



Site Stabilization Work Plan -

Former East Alcoa Property

June 30, 2023

Geo-Technology Associates, Inc. (GTA), on behalf of Quantum Maryland LLC, has prepared the following Work Plan for site stabilization activities at the Former East Alcoa Property (“Site”). These activities are proposed to address concerns transmitted by the Water and Sciences Administration.

Various activities are needed to return floodplain areas to their natural state and to stabilize the Site. These activities are detailed below and are highlighted on the attached figures (Figures 1 through 6). All work below is proposed to be conducted by Petillo, the site grading and utility contractor.

Mulch (seed and straw) and tack (fibrous erosion control blanket) has been the most common sediment erosion control measure utilized on the Site to stabilize disturbed areas. Mulch and tack involve the placement of seed and straw via a hydroseeder over an area and then is anchored in place by with a fibrous erosion control blanket. Straw utilized on the Site is from Jody Bell Farms, a local farmer with farms all throughout Frederick County. Straw is brought to the site on an as needed basis, with a supply of over 800 bails currently stored on the Site for the work proposed herein. The erosion control blankets are commercially available.

Floodplain Gravel and Straw Bale Removal – Gravel, filter bags, and straw bales are to be removed from the portions of the floodplain located outside of the LOD. These areas are primarily located west of MH-3 and MH-5, and east of MH-6 (see Figure 1).

Work associated with the area west of MH-3 and MH-5 is anticipated to take approximately 1½ days and would involve the use of a dump truck and a skid steer. Hay bales, gravel, and filter bags are to be removed by hand, placed into the skid steer, then loaded into a dump truck. Removed materials are to be relocated to a temporary storage area along the proposed Happy Landing Road, within the LOD and outside of the floodplain (see Figure 5). A hydroseeder will be utilized to stabilize the area after work is completed. (Personnel: 1 Operator, 1 Drivers, 2 Laborers)

Work associated with the area east of MH-6 is anticipated to take approximately 1 day and would involve the use of a dump truck and a skid steer. Excess gravel, mulch and tack are to be removed via use of a skid steer and loaded into a dump truck. Removed materials are to be relocated to a temporary storage area along the proposed Happy Landing Road, within the LOD and outside of the floodplain (see Figure 5). A hydroseeder will be utilized to stabilize the area after work is completed. (Personnel: 1 Operator, 1 Drivers, 2 Laborers)

Soil Stockpile Relocation – Nine soil stockpiles are currently located within the sewer LOD, but within the floodplain along sewer line 1A. An additional stockpile is currently located outside of the LOD and within the floodplain. These stockpiles include the following:



Site Stabilization Work Plan -

Former East Alcoa Property

June 30, 2023

Stockpile Identification	Approximate Cubic Yardage	Origination Area	Current Site Location
4	325	Sewer Line 1B	Between MH-18 and MH-19
5	125	Sewer Line 1B	Near MH-18
6	175	Sewer Line 1B	Between MH-17 and MH-18
7	300	Sewer Line 1B	Between MH-12 and MH-13
8	800	Sewer Line 1B	Near MH-10
9	200	Sewer Line 1A	Near MH-10
10	275	Sewer Line 1A	Between MH-8 and MH-9
11	175	Sewer Line 1A	Near MH-8
12	375	Sewer Line 1A	Between MH-7 and MH-8
13	4,000	MH-1 and MH-2 pre-excavation, pump station	West of the pump station

Note: These and additional stockpiles located on the Site and will be summarized under separate cover titled *Soil Disposition Memorandum*.

As indicated above, these stockpiles originated from the installation activities associated with sewer line 1A and 1B and the pump station. No soils located in these stockpiles was transported to the site from an off-site source. These stockpiles are proposed to be relocated into three separate stockpiles located within the LOD but outside of the floodplain. These new stockpiles will be designated Stockpile A (consisting of soil from stockpiles 4 through 8), Stockpile B (consisting of soil from stockpiles 9 through 12), and the relocated Stockpile 13. The proposed stockpile locations are in areas where existing sediment erosion control fencing is in place. These existing and proposed stockpile locations are depicted on the attached Figures 1, 2, 3, and 4. Figure 1 also depicts two additional stockpiles associated with the pump station excavation (Stockpiles 14 and 15).

Work associated with the stockpile relocation is anticipated to take approximately 3-4 days and would involve the use of an excavator, three end dumps, and a bulldozer. The excavator would be utilized to load the existing soil stockpiles into the end dumps for relocation of the stockpiles to the designated areas outside of the floodplains. The bulldozer would be utilized to prepare the former stockpile locations to be prepared for mulch and tack. Relocated stockpiles would be strawed and seeded for stabilization. (Personnel: 2 Operators, 3 Drivers, 2 Laborers)

DA-11 Work – Disturbance previously occurred during the expansion of the former Rainwater Pond 102 to the proposed dimensions of the proposed DA-11 sediment basin. These activities resulted in the generation of concrete and soil spoils that are currently located along the southern portion of DA-11. The concrete and soil spoils are proposed to be relocated to a designated stockpile area east of DA-11 (see Figure 6).

GTA obtained construction drawings for the South Landfill Leachate Tank Management System and these drawings are attached to this Work Plan. These drawings were overlain on



Site Stabilization Work Plan -

Former East Alcoa Property

June 30, 2023

the proposed development plans to locate the leachate line associated with the above referenced leachate collection system; and this leachate line is depicted on the attached Figure 6. The leachate line is as close as 7 feet from the limits of disturbance at the leachate collection system and increases to greater than 30 feet as the line progresses to the east and south.

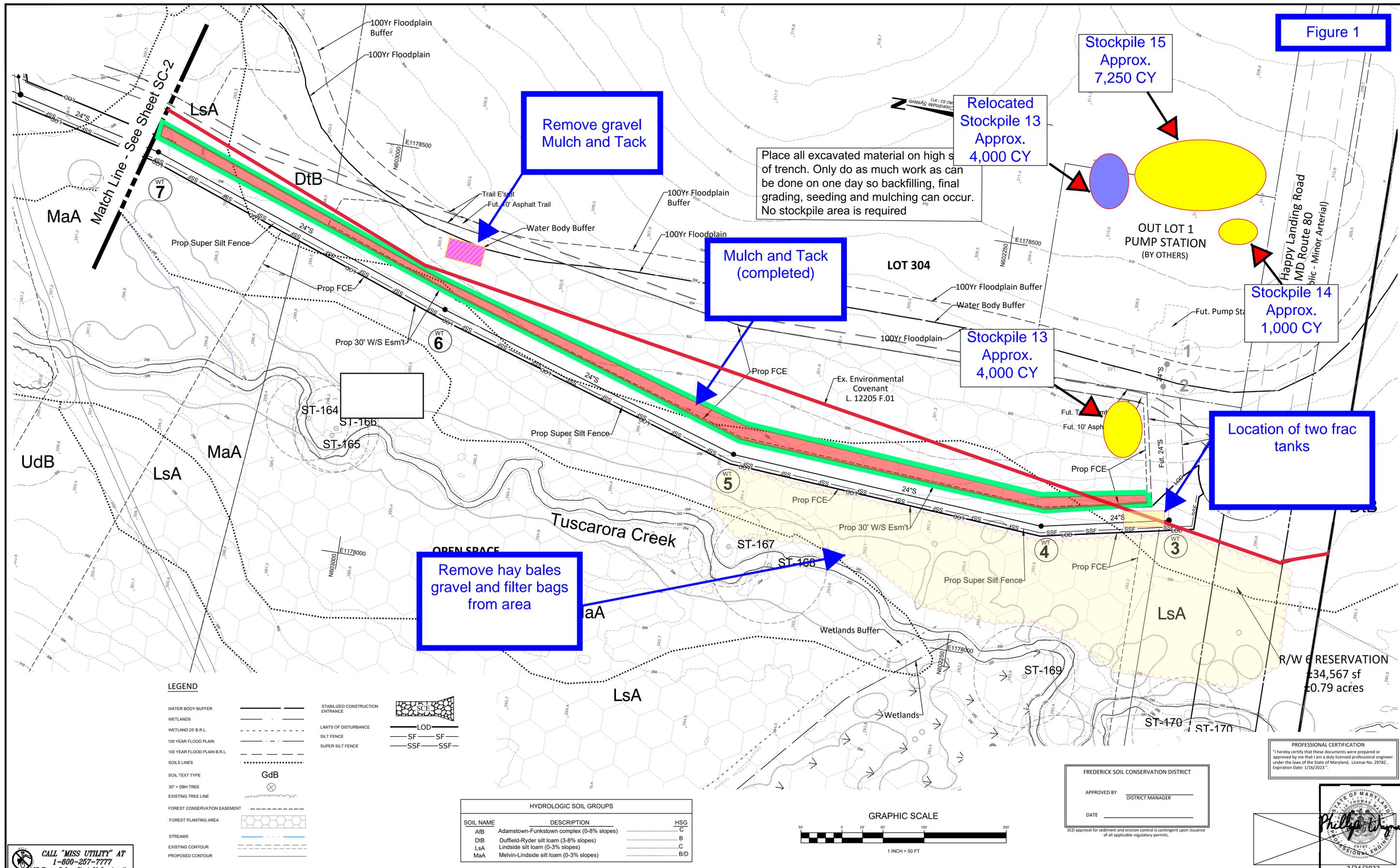
A typical (leachate) trench piping detail included in the plans indicates that an electrical conduit is located adjacent to the leachate pipe. Electrical power for the leachate collection system originates from the northwest of the system.

Based on the proximity of electrical and leachate lines near the location of proposed work, a private utility locator was contracted to identify potential utilities in the proposed work area. On June 26, 2023, the utility locator identified and marked the electrical and leachate lines in the field. No additional utilities were identified proximate to the proposed work. The approximate electrical and leachate lines are identified on Figure 6.

After utilities were identified in the proposed work area, silt fencing was generally placed as show on Figure 6. However, some modifications to the silt fence installation were needed based on existing vegetation. These modifications to the silt fencing configuration were made since no additional ground disturbance is permitted at this time; however, the modifications did not affect the intent to provide a barrier between known disturbed areas and downgradient receptors.

Work associated with the concrete and soil spoils clean-up at DA-11 is anticipated to take approximately 1 day and would involve the use of an excavator, three end dumps, and a bulldozer. The excavator would be utilized to load the concrete and soil spoils into the end dumps for relocation of the material to a stockpile located immediately east of DA-11. Aside from loading of the concrete and soil spoils, no additional excavation within the DA-11 is to be performed at this time. The bulldozer would be utilized to prepare the former concrete and soil spoils area to for mulch and tack. Disturbed areas of DA-11 are to be stabilized and stockpile would be strawed and seeded for stabilization. Silt fencing is currently in place at the existing/proposed stockpile location. (Personnel: 2 Operators, 3 Drivers, 2 Laborers)

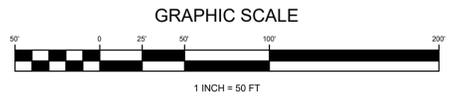
Figure 1



LEGEND

- WATER BODY BUFFER
- WETLANDS
- WETLAND 25' B.R.L.
- 100 YEAR FLOOD PLAIN
- 100 YEAR FLOOD PLAIN B.R.L.
- SOILS LINES
- SOIL TEXT TYPE
- 30' > DBH TREE
- EXISTING TREE LINE
- FOREST CONSERVATION EASEMENT
- FOREST PLANTING AREA
- STREAMS
- EXISTING CONTOUR
- PROPOSED CONTOUR
- STABILIZED CONSTRUCTION ENTRANCE
- LIMITS OF DISTURBANCE
- SILT FENCE
- SUPER SILT FENCE
- LOD
- SF
- SSF
- GdB

HYDROLOGIC SOIL GROUPS		
SOIL NAME	DESCRIPTION	HSG
AiB	Adamstown-Funkstown complex (0-8% slopes)	C
DIB	Duffield-Ryder silt loam (3-8% slopes)	B
LsA	Lindsay silt loam (0-3% slopes)	C
MaA	Melvin-Lindsay silt loam (0-3% slopes)	B/D



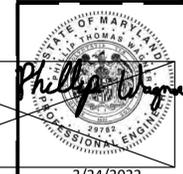
FREDERICK SOIL CONSERVATION DISTRICT

APPROVED BY: _____ DISTRICT MANAGER

DATE: _____

SCD approval for sediment and erosion control is contingent upon issuance of all applicable regulatory permits.

PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 23782, Expiration Date: 3/16/2023.



CALL "MISS UTILITY" AT 1-800-257-7777 72 Hours Before Start Of Construction

REVISION	DATE	REVISION	DATE	BY	DATE

DEVELOPER/ OWNER:
 QUANTUM MARYLAND, LLC
 500 E 4TH STREET SUITE 333
 AUSTIN, TX 78701
 PHONE: 530-417-7496
 CONTACT: AD ROBISON

Sediment Control Plan

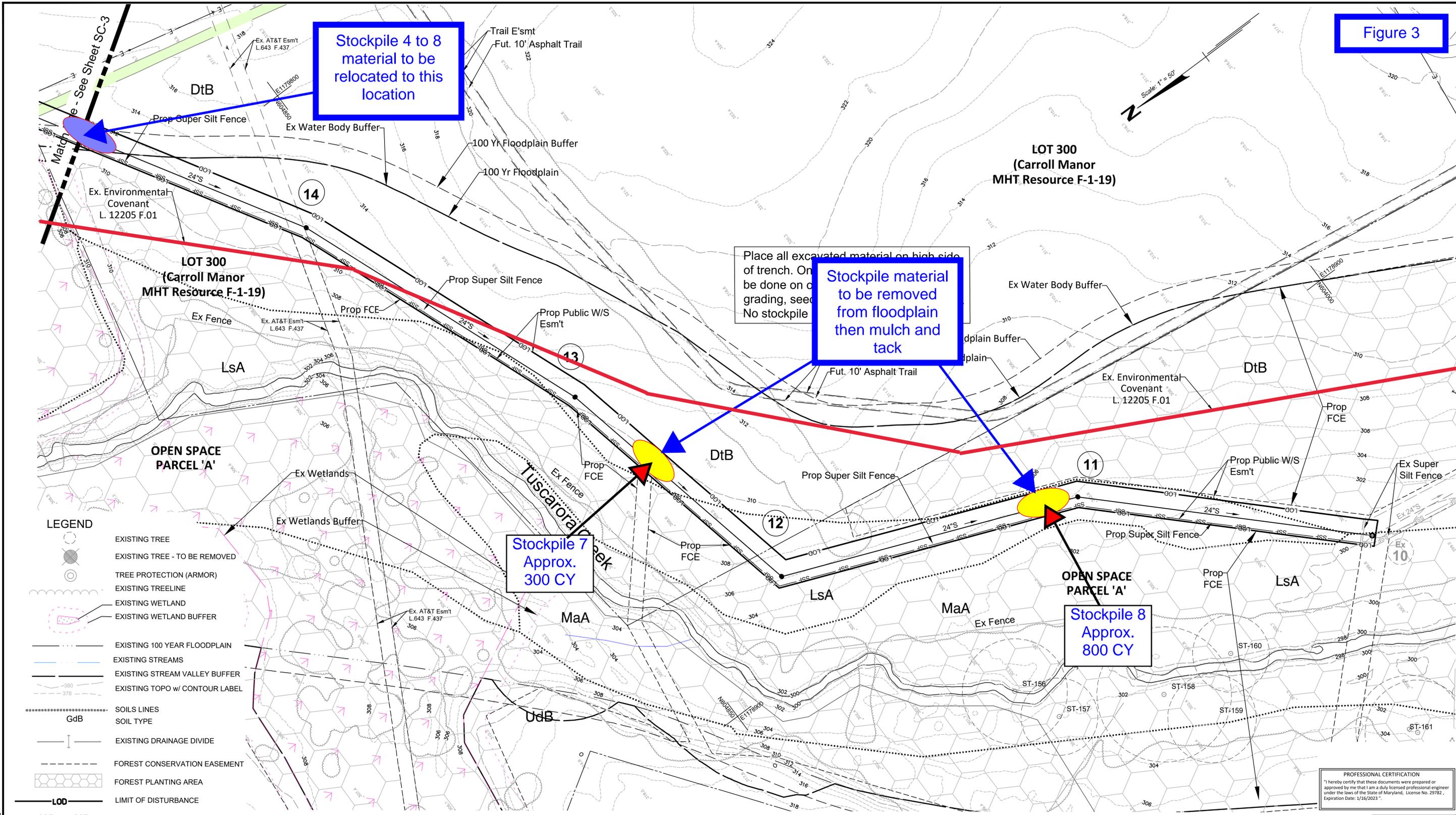
RODGERS CONSULTING
 19847 Century Boulevard, Suite 200, Germantown, Maryland 20874
 Ph: 301.948.4700 Fax: 301.948.6256 www.rodgers.com

SEWER OUTFALL
 Happy Landing Rd to MH10
 & Conn. to Lot 300 (Historic Carroll Manor)
QUANTUM FREDERICK
 LIBER 15038 FOLIO 393
 ELECTION DISTRICT NO. 1
 FREDERICK COUNTY, MARYLAND

SCALE: 1"=50'

JOB No.	1339A
INDEX No.	SC-1
SHEET No.	2 OF 7

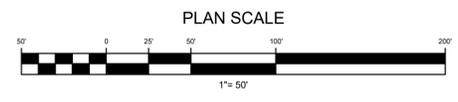
Figure 3



- LEGEND**
- EXISTING TREE
 - EXISTING TREE - TO BE REMOVED
 - TREE PROTECTION (ARMOR)
 - EXISTING TREELINE
 - EXISTING WETLAND
 - EXISTING WETLAND BUFFER
 - EXISTING 100 YEAR FLOODPLAIN
 - EXISTING STREAMS
 - EXISTING STREAM VALLEY BUFFER
 - EXISTING TOPO w/ CONTOUR LABEL
 - SOILS LINES
 - SOIL TYPE
 - EXISTING DRAINAGE DIVIDE
 - FOREST CONSERVATION EASEMENT
 - FOREST PLANTING AREA
 - LIMIT OF DISTURBANCE
 - SSSF - SUPER SILT FENCE
 - SF - SILT FENCE
 - STABILIZED CONSTRUCTION ENTRANCE

HYDROLOGIC SOIL GROUPS

SOIL NAME	DESCRIPTION	HSG
AfB	Adamstown-Funkstown complex (0-8% slopes)	C
DtB	Duffield-Ryder silt loam (3-8% slopes)	B
MaA	Melvin-Lindside silt loam (0-3% slopes)	B/D



FREDERICK SOIL CONSERVATION DISTRICT

APPROVED BY: _____ DISTRICT MANAGER

DATE: _____

SCD approval for sediment and erosion control is contingent upon issuance of all applicable regulatory permits.

Released for Bid
2022-07-29

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 33782, Expiration Date: 1/16/2023.

CALL "MISS UTILITY" AT 1-800-257-7777 72 Hours Before Start Of Construction

REVISION	DATE	REVISION	DATE	BY	DATE

DEVELOPER/ OWNER:
QUANTUM MARYLAND, LLC
500 E 4TH STREET SUITE 333
AUSTIN, TX 78701
PHONE: 530-417-7496
CONTACT: AD ROBISON

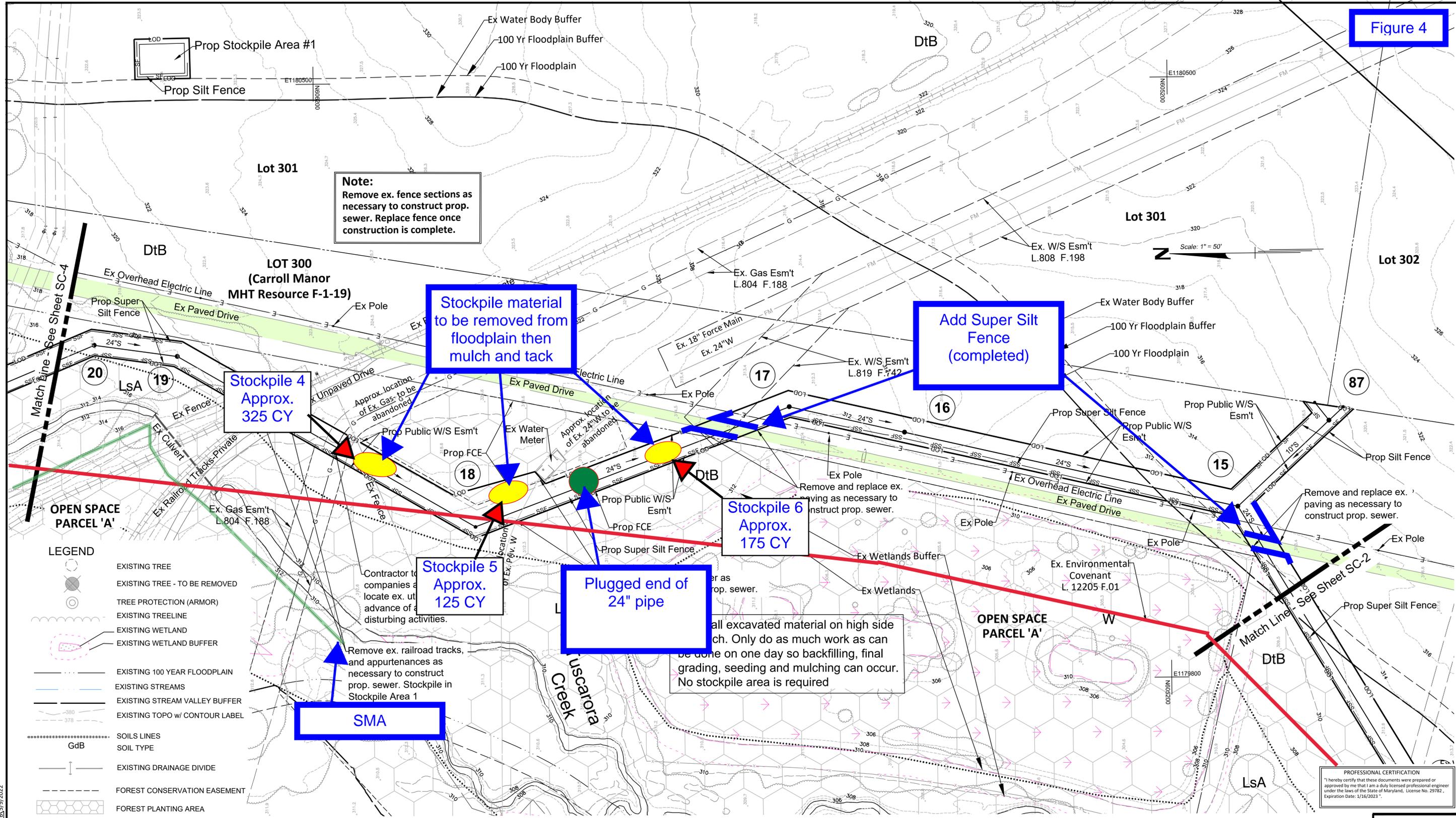
Sediment Control Plan

RODGERS CONSULTING
1947 Century Boulevard, Suite 200, Germantown, Maryland 20874
Ph: 301.948.4700 Fx: 301.948.6256 www.rodgers.com

SEWER OUTFALL
MH10 to Quantum Place South
& Conn. to Lots 301 and 302
QUANTUM FREDERICK
LIBER 15038 FOLIO 393
ELECTION DISTRICT NO. 1
FREDERICK COUNTY, MARYLAND

SCALE: 1"=50'
JOB No: 1339A2
March, 2022
INDEX No: SC-2
SHEET No: 3 OF 11

Figure 4



Note:
Remove ex. fence sections as necessary to construct prop. sewer. Replace fence once construction is complete.

Stockpile material to be removed from floodplain then mulch and tack

Add Super Silt Fence (completed)

**Stockpile 4
Approx. 325 CY**

**Stockpile 6
Approx. 175 CY**

**Stockpile 5
Approx. 125 CY**

Plugged end of 24" pipe

SMA

Remove and replace ex. paving as necessary to construct prop. sewer. Stockpile in Stockpile Area 1

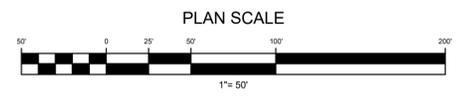
Remove and replace ex. paving as necessary to construct prop. sewer.

Remove and replace ex. paving as necessary to construct prop. sewer. Only do as much work as can be done on one day so backfilling, final grading, seeding and mulching can occur. No stockpile area is required

- LEGEND**
- EXISTING TREE
 - EXISTING TREE - TO BE REMOVED
 - TREE PROTECTION (ARMOR)
 - EXISTING TREELINE
 - EXISTING WETLAND
 - EXISTING WETLAND BUFFER
 - EXISTING 100 YEAR FLOODPLAIN
 - EXISTING STREAMS
 - EXISTING STREAM VALLEY BUFFER
 - EXISTING TOPO w/ CONTOUR LABEL
 - SOILS LINES
 - SOIL TYPE
 - EXISTING DRAINAGE DIVIDE
 - FOREST CONSERVATION EASEMENT
 - FOREST PLANTING AREA
 - LIMIT OF DISTURBANCE
 - SSF - SUPER SILT FENCE
 - SF - SILT FENCE
 - STABILIZED CONSTRUCTION ENTRANCE

CALL "MISS UTILITY" AT 1-800-257-7777 72 Hours Before Start Of Construction

HYDROLOGIC SOIL GROUPS		
SOIL NAME	DESCRIPTION	HSG
A/B	Adamstown-Funkstown complex (0-8% slopes)	C
D/B	Duffield-Ryder silt loam (3-8% slopes)	B
LsA	Lindside silt loam (0-3% slopes)	C
MaA	Melvin-Lindside silt loam (0-3% slopes)	B/D



FREDERICK SOIL CONSERVATION DISTRICT

APPROVED BY: _____ DISTRICT MANAGER

DATE: _____

SCD approval for sediment and erosion control is contingent upon issuance of all applicable regulatory permits.

Released for Bid
2022-07-29

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 23922, Expiration Date: 1/16/2023.

REVISION	DATE	REVISION	DATE	BY	DATE

DEVELOPER/ OWNER:
QUANTUM MARYLAND, LLC
500 E 4TH STREET SUITE 333
AUSTIN, TX 78701
PHONE: 530-417-7496
CONTACT: AD ROBISON

Sediment Control Plan

RODGERS CONSULTING
1947 Century Boulevard, Suite 200, Germantown, Maryland 20874
Ph: 301.948.4700 Fax: 301.948.6256 www.rodgers.com

QUANTUM FREDERICK
LIBER 15038 FOLIO 393
ELECTION DISTRICT NO. 1
FREDERICK COUNTY, MARYLAND

SCALE: 1"=50'
JOB No. 1339A2
March, 2022
INDEX No. SC-3
SHEET No. 4 OF 11

Figure 5

LEGEND

- EXISTING TREE
- EXISTING TREELINE
- EXISTING WETLAND
- EXISTING WETLAND BUFFER
- WASTE DISPOSAL SITE
- EFFECTIVE 100 YEAR FLOODPLAIN
- EFFECTIVE 100 YEAR FLOODPLAIN BUFFER
- PENDING 100 YEAR FLOODPLAIN
- PENDING 100 YEAR FLOODPLAIN BUFFER
- EXISTING STREAM VALLEY BUFFER
- EXISTING TOPO w/ CONTOUR LABEL
- SOILS LINES
- SOIL TYPE

HYDROLOGIC SOIL GROUPS		
SOIL NAME	DESCRIPTION	HSG
AIB	Adamstown-Funkstown complex (0-8% slopes)	C
BIC	Buckeystown loam (3-8% slopes)	B
DiB	Duffield-Ryder silt loam (3-8% slopes)	B
HcB	Hagerstown-Opequon silty clay loams (3-8% slopes)/rocky	B
LsA	Lindside silt loam (0-3% slopes)	C
MAA	Melvin-Lindside silt loam (0-3% slopes)	BD

Proposed stockpile and storage area for hay, gravel, and filter bags removed from the floodplain



CALL "MISS UTILITY" AT 1-800-257-7777 72 Hours Before Start of Construction

REVISION	DATE	REVISION	DATE	BY	DATE

DEVELOPER/ OWNER:
 QUANTUM MARYLAND, LLC
 500 E 4TH STREET SUITE 333
 AUSTIN, TX 78701
 PHONE: 530-417-7496
 CONTACT: AD ROBISON

Site Exhibit

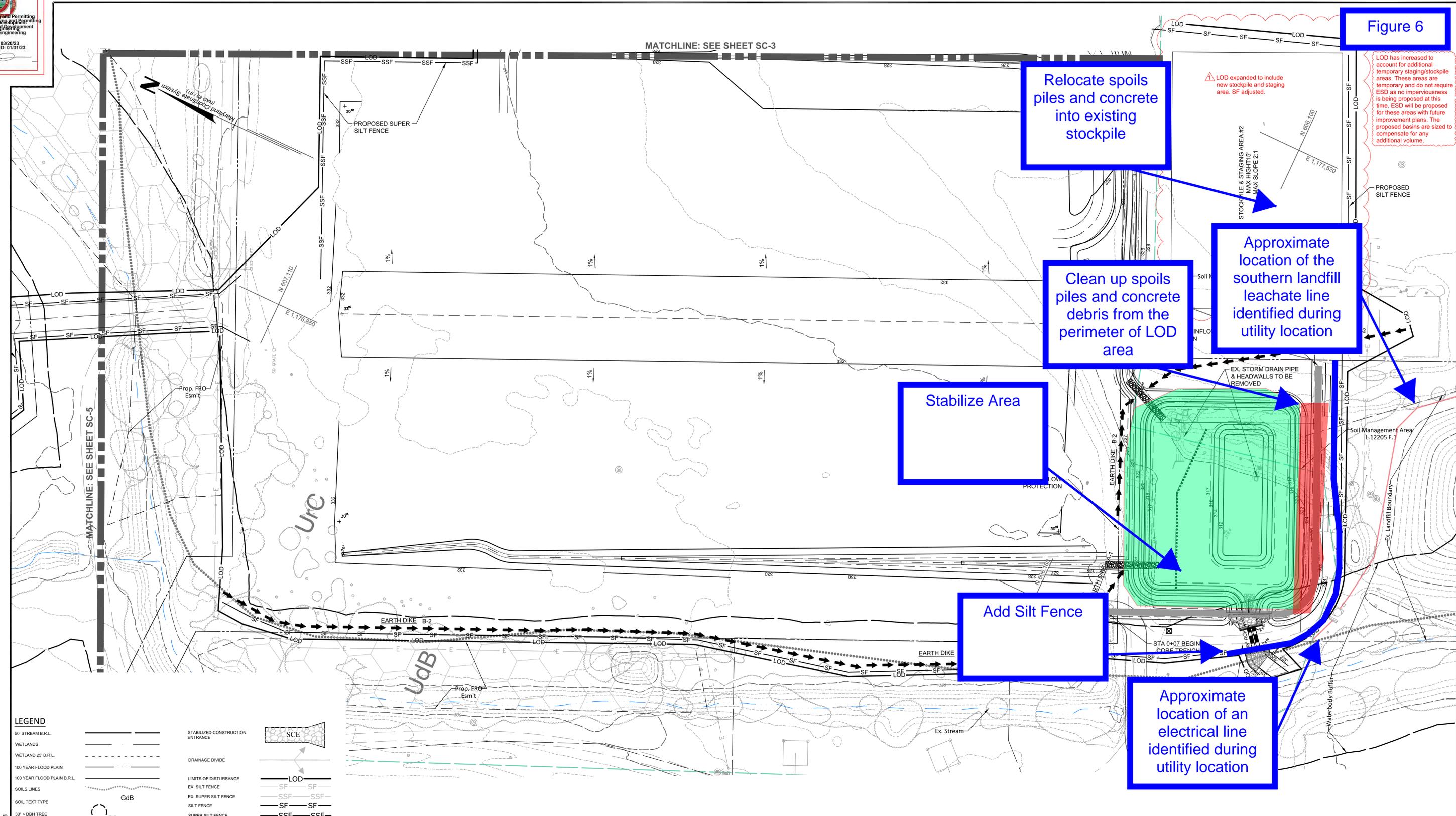
RODGERS CONSULTING
 19847 Century Boulevard, Suite 200, Germantown, Maryland 20874
 Ph: 301.948.4700 Fx: 301.948.6256 www.rodgers.com

QUANTUM FREDERICK
 LIBER 15038 FOLIO 393
 ELECTION DISTRICT NO. 1
 FREDERICK COUNTY, MARYLAND

SCALE:	1"=500'
JOB No.	1339A2
DATE	June, 2023
INDEX No.	EXB-1
SHEET No.	1 OF 1



Figure 6



Relocate spoils piles and concrete into existing stockpile

Clean up spoils piles and concrete debris from the perimeter of LOD area

Approximate location of the southern landfill leachate line identified during utility location

Stabilize Area

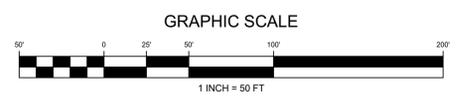
Add Silt Fence

Approximate location of an electrical line identified during utility location

LOD has increased to account for additional temporary staging/stockpile areas. These areas are temporary and do not require ESD as no imperviousness is being proposed at this time. ESD will be proposed for these areas with future improvement plans. The proposed basins are sized to compensate for any additional volume.

LEGEND

50' STREAM B.R.L.	STABILIZED CONSTRUCTION ENTRANCE	SCE
WETLANDS	DRAINAGE DIVIDE	
WETLAND 25' B.R.L.	LIMITS OF DISTURBANCE	LOD
100 YEAR FLOOD PLAN	EX. SILT FENCE	SF
100 YEAR FLOOD PLAN B.R.L.	EX. SUPER SILT FENCE	SSF
SOILS LINES	SILT FENCE	SF
SOIL TEXT TYPE	SUPER SILT FENCE	SSF
30' > DBH TREE	INLET PROTECTION	IP
EXISTING TREE LINE	PROPOSED EARTH DIKE	
FOREST CONSERVATION ESM'T	EXISTING EARTH DIKE	
STREAMS	PROPOSED STOCK PILE	
EXISTING CONTOUR		
PROPOSED CONTOUR		



NOTE: THIS PLAN TO BE USED FOR SEDIMENT CONTROL ONLY
ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY.

FREDERICK SOIL CONSERVATION DISTRICT
APPROVED BY: _____
DISTRICT MANAGER
DATE: 12/16/2022

FREDERICK SOIL CONSERVATION DISTRICT
APPROVED BY: _____
DISTRICT MANAGER
DATE: _____

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me that I am a duly licensed professional engineer under the laws of the State of Maryland, and NRCS Standard for Ponds 378.
License No. 29782, Expiration Date: 01/16/2025



CALL "MISS UTILITY" AT 1-800-257-7777 72 Hours Before Start of Construction

REVISION	DATE	REVISION	DATE	BY	DATE
LOD updates & utility layout changes	2/22/2023				

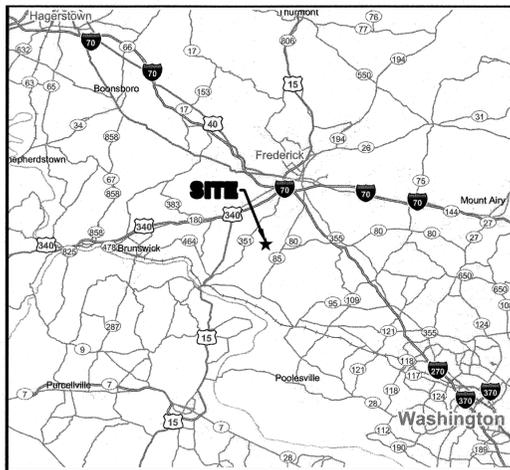
DEVELOPER/OWNER:
QUANTUM MARYLAND, LLC
500 E 4TH STREET SUITE 333
AUSTIN, TX 78701
CONTACT: AD ROBISON
PHONE: 530-417-7496

Sediment Control

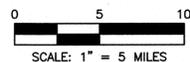
RODGERS CONSULTING
19847 Century Boulevard, Suite 200, Germantown, Maryland 20874
Ph: 301.948.4700 Fx: 301.948.6256 www.rodgers.com

Quantum Frederick
Combined SWM Development and Improvement Plan
Quantum Place South
PW#275128
Liber 15038, Folio 393
ELECTION DISTRICT NO. 1
FREDERICK COUNTY, MARYLAND

SCALE: 1"=50'
JOB No. 1339A
INDEX No. SC-4
SHEET No. 05 OF 54



LOCATION MAP



OWNER/DEVELOPERS CERTIFICATION

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

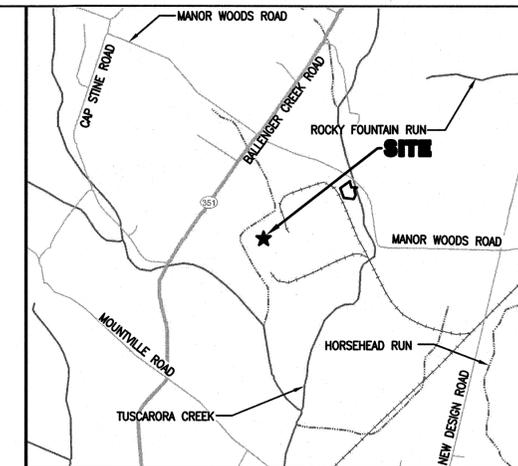
SIGNATURE OF OWNER/DEVELOPER _____ DATE _____
 Print Name, Title, Address, Phone Number Below

OSCAR FISHER, JR.
 EASTALCO ALUMINUM CO.
 5601 MANOR WOODS ROAD
 FREDERICK, MD 21701
 (301) 696-1721

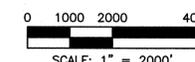
DISTURBED AREA QUANTITY FOR SOUTH LANDFILL LEACHATE MANAGEMENT TANK

THE TOTAL AREA TO BE DISTURBED SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE APPROXIMATELY 3,800 SQ. FT. AND THE TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO BE APPROXIMATELY 90 CY OF EXCAVATION AND APPROXIMATELY 90 CY OF FILL.

NAME Jerry A. Zand DATE 15 August 2013



VICINITY MAP



ENGINEER/ARCHITECT DESIGN CERTIFICATION

"I HEREBY CERTIFY THAT THE PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH LOCAL ORDINANCES, COMAR 08.05.01, AND 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."

SIGNATURE Jerry A. Zand REG. NO. 15453 DATE 15 August 2013

EASTALCO ALUMINUM COMPANY

SOUTH LANDFILL LEACHATE MANAGEMENT TANK

FREDERICK, MARYLAND

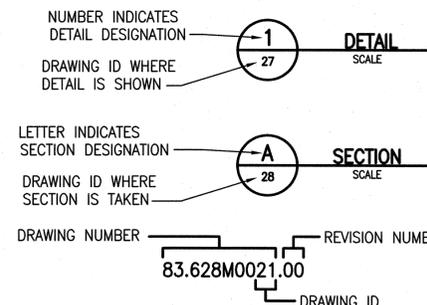
LIST OF DRAWINGS

DRAWING NUMBER	DRAWING ID	SHEET DESCRIPTION
83.628T0042	T-1	TITLE SHEET
83.628C0043	C-1	SITE PLAN
83.628M0044	M-1	LEACHATE STORAGE TANK PLAN
83.628M0045	M-2	DETAILS
83.628E0046	E-1	ELECTRICAL SITE PLAN
83.628E0047	E-2	PUMP CONTROL PANEL

REFERENCE DRAWINGS INCLUDED IN SHEET SET

10.485A0084.02	FINAL COVER SYSTEM AND PIPING PLAN (C-3)
10.485A0085.03	SECTIONS AND DETAILS (C-4)
10.485A0087.01	SECTIONS AND DETAILS (C-6)
10.485A0088.03	SECTIONS AND DETAILS (C-7)

REFERENCE SYMBOLS



REFERENCE DRAWINGS - NIC

EAC INDUSTRIAL WASTE LANDFILL CLOSURE, FREDERICK, MD - CH2M HILL (1993):

PERMITTING FOR INDUSTRIAL WASTE LANDFILL AND CONSTRUCTION DRAWINGS FOR CELL 1 - EA ENGINEERING, SCIENCE AND TECHNOLOGY, INC. (FEB 1993)

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 15453, Expiration Date: 07/02/2015



REV. EWR No.	NO.	CHANGES MADE	BY	APP'D	DATE
DATE	AUGUST 2013				
DRAWN BY	TMR				
ENGINEER	TMR				
SCALE	AS SHOWN				
PLOT SIZE	ARCH D				
E.W.R. NO.					
C.P.A.R. NO.					

EA ENGINEERING, SCIENCE AND TECHNOLOGY
 Loveton Center
 15 Loveton Circle
 Sparks, Maryland 21152
 (410) 771-4950

AN ALUMAX COMPANY

EASTALCO ALUMINUM COMPANY
 5601 MANOR WOODS ROAD
 FREDERICK, MARYLAND 21701
 (301) 662-6100 FAX (301) 874-2062

TOLERANCES EXCEPT AS NOTED

SOUTH LANDFILL LEACHATE MANAGEMENT TANK

TITLE SHEET

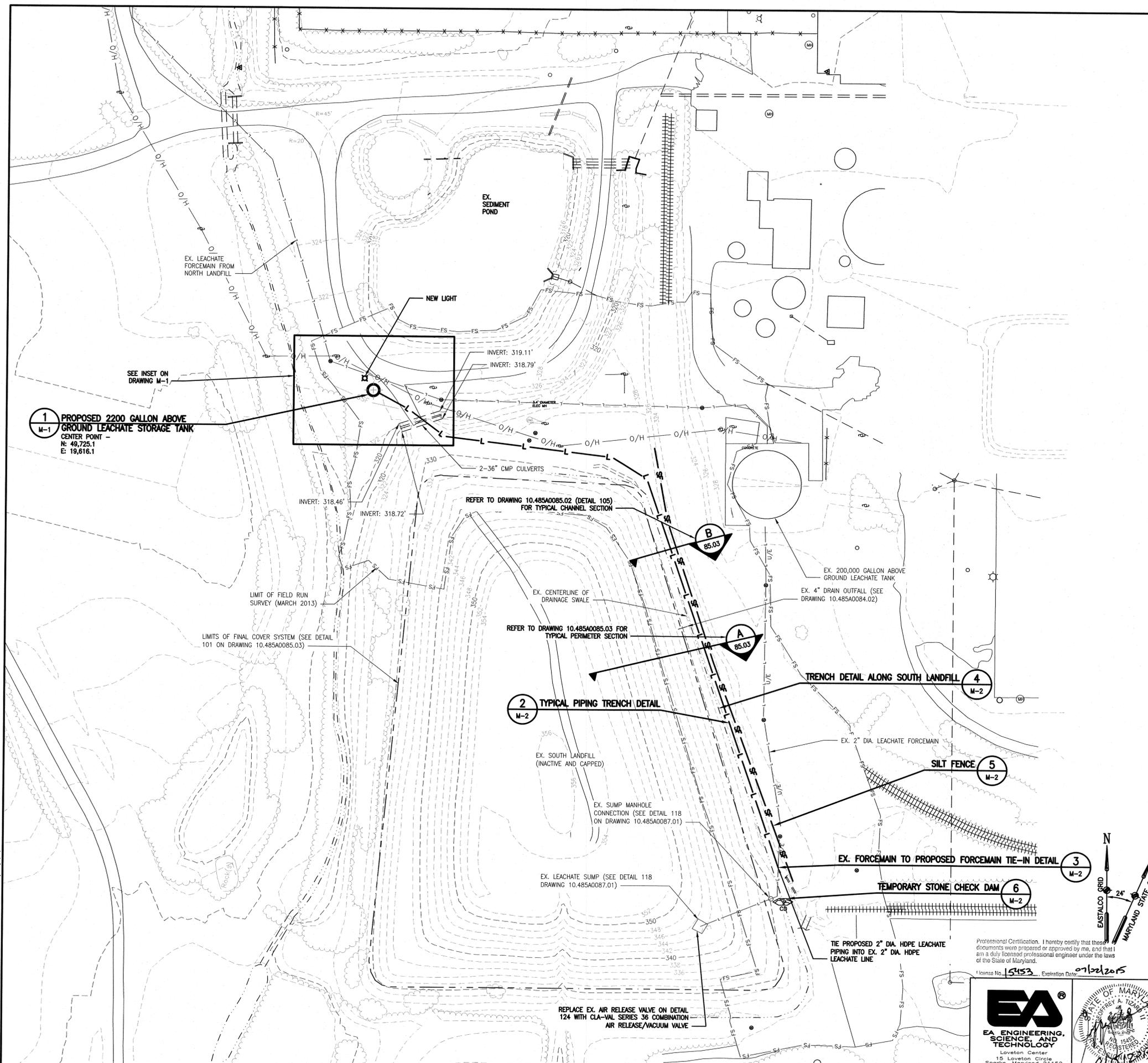
DWG. NO. **83.628T0042**

DWG. NO. **1 OF 6**

FILE PATH: G:\PROJECTS\148994 - EASTALCO CLOSURE\148994-CH2MHILL.DWG [1-0] 8/15/13

LEGEND

SYMBOL	DESCRIPTION
- - - - -110	EXISTING INDEX CONTOUR
- - - - -108	EXISTING INTERMEDIATE CONTOUR
---	EXISTING STRUCTURE
- - - - -	EXISTING EDGE OF UNPAVED ROAD
==	EXISTING EDGE OF PAVED ROAD
==	EXISTING CULVERT/STORM DRAIN
FS	LIMIT OF FIELD RUN SURVEY
- - - - -	EXISTING STREAM/SWALE
x x x x	EXISTING FENCE
	EXISTING RIPRAP
	EXISTING TREE OR BRUSH LINE
L	EXISTING LEACHATE FORCEMAIN
- - - - -	EXISTING ANCHOR TRENCH (CELL LINER)
o	EXISTING UTILITY POLE
SSF	EXISTING SUPER SILT FENCE
SF	EXISTING SILT FENCE
E	EXISTING UNDERGROUND ELECTRIC LINE
⊙	EXISTING POWER POLE GUY
⊙	EXISTING ROCK(S)
⊙	EXISTING BENCHMARK
O/H	EXISTING OVERHEAD ELECTRICAL LINE
LOD	LIMIT OF DISTURBANCE
⊙	EXISTING MANHOLE/WELL
	EXISTING RAILROAD TRACKS
- - - - -110	PROPOSED INDEX CONTOUR
- - - - -	PROPOSED INTERMEDIATE CONTOUR
x x x x	PROPOSED FENCE
SF	PROPOSED SUPER SILT FENCE
SCE	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
L	PROPOSED LEACHATE FORCEMAIN
+110.7	PROPOSED SPOT ELEVATION
DF	PROPOSED DIVERSION FENCE
⊙	PROPOSED TEMPORARY STONE CHECK DAM



1
M-1
PROPOSED 2200 GALLON ABOVE
GROUND LEACHATE STORAGE TANK
CENTER POINT -
N: 49,725.1
E: 19,616.1

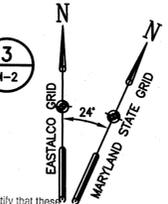
2
M-2
TYPICAL PIPING TRENCH DETAIL

3
M-2
TRENCH DETAIL ALONG SOUTH LANDFILL

4
M-2
SILT FENCE

5
M-2
TEMPORARY STONE CHECK DAM

- SURVEY NOTES:**
- AREA INSIDE OF -FS- LINETYPE PERFORMED BY HARRIS, SMARIGA AND ASSOCIATES IN MARCH 2013.
 - AREA OUTSIDE OF -FS- LINETYPE PERFORMED BY HARRIS, SMARIGA AND ASSOCIATES IN APRIL 2012.

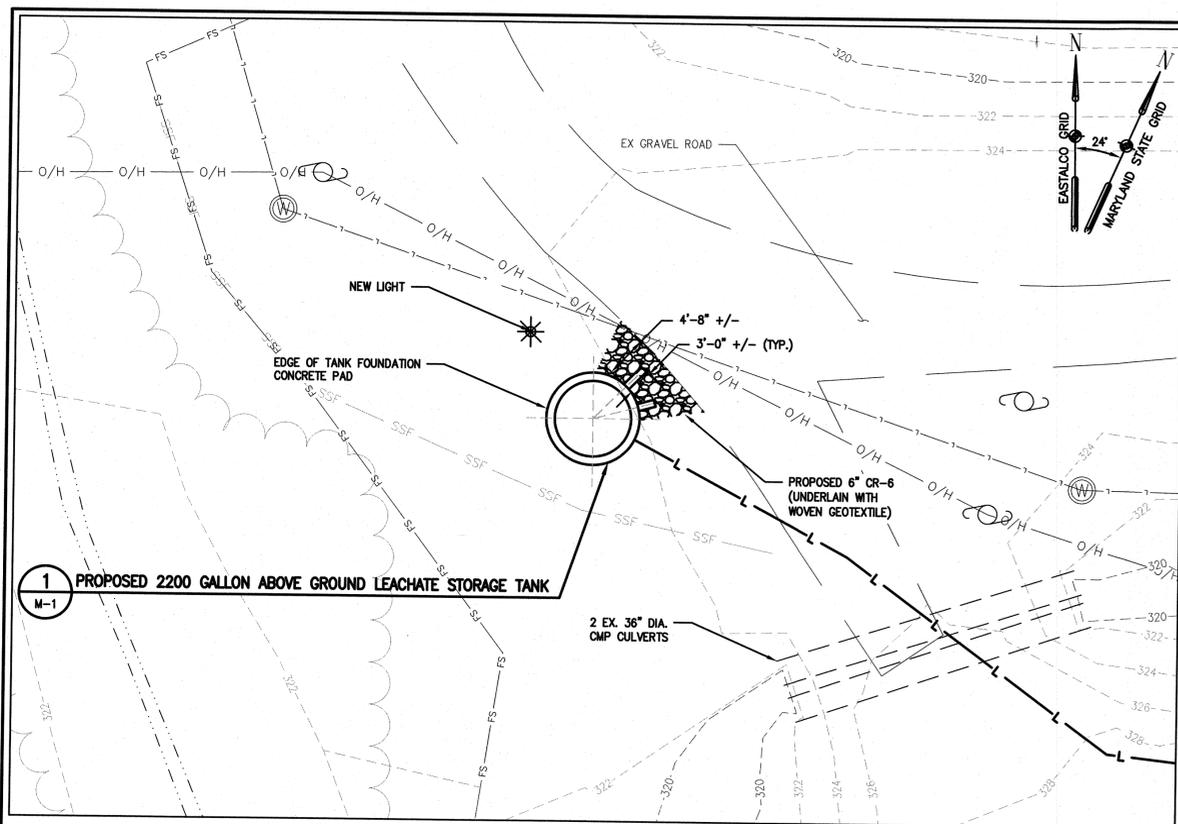


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 15453, Expiration Date: 07/22/2015

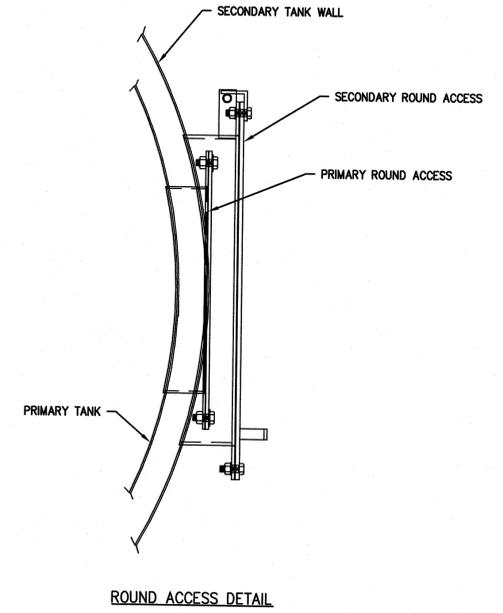
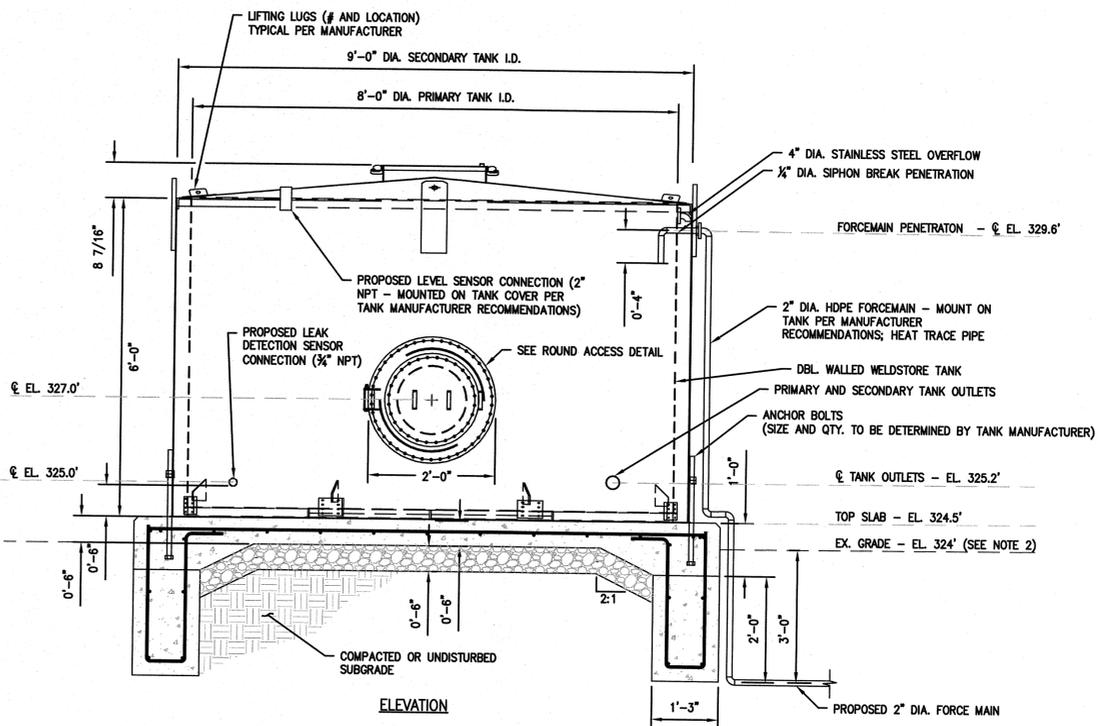
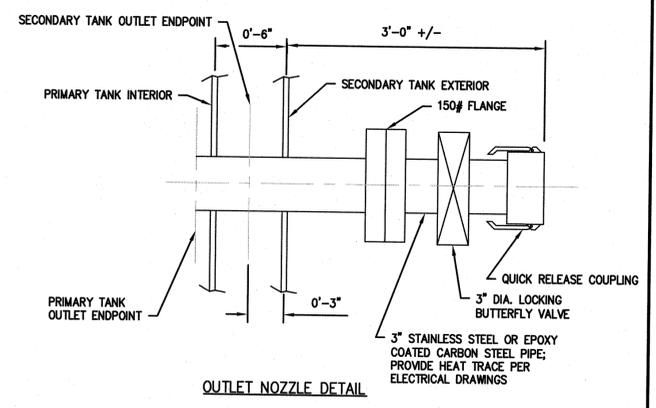
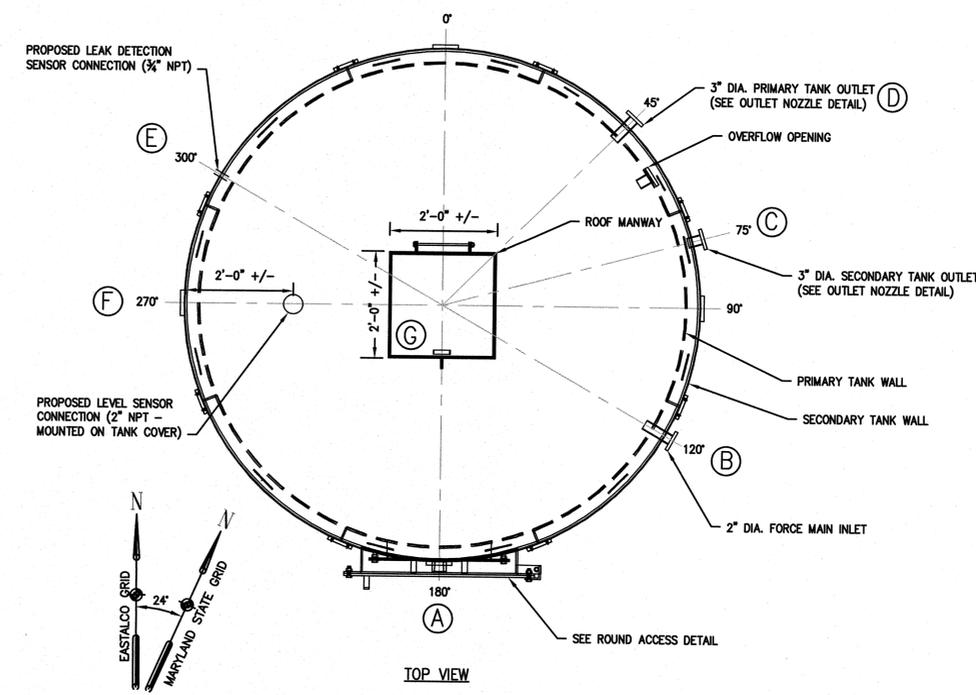


REV.	EWR No.	NO.	CHANGES MADE	BY	APP'D	DATE
	AUGUST 2013					
DRAWN BY: TMR		 EASTALCO ALUMINUM COMPANY 5601 MANOR WOODS ROAD FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062				
ENGINEER: TMR						
SCALE: AS SHOWN		TOLERANCES EXCEPT AS NOTED FINISH: _____ ANGULAR: _____ DIMS: FRACTIONAL, 2 PLS, 3 PLS PLOT SIZE: ARCH D E.W.R. NO.: _____ C.P.A.R. NO.: _____				
TITLE: SOUTH LANDFILL LEACHATE MANAGEMENT TANK SITE PLAN						DWG. NO.:
83.628C0043						DWG. NO.:
2 OF 6						

REF: PLAN: 10.485A0085.03; 10.485A0085.02; 10.485A0085.01; 10.485A0085.04; 10.485A0085.05; 10.485A0085.06; 10.485A0085.07; 10.485A0085.08; 10.485A0085.09; 10.485A0085.10; 10.485A0085.11; 10.485A0085.12; 10.485A0085.13; 10.485A0085.14; 10.485A0085.15; 10.485A0085.16; 10.485A0085.17; 10.485A0085.18; 10.485A0085.19; 10.485A0085.20; 10.485A0085.21; 10.485A0085.22; 10.485A0085.23; 10.485A0085.24; 10.485A0085.25; 10.485A0085.26; 10.485A0085.27; 10.485A0085.28; 10.485A0085.29; 10.485A0085.30; 10.485A0085.31; 10.485A0085.32; 10.485A0085.33; 10.485A0085.34; 10.485A0085.35; 10.485A0085.36; 10.485A0085.37; 10.485A0085.38; 10.485A0085.39; 10.485A0085.40; 10.485A0085.41; 10.485A0085.42; 10.485A0085.43; 10.485A0085.44; 10.485A0085.45; 10.485A0085.46; 10.485A0085.47; 10.485A0085.48; 10.485A0085.49; 10.485A0085.50; 10.485A0085.51; 10.485A0085.52; 10.485A0085.53; 10.485A0085.54; 10.485A0085.55; 10.485A0085.56; 10.485A0085.57; 10.485A0085.58; 10.485A0085.59; 10.485A0085.60; 10.485A0085.61; 10.485A0085.62; 10.485A0085.63; 10.485A0085.64; 10.485A0085.65; 10.485A0085.66; 10.485A0085.67; 10.485A0085.68; 10.485A0085.69; 10.485A0085.70; 10.485A0085.71; 10.485A0085.72; 10.485A0085.73; 10.485A0085.74; 10.485A0085.75; 10.485A0085.76; 10.485A0085.77; 10.485A0085.78; 10.485A0085.79; 10.485A0085.80; 10.485A0085.81; 10.485A0085.82; 10.485A0085.83; 10.485A0085.84; 10.485A0085.85; 10.485A0085.86; 10.485A0085.87; 10.485A0085.88; 10.485A0085.89; 10.485A0085.90; 10.485A0085.91; 10.485A0085.92; 10.485A0085.93; 10.485A0085.94; 10.485A0085.95; 10.485A0085.96; 10.485A0085.97; 10.485A0085.98; 10.485A0085.99; 10.485A0085.100



INSET
1"=10'



GENERAL SEQUENCING NOTES:

1. THE SOUTH LANDFILL LEACHATE PUMPING SYSTEM SHALL CONTINUE TO USE THE 200,000 GALLON TANK UNTIL THE NEW TANK IS READY FOR SERVICE.
2. THE EX. LEACHATE LEVEL SENSOR AND FLOWMETER AT THE 200,000 GALLON TANK SHALL REMAIN IN SERVICE WITH POWER UNTIL THE 200,000 GALLON TANK IS DEMOLISHED AFTER CLOSURE OF THE NORTH LANDFILL. POWER, UTILITIES, TANK, WIRE ETC. SHALL BE DEMOLISHED AND REMOVED AT THE EX. 200,000 GALLON TANK AFTER CLOSURE OF THE NORTH LANDFILL.

NOTES

1. REBAR, FOOTING DEPTH, SLAB THICKNESS, ANCHOR BOLT SIZE AND ANCHOR BOLT QTY. ARE BASED ON SOIL BEARING AND WILL BE DETERMINED BY TANK MANUFACTURER. THIS FOUNDATION DESIGN IS PRELIMINARY.
2. ELEVATION OF EXISTING GRADE WAS APPROXIMATED FROM FIELD RUN SURVEY PERFORMED MARCH 2013. ALL OTHER ELEVATIONS OF TANK ARE RELATIVE TO THIS ELEVATION.
3. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION RELATING TO LEAK DETECTION AND LEVEL SENSORS.
4. EXCAVATE EX. SOILS UNTIL SUITABLE FOUNDATION SOILS ARE ENCOUNTERED AND BACKFILL WITH CR-6 AND TAMP.
5. GUARDRAIL TO ROOF MANWAY NOT SHOWN. GUARDRAIL SHALL BE DESIGNED BY MANUFACTURER TO COMPLY WITH OSHA AND ALCOA FALL PROTECTION STANDARDS.

2,000 GALLON LEACHATE TANK					
SYMBOL	SIZE	QUANTITY	SERVICE	LOCATION	REMARKS
(A)	24" DIA.	1	ACCESS HATCH	SIDE	HINGED
(B)	2" DIA.	1	FORCEMAIN INLET	SIDE	FLANGED
(C)	3" DIA.	1	SECONDARY TANK OUTLET	SIDE	FLANGED
(D)	3" DIA.	1	PRIMARY TANK OUTLET	SIDE	FLANGED
(E)	3/4" NPT	1	LEAK DETECTION SENSOR CONNECTION	SIDE	THREADED
(F)	2" NPT	1	LEVEL SENSOR CONNECTION	TOP	THREADED
(G)	24"x24"	1	TOP TANK HATCH	TOP	HINGED

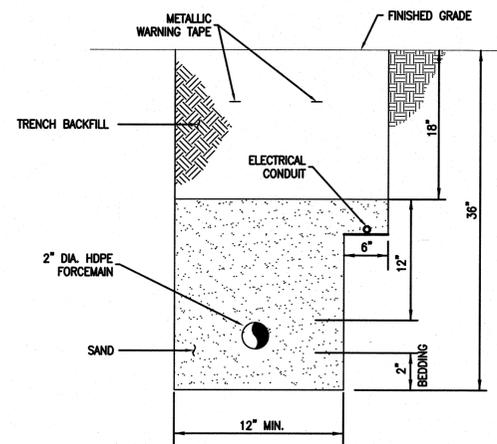
1 PROPOSED 2200 GALLON ABOVE GROUND LEACHATE STORAGE TANK
C-1 NOT TO SCALE



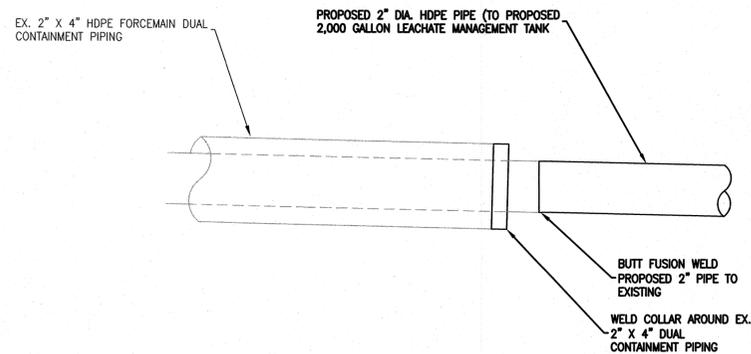
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16453, Expiration Date: 07/02/2015

REV.	EWR No.	NO.	CHANGES MADE	BY	APP'D	DATE		
	AUGUST 2013							
<table border="0"> <tr> <td> EASTALCO ALUMINUM COMPANY 5601 MANOR WOODS ROAD FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062 </td> <td> SOUTH LANDFILL LEACHATE MANAGEMENT TANK LEACHATE STORAGE TANK PLAN DWG. NO. 83.628M0044 3 OF 6 </td> </tr> </table>							EASTALCO ALUMINUM COMPANY 5601 MANOR WOODS ROAD FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062	SOUTH LANDFILL LEACHATE MANAGEMENT TANK LEACHATE STORAGE TANK PLAN DWG. NO. 83.628M0044 3 OF 6
EASTALCO ALUMINUM COMPANY 5601 MANOR WOODS ROAD FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062	SOUTH LANDFILL LEACHATE MANAGEMENT TANK LEACHATE STORAGE TANK PLAN DWG. NO. 83.628M0044 3 OF 6							

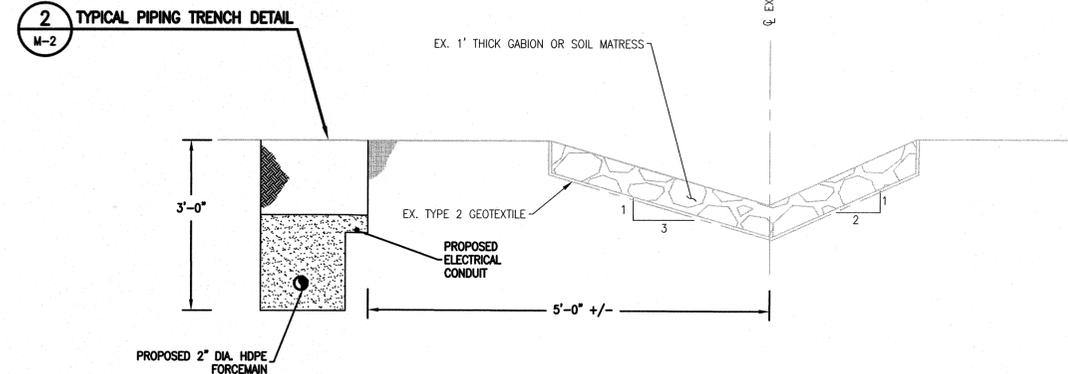
FILE PATH: O:\PROJECTS\143096 - EASTALCO CLOSURE\143096-01\DWG\C-01 8/15/13



2 TYPICAL PIPING TRENCH DETAIL
C-1 NOT TO SCALE

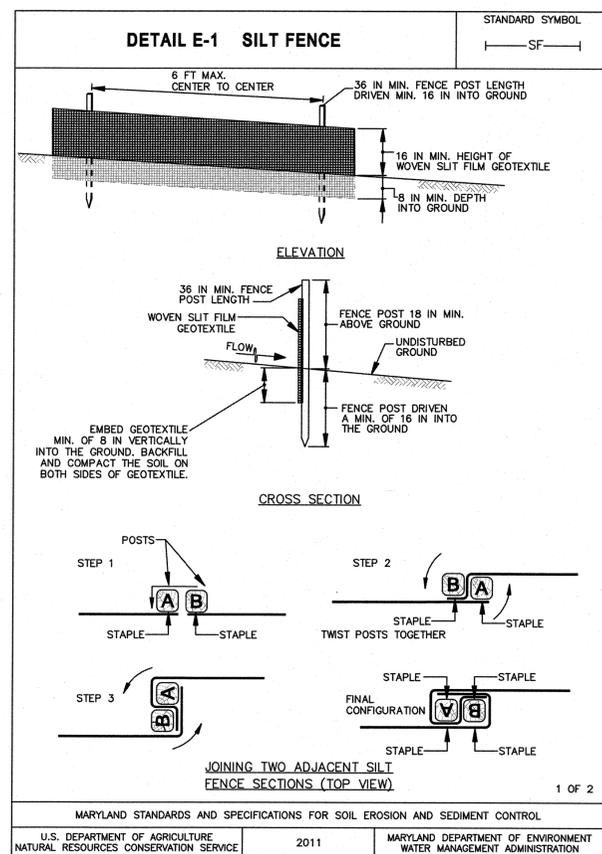


3 EX. FORCEMAIN TO PROPOSED FORCEMAIN TIE-IN DETAIL
C-1 NOT TO SCALE

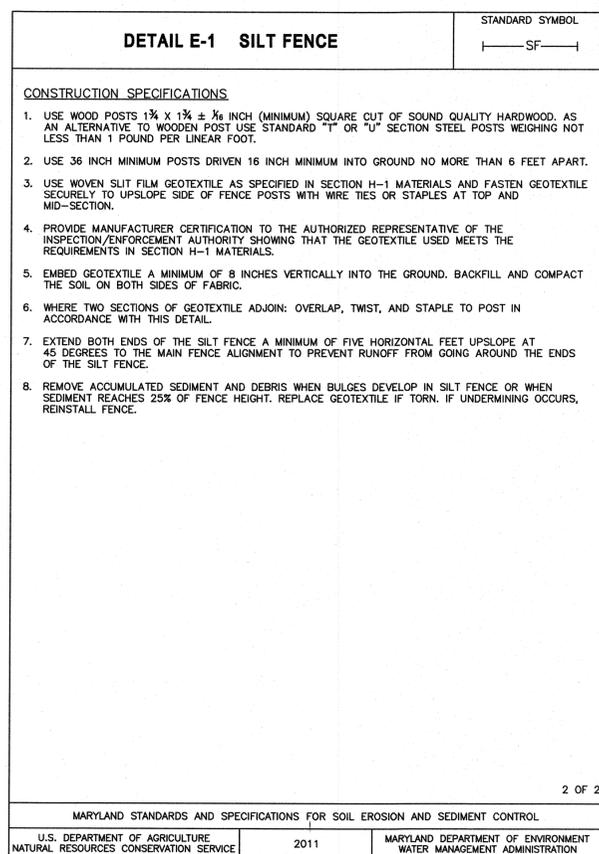


NOTE: THIS DETAIL WAS ADAPTED FROM DETAIL 105 ON DRAWING 10.48540085.03

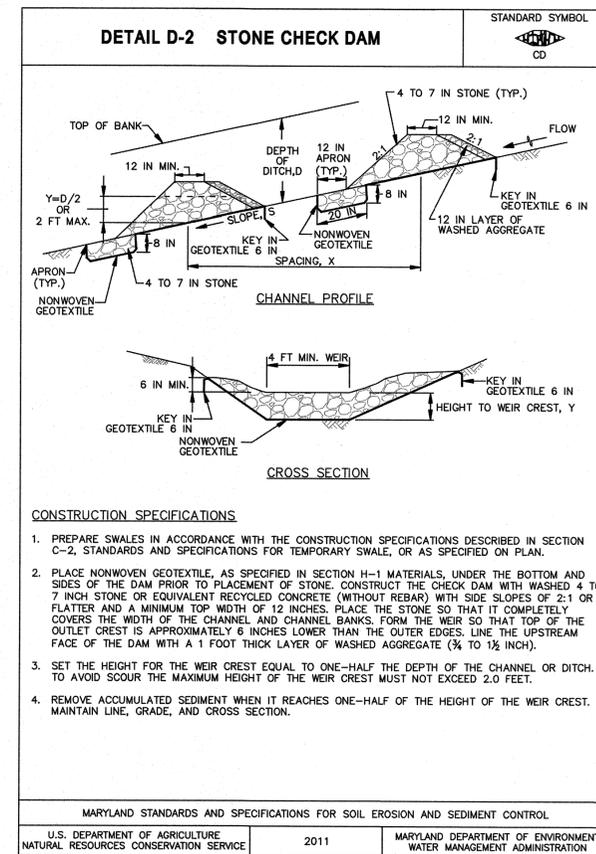
4 TRENCH DETAIL ALONG SOUTH LANDFILL
C-1 NOT TO SCALE



5 SILT FENCE
C-1 NOT TO SCALE



5 SILT FENCE
C-1 NOT TO SCALE



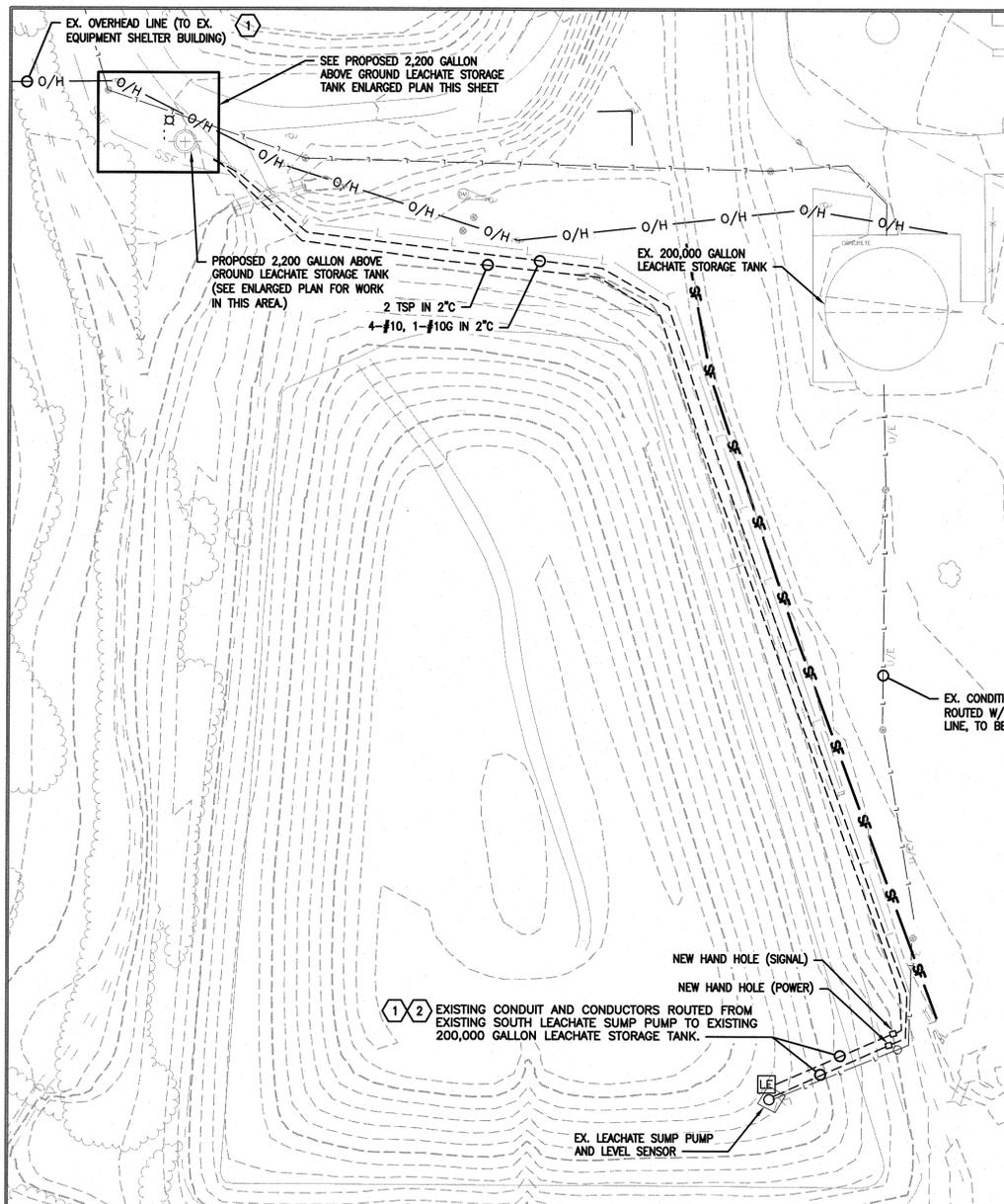
6 TEMPORARY STONE CHECK DAM
C-1 NOT TO SCALE

FILE PATH: \\VOLUME001\DATA\PROJECTS\10000000 - ESTALCO CLOSURE\10000000-00000000\DWG (M-02) 8/15/13

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16443, Expiration Date 07/04/2015



REV.	EWR No.	NO.	CHANGES MADE	BY	APP'D	DATE
DATE	AUGUST 2013					
DRAWN BY	TMR					
ENGINEER	TMR					
SCALE	AS SHOWN	FINISH				
		ANGULAR				
PLOT SIZE	ARCH D	DIMS.	FRACTIONAL	2 PLS	3 PLS	
E.W.R. NO.		INCH				
C.P.A.R. NO.		MM				
EASTALCO ALUMINUM COMPANY 5601 MANOR WOODS ROAD FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062						
SOUTH LANDFILL LEACHATE MANAGEMENT TANK DETAILS						
83.628M0045						
4 OF 6						



SITE PLAN
SCALE: 1"=40'

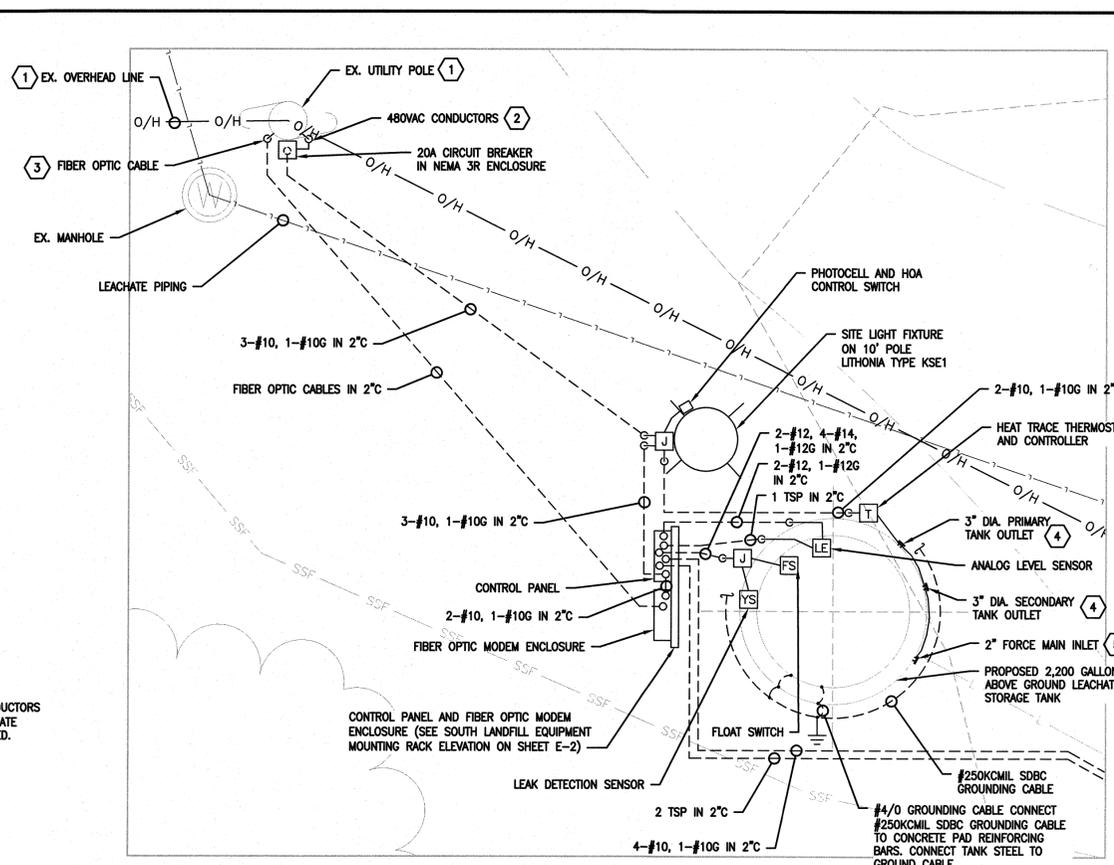


ABBREVIATIONS

AMP	AMPERE	OL	OVERLOAD
AC	ALTERNATING CURRENT	PF-0	POWER FEEDER W/SOURCE DESIGNATION & CIRCUIT DESIGNATION
AF	AMPS FRAME	PH	PHASE
APPROX.	APPROXIMATELY	PP-0	POWER PANELBOARD
AT	AMPS TRIP	#P	(#) POLE, # REPRESENTS A NUMBER
AWG	AMERICAN WIRE GAGE	P-0	PUMP W/DESIGNATION
BKR	BREAKER	QTY	QUANTITY
BLDG.	BUILDING	SDBC	SOFT DRAWN BARE COPPER SERVICE ENTRANCE
CB	CIRCUIT BREAKER	S.E.	TRANSFORMER W/DESIGNATION
C.E.P.	CONCRETE EQUIPMENT PAD	T-0	TERMINAL BOX W/DESIGNATION
CKT. CIR.	CIRCUIT	TB-0	TYPICAL
CP, C.P.	CONTROL PANEL	UTL	UTILITY
DC	DIRECT CURRENT	VAC	VOLTS ALTERNATING CURRENT
DIA	DIAMETER	W/	WITH
D.S.	DISCONNECT SWITCH		
DWG	DRAWING		
ELEC	ELECTRICAL ENCLOSURE		
ENCL.	ENCLOSURE		
EX, EXIST	EXISTING		
FVNR	FULL VOLTAGE NON-REVERSING GREEN OR GROUNDING CONDUCTOR		
G	GROUND FAULT		
GF	GROUND FAULT		
GFCL, GFI	GROUND FAULT CIRCUIT INTERRUPTER		
JB OR JB-0	JUNCTION BOX OR JUNCTION BOX W/DESIGNATION		
KCMIL	KILO (THOUSAND) CIRCULAR MILS		
KV	KILOVOLT		
KVA	KILOVOLT AMPERE		
KW	KILOWATT		
LP	LIGHTING PANELBOARD		
LTG.	LIGHTING		
M-0	MOTOR STARTER COIL W/DESIGNATION		
MTG	MOUNTING		
N	NEUTRAL		
NEC	NATIONAL ELECTRICAL CODE		
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION		
NFSS	NON-FUSED SAFETY SWITCH		
NO.	NUMBER		
NTS	NOT TO SCALE		

SYMBOLS

	CIRCUIT BREAKER
	CIRCUIT CONNECTION
	CONTACTOR
	DELTA, Y
	DISCONNECT SWITCH
	GROUND ROD
	GROUND TEST WELL
	JUNCTION BOX
	SITE LIGHTING
	MOTOR
	MOTOR, W/ HP
	OVERLOAD
	TRANSFORMER
	HOME RUN TO LIGHTING OR POWER PANELBOARD - INCLUDES CONDUIT AND CIRCUIT (CONDUCTORS)
	CONDUIT CONCEALED BELOW SLAB OR GRADE (UNLESS NOTED OTHERWISE)
	CONDUIT DOWN
	CONDUIT UP

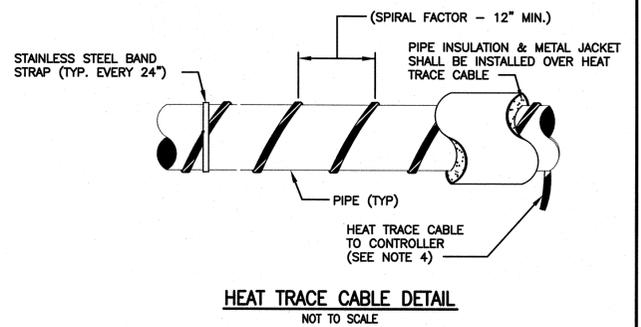


PROPOSED 2,200 GALLON ABOVE GROUND LEACHATE STORAGE TANK ENLARGED PLAN
SCALE: 1"=5'

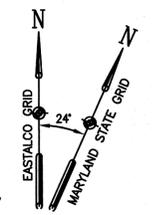


SITE PLAN NOTES:

- LOCATE CONDUIT AND CONDUCTORS (3-#12, 1-#12G IN 2" C) ROUTED FROM EXISTING SOUTH LEACHATE SUMP PUMP TO EXISTING 200,000 GALLON LEACHATE STORAGE TANK. INSTALL HANDHOLE, CUT INTO CONDUIT AND CONDUCTORS, AND SPLICE INTO EXISTING CONDUCTORS FROM THE SUMP PUMP SO THAT POWER MAY BE OBTAINED FROM THE NEW CONTROL PANEL AT THE NEW 2,200 GALLON LEACHATE TANK
- LOCATE CONDUIT AND SIGNAL CONDUCTORS ROUTED FROM EXISTING LEVEL TRANSMITTER TO EXISTING GENIUS ENCLOSURE LOCATED AT THE EXISTING 200,000 GALLON LEACHATE STORAGE TANK. INSTALL HAND HOLE, CUT INTO CONDUIT AND SIGNAL CONDUCTORS, AND SPLICE INTO EXISTING SIGNAL CONDUCTORS FROM LEVEL TRANSMITTER SO THAT THE LEVEL SIGNAL IS PROVIDED TO THE NEW CONTROL PANEL AT THE NEW 2,200 GALLON LEACHATE TANK.
- COORDINATE THE MODIFICATION OF THE EXISTING PLC PROGRAM SO THAT THE EXISTING LEACHATE SUMP PUMP OPERATES THE SAME AS PREPROJECT CONDITIONS (LOW LEVEL ON, HIGH LEVEL OFF), WITH THE ADDITIONAL REQUIREMENT THAT THE PUMP SHALL NOT RUN IF THE 2,200 GALLON LEACHATE TANK IS FULL (USER ADJUSTABLE HIGH-HIGH LEVEL).

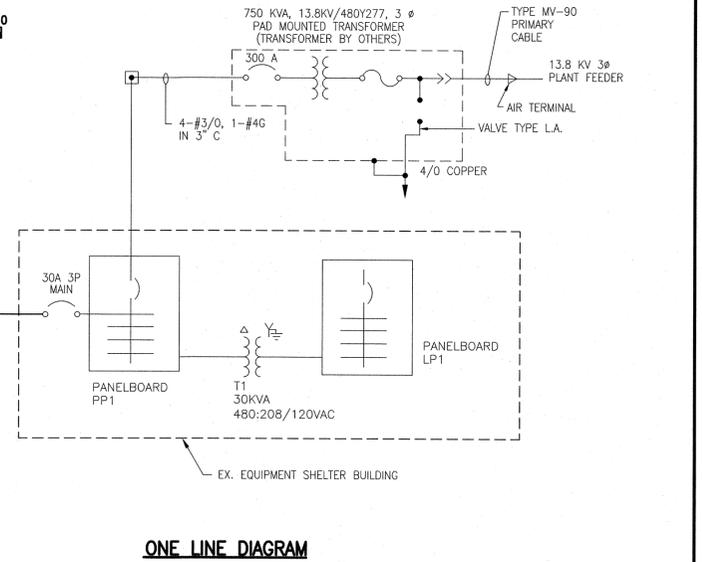


- NOTES:**
- HEAT TRACE SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS ON PORTIONS OF PIPING AS SCHEDULED.
 - PROVIDE HEAT TRACE CAUTION LABELS ON PIPE INSULATION METAL JACKET.
 - CONTRACTOR SHALL INSTALL A COMPLETE, IN-PLACE HEAT TRACE CABLE AS SPECIFIED.



NOTES:

- EXISTING OVERHEAD LINES ROUTED FROM EXISTING EQUIPMENT SHELTER BUILDING TO PROPOSED 2,200 GALLON LEACHATE STORAGE TANK.
- OBTAIN 480VAC POWER FROM EXISTING OVERHEAD POWER CONDUCTORS. ROUTE CONDUCTORS TO NEW 60A CIRCUIT BREAKER.
- OBTAIN PLC COMMUNICATIONS SIGNAL FROM EXISTING FIBER OPTIC CABLES. ROUTE TO NEW FIBER OPTIC MODEM. SPLICE FIBER OPTIC CABLE AS NECESSARY TO CONTINUE ROUTING TO EXISTING 200,000 GALLON TANK
- INSTALL HEAT TRACE PRIMARY AND SECONDARY TANK OUTLETS.
- INSTALL HEAT TRACE ON OPPOSED PIPING OF FORCE MAIN INLET PIPING.

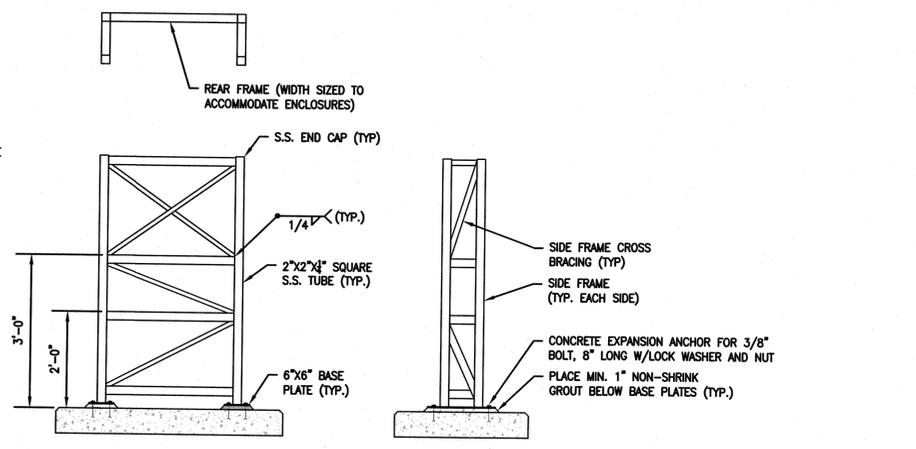
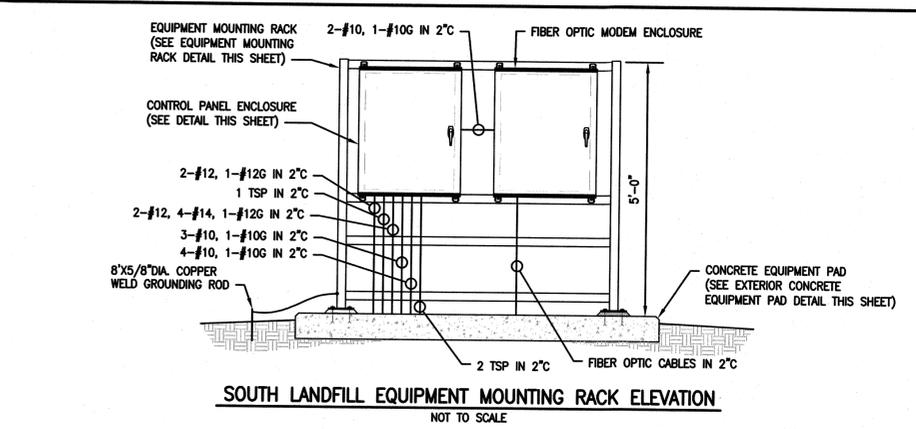
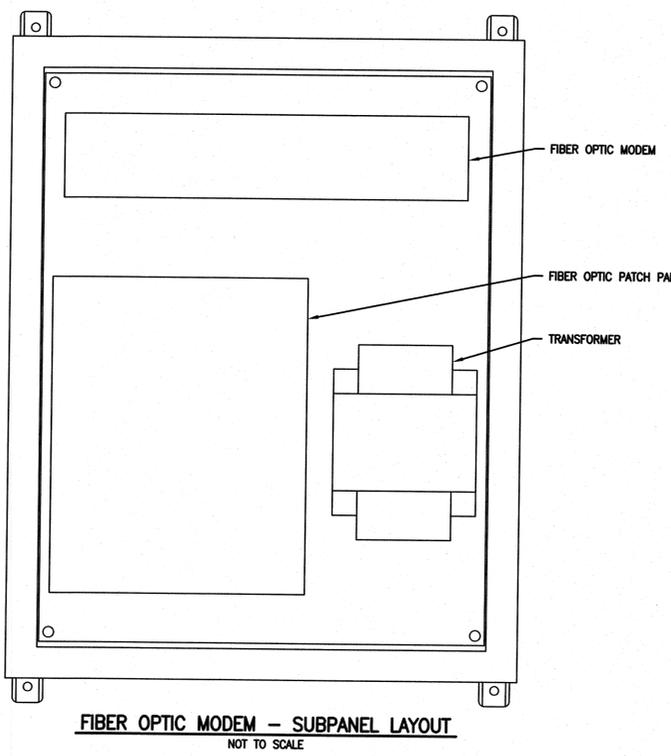
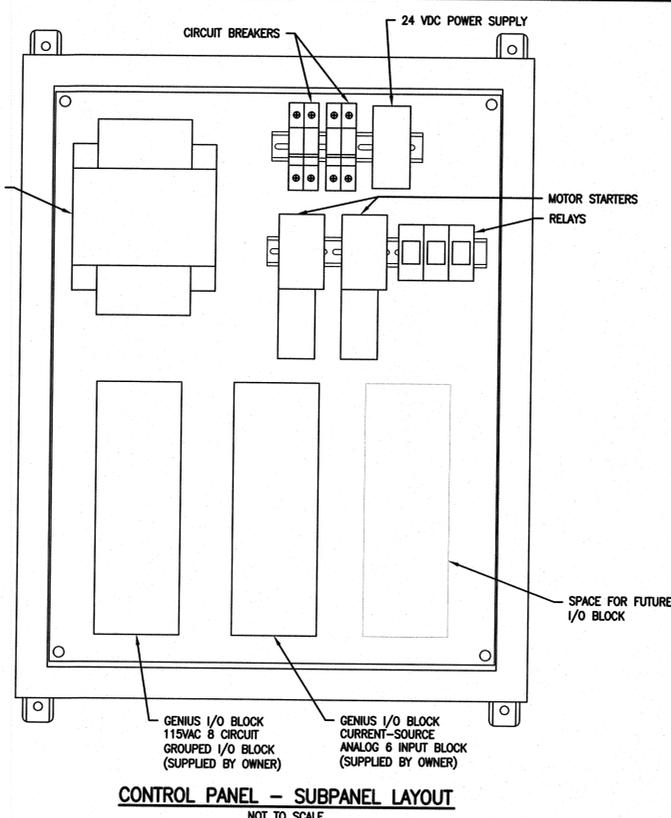
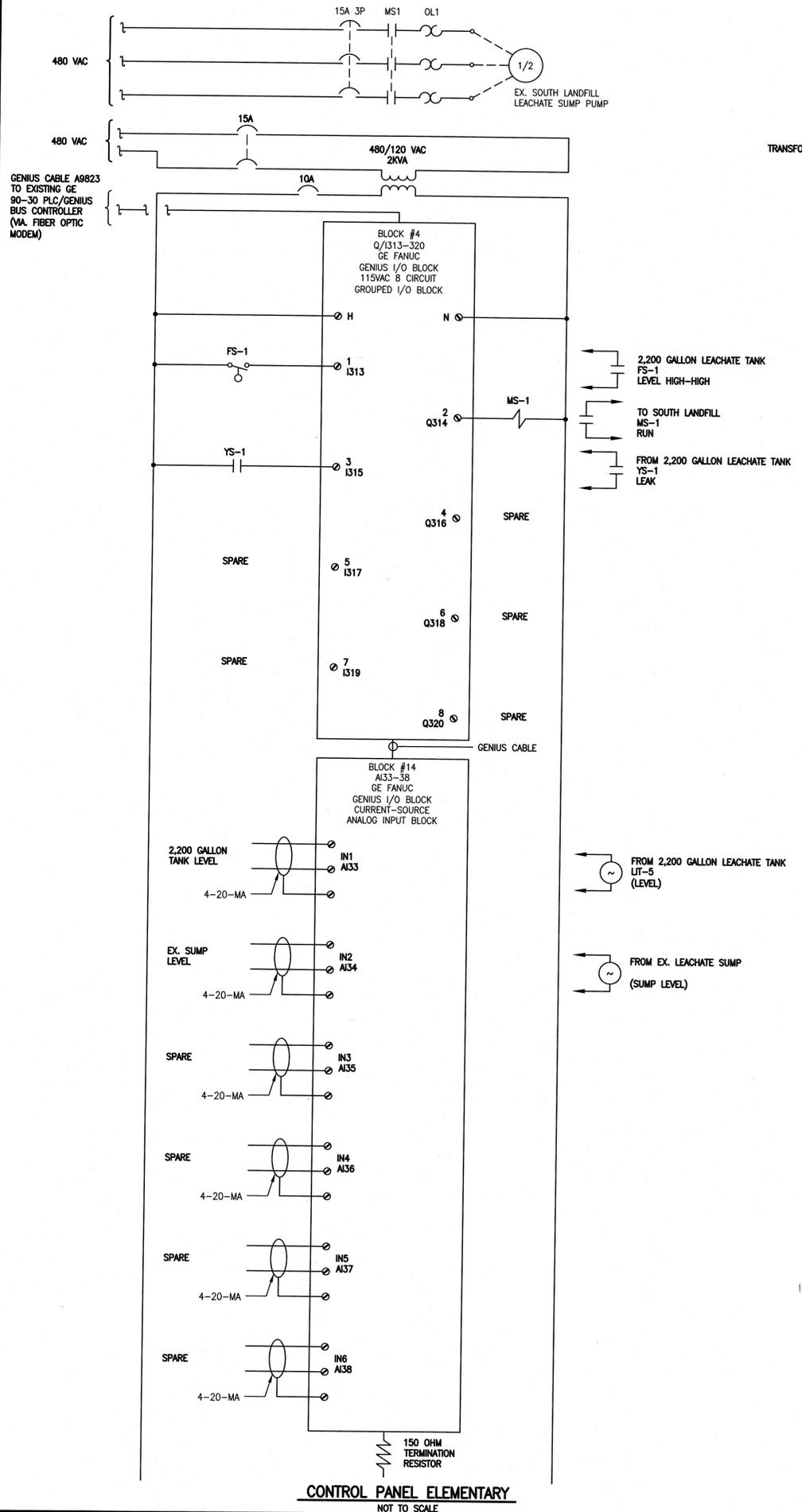


- NOTES:**
- TO BE REMOVED IN FUTURE

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 26826, Expiration Date: April 2015

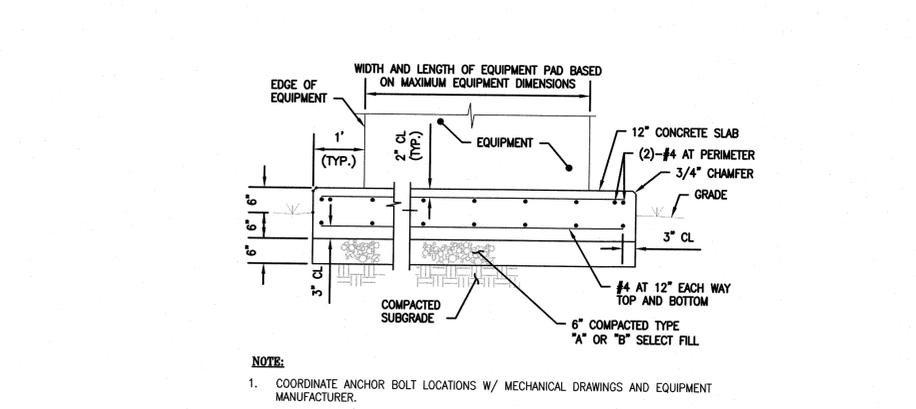


REV. EWR No.	NO.	CHANGES MADE	BY	APP'D	DATE
DATE: AUGUST 2013					
DRAWN BY: JAP	 EASTALCO ALUMINUM COMPANY 5601 MANOR WOODS ROAD FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062				
ENGINEER: DY					
SCALE: AS SHOWN	TOLERANCES EXCEPT AS NOTED	SOUTH LANDFILL LEACHATE MANAGEMENT TANK ELECTRICAL SITE PLAN			
PLOT SIZE: ARCH D	DIMS: FRACTIONAL 2 PLS 3 PLS	83.628E0046			
E.W.R. NO.	INCH	5 OF 6			
C.P.A.R. NO.	MM				



NOTES:

- SIDE FRAME SHALL BE 10" DEEP MINIMUM. THE SIDE FRAME SHALL BE APPROXIMATELY TWO THIRDS THE SIZE OF THE LARGEST ENCLOSURE DEPTH.
- CROSS BRACING SHALL BE PROVIDED ON THE REAR FRAME ASSEMBLY FOR EMRS 24" WIDE AND LARGER. CROSS BRACING SHALL BE PROVIDED ON THE SIDE FRAME FOR EMRS 18" DEEP OR LARGER.
- ENCLOSURES SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE. THE EMR SHALL BE FASTENED TO THE CEP WITH CORROSION RESISTANT EXPANSION ANCHORS.
- MOUNTING RACK AND CONTROL PANELS SHALL BE STAINLESS STEEL.



NOTE:

- COORDINATE ANCHOR BOLT LOCATIONS W/ MECHANICAL DRAWINGS AND EQUIPMENT MANUFACTURER.

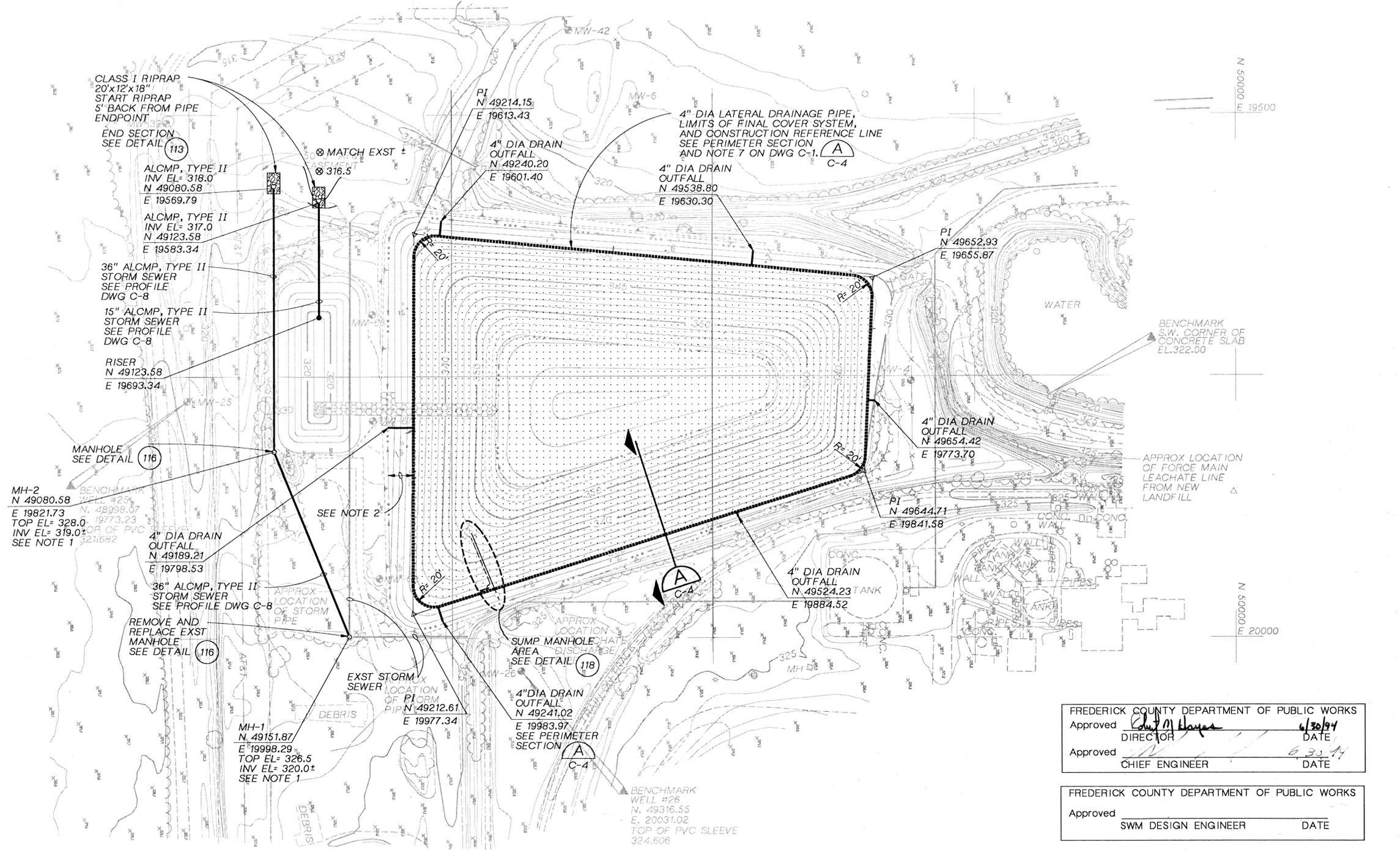
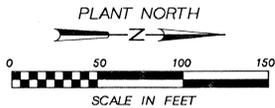
FILE PATH: G:\PROJECTS\145006 - EASTALCO CLOSURE\145006-02\DRAWING [1-3] 8/16/13

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 26812, Expiration Date: Aug 1, 2015

REV. EWR No.	NO.	CHANGES MADE	BY	APP'D	DATE
DATE AUGUST 2013					
DRAWN BY JAP	 EASTALCO ALUMINUM COMPANY 5601 MANOR WOODS ROAD FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062				
ENGINEER DY					
SCALE AS SHOWN	TOLERANCES EXCEPT AS NOTED FINISH ANGLE DIMS. FRACTIONAL 2 PLS 3 PLS PLOT SIZE ARCH D DIMS. INCH E.W.R. NO. C.P.A.R. NO.				
SOUTH LANDFILL LEACHATE MANAGEMENT TANK PUMP CONTROL PANEL					
DWG. NO. 83.628E0047					DWG. NO. 6 OF 6

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
 Loveton Center
 15 Loveton Circle
 Sparks, Maryland 21152
 (410) 771-4950

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 August 16, 2013



NOTES:

- CONTRACTOR SHALL FIELD LOCATE AND CONFIRM THE INVERT ELEVATION OF EXST STORM SEWER PIPE AT MH-1 PRIOR TO START OF STORM SEWER INSTALLATION. CONTRACTOR SHALL REPORT THIS RESULT TO OWNERS REPRESENTATIVE PRIOR TO STARTING CONSTRUCTION TO ASSURE THAT A MINIMUM 0.5% STORM SEWER SLOPE IS ACHIEVED.
- CONTRACTOR SHALL REGRADE THE SIDE SLOPES OF THE BERM OUTSIDE THE LIMITS OF FINAL COVER SYSTEM TO MEET THE GRADES SHOWN ON DWGS C-2 AND C-3.

FREDERICK SOIL CONSERVATION DISTRICT
 Approved By Nawn Carey
 DATE 6/21/94
 DISTRICT MANAGER

Reviewed for FREDERICK S.C.D. and meets Technical Requirements
KL MacLean DATE 6-21-94
 Signature
 U.S. Soil Conservation Service

SCD and SCS approval for sediment and erosion control is contingent upon issuance of all applicable regulatory permits.



REUSE OF DOCUMENTS
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.
 ©CH2M HILL

VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL DRAWING.
 0 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

EASTALCO ALUMINUM COMPANY
 INDUSTRIAL LANDFILL CLOSURE
 FREDERICK, MARYLAND

SHEET 4
 DWG NO. C-3
 DATE SEP 1993
 PROJ NO. WDC35015.L1

DATE	05-31-94	 AN ALUMAX COMPANY TOLERANCES EXCEPT AS NOTED	EASTALCO ALUMINUM COMPANY 5601 MANOR WOODS RD. FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062		
DRAWN BY	G. ANDERSON		FINAL COVER SYSTEM AND PIPING PLAN		
ENGINEER	R. BRAWLEY B. PARSONS	SCALE	1" = 50'	DWG. NO.	10.485A0084.02
REV. EWR No.	NO.	FINISH	125		
2	CHANGED PIPE TYPE FROM CMP TO ALCMP	ANGULAR	• 0'30'		
1	ADDED SCD SIGNATURE BLOCK	DIMS. FRACTIONAL	2 PLS 3 PLS		
		INCH	1/8" • 0.1 • 0.005		
		MM	- - -		

FREDERICK COUNTY DEPARTMENT OF PUBLIC WORKS
 Approved [Signature] DATE 6/30/94
 DIRECTOR
 Approved [Signature] DATE 6/30/94
 CHIEF ENGINEER

FREDERICK COUNTY DEPARTMENT OF PUBLIC WORKS
 Approved _____ DATE _____
 SWM DESIGN ENGINEER

BENCHMARK
 S.W. CORNER OF
 CONCRETE SLAB
 EL. 322.00

APPROX LOCATION
 OF FORCE MAIN
 LEACHATE LINE
 FROM NEW
 LANDFILL

SUMP MANHOLE
 AREA
 SEE DETAIL (118)

MH-2
 N 49080.58
 E 19821.73
 TOP EL= 328.0
 INV EL= 319.0
 SEE NOTE 1

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

REMOVE AND
 REPLACE EXST
 MANHOLE
 SEE DETAIL (116)

MH-1
 N 49151.87
 E 19998.29
 TOP EL= 326.5
 INV EL= 320.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49241.02
 E 19983.97
 SEE PERIMETER
 SECTION

BENCHMARK
 WELL #26
 N. 49316.55
 E. 20031.02
 TOP OF PVC SLEEVE
 324.606

4" DIA DRAIN
 OUTFALL
 N 49524.23
 E 19884.52

PI
 N 49644.71
 E 19841.58

4" DIA DRAIN
 OUTFALL
 N 49654.42
 E 19773.70

PI
 N 49652.93
 E 19655.87

4" DIA LATERAL DRAINAGE PIPE,
 LIMITS OF FINAL COVER SYSTEM,
 AND CONSTRUCTION REFERENCE LINE
 SEE PERIMETER SECTION
 AND NOTE 7 ON DWG C-1.

4" DIA DRAIN
 OUTFALL
 N 49538.80
 E 19630.30

4" DIA DRAIN
 OUTFALL
 N 49240.20
 E 19601.40

PI
 N 49214.15
 E 19613.43

CLASS I RIPRAP
 20"x12"x18"
 START RIPRAP
 5' BACK FROM PIPE
 ENDPOINT

END SECTION
 SEE DETAIL (113)

ALCMP, TYPE II
 INV EL= 318.0
 N 49080.58
 E 19569.79

ALCMP, TYPE II
 INV EL= 317.0
 N 49123.58
 E 19583.34

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

15" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

RISER
 N 49123.58
 E 19693.34

MANHOLE
 SEE DETAIL (116)

MH-2
 N 49080.58
 E 19821.73
 TOP EL= 328.0
 INV EL= 319.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49189.21
 E 19798.53

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

REMOVE AND
 REPLACE EXST
 MANHOLE
 SEE DETAIL (116)

MH-1
 N 49151.87
 E 19998.29
 TOP EL= 326.5
 INV EL= 320.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49241.02
 E 19983.97
 SEE PERIMETER
 SECTION

BENCHMARK
 WELL #26
 N. 49316.55
 E. 20031.02
 TOP OF PVC SLEEVE
 324.606

4" DIA DRAIN
 OUTFALL
 N 49524.23
 E 19884.52

PI
 N 49644.71
 E 19841.58

4" DIA DRAIN
 OUTFALL
 N 49654.42
 E 19773.70

PI
 N 49652.93
 E 19655.87

4" DIA LATERAL DRAINAGE PIPE,
 LIMITS OF FINAL COVER SYSTEM,
 AND CONSTRUCTION REFERENCE LINE
 SEE PERIMETER SECTION
 AND NOTE 7 ON DWG C-1.

4" DIA DRAIN
 OUTFALL
 N 49538.80
 E 19630.30

4" DIA DRAIN
 OUTFALL
 N 49240.20
 E 19601.40

PI
 N 49214.15
 E 19613.43

CLASS I RIPRAP
 20"x12"x18"
 START RIPRAP
 5' BACK FROM PIPE
 ENDPOINT

END SECTION
 SEE DETAIL (113)

ALCMP, TYPE II
 INV EL= 318.0
 N 49080.58
 E 19569.79

ALCMP, TYPE II
 INV EL= 317.0
 N 49123.58
 E 19583.34

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

15" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

RISER
 N 49123.58
 E 19693.34

MANHOLE
 SEE DETAIL (116)

MH-2
 N 49080.58
 E 19821.73
 TOP EL= 328.0
 INV EL= 319.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49189.21
 E 19798.53

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

REMOVE AND
 REPLACE EXST
 MANHOLE
 SEE DETAIL (116)

MH-1
 N 49151.87
 E 19998.29
 TOP EL= 326.5
 INV EL= 320.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49241.02
 E 19983.97
 SEE PERIMETER
 SECTION

BENCHMARK
 WELL #26
 N. 49316.55
 E. 20031.02
 TOP OF PVC SLEEVE
 324.606

4" DIA DRAIN
 OUTFALL
 N 49524.23
 E 19884.52

PI
 N 49644.71
 E 19841.58

4" DIA DRAIN
 OUTFALL
 N 49654.42
 E 19773.70

PI
 N 49652.93
 E 19655.87

4" DIA LATERAL DRAINAGE PIPE,
 LIMITS OF FINAL COVER SYSTEM,
 AND CONSTRUCTION REFERENCE LINE
 SEE PERIMETER SECTION
 AND NOTE 7 ON DWG C-1.

4" DIA DRAIN
 OUTFALL
 N 49538.80
 E 19630.30

4" DIA DRAIN
 OUTFALL
 N 49240.20
 E 19601.40

PI
 N 49214.15
 E 19613.43

CLASS I RIPRAP
 20"x12"x18"
 START RIPRAP
 5' BACK FROM PIPE
 ENDPOINT

END SECTION
 SEE DETAIL (113)

ALCMP, TYPE II
 INV EL= 318.0
 N 49080.58
 E 19569.79

ALCMP, TYPE II
 INV EL= 317.0
 N 49123.58
 E 19583.34

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

15" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

RISER
 N 49123.58
 E 19693.34

MANHOLE
 SEE DETAIL (116)

MH-2
 N 49080.58
 E 19821.73
 TOP EL= 328.0
 INV EL= 319.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49189.21
 E 19798.53

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

REMOVE AND
 REPLACE EXST
 MANHOLE
 SEE DETAIL (116)

MH-1
 N 49151.87
 E 19998.29
 TOP EL= 326.5
 INV EL= 320.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49241.02
 E 19983.97
 SEE PERIMETER
 SECTION

BENCHMARK
 WELL #26
 N. 49316.55
 E. 20031.02
 TOP OF PVC SLEEVE
 324.606

4" DIA DRAIN
 OUTFALL
 N 49524.23
 E 19884.52

PI
 N 49644.71
 E 19841.58

4" DIA DRAIN
 OUTFALL
 N 49654.42
 E 19773.70

PI
 N 49652.93
 E 19655.87

4" DIA LATERAL DRAINAGE PIPE,
 LIMITS OF FINAL COVER SYSTEM,
 AND CONSTRUCTION REFERENCE LINE
 SEE PERIMETER SECTION
 AND NOTE 7 ON DWG C-1.

4" DIA DRAIN
 OUTFALL
 N 49538.80
 E 19630.30

4" DIA DRAIN
 OUTFALL
 N 49240.20
 E 19601.40

PI
 N 49214.15
 E 19613.43

CLASS I RIPRAP
 20"x12"x18"
 START RIPRAP
 5' BACK FROM PIPE
 ENDPOINT

END SECTION
 SEE DETAIL (113)

ALCMP, TYPE II
 INV EL= 318.0
 N 49080.58
 E 19569.79

ALCMP, TYPE II
 INV EL= 317.0
 N 49123.58
 E 19583.34

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

15" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

RISER
 N 49123.58
 E 19693.34

MANHOLE
 SEE DETAIL (116)

MH-2
 N 49080.58
 E 19821.73
 TOP EL= 328.0
 INV EL= 319.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49189.21
 E 19798.53

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

REMOVE AND
 REPLACE EXST
 MANHOLE
 SEE DETAIL (116)

MH-1
 N 49151.87
 E 19998.29
 TOP EL= 326.5
 INV EL= 320.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49241.02
 E 19983.97
 SEE PERIMETER
 SECTION

BENCHMARK
 WELL #26
 N. 49316.55
 E. 20031.02
 TOP OF PVC SLEEVE
 324.606

4" DIA DRAIN
 OUTFALL
 N 49524.23
 E 19884.52

PI
 N 49644.71
 E 19841.58

4" DIA DRAIN
 OUTFALL
 N 49654.42
 E 19773.70

PI
 N 49652.93
 E 19655.87

4" DIA LATERAL DRAINAGE PIPE,
 LIMITS OF FINAL COVER SYSTEM,
 AND CONSTRUCTION REFERENCE LINE
 SEE PERIMETER SECTION
 AND NOTE 7 ON DWG C-1.

4" DIA DRAIN
 OUTFALL
 N 49538.80
 E 19630.30

4" DIA DRAIN
 OUTFALL
 N 49240.20
 E 19601.40

PI
 N 49214.15
 E 19613.43

CLASS I RIPRAP
 20"x12"x18"
 START RIPRAP
 5' BACK FROM PIPE
 ENDPOINT

END SECTION
 SEE DETAIL (113)

ALCMP, TYPE II
 INV EL= 318.0
 N 49080.58
 E 19569.79

ALCMP, TYPE II
 INV EL= 317.0
 N 49123.58
 E 19583.34

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

15" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

RISER
 N 49123.58
 E 19693.34

MANHOLE
 SEE DETAIL (116)

MH-2
 N 49080.58
 E 19821.73
 TOP EL= 328.0
 INV EL= 319.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49189.21
 E 19798.53

36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

REMOVE AND
 REPLACE EXST
 MANHOLE
 SEE DETAIL (116)

MH-1
 N 49151.87
 E 19998.29
 TOP EL= 326.5
 INV EL= 320.0
 SEE NOTE 1

4" DIA DRAIN
 OUTFALL
 N 49241.02
 E 19983.97
 SEE PERIMETER
 SECTION

BENCHMARK
 WELL #26
 N. 49316.55
 E. 20031.02
 TOP OF PVC SLEEVE
 324.606

4" DIA DRAIN
 OUTFALL
 N 49524.23
 E 19884.52

PI
 N 49644.71
 E 19841.58

4" DIA DRAIN
 OUTFALL
 N 49654.42
 E 19773.70

PI
 N 49652.93
 E 19655.87

4" DIA LATERAL DRAINAGE PIPE,
 LIMITS OF FINAL COVER SYSTEM,
 AND CONSTRUCTION REFERENCE LINE
 SEE PERIMETER SECTION
 AND NOTE 7 ON DWG C-1.

4" DIA DRAIN
 OUTFALL
 N 49538.80
 E 19630.30

4" DIA DRAIN
 OUTFALL
 N 49240.20
 E 19601.40

PI
 N 49214.15
 E 19613.43

CLASS I RIPRAP
 20"x12"x18"
 START RIPRAP
 5' BACK FROM PIPE
 ENDPOINT

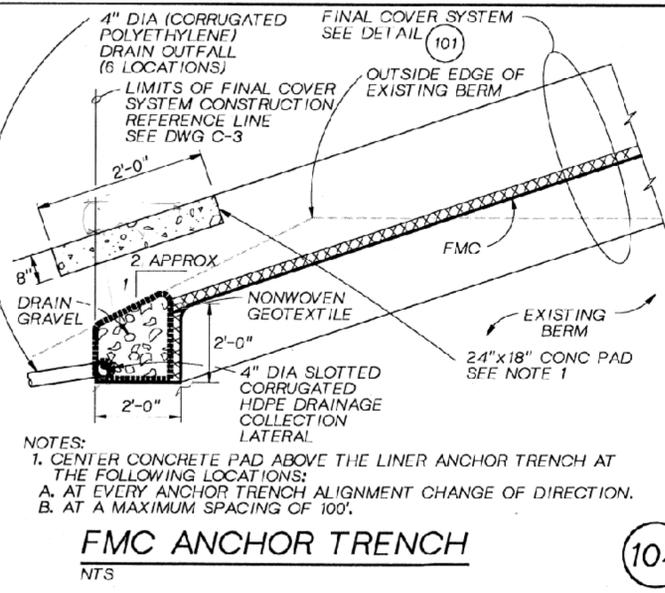
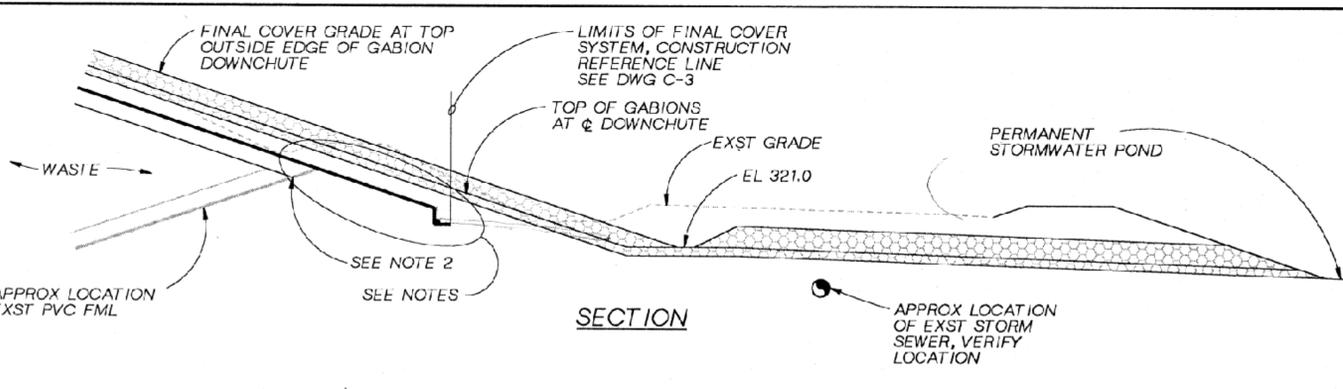
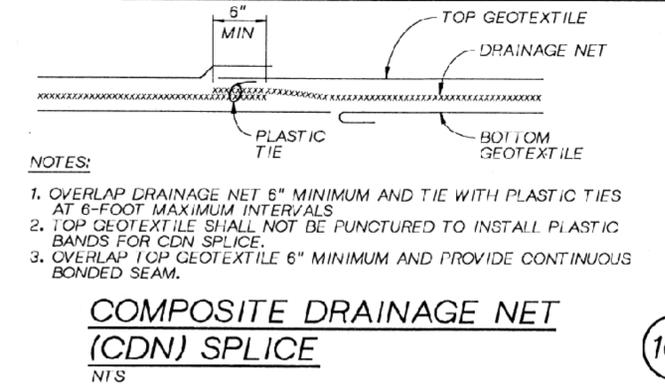
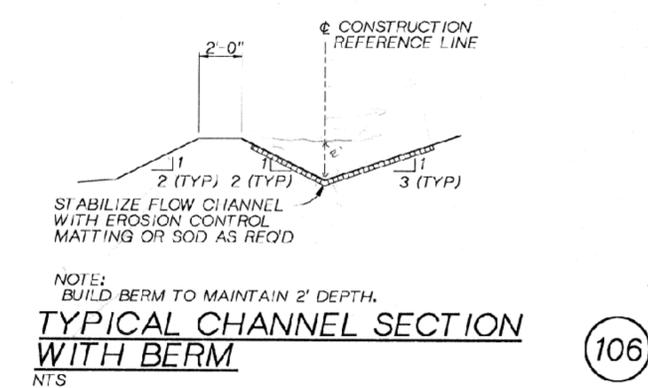
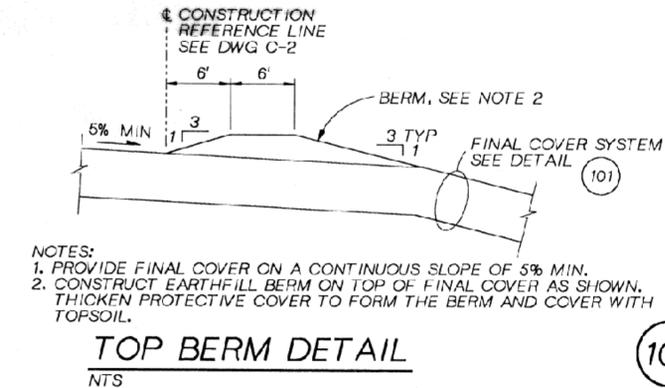
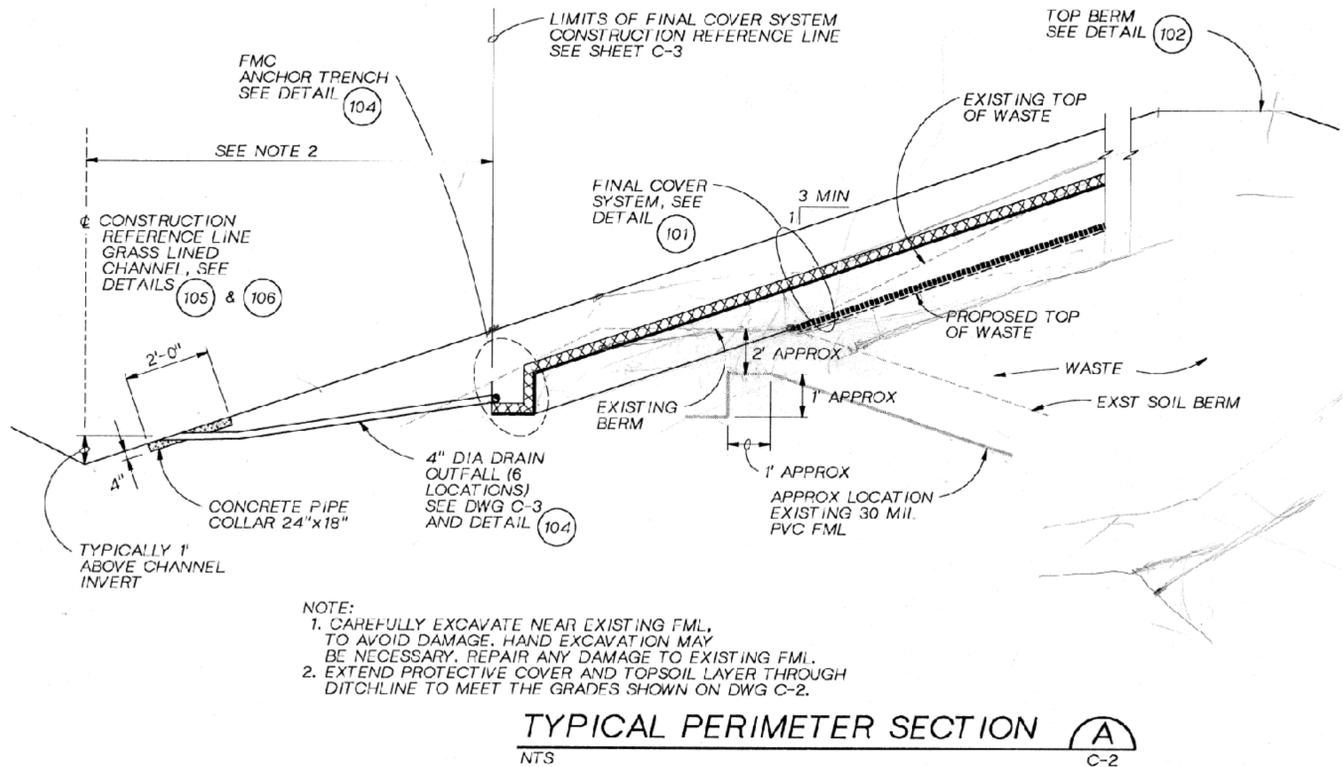
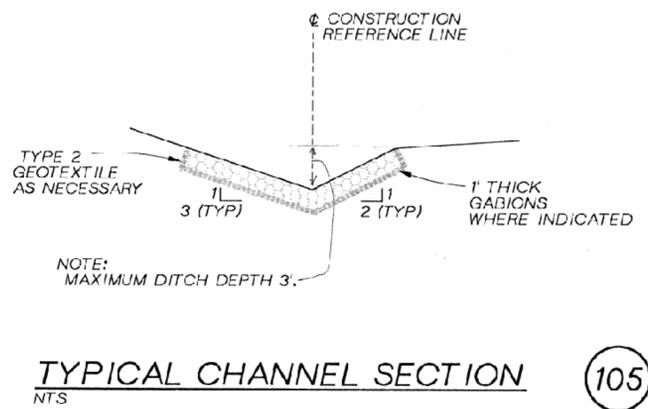
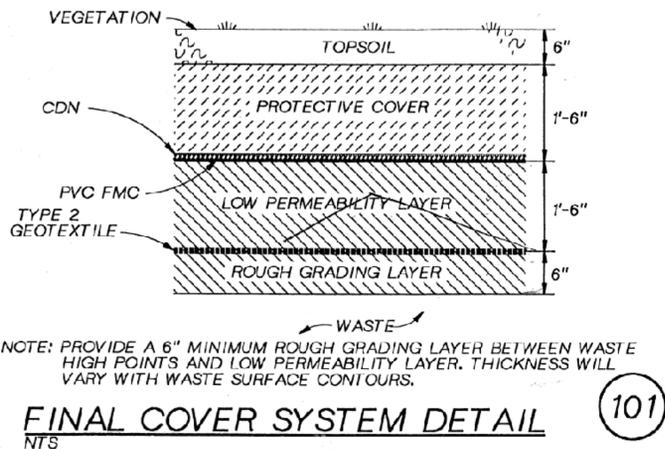
END SECTION
 SEE DETAIL (113)

ALCMP, TYPE II
 INV EL= 318.0
 N 49080.58
 E 19569.79

ALCMP, TYPE II
 INV EL= 317.0
 N 49123.58
 E 19583.34

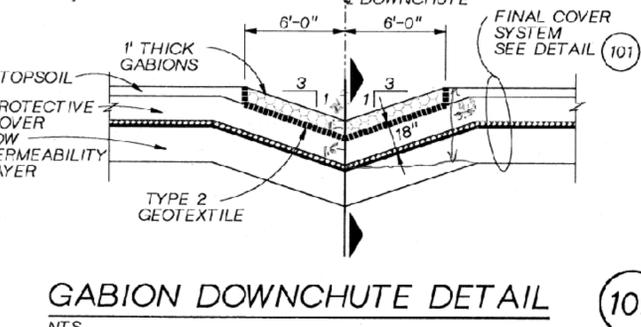
36" ALCMP, TYPE II
 STORM SEWER
 SEE PROFILE
 DWG C-8

15" ALCMP, TYPE II



FREDERICK COUNTY DEPARTMENT OF PUBLIC WORKS
Approved: *[Signature]* 6/30/94 DATE
DIRECTOR
Approved: *[Signature]* 6/30/94 DATE
CHIEF ENGINEER

FREDERICK COUNTY DEPARTMENT OF PUBLIC WORKS
Approved: *[Signature]* 6/30/94 DATE
SWM DESIGN ENGINEER



- NOTES:**
- CAREFULLY HAND EXCAVATE EXISTING FML AT DOWNCHUTE LOCATION. REMOVE EXISTING LINER IN ANCHOR TRENCH AS NECESSARY TO GRADE DOWNCHUTE.
 - WELD THE COVER PVC FMC TO EXISTING PVC FML ALONG WIDTH OF REMOVED ANCHOR TRENCH. WELD PVC FMC TO FML AT DOWNCHUTE ONLY.
 - EXTEND COVER PVC FMC TO PROVIDE A CONTINUOUS COVER LINER ANCHOR TRENCH.
 - END THE LOW PERMEABILITY LINER ON INSIDE OF LANDFILL AS REQUIRED TO SEAM THE COVER PVC FMC TO EXST PVC FML.
 - SEE DWG C-2 FOR DOWNCHUTE LOCATION.
 - CONTOUR FINAL COVER GRADE AT DOWNCHUTE AS SHOWN.
 - PROVIDE GABION LINING ON DOWNCHUTE. PLACE GABION ON TOP OF THE FINAL PROTECTIVE COVER LAYER WITHIN THE FINAL COVER SYSTEM.



FREDERICK SOIL CONSERVATION DISTRICT
Approved By: *[Signature]* DATE 6/21/94
DISTRICT MANAGER

Reviewed for FREDERICK S.C.D. and meets Technical Requirements
[Signature] DATE 6-21-94
Signature
U.S. Soil Conservation Service

SCD and SCS approval for sediment and erosion control is contingent upon issuance of all applicable regulatory permits.

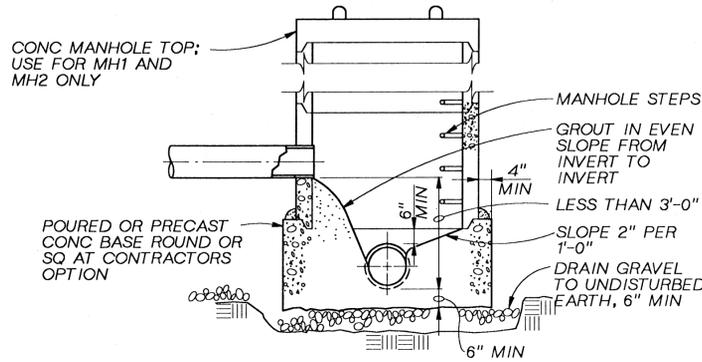
REUSE OF DOCUMENTS
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1' 2'
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

EASTALCO ALUMINUM COMPANY
INDUSTRIAL LANDFILL CLOSURE
FREDERICK, MARYLAND

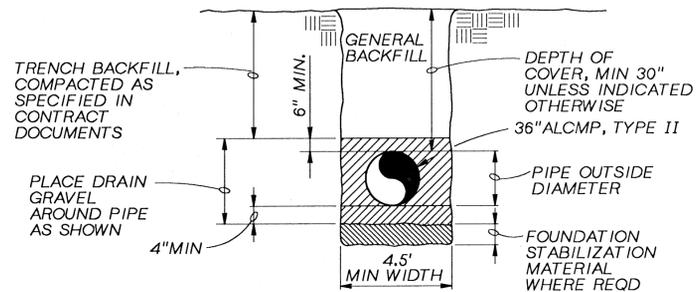
SHEET 5
DWG NO. C-4
DATE SEP 1993
PROJ NO. WDC35016.L1

REV. EWR No.	NO.	CHANGES MADE	BY	APP'D	DATE
05-31-94					
<p>EASTALCO ALUMINUM COMPANY 5501 MANOR WOODS RD. FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 674-2062</p>					
<p>SECTIONS AND DETAILS</p>					
<p>10.485A0085.03</p>					



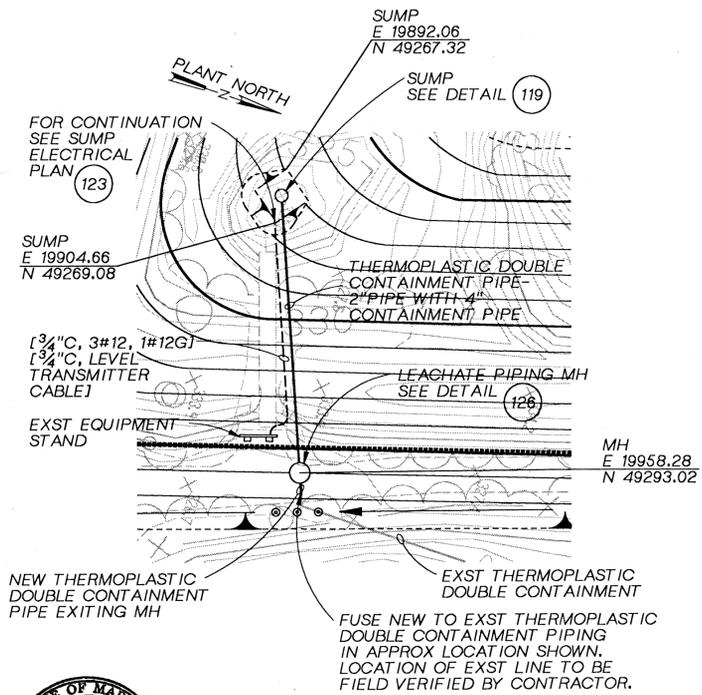
MANHOLE BASE SECTION PIPE (116)

NTS



STORM DRAIN PIPE TRENCH (117)

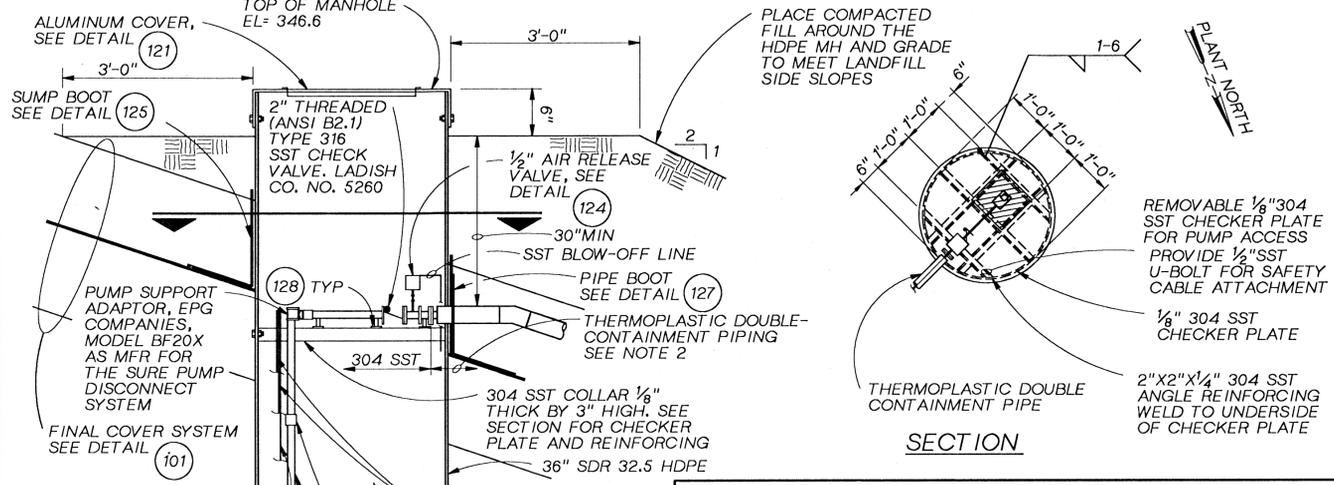
NTS



SUMP MANHOLE CONNECTION DETAIL (118)

DETAILS ARE NTS, TOPOGRAPHIC INFO IS 1"=20'

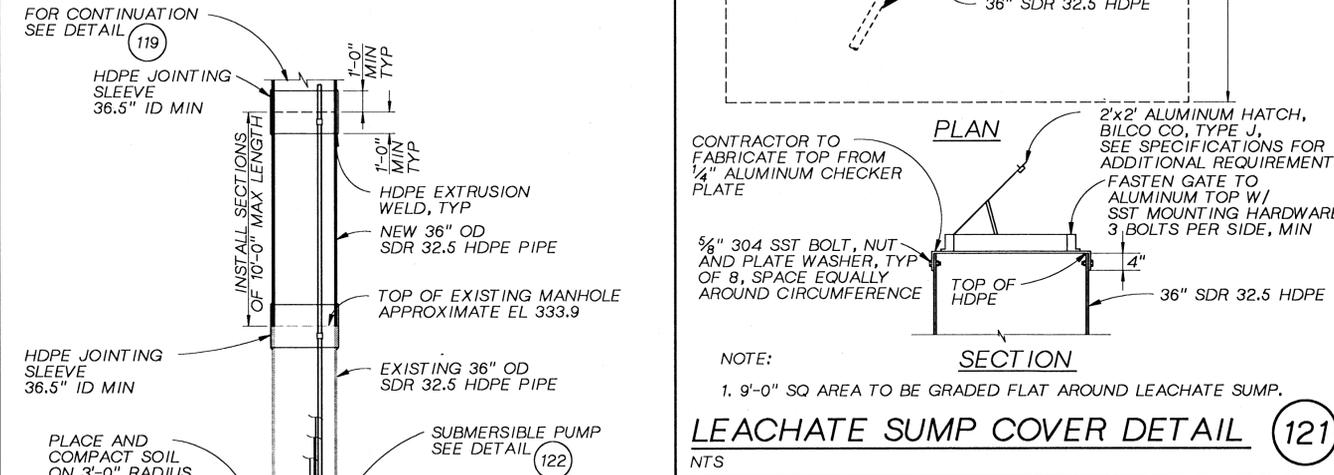
(118)



LEACHATE SUMP MANHOLE DETAIL (119)

NTS

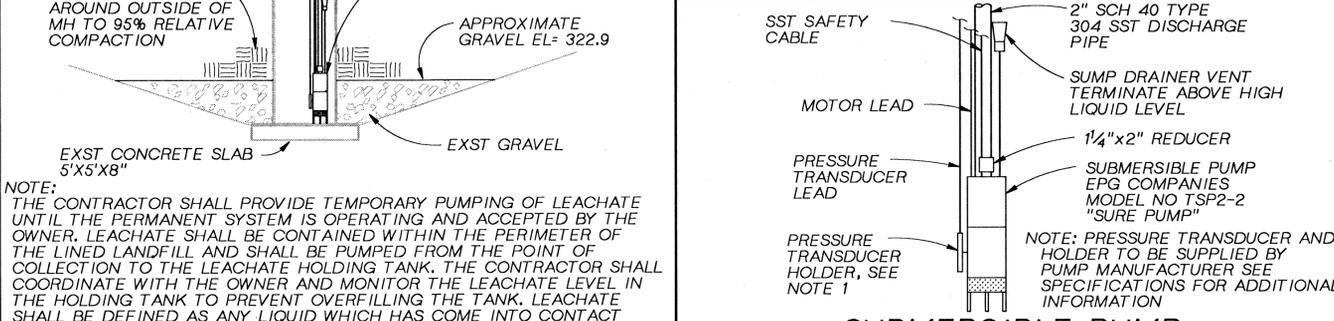
(119)



LEACHATE SUMP COVER DETAIL (121)

NTS

(121)



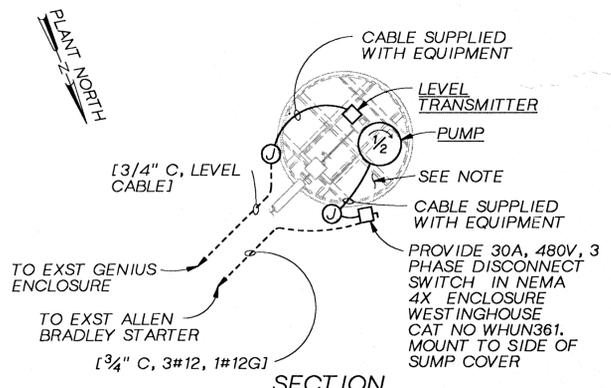
SUBMERSIBLE PUMP INSTALLATION (122)

NTS

(122)

ELECTRICAL LEGEND

- EXPOSED CONDUIT
- [3/4" C, 3#12, 1#12G] CONDUIT AND CONDUCTOR SIZE CALLOUT
- ⊙ JUNCTION BOX
- C ROBOY CONDUIT
- G GREEN GROUND CONDUCTOR
- #12 #12 AWG CONDUCTOR
- 1/2 MOTOR, HORSEPOWER INDICATED
- BURIED CONDUIT

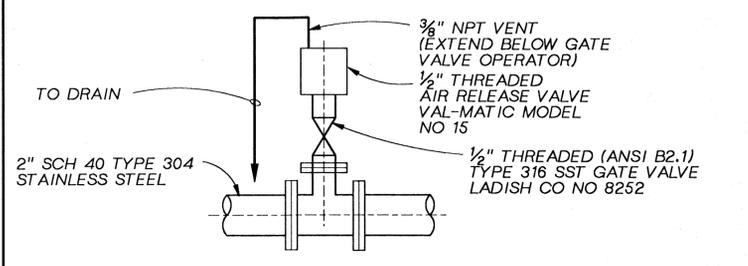


SUMP ELECTRICAL PLAN (123)

NTS

(123)

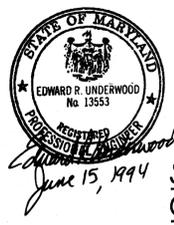
NOTE: SEE ATTACHED EASTALCO DWGS 71.540E0002.02, 71.540E0005.03, 71.540E0006.05, 71.540E0010.02 AND 71.540E0057.01 (REVISED BY CH2M HILL, 11/93) FOR ADDITIONAL ELECTRICAL DEMOLITION DETAILS AND WORK.



AIR RELEASE VALVE ASSEMBLY (124)

NTS

(124)



REUSE OF DOCUMENTS
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

EASTALCO ALUMINUM COMPANY
INDUSTRIAL LANDFILL CLOSURE
FREDERICK, MARYLAND

SHEET 7
DWG NO. C-6
DATE SEP 1993
PROJ NO. WDC35015.L1

REV. EWR No.	NO.	CHANGES MADE	BY	APP'D	DATE
1		CHANGED PIPE TYPE TO ALCMP, TYPE II DET 117	G.A.	G.A.	5-19-94
DATE	EASTALCO ALUMINUM COMPANY				
05-31-94	5601 MANOR WOODS RD. FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062				
DRAWN BY	AN ALUMAX COMPANY				
G. ANDERSON	TOLERANCES EXCEPT AS NOTED				
ENGINEER	TITLE				
R. BRAWLEY	SECTIONS AND DETAILS				
B. PARSONS	10.485A0087.01				
SCALE	N/A	FINISH	125		
		ANGULAR	0°30'		
PLOT SIZE	D1	DIMS. FRACTIONS	2 PLS	3 PLS	
E.W.R. NO.		INCH	1/8"	.01	.005
C.P.A.R. NO.		MM			

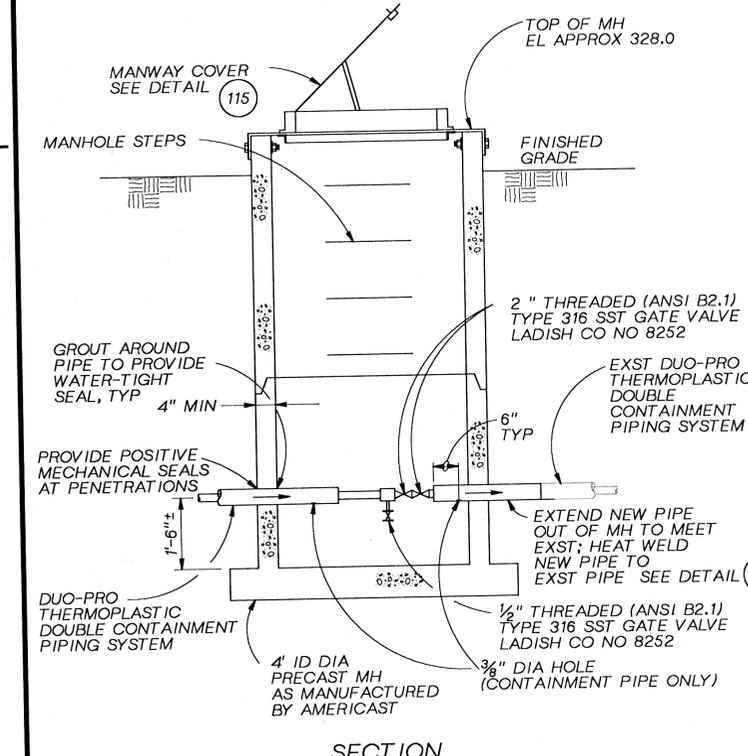
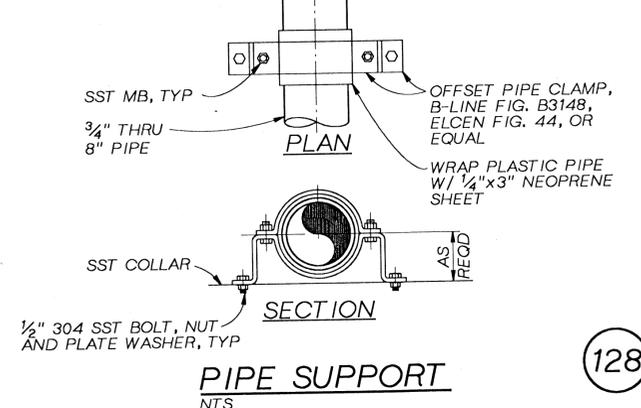
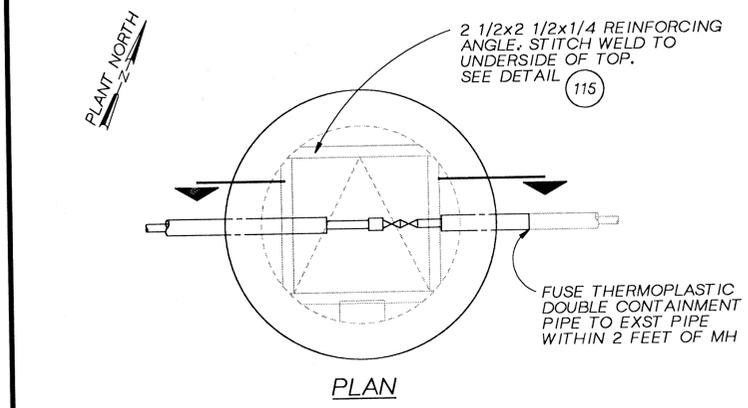
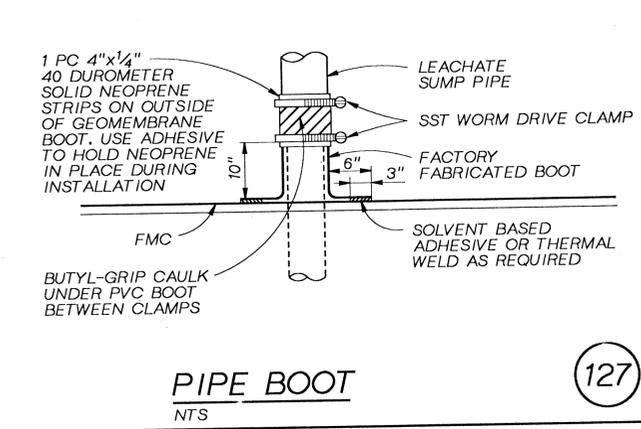
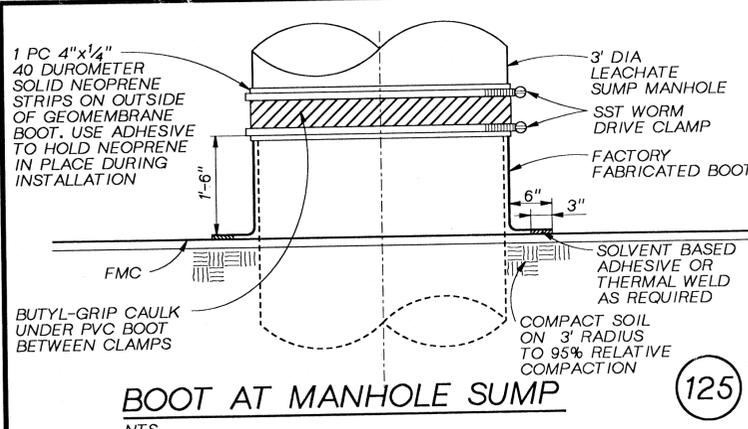
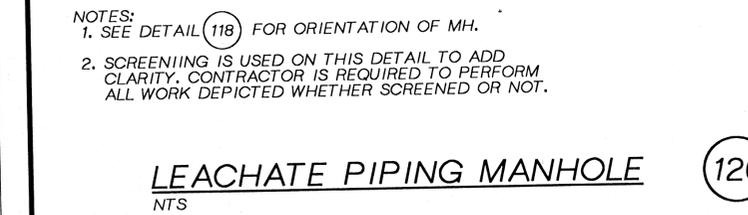


TABLE 25 PERMANENT SEEDING FOR LOW MAINTENANCE AREAS

MIX	SEED MIX (US CERTIFIED MATERIAL IF AVAILABLE)	PLANTING DATE (M/D/Y)	SITE CONDITIONS	USDA HARDINESS ZONES	RECOMMENDED PLANTING DATES						COMMENTS
					3/1	3/15	5/15	8/15	10/1	10/15	
5	TALL FESCUE (85%) OR PERENNIAL RYEGRASS (10%) PLUS CROWN VETCH	10/20	MOIST TO DRY	5b	x	x	x	x	x	x	USE ON LOW MAINTENANCE AREAS. USE IN SLOPE AREAS. USE IN SLOPE AREAS. USE IN SLOPE AREAS.
				5d	x	x	x	x	x	x	
				6b	x	x	x	x	x	x	
				7a	x	x	x	x	x	x	
				7b	x	x	x	x	x	x	

DETAIL (129)



FREDERICK SOIL CONSERVATION DISTRICT

Approved By _____ DISTRICT MANAGER

DATE _____

Reviewed for FREDERICK S.C.D. and meets Technical Requirements

R. M. Lewis DATE 06-21-94

Signature _____

U.S. Soil Conservation Service

SCD and SCS approval for sediment and erosion control is contingent upon issuance of all applicable regulatory permits.

REUSE OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

EDWARD R. UNDERWOOD No. 13553

REGISTERED PROFESSIONAL ENGINEER

June 15, 1994

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

0 1'

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CH2M HILL

EASTALCO ALUMINUM COMPANY INDUSTRIAL LANDFILL CLOSURE FREDERICK, MARYLAND

SHEET 8

DWG NO. C-7

DATE SEP 1993

PROJ NO. WDC35015.L1

SOIL EROSION CONTROL NARRATIVE
EASTALCO ALUMINUM COMPANY,
FREDERICK, MARYLAND

NOTE 1. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS AND SEED WITH THE TEMPORARY SEED MIX AS SPECIFIED BELOW. PERMANENT SEEDING, AS SPECIFIED BELOW, SHALL BE APPLIED TO THE FINISHED SURFACES OF THE LANDFILL COVER SYSTEM. ALL SEEDING SHALL COMPLY WITH THE "1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED JOINTLY BY WATER RESOURCES ADMINISTRATION, SOIL CONSERVATION SERVICE, AND THE STATE SOIL CONSERVATION COMMITTEE.

NOTE 2. SEDIMENT AND EROSION CONTROL NOTES

- ALL EROSION/SEDIMENT CONTROL MEASURES SHALL COMPLY WITH THE "1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" AS APPROVED BY THE COUNTY. CONSTRUCTION OF THE FINAL COVER SYSTEM SHALL NOT COMMENCE UNTIL ALL PERIMETER SEDIMENT AND EROSION CONTROLS ARE ESTABLISHED AND SHOWN TO BE EFFECTIVE.
- ALL DISTURBED AREAS TO BE SEEDED WITHIN 14 DAYS OF INITIAL GRADING. FOR TEMPORARY SEEDING SPECIFICATIONS, SEE SECTION G-20, "1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL".
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AT THE INITIATION OF GRADING.
- ALL STORM DRAIN LINES NOT IN PAVED AREAS ARE TO BE MULCHED AND SEEDED WITHIN 14 DAYS OF INITIAL BACKFILL.
- UTILITY LINES ARE TO BE COMPACTED, SEEDED, AND MULCHED WITHIN 14 DAYS AFTER INITIAL BACKFILL.
- ALL EARTH BERMS AND SEDIMENT DAMS ARE TO BE MULCHED AND SEEDED (SEE SECTION G OF ABOVE REFERENCE) WITHIN 7 DAYS AFTER GRADING. ALL SOIL STOCKPILES ARE TO BE MULCHED AND SEEDED WITHIN 14 DAYS.
- DURING CONSTRUCTION, ALL SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED AFTER EACH RAINFALL AND REPAIRED IF NECESSARY. SEDIMENT IS TO BE REMOVED TO A SUITABLE DISPOSAL AREA AND STABILIZED WITH PERMANENT VEGETATIVE COVER.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL SEDIMENT AND EROSION CONTROL MEASURES UNTIL DISTURBED AREAS ARE STABILIZED.
- AFTER FINE GRADING, ALL DISTURBED AREAS ARE TO BE PERMANENTLY MULCHED AND SEEDED (SEE SECTION G).
- NO SLOPE SHALL BE GREATER THAN 2:1.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THIS DOES NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE CURRENTLY BEING USED FOR MATERIAL STORAGE OR FOR THOSE AREAS ON WHICH ACTUAL CONSTRUCTION ACTIVITIES ARE CURRENTLY BEING PERFORMED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE THAT STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS FOR THE "1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL".

NOTE 3. TEMPORARY SEEDING NOTES

GENERAL

- SCOPE: PLANTING SHORT-TERM VEGETATION TO DISTURBED, CLEARED, OR GRADED AREAS SUBJECT TO EROSION FOR A PERIOD OF 14 DAYS OR MORE.
- STANDARDS: TEMPORARY SEEDING SHALL CONFORM TO ALL REQUIREMENTS OF SECTION G-20 OF THE "1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED JOINTLY BY WATER RESOURCES ADMINISTRATION, SOIL CONSERVATION SERVICE, AND THE STATE SOIL CONSERVATION COMMITTEE.
- SEDIMENT AND EROSION CONTROL: ALL PERIMETER CONTROLS MUST BE ESTABLISHED WITHIN 2 DAYS AFTER COMPLETION OF GRADING OR DISTURBANCE. ALL INTERIOR CONTROLS MUST BE ESTABLISHED WITHIN 14 DAYS.

SPECIFICATIONS

- SITE PREPARATION
 - PRIOR TO SEEDING, INSTALL ALL REQUIRED SEDIMENT AND EROSION CONTROL MEASURES.
 - FINAL GRADING NOT REQUIRED FOR TEMPORARY SEEDING. PERFORM ALL GRADING AT RIGHT ANGLES TO THE SLOPE.
- SOIL AMENDMENTS
 - FERTILIZER SHALL BE APPLIED AT THE RATE OF 600 LBS/ACRE USING 10-10-10 OR EQUIVALENT.
 - ACID SOILS SHALL BE LIMED, AS PER MARYLAND STANDARD SPECIFICATIONS.
- SEEDBED PREPARATION
 - SOIL SHALL BE LOOSENEED TO A DEPTH OF 3 INCHES BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS, PRIOR TO SEEDING.
- SEEDING
 - SELECT A MIXTURE FROM TABLE 26 IN STANDARD SPECIFICATIONS.
 - APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER DRILL, CULTIPACKER, OR HYDROSEEDER.

5. MULCHING

- MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. MULCH MATERIALS AND APPLICATIONS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.

NOTE 4. PERMANENT SEEDING AND SOD NOTES

GENERAL

- SCOPE: PLANTING PERMANENT, LONG-LIVED VEGETATIVE COVER ON FINAL GRADED OR CLEARED AREAS WITHIN 90 DAYS AFTER COMPLETION OF FINAL GRADED OR OTHERWISE DISTURBED AREAS.
- STANDARDS: PERMANENT SEEDING SHALL CONFORM TO ALL REQUIREMENTS OF SECTION G-20 OF THE "1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED JOINTLY BY WATER RESOURCES ADMINISTRATION, SOIL CONSERVATION SERVICE, AND THE STATE SOIL CONSERVATION COMMITTEE.

SPECIFICATIONS

- SITE PREPARATION
 - PRIOR TO SEEDING, INSTALL ALL REQUIRED SEDIMENT AND EROSION CONTROL MEASURES.
 - FINE GRADING REQUIRED FOR PERMANENT SEEDING.
- SOIL AMENDMENTS
 - FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 LBS/ACRE USING 10-10-10 OR EQUIVALENT.
- SEEDBED PREPARATION
 - SOIL SHALL BE LOOSENEED TO A DEPTH OF 3 INCHES BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS PRIOR TO SEEDING.
 - APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, OR HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER ON A FIRM, MOIST SEEDBED). USE A CULTIPACKER SEEDER WITH CROWN VETCH. MAXIMUM SEEDING DEPTH SHOULD BE 1/4 INCH ON CLAYEY SOILS AND 1/2 INCH ON SANDY SOILS, WHEN USING OTHER THAN HYDROSEEDER METHOD OF APPLICATION. NOTE: IF HYDROSEEDING IS USED AND THE SEED AND FERTILIZER IS MIXED, THEY WILL BE MIXED ONSITE AND THE SEEDING SHALL BE IMMEDIATE WITHOUT INTERRUPTION.
- SEEDING
 - USE MIX 5 WITH CROWN VETCH FROM TABLE 25 IN STANDARD SPECIFICATIONS, AS SHOWN IN DETAIL 129.
- MULCHING
 - MULCH SHALL BE APPLIED ON ALL DISTURBED AREAS DURING OR IMMEDIATELY AFTER PERMANENT SEEDING. THE CONTRACTOR SHALL IDENTIFY THE TYPE AND APPLICATION RATE OF MULCH TO THE OWNER BEFORE COMMENCING PERMANENT SEEDING WORK.

SEQUENCE OF CONSTRUCTION

- NOTIFY SEDIMENT CONTROL INSPECTOR 24 HOURS PRIOR TO START OF CONSTRUCTION. (694-1679)
- PERFORM CLEARING AND GRUBBING REQUIRED FOR POND AND PERIMETER CHANNELS.
- INSTALL POND AND PERIMETER CONTROLS; NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL BEFORE PRECEDING.
- COMPLETE ALL REQUIRED CLEARING AND GRUBBING.
- GRADE ACCESS ROAD TO BORROW AREA; CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
- START ROUGH GRADING.
- INSTALL SITE PIPING AND PERFORM DEMOLITION WORK AS INDICATED.
- COMPLETE CONSTRUCTION OF LANDFILL CLOSURE INCLUDING SITE GRADING, COVER GEOMEMBRANE INSTALLATION, DRAINAGE AND LEACHATE CONTROLS.
- PERFORM TEMPORARY SEEDING AS INDICATED ON DWG. C-7.
- WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE TEMPORARY SILT FENCE WHEN SITE IS STABILIZED.
- PERIODICALLY CLEAN AND REPAIR TEMPORARY SEDIMENT/STORMWATER POND TO DESIGN DIMENSIONS.
- WHEN CLOSURE CAP FINAL GRADES ARE ACHIEVED, STABILIZE WITH TOPSOIL AND PERMANENT SEEDING AS REQUIRED ON THE DRAWINGS.
- CHANGE TEMPORARY SEDIMENTATION BASIN TO STORMWATER POND BY REMOVING DEWATERING DEVICE AND CLEANING OUT THE POND TO THE DESIGN ELEVATIONS, AS INDICATED ON DWG C-5.
- NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL TO REMOVE TEMPORARY SEDIMENT TRAP. PERIMETER CHANNELS AND STORMWATER POND SHALL REMAIN IN PLACE.

* INCLUDES NOTIFICATION OF SEDIMENT CONTROL INSPECTOR, CLEARING AND GRUBBING, STABILIZATION OF PERMANENT SWALES AND BERMS, AND REMOVAL OF TEMPORARY MEASURES UPON APPROVAL.

3	MODIFIED SEQUENCE OF CONSTRUCTION NOTE 1	G.A.	S.B.	5-19-94
2	MODIFIED SEQUENCE OF CONSTRUCTION NOTE 13	M.G.	B.P.	3-17-94
1	ADDED SCD SIGNATURE BLOCK	G.A.	B.P.	2-28-94
REV. EWR No.		NO.		CHANGES MADE
DATE 05-31-94				BY APP'D DATE
DRAWN BY G. ANDERSON		EASTALCO ALUMINUM COMPANY		5601 MANOR WOODS RD. FREDERICK, MARYLAND 21701 (301) 662-6100 FAX (301) 874-2062
ENGINEER R. BRAWLEY B. PARSONS		AN ALUMAX COMPANY		TOLERANCES EXCEPT AS NOTED
SCALE N/A		FINISH ANGULAR		125 0°-30'
PLOT SIZE D1		DIM. FUNCTIONAL		2 PLS 3 PLS
E.W.R. NO.		INCH		1/8" .01 .005
C.P.A.R. NO.		MM		- - -
SECTIONS AND DETAILS				
10.485A0088.03				