

Ohio River

Ohio River

State Route 7

State Route 872

- Project Area
- Hendershot / Lewis Parcels (312 acres)
- Dilles Bottom Parcels (28 acres)
- First Energy Parcels (171 acres)
- Ordinary High Water Mark
- Property Boundaries
- State Boundary

**Notes:**  
The aerial photo was acquired through the ESRI Imagery web service. Aerial photography dated 2014.



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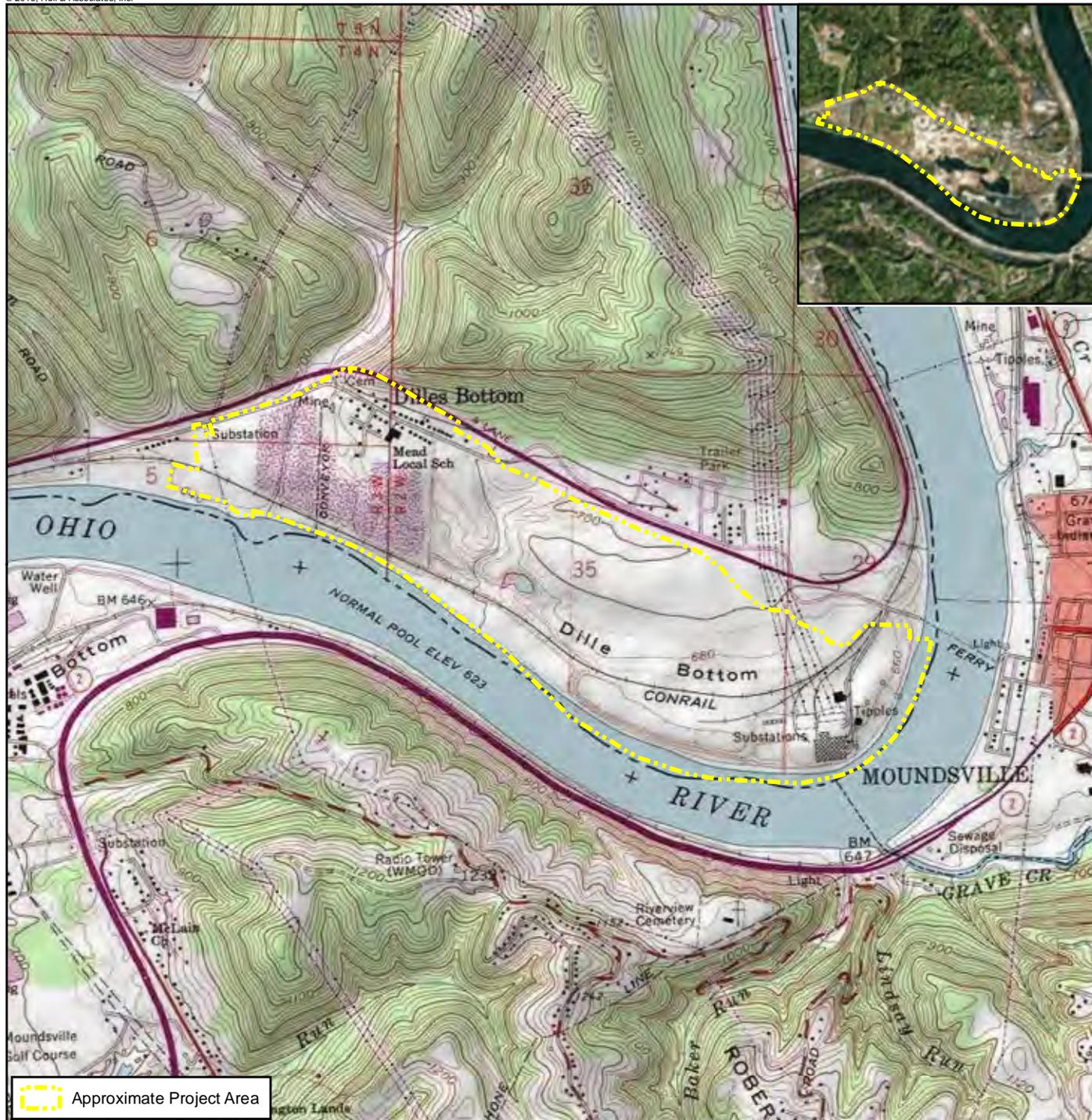
May 2016  
PTTGCA US Petrochemical Complex Project  
Existing Conditions

Project Site

Dilles Bottom, Belmont County, Ohio

Figure

6.0



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0 500 1,000 2,000

Feet  
1:24,000



**Quad: Businessburg**

Source: The topographic map was acquired through the USGS Topographic Map web service.

The aerial photo in the inset was acquired through the ESRI Image web service. Aerial photography dated 2014.



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PTTGCA US Petrochemical Complex Project  
Existing Conditions

**Vicinity Map**

Dilles Bottom, Belmont County, Ohio

Date:

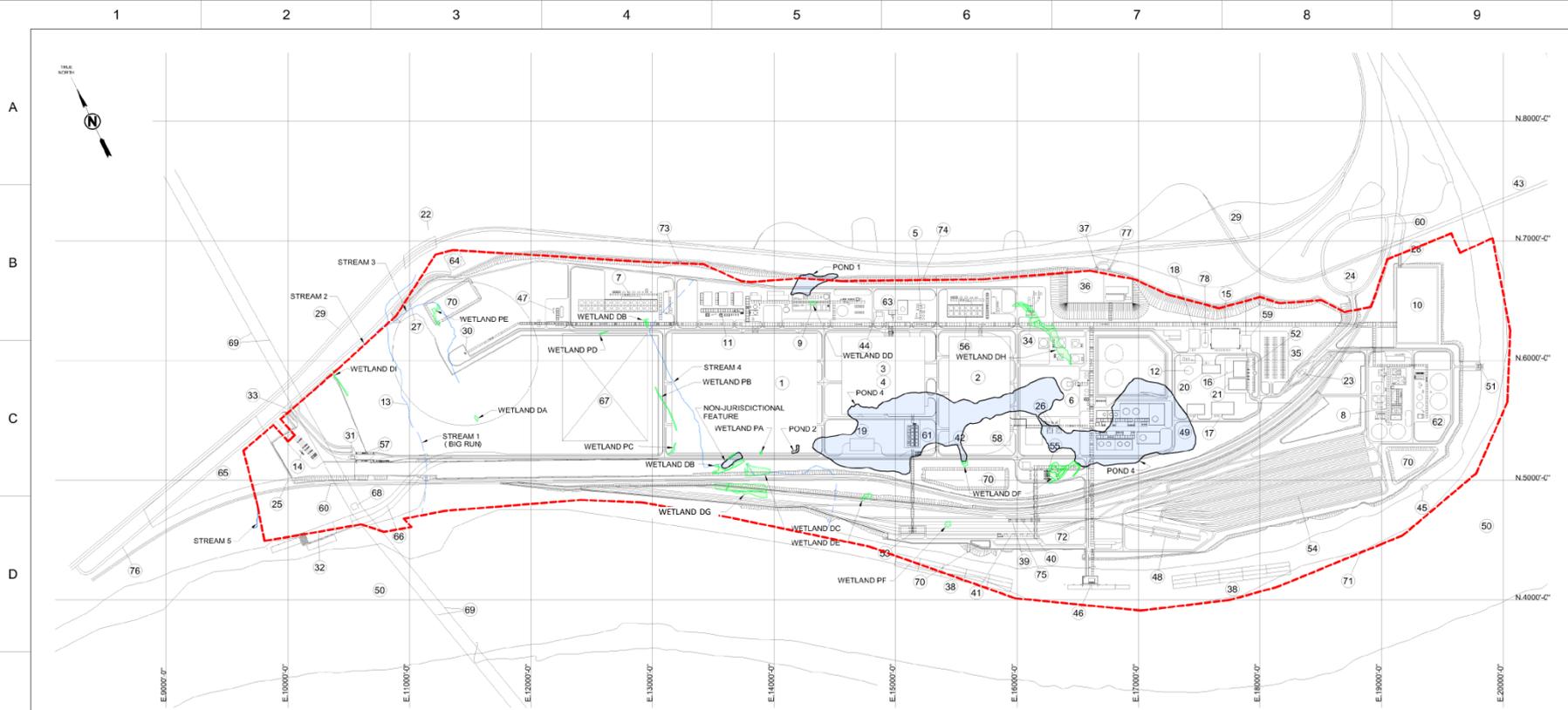
May 2016

File Name:  
OWV002\_07\_Fig06.1\_Vicinity.mxd

Edited: 5/3/2016 By: moppel

Figure

**6.1**



**INDEX**

ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	ETHANE CRACKER UNIT 1	21	CAFETERIA / CANTEN BUILDING	61	BLENDING SILOS
2	EOEG UNIT 2	22	PLANT PROPERTY LINE	62	RAW WATER TREATMENT
3	HDPE UNIT 3	23	GUARD HOUSE #1 ( MAIN ENTRANCE)	63	WET AIR OXIDATION UNIT
4	HDPE UNIT 4	24	MAIN ENTRANCE	64	DILLES BOTTOM CEMETERY
5	CENTRAL UTILITIES AREA ( IA, PA, PW & FG)	25	COORDINATE REFERENCE POINT ( SEE NOTE 1)	65	PROBABLE LAND ACQUISITION
6	TANK FARM	26	ETHYLENE OXIDE TANKS	66	HEAVY HALL ROAD
7	COOLING TOWER ( ECU / HDPE)	27	SERVICE ROAD	67	FUTURE AREA 900 X 700
8	WASTE WATER TREATMENT AREA	28	ASU UNIT ENTRANCE	68	EXISTING ELECTRICAL TRANSMISSION TOWER
9	DEMINERALIZED WATER TREATMENT	29	OHIO RIVER SCENIC BYWAY ( STATE HWY RTE)	69	EXISTING ELECTRICAL R.O.W.
10	ASU ( AIR SEPARATION UNIT)	30	FLARE ( HP & LP)	70	DETENTION PONDS
11	STEAM PLANT	31	GUARD HOUSE #2	71	OHIO / WEST VIRGINIA STATE BOUNDARY LINE
12	FIREWATER TANK & PUMPS	32	MOF ( MATERIAL OFFLOADING FACILITY)	72	GUARD HOUSE #3
13	BIG RUN CREEK	33	PRODUCT TRUCK ENTRANCE	73	ETHANE / NATURAL GAS PIPELINE ENTRY LOCATION
14	TRUCK STAGING AREA	34	THERMAL OXIDIZER	74	POTABLE WATER PIPELINE ENTRY LOCATION
15	CENTRAL CONTROL BUILDING	35	EMPLOYEE PARKING	75	TRUCK LIQUID UNLOADING
16	ADMINISTRATION BUILDING	36	138KV SWITCHYARD ( BY AEP)	76	OLD STATE HWY 7
17	MAINTENANCE / WORKSHOP BUILDING	37	SWITCHYARD ENTRANCE	77	MAIN SUBSTATION ENTRANCE
18	LABORATORY BUILDING	38	BARGE STORAGE	78	RADIO TOWER
19	CHEMICAL STORAGE WAREHOUSE	39	RAIL CAR LIQUIDS LOADOUT SHELTER		
20	CENTRAL FIRE FIGHTING/EMERGENCY SERVICES BLDG	40	RAIL CAR LIQUIDS LOADOUT OPERATOR SHELTER		
41	RAIL CAR LIQUID LINE DRAIN				
42	TRUCK SOLIDS LOADOUT SHELTER ( FUTURE)				
43	FERRY LANDING ROAD ( HWY 2)				
44	FIELD OPERATOR BUILDING				
45	WATER DISCHARGE STRUCTURE				
46	BARGE LOADING BERTH				
47	FLARE K.O. DRUMS				
48	RAIL CAR WASH SHELTER				
49	SPARE PARTS WAREHOUSE				
50	OHIO RIVER				
51	WATER INTAKE STRUCTURE				
52	ADMINISTRATION BUILDING / VISITOR PARKING				
53	RAIL CAR SOLIDS LOADOUT SHELTER				
54	RAIL CAR STORAGE				
55	TRUCK LIQUID LOADOUT SHELTER				
56	COOLING TOWER ( EO / EG)				
57	TRUCK SCALE				
58	LOGISTICS BUILDING ( BARGE, RAIL, TRUCK LOADING)				
59	CHANGE FACILITIES BUILDING				
60	EXISTING RAILROAD				

**LEGEND:**

- PROPERTY BOUNDARY - - - - -
- STREAMS - - - - -
- WETLANDS - - - - -
- PONDS - - - - -

**NOTE:**

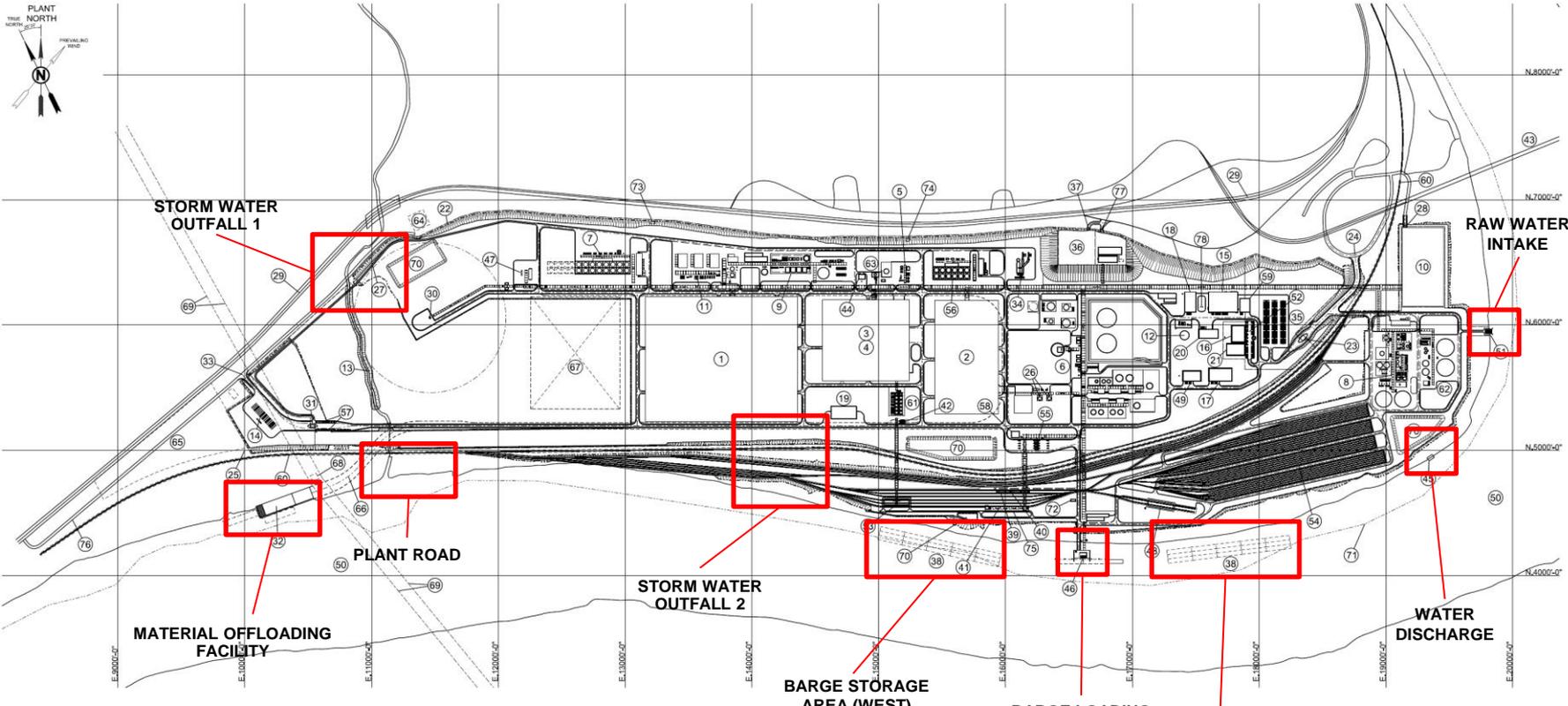
1. PLANT COORDINATES N.5000'-0", E.10000'-0" ARE EQUIVALENT TO STATE PLANE COORDINATES N.704000'-0", E.2448000'-0" ( NAD83/OHIO SOUTH (34G) / U.S. SURVEY FEET ) .

0 100 200 300 400 500 1000  
SCALE (FEET)

Figure 6.7

MINIMAL DEGRADATION  
ALTERNATIVE - A

26056-000-P1-0000-0001



INDEX					
ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION
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2	EO/EG UNIT 2	22	PLANT PROPERTY LINE	42	TRUCK SOLIDS LOADOUT SHELTER ( FUTURE)
3	HDPE UNIT 3	23	GUARD HOUSE #1 ( MAIN ENTRANCE)	43	FERRY LANDING ROAD ( HWY 2)
4	HDPE UNIT 4	24	MAIN ENTRANCE	44	FIELD OPERATOR BUILDING
5	CENTRAL UTILITIES AREA ( IA, PA, PW & FG)	25	COORDINATE REFERENCE POINT ( SEE NOTE 1)	45	WATER DISCHARGE STRUCTURE
6	TANK FARM	26	ETHYLENE OXIDE TANKS	46	BARGE LOADING BERTH
7	COOLING TOWER ( ECU / HDPE)	27	SERVICE ROAD	47	FLARE K.O. DRUMS
8	WASTE WATER TREATMENT AREA	28	ASU UNIT ENTRANCE	48	RAIL CAR WASH SHELTER
9	DIMINERALIZED WATER TREATMENT	29	OHIO RIVER SCENIC BYWAY ( STATE HWY RTE#)	49	SPARE PARTS WAREHOUSE
10	ASU ( AIR SEPARATION UNIT)	30	FLARE ( HP & LP)	50	OHIO RIVER
11	STEAM PLANT	31	GUARD HOUSE #2	51	WATER INTAKE STRUCTURE
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76	OLD STATE HWY 7	77	MAIN SUBSTATION ENTRANCE	78	RADIO TOWER

**BARGE STORAGE AREA (EAST)**

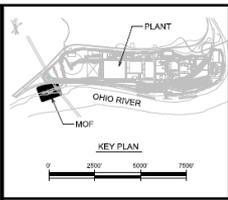
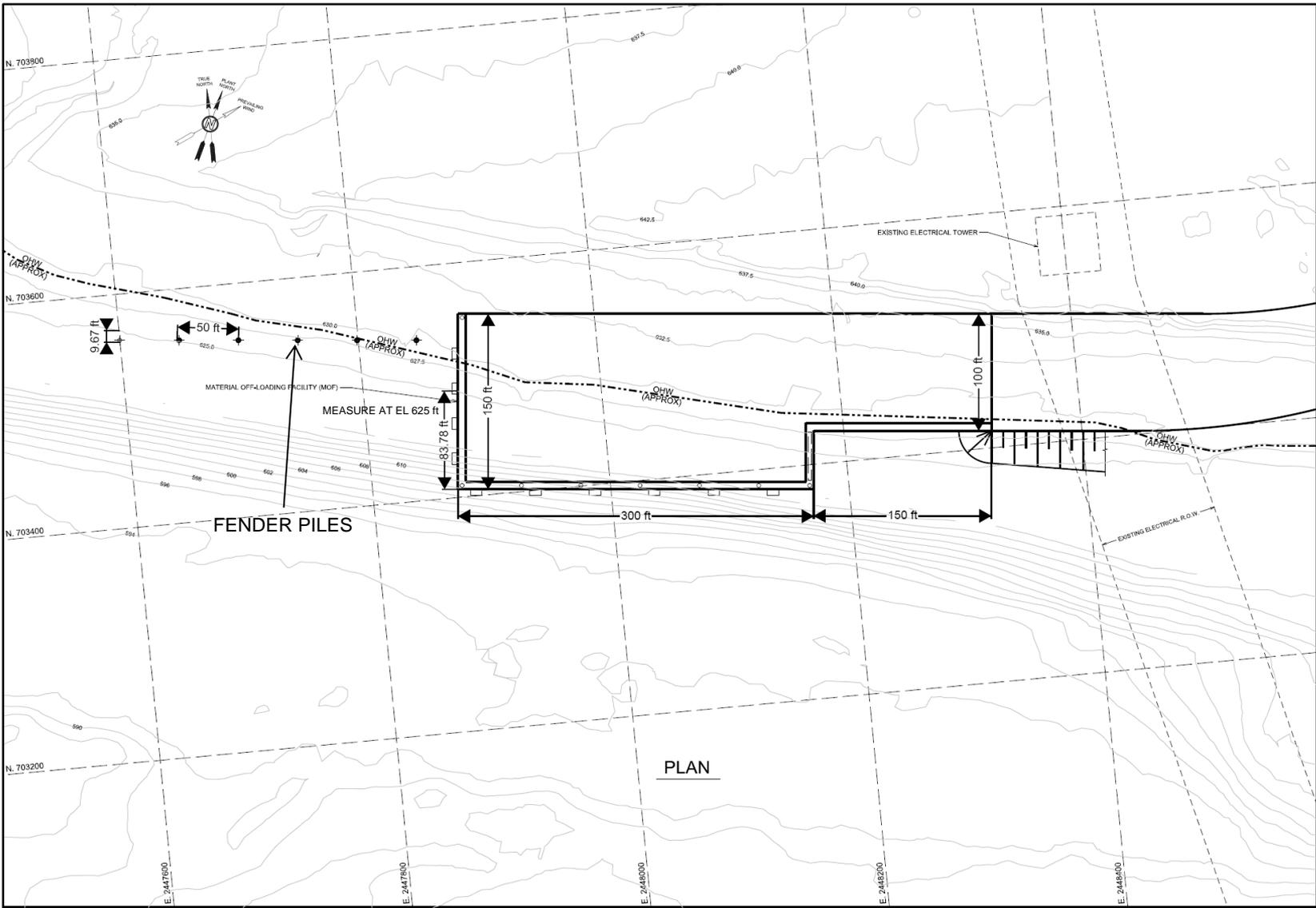
NOTE:  
 1. PLANT COORDINATES N.5000'-0" E.10000'-0" ARE EQUIVALENT TO STATE PLANE COORDINATES N.704000'-0" E.2448000'-0" ( NAD83/OHIO SOUTH ( 3402 ) / U.S. SURVEY FEET ) .

- REFERENCE DRAWINGS:  
 1. FOR WBS DRAWING SEE 26056-000-P1-0000-00002.  
 2. FOR OSBL PLOT PLAN KEY PLAN DRAWING SEE 26056-B10-P1-5000-00001.  
 3. FOR FENCING DRAWING SEE 26056-000-CG-0000-00109.



**MDA-A**  
**OVERALL SITE PLAN**

Figure 6.7i



- NOTES:
1. COORDINATES ARE IN US SURVEY FEET, TO OHIO STATE PLANE SOUTH.
  2. CONTOUR ELEVATIONS ARE SHOWN IN US SURVEY FEET, DATUM NAVD 88.
  3. ORDINARY HIGH WATER (OHW) IS BASED FROM OHIO RIVER NAVIGATION CHART NO. 193 & 194 OF THE US ARMY CORPS OF ENGINEER, PITTSBURGH DISTRICT, DATED JANUARY, 2003.
  4. ELEVATION DATUM SHIFT AT PROJECT SITE: 0 NAVD88 = 0.463' NAVD 29. BASED FROM NOAA ORTHOMETRIC HEIGHT CONVERSION (VERTICOM).

PLAN

**MDA-A**  
**MATERIAL OFFLOADING FACILITY**

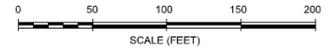
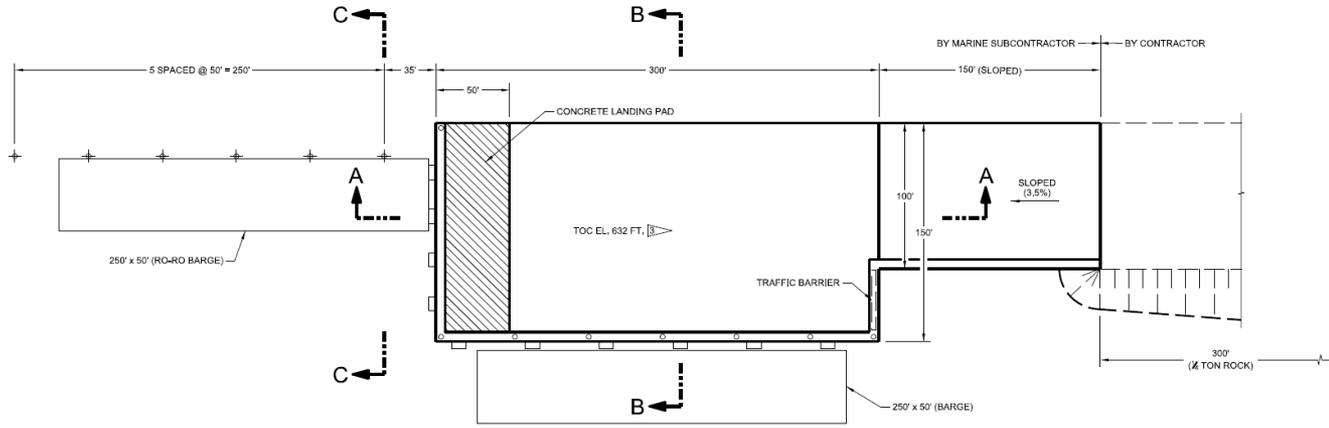
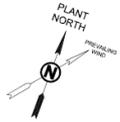
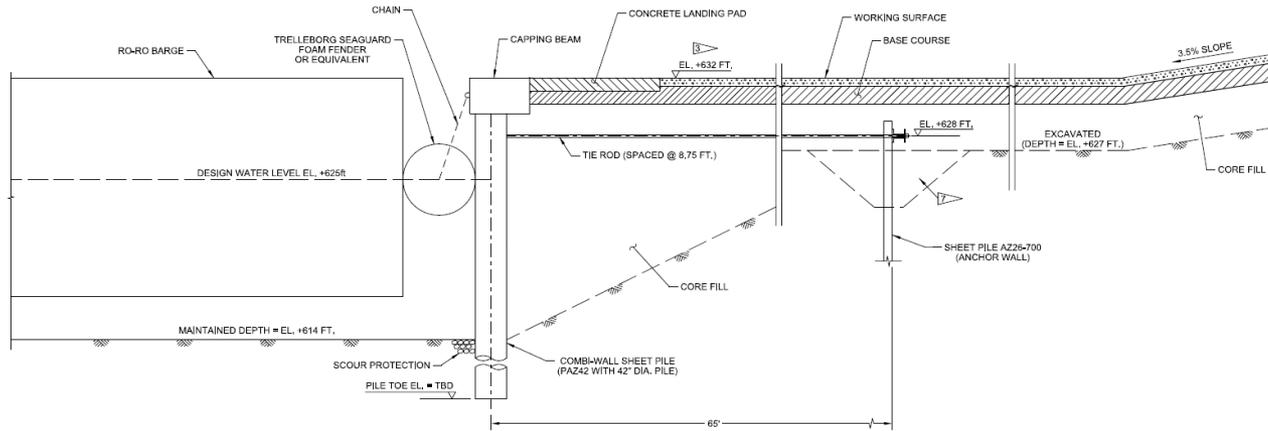


Figure 6.7j



**PLAN**



**SECTION A-A**

Figure 6.7k

<b>MDA-A</b>
<b>MATERIAL OFFLOADING FACILITY</b>

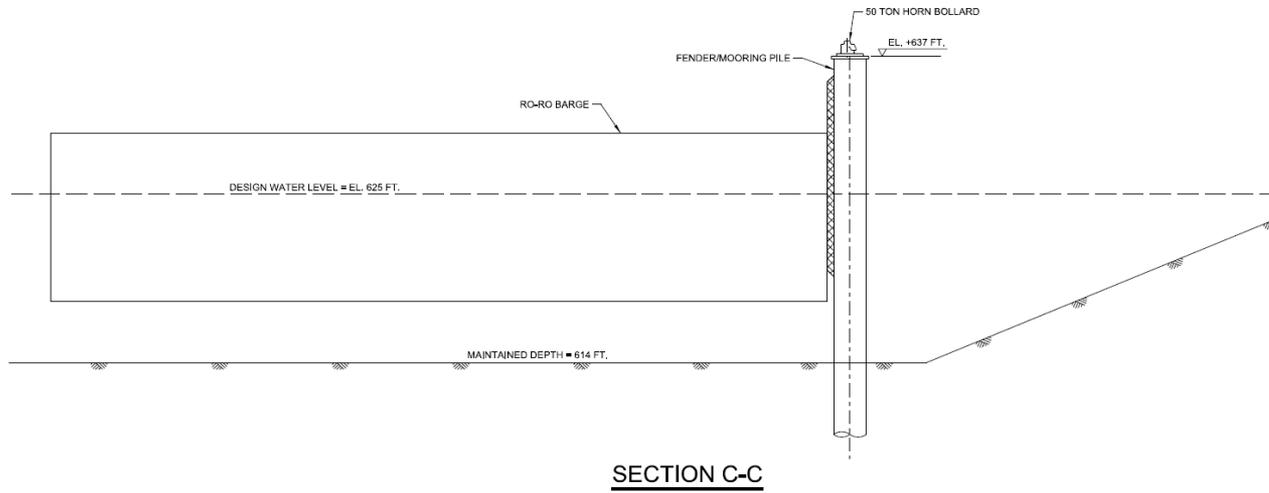
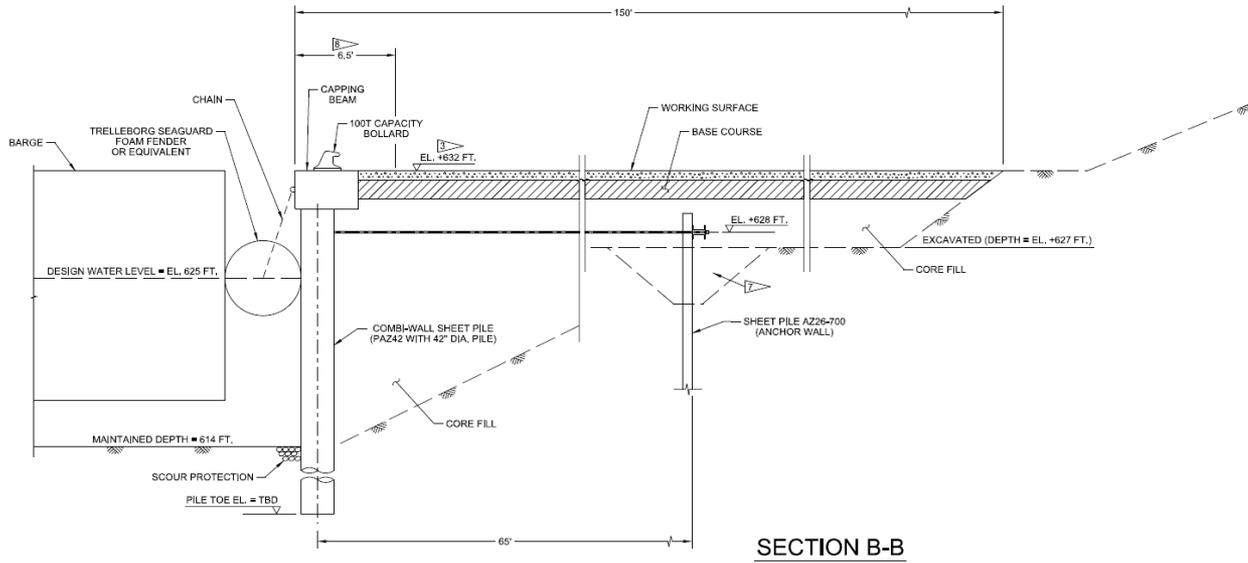
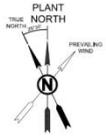


Figure 6.71

<b>MDA-A</b>
<b>MATERIAL OFFLOADING FACILITY</b>



00101	00102	00103	00104
00105	00106	00107	00108

KEYMAP

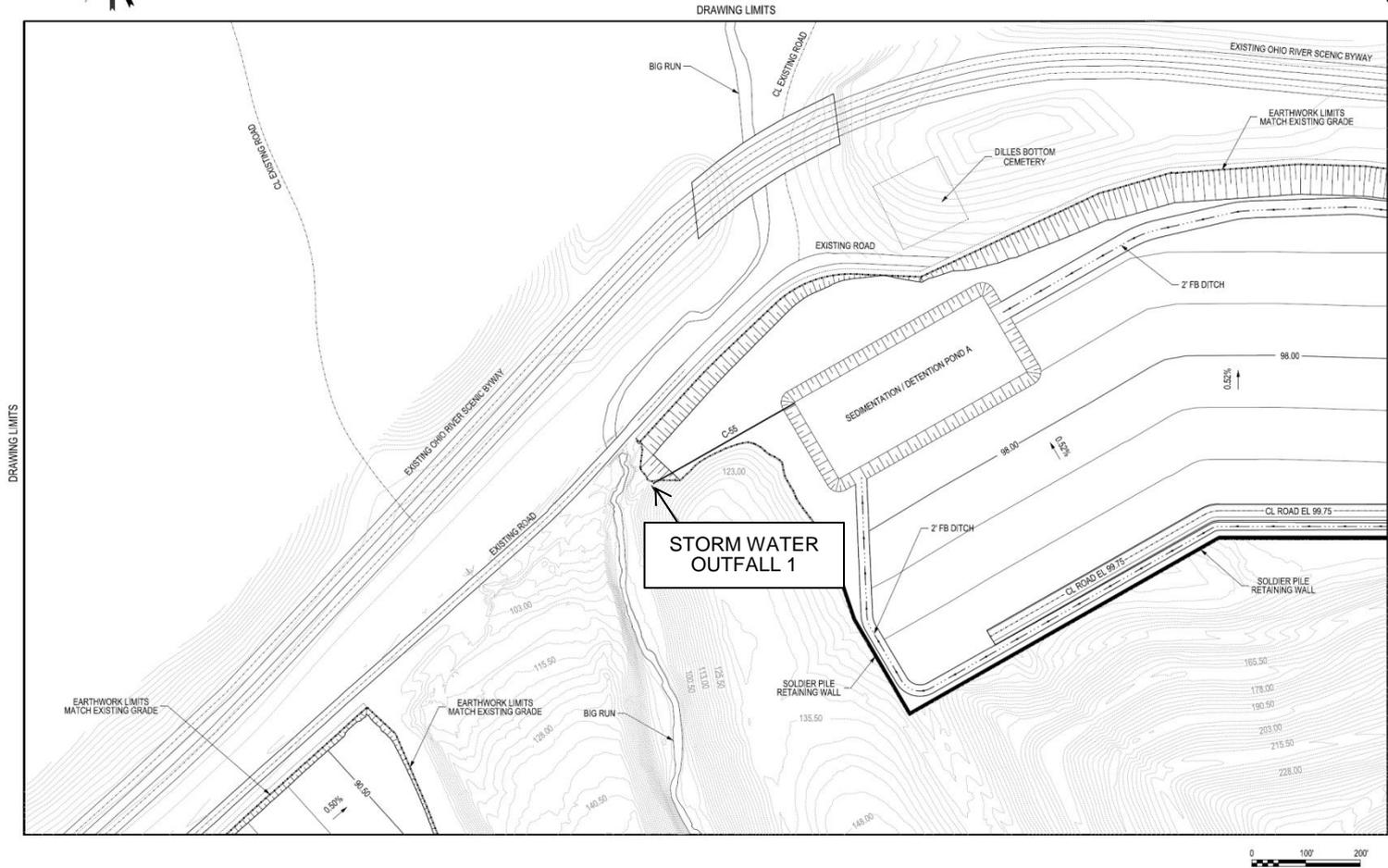


Figure 6.7m

<b>MDA-A</b>
<b>STORM WATER OUTFALL 1</b>

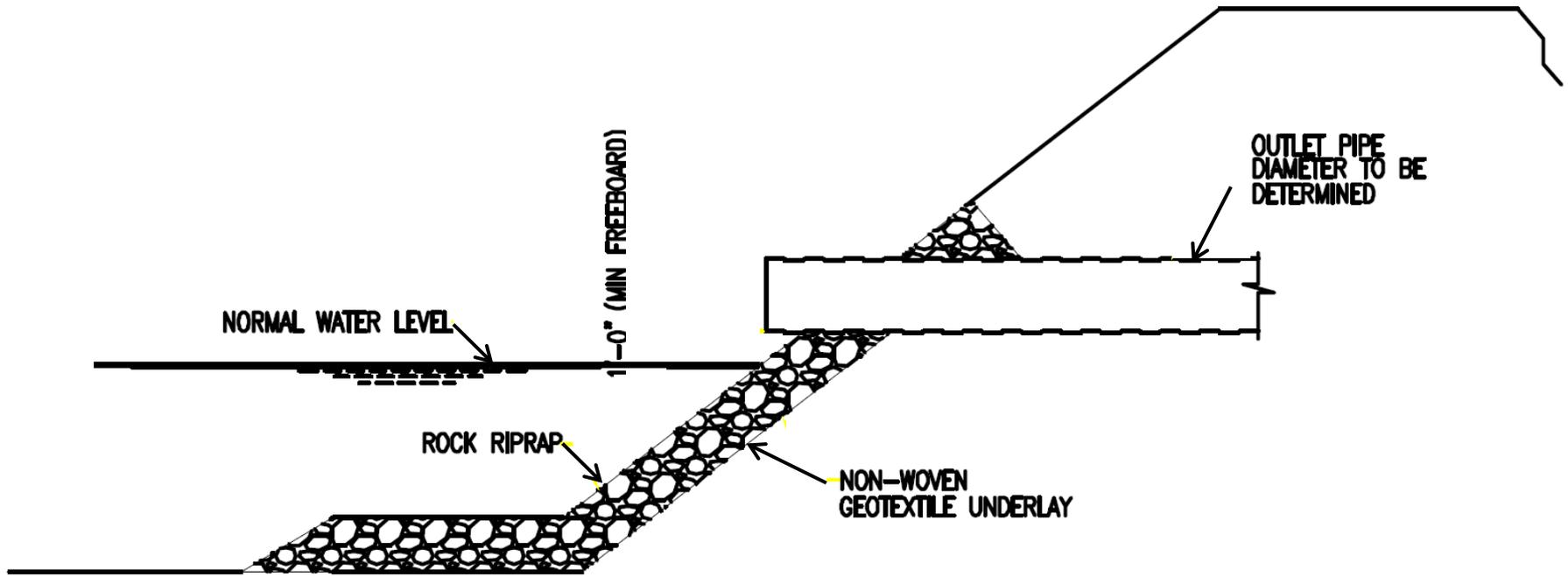
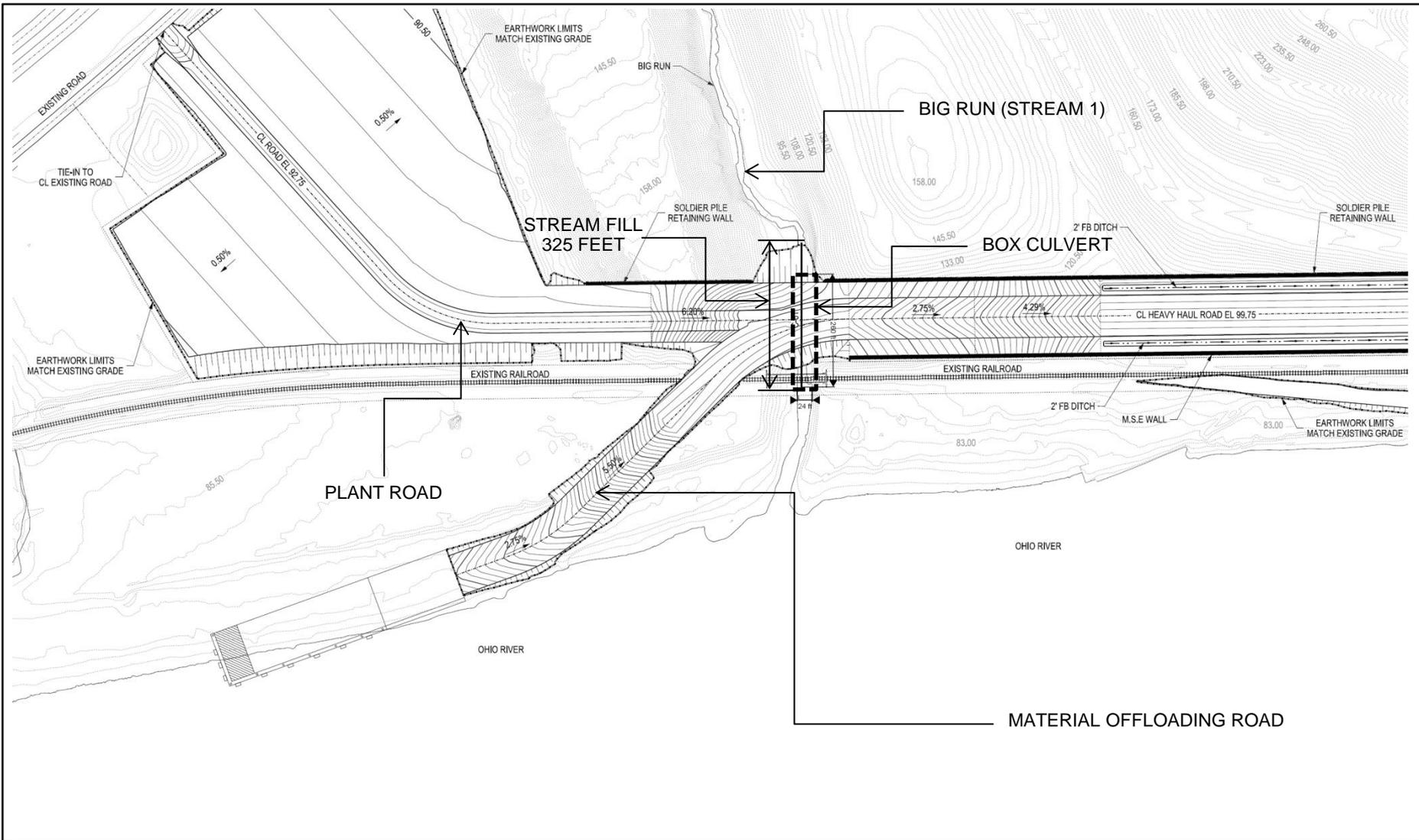


Figure 6.7n

<b>MDA-A</b>
STORM WATER OUTFALL 1

 00101	00102	00103	00104
00105	00106	00107	00108



DRAWING LIMITS



**MDA-A**

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PLANT ROAD (CROSS BIG RUN)

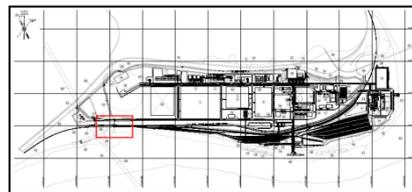
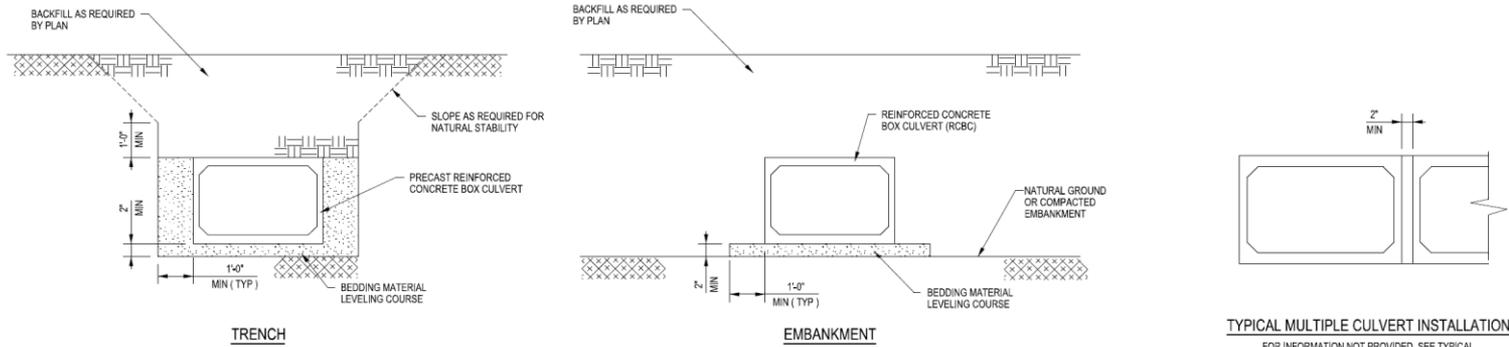
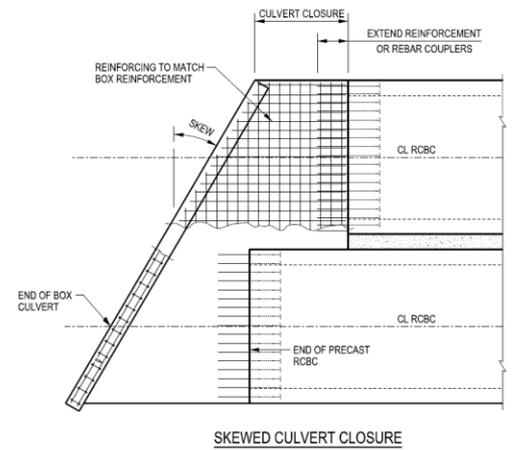
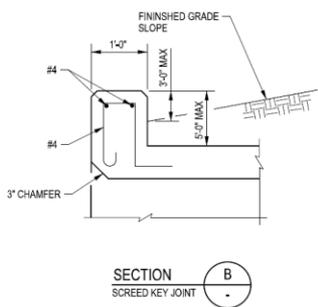
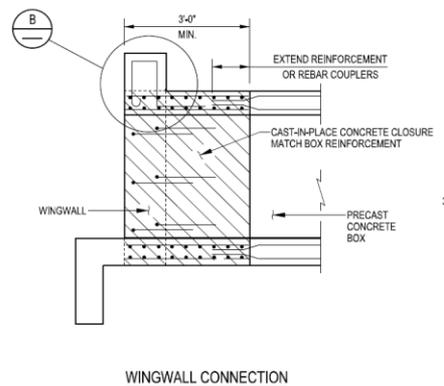
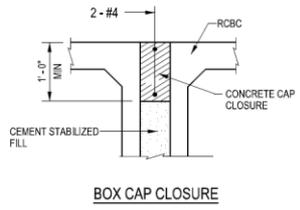
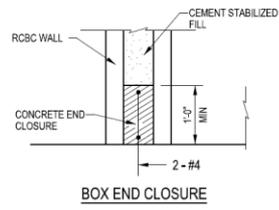


Figure 6.7o



**TYPICAL BOX CULVERT INSTALLATION**

FOR INFORMATION NOT PROVIDED, SEE TYPICAL BOX CULVERT INSTALLATION DETAILS IN THIS DRAWING



**MDA-A**

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**PLANT ROAD (CULVERT)**

Figure 6.7p

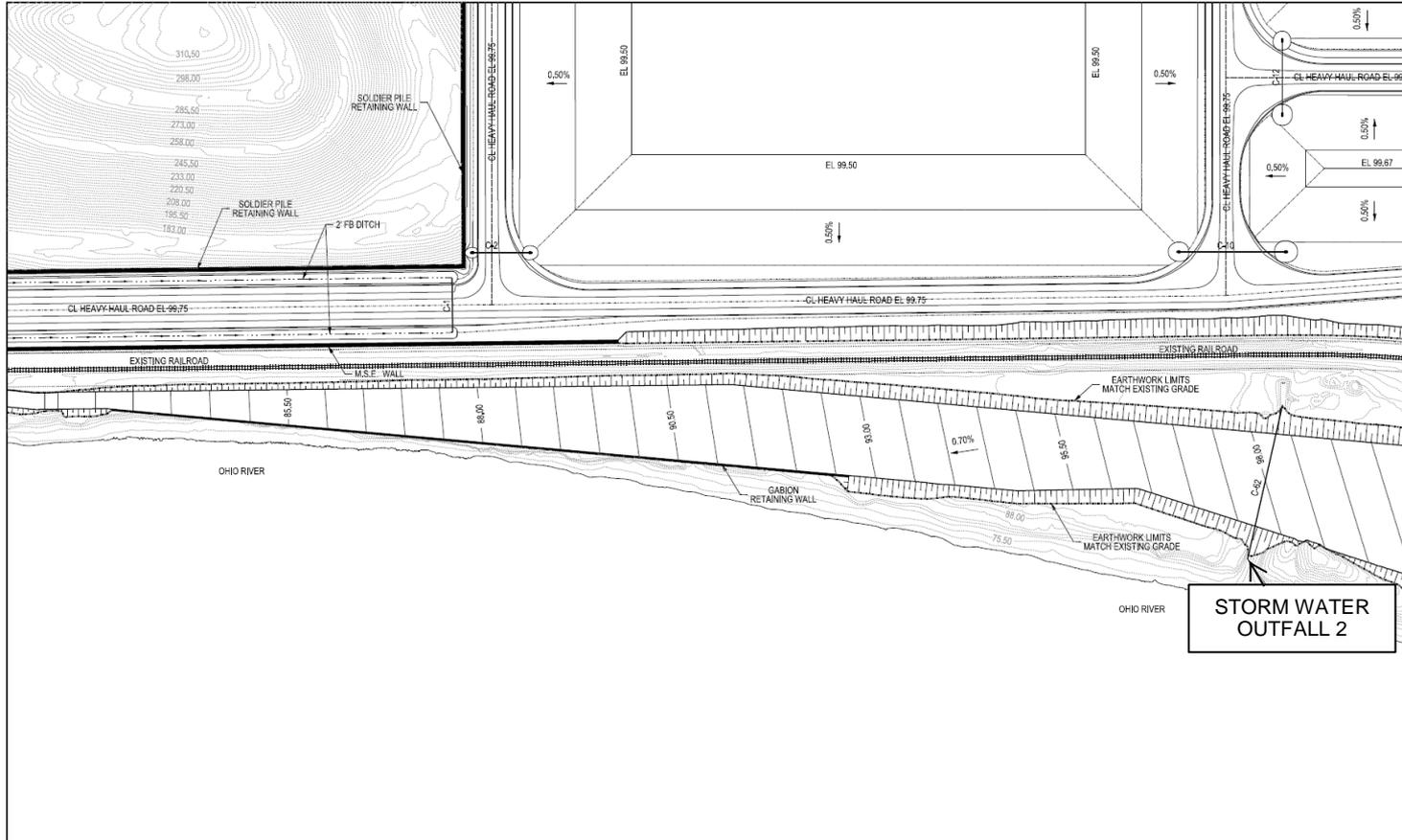
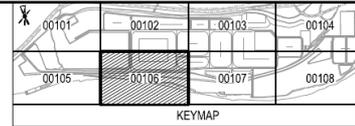
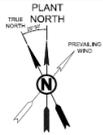


Figure 6.7q

**MDA-A**

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**STORM WATER OUTFALL 2**

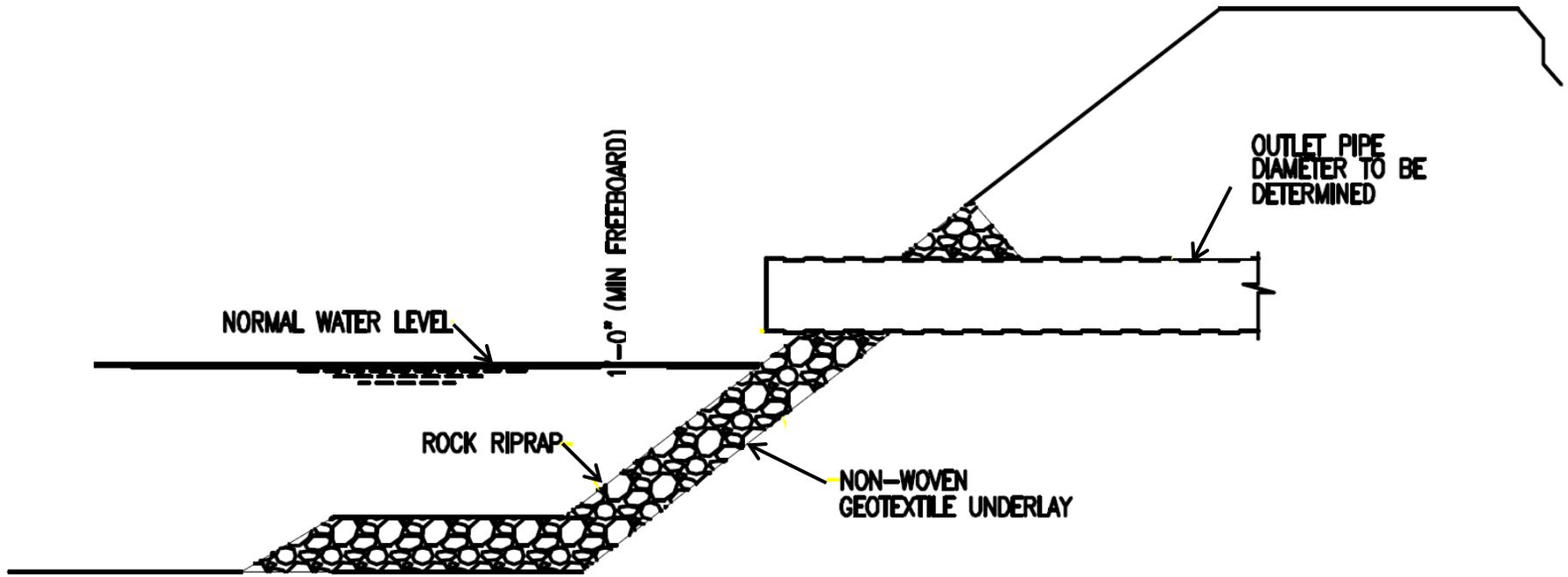
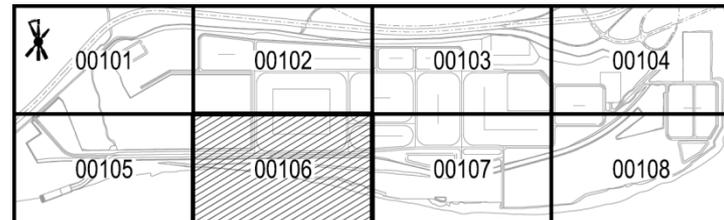
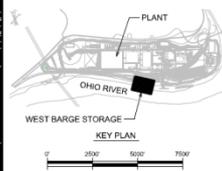
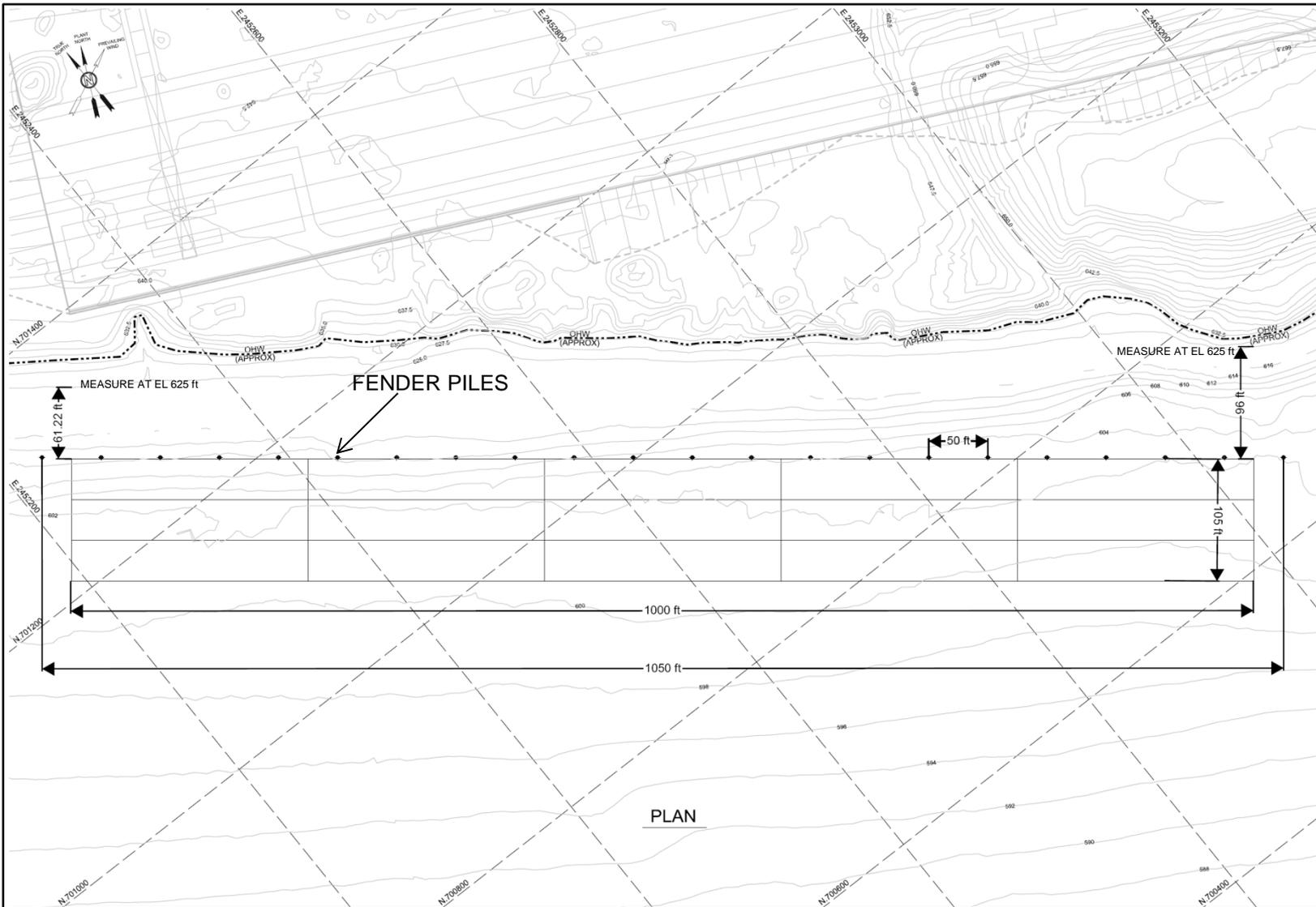


Figure 6.7r

<b>MDA-A</b>
STORM WATER OUTFALL 2





- NOTES:
1. COORDINATES ARE IN US SURVEY FEET, TO OHIO STATE PLANE SOUTH.
  2. CONTOUR ELEVATIONS ARE SHOWN IN US SURVEY FEET DATUM NAVD 83.
  3. ORDINARY HIGH WATER (OHW) IS BASED FROM OHIO RIVER NAVIGATION CHART NO. 193 & 194 OF THE US ARMY CORPS OF ENGINEER, PITTSBURG DISTRICT, DATED JANUARY, 2003.
  4. ELEVATION DATUM SHIFT AT PROJECT SITE: 0' NAVD88 = 0.482' NAVD 29, BASED FROM NOAA ORTHOMETRIC HEIGHT CONVERSION (VERTCON).

PLAN

**MDA-A**  
BARGE STORAGE AREA (WEST)

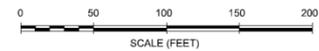
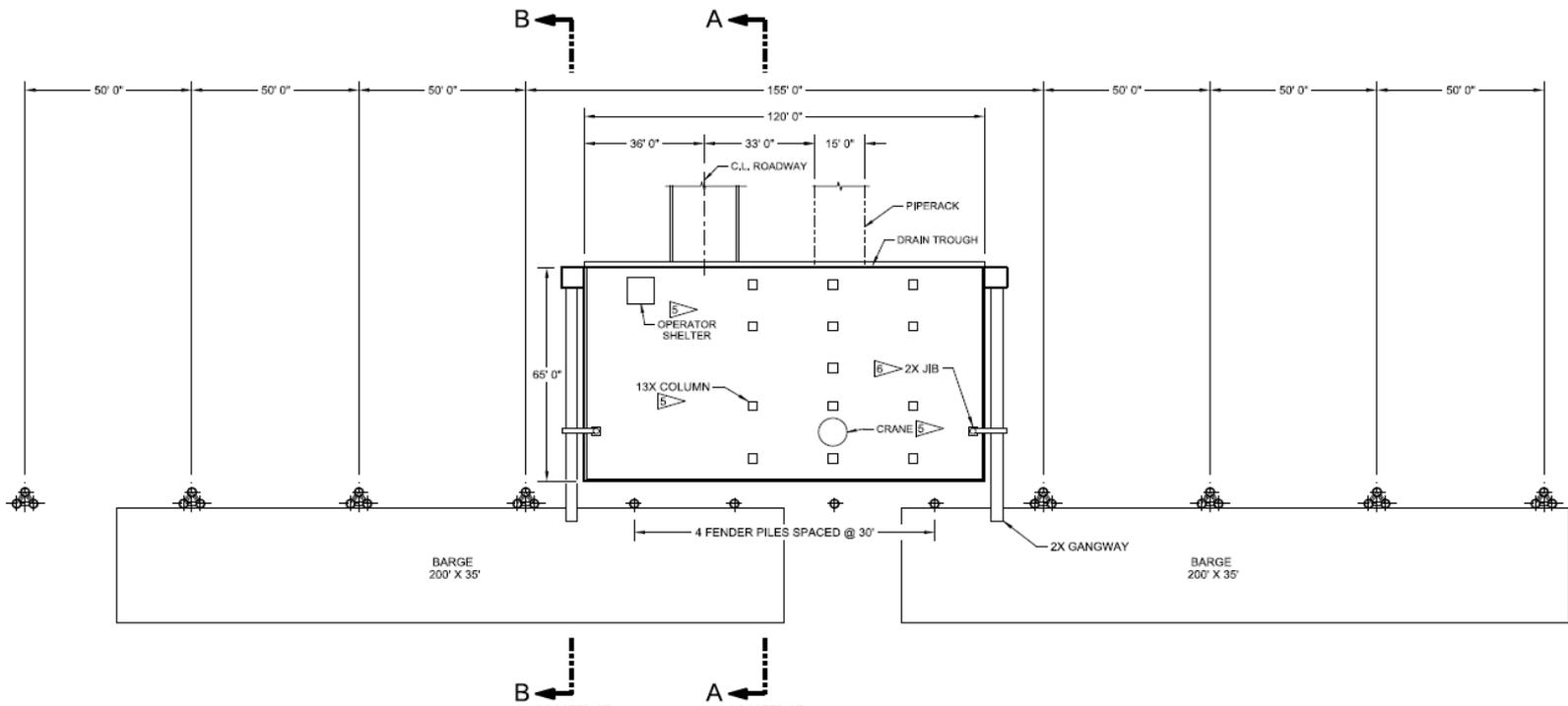


Figure 6.7s

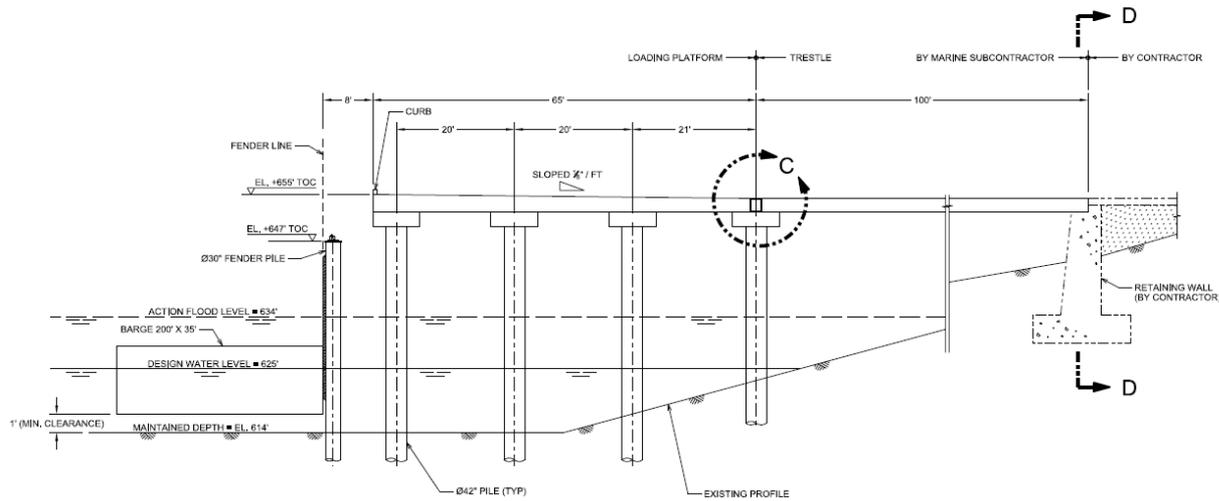




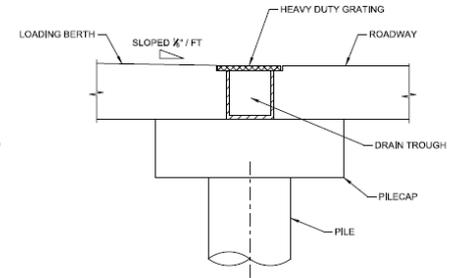
PLAN

Figure 6.7u

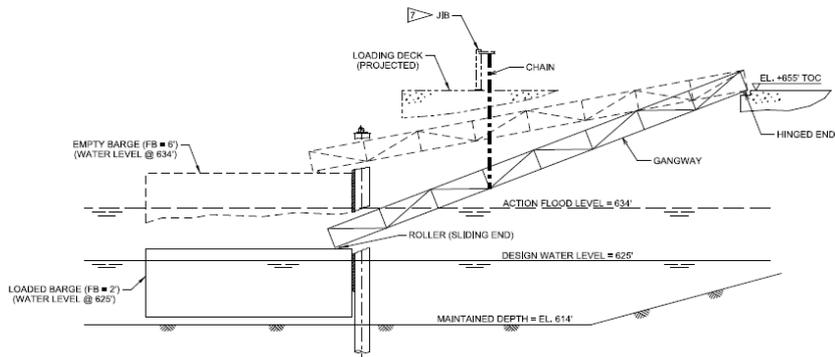
<b>MDA-A</b>
<b>BARGE LOADING</b>



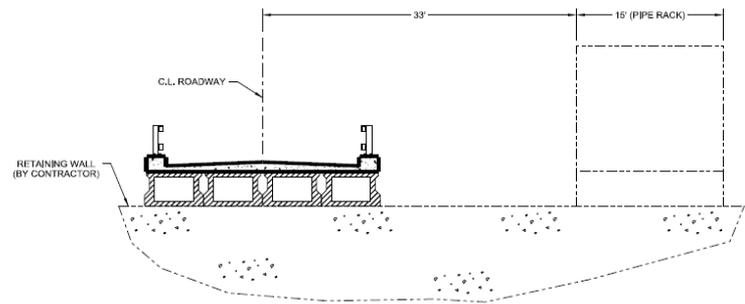
**SECTION A-A**



**DETAIL "C"**



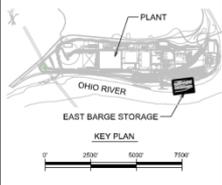
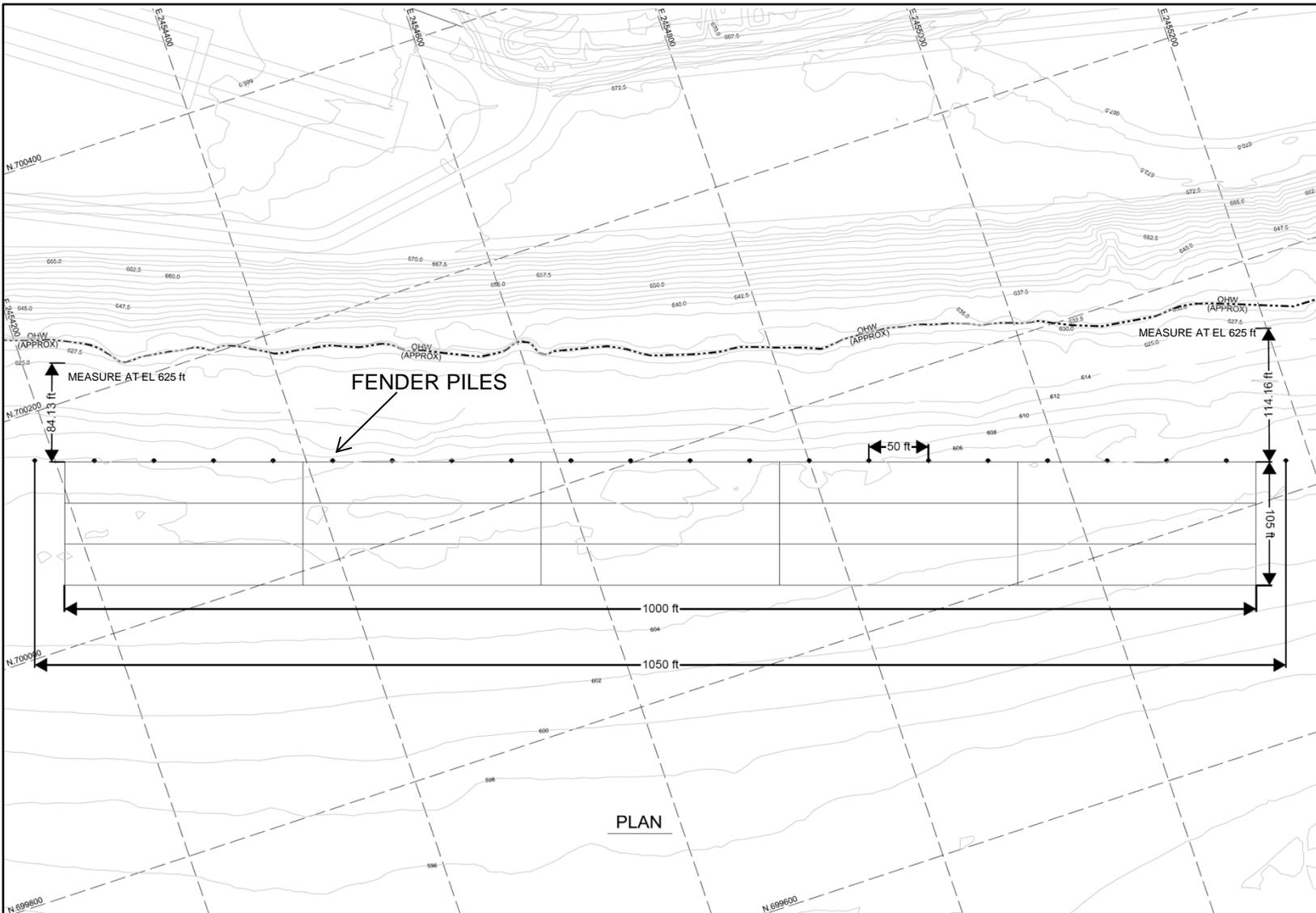
**SECTION B-B**



**SECTION D-D**

**Figure 6.7v**

<b>MDA-A</b>
<b>BARGE LOADING</b>



- NOTES:
1. COORDINATES ARE IN US SURVEY FEET, TO OHIO STATE PLANE SOUTH.
  2. CONTOUR ELEVATIONS ARE SHOWN IN US SURVEY FEET, DATUM NAVD 83.
  3. ORDINARY HIGH WATER (OHW) IS BASED FROM OHIO RIVER NAVIGATION CHART NO. 193 & 194 OF THE US ARMY CORPS OF ENGINEERS, PITTSBURGH DISTRICT, DATED JANUARY, 2003.
  4. ELEVATION DATUM SHIFT AT PROJECT SITE: 0' NAVD83 = 0.483' NAVD 29, BASED FROM NOAA ORTHOMETRIC HEIGHT CONVERSION (VERTCON).

**MDA-A**

**BARGE STORAGE AREA (EAST)**

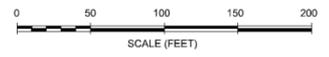
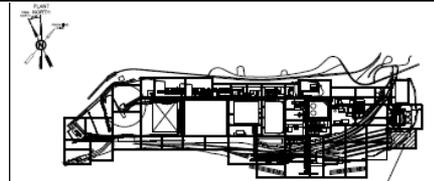
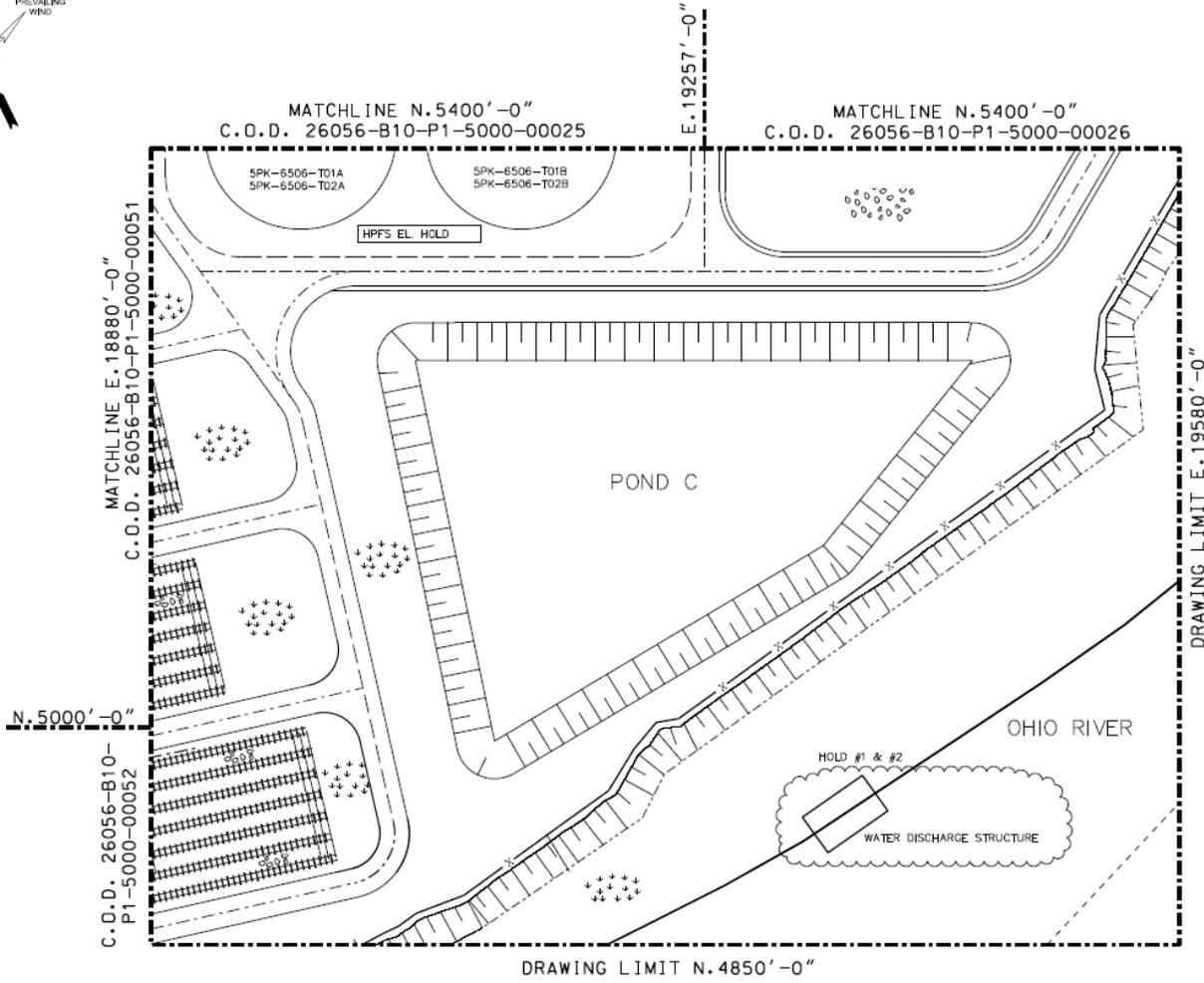
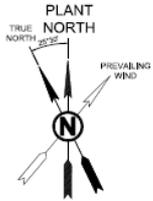


Figure 6.7w



OSBL AREA KEY PLAN

LEGEND:

- CONCRETE PAVING
- GRAVEL
- HIGH POINT FINISHED SURFACE
- NATURAL SURFACE
- FENCE

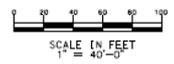


Figure 6.7x

<b>MDA-A</b>
<b>WATER DISCHARGE</b>

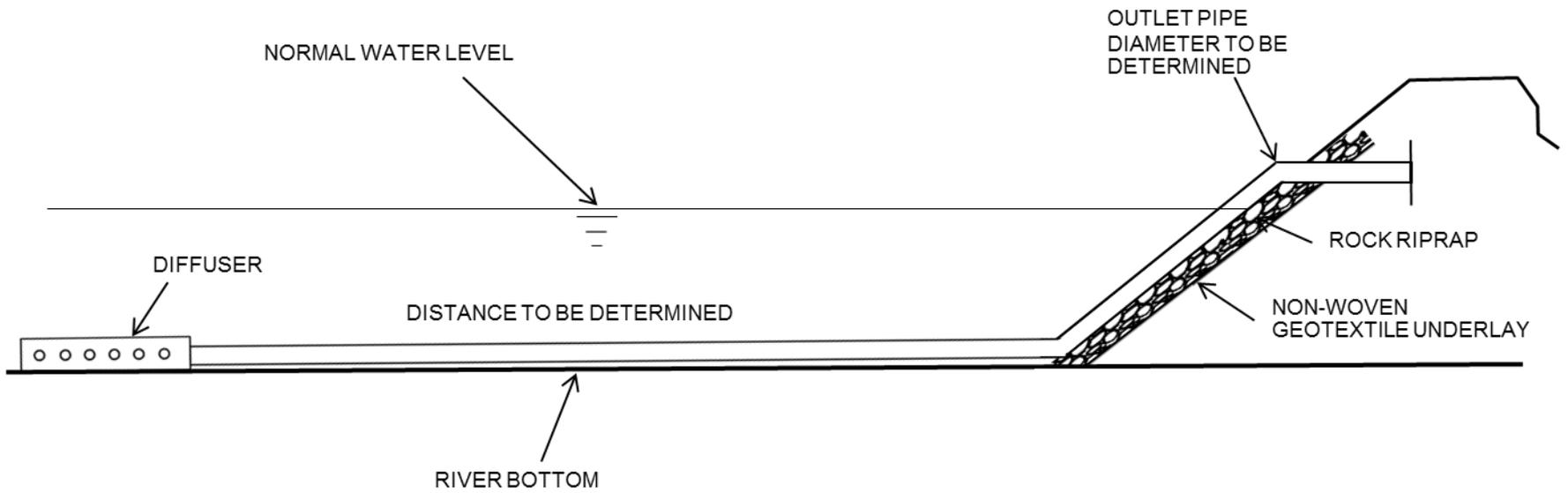
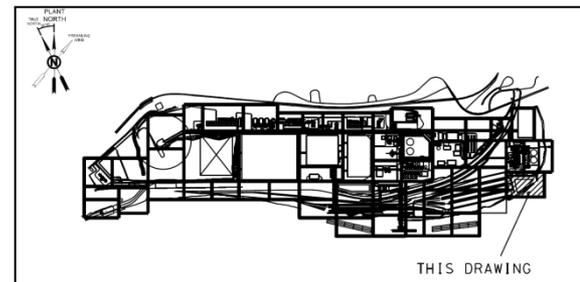


Figure 6.7y

<b>MDA-A</b>
WATER DISCHARGE



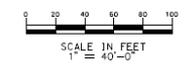
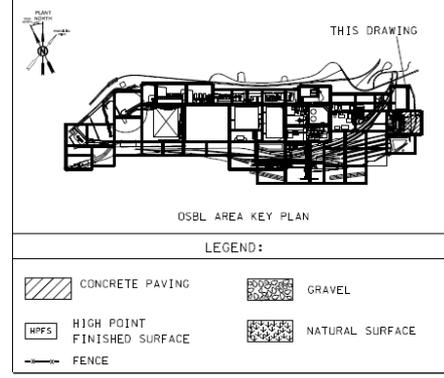
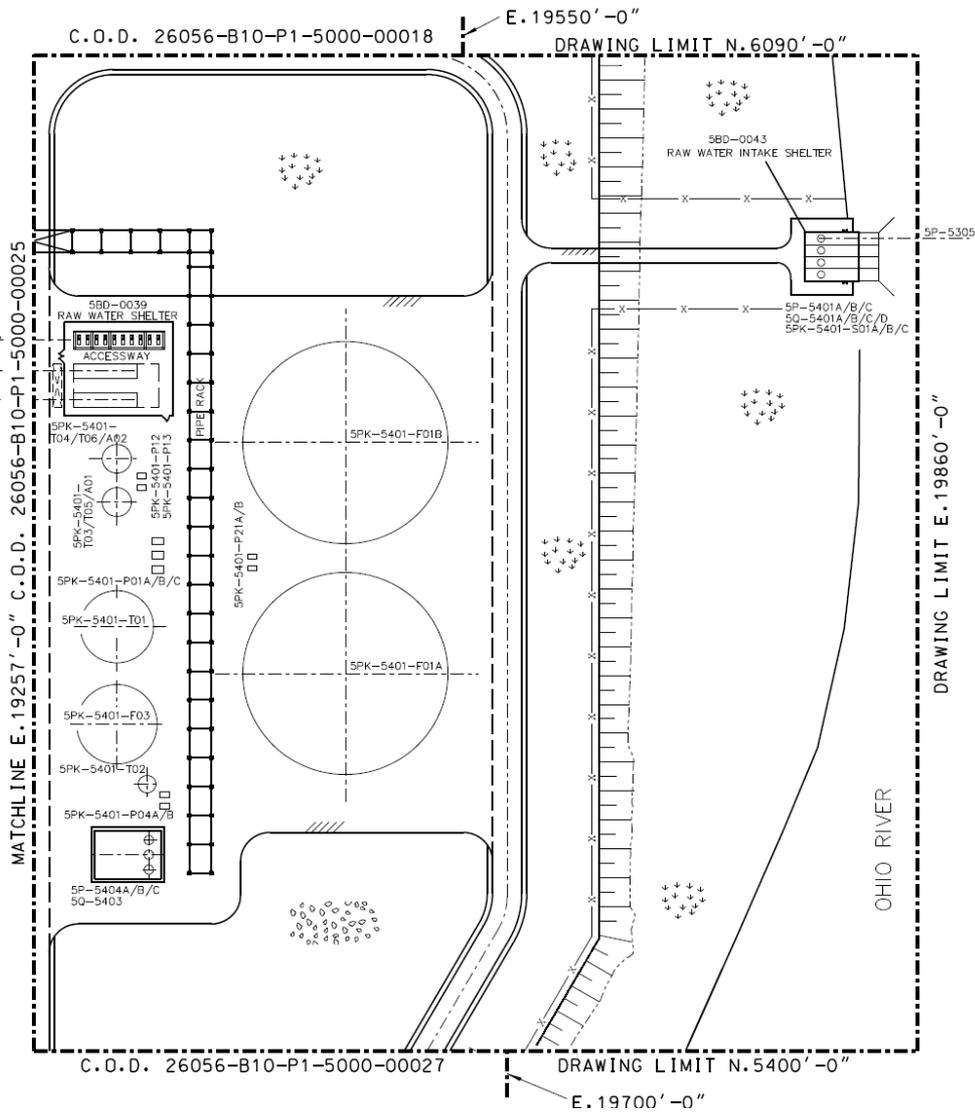
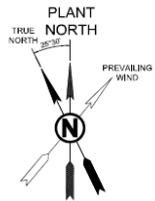


Figure 6.7z

**MDA-A**

**RAW WATER INTAKE**

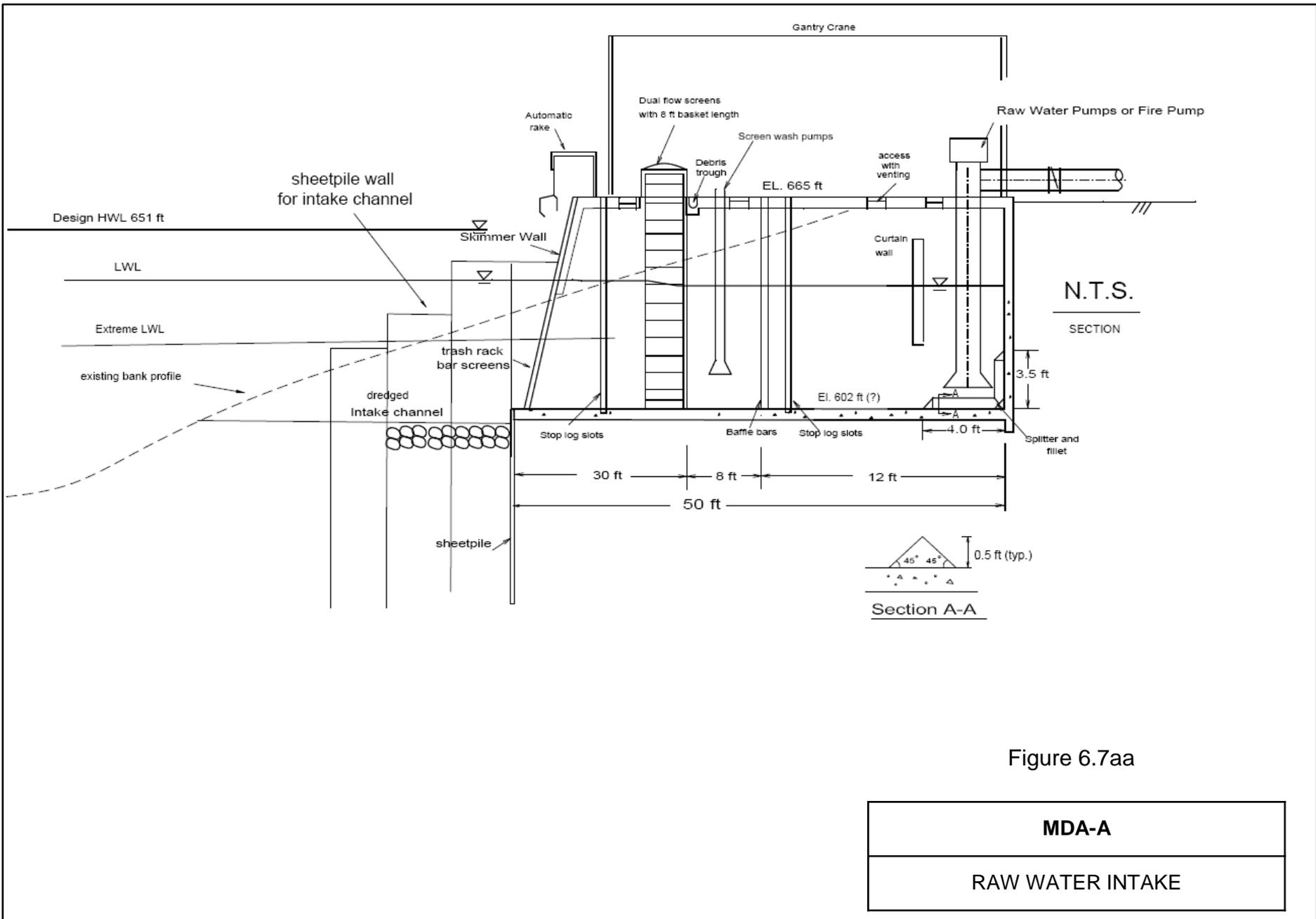


Figure 6.7aa

<b>MDA-A</b>
RAW WATER INTAKE

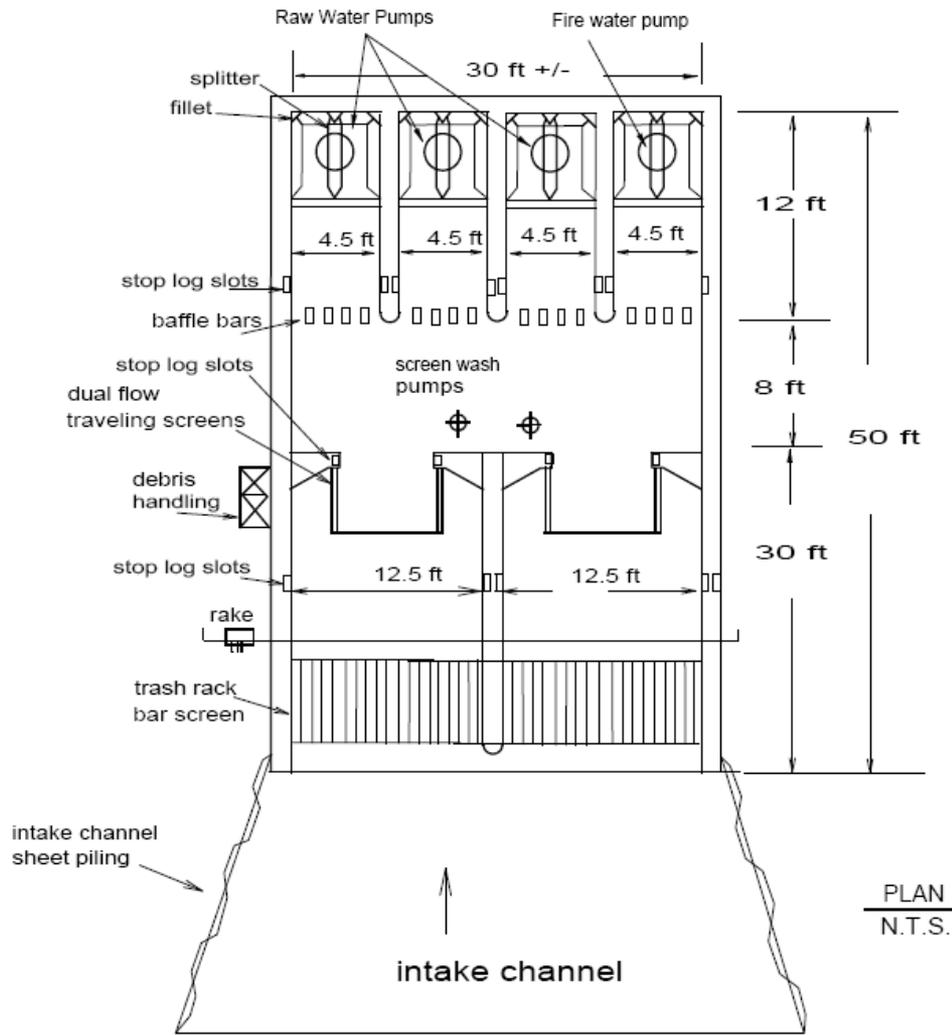
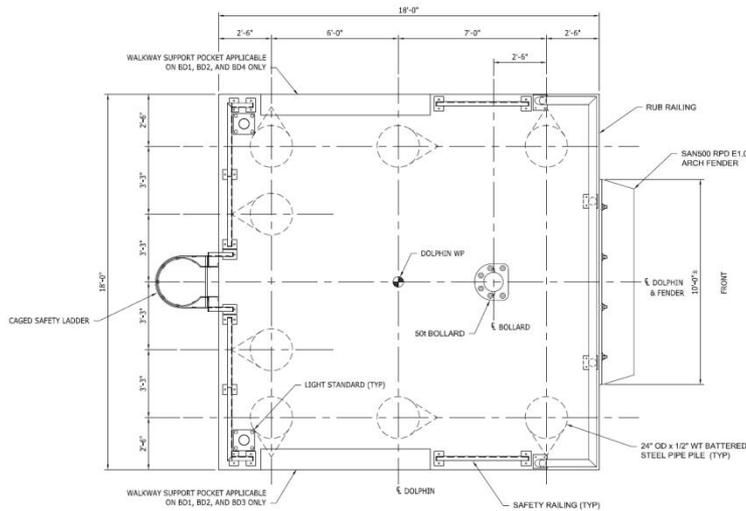
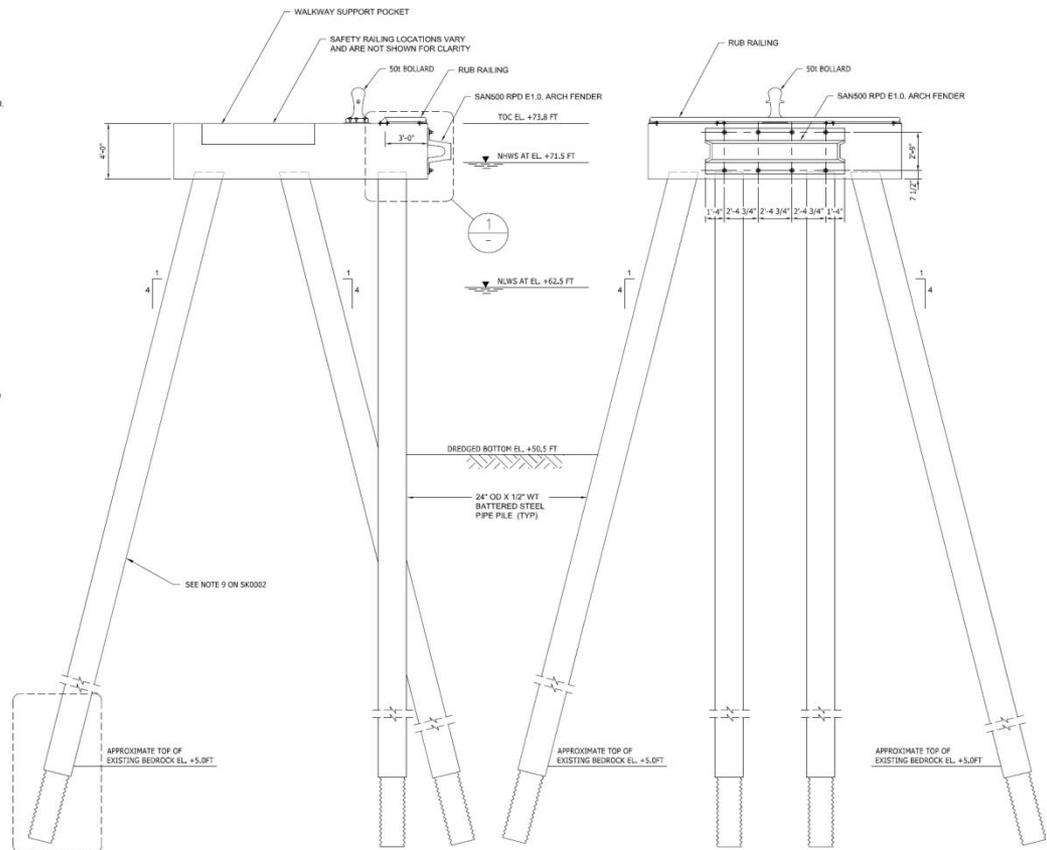


Figure 6.7bb

<b>MDA-A</b>
RAW WATER INTAKE

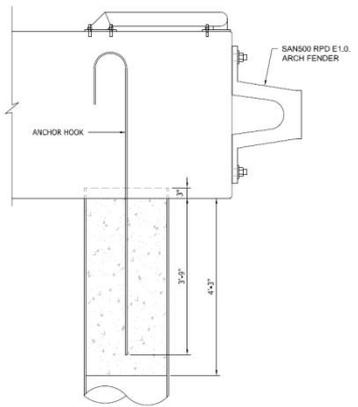
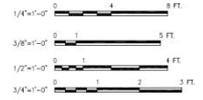


**DOLPHIN STRUCTURE  
TYPICAL PLAN**  
SCALE: 3/8"=1'-0"

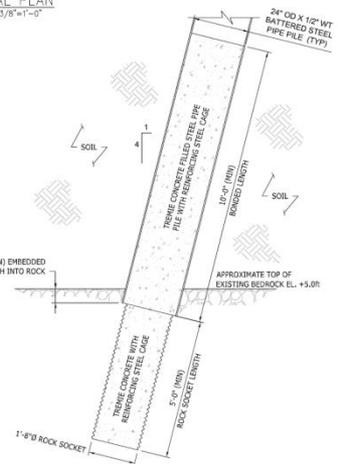


**SIDE ELEVATION**  
SCALE: 1/4"=1'-0"

**FRONT ELEVATION**  
SCALE: 1/4"=1'-0"



**TYPICAL PILE CONNECTION DETAIL**  
SCALE: 3/4"=1'-0"



**TYPICAL ROCK SOCKET FOR DOLPHIN PILES**  
SCALE: 1/2"=1'-0"

**MDA-A**

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**DOLPHIN**

Figure 6.7cc