



DEPARTMENT OF
ENVIRONMENTAL PROGRAMS

Worcester County

GOVERNMENT CENTER
ONE WEST MARKET STREET, ROOM 1306
SNOW HILL, MARYLAND 21863
TEL: 410.632.1220 / FAX: 410.632.2012

LAND PRESERVATION PROGRAM
STORMWATER MANAGEMENT
SEDIMENT AND EROSION CONTROL
SHORELINE CONSTRUCTION
AGRICULTURAL PRESERVATION
ADVISORY BOARD

WELL & SEPTIC
WATER & SEWER PLANNING
PLUMBING & GAS
CRITICAL AREAS/FORESTRY
COMMUNITY HYGIENE

June 29, 2023

This notification is to advise you that the Department has received and is presently reviewing the following request for a shoreline construction project:

Marina Village Town Home Association c/o Mike Reynolds – Request No. 2023-066 – Request to replace 715' of existing deteriorating timber bulkhead with new vinyl sheet pile bulkhead and new piles spaced at a maximum of 6.5' O.C and backfill void between old and new bulkhead with clean sand. Maximum channelward extension of 18". This project is located at Yacht Club Drive (multiple locations), Berlin, also known as Tax Map 16, Parcels 14,50,103, Lots- Multiple. Third Tax District of Worcester County, Maryland.

The Department in considering this application will make specific findings of fact with regard to the environmental impact, navigational impact, recreational potential, commercial benefit to Worcester County, impact of the proposed construction upon the surrounding neighborhood and upon property values therein, and any other pertinent issues. Approval from the Department does not guarantee approval from any other applicable regulatory agencies.

If you have an interest which may be adversely affected by the issuance of this permit, you are requested to notify this Department in writing within fifteen (15) calendar days which will end on July 14, 2023.

Sincerely,

Brandy Whitlock
Environmental Inspector

cc: Interested Parties
Joy Birch
File



WORCESTER COUNTY
SHORELINE CONSTRUCTION
APPLICATION

Request No.: 2023-066
Submission Date: 6-29-23

X Major Construction (\$300.00) Minor Construction (\$150.00)

Written Description of Proposed Improvement (include channelward distance):

To replace 715 LF of existing deteriorating timber bulkhead near Yacht Club Drive in Ocean Pines, see attached location map, with new vinyl sheet pile bulkhead and new piles spaced at a maximum 6.5' o.c. with a maximum channelward encroachment of 18" and backfill the void between the old and new bulkhead with clean sand.

Property Description:

Map: 16 Parcel: 14,50,103 Lot: Various Section: 14A & 18 Block: Tax District:

Street Address: Yacht Club Drive & Pintail Drive, Ocean Pines, MD 21811

Subdivision: Ocean Pines - Sections 14A & 18

Dwelling on lot: Yes Dwelling under construction: No Vacant: Commercial:

(Bulkhead Owner) -

Owner: Marina Village Town Home Association - c/o Mike Reynolds Phone No. (302) 540-5622

Mailing Address: 959 Yacht Club Drive, Ocean Pines, MD 21811

E-Mail Address: mikeocnorthern@gmail.com

Contractor: To be determined Phone No.:

Mailing Address:

E-Mail Address:

Recorded Adjacent Property Owner: See Affected and Adjacent Lot Owner Tables

Property Address: Yacht Club and Pintail Drive, Ocean Pines, MD 21811

Tax Map: Parcel: Lot: Section: Block:

Recorded Adjacent Property Owner: See Affected and Adjacent Lot Owner Tables

Property Address: Various Streets, Ocean Pines, MD 21811

Tax Map: Parcel: Lot: Section: Block:

As the applicant, I attest that the information presented on this application, site plan and any written documentation attached hereto is known to be accurate. I understand that the proposed shoreline improvement will be constructed to meet or exceed minimum design standards adopted by the Department. Any deviation from these standards will require construction plans sealed by an engineer registered in the State of Maryland. I acknowledge that any falsification of information presented may result in revocation of this approval and of the subsequent Shoreline Construction Permit.

Signature: [Handwritten Signature] Date: 6/14/23

DEPT. USE ONLY:

Notification Distribution Date: 6-29-23 Public Comment Deadline: 7-14-23 (15 calendar days)

Department Approval Date: Expiration:



UNNAMED CANALS TO ISLE OF WIGHT BAY 38°22'27" N 75°07'42" W

SHEET INDEX

- 1 VICINITY MAP, PERMIT REQUEST
- 2-3 OWNER & QUANTITY TABLE
- 4-8 EXISTING SITE AREA/PROPOSED PLANS
- 9-17 SECTION & ELEVATION DETAILS

QUANTITY

TOTAL LENGTH = 715 LF TOTAL AREA = 1,073 SQ. FT.
 TOTAL CLEAN SAND FILL = 318 CU. YD.

PERMIT REQUEST

TO REPLACE 715 LINEAR FEET OF DETERIORATING TIMBER BULKHEAD WITH NEW VINYL SHEETING WITH MAXIMUM CHANNEL-WARD ENCROACHMENT OF 18". ALSO INCLUDED AS PART OF THIS PERMIT IS TO BACKFILL THE VOID BETWEEN THE OLD BULKHEAD AND NEW BULKHEAD WITH CLEAN SAND.

NOTES:

EXISTING BULKHEAD IS THE PROPERTY OF THE MARINA VILLAGE TOWN HOME ASSOCIATION (MVTHA) AND MEMBERS THERE OF. THERE ARE NO OBSERVED SUB-AQUATIC VEGETATIVE (SAV) BEDS WITHIN PERMIT AREA.

LEGEND

- AFFECTED PROPERTY ADDRESS
- ADJACENT PROPERTY ADDRESS
- BULKHEAD ELEVATION POINTS
- SOUNDINGS ELEVATION POINTS
- EXISTING PROPERTY LINE
- EXISTING BULKHEAD
- MEAN HIGH WATER LEVEL
- PROPOSED NEW BULKHEAD

- 84
- 82
- X3.9
- X(-4.1)

BULKHEAD OWNER:

MARINA VILLAGE TOWN HOME ASSOC.
 C/O MIKE REYNOLDS
 959 YACHT CLUB DRIVE
 OCEAN PINES, MARYLAND 21811
 PHONE 302-540-5622

LOCATION:

- UNNAMED CANALS NEAR
- YACHT CLUB DRIVE
- OCEAN PINES, MARYLAND 21811
- WORCESTER COUNTY



SCALE: 1" = 2000'

NOTE:

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NOTE:

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MARINA VILLAGE
 BULKHEAD
 REPLACEMENT

LOCATION
 MAP

VISTA
 DESIGN, INC. MDE AI #
 Engineers • Architects • Surveyors • Landscape Architects
 Land Planning Consultants • GIS Services
 11634 Worcester Hwy, Shovel, MD 21862
 Ph. 410-352-3874 • www.vistadesigninc.com

PROJECT DATA	
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File:	CE032023.dwg
Date:	6/23/2023
Scale:	1" = 2000'
Sheet:	I of 17

BULKHEAD QUANTITIES

MARINA VILLAGE TOWNHOMES BULKHEAD REPLACEMENT AREA 715 LF x 1.5W = 1,073 SQ. FT.
 CLEAN SAND FILL 715 LF x 1.5W x 8'H = 8,580 CU. FT. / 318 CU.YD.
 TOTAL LENGTH = 715 LF
 TOTAL AREA OF NEW BULKHEAD = 1,073 SQ. FT.
 TOTAL CLEAN SAND FILL REQUIRED 318 CU. YD.
 TOTAL DISTURBED AREA = 15,050 SQ. FT.

APPLICANT & BULKHEAD OWNER ADDRESS

***APPLICANT & BULKHEAD OWNER**

BULKHEAD
 1 MARINA VILLAGE
 TOWN HOME ASSOC.
 C/O MIKE REYNOLDS
 959 YACHT CLUB DRIVE
 OCEAN PINES, MARYLAND 21811

AFFECTED LOT OWNER INFORMATION

PROPERTY ADDRESS	MAILING ADDRESS	CURRENT OWNER	TAX MAP	GRID	PAR CEL	LOT #	SUB. SECT.	PLAT REF. (BOOK - PAGE)	DEED REF. (LIBER / FOLIO)
YACHT CLUB DRIVE OCEAN PINES 21811	239 OCEAN PARKWAY, BERLIN, MD 21811	OCEAN PINES ASSOCIATION INC.	16	23	14	G1	18	FWH 144-52	3543 / 548
YACHT CLUB DRIVE OCEAN PINES 21811	239 OCEAN PARKWAY, BERLIN, MD 21811	OCEAN PINES ASSOCIATION INC.	16	23	14	G2	18	FWH 144-52	3543 / 548
913 YACHT CLUB DRIVE OCEAN PINES 21811	12503 SHETLAND LANE, BOWIE, MD 20715	WILLIAM A. MECCA JR.	16	23	103	50	18	FWH 144-52	2330 / 85
915 YACHT CLUB DRIVE OCEAN PINES 21811	105 HIESTER AVE, NEW HOLLAND, PA 17557	DANETTE L. & CRAIG R. SHELLY	16	23	103	49	18	FWH 144-52	7202 / 304
917 YACHT CLUB DRIVE OCEAN PINES 21811	SAME	MARTIN A. FERRIS III & VERONICA S. FERRIS	16	23	103	48	18	FWH 144-52	2628 / 49
919 YACHT CLUB DRIVE OCEAN PINES 21811	1722 ROYDON TRL, ANNAPOLIS, MD 21401	BAKER MYERS LIVING TRUST, RICHARD J. BAKER TRUSTEE	16	23	103	47	18	FWH 144-52	7601 / 123
921 YACHT CLUB DRIVE OCEAN PINES 21811	1933 BALTIMORE ANNAPOLIS BLVD, ANNAPOLIS, MD 21409	TRRENCE P. COOK & KAREN L. COOK FOR LIFE	16	23	103	46	18	FWH 144-52	7595 / 236
925 YACHT CLUB DRIVE OCEAN PINES 21811	3 TROTGING HORSE CT, CATONSVILLE, MD 21228	RAYMOND G. TRUITT & MARY K. TILGHMAN	16	23	103	45	18	FWH 144-52	7535 / 153

PERMIT REQUEST

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NOTES:

- EXISTING BULKHEAD IS THE PROPERTY OF THE MARINA VILLAGE TOWN HOME ASSOCIATION (MVTHA) AND MEMBERS THERE OF. THIS PERMIT DOES NOT INCLUDE ANY ALTERATIONS TO ANY EXISTING BOAT LIFTS, POWER WATER CRAFT LIFTS, PLATFORMS, PIERS ETC. AND WILL REQUIRE SEPARATE PERMITS TO ALTER OR MOVE CHANNEL-WARD.
- THERE ARE NO OBSERVED SUB-AQUATIC VEGETATIVE (SAV) BEDS WITHIN PERMIT AREA.

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	<p>MARINA VILLAGE BULKHEAD REPLACEMENT</p>	<p>OWNER & QUANTITY TABLE</p>	<p>VISTA DESIGN, INC. MDE AI # Engineers • Architects • Surveyors • Landscape Architects Land Planning Consultants • GIS Services 11634 Worcester Hwy, Showell, MD 21862 Ph. 410-352-3874 • www.vistadesigninc.com</p>	<p>PROJECT DATA</p>
				<p>Project: 23-009 File: CE032023.dwg Date: 6/23/2023 Scale: 1" = 2000' Sheet: 2 of 17</p>

AFFECTED LOT OWNER INFORMATION

PROPERTY ADDRESS	MAILING ADDRESS	CURRENT OWNER	TAX MAP	GRID	PAR CEL	LOT #	SUB. SECT.	PLAT REF. (BOOK - PAGE)	DEED REF. (LIBER / FOLIO)
927 YACHT CLUB DRIVE OCEAN PINES 21811	502 HAWTHORNE RD, LINTHICUM, MD 21090	BRUCE T. & SHERRY M. BROWN	16	23	103	44	18	FWH 144-52	5703 / 275
929 YACHT CLUB DRIVE OCEAN PINES 21811	132 MORNING WALK DR, WARRINGTON, PA 18976	JILL ANNE & STEVEN A. DUDA	16	23	103	43	18	FWH 144-52	8368 / 458
931 YACHT CLUB DRIVE OCEAN PINES 21811	SAME	VICTOR T. & MADELYN DEBARI	16	23	103	42	18	FWH 144-52	2375 / 449
933 YACHT CLUB DRIVE OCEAN PINES 21811	117 ELM STREET, WHEELING, WV 26003	LAURA KRISTI LONG	16	23	103	41	18	FWH 144-52	8435 / 385
935 YACHT CLUB DRIVE OCEAN PINES 21811	SAME	DAVID A. & PATRICIA A. VOLRATH	16	23	103	40	18	FWH 144-52	4184 / 508
939 YACHT CLUB DRIVE OCEAN PINES 21811	4605B 36TH STREET S., ARLINGTON, VA 22206	LAWRENCE W. & JANICE D. PETERS	16	23	103	39	18	FWH 144-52	3437 / 388
941 YACHT CLUB DRIVE OCEAN PINES 21811	56 SEABORNE DR, PASADENA, MD 21122	ROBERT GARY STAMPER JR. & DEBORAH EICHELMAN STAMPER 2021 REVOCABLE FAMILY TRUST	16	23	103	38	18	FWH 144-52	8265 / 353
943 YACHT CLUB DRIVE OCEAN PINES 21811	SAME	PATRICIA JO KELLY	16	23	103	37	18	FWH 144-52	7631 / 356
945 YACHT CLUB DRIVE OCEAN PINES 21811	8307 MEADOWOOD DR, HANOVER, MD 21076	STEPHEN A. PREDEKOSKI	16	23	103	36	18	FWH 144-52	8465 / 120
947 YACHT CLUB DRIVE OCEAN PINES 21811	SAME	PETER PAUL MALECKI & PAMELA J. SLATER	16	23	103	35	18	FWH 144-52	6771 / 159
51 PINTAIL DRIVE OCEAN PINES 21811	151 CHARLESTOWN DR, NOTTINGHAM, PA 19362	STAY M. MERRIGAN	16	0	50	60	14A	FWH 26-17	7441 / 430
53 PINTAIL DRIVE OCEAN PINES 21811	14705 WINDWARD LN, NAPLES, FL 34114	JOYCE CAMPBELL TRUST ARTHUR A. CAMPBELL SUCCESSOR TRUSTEE	16	0	50	61	14A	FWH 26-17	4527 / 272

ADJACENT LOT OWNER INFORMATION

PROPERTY ADDRESS	MAILING ADDRESS	CURRENT OWNER	TAX MAP	GRID	PAR CEL	LOT #	SUB. SECT.	PLAT REF. (BOOK - PAGE)	DEED REF. (LIBER / FOLIO)
49 PINTAIL DRIVE OCEAN PINES 21811	9 PEMBERLY LN, REISTERSTOWN, MA 21136	JOHN CASEY CLARK	16	0	50	59	14A	FWH 26-17	2790 / 379
54 PINTAIL DRIVE OCEAN PINES 21811	16 BADGER ST, NEW CITY, NY 10956	J & J MORAN LLC.	16	0	50	62	14A	FWH 26-17	7173 / 225
538 YACHT CLUB DRIVE OCEAN PINES 21811	SAME	MARY MALLOW & RON JEFFERY BOLTZ	16	23	14	5	18	RHO 144-40	7758 / 151
909 YACHT CLUB DRIVE OCEAN PINES 21811	SAME	SCOTT R. PRIEBE	16	23	103	51	18	FWH 144-52	6470 / 228
951 YACHT CLUB DRIVE OCEAN PINES 21811	SAME	JANET P. STOER	16	23	103	34	18	FWH 144-52	4205 / 205



**MARINA VILLAGE
BULKHEAD
REPLACEMENT**

**OWNER
SUMMARY
TABLE**

VISTA
DESIGN, INC. MDE AI #
Engineers • Architects • Surveyors • Landscape Architects
Land Planning Consultants • GIS Services
11634 Worcester Hwy, Showell, MD 21862
Ph. 410-352-3874 • www.vistadesigninc.com

PROJECT DATA

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File: CE032023.dwg
Date: 4/20/2023
Scale: 1" = 2000'
Sheet: **3 of 17**



LEGEND

AFFECTED PROPERTY ADDRESS	84
ADJACENT PROPERTY ADDRESS	82
BULKHEAD ELEVATION POINTS	X 3.9
SOUNDINGS ELEVATION POINTS	X (-4.1)
EXISTING PROPERTY LINE	
EXISTING BULKHEAD	
MEAN HIGH WATER LEVEL	
PROPOSED NEW BULKHEAD	



SCALE: 1" = 100'

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NOTE:
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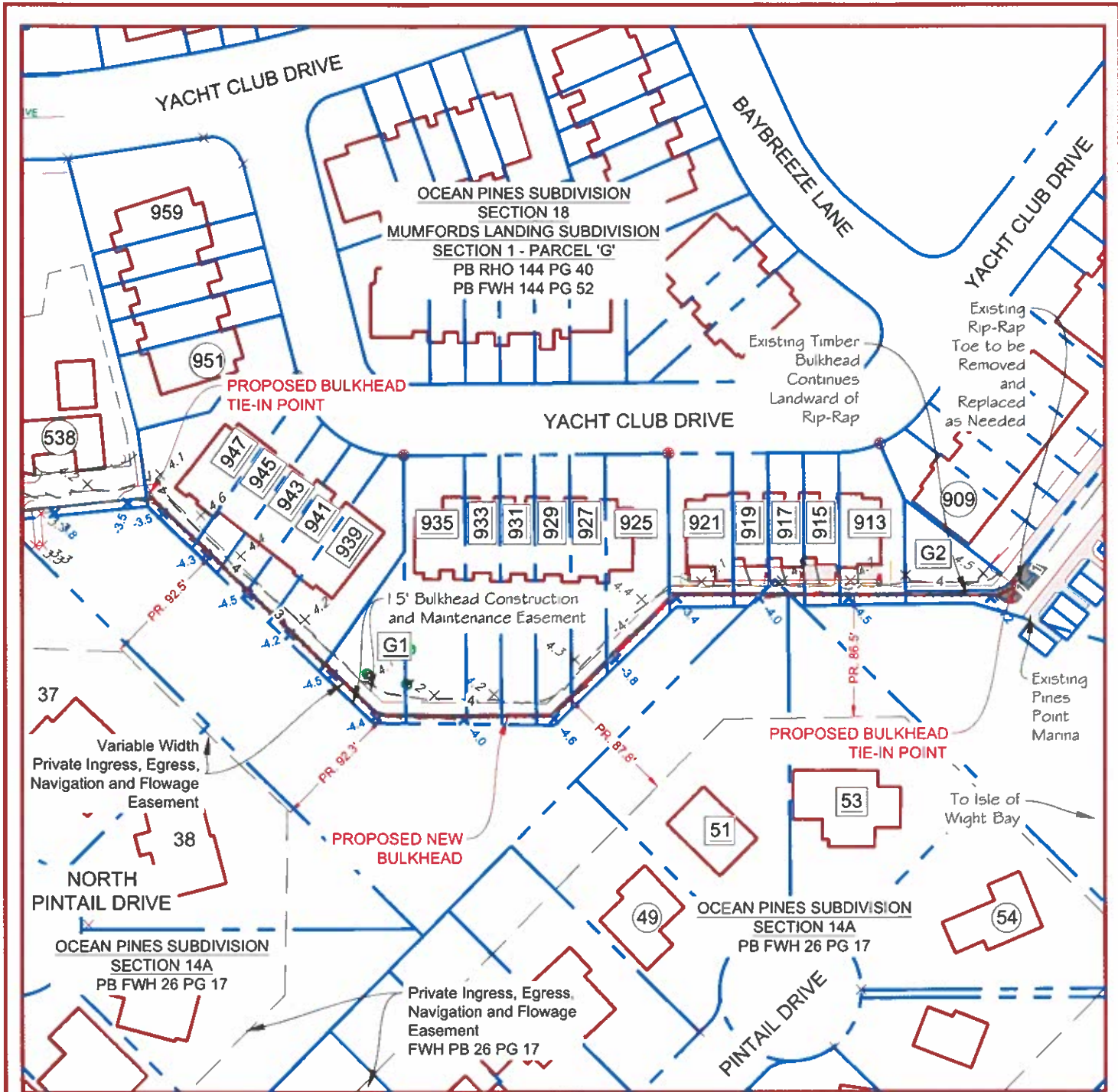


MARINA VILLAGE
BULKHEAD
REPLACEMENT

EXISTING
CONDITIONS
PLAN

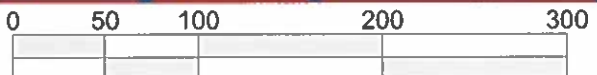
VISTA
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Date:	4/20/2023
Scale:	1" = 100'
Sheet:	4 of 17



LEGEND

AFFECTED PROPERTY ADDRESS	84
ADJACENT PROPERTY ADDRESS	82
BULKHEAD ELEVATION POINTS	X 3.9
SOUNDINGS ELEVATION POINTS	X (-4.1)
EXISTING PROPERTY LINE	---
EXISTING BULKHEAD	—
MEAN HIGH WATER LEVEL	—
PROPOSED NEW BULKHEAD	—



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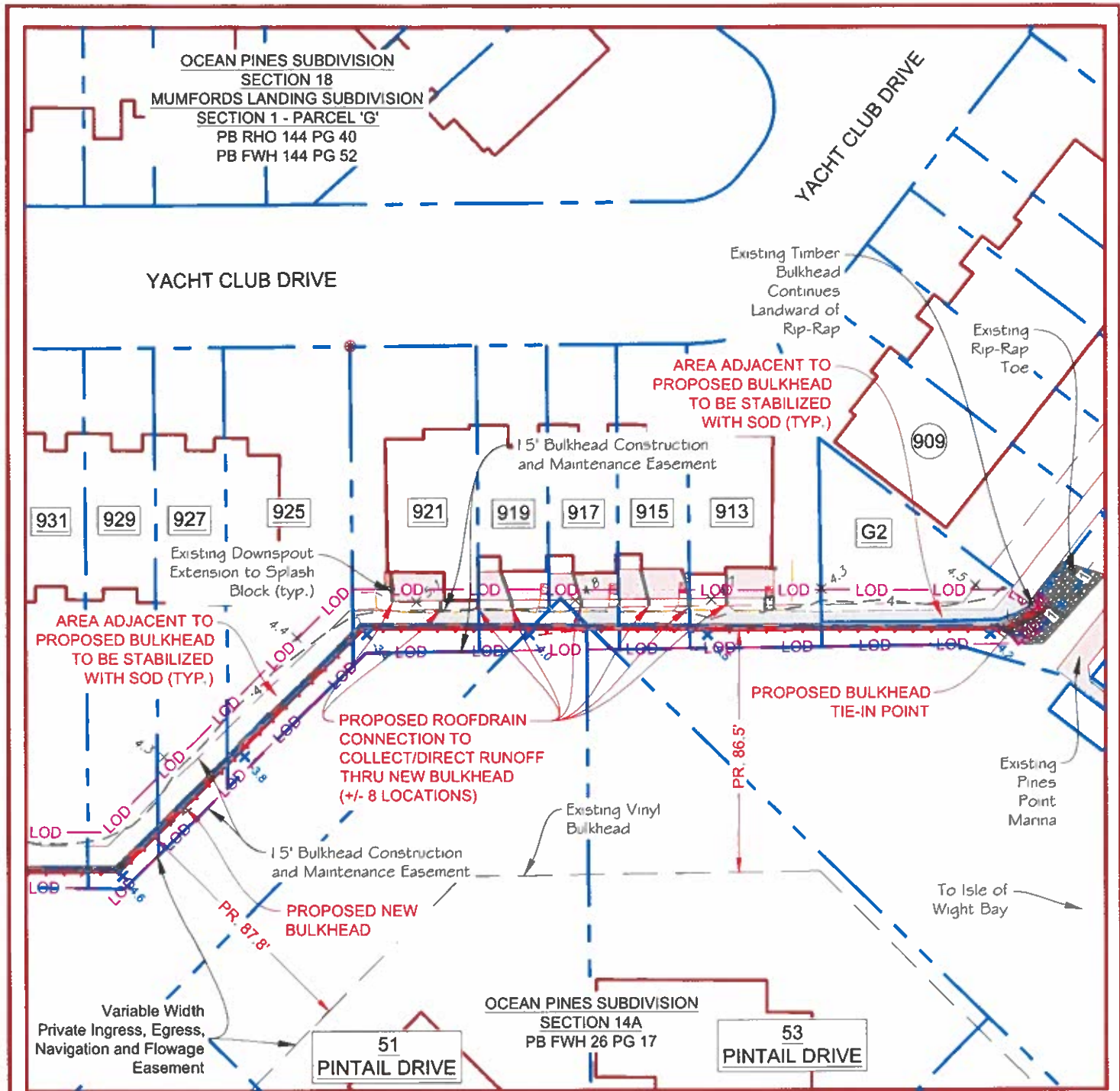


**MARINA VILLAGE
BULKHEAD
REPLACEMENT**

**PROPOSED
SITE
PLAN**

**VISTA
DESIGN, INC.** MDE AI #
Engineers • Architects • Surveyors • Landscape Architects
Land Planning Consultants • GIS Services
11634 Worcester Hwy, Showell, MD 21862
Ph. 410-352-3874 • www.vistadesigninc.com

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Project:	23-009
File:	CE032023.dwg
Date:	4/20/2023
Scale:	1" = 100'
Sheet:	5 of 17



LEGEND

- AFFECTED PROPERTY ADDRESS 84
- ADJACENT PROPERTY ADDRESS 82
- BULKHEAD ELEVATION POINTS X3.9
- SOUNDINGS ELEVATION POINTS X(-4.1)
- EXISTING PROPERTY LINE
- EXISTING BULKHEAD
- MEAN HIGH WATER LEVEL
- PROPOSED NEW BULKHEAD

0 25 50 100 150

SCALE: 1" = 50'

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MARINA VILLAGE
BULKHEAD
REPLACEMENT

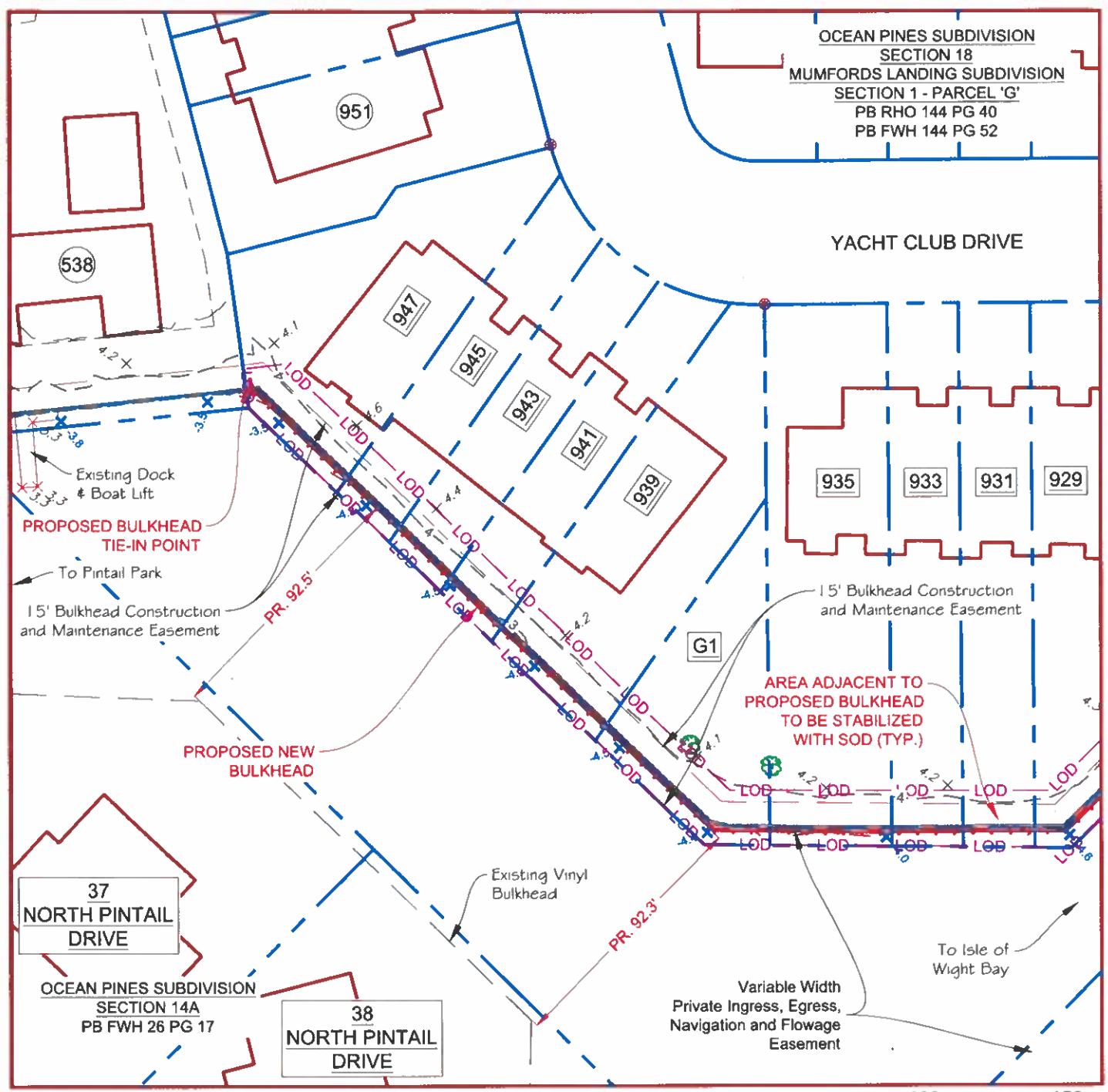
PROPOSED
SITE
PLAN

VISTA
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File: CE032023.dwg
Date: 4/20/2023
Scale: 1" = 50'
Sheet: 6 of 17

OCEAN PINES SUBDIVISION
SECTION 18
MUMFORDS LANDING SUBDIVISION
SECTION 1 - PARCEL 'G'
PB RHO 144 PG 40
PB FWH 144 PG 52

YACHT CLUB DRIVE



LEGEND

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- BULKHEAD ELEVATION POINTS x3.9
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SCALE: 1" = 50'

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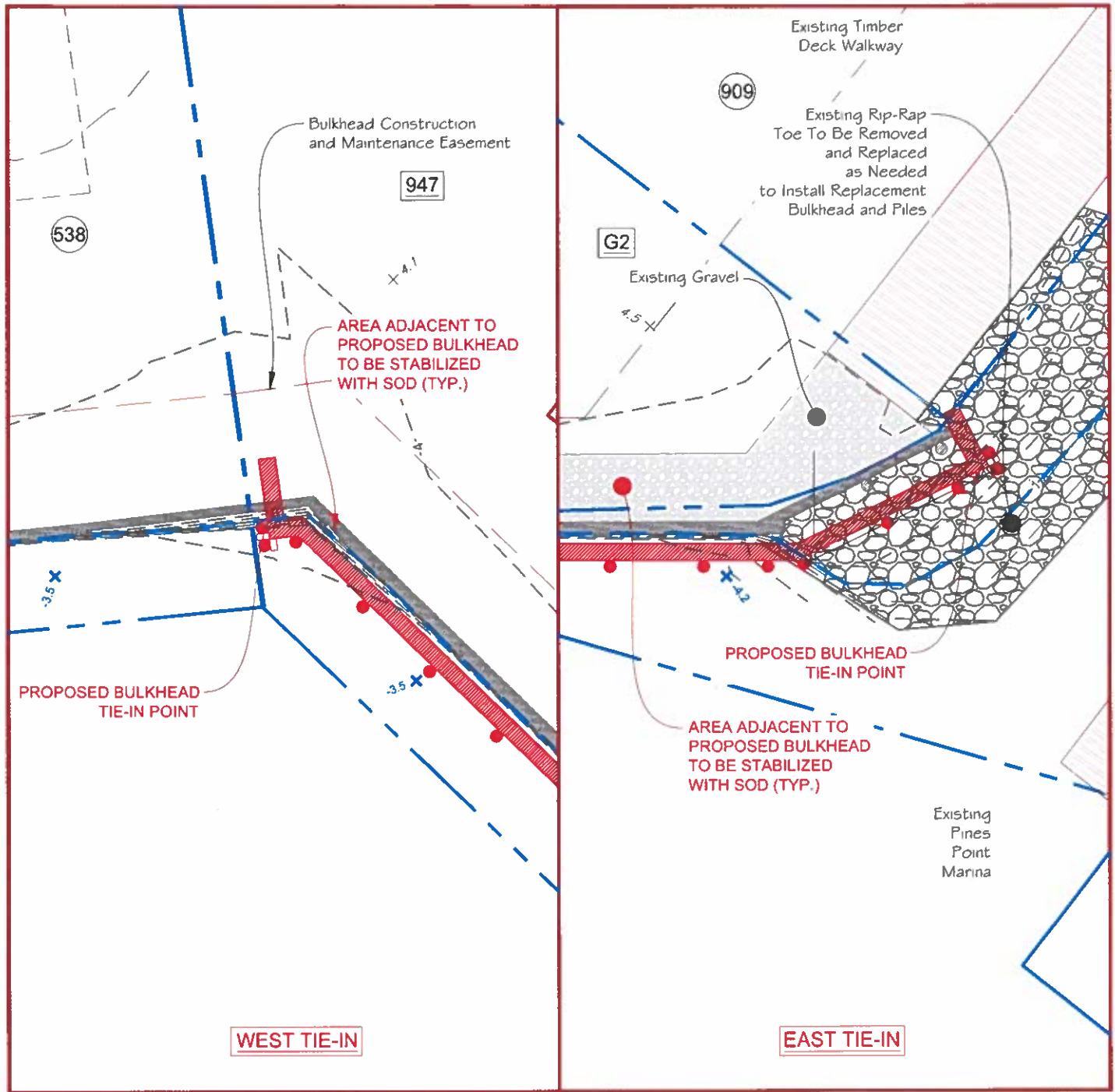


MARINA VILLAGE
BULKHEAD
REPLACEMENT

PROPOSED
SITE
PLAN

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PROJECT DATA	
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Scale:	1" = 50'
Sheet:	7 of 17



LEGEND

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EXISTING BULKHEAD	—
MEAN HIGH WATER LEVEL	—
PROPOSED NEW BULKHEAD	—



SCALE: 1" = 10'

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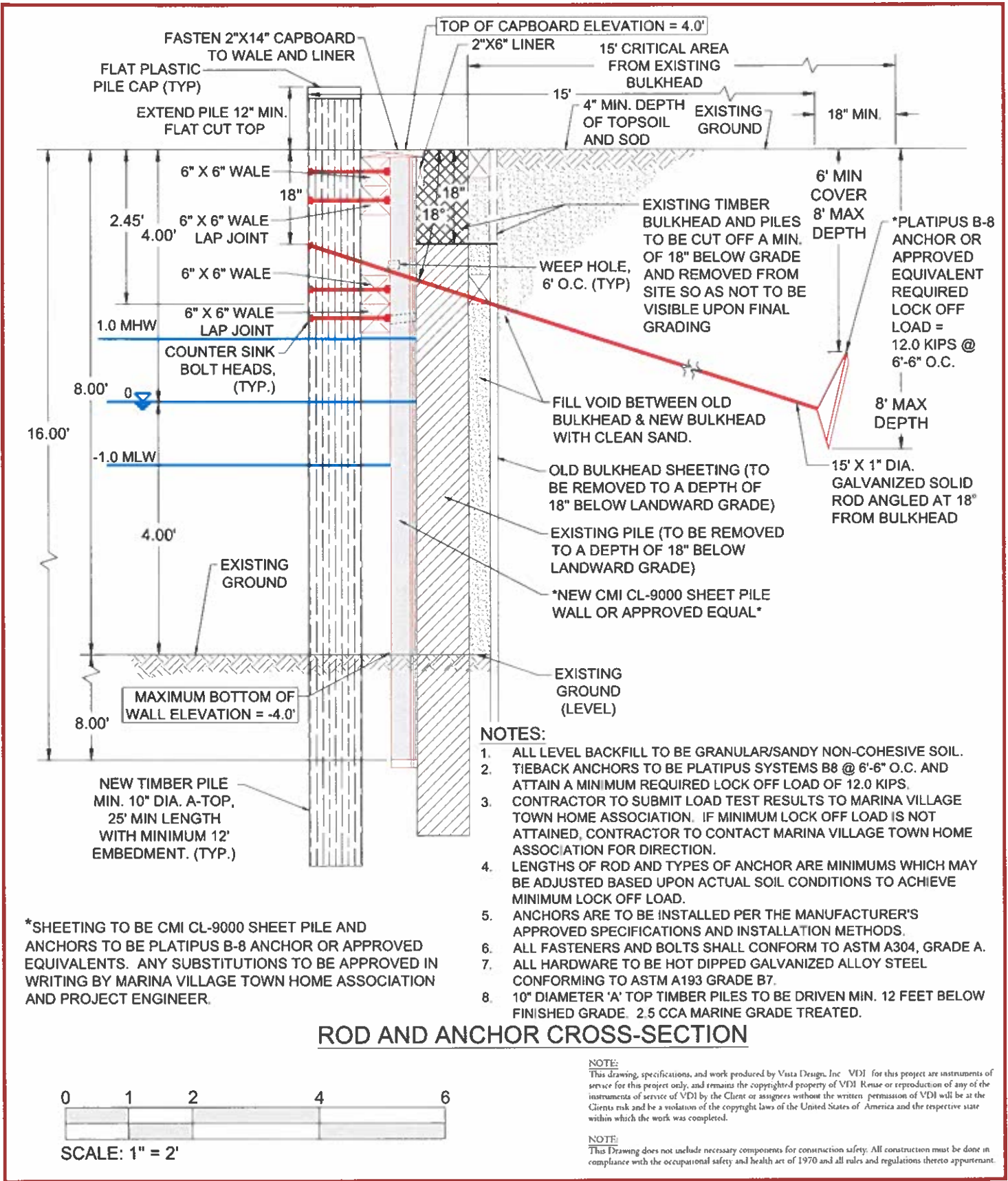


MARINA VILLAGE
BULKHEAD
REPLACEMENT

PROPOSED
SITE TIE-IN
LOCATIONS

VISTA
DESIGN, INC. MDE AI #
Engineers • Architects • Surveyors • Landscape Architects
Land Planning Consultants • GIS Services
11634 Worcester Hwy, Shovel, MD 21862
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Scale:	1" = 10'
Sheet:	8 of 17



ROD AND ANCHOR CROSS-SECTION

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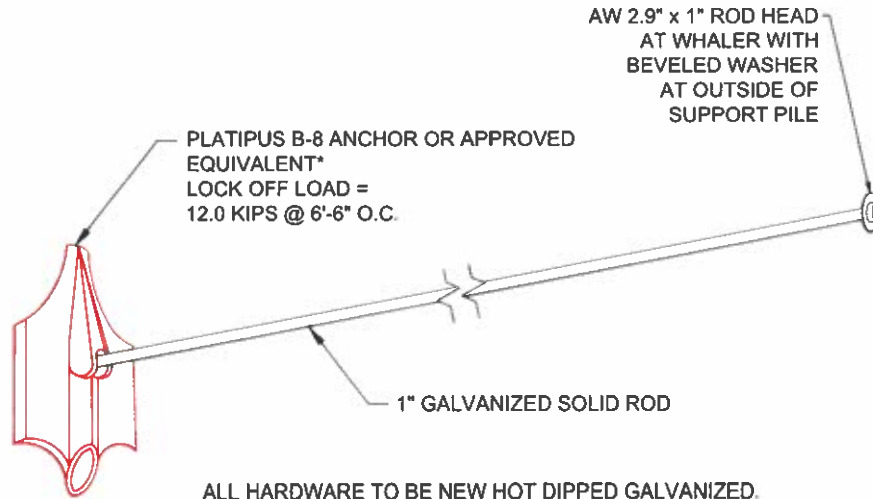


**MARINA VILLAGE
BULKHEAD
REPLACEMENT**

**TYPICAL SECTION
THRU NEW/
OLD BULKHEAD
PLATIPUS ANCHOR**

**VISTA
DESIGN, INC. MDE AI #**
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File:	CE032023.dwg
Date:	4/20/2023
Scale:	1" = 2'
Sheet:	9 of 17



ANCHOR TYPE	T-LOC VERSION	DIMENSIONS L x W x H (mm)	PROJECTED SURFACE AREA SQUARE MM (SQUARE INCH)	MATERIALS	TYPICAL LOAD RANGE	MINIMUM DRIVEN DEPTH	Wire	Rod	Chain
B4		310 x 110 x 93 (12.2 x 4.3 x 3.6)	28,736 (44.54)	SG Cast Iron; Aluminum Bronze	10 - 30+ kN (2000 - 6000lbs)	2m	✓	✓	✓
B6		336 x 206 x 91 (13.22 x 8.11 x 3.58)	45,500 (70.52)	SG Cast Iron; Aluminum Bronze	15 - 50+ kN (3500 - 11000lbs)	2m	✓	✓	✓
B8		423 x 259 x 105 (16.65 x 10.19 x 4.13)	71,500 (110.82)	SG Cast Iron; Aluminum Bronze	25 - 75+ kN (5500 - 16500lbs)	3m	✓	✓	✓
B10		541 x 335 x 110 (21.29 x 13.18 x 4.33)	115,800 (179.49)	SG Cast Iron; Aluminum Bronze	40 - 100+ kN (9000 - 22000lbs)	4m	✓	✓	✓



SCALE: 1" = 1'

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*PLATIPUS B-8 ANCHOR OR APPROVED EQUIVALENT.
ANY SUBSTITUTIONS TO BE APPROVED IN WRITING
BY MARINA VILLAGE TOWN HOME ASSOCIATION
AND PROJECT ENGINEER.

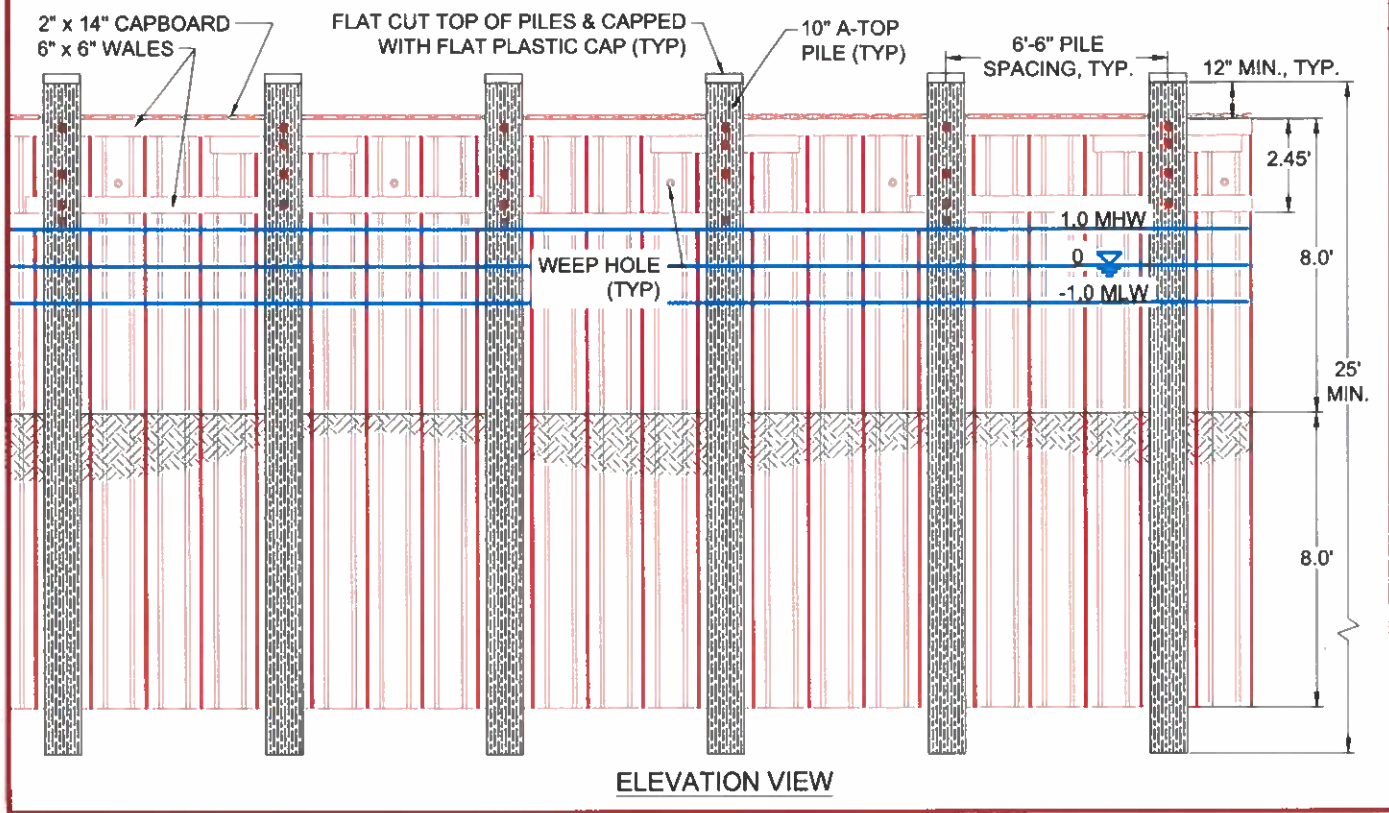
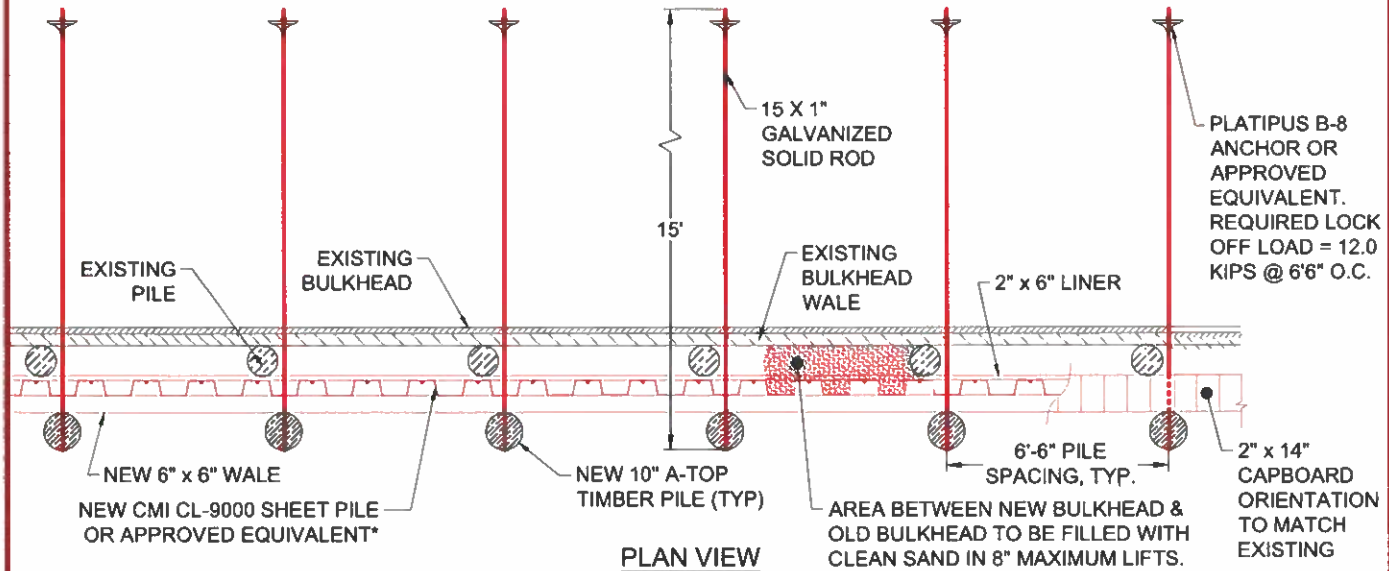


MARINA VILLAGE
BULKHEAD
REPLACEMENT

TYPICAL DETAIL
PLATIPUS B-8
ANCHOR

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PROJECT DATA
Project: 17-111
File: CE032023.dwg
Date: 4/20/2023
Scale: 1" = 1'
Sheet: 10 of 17



SCALE: 1" = 5'

*SHEETING TO BE CMI CL-9000 SHEET PILE OR APPROVED EQUIVALENT. PLATIPUS B-8 ANCHOR OR APPROVED EQUIVALENT. ANY SUBSTITUTIONS TO BE APPROVED IN WRITING BY MARINA VILLAGE TOWN HOME ASSOCIATION AND PROJECT ENGINEER.

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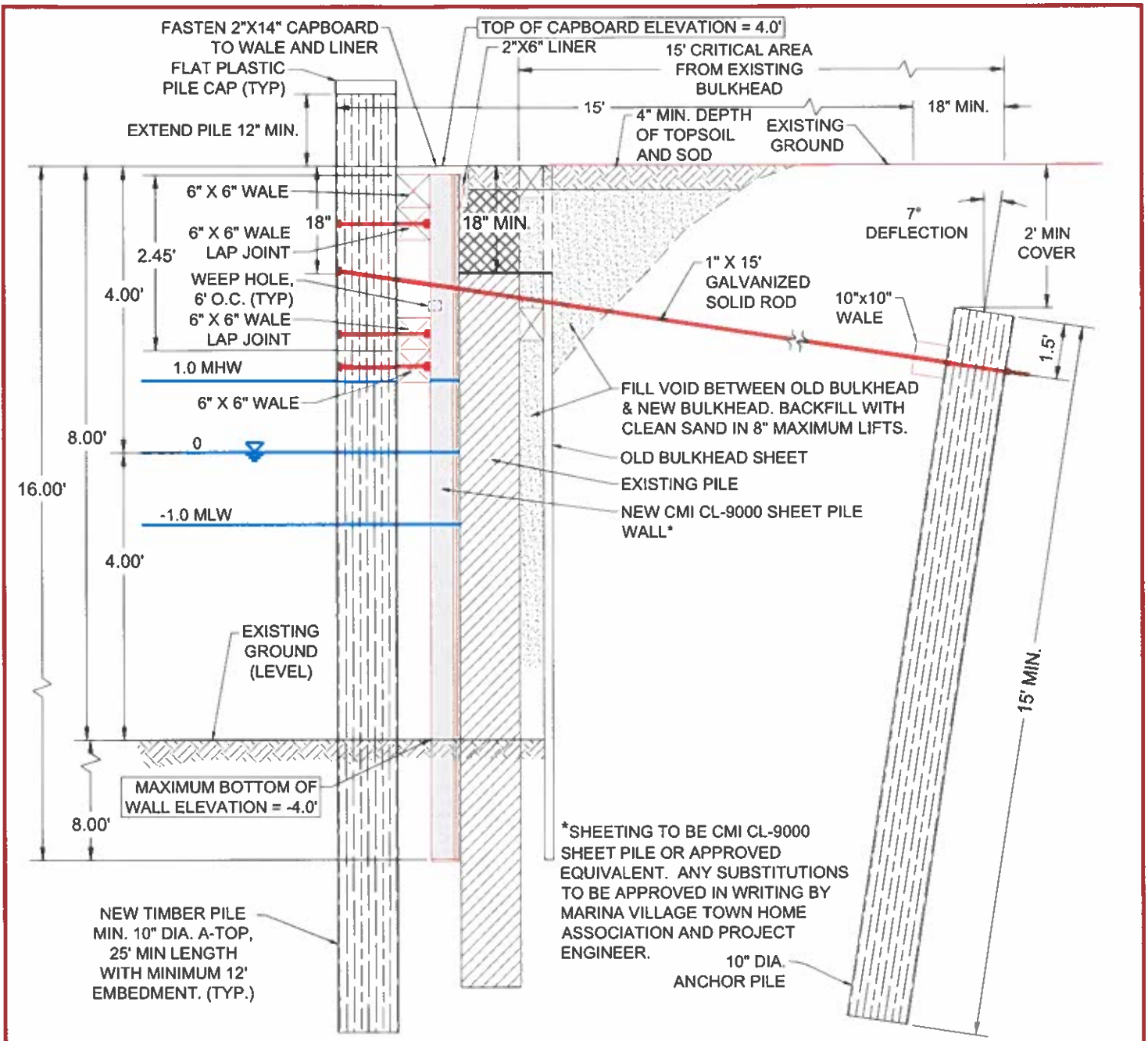


MARINA VILLAGE
BULKHEAD
REPLACEMENT

TYPICAL SECTION
THRU NEW/
OLD BULKHEAD
(PLATIPUS ANCHOR)

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Project:	23-009
File:	CE032023.dwg
Date:	4/20/2023
Scale:	1" = 5'
Sheet:	11 of 17



NOTES:

1. ALL LEVEL BACKFILL TO BE GRANULAR/SANDY NON-COHESSIVE SOIL.
2. LENGTHS OF ROD AND TYPES OF ANCHOR ARE MINIMUMS WHICH MAY BE ADJUSTED BASED UPON ACTUAL SOIL CONDITIONS TO ACHIEVE MINIMUM LOCK OFF LOAD.
3. ANCHORS ARE TO BE INSTALLED PER THE MANUFACTURER'S APPROVED SPECIFICATIONS AND INSTALLATION METHODS.
4. ALL FASTENERS AND BOLTS SHALL CONFORM TO ASTM A304, GRADE A.
5. ALL HARDWARE TO BE HOT DIPPED GALVANIZED ALLOY STEEL CONFORMING TO ASTM A193 GRADE B7.
6. 10" DIAMETER 'A' TOP TIMBER PILES TO BE DRIVEN MIN. 12 FEET BELOW FINISHED GRADE. 2.5 CCA MARINE GRADE TREATED.

TYPICAL CROSS-SECTION

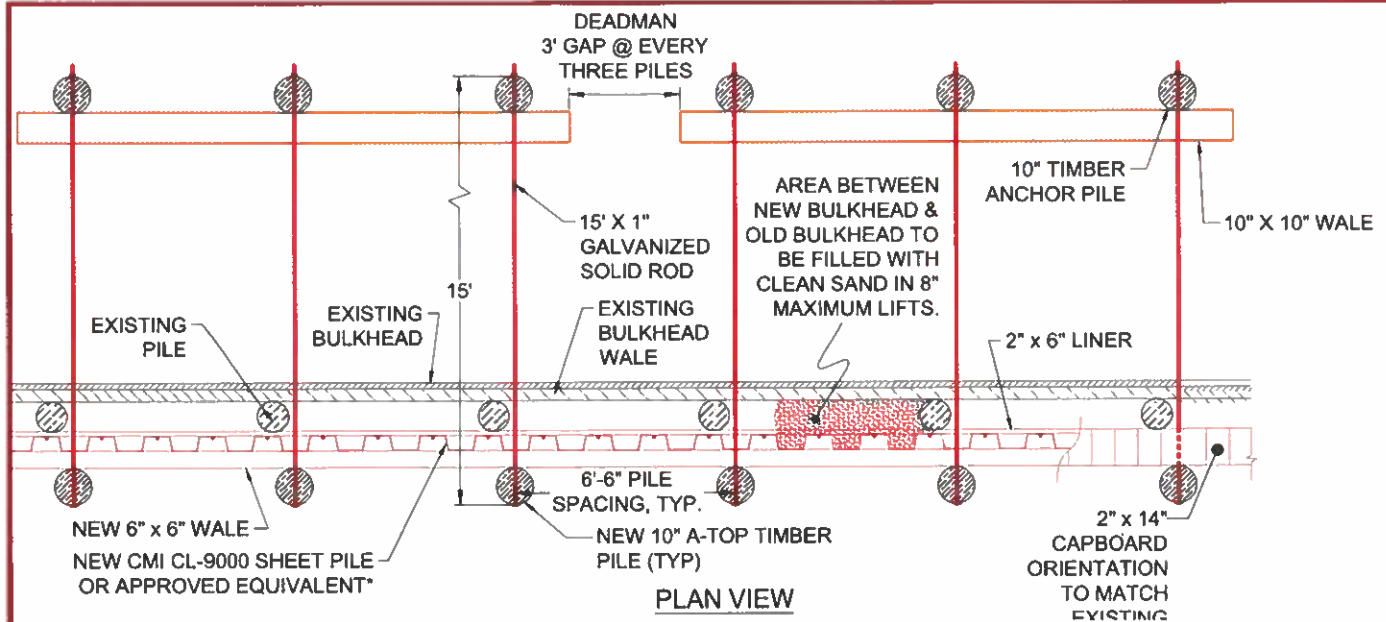


SCALE: 1" = 2'

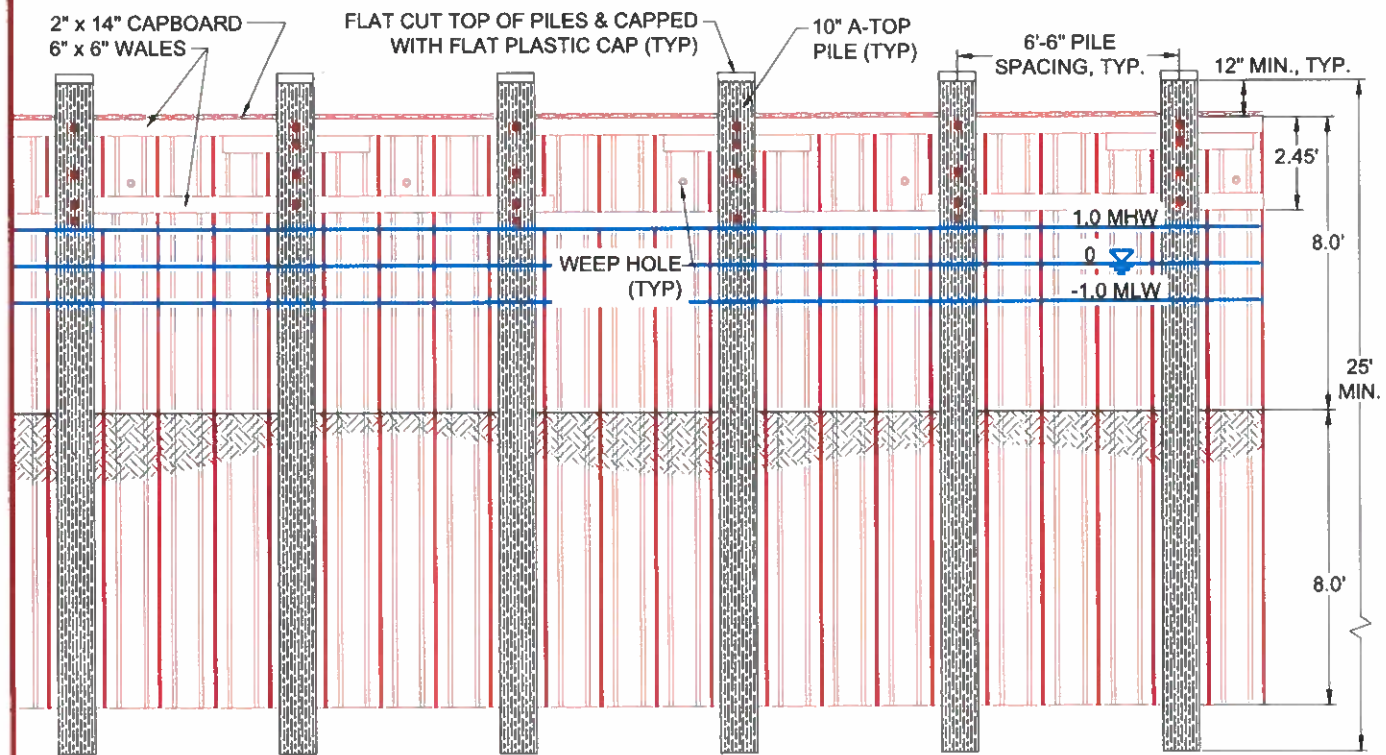
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	<p>MARINA VILLAGE BULKHEAD REPLACEMENT</p>	<p>TYPICAL SECTION THRU NEW/ OLD BULKHEAD (PILE DEADMAN)</p>	<p>VISTA DESIGN, INC. MDE AI # Engineers • Architects • Surveyors • Landscape Architects Land Planning Consultants • GIS Services 11634 Worcester Hwy, Showell, MD 21862 Ph. 410-352-3874 • www.vistadesigninc.com</p>	<p>PROJECT DATA</p> <p>Project: 23-009 File: CE032023.dwg Date: 4/20/2023 Scale: 1" = 2' Sheet: 12 of 17</p>
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PLAN VIEW



ELEVATION VIEW



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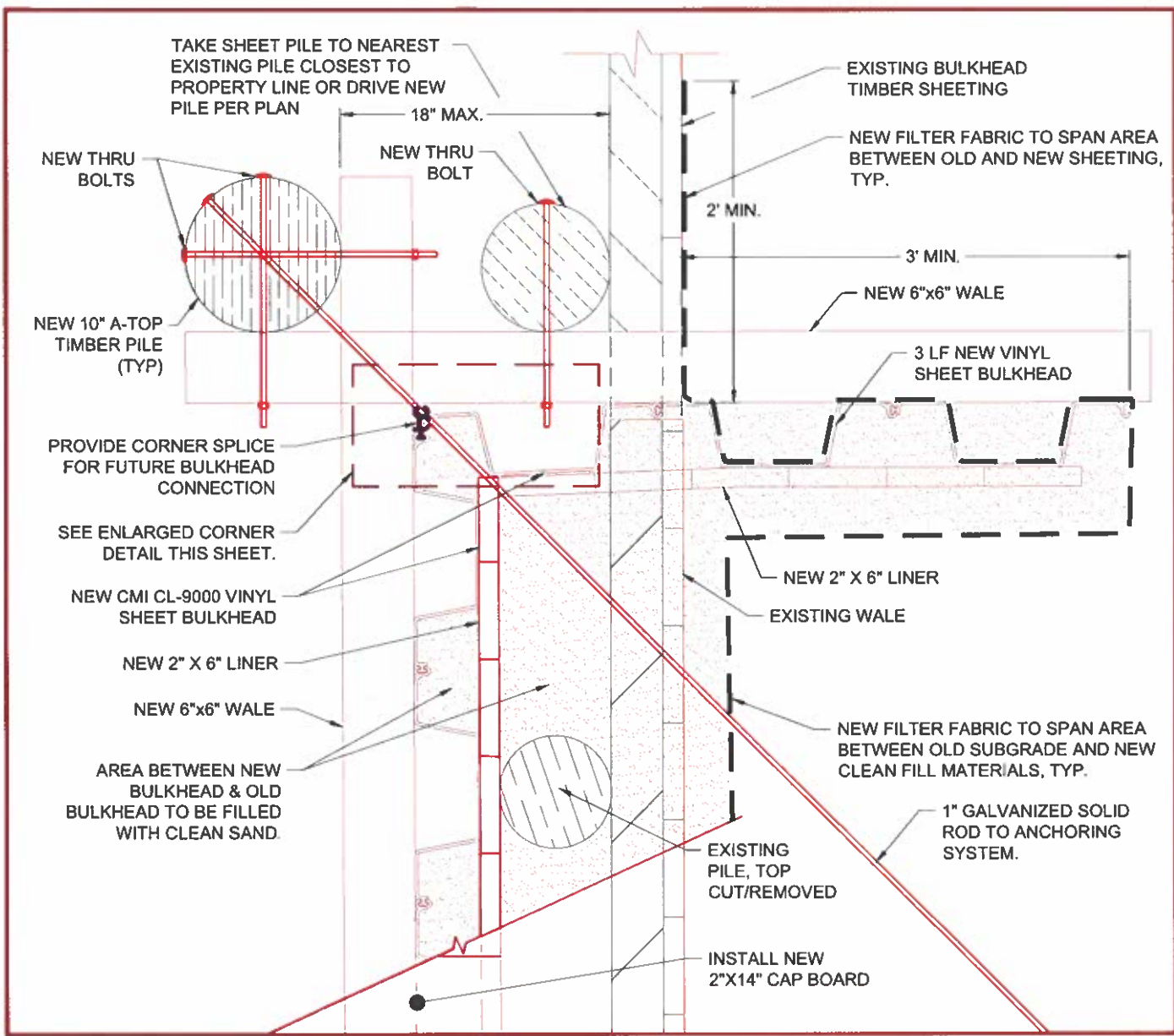


MARINA VILLAGE
BULKHEAD
REPLACEMENT

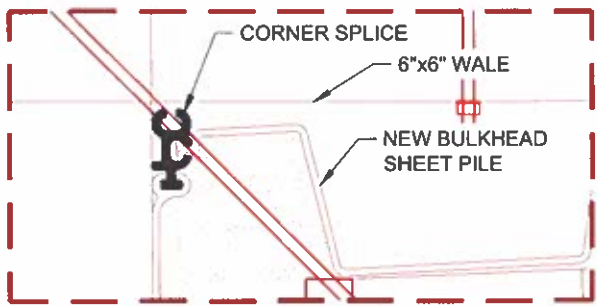
TYPICAL SECTION
THRU NEW/
OLD BULKHEAD
(PILE DEADMAN)

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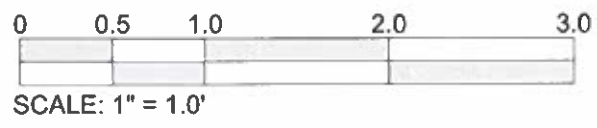
PROJECT DATA	
Project:	23-009
File:	CE032023.dwg
Date:	4/20/2023
Scale:	1" = 5'
Sheet:	13 of 17



PLAN VIEW CORNER DETAIL
SCALE: 1" = 1'



ENLARGED CORNER DETAIL
SCALE: 1" = 0.5'



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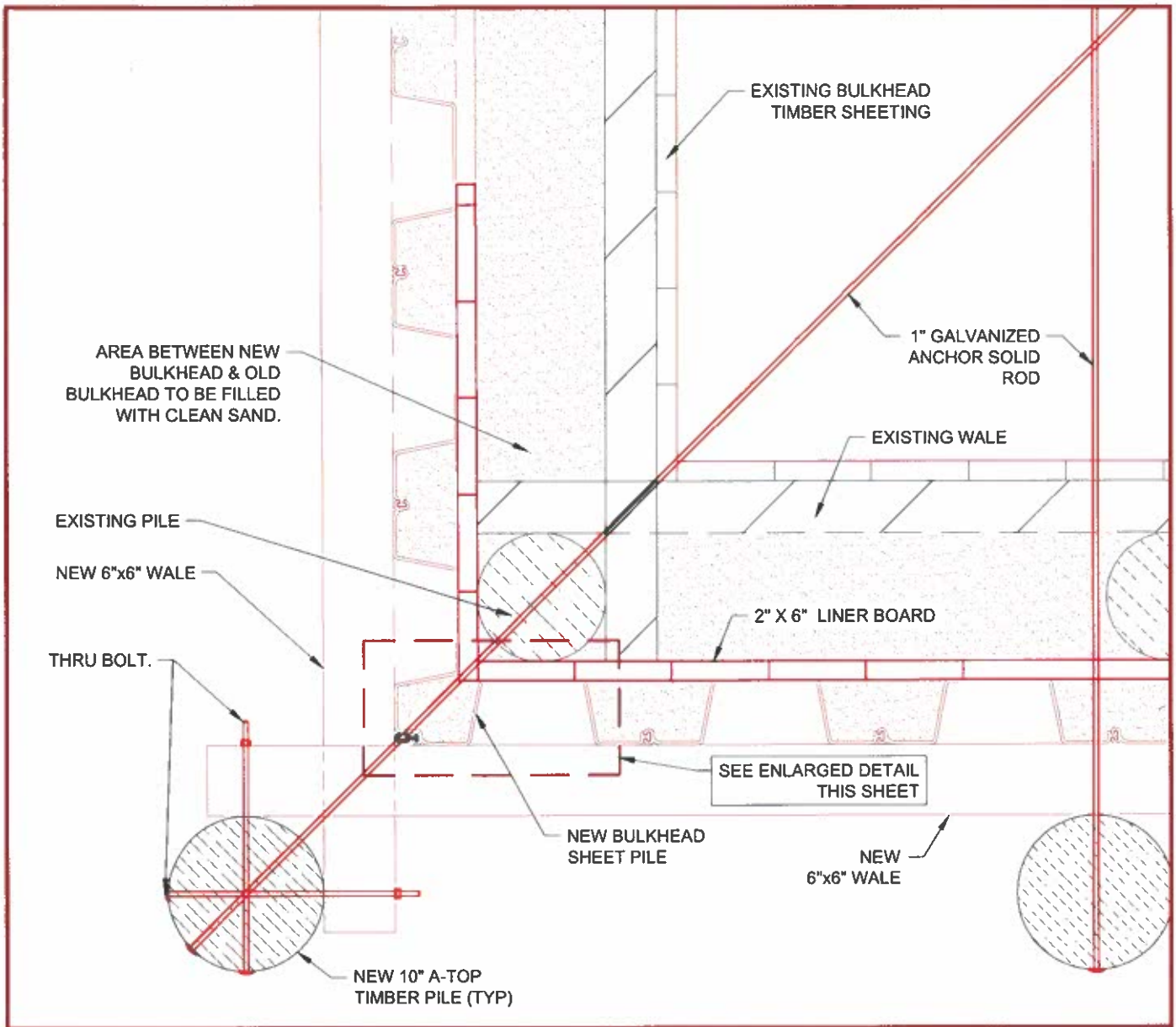


**MARINA VILLAGE
BULKHEAD
REPLACEMENT**

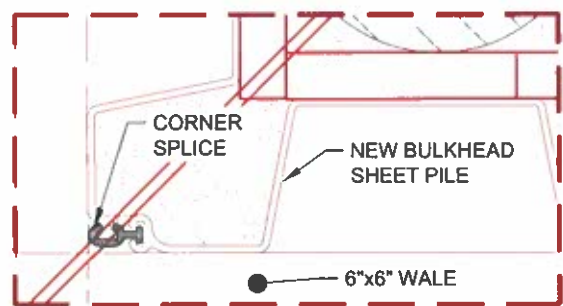
**VINYL BULKHEAD
TO EXISTING
BULKHEAD DETAIL
(IN-LINE)**

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Project:	23-009
File:	CE032023.dwg
Date:	4/20/2023
Scale:	AS SHOWN
Sheet:	14 of 17



PLAN VIEW CORNER DETAIL
SCALE: 1" = 1'



ENLARGED CORNER DETAIL
SCALE: 1" = 0.5'



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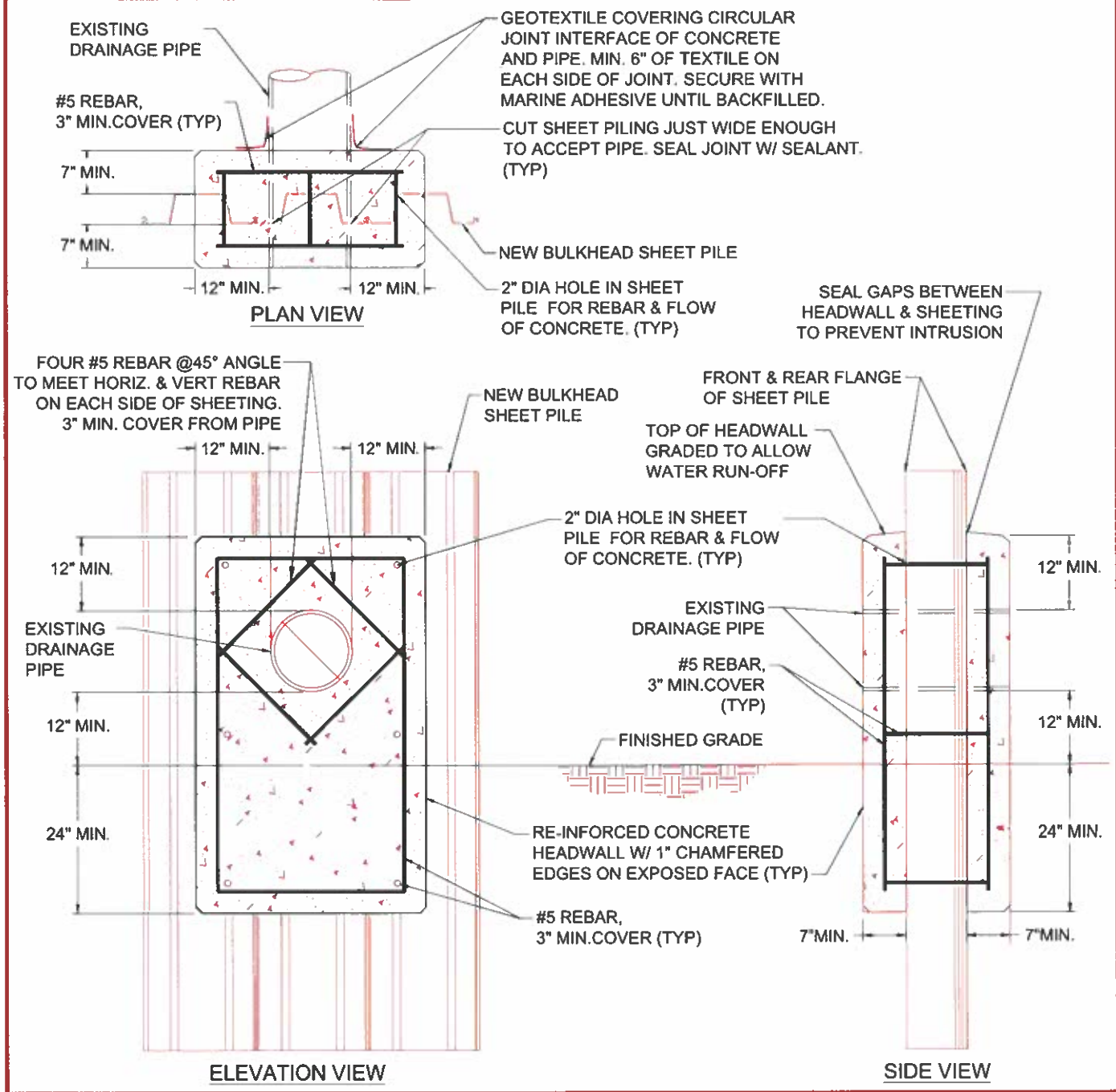


**MARINA VILLAGE
BULKHEAD
REPLACEMENT**

**VINYL BULKHEAD
TO EXISTING
BULKHEAD DETAIL
(CORNER)**

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PROJECT DATA
Project: 23-009
File: CE032023.dwg
Date: 4/20/2023
Scale: AS SHOWN
Sheet: **15 of 17**



SCALE: 1" = 2'

GENERAL NOTES

1. CONCRETE TO HAVE A MINIMUM OF COMPRESSIVE STRENGTH OF 5000 PSI AND MAXIMUM WATER/CEMENT RATIO OF 0.4. CONCRETE TO BE VIBRATED DURING PLACEMENT TO PREVENT HONEYCOMBS.
2. STEEL REBAR TO BE GRADE 60 AND TO HAVE COVER OF 3 INCHES

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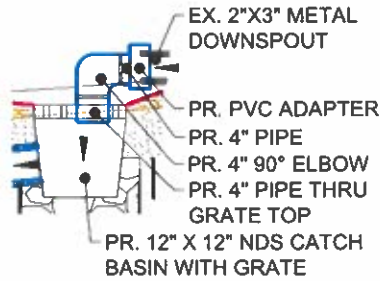
MARINA VILLAGE
BULKHEAD
REPLACEMENT

STORM DRAINAGE
PIPE THUR
BULKHEAD DETAIL

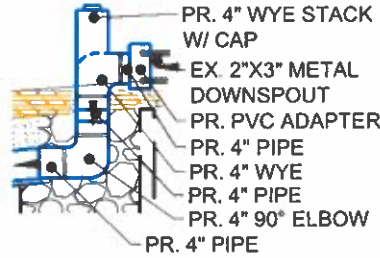
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PROJECT DATA	
Project:	23-009
File:	CE032023.dwg
Date:	4/20/2023
Scale:	1" = 2'
Sheet:	16 of 17

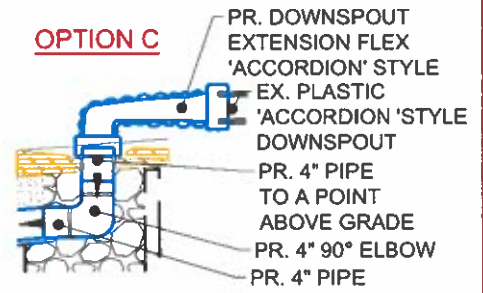
OPTION A



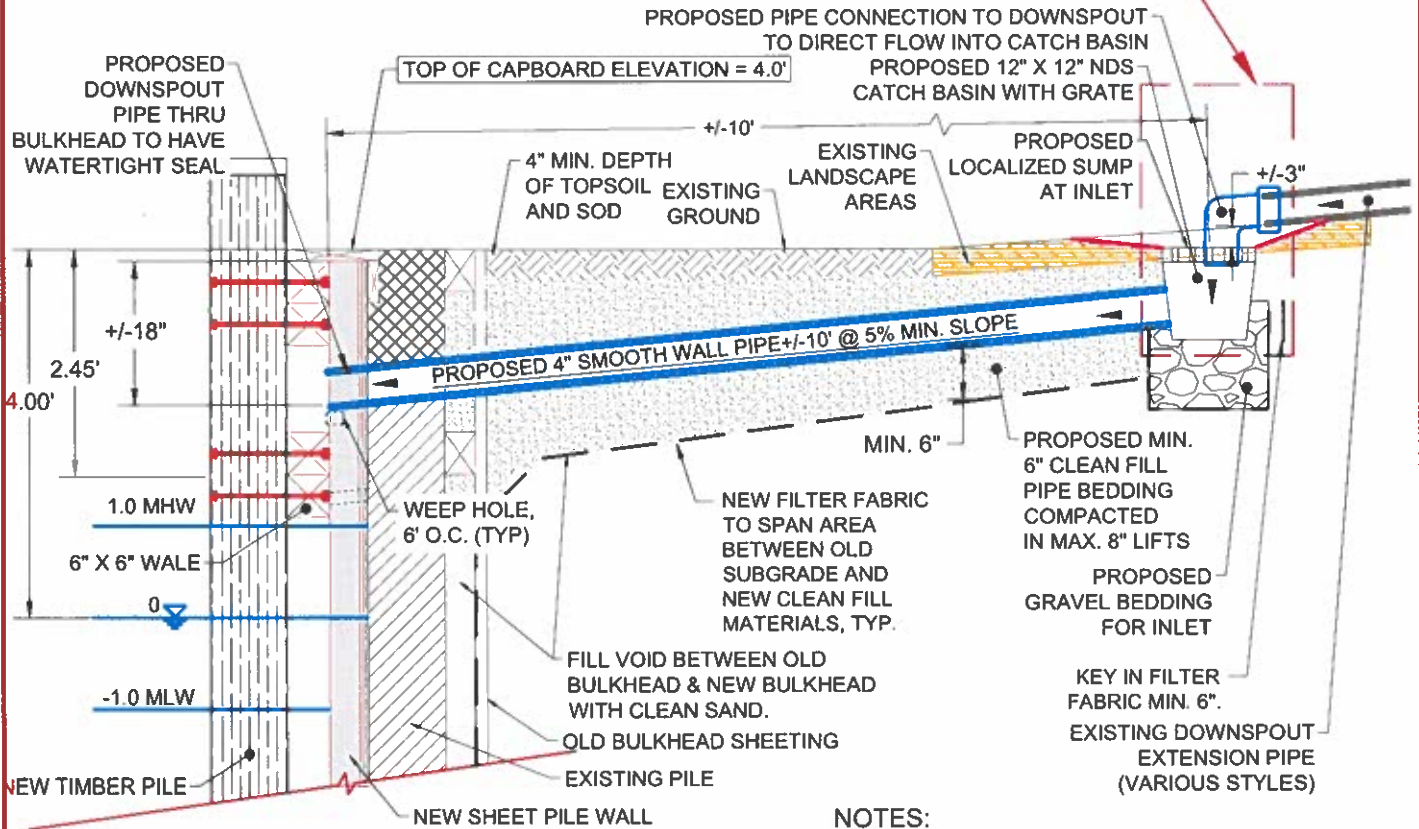
OPTION B



OPTION C



SEE OPTIONS OF POSSIBLE CONNECTIONS



SECTION VIEW

NOTES:

1. ALL MATERIALS AND FITTINGS TO BE MARINE GRADE AND WATERTIGHT.
2. PIPE THRU BULKHEAD TO BE SMOOTH WALL (NON-CORRUGATED).
3. PIPE AND INLET TO BE INSTALLED PER MANUFACTURERS STANDARDS AND SPECIFICATIONS.



SCALE: 1" = 2'

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MARINA VILLAGE
BULKHEAD
REPLACEMENT

DOWNSPOUT
PIPE THRU
BULKHEAD DETAIL

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Scale:	1" = 2'
Sheet:	17 of 17