

# PERMIT DRAWINGS

## GEORGIA POWER COMPANY

### PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)

#### EXISTING LANDFILL NO. 4

#### EFFINGHAM, GEORGIA

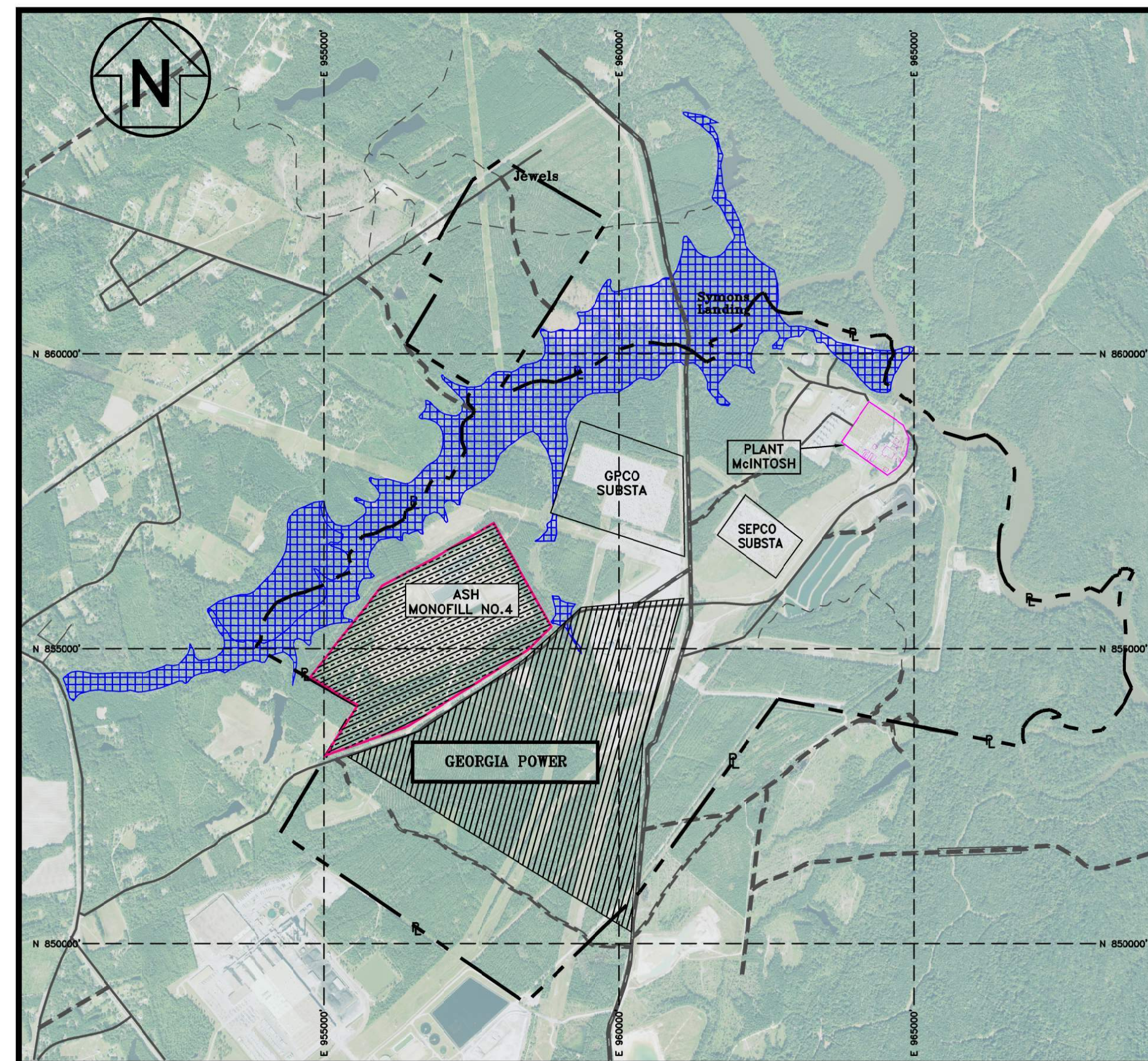
SEPTEMBER 30, 2022

### OWNER/OPERATOR

GEORGIA POWER COMPANY  
 241 RALPH MCGILL BLVD.  
 ATLANTA, GEORGIA 30308

### RESPONSIBLE OFFICIAL

GENERAL MANAGER-ENVIRONMENTAL AFFAIRS  
 GEORGIA POWER COMPANY  
 241 RALPH MCGILL BLVD.  
 ATLANTA, GEORGIA 30308  
 (404) 506-6505



PROJECT SITE LOCATION  
 NOT TO SCALE

### REVISION HISTORY

| DATE | SHEETS | REQUESTED BY |
|------|--------|--------------|
|      |        |              |
|      |        |              |
|      |        |              |



Georgia  
Power

**GEI** Consultants  
 3065 AKERS MILL ROAD SE, SUITE 235  
 ATLANTA, GEORGIA 30339  
 (404) 592-0050



# INDEX TO DRAWINGS

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| 38        | PLAT BOUNDARY & LEGAL DESCRIPTION                 |

# LEGEND

| EXISTING | PROPOSED | EXISTING  | PROPOSED | EXISTING                                      | PROPOSED |
|----------|----------|---|----------|---|----------|
|          |          | PROPERTY LINE (APPROXIMATE)                     |          | UNDISTURBED PROPERTY BUFFER                   |          |
|          |          | AREAS INUNDATED BY 100 YEAR FLOOD (APPROXIMATE) |          | ASH DISPOSAL SITE No.4 BOUNDARY (APPROXIMATE) |          |
|          |          | STREAM AND WETLAND BUFFER                       |          | SURFACE WATER MONITORING POINT                |          |
|          |          | TREELINE  |          | OUTLET PROTECTION                             |          |
|          |          | BENCHMARK                                       |          | STONE CHECK DAM                               |          |
|          |          | UNPAVED ROAD                                    |          | HAY BALE CHECK DAM                            |          |
|          |          | PAVED ROAD                                      |          | FLARED END SECTION                            |          |
|          |          | GRAVEL ROAD                                     |          | INLET PROTECTION                              |          |
|          |          | DITCH CENTERLINE                                |          | CONSTRUCTION EXIT                             |          |
|          |          | STORM DRAINAGE PIPE                             |          | NPDES SAMPLING POINT                          |          |
|          |          | STORM WATER DIVERSION BERM                      |          | LEACHATE CLEANOUT                             |          |
|          |          | SILT FENCE                                      |          | LEACHATE SUMP                                 |          |
|          |          | WATER MAIN                                      |          | LEACHATE MANHOLE / PUMP STATION               |          |
|          |          | SANITARY SEWER                                  |          | LEACHATE VAULT                                |          |
|          |          | POWER LINE                                      |          | AIR RELEASE VALVE                             |          |
|          |          | FENCE   |          | HEADWALL                                      |          |
|          |          | SITE BOUNDARY                                   |          | DROP INLET                                    |          |
|          |          | 200' BUFFER                                     |          | OVERFLOW STRUCTURE                            |          |
|          |          | 50' WETLAND BUFFER                              |          | GATE  |          |
|          |          | EXIST GROUND CONTOURS                           |          | BORING/PIEZOMETER                             |          |
|          |          | FINAL GRADE CONTOURS                            |          | SPOT ELEVATION                                |          |
|          |          | UNDERDRAIN                                      |          | MARKER POST                                   |          |
|          |          | DOWNDRAIN                                       |          | DOWNDRAIN PIPE AND SLOPED PAVED HEADWALL      |          |
|          |          | SURFACE RUNOFF DIRECTION                        |          | SEDIMENT TRAP                                 |          |
|          |          | LIMITS OF WASTE                                 |          | EXCELSIOR SLOPE MATTING                       |          |

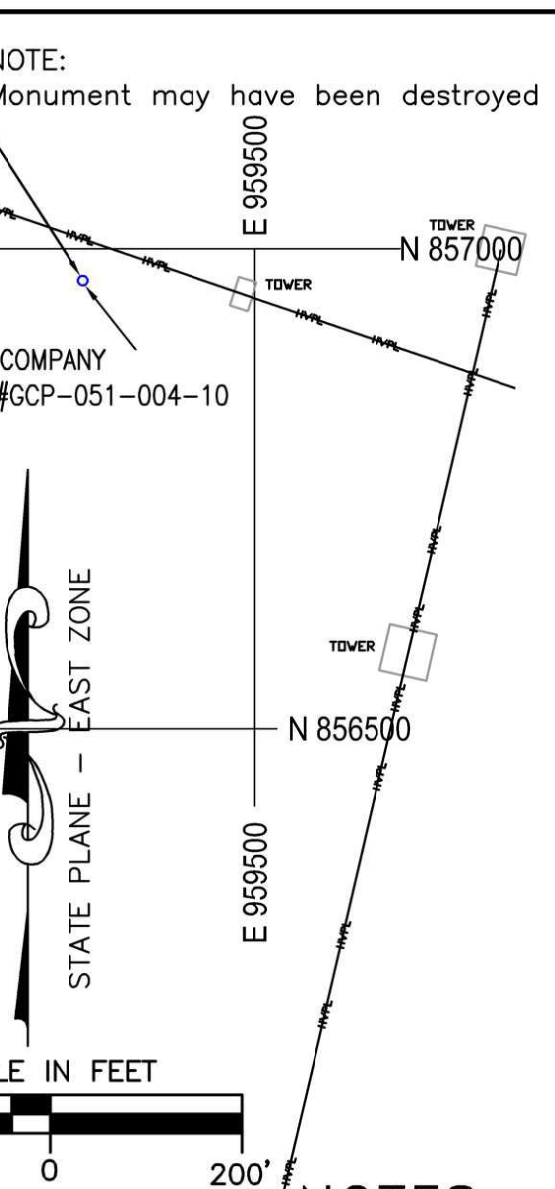
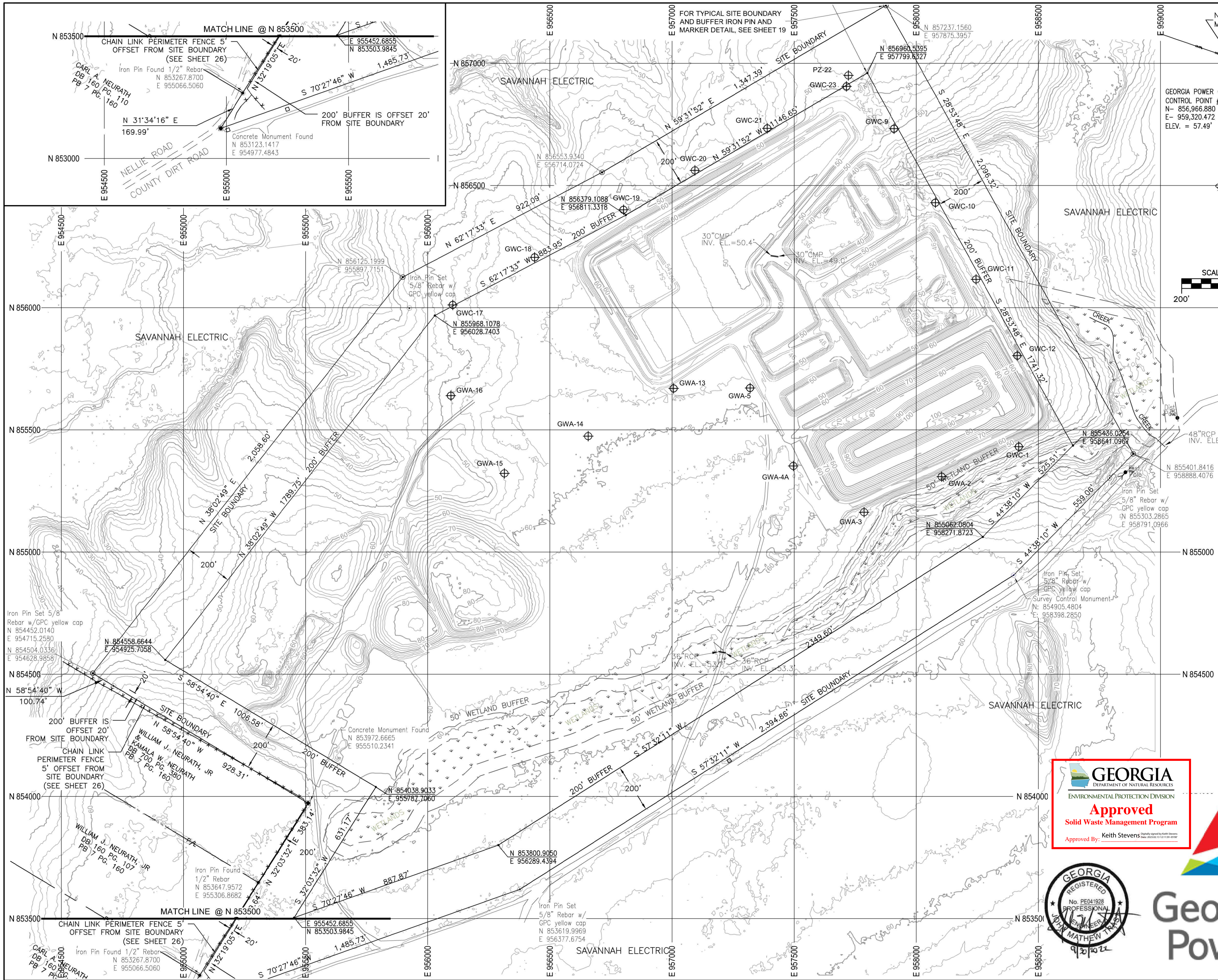
## GENERAL NOTES:

- PROPERTY LINE IS APPROXIMATE.
- GRID IS STATE PLANE GRID, NAD83, EAST ZONE. (APPROXIMATE)
- AERIAL WAS DEVELOPED FROM 2017 NAIP USDA-FSA-APFO AERIAL PHOTOGRAPHY.
- GEORGIA POWER COMPANY PROPERTY LINE DATA OBTAINED FROM ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY.
- SOUTHERN COMPANY SERVICES, EPS-7017-4 SITE SA-1, LAYOUT.
- SAVANNAH ELECTRIC, P121 MCINTOSH PLANT SITE.
- FLOOD INSURANCE RATE MAP, EFFINGHAM COUNTY, GEORGIA, PANEL 100 OF 175, MARCH, 1987.
- SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



| INDEX AND LEGEND   |           |   |
|--|-----------|---|
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |
|  |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>  |           |   |
| PROJ. NO.  | 1702944   | DWG. 1  |
| SCALE  | NONE      | EDIT  |
| DATE   | 9/30/2022 | SHEET 1 OF 38   |





**LEGEND**  
 ⊕ GWC-18 BORING/PIEZOMETER LOCATION

**NOTE:**  
 BORINGS M16 THROUGH M20 WERE DRILLED MAY 2003 DURING THE PROCESS OF DEVELOPING THE GROUNDWATER MONITORING PLAN FOR THE SITE. TEMPORARY PIEZOMETERS WERE INSTALLED FOR THE PURPOSE OF OBTAINING ADDITIONAL GROUNDWATER LEVEL READINGS.

**PROJECT CONTROL**  
 ALL COORDINATES ARE GEORGIA STATE PLANE - EAST ZONE NAD83(94)  
 ALL ELEVATIONS SHOWN ARE NAVD88  
 STATE PLANE COORDS. - NAD83(94) - GEORGIA EAST ZONE  
 GPC-MACK12 N: 855201.8250 E: 961020.2460 ELEV.: 61.572  
 GPC-MACK15 N: 855380.6352 E: 962265.4434 ELEV.: 59.306

- NOTES:**
- CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM LIDAR DATA COMPLETED IN 2010.
  - HORIZONTAL AND VERTICAL CONTROL PROVIDED BY GREG JOHNSON @ GEORGIA POWER.
  - BOUNDARY SURVEY PERFORMED BY BARKER AND ASSOCIATES SURVEYORS, JANUARY 2003

- REFERENCES:**
- FOR A COMPLETE DRAWING LIST SEE SHEET 1.
  - SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

| Well Construction Data |           |           |                  |                                |                             |            |
|------------------------|-----------|-----------|------------------|--------------------------------|-----------------------------|------------|
| Well ID                | Northing  | Easting   | Elevation (feet) | Elevation Top of Casing (feet) | Elevation Top of PVC (feet) | Note       |
| GWC-1                  | 855444.67 | 958416.09 | 44.06            | 47.37                          | 46.85                       | Nail       |
| GWA-2                  | 855307.00 | 958105.74 | 50.46            | 53.98                          | 53.43                       | Casing/Pad |
| GWA-3                  | 855168.65 | 957788.07 | 54.94            | 58.27                          | 57.75                       | Casing/Pad |
| GWA-4A                 | 855352.40 | 957496.55 | 61.90            | 65.20                          | 65.00                       | Nail       |
| GWA-5                  | 855677.36 | 957324.69 | 58.88            | 62.60                          | 62.09                       | Casing/Pad |
| GWC-9                  | 856726.86 | 957902.73 | 50.83            | 53.93                          | 53.38                       | Casing/Pad |
| GWC-10                 | 856427.33 | 958081.67 | 46.73            | 49.92                          | 49.39                       | Casing/Pad |
| GWC-11                 | 856116.10 | 958251.47 | 55.02            | 58.23                          | 57.74                       | Casing/Pad |
| GWC-12                 | 855803.06 | 958419.42 | 54.45            | 57.55                          | 57.05                       | Casing/Pad |
| GWA-13                 | 855669.78 | 957006.93 | 57.92            | 61.09                          | 60.93                       | Nail       |
| GWA-14                 | 855474.34 | 956656.93 | 58.76            | 61.73                          | 61.59                       | Nail       |
| GWA-15                 | 855322.04 | 956314.43 | 53.76            | 57.06                          | 56.86                       | Nail       |
| GWA-16                 | 855639.94 | 956094.72 | 51.49            | 54.95                          | 54.67                       | Nail       |
| GWC-17                 | 856011.11 | 956102.53 | 51.50            | 54.46                          | 54.29                       | Nail       |
| GWC-18                 | 856205.60 | 956438.23 | 56.62            | 59.88                          | 59.74                       | Nail       |
| GWC-19                 | 856400.67 | 956801.55 | 51.00            | 53.77                          | 53.59                       | Nail       |
| GWC-20                 | 856561.94 | 957093.84 | 44.35            | 47.62                          | 47.36                       | Nail       |
| GWC-21                 | 856734.02 | 957390.27 | 42.31            | 45.42                          | 45.22                       | Nail       |
| PZ-22                  | 856950.76 | 957722.56 | 47.84            | 51.32                          | 51.17                       | Nail       |
| GWC-23                 | 856905.61 | 957714.35 | 49.45            | 52.64                          | 52.43                       | Nail       |

- Notes:**
- Well Survey information from July 2, 2020 memorandum from Gunnin Land Surveying
  - Georgia State Plane East Zone (NAD 83 horizontal and NAVD 88 vertical)
  - Conventional Survey - GPS, OPUS processing, and level loop. Survey tolerance 0.01' vertical and 0.5' horizontal



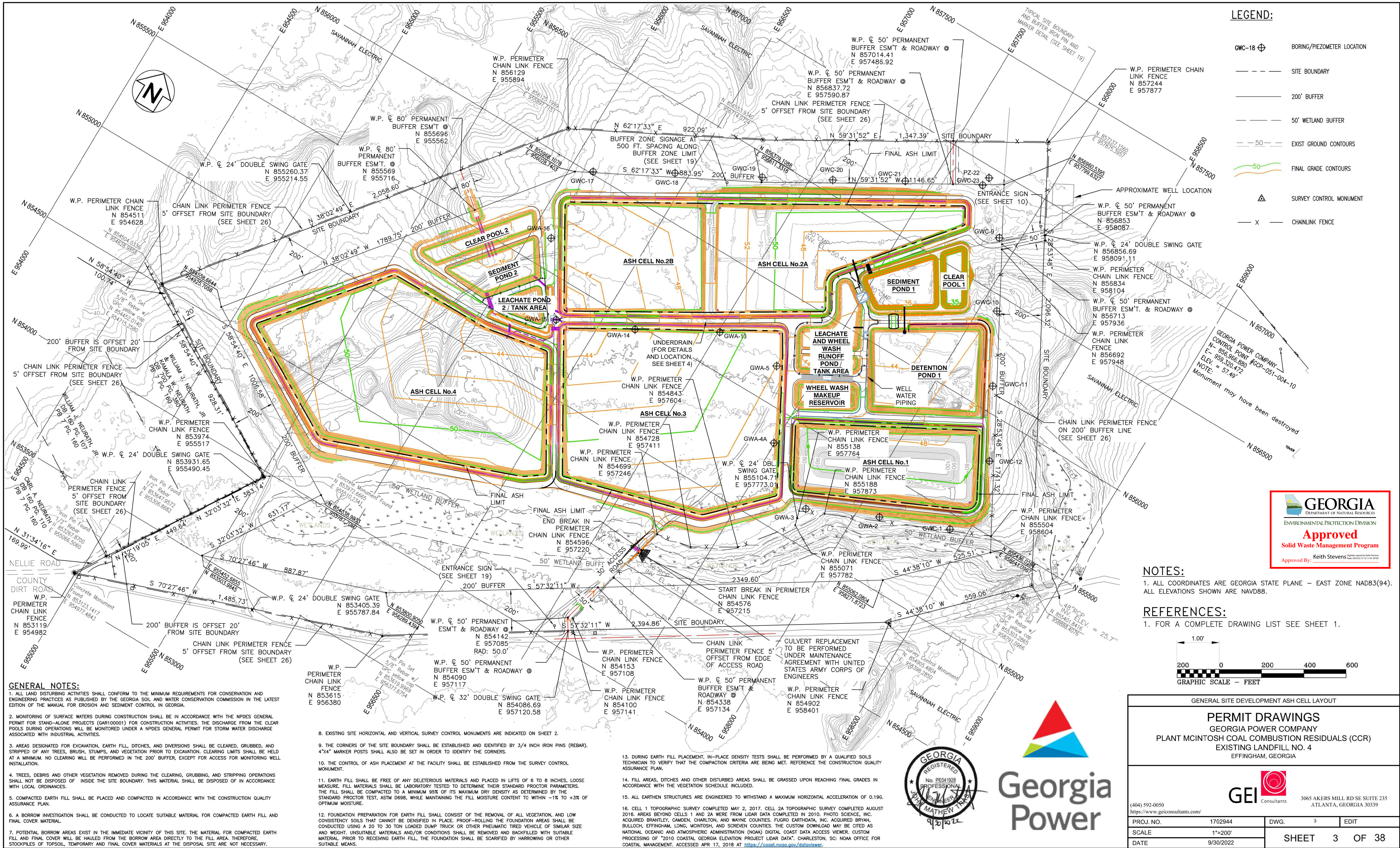
EXISTING SITE TOPOGRAPHIC MAP

**PERMIT DRAWINGS**  
 GEORGIA POWER COMPANY  
 PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)  
 EXISTING LANDFILL NO. 4  
 EFFINGHAM, GEORGIA

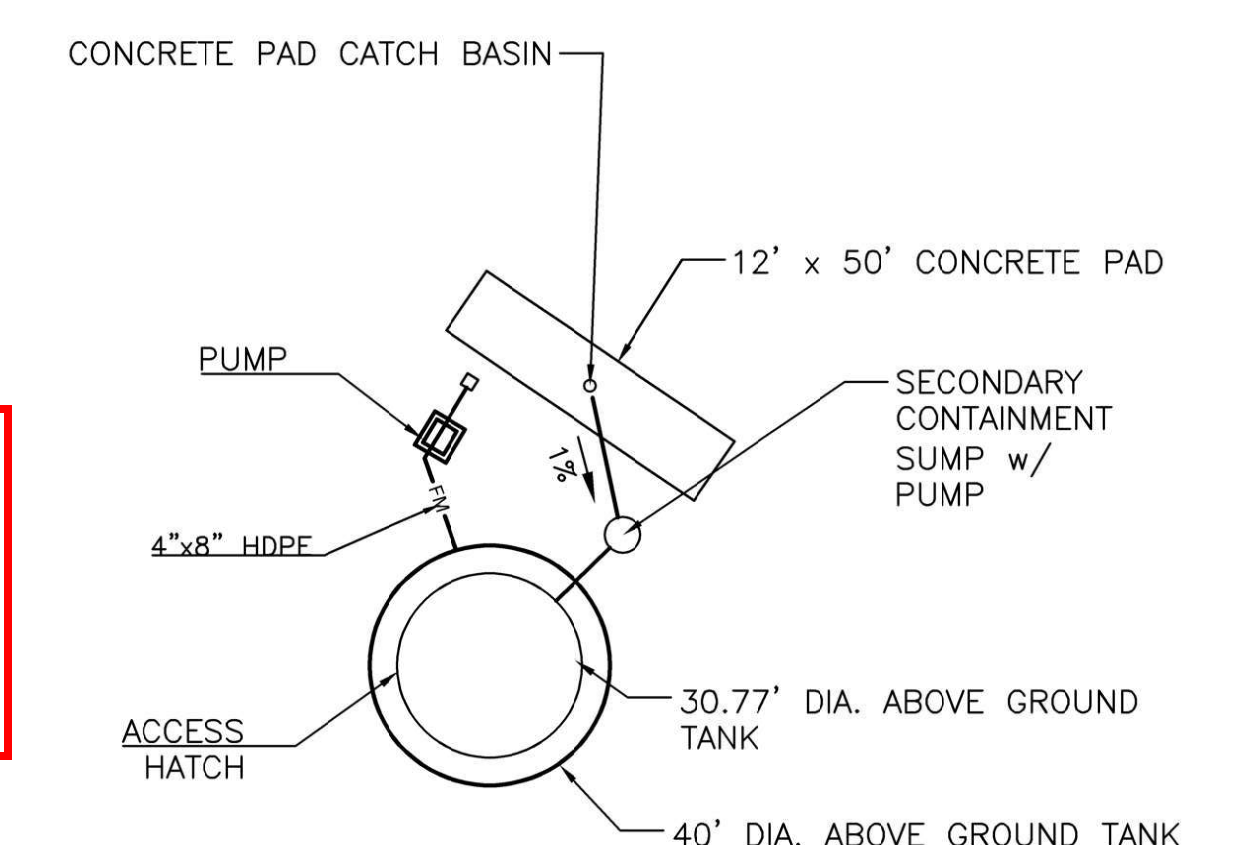
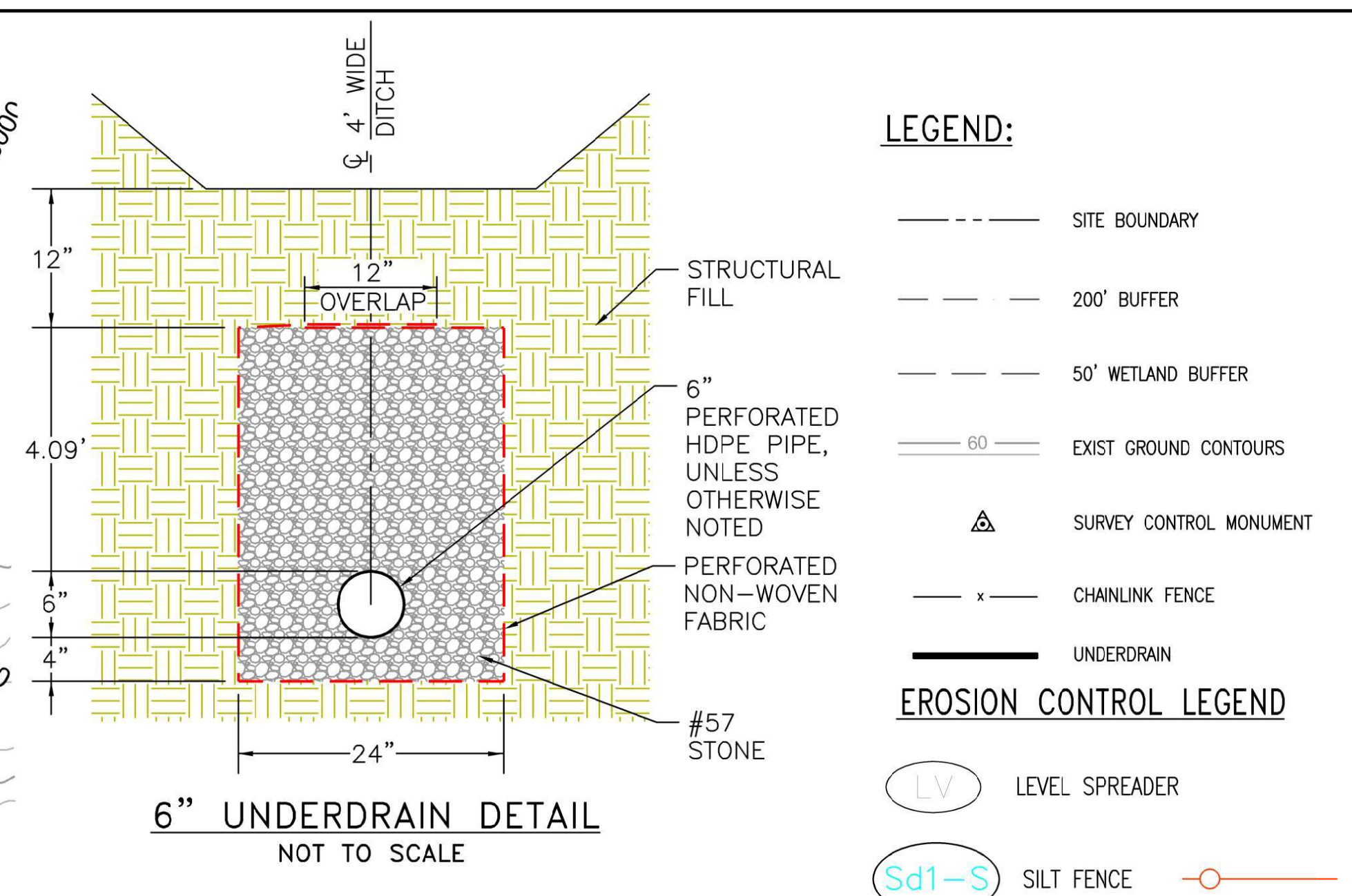
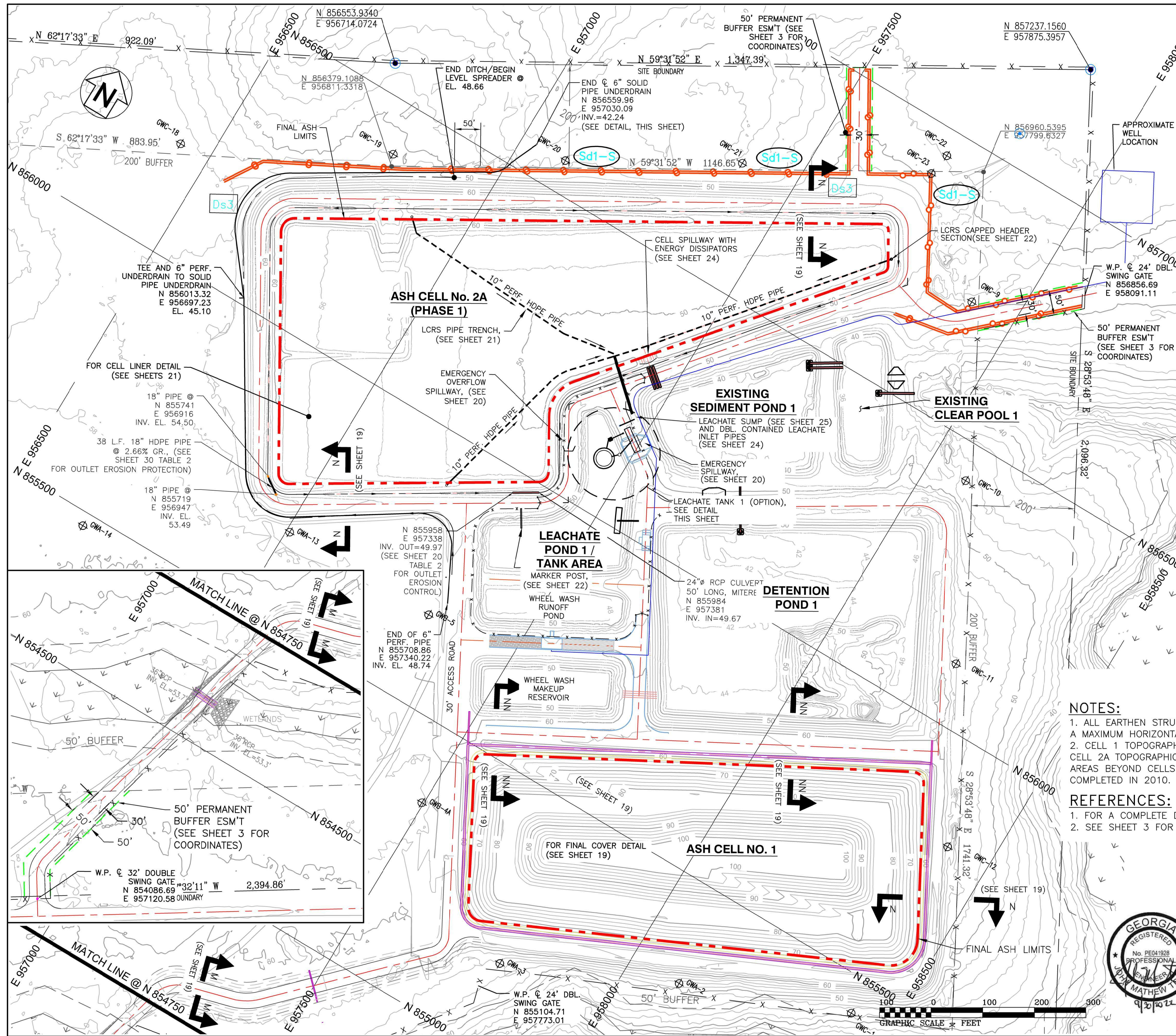
**GEI** Consultants 3065 AKERS MILL RD SE SUITE 235 ATLANTA, GEORGIA 30339

|           |           |               |   |      |
|-----------|-----------|---------------|---|------|
| PROJ. NO. | 1702944   | DWG.          | 2 | EDIT |
| SCALE     | 1"=200'   | SHEET 2 OF 38 |   |      |
| DATE      | 9/30/2022 |               |   |      |





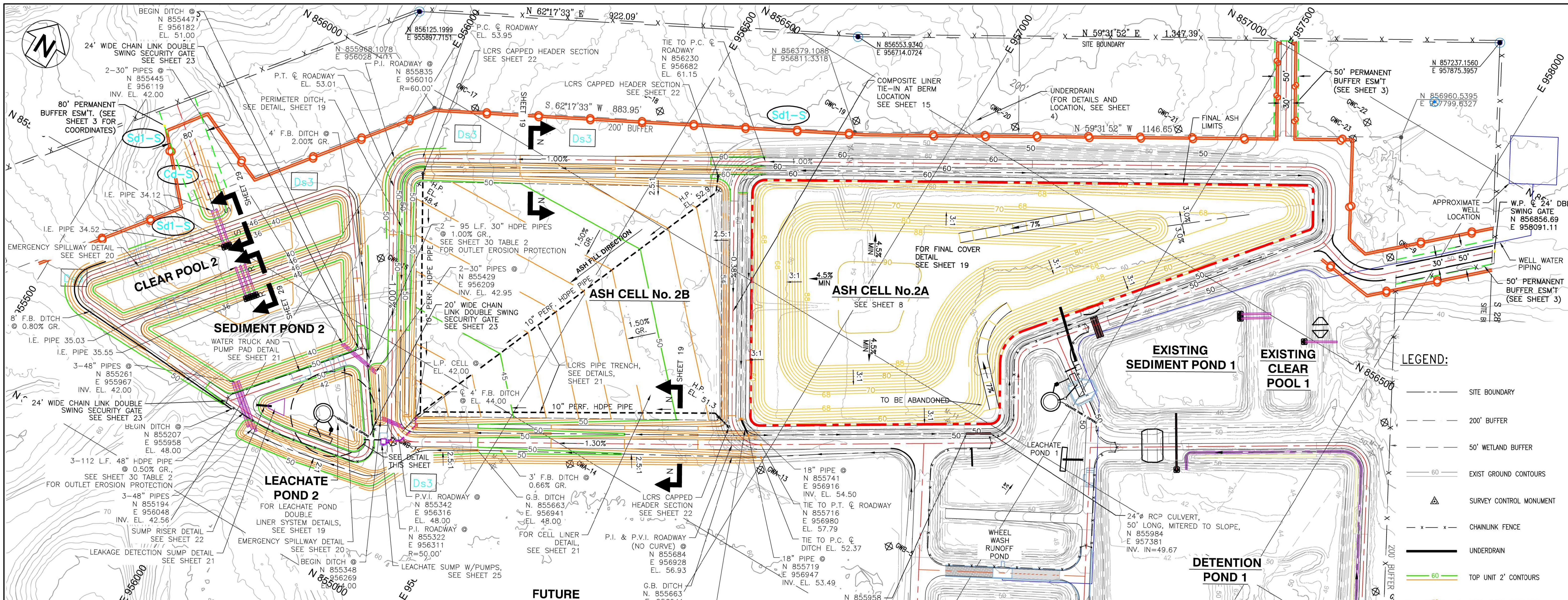




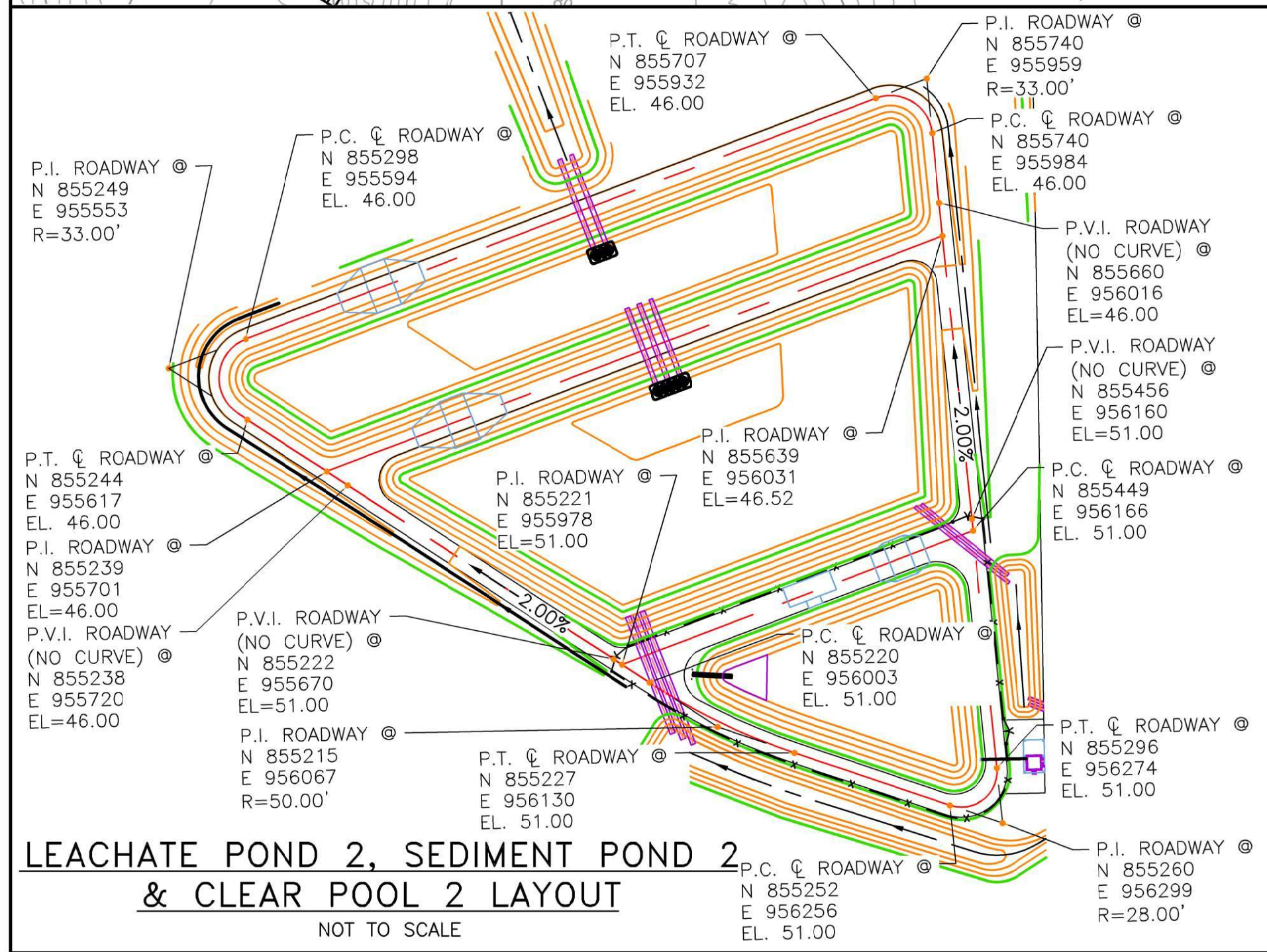
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|--|-----------|----------------------|---|
| CELL 2A SITE DEVELOPMENT PLAN  |           |                      |   |
| <b>PERMIT DRAWINGS</b>   |           |                      |   |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |                      |   |
|  |           |                      |   |
| (404) 592-0050<br>https://www.geiconsultants.com/  |           |                      |   |
| PROJ. NO.  | 1702944   | DWG.                 | 4 |
| SCALE  | 1"=100'   | EDIT                 |   |
| DATE   | 9/30/2022 | <b>SHEET 4 OF 38</b> |   |



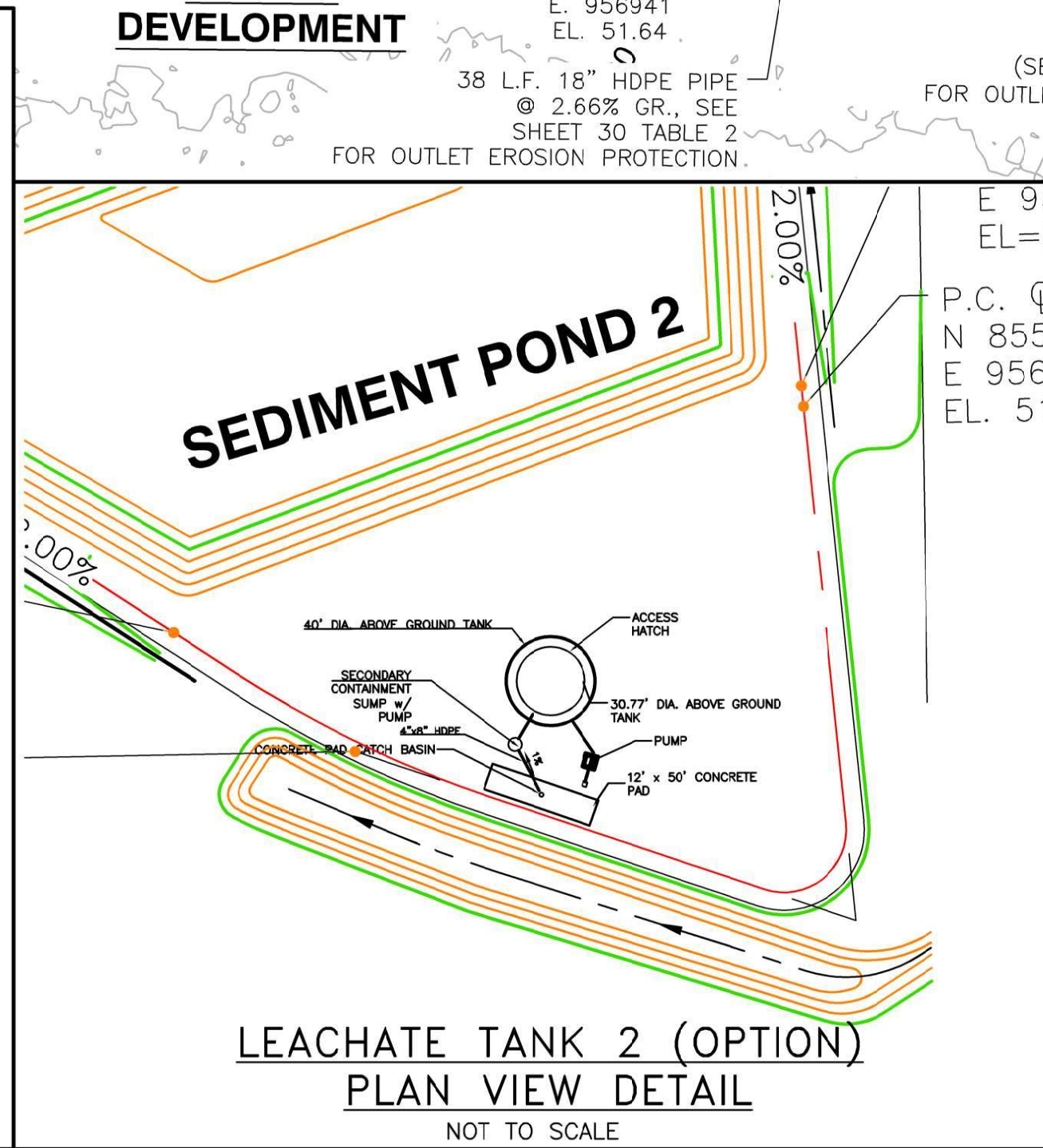




- LEGEND:**
- SITE BOUNDARY
  - 200' BUFFER
  - 50' WETLAND BUFFER
  - 60 --- EXIST GROUND CONTOURS
  - 70 --- FINAL GRADE CONTOURS
  - ▲ SURVEY CONTROL MONUMENT
  - x - x - CHAINLINK FENCE
  - UNDERDRAIN
  - 60 --- TOP UNIT 2' CONTOURS
  - 70 --- FINAL GRADE CONTOURS
- EROSION CONTROL LEGEND**
- (Cd-S) CHECKDAM
  - (Sd1-S) SILT FENCE
  - [Ds2] AREA STABILIZATION (TEMPORARY VEGETATION)
  - [Ds3] AREA STABILIZATION (PERMANENT VEGETATION)
  - (Co) CONSTRUCTION EXIT



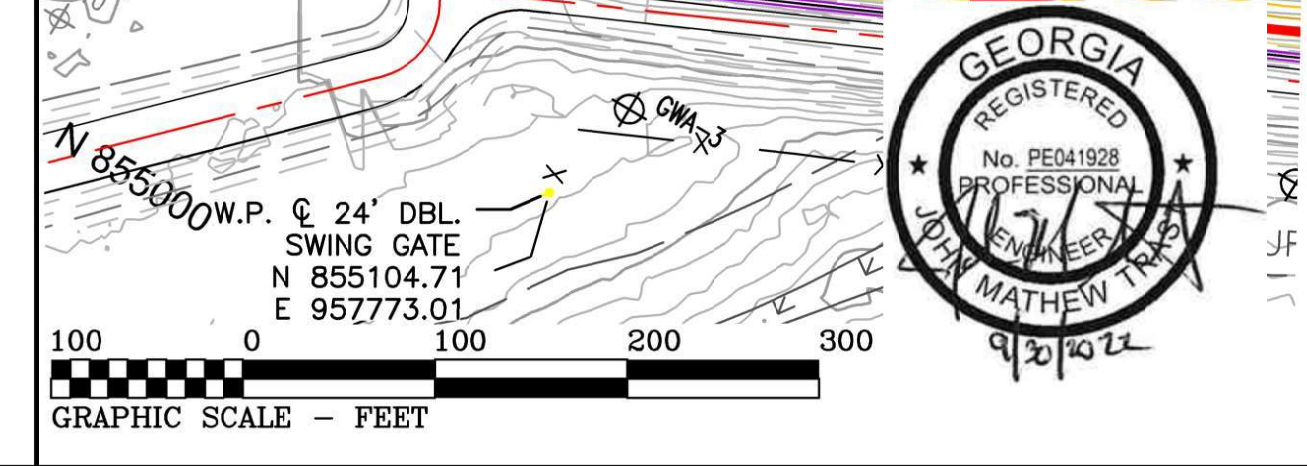
**LEACHATE POND 2, SEDIMENT POND 2 & CLEAR POOL 2 LAYOUT**  
NOT TO SCALE



**LEACHATE TANK 2 (OPTION) PLAN VIEW DETAIL**  
NOT TO SCALE

- NOTES:**
1. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
  2. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM LIDAR DATA COMPLETED IN 2010.

- REFERENCES:**
1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
  2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



**Georgia Power**

**GEI Consultants**

**APPROVED**

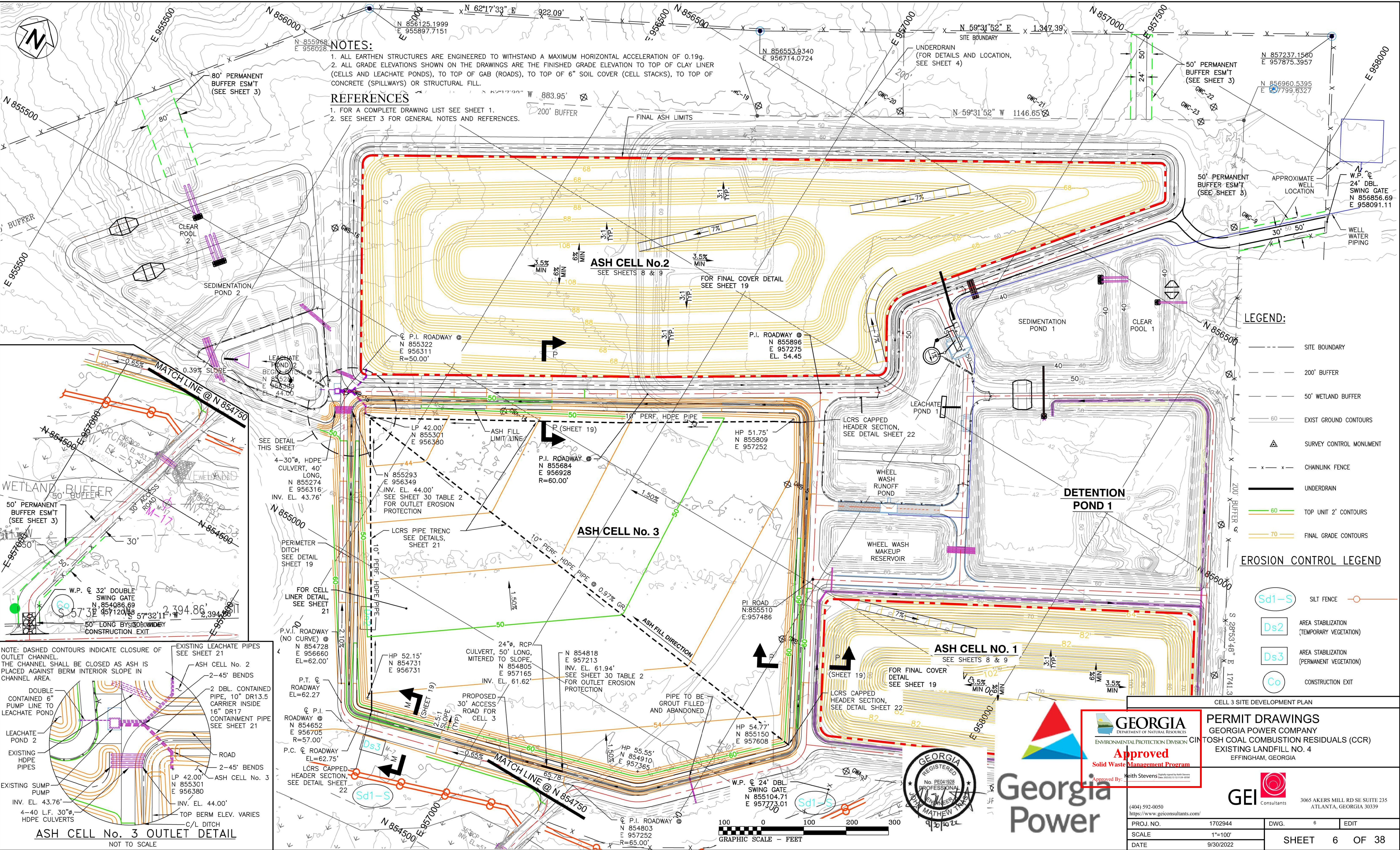
Approved By: Keith Stevens

**PERMIT DRAWINGS**

GEORGIA POWER COMPANY  
OSH COAL COMBUSTION RESIDUALS (CCR)  
EXISTING LANDFILL NO. 4  
EFFINGHAM, GEORGIA

|                   |  |                |  |               |  |
|-------------------|--|----------------|--|---------------|--|
| PROJ. NO. 1702944 |  | DWG. 5         |  | EDIT          |  |
| SCALE 1"=100'     |  | DATE 9/30/2022 |  | SHEET 5 OF 38 |  |

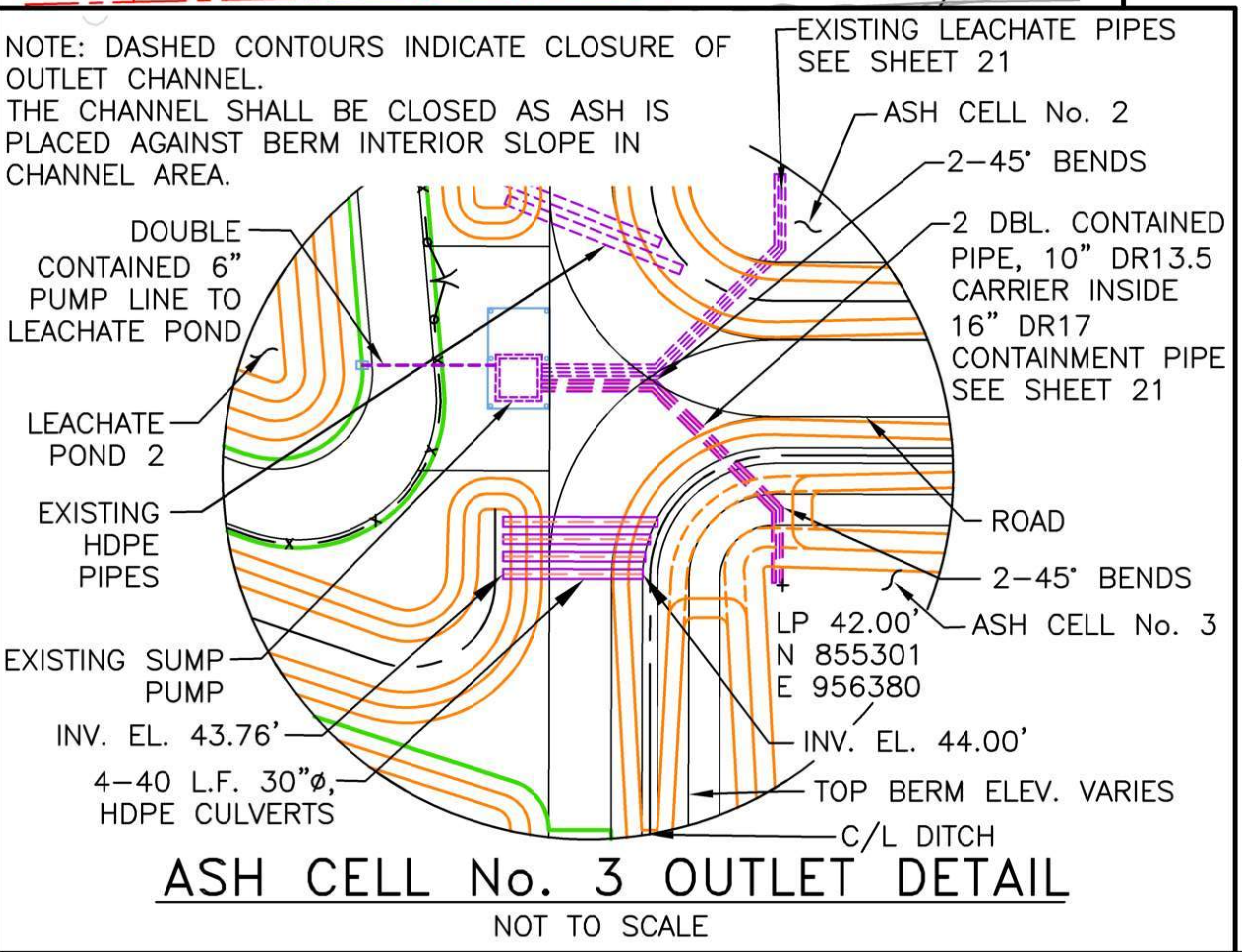




**NOTES:**  
 1. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.  
 2. ALL GRADE ELEVATIONS SHOWN ON THE DRAWINGS ARE THE FINISHED GRADE ELEVATION TO TOP OF CLAY LINER (CELLS AND LEACHATE PONDS), TO TOP OF GAB (ROADS), TO TOP OF 6" SOIL COVER (CELL STACKS), TO TOP OF CONCRETE (SPILLWAYS) OR STRUCTURAL FILL.

**REFERENCES**  
 1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.  
 2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

- LEGEND:**
- SITE BOUNDARY
  - 200' BUFFER
  - 50' WETLAND BUFFER
  - 60 --- EXIST GROUND CONTOURS
  - 70 --- FINAL GRADE CONTOURS
  - ▲ SURVEY CONTROL MONUMENT
  - x - x - CHAINLINK FENCE
  - UNDERDRAIN
  - 60 --- TOP UNIT 2' CONTOURS
  - 70 --- FINAL GRADE CONTOURS
- EROSION CONTROL LEGEND**
- (Sd1-S) SILT FENCE
  - (Ds2) AREA STABILIZATION (TEMPORARY VEGETATION)
  - (Ds3) AREA STABILIZATION (PERMANENT VEGETATION)
  - (Co) CONSTRUCTION EXIT



**CELL 3 SITE DEVELOPMENT PLAN**

**GEORGIA**  
 DEPARTMENT OF NATURAL RESOURCES  
 ENVIRONMENTAL PROTECTION DIVISION

**PERMIT DRAWINGS**  
 GEORGIA POWER COMPANY  
 TOSH COAL COMBUSTION RESIDUALS (CCR)  
 EXISTING LANDFILL NO. 4  
 EFFINGHAM, GEORGIA

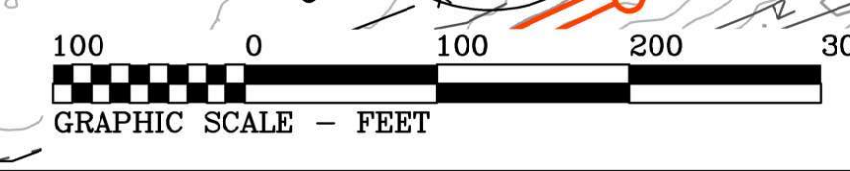
**Approved**  
 Solid Waste Management Program  
 Approved By: Keith Stevens

**Georgia Power**

**GEI** Consultants  
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 ATLANTA, GEORGIA 30339

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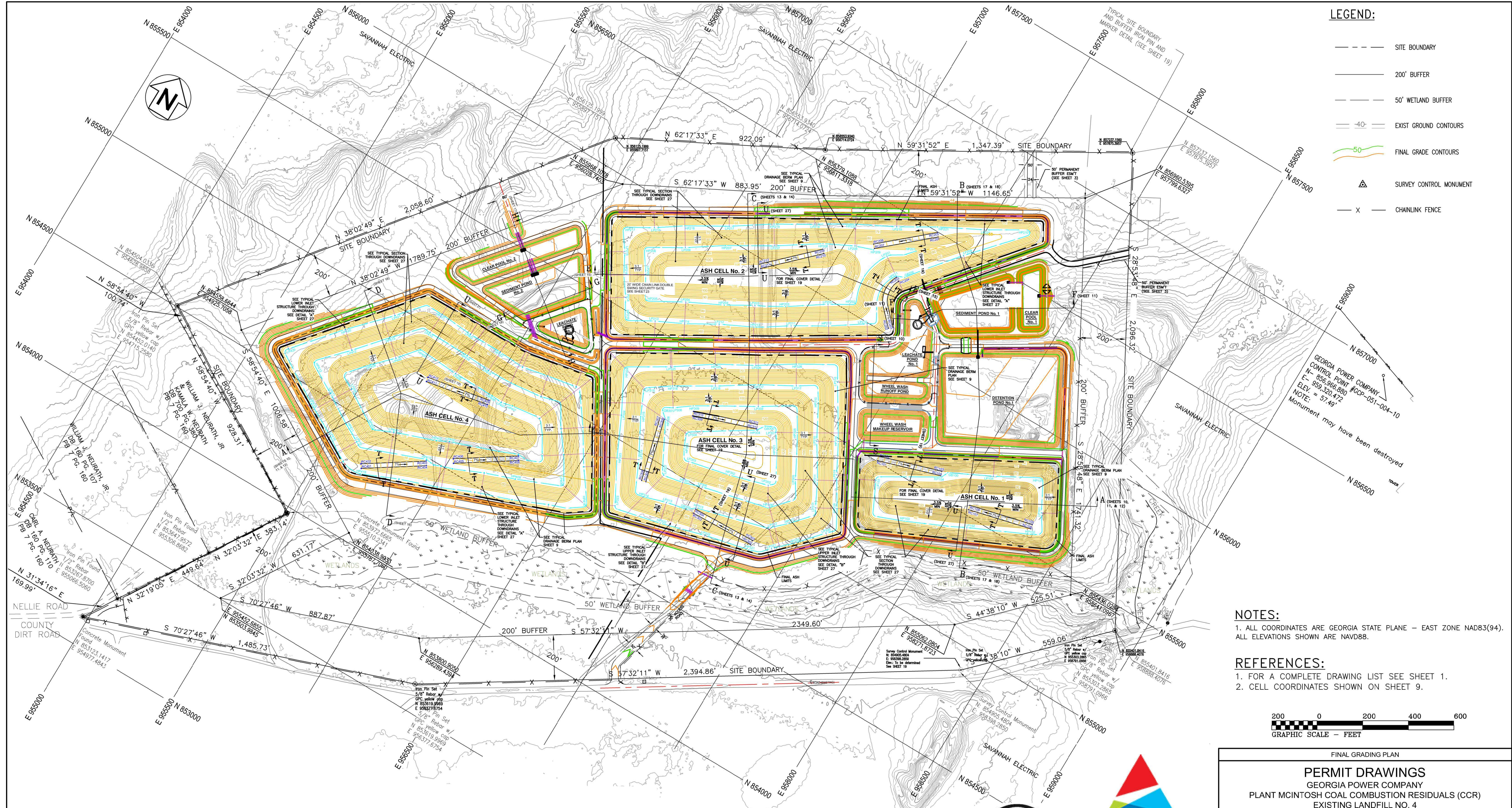
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| PROJ. NO. | 1702944   | DWG.          | 6 | EDIT |
| SCALE     | 1"=100'   | SHEET 6 OF 38 |   |      |
| DATE      | 9/30/2022 |               |   |      |





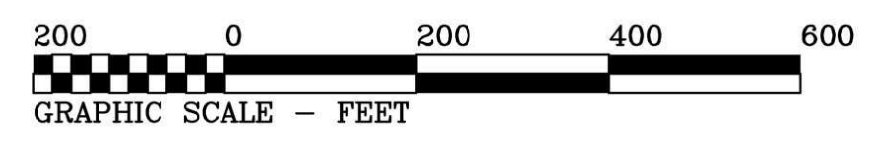






- LEGEND:**
- SITE BOUNDARY
  - 200' BUFFER
  - 50' WETLAND BUFFER
  - 40' --- EXIST GROUND CONTOURS
  - 50' --- FINAL GRADE CONTOURS
  - ▲ SURVEY CONTROL MONUMENT
  - X — CHAINLINK FENCE

- NOTES:**
- ALL COORDINATES ARE GEORGIA STATE PLANE – EAST ZONE NAD83(94). ALL ELEVATIONS SHOWN ARE NAVD88.
- REFERENCES:**
- FOR A COMPLETE DRAWING LIST SEE SHEET 1.
  - CELL COORDINATES SHOWN ON SHEET 9.



FINAL GRADING PLAN

**PERMIT DRAWINGS**  
 GEORGIA POWER COMPANY  
 PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)  
 EXISTING LANDFILL NO. 4  
 EFFINGHAM, GEORGIA



3065 AKERS MILL RD SE SUITE 235  
 ATLANTA, GEORGIA 30339

|   |                   |        |      |
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| (404) 592-0050<br>https://www.geiconsultants.com/ | PROJ. NO. 1702944 | DWG. 8 | EDIT |
| SCALE 1"=200'                                     | SHEET 8 OF 38     |        |      |
| DATE 9/30/2022                                    |                   |        |      |





| CELL 1 - HIGH POINTS & LOW POINTS |           |           |       |
|-----------------------------------|-----------|-----------|-------|
| High Point                        | Northing  | Easting   | Elev. |
| HP101                             | 855806.85 | 958271.32 | 81.5  |
| HP102                             | 855572.18 | 958352.85 | 81.5  |
| HP103                             | 855336.46 | 957847.66 | 81.5  |
| HP104                             | 855588.20 | 957890.49 | 81.5  |

|       |           |           |      |
|-------|-----------|-----------|------|
| GB100 | 855617.84 | 957903.03 | 81.5 |
|-------|-----------|-----------|------|

| CELL 2 - HIGH POINTS, LOW POINTS & GRADE BREAKS |           |           |       |
|---|-----------|-----------|-------|
| High Point                                      | Northing  | Easting   | Elev. |
| HP201   | 856378.40 | 957283.00 | 87.5  |
| HP202   | 856043.82 | 957174.07 | 87.5  |
| HP203   | 855875.13 | 956917.92 | 87.5  |
| HP204   | 855742.57 | 956684.59 | 87.5  |
| HP205   | 855584.87 | 956379.37 | 87.5  |
| HP206   | 855777.15 | 956259.07 | 87.5  |
| HP207   | 855970.04 | 956555.22 | 87.5  |
| HP208   | 856197.14 | 956916.52 | 87.5  |
| HP209   | 856287.44 | 957119.29 | 87.5  |
| HP210   | 856705.59 | 957669.26 | 87.5  |
| HP211   | 856240.11 | 957264.57 | 87.5  |
| HP212   | 855899.47 | 957123.84 | 87.5  |
| HP213   | 855726.58 | 956845.25 | 87.5  |
| HP214   | 855582.84 | 956577.14 | 87.5  |
| HP215   | 855465.87 | 956347.88 | 87.5  |
| HP216   | 855630.00 | 956238.52 | 87.5  |
| HP217   | 855805.45 | 956134.98 | 87.5  |
| HP218   | 855951.00 | 956357.08 | 87.5  |
| HP219   | 856159.62 | 956687.69 | 87.5  |
| HP220   | 856344.05 | 956995.60 | 87.5  |
| HP221   | 856519.00 | 957310.47 | 87.5  |

|       |           |           |       |
|-------|-----------|-----------|-------|
| GB200 | 856254.58 | 957299.81 | 87.25 |
|-------|-----------|-----------|-------|

| CELL 3 - HIGH POINTS, LOW POINTS & GRADE BREAKS |           |           |       |
|---|-----------|-----------|-------|
| High Point                                      | Northing  | Easting   | Elev. |
| HP301   | 855315.18 | 957210.40 | 127.5 |
| HP302   | 855115.33 | 957087.70 | 127.5 |
| HP303   | 855111.00 | 956857.41 | 127.5 |
| HP304   | 855345.96 | 957088.65 | 127.5 |
| HP305   | 855429.02 | 957247.76 | 107.5 |
| HP306   | 855079.15 | 957306.77 | 107.5 |
| HP307   | 854981.80 | 956928.41 | 107.5 |
| HP308   | 855180.71 | 956721.31 | 107.5 |
| HP309   | 855294.02 | 956795.39 | 107.5 |
| HP310   | 855588.83 | 957258.03 | 87.5  |
| HP311   | 855295.34 | 957429.77 | 87.5  |
| HP312   | 855067.92 | 957420.83 | 87.5  |
| HP313   | 854916.38 | 957036.05 | 87.5  |
| HP314   | 854839.86 | 956815.36 | 87.5  |
| HP315   | 855135.02 | 956621.65 | 87.5  |
| HP316   | 855321.67 | 956671.77 | 87.5  |
| HP317   | 855520.55 | 956991.76 | 87.5  |
| HP318   | 855488.15 | 957421.85 | 87.5  |
| HP319   | 855233.55 | 957568.19 | 87.5  |
| HP320   | 855006.25 | 957486.38 | 87.5  |
| HP321   | 854878.24 | 957329.73 | 87.5  |
| HP322   | 854777.74 | 956935.91 | 87.5  |
| HP323   | 854925.86 | 956626.55 | 87.5  |
| HP324   | 855282.51 | 956452.59 | 87.5  |
| HP325   | 855500.29 | 956783.96 | 87.5  |
| HP326   | 855684.04 | 957088.51 | 87.5  |

|       |           |           |        |
|-------|-----------|-----------|--------|
| GB300 | 855380.17 | 957111.09 | 126.74 |
| GB301 | 855207.62 | 956690.61 | 106.6  |
| GB302 | 854889.78 | 957004.16 | 86.9   |

| CELL 1 - STACK ACCESS RAMPS |           |           |       |
|-----------------------------|-----------|-----------|-------|
| Ramp Corner                 | Northing  | Easting   | Elev. |
| RC101                       | 855504.16 | 957611.50 | 62.0  |
| RC102                       | 855523.22 | 957605.44 | 62.0  |
| RC103                       | 855609.82 | 957877.71 | 82.0  |
| RC104                       | 855590.76 | 957883.78 | 82.0  |
| RC105                       | 855613.60 | 958337.14 | 82.0  |
| RC106                       | 855594.19 | 958341.96 | 82.0  |
| RC107                       | 855254.44 | 958064.84 | 102.0 |
| RC108                       | 855544.81 | 958059.85 | 102.0 |

| CELL 2 - STACK ACCESS RAMPS |           |           |       |
|-----------------------------|-----------|-----------|-------|
| Ramp Corner                 | Northing  | Easting   | Elev. |
| RC201                       | 856039.98 | 957367.73 | 54.0  |
| RC202                       | 856026.06 | 957353.38 | 54.0  |
| RC203                       | 856236.94 | 957269.13 | 68.0  |
| RC204                       | 856227.21 | 957286.60 | 68.0  |
| RC205                       | 856497.58 | 957322.37 | 68.0  |
| RC206                       | 856482.54 | 957335.54 | 68.0  |
| RC207                       | 856294.41 | 957120.50 | 88.0  |
| RC208                       | 856309.46 | 957107.33 | 88.0  |
| RC209                       | 856176.05 | 956928.99 | 88.0  |
| RC210                       | 856161.73 | 956942.96 | 88.0  |
| RC211                       | 855962.27 | 956738.39 | 108.0 |
| RC212                       | 855976.59 | 956724.42 | 108.0 |

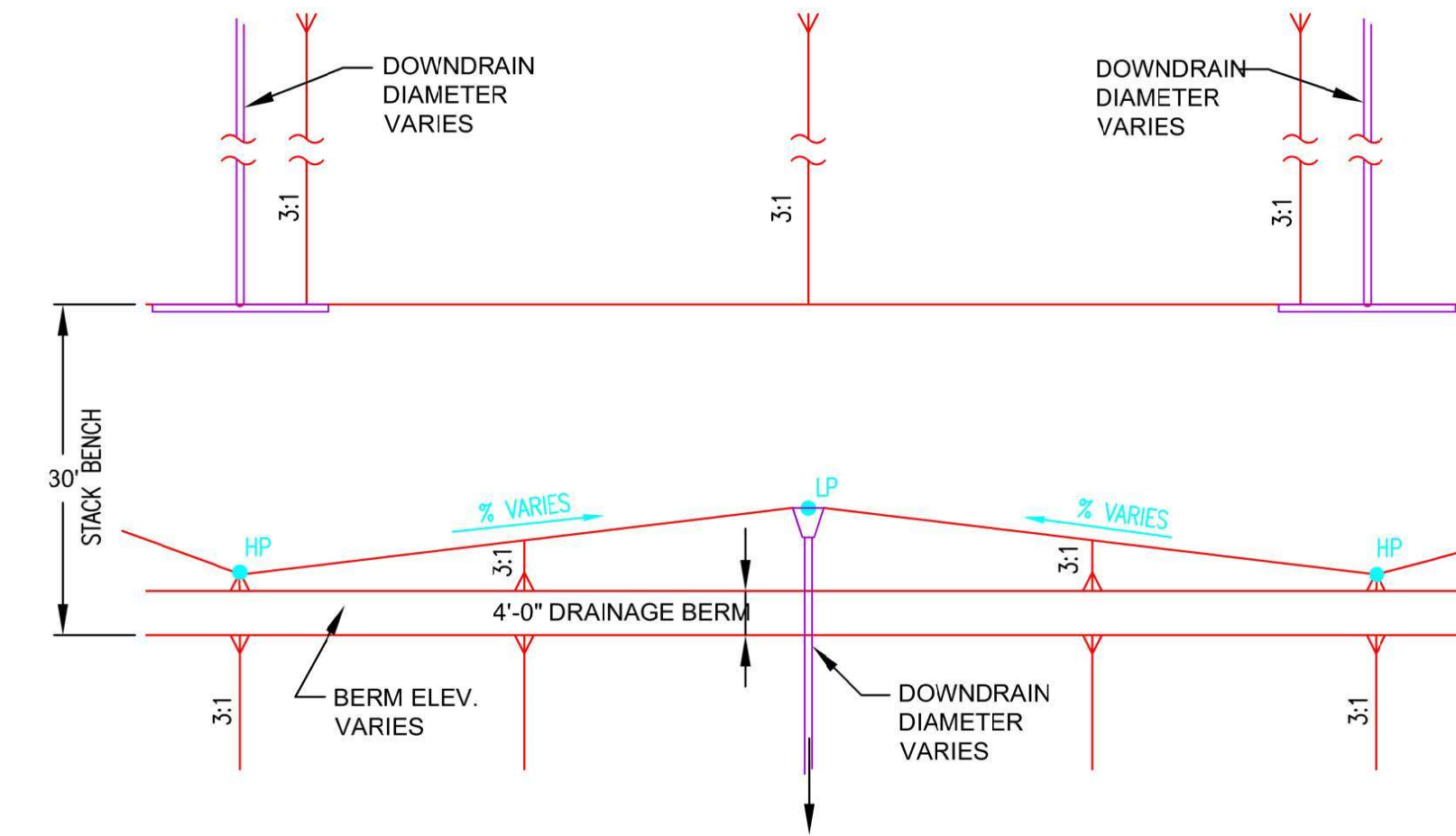
**NOTES:**  
 1. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.  
 2. ALL GRADE ELEVATIONS SHOWN ON THE DRAWINGS ARE THE FINISHED GRADE ELEVATIONS TO TOP OF CLAY LINER (CELLS AND LEACHATE PONDS), TO TOP OF GAB (ROADS), TO TOP OF 6" SOIL COVER (CELL STACKS), TO TOP OF CONCRETE (SPILLWAYS) OR STRUCTURAL FILL.

| CELL 4 - HIGH POINTS, LOW POINTS & GRADE BREAKS |           |           |       |           |           |           |       |
|---|-----------|-----------|-------|-----------|-----------|-----------|-------|
| High Point                                      | Northing  | Easting   | Elev. | Low Point | Northing  | Easting   | Elev. |
| HP401   | 854683.32 | 956167.19 | 107.5 | LP401     | 854764.05 | 956339.46 | 105.5 |
| HP402   | 854582.64 | 955908.61 | 107.5 | LP402     | 854608.70 | 955958.88 | 105.5 |
| HP403   | 854481.20 | 955642.74 | 107.5 | LP403     | 854519.02 | 955728.56 | 105.5 |
| HP404   | 854719.36 | 955488.63 | 107.5 | LP404     | 854801.19 | 955473.10 | 105.5 |
| HP405   | 854888.53 | 955643.19 | 107.5 | LP405     | 854878.06 | 955570.24 | 105.5 |
| HP406   | 854877.76 | 956016.07 | 107.5 | LP406     | 854872.91 | 955829.33 | 105.5 |
| HP407   | 854884.86 | 956114.55 | 107.5 | LP407     | 854950.57 | 956065.99 | 105.5 |
| HP408   | 854817.80 | 956419.01 | 87.5  | LP408     | 854701.80 | 956484.08 | 85.5  |
| HP409   | 854616.79 | 956292.19 | 87.5  | LP409     | 854569.80 | 956160.61 | 85.5  |
| HP410   | 854490.09 | 955913.47 | 87.5  | LP410     | 854399.43 | 955612.24 | 85.5  |
| HP411   | 854441.53 | 955532.65 | 87.5  | LP411     | 854521.68 | 955404.16 | 85.5  |
| HP412   | 854601.14 | 955273.41 | 87.5  | LP412     | 854731.53 | 955386.51 | 85.5  |
| HP413   | 854864.06 | 955500.36 | 87.5  | LP413     | 854974.47 | 955641.23 | 85.5  |
| HP414   | 854972.01 | 955832.50 | 87.5  | LP414     | 854964.18 | 955945.70 | 85.5  |
| HP415   | 854968.66 | 956059.02 | 87.5  | LP415     | 854983.84 | 956201.29 | 85.5  |
| HP416   | 854870.52 | 956408.17 | 85.5  | LP416     | 854817.13 | 956520.83 | 65.5  |
| HP417   | 854410.95 | 956017.39 | 67.5  | LP417     | 854595.48 | 956474.35 | 65.5  |
| HP418   | 854286.14 | 955697.15 | 67.5  | LP418     | 854354.13 | 955855.09 | 65.5  |
| HP419   | 854438.87 | 955355.53 | 67.5  | LP419     | 854365.65 | 955492.05 | 65.5  |
| HP420   | 854795.73 | 955315.14 | 67.5  | LP420     | 854593.77 | 955145.59 | 65.5  |
| HP421   | 855070.41 | 955644.47 | 67.5  | LP421     | 854959.40 | 955470.44 | 65.5  |
| HP422   | 855060.13 | 955948.96 | 67.5  | LP422     | 855059.27 | 955796.50 | 65.5  |
| HP423   | 855077.58 | 956180.57 | 67.5  | LP423     | 855053.71 | 956066.16 | 65.5  |
| HP424   | 854842.98 | 956293.38 | 107.5 | LP424     | 854899.04 | 956245.44 | 105.5 |
| HP425   | 855005.72 | 956287.88 | 87.5  | LP425     | 854909.60 | 956349.74 | 85.5  |
| HP426   | 854513.49 | 956032.66 | 87.5  | LP426     | 854497.71 | 955983.57 | 86.45 |
| HP427   | 854316.65 | 955563.62 | 67.5  | LP427     | 854294.35 | 955604.55 | 67.0  |
| HP428   | 854531.07 | 956325.60 | 67.5  | LP428     | 854476.60 | 956169.31 | 65.5  |
| HP429   | 854963.35 | 956429.28 | 67.5  | LP429     | 855100.77 | 956313.28 | 65.5  |

|       |           |           |        |
|-------|-----------|-----------|--------|
| GB424 | 854714.18 | 956292.55 | 106.64 |
| GB425 | 854485.95 | 955953.28 | 87.1   |
| GB426 | 854716.58 | 956247.82 | 106.93 |

| CELL 4 - STACK ACCESS RAMPS |           |           |       |
|-----------------------------|-----------|-----------|-------|
| Ramp Corner                 | Northing  | Easting   | Elev. |
| RC401                       | 854309.13 | 955688.66 | 68.0  |
| RC402                       | 854325.83 | 955677.66 | 68.0  |
| RC403                       | 854483.10 | 955916.19 | 88.0  |
| RC404                       | 854466.40 | 955927.20 | 88.0  |
| RC405                       | 854536.31 | 956023.74 | 88.0  |
| RC406                       | 854553.01 | 956012.73 | 88.0  |
| RC407                       | 854710.35 | 956251.22 | 108.0 |
| RC408                       | 854693.66 | 956262.23 | 108.0 |
| RC409                       | 854853.27 | 956015.32 | 108.0 |
| RC410                       | 854833.59 | 956018.87 | 108.0 |
| RC411                       | 854782.94 | 955737.68 | 128.0 |
| RC412                       | 854802.63 | 955734.13 | 128.0 |

NOTE: LOW POINT (LP) ELEVATIONS =  $\epsilon$  DOWNDRAIN END SECTION AND "INVERT IN" ELEVATION



TYPICAL DRAINAGE BERM PLAN ON 30' STACK BENCH

N.T.S.

**LEGEND:**

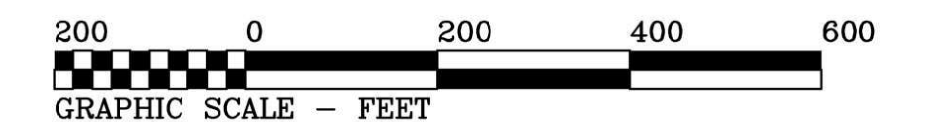
- DOWNDRAIN (FOR DIAMETER SEE TABLE 3, H1C2708)
- SURFACE RUNOFF DIRECTION
- HP423 HIGH POINT
- LP423 LOW POINT
- GB424 GRADE BREAK
- RC211 ACCESS RAMP

**NOTES:**

1. ALL COORDINATES ARE GEORGIA STATE PLANE - EAST ZONE NAD83(94). ALL ELEVATIONS SHOWN ARE NAVD88.

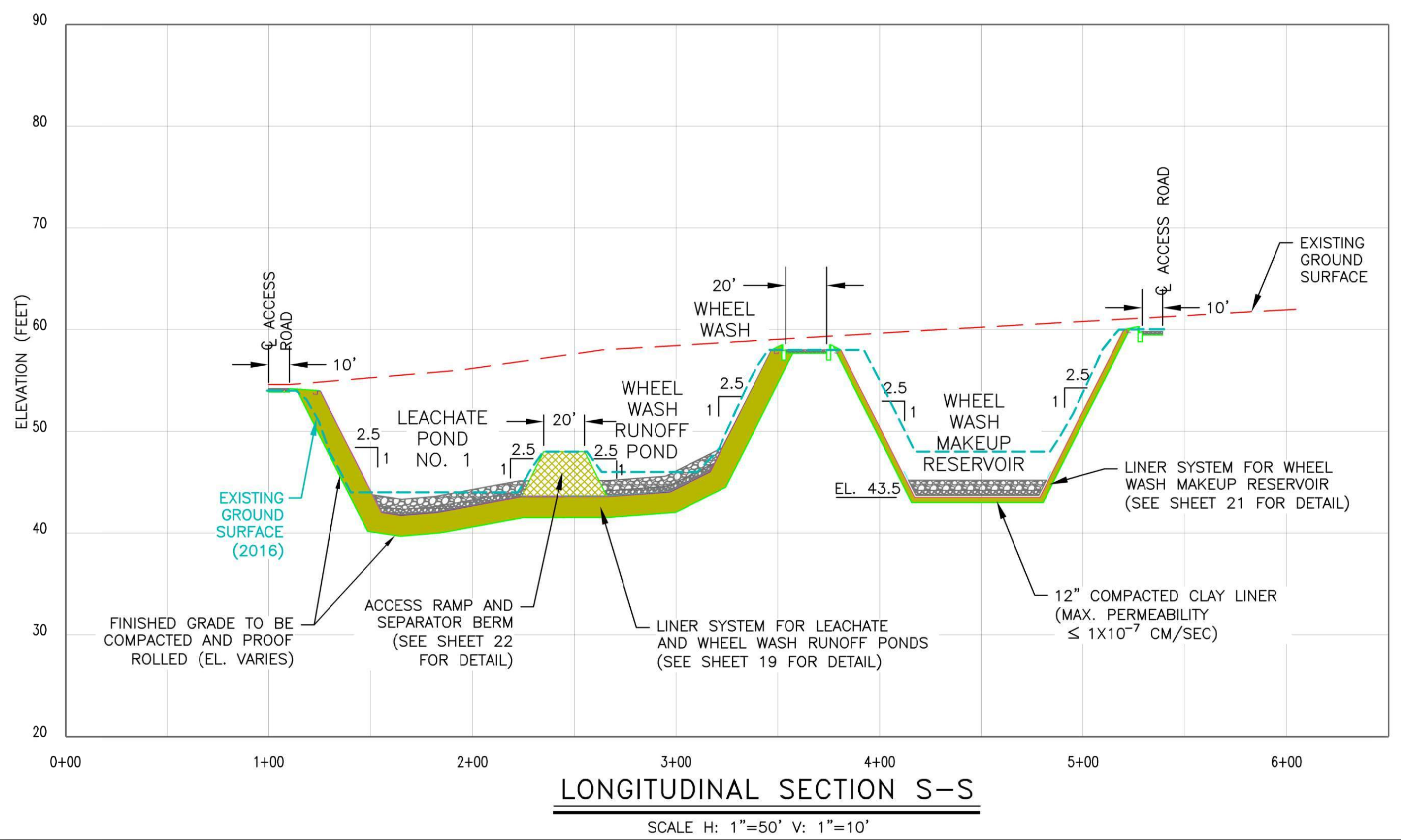
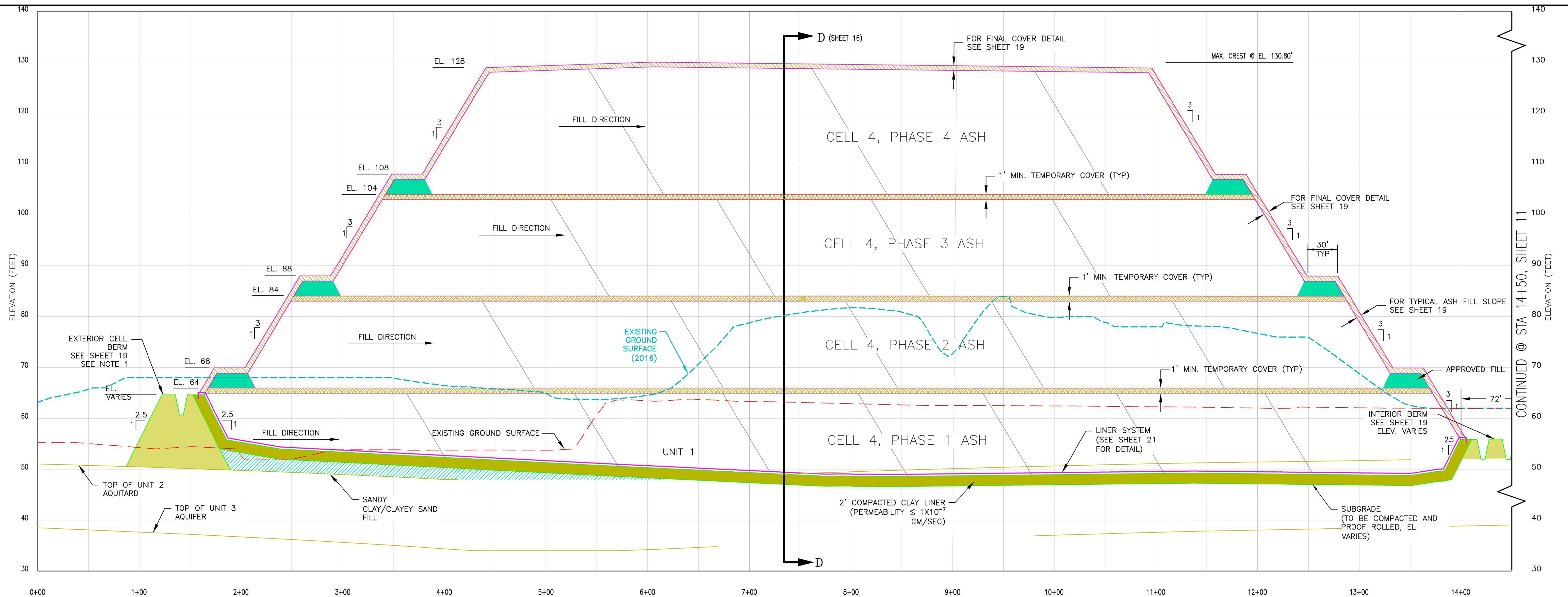
**REFERENCES:**

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.

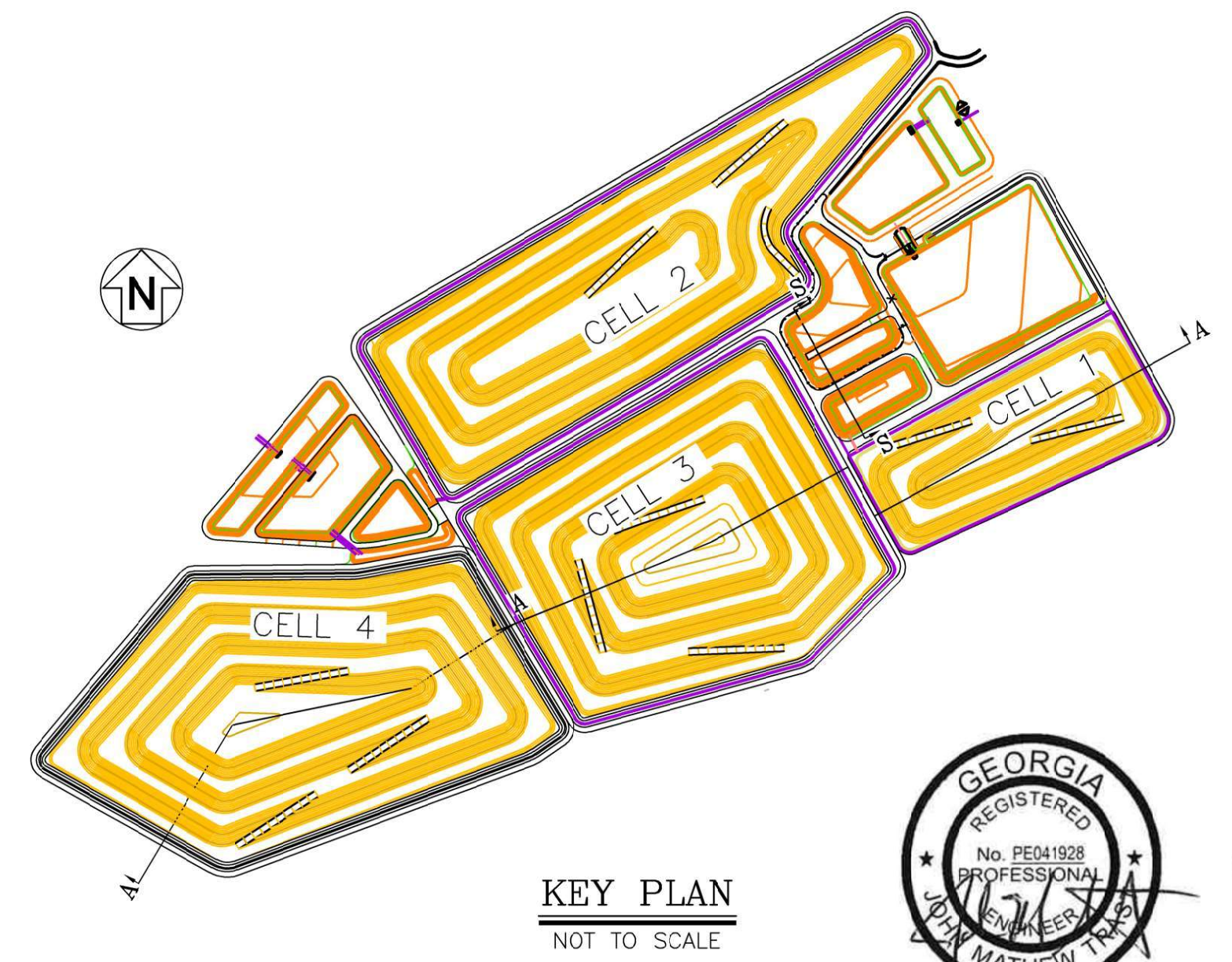


| FINAL GRADING PLAN   |                   |   |      |
|--|-------------------|---|------|
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |                   |   |      |
|  |                   | 3065 AKERS MILL ROAD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |      |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>  | PROJ. NO. 1702944 | DWG. 8  | EDIT |
| SCALE 1"=200'  | SHEET 9 OF 38     |   |      |
| DATE 9/30/2022   |                   |   |      |





**LONGITUDINAL SECTION A-A**  
SCALE H: 1"=50' V: 1"=10'



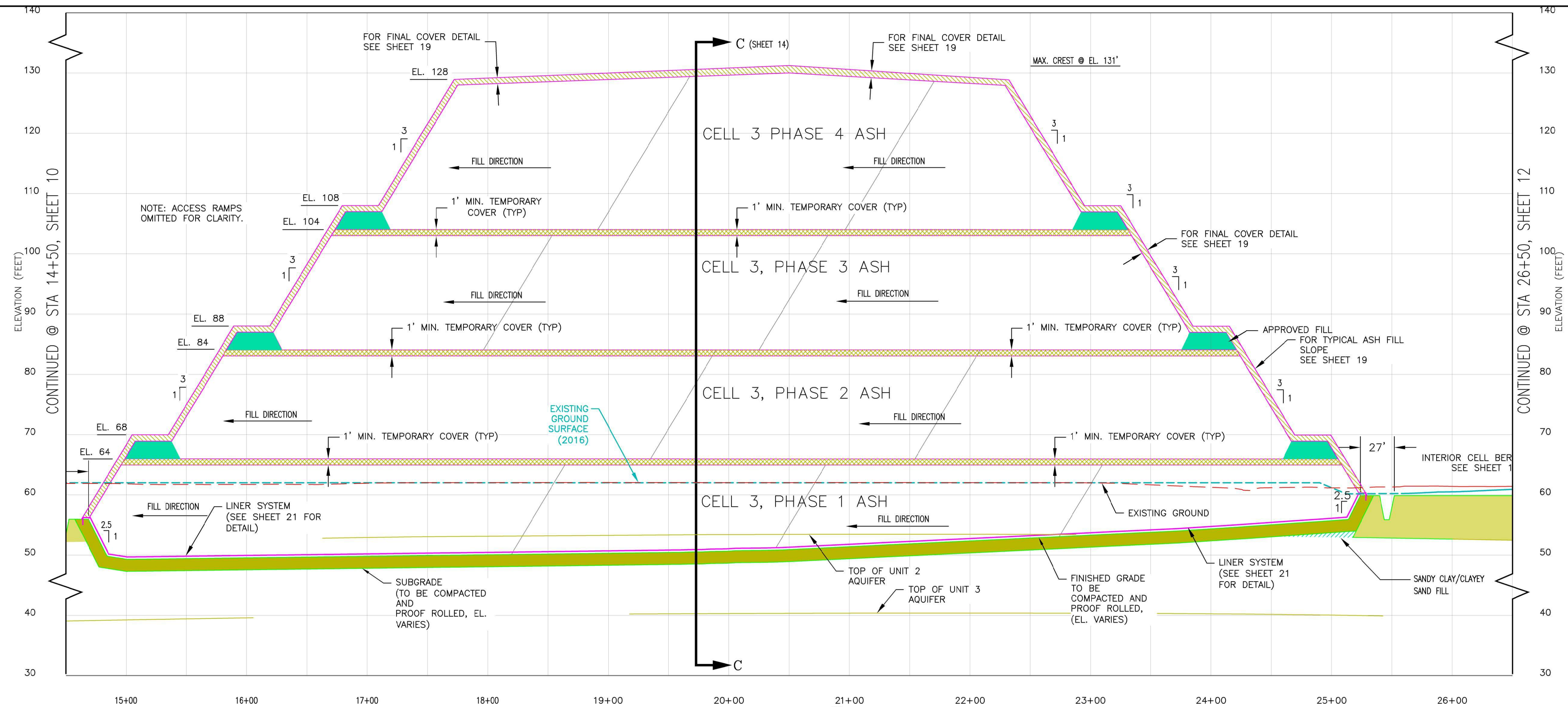
- NOTES:**
1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
  2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
  3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM A SURVEY COMPLETED IN 2010.

- REFERENCES:**
1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
  2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

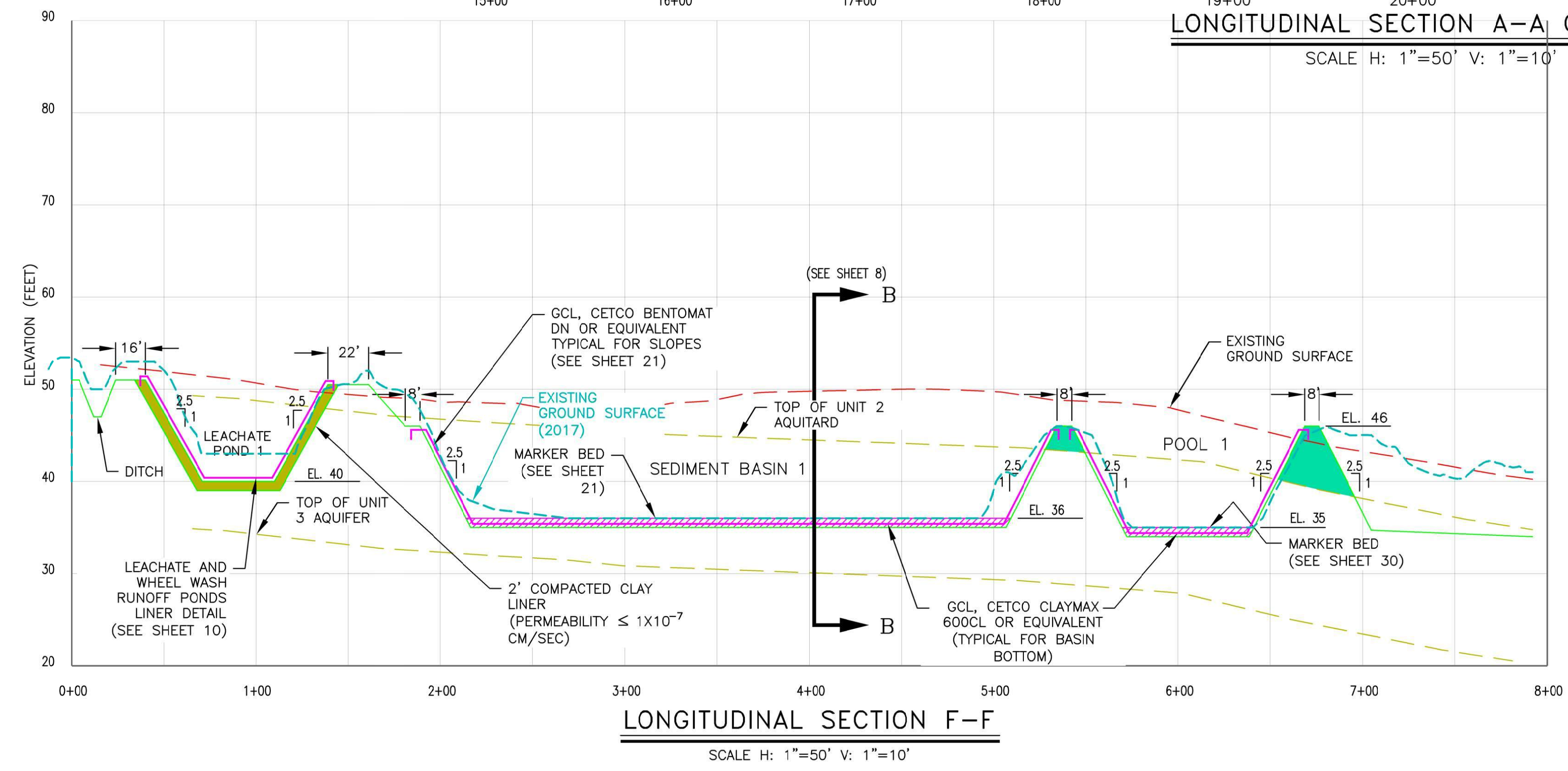


|  |           |   |    |
|--|-----------|---|----|
| LONGITUDINAL & TRAVERSE SECTIONS   |           |   |    |
| <b>PERMIT DRAWINGS</b>   |           |   |    |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |    |
| <b>GEI</b> Consultants   |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| <small>(404) 592-0050<br/>https://www.geiconsultants.com/</small>  |           |   |    |
| PROJ. NO.  | 1702944   | DWG.  | 10 |
| SCALE  | SEE ABOVE | SHEET 10 OF 38  |    |
| DATE   | 9/30/2022 |   |    |

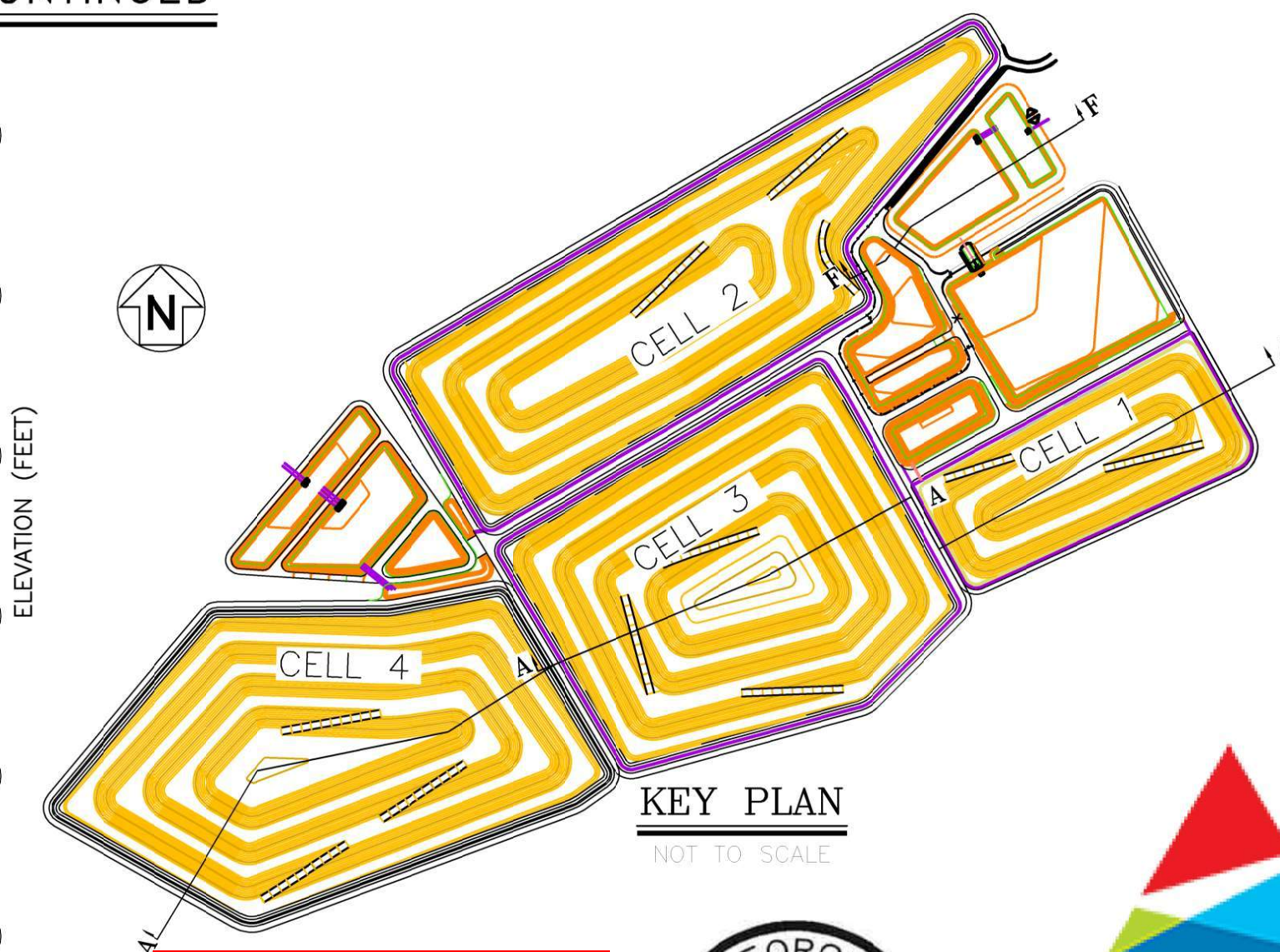




LONGITUDINAL SECTION A-A CONTINUED  
SCALE H: 1"=50' V: 1"=10'



LONGITUDINAL SECTION F-F  
SCALE H: 1"=50' V: 1"=10'



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION  
**Approved**  
Solid Waste Management Program  
Approved By: Keith Stevens

REGISTERED  
No. PE041928  
PROFESSIONAL  
ENGINEER  
JOHN MATHEW THOMAS  
9/30/2022

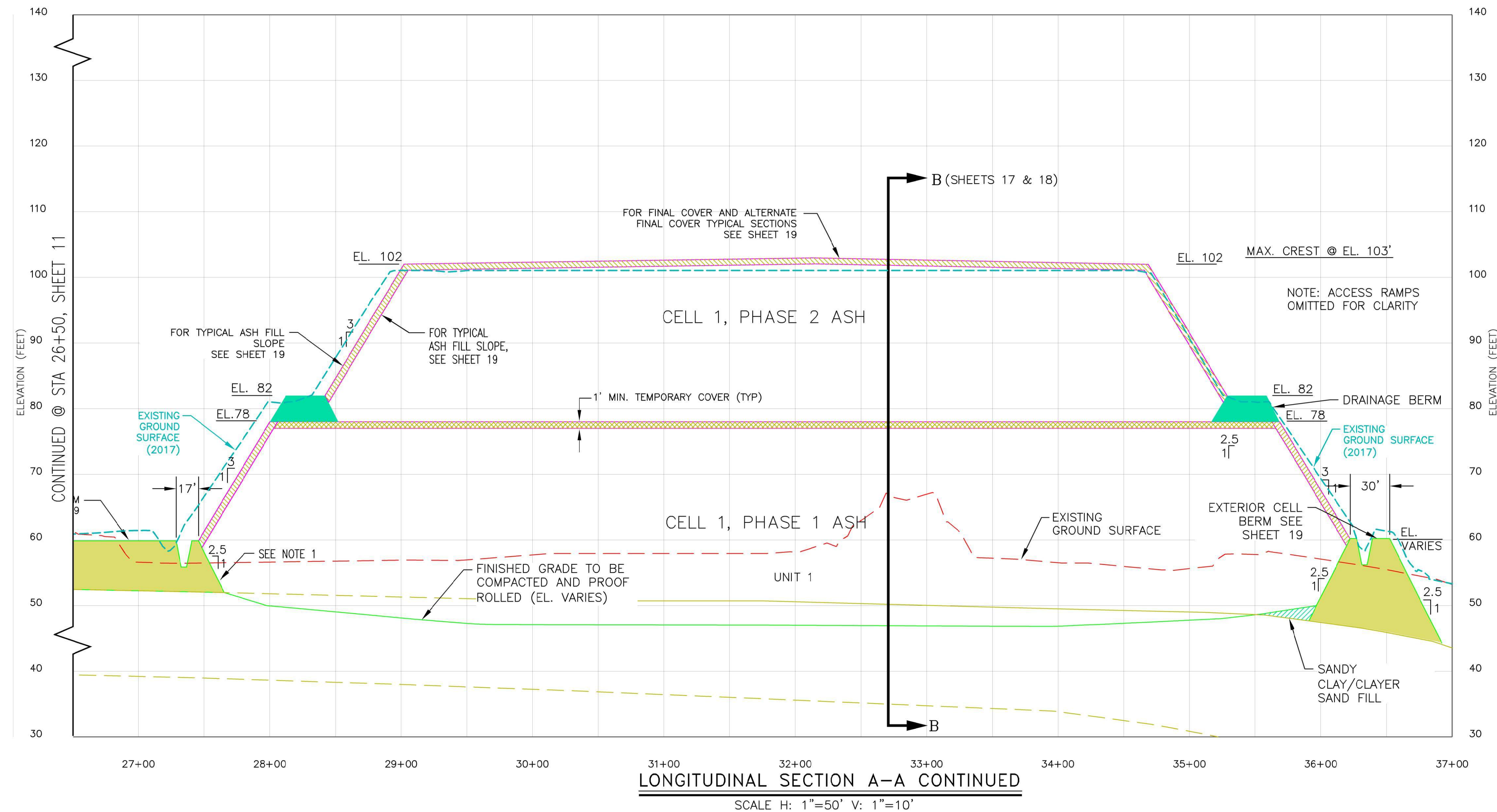


- NOTES:**
1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
  2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
  3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM LIDAR DATA COMPLETED IN 2010.

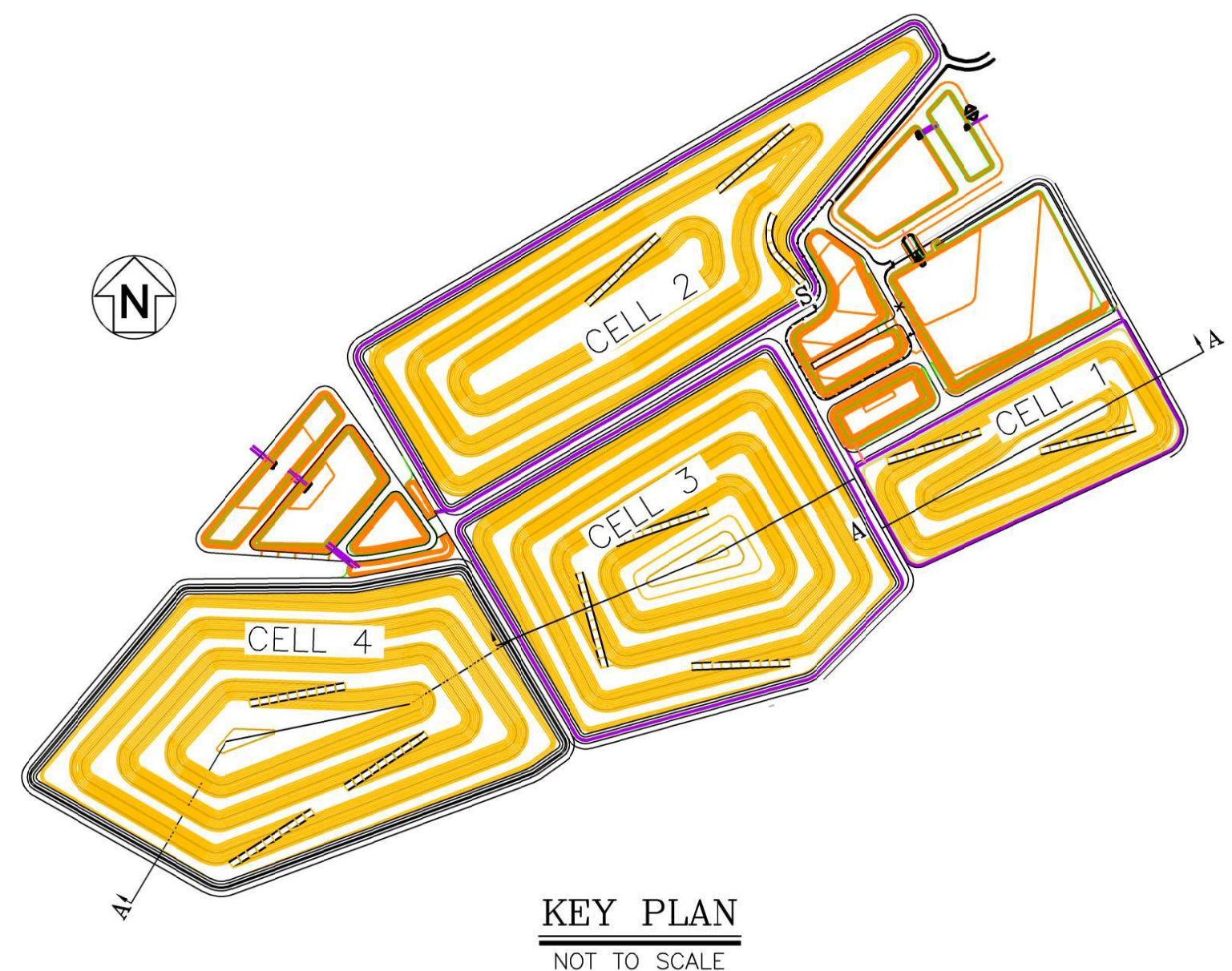
- REFERENCES:**
1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
  2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

|   |           |   |          |
|---|-----------|---|----------|
| LONGITUDINAL & TRAVERSE SECTIONS                                  |           |   |          |
| <b>PERMIT DRAWINGS</b>  |           |   |          |
| GEORGIA POWER COMPANY   |           |   |          |
| PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)                    |           |   |          |
| EXISTING LANDFILL NO. 4   |           |   |          |
| EFFINGHAM, GEORGIA  |           |   |          |
| <b>GEI</b> Consultants  |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |          |
| <small>(404) 592-0050<br/>https://www.geiconsultants.com/</small> |           |   |          |
| PROJ. NO.   | 1702944   | DWG.  | 11       |
| SCALE   | SEE ABOVE |   |          |
| DATE  | 9/30/2022 | SHEET   | 11 OF 38 |





LONGITUDINAL SECTION A-A CONTINUED  
SCALE H: 1"=50' V: 1"=10'



**NOTES:**

1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYER SAND FILL OR NATURAL, IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
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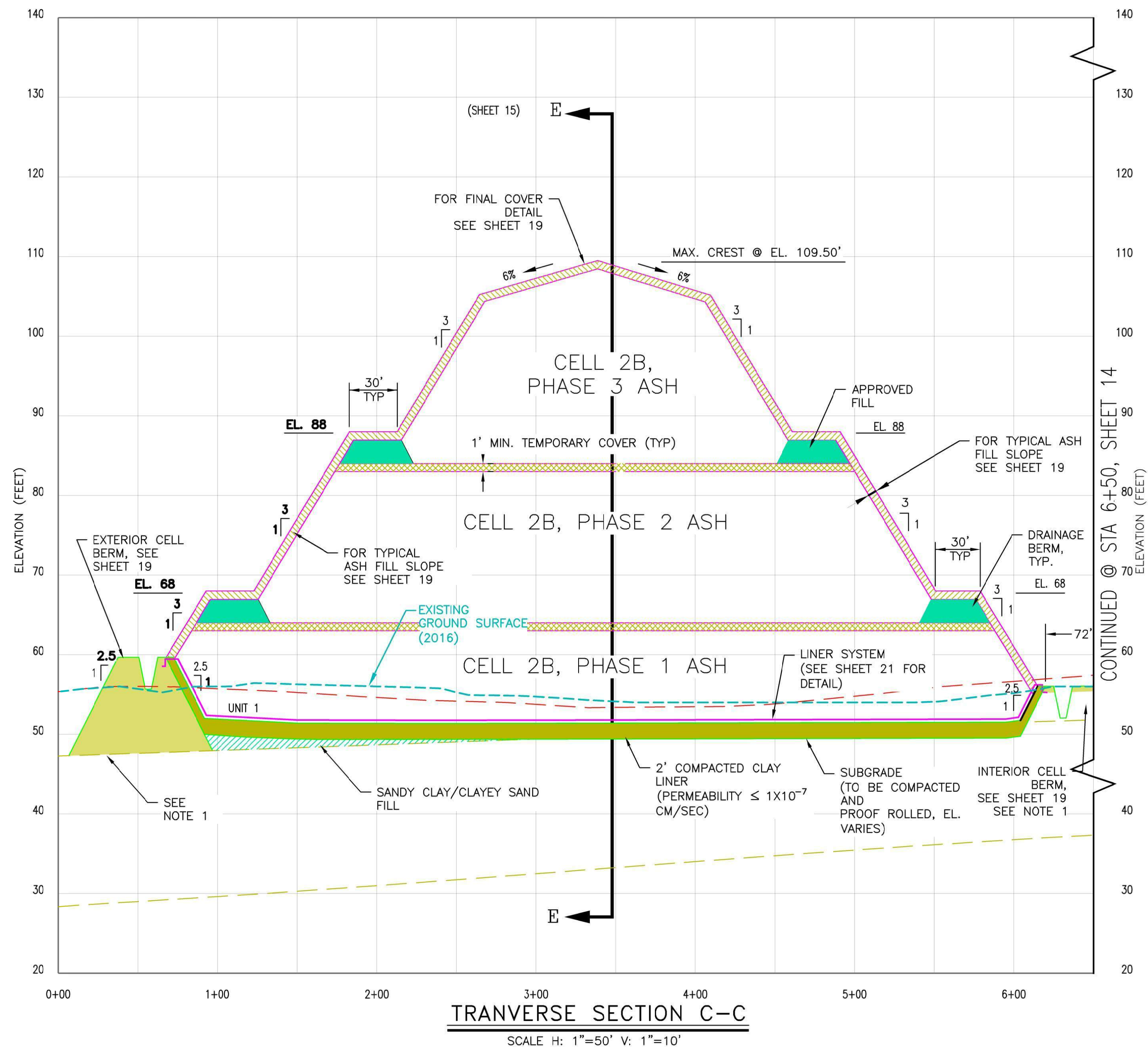
**REFERENCES:**

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



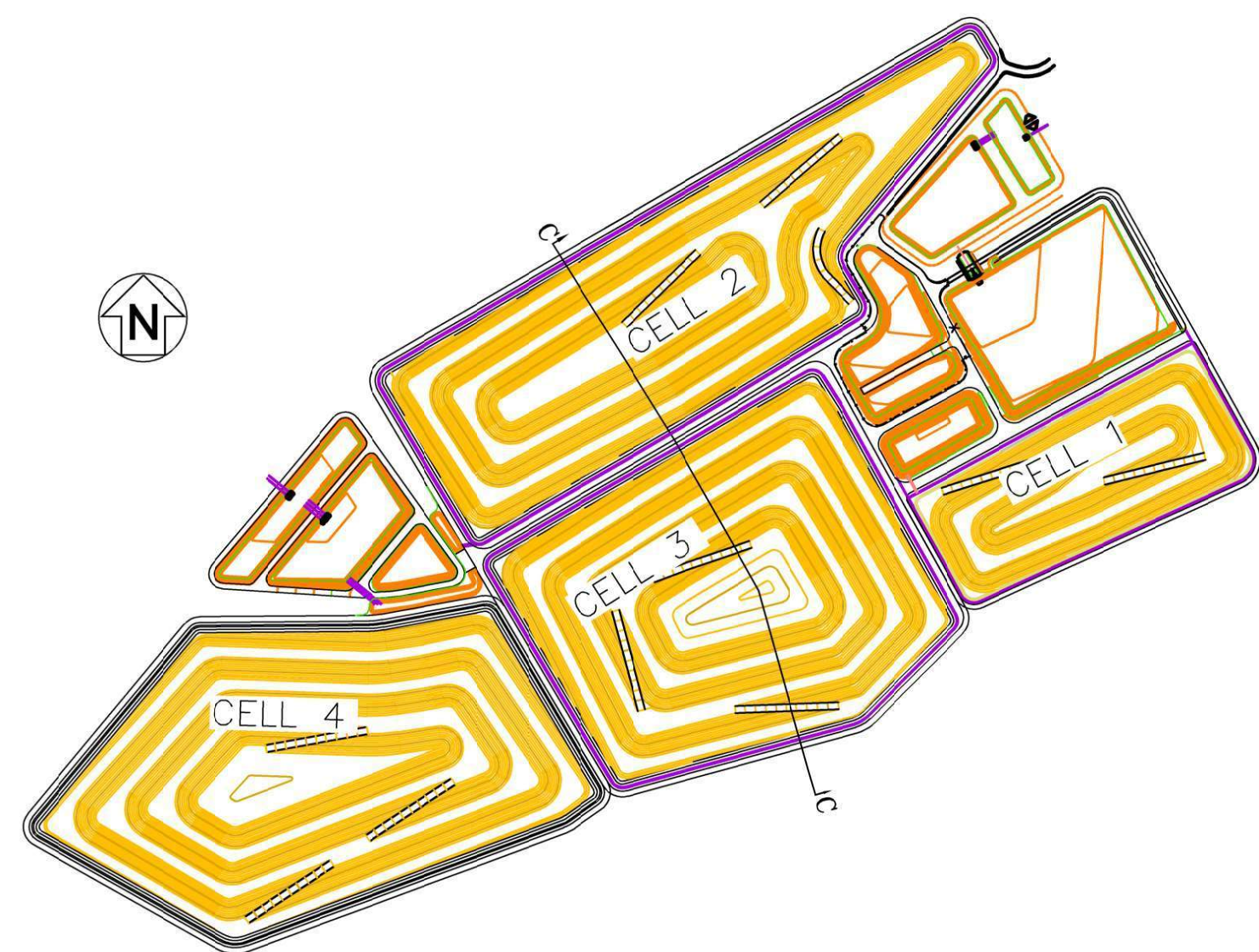
|  |           |   |    |
|--|-----------|---|----|
| LONGITUDINAL & TRAVERSE SECTIONS   |           |   |    |
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |    |
|  |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>  |           |   |    |
| PROJ. NO.  | 1702944   | DWG.  | 12 |
| SCALE  | SEE ABOVE | SHEET 12 OF 38  |    |
| DATE   | 9/30/2022 |   |    |





TRANSVERSE SECTION C-C  
SCALE H: 1"=50' V: 1"=10'

CONTINUED @ STA 6+50, SHEET 14



KEY PLAN  
NOT TO SCALE

**NOTES:**

1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM LIDAR DATA COMPLETED IN 2010.

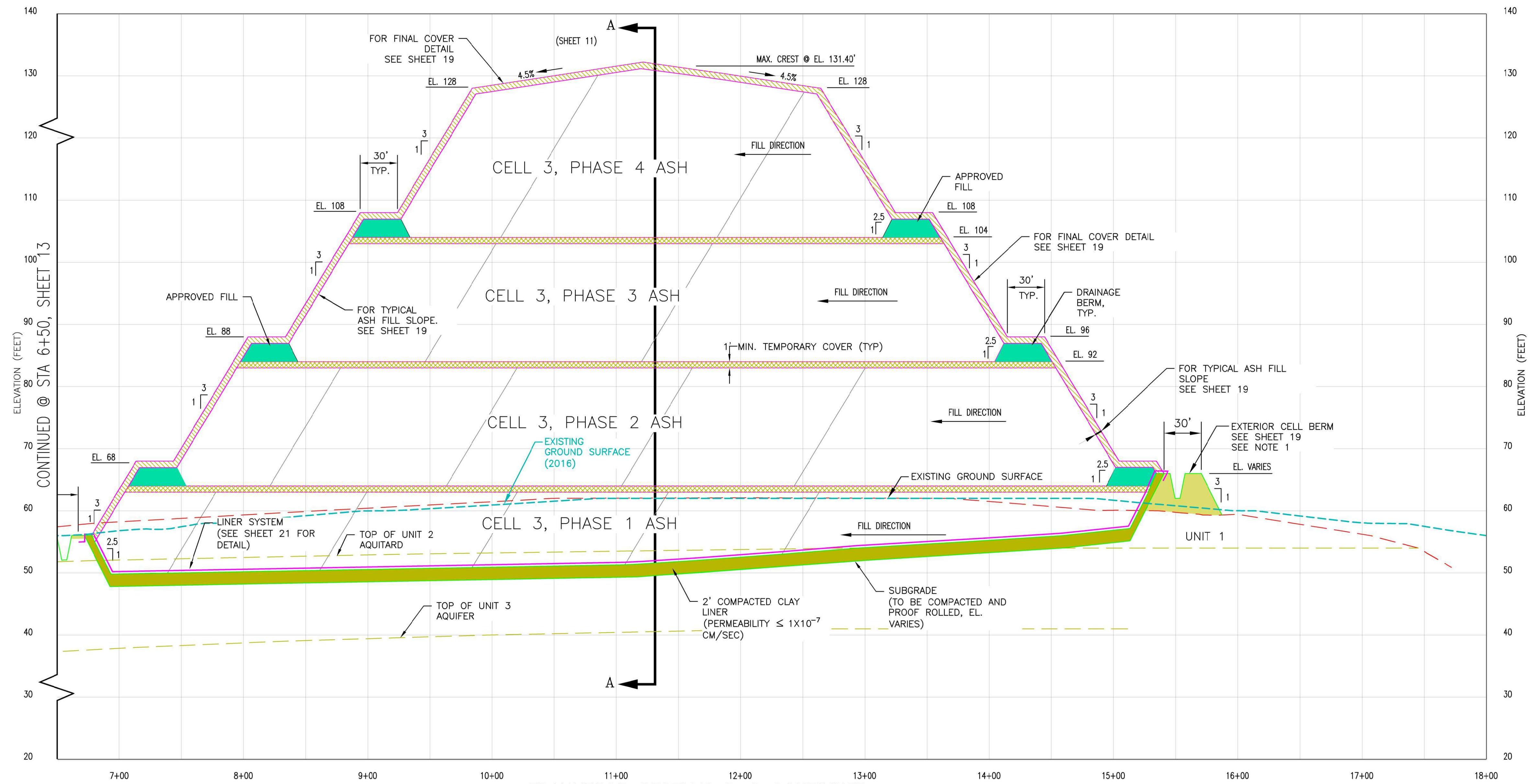
**REFERENCES:**

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



|  |           |   |    |
|--|-----------|---|----|
| LONGITUDINAL & TRAVERSE SECTIONS   |           |   |    |
| <b>PERMIT DRAWINGS</b>   |           |   |    |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |    |
| <b>GEI</b> Consultants   |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
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| PROJ. NO.  | 1702944   | DWG.  | 13 |
| SCALE  | SEE ABOVE | SHEET 13 OF 38  |    |
| DATE   | 9/30/2022 |   |    |





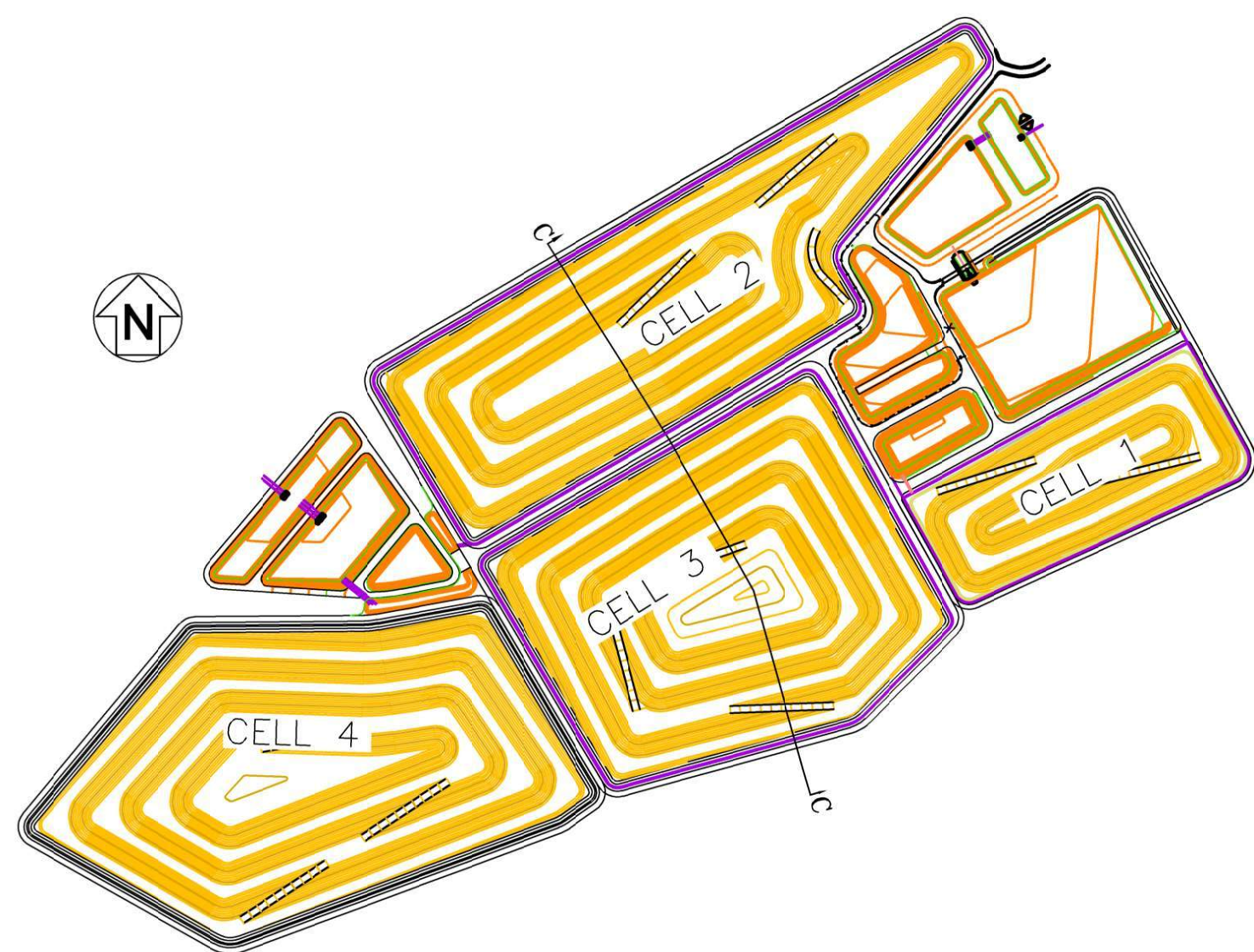
TRANVERSE SECTION C-C CONTINUED  
SCALE H: 1"=50' V: 1"=10'

**NOTES:**

1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM LIDAR DATA COMPLETED IN 2010.

**REFERENCES:**

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

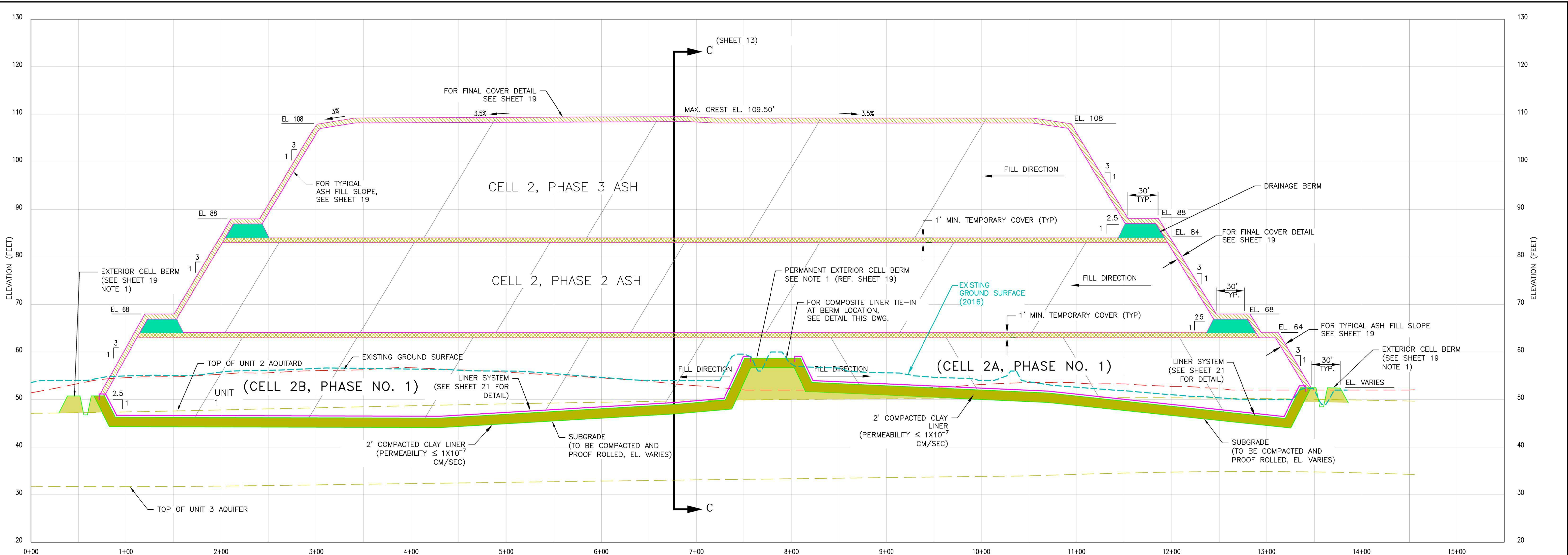


KEY PLAN  
NOT TO SCALE

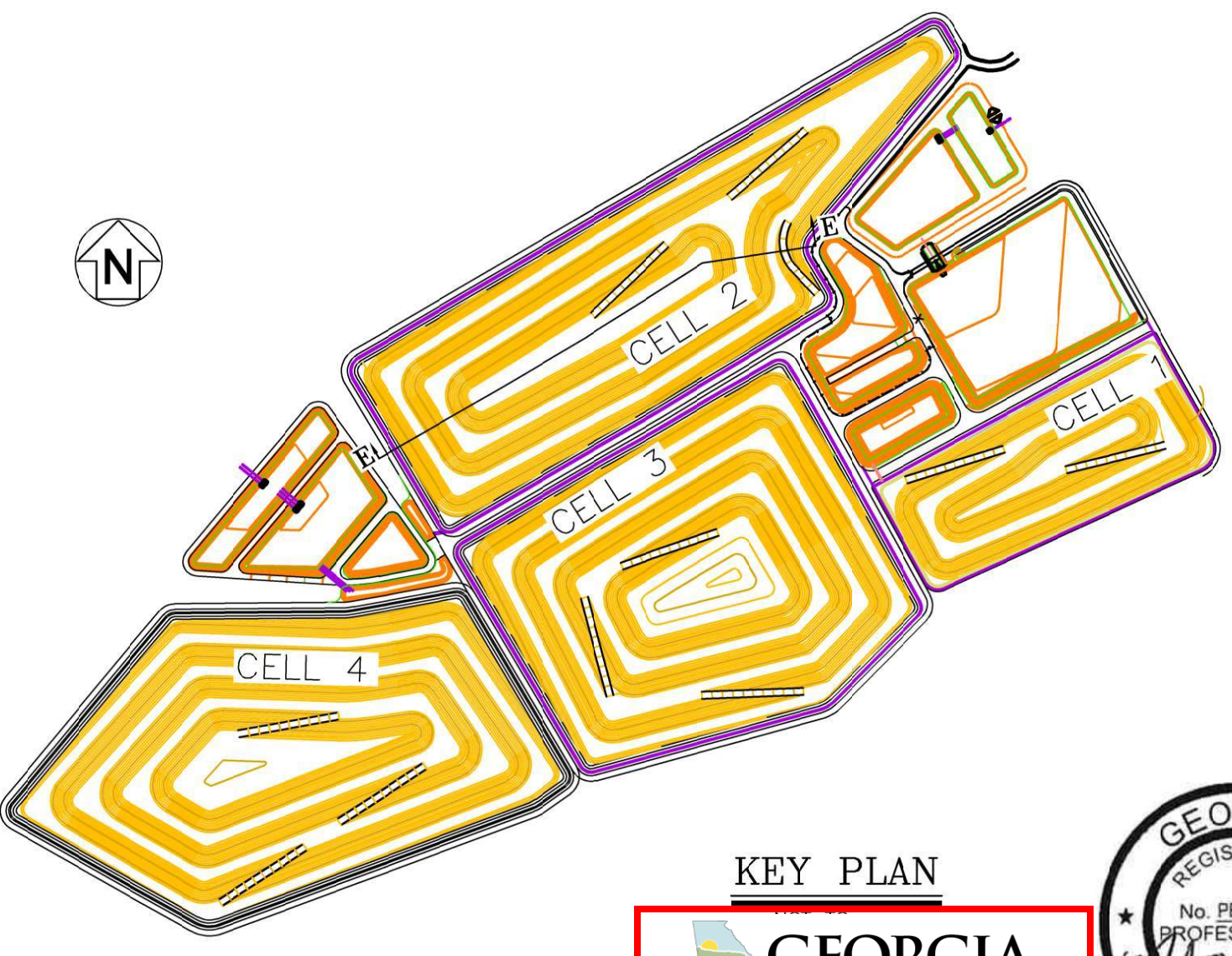
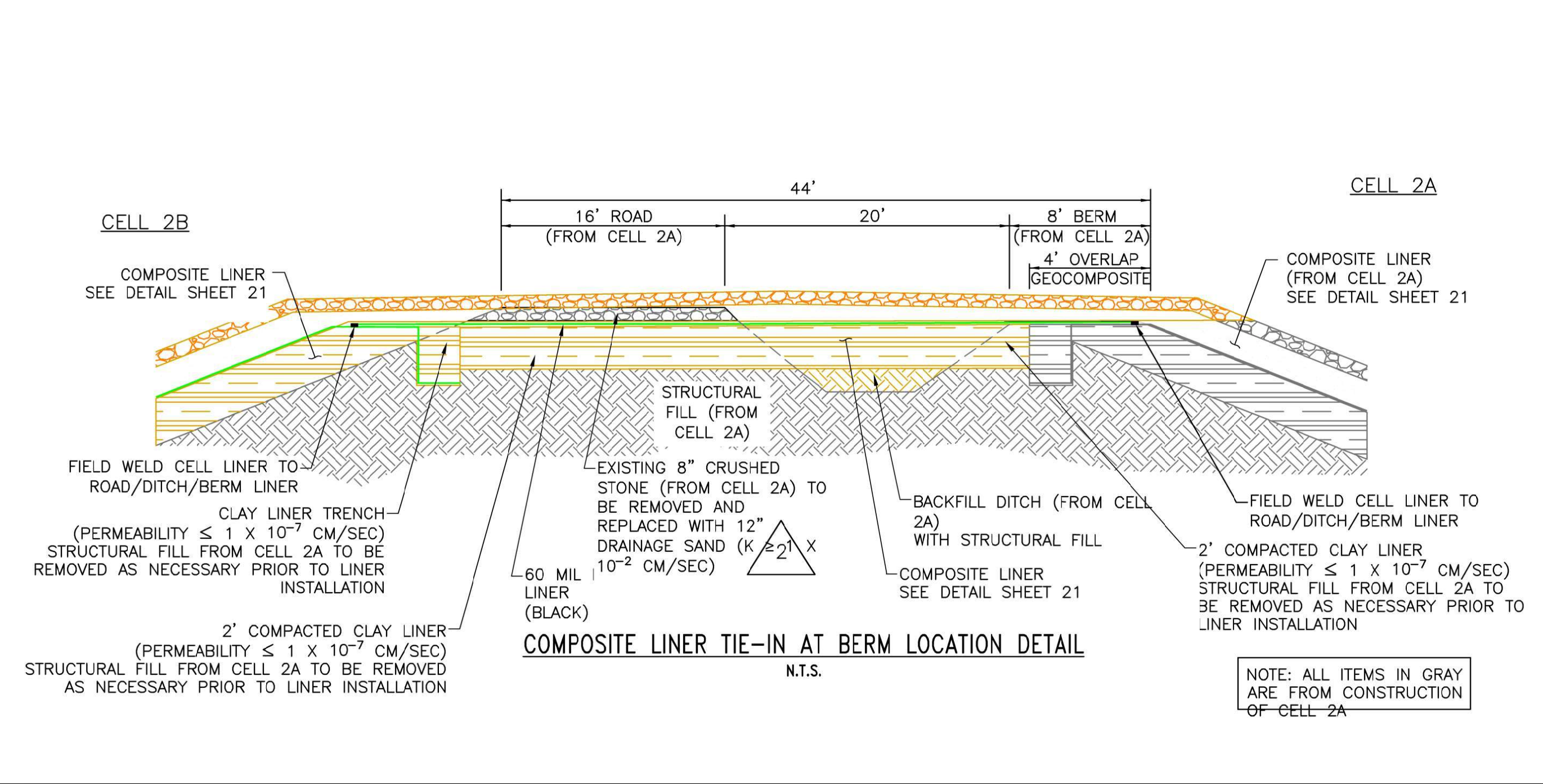


|  |           |   |
|--|-----------|---|
| LONGITUDINAL & TRAVERSE SECTIONS   |           |   |
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |
|   |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>  |           |   |
| PROJ. NO.  | 1702944   | DWG. 14   |
| SCALE  | SEE ABOVE | EDIT  |
| DATE   | 9/30/2022 | SHEET 14 OF 38  |





LONGITUDINAL SECTION E-E  
SCALE H: 1"=50' V: 1"=10'



**NOTES:**

1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM LIDAR DATA COMPLETED IN 2010.

**REFERENCES:**

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

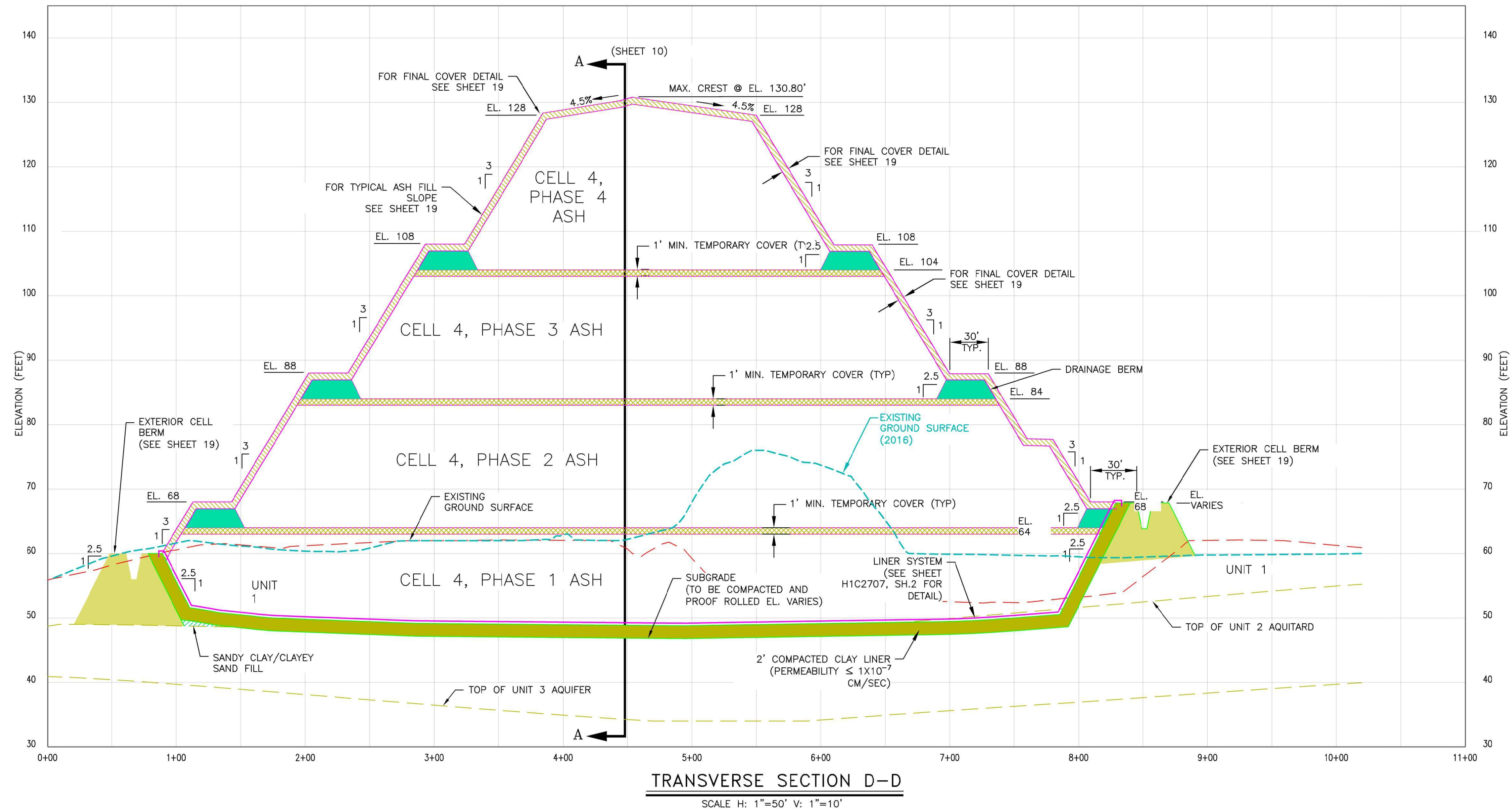
KEY PLAN

**Approved**  
Solid Waste Management Program  
Approved By: Keith Stevens



|   |           |   |    |
|---|-----------|---|----|
| LONGITUDINAL & TRAVERSE SECTIONS                                  |           |   |    |
| <b>PERMIT DRAWINGS</b>  |           |   |    |
| GEORGIA POWER COMPANY   |           |   |    |
| PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)                    |           |   |    |
| EXISTING LANDFILL NO. 4   |           |   |    |
| EFFINGHAM, GEORGIA  |           |   |    |
|   |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| <small>(404) 592-0050<br/>https://www.geiconsultants.com/</small> |           |   |    |
| PROJ. NO.   | 1702944   | DWG.  | 15 |
| SCALE   | SEE ABOVE | SHEET 15 OF 38  |    |
| DATE  | 9/30/2022 |   |    |





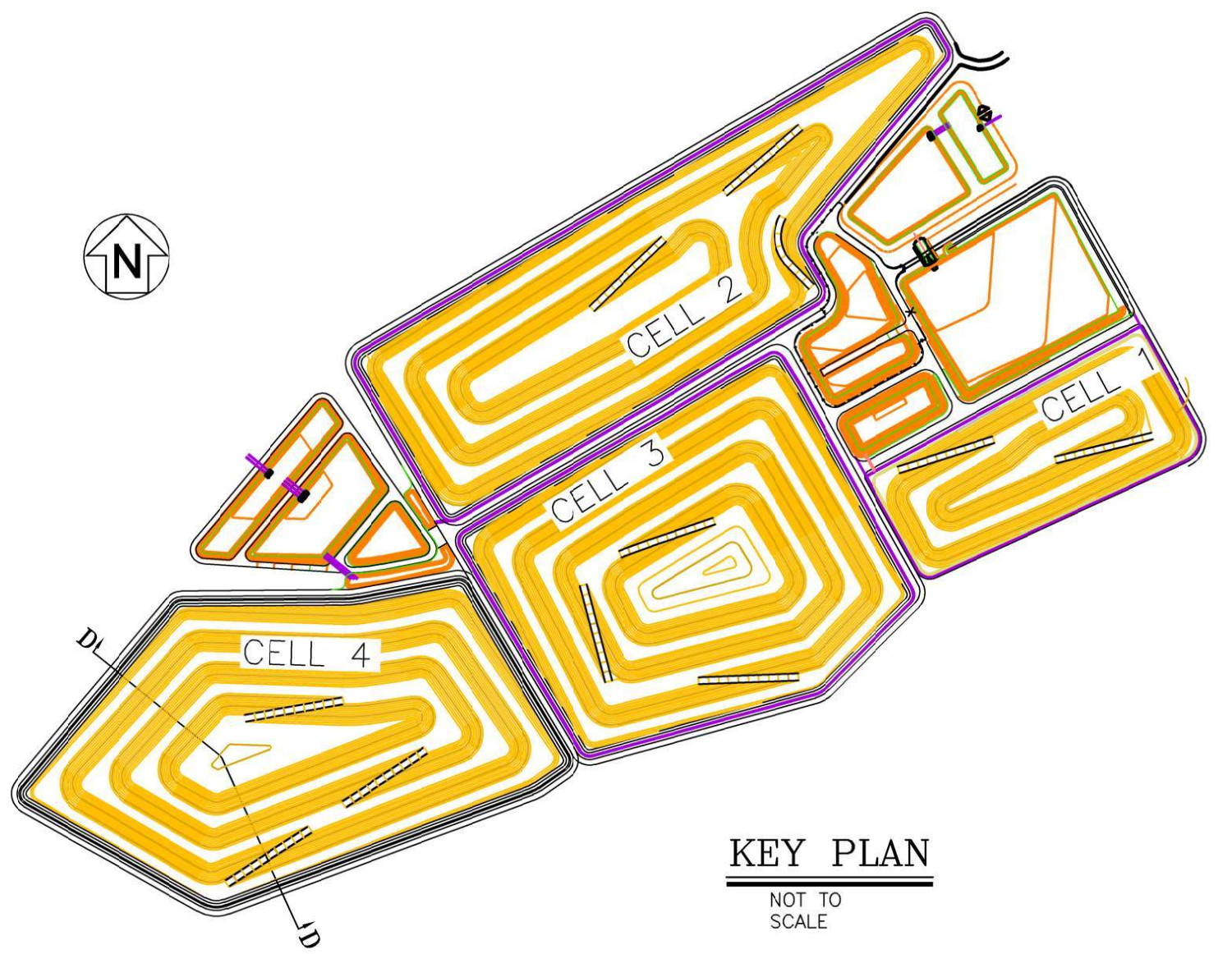
**TRANSVERSE SECTION D-D**  
SCALE H: 1"=50' V: 1"=10'

**NOTES:**

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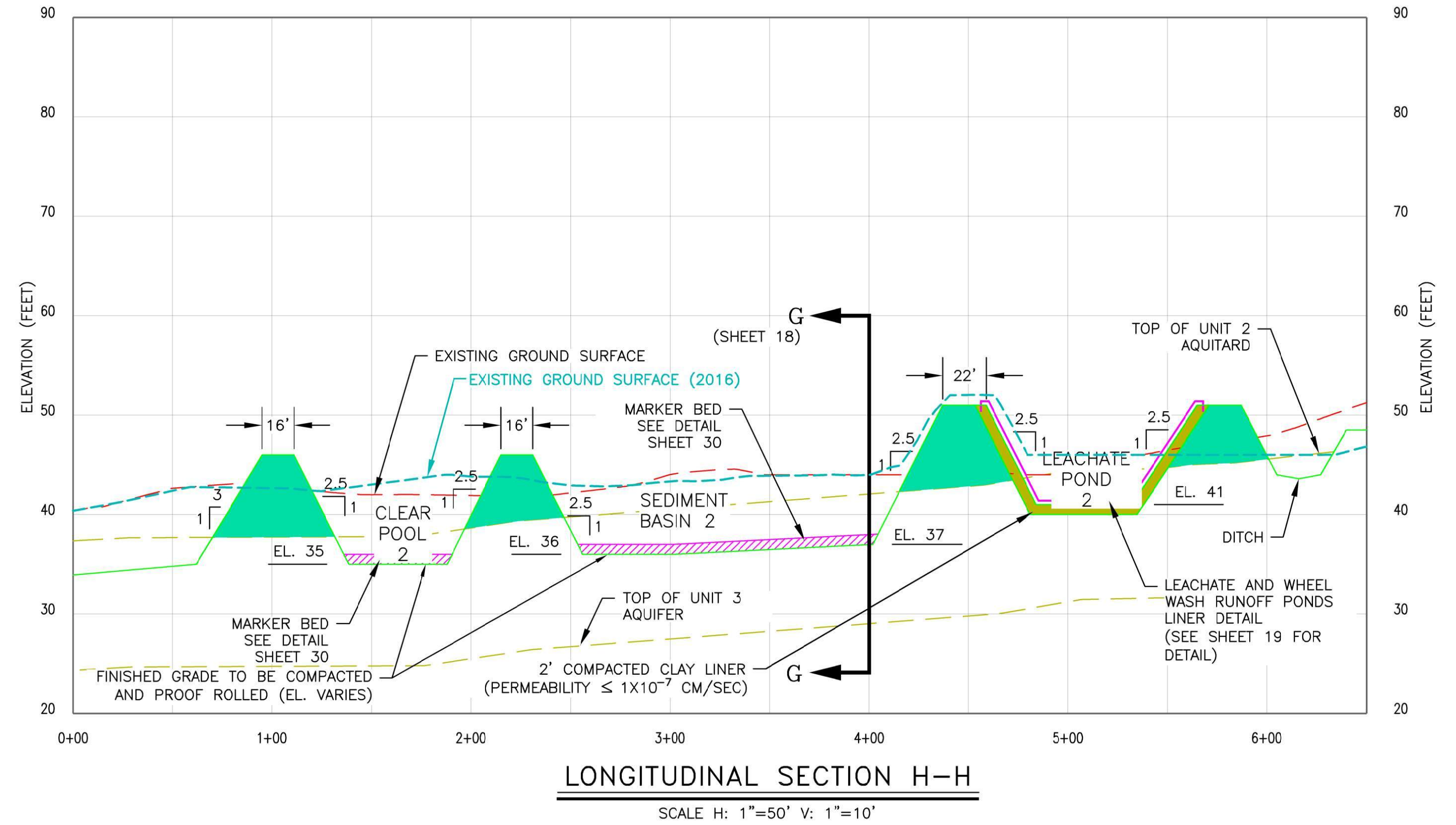
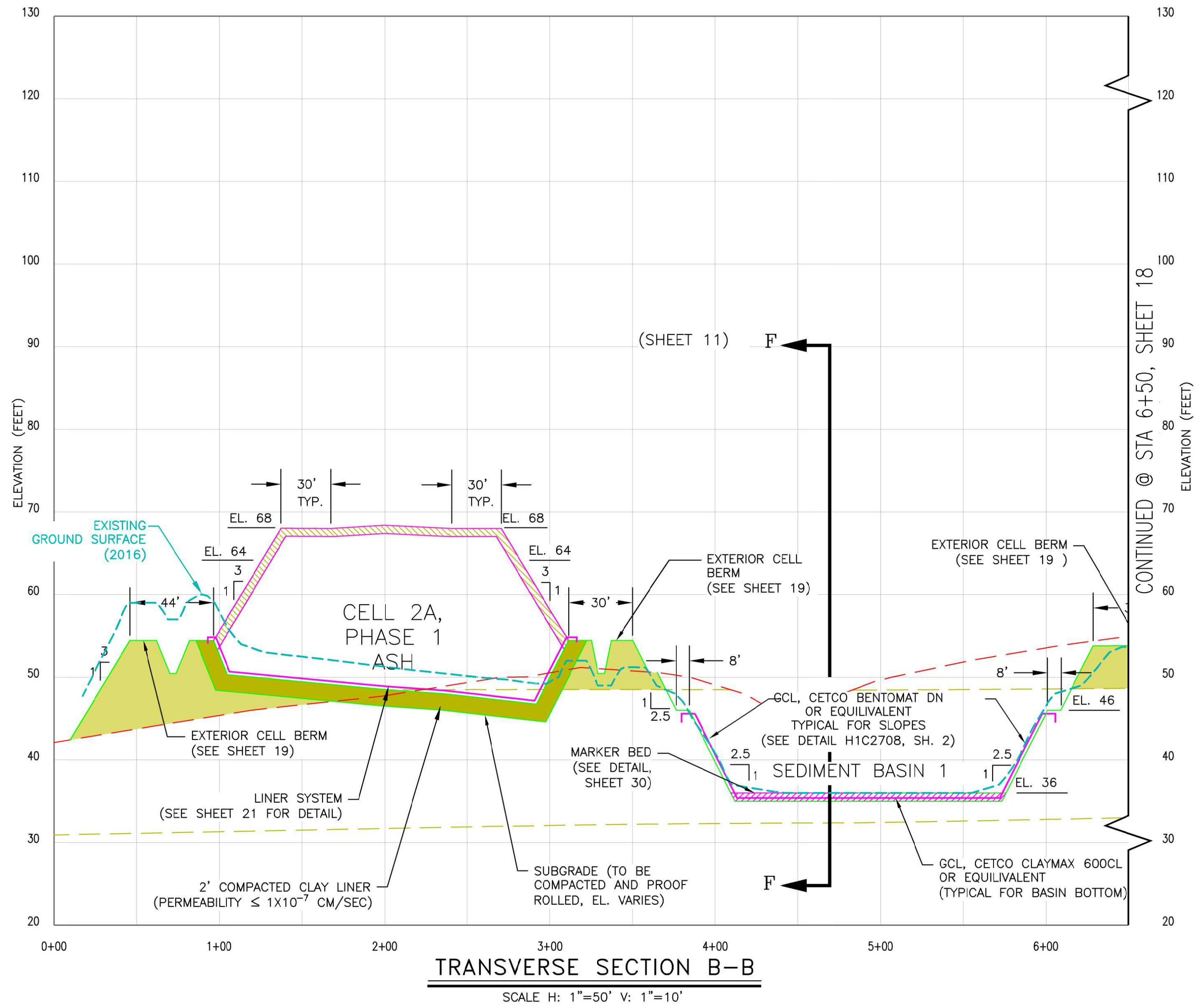
**REFERENCES:**

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



|  |           |   |    |
|--|-----------|---|----|
| LONGITUDINAL & TRAVERSE SECTIONS   |           |   |    |
| <b>PERMIT DRAWINGS</b>   |           |   |    |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |    |
| <b>GEI</b> Consultants   |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| <small>(404) 592-0050<br/><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a></small>          |           |   |    |
| PROJ. NO.  | 1702944   | DWG.  | 16 |
| SCALE  | SEE ABOVE | SHEET 16 OF 38  |    |
| DATE   | 9/30/2022 |   |    |



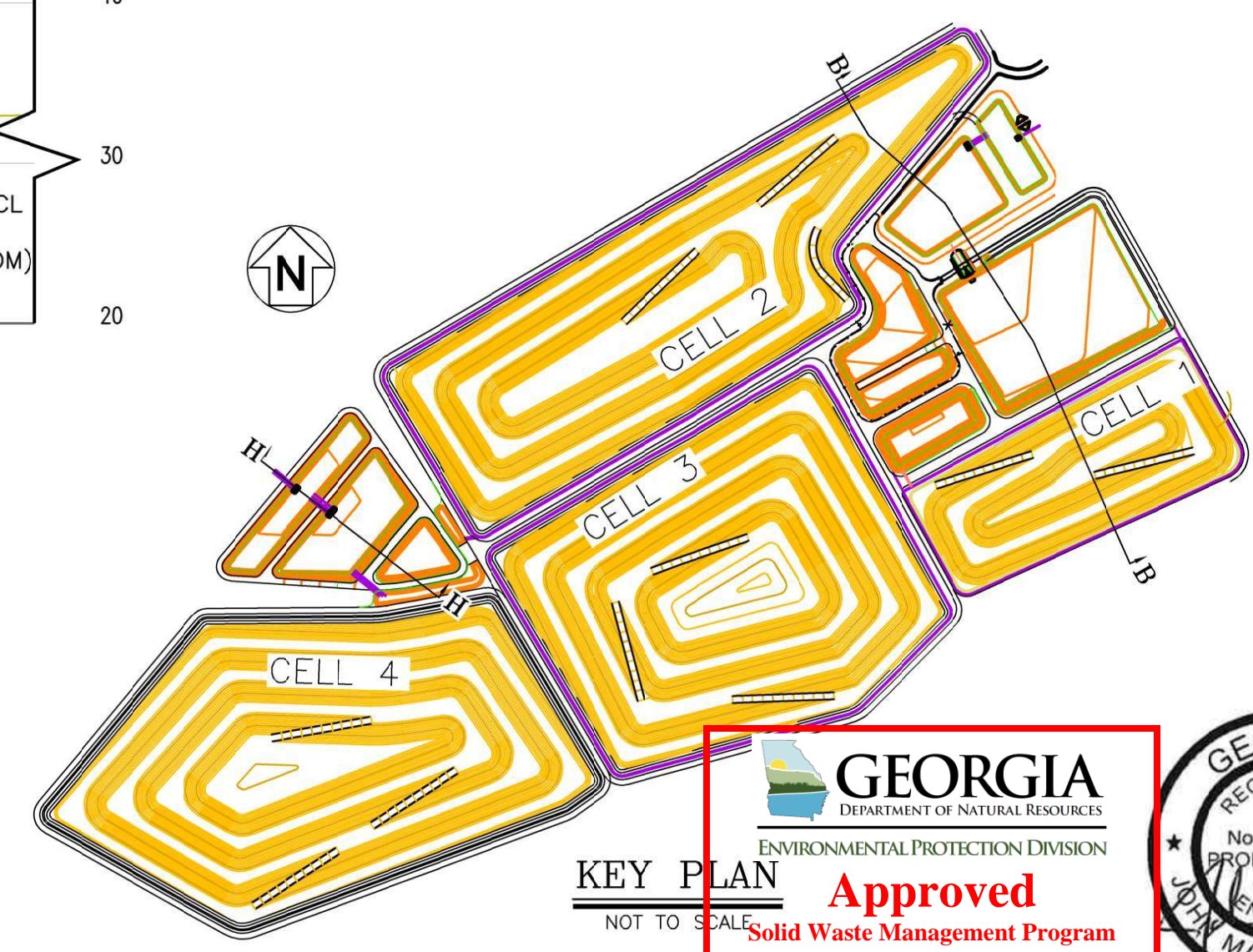


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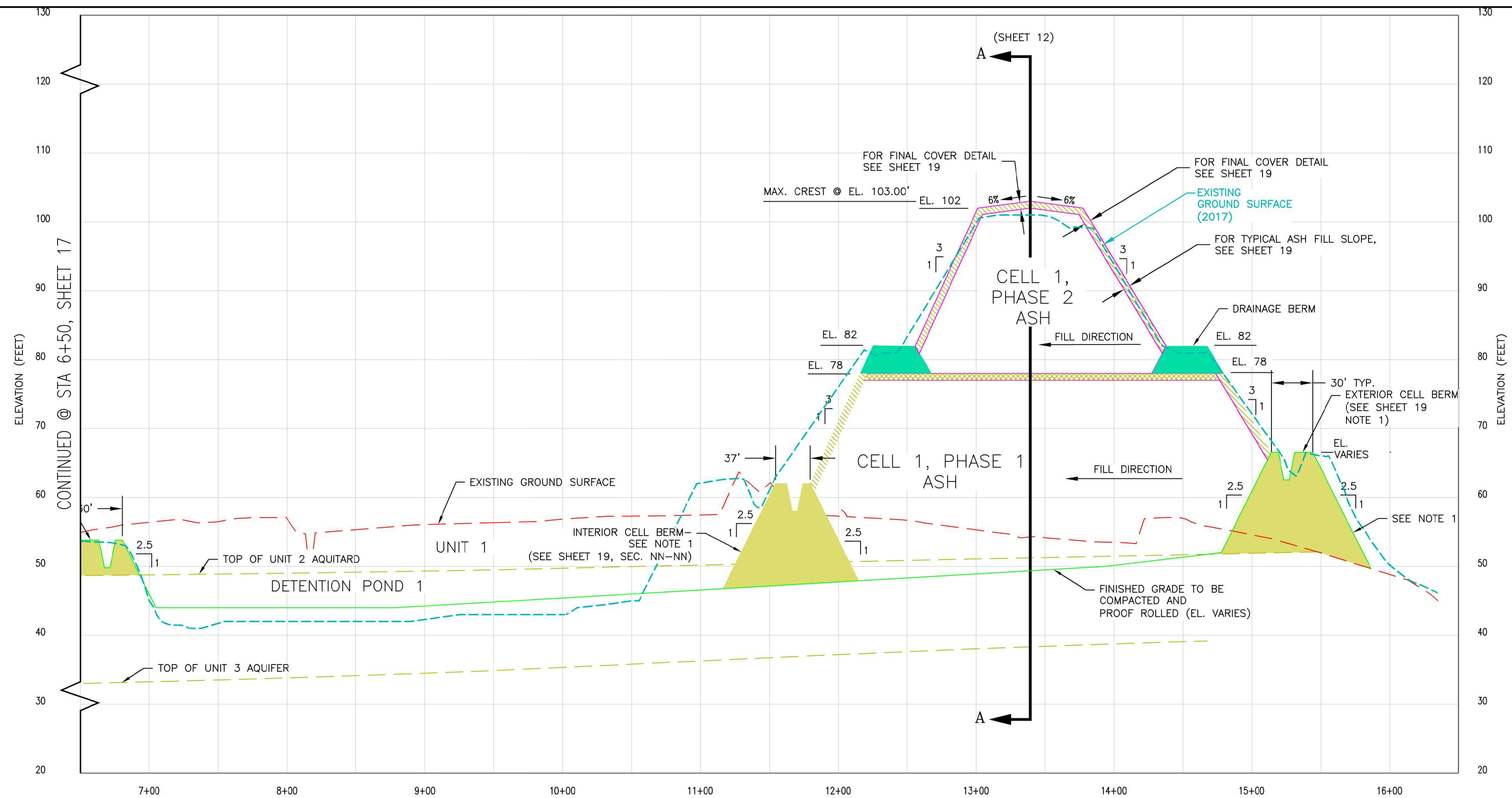
**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION  
**Approved**  
Solid Waste Management Program  
Approved By: Keith Stevens Date: 2022.02.11 11:15:40 AM

**GEORGIA**  
REGISTERED  
No. PE041928  
PROFESSIONAL  
ENGINEER  
JONATHAN MATHIEW TORRES  
9/30/2022



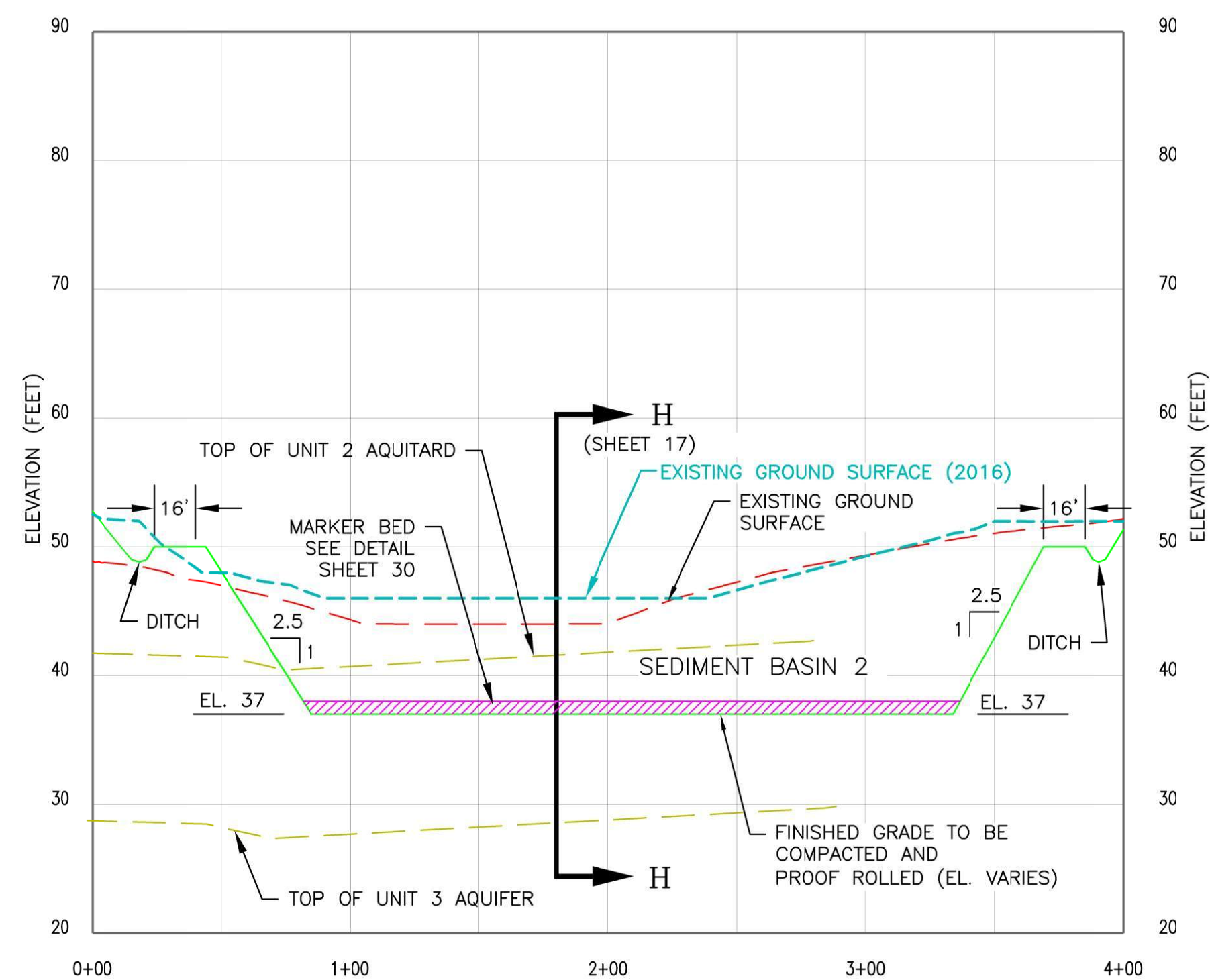
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|--|-----------|---|----|
| LONGITUDINAL & TRAVERSE SECTIONS   |           |   |    |
| <b>PERMIT DRAWINGS</b>   |           |   |    |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |    |
| <b>GEI</b> Consultants   |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| <small>(404) 592-0050<br/>https://www.geiconsultants.com/</small>  |           |   |    |
| PROJ. NO.  | 1702944   | DWG.  | 17 |
| SCALE  | SEE ABOVE | SHEET 17 OF 38  |    |
| DATE   | 9/30/2022 |   |    |





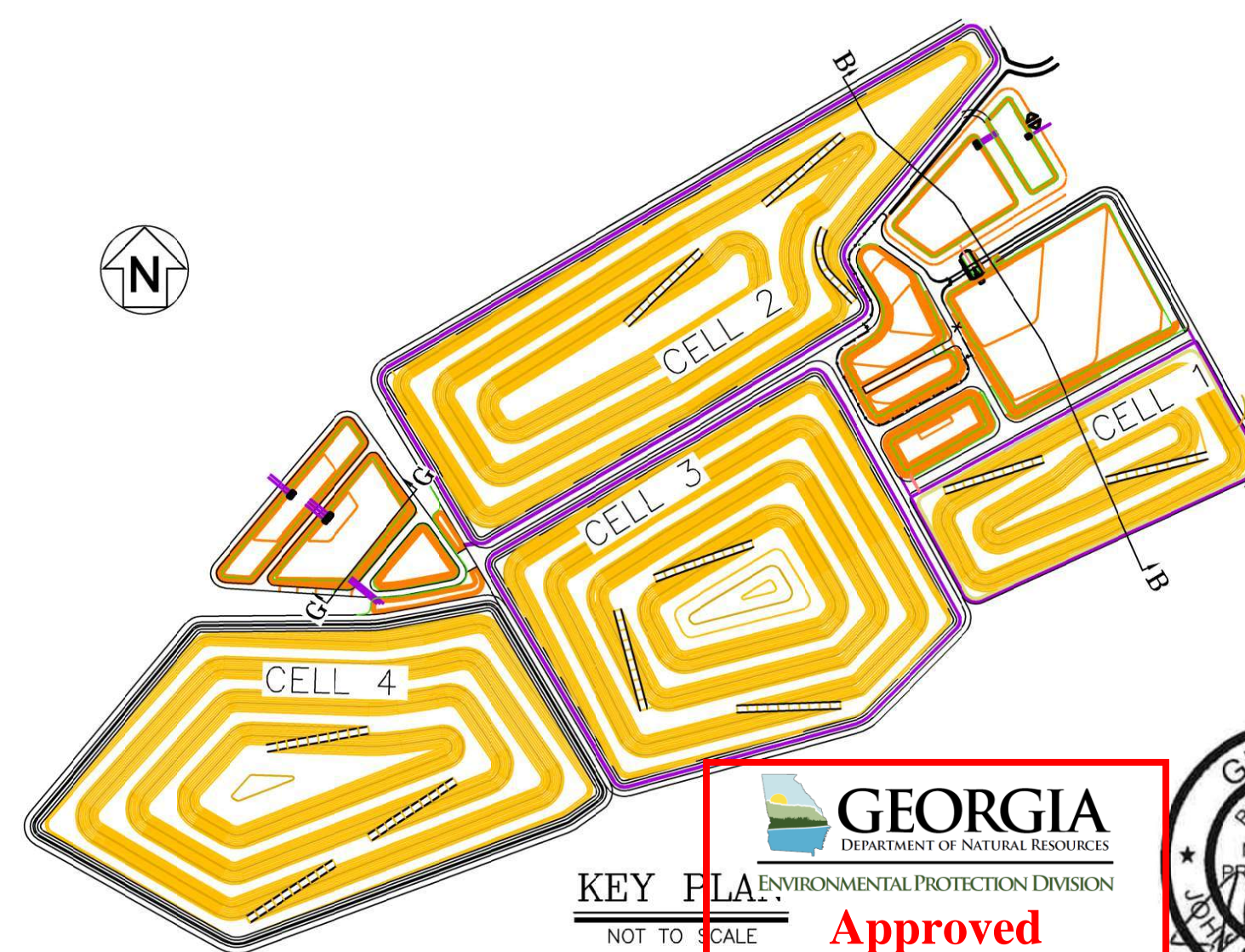
TRANSVERSE SECTION B-B CONTINUED

SCALE H: 1"=50' V: 1"=10'



LONGITUDINAL SECTION G-G

SCALE H: 1"=50' V: 1"=10'



  
 GEORGIA  
 DEPARTMENT OF NATURAL RESOURCES  
 ENVIRONMENTAL PROTECTION DIVISION  
**Approved**  
 Solid Waste Management Program  
 Approved By: Keith Stevens

  
 REGISTERED  
 No. PE041928  
 PROFESSIONAL  
 ENGINEER  
 KEITH STEVENS  
 9/30/2022



**NOTES:**

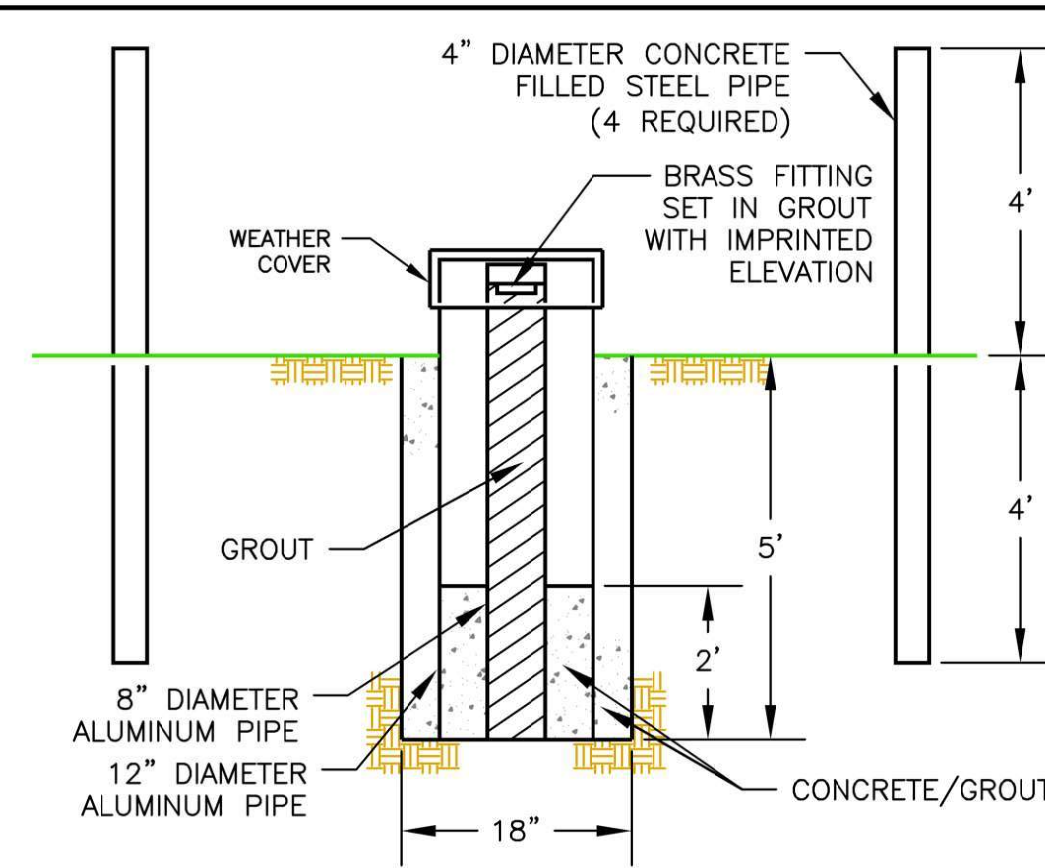
1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
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**REFERENCES:**

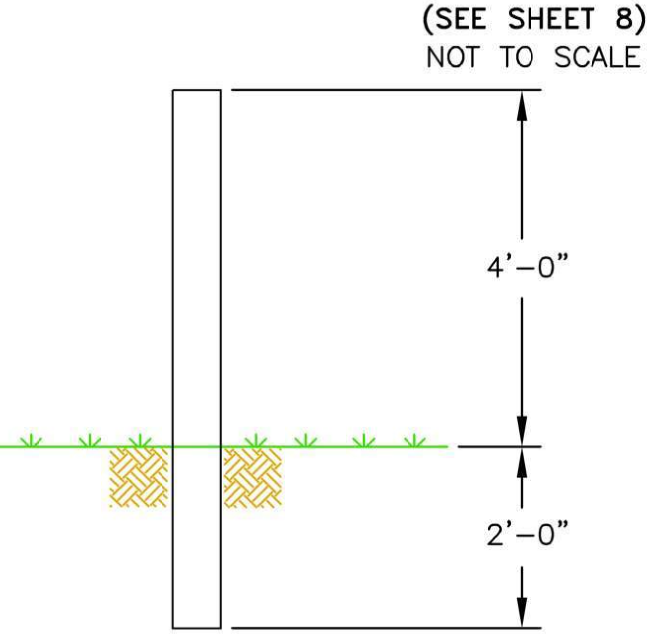
1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

| LONGITUDINAL & TRAVERSE SECTIONS   |                   |   |      |
|--|-------------------|---|------|
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |                   |   |      |
| <br><b>GEI</b> Consultants                                    |                   | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30309 |      |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>  | PROJ. NO. 1702944 | DWG. 18   | EDIT |
| SCALE SEE ABOVE  | SHEET 18 OF 38    |   |      |
| DATE 9/30/2022   |                   |   |      |

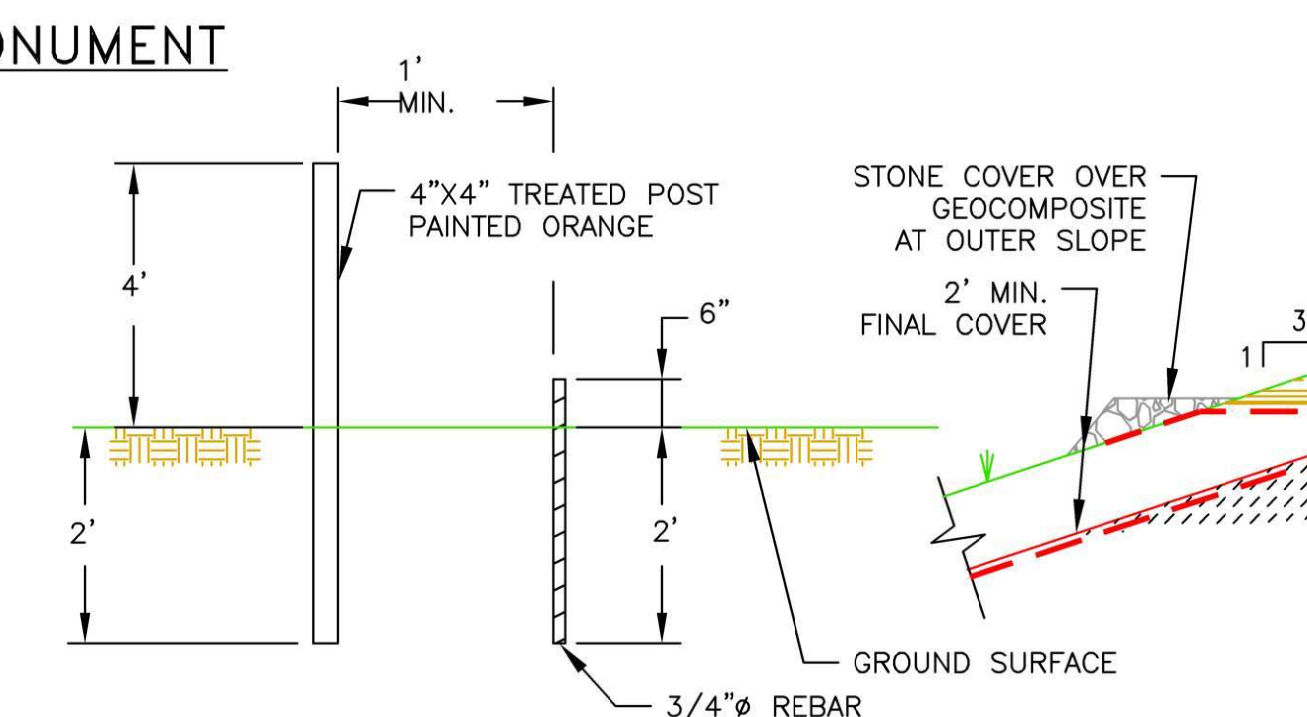




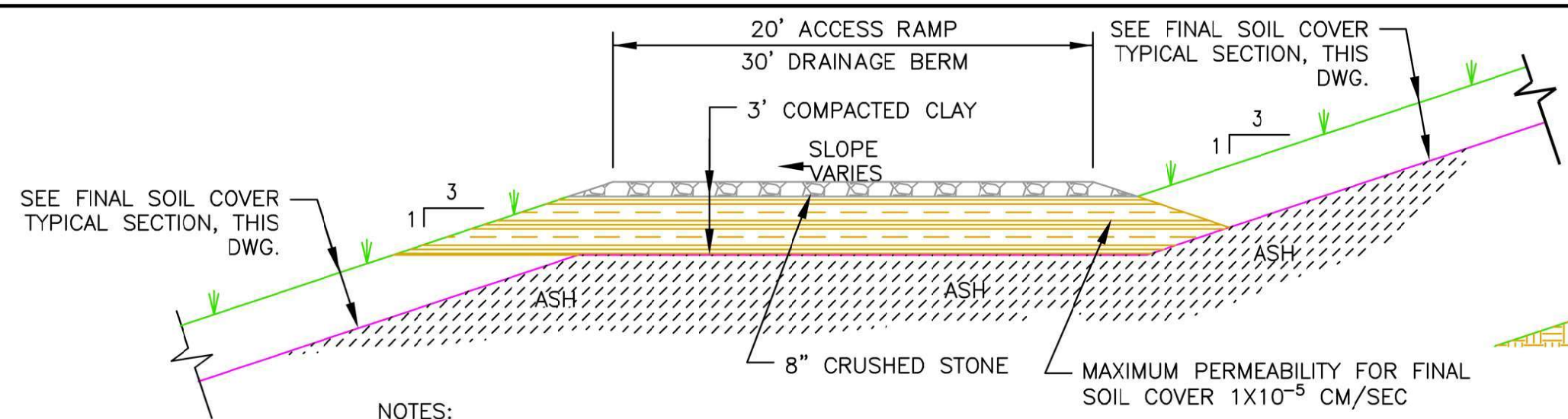
**SURVEY CONTROL MONUMENT**  
(SEE SHEET 8)  
NOT TO SCALE



**TYPICAL MONITORING WELL MARKER**  
(SEE SHEET 2)  
NOT TO SCALE

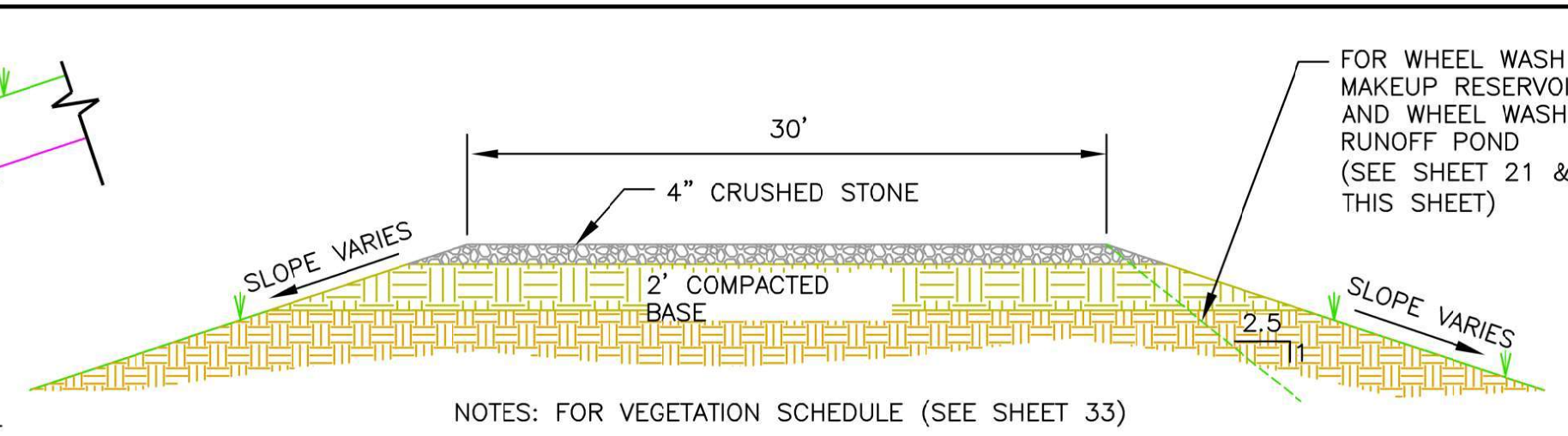


**TYPICAL WASTE MANAGEMENT BOUNDARY AND BUFFER ZONE PIN AND MARKER DETAIL**  
(SEE SHEET 2)  
NOT TO SCALE



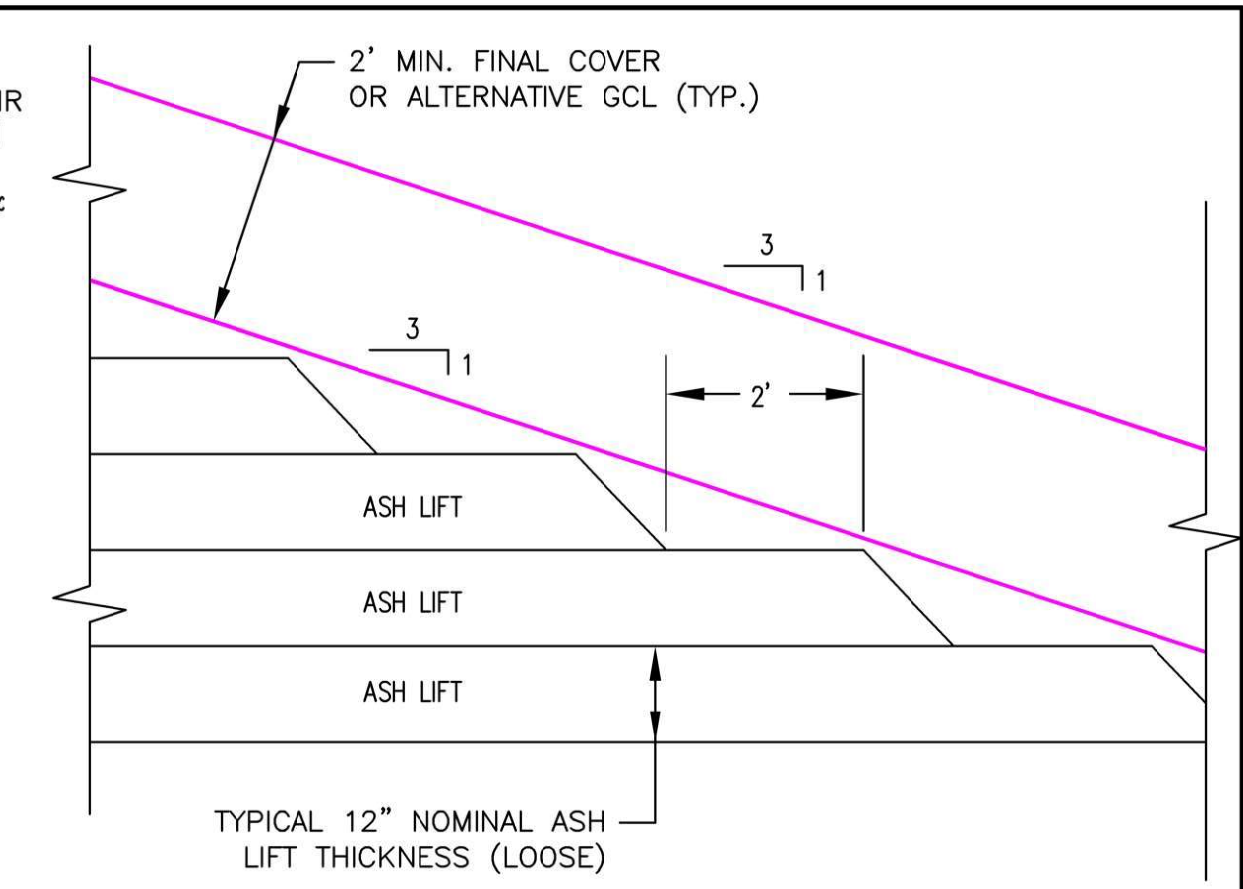
**SECTION T-T  
TYPICAL FINAL ACCESS RAMP &  
DRAINAGE BERM - CELL 1**  
(SEE SHEET 8)  
NOT TO SCALE

NOTES:  
1. 36" TO BE COMPACTED.  
2. FOR VEGETATION SCHEDULE (SEE SHEET 33)



**SECTION M-M  
TYPICAL ACCESS ROAD**  
(SEE SHEETS 6 & 7)  
NOT TO SCALE

NOTES: FOR VEGETATION SCHEDULE (SEE SHEET 33)



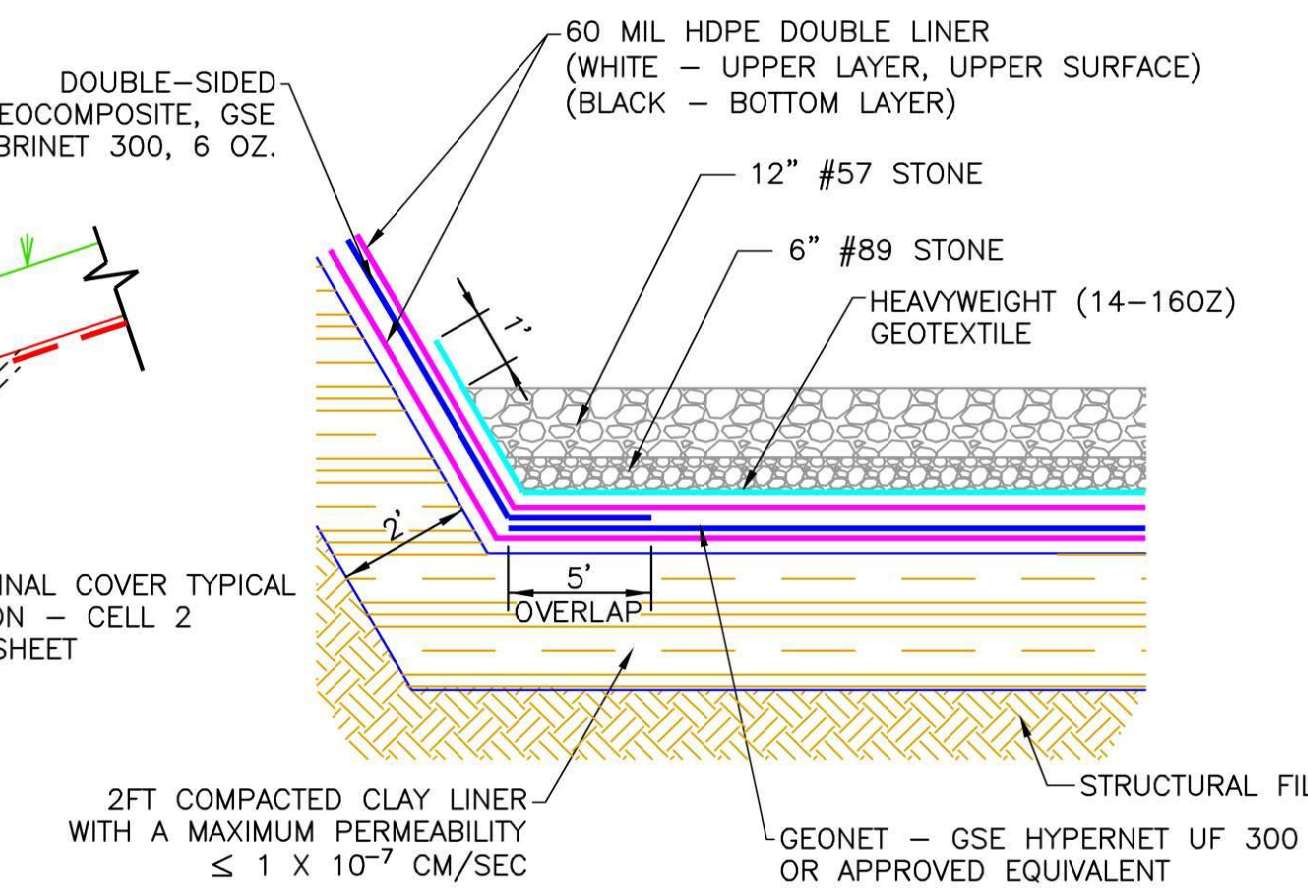
**TYPICAL ASH FILL SLOPE**  
(SEE SHEETS 10 & 11)  
NOT TO SCALE

NOTE: ASH SLOPE SURFACE TO BE STEPPED AS SHOWN OR SURFACE ROUGHENED TO MINIMIZE EROSION



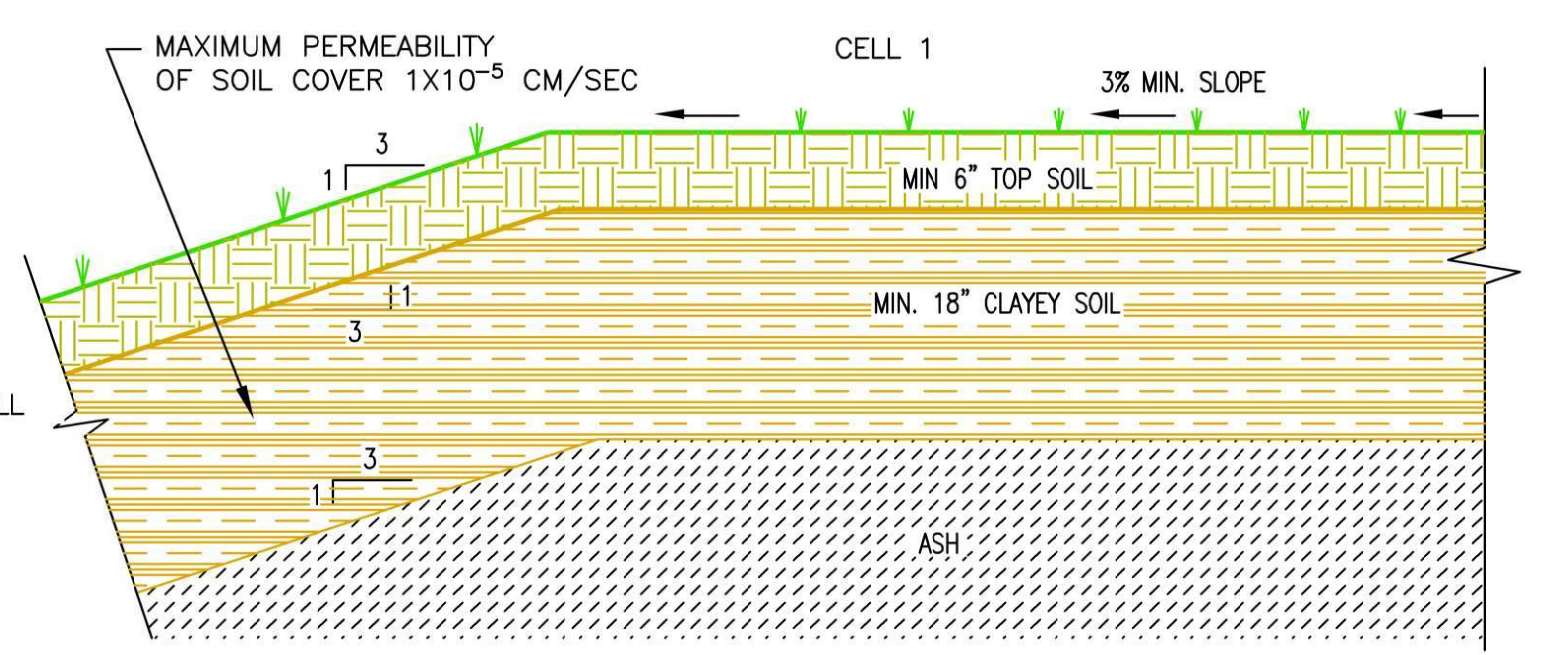
**SECTION T-T  
TYPICAL FINAL ACCESS RAMP &  
DRAINAGE BERM - CELLS 2, 3, & 4**  
(SEE SHEET 8)  
NOT TO SCALE

NOTES:  
1. FIRST 6" OF CLAY TO BE PLACED CAREFULLY TO PROTECT GCL. TOP 30" TO BE COMPACTED.  
2. FOR VEGETATION SCHEDULE (SEE SHEET 33)



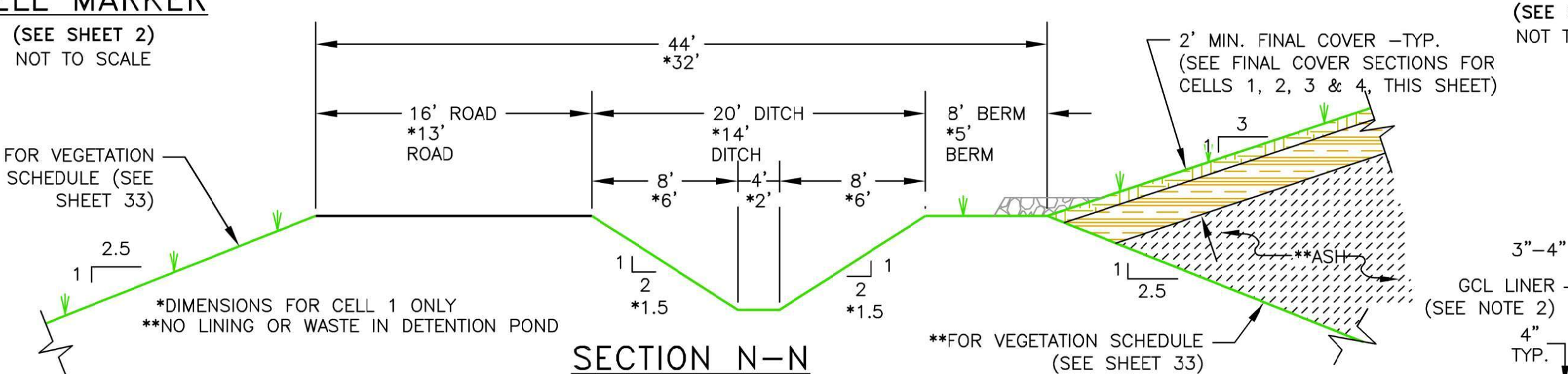
**LEACHATE AND WHEEL WASH RUNOFF PONDS LINER DETAIL**  
NOT TO SCALE

NOTES:  
1. DRAINAGE LAYER TO CONSIST OF DOUBLE-SIDED GEOCOMPOSITE AND EXTEND 12 INCHES PAST THE SIDE SLOPE.  
2. WHEN THE GCL IS PLACED OVER A VERTICAL PIPE PENETRATION OR STRUCTURE, A 4"x3" NOTCH SHOULD BE EXCAVATED INTO THE SUBGRADE AROUND THE PENETRATION. THE NOTCH SHOULD THEN BE BACKFILLED WITH GRANULAR BENTONITE, AND THE GCL SHOULD BE PLACED OVER THE NOTCH AND UP AGAINST THE STRUCTURE. THE CONNECTION TO THE STRUCTURE CAN BE ACCOMPLISHED BY PLACEMENT OF SOIL OR STONE BACKFILL IN THIS AREA.



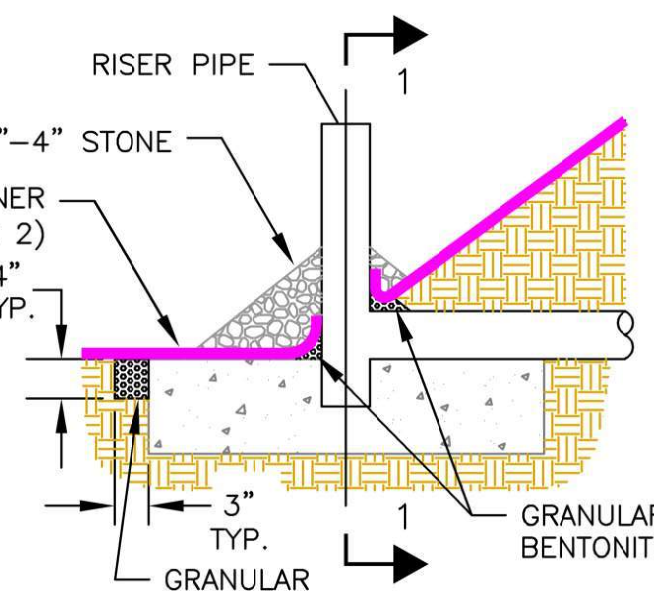
**FINAL SOIL COVER TYPICAL SECTION - CELL 1**  
(SEE SHEETS 12 & 18)  
NOT TO SCALE

NOTES: 1. REFERENCE SHEET 33 FOR VEGETATION SCHEDULE.  
2. REFERENCE FINAL COVER TECHNICAL SPECIFICATIONS.



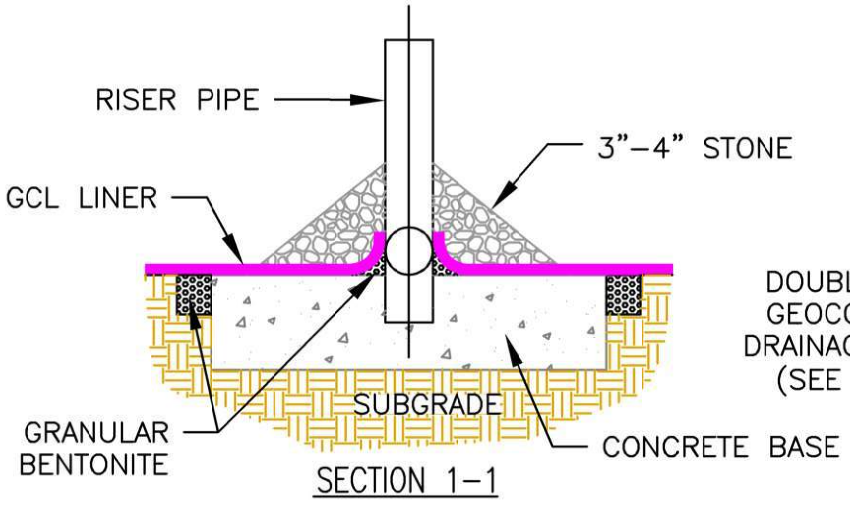
**SECTION N-N  
TYPICAL EXTERNAL CELL BERM**  
(SEE SHEETS 4 & 8)  
NOT TO SCALE

FOR VEGETATION SCHEDULE (SEE SHEET 33)  
\*DIMENSIONS FOR CELL 1 ONLY  
\*\*NO LINING OR WASTE IN DETENTION POND  
\*\*FOR VEGETATION SCHEDULE (SEE SHEET 33)



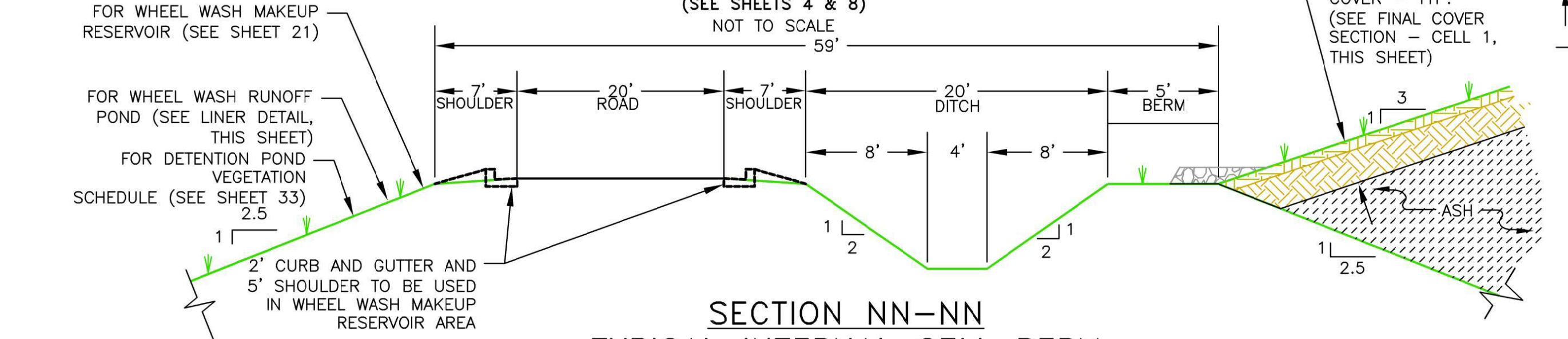
**SEALING AROUND RISER PIPE BASE**  
NOT TO SCALE

NOTE: GCL WILL BE USED FOR SEDIMENT POND 1 AND CLEAR POOL 1 ONLY



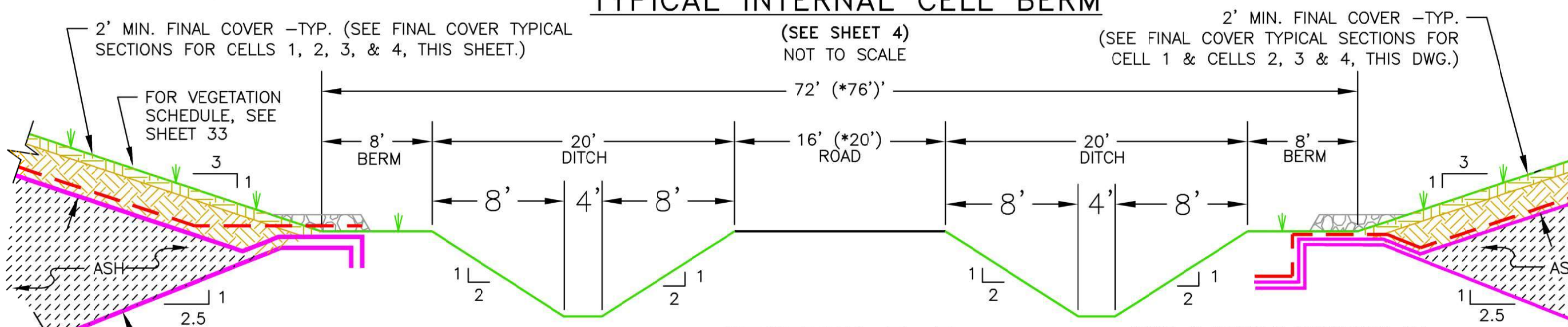
**FINAL COVER TYPICAL SECTION - CELLS 2, 3, & 4**  
(SEE SHEET 8)  
NOT TO SCALE

NOTES: 1. REFERENCE SHEET 33 FOR VEGETATION SCHEDULE.  
2. REFERENCE FINAL COVER TECHNICAL SPECIFICATIONS.



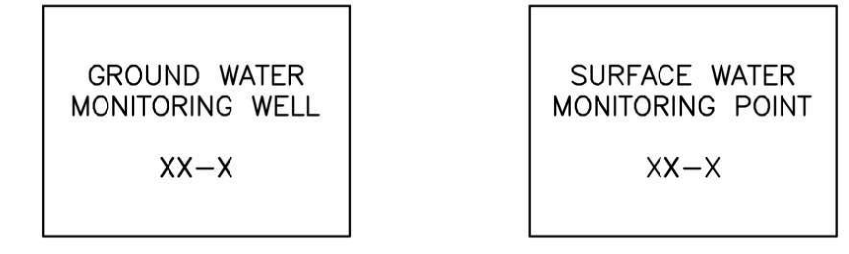
**SECTION NN-NN  
TYPICAL INTERNAL CELL BERM**  
(SEE SHEET 4)  
NOT TO SCALE

FOR WHEEL WASH MAKEUP RESERVOIR (SEE SHEET 21)  
FOR WHEEL WASH RUNOFF POND (SEE LINER DETAIL THIS SHEET)  
FOR DETENTION POND VEGETATION SCHEDULE (SEE SHEET 33)  
2' CURB AND GUTTER AND 5' SHOULDER TO BE USED IN WHEEL WASH MAKEUP RESERVOIR AREA

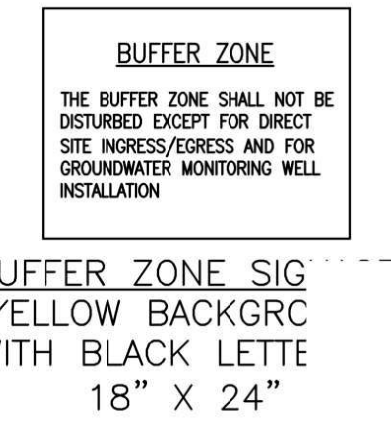


**SECTION P-P  
TYPICAL INTERNAL CELL BERM (SHEET 6)**  
NOT TO SCALE

NOTE: \* DENOTES DIMENSIONS OF COMMON ROAD BETWEEN CELLS 1, 2 & 3



**GROUND WATER & SURFACE WATER MONITORING POINT SIGNAGE**  
YELLOW BACKGROUND WITH BLACK LETTERING 18" X 24"



**BUFFER ZONE SIGNAGE**  
YELLOW BACKGROUND WITH BLACK LETTERING 18" X 24"



**ENTRANCE SIGNAGE**  
WHITE BACKGROUND WITH BLACK LETTERING 4' X 6'

**SIGNAGE**  
NOT TO SCALE

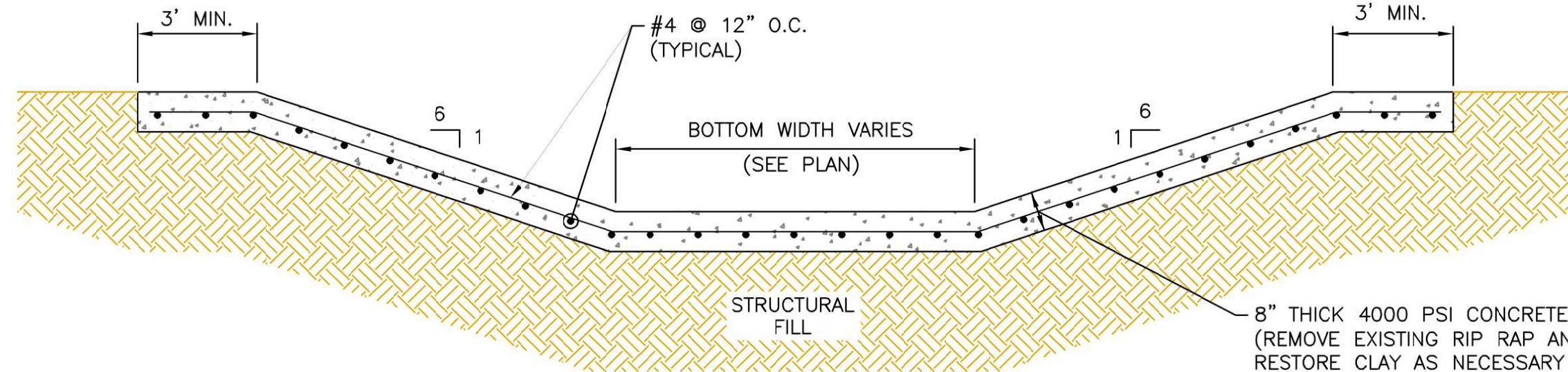
**REFERENCES:**

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE LIST OF REFERENCES, SEE SHEET 33.



| MISC. SECTIONS & DETAILS  |                   |         |      |
|---|-------------------|---------|------|
| <b>PERMIT DRAWINGS</b>  |                   |         |      |
| GEORGIA POWER COMPANY   |                   |         |      |
| PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)  |                   |         |      |
| EXISTING LANDFILL NO. 4   |                   |         |      |
| EFFINGHAM, GEORGIA  |                   |         |      |
|   |                   |         |      |
| 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339                                       |                   |         |      |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a> | PROJ. NO. 1702944 | DWG. 19 | EDIT |
| SCALE NONE  | SHEET 19 OF 38    |         |      |
| DATE 9/30/2022  |                   |         |      |

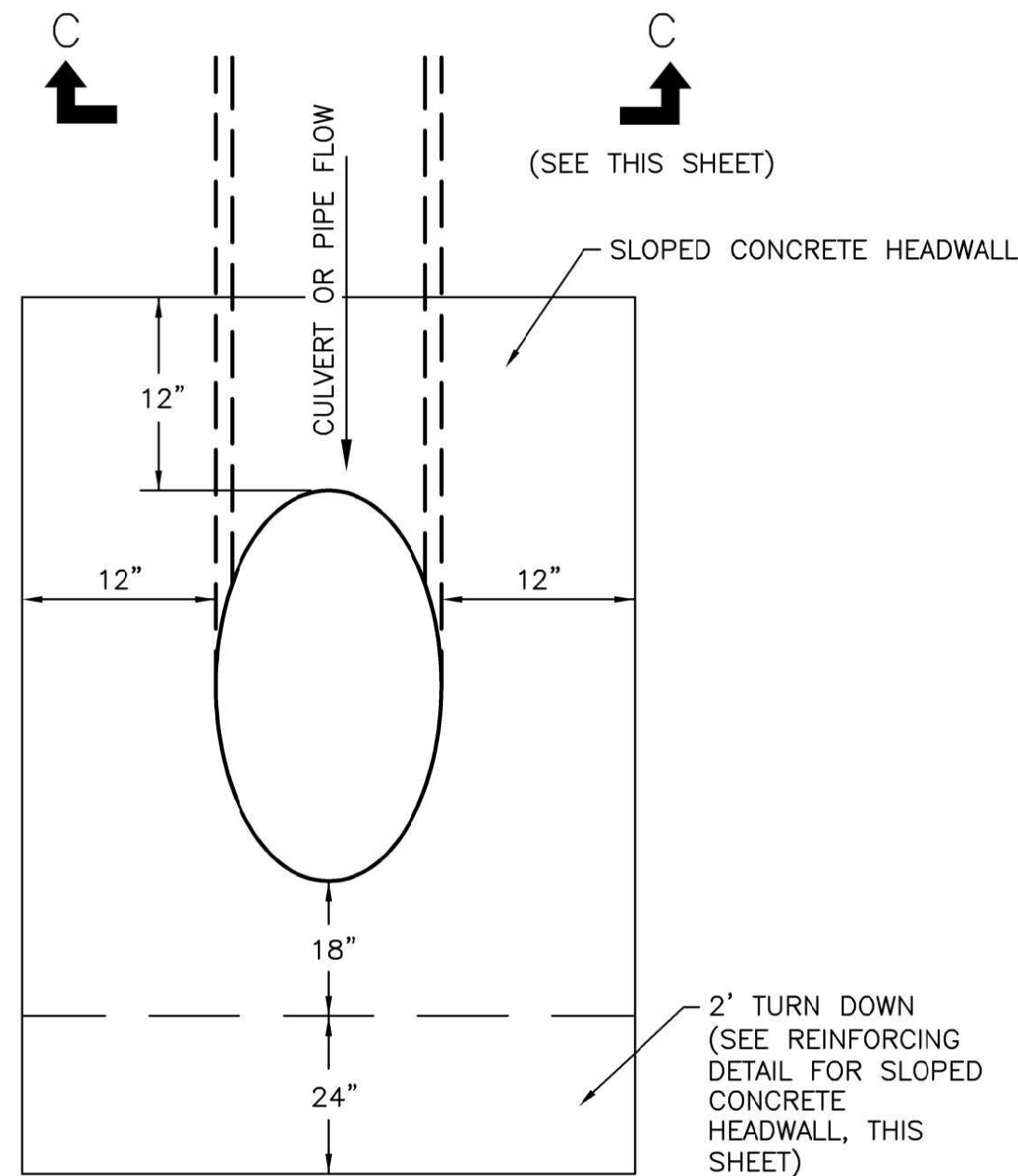




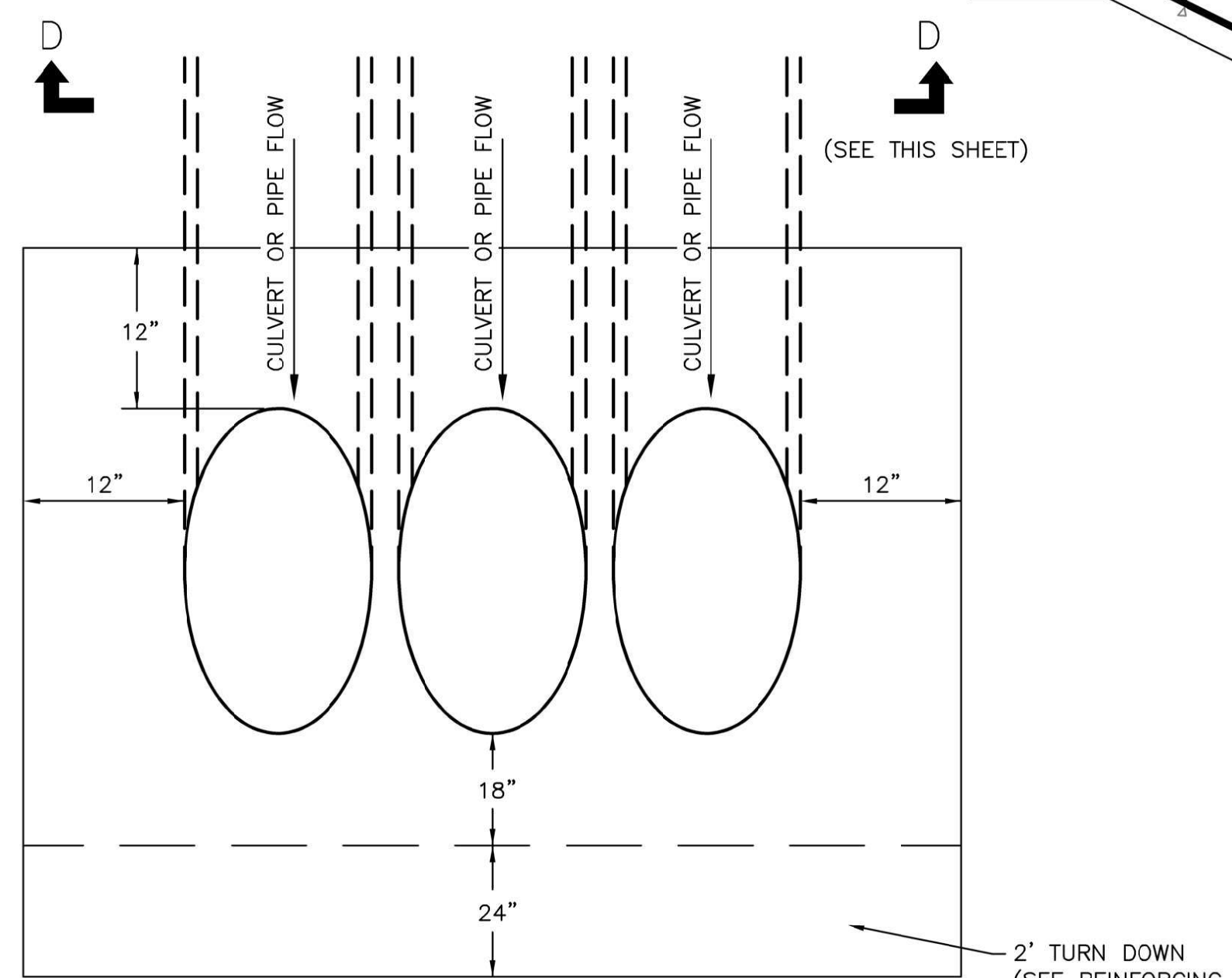
SECTION A-A  
N.T.S.

8" THICK 4000 PSI CONCRETE  
(REMOVE EXISTING RIP RAP AND  
RESTORE CLAY AS NECESSARY PRIOR  
TO INSTALLATION OF CONCRETE  
SPILLWAY)

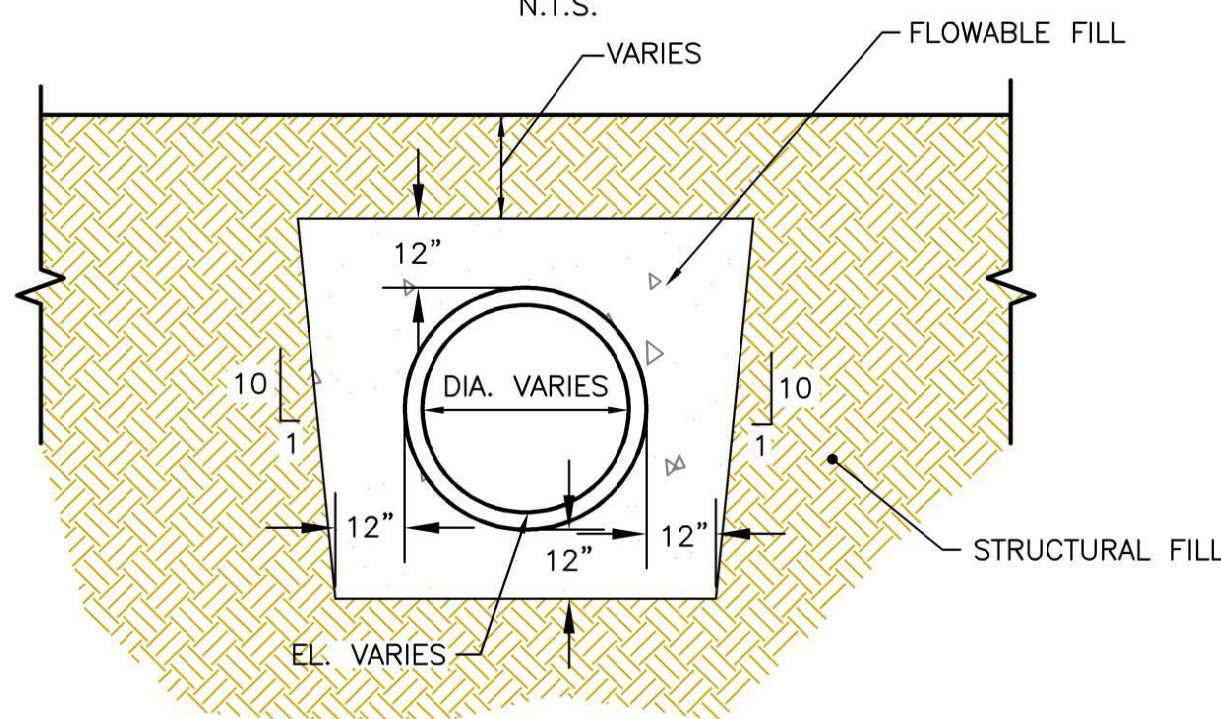
SLOPED CONCRETE HEADWALL



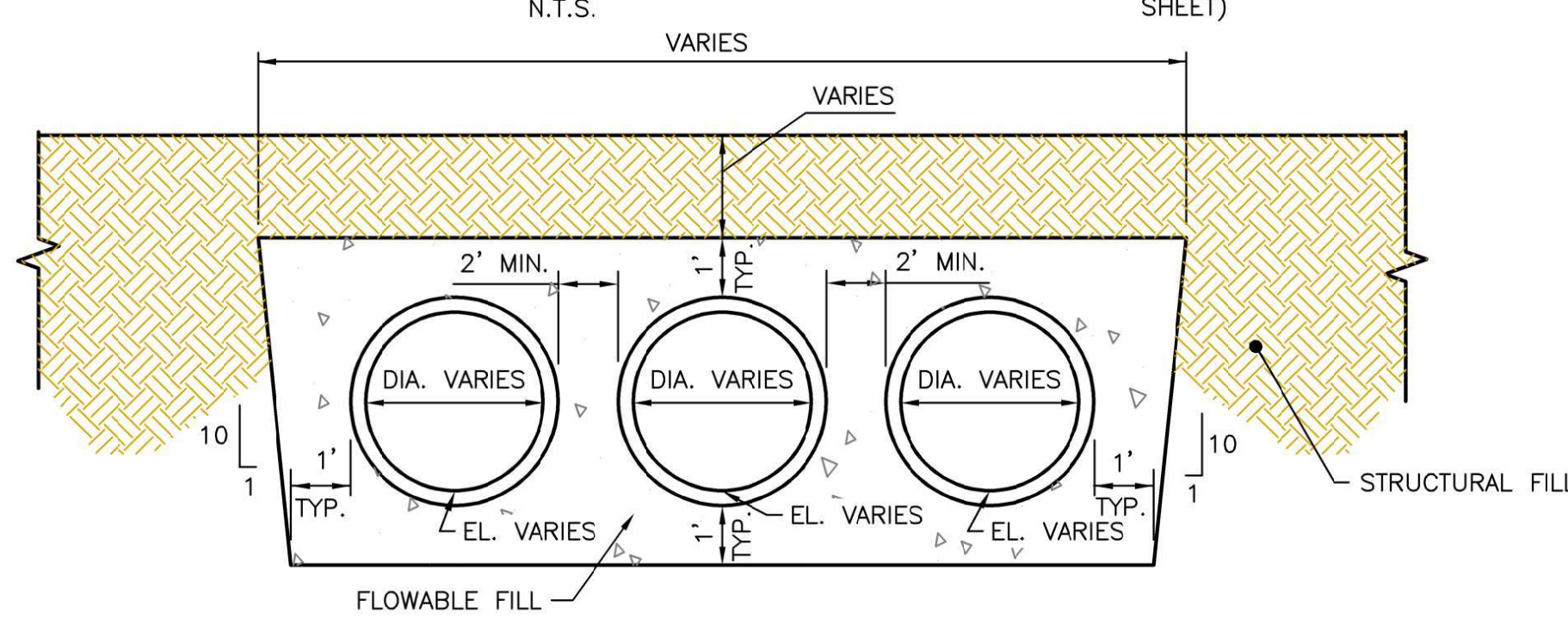
SINGLE PIPE CONCRETE HEADWALL PLAN  
N.T.S.



MULTIPLE PIPE CONCRETE HEADWALL PLAN  
N.T.S.



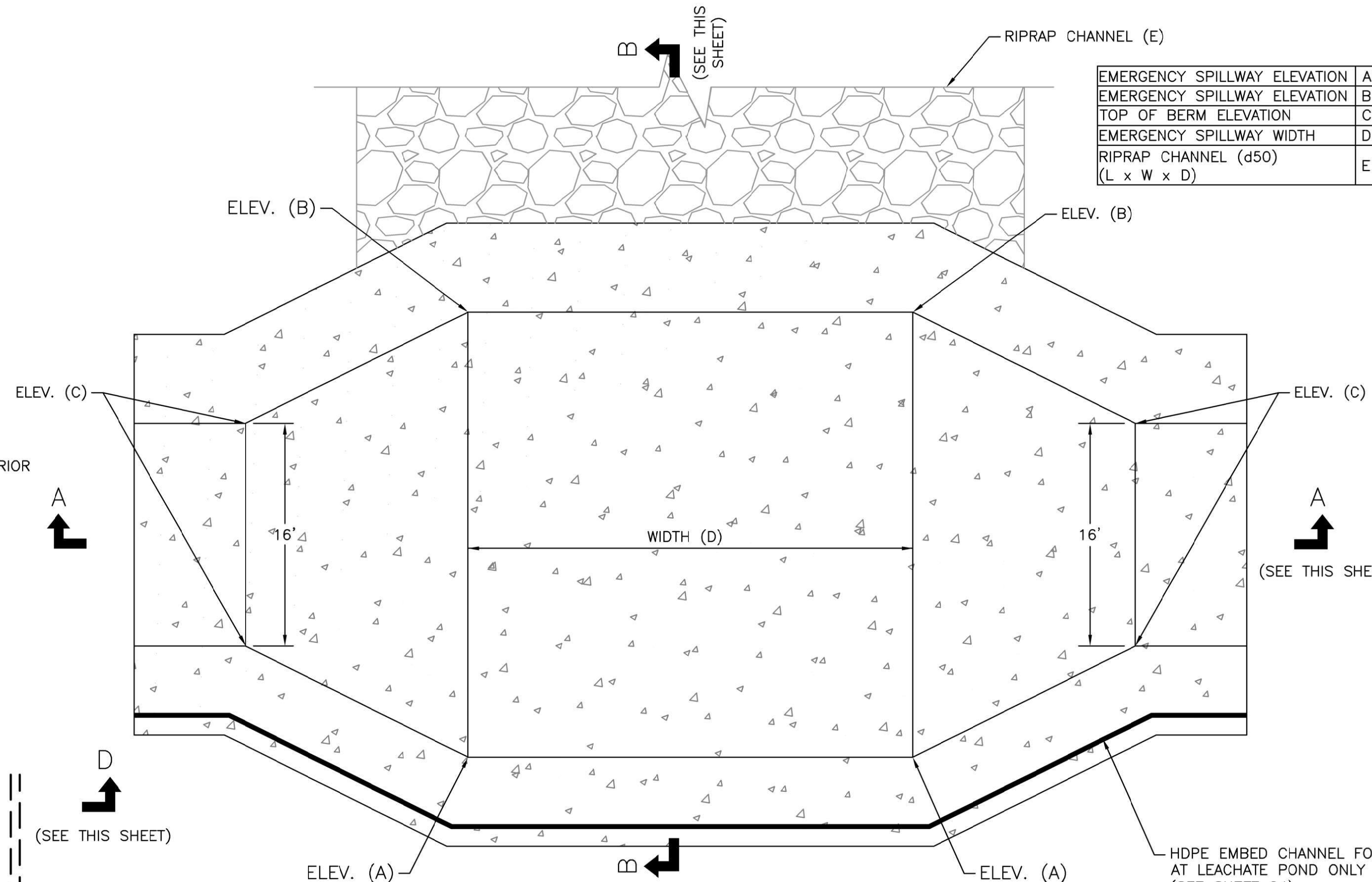
TYPICAL SINGLE PIPE SECTION C-C  
N.T.S.



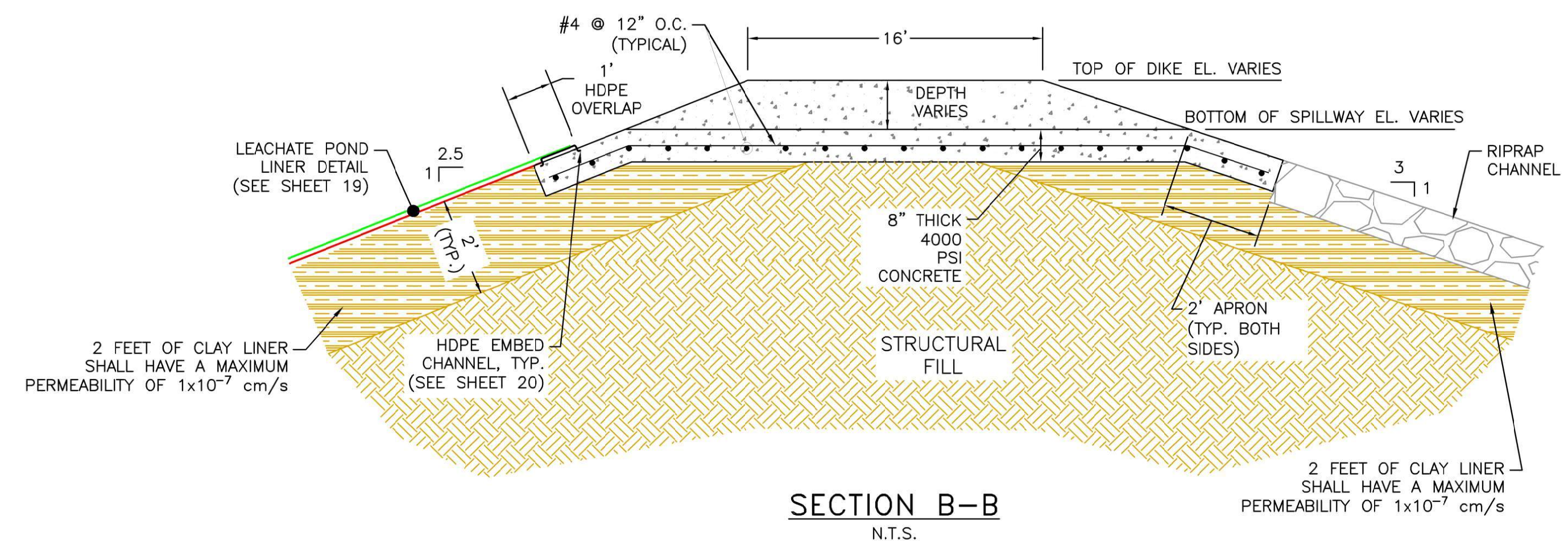
TYPICAL MULTIPLE PIPE SECTION D-D  
N.T.S.

PIPE SECTIONS INSTALLED IN UNLINED PONDS  
N.T.S.

|                              | DETENTION POND 1 | CLEAR POOL 1  | LEACHATE POND 1 | SEDIMENT BASIN 2 | CLEAR POOL 2  | LEACHATE POND 2 |
|------------------------------|------------------|---------------|-----------------|------------------|---------------|-----------------|
| EMERGENCY SPILLWAY ELEVATION | A 50.00          | 41.00         | 49.00           | 41.50            | 42.00         | 49.00           |
| EMERGENCY SPILLWAY ELEVATION | B 49.75          | 40.75         | 48.75           | 41.25            | 41.75         | 48.75           |
| TOP OF BERM ELEVATION        | C 52.00          | 46.00         | 50.00           | 46.00            | 46.00         | 51.00           |
| EMERGENCY SPILLWAY WIDTH     | D 20'            | 20'           | 20'             | 20'              | 20'           | 18'             |
| RIPRAP CHANNEL (d50)         | E 0.50'          | 0.25'         | 0.25'           | 1.0'             | 1.0'          | 0.25'           |
| (L x W x D)                  | 43'x24'x1.13'    | 10'x24'x0.56' | 4'x22'x0.56'    | 11'x24'x2.25'    | 10'x24'x2.25' | 4'x22'x0.56'    |



SPILLWAY DETAIL PLAN  
N.T.S.



SECTION B-B  
N.T.S.



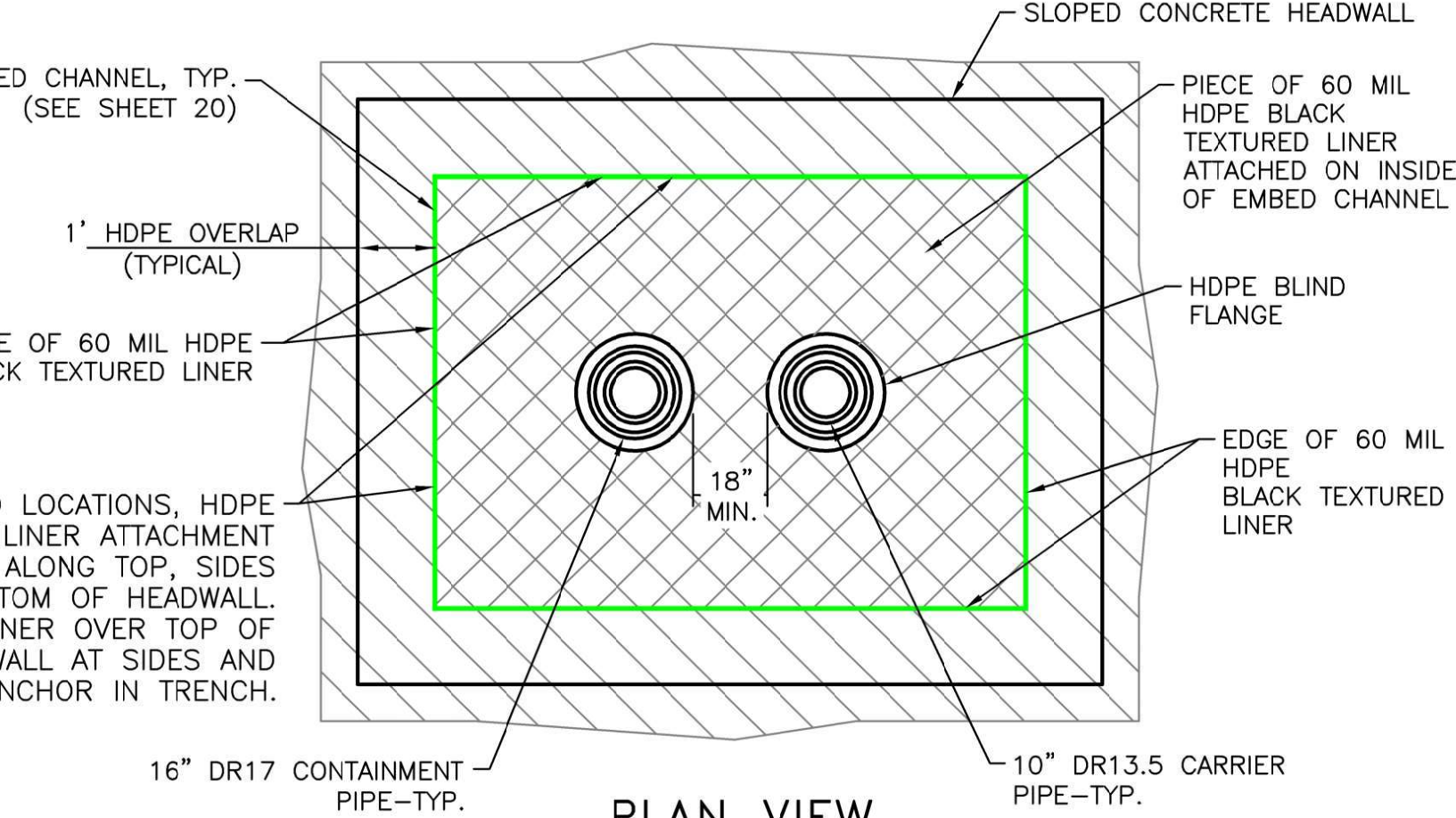
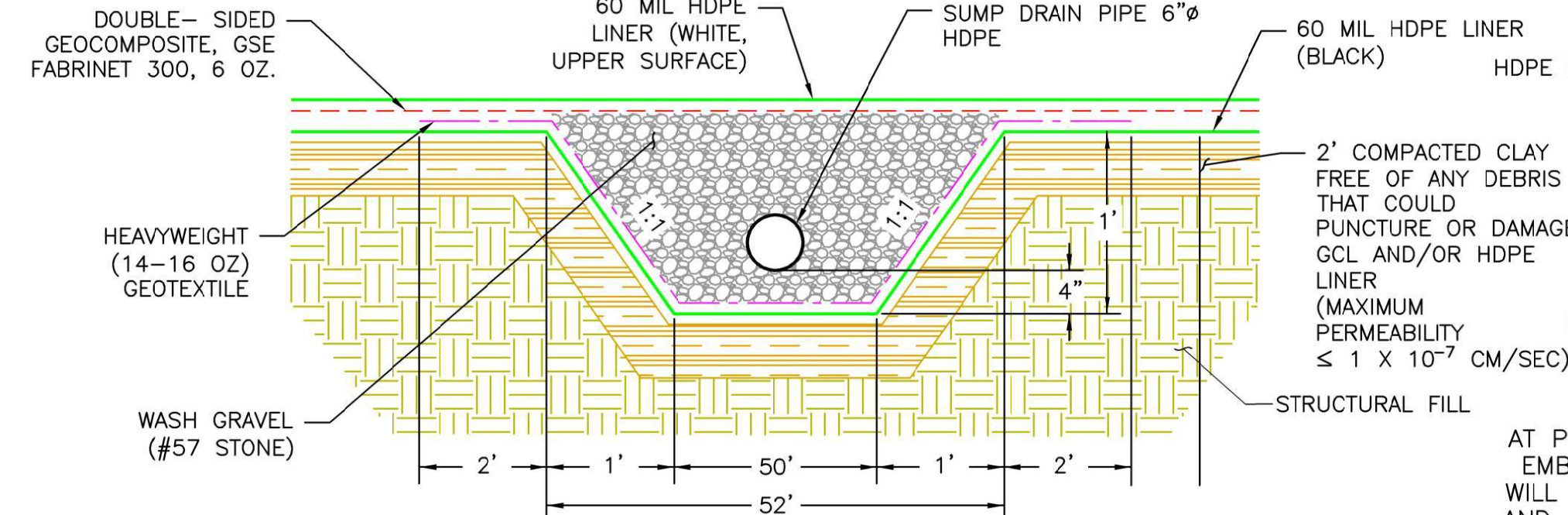
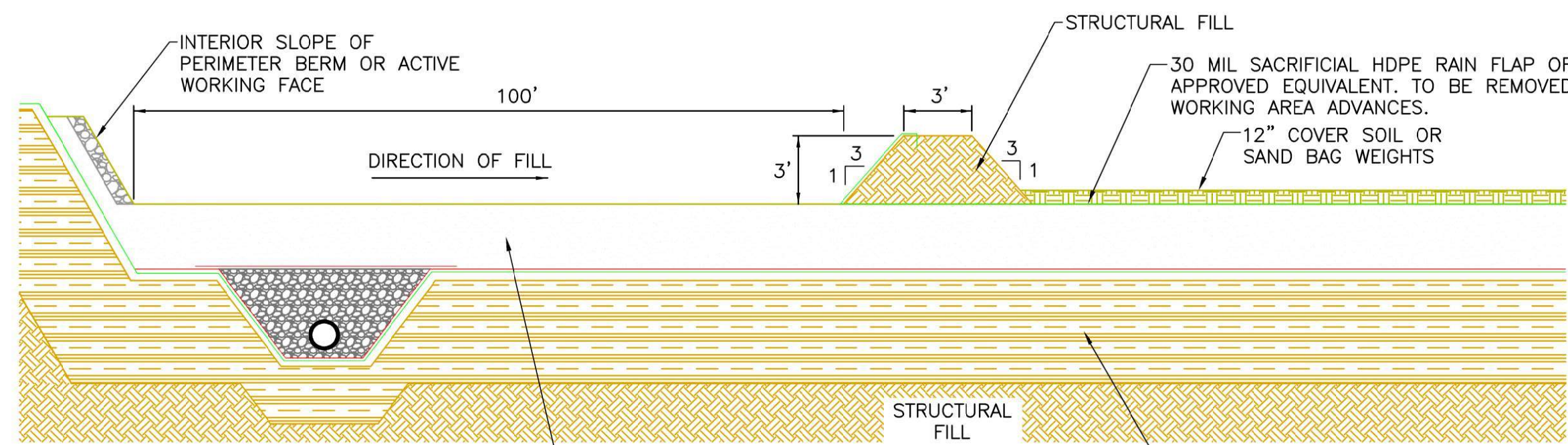
REFERENCES:

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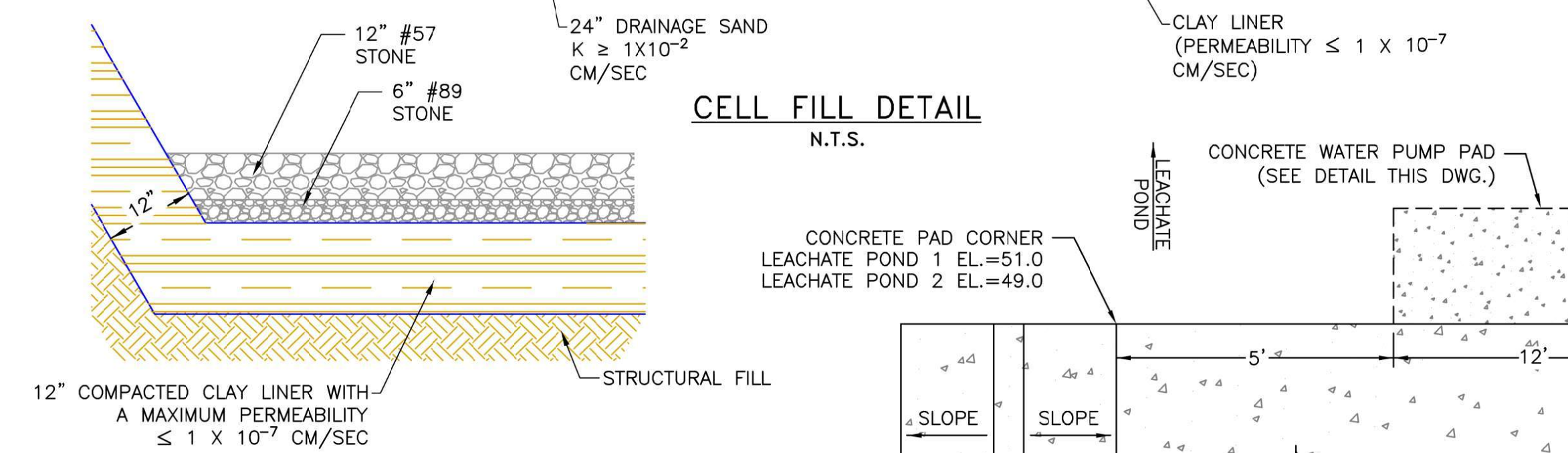


| MISC. SECTIONS & DETAILS  |                   |   |      |
|---|-------------------|---|------|
| <b>PERMIT DRAWINGS</b>  |                   |   |      |
| GEORGIA POWER COMPANY   |                   |   |      |
| PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)  |                   |   |      |
| EXISTING LANDFILL NO. 4   |                   |   |      |
| EFFINGHAM, GEORGIA  |                   |   |      |
|   |                   | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |      |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a> | PROJ. NO. 1702944 | DWG. 20   | EDIT |
| SCALE NONE  | SHEET 20 OF 38    |   |      |
| DATE 9/30/2022  |                   |   |      |



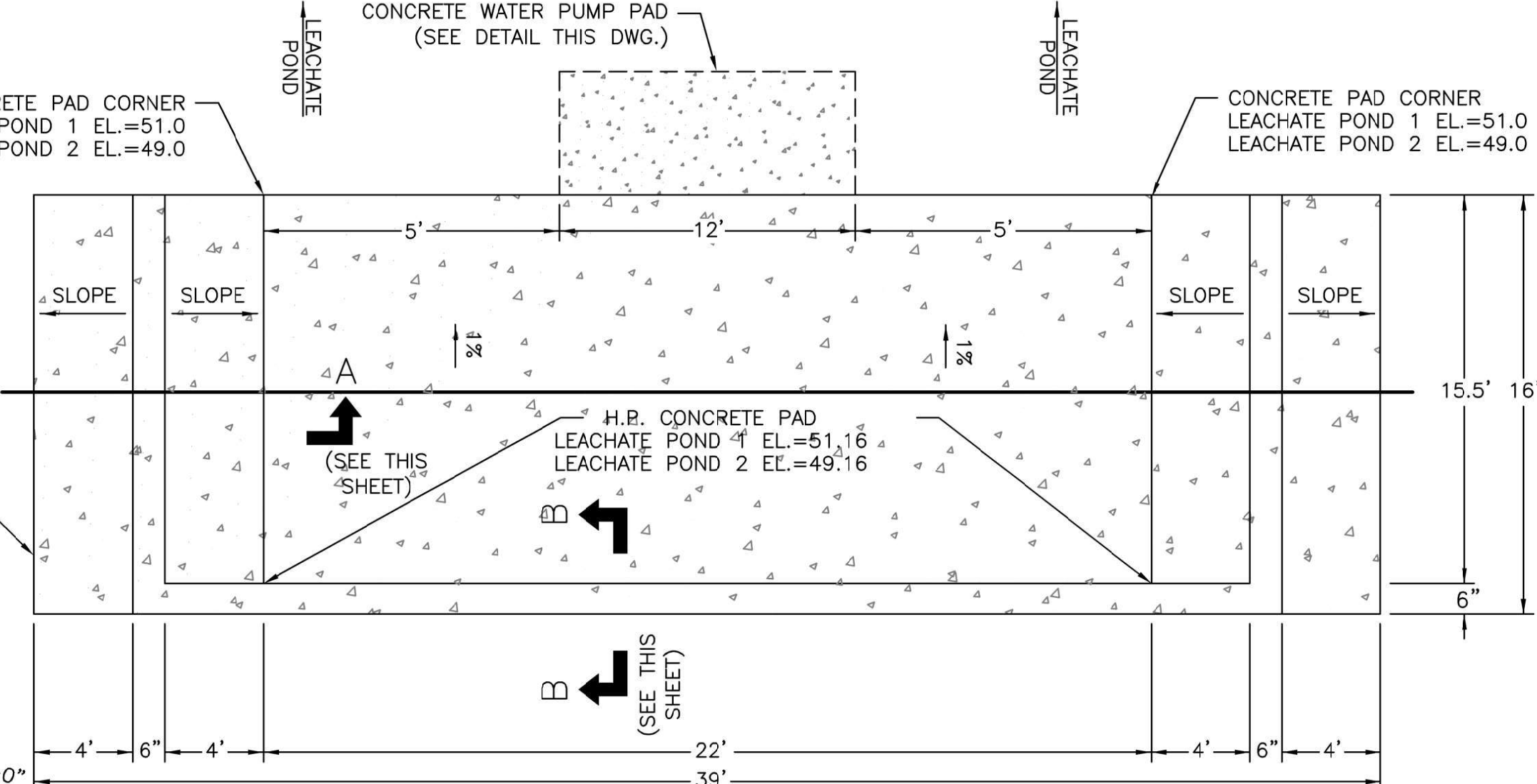
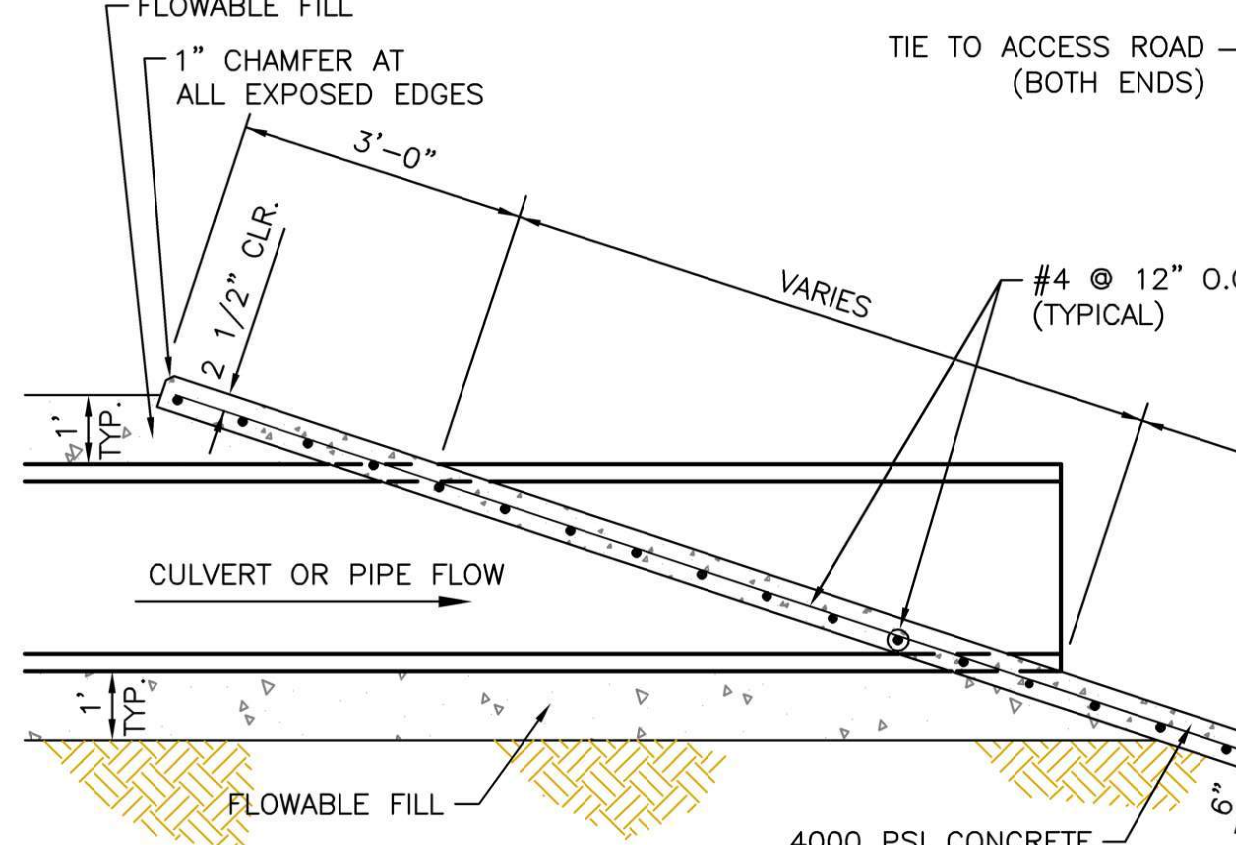


**LEAK DETECTION SUMP DETAIL**  
NOT TO SCALE

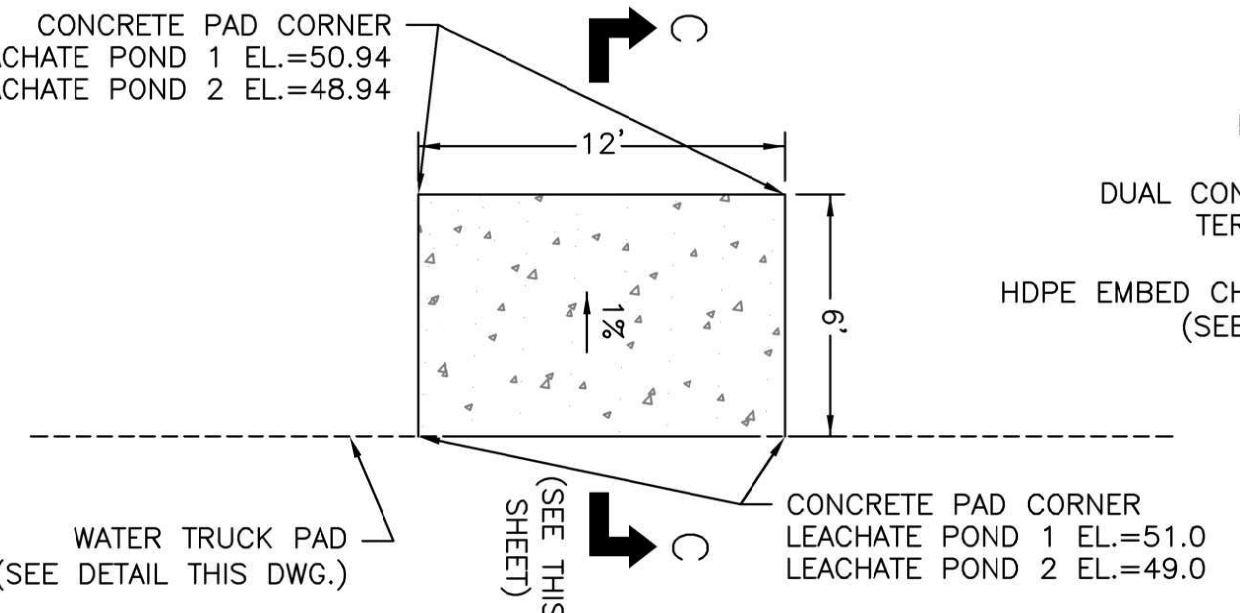


**CELL FILL DETAIL**  
N.T.S.

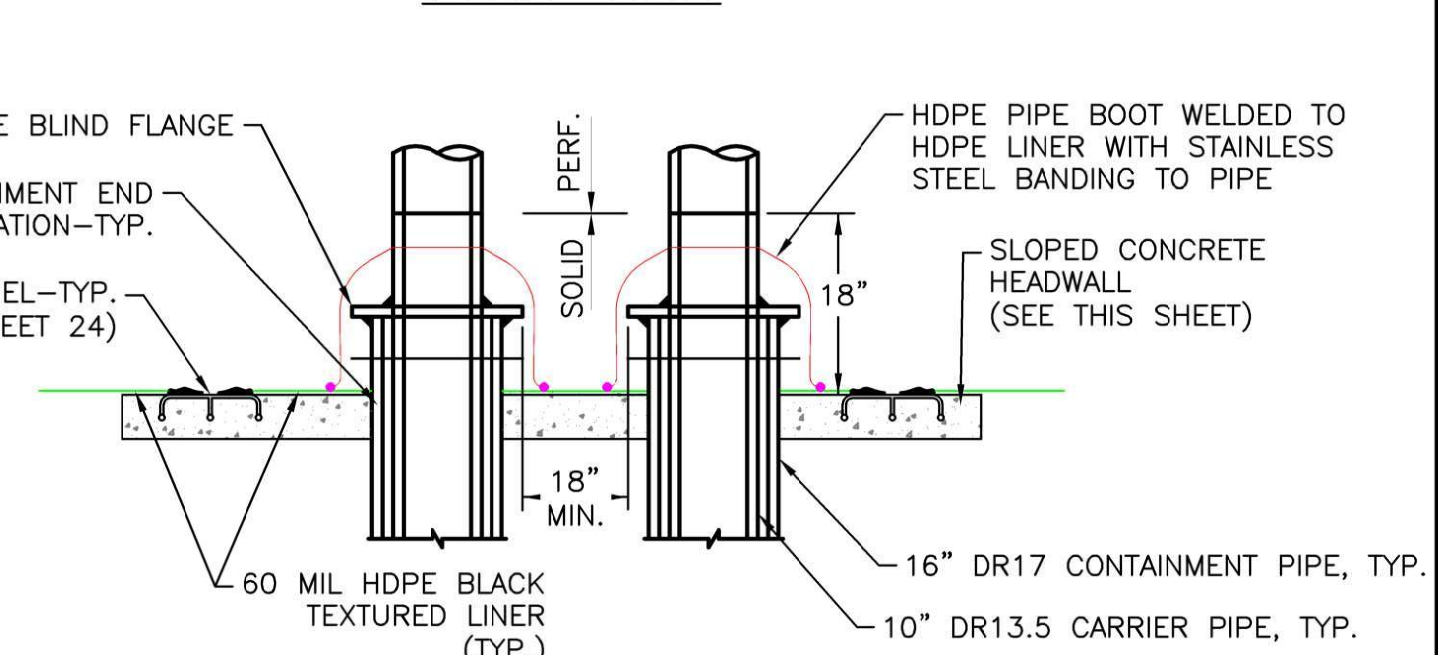
**WHEEL WASH MAKEUP RESERVOIR LINER SYSTEM**  
N.T.S.



**WATER TRUCK PAD DETAIL PLAN**  
NOT TO SCALE



**CONCRETE WATER PUMP PAD DETAIL PLAN**  
NOT TO SCALE

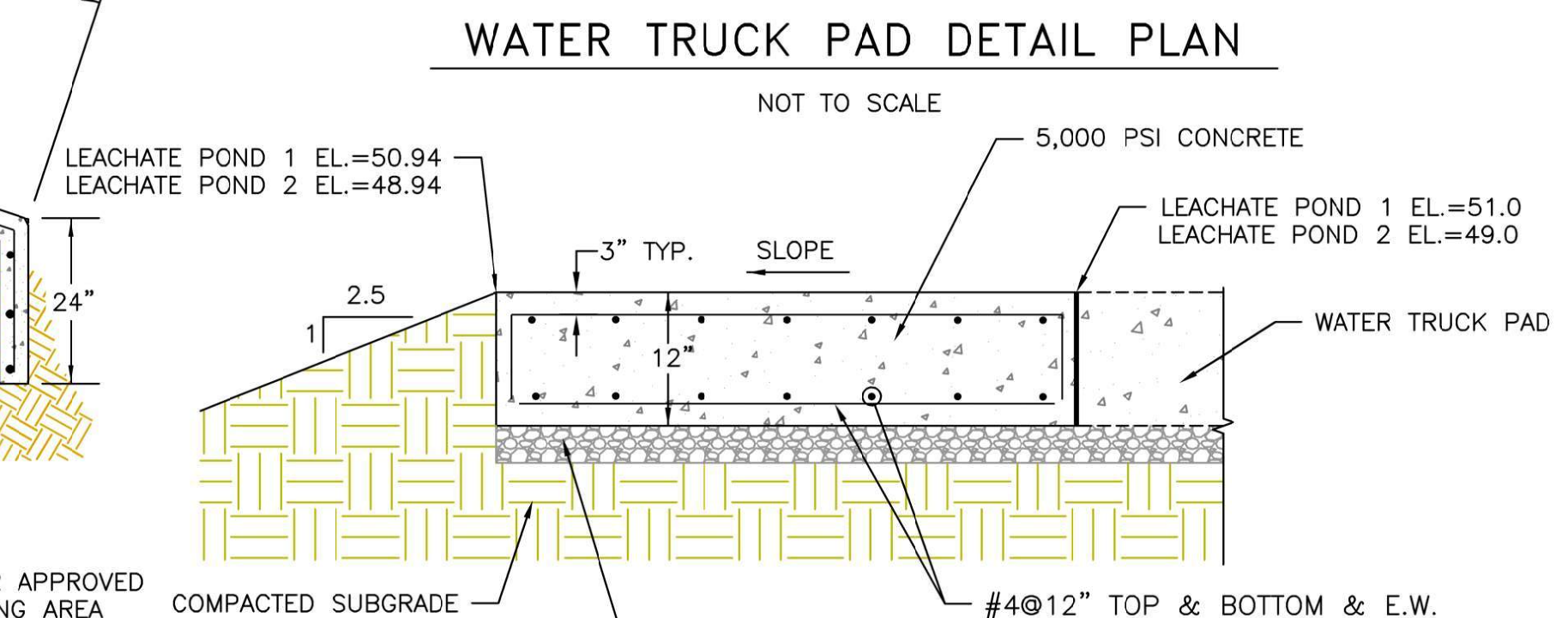
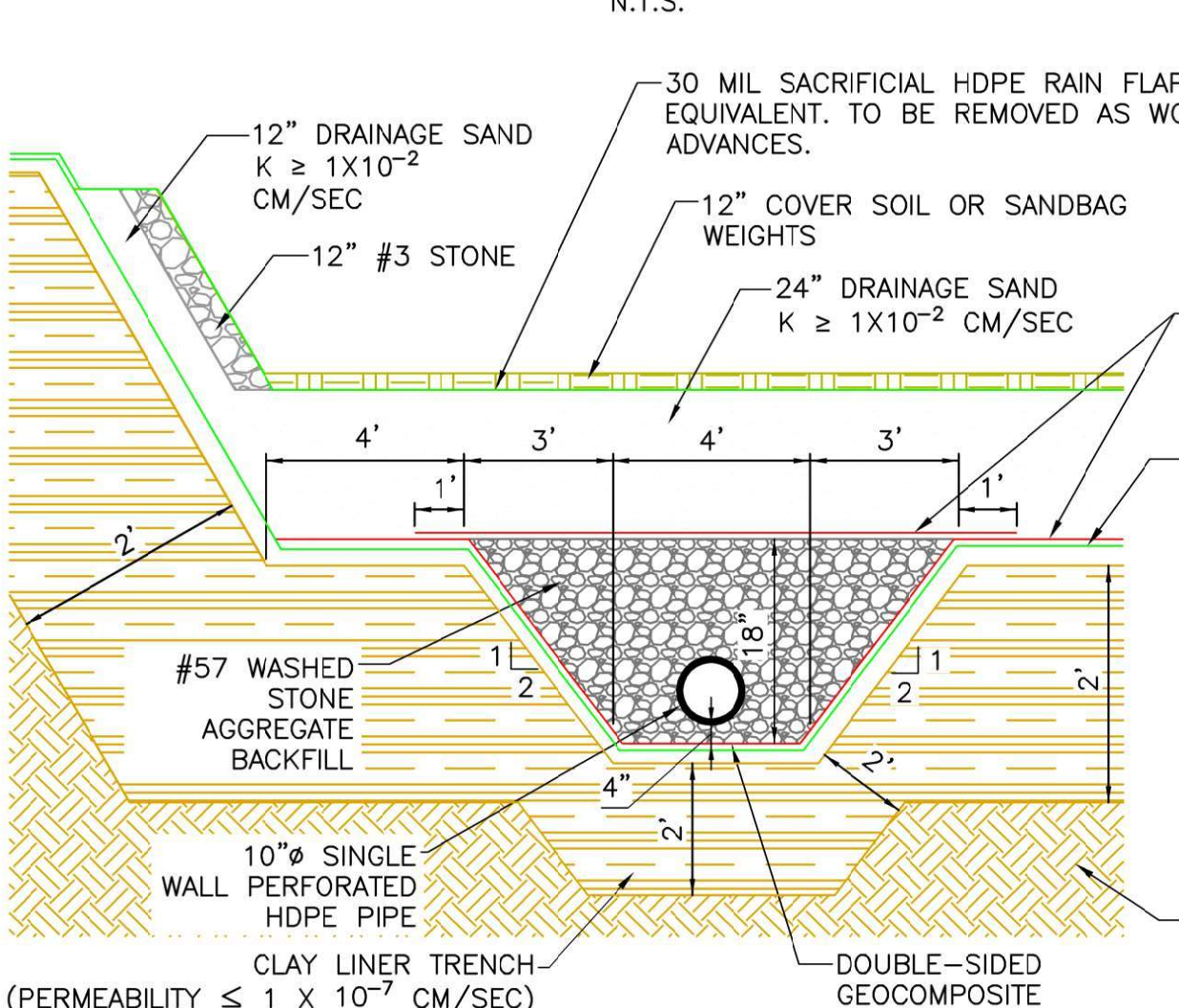


**LEACHATE COLLECTION PIPE HEADWALL DETAIL**  
N.T.S.

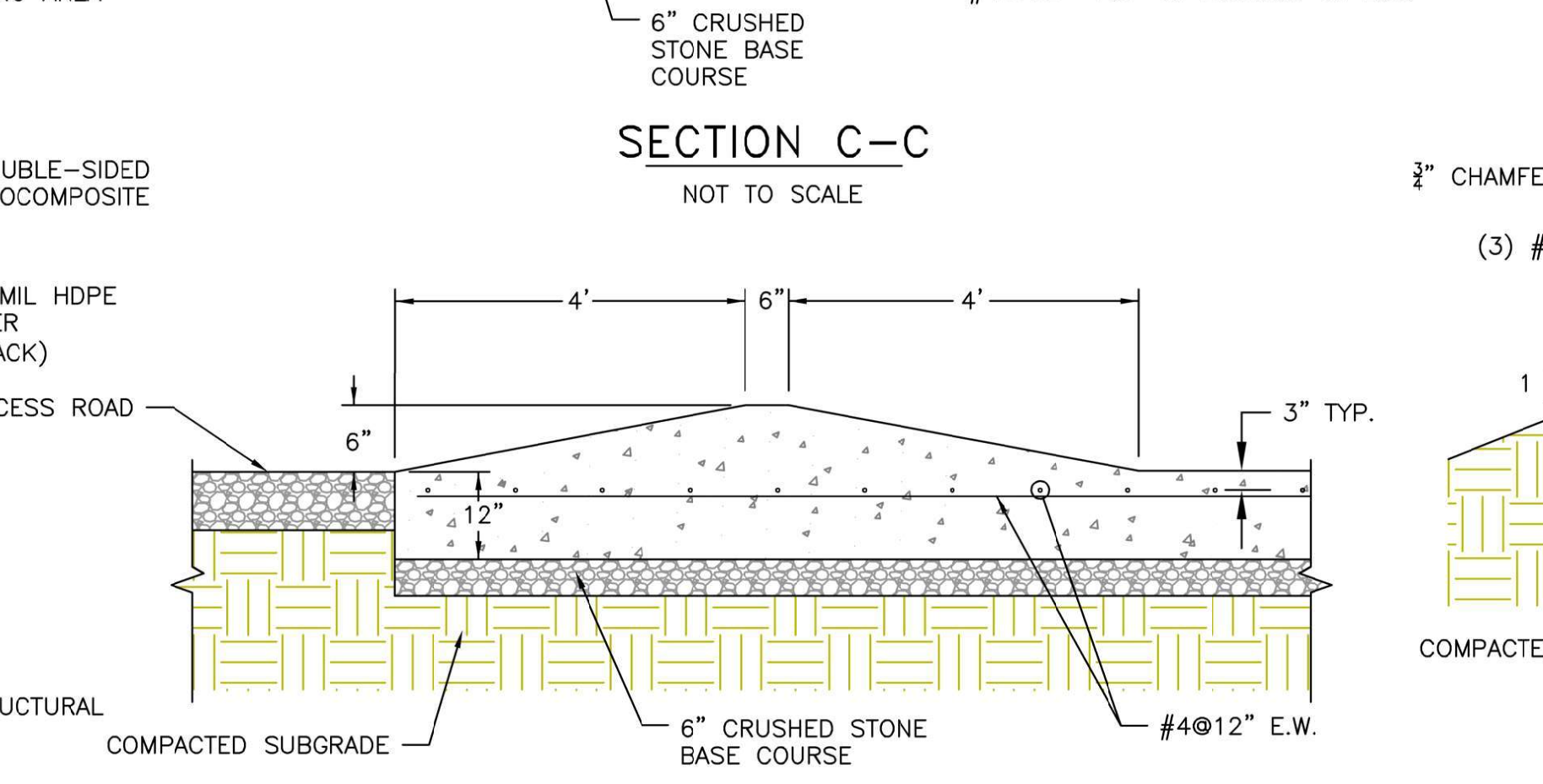
**REFERENCES:**

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

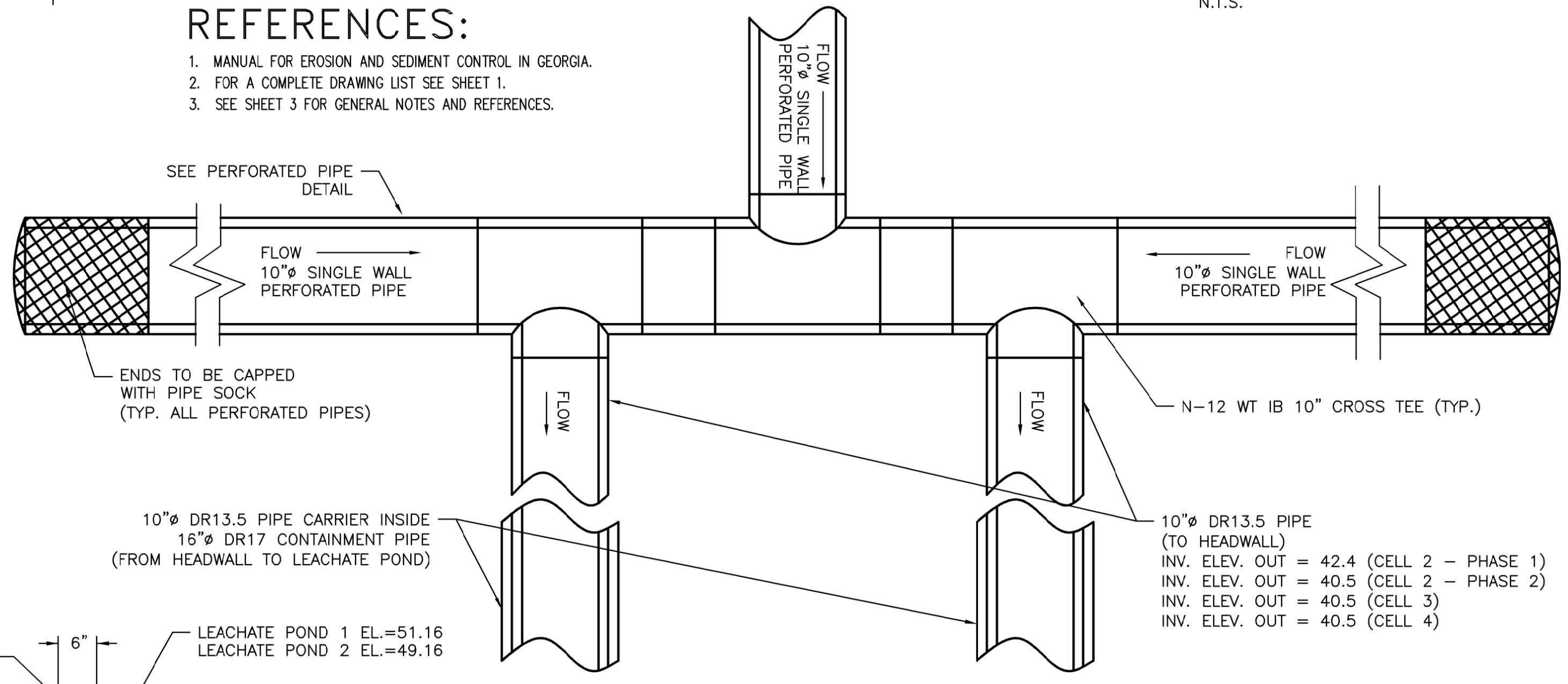
**REINFORCING DETAIL FOR SLOPED CONCRETE HEADWALL IN UNLINED AREAS**  
N.T.S.



**SECTION C-C**  
NOT TO SCALE

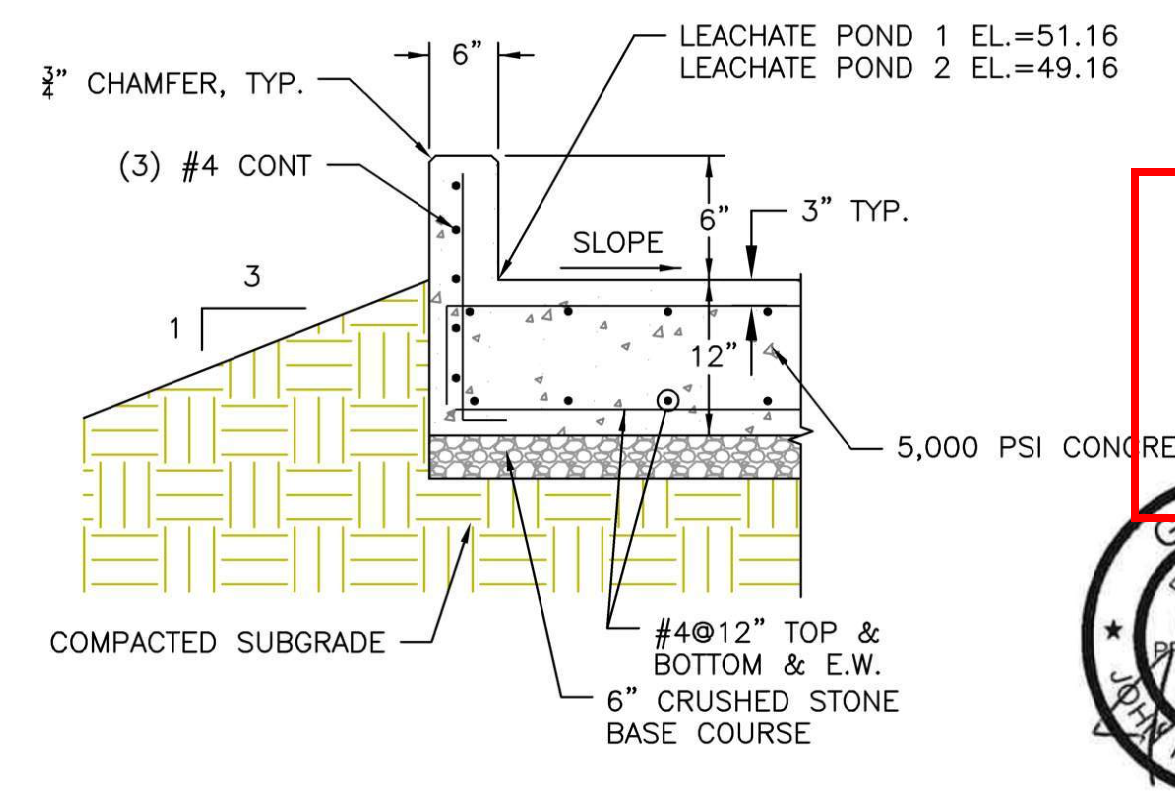


**SECTION A-A**  
NOT TO SCALE



**COLLECTOR PIPE JUNCTION DETAIL**  
NOT TO SCALE

**CELLS 2, 3, AND 4 COMPOSITE LINER & LCRS TRENCH DETAIL**  
N.T.S.

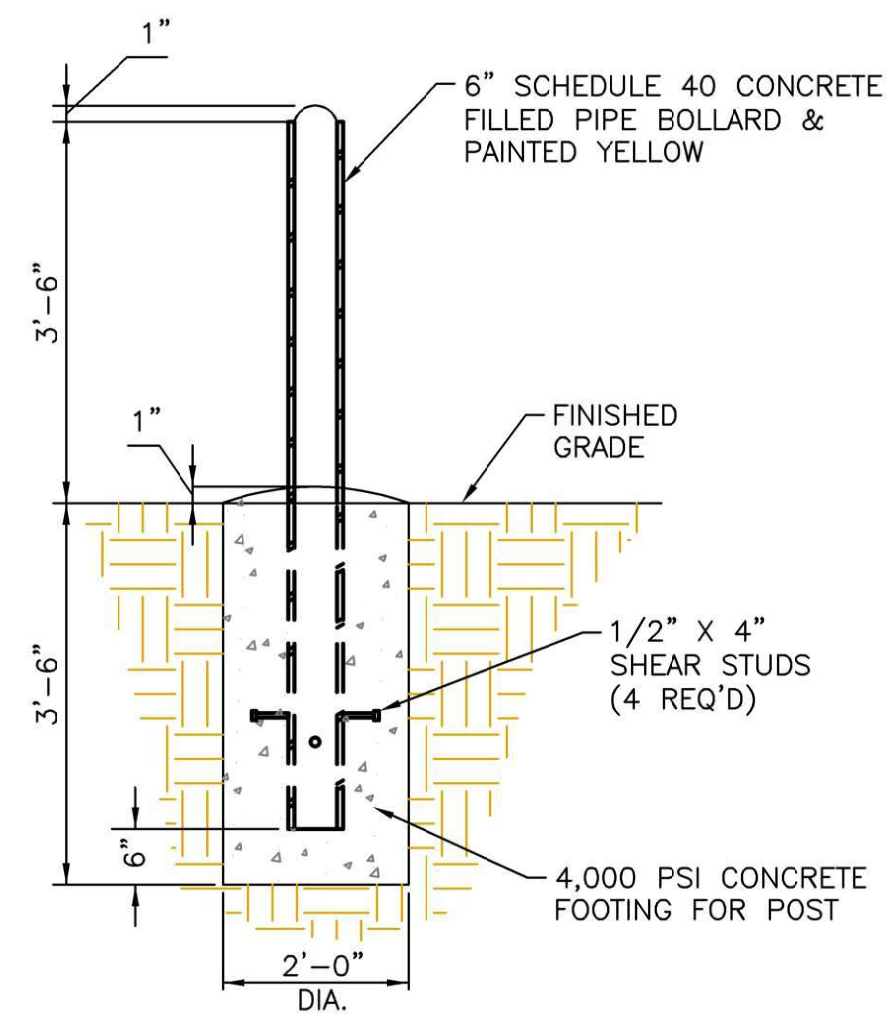


**SECTION B-B**  
NOT TO SCALE

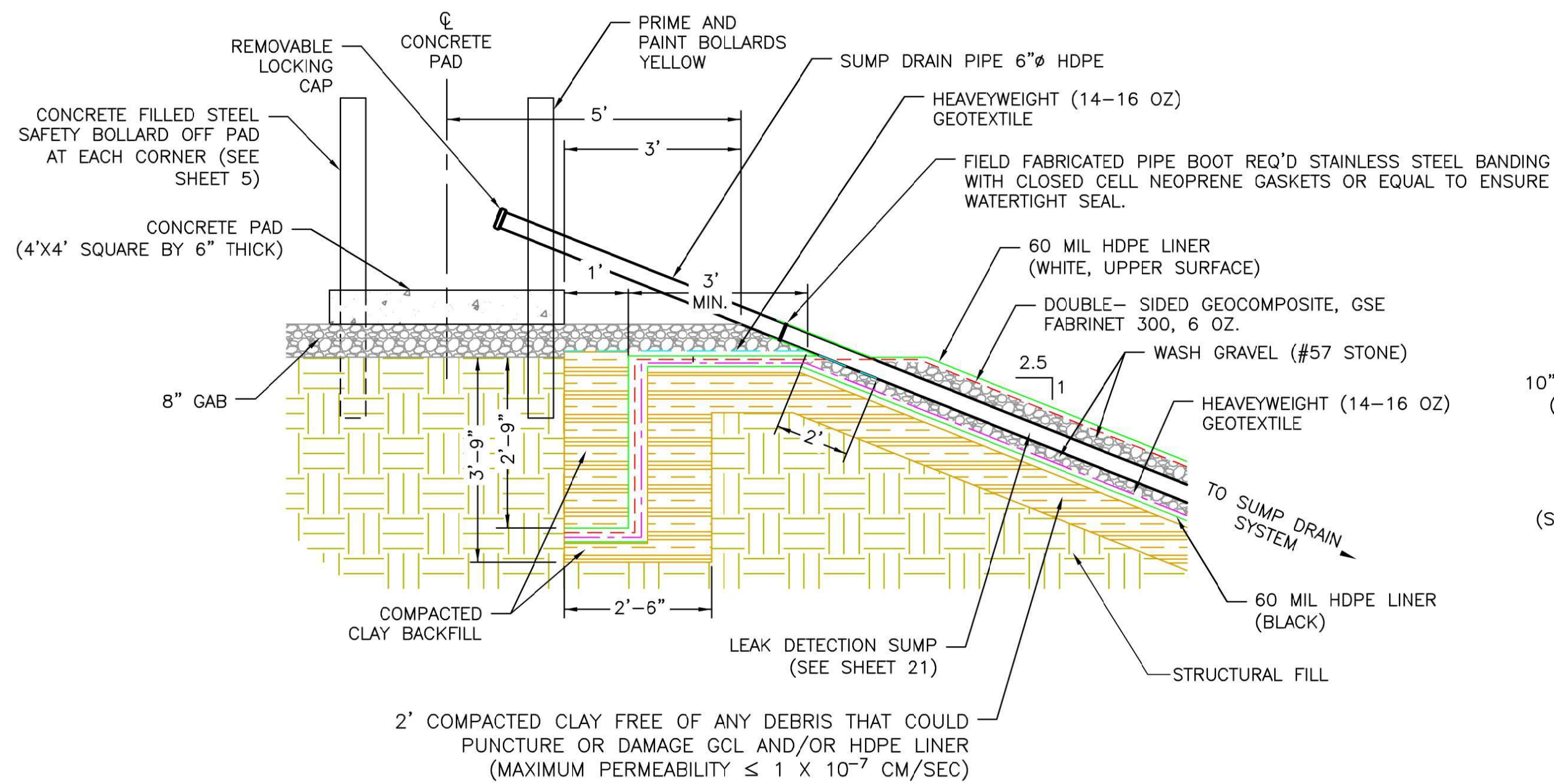


| MISC. SECTIONS & DETAILS  |                   |         |
|---|-------------------|---------|
| <b>PERMIT DRAWINGS</b>  |                   |         |
| GEORGIA POWER COMPANY   |                   |         |
| PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)  |                   |         |
| EXISTING LANDFILL NO. 4   |                   |         |
| EFFINGHAM, GEORGIA  |                   |         |
|   |                   |         |
| 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339                                       |                   |         |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a> | PROJ. NO. 1702944 | DWG. 21 |
| SCALE NONE  | SHEET 21 OF 38    |         |
| DATE 9/30/2022  |                   |         |

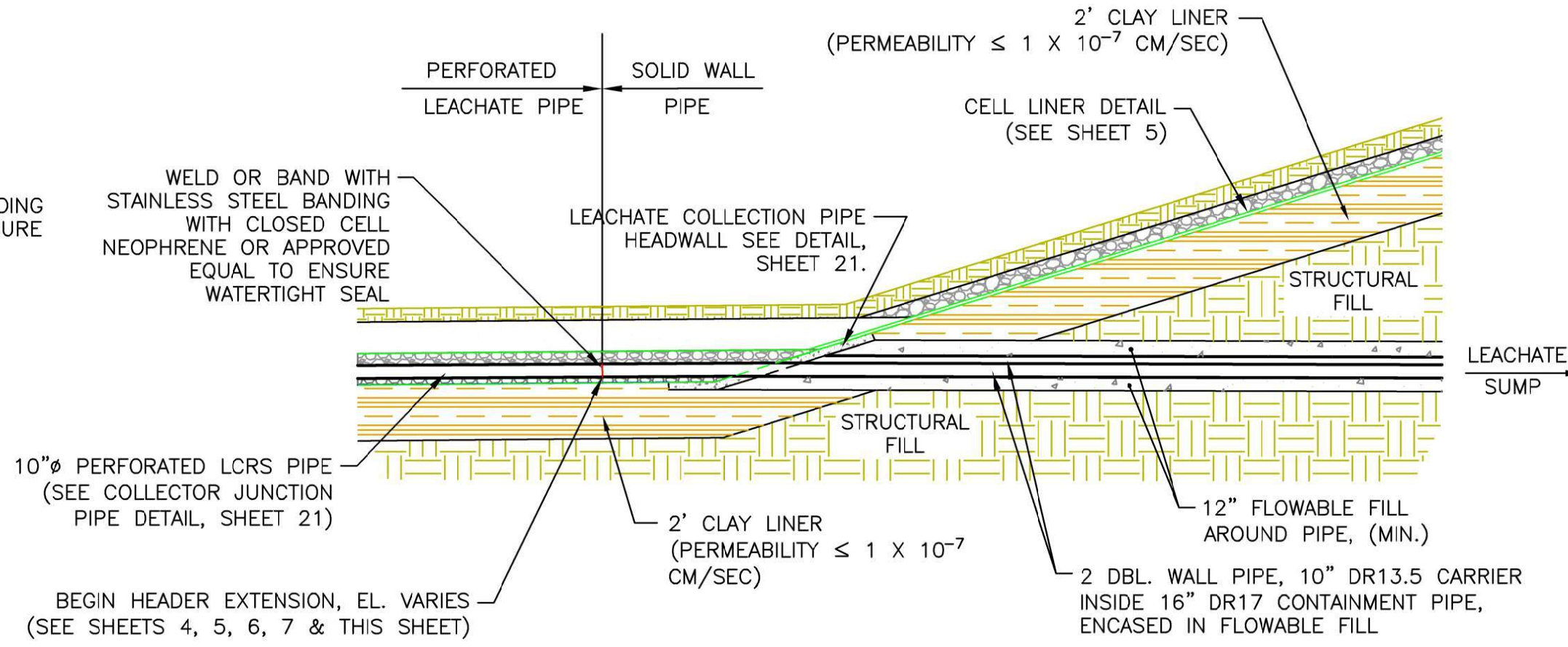




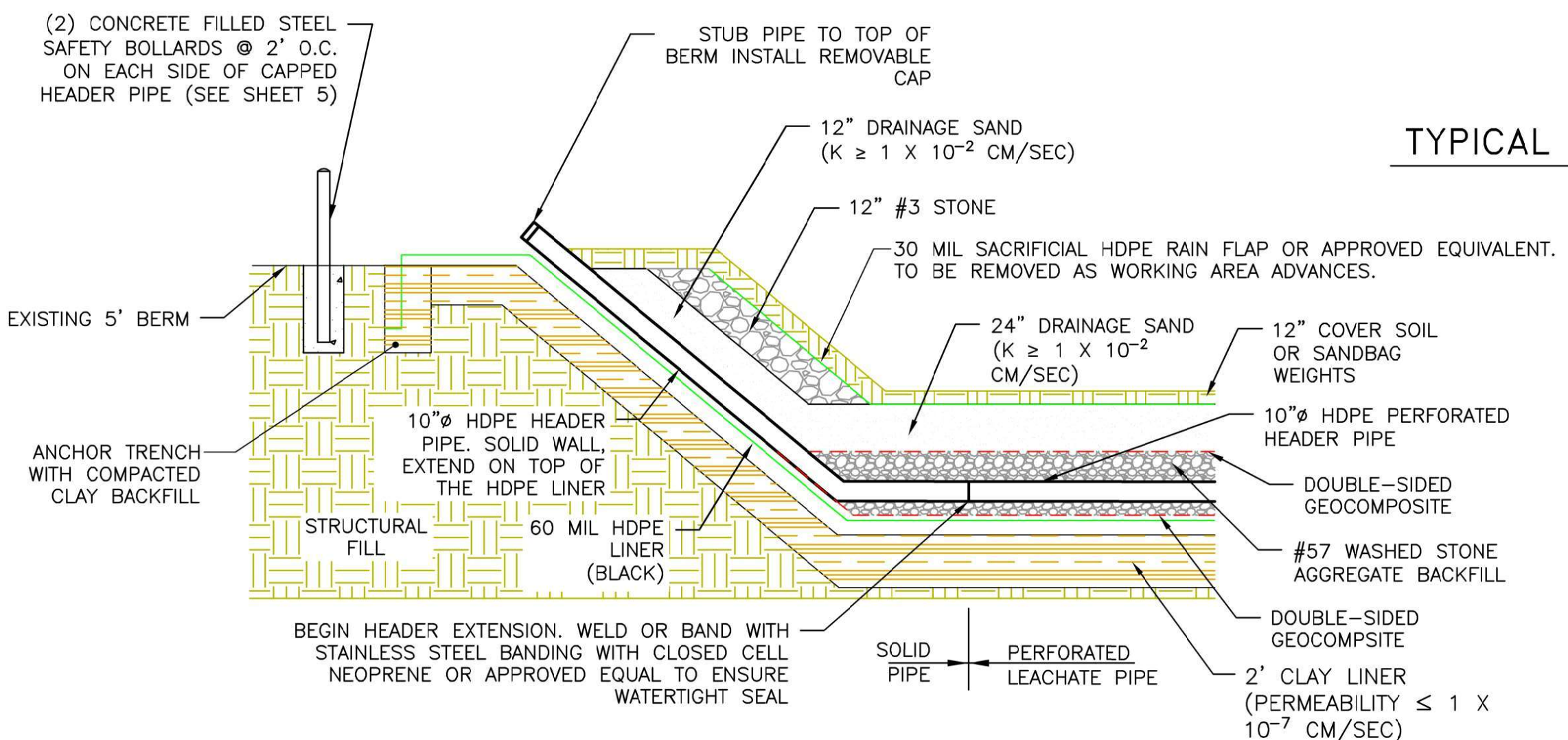
**BOLLARD DETAIL**  
N.T.S.



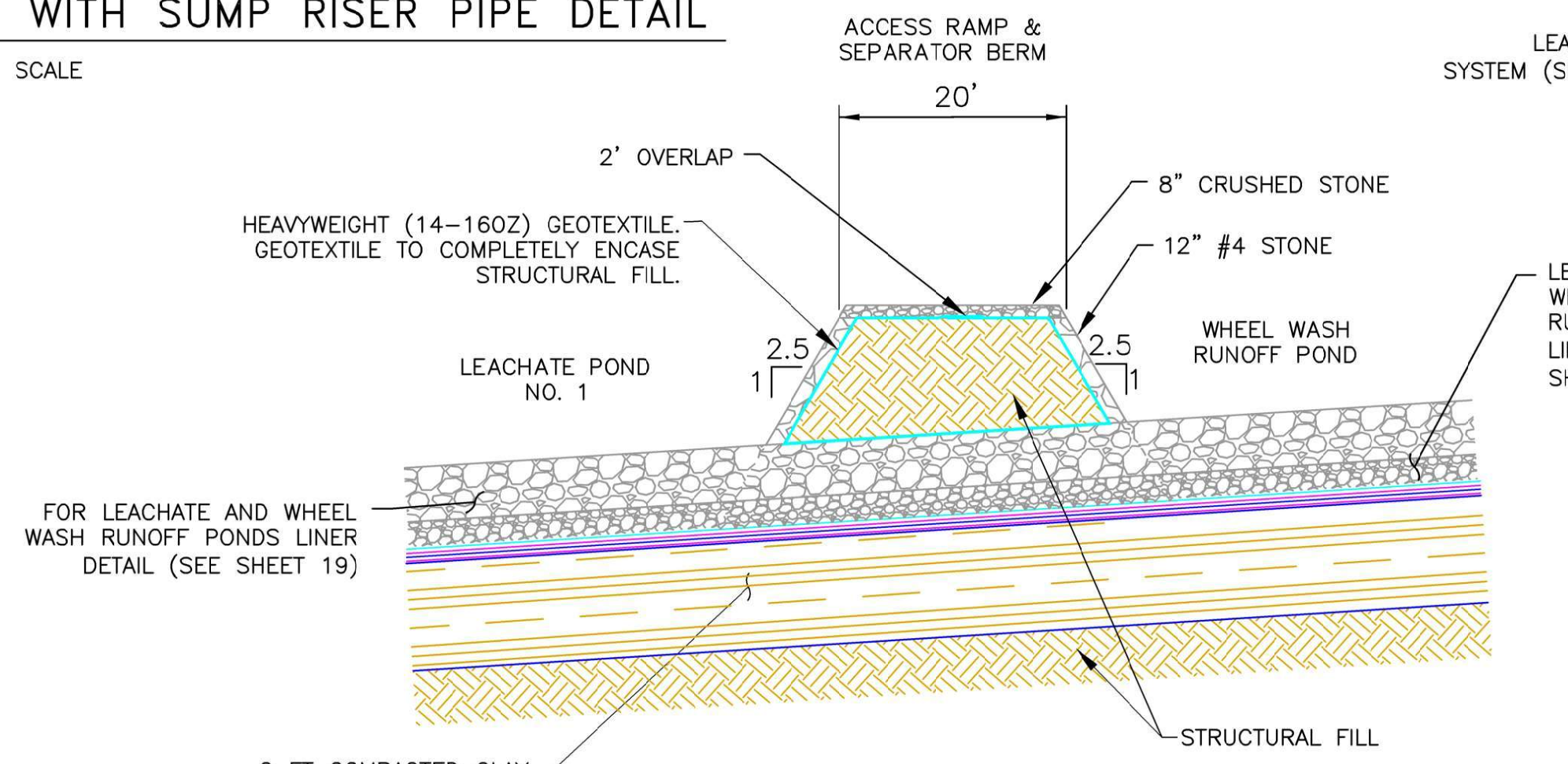
**TYPICAL POND ANCHOR TRENCH WITH SUMP RISER PIPE DETAIL**  
NOT TO SCALE



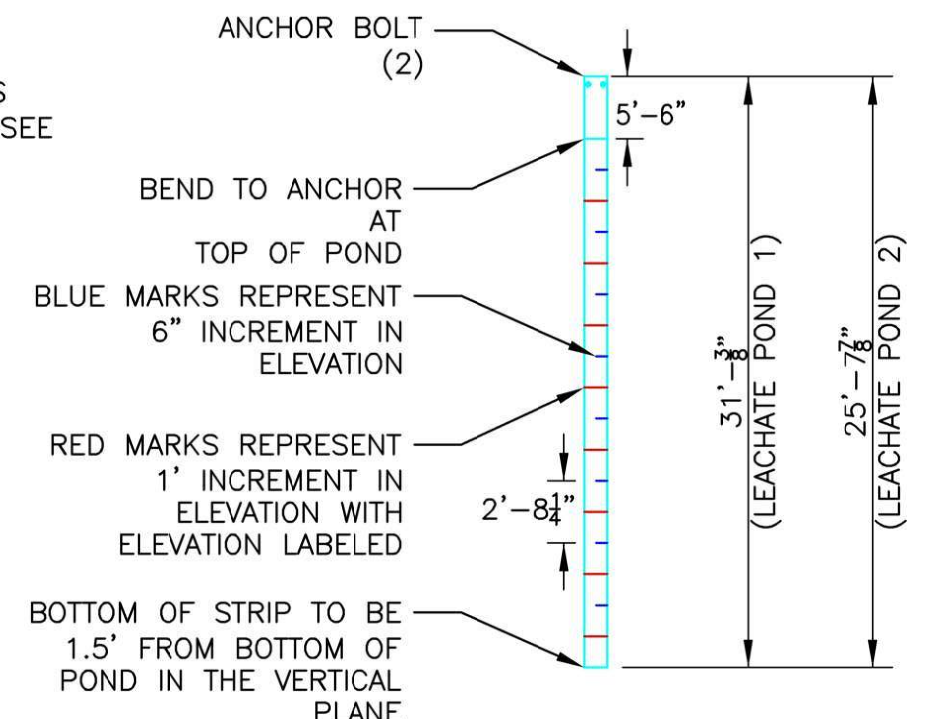
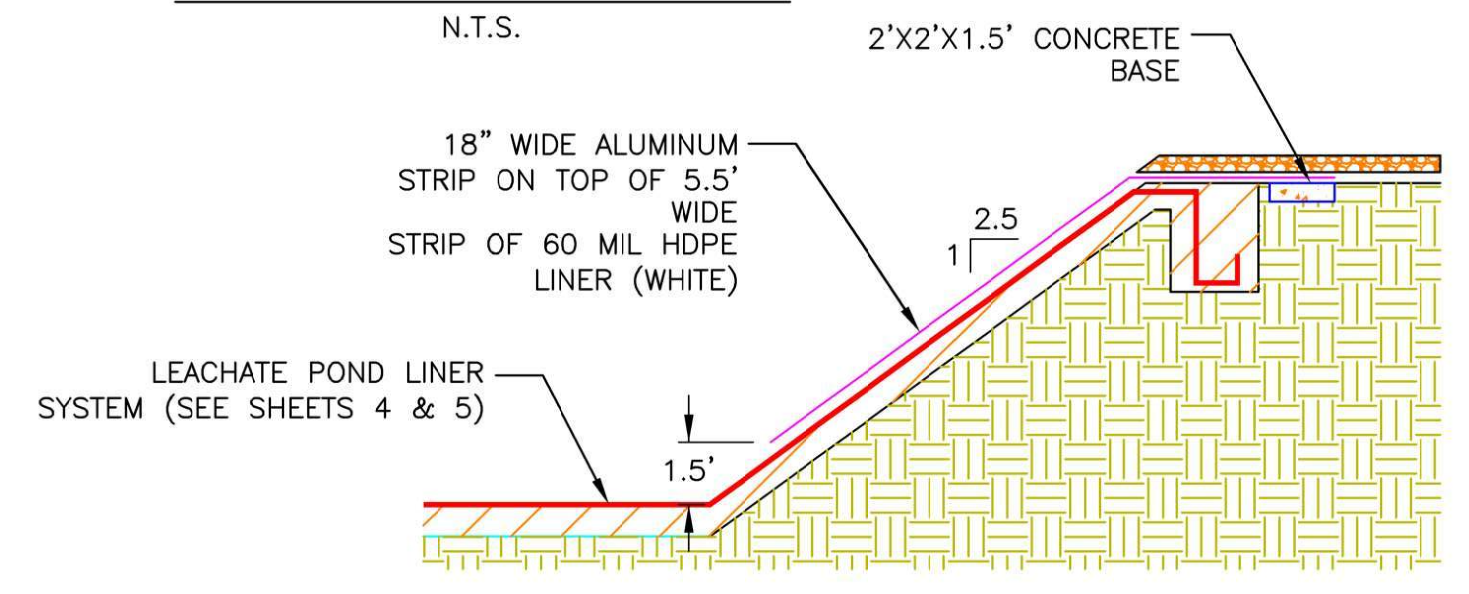
**LEACHATE COLLECTION AND REMOVAL SYSTEM (LCRS) OUTLET PIPE SECTION**  
N.T.S.



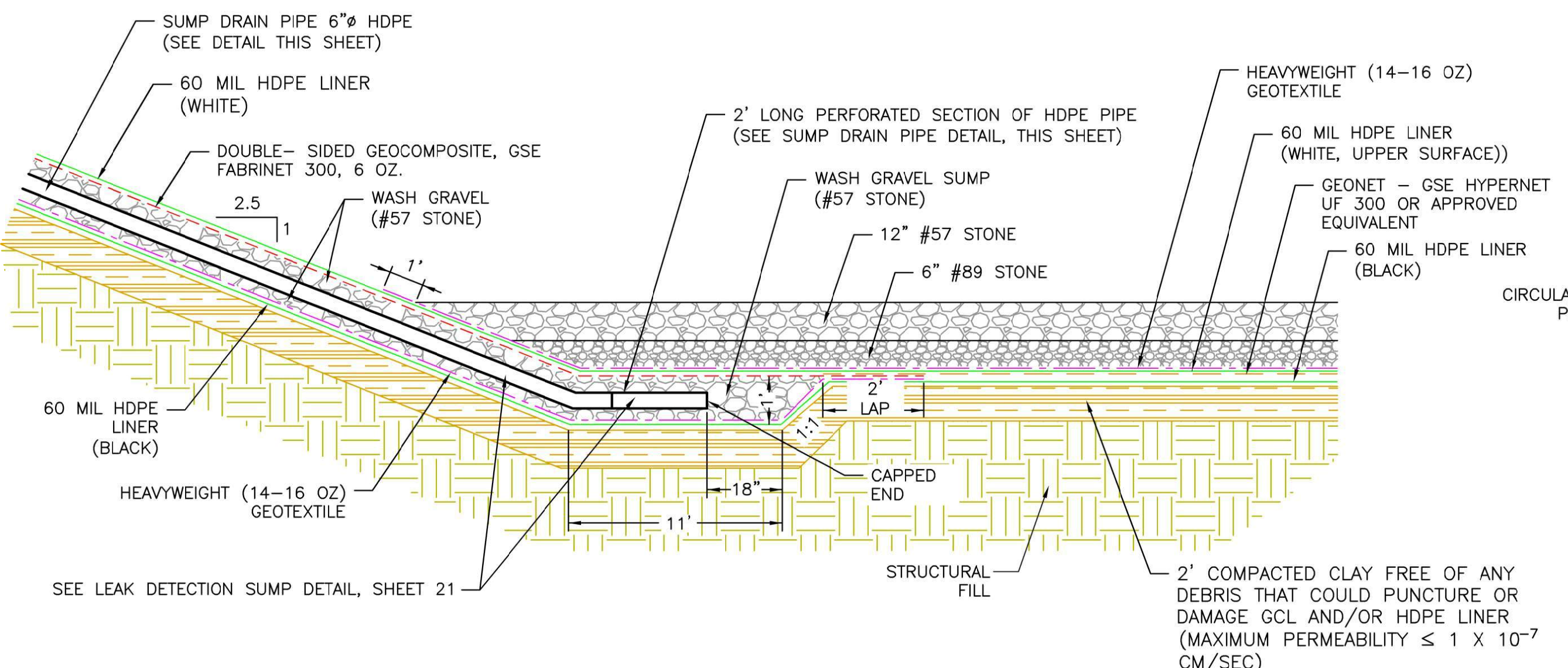
**LEACHATE COLLECTION AND REMOVAL SYSTEM (LCRS) CAPPED HEADER SECTION DETAIL**  
NOT TO SCALE



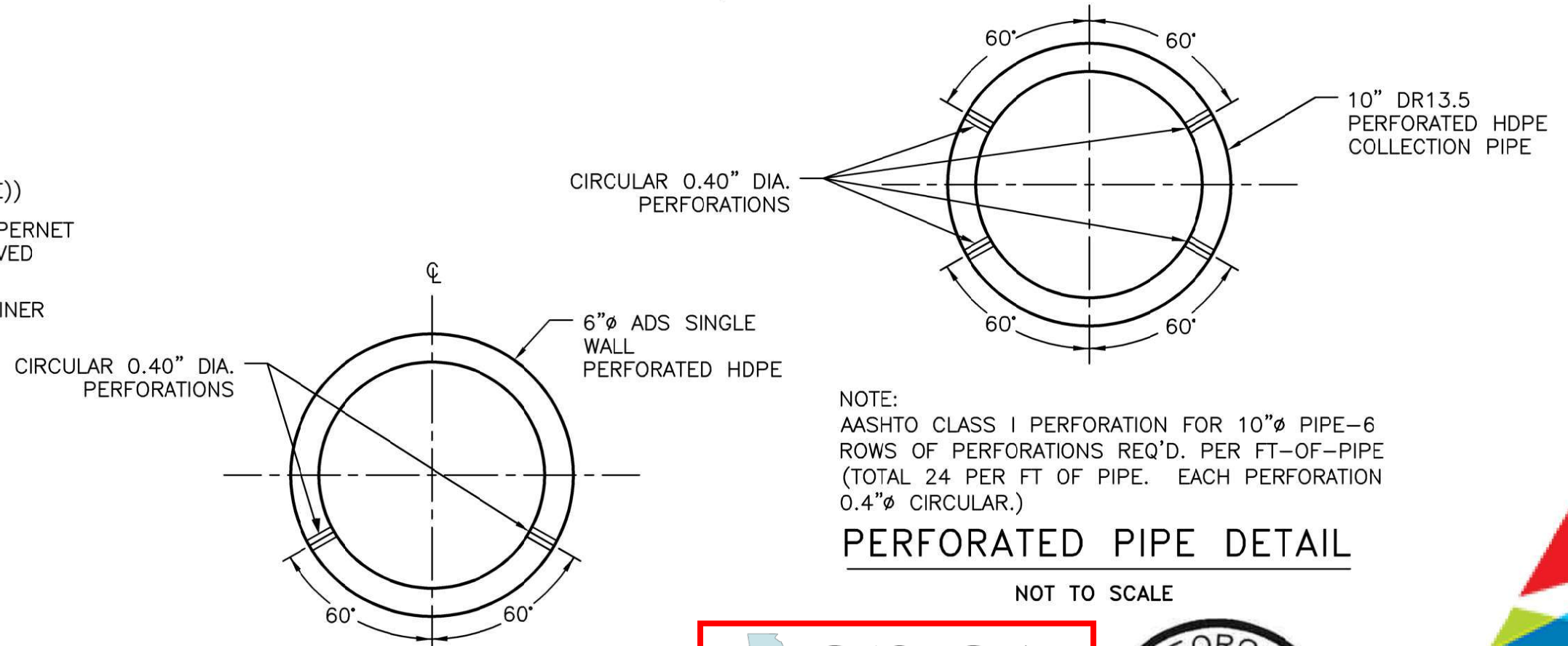
**ACCESS RAMP AND SEPARATOR BERM DETAIL**  
NOT TO SCALE



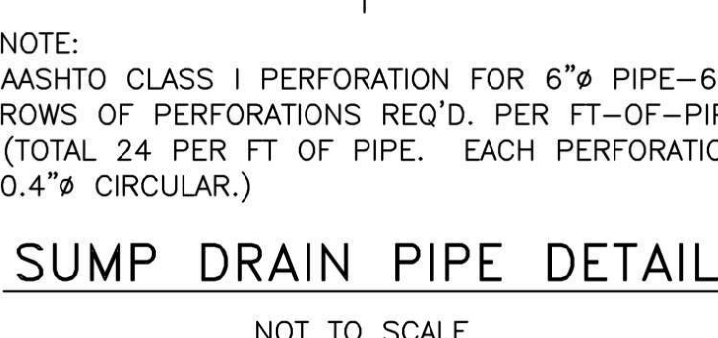
**WATER LEVEL MARKER POST DETAIL**  
NOT TO SCALE



**TYPICAL LEACHATE POND LEAKAGE DETECTION SUMP DETAIL**  
NOT TO SCALE



**PERFORATED PIPE DETAIL**  
NOT TO SCALE



**SUMP DRAIN PIPE DETAIL**  
NOT TO SCALE



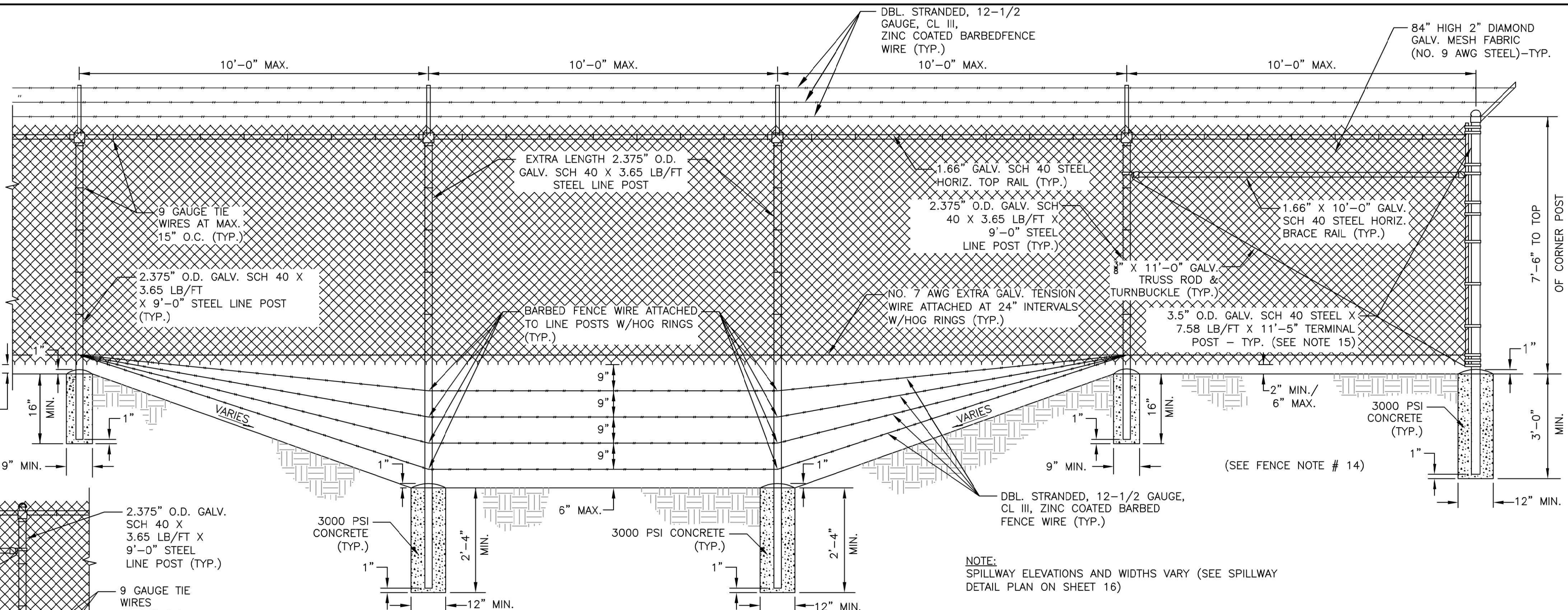
- REFERENCES:**
1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
  2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
  3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

|   |                   |         |
|---|-------------------|---------|
| MISC. SECTIONS & DETAILS  |                   |         |
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA                        |                   |         |
|  <b>GEI</b> Consultants<br>3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |                   |         |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>   | PROJ. NO. 1702944 | DWG. 22 |
| SCALE NONE  | SHEET 22 OF 38    |         |
| DATE 9/30/2022  | EDIT              |         |



**FENCE**

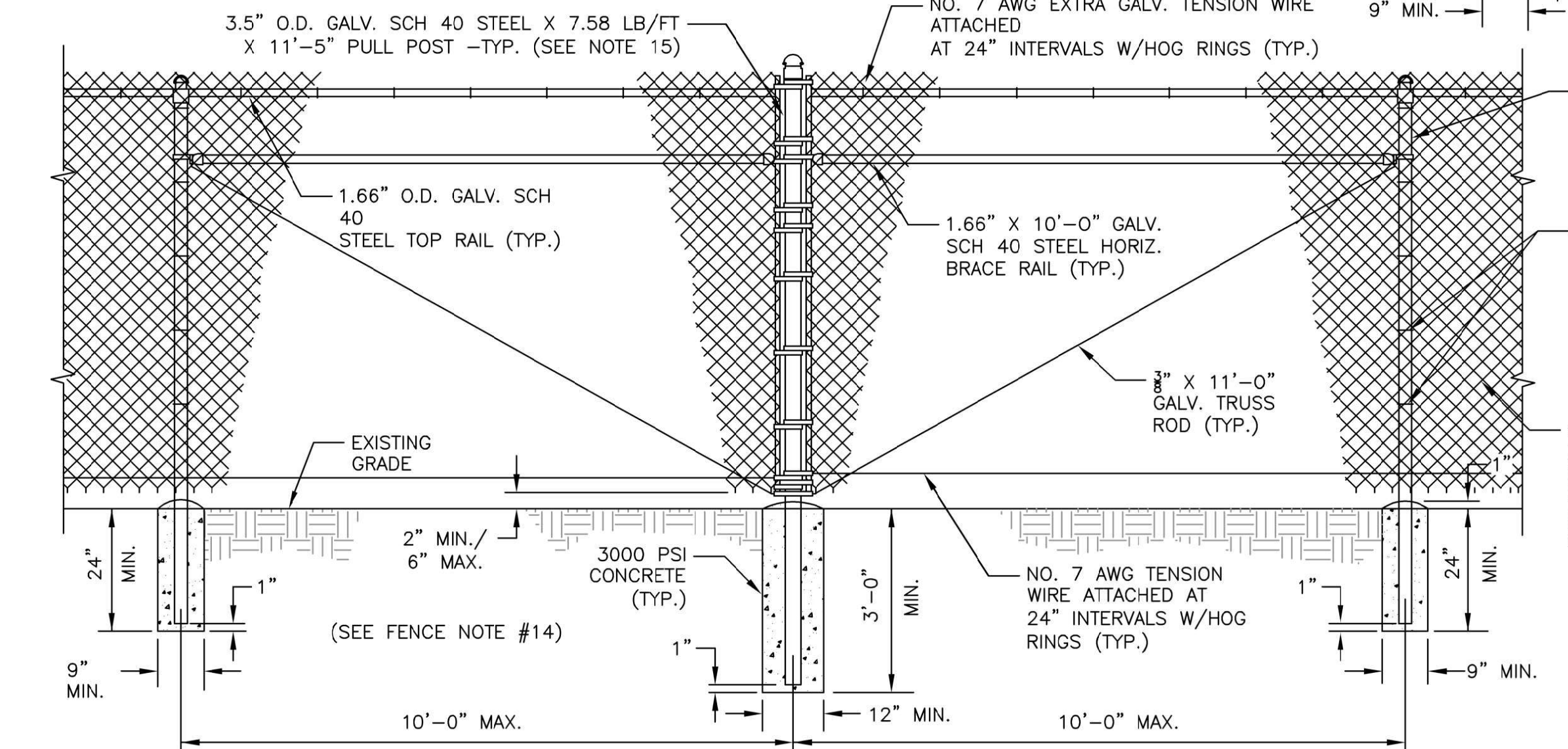
- FENCE MATERIALS AND ERECTION SHALL BE IN ACCORDANCE WITH THE SOUTHERN COMPANY GENERAL PROVISIONS FOR CHAIN LINK FENCE SPECIFICATIONS 32 31 13.
- TIE FENCE FABRIC TO SPIRALED TENSION WIRE BETWEEN POSTS WITH GALVANIZED STEEL HOG RINGS TOP AND BOTTOM AT INTERVALS OF TWO FEET.
- LIMIT TENSION IN FABRIC AND WIRE TO PREVENT BENDING OF GATE POSTS AND CORNER POSTS.
- WHEN GATE PANEL IS INSTALLED ON A CORNER POST, THE LATCH SHOULD BE INSTALLED ON THE OPPOSITE PANEL.
- PULL POSTS WILL BE INSTALLED AT APPROXIMATELY MID-SPAN WHERE SPACING BETWEEN CORNER POSTS OR TERMINAL POSTS EXCEEDS 100 FEET TO PROVIDE FENCE GROUNDING POINT PER NEC, OR WHERE IT IS NECESSARY TO TERMINATE THE FENCE DUE TO A CHANGE IN GRADE. MATERIAL FOR PULL POSTS TO BE SAME AS CORNER POSTS.
- HINGE TO BE INSTALLED WITH GALVANIZED STEEL BOLT WITH TWO NUTS OR PREFERRED SELF-LOCKING TYPE NUT TO LOCK BOLT IN PLACE.
- CHAIN FOR GATE TO BE ONE PIECE: 1/2" GALVANIZED STEEL, WELDED, SIZE 5/0, INSERTED BETWEEN GATE FRAME AND TENSION BAR, SUCH THAT A TIGHT FIT IS OBTAINED WITH LOCK INSTALLED FROM OUTSIDE GATE, EXCESS LINKS SHOULD BE REMOVED.
- FENCE FABRIC TO BE INSTALLED WITH TWIST SELVAGES AT BOTTOM.
- GATE HINGE TO BE INSTALLED FOR 1/2" OR LESS GAP BETWEEN GATE POST AND FRAME TO PREVENT ACCESS WHEN CLOSED AND TO ALLOW APPROX. 180-DEGREES INWARD OPENING.
- GATE KEEPER TO BE INSTALLED FOR EACH PANEL OF DOUBLE GATES AT MAXIMUM OPEN POSITION.
- TRUSS RODS ARE NOT REQUIRED WHEN ONLY ONE LINE POST IS IN A CONTINUOUS SPAN OF FABRIC.
- BOTTOM OF CHAIN LINK FABRIC TO BE INSTALLED A MINIMUM OF 2" TO A MAXIMUM OF 6" ABOVE FINISHED GRADE.
- USE 3/8" O.D. X 11'-5" POST FOR CORNER AND PULL POSTS REQUIRING BARBED WIRE TO BE HELD BY 45-DEGREE ARMS, CUT 12" OFF POST FOR A HEIGHT OF 10'-5".
- DOUBLE DRIVE GATES TO BE INSTALL TO MINIMIZE OPENING TO 2" MAXIMUM. (CHAIN SHOULD NOT BE SLACK.)
- CONCRETE TO BE POURED WITH A 1" DOME TO PREVENT PUDDLING NEAR POST.



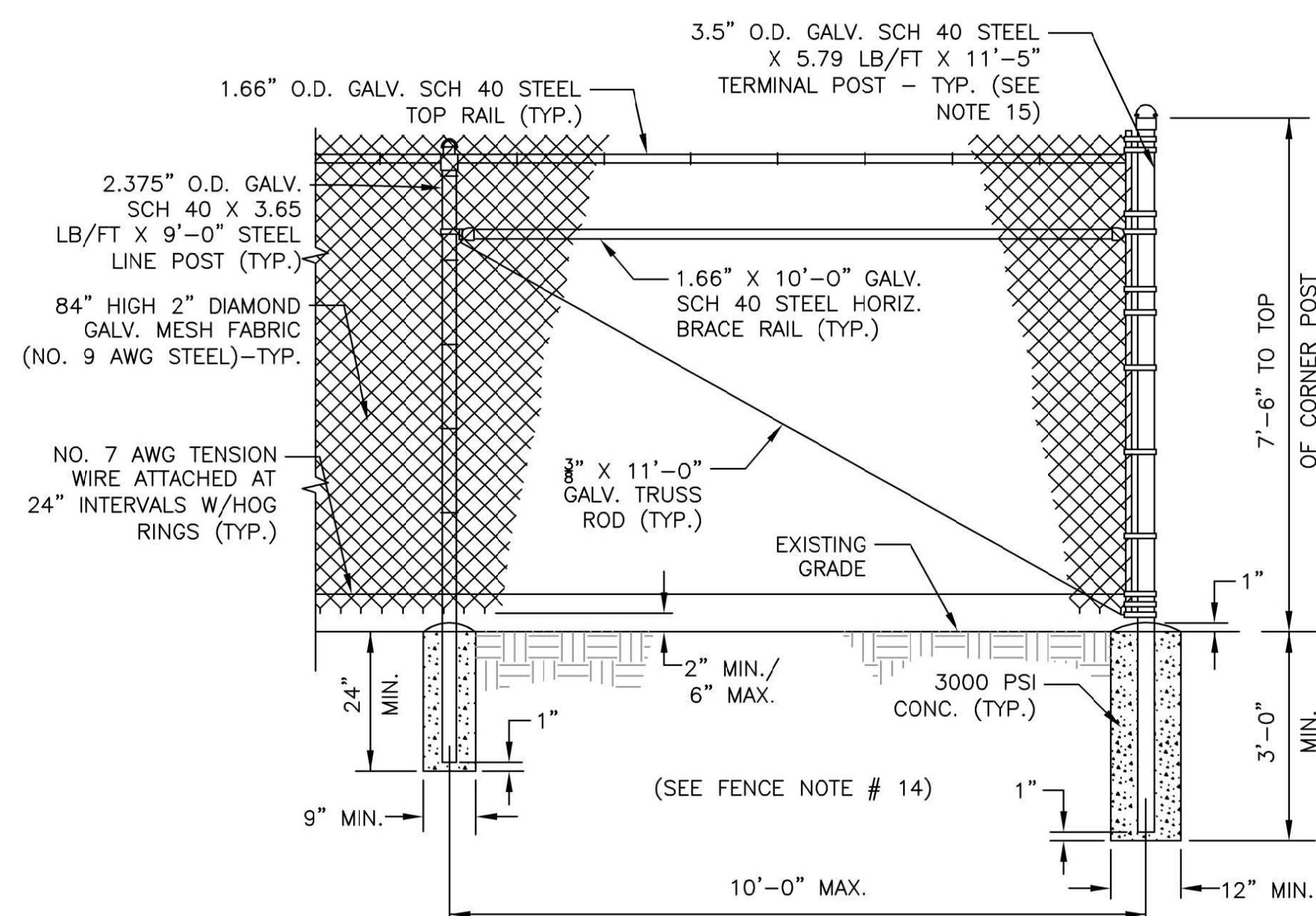
**PERIMETER SECURITY FENCE DITCH CROSSING**  
N.T.S.

**REFERENCES:**

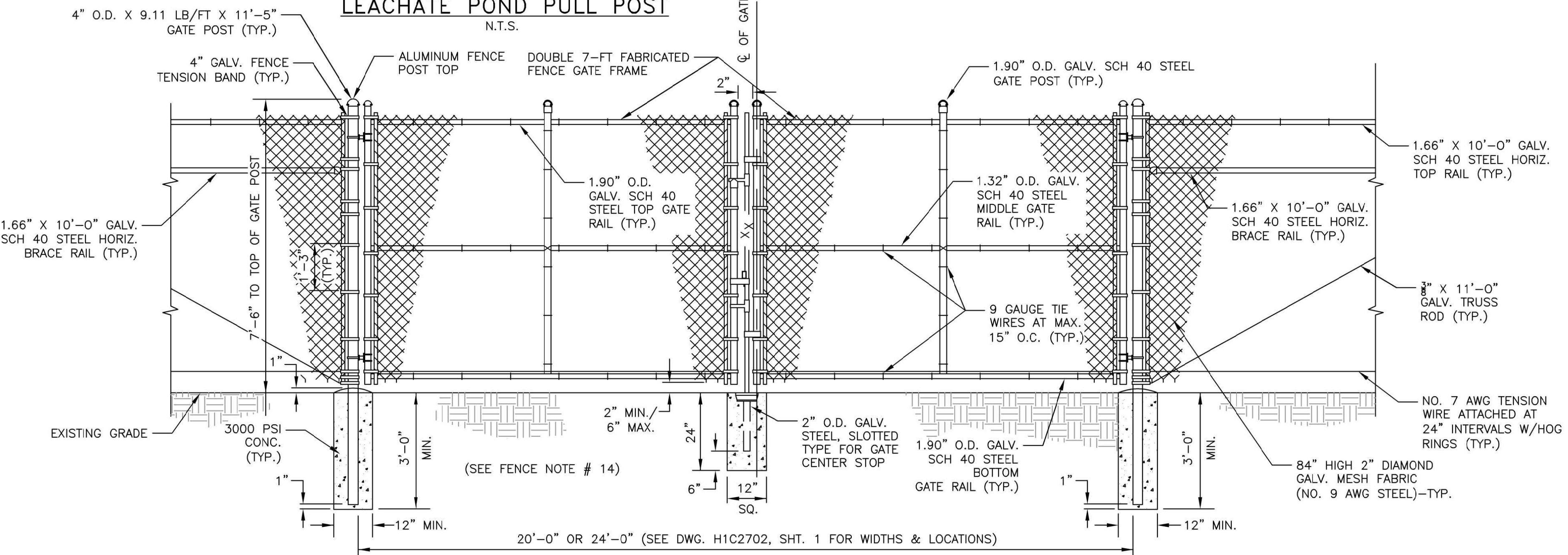
- MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
- FOR A COMPLETE DRAWING LIST SEE SHEET 1.
- SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



**LEACHATE POND PULL POST**  
N.T.S.



**LEACHATE POND TYPICAL CORNER**  
N.T.S.

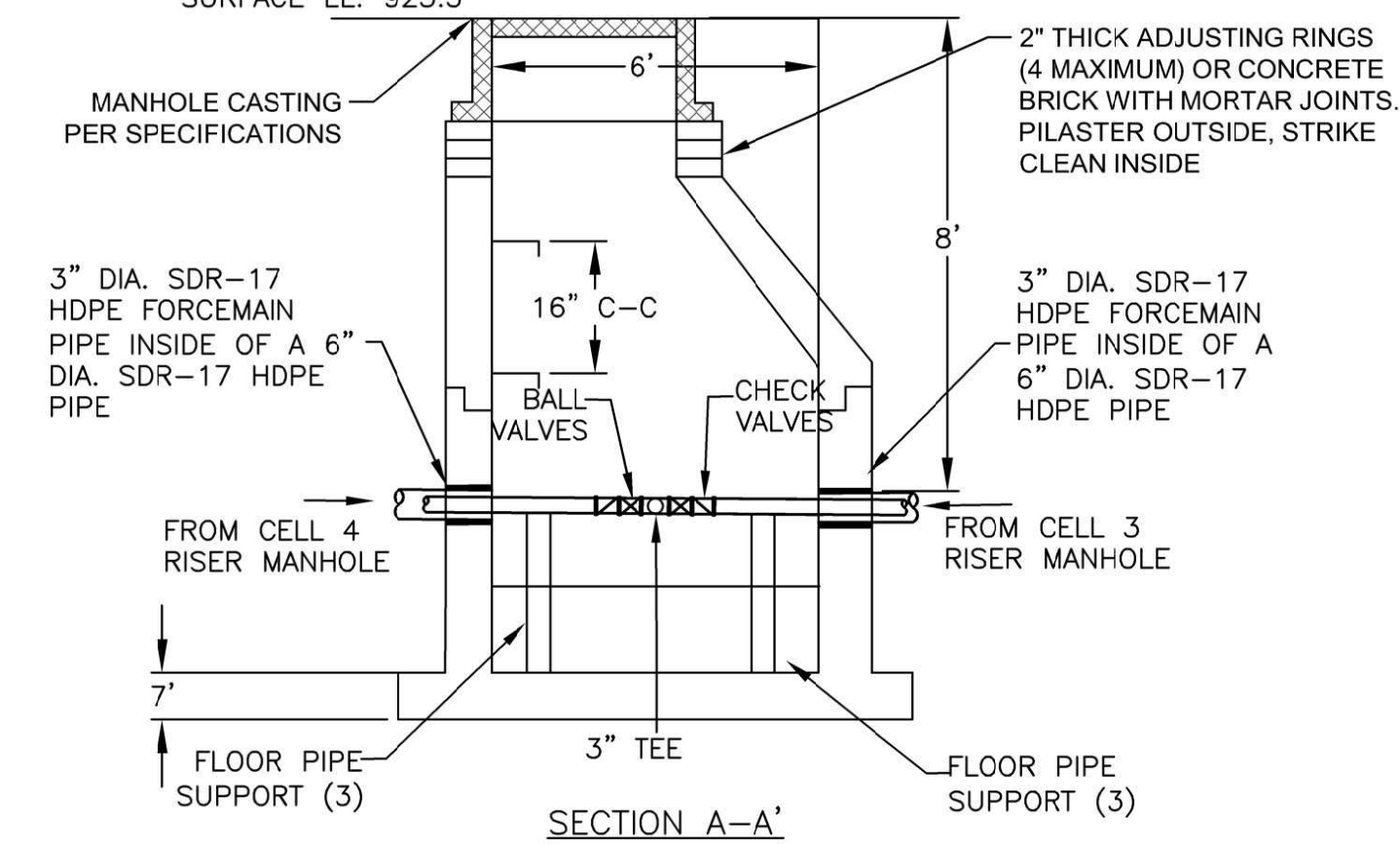
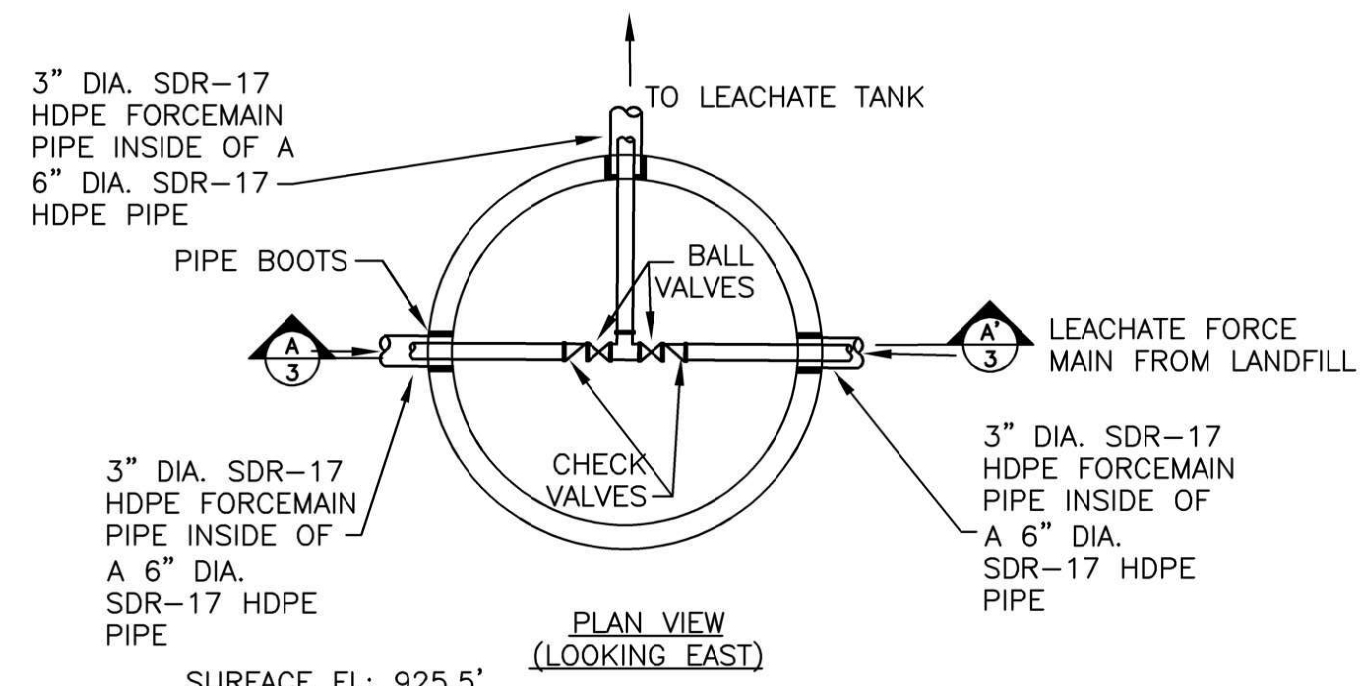
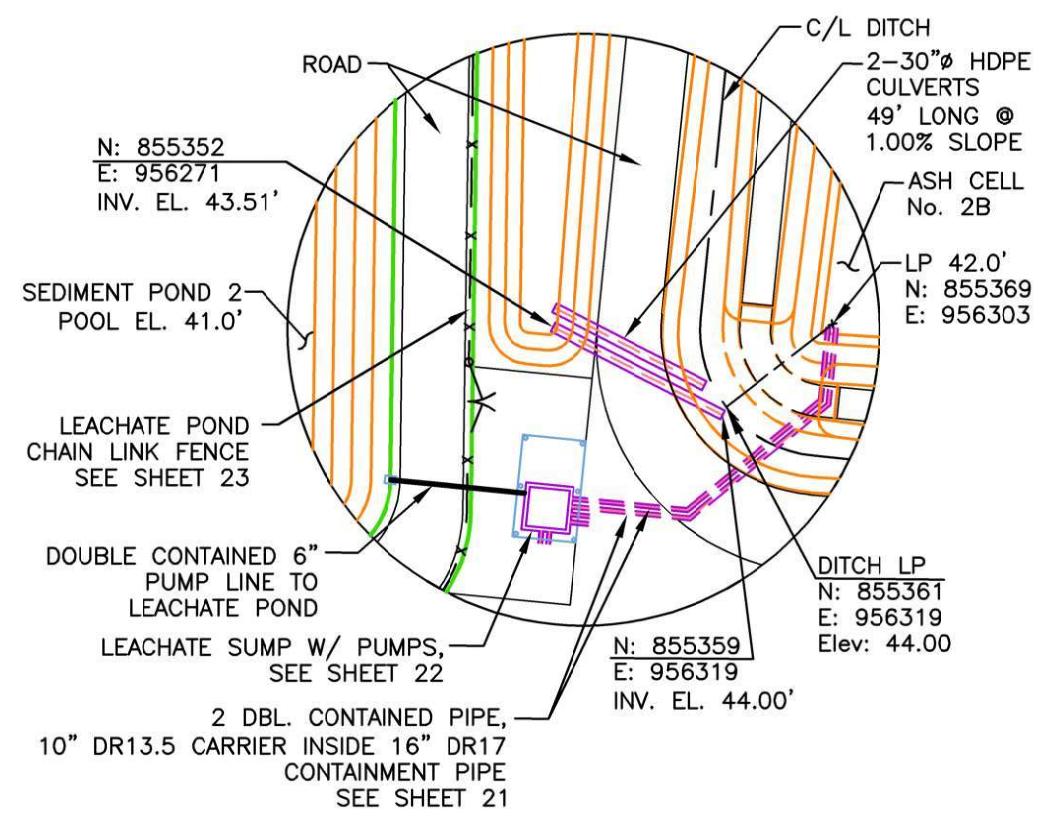


**LEACHATE POND 20' OR 24' WIDE CHAIN LINK DOUBLE SWING SECURITY GATE**  
N.T.S.



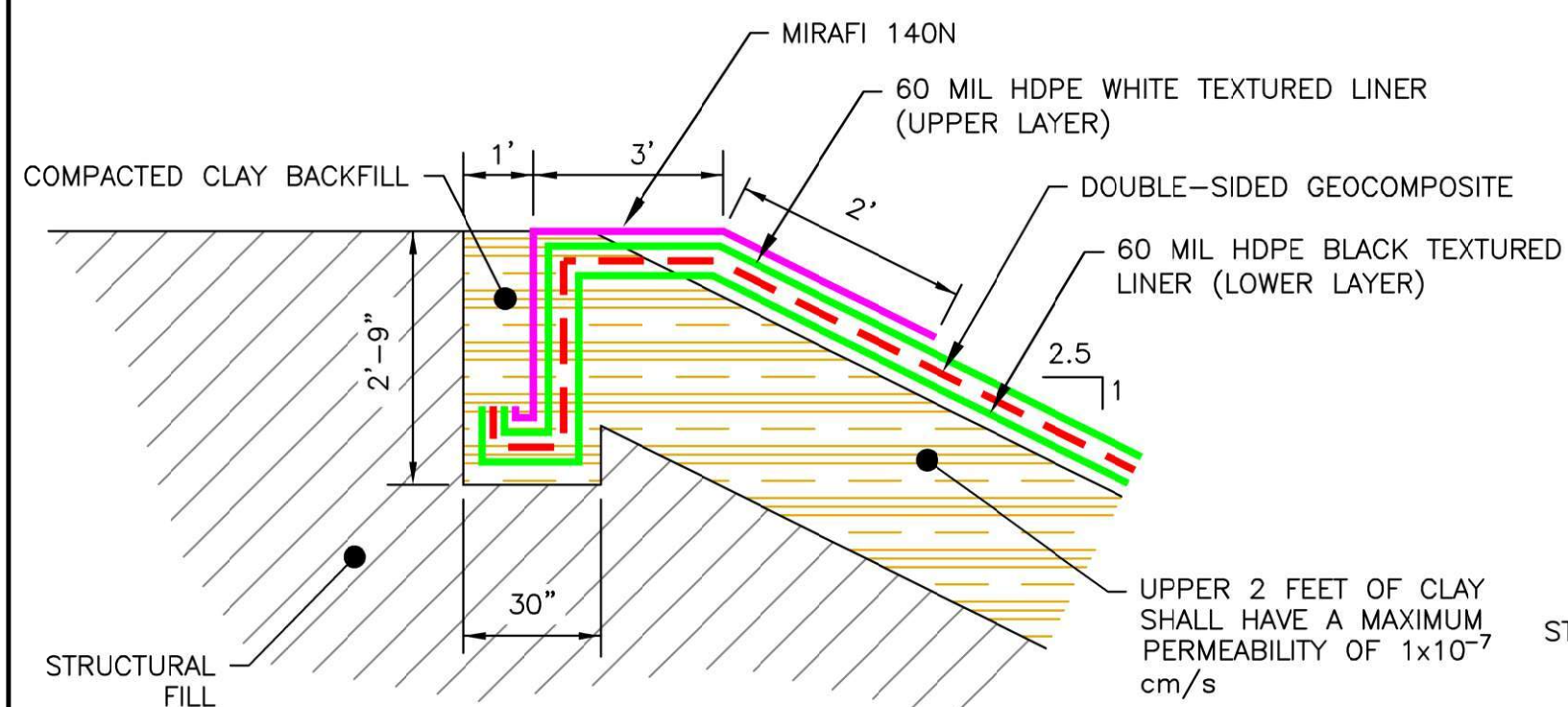
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|--|-------------------|---------|
| MISC. SECTIONS & DETAILS   |                   |         |
| <b>PERMIT DRAWINGS</b>   |                   |         |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |                   |         |
|                                     |                   |         |
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| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>                          | PROJ. NO. 1702944 | DWG. 23 |
| SCALE NONE   | SHEET 23 OF 38    |         |
| DATE 9/30/2022   |                   |         |



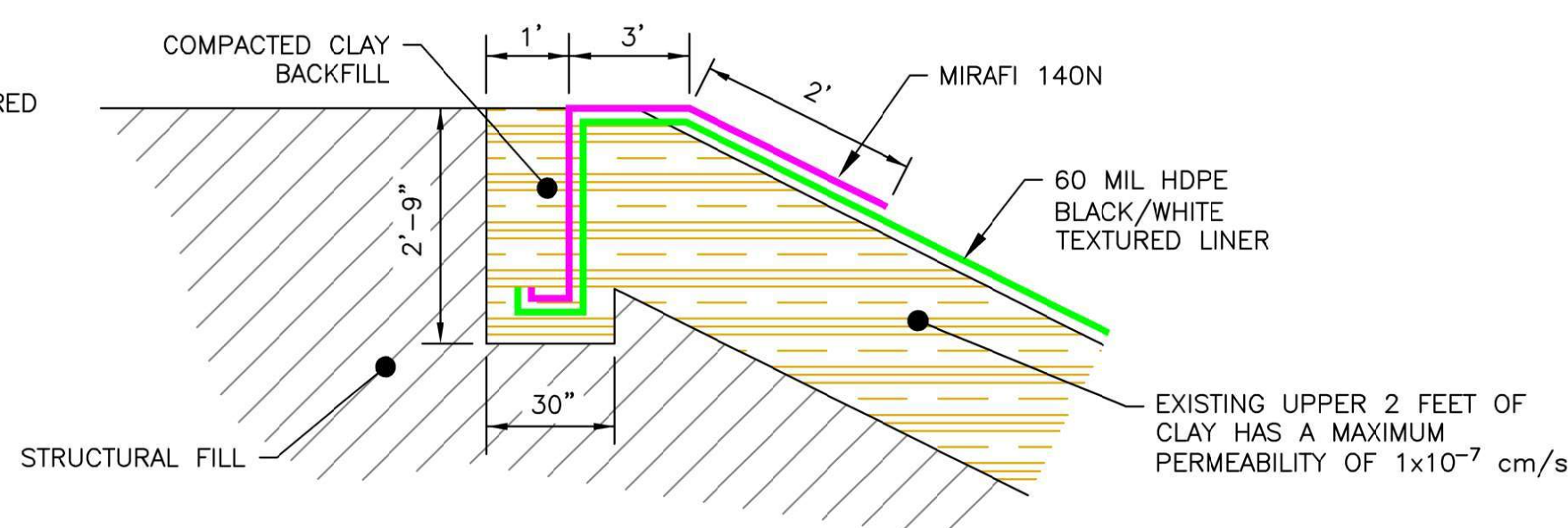


LEACHATE TANK FORCE MAIN JUNCTION MANHOLE DETAIL  
N.T.S.

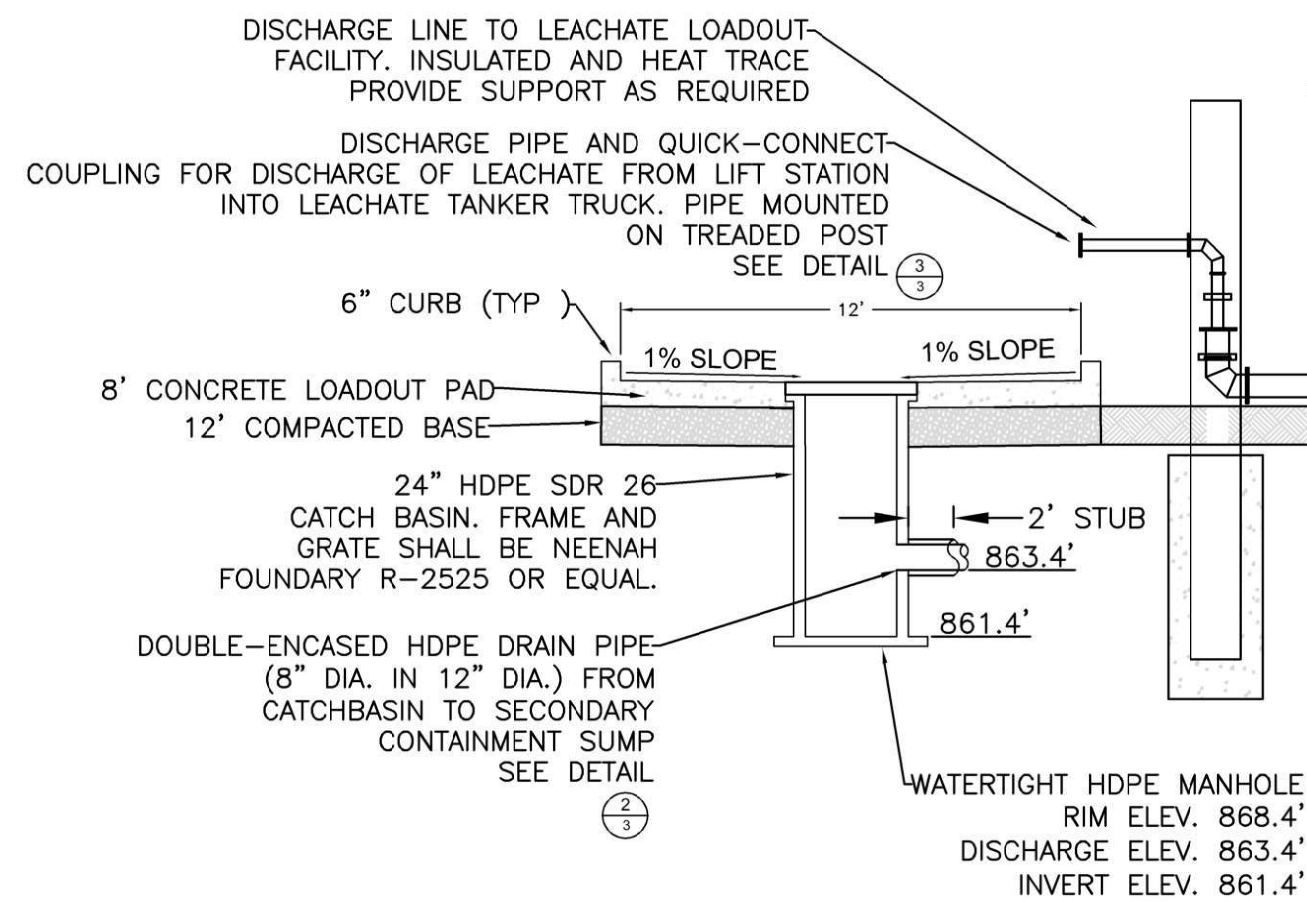
NOTE: UPSTREAM END OF SECONDARY CONTAINMENT PIPE SEALED AT MANHOLE. DOWNSTREAM END OF SECONDARY CONTAINMENT PIPES OPEN TO ALLOW DRAINAGE TO MANHOLE.



DOUBLE LINER ANCHOR TRENCH DETAIL  
N.T.S.



SINGLE LINER ANCHOR TRENCH DETAIL  
N.T.S.

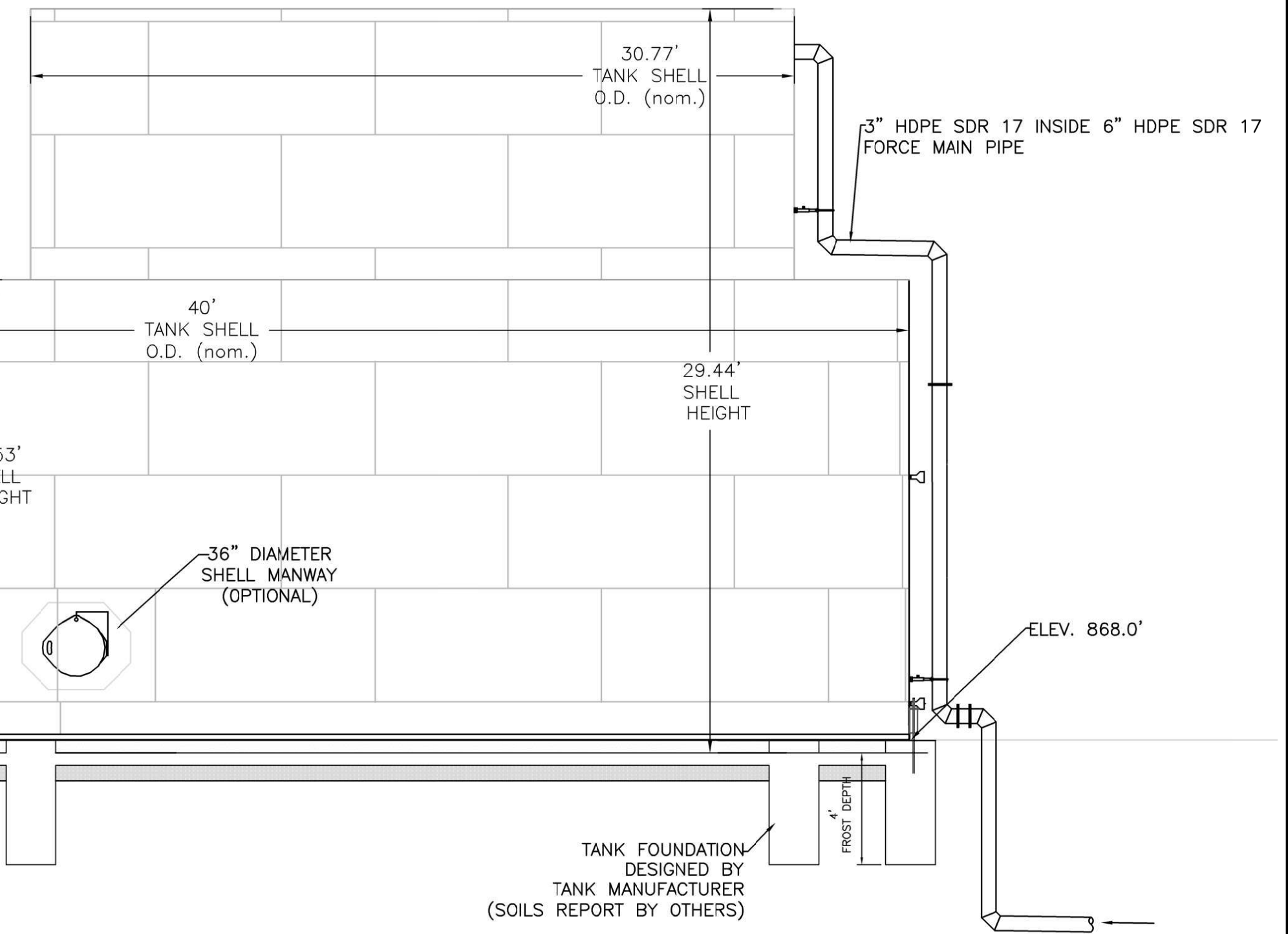


TRUCK LOADING SECONDARY CONTAINMENT SUMP DETAIL  
N.T.S.

NOTE: DOWNSTREAM END OF SECONDARY CONTAINMENT PIPES OPEN TO ALLOW DRAINAGE TO MANHOLE.

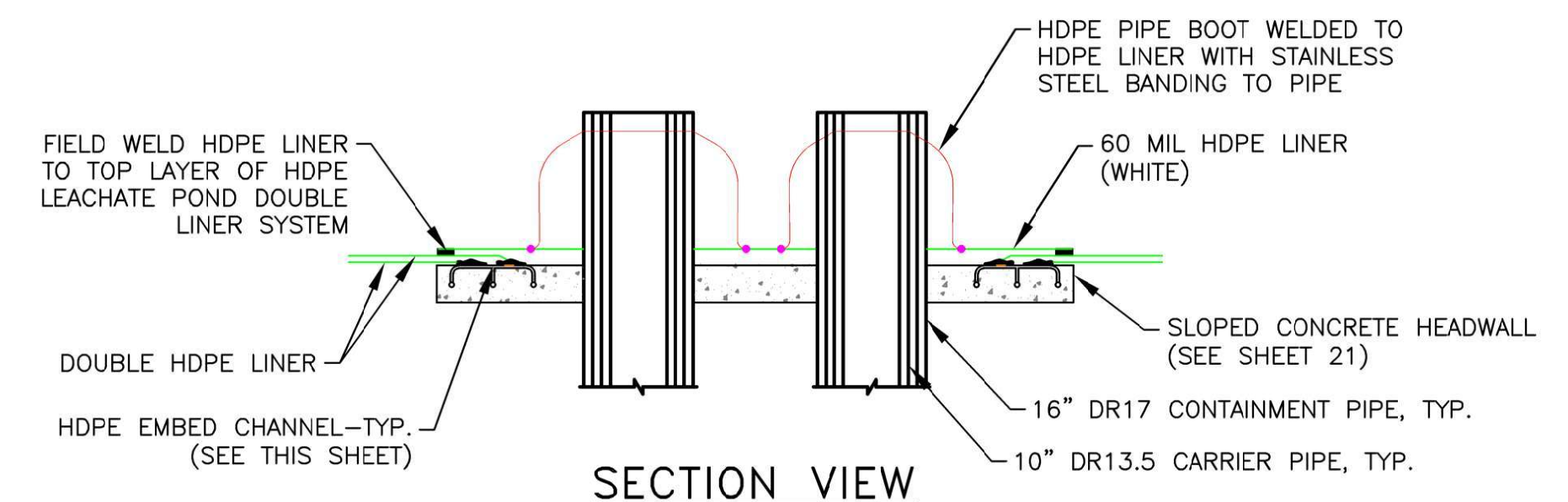
REFERENCES:

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 2 FOR GENERAL NOTES AND REFERENCES.



TRUCK LOADING PAD AND LEACHATE TANK DETAIL  
N.T.S.

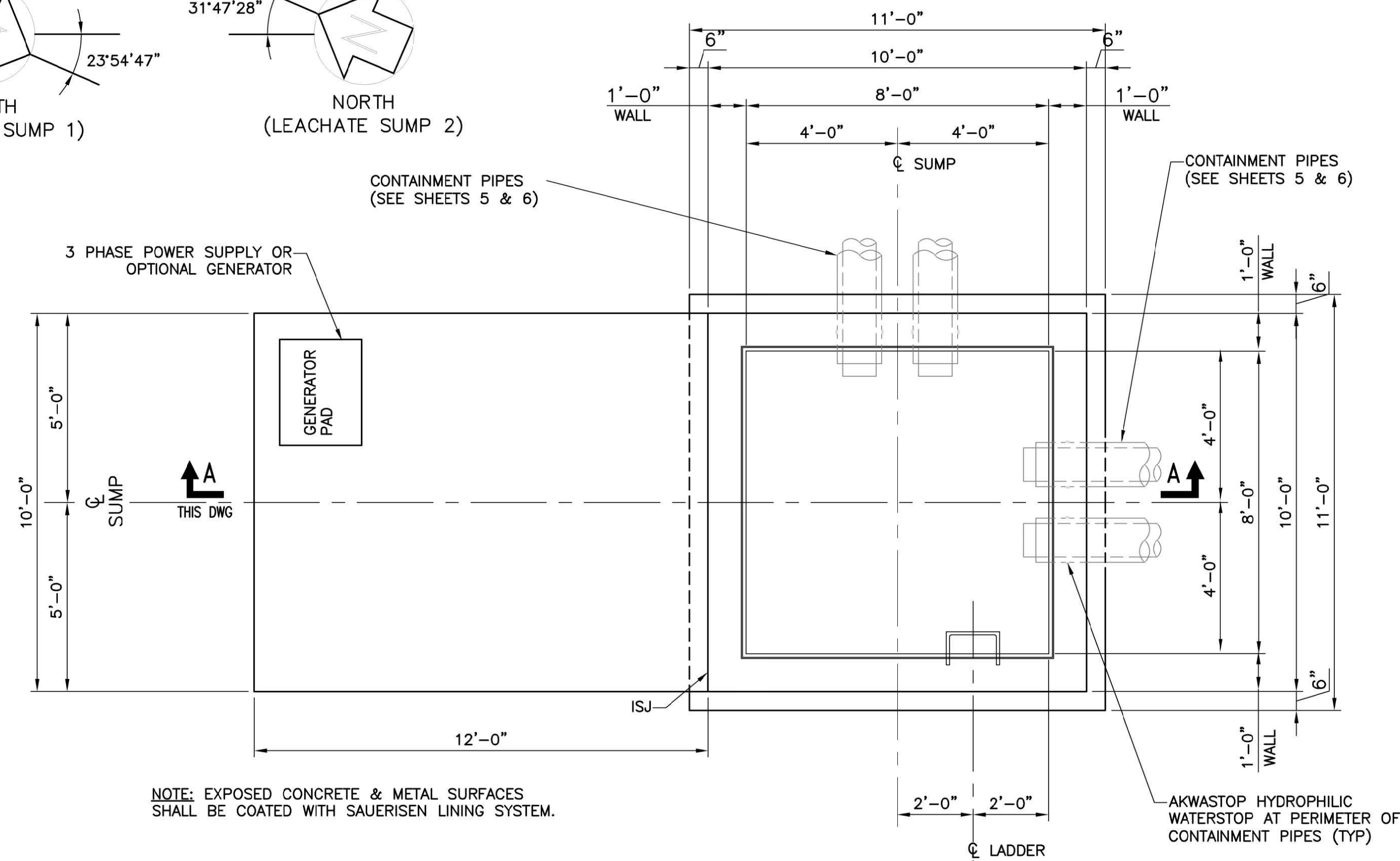
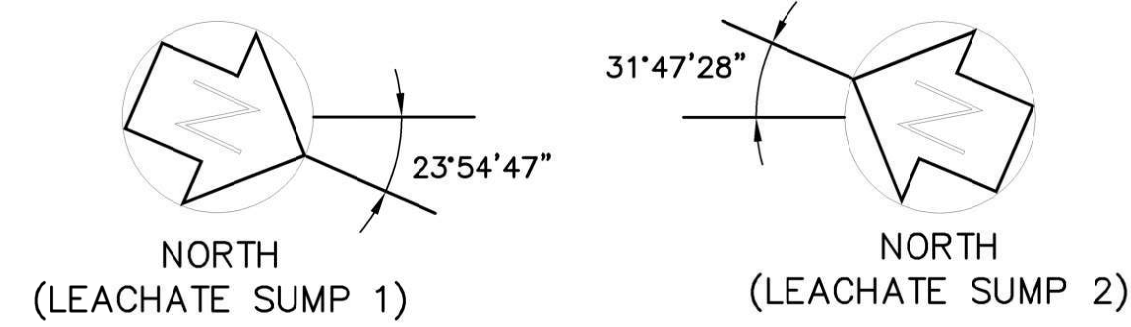
NOTE: ALTERNATIVE TO SECONDARY DRAIN PIPE W/ VALVE MAY INCLUDE SUMP PUMP WITH DISCHARGE PIPED OVER SECONDARY TANK WALL. STORMWATER WILL BE INSPECTED FOR CONTAMINATION PRIOR TO DISCHARGE.



LEACHATE PIPE HEADWALL AT LEACHATE POND DETAIL  
N.T.S.

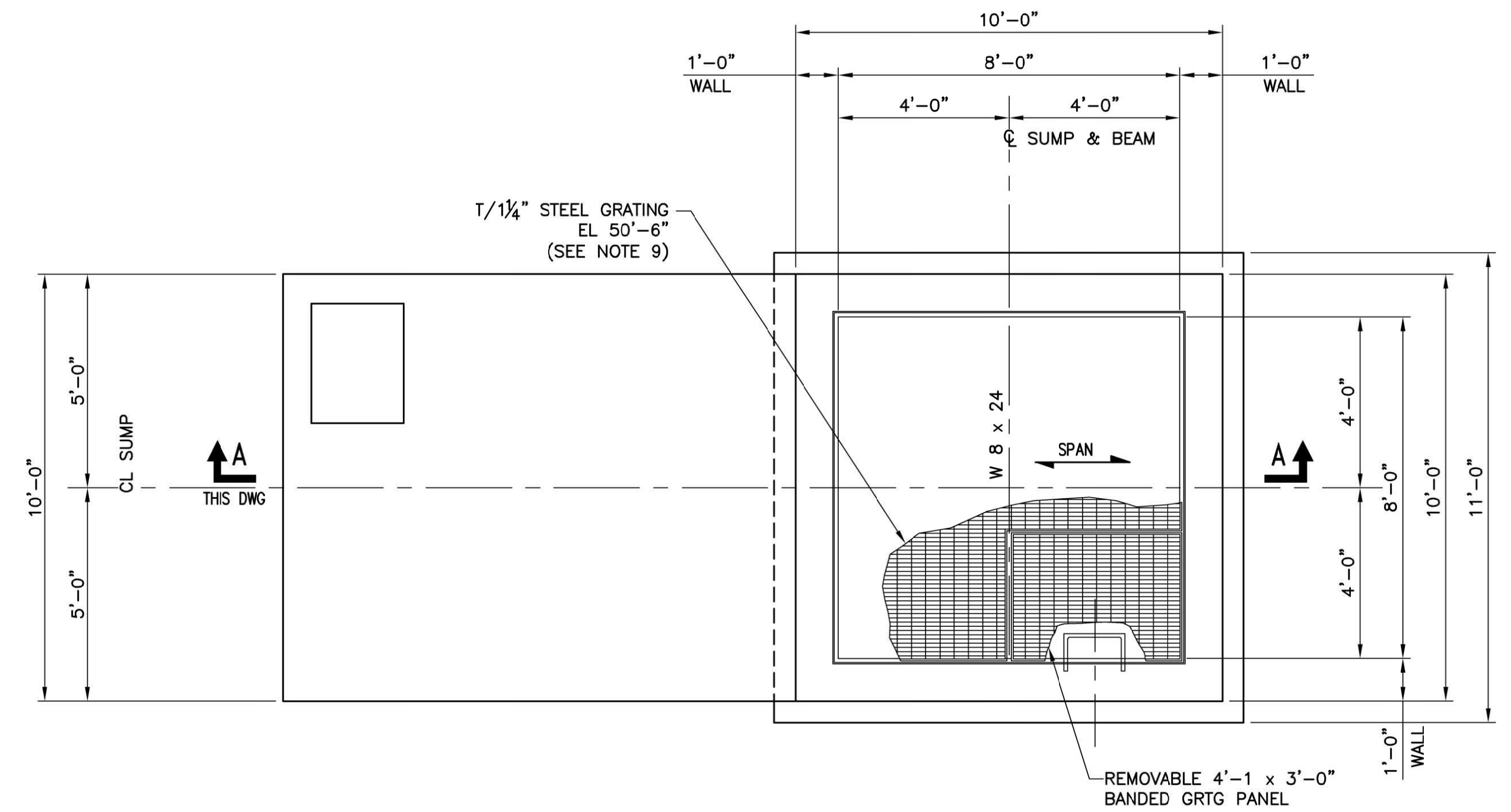
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|--|-----------|----------------|
| MISC. SECTIONS & DETAILS   |           |                |
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |                |
|  |           |                |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>  |           |                |
| PROJ. NO.  | 1702944   | DWG. 24        |
| SCALE  | NONE      | EDIT           |
| DATE   | 9/30/2022 | SHEET 24 OF 38 |





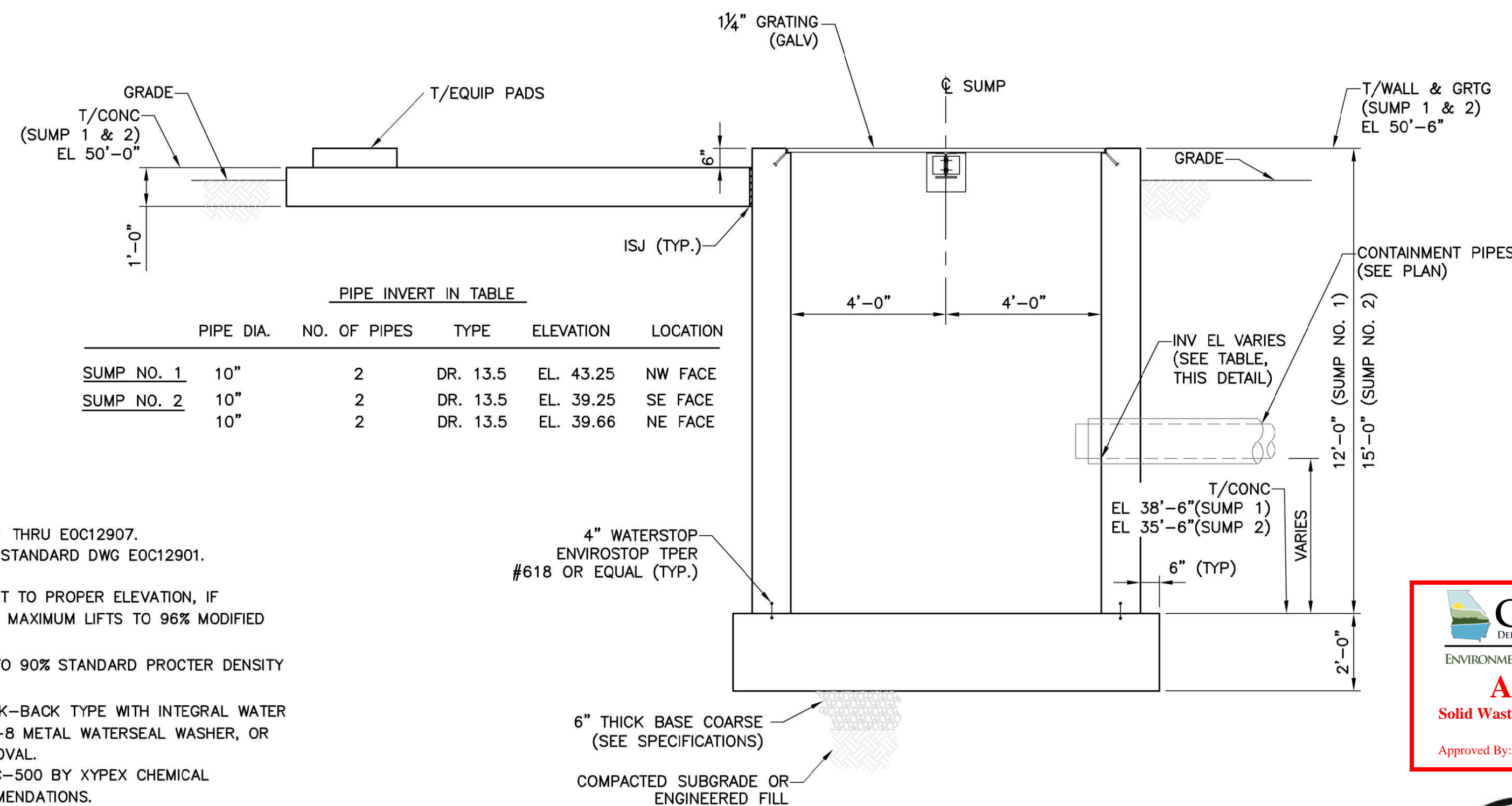
**PLAN - SUMP TOP**

SCALE:  $\frac{3}{8}'' = 1'-0''$   
(FOR SUMP LOCATION & ORIENTATION, SEE SHEET 4 & 24)



**PLAN - STRUCTURAL STEEL**

SCALE:  $\frac{3}{8}'' = 1'-0''$



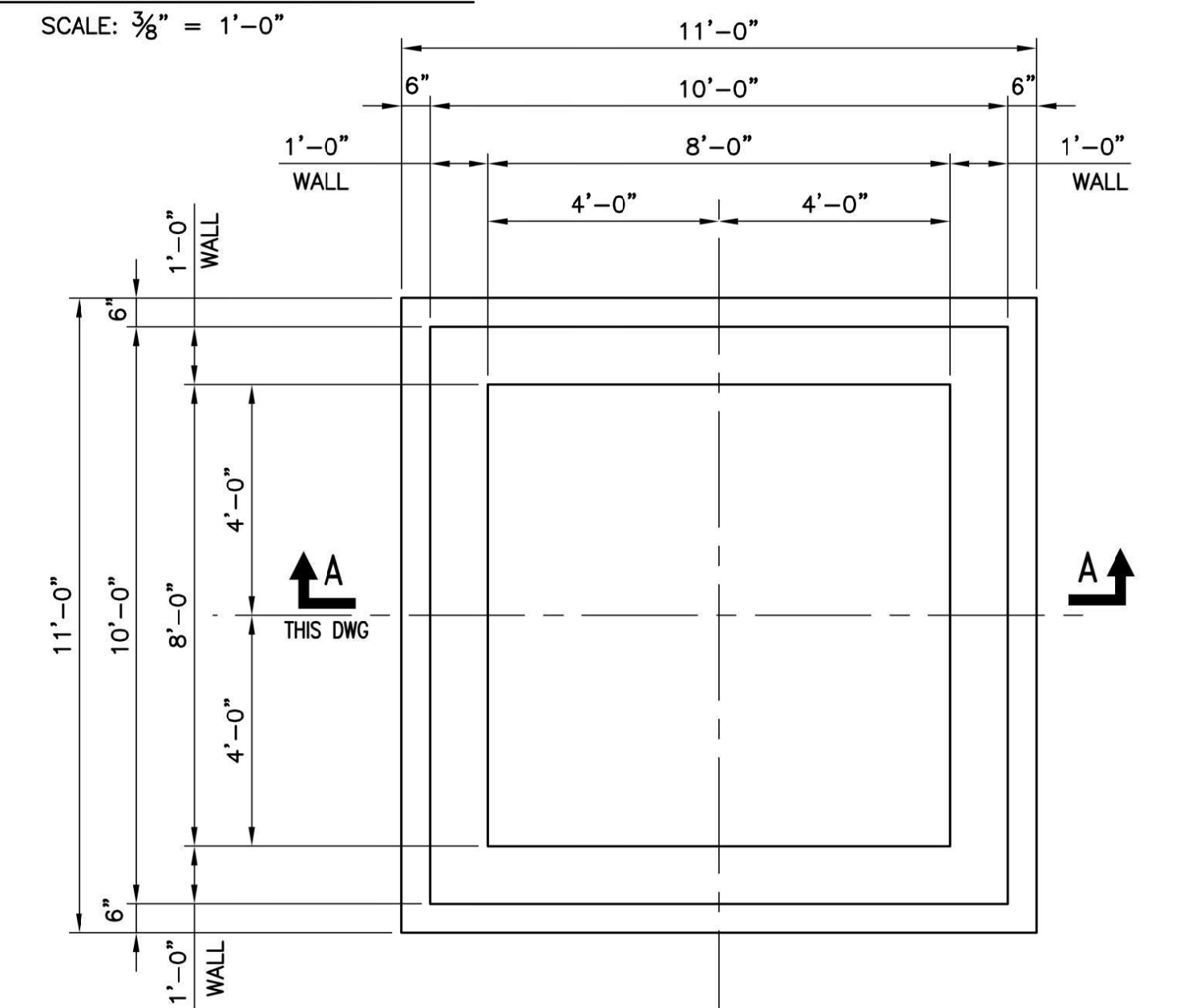
**SECTION A-A**

SCALE:  $\frac{3}{8}'' = 1'-0''$

| PIPE INVERT IN TABLE |           |              |          |           |          |
|----------------------|-----------|--------------|----------|-----------|----------|
| SUMP NO.             | PIPE DIA. | NO. OF PIPES | TYPE     | ELEVATION | LOCATION |
| SUMP NO. 1           | 10"       | 2            | DR. 13.5 | EL. 43.25 | NW FACE  |
|                      | 10"       | 2            | DR. 13.5 | EL. 39.25 | SE FACE  |
| SUMP NO. 2           | 10"       | 2            | DR. 13.5 | EL. 39.66 | NE FACE  |
|                      | 10"       | 2            | DR. 13.5 | EL. 39.66 | NE FACE  |

**NOTES:**

- FOR GENERAL CONCRETE NOTES SEE SCS STANDARD DWG EOC12901.
- FOR STANDARD CONCRETE DETAILS SEE SCS STANDARD DWGS EOC12901 THRU EOC12907.
- FOR STANDARD ANCHOR BOLT DETAILS AND MATERIAL NOTES SEE SCS STANDARD DWG EOC12901.
- REFERENCE SHEET 4 FOR AREA LAYOUT AND GRADING.
- EXISTING SOIL SHALL BE EXCAVATED TO SOUND MATERIAL AND BROUGHT TO PROPER ELEVATION, IF REQUIRED, WITH COARSE AGGREGATE BASE MATERIAL COMPACTED IN 8" MAXIMUM LIFTS TO 96% MODIFIED PROCTER DENSITY (ASTM D1557).
- BACKFILL AROUND SUMP SHALL BE COMPACTED IN 8" MAXIMUM LIFTS TO 90% STANDARD PROCTER DENSITY (ASTM D698).
- SUMP WALL FORM-TIES SHALL BE PREFABRICATED 1" DEEP CONE BREAK-BACK TYPE WITH INTEGRAL WATER BARRIER PLATE: DAYTON A-4 TIES WITH A-2 PLASTIC CONES AND A-8 METAL WATERSEAL WASHER, OR EQUAL. TIE HOLES SHALL BE PLUGGED IMMEDIATELY AFTER FORM REMOVAL.
- CONCRETE FOR SUMP WALLS AND BOTTOM SHALL HAVE XYPEX ADMIN C-500 BY XYPEX CHEMICAL CORPORATION. DOSAGE RATE SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
- STEEL BAR GRATING SHALL BE W-19-4 (1 1/4" x 3/8" BEARING BARS) GALVANIZED STEEL GRATING.
- ALL EXPOSED CONCRETE & METAL SURFACES SHALL BE COATED WIT SAUERISEN LINING SYSTEM.



**PLAN - SUMP BOTTOM**

SCALE:  $\frac{3}{8}'' = 1'-0''$

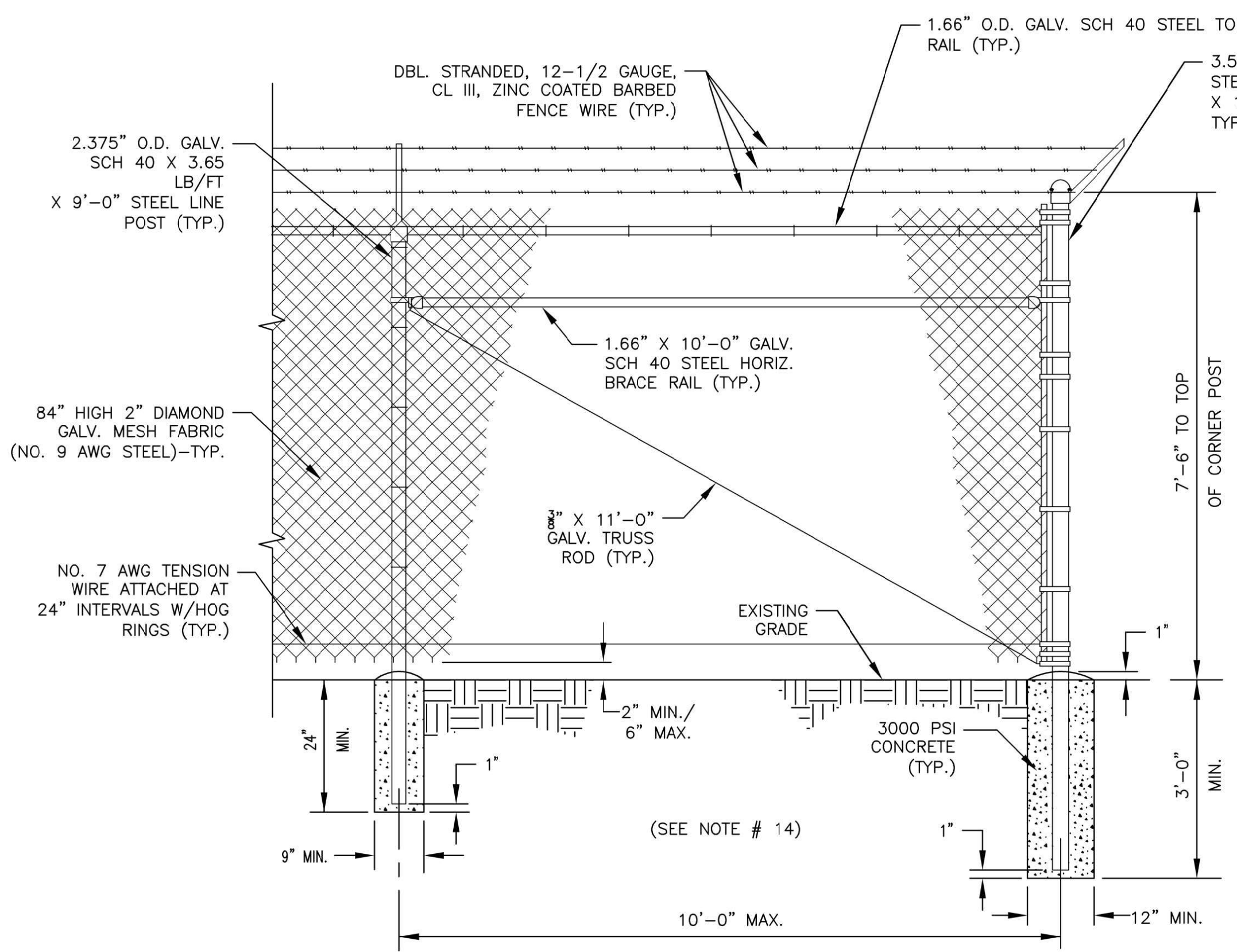


| MISC. SECTIONS & DETAILS   |           |                |
|--|-----------|----------------|
| <b>PERMIT DRAWINGS</b>   |           |                |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |                |
| <b>GEI</b> Consultants   |           |                |
| 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339  |           |                |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>                          |           |                |
| PROJ. NO.  | 1702944   | DWG. 25        |
| SCALE  | NONE      | EDIT           |
| DATE   | 9/30/2022 | SHEET 25 OF 38 |

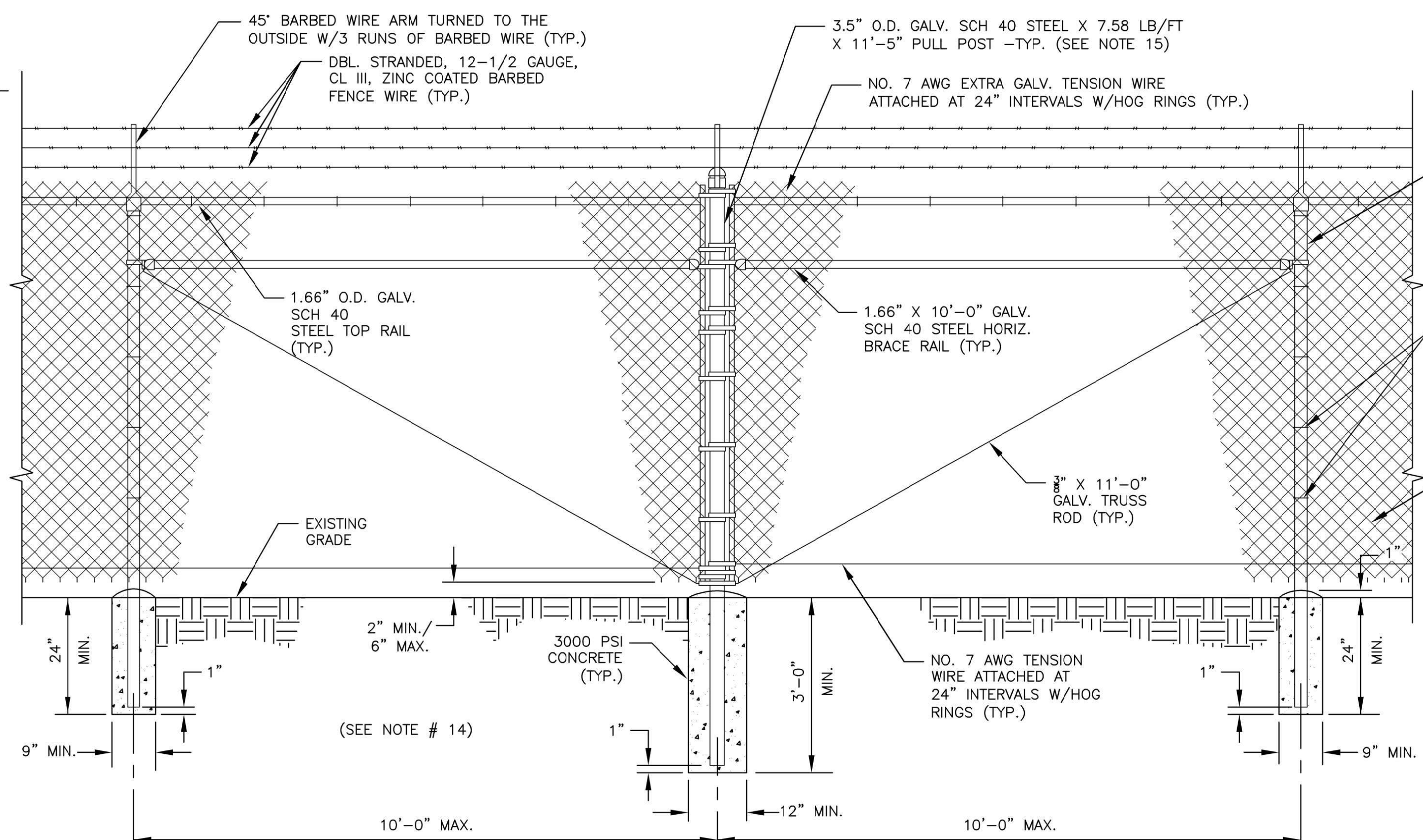
**REFERENCES:**

- MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
- FOR A COMPLETE DRAWING LIST SEE SHEET 1.
- SEE SHEET 2 FOR GENERAL NOTES AND REFERENCES.





PERIMETER SECURITY FENCE TYPICAL CORNER



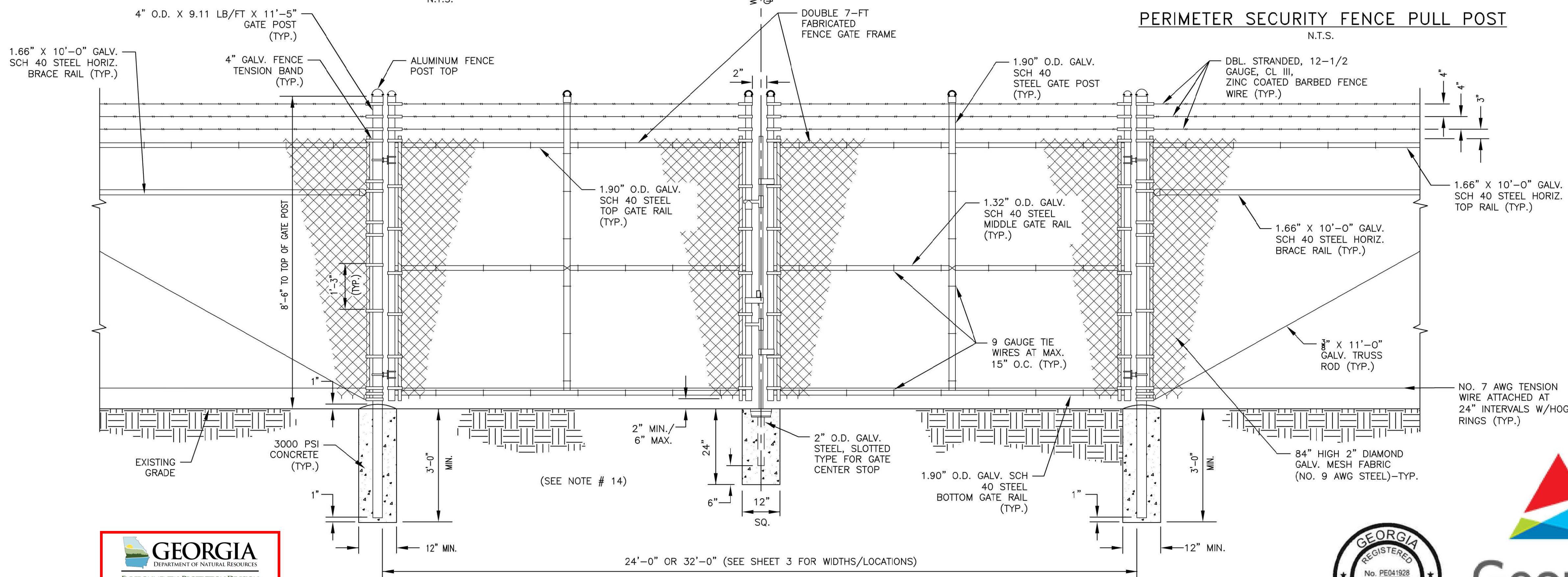
PERIMETER SECURITY FENCE PULL POST

REFERENCES:

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 2 FOR GENERAL NOTES AND REFERENCES.

FENCE

1. FENCE MATERIALS AND ERECTION SHALL BE IN ACCORDANCE WITH THE SOUTHERN COMPANY GENERAL PROVISIONS FOR CHAIN LINK FENCE SPECIFICATIONS 32 31 13.
2. TIE FENCE FABRIC TO SPIRALED TENSION WIRE BETWEEN POSTS WITH GALVANIZED STEEL HOG RINGS TOP AND BOTTOM AT INTERVALS OF TWO FEET.
3. LIMIT TENSION IN FABRIC AND WIRE TO PREVENT BENDING OF GATE POSTS AND CORNER POSTS.
4. WHEN GATE PANEL IS INSTALLED ON A CORNER POST, THE LATCH SHOULD BE INSTALLED ON THE OPPOSITE PANEL.
5. PULL POSTS WILL BE INSTALLED AT APPROXIMATELY MID-SPAN WHERE SPACING BETWEEN CORNER POSTS OR TERMINAL POSTS EXCEEDS 100 FEET TO PROVIDE FENCE GROUNDING POINT PER NESC, OR WHERE IT IS NECESSARY TO TERMINATE THE FENCE DUE TO A CHANGE IN GRADE. MATERIAL FOR PULL POSTS TO BE SAME AS CORNER POSTS.
6. HINGE TO BE INSTALLED WITH GALVANIZED STEEL BOLT WITH TWO NUTS OR PREFERRED SELF-LOCKING TYPE NUT TO LOCK BOLT IN PLACE.
7. CHAIN FOR GATE TO BE ONE PIECE: 3/4\"/>



PERIMETER SECURITY FENCE 24' & 32' WIDE CHAINLINK DOUBLE SWING SECURITY GATE



|   |           |                |
|---|-----------|----------------|
| MISC. SECTIONS & DETAILS  |           |                |
| <b>PERMIT DRAWINGS</b>  |           |                |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA                        |           |                |
|  3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |           |                |
| PROJ. NO.   | 1702944   | DWG. 26        |
| SCALE   | NONE      | EDIT           |
| DATE  | 9/30/2022 | SHEET 26 OF 38 |

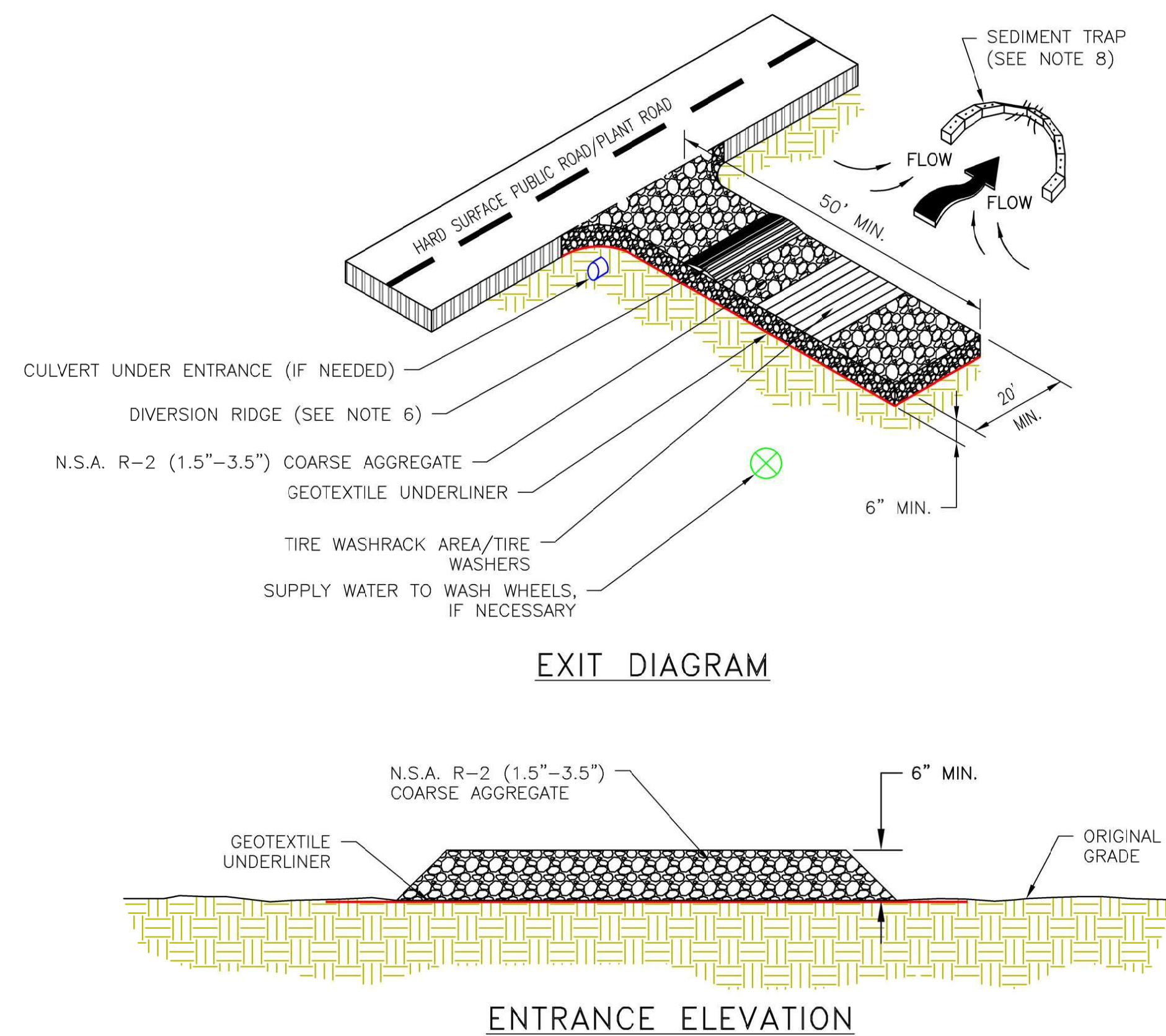






**NOTES:**

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVES MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.



**CRUSHED STONE CONSTRUCTION EXIT** (Co)  
N.T.S.

**DEFINITION**

A TEMPORARY GRADE CONTROL STRUCTURE, OR DAM CONSTRUCTED ACROSS A SWALE, DRAINAGE DITCH, OR AREA OF CONCENTRATED FLOW.

**CONDITIONS**

THIS PRACTICE IS APPLICABLE FOR USE IN SMALL OPEN CHANNELS AND IS NOT TO BE USED IN A LIVE STREAM. SPECIFIC APPLICATIONS INCLUDE:

1. TEMPORARY OR PERMANENT SWALES OR DITCHES IN NEED OF PROTECTION DURING ESTABLISHMENT OF GRASS LININGS.
2. TEMPORARY OR PERMANENT SWALES OR DITCHES WHICH, DUE TO THEIR SHORT LENGTH OF SERVICE OR OTHER REASONS, CANNOT RECEIVE A PERMANENT NON-ERODIBLE LINING, FOR AN EXTENDED PERIOD OF TIME.
3. OTHER LOCATIONS WHERE SMALL LOCALIZED EROSION AND RESULTING SEDIMENTATION PROBLEMS EXIST.

**SPECIFICATIONS:**

THE FOLLOWING TYPES OF CHECK DAMS ARE USED FOR THIS STANDARD:

**STONE CHECK DAM**

STONE CHECK DAMS SHOULD BE CONSTRUCTED OF GRADED SIZE 2-10 INCH STONE. MECHANICAL OR HAND PLACEMENT SHALL BE REQUIRED TO ENSURE COMPLETE COVERAGE OF THE ENTIRE WIDTH OF DITCH OR SWALE AND THAT CENTER OF THE DAM IS LOWER THAN THE EDGES. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.

**SPACING:**

TWO OR MORE CHECK DAMS IN A SERIES SHALL BE USED FOR DRAINAGE AREAS GREATER THAN ONE (1) ACRE. MAXIMUM SPACING BETWEEN DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.

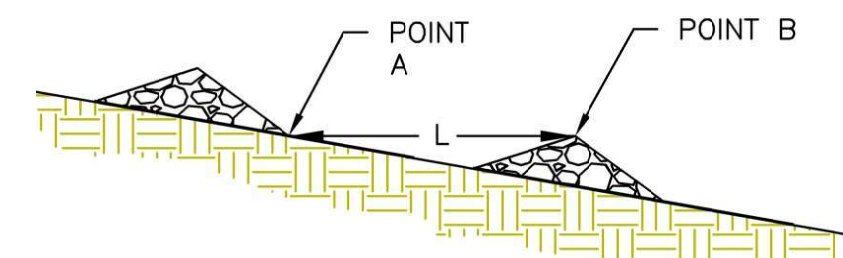
**GEOTEXTILES:**

A GEOTEXTILE SHOULD BE USED AS A SEPARATOR BETWEEN THE GRADED STONE AND THE SOIL BASE AND ABUTMENTS. THE GEOTEXTILE WILL PREVENT THE MIGRATION OF SOIL PARTICLES FROM THE SUBGRADE INTO THE GRADED STONE. THE GEOTEXTILE SHALL BE SELECTED/SPECIFIED IN ACCORDANCE WITH AASHTO M288-96 SECTION 7.3, **SEPARATION REQUIREMENTS**, TABLE 3. GEOTEXTILES SHALL BE "SET" INTO THE SUBGRADE SOILS. THE GEOTEXTILE SHALL BE PLACED IMMEDIATELY ADJACENT TO THE SUBGRADE WITHOUT ANY VOIDS AND EXTEND FIVE FEET BEYOND THE DOWNSTREAM TOE OF THE DAM TO PREVENT SCOUR.

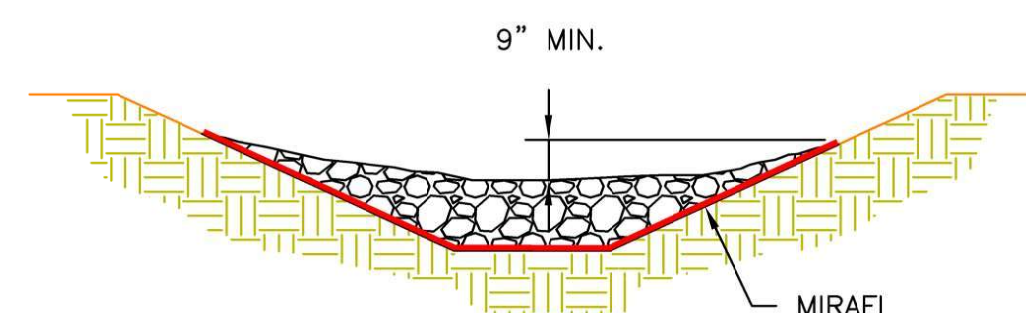
**MAINTENANCE:**

PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF ONE-HALF THE ORIGINAL DAM HEIGHT OR BEFORE. IF THE AREA IS TO BE MOWED, CHECK DAMS SHALL BE REMOVED ONCE FINAL STABILIZATION HAS OCCURRED. OTHERWISE, CHECK DAMS MAY REMAIN IN PLACE PERMANENTLY. AFTER REMOVAL, THE AREA BENEATH THE DAM SHALL BE SEEDED AND MULCHED IMMEDIATELY.

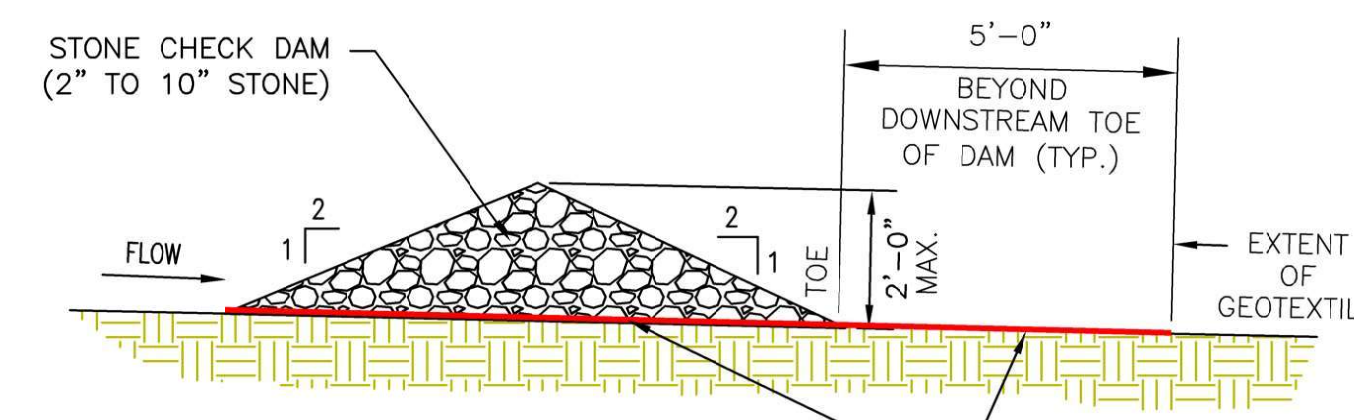
A = THE TOE OF THE UPSTREAM CHECK DAM.  
B = TOP OF THE DOWNSTREAM CHECK DAM.  
L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION.



**SPACING BETWEEN CHECK DAMS**  
N.T.S.



**CROSS SECTION**  
N.T.S.



**PROFILE VIEW**  
N.T.S.

**CHECK DAM - STONE CHECK DAM (Cd-S)**  
N.T.S.

**NOTES:**

1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).
2. THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.
3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.
5. THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
6. GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).

**REFERENCES:**

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



|  |                       |      |
|--|-----------------------|------|
| EROSION CONTROL SECTIONS & DETAILS   |                       |      |
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA                           |                       |      |
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| SCALE NONE   | <b>SHEET 28 OF 38</b> |      |
| DATE 9/30/2022   |                       |      |



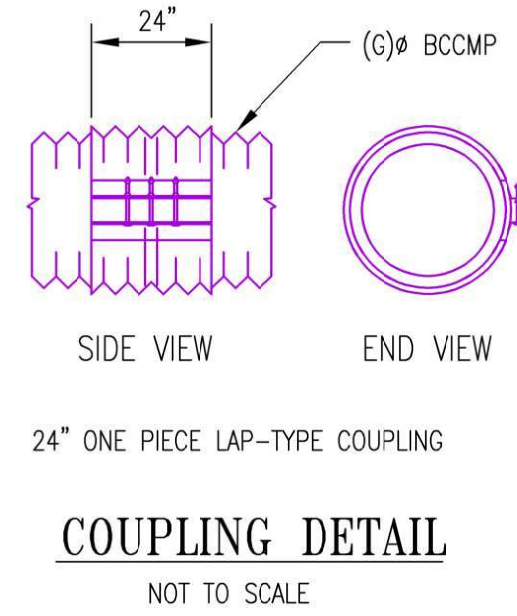
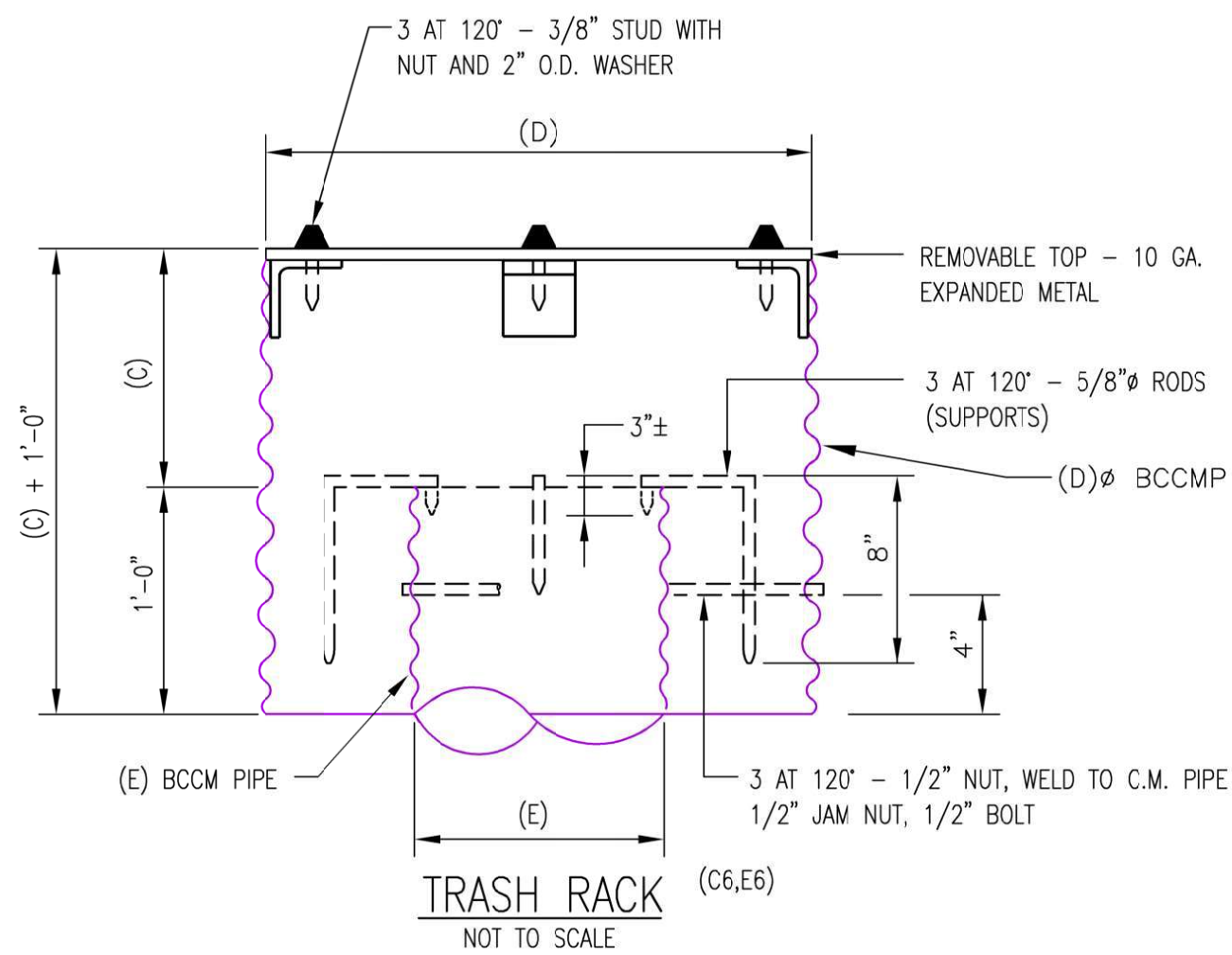
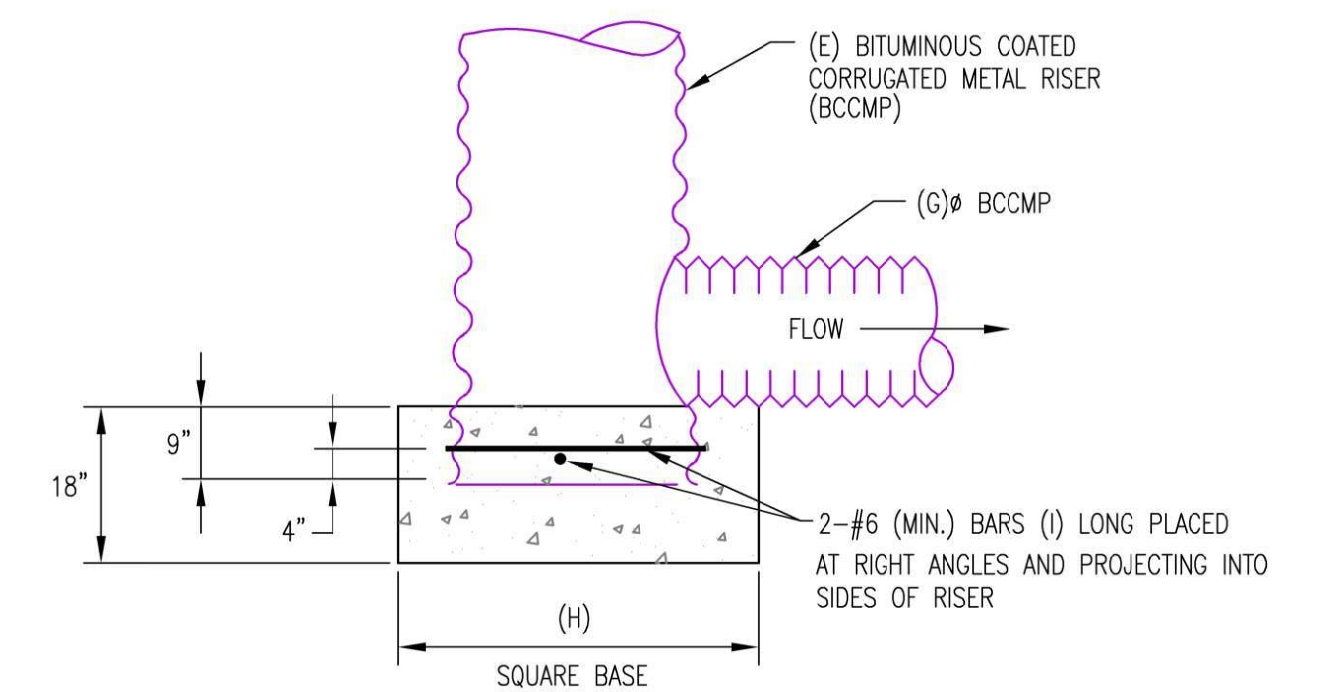
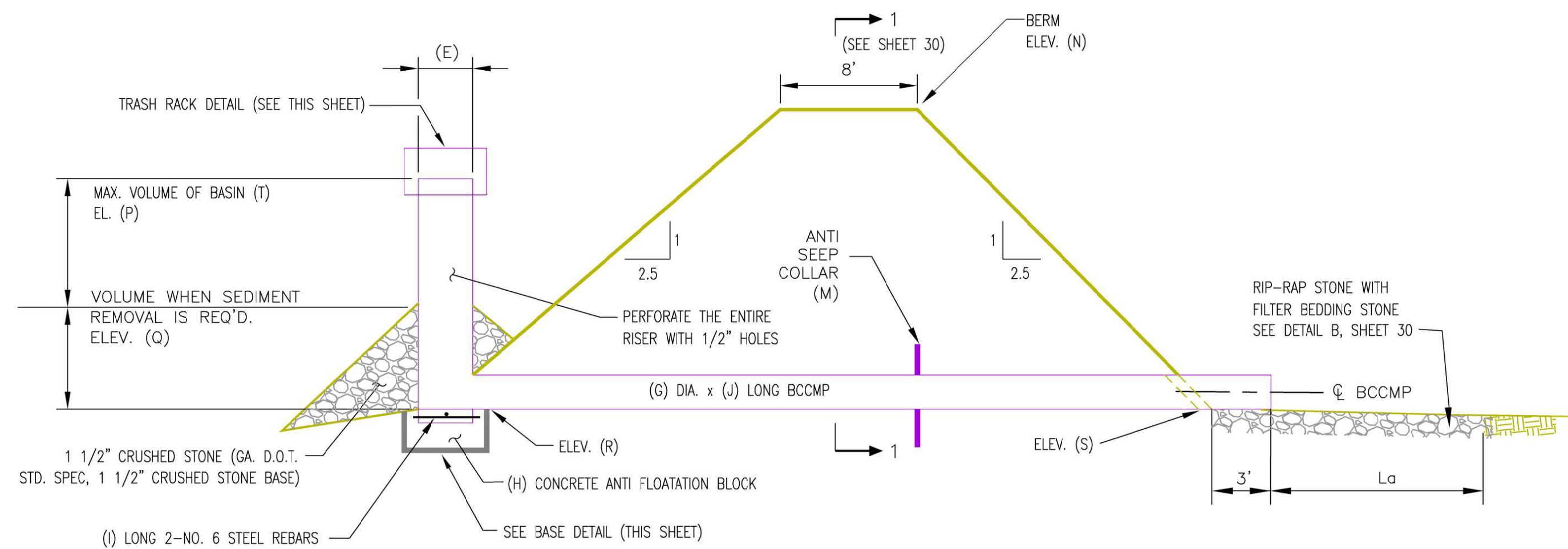


TABLE 1 - SEDIMENTATION POND AND CLEAR POOL DETAILS

|  | Sediment Pond 1   | Clear Pool 1    | Sediment Pond 2   | Clear Pool 2    | Detention Pond 1 |
|--|-------------------|-----------------|-------------------|-----------------|------------------|
| Top Width of Berm  | A 8'              | 8'              | 8'                | 8'              | 70'              |
| Emergency Spillway Flow Depth                                      | B NA              | 1.0'            | NA                | 1.0'            | 1.0'             |
| Storage Level - Difference Between Riser and Emer. Spillway        | C NA              | 2.0'            | NA                | 2.0'            | 2.0'             |
| Trash Rack Diameter  | D 96"             | 96"             | 108"              | 78"             | 72"              |
| Riser Diameter   | E 66"             | 66"             | 72"               | 54"             | 48"              |
| Riser Length (Includes 9" into antifloatation block)               | F 4'-9"           | 4'-9"           | 5'-9"             | 4'-9"           | 4'-9"            |
| Principal Spillway Pipe Diameter                                   | G 2'-42"          | 42"             | 3'-42"            | 2'-42"          | 30"              |
| Concrete Antifloatation Block                                      | H 90" x 90" x 18" | 90" x 90" x 18" | 110" x 110" x 18" | 73" x 73" x 18" | 80" x 80" x 18"  |
| Length of Riser Anchoring Bars (rebar)                             | I 84"             | 84"             | 104"              | 67"             | 74"              |
| Length of Principal Spillway Pipe                                  | J 61.8'           | 66.8'           | 61.8'             | 66.8'           | 115.0'           |
| Emergency Spillway Bottom Width                                    | K NA              | 20'             | 20'               | 20'             | 20'              |
| Emergency Spillway Top Width                                       | L NA              | 80'             | 74'               | 80'             | 44'              |
| Antiseep Collar  | M 78" x 78"       | 78" x 78"       | 84" x 84"         | 72" x 72"       | 18" x 18"        |
| Elevation of Top of Berm, ft msl                                   | N 46.0 ft msl     | 46.0 ft msl     | 46.0 ft msl       | 46.0 ft msl     | 52.0 ft msl      |
| Elevation of Emergency Spillway Crest, ft msl                      | O NA              | 41.0 ft msl     | 41.5 ft msl       | 42.0 ft msl     | 50.0 ft msl      |
| Elevation of Top of Riser, ft msl                                  | P 40.0 ft msl     | 39.0 ft msl     | 41.0 ft msl       | 39.0 ft msl     | 46.0 ft msl      |
| Elevation of Clean Out, ft msl                                     | Q 37.0 ft msl     | 36.0 ft msl     | 37.0 ft msl       | 38.0 ft msl     | 42.5 ft msl      |
| Elevation of Principal Spillway at Inlet, ft msl (Bottom Pond El.) | R 36.0 ft msl     | 35.0 ft msl     | 36.0 ft msl       | 35.0 ft msl     | 42.0 ft msl      |
| Elevation of Principal Spillway at Outlet, ft msl                  | S 35.7 ft msl     | 34.7 ft msl     | 35.7 ft msl       | 34.7 ft msl     | 41.0 ft msl      |
| Maximum Volume of Basin, cubic feet                                | T 7969            | 2986            | 8925              | 2005            | 1233             |
| Clean Out Volume, cubic feet                                       | U 1861            | 658             | 1615              | 1439            | 405              |
| Freeboard  | V 6'              | 4'              | 5'                | 4'              | 1'               |

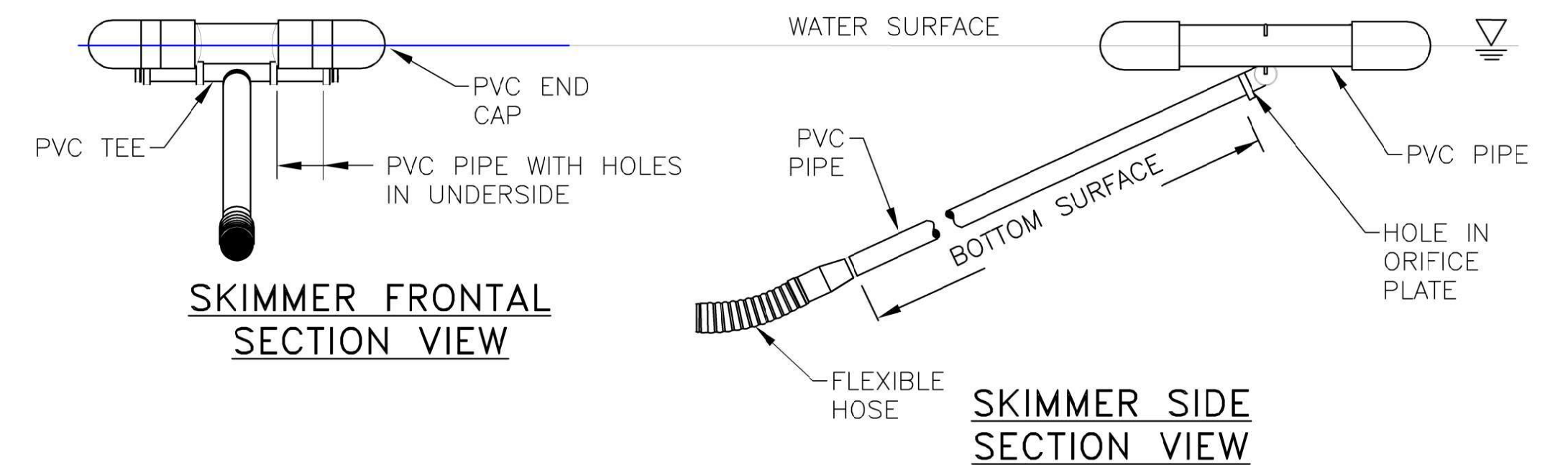
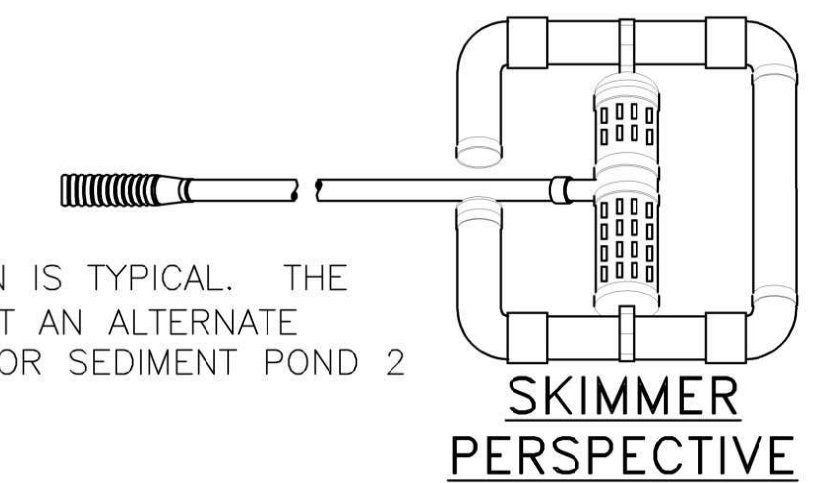


CONCRETE RISER BASE DETAIL (B6,D6)  
NOT TO SCALE



SECTION R-R, MAIN BASIN  
(SEE SHEET 30)  
NOT TO SCALE

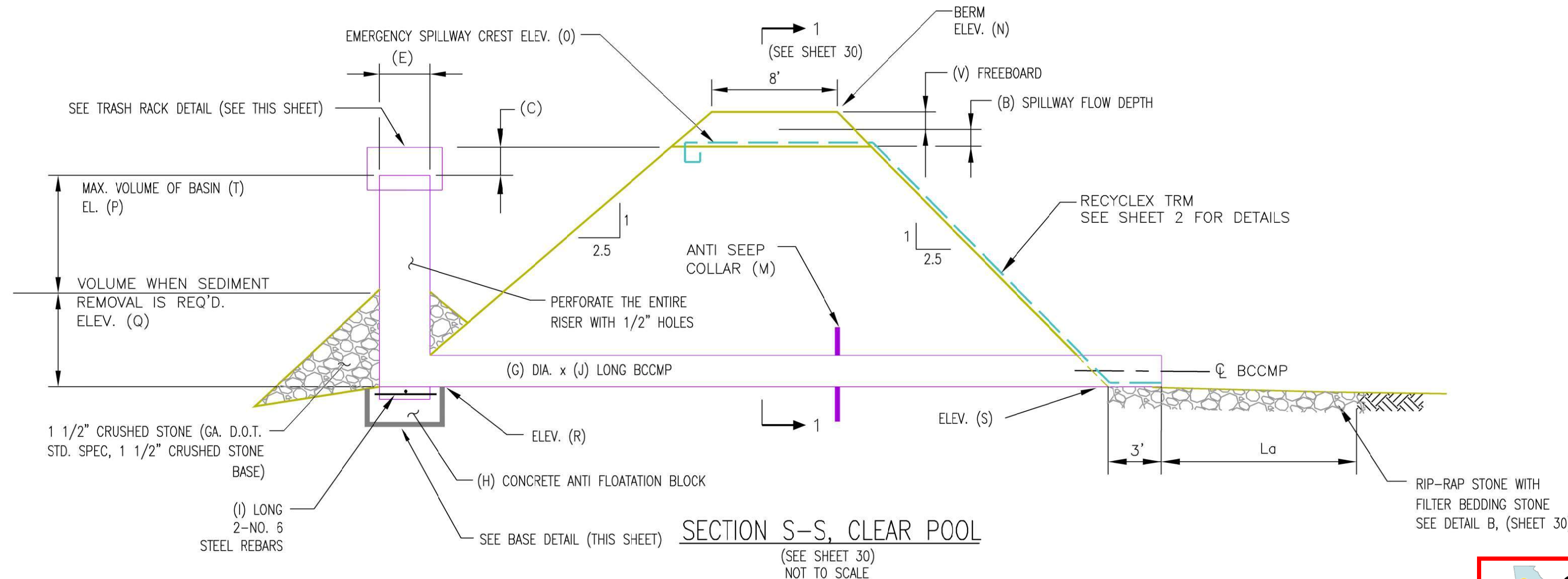
NOTE:  
SKIMMER CONFIGURATION SHOWN IS TYPICAL. THE DESIGNER/ENGINEER MAY SUBMIT AN ALTERNATE SKIMMER DETAIL FOR REVIEW. FOR SEDIMENT POND 2 ONLY.



SKIMMER FRONTAL SECTION VIEW

FLOATING SURFACE SKIMMER  
NOT TO SCALE

SKIMMER SIDE SECTION VIEW



SECTION S-S, CLEAR POOL  
(SEE SHEET 30)  
NOT TO SCALE

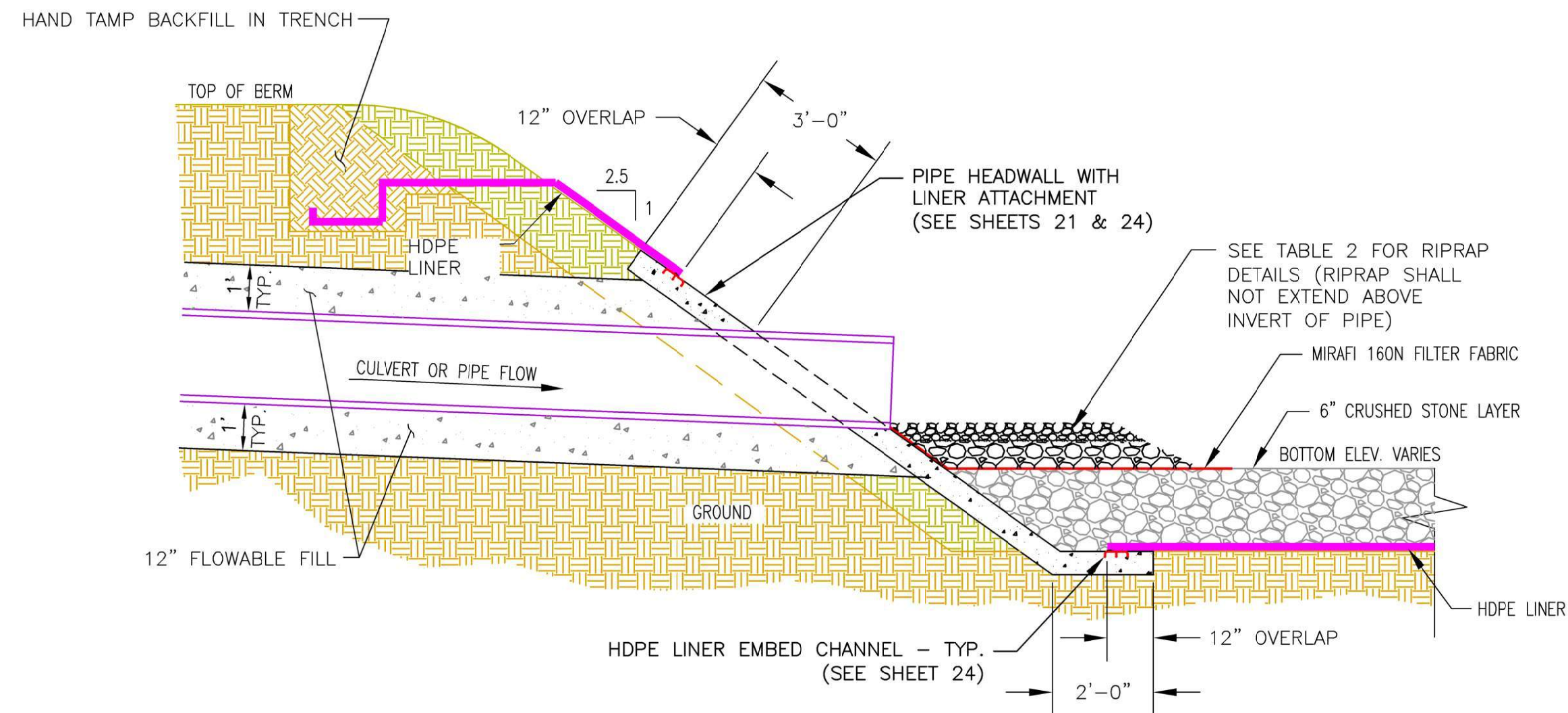
REFERENCES:

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
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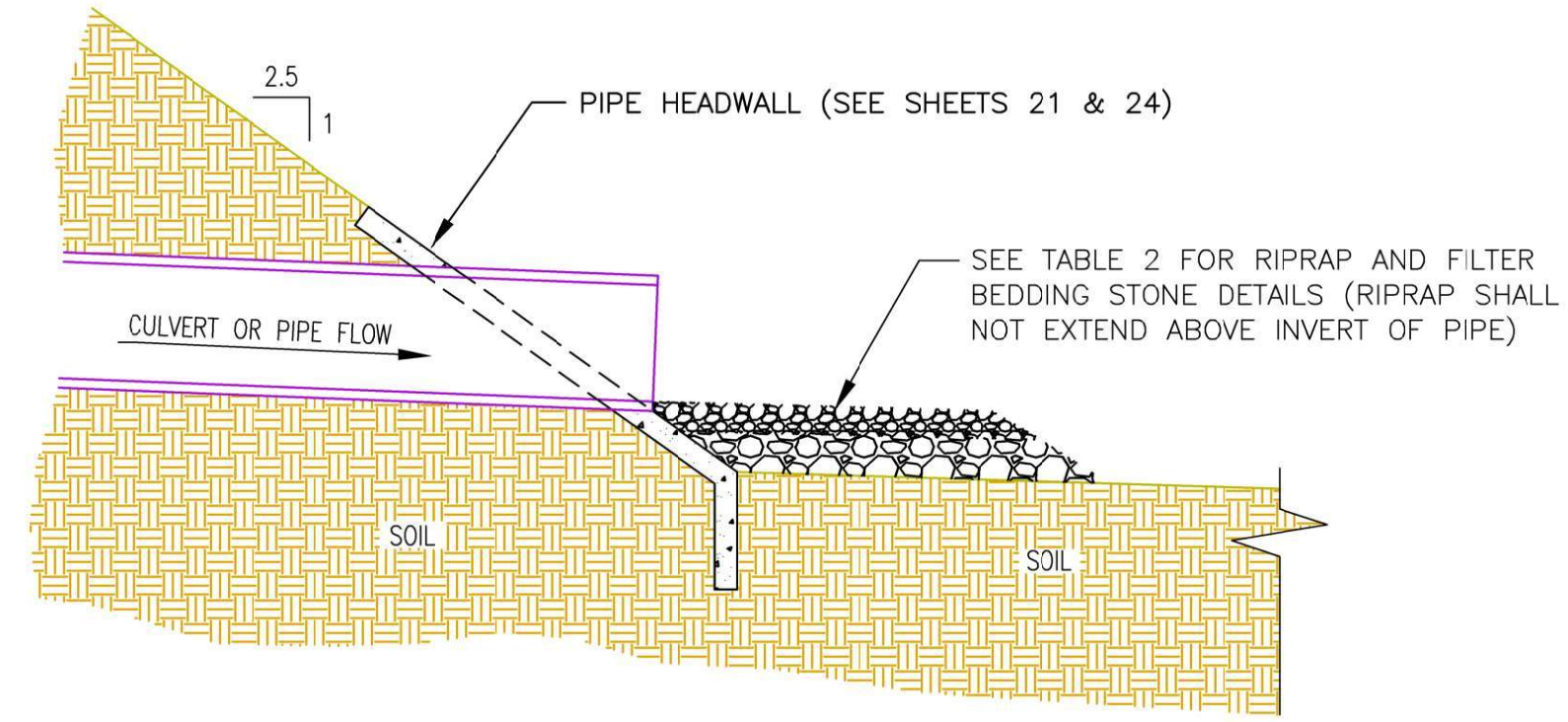


| EROSION CONTROL SECTIONS & DETAILS   |                   |         |
|--|-------------------|---------|
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| SCALE NONE   | SHEET 29 OF 38    |         |
| DATE 9/30/2022   |                   |         |

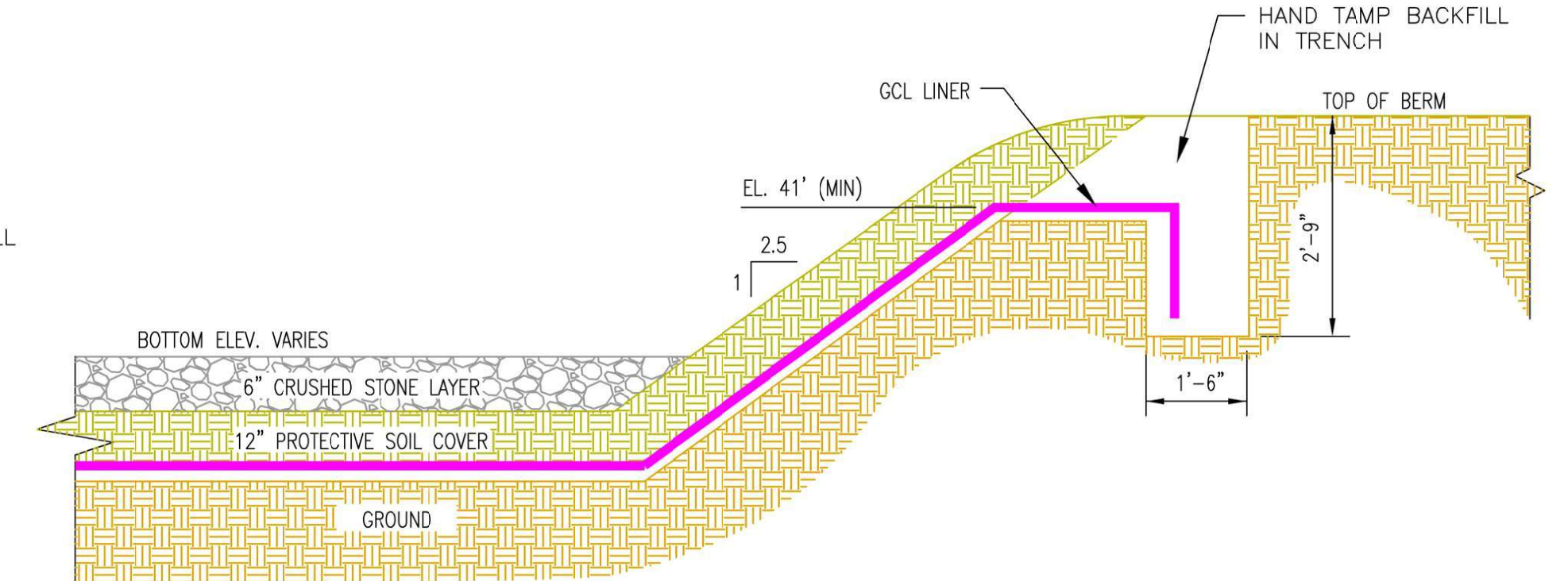




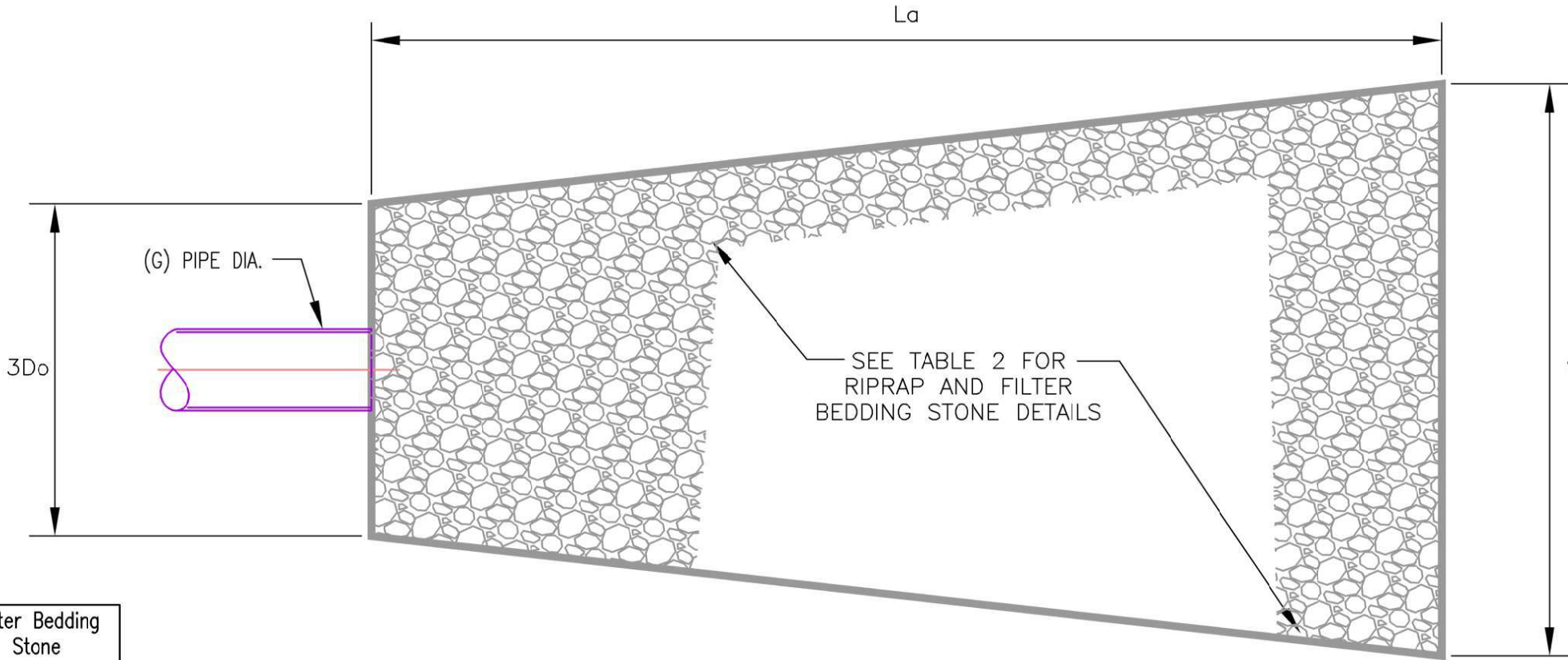
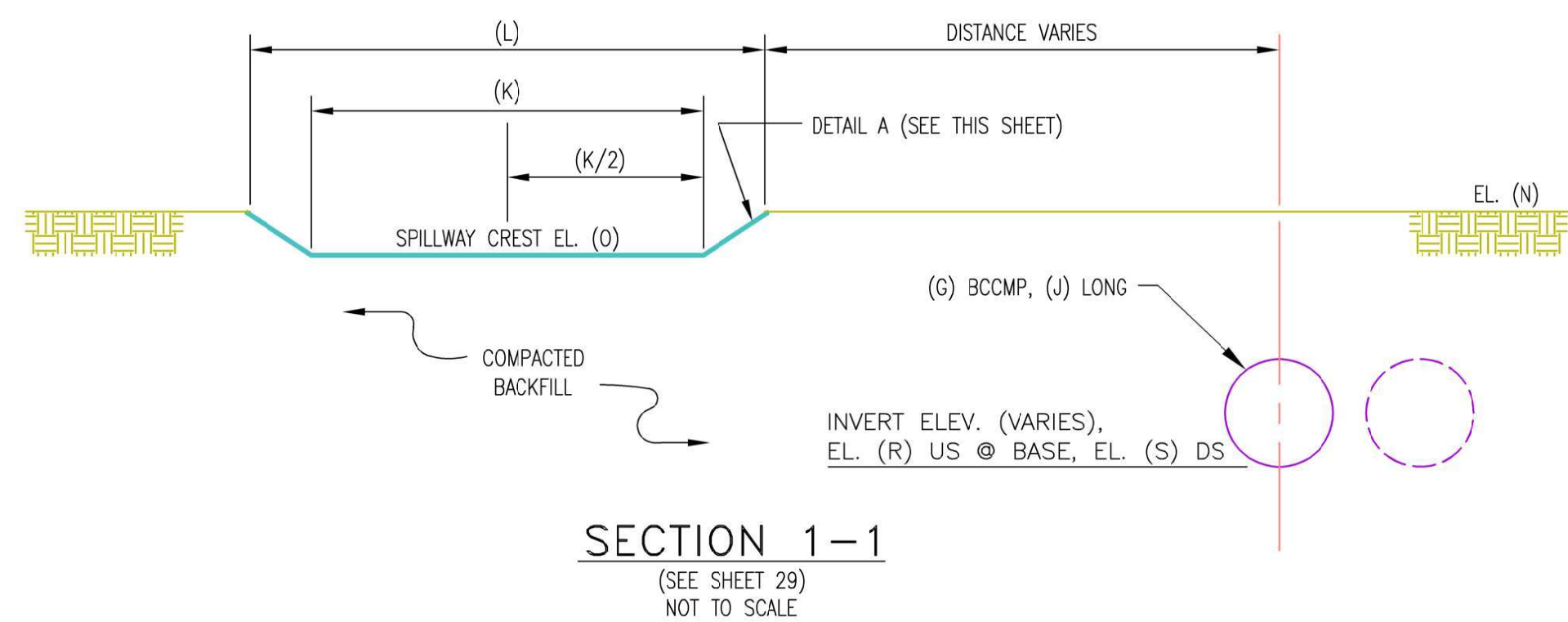
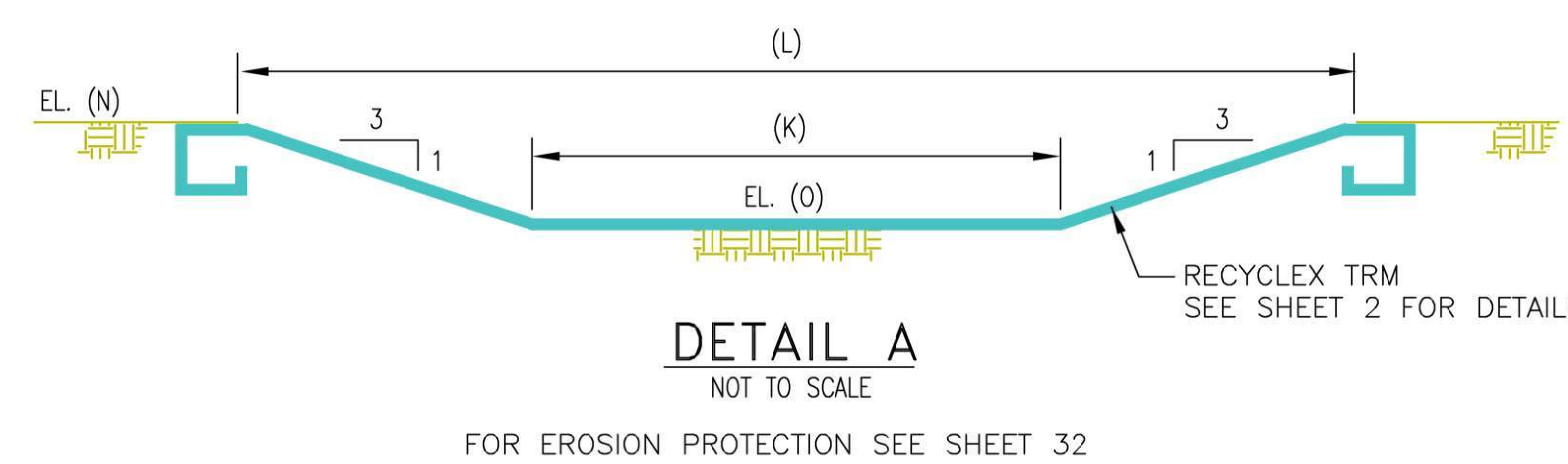
RIPRAP PLACEMENT  
PIPE HEADWALL WITH LINER ATTACHMENT  
SIDE VIEW  
NOT TO SCALE



RIPRAP PLACEMENT IN UNLINED AREA  
SIDE VIEW  
NOT TO SCALE



SEDIMENTATION POND 1 AND CLEAR POOL 1  
MARKER BED DETAIL  
NOT TO SCALE  
REFERENCE LINED POND 1  
GCL NOT APPLICABLE TO SEDIMENT POND 2 OR CLEAR POOL 2



DETAIL B, SECTION R-R, S-S  
NOT TO SCALE

TABLE 2 - DETENTION POND, SEDIMENTATION POND AND CLEAR POOL RIPRAP DETAILS

| Location                    | Pipe Dia. | La  | 3Do   | W     | Thickness | Riprap      | Filter Bedding Stone |
|-----------------------------|-----------|-----|-------|-------|-----------|-------------|----------------------|
| Detention Pond 1            | 30"       | 16' | 7.5'  | 18.5' | 13.6"     | N.S.A. #R-4 | N.S.A. #FS-2         |
| Sediment Pond 1             | 2-42"     | 32' | 10.5' | 35.5' | 45"       | N.S.A. #R-7 | N.S.A. #FS-3         |
| Sediment Pond 2             | 3-42"     | 25' | 25.5' | 35.5' | 45"       | N.S.A. #R-7 | N.S.A. #FS-3         |
| Clear Pool 1                | 42"       | 23' | 10.5' | 28.5' | 27"       | N.S.A. #R-5 | N.S.A. #FS-2         |
| Clear Pool 2                | 2-42"     | 23' | 15.5' | 30'   | 27"       | N.S.A. #R-5 | N.S.A. #FS-2         |
| Wheel Wash Makeup Reservoir | 4-24"     | 26' | 16'   | 24'   | 27"       | N.S.A. #R-5 | N.S.A. #FS-2         |

CULVERT OUTLET RIPRAP DETAILS

| Location   | Pipe Dia. | Pipe Type | Inlet Invert El. | Outlet Invert El. | Pipe Length | La  | 3Do   | W     | Riprap      | *Depth | Filter Bedding Stone |
|--|-----------|-----------|------------------|-------------------|-------------|-----|-------|-------|-------------|--------|----------------------|
| Access Rd Culv                                     | 24"       | ADS N-12  | 61.00'           | 60.36'            | 64'         | 13' | 6'    | 15'   | N.S.A. #R-4 | 10.8"  | N.S.A. #FS-2         |
| Cell 1 Berm West Culv                              | 24"       | RCP       | 56.35'           | 55.81'            | 54'         | 13' | 4'    | 7.2'  | N.S.A. #R-2 | 9.6"   | N.S.A. #FS-1         |
| Cell 1 Berm East Culv                              | 30"       | RCP       | 56.33'           | 55.99'            | 46'         | 14' | 4'    | 4'    | N.S.A. #R-4 | 4.2"   | N.S.A. #FS-2         |
| Cell 2 (Phase 1) Perimeter Ditch to Sed. Pond      | 3-30"     | ADS N-12  | 45.85'           | 45.63'            | 44'         | 16' | 22.5' | 26.7' | N.S.A. #R-3 | 13.6"  | N.S.A. #FS-2         |
| Cell 2 (Phase 2) Perimeter Ditch to Exterior Ditch | 2-30"     | ADS N-12  | 44.00'           | 43.51'            | 49'         | 16' | 8'    | 8'    | N.S.A. #R-3 | 13.6"  | N.S.A. #FS-2         |
| Cell 2 (Phase 2) Exterior Ditch to Sed. Pond       | 2-30"     | ADS N-12  | 42.95'           | 42.00'            | 95'         | 16' | 15'   | 17.8' | N.S.A. #R-4 | 13.6"  | N.S.A. #FS-2         |
| Cell 3 Perimeter Ditch to Exterior Ditch           | 4-30"     | ADS N-12  | 44.00'           | 43.76'            | 40'         | 16' | 8'    | 8'    | N.S.A. #R-4 | 13.6"  | N.S.A. #FS-2         |
| Cell 4 Perimeter Ditch to Exterior Ditch           | 2-30"     | ADS N-12  | 44.00'           | 42.89'            | 36'         | 50' | 8'    | 8'    | N.S.A. #R-7 | 17.7"  | N.S.A. #FS-3         |
| Cell 3 & 4 Exterior Ditch to Sed. Pond             | 3-48"     | ADS N-12  | 42.56'           | 42.00'            | 112'        | 33' | 36'   | 17.8' | N.S.A. #R-4 | 35.2"  | N.S.A. #FS-2         |
| Cell 1 Stack Access Culvert                        | 24"       | RCP       | 56.77'           | 56.94'            | 28'         | 13' | 4'    | 4'    | N.S.A. #R-4 | 10.8"  | N.S.A. #FS-2         |
| Cell 2 Stack Access Culvert                        | 24"       | RCP       | 49.97'           | 49.67'            | 50'         | 13' | 4'    | 4'    | N.S.A. #R-4 | 10.8"  | N.S.A. #FS-2         |
| Cell 3 Stack Access Culvert                        | 24"       | RCP       | 61.94'           | 61.62'            | 50'         | 13' | 4'    | 4'    | N.S.A. #R-4 | 10.8"  | N.S.A. #FS-2         |
| Cell 4 Stack Access Culvert                        | 24"       | RCP       | 63.38'           | 63.13'            | 50'         | 13' | 4'    | 4'    | N.S.A. #R-4 | 10.8"  | N.S.A. #FS-2         |

GENERAL NOTES:

1. THE AREA TO RECEIVE THE PIPE SHALL BE HAND COMPACTED AND ANY SOFT OR UNSUITABLE MATERIAL REMOVED, THE AREA BACKFILLED, AND COMPACTED.
2. THE PIPE AND RISER SHALL BE PLACED ON FIRM, SMOOTH FOUNDATION.
3. THE BACKFILL MATERIAL SHALL BE CLEAN SOIL, FREE OF ROOTS, VEGETATION, OVERSIZED ROCKS, STONES OR OTHER OBJECTIONABLE MATERIAL.
4. AREAS ON WHICH FILL IS TO PLACED SHALL BE SCARIFIED PRIOR TO FILL PLACEMENT.
5. FILL MATERIAL SHALL BE CONDITIONED, PLACED AND COMPACTED IN ACCORDANCE WITH THE CONSTRUCTION QUALITY CONTROL/QUALITY ASSURANCE PLAN AND THE SPECIFICATIONS FOR EARTH FILL ON DRAWING H1C2700.
6. THE RISER SHALL BE SECURELY ATTACHED TO THE PIPE OR STUB BY WELDING THE FULL CIRCUMFERENCE MAKING A WATERTIGHT STRUCTURAL CONNECTION.
7. THE CONNECTION BETWEEN THE RISER AND THE RISER BASE SHALL BE WATERTIGHT.
8. ALL CONNECTIONS BETWEEN PIPE SECTIONS SHALL BE WATERTIGHT, ACHIEVED BY APPROVED WATERTIGHT BAND ASSEMBLIES.
9. THE FILL MATERIAL AROUND THE PIPE SHALL BE PLACED IN 4 INCH LAYERS AND HAND COMPACTED UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT FILL MATERIAL.
10. CARE MUST BE TAKEN TO NOT RAISE THE PIPE FROM FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES.
11. A MINIMUM DEPTH OF 2 FT. OF HAND COMPACTED FILL SHALL BE PLACE DOVER THE PIPE BEFORE PLACING AND COMPACTING FILL WITH CONSTRUCTION EQUIPMENT.
12. TRASH RACK NUTS, BOLTS, THREADS AND RODS SHALL BE BITUMINOUS COATED AFTER INSTALLATION.
13. ALL DISTURBED SOIL AREAS SHALL BE GRASSED UPON REACHING FINAL GRADE IN ACCORDANCE WITH THE VEGETATION SCHEDULE, DRAWING H1C2709.

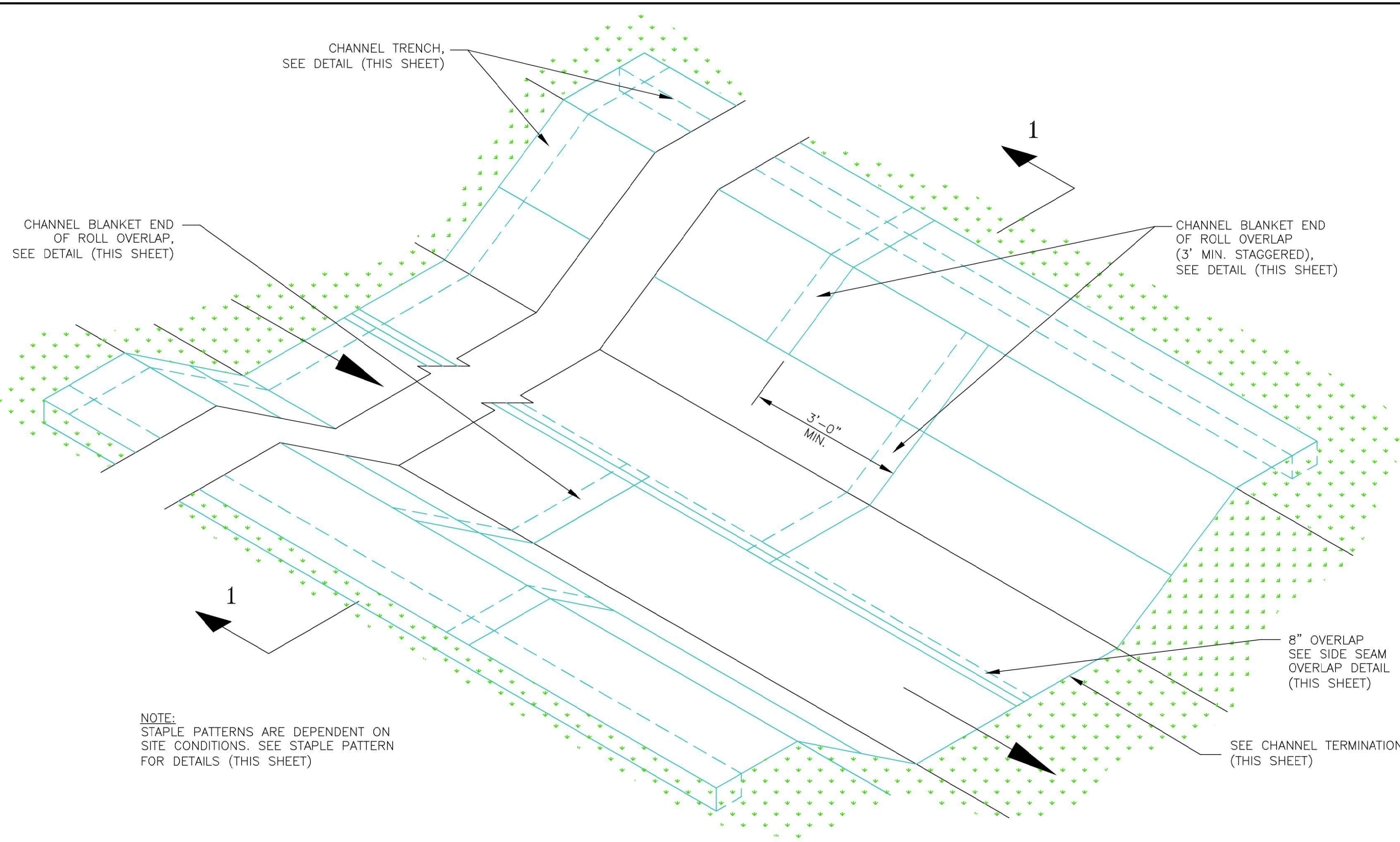
REFERENCES:

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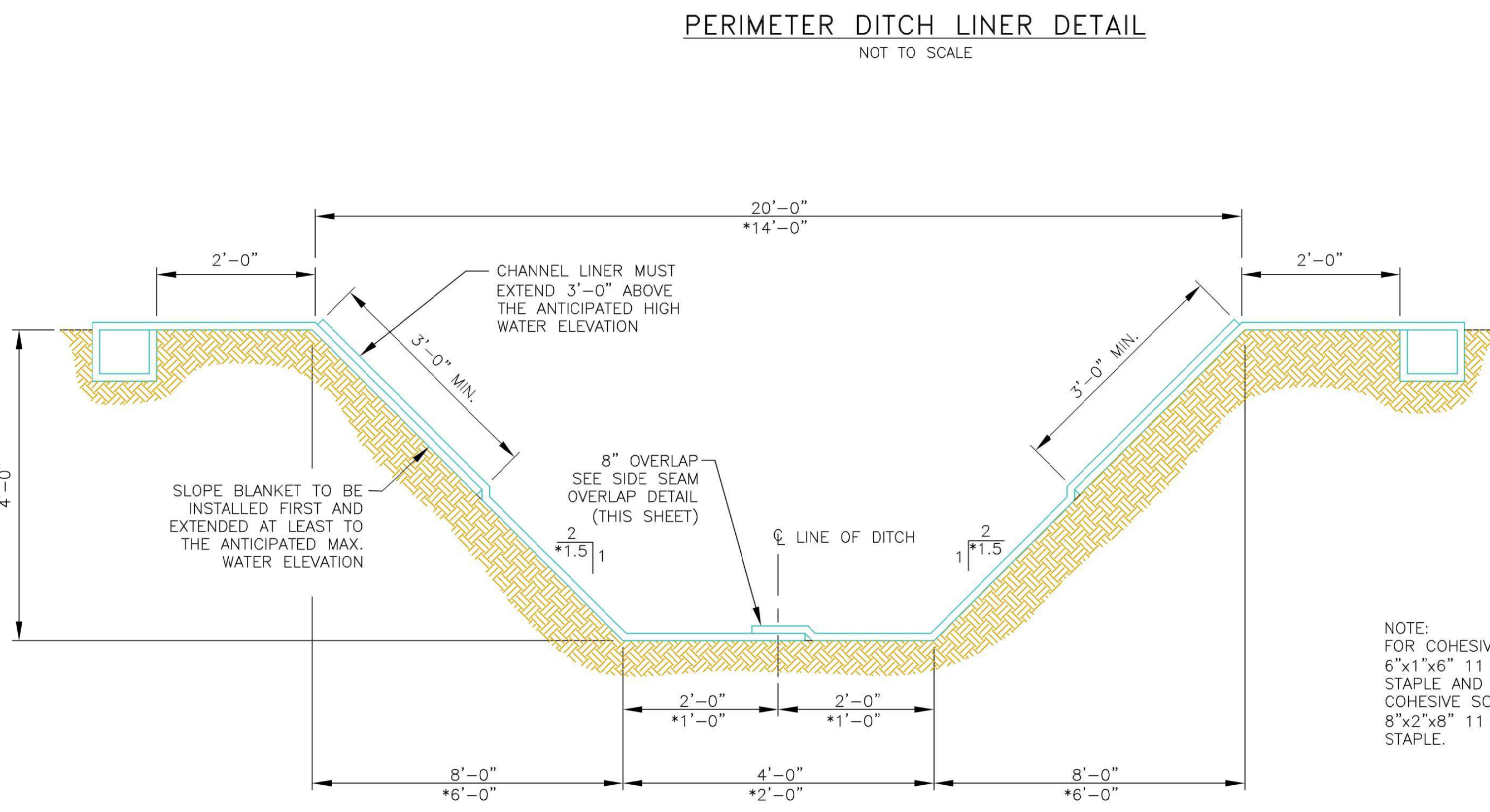


| EROSION CONTROL SECTIONS & DETAILS   |           |   |          |
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| DATE   | 9/30/2022 |   |          |



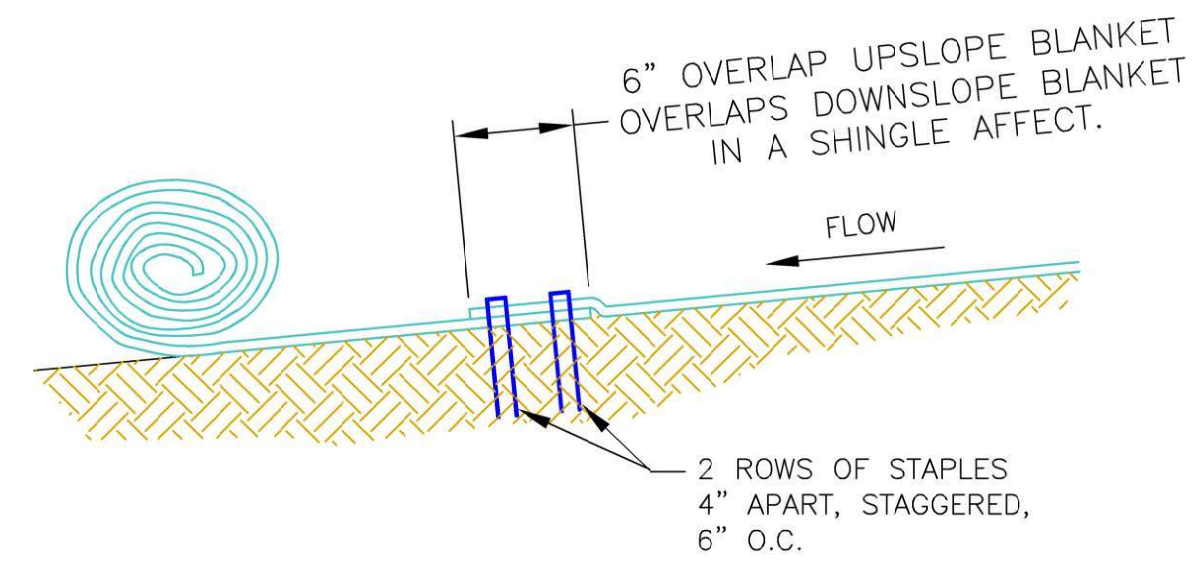


**PERIMETER DITCH LINER DETAIL**  
NOT TO SCALE

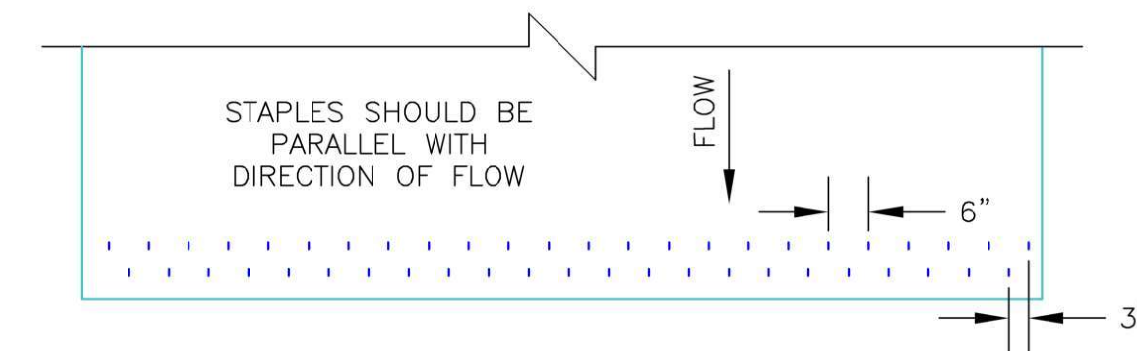


**SECTION 1-1**  
NOT TO SCALE

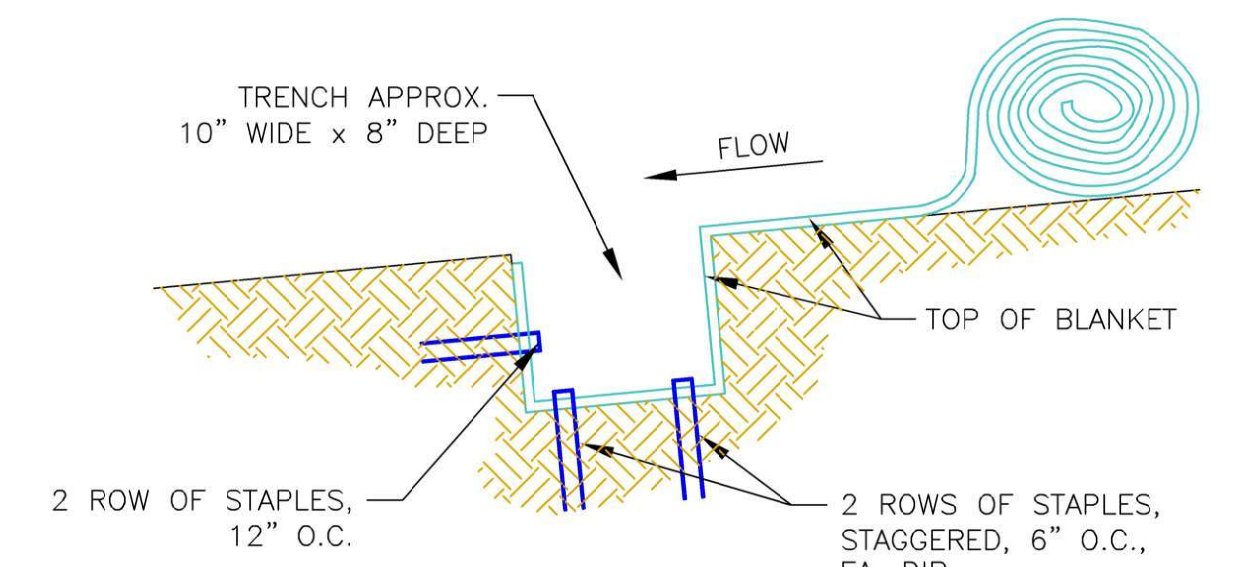
\*DIMENSIONS FOR CELL 1 PERIMETER DITCH



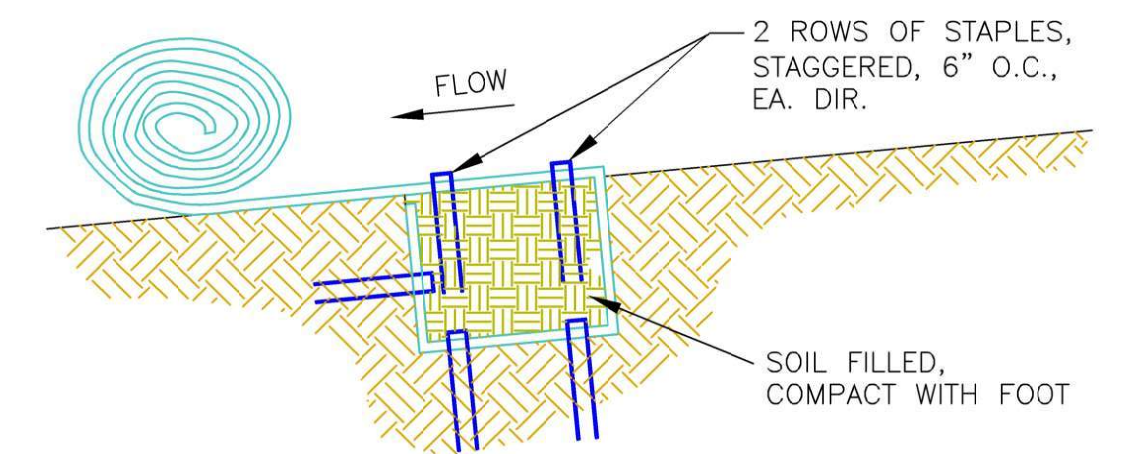
**CHANNEL BLANKET END OF ROLL OVERLAP**  
NOT TO SCALE



**CHANNEL TERMINATION PLAN**  
NOT TO SCALE

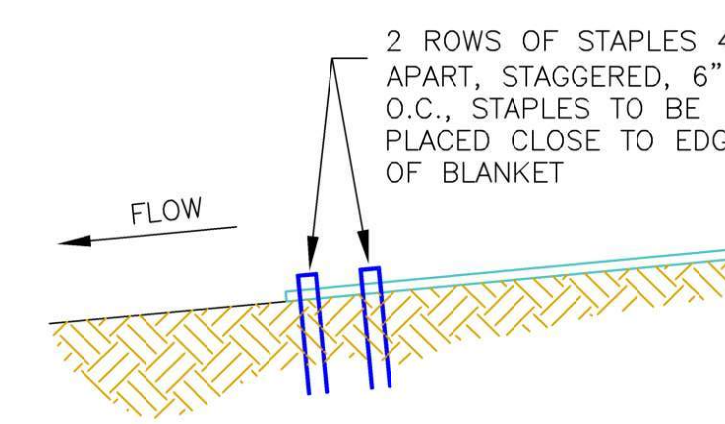


**STEP 1**

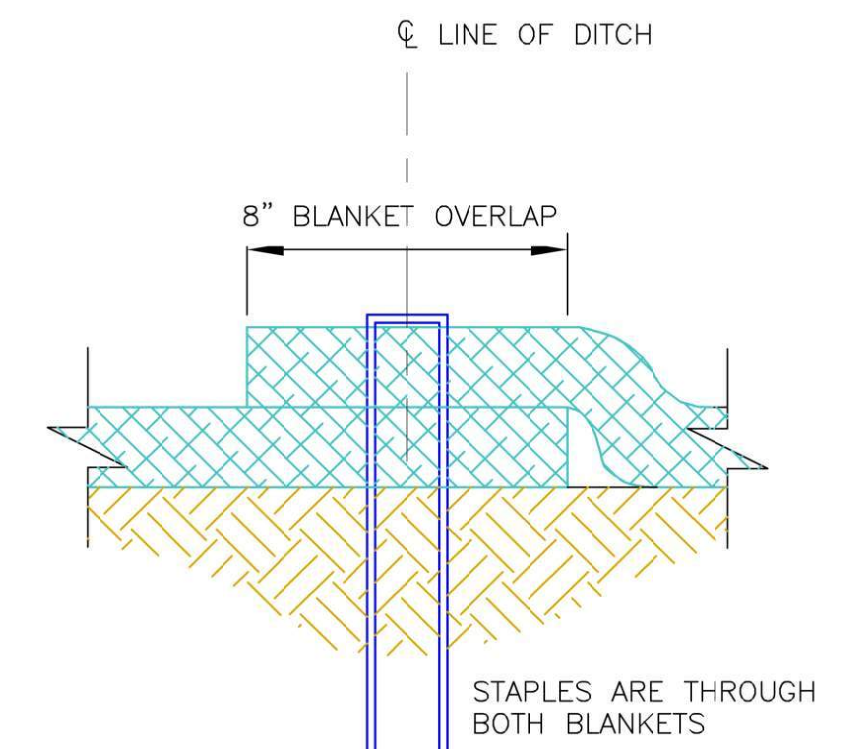


**STEP 2**

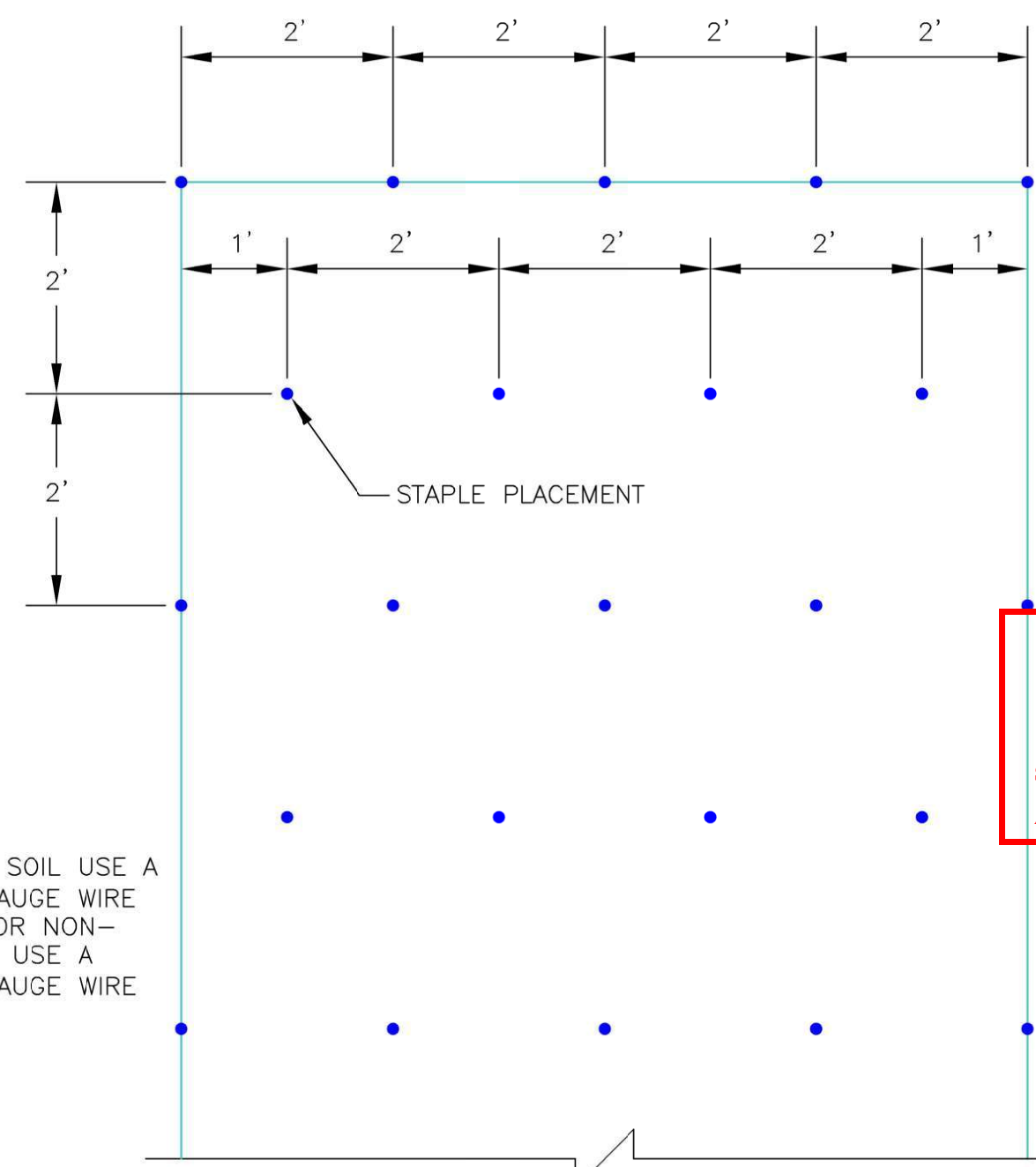
**CHANNEL TRENCH**  
NOT TO SCALE



**CHANNEL TERMINATION**  
NOT TO SCALE



**SIDE SEAM OVERLAP STAPLE DETAIL**  
NOT TO SCALE



**BLANKET STAPLE PATTERN**  
NOT TO SCALE

NOTE:  
FOR COHESIVE SOIL USE A 6"x1"x6" 11 GAUGE WIRE STAPLE AND FOR NON-COHESIVE SOIL USE A 8"x2"x8" 11 GAUGE WIRE STAPLE.

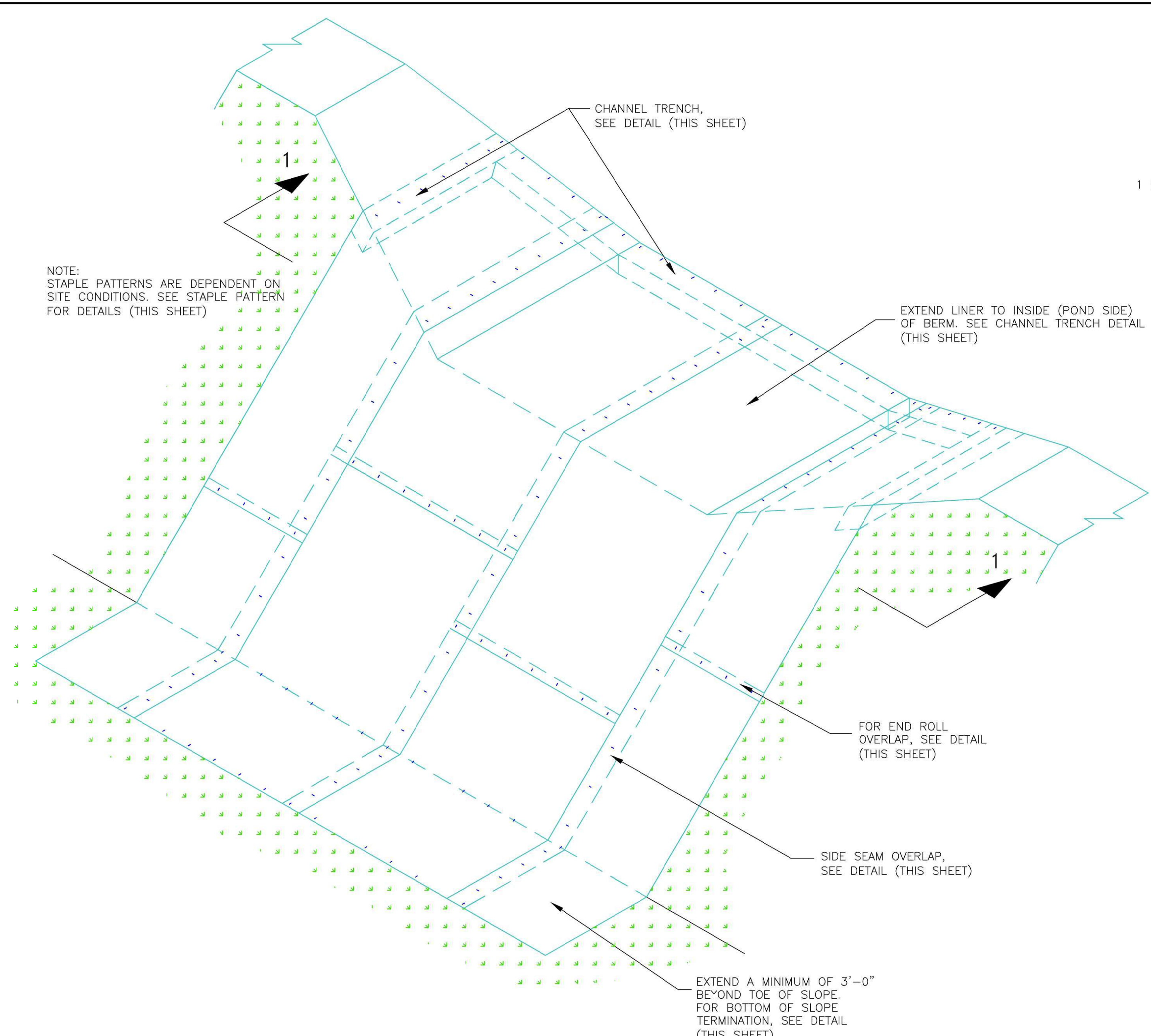
**REFERENCES:**

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

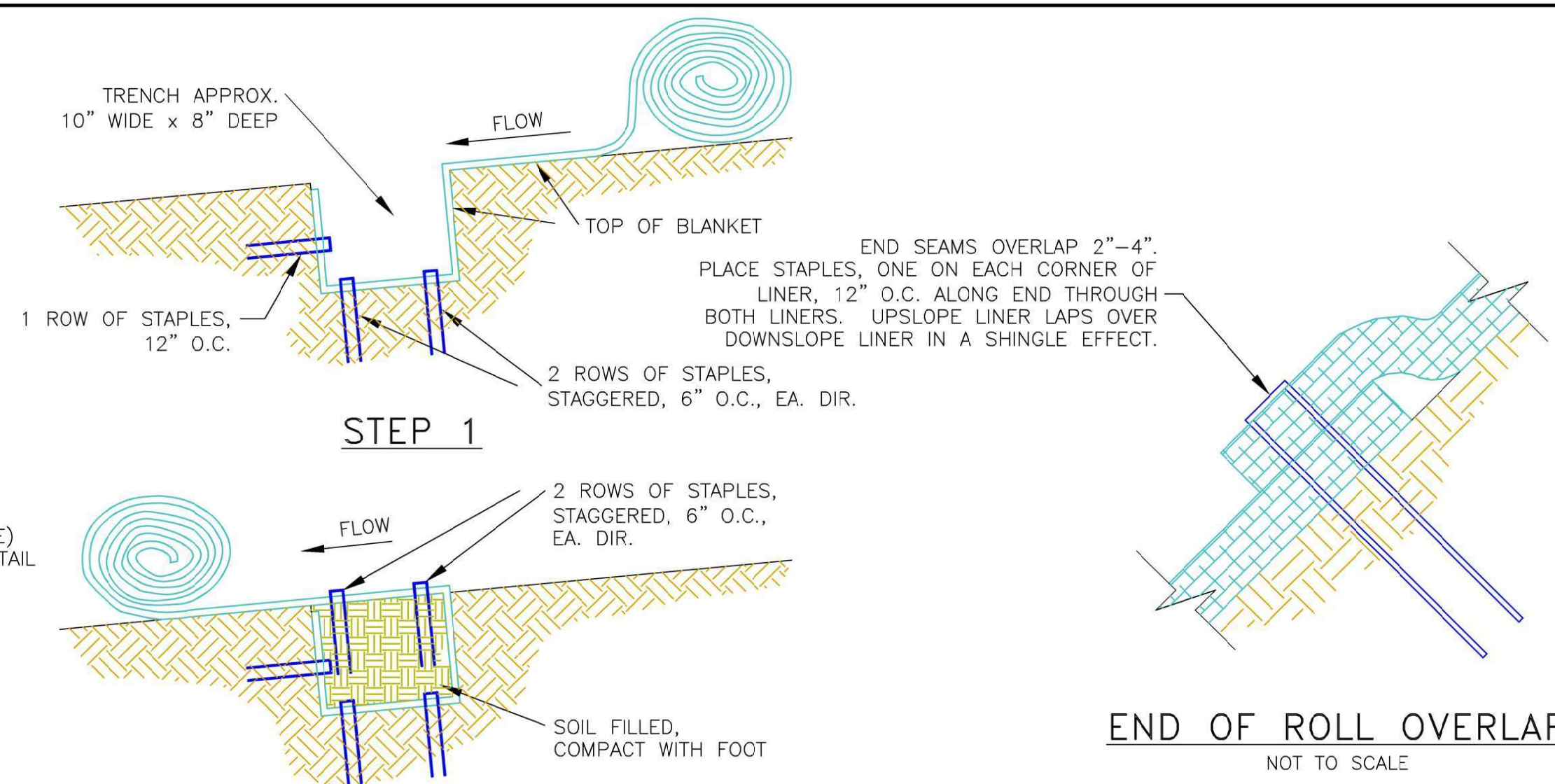


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|--|-------------------|---|------|
| EROSION CONTROL SECTIONS & DETAILS   |                   |   |      |
| <b>PERMIT DRAWINGS</b>   |                   |   |      |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |                   |   |      |
| <b>GEI</b> Consultants   |                   | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |      |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>                          | PROJ. NO. 1702944 | DWG. 31   | EDIT |
| SCALE NONE   | SHEET 31 OF 38    |   |      |
| DATE 9/30/2022   |                   |   |      |

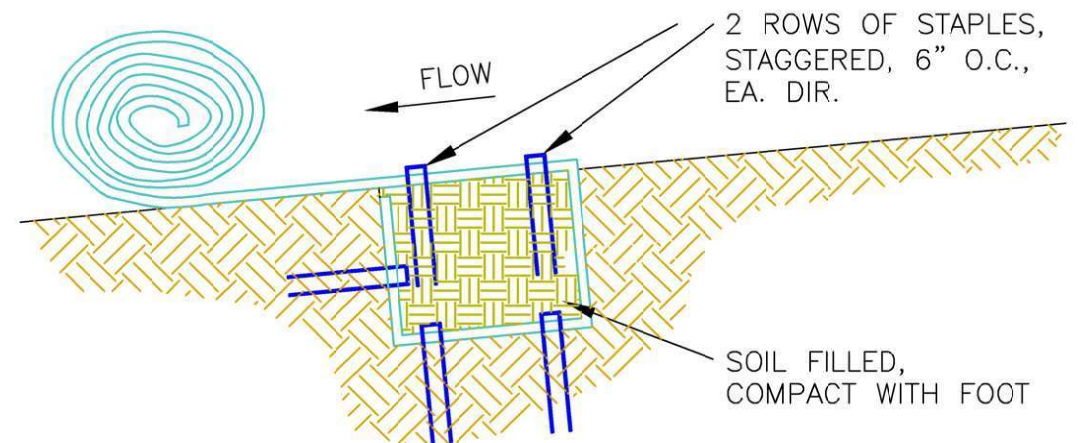




**EMERGENCY SPILLWAY LINER DETAIL**  
NOT TO SCALE

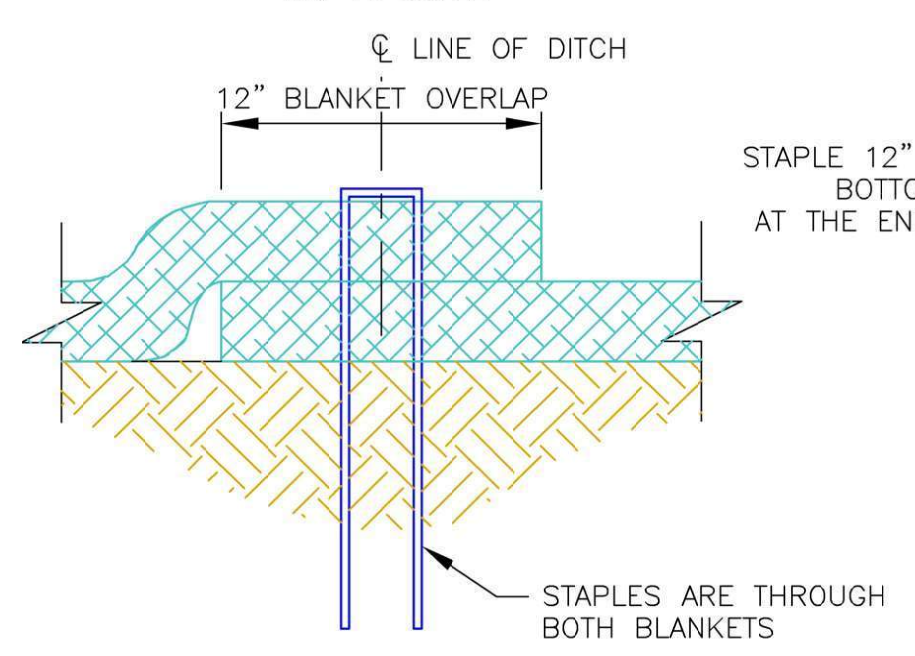


**STEP 1**

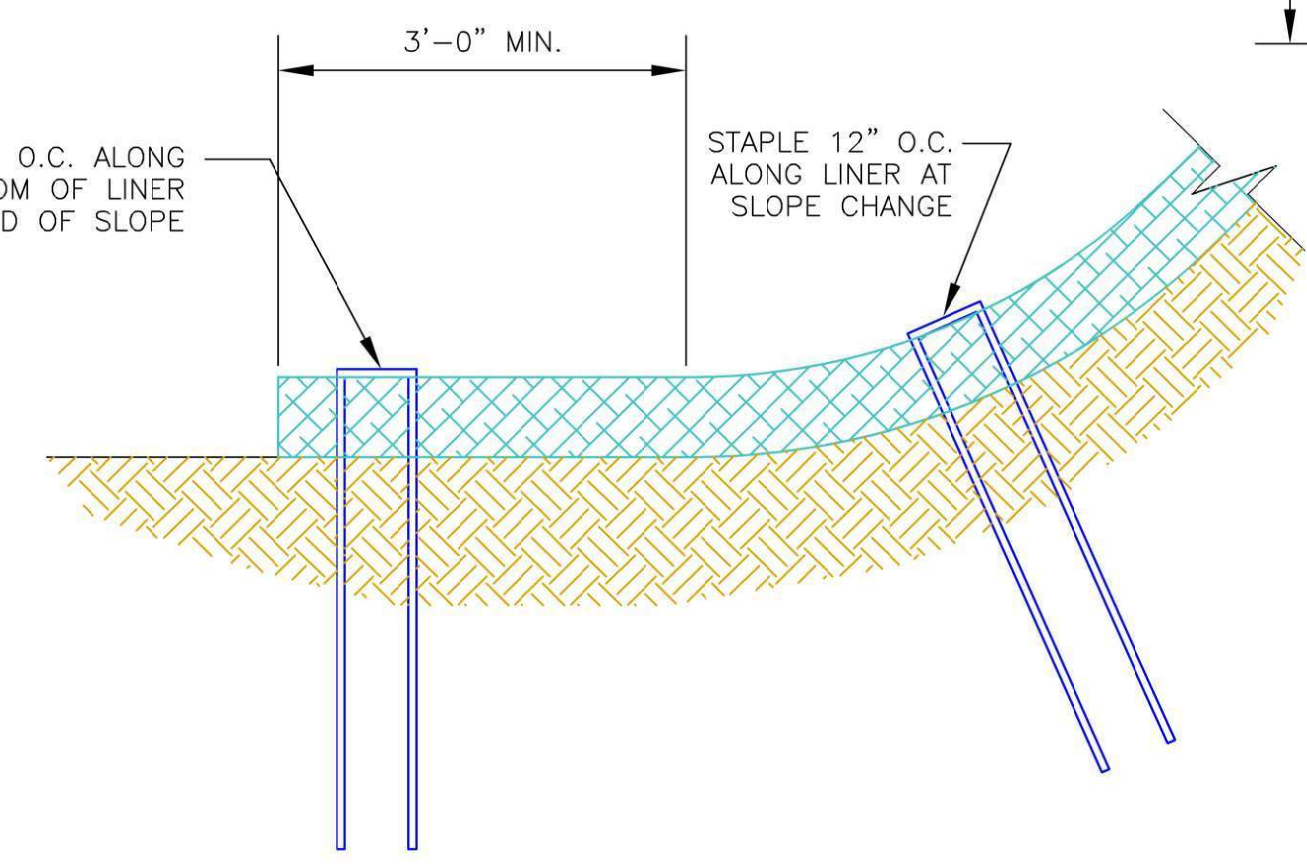


**STEP 2**

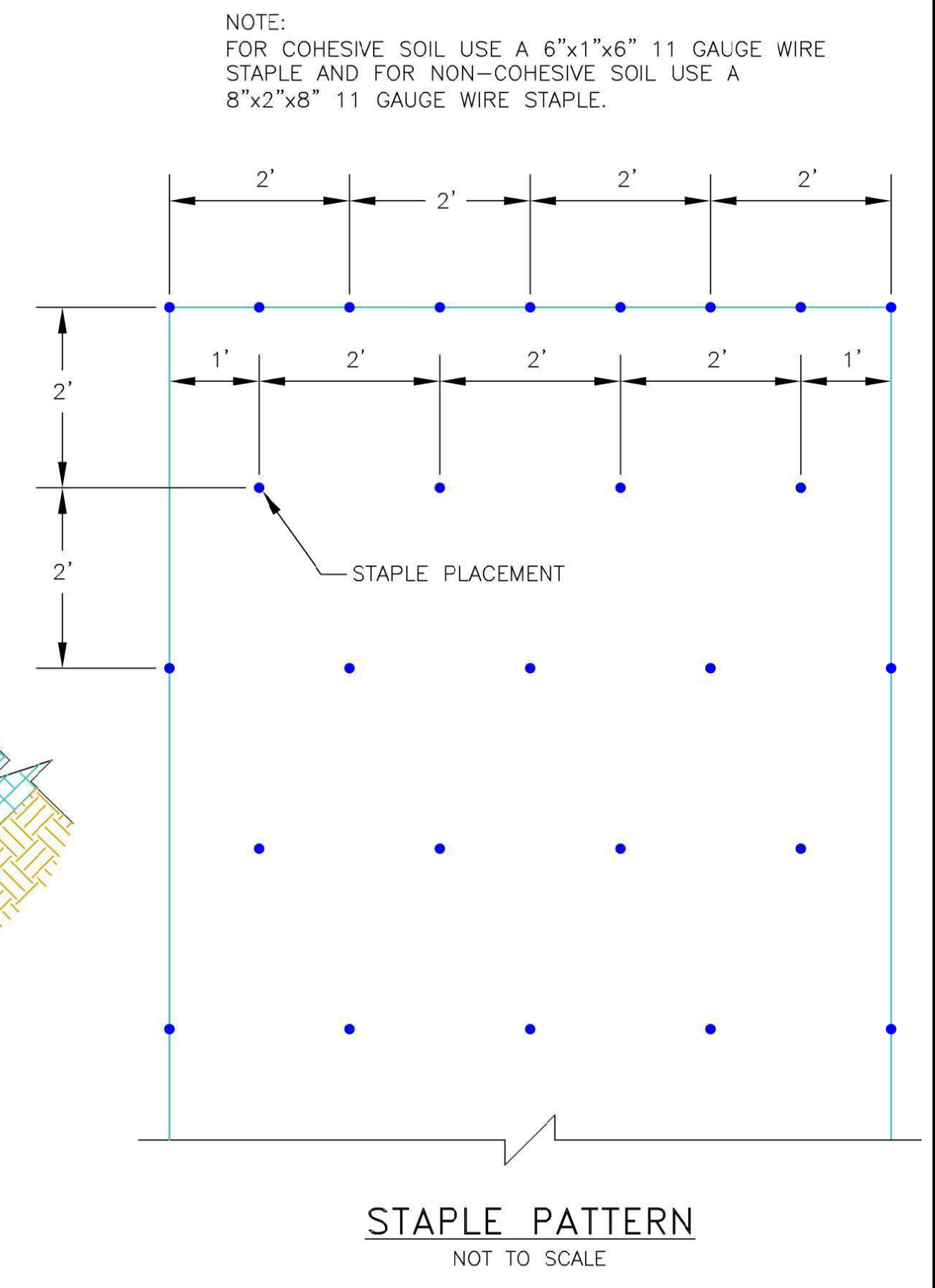
**SLOPE TRENCH**  
NOT TO SCALE



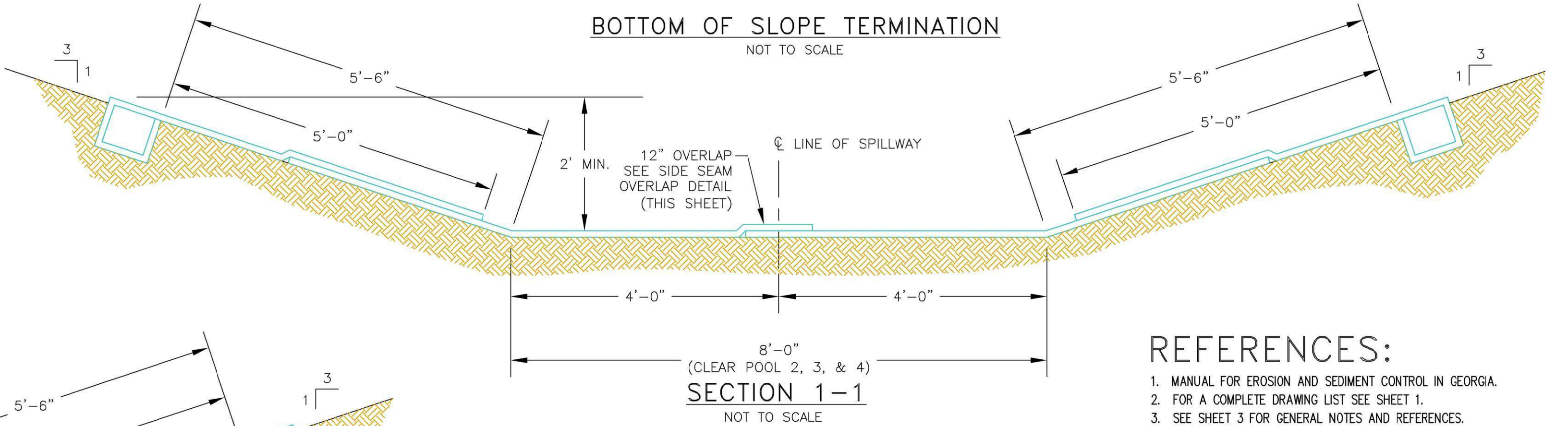
**SIDE SEAM OVERLAP STAPLE DETAIL**  
NOT TO SCALE



**BOTTOM OF SLOPE TERMINATION**  
NOT TO SCALE

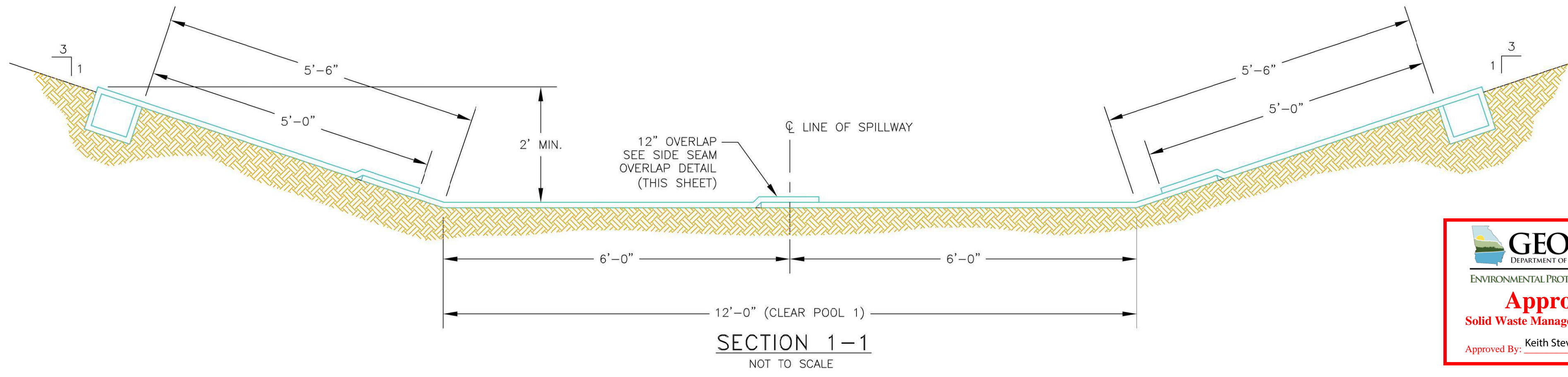


NOTE:  
FOR COHESIVE SOIL USE A 6"x1"x6" 11 GAUGE WIRE STAPLE AND FOR NON-COHESIVE SOIL USE A 8"x2"x8" 11 GAUGE WIRE STAPLE.



**SECTION 1-1**  
NOT TO SCALE

- REFERENCES:**
1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
  2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
  3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



**SECTION 1-1**  
NOT TO SCALE



|  |           |  |    |
|--|-----------|--|----|
| EROSION CONTROL SECTIONS & DETAILS   |           |  |    |
| <b>PERMIT DRAWINGS</b>   |           |  |    |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |  |    |
|  |           | 3065 AKERS MILL RD SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| <small>(404) 592-0050<br/><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a></small>          |           |  |    |
| PROJ. NO.  | 1702944   | DWG.   | 32 |
| SCALE  | NONE      | SHEET 32 OF 38   |    |
| DATE   | 9/30/2022 |  |    |



**PLANT, PLANTING RATE & PLANTING DATE FOR PERMANENT COVER**

| SPECIES   | BROADCAST RATES | PLANTING DATES |   |   |   |   |   |   |   |   |   |   |   | REMARKS |  |
|---|-----------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---------|--|
|   |                 | J              | F | M | A | M | J | J | A | S | O | N | D |         |  |
| Pensacola Bahia alone or with temporary cover     | 60 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |         | Low growing. Sod forming. Slow to establish. Plant with a companion crop. Will spread into bermuda pastures and lawns. Mix with <i>Sericea Lespedeza</i> .   |
| Wilmington Bahia with other perennials            | 30 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |         |  |
| Tall Fescue alone                                 | 50 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |         | Use alone only on better sites. Mix with perennial <i>Lespedeza</i> or <i>Crownvetch</i> . Apply top dressing in spring following fall plantings. <b>Nor for heavy use areas or athletic fields.</b> |
| Tall Fescue with other perennials                 | 30 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |         |  |
| Reed Canary Grass alone                           | 50 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |         |  |
| Reed Canary Grass with other perennials           | 30 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |         | Grows similar to Tall Fescue.  |
| Common Bermuda unhulled seed with temporary cover | 10 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |         | Plant with winter annuals  |
| Common Bermuda unhulled seed w/other perennials   | 6 lbs./ac       |                |   |   |   |   |   |   |   |   |   |   |   |         | Plant with Tall Fescue.  |

Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.

**DEFINITION**

THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.

**CONDITIONS**

PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDEED AREAS.

**SPECIFICATIONS**

GRADING AND SHAPING  
GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT. WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AND MAINTENANCE OF THE VEGETATION. CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET. DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE APPROPRIATE STANDARDS AND SPECIFICATIONS.

**SEEDBED PREPARATION**

SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED (BUT IS STRONGLY RECOMMENDED FOR ANY SEEDING PROCESS, WHEN POSSIBLE). WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS:

**BROADCAST PLANTINGS**

- TILLAGE, AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVIATE COMPACTION; INCORPORATE LIME AND FERTILIZER; SMOOTH AND FIRM THE SOIL; ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED.
- TILLAGE SHOULD BE DONE WITH ANY SUITABLE EQUIPMENT.
- TILLAGE SHOULD BE DONE ON THE CONTOUR WHERE FEASIBLE.
- ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.

**INDIVIDUAL PLANTS**

- WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS, OR DIBBLE PLANTING.
- FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO ACCOMMODATE ROOTS WITHOUT CROWDING.
- WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR FOUR TO SIX MONTHS PRIOR TO PLANTING. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.

**PLANTING**

**HYDRAULIC SEEDING**

MIX THE SEED (INNOCULATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.

**CONVENTIONAL SEEDING**

SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED. FOR BROADCAST PLANTING, USE A CULTI-PACKER-SEEDER, DRILL ROTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/8 TO 1/4 INCH OF SOIL FOR SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT.

**NO-TILLING SEEDING**

NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY OF THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF THE PERMANENT (PERENNIAL) SPECIES. NO-TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO-TILL SEEDING EQUIPMENT. THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH.

**INDIVIDUAL PLANTS**

SHRUBS, VINES AND SPRIGS MAY BE PLANTED WITH APPROPRIATE PLANTERS OR HAND TOOLS. PINE TREES SHALL BE PLANTED MANUALLY IN THE SUBSOIL FURROW. EACH PLANT SHALL BE SET IN A MANNER THAT WILL AVOID CROWDING THE ROOTS.

NURSERY STOCK PLANTS SHALL BE PLANTED AT THE SAME DEPTH OR SLIGHTLY DEEPER THAN THEY GREW AT THE NURSERY. THE TIPS OF VINES AND SPRIGS MUST BE AT OR SLIGHTLY ABOVE THE GROUND SURFACE.

**DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION) Ds3**

**FERTILIZER REQUIREMENTS**

| WARM SEASON GRASSES |                  |                  |                      |
|---------------------|------------------|------------------|----------------------|
| YEAR                | EQUIVALENT N-P-K | ANALYSIS OR RATE | N TOP DRESSING RATE  |
| First               | 6-12-12          | 1500 lbs./ac.    | 50-100 lbs./ac. 2/6/ |
| Second              | 6-12-12          | 800 lbs./ac.     | 50-100 lbs./ac. 2/   |
| Maintenance         | 10-10-10         | 400 lbs./ac.     | 30 lbs./ac.          |

| COOL SEASON GRASSES |                  |                  |                     |
|---------------------|------------------|------------------|---------------------|
| YEAR                | EQUIVALENT N-P-K | ANALYSIS OR RATE | N TOP DRESSING RATE |
| First               | 6-12-12          | 1500 lbs./ac.    | 50 lbs./ac./6/      |
| Second              | 0-10-10          | 1000 lbs./ac.    | -----               |
| Maintenance         | 0-10-10          | 400 lbs./ac.     | -----               |

WHERE INDIVIDUAL HOLES ARE DUG, FERTILIZER SHALL BE PLACED IN THE BOTTOM OF THE HOLE, TWO INCHES OF SOIL SHALL BE ADDED AND THE PLANT SHALL BE SET IN THE HOLE.

**MULCHING**

MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL RECEIVE 75% TO 100% SOIL COVER. WHEN SELECTING A MULCH, DESIGN PROFESSIONALS SHOULD CONSIDER THE MULCH'S FUNCTIONAL LONGEVITY, VEGETATION ESTABLISHMENT ENHANCEMENT, AND EROSION CONTROL EFFECTIVENESS. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:

- DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.
- WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
- ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 1/4:1 OR STEEPER.
- SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
- PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.
- WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
- BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS, SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED RIVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS. WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.

**APPLYING MULCH**

STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING. THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE. WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.

**ANCHORING MULCH**

- ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS:
- HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE MULCH IS SPREAD. A SPECIAL "PACKER DISK" OR DISK HARROW WITH THE DISKS SET STRAIGHT MAY BE USED. THE DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISKS SHALL BE DULL ENOUGH TO PRESS THE MULCH INTO THE GROUND WITHOUT CUTTING IT, LEAVING MUCH OF IT IN AN ERECT POSITION. MULCH SHALL NOT BE PLOWED INTO THE SOIL.
  - SYNTHETIC TACKIFIERS, FINDERS OR HYDRAULIC MULCH SPECIFICALLY DESIGNED TO TACK STRAW, SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. ALL TACKIFIERS, FINDERS OR HYDRAULIC MULCH SPECIFICALLY DESIGNED TO TACK STRAW SHOULD BE VERIFIED NONTOXIC THROUGH EPA 2021.0 TESTING. REFER TO TACKIFIERS-TAC IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, SIXTH EDITION.
  - RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE MULCH. THEY SHALL BE APPLIED AT A RATE OF ONE-QUARTER TO ONE-HALF BUSHED PER ACRE.
  - PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

**IRRIGATION**

IRRIGATION WILL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.

**DEFINITION**

THE ESTABLISHMENT OF TEMPORARY VEGETATION COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENUDEED AREAS.

**CONDITIONS**

TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE AS COMPANION CROPS UNTIL THE PERMANENT VEGETATION IS ESTABLISHED. NOTE: SOME SPECIES OF TEMPORARY VEGETATION ARE NOT APPROPRIATE FOR COMPANION CROP PLANTINGS BECAUSE OF THEIR POTENTIAL TO OUT-COMPETE THE DESIRED SPECIES. (E.G. ANNUAL RYEGRASS). CONTACT NRCS OR THE LOCAL SWCD FOR MORE INFORMATION.

**SPECIFICATIONS**

GRADING AND SHAPING  
EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

**SEEDBED PREPARATION**

WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HAND-SEEDED, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL. WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LEDGE AND GERMINATE.

**LIME AND FERTILIZER**

AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE DETERMINED BY SOIL TEST FOR pH. QUICK ACTING LIME SHOULD BE INCORPORATED TO MODIFY pH DURING THE GERMINATION PERIOD. BIO STIMULANTS SHOULD ALSO BE CONSIDERED WHEN THERE IS LESS THAN 3% ORGANIC MATTER IN THE SOIL. GRADED AREAS REQUIRE LIME APPLICATION. SOILS MUST BE TESTED TO DETERMINE REQUIRED AMOUNTS OF FERTILIZER AND AMENDMENTS. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER, OR CHISEL. ON SLOPES TOO STEEP FOR, OR INACCESSIBLE TO EQUIPMENT, FERTILIZER SHALL BE HYDRAULICALLY APPLIED, PREFERABLY IN THE FIRST PASS WITH SEED AND SOME HYDRAULIC MULCH, THEN TOPPED WITH THE REMAINING REQUIRED APPLICATION RATE.

SEEDING SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, SULTI-PACKER-SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER TO ONE-HALF INCH DEEP. APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER. SOIL SHOULD BE "RAKED" LIGHTLY TO COVER SEED WITH SOIL IF SEEDED BY HAND. SEE TABLE 6-4.1 IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, SIXTH EDITION, 2014.

**MULCHING**

TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH, PROVIDED THERE IS LITTLE TO NO EROSION POTENTIAL. HOWEVER, THE USE OF MULCH CAN OFTEN ACCELERATE AND ENHANCE GERMINATION AND VEGETATION ESTABLISHMENT. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. REFER TO Ds1-DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, SIXTH EDITION, 2014.

**IRRIGATION**

DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

**DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING) Ds2**


**SEEDING RATES FOR TEMPORARY SEEDING**

| SPECIES                       | BROADCAST RATES | PLANTING DATES |   |   |   |   |   |   |   |   |   |   |   | COMMENTS |   |
|-------------------------------|-----------------|----------------|---|---|---|---|---|---|---|---|---|---|---|----------|---|
|                               |                 | J              | F | M | A | M | J | J | A | S | O | N | D |          |   |
| Barley alone                  | 144 lbs./ac     |                |   |   |   |   |   |   |   |   |   |   |   |          | Winter hardy, use on productive soils   |
| Barley in mixture             | 24 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          |   |
| Lespedeza, Annual alone       | 40 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          | May volunteer for several years. Use inoculant EL.  |
| Lespedeza, Annual in mixture  | 10 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          |   |
| Lovegrass, Weeping alone      | 4 lbs./ac       |                |   |   |   |   |   |   |   |   |   |   |   |          | May last for several years. Mix with <i>Sericea Lespedeza</i> .                           |
| Lovegrass, Weeping in mixture | 2 lbs./ac       |                |   |   |   |   |   |   |   |   |   |   |   |          |   |
| Millet, Browntop alone        | 40 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          | Quick dense cover. Will provide too much competition in mixtures if seeded at high rates. |
| Millet, Browntop in mixture   | 10 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          |   |
| Millet, Pearl alone           | 50 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          | Quick dense cover. May reach 5 feet in height. NOT recommended for mixtures.              |
| Oats alone                    | 128 lbs./ac     |                |   |   |   |   |   |   |   |   |   |   |   |          |   |
| Oats in mixture               | 32 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          | Use on productive soils. Not as winter hardy as rye or barley.                            |
| Rye alone                     | 168 lbs./ac     |                |   |   |   |   |   |   |   |   |   |   |   |          |   |
| Rye in mixture                | 28 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          | Quick cover. Drought tolerant and winter hardy.   |
| Ryegrass, Annual alone        | 40 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          |   |
| Sudangrass alone              | 60 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          | Good on droughty sites. NOT recommended for mixtures.                                     |
| Triticale alone               | 144 lbs./ac     |                |   |   |   |   |   |   |   |   |   |   |   |          |   |
| Triticale in mixture          | 24 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          | Use on lower part of Southern Coastal Plain and in Atlantic Coastal Flatwoods only.       |
| Wheat alone                   | 180 lbs./ac     |                |   |   |   |   |   |   |   |   |   |   |   |          |   |
| Wheat w/other perennials      | 30 lbs./ac      |                |   |   |   |   |   |   |   |   |   |   |   |          | Winter hardy.   |

Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.

**REFERENCES:**

- MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
- FOR A COMPLETE DRAWING LIST SEE SHEET 1.
- SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

|  |           |   |    |
|--|-----------|---|----|
| EROSION CONTROL SECTIONS & DETAILS   |           |   |    |
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |    |
| <br>GEI Consultants   |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>  |           |   |    |
| PROJ. NO.  | 1702944   | DWG.  | 33 |
| SCALE  | NONE      | <b>SHEET 33 OF 38</b>                                     |    |
| DATE   | 9/30/2022 |   |    |





**PURPOSE**  
TO MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE SITE AND ENTERING NATURAL DRAINAGE WAYS OR STORM DRAINAGE SYSTEMS BY SLOWING STORM WATER RUNOFF AND CAUSING THE DEPOSITION AND/OR FILTRATION OF SEDIMENT AT THE STRUCTURE. THE BARRIERS RETAIN THE SOIL ON THE DISTURBED LAND UNTIL THE ACTIVITIES DISTURBING THE LAND ARE COMPLETED AND VEGETATION IS ESTABLISHED.

**PERFORMANCE EVALUATION**  
FOR A PRODUCT OR PRACTICE TO BE APPROVED AS A SEDIMENT BARRIER, THAT PRODUCT OR PRACTICE MUST HAVE A DOCUMENTED P-FACTOR NO GREATER THAN 0.045 FOR NON-SENSITIVE AREAS OR A P-FACTOR NO GREATER THAN 0.030 FOR SENSITIVE AREAS, AS SPECIFIED BY GSWCC. FOR COMPLETE TEST PROCEDURES AND APPROVED PRODUCTS LIST PLEASE VISIT [WWW.GASWCC.GEORGIA.GOV](http://WWW.GASWCC.GEORGIA.GOV).

**DESIGN CRITERIA**  
SEDIMENT BARRIERS ARE DESIGNED TO RETAIN SEDIMENT TRANSPORTED BY SHEET FLOW FROM DISTURBED AREAS. IT IS IMPORTANT FOR THE DESIGN PROFESSIONAL TO TAKE INTO ACCOUNT THE PROFILE OF THE PRODUCT FOR USE ON THE SITE. ALL SEDIMENT BARRIERS SHALL MEET THE REQUIRED P-FACTOR PERFORMANCE LEVEL. SUPPORTING INFORMATION ON TESTING CAN BE FOUND AT [WWW.GASWCC.GEORGIA.GOV](http://WWW.GASWCC.GEORGIA.GOV), UNDER, DOCUMENTS. SEDIMENT BARRIERS SHOULD ALSO PROVIDE A RIPRAP SPLASH PAD OR OTHER OUTLET PROTECTION DEVICE FOR ANY POINT WHERE FLOW MAY OVERTOP THE SEDIMENT BARRIER. ENSURE THAT THE MAXIMUM HEIGHT OF THE BARRIER AT A PROTECTED, REINFORCED OUTLET DOES NOT EXCEED 1 FOOT AND THAT THE SUPPORT SPACING DOES NOT EXCEED 4 FEET. WHERE ALL RUNOFF IS TO BE STORED BEHIND THE SEDIMENT BARRIER (WHERE NO STORM WATER DISPOSAL SYSTEM IS PRESENT), MAXIMUM CONTINUOUS SLOPE LENGTH BEHIND A SEDIMENT BARRIER SHALL NOT EXCEED THOSE SHOWN IN CRITERIA FOR SEDIMENT BARRIER TABLE. FOR LONGER SLOPE LENGTHS, SLOPE INTERRUPTERS MUST BE USED. THE DRAINAGE AREA SHALL NOT EXCEED 1/4 ACRE FOR EVERY 100 FEET OF SEDIMENT BARRIER.

**PLACEMENT**  
WHEN USING A SEDIMENT BARRIER THE DESIGN PROFESSIONAL MUST DETERMINE TYPE NS OR TYPE S. SENSITIVE AREAS CAN BE DEFINED AS ANY AREA THAT NEEDS ADDITIONAL PROTECTION, THESE AREAS INCLUDE BUT ARE NOT LIMITED TO, STATE WATERS, WETLANDS, OR ANY AREA THE DESIGN PROFESSIONAL DESIGNATES AS SENSITIVE. WHEN USING MULTIPLE TYPES OF SEDIMENT BARRIERS ON A SITE IN A SINGLE RUN THE BARRIERS MUST BE OVERLAPPED 18 INCHES OR AS SPECIFIED BY DESIGN PROFESSIONAL. SEE OVERLAP AT FABRIC ENDS DETAIL.

**CONSTRUCTION SPECIFICATIONS**

**TYPE S SEDIMENT BARRIER SENSITIVE AREAS**

SEDIMENT BARRIERS BEING USED AS TYPE S SHALL HAVE A SUPPORT SPACING OF NO GREATER THAN 4 FEET ON CENTER, WITH EACH DRIVEN INTO THE GROUND 18 INCHES. TYPE S SEDIMENT BARRIERS SHALL HAVE A P-FACTOR NO GREATER THAN 0.030.

**INSTALLATION**  
SEDIMENT BARRIERS SHOULD BE INSTALLED ALONG THE CONTOUR. TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED ACCORDING TO THE FOLLOWING SPECIFICATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE DESIGN PROFESSIONAL. FOR INSTALLATION OF THE BARRIERS, SEE DETAILS. IT IS IMPORTANT TO REMEMBER THAT NOT ALL SEDIMENT BARRIERS NEED TO BE TRENCHED INTO THE GROUND BUT MOST TALLER SEDIMENT BARRIERS DO. POST INSTALLATION SHALL START AT THE CENTER OF A LOW POINT (IF APPLICABLE) WITH THE REMAINING POSTS SPACED NO GREATER THAN 6 FEET APART FOR TYPE S SEDIMENT BARRIERS AND NO GREATER THAN 4 FEET APART FOR TYPE NS SEDIMENT BARRIERS. FOR POST SIZE REQUIREMENT, SEE POST SIZE TABLE. FASTENERS FOR WOOD POSTS ARE LISTED IN FASTENERS FOR WOOD POSTS TABLE.

**TRENCHING METHOD**  
TRENCHING MACHINES HAVE BEEN USED FOR OVER TWENTY-FIVE YEARS TO DIG A TRENCH FOR BURYING PART OF THE FILTER FABRIC UNDERGROUND. USUALLY THE TRENCH IS ABOUT 2"-6" WIDE WITH A 6" EXCAVATION. POST SETTING AND FABRIC INSTALLATION OFTEN PRECEDE COMPACTION, WHICH MAKE EFFECTIVE COMPACTION MORE DIFFICULT TO ACHIEVE. EPA SUPPORTED AN INDEPENDENT TECHNOLOGY EVALUATION (ASCE 2001), WHICH COMPARED THREE PROGRESSIVELY BETTER VARIATIONS OF THE TRENCHING METHOD WITH STATIC SLICING METHOD. THE STATIC SLICING METHOD PERFORMED BETTER THAN TWO LOWER PERFORMANCE LEVELS OF THE TRENCHING METHOD, AND WAS AS GOOD AS OR BETTER THAN THE TRENCHING METHOD'S HIGHEST PERFORMANCE LEVEL. THE BEST TRENCHING METHOD TYPICALLY REQUIRED NEARLY TRIPLE THE TIME AND EFFORT TO ACHIEVE RESULTS COMPARABLE TO THE STATIC SLICING METHOD.

ALONG ALL STATE WATERS AND OTHER SENSITIVE AREAS, TWO ROWS OF TYPE S SEDIMENT BARRIERS SHALL BE USED. THE TWO ROWS TYPE S SHOULD BE PLACED A MINIMUM OF 36 INCHES APART.

**MAINTENANCE**  
SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER. THIS IS EXTREMELY IMPORTANT WHEN SELECTING BMPs WITH A LOWER PROFILE. SEDIMENT BARRIERS SHALL BE REPLACED WHENEVER THEY HAVE DETERIORATED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF THE PRODUCT IS REDUCED (APPROXIMATELY SIX MONTHS) OR THE HEIGHT OF THE PRODUCT IS NOT MAINTAINING 80% OF ITS PROPERLY INSTALLED HEIGHT. TEMPORARY SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ALL SEDIMENT ACCUMULATED AT THE BARRIER SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE BARRIER IS REMOVED.

|              | GAUGE   | CROWN     | LEGS         | STAPLES/POST |
|--------------|---------|-----------|--------------|--------------|
| WIRE STAPLES | 17 MIN. | 3/4" WIDE | 1/2" LONG    | 5 MIN.       |
|              | GAUGE   | LENGTH    | BUTTON HEADS | NAIL/POST    |
| NAILS        | 14 MIN. | 1"        | 3/4"         | 4 MIN.       |

NOTE: FILTER FABRIC MAY ALSO BE ATTACHED TO THE POST BY WIRE, CHORDS, AND POCKETS OR ANY OTHER METHOD PROVIDED MINIMUM P-FACTOR, AS REQUIRED BY GSWCC, IS MET.

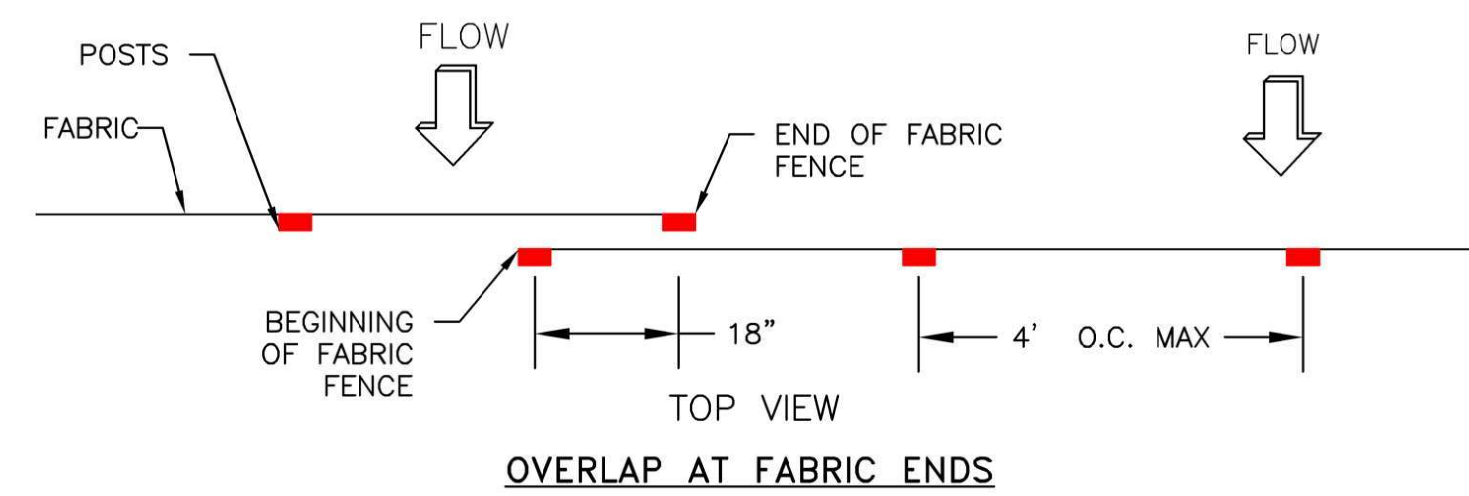
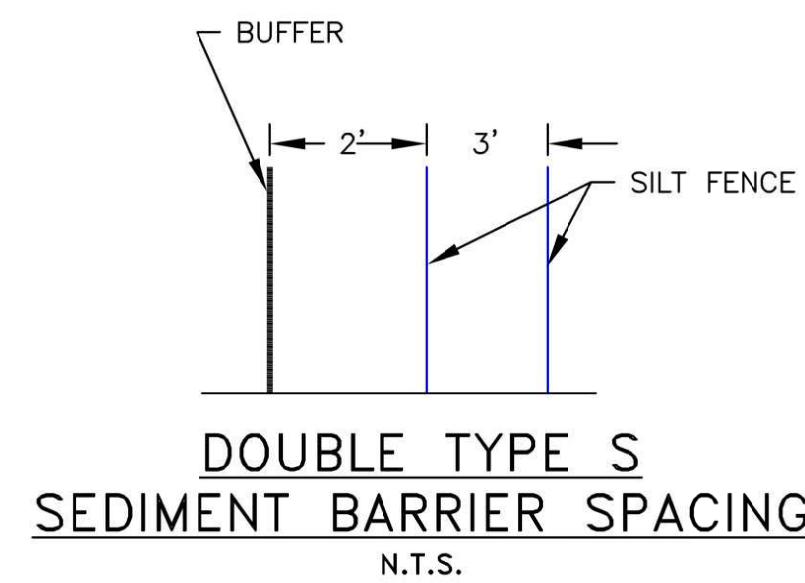
| TYPE | MIN. LENGTH | TYPE OF POST  | SIZE OF POST               |
|------|-------------|---------------|----------------------------|
| NS   | 4'          | SOFT WOOD OAK | 3" DIA. OR 2X4 1.5" X 1.5" |
| S    | 4'          | STEEL OAK     | 1.3 LB./FT. MIN. 2" X 2"   |

NOTE: THE FABRIC AND WIRE SHOULD BE SECURELY FASTENED TO POSTS, AND FABRIC ENDS MUST BE OVERLAPPED A MINIMUM OF 18" OR WRAPPED TOGETHER AROUND A POST TO PROVIDE A CONTINUOUS FABRIC BARRIER AROUND THE INLET.

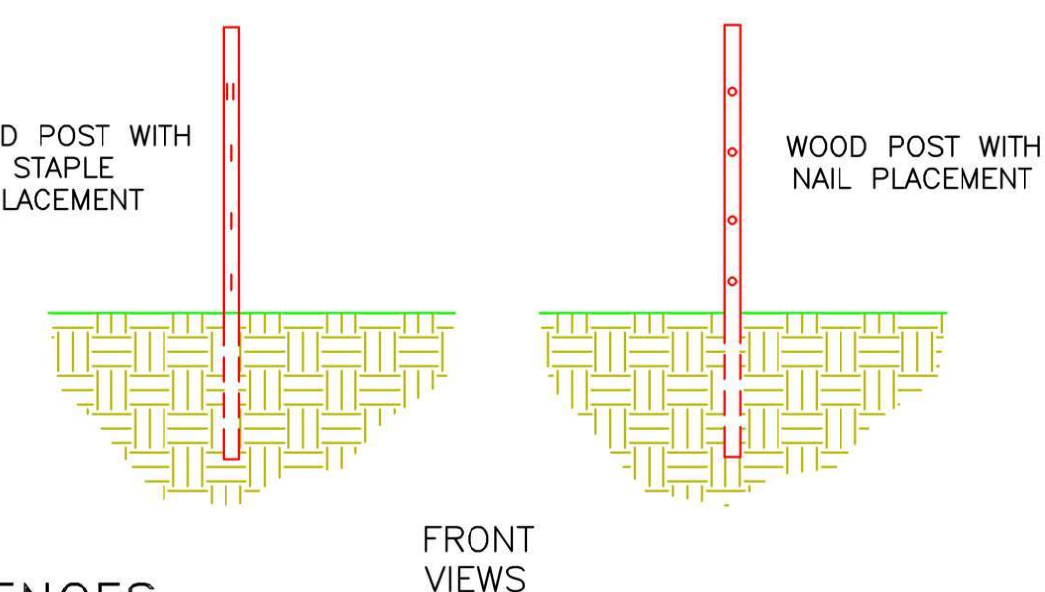
**CRITERIA FOR SEDIMENT BARRIER**

| LAND SLOPE PERCENT | MAXIMUM SLOPE LENGTH ABOVE FENCE FEET |
|--------------------|---------------------------------------|
| <2                 | 100                                   |
| 2 TO 5             | 75                                    |
| 5 TO 10            | 50                                    |
| 10 TO 20           | 25                                    |
| >20*               | 15                                    |

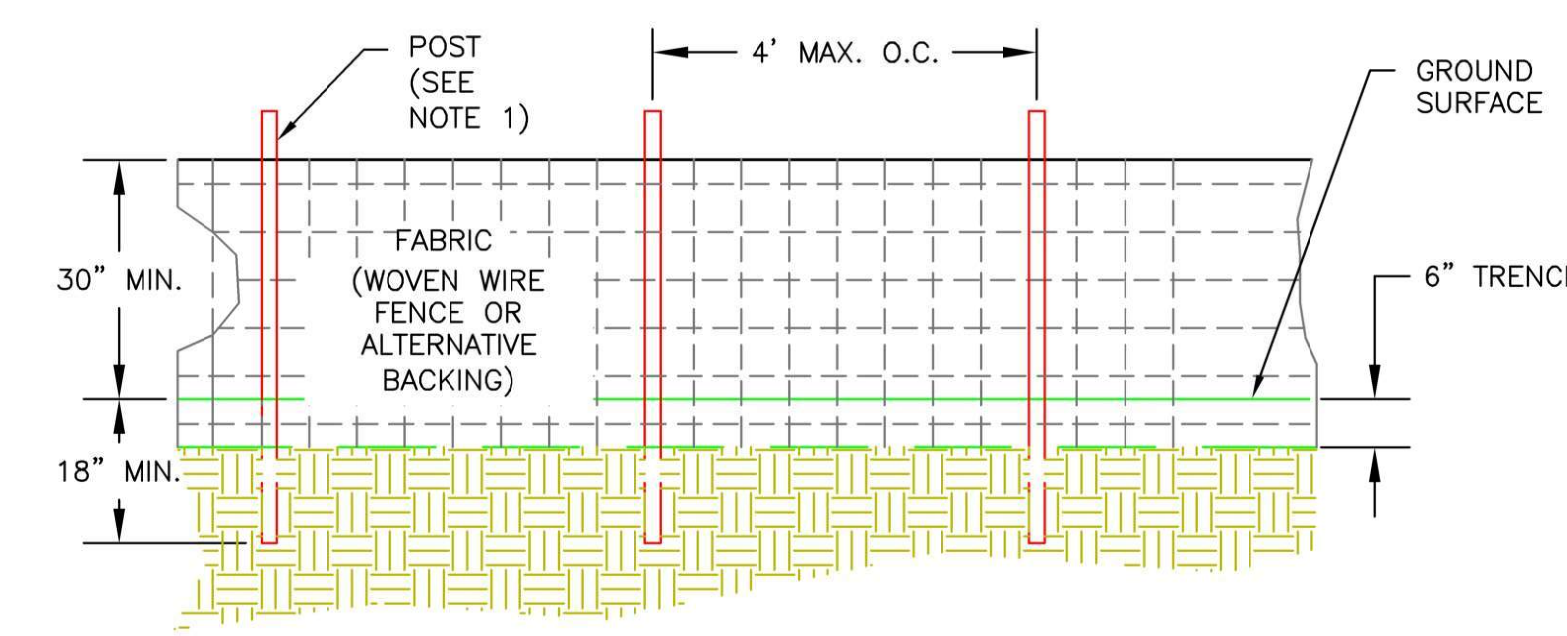
\*IN AREAS WHERE THE SLOPE IS GREATER THAN 20%, A FLAT AREA LENGTH OF 10 FEET BETWEEN THE TOE OF SLOPE TO THE BARRIER SHOULD BE PROVIDED.



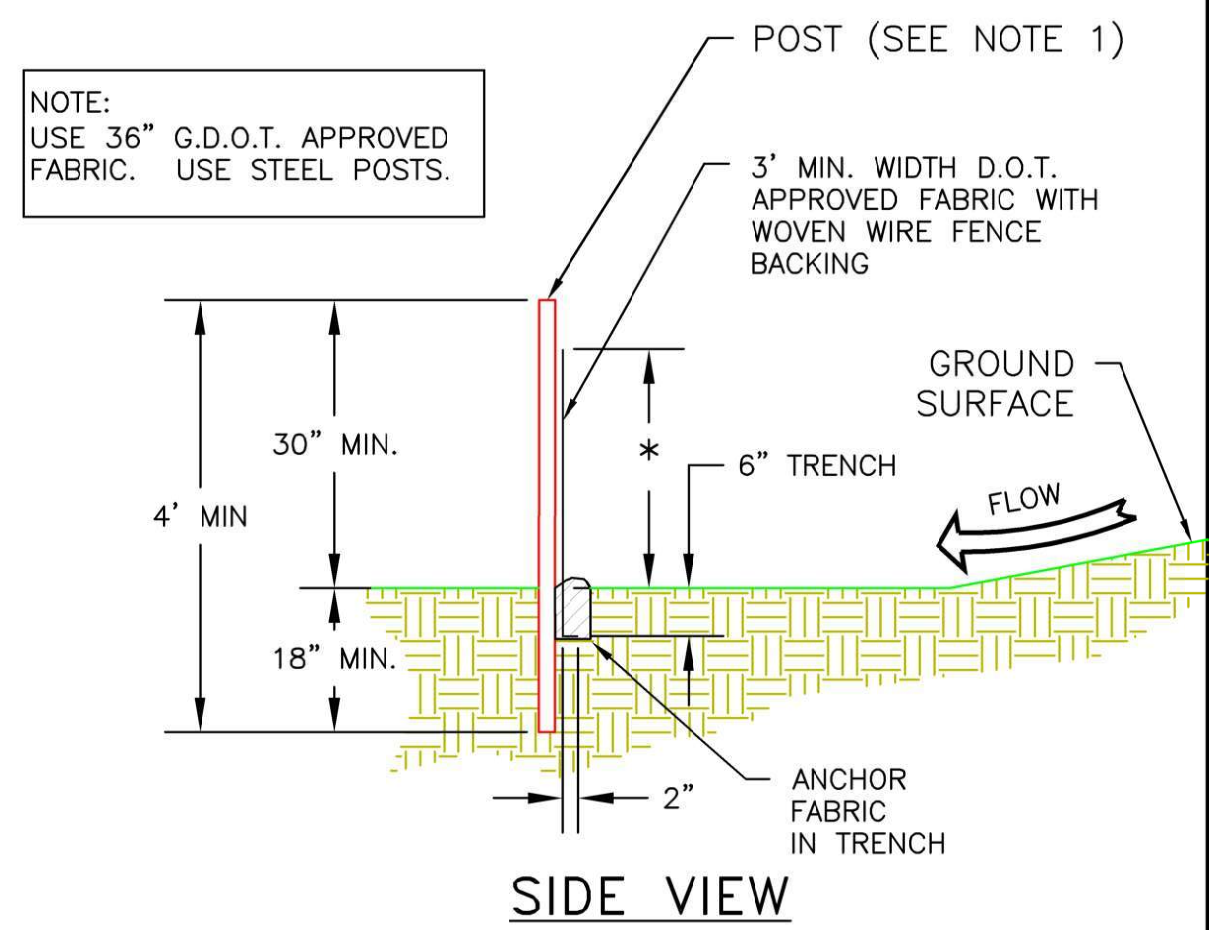
**FASTENERS FOR SILT FENCES**  
N.T.S.



NOTES:  
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.  
2. HEIGHT (\*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

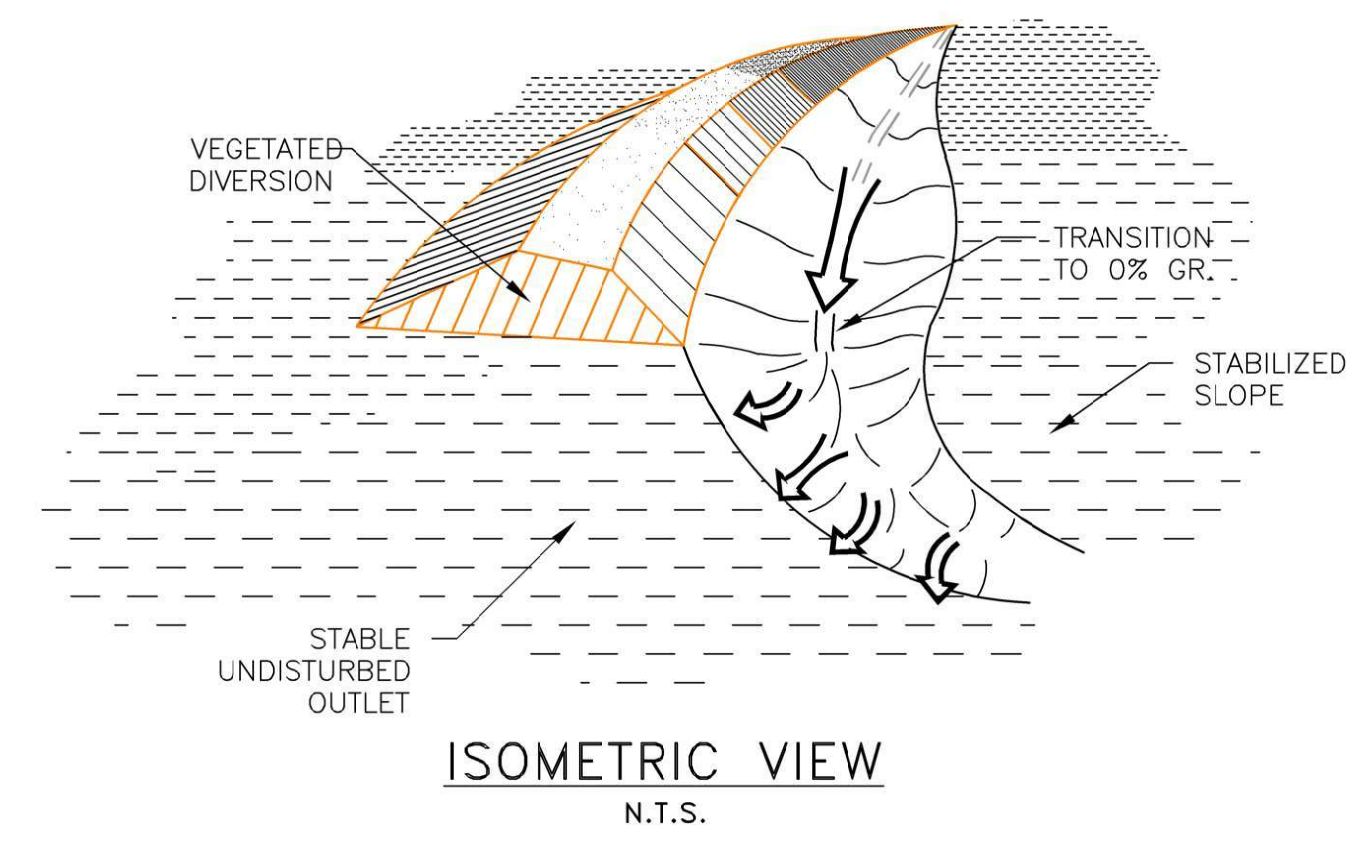


**FRONT VIEW**

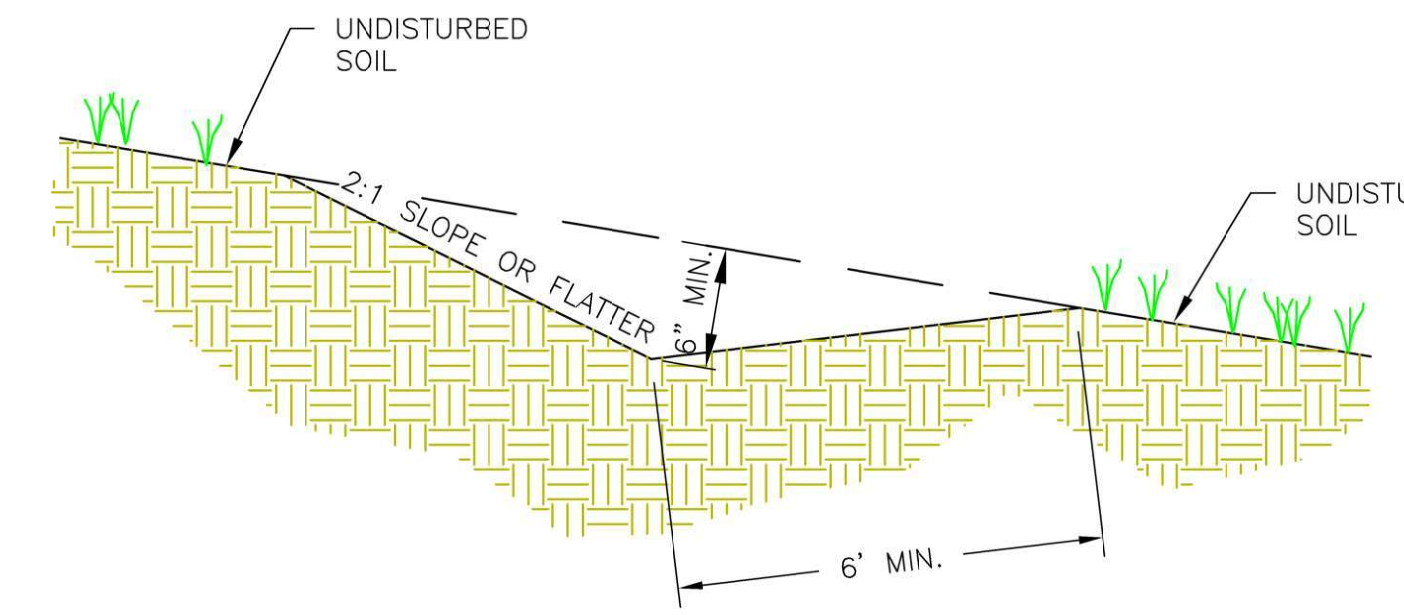


**SIDE VIEW**

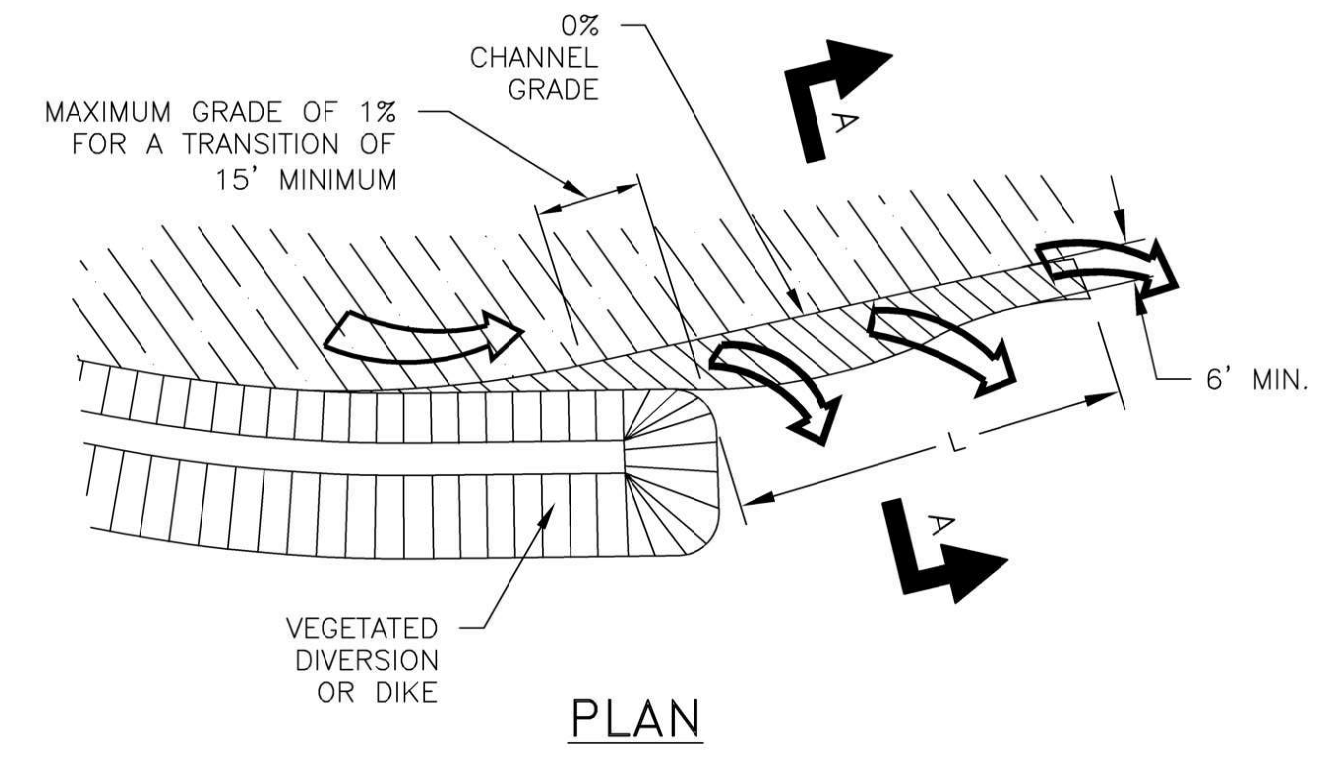
**TYPE S SEDIMENT BARRIER Sd1-S**  
N.T.S.



**ISOMETRIC VIEW**  
N.T.S.



**SECTION A-A**



**TYPICAL LEVEL SPREADER**  
N.T.S.

NOTES:  
1. FINAL DISCHARGE WILL BE OVER THE LEVEL LIP ONTO AN UNDISTURBED, STABILIZED AREA. THE OUTLET SHALL BE GENERALLY SMOOTH TO CREATE UNIFORM SHEET FLOW.  
2. GRADE OF CHANNEL FOR LAST 15 FEET OF THE DIKE OR DIVERSION ENTERING THE LEVEL SPREADER SHALL BE LESS THAN OR EQUAL TO 1%.  
3. LEVEL SPREADERS MUST BE CONSTRUCTED ON UNDISTURBED SOIL (NOT ON FILL).  
4. STORM RUNOFF CONVERTED TO SHEET FLOW MUST DISCHARGE ONTO UNDISTURBED STABILIZED AREAS.

| DESIGNED Q10/24 (cfs) | MINIMUM LENGTH "L" (feet) |
|-----------------------|---------------------------|
| UP TO 10              | 10                        |
| 11 TO 20              | 20                        |
| 21 TO 30              | 30                        |
| 31 TO 40              | 40                        |
| 41 TO 50              | 50                        |

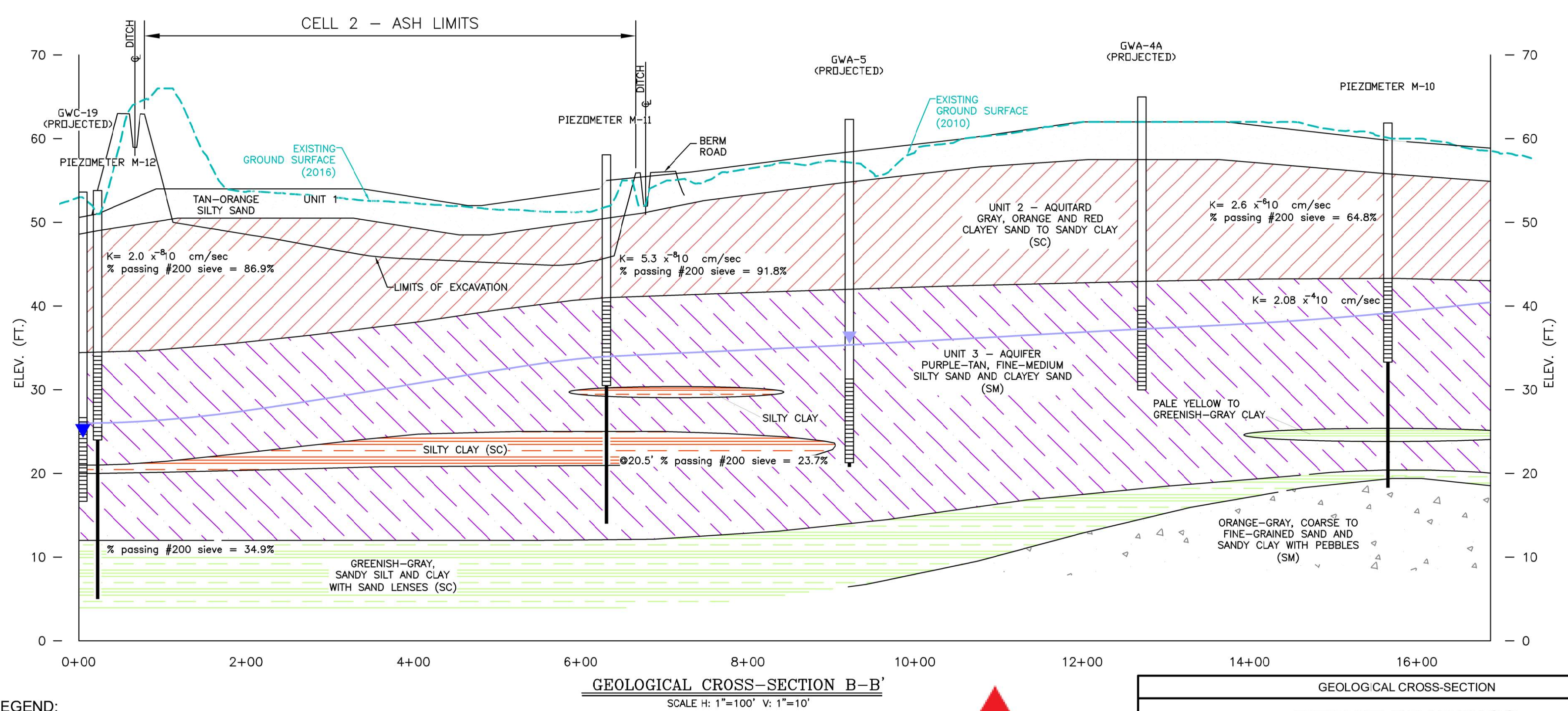
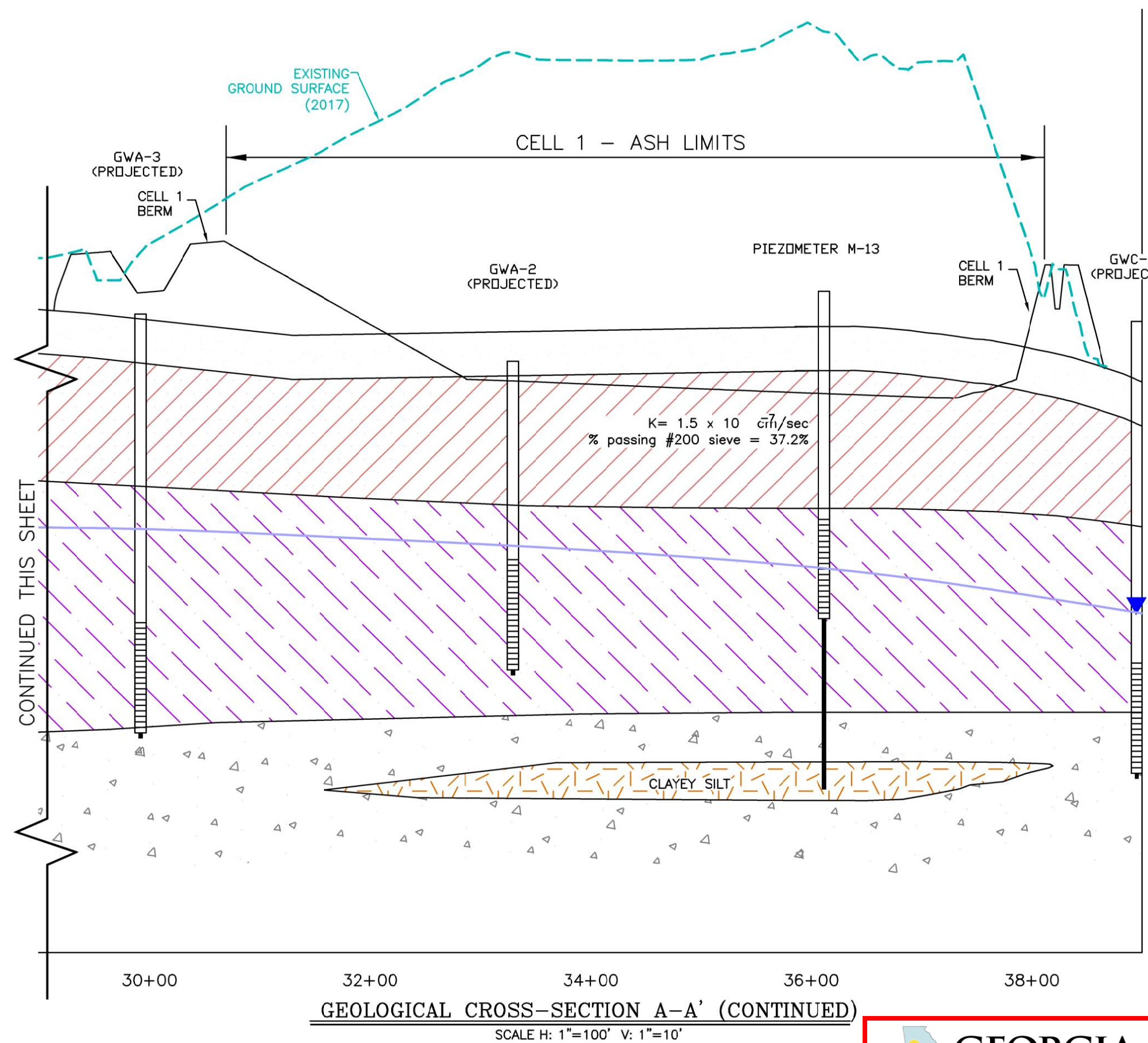
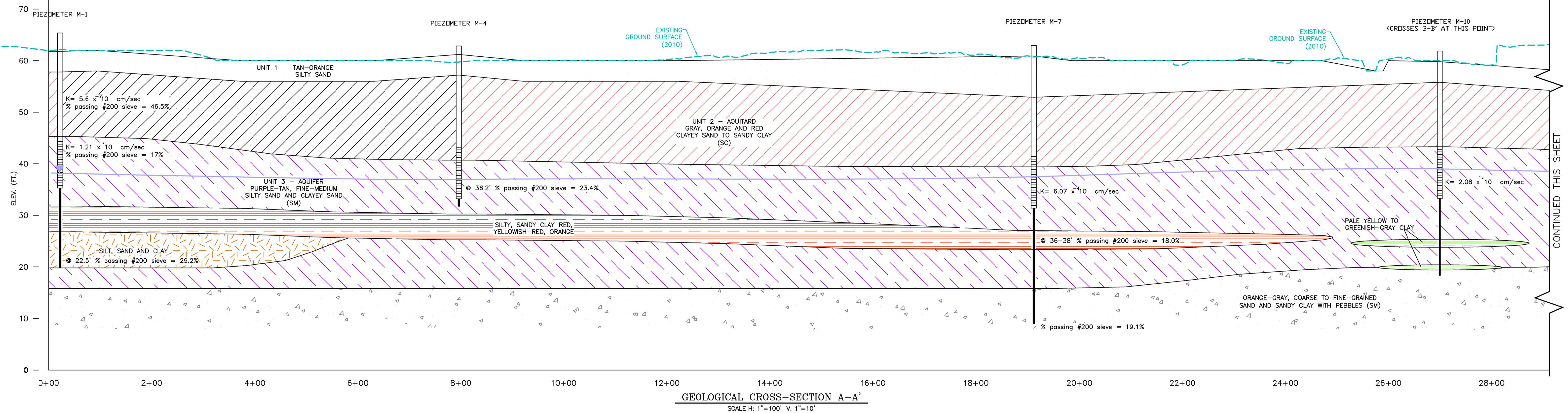
**REFERENCES:**

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



| EROSION CONTROL SECTIONS & DETAILS   |           |   |    |
|--|-----------|---|----|
| <b>PERMIT DRAWINGS</b>   |           |   |    |
| GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |    |
| <b>GEI</b> Consultants   |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| <small>(404) 592-0050<br/><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a></small>          |           |   |    |
| PROJ. NO.  | 1702944   | DWG.  | 34 |
| SCALE  | NONE      | SHEET 34 OF 38  |    |
| DATE   | 9/30/2022 |   |    |





**LEGEND:**

▲ WATER TABLE (2003)

▼ WATER TABLE (2021)

I hereby certify that I am a qualified groundwater scientist, in accordance with the Rules of Solid Waste Management, and 40 CFR Par 258.50(g). A qualified groundwater scientist is a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by State registration, professional Certification, or completion of accredited university programs that enable individuals to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action. I hereby certify that the design of this groundwater monitoring system was developed in accordance with the Rules of Solid Waste Management, Chapter 391-3-4.

Signature: *Christie J. Battenhouse*  
Date: September 9, 2022



|  |           |   |    |
|--|-----------|---|----|
| <b>PERMIT DRAWINGS</b><br>GEORGIA POWER COMPANY<br>PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |   |    |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>  |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| PROJ. NO.  | 1702944   | DWG.  | 35 |
| SCALE  | SEE ABOVE | SHEET 35 OF 38  |    |
| DATE   | 9/30/2022 |   |    |



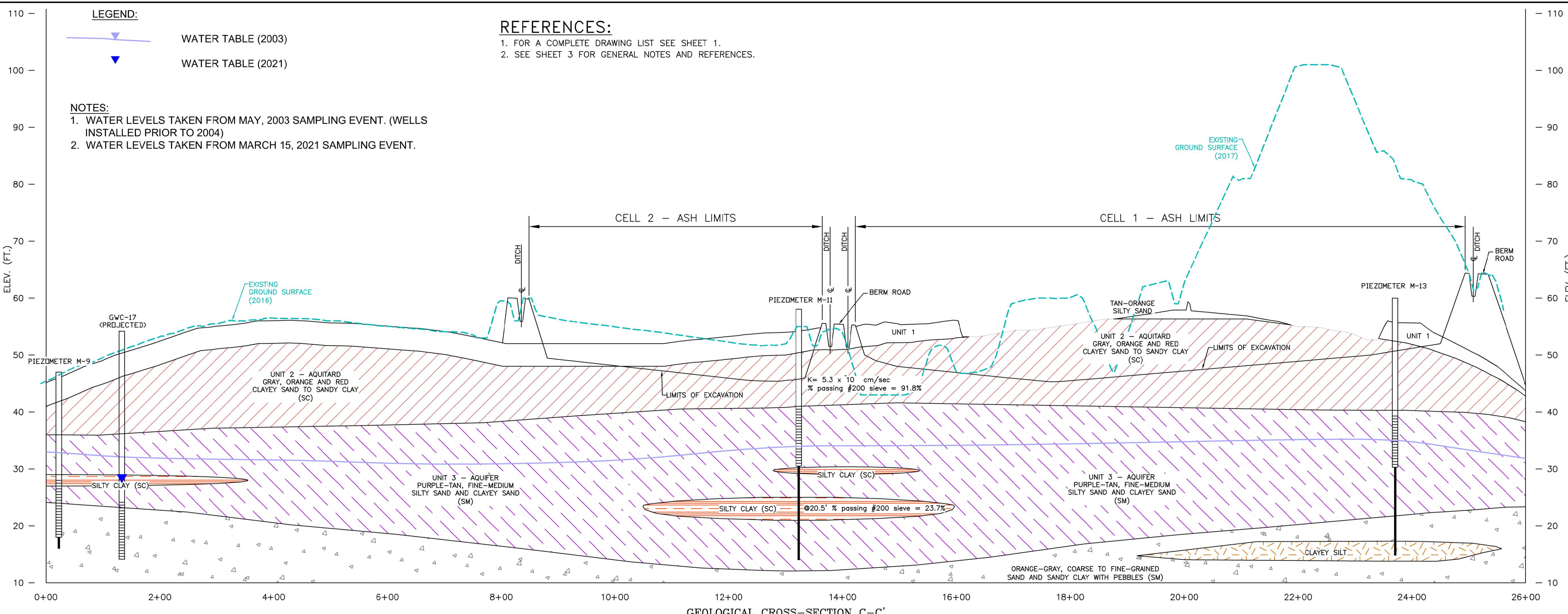
**REFERENCES:**

- FOR A COMPLETE DRAWING LIST SEE SHEET 1.
- SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

**NOTES:**

- WATER LEVELS TAKEN FROM MAY, 2003 SAMPLING EVENT. (WELLS INSTALLED PRIOR TO 2004)
- WATER LEVELS TAKEN FROM MARCH 15, 2021 SAMPLING EVENT.

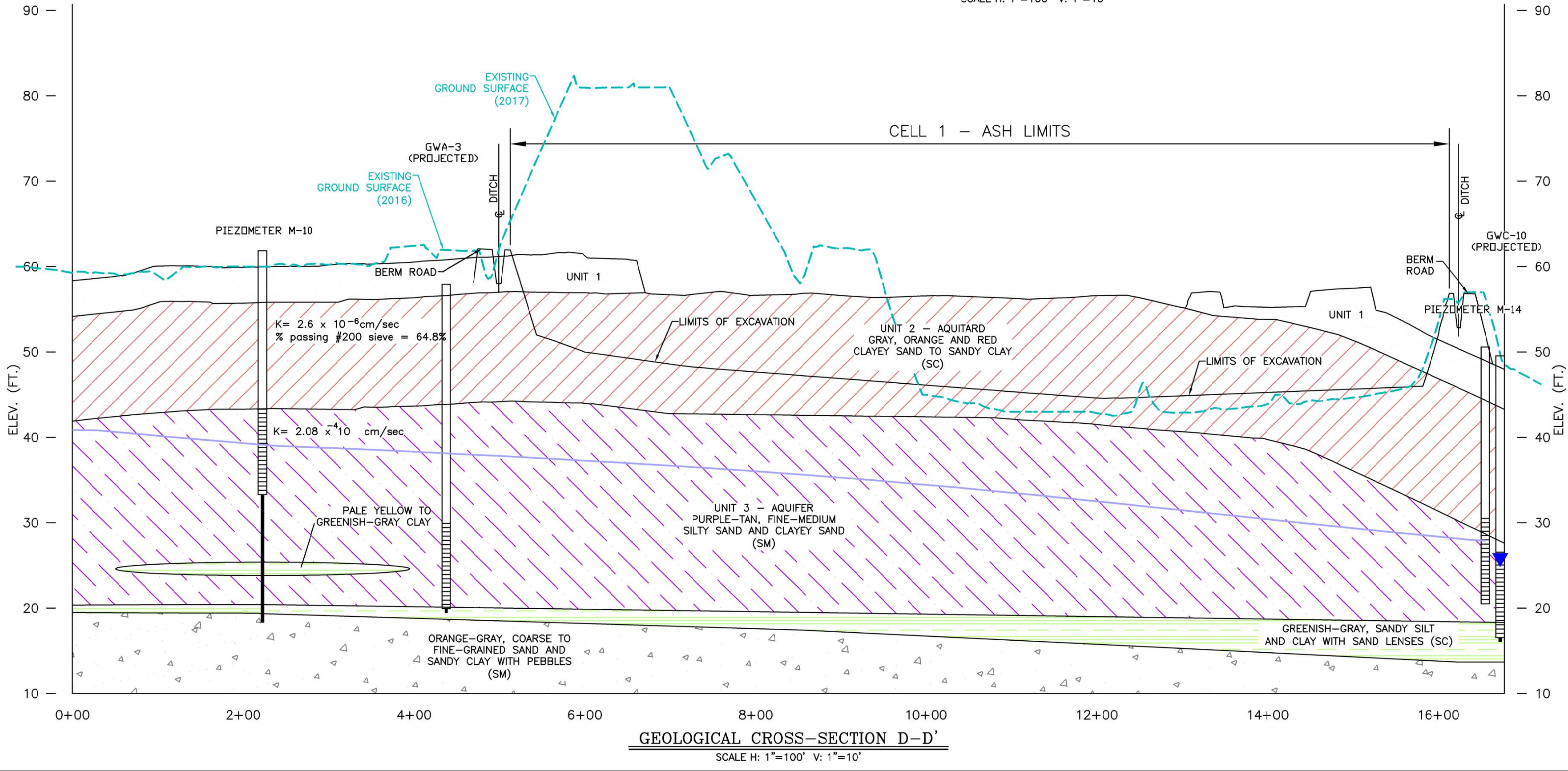




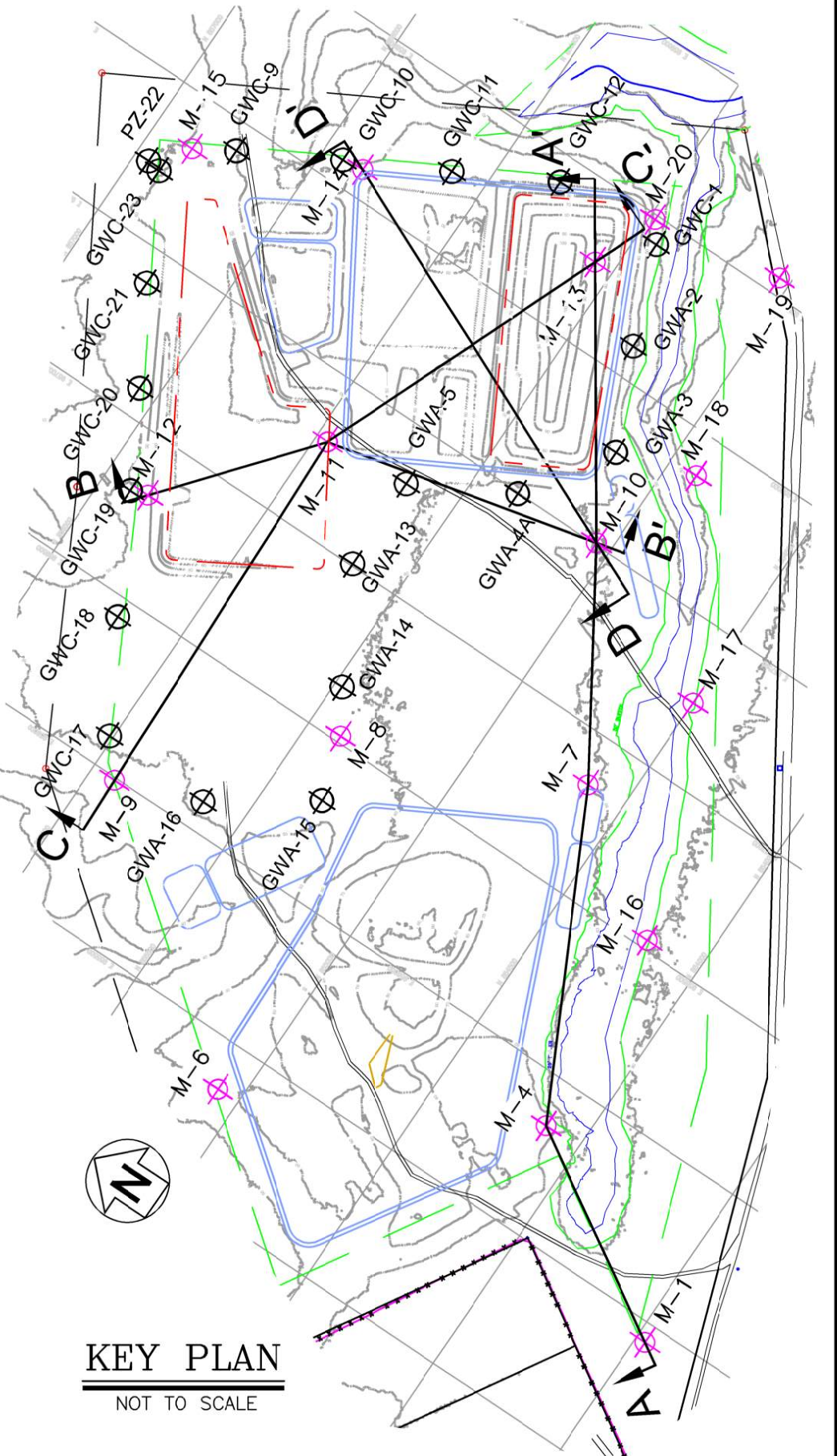
**REFERENCES:**  
 1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.  
 2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

**NOTES:**  
 1. WATER LEVELS TAKEN FROM MAY, 2003 SAMPLING EVENT. (WELLS INSTALLED PRIOR TO 2004)  
 2. WATER LEVELS TAKEN FROM MARCH 15, 2021 SAMPLING EVENT.

**GEOLOGICAL CROSS-SECTION C-C'**  
 SCALE H: 1"=100' V: 1"=10'



**GEOLOGICAL CROSS-SECTION D-D'**  
 SCALE H: 1"=100' V: 1"=10'



I hereby certify that I am a qualified groundwater scientist, in accordance with the Rules of Solid Waste Management, and 40 CFR Par 258.50(g). A qualified groundwater scientist is a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by State registration, professional Certification, or completion of accredited university programs that enable individuals to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action. I hereby certify that the design of this groundwater monitoring system was developed in accordance with the Rules of Solid Waste Management, Chapter 391-3-4.

Signature: *Keith Stevens*  
 Date: September 9, 2022



|   |           |   |    |
|---|-----------|---|----|
| GEOLOGICAL CROSS-SECTION  |           |   |    |
| PERMIT DRAWINGS   |           |   |    |
| GEORGIA POWER COMPANY   |           |   |    |
| PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)  |           |   |    |
| EXISTING LANDFILL NO. 4   |           |   |    |
| EFFINGHAM, GEORGIA  |           |   |    |
|   |           | 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339 |    |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a> |           |   |    |
| PROJ. NO.   | 1702944   | DWG.  | 36 |
| SCALE   | SEE ABOVE | EDIT  |    |
| DATE  | 9/30/2022 | SHEET 36 OF 38  |    |







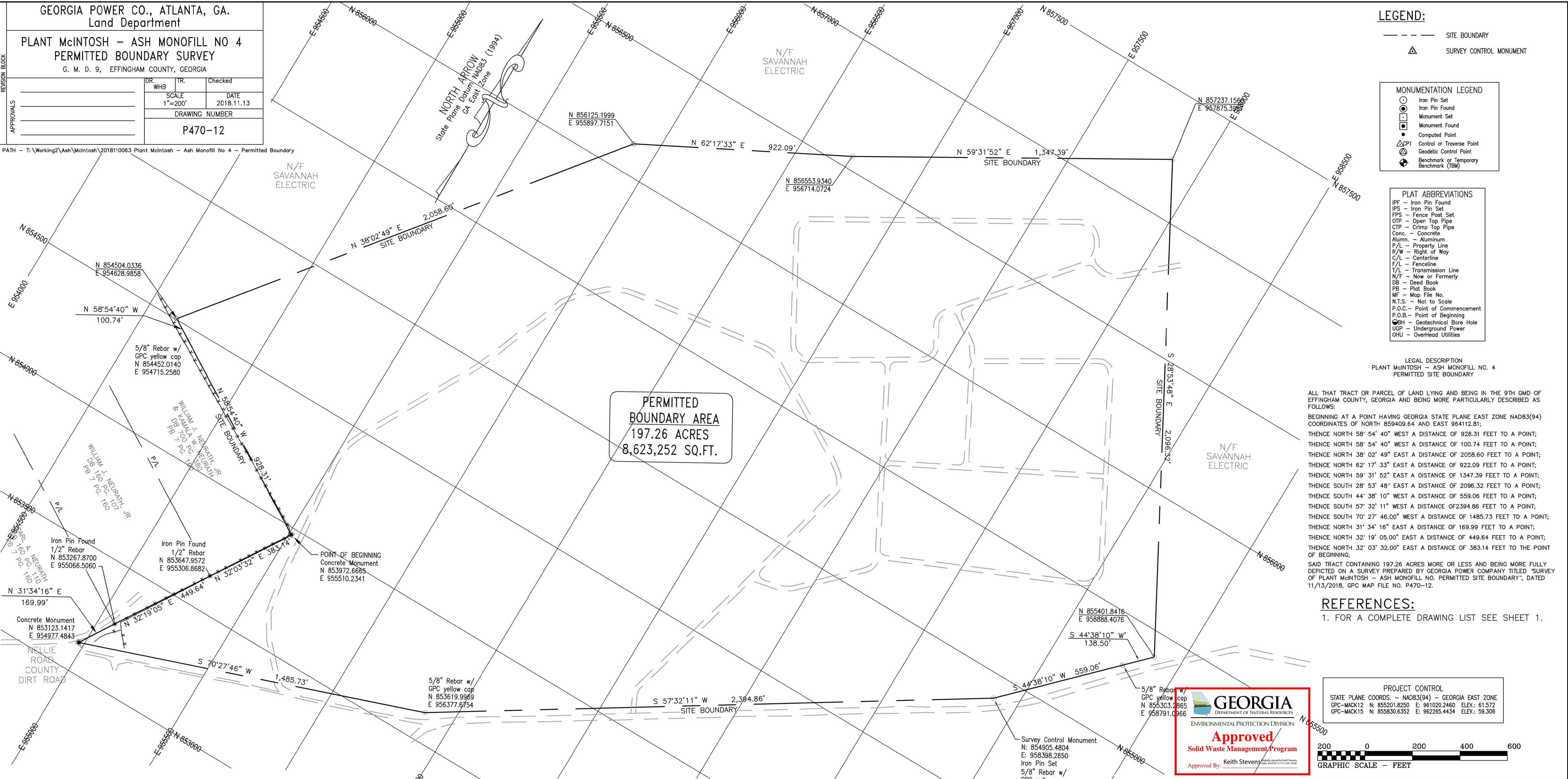
GEORGIA POWER CO., ATLANTA, GA.  
Land Department

PLANT McINTOSH - ASH MONOFILL NO 4  
PERMITTED BOUNDARY SURVEY

G. M. D. 9, EFFINGHAM COUNTY, GEORGIA

|                |            |         |
|----------------|------------|---------|
| DR.            | TR.        | Checked |
| WHB            |            |         |
| SCALE          | DATE       |         |
| 1"=200'        | 2018.11.13 |         |
| DRAWING NUMBER |            |         |
| P470-12        |            |         |

PATH - T:\Working2\Ash\McIntosh\2018110063 Plant McIntosh - Ash Monofill No 4 - Permitted Boundary



PERMITTED  
BOUNDARY AREA  
197.26 ACRES  
8,623,252 SQ.FT.

LEGEND:

- SITE BOUNDARY
- ▲ SURVEY CONTROL MONUMENT

MONUMENTATION LEGEND

- Iron Pin Set
- Iron Pin Found
- Monument Set
- Monument Found
- Computed Point
- △ C/P1 Control or Traverse Point
- △ Geodetic Control Point
- ⊕ Benchmark or Temporary Benchmark (TBM)

PLAT ABBREVIATIONS

- IPF - Iron Pin Found
- IPS - Iron Pin Set
- FPS - Fence Post Set
- OTF - Open Top Pipe
- CTP - Grimo Top Pipe
- Conc. - Concrete
- Alumn. - Aluminum
- P/L - Property Line
- R/W - Right of Way
- C/L - Centerline
- F/L - Fenceline
- T/L - Transmission Line
- N/F - Now or Formerly
- DB - Deed Book
- PB - Plat Book
- MF - Map File No.
- N.T.S. - Not to Scale
- P.O.C. - Point of Commencement
- P.O.B. - Point of Beginning
- ⊕ - Geotechnical Bore Hole
- UGP - Underground Power
- OHU - Overhead Utilities

LEGAL DESCRIPTION  
PLANT McINTOSH - ASH MONOFILL NO. 4  
PERMITTED SITE BOUNDARY

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN THE 9TH GMD OF EFFINGHAM COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT HAVING GEORGIA STATE PLANE EAST ZONE NAD83(94) COORDINATES OF NORTH 859409.64 AND EAST 954112.81;

THENCE NORTH 58° 54' 40" WEST A DISTANCE OF 928.31 FEET TO A POINT;

THENCE NORTH 58° 54' 40" WEST A DISTANCE OF 100.74 FEET TO A POINT;

THENCE NORTH 38° 02' 49" EAST A DISTANCE OF 2058.60 FEET TO A POINT;

THENCE NORTH 62° 17' 33" EAST A DISTANCE OF 922.09 FEET TO A POINT;

THENCE NORTH 59° 31' 52" EAST A DISTANCE OF 1347.39 FEET TO A POINT;

THENCE SOUTH 28° 53' 48" EAST A DISTANCE OF 2096.32 FEET TO A POINT;

THENCE SOUTH 44° 38' 10" WEST A DISTANCE OF 559.06 FEET TO A POINT;

THENCE SOUTH 57° 32' 11" WEST A DISTANCE OF 2394.86 FEET TO A POINT;

THENCE SOUTH 70° 27' 46.00" WEST A DISTANCE OF 1485.73 FEET TO A POINT;

THENCE NORTH 31° 34' 16" EAST A DISTANCE OF 169.99 FEET TO A POINT;

THENCE NORTH 32° 19' 05.00" EAST A DISTANCE OF 449.64 FEET TO A POINT;

THENCE NORTH 32° 03' 32.00" EAST A DISTANCE OF 383.14 FEET TO THE POINT OF BEGINNING;

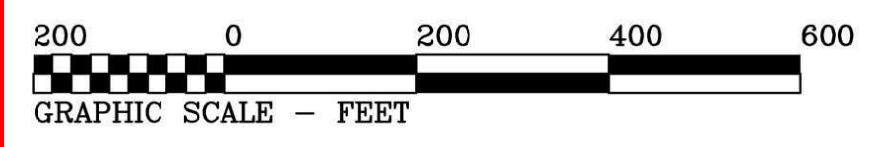
SAID TRACT CONTAINING 197.26 ACRES MORE OR LESS AND BEING MORE FULLY DEPICTED ON A SURVEY PREPARED BY GEORGIA POWER COMPANY TITLED "SURVEY OF PLANT McINTOSH - ASH MONOFILL NO. PERMITTED SITE BOUNDARY", DATED 11/13/2018, GPC MAP FILE NO. P470-12.

REFERENCES:

- FOR A COMPLETE DRAWING LIST SEE SHEET 1.

PROJECT CONTROL

STATE PLANE COORDS. - NAD83(94) - GEORGIA EAST ZONE  
 GPC-MACK12 N: 855201.8250 E: 961020.2460 ELEV.: 61.572  
 GPC-MACK15 N: 855830.6352 E: 962265.4434 ELEV.: 59.306



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION

**Approved**  
Solid Waste Management Program

Approved By: Keith Stevens

LATITUDE: N32°20'50.5"  
LONGITUDE: W81°11'33.7"

F.I.R.M. FLOOD NOTE:  
THE PROPERTY SHOWN HEREON IS LOCATED IN ZONE X,  
PER FEDERAL INSURANCE RATE MAP OF EFFINGHAM  
COUNTY, GEORGIA, PANEL 280 OF 426, MAP NUMBER  
1310300280E EFFECTIVE DATE: MARCH 16, 2015.



NOTE: THIS PLAT IS NOT VALID FOR RECORDING PURPOSES UNLESS SURVEYOR'S SIGNATURE APPEARS HEREON IN A CONTRASTING COLOR OF INK

SURVEYOR:  
**GEORGIA POWER COMPANY**  
 FIRM COA No. LSF 000191  
 WILLIAM H. BECHTLER, GA PLS No. 3055  
 241 RALPH MCGILL BLVD., N.E.  
 BIN 10151  
 ATLANTA, GA. 30308-3374  
 PHONE (404) 506-2450

AS REQUIRED BY SUBSECTION (D) OF O.C.G.A. SECTION 5-6-67, THIS PLAT HAS BEEN PREPARED BY A LAND SURVEYOR. THIS PLAT HAS BEEN APPROVED BY ALL APPLICABLE LOCAL JURISDICTIONS THAT REQUIRE PRIOR APPROVAL FOR RECORDING THIS TYPE OF PLAT OR ONE OR MORE OF THE APPLICABLE LOCAL JURISDICTIONS DO NOT REQUIRE APPROVAL OF THIS TYPE OF PLAT, FOR ANY APPLICABLE LOCAL JURISDICTION THAT REQUIRES APPROVAL OF THIS TYPE OF PLAT, THE NAMES OF THE INDIVIDUALS SIGNING OR APPROVING THIS PLAT, THE AGENCY OR OFFICE OF THAT INDIVIDUAL, AND THE DATE OF APPROVAL ARE LISTED IN THE APPROVAL TABLE SHOWN HEREON. FOR ANY APPLICABLE LOCAL JURISDICTION THAT DOES NOT REQUIRE APPROVAL OF THIS TYPE OF PLAT, THE NAME OF SUCH LOCAL JURISDICTION AND THE NUMBER OF THE APPLICABLE ORDINANCE OR RESOLUTION PROVIDING THAT NO SUCH APPROVAL IS REQUIRED ARE LISTED IN THE APPROVAL TABLE SHOWN HEREON. SUCH APPROVALS, AFFIRMATIONS, OR ORDINANCE OR RESOLUTION NUMBERS SHOULD BE CONFIRMED WITH THE APPROPRIATE GOVERNMENTAL BODIES BY ANY PURCHASER OR USER OF THIS PLAT AS TO INTENDED USE OF ANY PARCEL. FURTHERMORE, THE UNDERSIGNED LAND SURVEYOR CERTIFIES THAT THIS PLAT COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN THE RULES AND REGULATIONS OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN O.C.G.A. SECTION 15-6-67.

*William H. Bechtler* 11-13-2018  
 WILLIAM H. BECHTLER, GA PLS NO. 3055 DATE

NOTES AND REFERENCES

- THE SURVEY SHOWN HEREON IS A SPECIAL PURPOSE SURVEY TO ESTABLISH THE BOUNDARY OF THE PLANT McINTOSH ASH MONOFILL NO. 4 PERMITTED LANDS PER THE REQUIREMENTS OF THE STATE OF GEORGIA, DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION.
- BACKGROUND INFORMATION SHOWN HEREON TAKEN FROM FIELDWORK PERFORMED BY GEORGIA POWER COMPANY, DATED 1/9/2003.
- REFERENCE WAS MADE TO THE FOLLOWING MAPS & SURVEYS:
  - SURVEY PREPARED BY GEORGIA POWER COMPANY TITLED "PLANT McINTOSH - PROPOSED ASH MONOFILL SITE", DATED JANUARY 9, 2003, GPC MAP FILE NO. H-762-2.
  - SURVEY PREPARED BY SOUTHERN COMPANY GENERATION ENGINEERING AND CONSTRUCTION SERVICES TITLED "PLANT McINTOSH COB LANDFILL NO. 4 EXISTING SITE TOPOGRAPHIC MAP AND BORING/PIEZOMETER LOCATIONS", LAST REVISED NOVEMBER 10, 2014, DRAWING NO. H1C1303.
- NO FIELD WORK WAS PERFORMED. THIS MAP HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 1,737,916 FEET.
- HORIZONTAL DATUM IS GEORGIA STATE PLANE - EAST ZONE NAD84(94)



| PLAT BOUNDARY & LEGAL DESCRIPTION  |           |                |    |
|--|-----------|----------------|----|
| <b>PERMIT DRAWINGS</b>   |           |                |    |
| GEORGIA POWER COMPANY<br>PLANT McINTOSH COAL COMBUSTION RESIDUALS (CCR)<br>EXISTING LANDFILL NO. 4<br>EFFINGHAM, GEORGIA |           |                |    |
|  |           |                |    |
| 3065 AKERS MILL RD SE SUITE 235<br>ATLANTA, GEORGIA 30339  |           |                |    |
| (404) 592-0050<br><a href="https://www.geiconsultants.com/">https://www.geiconsultants.com/</a>                          |           |                |    |
| PROJ. NO.  | 1702944   | DWG.           | 38 |
| SCALE  | 1"=200'   | SHEET 38 OF 38 |    |
| DATE   | 9/30/2022 |                |    |