



# Indiana Department of Environmental Management Office of Water Quality Wetlands Section

**Publication Date:**

11 October 2024

**Closing Date:**

1 November 2024

**IDEM ID Number:**

2024-612-49-LDC-WQC

**Corps of Engineers ID Number:**

LRL-2024-00569-cte

## PUBLIC NOTICE

**To all interested parties:**

This letter shall serve as a formal notice of the receipt of an application for **Section 401 Water Quality Certification** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

- 1. Applicant:** Bayside Woods HOA  
Attention: Patia Gaugh  
9430 Bay Vista E Drive  
Indianapolis, IN 46250
- 2. Agent:** SWCA  
Attention: Ross St. Clair  
18853 US-12, Suite 2  
New Buffalo, MI 49117
- 3. Project location:** Within the Bayside Woods Neighborhood easement near 6319 Behner Way in Indianapolis, Marion County, Indiana. GPS coordinates Latitude: 39.923728, Longitude: -86.058396.
- 4. Affected waterbody:** Behner Brook
- 5. Project Description:** The proposed project will involve various restoration activities, bank stabilization, and infrastructure improvements to 525 linear feet (0.139 acre) of Behner Brook. Restoration activities include removal of a concrete dam that impounds Behner Brook near the downstream terminus of the project area, grade restoration of channel width and sinuosity, construction of riffles utilizing revetment and Class II riprap, and grading of an adjacent floodplain with native vegetation within the footprint of the impoundment. Additional activities include stone toe bank stabilization, the construction of a plunge pool west of the culvert carrying Behner Crossing over Behner Brook utilizing revetment and Class I riprap, and placement of revetment riprap for additional outlet protection. Existing invasive vegetation within the project area will be removed and seeded with native vegetation within impacted bank slopes, construction access areas, and adjacent floodplain.  
  
After the fact impacts from dredge and dewatering activities total 2.876 ac and 9,280 cy from Fishtail Cove (0.57 ac; 1,839 cy), Anchor Cove (0.541 ac; 1,746 cy), Beach Cove (1.182 ac; 3,814 cy), and Sunset Cove (0.583 ac; 1,881 cy). Proposed impacts from dredge and dewatering activities from Fishing Cove total 14.18 ac and 68,631 cy. Additional information may be found online at <https://www.in.gov/idem/5474.htm>

**Comment period:** Any person or entity who wishes to submit comments or information relevant to the aforementioned project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.

**Public Hearing:** Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.

**Questions?**

Additional information may be obtained from L. David Cohen, Project Manager, by phone at 317-450-5380 or by e-mail at [LCohen@idem.in.gov](mailto:LCohen@idem.in.gov). Please address all correspondence to the project manager and reference the IDEM project identification number listed on this notice. Indicate if you wish to receive a copy of IDEM's final decision. Written comments and inquiries may be forwarded to -

Indiana Department of Environmental Management  
100 North Senate Avenue  
MC65-42 WQS IGCN 1255  
Indianapolis, Indiana 46204-2251 FAX: 317/232-8406



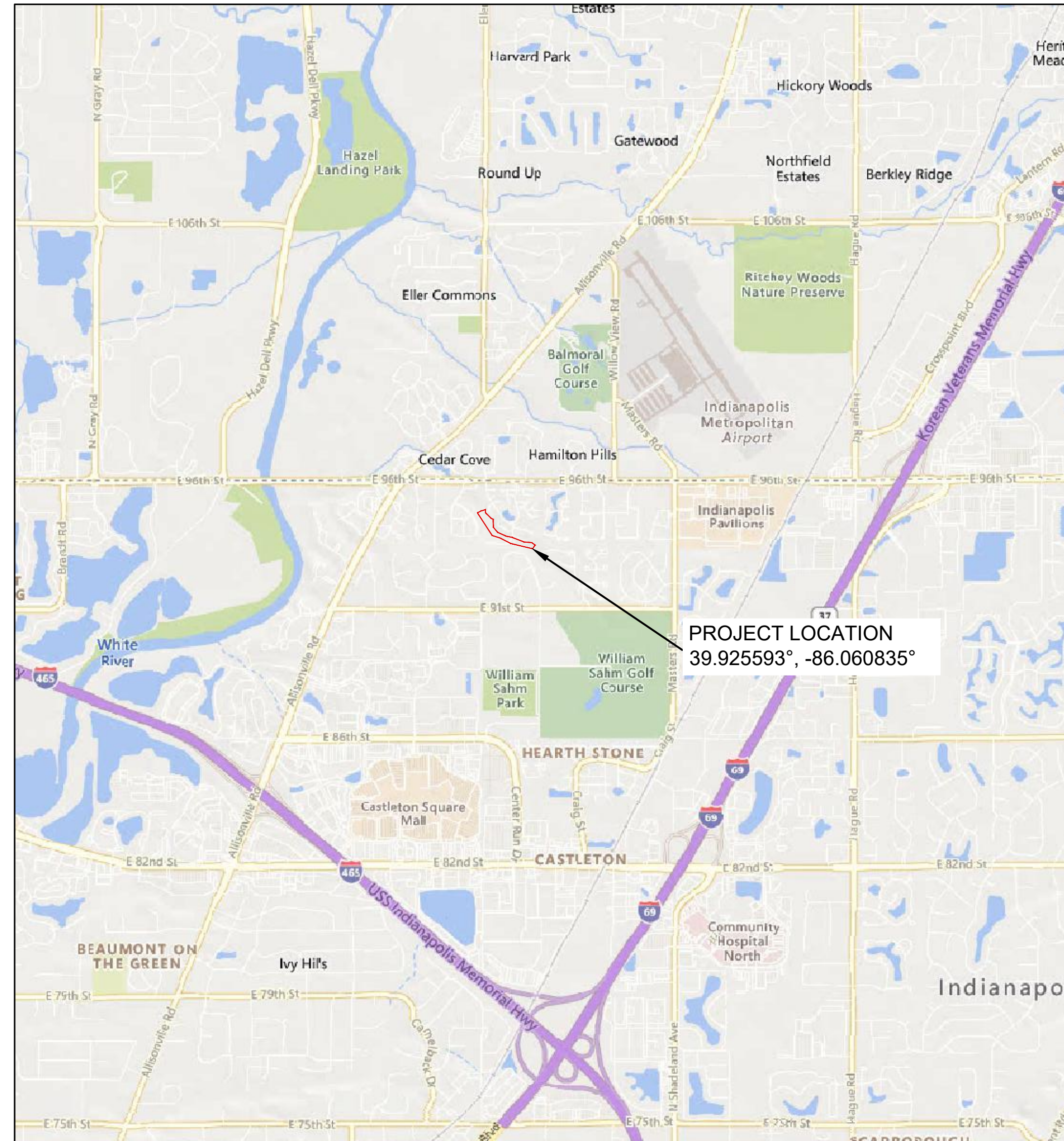
# BEHNER BROOK RESTORATION PERMIT PLANS

MARION COUNTY, INDIANA  
AUGUST, 2024

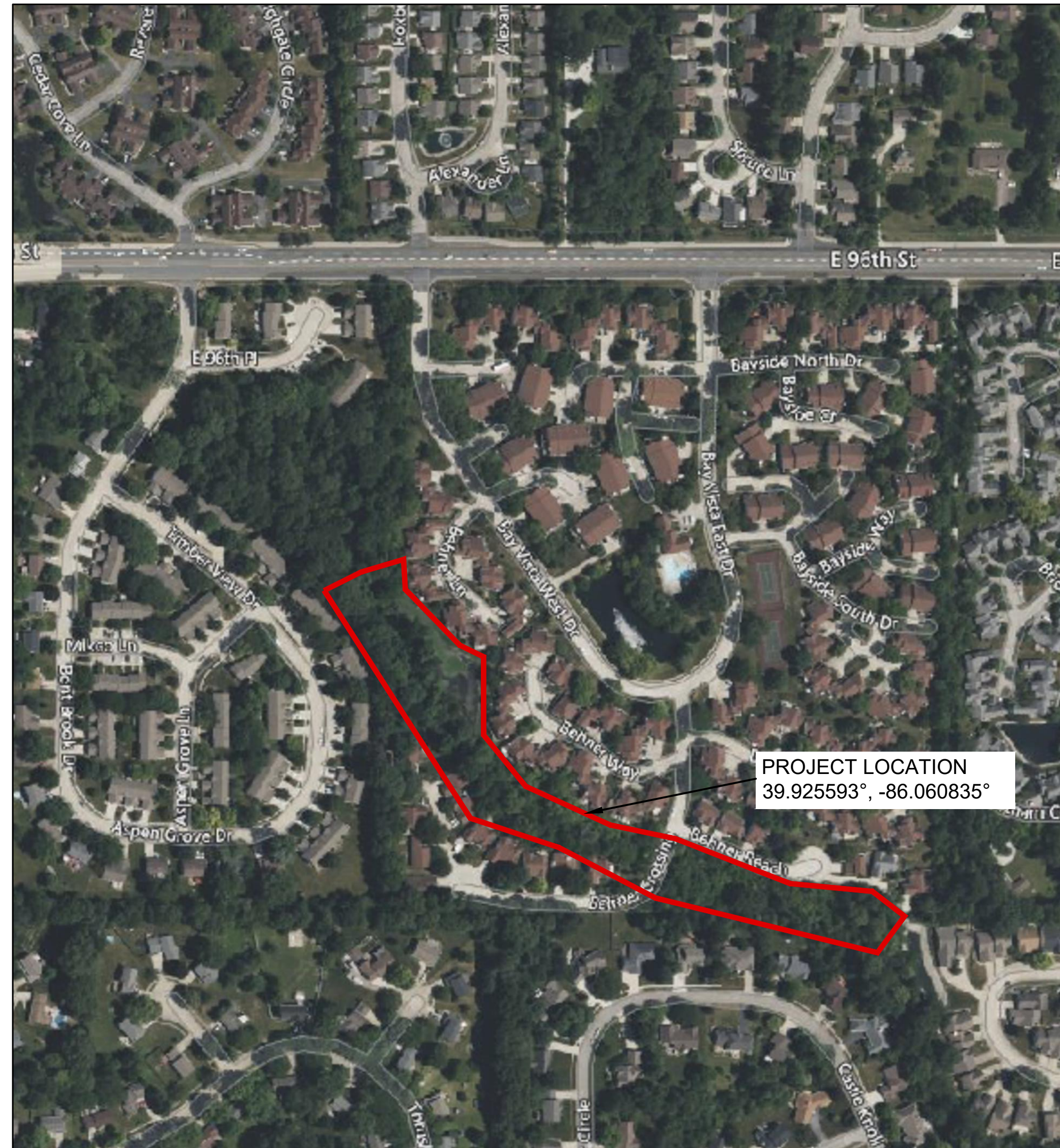
PREPARED BY:  
**SWCA**  
ENVIRONMENTAL CONSULTANTS  
18853 US-12, SUITE 2  
NEW BUFFALO, MI 48117 630-765-1762  
www.swca.com

PREPARED FOR:  
  
BAYSIDE WOODS  
CONDOMINIUMS

SURVEY/ BASE MAP PREPARED BY:  
  
TERRITORIAL  
ENGINEERING,  
LLC



**1 SITE LOCATION PLAN**  
SCALE IN FEET  
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**2 ORTHO-PHOTOGRAPH**  
SCALE IN FEET  
0 100 200 400

Sheet Number	Sheet Title
1	COVER SHEET
2	EXISTING OVERVIEW
3	PROPOSED CONDITIONS
4	PROPOSED CONDITIONS
5	PROPOSED CONDITIONS
6	CROSS-SECTIONS
7	DETAILS
8	DETAILS

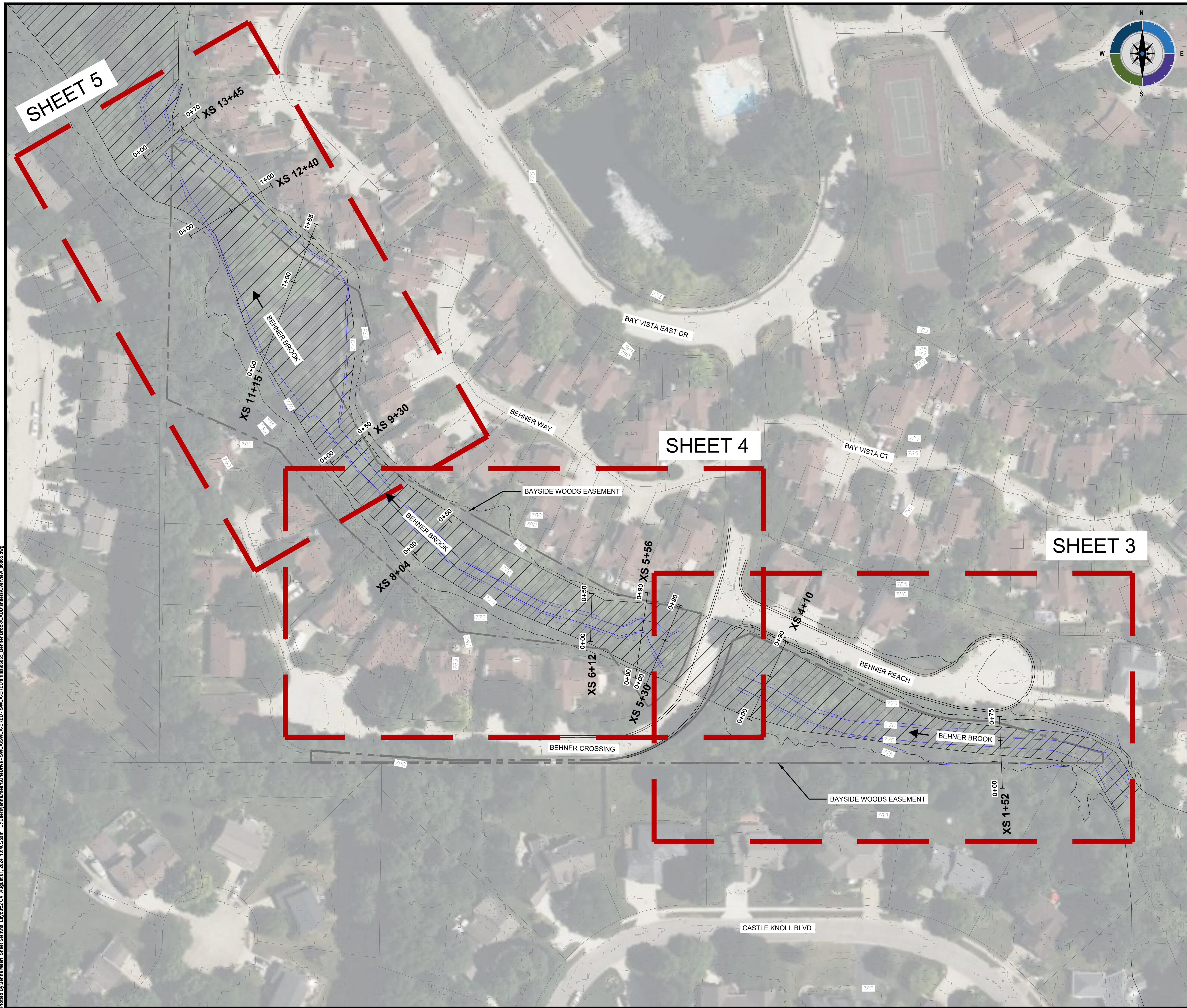
**BEHNER BROOK RESTORATION  
PERMIT PLANS  
COVER SHEET**

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XXX		RAS		JLM	

DATE: 08/01/2024  
PROJECT #: 86865

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**LEGEND**

- EXISTING MAJOR CONTOUR (5')
- EXISTING MINOR CONTOUR (1')
- PROPERTY BOUNDARY
- EXISTING TOP OF BANK
- EXISTING TOE OF SLOPE
- STORM WATER LINE
- EXISTING TREE
- IDNR FLOODPLAIN
- IDNR FLOODWAY

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 630-705-1762  
 www.swca.com

PREPARED FOR:

SURVEY/ BASE PLAN PREPARED BY:  
 TERRITORIAL  
 ENGINEERING,  
 LLC

**BEHNER BROOK RESTORATION  
 PERMIT PLANS  
 EXISTING OVERVIEW**

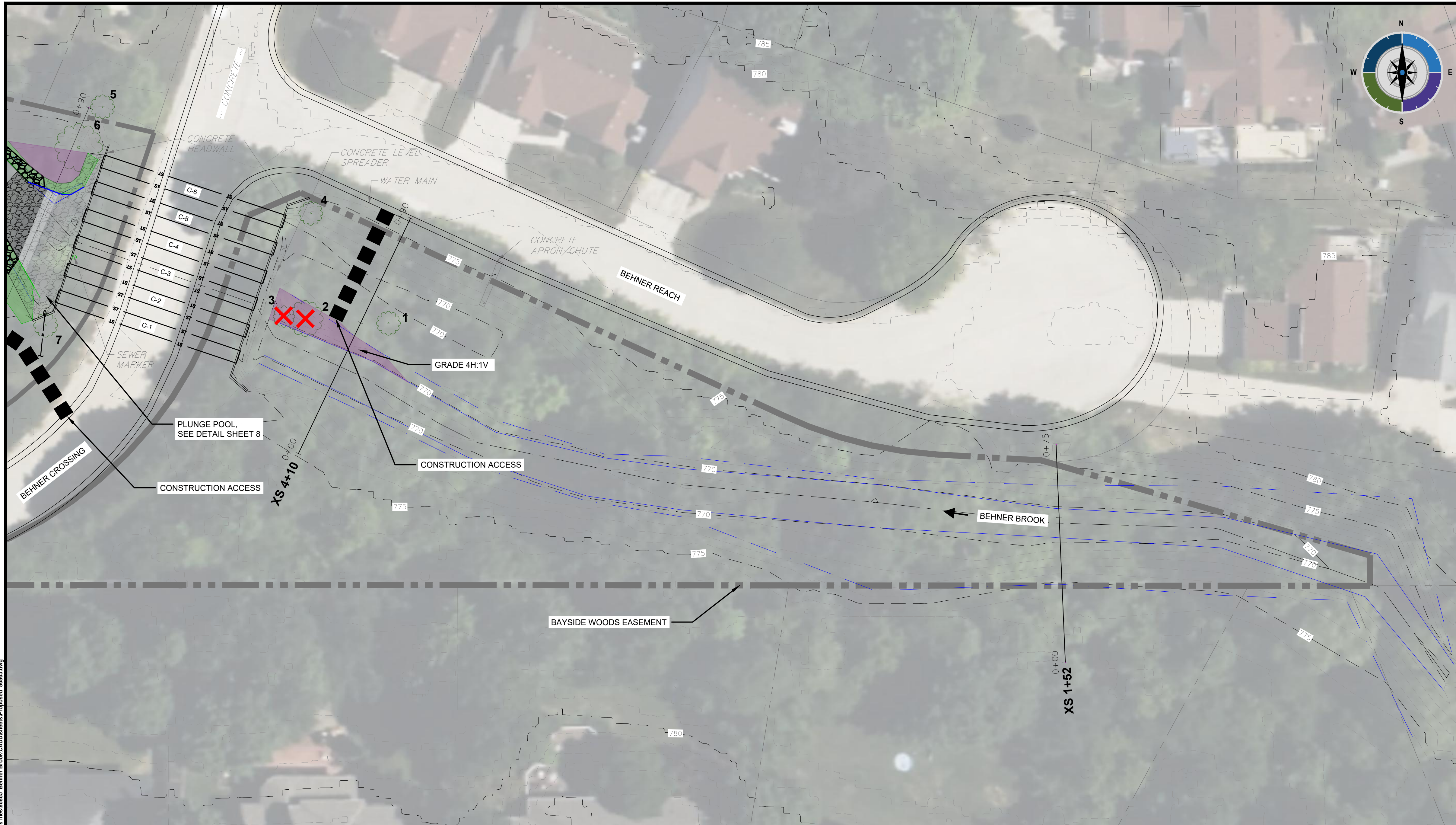
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DATE: 08/01/2024  
 PROJECT #: 86865



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- LEGEND**
- 675 --- EXISTING MAJOR CONTOUR (5')
  - 674 --- EXISTING MINOR CONTOUR (1')
  - --- PROPERTY BOUNDARY
  - --- EXISTING TOP OF BANK
  - --- EXISTING TOE OF SLOPE
  - --- STORM WATER LINE
  - EXISTING TREE
  - █ 2:1 BANK GRADING
  - █ FLOODPLAIN GRADING
  - █ STONE TOE
  - █ CONSTRUCTED RIFFLE
  - █ OUTLET PROTECTION/LEVEL SPREAD
  - --- PROPOSED TOP OF BANK
  - --- PROPOSED TOE OF SLOPE

**NOTES:**

- INVASIVE SPECIES (TARGET WOODY INVASIVES AND BAMBOO) TO BE TREATED WITHIN THE EXTENT OF THE BAYSIDEWOODS EASEMENT.
- CONTRACTOR TO MAINTAIN DRAINAGE THROUGH ALL 4" TILES. CUT FLUSH TO PROPOSED BANK IN ALL TREATMENT AREAS OR EXTEND TO STONE TOE.

**TREE TABLE**

Tree #	DBH (in)	Species	To be Removed (=X)	Bat Tree (=B)
1	10	Black Willow		
2	10	Walnut	X	
3	9, 9, 8	Silver Maple	X	
4	10	Ash		
5	10	Mulberry		
6	20	Mulberry Cluster		
7	10	Mulberry		

**CULVERT**

Culvert #	US Invert	DS Invert
1	769.62	769.01
2	769.61	769.39
3	769.83	769.3
4	769.74	769.19
5	769.76	769.21
6	769.85	769.69

All culverts are 84"x 58" pipe arch RCP

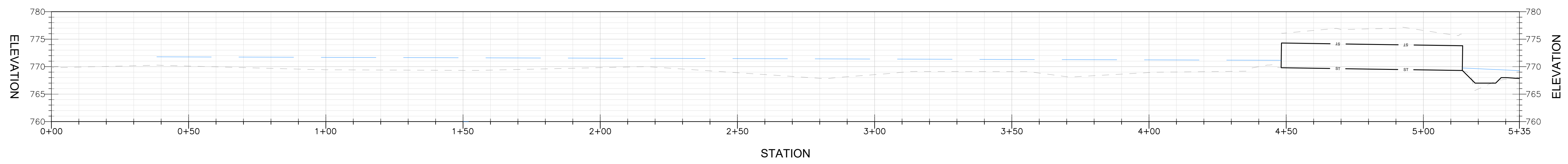
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 www.swca.com

PREPARED FOR:  
 TERRITORIAL ENGINEERING, LLC

**BEHNER BROOK RESTORATION**  
**CONCEPT PLANS**  
**PROPOSED CONDITIONS**

- LEGEND**
- EXISTING GRADE
  - PROPOSED GRADE
  - OHWM

PROFILE VIEW OF THALWEG



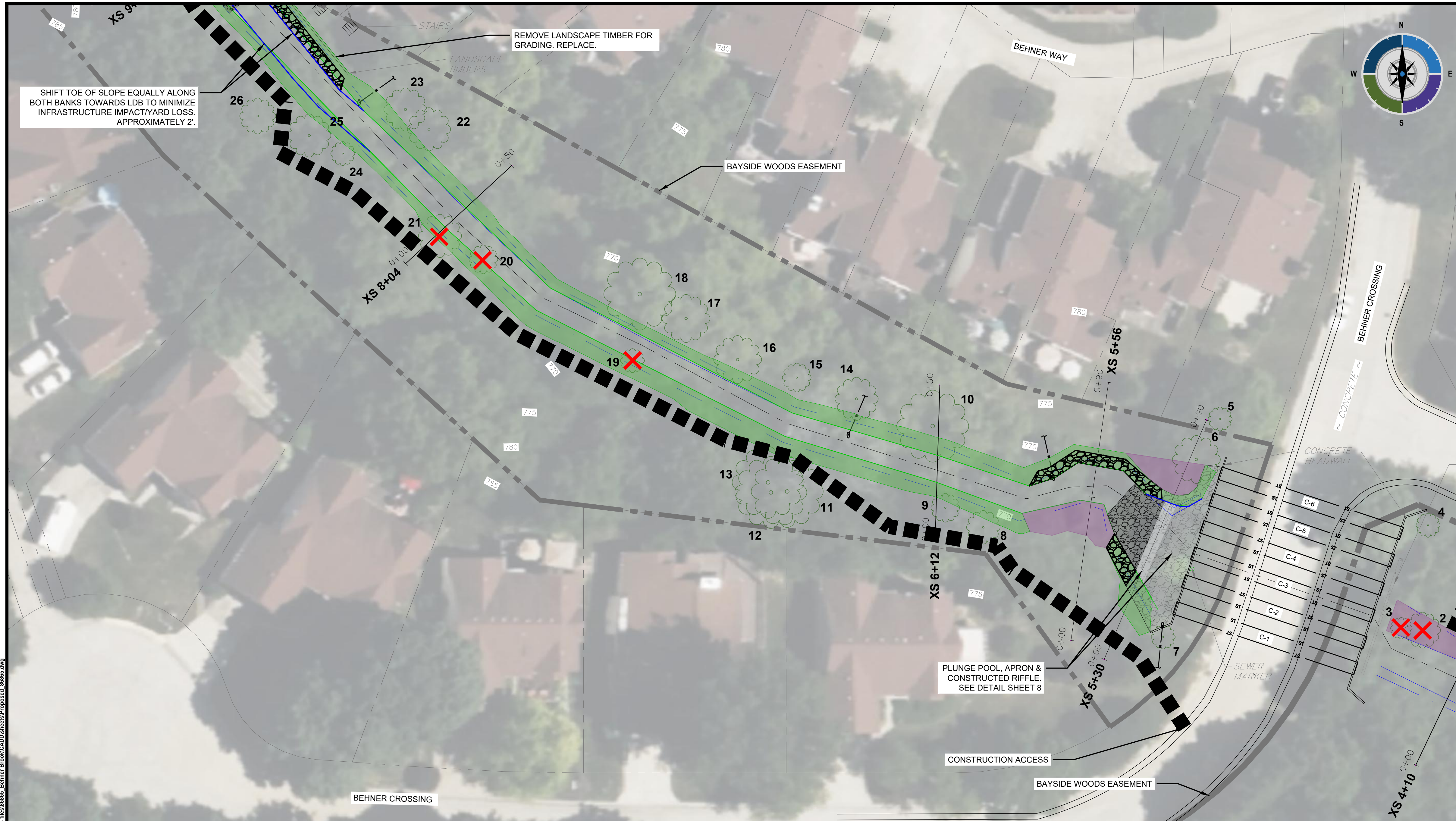
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RAS	
DRAWN BY: <th>APPROV</th>	APPROV
JLM	

DATE: 08/01/2024  
 PROJECT #: 86865

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 SCALE IN FEET

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**LEGEND**

- 6'75' --- EXISTING MAJOR CONTOUR (5')
- 6'74' --- EXISTING MINOR CONTOUR (1')
- --- PROPERTY BOUNDARY
- --- EXISTING TOP OF BANK
- --- EXISTING TOE OF SLOPE
- --- STORM WATER LINE
- --- EXISTING TREE
- █ 2:1 BANK GRADING
- █ FLOODPLAIN GRADING
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- --- PROPOSED TOP OF BANK
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**NOTES:**

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**TREE TABLE**

Tree #	DBH (in)	Species	To be Removed (=X)	Bat Tree (=B)
2	10	Walnut	X	
3	9, 9, 8	Silver Maple	X	
4	10	Ash		
5	10	Mulberry		
6	20	Mulberry Cluster		
7	10	Mulberry		
8	15	Ash		
9	9	Ash		
10	10	Ash		
11	10	Mulberry		
12	20	Mulberry Cluster		
13	10	Mulberry		
14	10	Mulberry		
8	14	Ash		
9	12	Ash		
10	30	River Birch		
11	30	Birch		
12	30	Birch		
13	30	Birch		
14	18	River Birch		
15	12	River Birch		
16	20	River Birch		
17	20	River Birch		
18	30	River Birch		
19	10	Ash	X	
20	12	Ash	X	
21	18	Walnut	X	
22	18	River Birch		
23	18	River Birch		
24	10	Dead		X
25	18	River Birch		
26	15	Walnut		

**CULVERT**

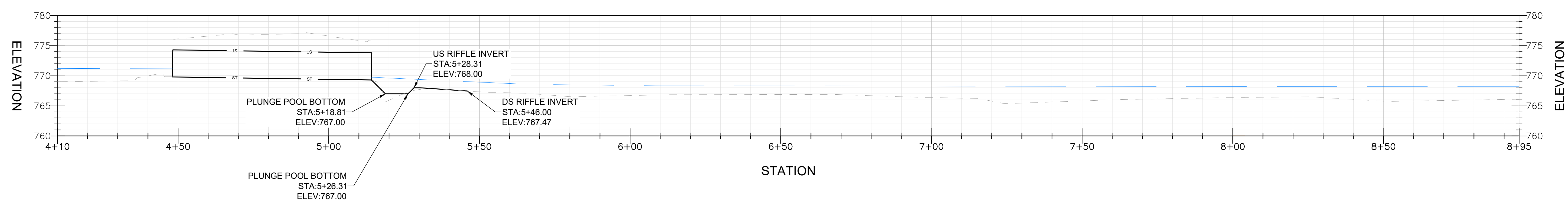
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All culverts are 84"x 58" pipe arch RCP

**LEGEND**

- --- EXISTING GRADE
- --- PROPOSED GRADE
- --- OHWM

PROFILE VIEW OF THALWEG



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PREPARED FOR: TERRITORIAL ENGINEERING, LLC

SURVEY/ BASE PLAN PREPARED BY: TERRITORIAL ENGINEERING, LLC

**BEHNER BROOK RESTORATION PERMIT PLANS**

PROPOSED CONDITIONS

CHECKED BY:	XXX	DATE
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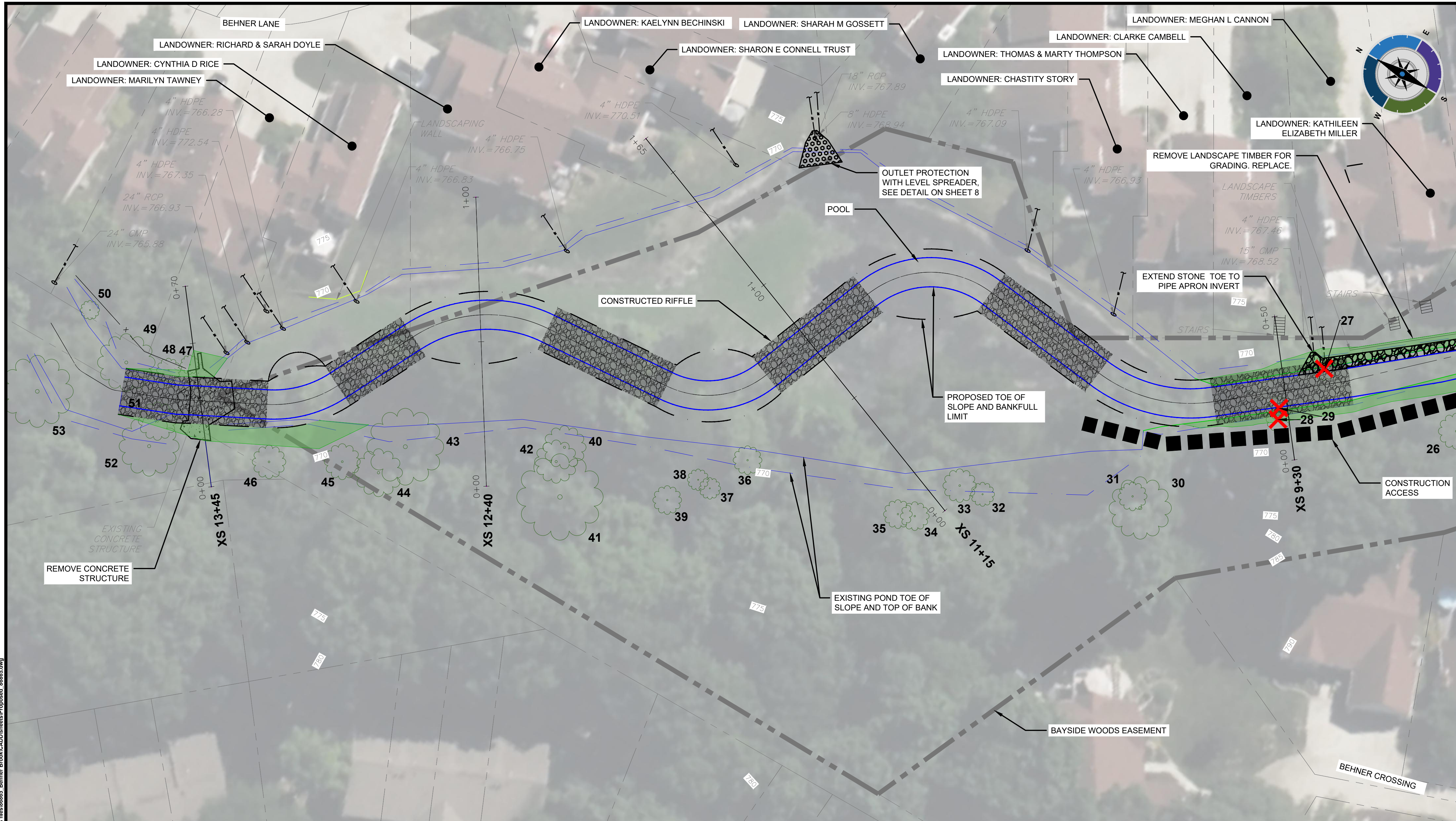
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 SCALE IN FEET

SHEET **4**

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**LEGEND**

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**TREE TABLE**

Tree #	DBH (in)	Species	To be Removed (=X)	Bat Tree (=B)
26	15	Walnut		
27	10	Dead Ash	X	X
28	10	Maple	X	
29	10	Maple	X	
30	26	Oak		
31	12	Basswood		
32	10			X
33	14	Walnut		
34	12	Black Cherry		
35	12	Dead		X
36	12	Black Cherry		
37	9			
38	9			
39	12	Black Cherry		
40	18	Oak		
41	36			X
42	18	Oak		
43	32	Walnut		
44	20			X
45	15			X
46	14			X
47	8	Ash		
48	10	Mulberry		
49	24	Oak		
50	8	Walnut		
51	16	Oak		
52	25	Walnut		
53	30	Walnut		

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PREPARED FOR:  
 TERRITORIAL  
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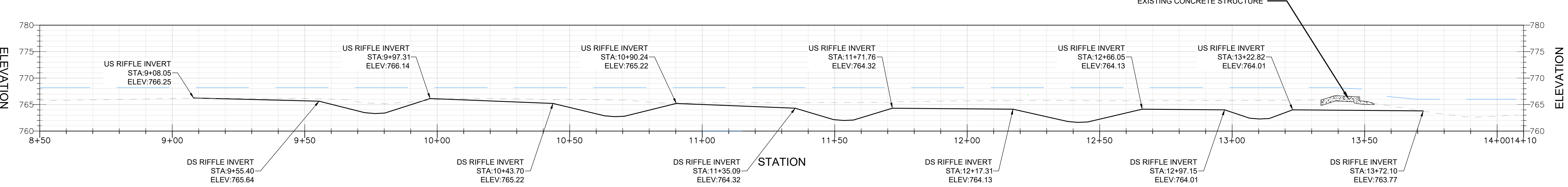
SURVEY/ BASE PLAN PREPARED BY:

**BEHNER BROOK RESTORATION  
 PERMIT PLANS  
 PROPOSED CONDITIONS**

**LEGEND**

- --- EXISTING GRADE
- --- PROPOSED GRADE
- --- OHWM

**PROFILE VIEW OF THALWEG**

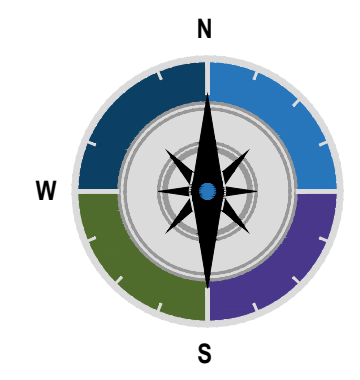


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REV:		

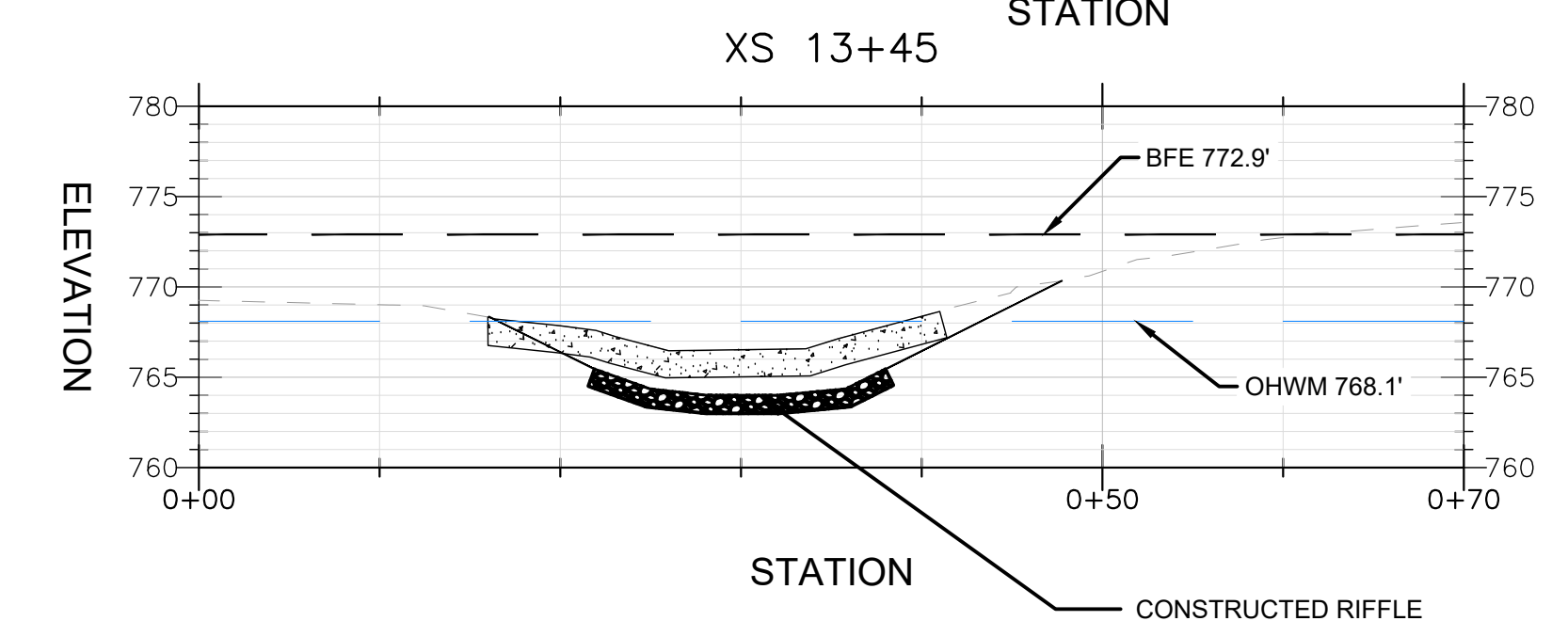
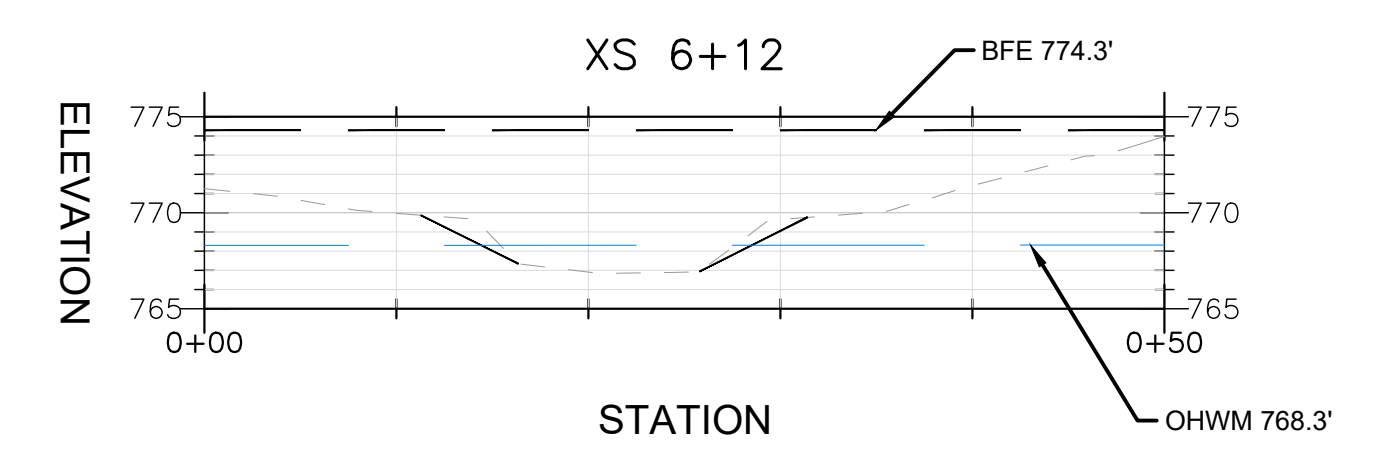
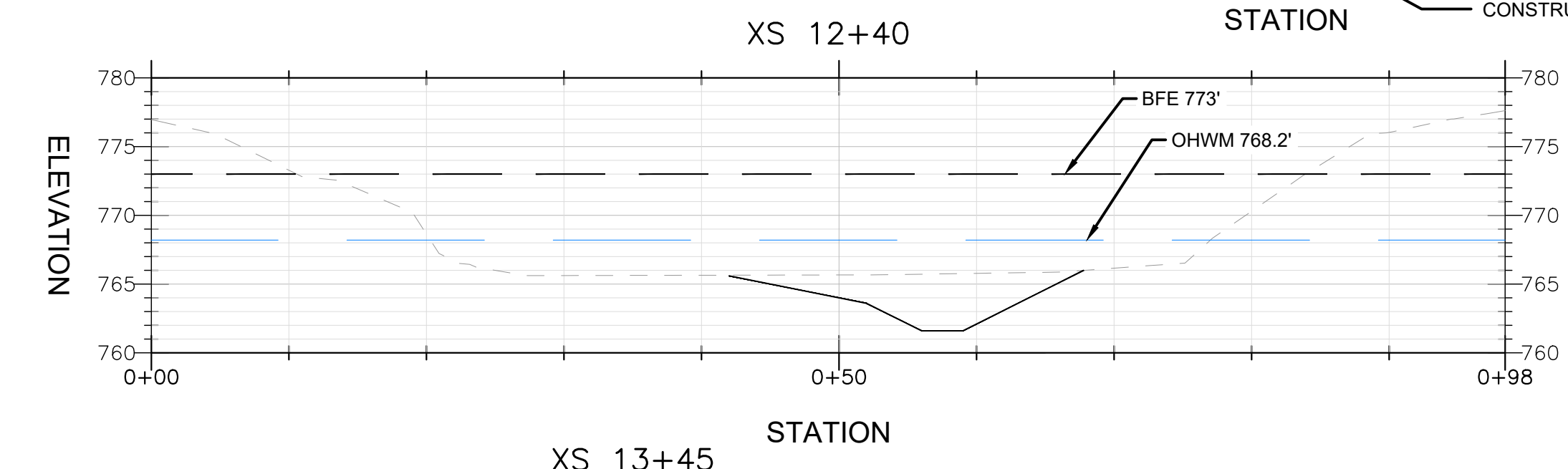
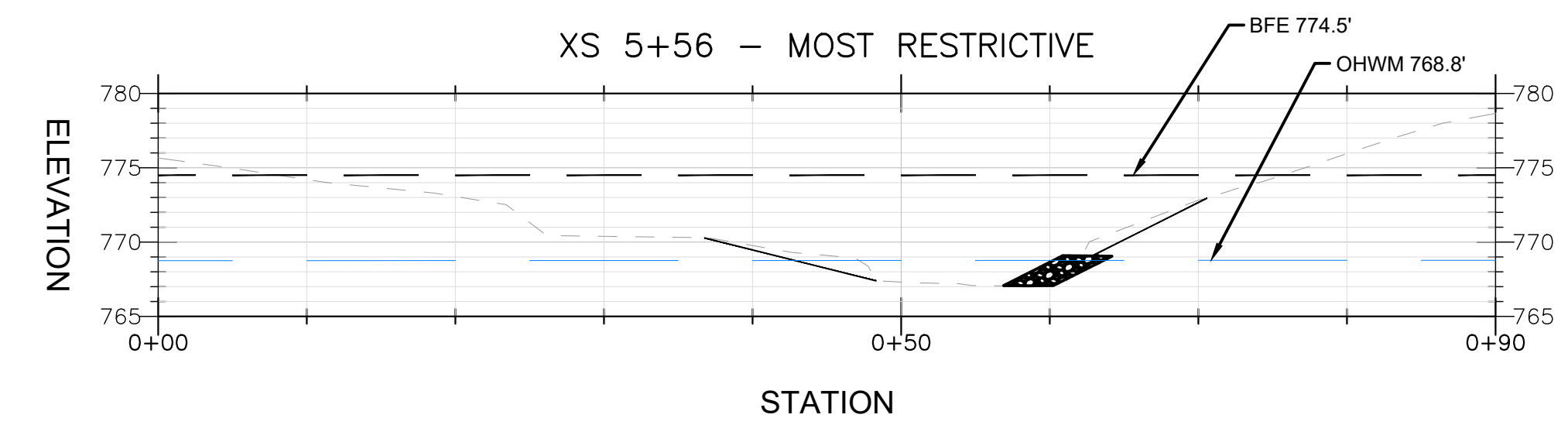
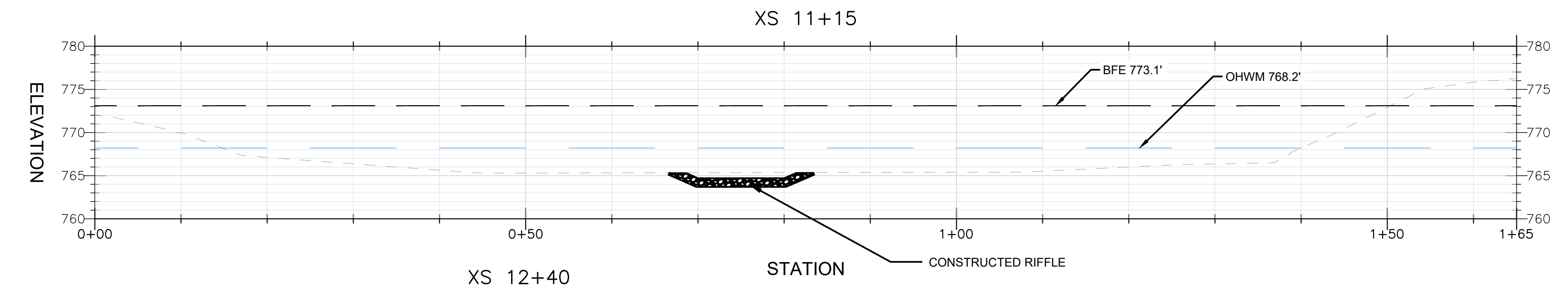
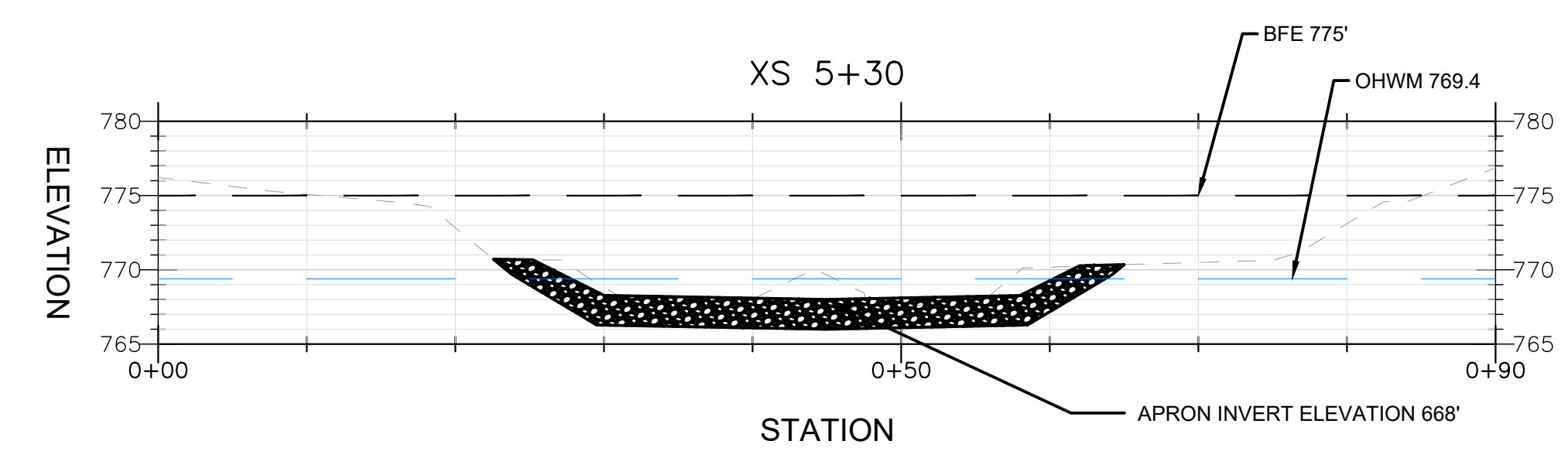
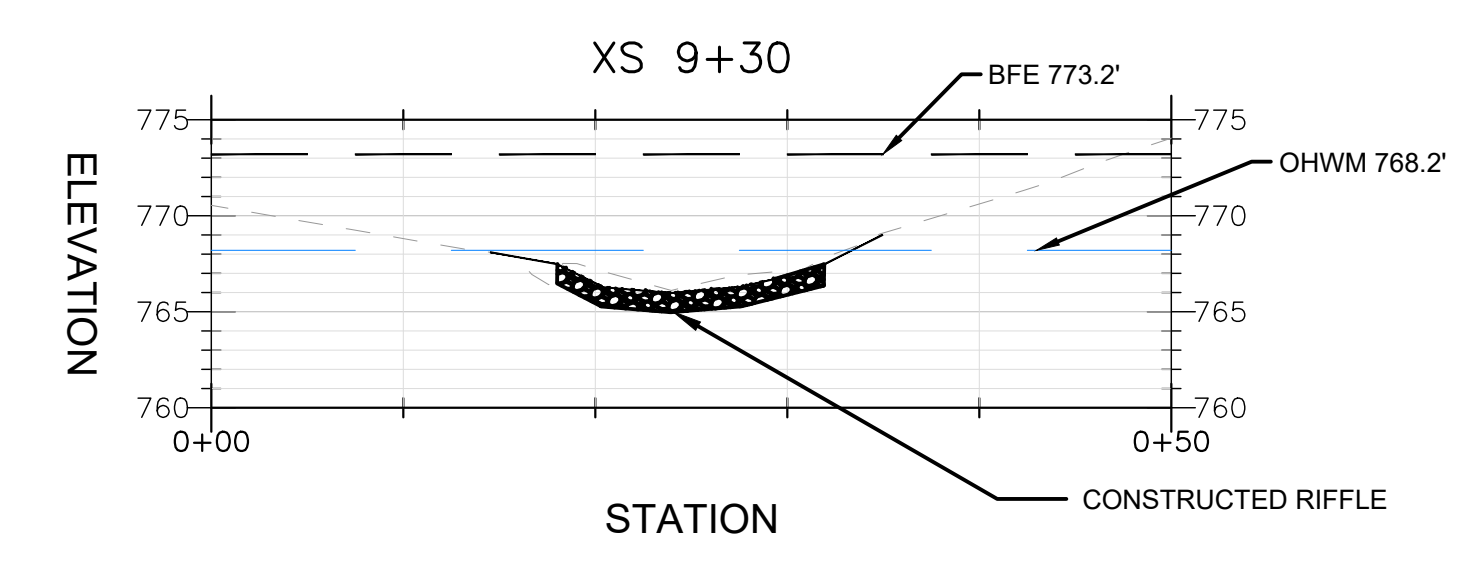
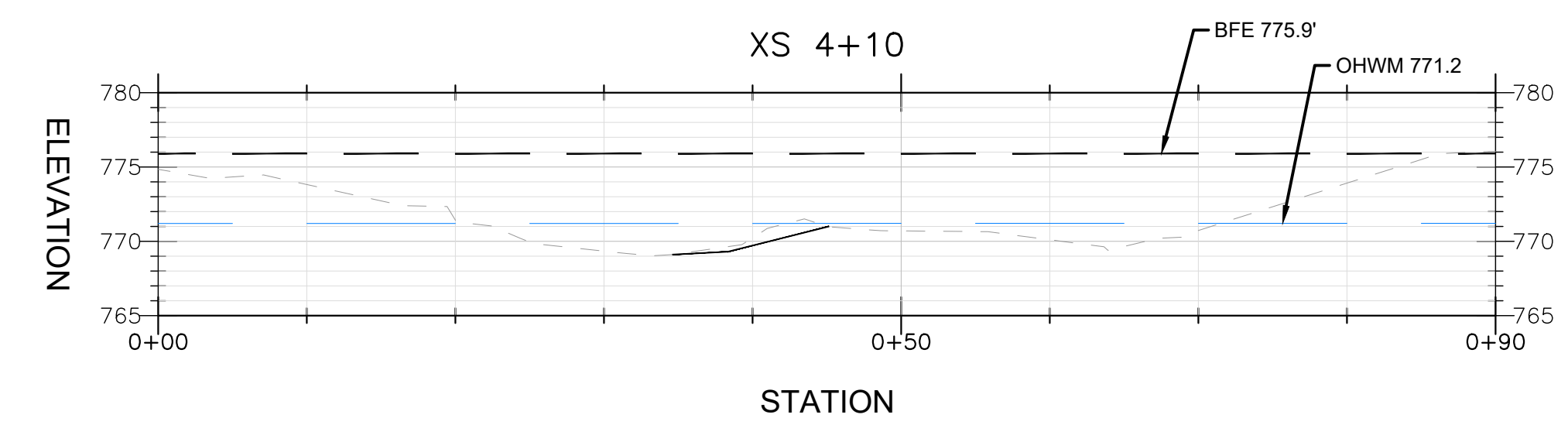
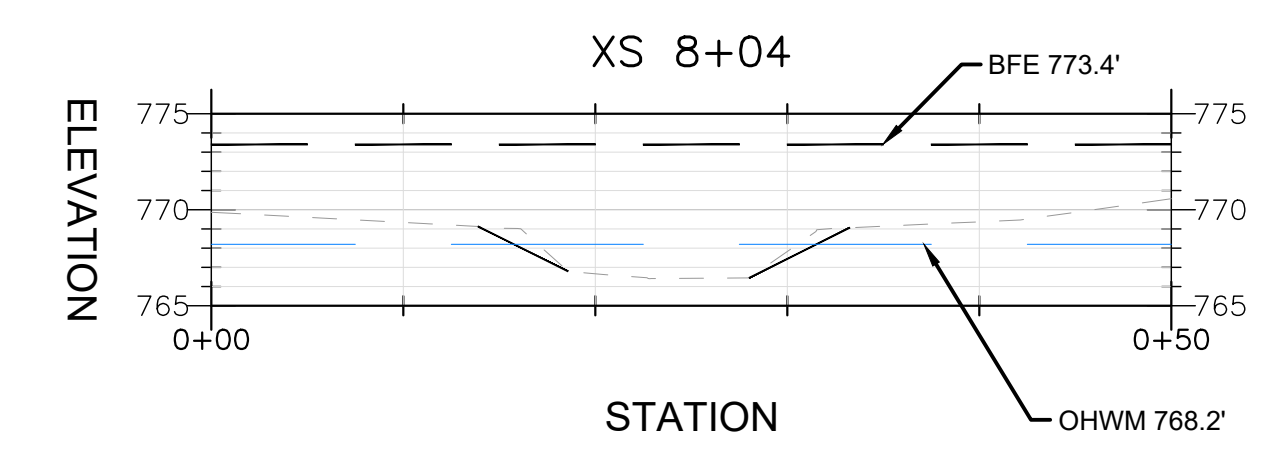
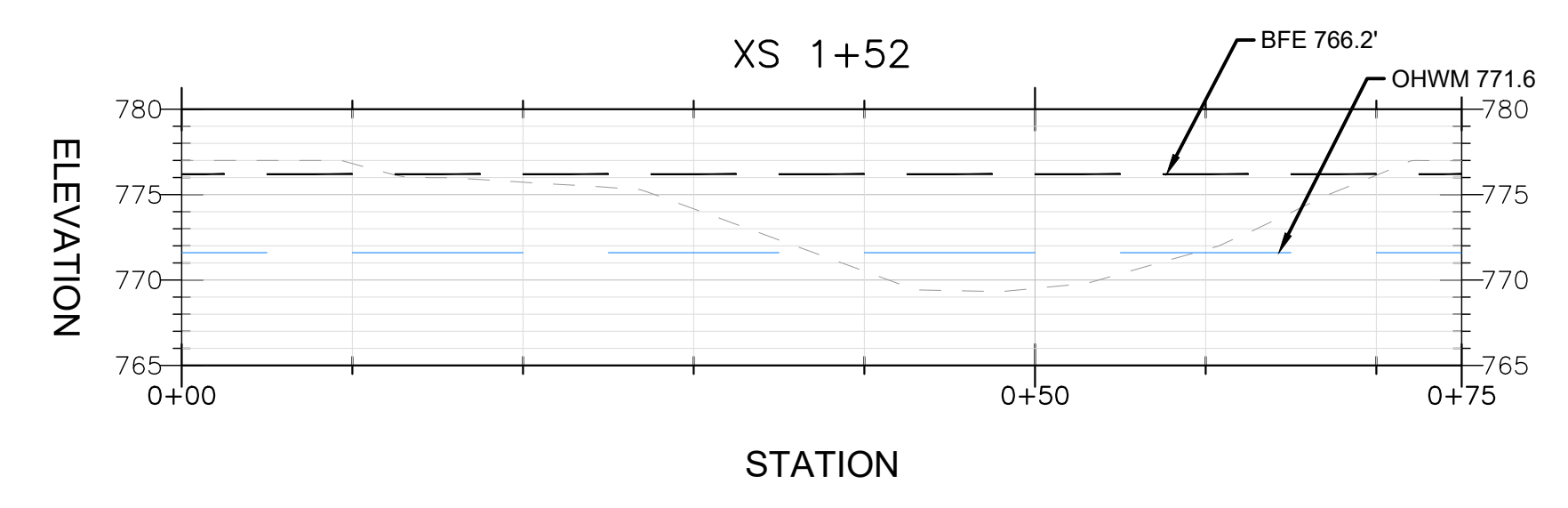
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SHEET **5**





- LEGEND**
- EXISTING GRADE
  - PROPOSED GRADE
  - █ STONE
  - ▨ CONCRETE
  - OHWM
  - BASE FLOOD ELEVATION (BFE)



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 ENGINEERING,  
 LLC

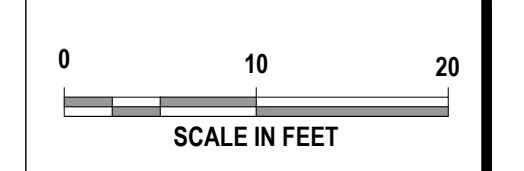
**BEHNER BROOK RESTORATION**  
**PERMIT PLANS**  
**CROSS-SECTIONS**

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XXX	RAS	

REV	DATE	DESCRIPTION

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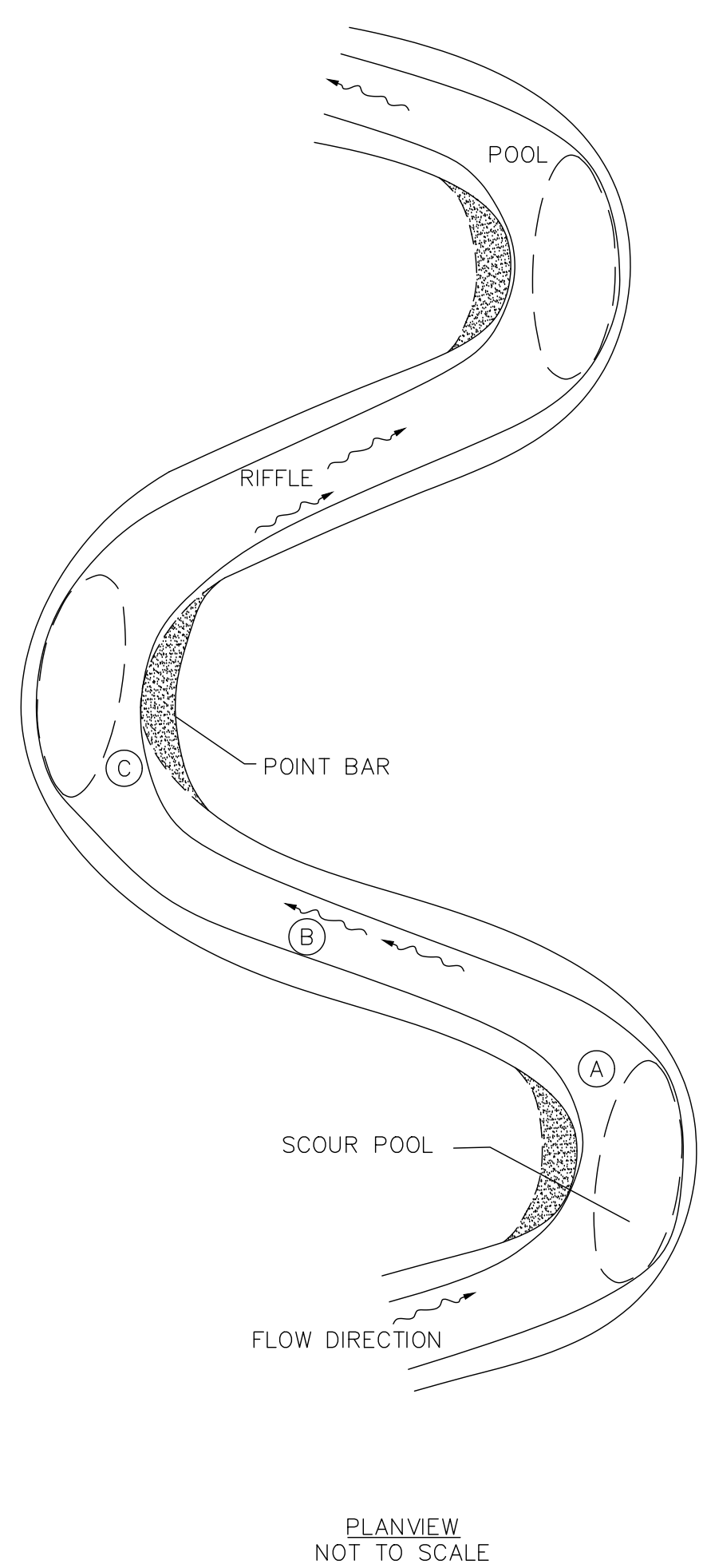
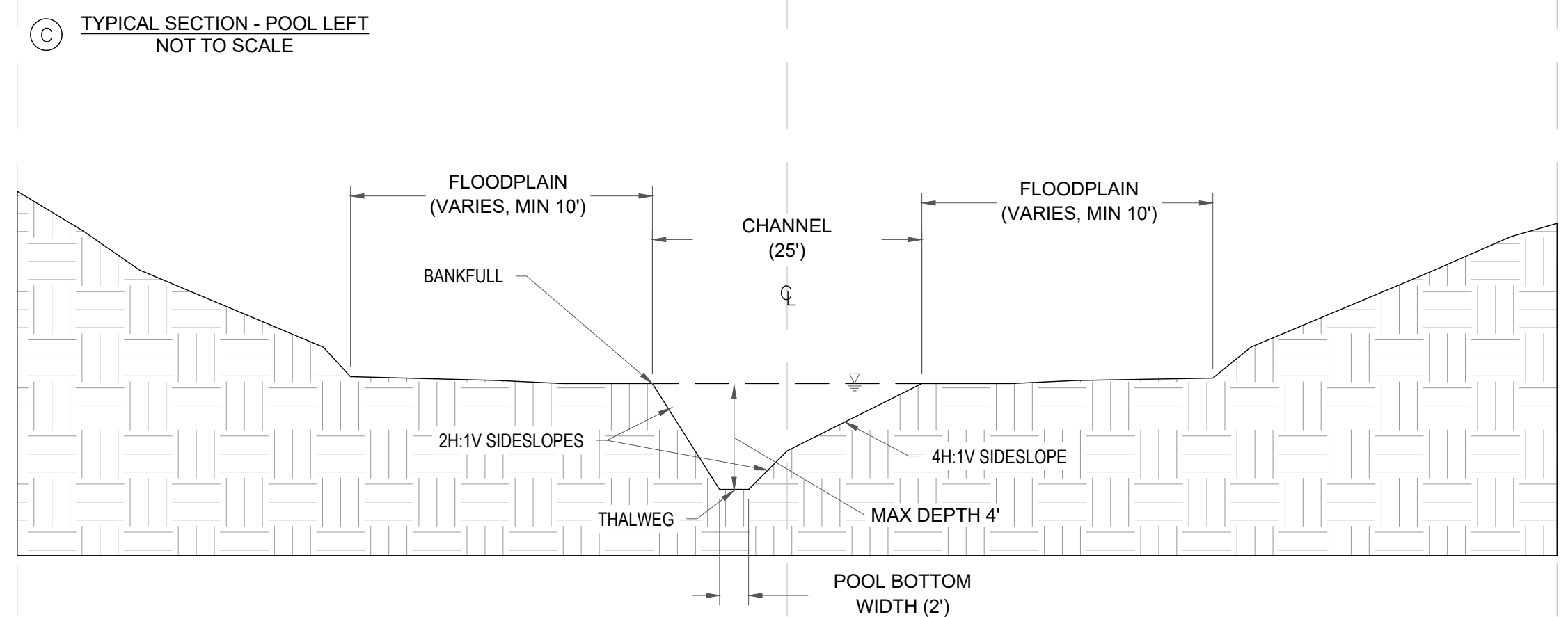
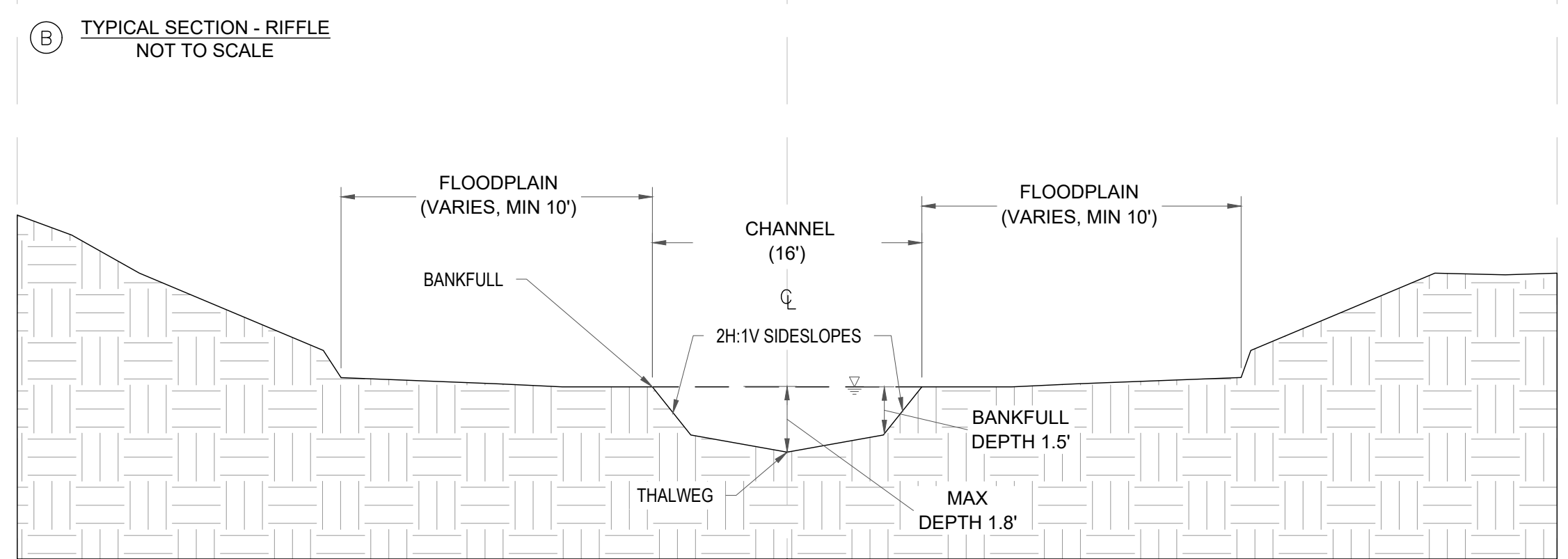
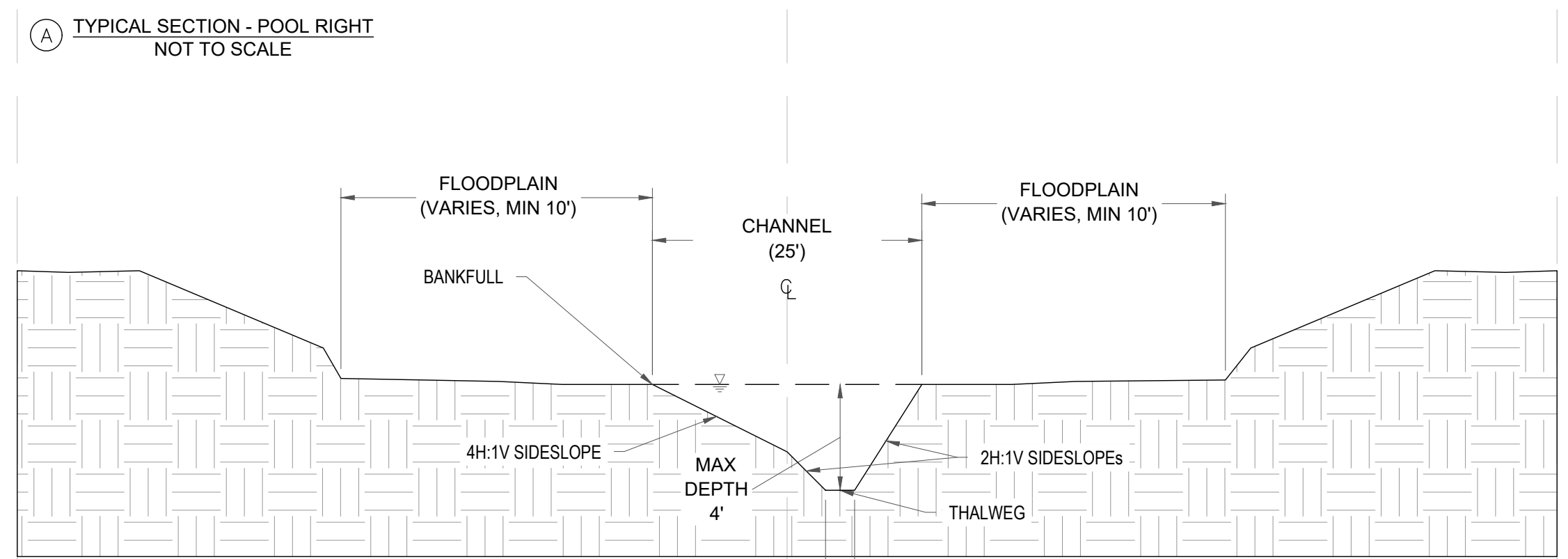
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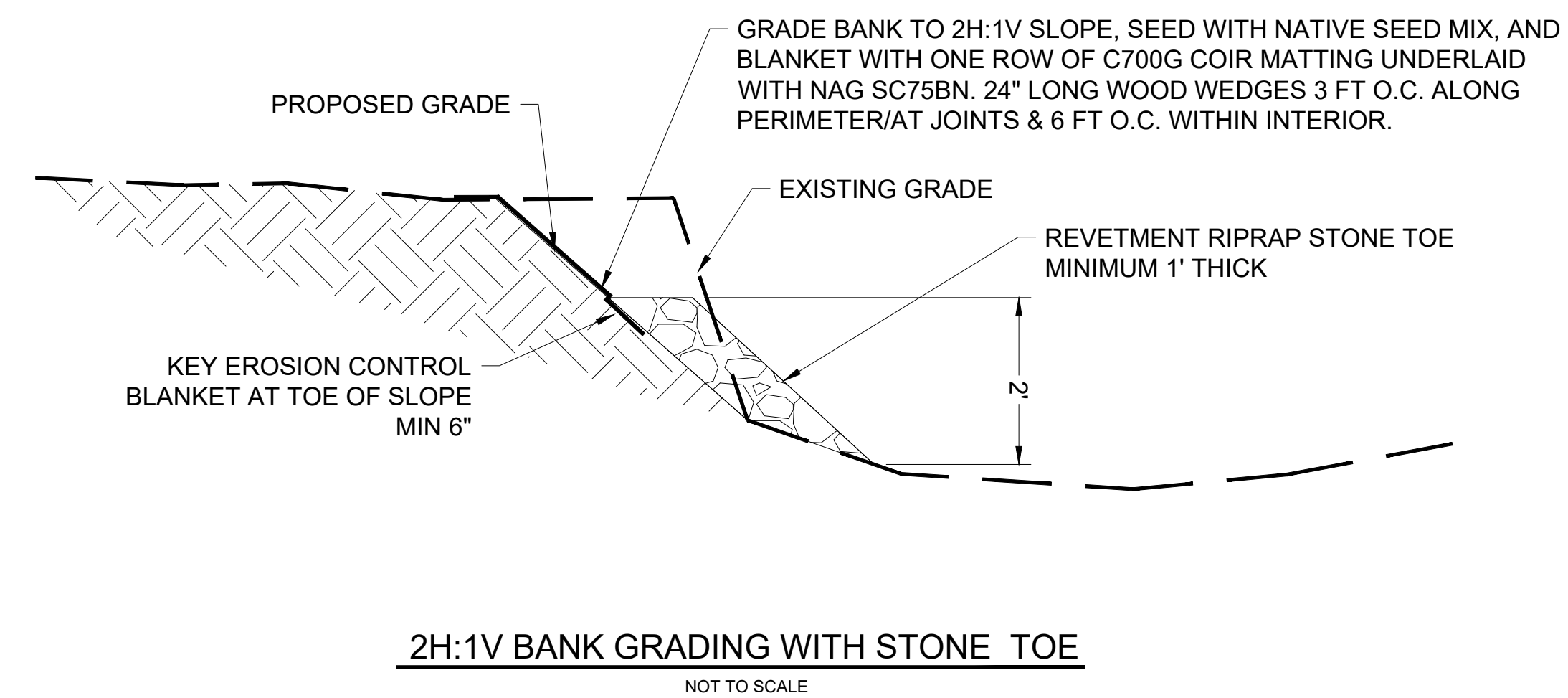
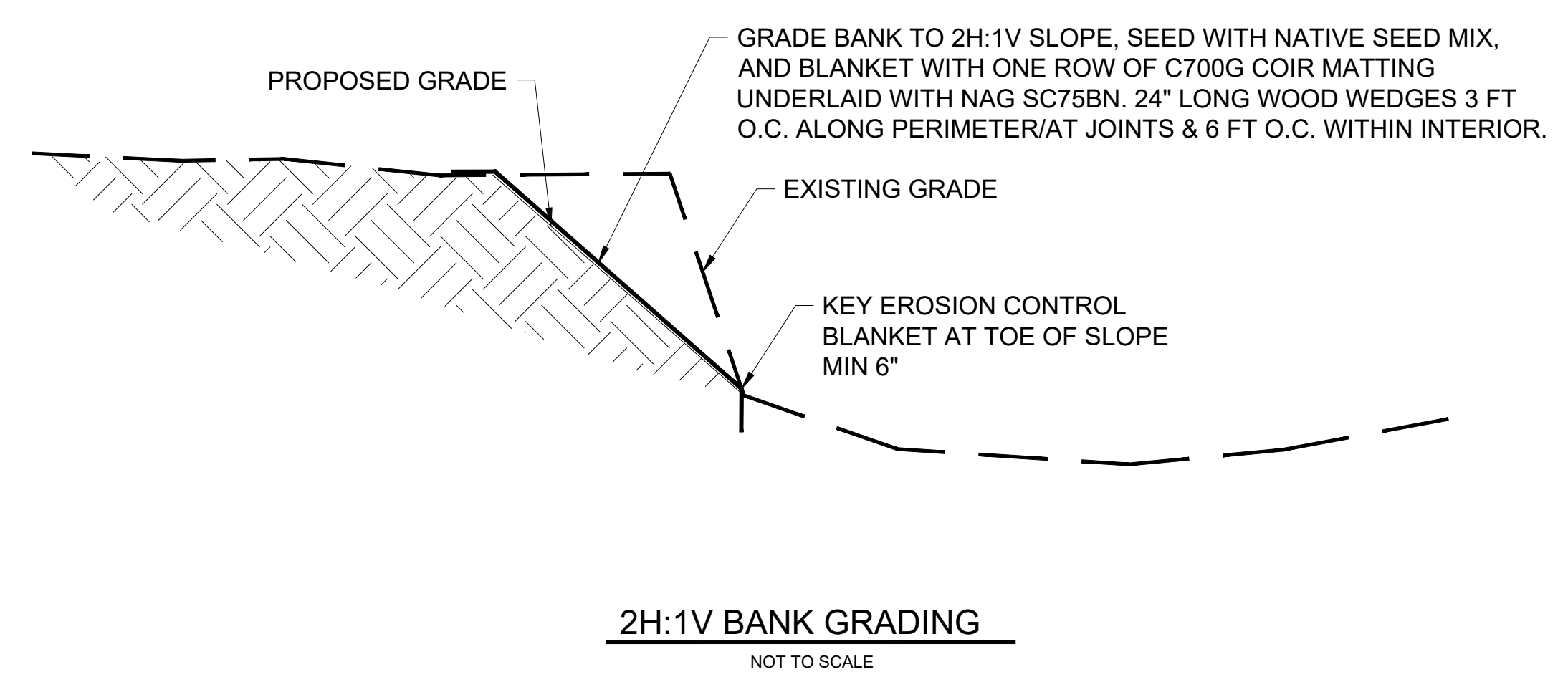
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**BEHNER BROOK RESTORATION  
 PERMIT PLANS  
 DETAILS**



NOTES:  
 1. TYPICAL POOL DETAIL DISPLAYS TARGET DIMENSIONS. ADJUSTMENTS TO POOL WIDTH MAY BE NECESSARY TO COMPLIMENT OVERALL GRADING PLANS. NOTABLE DEVIATIONS TO BE APPROVED BY THE ENGINEER



**STREAM CHANNEL**  
 NOT TO SCALE

**PLANTING PLAN**

**TREE REPLACEMENT**

COMMON NAME	SCIENTIFIC NAME	QUANTITY
Red Maple	<i>Acer rubrum</i>	10
Swamp White Oak	<i>Quercus bicolor</i>	10
Red Bud	<i>Cercis canadensis</i>	10
Bitternut Hickory	<i>Carya cordiformis</i>	5
Black Walnut	<i>Juglans nigra</i>	5
<b>TOTAL</b>		<b>40</b>

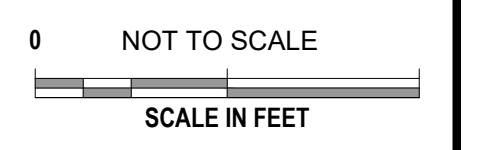
**NATIVE SEED MIX**

COMMON NAME	SCIENTIFIC NAME	PLS (oz/acre)
Big Bluestem	<i>Andropogon gerardii</i>	48
Side-Oats Grama	<i>Bouteloua curtipendula</i>	16
Prairie Sedge Species	<i>Carex spp.</i>	4
Canada Wild Rye	<i>Elymus canadensis</i>	32
Virginia Wild Rye	<i>Elymus virginicus</i>	24
Switch Grass	<i>Panicum virgatum</i>	12
Little Blue Stem	<i>Schizachyrium scoparium</i>	32
Indian Grass	<i>Sorghastrum nutans</i>	32
Common Oat	<i>Avena sativa</i>	640
Annual Rye	<i>Lolium multiflorum</i>	120
<b>TOTAL</b>		<b>960</b>

NOTES:  
 1. NATIVE SEED MIX TO BE SEEDED IN ALL DISTURBED AREAS EXCEPT FOR LAWN AREAS TO BE SEEDED WITH INDOT SEED MIXTURE P OR SIMILAR.  
 2. ALL DISTURBED AREAS BETWEEN STATIONS 3+90 TO 9+50 NOT OTHERWISE MATTED, TO BE SECURED WITH NAG SC75BN OR EQUIVALENT AND STAKED WITH 6" BIODEGRADABLE WOOD STAKES.  
 3. ALL DISTURBED AREAS DOWNSTREAM OF STATION 9+50 NOT OTHERWISE MATTED TO BE STRAW MULCHED AT A RATE OF 1-2 TONS/ACRE.

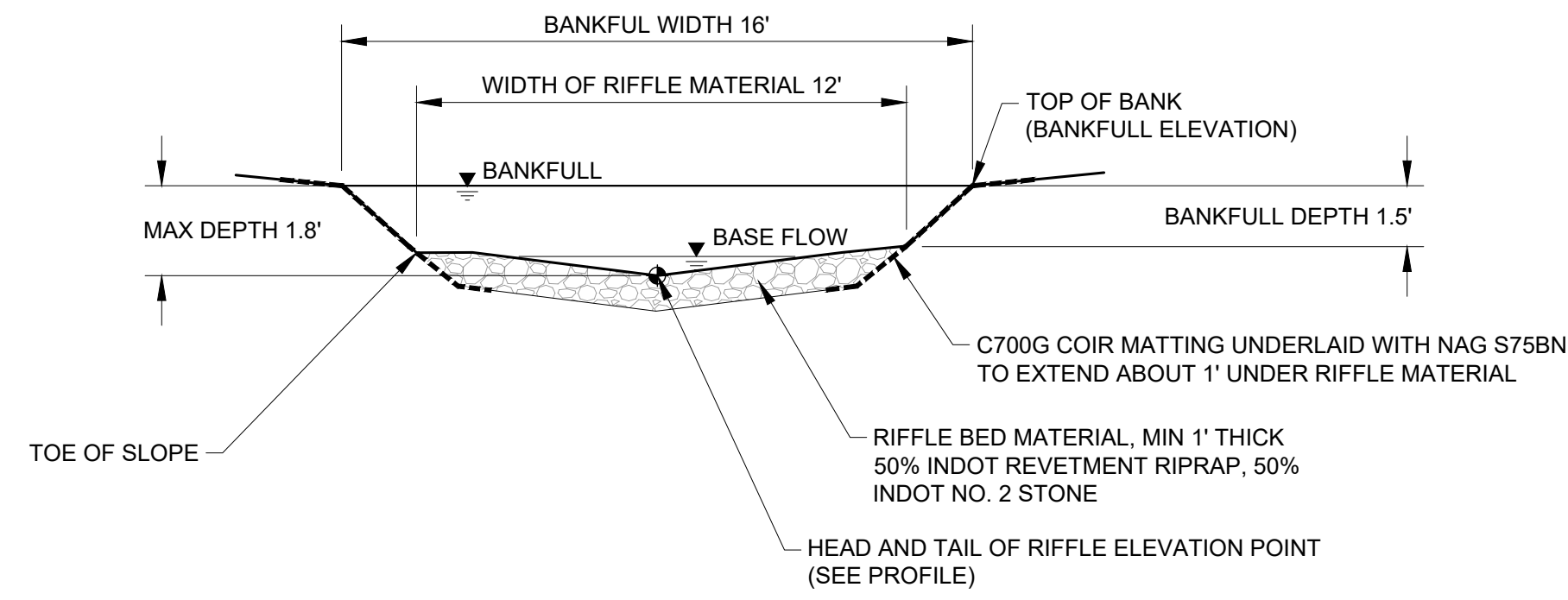
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 PROJECT #: 86865

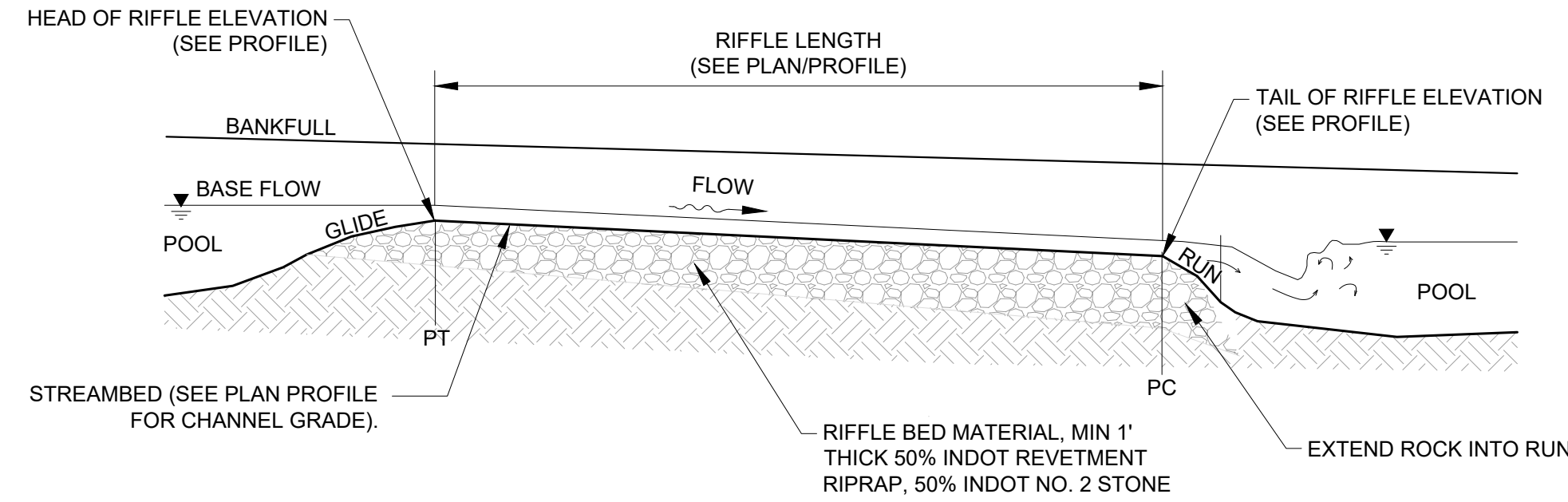


Plotted By: juliana Meert, Sheet Set: kha Layout: 01\_2024\_10:40:28am, C:\Users\jmeert\OneDrive - SWCA\SWCA-RED - SWCA\SWCA-RED - SWCA\SWCA-RED\1883 US-12, SUITE 2\New Buffalo\Details\86865.dwg

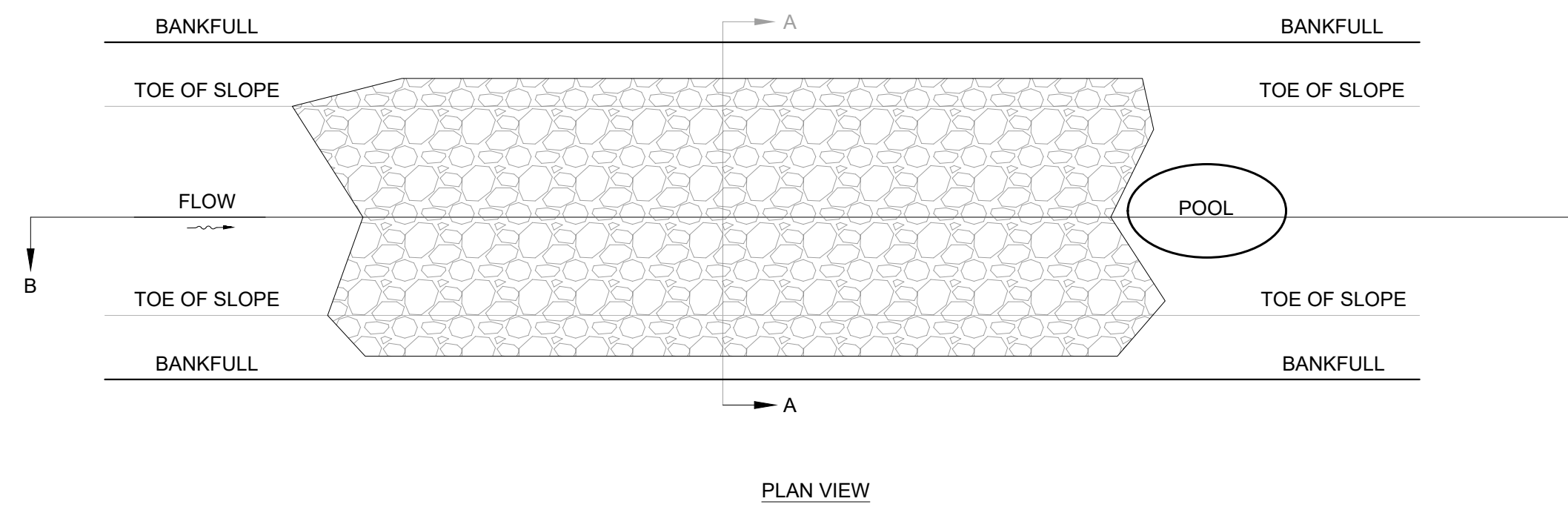




SECTION A-A

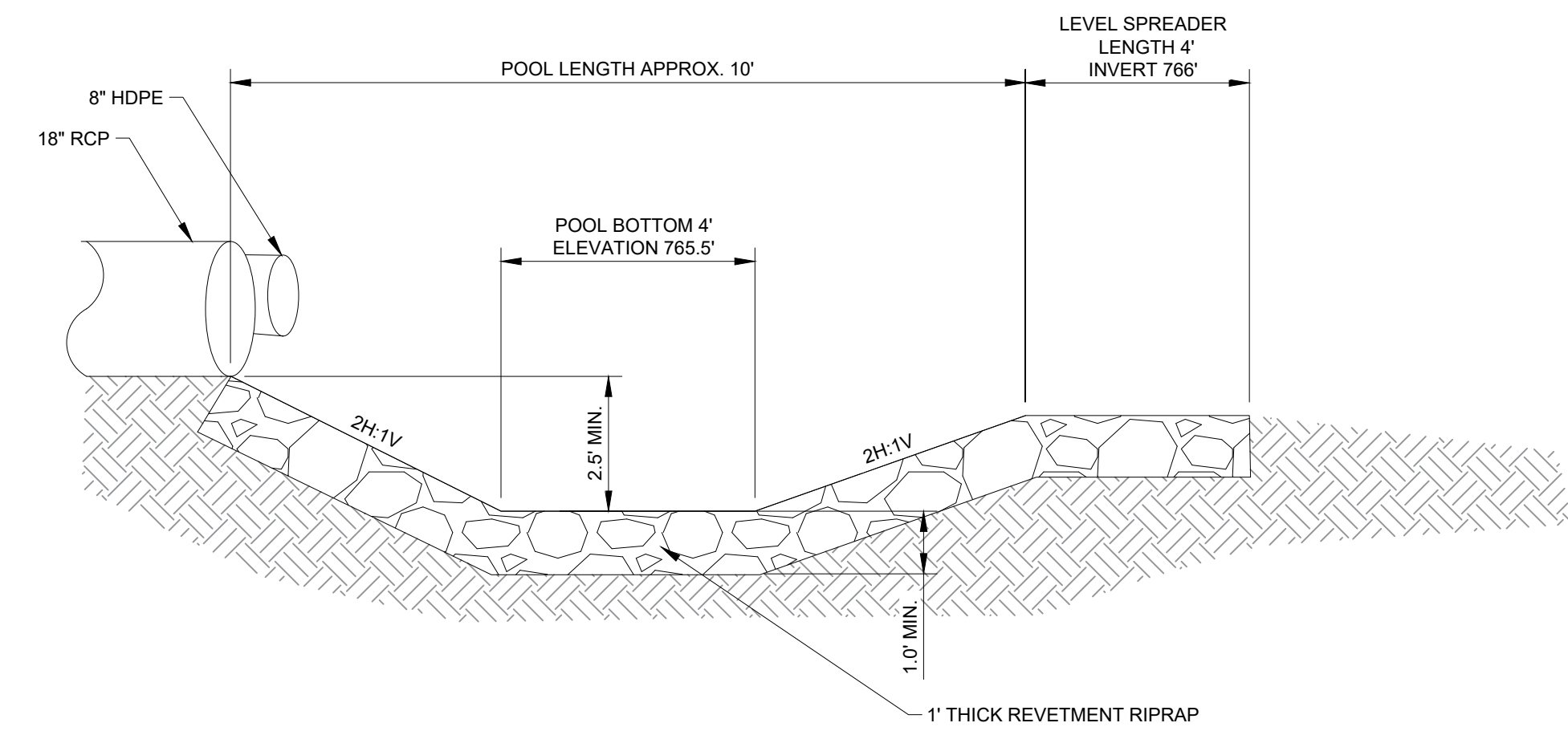


SECTION B-B

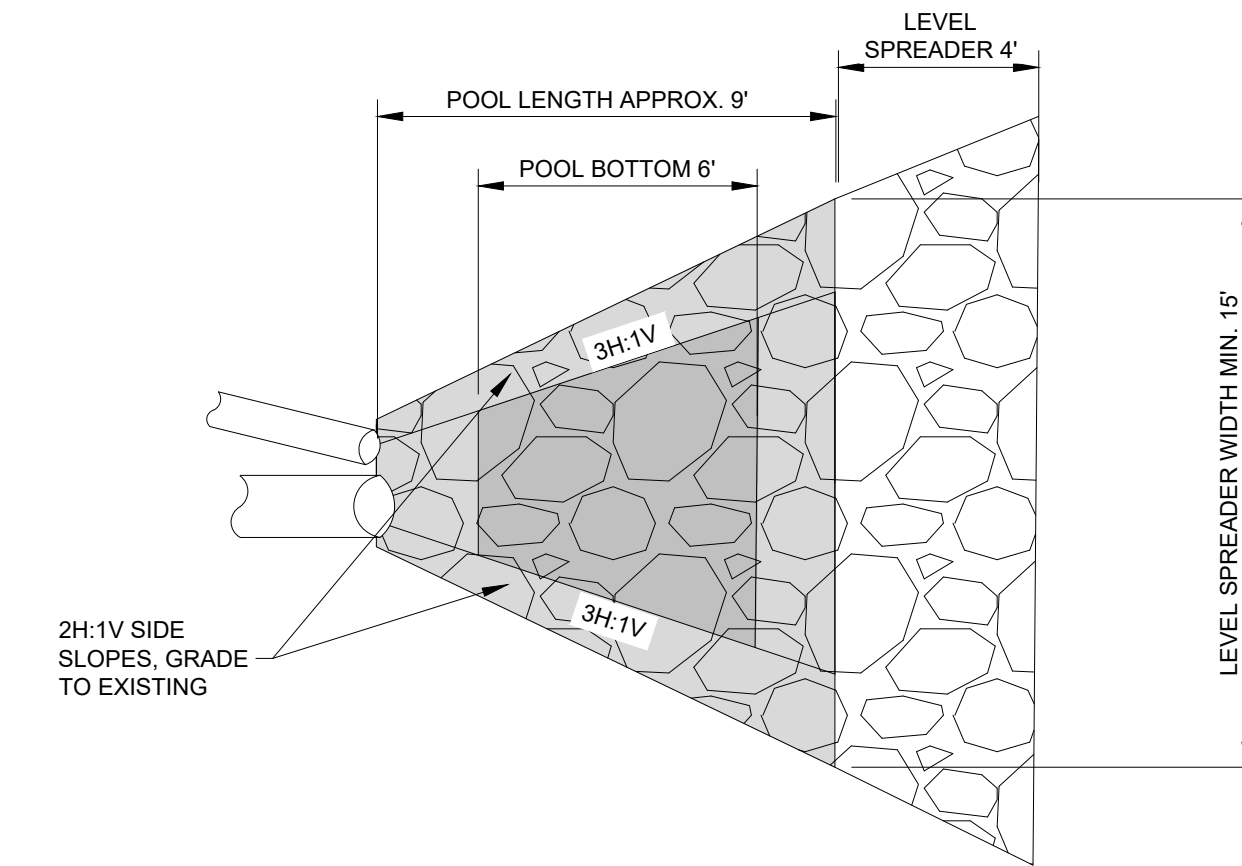


CONSTRUCTED RIFFLE

NOT TO SCALE



SECTION VIEW

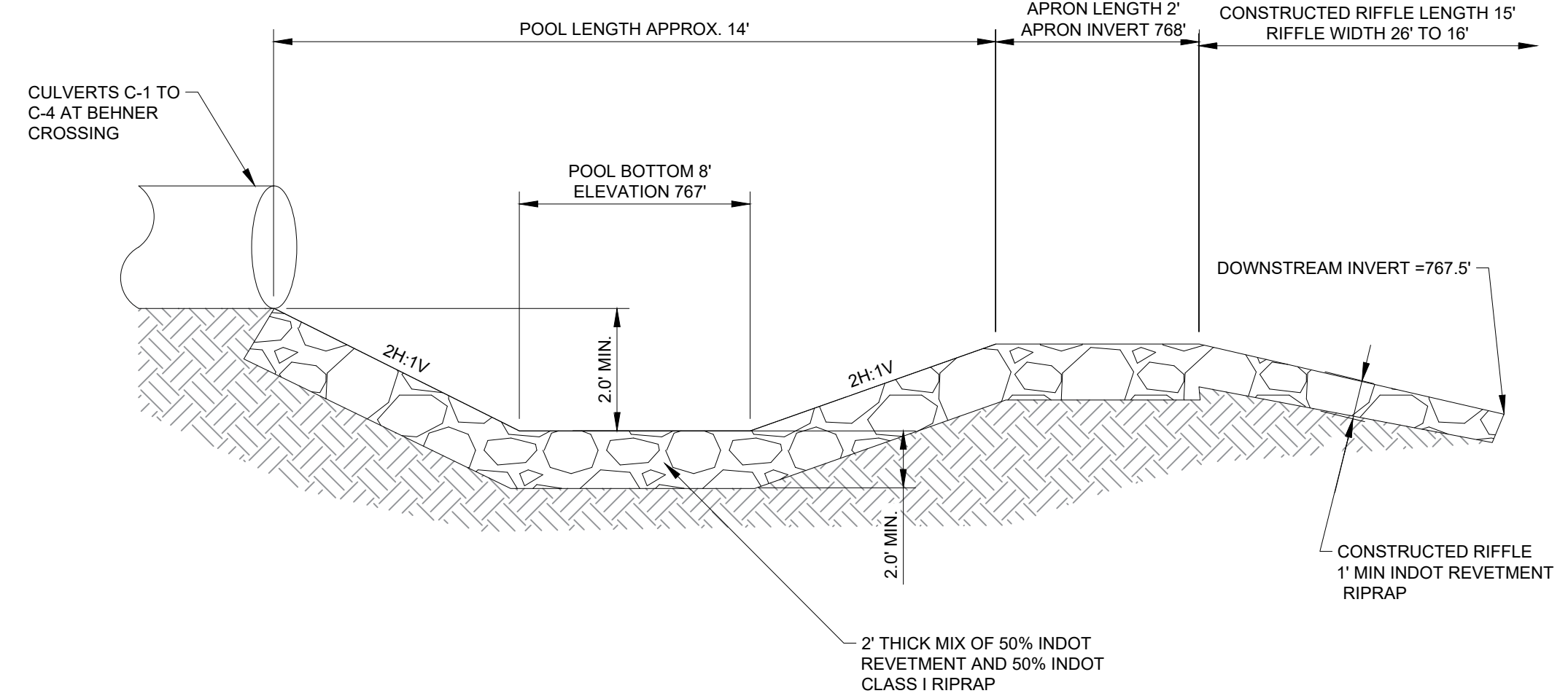


PLAN VIEW

- NOTES:  
 1. OUTLET PROTECTION AND LEVEL SPREADER TO BE INSTALLED AT THE 18" RCP AND 8" HDPE TILE OUTLETS AT APPROXIMATELY STATION 10+85. SEE SHEET 5 FOR PLAN VIEW.  
 2. EXISTING METAL APRON TO BE REMOVED

OUTLET PROTECTION WITH LEVEL SPREADER

NOT TO SCALE



- NOTES:  
 1. SEE SHEET 4 FOR PLAN VIEW.

PLUNGE POOL, APRON & CONSTRUCTED RIFFLE

NOT TO SCALE

PREPARED BY:



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PREPARED FOR:

SURVEY/ BASE PLAN PREPARED BY:

TERRITORIAL  
 ENGINEERING,  
 LLC

BEHNER BROOK RESTORATION  
 PERMIT PLANS  
 DETAILS

CHECKED BY:	DATE	DESIGNED BY:	DESCRIPTION	DRAWN BY:	APPROV
XXX		RAS		JLM	
REV					

DATE: 08/01/2024

PROJECT #: 86865

0 NOT TO SCALE  
 SCALE IN FEET

Modified by: James M. Meier - Sheet Set: 818 - Layout: 11 - August 01, 2024 - 10:40:36am - C:\Users\jmeier\Documents\SWCA\Projects\2024\818\818-11\818-11-11.dwg - SWCA\Projects\2024\818\818-11\818-11-11.dwg - Behner Brook Restoration - SWCA\Projects\2024\818\818-11\818-11-11.dwg