

Part III
Attachment III-D
Appendix III-D.3

LANDFILL DESIGN AND DETAILS

Pescadito Environmental Resource Center
MSW No. 2374
Webb County, Texas

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

Initial Submittal March 2015
Revised September 2015

Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, TX 78041

Prepared by:
CB&I Environmental and
Infrastructure, Inc.



12005 Ford Rd, Suite 600
Dallas, TX 75234

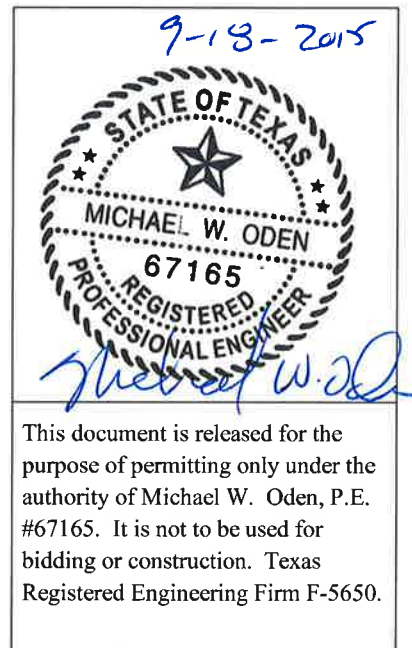
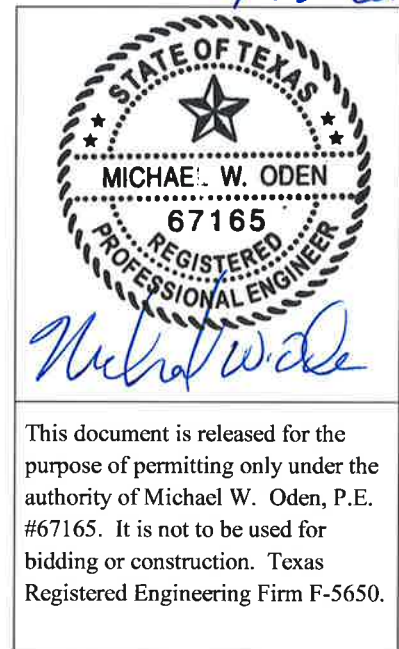
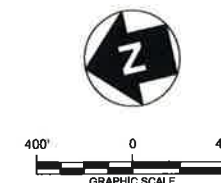
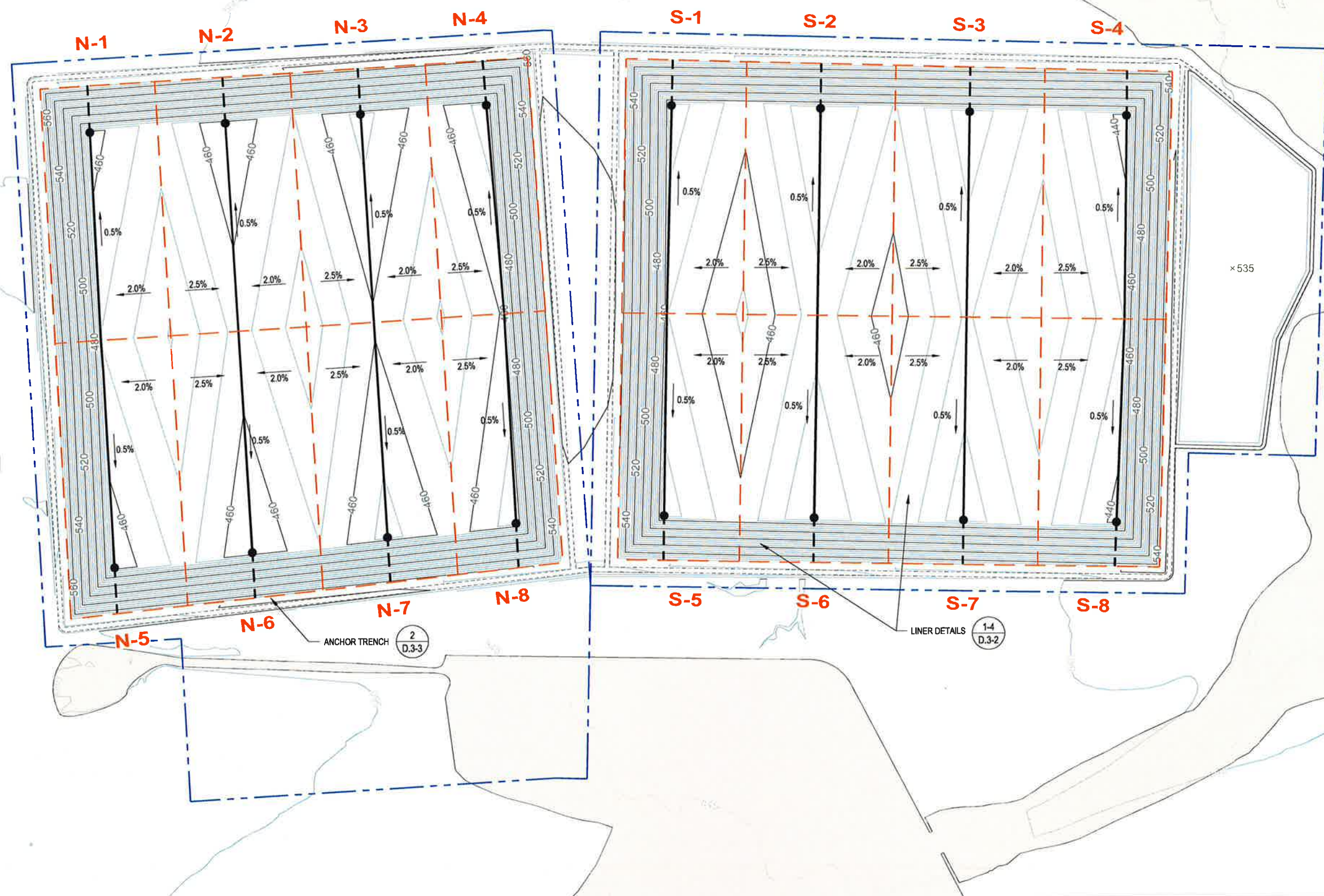


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LEGEND

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER ACCESS ROAD
- TOP OF LINER ELEVATION
- CLOMR 100-YEAR FLOODPLAIN
- LEACHATE COLLECTION PIPE
- LEACHATE SUMP LOCATION
- LEACHATE SUMP RISER PIPES

NOTES

- EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
- BOUNDARY AND IMPROVEMENT SURVEY DEVELOPED BY MEJIA ENGINEERING COMPANY ON AUGUST 15, 2011 AND JUNE 9, 2014.
- FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
- THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
- ALL CELLS ARE DESIGNATED TO POTENTIALLY RECEIVE CLASS I NON-HAZARDOUS INDUSTRIAL WASTE. ELEVATION SHOWN IS FOR 3' THICK COMPACTED SOIL LINER. CELLS THAT WILL RECEIVE ONLY MUNICIPAL SOLID WASTE WILL HAVE 2' THICK COMPACTED SOIL LINER.
- ENTRANCE FACILITIES TO BE RELOCATED OR WASTE UNITS MODIFIED TO REDUCE AREA AT TIME OF COMPLETING CELLS S-5 TO S-8.

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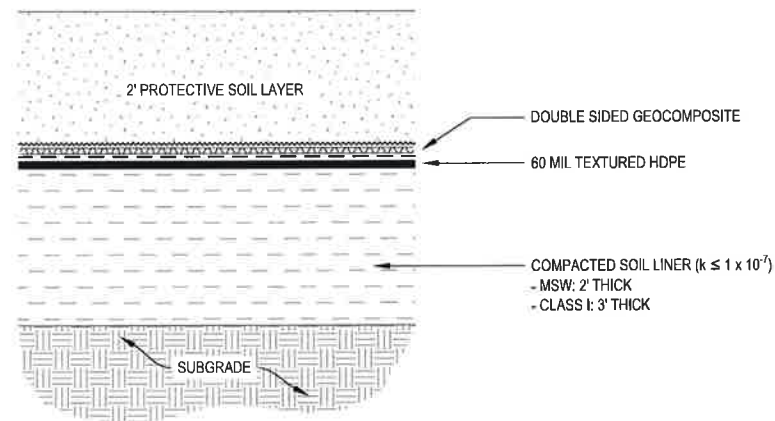
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MSW 2374**

LINER PLAN

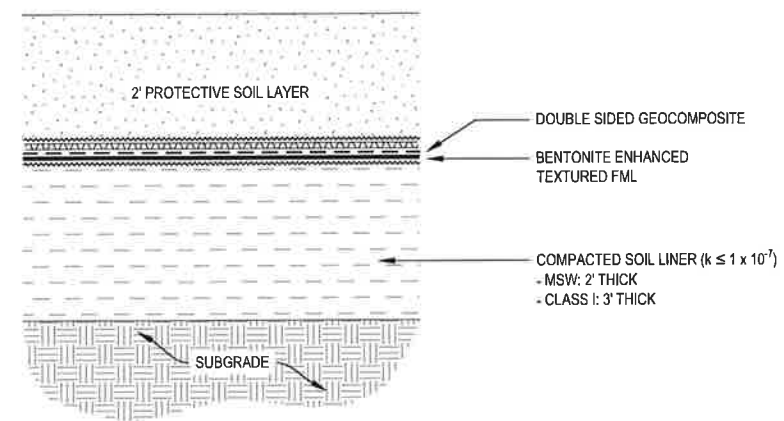
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**BOTTOM LINER DETAIL
OPTION 1**

1
D.3-2

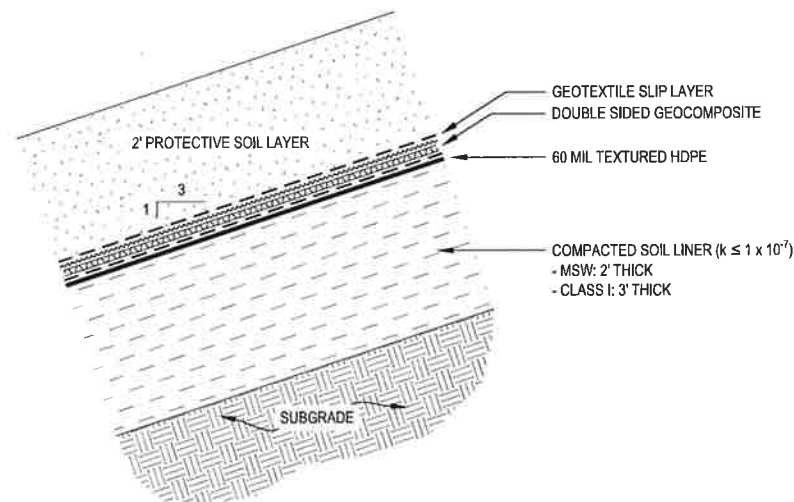
SCALE: 1"=3'



**BOTTOM LINER DETAIL
OPTION 2**

2
D.3-2

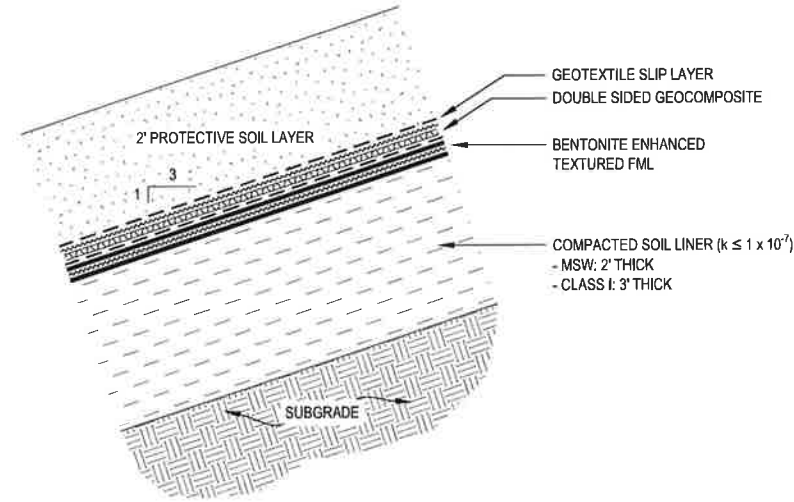
SCALE: 1"=3'



**SIDEWALL DETAIL
OPTION 1**

3
D.3-2

SCALE: 1"=3'



**SIDEWALL
OPTION 2**

4
D.3-2

SCALE: 1"=3'

NOTES:
1. GEOSYNTHETIC MATERIALS SHOWN WITH EXAGGERATED THICKNESS FOR CLARITY.

LINE AND SHADING LEGEND

GEOTEXTILE (WOVEN)	DOUBLE SIDED GEOCOMPOSITE
GEONET/GEOTEXTILE	
GEOTEXTILE (NON-WOVEN)	
GEOMEMBRANE	PLYWOOD
GEOSYNTHETIC CLAY LINER	BENTONITE ENHANCED FML
TOPSOIL	NATIVE SOIL
GENERAL FILL	CONCRETE
SELECT GRANULAR FILL	RIPRAP
SOIL BARRIER LAYER FILL	BITUMINOUS PAVING
SELECT AGGREGATE FILL	GRAVEL
COMPACTED SOIL	AGGREGATE BASE COURSE

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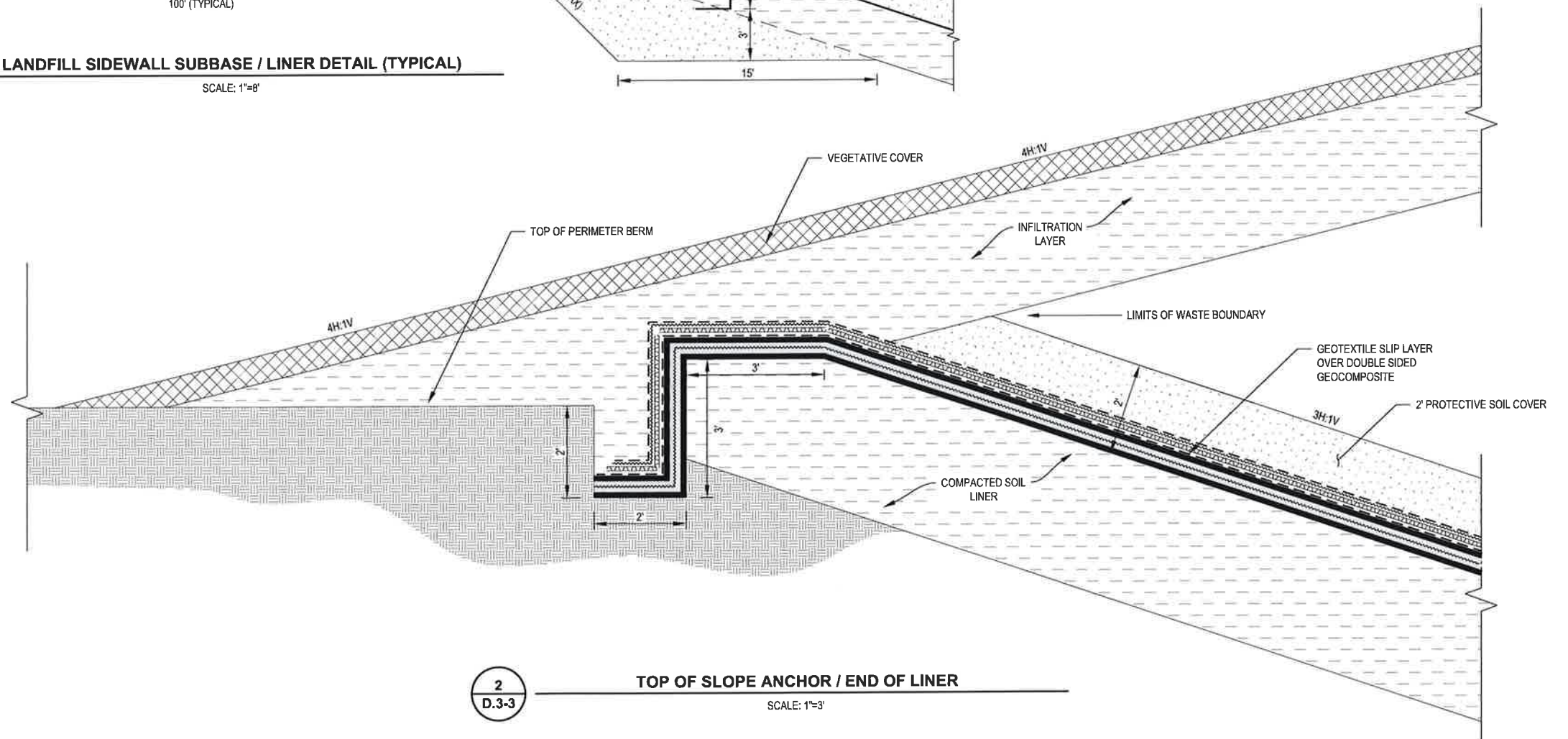


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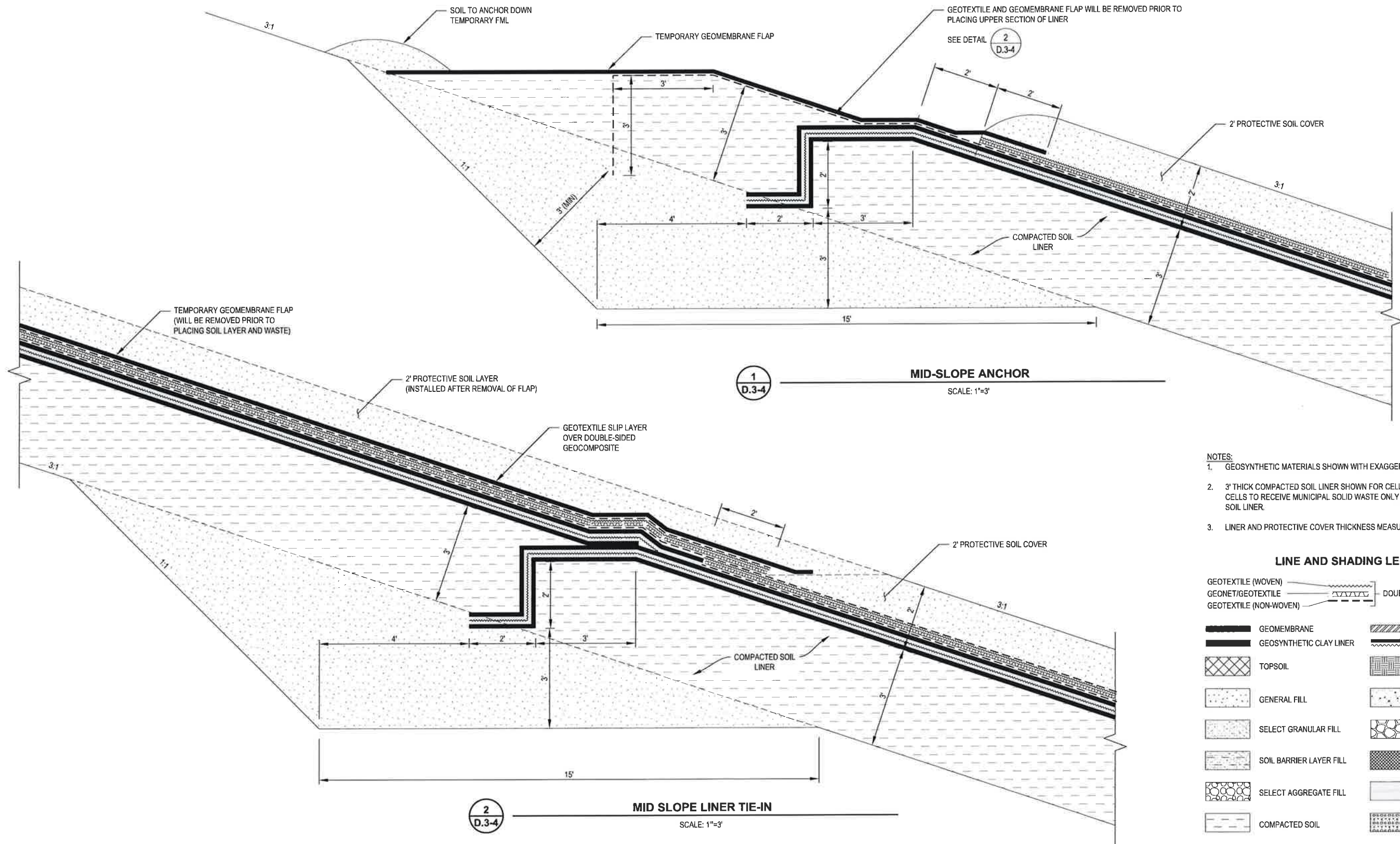
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III

D.3-3



NOTES:

1. GEOSYNTHETIC MATERIALS SHOWN WITH EXAGGERATED THICKNESS FOR CLARITY.
2. 3" THICK COMPACTED SOIL LINER SHOWN FOR CELLS TO RECEIVE CLASS I WASTES. CELLS TO RECEIVE MUNICIPAL SOLID WASTE ONLY MAY HAVE 2" THICK COMPACTED SOIL LINER.
3. LINER AND PROTECTIVE COVER THICKNESS MEASURED PERPENDICULAR TO SLOPE.

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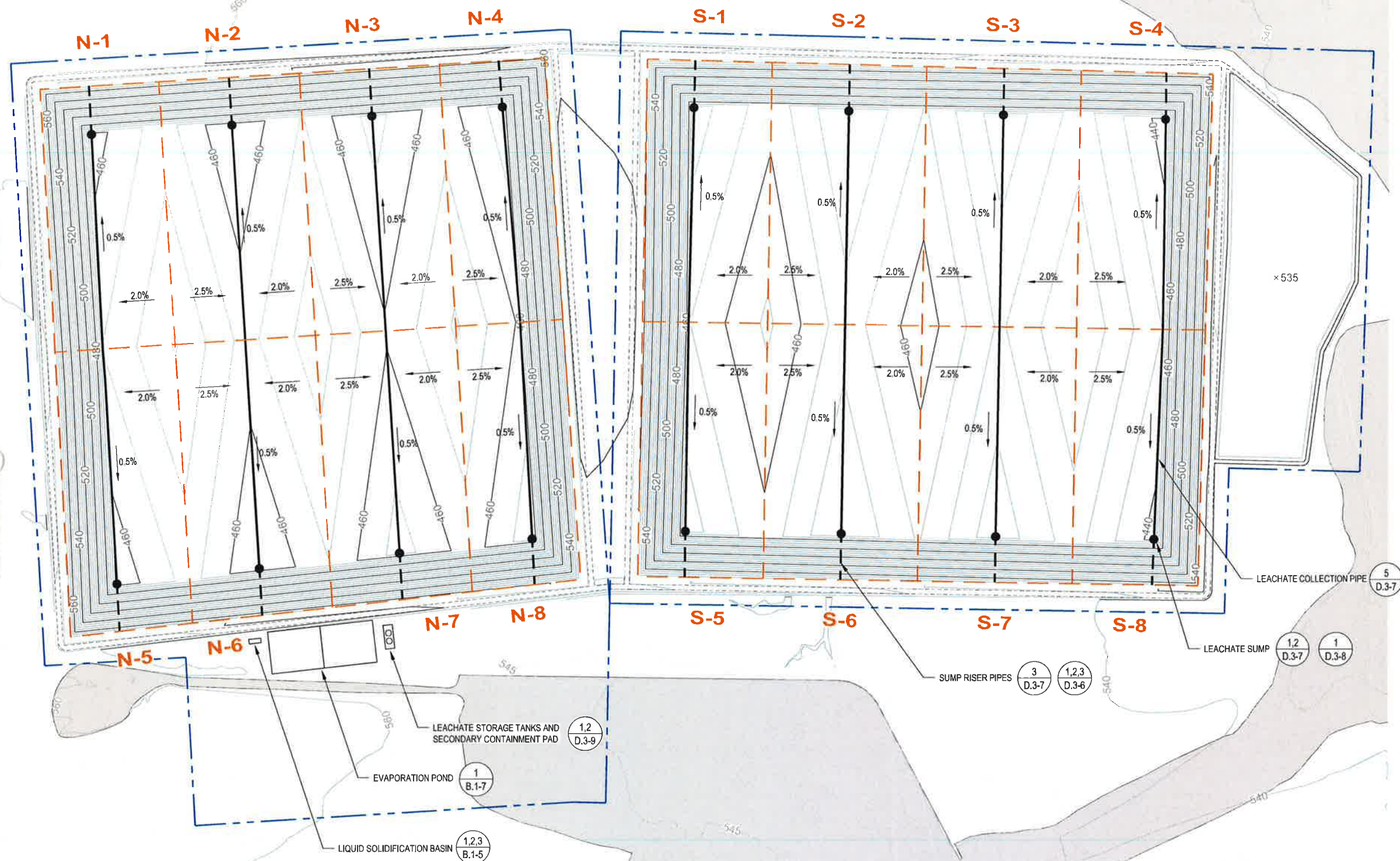


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MSW 2374**

LINER DETAILS

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LEGEND

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER ACCESS ROAD
- 500 TOP OF LINER ELEVATION
- CLOMR 100-YEAR FLOODPLAIN
- LEACHATE COLLECTION PIPE
- LEACHATE SUMP LOCATION
- LEACHATE SUMP RISER PIPES

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
2. BOUNDARY AND IMPROVEMENT SURVEY DEVELOPED BY MEJIA ENGINEERING COMPANY ON AUGUST 15, 2011 AND JUNE 9, 2014.
3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
4. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
5. NOT ALL FACILITIES WILL BE CONSTRUCTED AT THE SAME TIME.
6. ALL CELLS ARE DESIGNATED TO RECEIVE CLASS 1 WASTE. EACH CELL HAS A DEDICATED LEACHATE COLLECTION AND REMOVAL SYSTEM.

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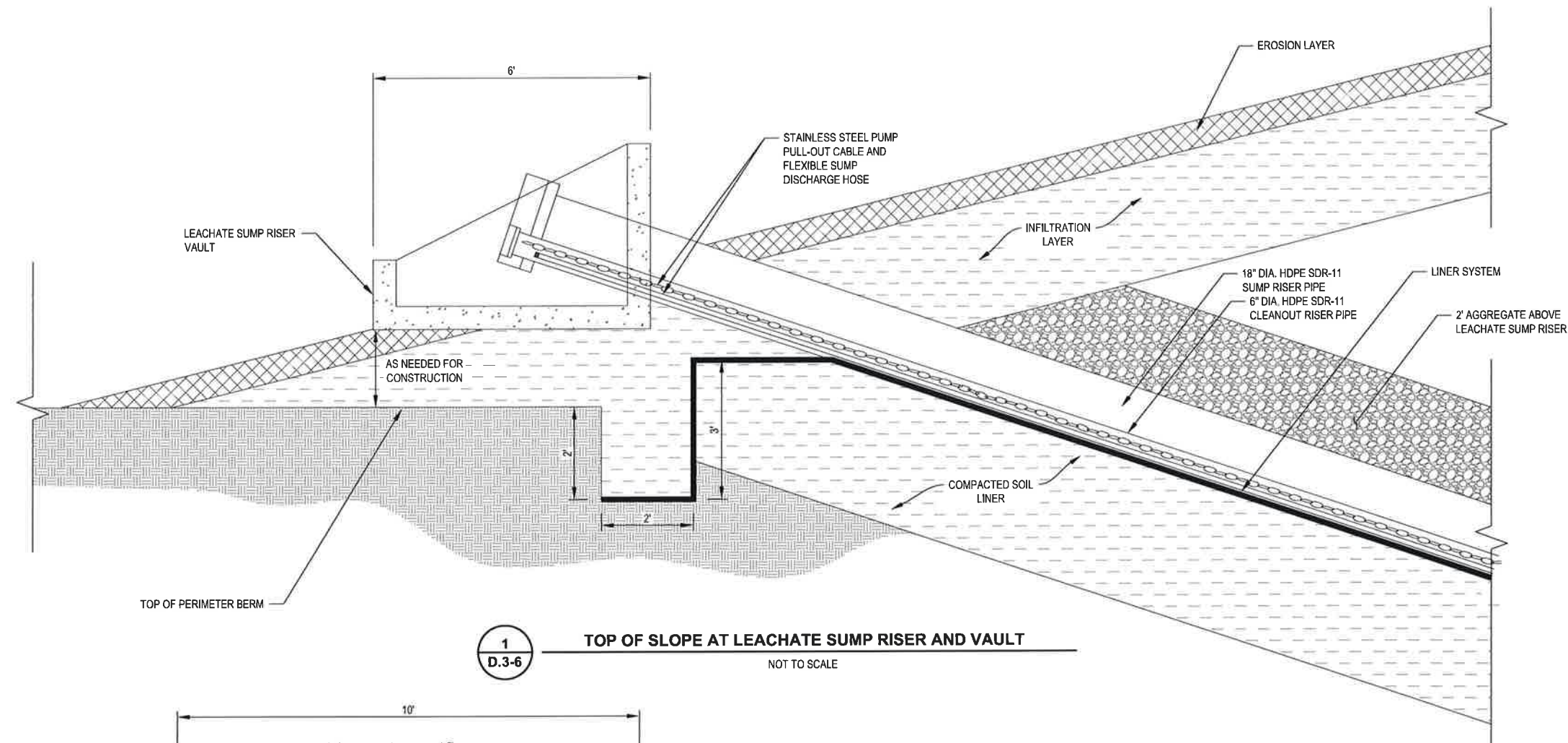
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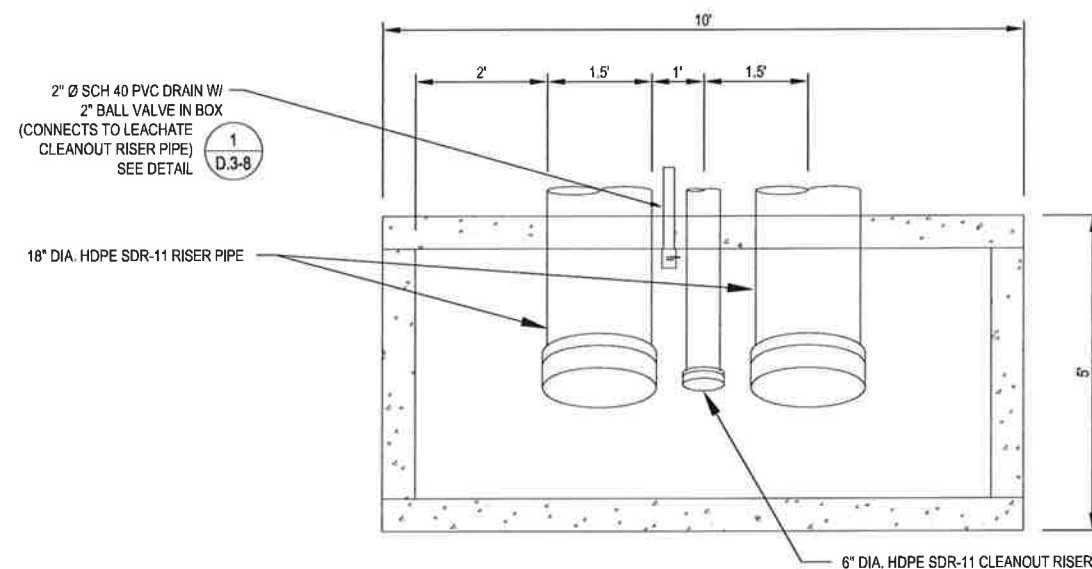
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LEACHATE COLLECTION SYSTEM PLAN

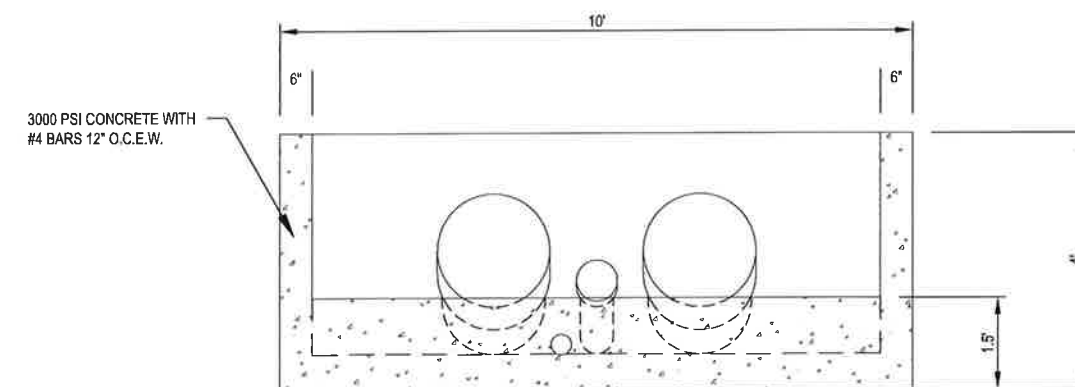
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1
D.3-6
TOP OF SLOPE AT LEACHATE SUMP RISER AND VAULT
NOT TO SCALE



2
D.3-6
RISER VAULT PLAN
NOT TO SCALE



3
D.3-6
RISER VAULT SECTION
NOT TO SCALE

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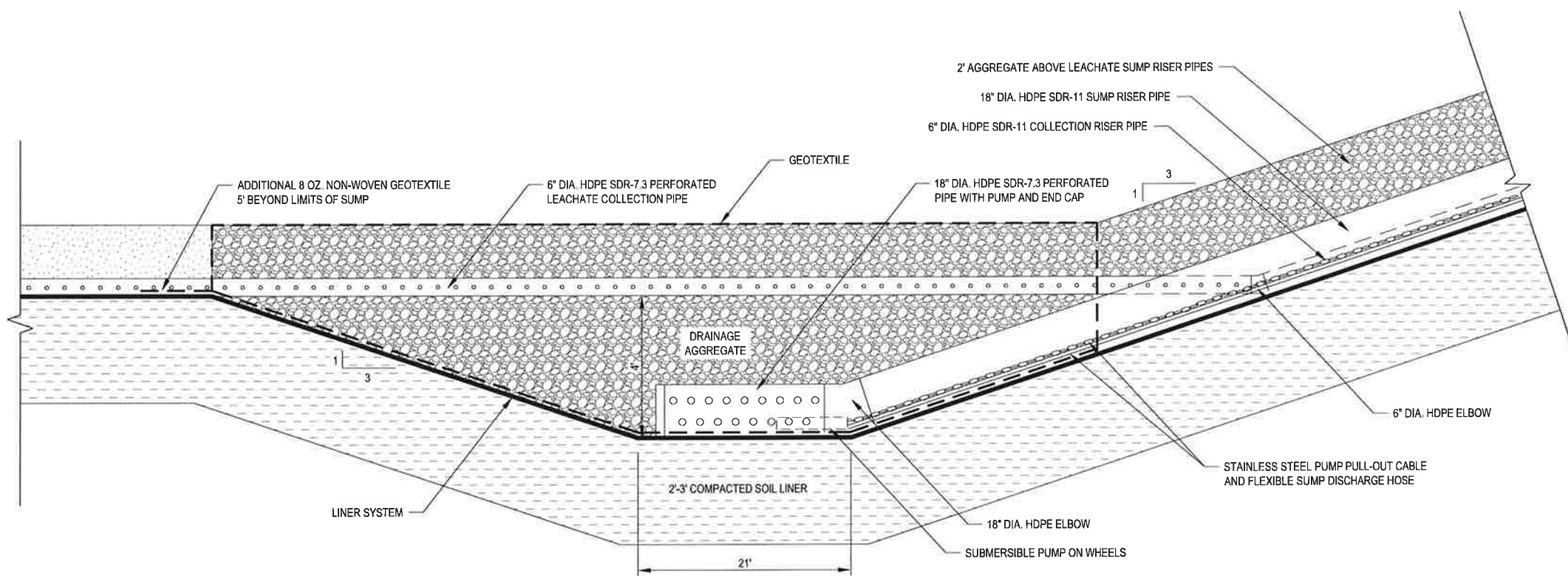


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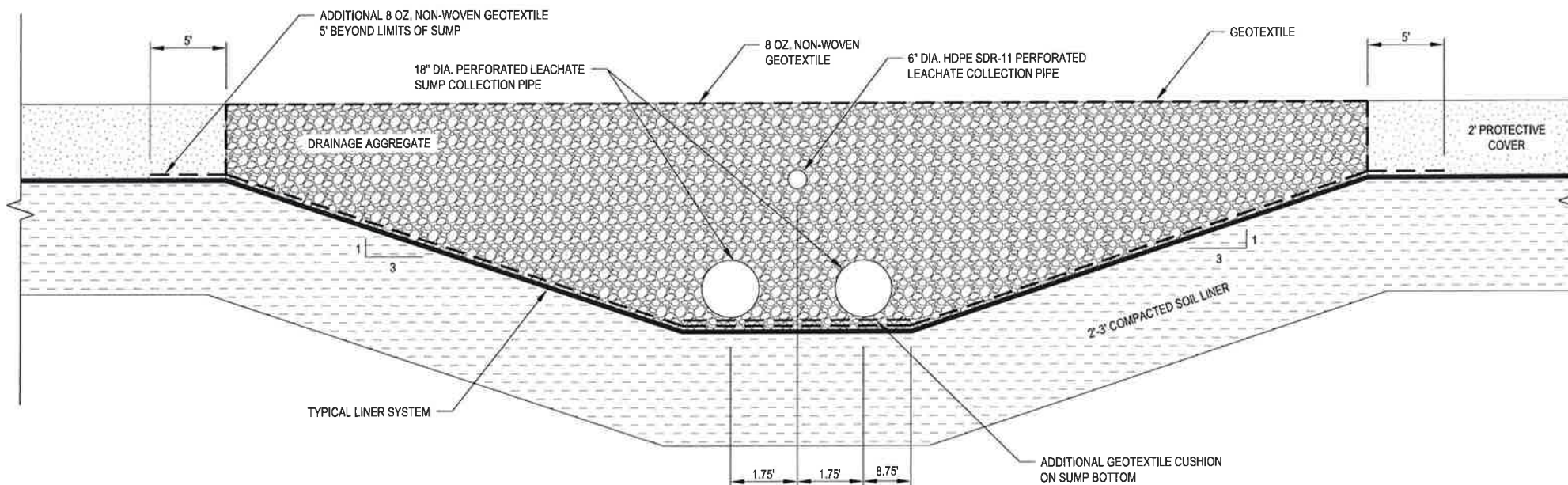
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LEACHATE COLLECTION DETAILS

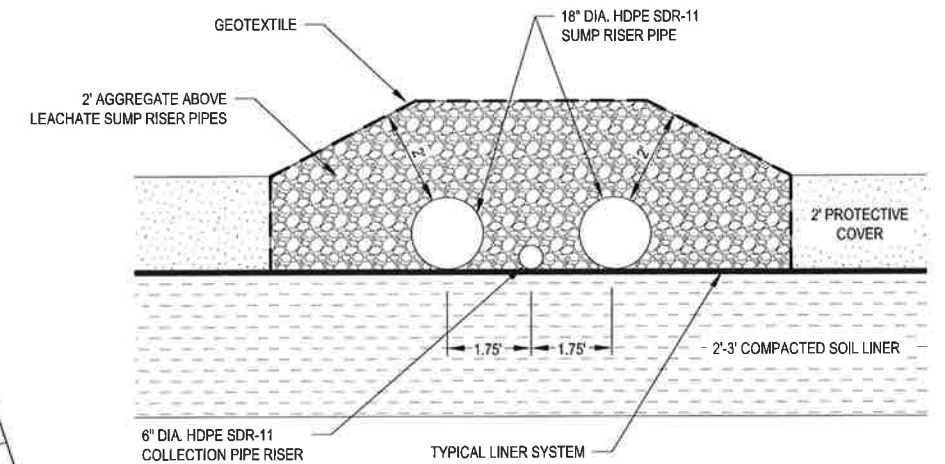
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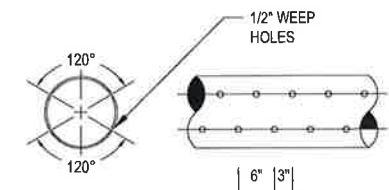
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D.3-7
LEACHATE SUMP PROFILE
NOT TO SCALE



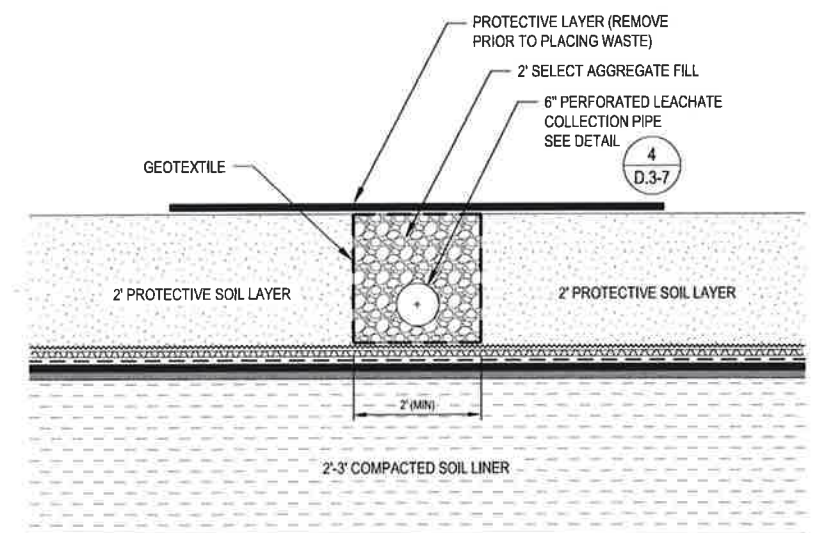
2
D.3-7
LEACHATE SUMP SECTION
NOT TO SCALE



3
D.3-7
SUMP RISER PIPES
NOT TO SCALE



4
D.3-7
PERFORATED PIPE
NOT TO SCALE



5
D.3-7
LEACHATE COLLECTION PIPE
NOT TO SCALE



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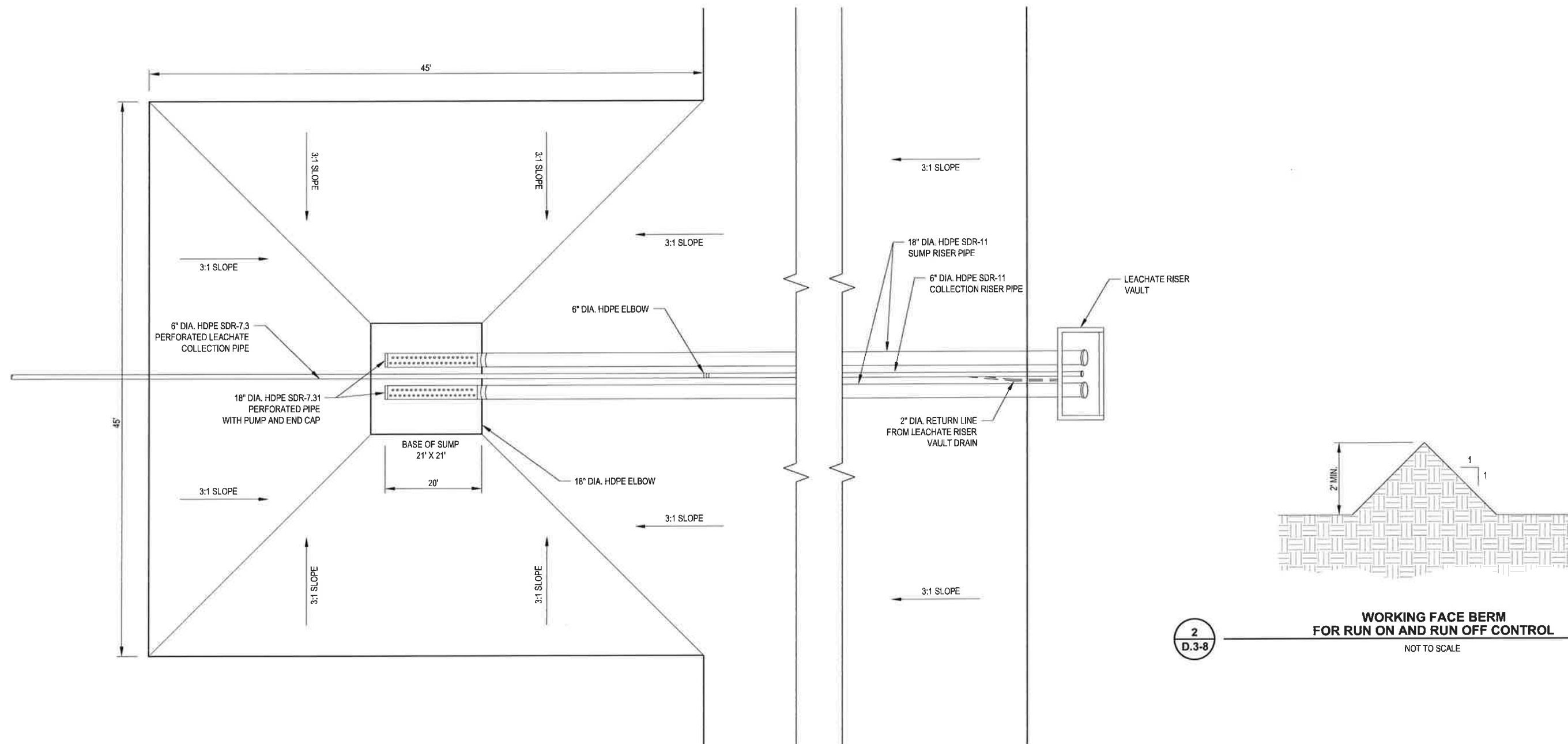


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LEACHATE COLLECTION DETAILS

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LEACHATE SUMP PLAN
NOT TO SCALE

[illegible]

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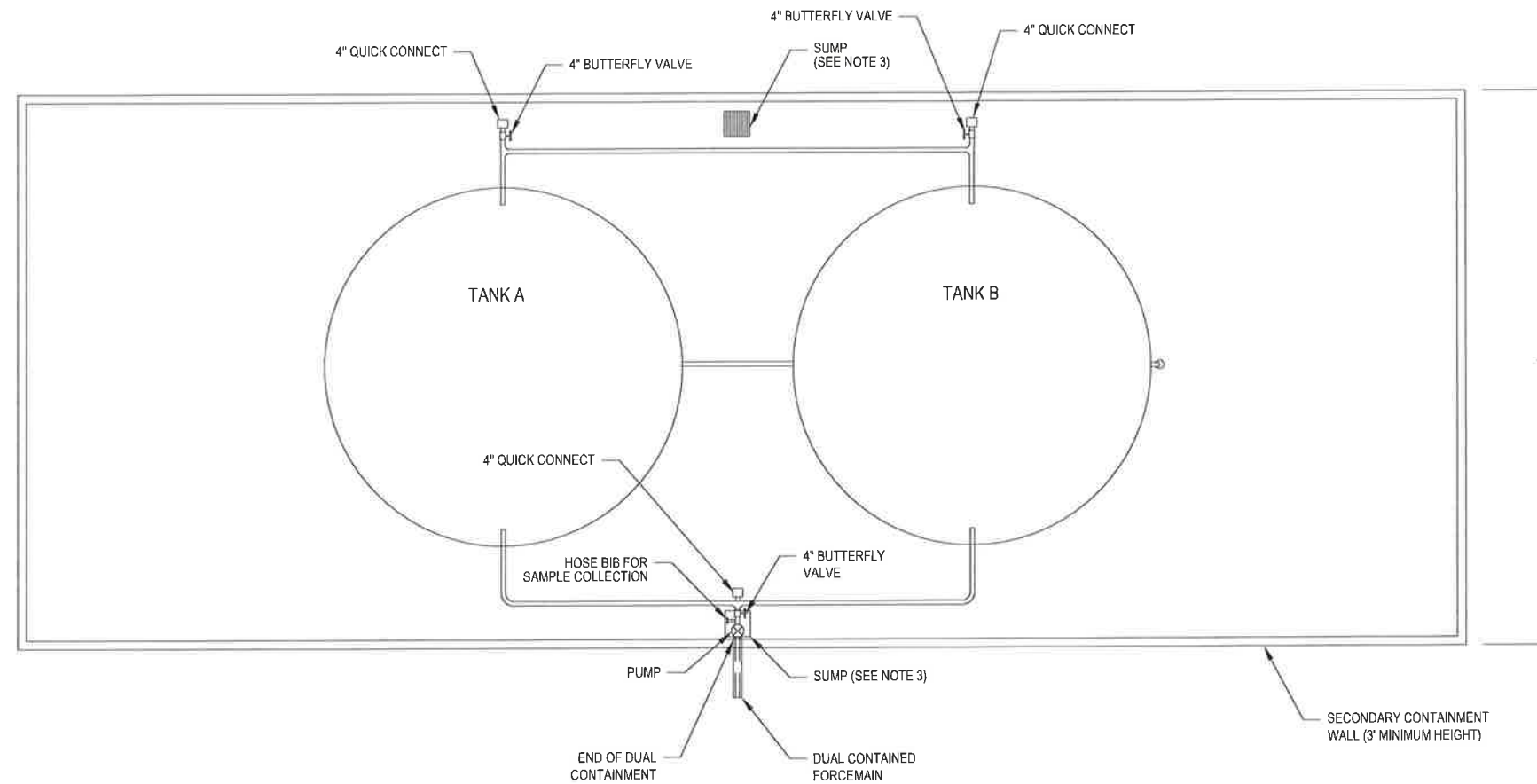
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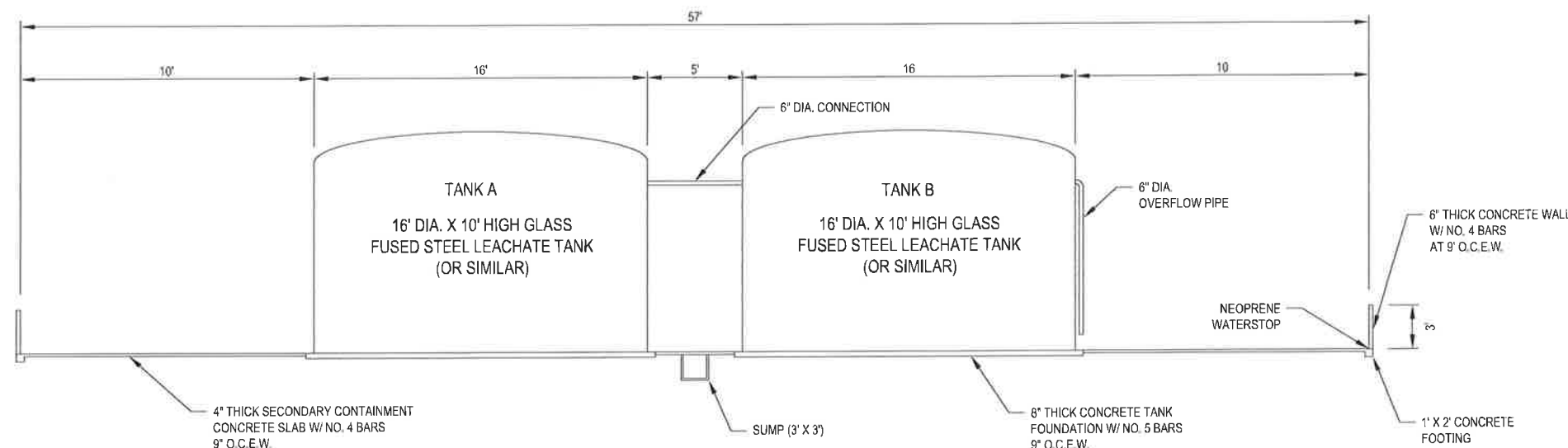
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LEACHATE COLLECTION DETAILS

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		8 OF 11 SHEETS	



1
D.3-9
LEACHATE STORAGE TANK FACILITY PLAN
NOT TO SCALE



2
D.3-9
LEACHATE STORAGE TANK FACILITY SECTION
NOT TO SCALE

NOTES:

1. REFER TO APPENDIX III-D.6 FOR DISCUSSION ON THE LEACHATE STORAGE FACILITY.
2. REFER TO APPENDIX III-D.6 FOR THE SECONDARY CONTAINMENT VOLUME CALCULATIONS FOR THE LEACHATE STORAGE FACILITY.
3. SUMPS ARE 3' WIDE AND 3' DEEP.
4. CONCRETE SECTIONS MAY VARY PENDING FINAL TANK SELECTION, SIZE, AND DESIGN.

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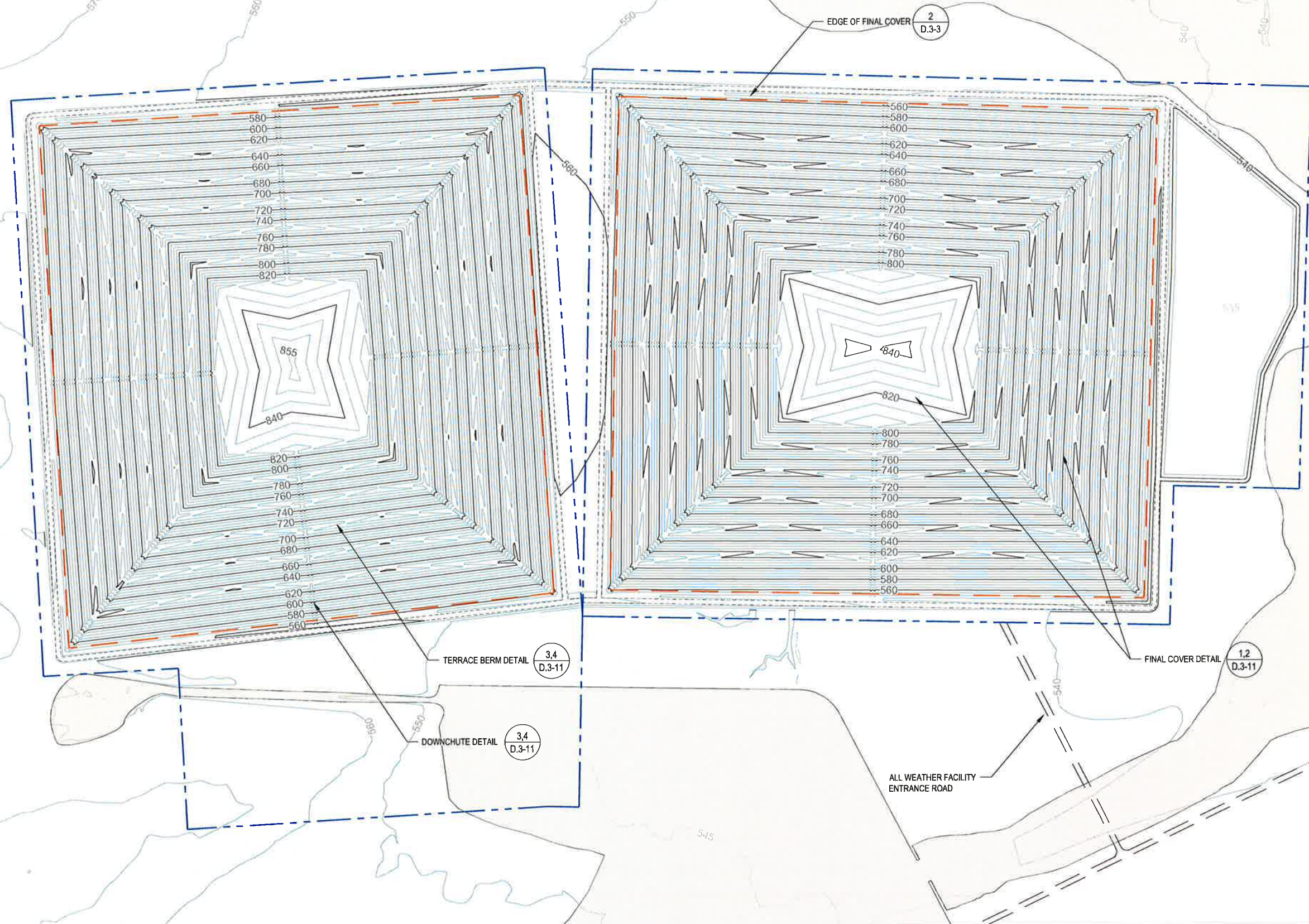


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LEACHATE STORAGE DETAILS

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LEGEND

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER ACCESS ROAD
- CLOMR 100-YEAR FLOODPLAIN

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
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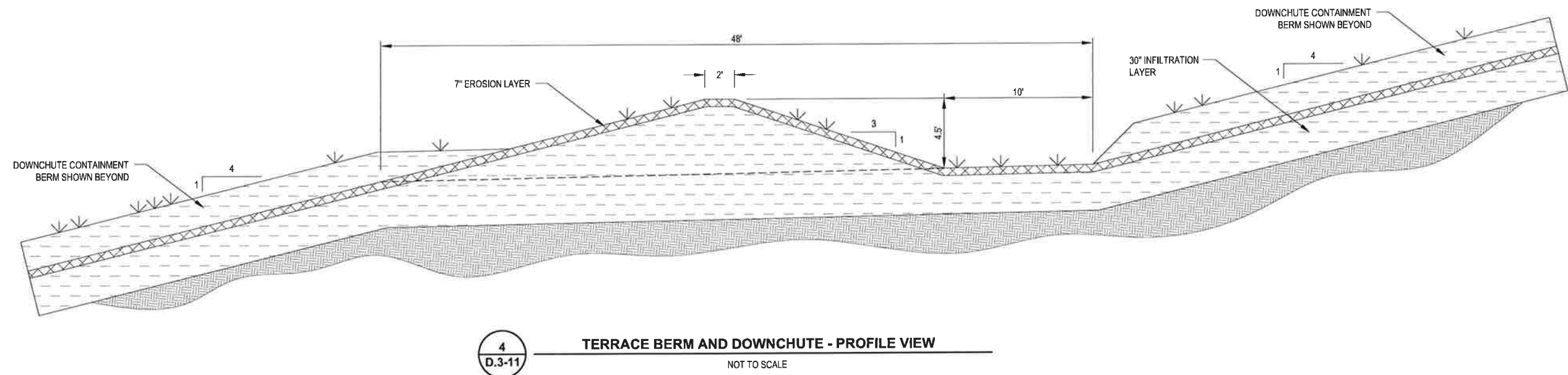
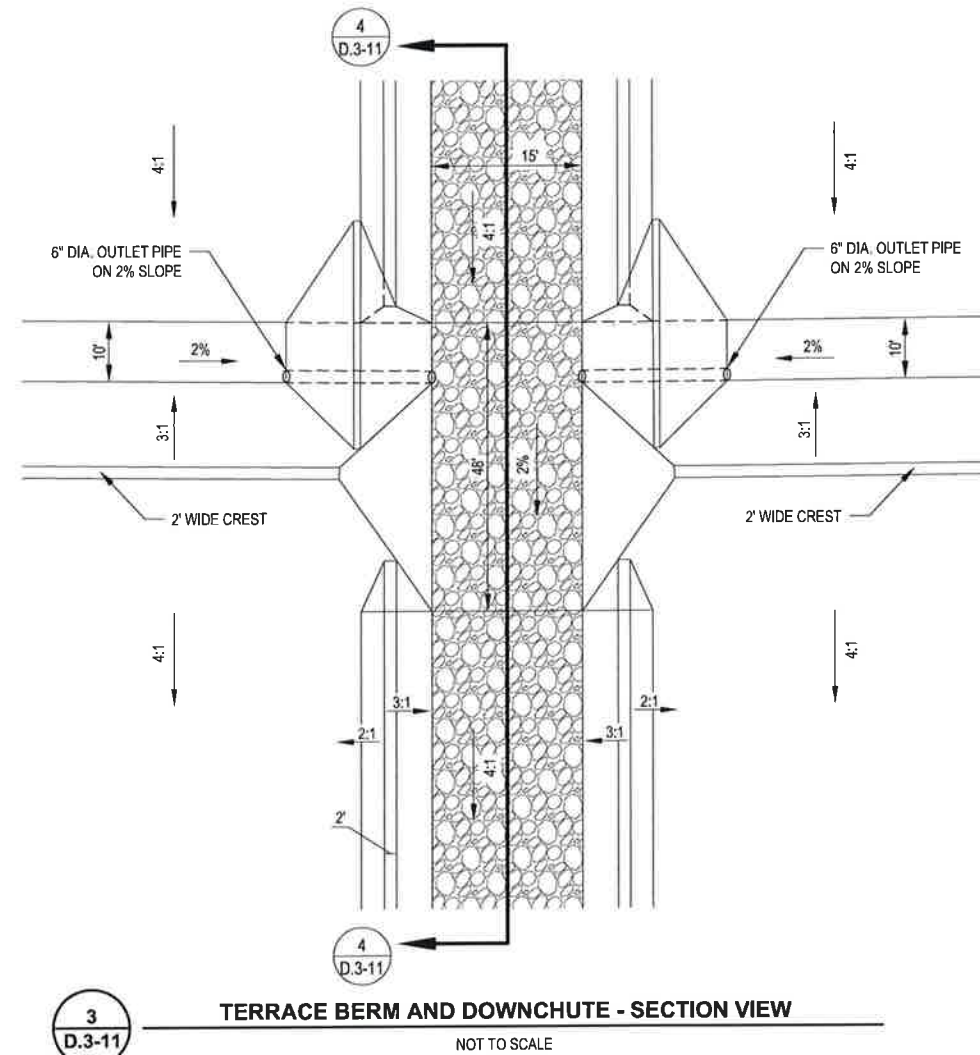
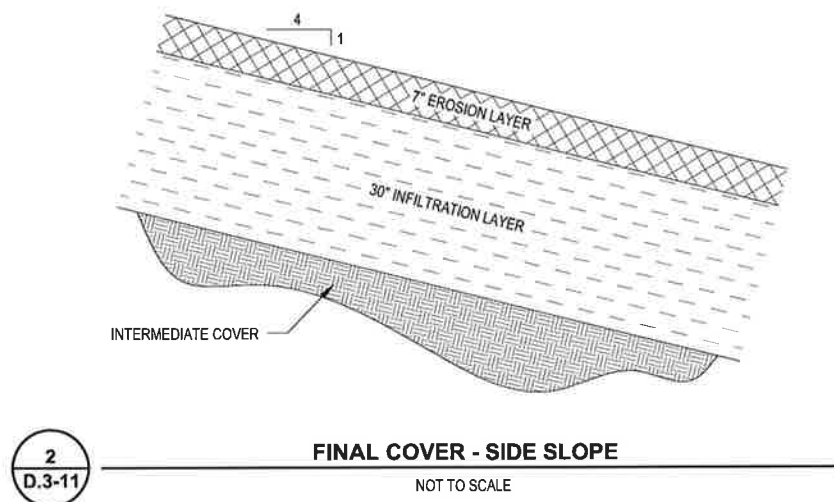
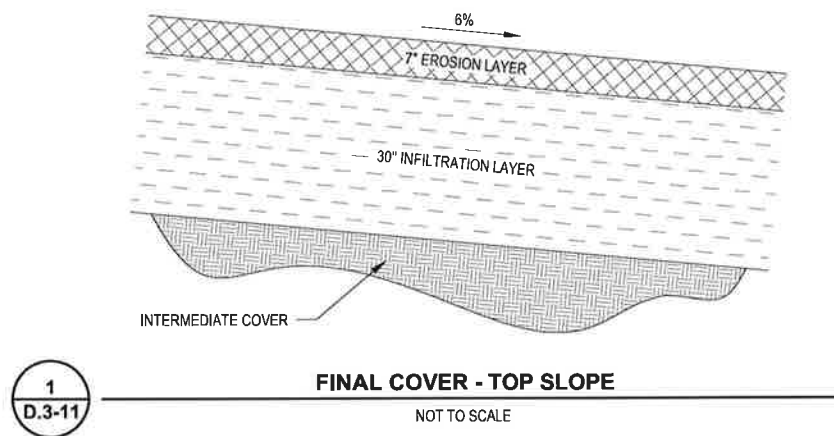


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FINAL COVER PLAN

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FINAL COVER DETAILS

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