

ADDENDUM #1

Job #: 190970 **Project Title** Alexandria Lower Dam Improvements
Client: City of Alexandria

Issue Date: February 16, 2023
Bid Date: February 21, 2023

THIS IS TO CERTIFY THAT YOU ARE IN RECEIPT OF ADDENDUM #1 FOR THE ABOVE-MENTIONED PROJECT.

PLEASE SIGN AND RETURN VIA EMAIL TO: pbellew@ctconsultants.com.

Name / Title:

Company:

Date:

RFI Responses:

- Is there a cross section for the storm structure and pipe that is getting removed?
 - The storm structure is approximately 8 ft long, 5.5 ft wide and 7.5 feet deep with 8” thick walls. No pipe is planned to be removed unless the contractor believes it is necessary to safe load the 36” diameter pipe, any pipe removal needed for this will be incidental to the safe load bid item.
- What are the requirements for placing the excess cut material on the toe of the upper dam?
 - Excess cut material may be spread beyond the toe of the lower dam. The deposit material shall not block existing drainage channels. The material should be loosely spread (we do not want to form large mounds. There is an area between the toe of the upper dam and the eastern wall of the spillway for the upper dam that could be filled in. Any deposited material should not exceed the height of the spillway wall.



- Can the silt removed from the bottom of the pond be disposed of onsite?
 - Yes, the City may ask for a small portion of the material to be brought to another portion of the park, but a majority of it can be disposed of with the excess cut material.
- Is the contractor responsible for hiring the inspector for testing and inspecting?
 - Someone from the City or CT Consultants will perform a daily site visit to conduct inspections. No additional inspections will be required.
- While clearing and grubbing, can all brush be burned or chipped and left onsite?
 - Yes. At the preconstruction meeting the City and Ct can meet on site to discuss where chippings can be spread.
- Will it be ok to trim trees on the path to allow for equipment access?
 - Yes, any trees or limbs that need to be trimmed or removed to provide access may be done so.
- Confirming that the sanitary sewer is already abandoned and all we will need to do is locate it, cut it and cap it?
 - Yes, the sanitary sewer line is abandoned, actual location and elevation is unknown. It is assumed that the contractor will come across the abandoned pipe during excavation, and the pipe would need to be capped on each side.
- Will we be able to shut traffic off to the parking lot unload equipment?
 - Yes, the lower parking lot may be temporarily shut down to unload and load equipment.
- Can the trail from the parking lot at the upper pond be closed.
 - Yes, you can add signs indicating that the trail is closed.
- Is there any work limitations or noise ordinances,
 - Work shall be allowed from 7:00 AM to 8:00 PM.
- When pumping is required where can the water be pumped to? Is there a limitation to how much can be pumped at one time?
 - The water may be pumped into the existing spillway. The only limitation to the amount that can be pumped is the capacity of the culvert under Riley Road. Water shall not flow over the pavement on Riley Road.
- If the 8” DIP is silted in, how will unclogging of the pipe be paid?
 - After the access path has been constructed and the silt has been removed around the structure, the City will evaluate 8” pipe to



determine what additional work will be need to get the 8” functioning properly. At that time the City may ask the contractor for additional services and a change order will be issued.

- Does the Flexamat get installed up the slopes of the spillway as well or just the bottom?
 - The original intention was to only have the Flexamat along the bottom of the spillway. After discussions with Dan Taphorn with Flexamat, we have determined that installing a 16’ wide section and a 15.5’ section with extension would be best for this project, which provides a 31.5’ wide section (approximately 3 ft up each side slope). A revised bid tab is being issued.

Revised Bid Tab:

Item 8: FLEXAMAT SPILLWAY PROTECTION; quantity has been adjusted.

An updated bid tab is attached.

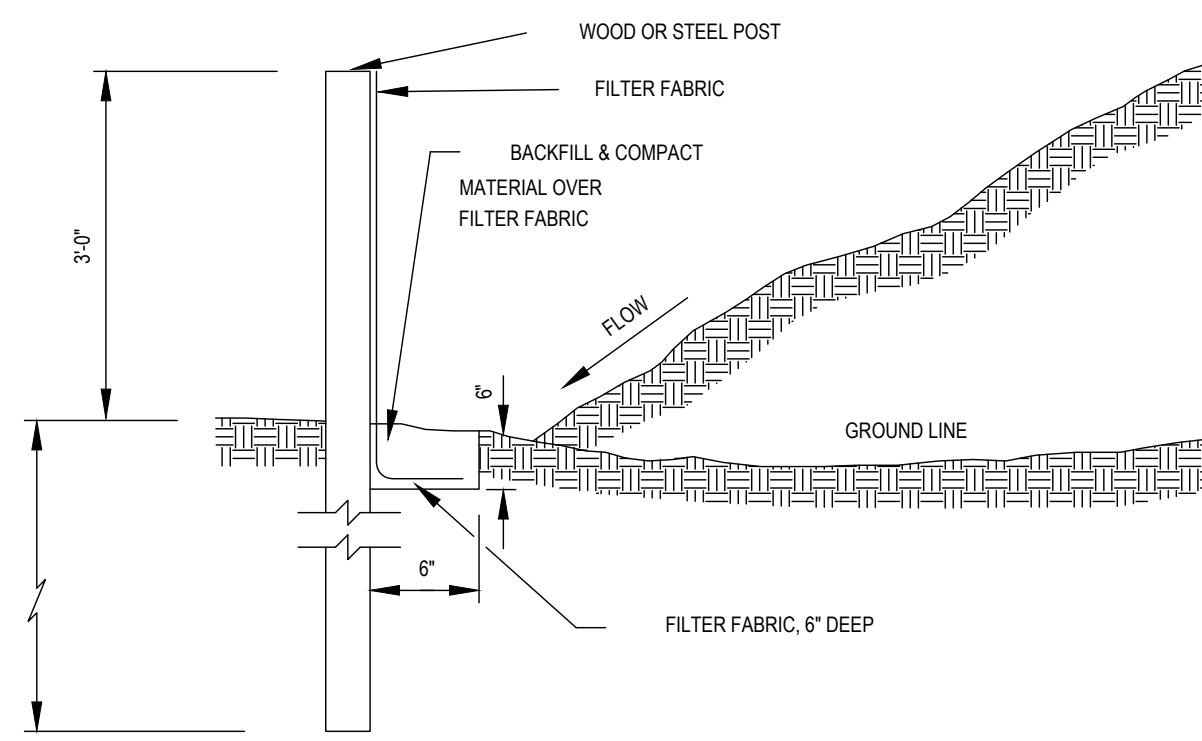
Additional exhibits from Flexamat is attached.

CT Consultants, Inc.

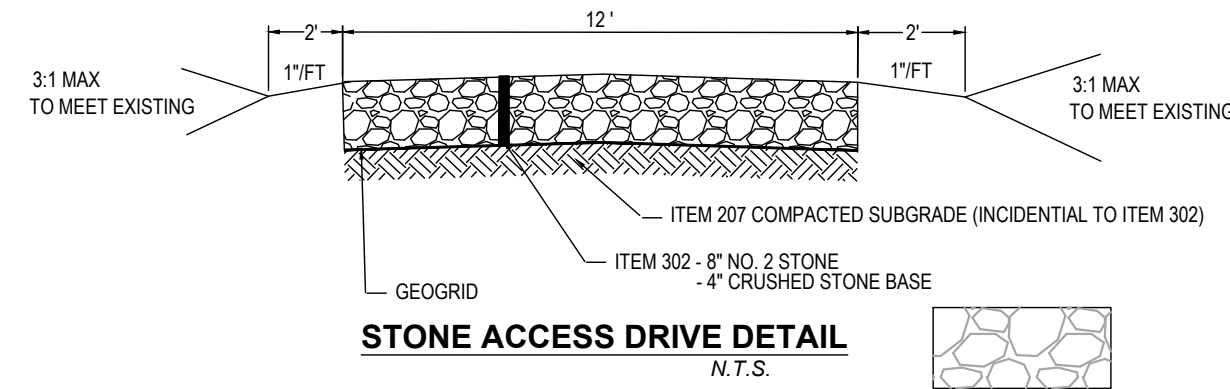
Project: **ALEXANDRIA LOWER DAM IMPROVEMENTS
ALEXANDRIA, KENTUCKY**

Date: 02/01/2024
Project No.: 190970

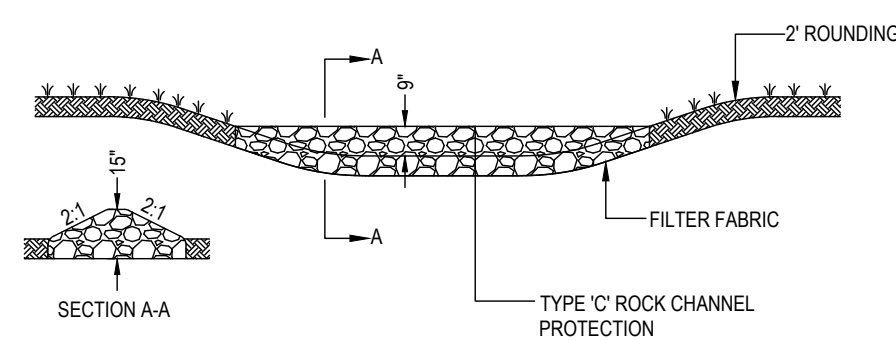
					Revised	
ITEM NO.	SPEC. NO.	ITEM	Estimated Quantity	Unit of Measure	Unit Cost Total	Total Amount Bid
LOWER DAM IMPROVEMENTS						
1	110	MOBILIZATION	1	LS		
2	202	CLEARING AND GRUBBING	1	LS		
3	204/SPL	SPILLWAY EXCAVATION (INCLUDES ROCK EXCAVATION)	5,200	CY		
4	204/SPL	POND BOTTOM EXCAVATION	250	CY		
5	206/SPL	ACCESS ROAD EMBANKMENT (ONSITE MATERIAL)	1,000	CY		
6	SPL	8" OF NO 2 STONE	50	CY		
7	SPL	4" OF CHRUSED STONE BASE	25	CY		
8	SPL	FLEXAMAT SPILLWAY PROTECTION	1,755	SY		
9	SPL	REMOVE EXISTING STORM STRUCTURE	1	EA		
10	SPL	SAFE LOAD 36" DIAMETER STORM SEWER	320	LF		
11	SPL	EROSION AND SEDIMENT CONTROL	1	LS		
12	SPL	YARD RESTORATION	1	LS		
13	SPL	DRAW DOWN PUMPING AS NEEDED	1	LS		
TOTAL						



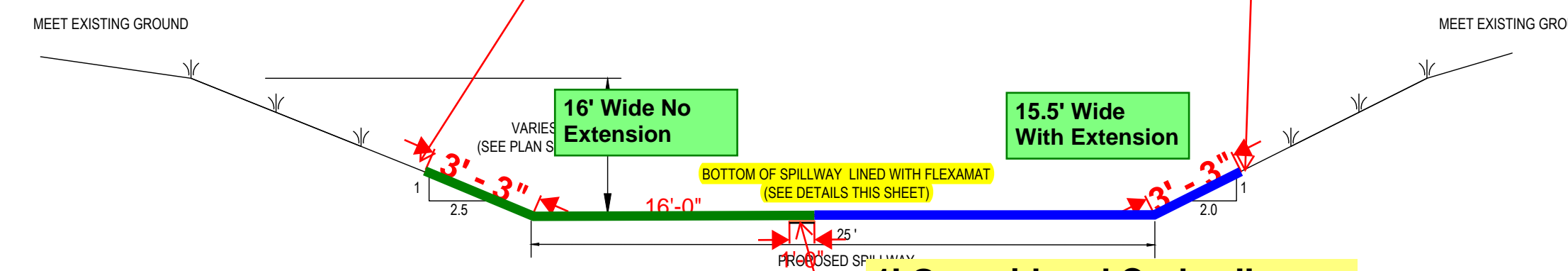
SF SILT FENCE DETAIL
N.T.S.



STONE ACCESS DRIVE DETAIL
N.T.S.



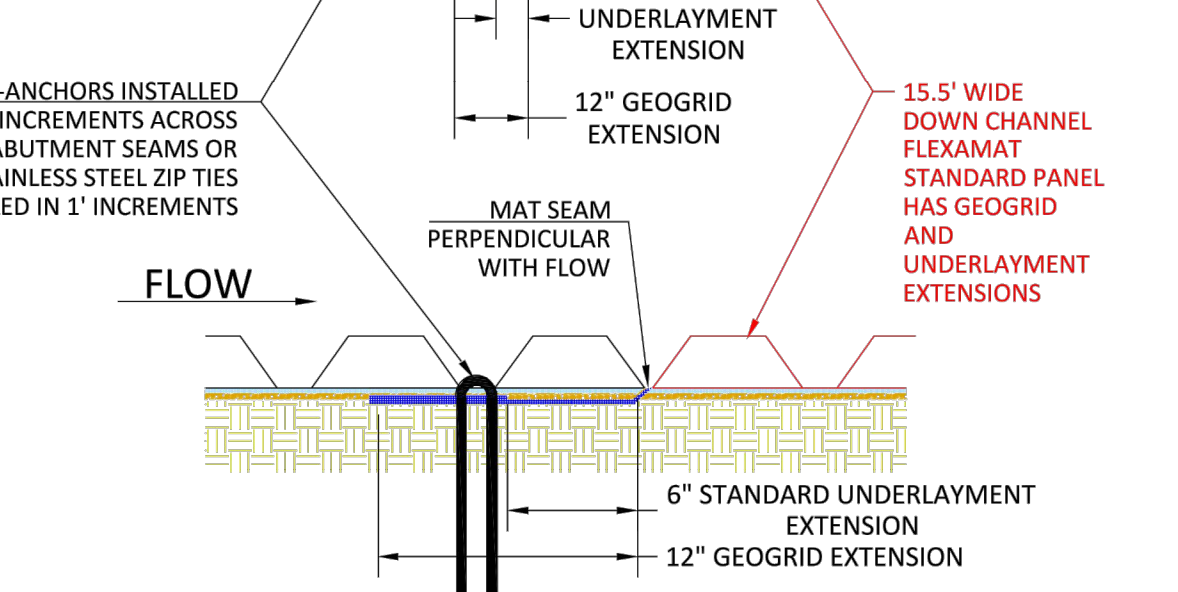
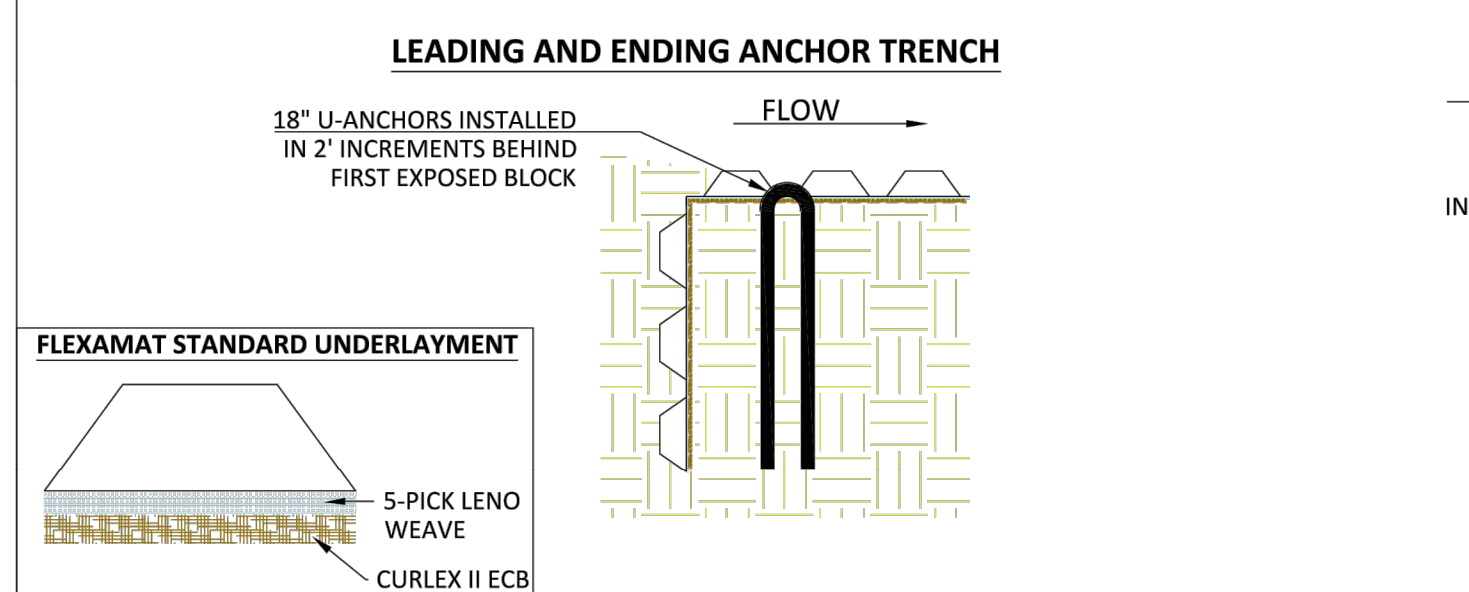
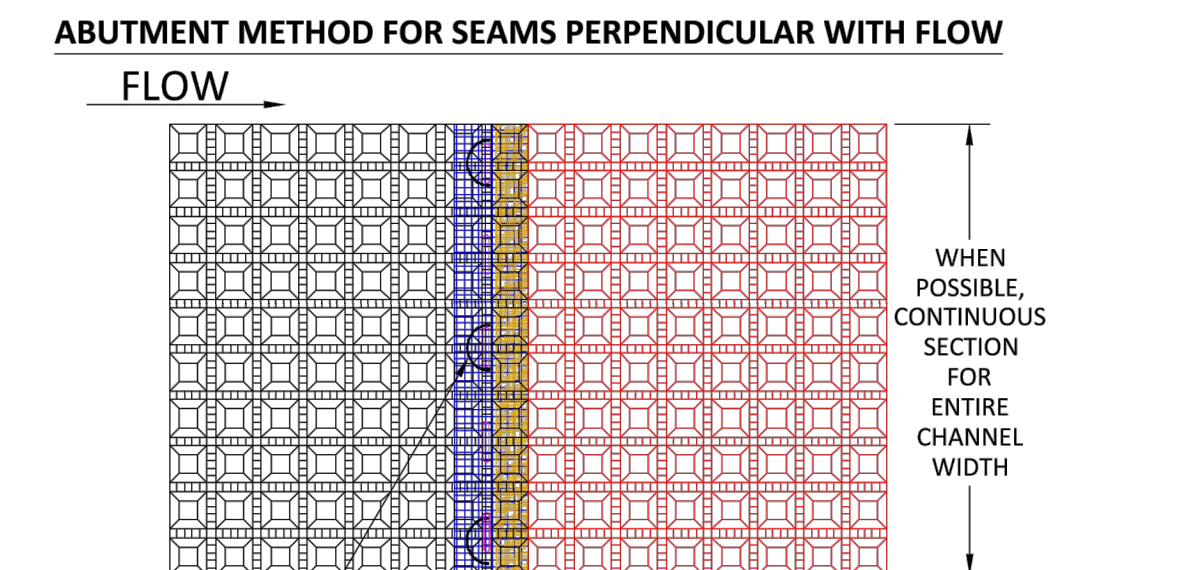
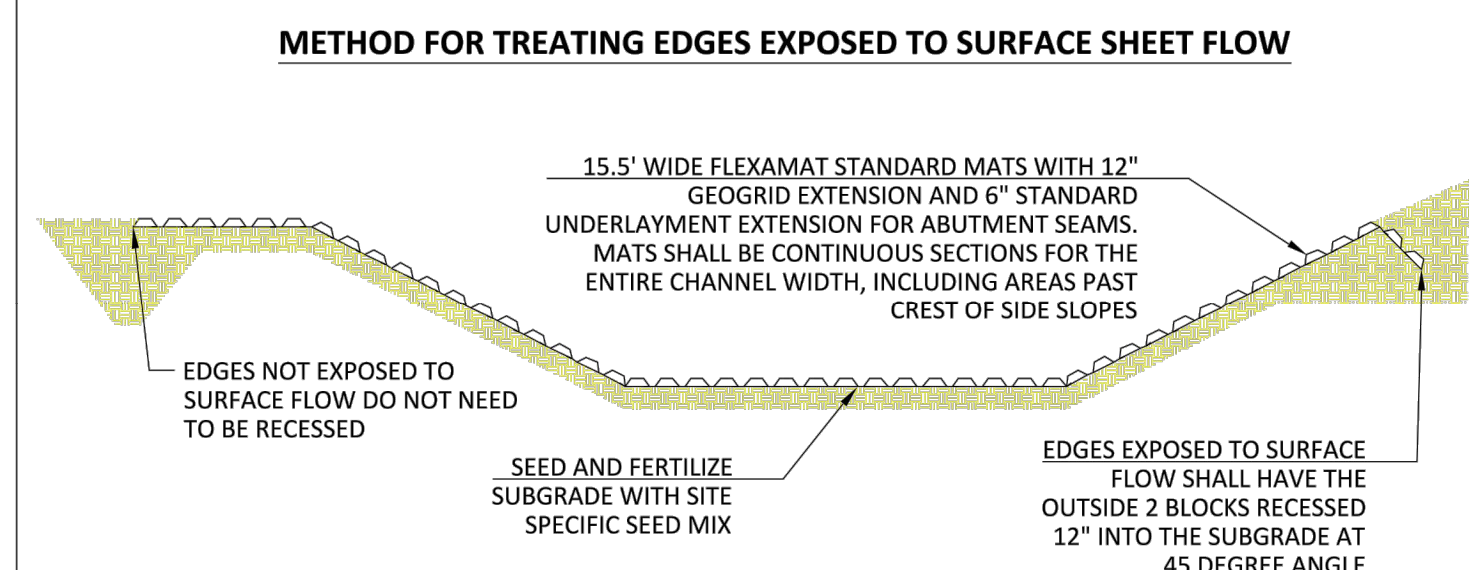
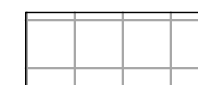
RCD ROCK CHECK DAM
N.T.S.



Finish grade of side slopes shall be feathered over the first two rows of block along the outside edges of channel.

1' Geogrid and Curlex II Underlayment Extension on 15.5' wide rolls.

Per discussion with Robert Seitzinger with CT Consultants - installing 15.5' wide rolls with geogrid and Curlex II Extensions and 16' wide roll no extensions adjacent to each other for a total width of 31.5'. This will allow for approximately 3' - 3" up each side slope of the spillway channel.



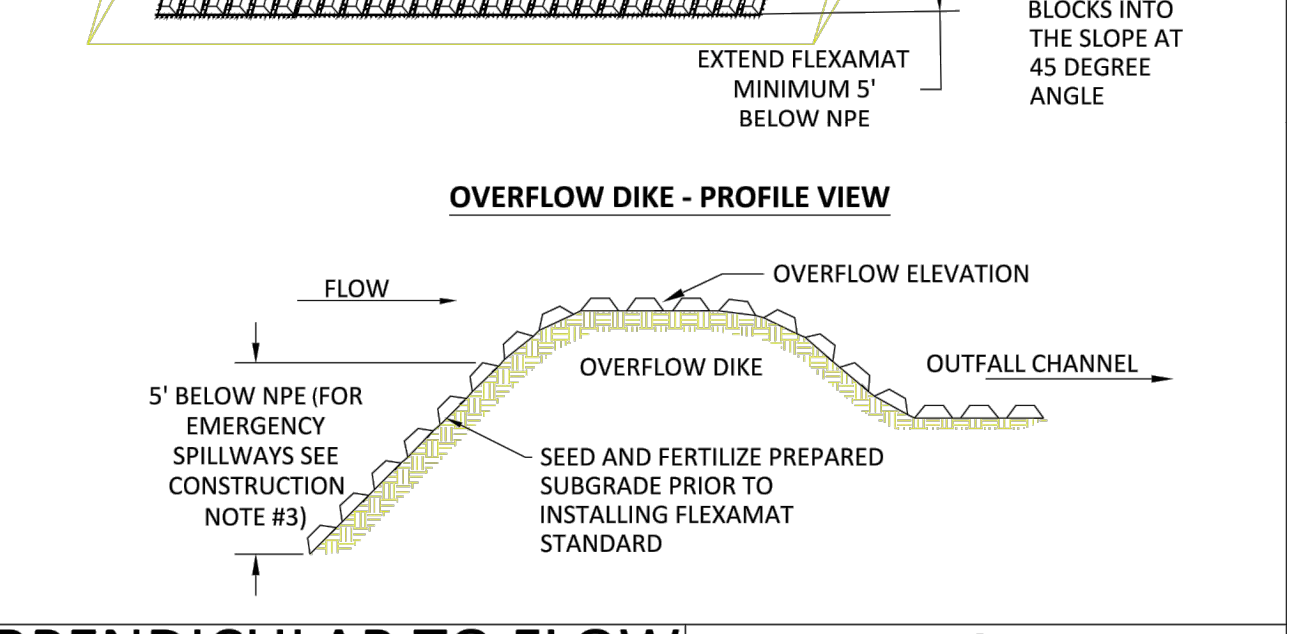
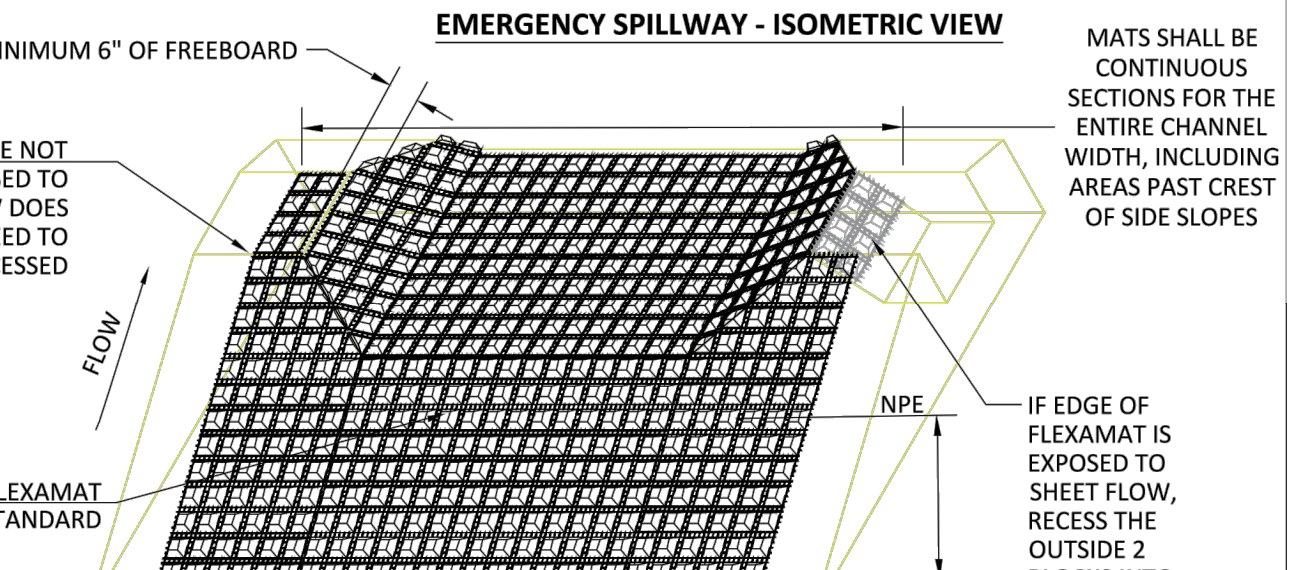
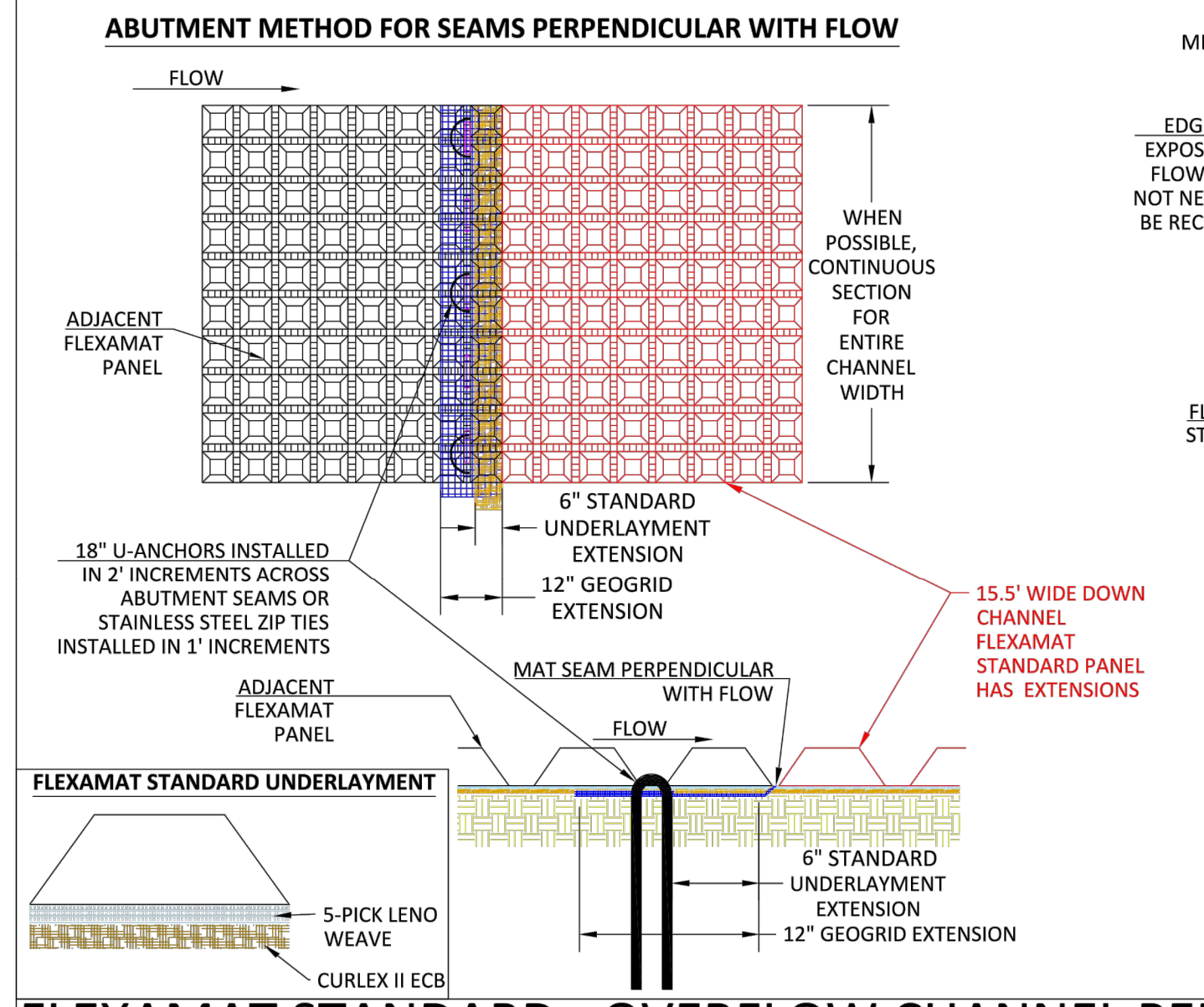
FLEXAMAT STANDARD - CHANNEL LAYOUT PERPENDICULAR TO FLOW

- CONSTRUCTION NOTES:**
1. AN AUTHORIZED MANUFACTURERS REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
 2. GRADE CHANNEL SO THAT WATER WILL FLOW DOWN CENTER OF THE CHANNEL AND BE CONTAINED TO THE CHANNEL. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
 3. PRIOR TO FLEXAMAT STANDARD INSTALLATION, SEED AND FERTILIZE SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
 4. INSTALL FLEXAMAT STANDARD ROLLS THAT ARE 15.5' WIDE WITH A 12" GEOGRID EXTENSION AND 6" STANDARD UNDERLAYMENT EXTENSION.
 - 4.1. INSTALL MATS SO THAT THE MATTING EXTENDS PAST THE CREST OF EITHER SIDE SLOPE FOR SLOPES STEEPER THAN 2:1, EMBED EDGE IN A 12" VERTICAL ANCHOR TRENCH. MATS SHALL BE CONTINUOUS SECTIONS ACROSS THE CHANNEL, INCLUDING AREAS PAST CREST OF SIDE SLOPES.
 - 4.2. FOR SLOPES LESS THAN 2:1, OUTSIDE LONGITUDINAL EDGES SHALL BE EMBEDDED IN A 12" 45 DEGREE ANCHOR TRENCH, ONLY IF EXPOSED TO SURFACE FLOW.
 - 4.3. INSTALLATION STARTS AT THE DOWN CHANNEL END AND MOVES UP THE CHANNEL, TOWARDS THE START OF CHANNEL OR OUTLET STRUCTURE. INSTALL UP CHANNEL MATS OVER THE GEOGRID AND UNDERLAYMENT EXTENSIONS OF DOWNSTREAM MATS. ENSURE EXTENSIONS ARE LAYING FLAT ON SUBGRADE AND UNDER ADJACENT MAT.
 5. INSTALL 18" U-ANCHORS IN 2" INCREMENTS BEHIND ANCHOR TRENCH AND ACROSS MAT ABUTMENT SEAMS. INSTALL U-ANCHORS PERPENDICULAR TO FLOW DIRECTLY BEHIND FIRST BLOCK OF THE UP-CHANNEL MAT. AN ALTERNATIVE TO THE 18" U-ANCHORS IS TO INSTALL 20" STAINLESS STEEL ZIP TIES IN 1" INCREMENTS ACROSS MAT ABUTMENT SEAM. ZIP TIE SHALL BE INSTALLED PERPENDICULAR TO FLOW AND ENCOMPASS A MINIMUM OF THREE CORDS OF GRID OF EITHER MAT AT ABUTMENT SEAMS.
 6. AT THE INITIAL LEADING EDGE OF THE ARMORED CHANNEL, EMBED MAT 18" IN A VERTICAL ANCHOR TRENCH. FILL AND COMPACT ANCHOR TRENCH WITH SUITABLE FILL. AT ENDING EDGE OF PROTECTION, EMBED THE MAT 18" IN A TERMINATION TRENCH. THE TRENCH SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL OR OTHER, AS DETERMINED BY THE ENGINEER OF RECORD.

MOTZ ENTERPRISES, INC.
Flexamat
(513) 772-6689
Info@Flexamat.com
Flexamat.com



FLEXAMAT INSTALLATION (SPILLWAY) DETAIL
N.T.S.



FLEXAMAT STANDARD - OVERFLOW CHANNEL PERPENDICULAR TO FLOW

- CONSTRUCTION NOTES:**
1. AN ENGINEER OR MANUFACTURERS REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
 2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND. THE PREPARED SURFACE SHALL PROVIDE A FIRM UNYIELDING SUBGRADE FOR THE MATS.
 3. PRIOR TO THE FLEXAMAT STANDARD INSTALLATION SEED AND FERTILIZE SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
 4. MAT SHALL EXTEND 5' BELOW NORMAL POND ELEVATION. (FOR EMERGENCY OVERFLOW INSTALLATIONS EXTEND THE MAT 3' DOWN THE INSIDE FACE OF THE OVERFLOW DIKE.)
 5. INSTALL FLEXAMAT STANDARD ROLLS. MANUFACTURER RECOMMENDS INSTALLING THE WIDEST MAT POSSIBLE FOR SPILLWAY APPLICATIONS.
 6. INSTALLATION STARTS AT THE DOWN CHANNEL END AND MOVES UP THE CHANNEL, TOWARDS THE START OF CHANNEL.
 - 6.1. FOR WIDTHS WIDER THAN 16', INSTALL 15.5' WIDE MATS WITH GEOGRID AND STANDARD UNDERLAYMENT EXTENSIONS. INSTALL ADJACENT MAT OVER THE 12" GEOGRID AND 6" STANDARD UNDERLAYMENT EXTENSIONS OF THE ADJACENT MATS. ENSURE THE GEOGRID AND STANDARD UNDERLAYMENT EXTENSIONS ARE LAYING FLAT ON THE SUBGRADE BEFORE INSTALLING ADJACENT MAT OVER THE EXTENSIONS.
 - 6.2. INSTALL 18" U-ANCHORS IN 2" INCREMENTS OR STAINLESS STEEL ZIP TIES IN 1" INCREMENTS ACROSS MAT ABUTMENT SEAMS. INSTALL U-ANCHORS AND ZIP TIES PERPENDICULAR TO FLOW DIRECTLY BEHIND FIRST BLOCK OF THE UP-CHANNEL MAT. U-ANCHORS SHALL ENCOMPASS TWO CORDS OF GEOGRID ON EACH MAT. ZIP TIES SHALL ENCOMPASS 3 CORDS OF GEOGRID FROM EACH MAT.
 7. AT THE END OF THE ARMORED SPILLWAY, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SUITABLE FILL. (AS SPECIFIED BY EOR.)

MOTZ ENTERPRISES, INC.
Flexamat
(513) 772-6689
Info@Flexamat.com
Flexamat.com



FLEXAMAT INSTALLATION (CHANNEL) DETAIL
N.T.S.



NO	REVISION	DATE

SCALE:	AS NOTED
DATE:	02/01/2024
DESIGNED BY:	RSEI
DRAWN BY:	RSEI
CHECKED BY:	MBRU

ALEXANDRIA LOWER DAM IMPROVEMENTS
CITY OF ALEXANDRIA
CAMPBELL COUNTY, KENTUCKY

DETAIL SHEET	
PROJECT NO:	190970
DRAWING NAME	DTL
SHEET	OF
2	8

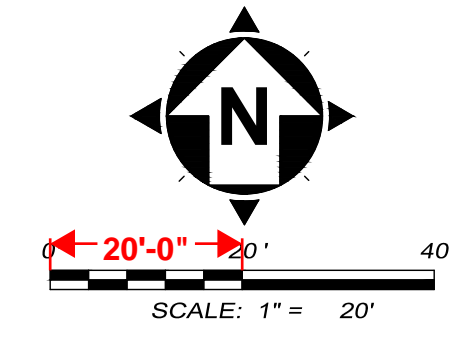
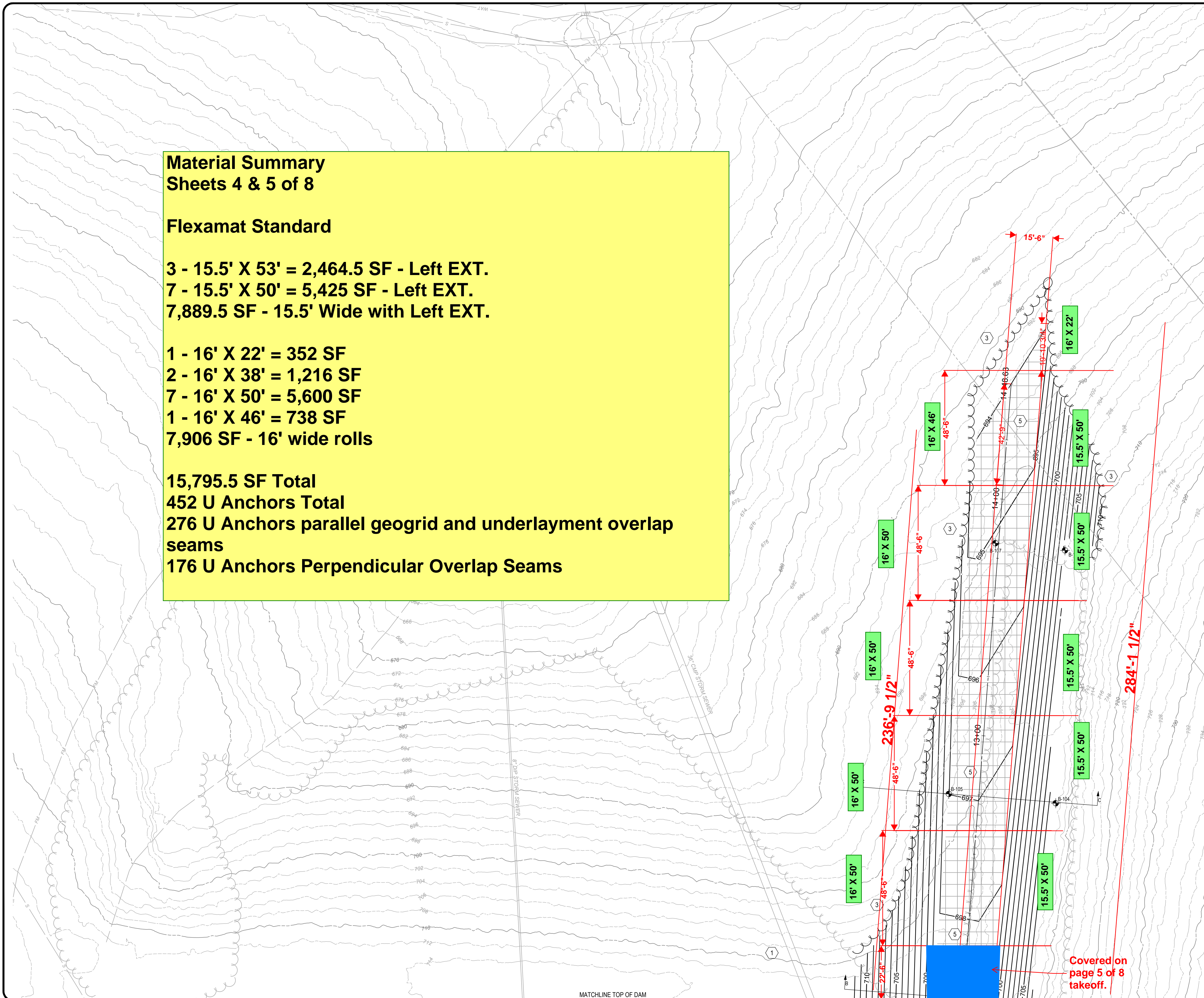
**Material Summary
Sheets 4 & 5 of 8**

Flexamat Standard

**3 - 15.5' X 53' = 2,464.5 SF - Left EXT.
7 - 15.5' X 50' = 5,425 SF - Left EXT.
7,889.5 SF - 15.5' Wide with Left EXT.**

**1 - 16' X 22' = 352 SF
2 - 16' X 38' = 1,216 SF
7 - 16' X 50' = 5,600 SF
1 - 16' X 46' = 738 SF
7,906 SF - 16' wide rolls**

**15,795.5 SF Total
452 U Anchors Total
276 U Anchors parallel geogrid and underlayment overlap seams
176 U Anchors Perpendicular Overlap Seams**



CONSTRUCTION NOTES

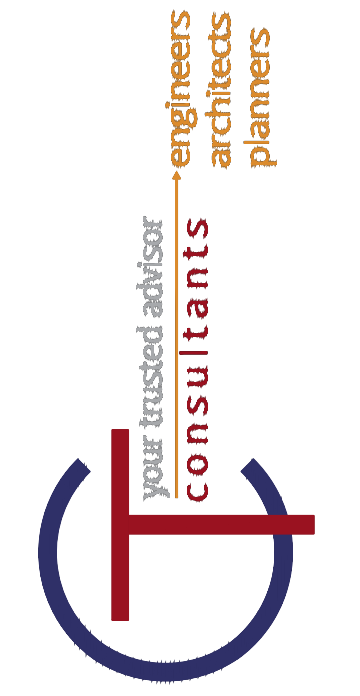
- 1 REMOVE/SAFELOAD EXISTING STORM STRUCTURE AND APPROXIMATELY 320 LF OF 36" STORM SEWER.
- 2 REMOVE ABANDONED SANITARY SEWER AS NEEDED. CAP SANITARY SEWER A MINIMUM OF 3 FEET BELOW PROPOSED GRADING AT EACH END.
- 3 REMOVE TREES AS NEEDED. COST SHALL BE INCLUDED AS PART OF CLEARING AND GRUBBING.
- 4 PROPERLY COMPACT FILL MATERIAL PRIOR TO INSTALLATION OF THE PROPOSED STONE ACCESS DRIVE.
- 5 INSTALL FLEXAMAT STANDARD PER MANUFACTURES INSTRUCTIONS.
- 6 EXCAVATE ACCUMULATED SEDIMENT FROM THE BOTTOM OF THE BASIN WITH 50 FT OF THE EXISTING INLET. THE GRADE SURROUNDING THE INLET SHALL BE SET TO THE MINIMUM OPENING ELEVATION FOR THE STRUCTURE.

HATCH LEGEND

- PROPOSED STONE ACCESS DRIVE
12" OF NO. 2 STONE
- SPILLWAY CHANNEL PROTECTION
FLEXAMAT STANDARD
- REESTABLISH BOTTOM OF BASIN/
REMOVE ACCUMULATION OF SEDIMENT

EROSION CONTROL LEGEND

- IP INLET PROTECTION (SEE DETAIL)
- RCD ROCK CHECK DAM (SEE DETAIL)
- SF SILT FENCE (SEE DETAIL)



NO	REVISION	DATE

SCALE: AS NOTED	DATE: 02/01/2024	DESIGNED BY: RSEI	DRAWN BY: RSEI	CHECKED BY: MBRU
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**ALEXANDRIA LOWER DAM
IMPROVEMENTS
CITY OF ALEXANDRIA
CAMPBELL COUNTY, KENTUCKY
PLAN SHEET 2
NORTH OF TOP OF DAM**

PROJECT NO:	
190970	
DRAWING NAME	
PLN 2	
SHEET	OF
4	8

**Material Summary
Sheets 4 & 5 of 8**

Flexamat Standard

**3 - 15.5' X 53' = 2,464.5 SF - Left EXT.
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7,889.5 SF - 15.5' Wide with Left EXT.**

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1 - 16' X 46' = 738 SF
7,906 SF - 16' wide rolls**

**15,795.5 SF Total
452 U Anchors Total
276 U Anchors parallel geogrid and underlayment overlap seams
176 U Anchors Perpendicular Overlap Seams**

Geogrid and Curlex II extensions on 15.5' wide roll. Install adjacent mat over extensions and secure with U anchors in 2' increments.

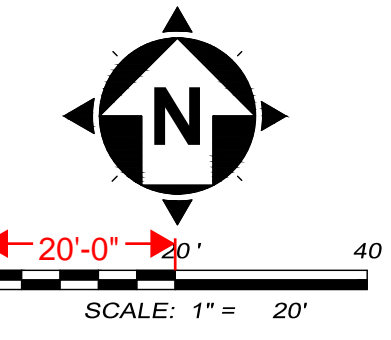
18" Perpendicular Overlap Seam, soil infill and seed, secure with U Anchors in 2' increments.

Initial leading edge needs to extend 3' down the inside face of dam.

MATCHLINE TOP OF DAM

ABANDONED SANITARY SEWER LINE
ACTUAL SIZE AND DEPTH UNKNOWN




EX STM INLET
T/G = 705.50
36" CMP = 688.45






CONSTRUCTION NOTES

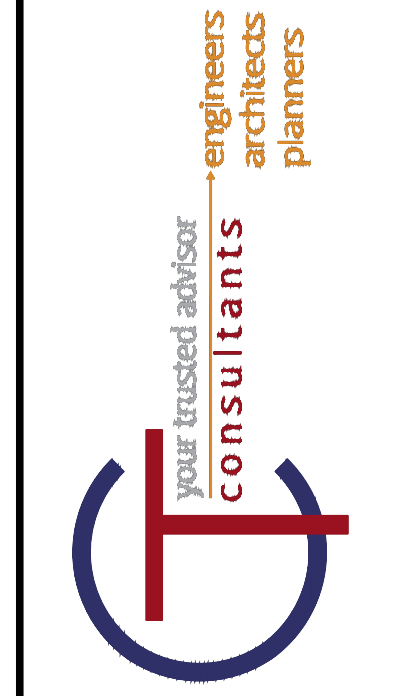
- 1 REMOVE/SAFELOAD EXISTING STORM STRUCTURE AND APPROXIMATELY 320 LF OF 36" STORM SEWER.
- 2 REMOVE ABANDONED SANITARY SEWER AS NEEDED. CAP SANITARY SEWER A MINIMUM OF 3 FEET BELOW PROPOSED GRADING AT EACH END.
- 3 REMOVE TREES AS NEEDED. COST SHALL BE INCLUDED AS PART OF CLEARING AND GRUBBING.
- 4 PROPERLY COMPACT FILL MATERIAL PRIOR TO INSTALLATION OF THE PROPOSED STONE ACCESS DRIVE.
- 5 INSTALL FLEXAMAT STANDARD PER MANUFACTURES INSTRUCTIONS.
- 6 EXCAVATE ACCUMULATED SEDIMENT FROM THE BOTTOM OF THE BASIN WITH 50 FT OF THE EXISTING INLET. THE GRADE SURROUNDING THE INLET SHALL BE SET TO THE MINIMUM OPENING ELEVATION FOR THE STRUCTURE.

HATCH LEGEND

-  PROPOSED STONE ACCESS DRIVE
12" OF NO. 2 STONE
-  SPILLWAY CHANNEL PROTECTION
FLEXAMAT STANDARD
-  REESTABLISH BOTTOM OF BASIN/
REMOVE ACCUMULATION OF SEDIMENT

EROSION CONTROL LEGEND

-  IP INLET PROTECTION (SEE DETAIL)
-  RCD ROCK CHECK DAM (SEE DETAIL)
-  SF SILT FENCE (SEE DETAIL)



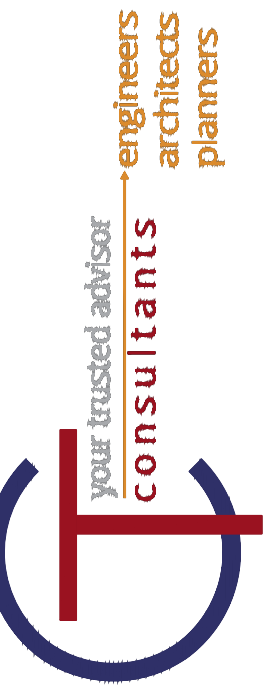
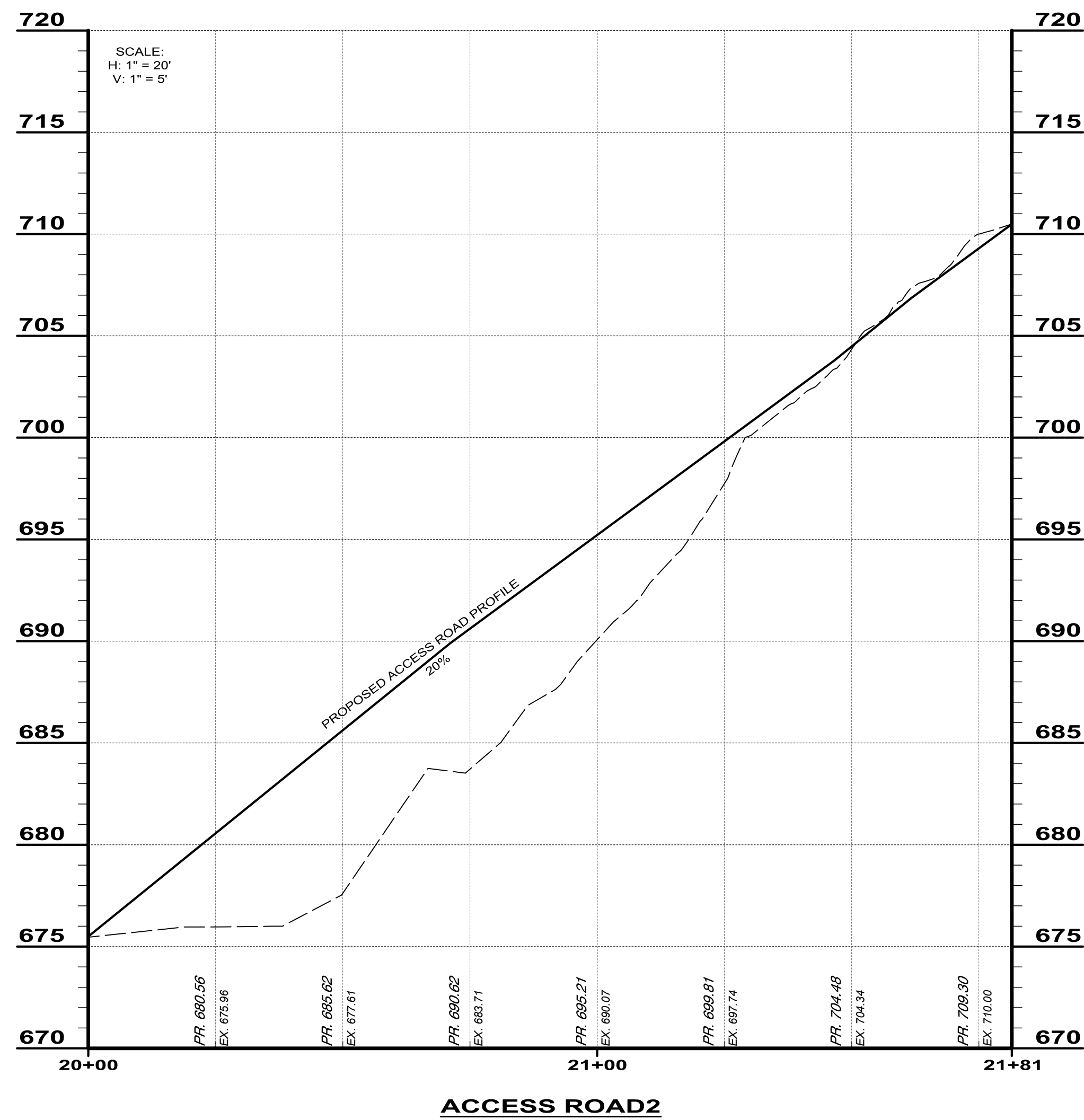
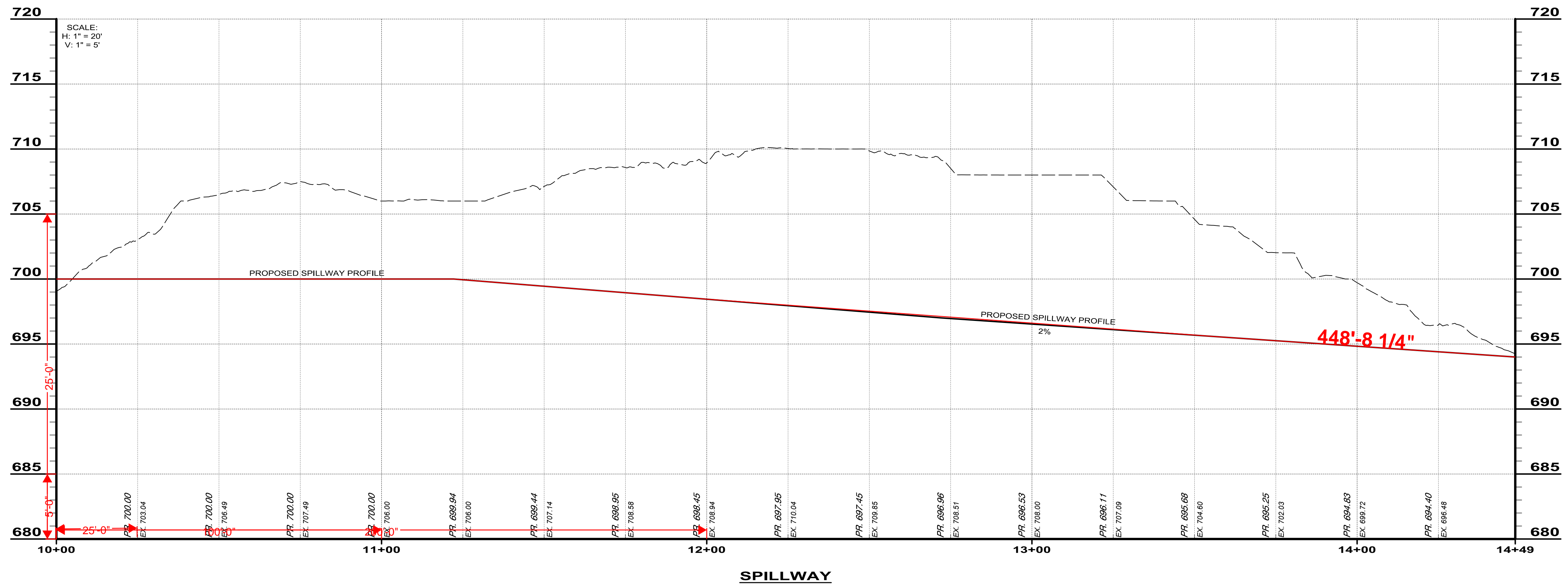
NO	REVISION	DATE

SCALE:	AS NOTED
DATE:	02/01/2024
DESIGNED BY:	RSEI
DRAWN BY:	RSEI
CHECKED BY:	MBRU

**ALEXANDRIA LOWER DAM
IMPROVEMENTS
CITY OF ALEXANDRIA
CAMPBELL COUNTY, KENTUCKY**

**PLAN SHEET 3
OVERALL SITE**

PROJECT NO:	
190970	
DRAWING NAME	
PLN 3	
SHEET	OF
5	8



NO	REVISION	DATE

SCALE:	AS NOTED
DATE:	02/01/2024
DESIGNED BY:	RSEI
DRAWN BY:	RSEI
CHECKED BY:	MBRU

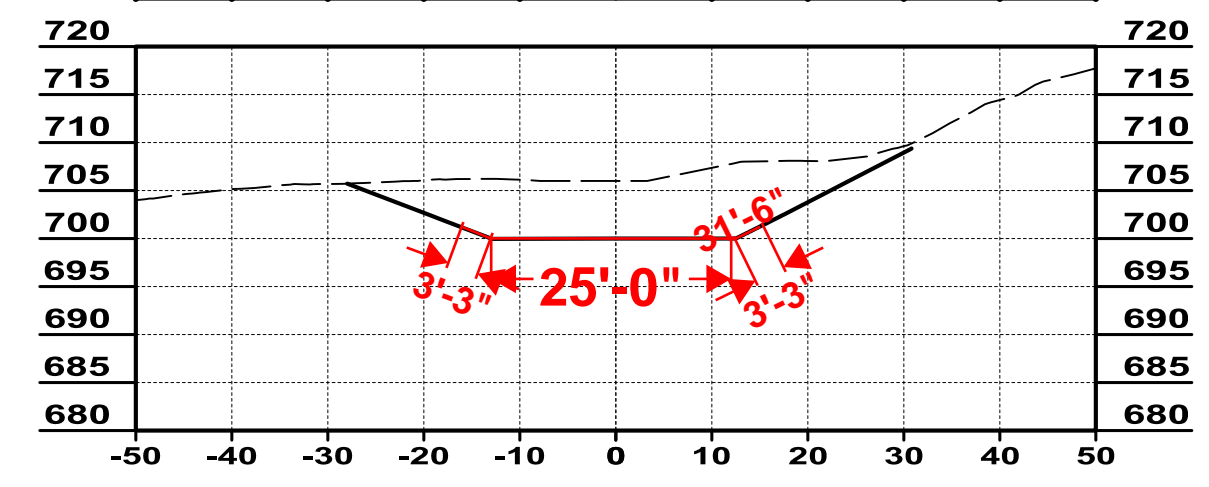
**ALEXANDRIA LOWER DAM
IMPROVEMENTS
CITY OF ALEXANDRIA
CAMPBELL COUNTY, KENTUCKY**

PROFILE SHEET

PROJECT NO:	
190970	
DRAWING NAME	
PRF	
SHEET	OF
6	8

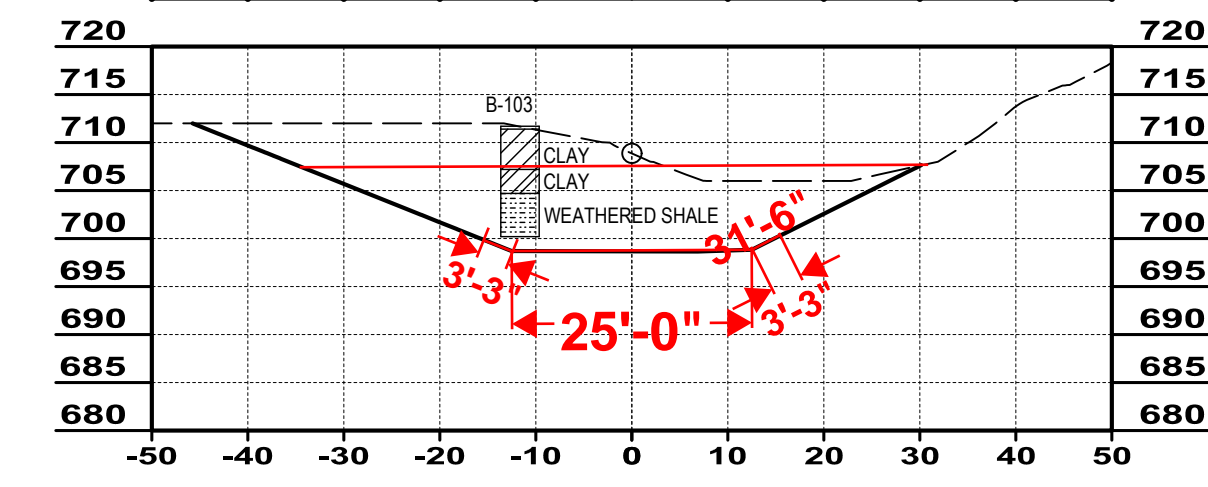


PROPOSED ELEVATIONS									
EXISTING ELEVATIONS	704.60	705.15	705.68	706.07	706.13	706.00	707.37	708.09	709.64



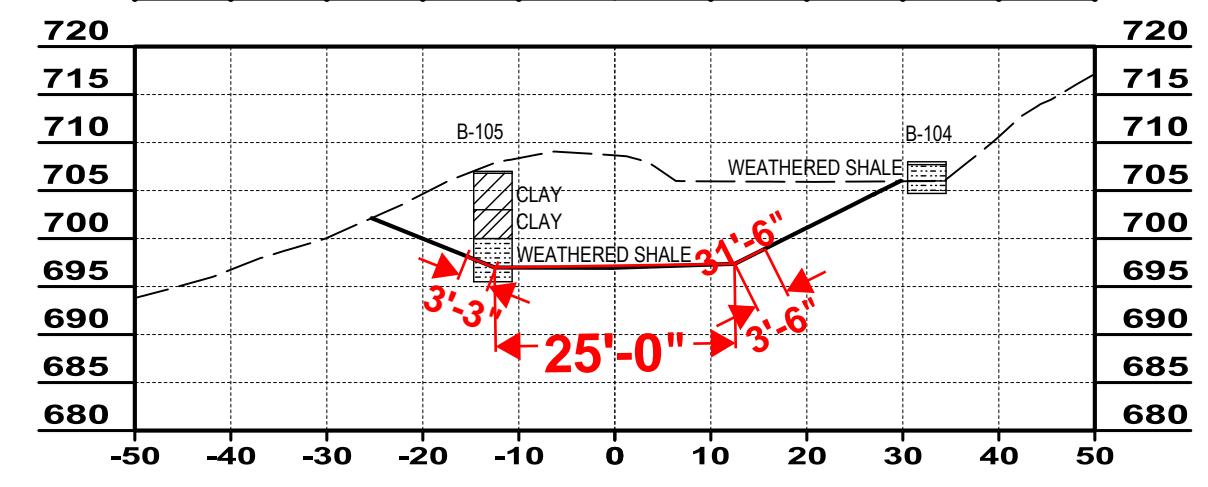
11+22.17
SECTION A - A

PROPOSED ELEVATIONS									
EXISTING ELEVATIONS	712.00	712.00	712.00	711.34	708.87	706.00	706.00	707.60	713.77



11+89.03
SECTION B - B

PROPOSED ELEVATIONS									
EXISTING ELEVATIONS	695.91	696.76	700.06	704.65	708.39	708.66	705.97	705.91	705.97



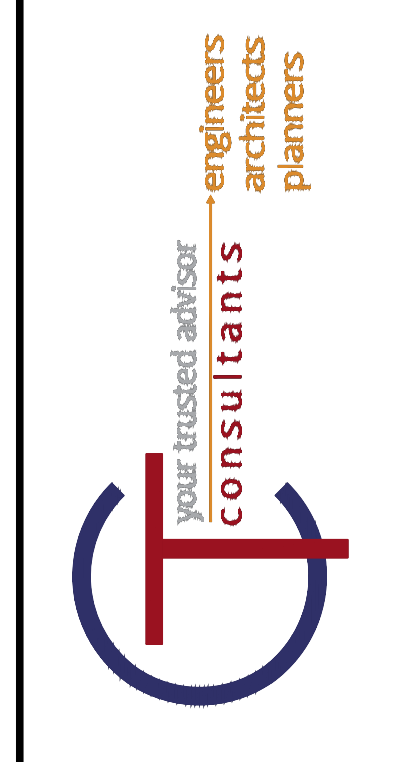
12+74.47
SECTION C - C

**ALEXANDRIA LOWER DAM
IMPROVEMENTS
CITY OF ALEXANDRIA
CAMPBELL COUNTY, KENTUCKY**

CROSS SECTIONS

SCALE:	AS NOTED
DATE:	02/01/2024
DESIGNED BY:	RSEI
DRAWN BY:	RSEI
CHECKED BY:	MBRU

NO	REVISION	DATE



PROJECT NO:	
190970	
DRAWING NAME	
XS	
SHEET	OF
7	8