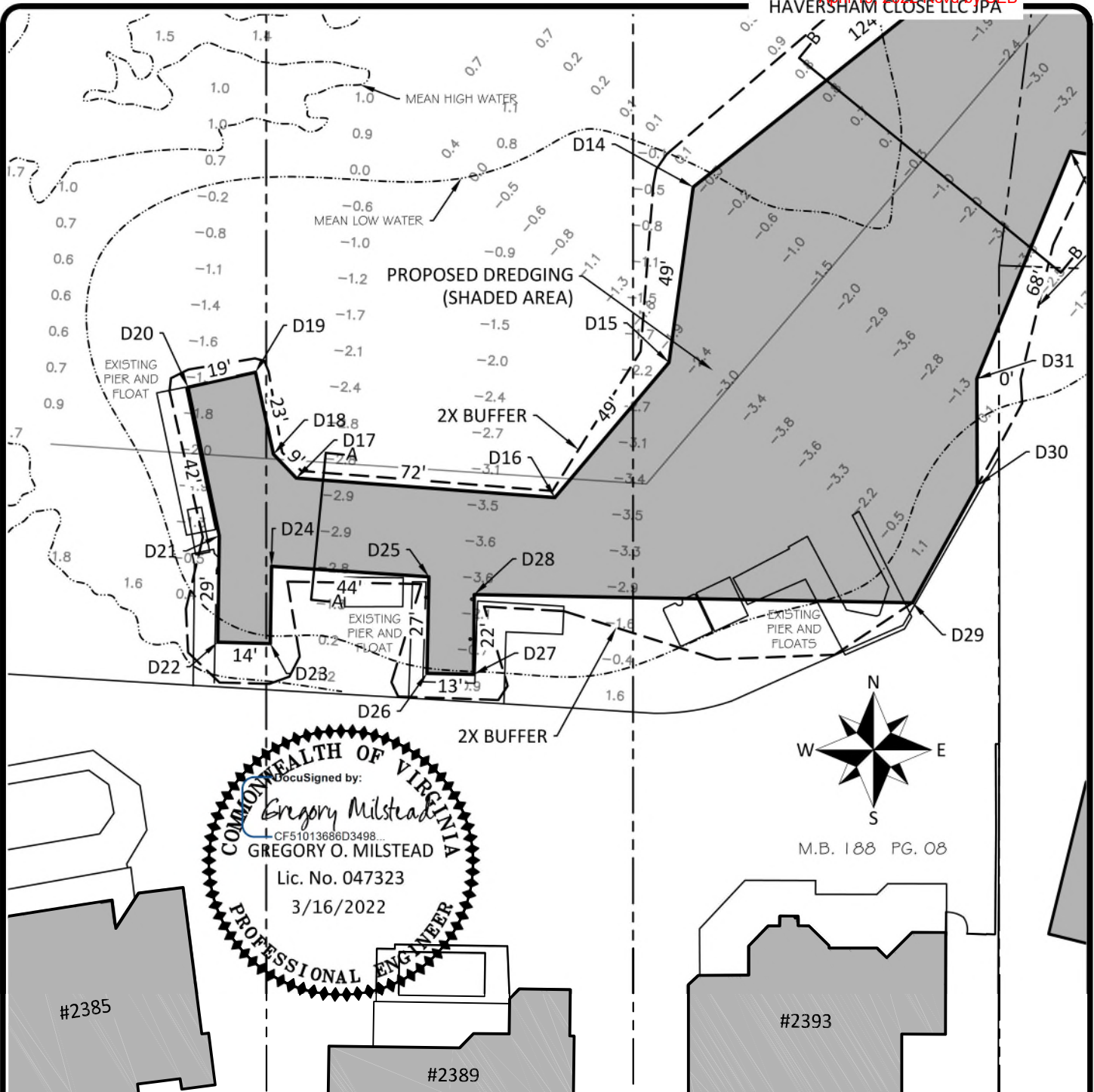


M.B. 188 PG. 08



PROPOSED IMPROVEMENTS

HAVERSHAM CLOSE LLC JPA

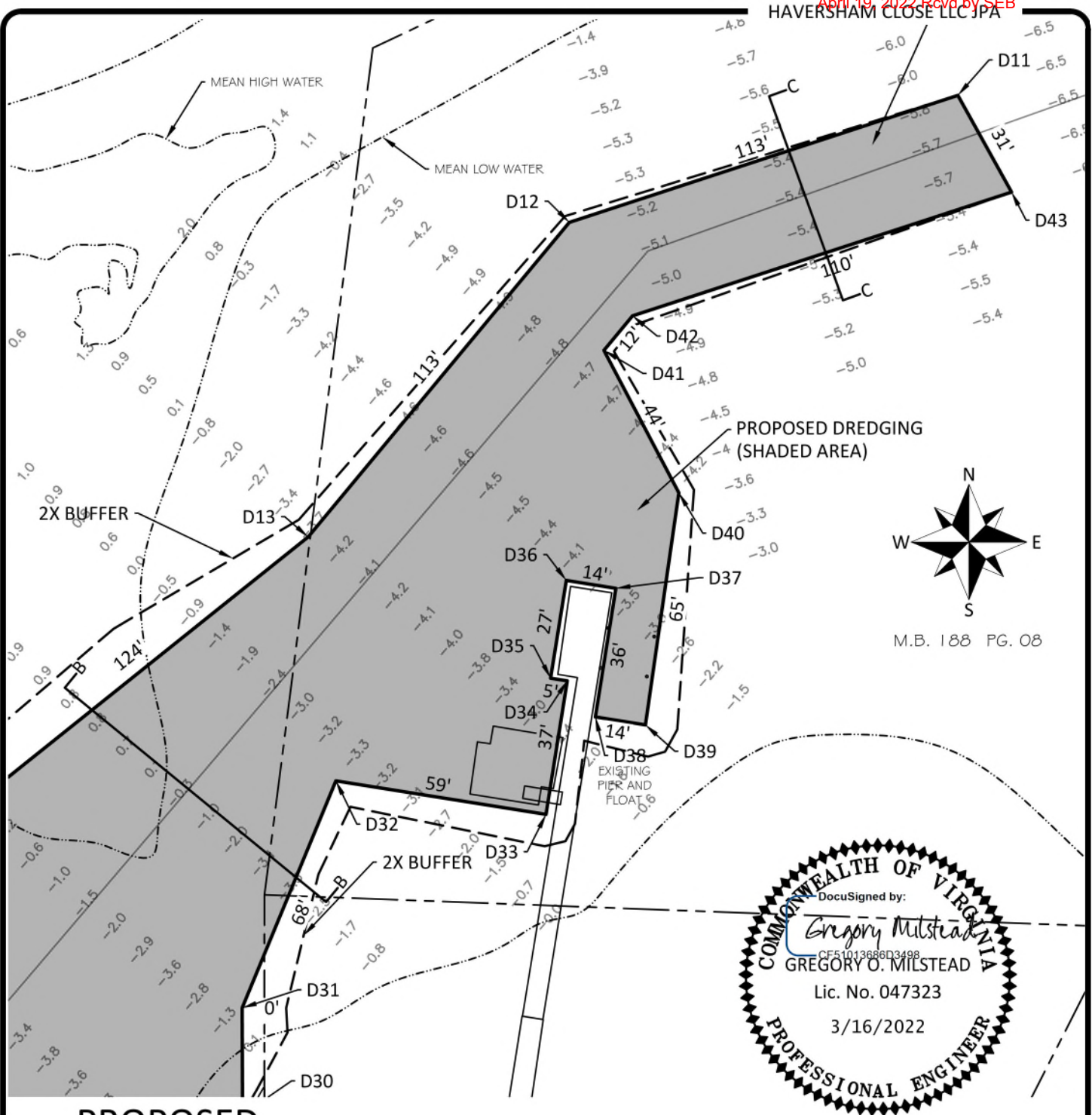


M.B. 188 PG. 08

WATERFRONT
CONSULTING, INC.

ENGINEERING SERVICES PROVIDED BY:

PHONE: (757) 575-3715



PROPOSED IMPROVEMENTS

© 2022 WATERFRONT CONSULTING, INC. ALL RIGHTS RESERVED

PURPOSE: BOATING ACCESS
DATUM: MLW = 0.00'

APOS:

1. DAVID S. CULPEPPER
2. ANDREW J. DOWNING



**WATERFRONT
CONSULTING, INC.**

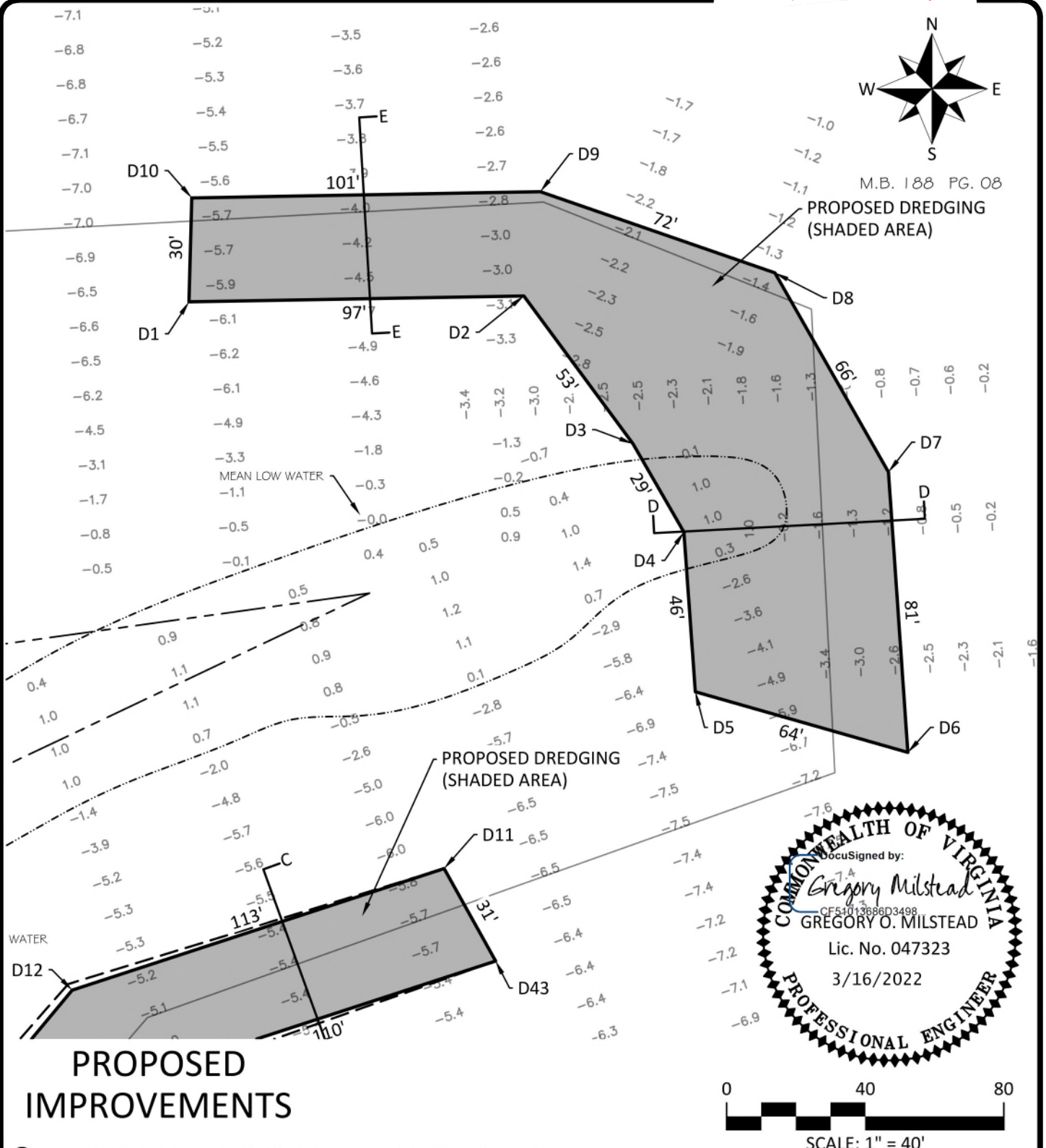
2589 QUALITY COURT, SUITE 323
VIRGINIA BEACH, VA 23454
PHONE: (757) 425-8244, MOBILE: (757) 619-7302

ENGINEERING SERVICES PROVIDED BY:
CHESAPEAKE BAY SITE SOLUTIONS, INC.
P.O BOX 6663 VIRGINIA BEACH, VA 23456
PHONE: (757) 575-3715

PROPOSED: DREDGING
IN: DEY COVE
AT: 2385, 2389, 2393, 2397 HAVERSHAM CLOSE
VIRGINIA BEACH, VA 23454
APPLICATION BY:
HAVERSHAM CLOSE LLC.

SHEET: 4 OF 12
DATE: MARCH 15, 2022





© 2022 WATERFRONT CONSULTING, INC. ALL RIGHTS RESERVED

PURPOSE: BOATING ACCESS
DATUM: MLW = 0.00'
APOS:
1. DAVID S. CULPEPPER
2. ANDREW J. DOWNING



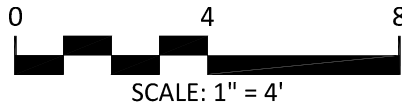
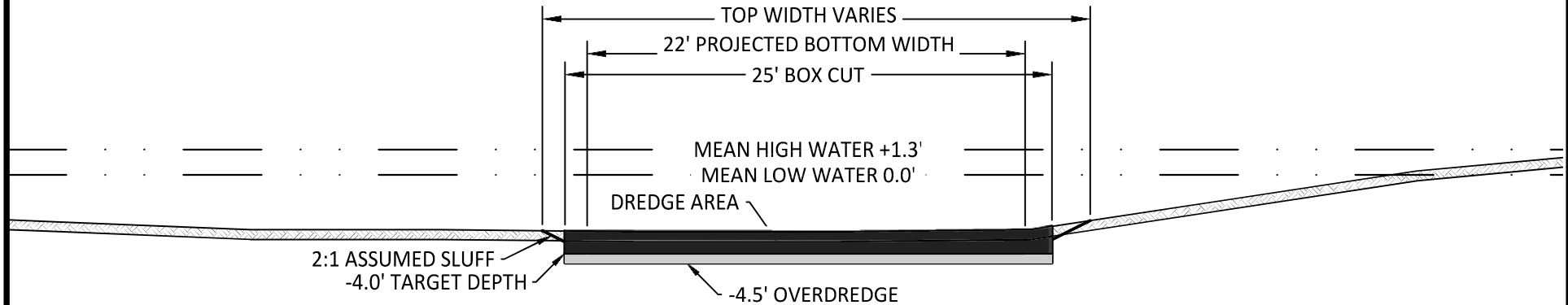
**WATERFRONT
CONSULTING, INC.**

2589 QUALITY COURT, SUITE 323
VIRGINIA BEACH, VA 23454
PHONE: (757) 425-8244, MOBILE: (757) 619-7302
ENGINEERING SERVICES PROVIDED BY:
CHESAPEAKE BAY SITE SOLUTIONS, INC.
P.O BOX 6663 VIRGINIA BEACH, VA 23456
PHONE: (757) 575-3715

PROPOSED: DREDGING
IN: DEY COVE
AT: 2385, 2389, 2393, 2397 HAVERSHAM CLOSE
VIRGINIA BEACH, VA 23454
APPLICATION BY:
HAVERSHAM CLOSE LLC.

SHEET: 5 OF 12
DATE: MARCH 15, 2022

PROPOSED DREDGING CROSS SECTION A-A (BASIN PAD)



Pad Report BASIN PAD CALCS Thu Dec 30 21:37:52 2021

Top of pad elevation range:: -6.0000 to -4.0000
 Cut Slope: 50.00% 2.000:1 26.57°
 Fill Slope: 50.00% 2.000:1 26.57°
 Existing Surface: C:\Carlson Projects\Drawing1-ex.tin
 Cut Swell Factor: 1.00
 Fill Shrink Factor: 1.00

Pad Earthwork Volumes
 Cut : 102,744.3 C.F., 3,805.34 C.Y.
 Fill: 0.1 C.F., 0.00 C.Y.
 Area: 40399.7 Sq.Ft., 0.927 Acres

Pad Report SAND BAR CHANNEL Fri Dec 31 08:57:34 2021

Top of pad elevation range:: -6.0000 to -6.0000
 Cut Slope: 50.00% 2.000:1 26.57°
 Fill Slope: 50.00% 2.000:1 26.57°
 Existing Surface: C:\Carlson Projects\Drawing1-ex.tin
 Cut Swell Factor: 1.00
 Fill Shrink Factor: 1.00

Pad Earthwork Volumes
 Cut : 50,534.0 C.F., 1,871.63 C.Y.
 Fill: 0.4 C.F., 0.01 C.Y.
 Area: 16022.3 Sq.Ft., 0.368 Acres

© 2022 WATERFRONT CONSULTING, INC. ALL RIGHTS RESERVED

PURPOSE: BOATING ACCESS
 DATUM: MLW = 0.00'
 APOS:
 1. DAVID S. CULPEPPER
 2. ANDREW J. DOWNING



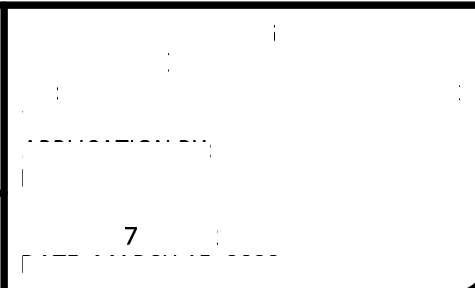
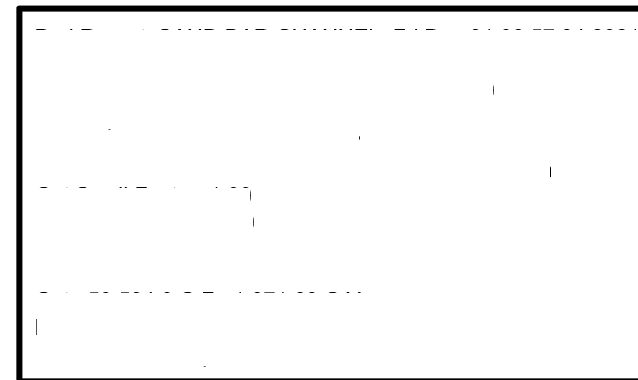
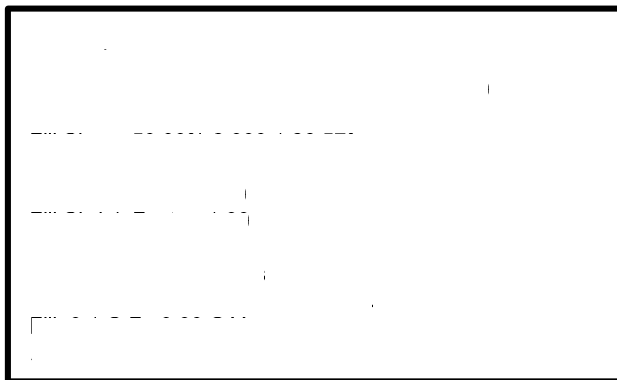
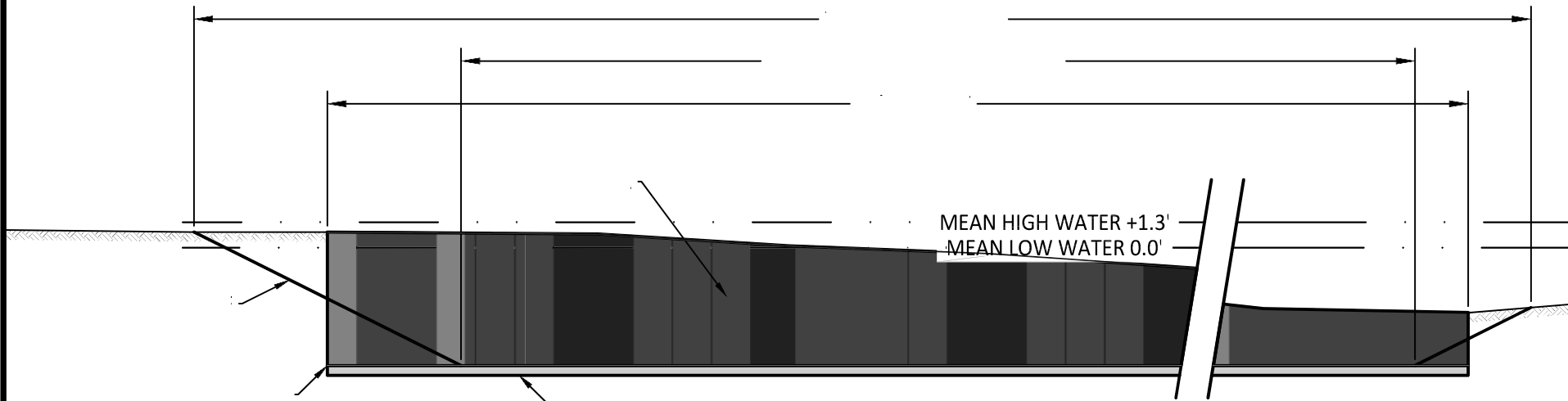
**WATERFRONT
CONSULTING, INC.**

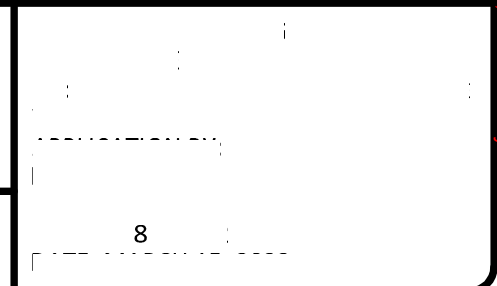
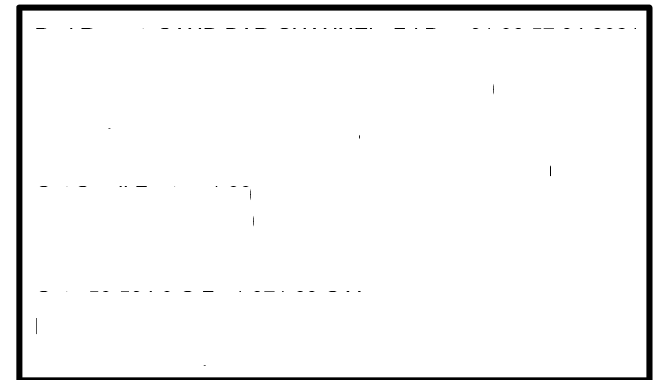
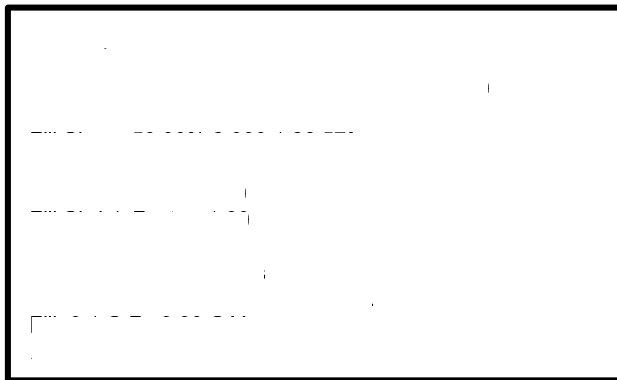
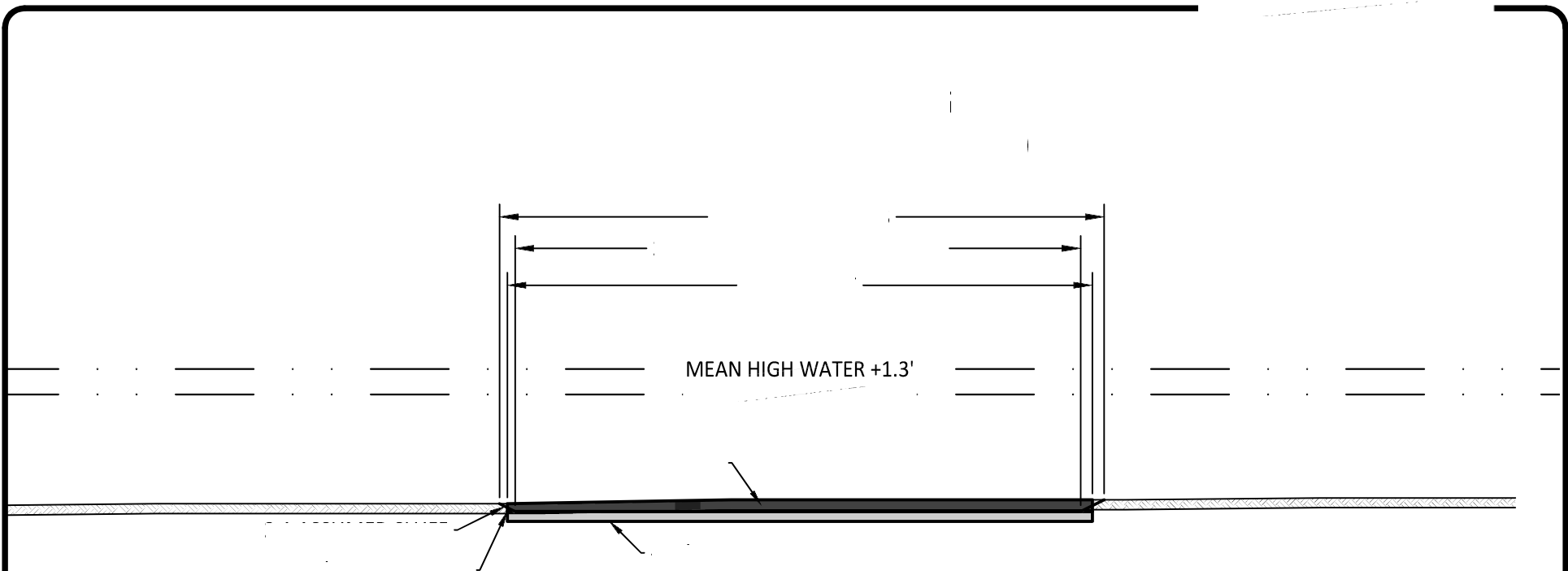
2589 QUALITY COURT, SUITE 323
 VIRGINIA BEACH, VA 23454
 PHONE: (757) 425-8244, MOBILE: (757) 619-7302

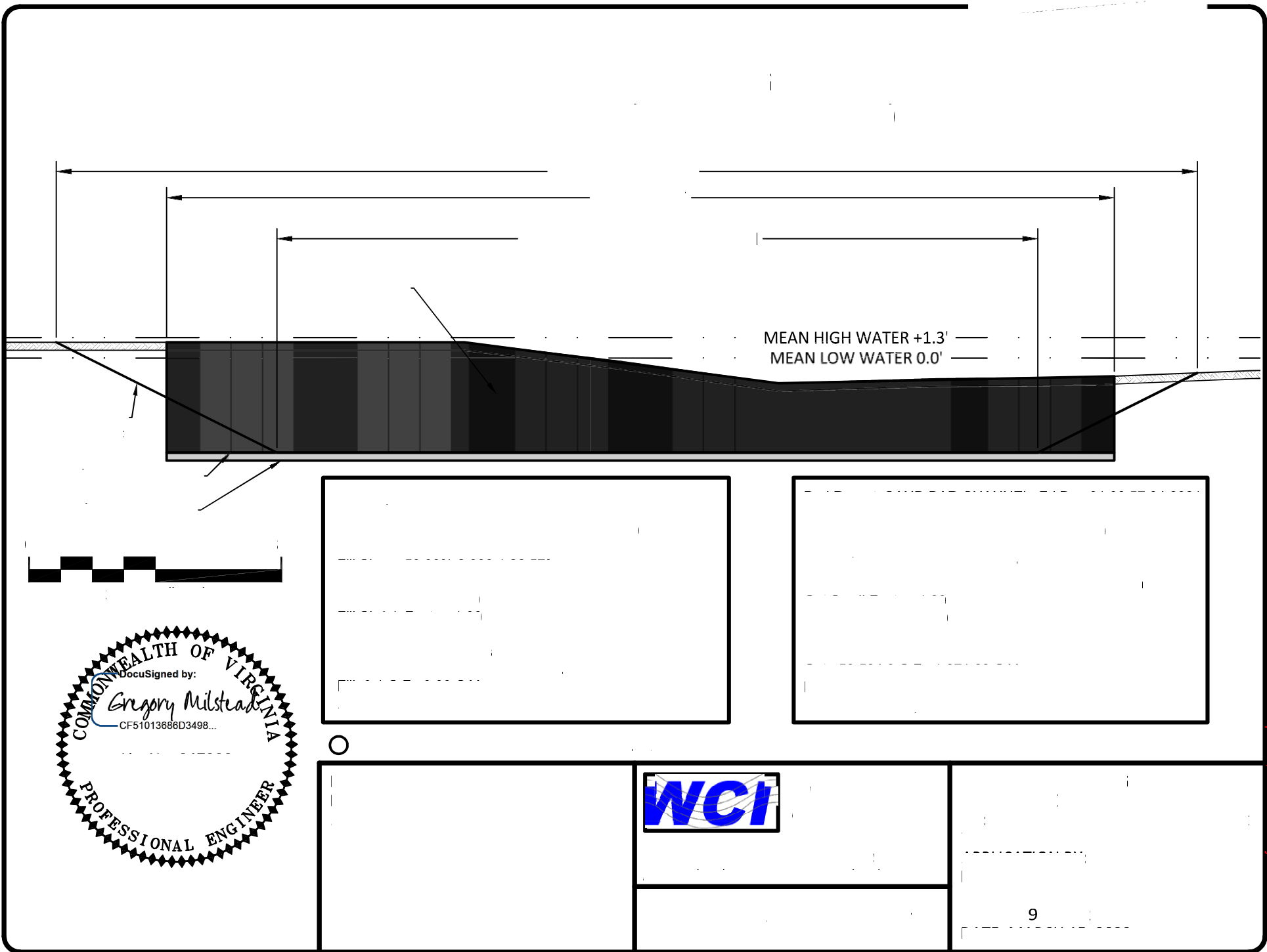
ENGINEERING SERVICES PROVIDED BY:
 CHESAPEAKE BAY SITE SOLUTIONS, INC.
 P.O BOX 6663 VIRGINIA BEACH, VA 23456
 PHONE: (757) 575-3715

PROPOSED: DREDGING
 IN: DEY COVE
 AT: 2385, 2389, 2393, 2397 HAVERSHAM CLOSE
 VIRGINIA BEACH, VA 23454
 APPLICATION BY:
 HAVERSHAM CLOSE LLC.

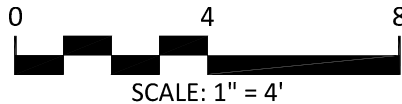
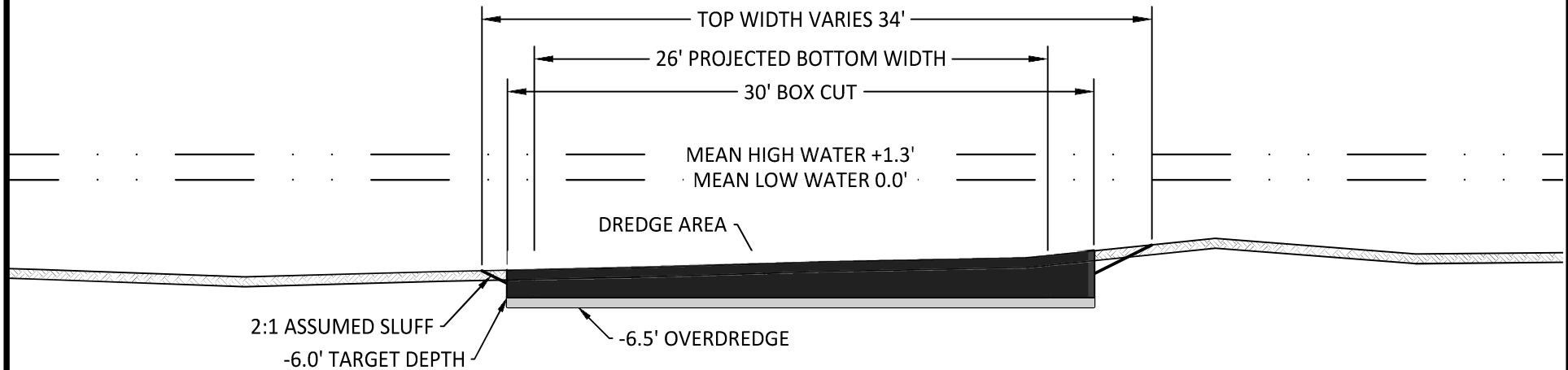
SHEET: 6 OF 12
 DATE: MARCH 15, 2022







PROPOSED DREDGING CROSS SECTION D-D (SAND BAR CHANNEL)



Pad Report BASIN PAD CALCS Thu Dec 30 21:37:52 2021

Top of pad elevation range:: -6.0000 to -4.0000
 Cut Slope: 50.00% 2.000:1 26.57°
 Fill Slope: 50.00% 2.000:1 26.57°
 Existing Surface: C:\Carlson Projects\Drawing1-ex.tin
 Cut Swell Factor: 1.00
 Fill Shrink Factor: 1.00

Pad Earthwork Volumes
 Cut : 102,744.3 C.F., 3,805.34 C.Y.
 Fill: 0.1 C.F., 0.00 C.Y.
 Area: 40399.7 Sq.Ft., 0.927 Acres

Pad Report SAND BAR CHANNEL Fri Dec 31 08:57:34 2021

Top of pad elevation range:: -6.0000 to -6.0000
 Cut Slope: 50.00% 2.000:1 26.57°
 Fill Slope: 50.00% 2.000:1 26.57°
 Existing Surface: C:\Carlson Projects\Drawing1-ex.tin
 Cut Swell Factor: 1.00
 Fill Shrink Factor: 1.00

Pad Earthwork Volumes
 Cut : 50,534.0 C.F., 1,871.63 C.Y.
 Fill: 0.4 C.F., 0.01 C.Y.
 Area: 16022.3 Sq.Ft., 0.368 Acres

© 2022 WATERFRONT CONSULTING, INC. ALL RIGHTS RESERVED

PURPOSE: BOATING ACCESS
 DATUM: MLW = 0.00'
 APOS:
 1. DAVID S. CULPEPPER
 2. ANDREW J. DOWNING



**WATERFRONT
CONSULTING, INC.**

2589 QUALITY COURT, SUITE 323
 VIRGINIA BEACH, VA 23454
 PHONE: (757) 425-8244, MOBILE: (757) 619-7302

ENGINEERING SERVICES PROVIDED BY:
 CHESAPEAKE BAY SITE SOLUTIONS, INC.
 P.O BOX 6663 VIRGINIA BEACH, VA 23456
 PHONE: (757) 575-3715

PROPOSED: DREDGING
 IN: DEY COVE
 AT: 2385, 2389, 2393, 2397 HAVERSHAM CLOSE
 VIRGINIA BEACH, VA 23454
 APPLICATION BY:
 HAVERSHAM CLOSE LLC.

SHEET: 10 OF 12
 DATE: MARCH 15, 2022

DREDGE CORNERS		
Point	Northing	Easting
D1	3494321.17	12201937.14
D2	3494237.86	12201888.16
D3	3494233.23	12201835.34
D4	3494234.02	12201805.93
D5	3494255.27	12201764.88
D6	3494212.07	12201717.91
D7	3494174.46	12201790.17
D8	3494172.57	12201856.04
D9	3494218.07	12201911.33
D10	3494304.71	12201962.27
D11	3494343.72	12201759.17
D12	3494453.60	12201785.25
D13	3494560.52	12201748.76
D14	3494683.14	12201733.24
D15	3494714.13	12201695.42
D16	3494760.44	12201680.07
D17	3494818.51	12201721.92
D18	3494820.43	12201730.82
D19	3494812.87	12201752.66
D20	3494830.92	12201758.90
D21	3494844.94	12201719.45
D22	3494860.60	12201694.59
D23	3494848.46	12201686.69
D24	3494837.05	12201704.71
D25	3494801.50	12201679.55
D26	3494815.91	12201657.16
D27	3494805.03	12201650.15
D28	3494793.37	12201668.85
D29	3494691.38	12201603.80
D30	3494659.28	12201622.04
D31	3494644.00	12201647.24
D32	3494589.16	12201687.27
D33	3494544.47	12201649.08
D34	3494520.20	12201677.48
D35	3494523.73	12201680.50
D36	3494505.96	12201701.31
D37	3494495.40	12201692.29
D38	3494518.78	12201664.94
D39	3494508.13	12201655.84
D40	3494466.66	12201705.86
D41	3494463.89	12201750.11
D42	3494452.18	12201754.11
D43	3494344.99	12201728.64

From	To	Direction	Distance
D1	D2	S 30°26'56" W	96.64
D2	D3	S 84°59'50" W	53.03
D3	D4	N 88°28'34" W	29.42
D4	D5	N 62°37'40" W	46.22
D5	D6	S 47°23'48" W	63.81
D6	D7	S 62°30'14" E	81.47
D7	D8	S 88°21'03" E	65.89
D8	D9	N 50°32'42" E	71.61
D9	D10	N 30°27'12" E	100.51
D10	D1	N 56°47'02" W	30.04
D11	D12	N 13°21'06" E	112.94
D12	D13	N 18°50'48" W	112.97
D13	D14	N 07°12'50" W	123.60
D14	D15	N 50°39'49" W	48.89
D15	D16	N 18°20'40" W	48.79
D16	D17	N 35°46'46" E	71.58
D17	D18	N 77°50'25" E	9.11
D18	D19	S 70°55'32" E	23.11
D19	D20	N 19°04'28" E	19.09
D20	D21	N 70°26'13" W	41.86
D21	D22	N 57°47'41" W	29.38
D22	D23	S 33°04'11" W	14.49
D23	D24	S 57°40'41" E	21.33
D24	D25	S 35°17'16" W	43.56
D25	D26	N 57°13'37" W	26.63
D26	D27	S 32°46'23" W	12.94
D27	D28	S 58°02'25" E	22.04
D28	D29	S 32°31'40" W	120.97
D29	D30	S 29°36'14" E	36.92
D30	D31	S 58°46'28" E	29.47
D31	D32	S 36°07'33" E	67.90
D32	D33	S 40°31'01" W	58.78
D33	D34	S 49°28'59" E	37.36
D34	D35	N 40°31'01" E	4.65
D35	D36	S 49°28'59" E	27.37
D36	D37	S 40°31'01" W	13.88
D37	D38	N 49°28'59" W	35.98
D38	D39	S 40°31'01" W	14.00
D39	D40	S 50°20'21" E	64.98
D40	D41	S 86°25'17" E	44.33
D41	D42	S 18°53'10" E	12.38
D42	D43	S 13°22'08" W	110.17
D43	D11	S 87°36'23" E	30.56



© 2022 WATERFRONT CONSULTING, INC. ALL RIGHTS RESERVED

PURPOSE: BOATING ACCESS
 DATUM: MLW = 0.00'
 APOS:
 1. DAVID S. CULPEPPER
 2. ANDREW J. DOWNING



**WATERFRONT
CONSULTING, INC.**

2589 QUALITY COURT, SUITE 323
 VIRGINIA BEACH, VA 23454
 PHONE: (757) 425-8244, MOBILE: (757) 619-7302
 ENGINEERING SERVICES PROVIDED BY:
 CHESAPEAKE BAY SITE SOLUTIONS, INC.
 P.O BOX 6663 VIRGINIA BEACH, VA 23456
 PHONE: (757) 575-3715

PROPOSED: DREDGING
 IN: DEY COVE
 AT: 2385, 2389, 2393, 2397 HAVERSHAM CLOSE
 VIRGINIA BEACH, VA 23454
 APPLICATION BY:
 HAVERSHAM CLOSE LLC.

SHEET: 11 OF 12
 DATE: MARCH 15, 2022

