

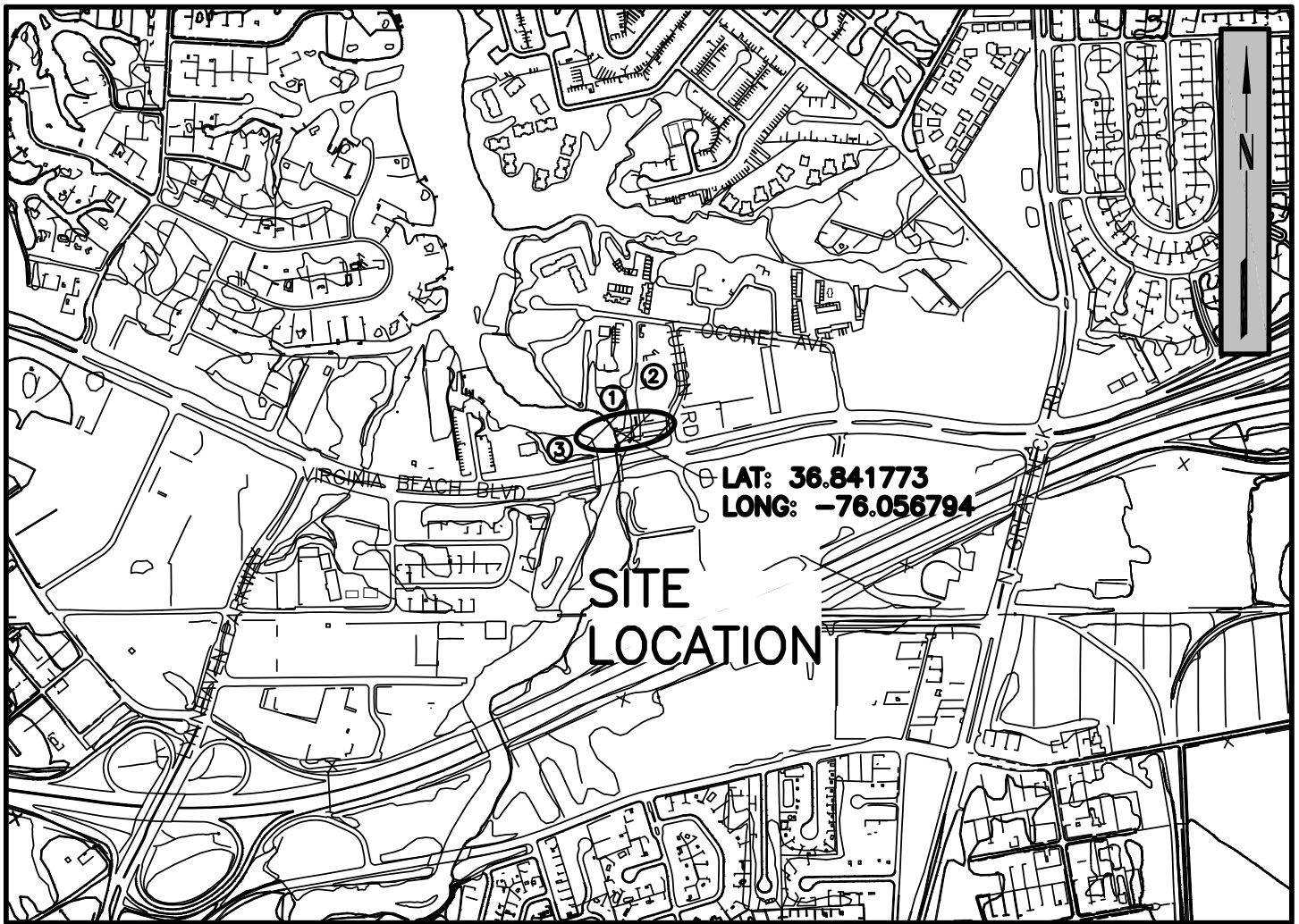
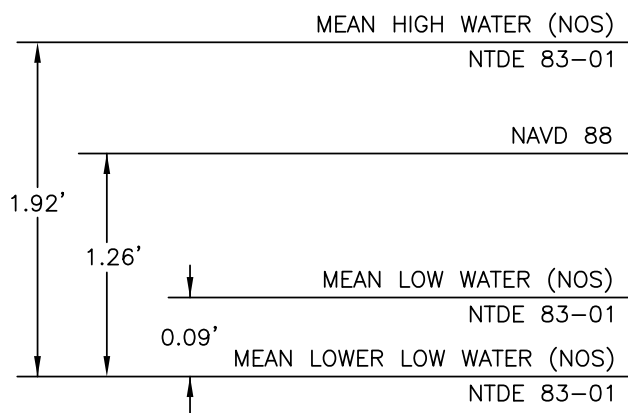
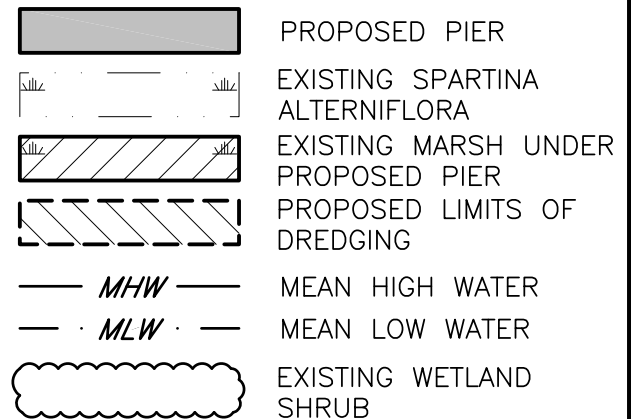


DIAGRAM OF DATUM PLANE

NATIONAL TIDAL DATUM EPOCH (NTDE) 1983-2001



LEGEND:



PURPOSE: PRIVATE
DATUM: N.O.S. NAVD 88=0.0'
ADJACENT PROPERTY OWNERS:
 ① JANET PRUETT
 ② THE PEP BOYS
 ③ JEFFREY ANDREW TIBBIT

LOCATION MAP

PREPARED BY:

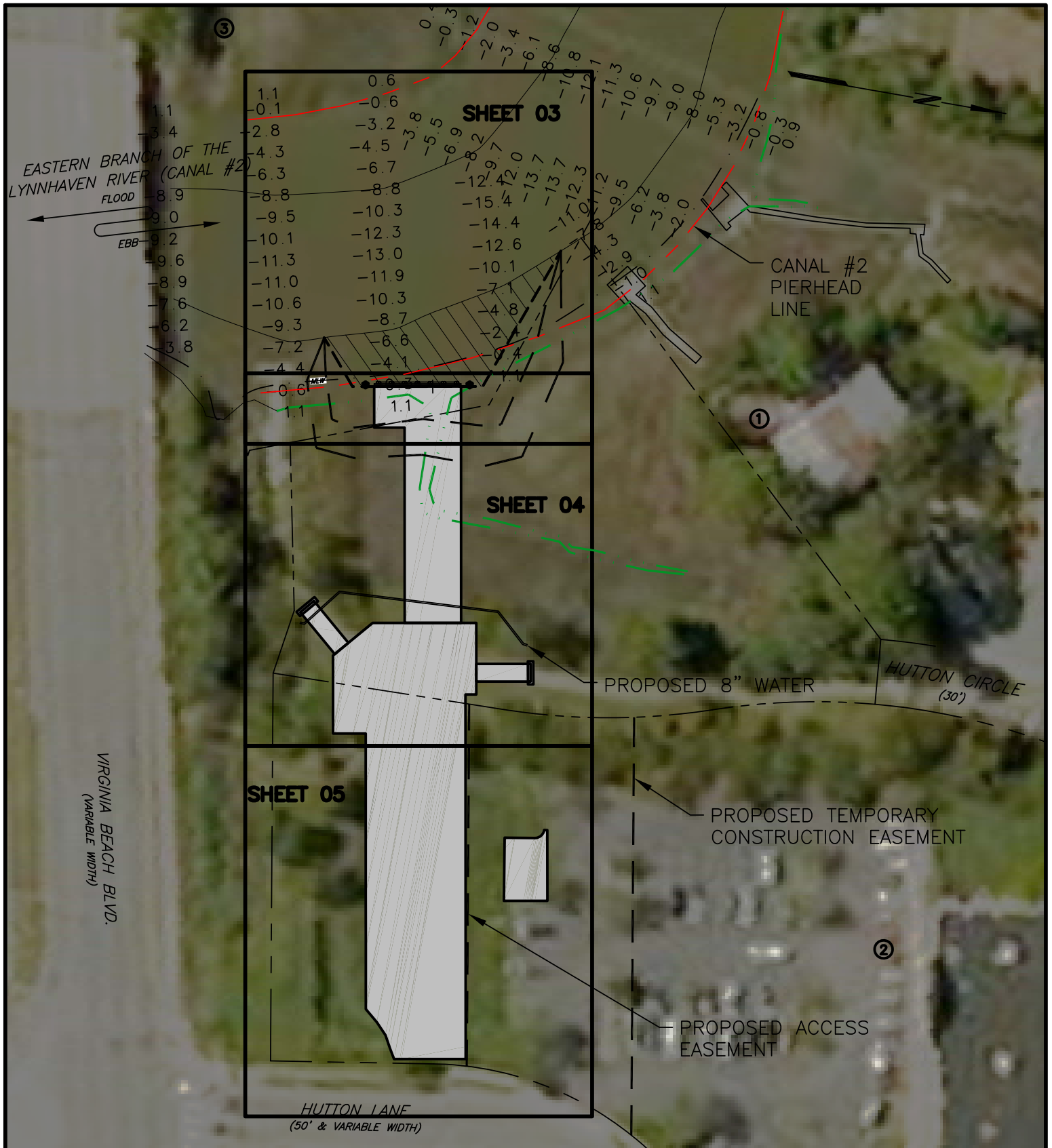
Waterway

Surveys & Engineering, Ltd.
 Virginia Beach, Virginia

PROPOSED PIER & DOLPHINS
IN: EASTERN BRANCH LYNNHAVEN RIVER
CITY: VIRGINIA BEACH **STATE:** VIRGINIA
APPLICATION BY: CITY OF VIRGINIA BEACH
SCALE: 1"=1,000' **DATE:** JUNE 23, 2017
SHEET 1 OF 8 **REVISION:** AUGUST 4, 2017

5112-00-22-01

DISCLAIMER: JOINT PERMIT APPLICATION IS NOT FOR CONSTRUCTION. TO BE USED FOR PERMITTING PURPOSES ONLY.



PURPOSE: PRIVATE
 DATUM: N.O.S. NAVD 88=0.0'
 ADJACENT PROPERTY OWNERS:
 ① JANET PRUETT
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SHEET LAYOUT

PREPARED BY:

Waterway

Surveys & Engineering, Ltd.
 Virginia Beach, Virginia

PROPOSED PIER & DOLPHINS
 IN: EASTERN BRANCH LYNNHAVEN RIVER
 CITY: VIRGINIA BEACH STATE: VIRGINIA
 APPLICATION BY: CITY OF VIRGINIA BEACH
 SCALE: 1"=60' DATE: JUNE 23, 2017
 SHEET 2 OF 8 REVISION: AUGUST 4, 2017

5112-00-22-02

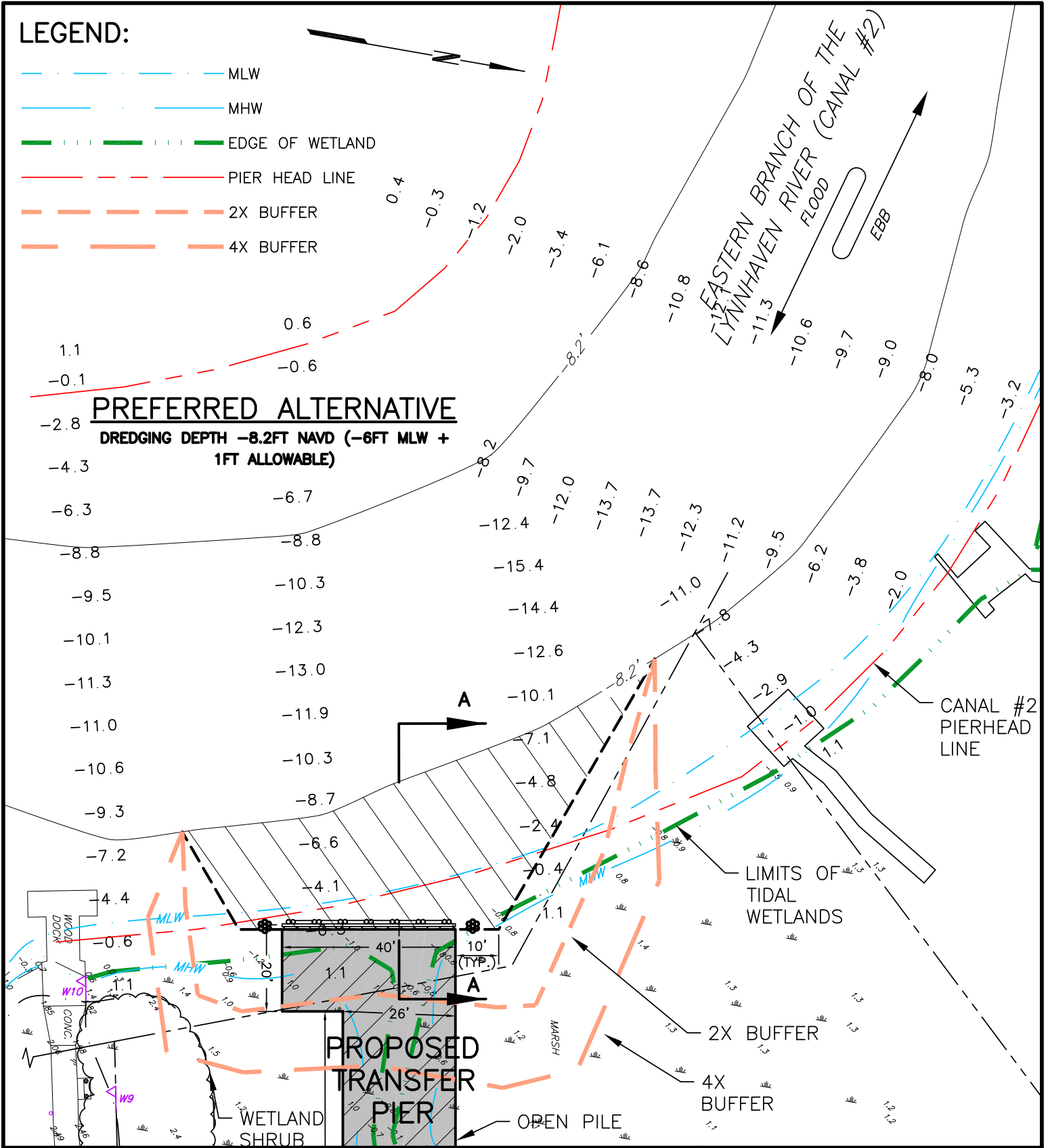
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LEGEND:

- MLW
- MHW
- EDGE OF WETLAND
- PIER HEAD LINE
- 2X BUFFER
- 4X BUFFER

PREFERRED ALTERNATIVE

DREDGING DEPTH -8.2FT NAVD (-6FT MLW + 1FT ALLOWABLE)



PURPOSE: PRIVATE
 DATUM: N.O.S. NAVD 88=0.0'
 ADJACENT PROPERTY OWNERS:
 ① JANET PRUETT
 ② THE PEP BOYS
 ③ JEFFREY ANDREW TIBBIT

PLAN VIEW

PREPARED BY:

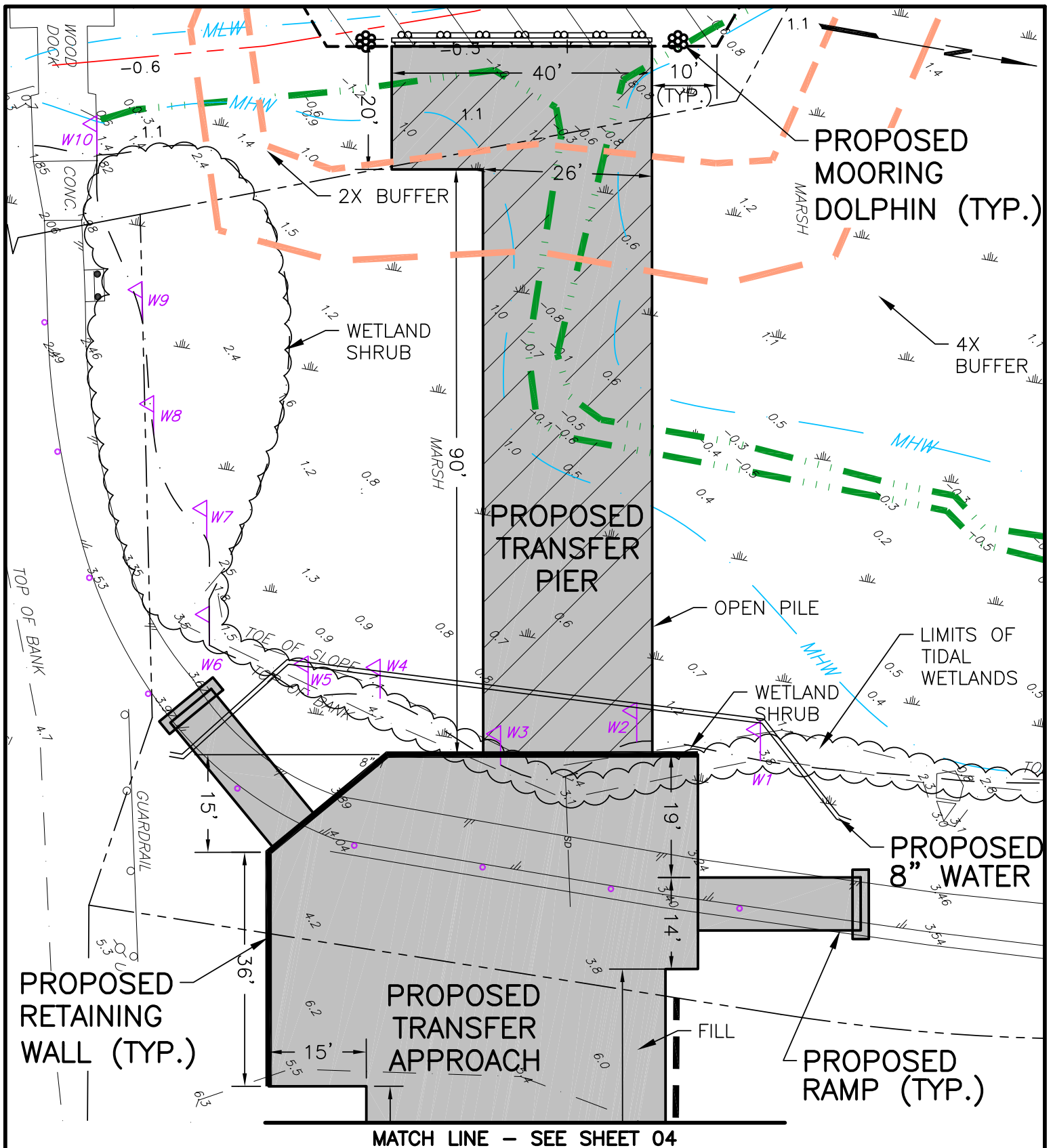
Waterway

Surveys & Engineering, Ltd.
 Virginia Beach, Virginia

PROPOSED PIER & DOLPHINS
 IN: EASTERN BRANCH LYNNHAVEN RIVER
 CITY: VIRGINIA BEACH STATE: VIRGINIA
 APPLICATION BY: CITY OF VIRGINIA BEACH
 SCALE: 1"=30' DATE: JULY 18, 2017
 SHEET 3 OF 8 REVISION: AUGUST 4, 2017

5112-00-22-03

DISCLAIMER: JOINT PERMIT APPLICATION IS NOT FOR CONSTRUCTION. TO BE USED FOR PERMITTING PURPOSES ONLY.



MATCH LINE – SEE SHEET 04

PURPOSE: PRIVATE
 DATUM: N.O.S. NAVD 88=0.0'
 ADJACENT PROPERTY OWNERS:
 ① JANET PRUETT
 ② THE PEP BOYS
 ③ JEFFREY ANDREW TIBBIT

PLAN VIEW

PREPARED BY:

Waterway

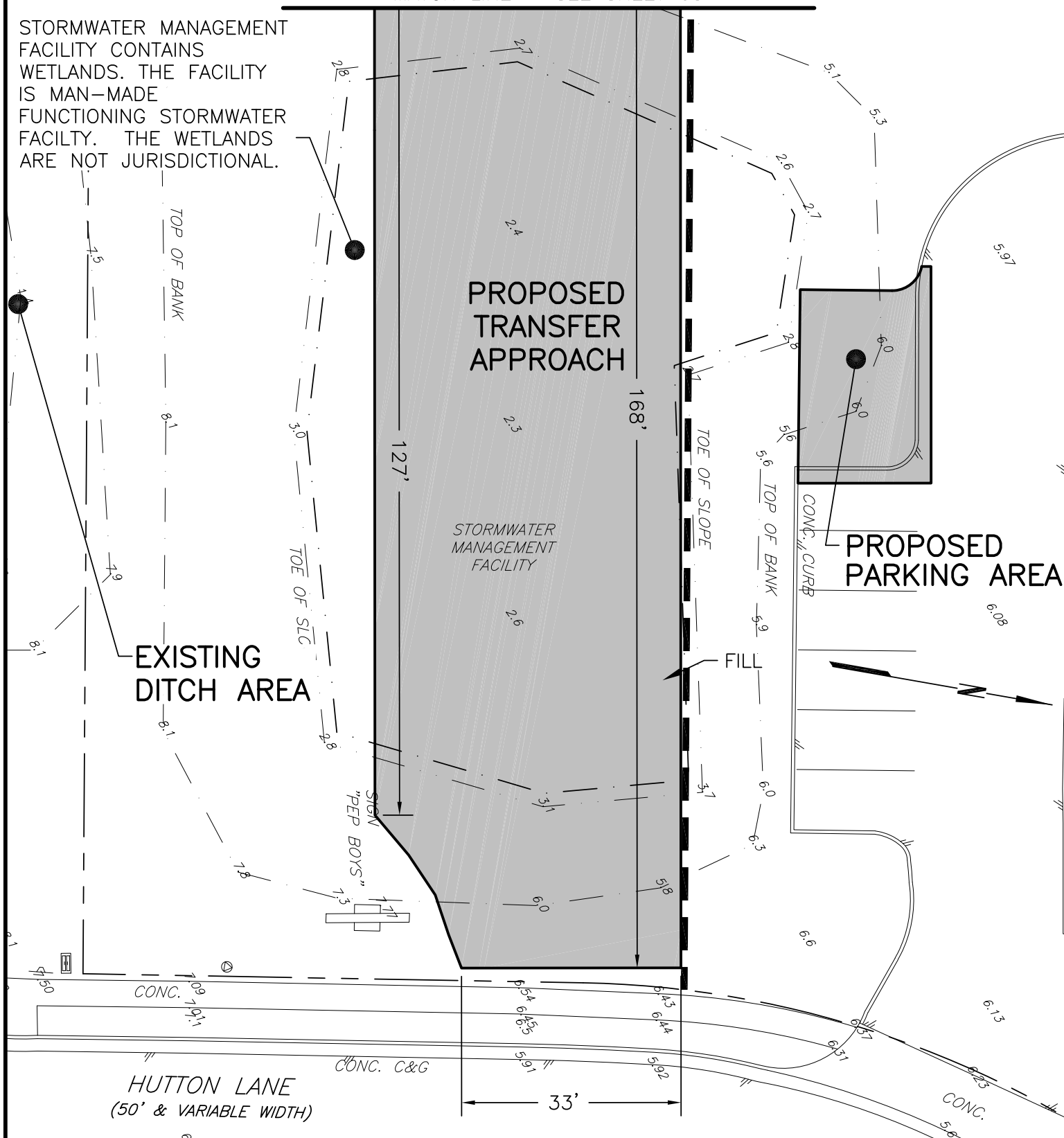
Surveys & Engineering, Ltd.
 Virginia Beach, Virginia

PROPOSED PIER & DOLPHINS
 IN: EASTERN BRANCH LYNNHAVEN RIVER
 CITY: VIRGINIA BEACH STATE: VIRGINIA
 APPLICATION BY: CITY OF VIRGINIA BEACH
 SCALE: 1"=20' DATE: JUNE 23, 2017
 SHEET 4 OF 8 REVISION: AUGUST 4, 2017

5112-00-22-04

DISCLAIMER: JOINT PERMIT APPLICATION IS NOT FOR CONSTRUCTION. TO BE USED FOR PERMITTING PURPOSES ONLY.

STORMWATER MANAGEMENT
FACILITY CONTAINS
WETLANDS. THE FACILITY
IS MAN-MADE
FUNCTIONING STORMWATER
FACILITY. THE WETLANDS
ARE NOT JURISDICTIONAL.



PLAN VIEW

PREPARED BY:

Waterway
Surveys & Engineering, Ltd.
Virginia Beach, Virginia

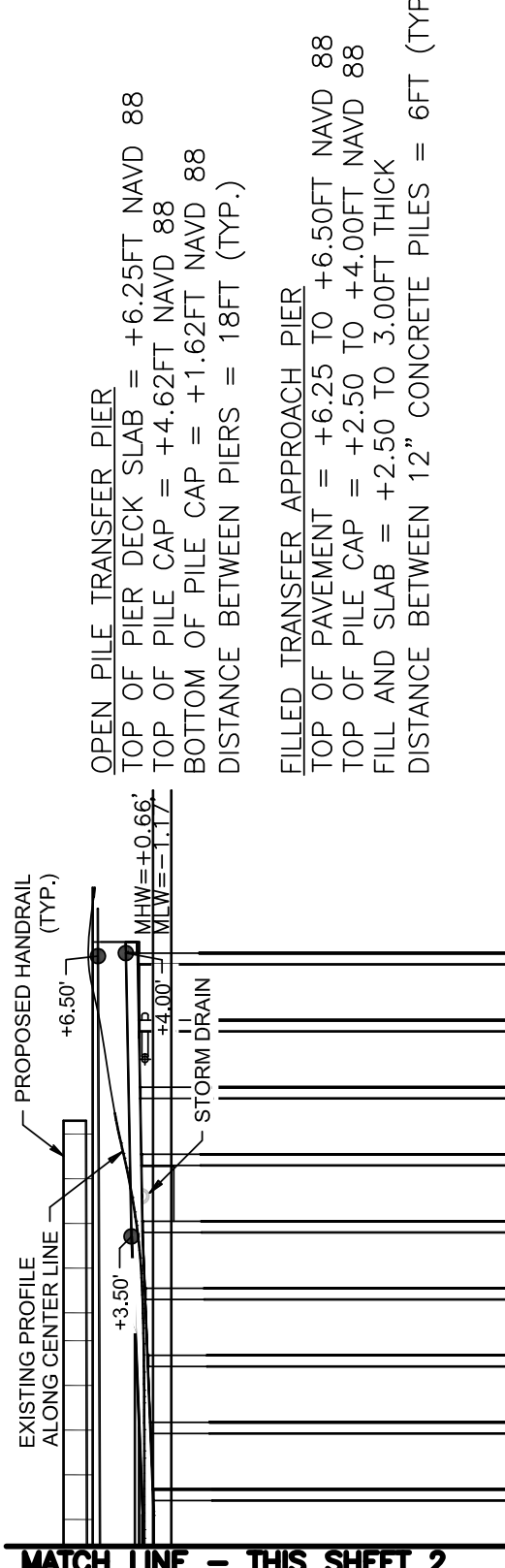
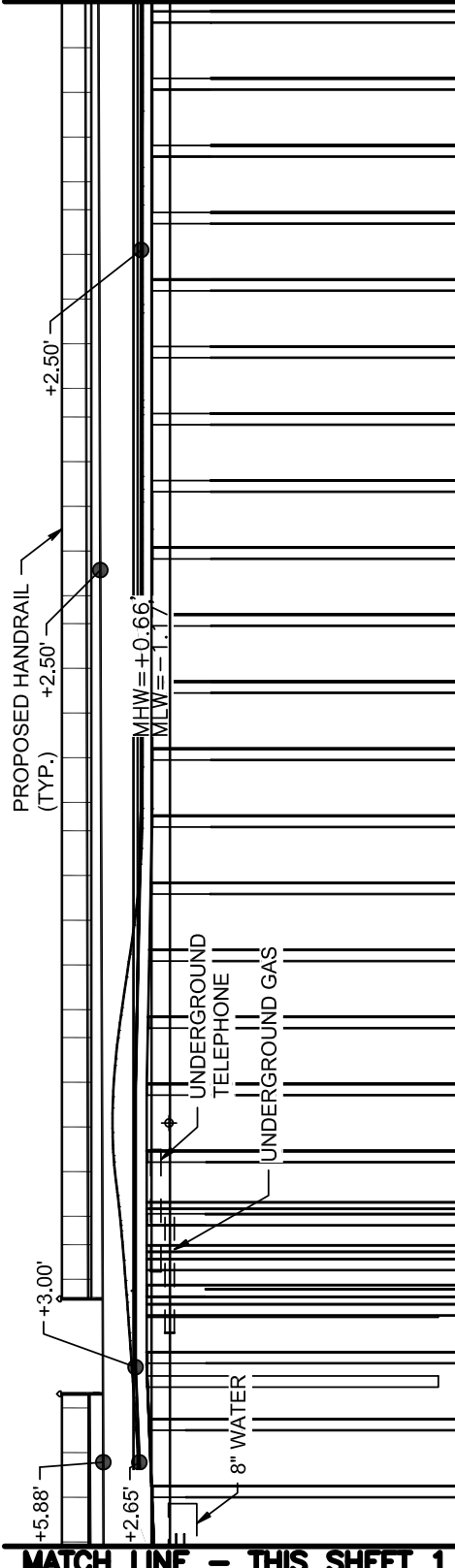
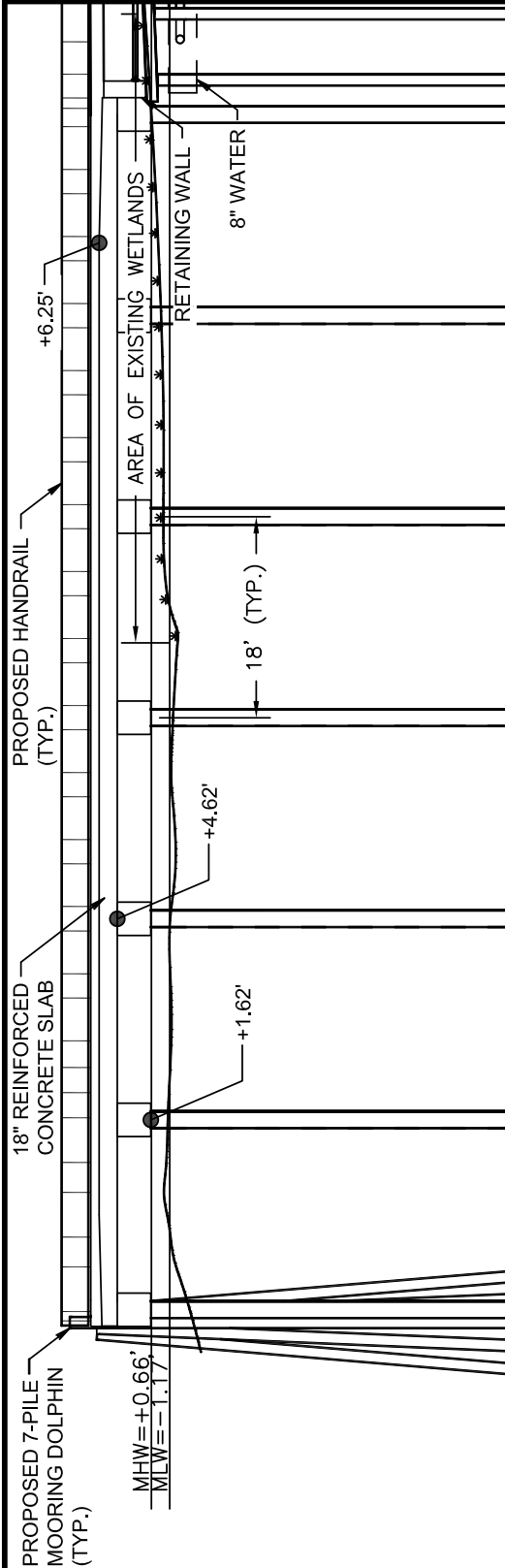
PROPOSED PIER & DOLPHINS
IN: EASTERN BRANCH LYNNHAVEN RIVER
CITY: VIRGINIA BEACH STATE: VIRGINIA
APPLICATION BY: CITY OF VIRGINIA BEACH
SCALE: 1"=20' DATE: JUNE 23, 2017
SHEET 5 OF 8 REVISION: AUGUST 4, 2017

5112-00-22-05

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MATCH LINE - THIS SHEET 1

MATCH LINE - THIS SHEET 2



OPEN PILE TRANSFER PIER

TOP OF PIER DECK SLAB = +6.25FT NAVD 88
 TOP OF PILE CAP = +4.62FT NAVD 88
 BOTTOM OF PILE CAP = +1.62FT NAVD 88
 DISTANCE BETWEEN PIERS = 18FT (TYP.)

FILLED TRANSFER APPROACH PIER

TOP OF PAVEMENT = +6.25 TO +6.50FT NAVD 88
 TOP OF PILE CAP = +2.50 TO +4.00FT NAVD 88
 FILL AND SLAB = +2.50 TO 3.00FT THICK
 DISTANCE BETWEEN 12" CONCRETE PILES = 6FT (TYP.)

PURPOSE: PRIVATE
 DATUM: N.O.S. NAVD 88=0.0'
 ADJACENT PROPERTY OWNERS:
 ① JANET PRUETT
 ② THE PEP BOYS
 ③ JEFFREY ANDREW TIBBIT

TYPICAL SECTION

PREPARED BY:

Waterway

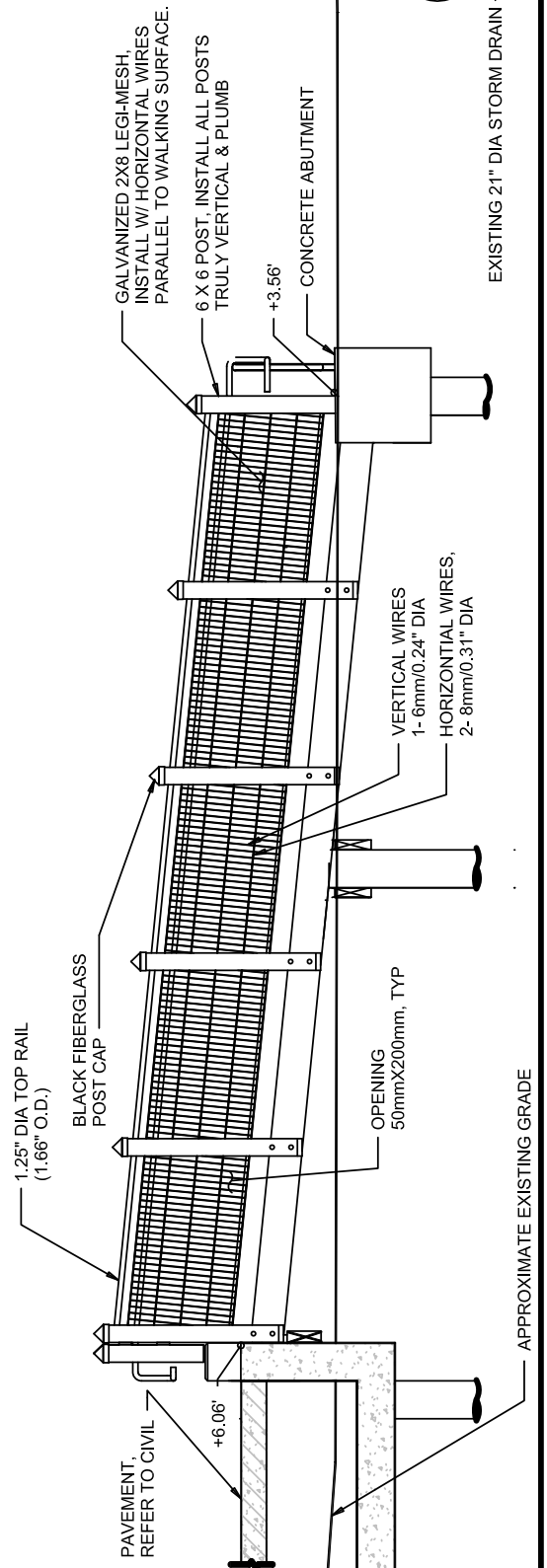
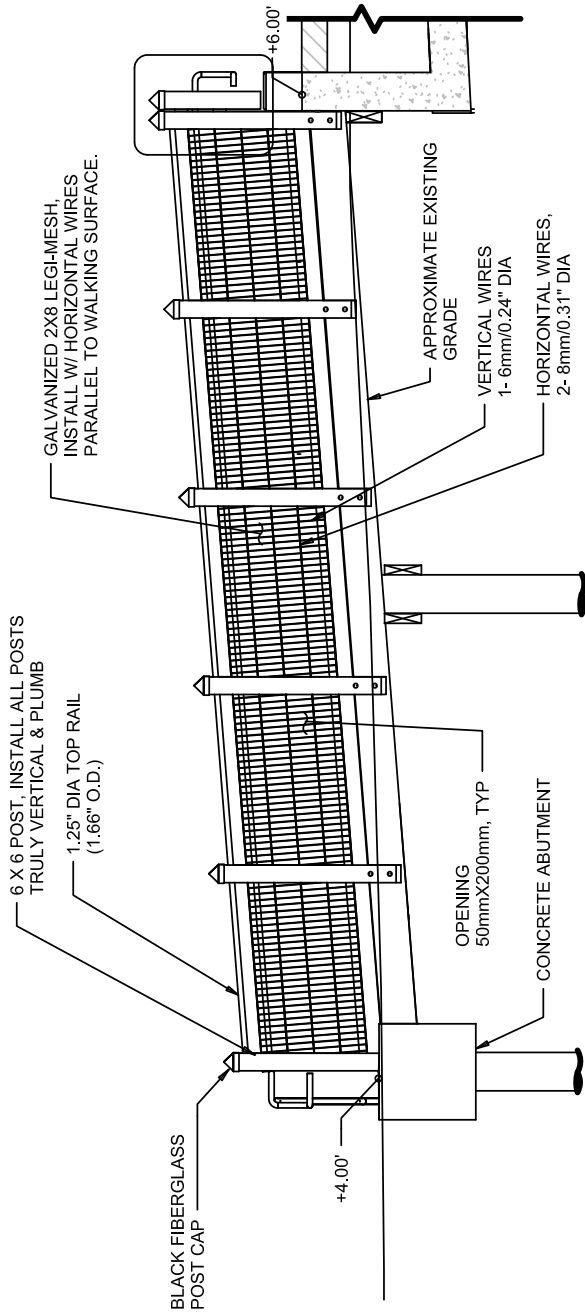
Surveys & Engineering, Ltd.
 Virginia Beach, Virginia

PROPOSED PIER & DOLPHINS
 IN: EASTERN BRANCH LYNNHAVEN RIVER
 CITY: VIRGINIA BEACH STATE: VIRGINIA
 APPLICATION BY: CITY OF VIRGINIA BEACH
 SCALE: N.T.S. DATE: JUNE 23, 2017
 SHEET 6 OF 8 REVISION: AUGUST 4, 2017

5112-00-22-08

DISCLAIMER: JOINT PERMIT APPLICATION IS NOT FOR CONSTRUCTION. TO BE USED FOR PERMITTING PURPOSES ONLY.

NOTE: ALL WORK ABOVE MHW.



PURPOSE: PRIVATE
 DATUM: N.O.S. NAVD 88=0.0'
 ADJACENT PROPERTY OWNERS:
 ① JANET PRUETT
 ② THE PEP BOYS
 ③ JEFFREY ANDREW TIBBIT

HANDRAIL DETAILS

PREPARED BY:

Waterway

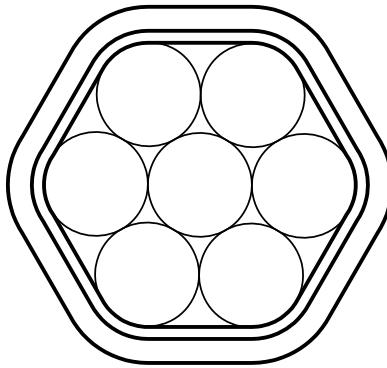
Surveys & Engineering, Ltd.
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PROPOSED PIER & DOLPHINS
 IN: EASTERN BRANCH LYNNHAVEN RIVER
 CITY: VIRGINIA BEACH STATE: VIRGINIA
 APPLICATION BY: CITY OF VIRGINIA BEACH
 SCALE: N.T.S. DATE: JUNE 23, 2017
 SHEET 7 OF 9 REVISION: AUGUST 4, 2017

5112-00-22-07

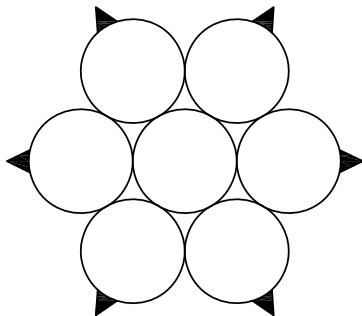
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7-PILE DOLPHIN WRAPPING OF WIRE

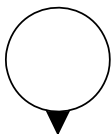
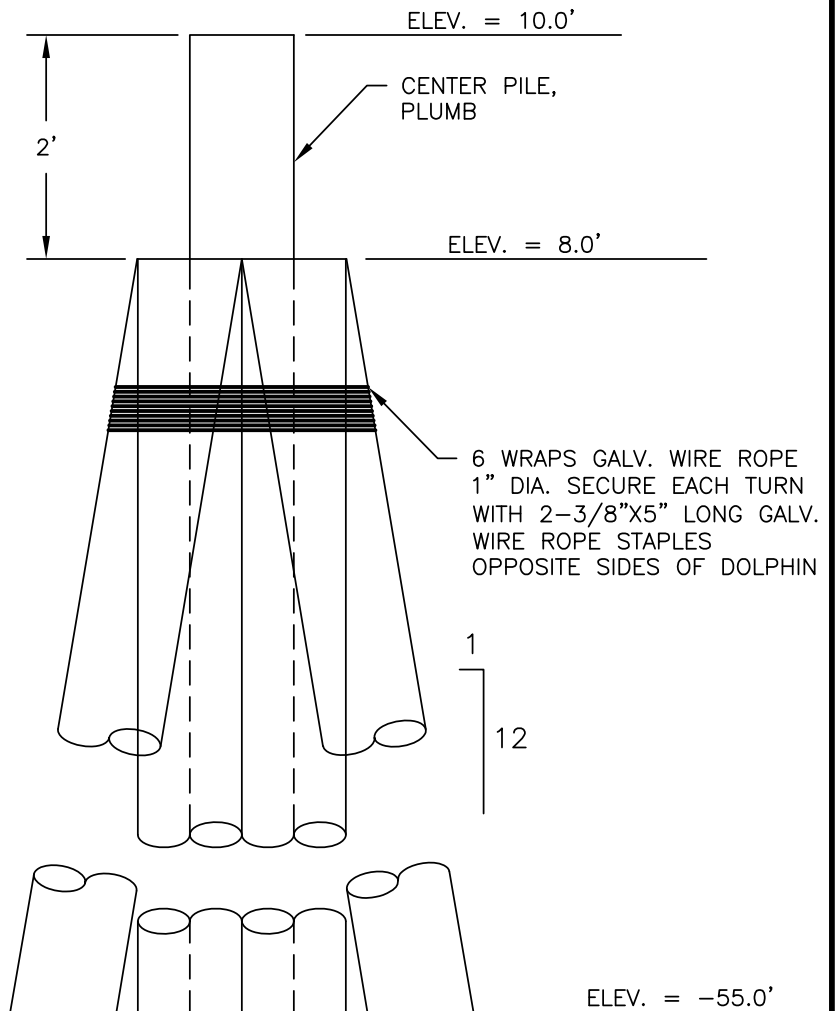


GALVANIZED STEEL SHEET
METAL CAP ON EACH PILE
OVERLAP EDGE 2" ALL
AROUND

7-PILE DOLPHIN
PLAN VIEW



7-PILE DOLPHIN
ELEVATION VIEW



BATTERED PILE

PURPOSE: PRIVATE
DATUM: N.O.S. NAVD 88=0.0'
ADJACENT PROPERTY OWNERS:
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③ JEFFREY ANDREW TIBBIT

MOORING DOLPHIN

PREPARED BY:

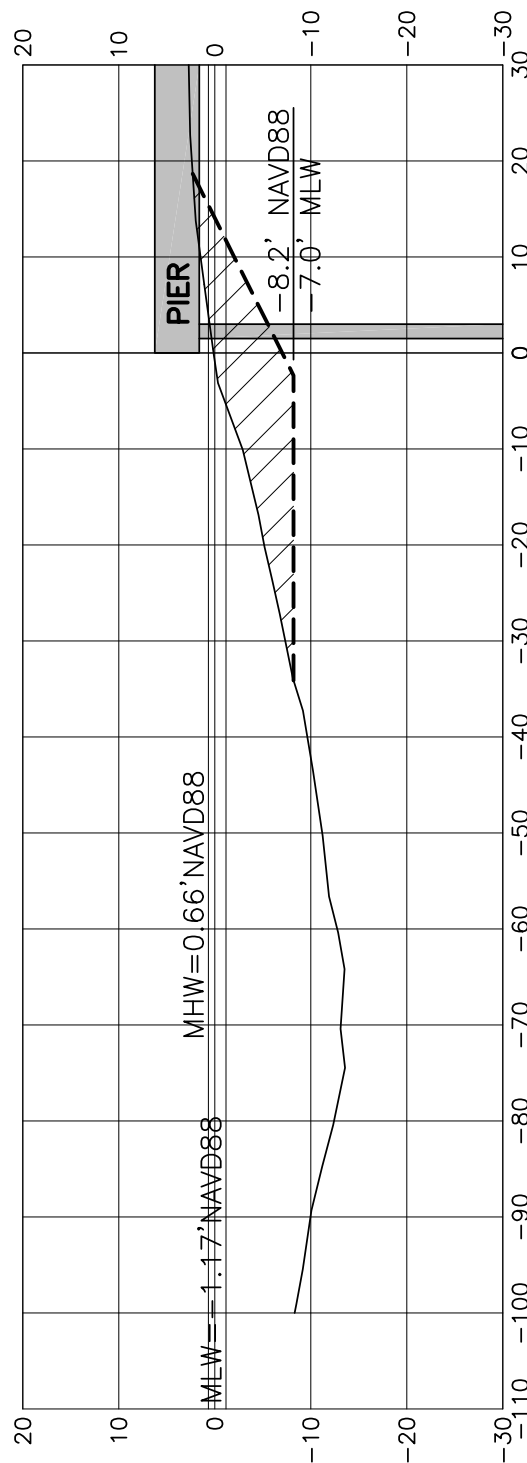
Waterway

Surveys & Engineering, Ltd.
Virginia Beach, Virginia

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SHEET 8 OF 9 REVISION: AUGUST 4, 2017

5112-00-22-08

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SECTION A-A

PURPOSE: PRIVATE
 DATUM: N.O.S. NAVD 88=0.0'
 ADJACENT PROPERTY OWNERS:
 ① JANET PRUETT
 ② THE PEP BOYS
 ③ JEFFREY ANDREW TIBBIT

SECTION A-A

PREPARED BY:

Waterway

Surveys & Engineering, Ltd.
 Virginia Beach, Virginia

PROPOSED PIER & DOLPHINS
 IN: EASTERN BRANCH LYNNHAVEN RIVER
 CITY: VIRGINIA BEACH STATE: VIRGINIA
 APPLICATION BY: CITY OF VIRGINIA BEACH
 SCALE: 1"=20' DATE: JUNE 23, 2017
 SHEET 9 OF 9 REVISION: AUGUST 4, 2017

5112-00-22-09

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LEGEND:

- MLW
- MHW
- EDGE OF WETLAND
- PIER HEAD LINE
- 2X BUFFER
- 4X BUFFER

EXHIBIT A

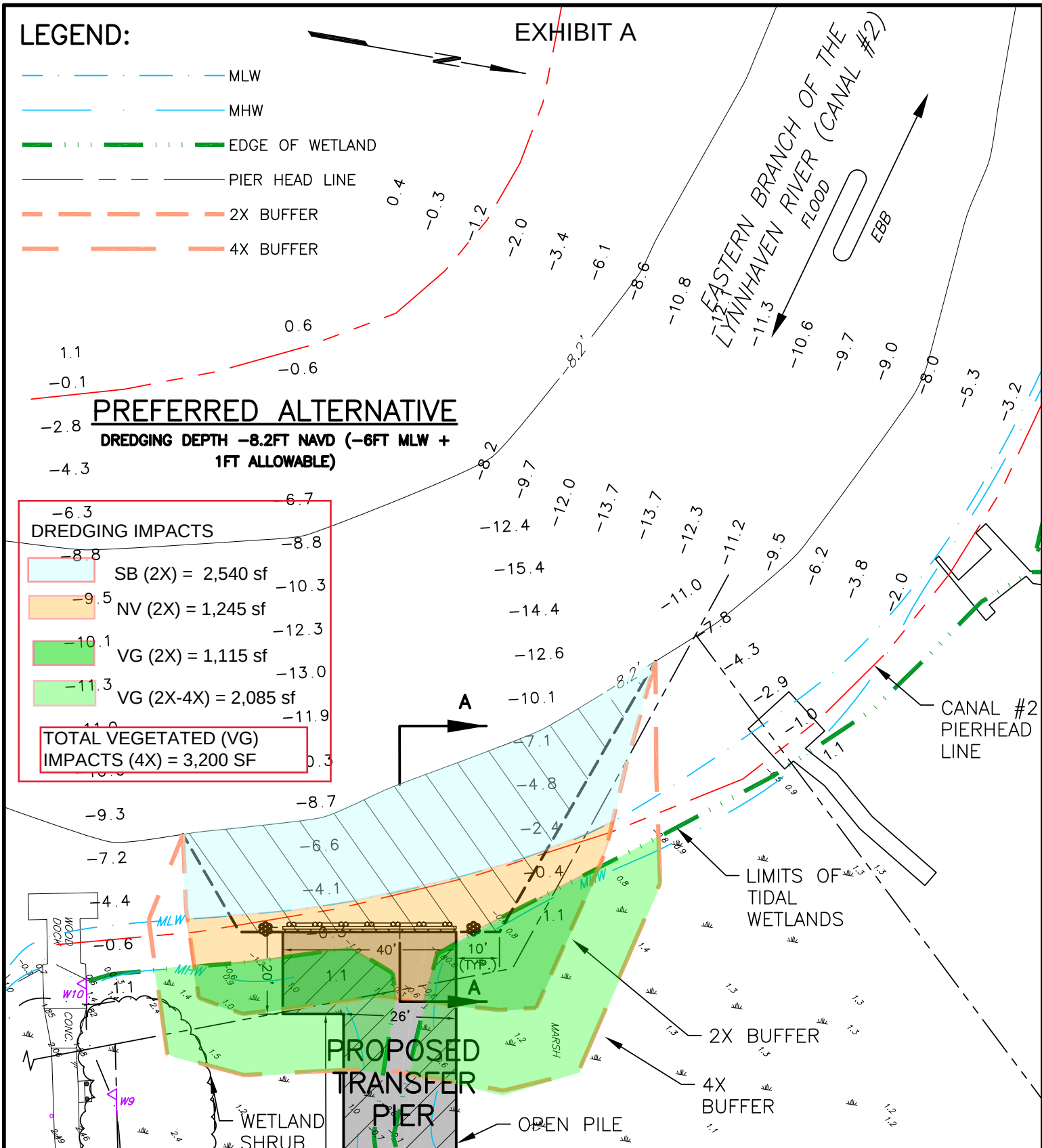
PREFERRED ALTERNATIVE

DREDGING DEPTH -8.2FT NAVD (-6FT MLW + 1FT ALLOWABLE)

DREDGING IMPACTS

- SB (2X) = 2,540 sf
- NV (2X) = 1,245 sf
- VG (2X) = 1,115 sf
- VG (2X-4X) = 2,085 sf

TOTAL VEGETATED (VG) IMPACTS (4X) = 3,200 SF



PLAN VIEW

PREPARED BY:

Waterway

Surveys & Engineering, Ltd.
Virginia Beach, Virginia

PROPOSED PIER & DOLPHINS

IN: EASTERN BRANCH LYNNHAVEN RIVER

CITY: VIRGINIA BEACH

STATE: VIRGINIA

APPLICATION BY: CITY OF VIRGINIA BEACH

SCALE: 1"=30'

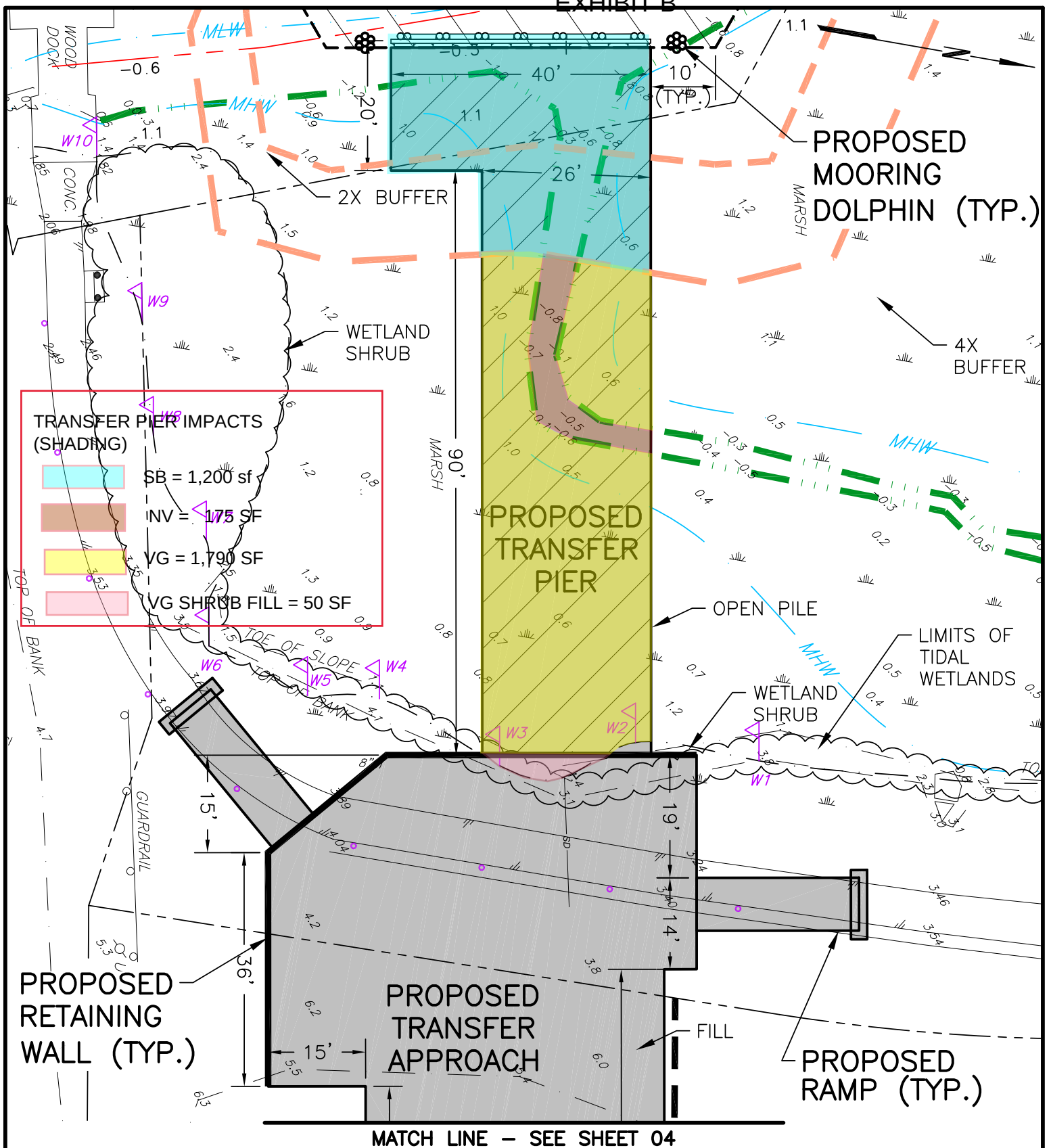
DATE: JULY 18, 2017

SHEET 3 OF 8

REVISION: AUGUST 4, 2017

5112-00-22-03

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SHEET 4 OF 8 **REVISION:** AUGUST 4, 2017

5112-00-22-04

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