

HDR  
 Firm Registration No. F-754  
 17111 Preston Road, Suite 300  
 Dallas, Texas 75248-1229  
 972.960.4400



Gibbons Creek Environmental  
 Redevelopment Group, LLC

Construction Drawings For

# Gibbons Creek Electric Station

## Site F Landfill Closure



VICINITY MAP  
 NOT TO SCALE

Project No.  
 10290148

Anderson, Texas  
 August 2021

### INDEX OF DRAWINGS

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STANDARD ABBREVIATIONS

Table of standard abbreviations including symbols like &, APPROX, @, AVG, etc., and their corresponding meanings.

Table of standard abbreviations including symbols like NOI, NTS, OC, etc., and their corresponding meanings.

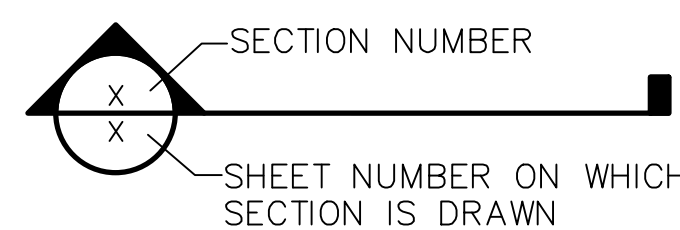
GENERAL NOTES

- 24 numbered general notes detailing project requirements, safety protocols, and construction standards.

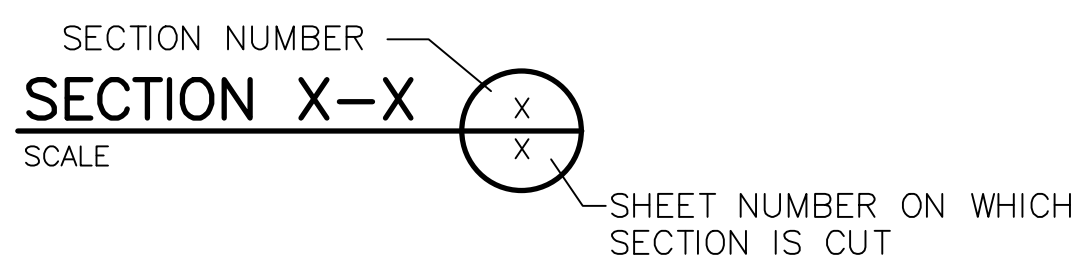
SYMBOLS

SECTION DETAIL INDICATORS

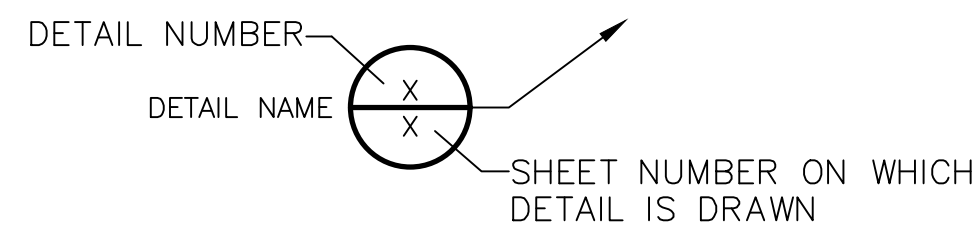
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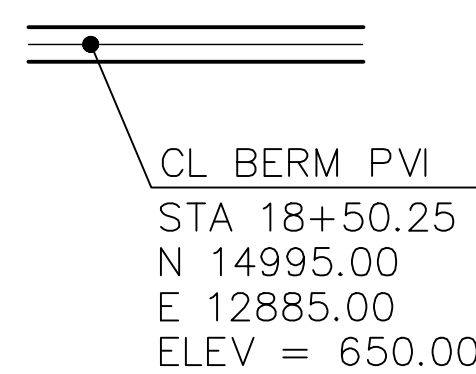
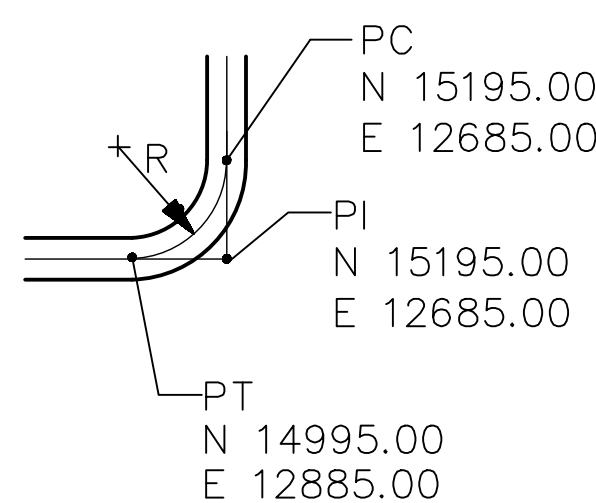
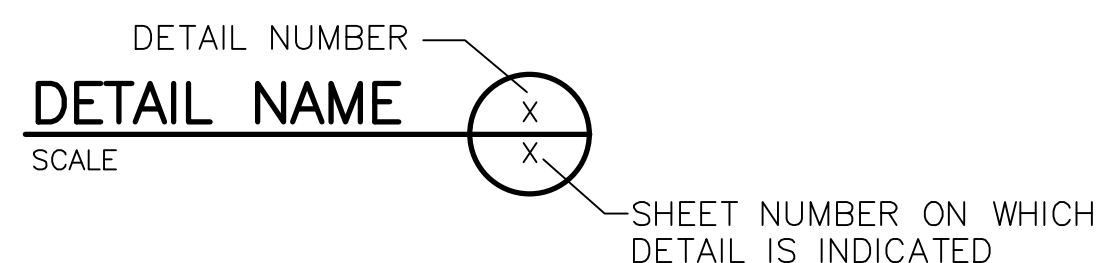
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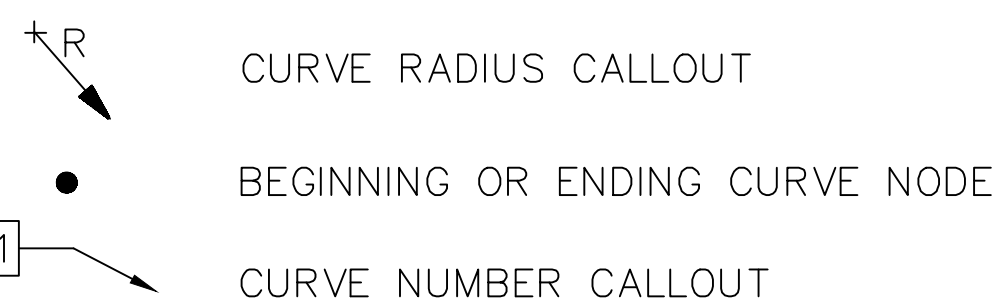
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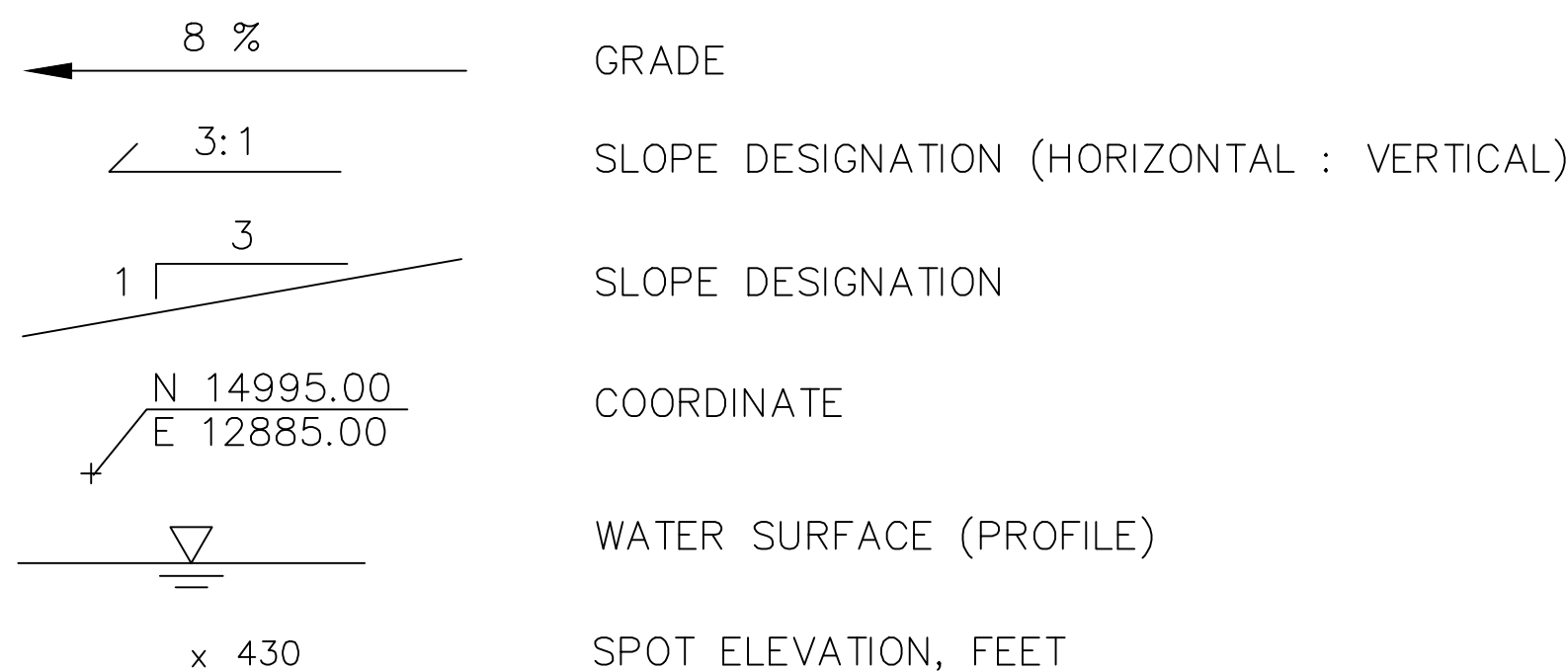
DRAWING ON WHICH DETAIL APPEARS:



CURVE WITH HORIZONTAL CONTROL:



VERTICAL CONTROL DESIGNATION



ISSUED FOR CONSTRUCTION

HDR Firm Registration No. F-754

17111 Preston Road, Suite 300 Dallas, Texas 75248-1229 972.960.4400

PROJECT MANAGER D. VOGT, P.E.



Gibbons Creek Environmental Redevelopment Group, LLC

SITE F LANDFILL CLOSURE Anderson, Texas

ABBREVIATIONS AND GENERAL NOTES



FILENAME | 00G-02.dwg

SCALE

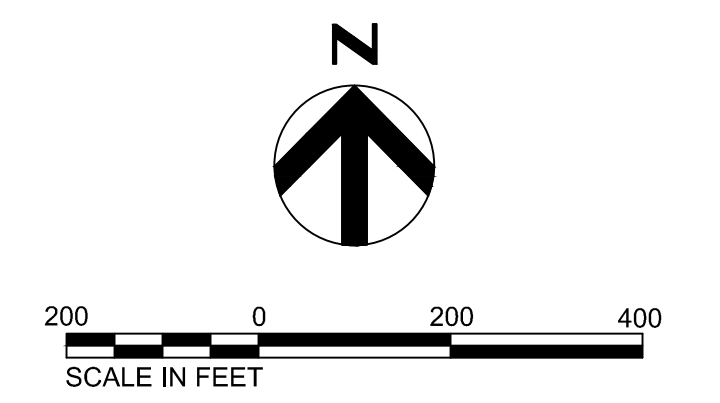
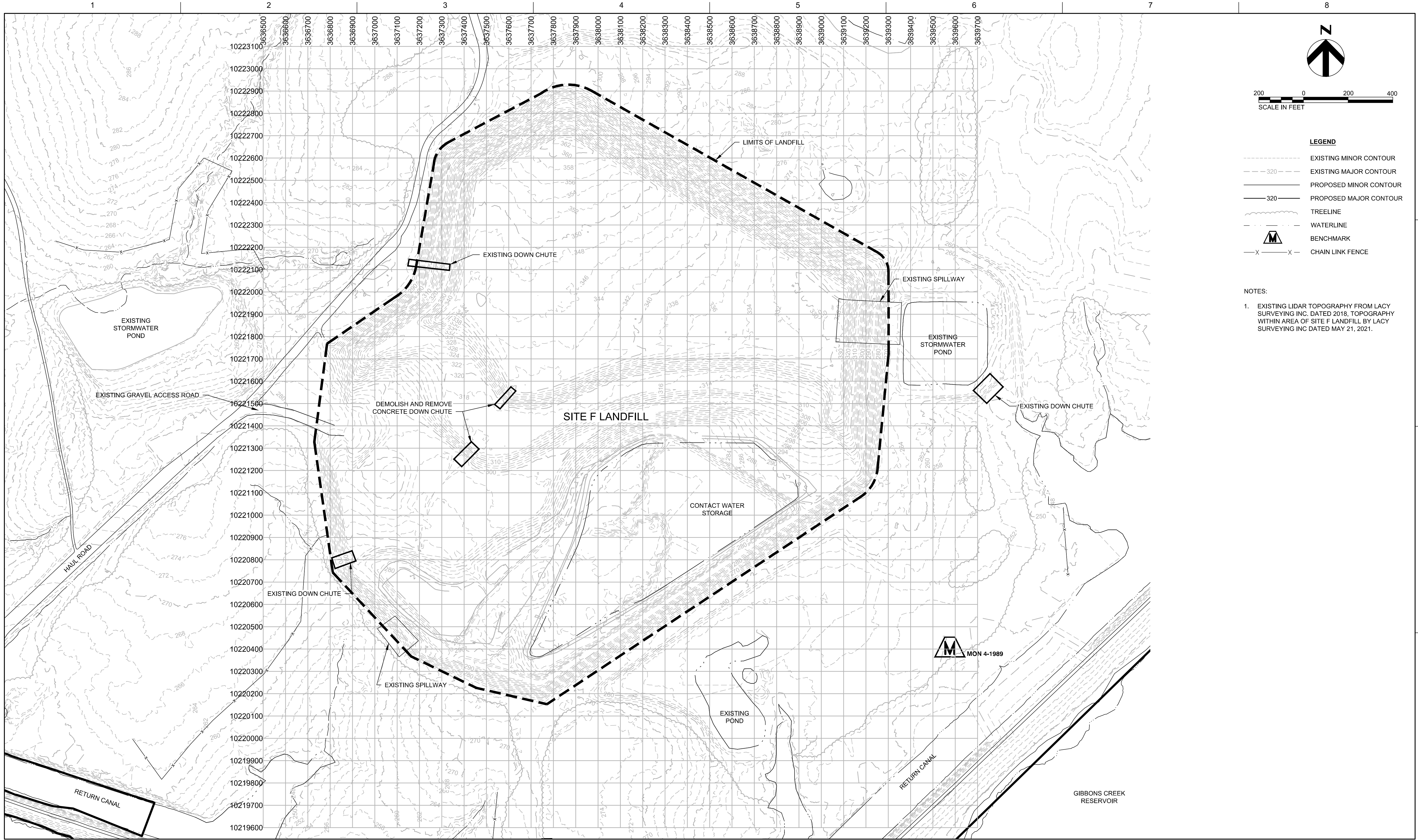
SHEET

00G-02

Table with columns: ISSUE, DATE, DESCRIPTION. Row 1: 1, 08/20/21, ISSUED FOR BID

PROJECT NUMBER | 10290148





- LEGEND**
- EXISTING MINOR CONTOUR
  - - - 320 - - - EXISTING MAJOR CONTOUR
  - 320 --- PROPOSED MINOR CONTOUR
  - - - 320 - - - PROPOSED MAJOR CONTOUR
  - TREELINE ---
  - WATERLINE ---
  - ▲ BENCHMARK
  - X-X- CHAIN LINK FENCE

**NOTES:**

- EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018, TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.



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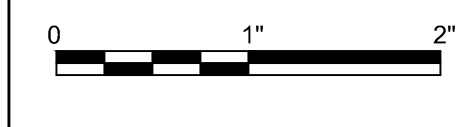
PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER	10290148
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**Gibbons Creek Environmental  
Redevelopment Group, LLC**

**SITE F LANDFILL CLOSURE**  
Anderson, Texas

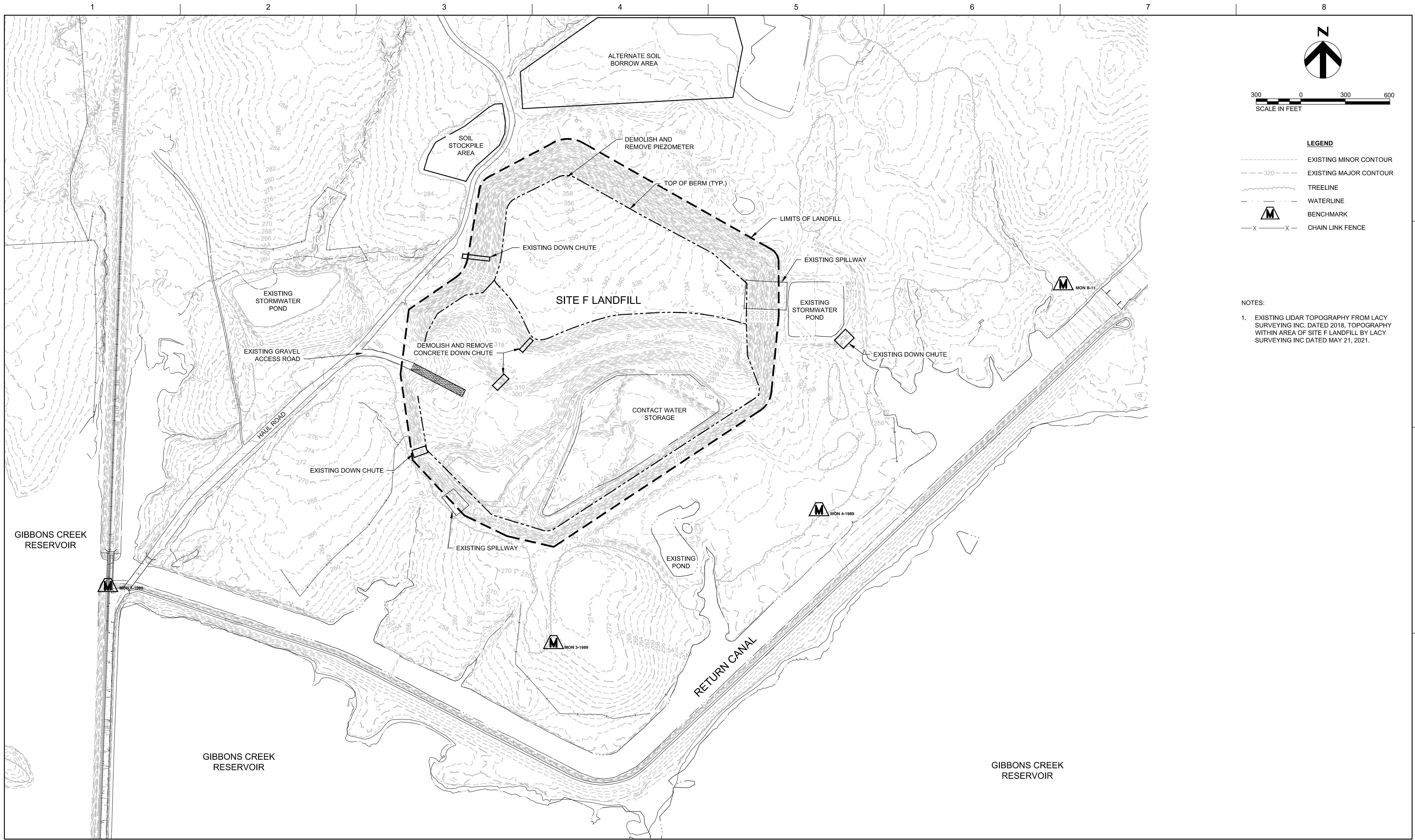


**SURVEY GRID**

FILENAME | 00C-01.dwg  
SCALE | 1"=200'

SHEET  
**00C-01**





- LEGEND**
- EXISTING MINOR CONTOUR
  - - - 320 - - - EXISTING MAJOR CONTOUR
  - ~ ~ ~ TREELINE
  - - - WATERLINE
  - M BENCHMARK
  - X - X - CHAIN LINK FENCE

- NOTES:**
- EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018, TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.



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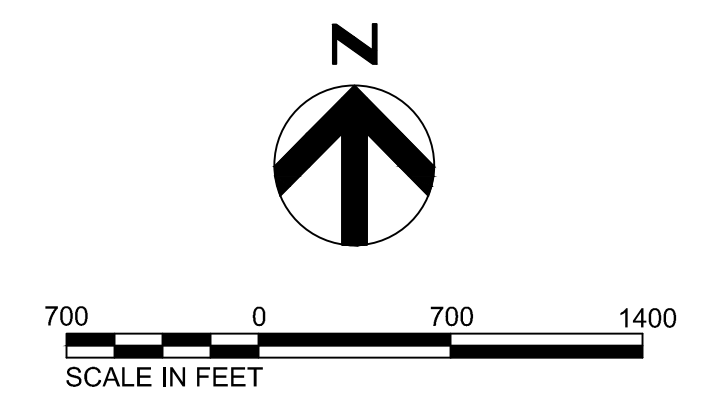
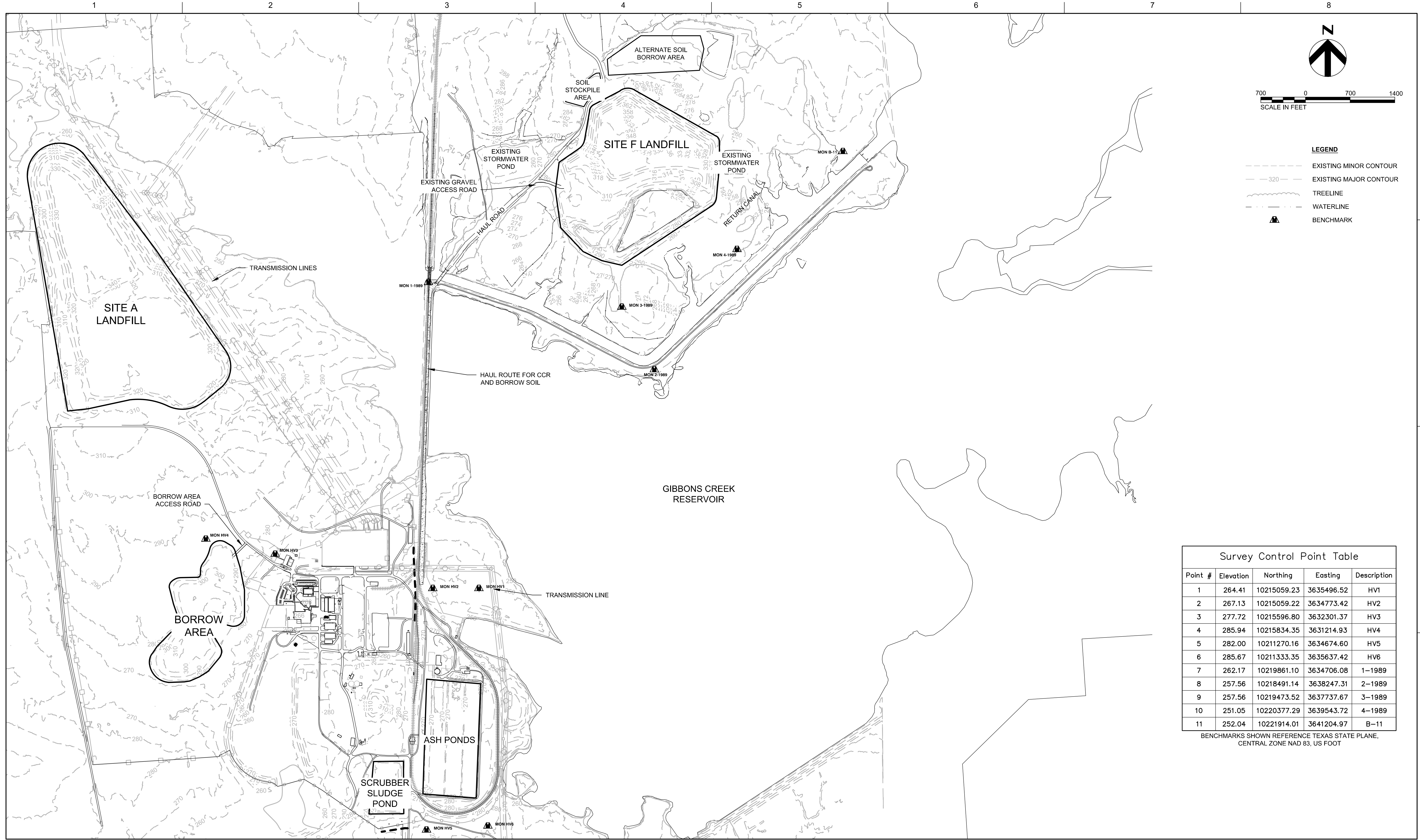
**SITE F LANDFILL CLOSURE**  
Anderson, Texas

**EXISTING CONDITIONS**

FILENAME | 00C-02.dwg  
SCALE | 1"=300'

SHEET  
**00C-02**





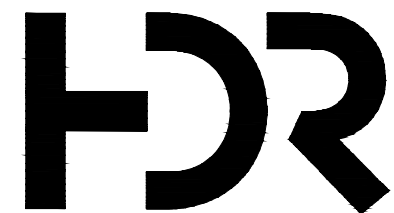
**LEGEND**

- EXISTING MINOR CONTOUR
- 320 — EXISTING MAJOR CONTOUR
- ~ TREELINE
- - - WATERLINE
- ▲ BENCHMARK

**Survey Control Point Table**

Point #	Elevation	Northing	Easting	Description
1	264.41	10215059.23	3635496.52	HV1
2	267.13	10215059.22	3634773.42	HV2
3	277.72	10215596.80	3632301.37	HV3
4	285.94	10215834.35	3631214.93	HV4
5	282.00	10211270.16	3634674.60	HV5
6	285.67	10211333.35	3635637.42	HV6
7	262.17	10219861.10	3634706.08	1-1989
8	257.56	10218491.14	3638247.31	2-1989
9	257.56	10219473.52	3637737.67	3-1989
10	251.05	10220377.29	3639543.72	4-1989
11	252.04	10221914.01	3641204.97	B-11

BENCHMARKS SHOWN REFERENCE TEXAS STATE PLANE, CENTRAL ZONE NAD 83, US FOOT



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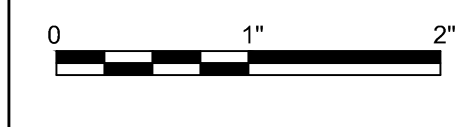
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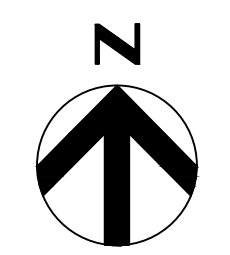
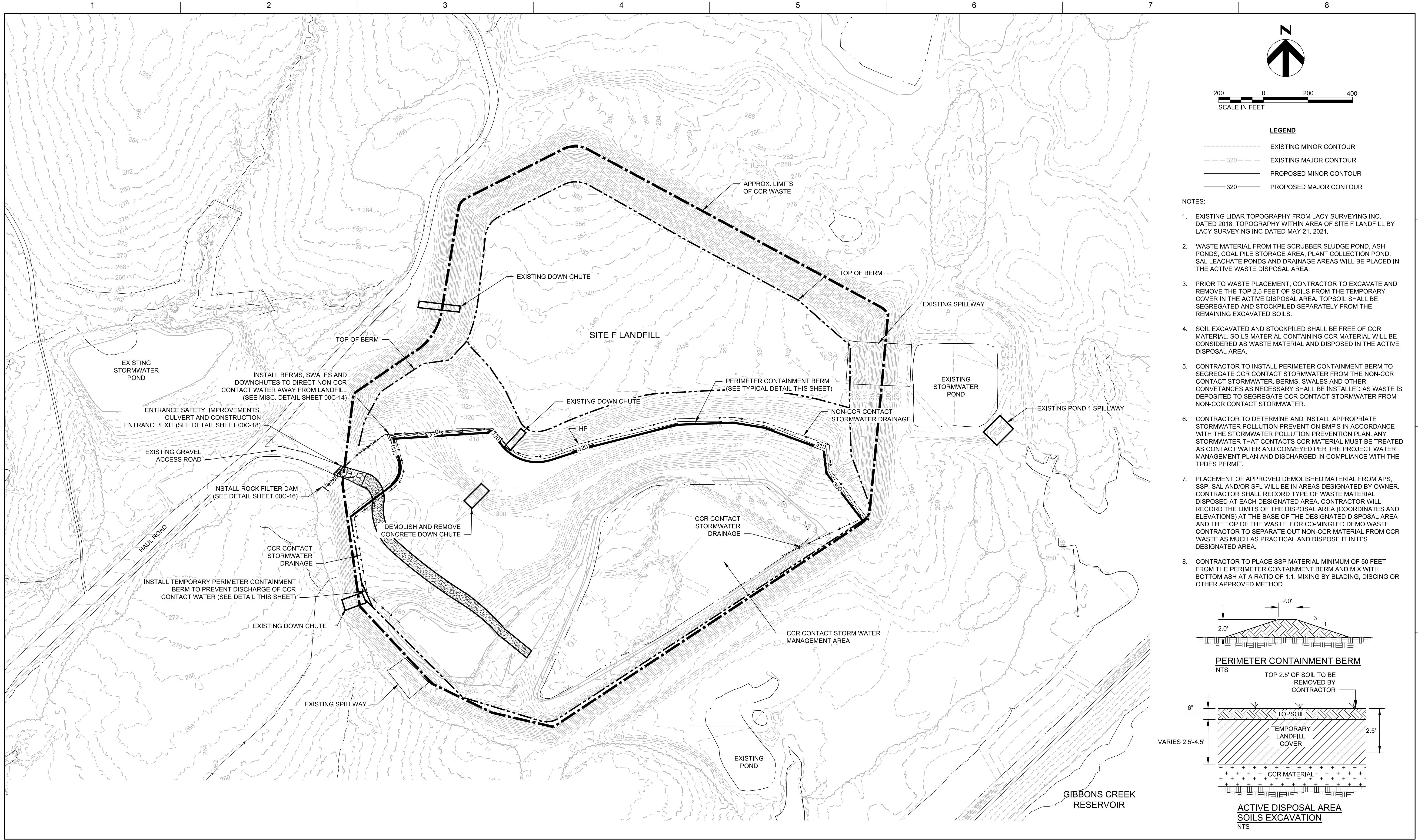
Gibbons Creek Environmental  
 Redevelopment Group, LLC  
 SITE F LANDFILL CLOSURE  
 Anderson, Texas



**SITE PLAN**  
 FILENAME | 00C-03.dwg  
 SCALE | 1"=700'

SHEET  
**00C-03**

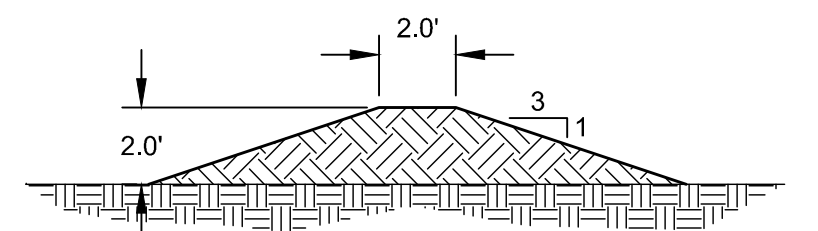




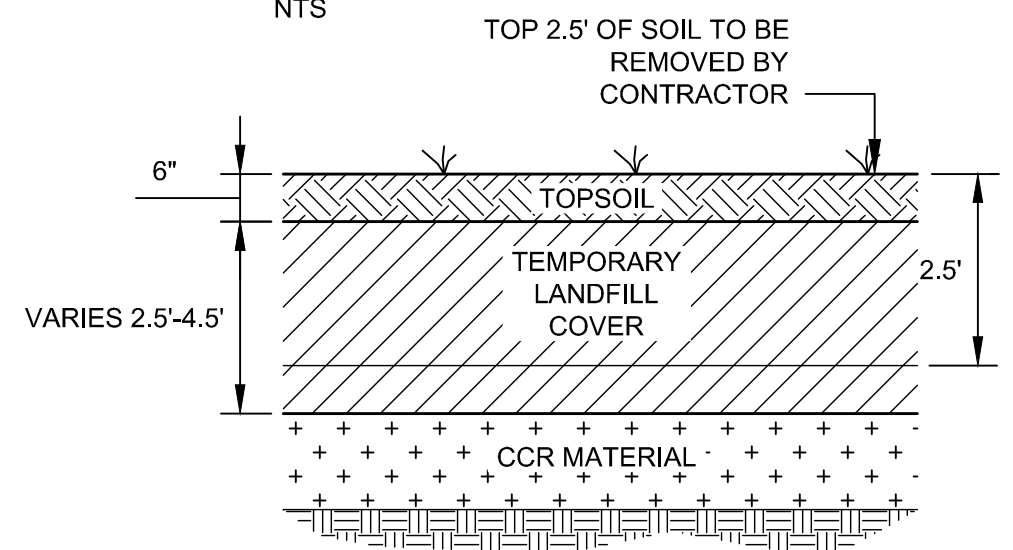
**LEGEND**

--- (dashed line)	EXISTING MINOR CONTOUR
--- (dashed line with 320)	EXISTING MAJOR CONTOUR
--- (solid line)	PROPOSED MINOR CONTOUR
--- (solid line with 320)	PROPOSED MAJOR CONTOUR

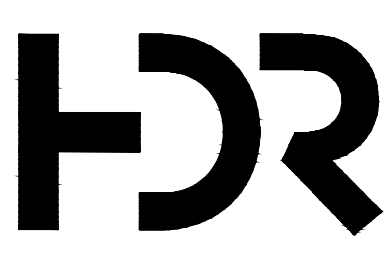
- NOTES:**
- EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018, TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.
  - WASTE MATERIAL FROM THE SCRUBBER SLUDGE POND, ASH PONDS, COAL PILE STORAGE AREA, PLANT COLLECTION POND, SAL LEACHATE PONDS AND DRAINAGE AREAS WILL BE PLACED IN THE ACTIVE WASTE DISPOSAL AREA.
  - PRIOR TO WASTE PLACEMENT, CONTRACTOR TO EXCAVATE AND REMOVE THE TOP 2.5 FEET OF SOILS FROM THE TEMPORARY COVER IN THE ACTIVE DISPOSAL AREA. TOPSOIL SHALL BE SEGREGATED AND STOCKPILED SEPARATELY FROM THE REMAINING EXCAVATED SOILS.
  - SOIL EXCAVATED AND STOCKPILED SHALL BE FREE OF CCR MATERIAL. SOILS MATERIAL CONTAINING CCR MATERIAL WILL BE CONSIDERED AS WASTE MATERIAL AND DISPOSED IN THE ACTIVE DISPOSAL AREA.
  - CONTRACTOR TO INSTALL PERIMETER CONTAINMENT BERM TO SEGREGATE CCR CONTACT STORMWATER FROM THE NON-CCR CONTACT STORMWATER. BERMS, SWALES AND OTHER CONVEYANCES AS NECESSARY SHALL BE INSTALLED AS WASTE IS DEPOSITED TO SEGREGATE CCR CONTACT STORMWATER FROM NON-CCR CONTACT STORMWATER.
  - CONTRACTOR TO DETERMINE AND INSTALL APPROPRIATE STORMWATER POLLUTION PREVENTION BMP'S IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN. ANY STORMWATER THAT CONTACTS CCR MATERIAL MUST BE TREATED AS CONTACT WATER AND CONVEYED PER THE PROJECT WATER MANAGEMENT PLAN AND DISCHARGED IN COMPLIANCE WITH THE TPDES PERMIT.
  - PLACEMENT OF APPROVED DEMOLISHED MATERIAL FROM APS, SSP, SAL AND/OR SFL WILL BE IN AREAS DESIGNATED BY OWNER. CONTRACTOR SHALL RECORD TYPE OF WASTE MATERIAL DISPOSED AT EACH DESIGNATED AREA. CONTRACTOR WILL RECORD THE LIMITS OF THE DISPOSAL AREA (COORDINATES AND ELEVATIONS) AT THE BASE OF THE DESIGNATED DISPOSAL AREA AND THE TOP OF THE WASTE. FOR CO-MINGLED DEMO WASTE, CONTRACTOR TO SEPARATE OUT NON-CCR MATERIAL FROM CCR WASTE AS MUCH AS PRACTICAL AND DISPOSE IT IN ITS DESIGNATED AREA.
  - CONTRACTOR TO PLACE SSP MATERIAL MINIMUM OF 50 FEET FROM THE PERIMETER CONTAINMENT BERM AND MIX WITH BOTTOM ASH AT A RATIO OF 1:1. MIXING BY BLADING, DISCING OR OTHER APPROVED METHOD.



**PERIMETER CONTAINMENT BERM**



**ACTIVE DISPOSAL AREA SOILS EXCAVATION**



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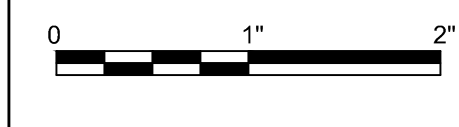
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PROJECT NUMBER	10290148
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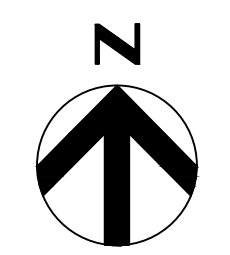
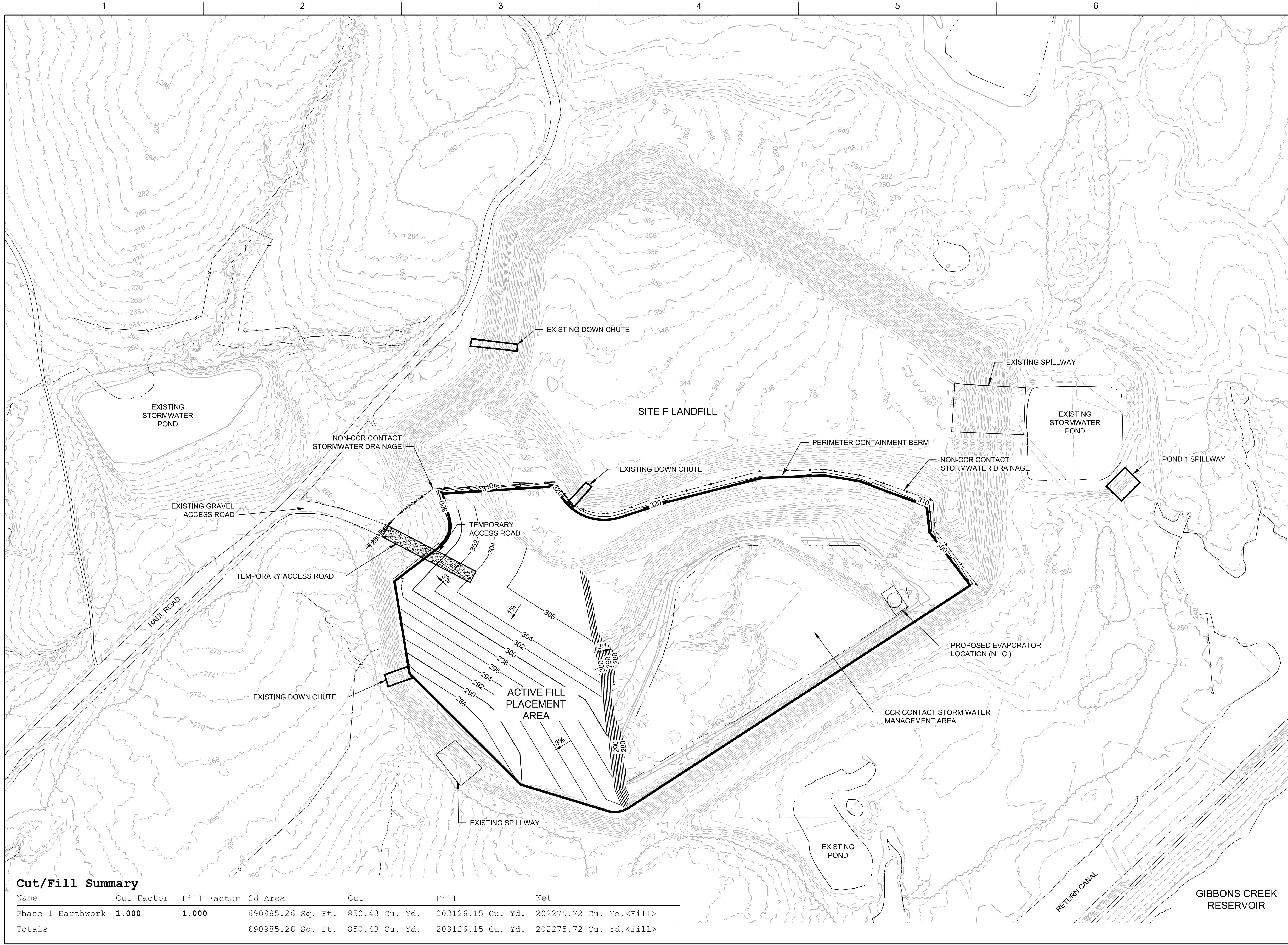
**Gibbons Creek Environmental Redevelopment Group, LLC**  
**SITE F LANDFILL CLOSURE**  
 Anderson, Texas



FILENAME | 00C-04.dwg  
 SCALE | 1"=200'

SHEET  
**00C-04**



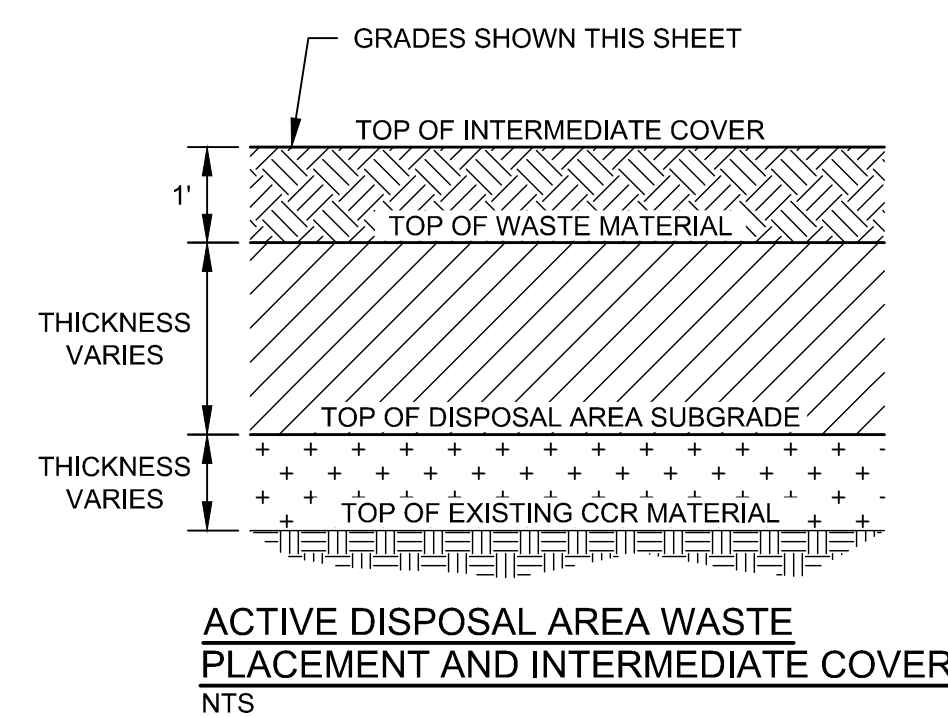


- LEGEND**
- EXISTING MINOR CONTOUR
  - - - - - EXISTING MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - - - - - PROPOSED MAJOR CONTOUR

- NOTES:**
1. EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018, TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.
  2. WASTE MATERIAL FROM THE SCRUBBER SLUDGE POND, ASH PONDS, COAL PILE STORAGE AREA, PLANT COLLECTION POND, SAL LEACHATE PONDS AND DRAINAGE AREAS WILL BE PLACED IN THE ACTIVE WASTE DISPOSAL AREA.
  3. CONTRACTOR SHALL INSTALL BERMS, SWALES AND OTHER CONVEYANCES AS NECESSARY TO SEGREGATE CCR CONTACT STORMWATER FROM NON-CCR CONTACT STORMWATER.
  4. CONTRACTOR TO INSTALL INTERMEDIATE COVER UTILIZING A 1-FOOT THICK LAYER OF GENERAL FILL MATERIAL OVER WASTE MATERIAL PLACED TO ITS FINAL GRADE.
  5. CONTRACTOR TO DETERMINE AND INSTALL APPROPRIATE STORMWATER POLLUTION PREVENTION BMP'S IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN. ANY STORMWATER THAT CONTACTS CCR MATERIAL MUST BE TREATED AS CONTACT WATER AND CONVEYED PER THE PROJECT WATER MANAGEMENT PLAN AND DISCHARGED IN COMPLIANCE WITH THE TPDES PERMIT.
  7. PLACEMENT OF APPROVED DEMOLISHED MATERIAL FROM APS, SSP, SAL AND/OR SFL WILL BE IN AREAS DESIGNATED BY OWNER. CONTRACTOR SHALL RECORD TYPE OF WASTE MATERIAL DISPOSED AT EACH DESIGNATED AREA. CONTRACTOR WILL RECORD THE LIMITS OF THE DISPOSAL AREA (COORDINATES AND ELEVATIONS) AT THE BASE OF THE DESIGNATED DISPOSAL AREA AND THE TOP OF THE WASTE. FOR CO-MINGLED DEMO WASTE, CONTRACTOR TO SEPARATE OUT NON-CCR MATERIAL FROM CCR WASTE AS MUCH AS PRACTICAL AND DISPOSE IT IN ITS DESIGNATED AREA.
  8. CONTRACTOR TO PLACE SSP MATERIAL MINIMUM OF 50 FEET FROM THE PERIMETER CONTAINMENT BERM AND MIX WITH BOTTOM ASH AT A RATIO OF 1:1. MIXING BY BLADING, DISCING OR OTHER APPROVED METHOD.

**Cut/Fill Summary**

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Phase 1 Earthwork	1.000	1.000	690985.26 Sq. Ft.	850.43 Cu. Yd.	203126.15 Cu. Yd.	202275.72 Cu. Yd.<Fill>
<b>Totals</b>			690985.26 Sq. Ft.	850.43 Cu. Yd.	203126.15 Cu. Yd.	202275.72 Cu. Yd.<Fill>



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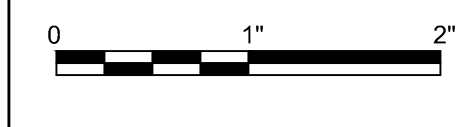
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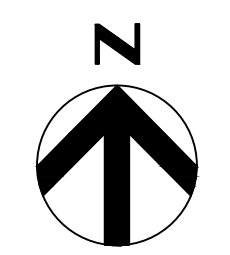
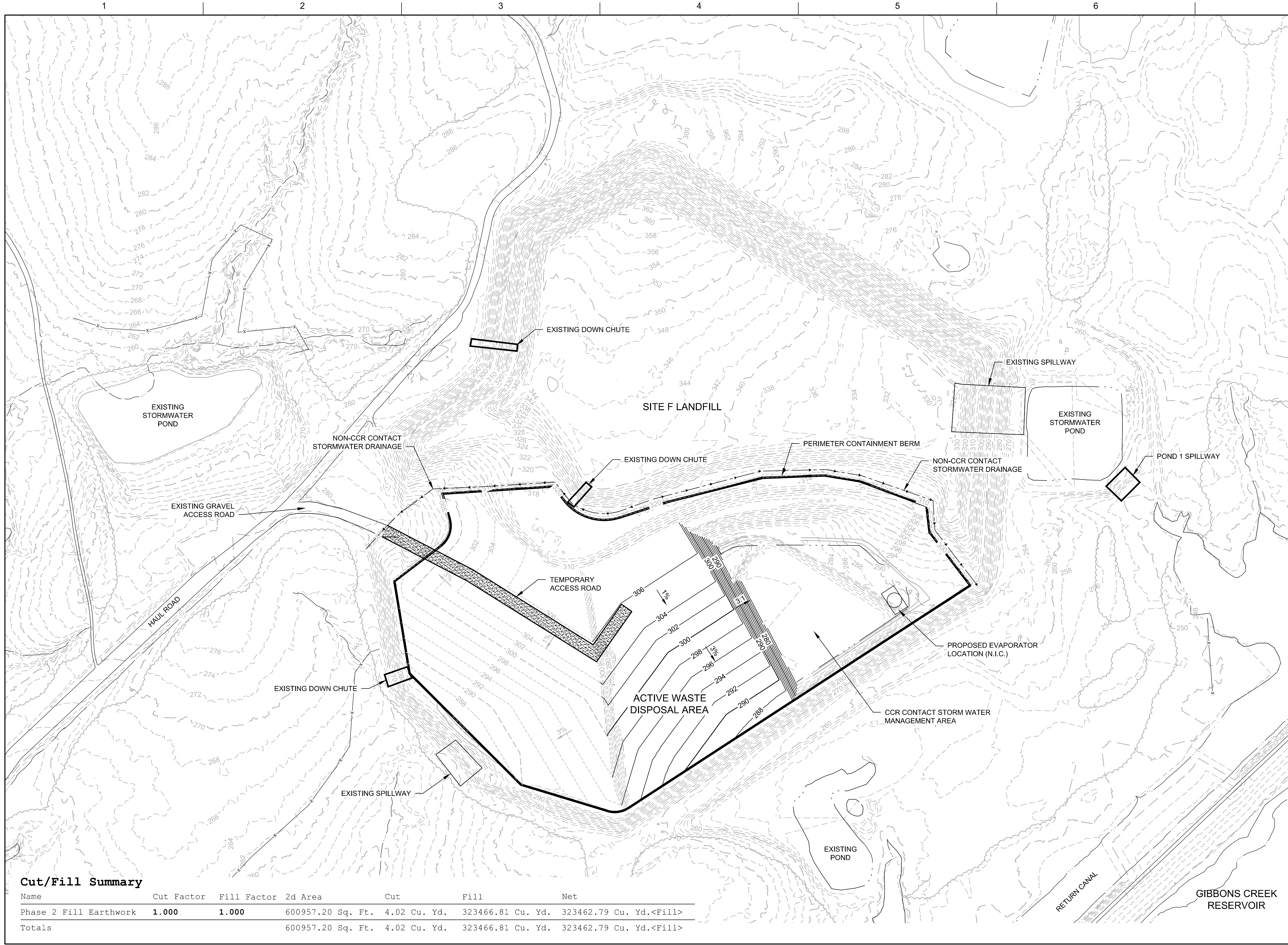
**Gibbons Creek Environmental  
 Redevelopment Group, LLC**  
**SITE F LANDFILL CLOSURE**  
 Anderson, Texas



FILENAME | 00C-05.dwg  
 SCALE | 1"=200'

SHEET  
**00C-05**





**LEGEND**

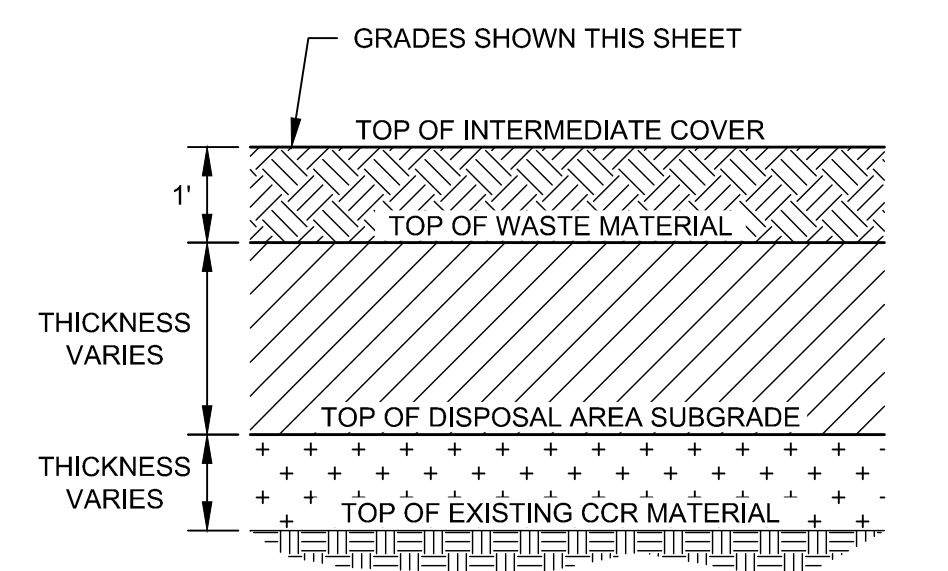
- EXISTING MINOR CONTOUR
- - - - - EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- - - - - PROPOSED MAJOR CONTOUR

**NOTES:**

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**Cut/Fill Summary**

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Phase 2 Fill Earthwork	1.000	1.000	600957.20 Sq. Ft.	4.02 Cu. Yd.	323466.81 Cu. Yd.	323462.79 Cu. Yd.<Fill>
Totals			600957.20 Sq. Ft.	4.02 Cu. Yd.	323466.81 Cu. Yd.	323462.79 Cu. Yd.<Fill>



**ACTIVE DISPOSAL AREA WASTE PLACEMENT AND INTERMEDIATE COVER**



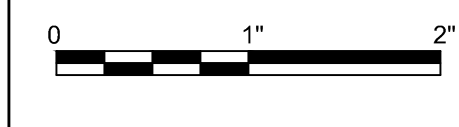
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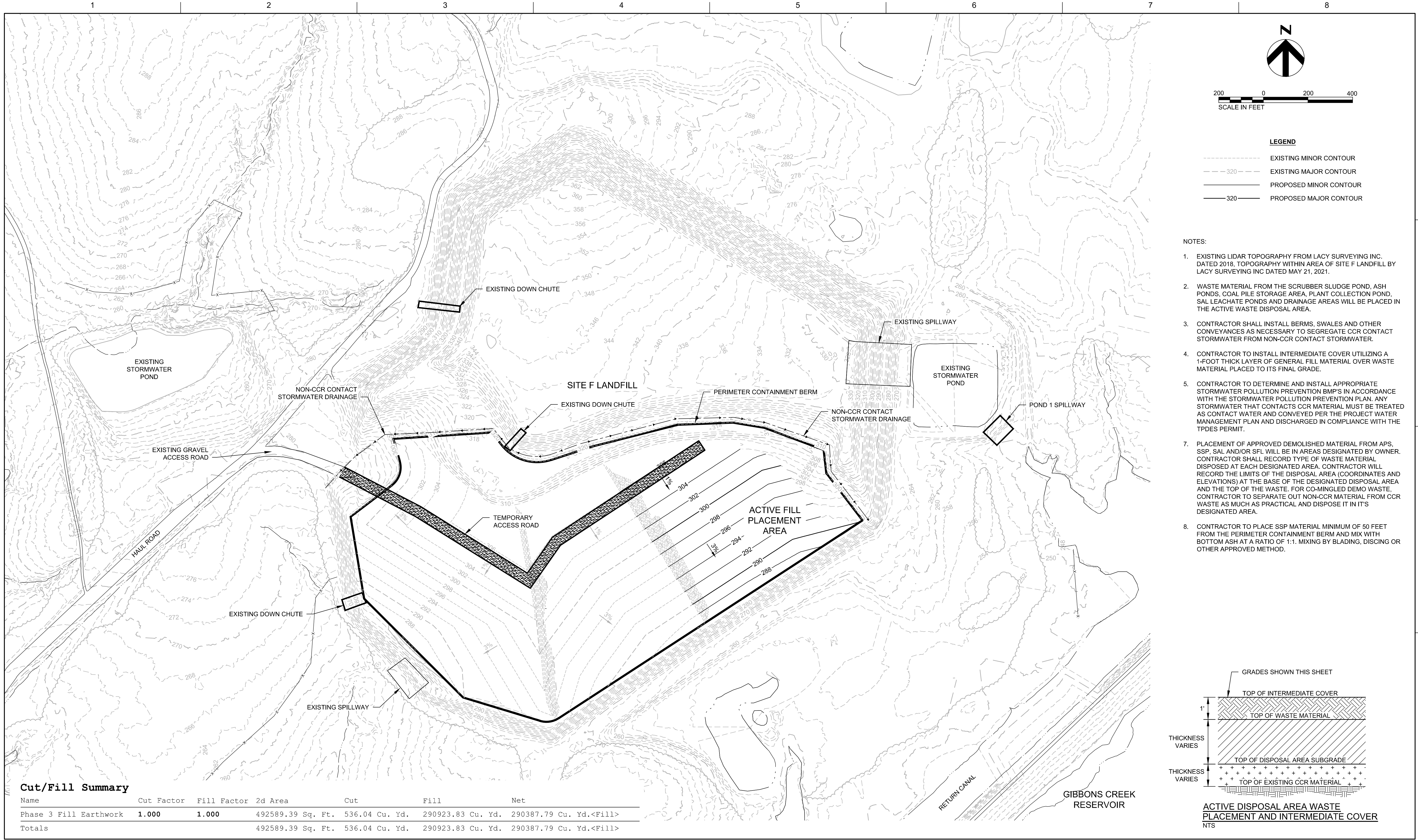
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**SITE F LANDFILL CLOSURE**  
 Anderson, Texas



FILENAME | 00C-06.dwg  
 SCALE | 1"=200'

SHEET  
**00C-06**



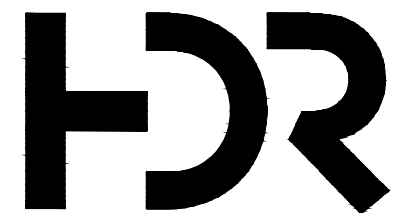
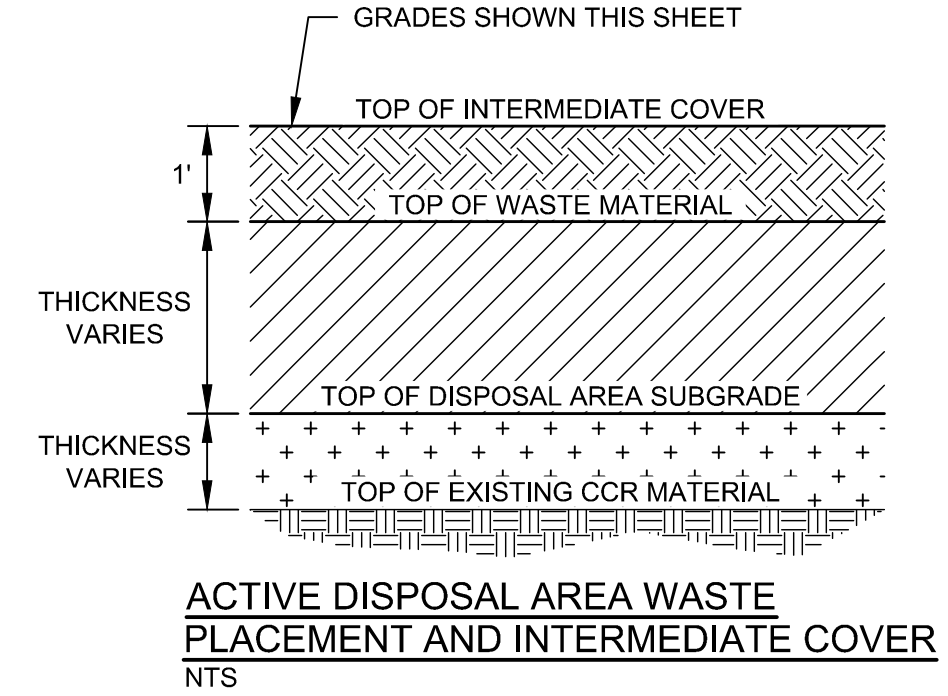


- LEGEND**
- EXISTING MINOR CONTOUR
  - - - 320 - - - EXISTING MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - - - 320 - - - PROPOSED MAJOR CONTOUR

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1. EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018, TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.
  2. WASTE MATERIAL FROM THE SCRUBBER SLUDGE POND, ASH PONDS, COAL PILE STORAGE AREA, PLANT COLLECTION POND, SAL LEACHATE PONDS AND DRAINAGE AREAS WILL BE PLACED IN THE ACTIVE WASTE DISPOSAL AREA.
  3. CONTRACTOR SHALL INSTALL BERMS, SWALES AND OTHER CONVEYANCES AS NECESSARY TO SEGREGATE CCR CONTACT STORMWATER FROM NON-CCR CONTACT STORMWATER.
  4. CONTRACTOR TO INSTALL INTERMEDIATE COVER UTILIZING A 1-FOOT THICK LAYER OF GENERAL FILL MATERIAL OVER WASTE MATERIAL PLACED TO ITS FINAL GRADE.
  5. CONTRACTOR TO DETERMINE AND INSTALL APPROPRIATE STORMWATER POLLUTION PREVENTION BMP'S IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN. ANY STORMWATER THAT CONTACTS CCR MATERIAL MUST BE TREATED AS CONTACT WATER AND CONVEYED PER THE PROJECT WATER MANAGEMENT PLAN AND DISCHARGED IN COMPLIANCE WITH THE TPDES PERMIT.
  7. PLACEMENT OF APPROVED DEMOLISHED MATERIAL FROM APS, SSP, SAL AND/OR SFL WILL BE IN AREAS DESIGNATED BY OWNER. CONTRACTOR SHALL RECORD TYPE OF WASTE MATERIAL DISPOSED AT EACH DESIGNATED AREA. CONTRACTOR WILL RECORD THE LIMITS OF THE DISPOSAL AREA (COORDINATES AND ELEVATIONS) AT THE BASE OF THE DESIGNATED DISPOSAL AREA AND THE TOP OF THE WASTE. FOR CO-MINGLED DEMO WASTE, CONTRACTOR TO SEPARATE OUT NON-CCR MATERIAL FROM CCR WASTE AS MUCH AS PRACTICAL AND DISPOSE IT IN ITS DESIGNATED AREA.
  8. CONTRACTOR TO PLACE SSP MATERIAL MINIMUM OF 50 FEET FROM THE PERIMETER CONTAINMENT BERM AND MIX WITH BOTTOM ASH AT A RATIO OF 1:1. MIXING BY BLADING, DISCING OR OTHER APPROVED METHOD.

**Cut/Fill Summary**

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Phase 3 Fill Earthwork	1.000	1.000	492589.39 Sq. Ft.	536.04 Cu. Yd.	290923.83 Cu. Yd.	290387.79 Cu. Yd.<Fill>
<b>Totals</b>			492589.39 Sq. Ft.	536.04 Cu. Yd.	290923.83 Cu. Yd.	290387.79 Cu. Yd.<Fill>



ISSUED FOR CONSTRUCTION  
 HDR  
 Firm Registration No. F-754  
 17111 Preston Road, Suite 300  
 Dallas, Texas 75248-1229  
 972.960.4400

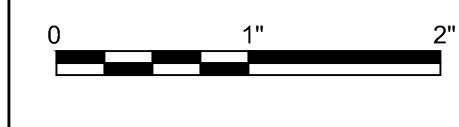
ISSUE	DATE	DESCRIPTION
1	08/20/21	ISSUED FOR BID

PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER	10290148
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**Gibbons Creek Environmental  
 Redevelopment Group, LLC**  
**SITE F LANDFILL CLOSURE**  
 Anderson, Texas

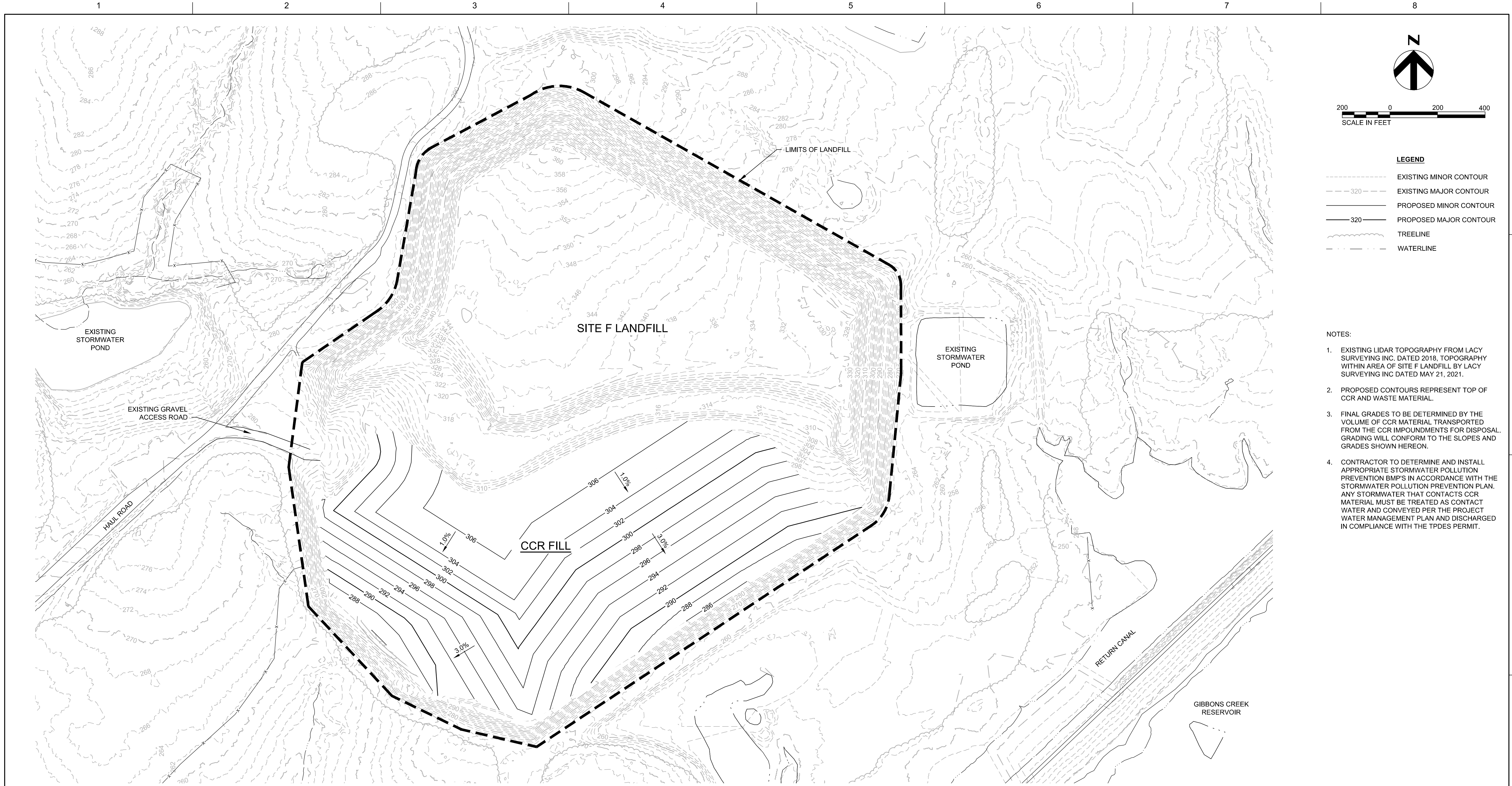


FILENAME | 00C-07.dwg  
 SCALE | 1"=200'

SHEET  
**00C-07**

**ACTIVE WASTE DISPOSAL AREA  
 PHASE 3 FILL PLACEMENT AREA**





- LEGEND**
- EXISTING MINOR CONTOUR
  - - - - 320 - - - - EXISTING MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - 320 — PROPOSED MAJOR CONTOUR
  - ~ TREELINE
  - - - - WATERLINE

- NOTES:**
1. EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018, TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.
  2. PROPOSED CONTOURS REPRESENT TOP OF CCR AND WASTE MATERIAL.
  3. FINAL GRADES TO BE DETERMINED BY THE VOLUME OF CCR MATERIAL TRANSPORTED FROM THE CCR IMPOUNDMENTS FOR DISPOSAL. GRADING WILL CONFORM TO THE SLOPES AND GRADES SHOWN HEREON.
  4. CONTRACTOR TO DETERMINE AND INSTALL APPROPRIATE STORMWATER POLLUTION PREVENTION BMP'S IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN. ANY STORMWATER THAT CONTACTS CCR MATERIAL MUST BE TREATED AS CONTACT WATER AND CONVEYED PER THE PROJECT WATER MANAGEMENT PLAN AND DISCHARGED IN COMPLIANCE WITH THE TPDES PERMIT.

**Cut/Fill Summary**

Name	Cut Factor	Fill Factor	2d Area	Fill
CCR Final Airspace 1.000	1.000	1.000	1688804.74 Sq. Ft.	783755.86 Cu. Yd.
<b>Totals</b>			<b>1688804.74 Sq. Ft.</b>	<b>783755.86 Cu. Yd.</b>



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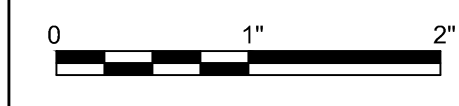
ISSUE	DATE	DESCRIPTION
1	08/20/21	ISSUED FOR BID

PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER	10290148
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**Gibbons Creek Environmental  
 Redevelopment Group, LLC**  
**SITE F LANDFILL CLOSURE**  
 Anderson, Texas

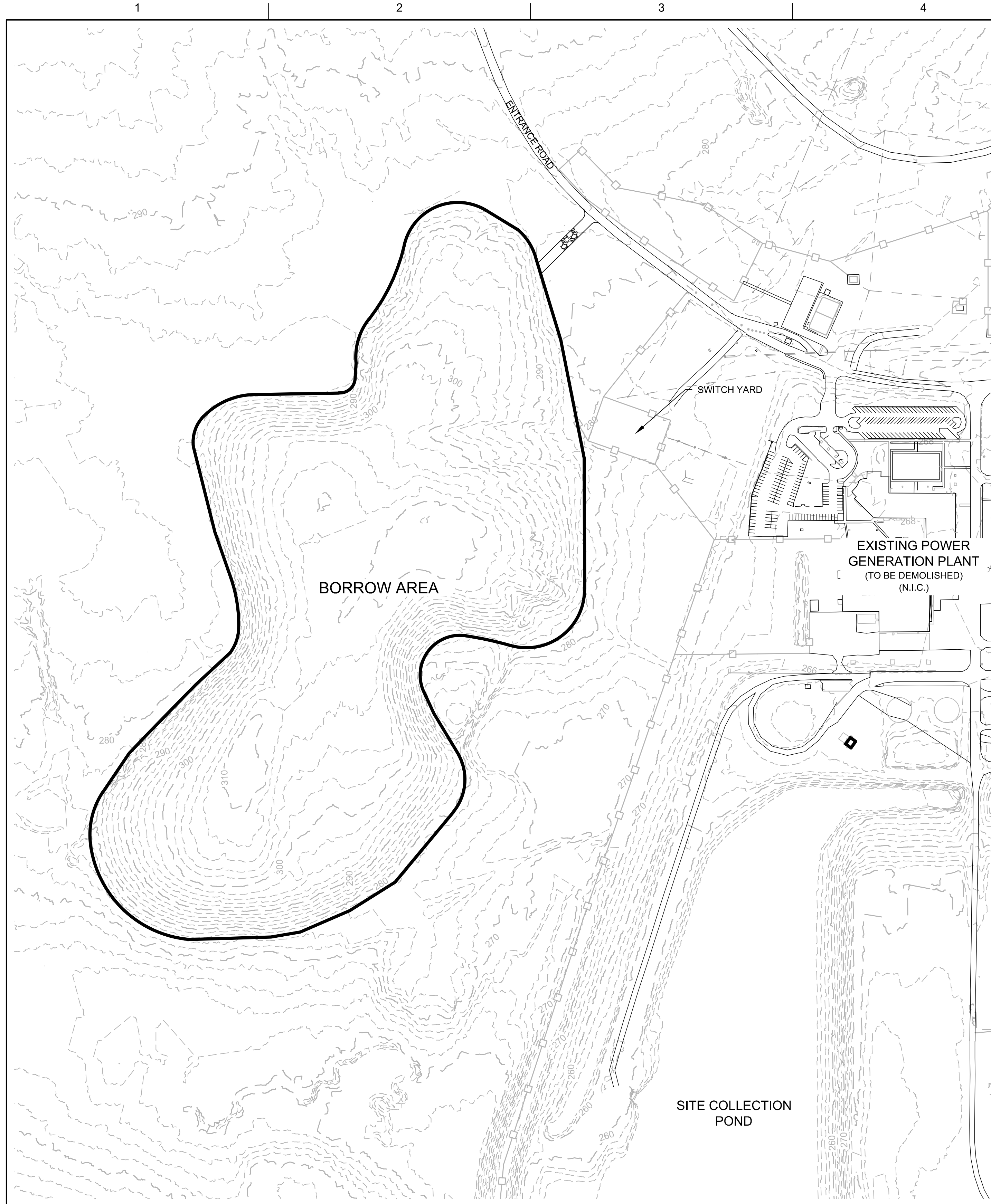


**Closure Grading  
 Top of CCR**

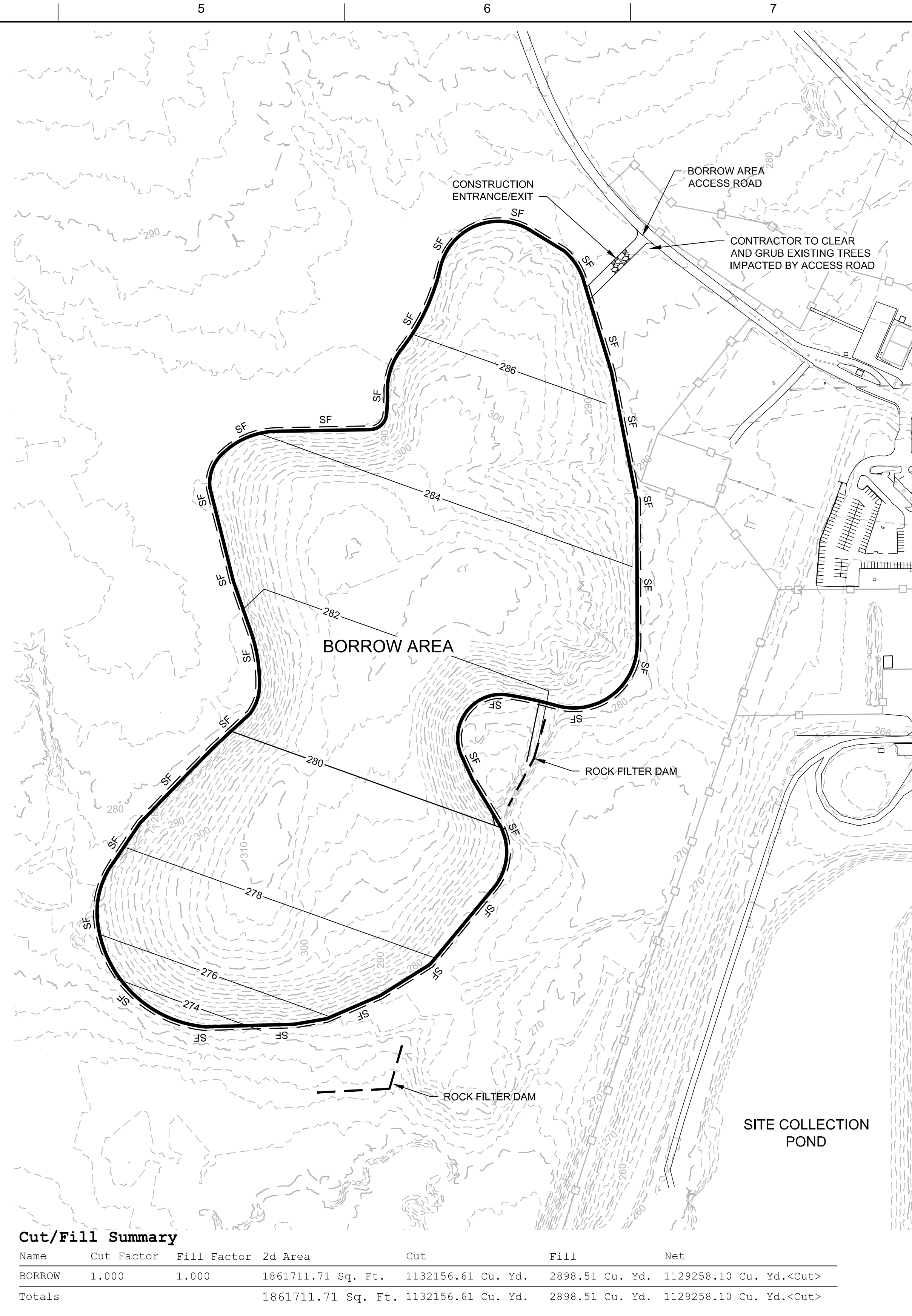
FILENAME | 00C-08.dwg  
 SCALE | 1"=200'

SHEET  
**00C-08**





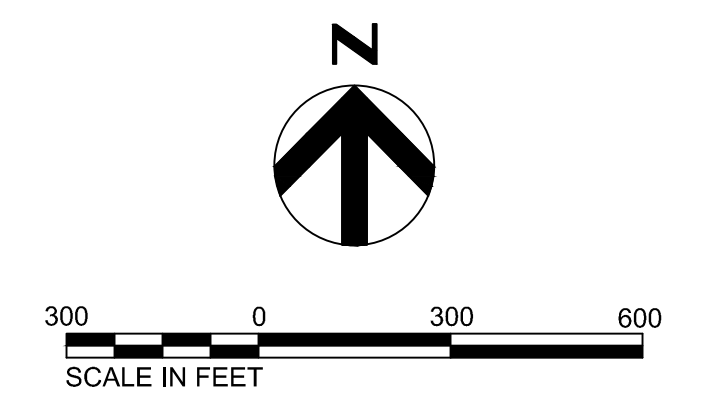
EXISTING CONDITONS



PROPOSED GRADING

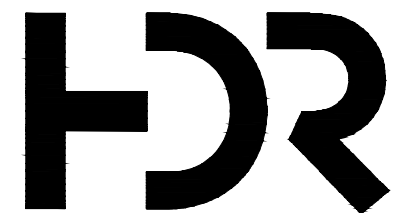
**Cut/Fill Summary**

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
BORROW	1.000	1.000	1861711.71 Sq. Ft.	1132156.61 Cu. Yd.	2898.51 Cu. Yd.	1129258.10 Cu. Yd.<Cut>
Totals			1861711.71 Sq. Ft.	1132156.61 Cu. Yd.	2898.51 Cu. Yd.	1129258.10 Cu. Yd.<Cut>



- LEGEND**
- EXISTING MINOR CONTOUR
  - - - - - EXISTING MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - - - - - PROPOSED MAJOR CONTOUR
  - - - - - SF - SILT FENCE

- NOTES:**
1. EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018, TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.
  2. CONTRACTOR TO REMOVE VEGETATION PRIOR TO EXCAVATION.
  3. SOILS USED FOR COMPACTED CLAY LINER OR GENERAL FILL MATERIAL SHALL NOT CONTAIN TOPSOIL.
  4. FINAL GRADING CONTOURS REPRESENT TOPOGRAPHY OF BORROW AREA AFTER TOTAL SOIL MATERIAL REMOVED FOR BOTH SITE F LANDFILL CLOSURE AND SITE A LANDFILL CLOSURE PROJECTS. CONTRACTOR SHALL STAGE SOILS REMOVAL ACCORDING TO THEIR CONSTRUCTION NEEDS AND INSTALL AND MAINTAIN APPROPRIATE EROSION AND SEDIMENT CONTROLS ACCORDING TO THEIR EXCAVATION PLAN.
  5. CONTRACTOR TO DETERMINE AND INSTALL APPROPRIATE STORMWATER POLLUTION PREVENTION BMP'S IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN. ANY STORMWATER THAT CONTACTS CCR MATERIAL MUST BE TREATED AS CONTACT WATER AND CONVEYED PER THE PROJECT WATER MANAGEMENT PLAN AND DISCHARGED IN COMPLIANCE WITH THE TPDES PERMIT.



ISSUED FOR CONSTRUCTION  
 HDR  
 Firm Registration No. F-754  
 17111 Preston Road, Suite 300  
 Dallas, Texas 75248-1229  
 972.960.4400

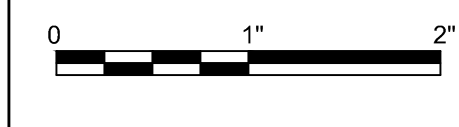
ISSUE	DATE	DESCRIPTION
1	08/20/21	ISSUED FOR BID

PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER	10290148
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**Gibbons Creek Environmental  
 Redevelopment Group, LLC**  
**SITE F LANDFILL CLOSURE**  
 Anderson, Texas

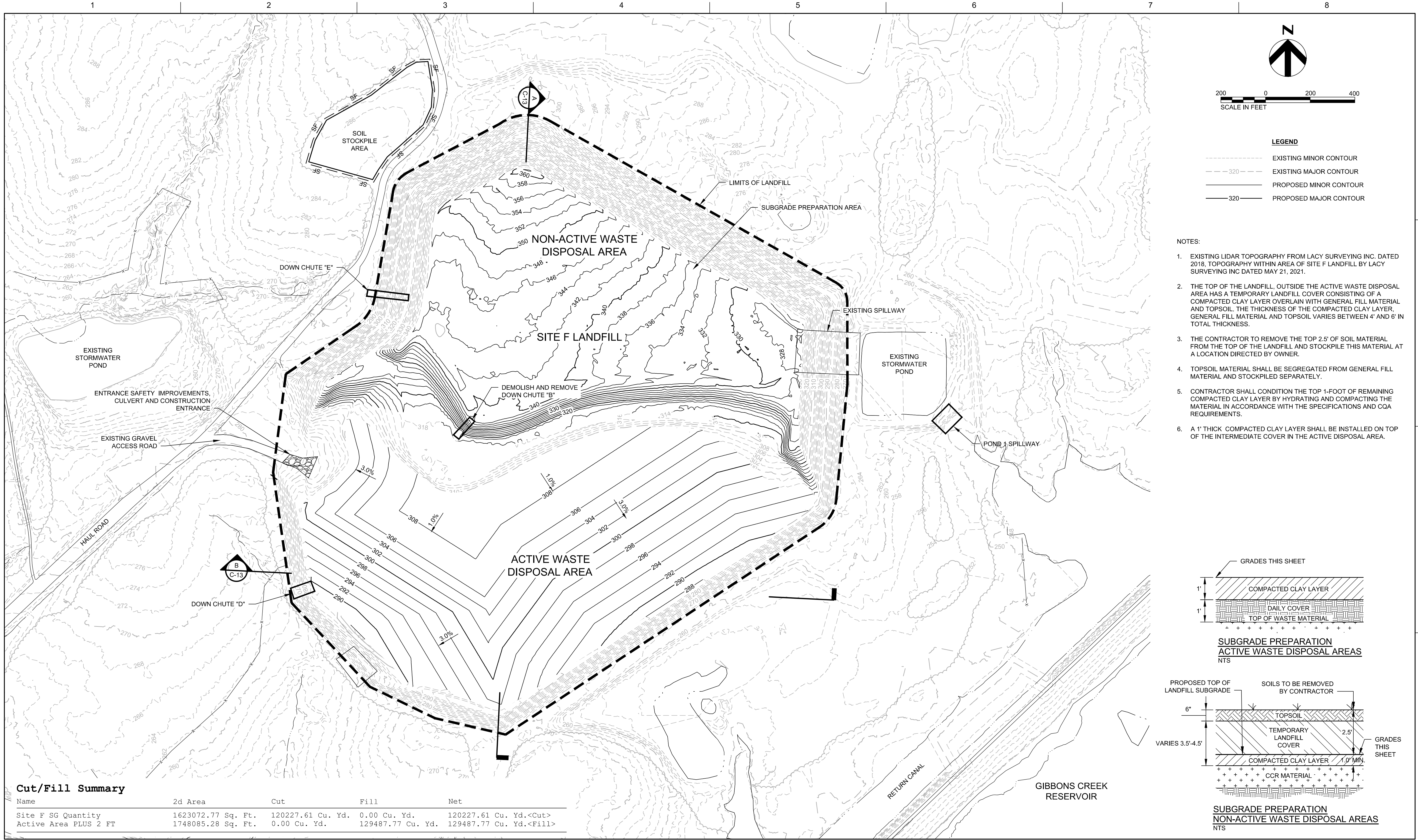


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 SCALE | 1"=200'

SHEET  
**00C-09**

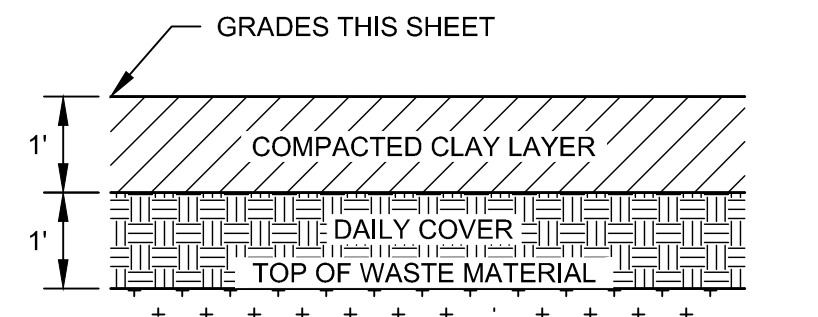
**BORROW AREA EXCAVATION PLAN**



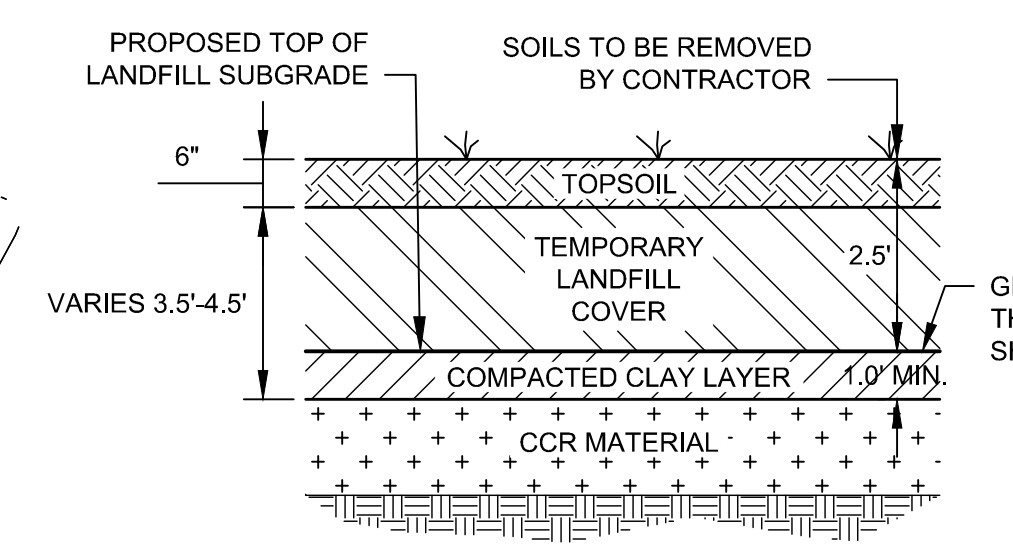


- LEGEND**
- EXISTING MINOR CONTOUR
  - - - 320 EXISTING MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - - - 320 PROPOSED MAJOR CONTOUR

- NOTES:**
1. EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018, TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.
  2. THE TOP OF THE LANDFILL, OUTSIDE THE ACTIVE WASTE DISPOSAL AREA HAS A TEMPORARY LANDFILL COVER CONSISTING OF A COMPACTED CLAY LAYER OVERLAIN WITH GENERAL FILL MATERIAL AND TOPSOIL. THE THICKNESS OF THE COMPACTED CLAY LAYER, GENERAL FILL MATERIAL AND TOPSOIL VARIES BETWEEN 4' AND 6' IN TOTAL THICKNESS.
  3. THE CONTRACTOR TO REMOVE THE TOP 2.5' OF SOIL MATERIAL FROM THE TOP OF THE LANDFILL AND STOCKPILE THIS MATERIAL AT A LOCATION DIRECTED BY OWNER.
  4. TOPSOIL MATERIAL SHALL BE SEGREGATED FROM GENERAL FILL MATERIAL AND STOCKPILED SEPARATELY.
  5. CONTRACTOR SHALL CONDITION THE TOP 1-FOOT OF REMAINING COMPACTED CLAY LAYER BY HYDRATING AND COMPACTING THE MATERIAL IN ACCORDANCE WITH THE SPECIFICATIONS AND COA REQUIREMENTS.
  6. A 1" THICK COMPACTED CLAY LAYER SHALL BE INSTALLED ON TOP OF THE INTERMEDIATE COVER IN THE ACTIVE DISPOSAL AREA.



**SUBGRADE PREPARATION  
ACTIVE WASTE DISPOSAL AREAS  
NTS**



**SUBGRADE PREPARATION  
NON-ACTIVE WASTE DISPOSAL AREAS  
NTS**

**Cut/Fill Summary**

Name	2d Area	Cut	Fill	Net
Site F SG Quantity	1623072.77 Sq. Ft.	120227.61 Cu. Yd.	0.00 Cu. Yd.	120227.61 Cu. Yd.<Cut>
Active Area PLUS 2 FT	1748085.28 Sq. Ft.	0.00 Cu. Yd.	129487.77 Cu. Yd.	129487.77 Cu. Yd.<Fill>



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 HDR  
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 17111 Preston Road, Suite 300  
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 972.960.4400

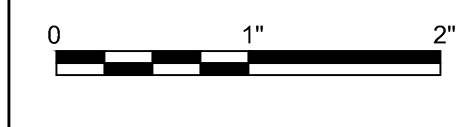
ISSUE	DATE	DESCRIPTION
1	08/20/21	ISSUED FOR BID

PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER	10290148
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**Gibbons Creek Environmental  
 Redevelopment Group, LLC**  
**SITE F LANDFILL CLOSURE**  
 Anderson, Texas

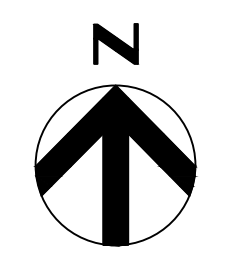
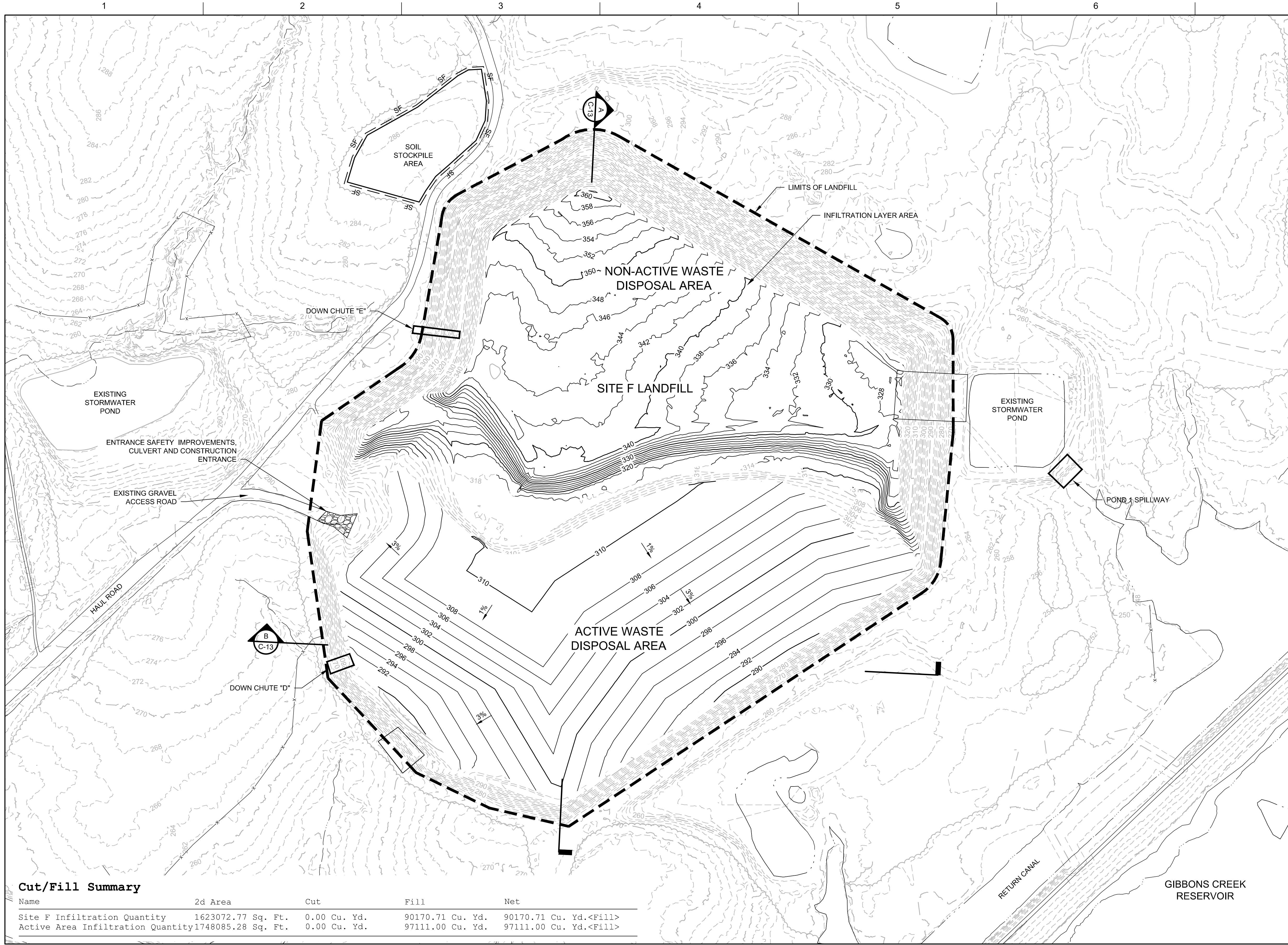


FILENAME | 00C-10.dwg  
 SCALE | 1"=200'

SHEET  
**00C-10**

**SUBGRADE PLAN  
 TOP OF COMPACTED CLAY LAYER  
 (INTERIM CCR COVER)**





**LEGEND**

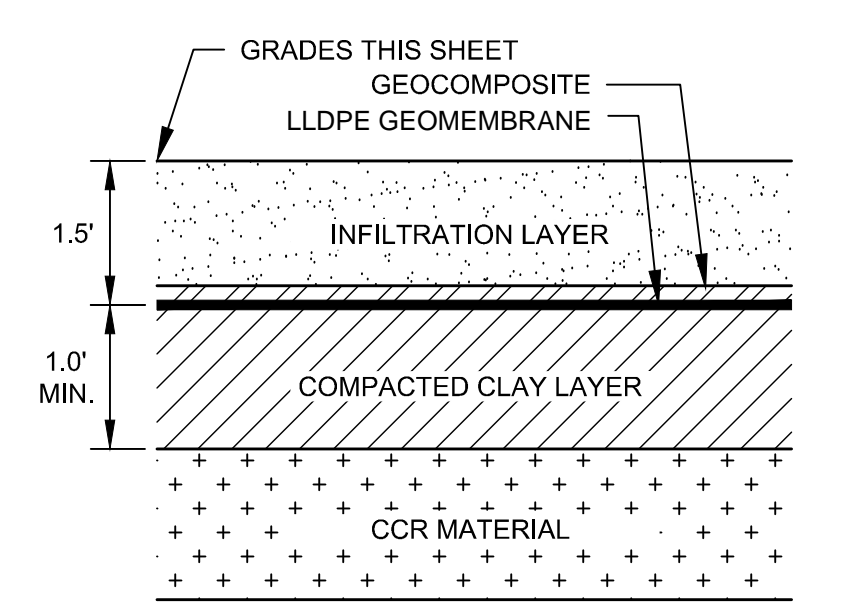
- EXISTING MINOR CONTOUR
- - - 320 --- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 320 — PROPOSED MAJOR CONTOUR

**NOTES:**

1. EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018, TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.
2. THE CONTRACTOR TO INSTALL THE LLDPE GEOMEMBRANE ON TOP OF THE COMPACTED CLAY LAYER IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND CQA PLAN.
3. CONTRACTOR TO INSTALL A 18" THICK INFILTRATION LAYER CONSISTING OF GENERAL FILL SOILS MATERIAL IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND CQA PLAN.

**Cut/Fill Summary**

Name	2d Area	Cut	Fill	Net
Site F Infiltration Quantity	1623072.77 Sq. Ft.	0.00 Cu. Yd.	90170.71 Cu. Yd.	90170.71 Cu. Yd.<Fill>
Active Area Infiltration Quantity	1748085.28 Sq. Ft.	0.00 Cu. Yd.	97111.00 Cu. Yd.	97111.00 Cu. Yd.<Fill>



**HDR**

ISSUED FOR CONSTRUCTION

HDR  
Firm Registration No. F-754

17111 Preston Road, Suite 300  
Dallas, Texas 75248-1229  
972.960.4400

ISSUE	DATE	DESCRIPTION
1	08/20/21	ISSUED FOR BID

PROJECT MANAGER	D. VOGT, P.E.
PROJECT NUMBER	10290148



**Gibbons Creek Environmental Redevelopment Group, LLC**

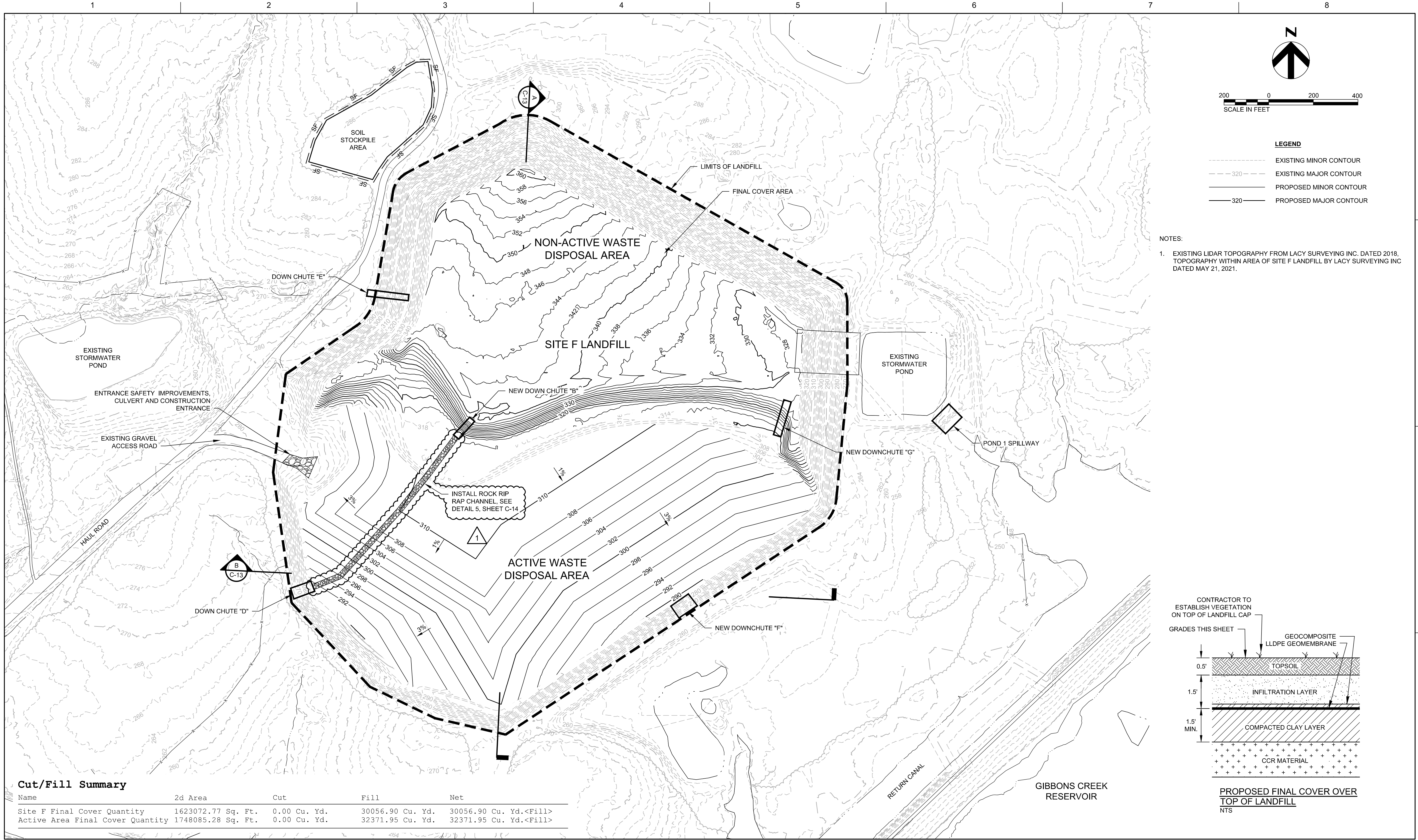
**SITE F LANDFILL CLOSURE**  
Anderson, Texas

**INFILTRATION LAYER PLAN**

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SCALE | 1"=200'

SHEET  
**00C-11**

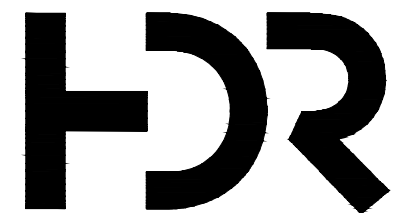




- NOTES:
- EXISTING LIDAR TOPOGRAPHY FROM LACY SURVEYING INC. DATED 2018. TOPOGRAPHY WITHIN AREA OF SITE F LANDFILL BY LACY SURVEYING INC DATED MAY 21, 2021.

**Cut/Fill Summary**

Name	2d Area	Cut	Fill	Net
Site F Final Cover Quantity	1623072.77 Sq. Ft.	0.00 Cu. Yd.	30056.90 Cu. Yd.	30056.90 Cu. Yd.<Fill>
Active Area Final Cover Quantity	1748085.28 Sq. Ft.	0.00 Cu. Yd.	32371.95 Cu. Yd.	32371.95 Cu. Yd.<Fill>



ISSUED FOR CONSTRUCTION  
 HDR  
 Firm Registration No. F-754  
 17111 Preston Road, Suite 300  
 Dallas, Texas 75248-1229  
 972.960.4400

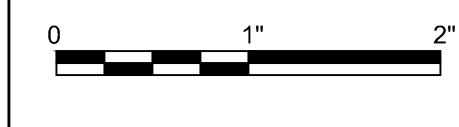
ISSUE	DATE	DESCRIPTION
1	08/20/21	ISSUED FOR BID

PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER	10290148
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**Gibbons Creek Environmental  
 Redevelopment Group, LLC**  
**SITE F LANDFILL CLOSURE**  
 Anderson, Texas

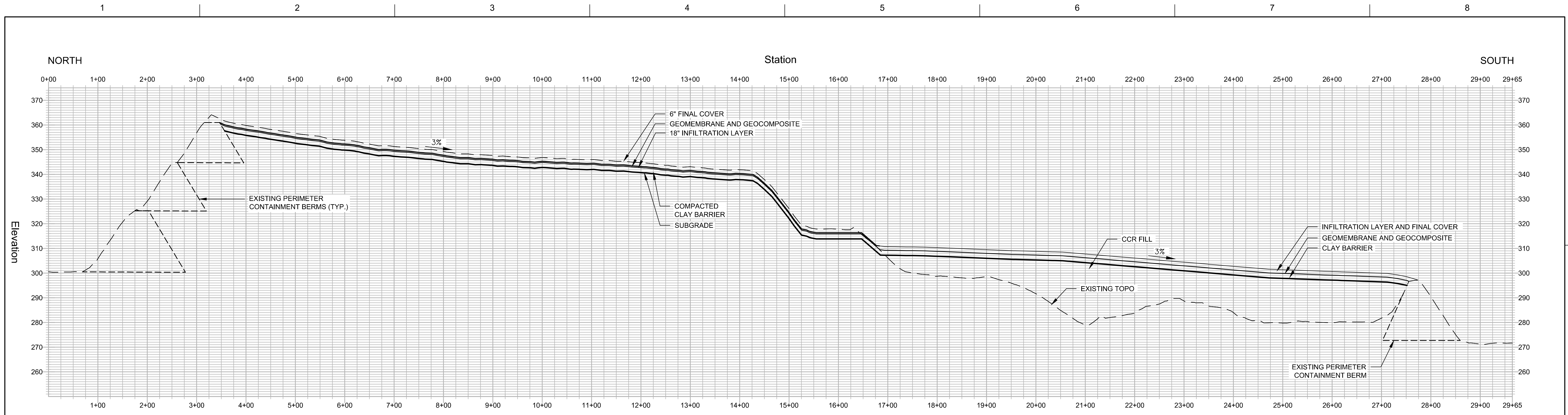


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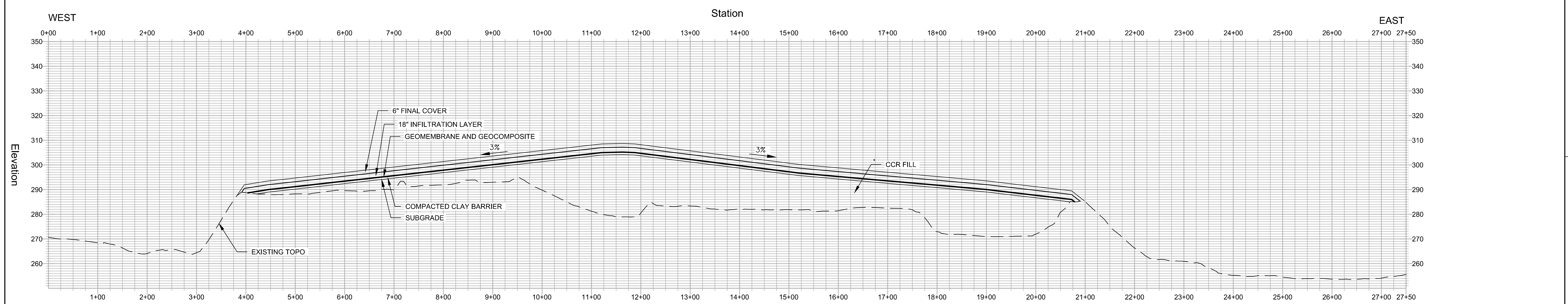
SHEET  
**00C-12**

**FINAL COVER PLAN**





**NORTH TO SOUTH**  
 HORIZ. 1"=100', VERT. 1"=20'



**WEST TO EAST**  
 HORIZ. 1"=100', VERT. 1"=20'



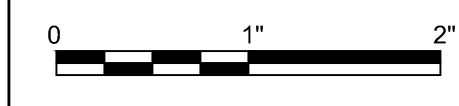
ISSUED FOR CONSTRUCTION  
 HDR  
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 17111 Preston Road, Suite 300  
 Dallas, Texas 75248-1229  
 972.960.4400

ISSUE	DATE	DESCRIPTION
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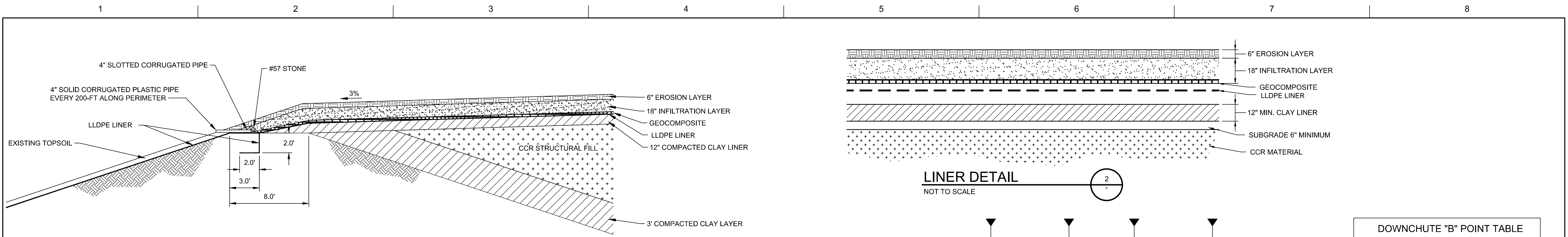
**Gibbons Creek Environmental  
 Redevelopment Group, LLC**  
 SITE F LANDFILL CLOSURE  
 Anderson, Texas



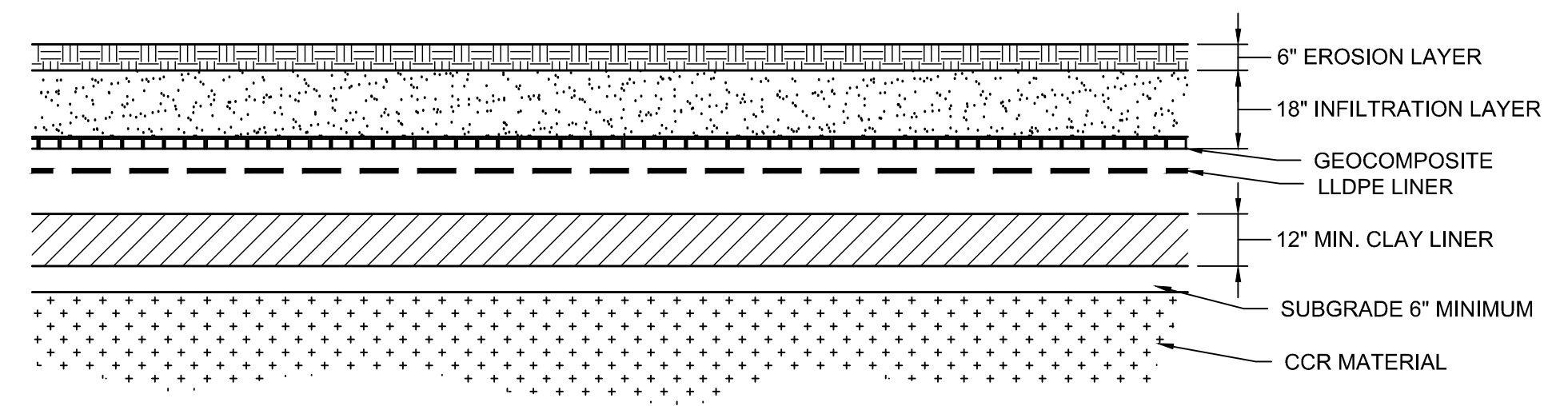
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 SCALE | AS SHOWN

SHEET  
**00C-13**

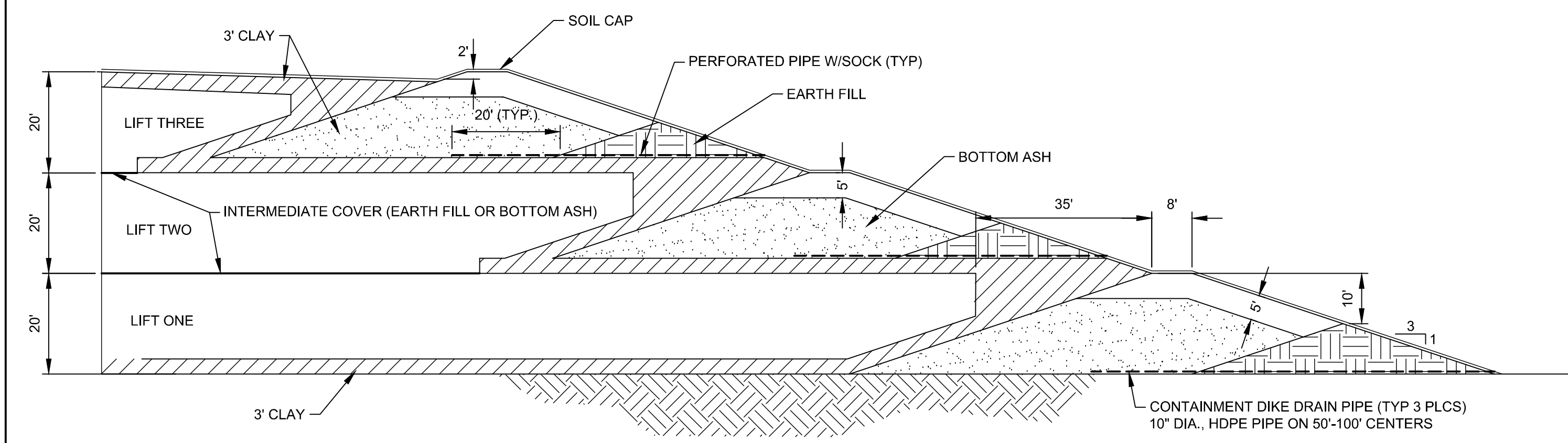




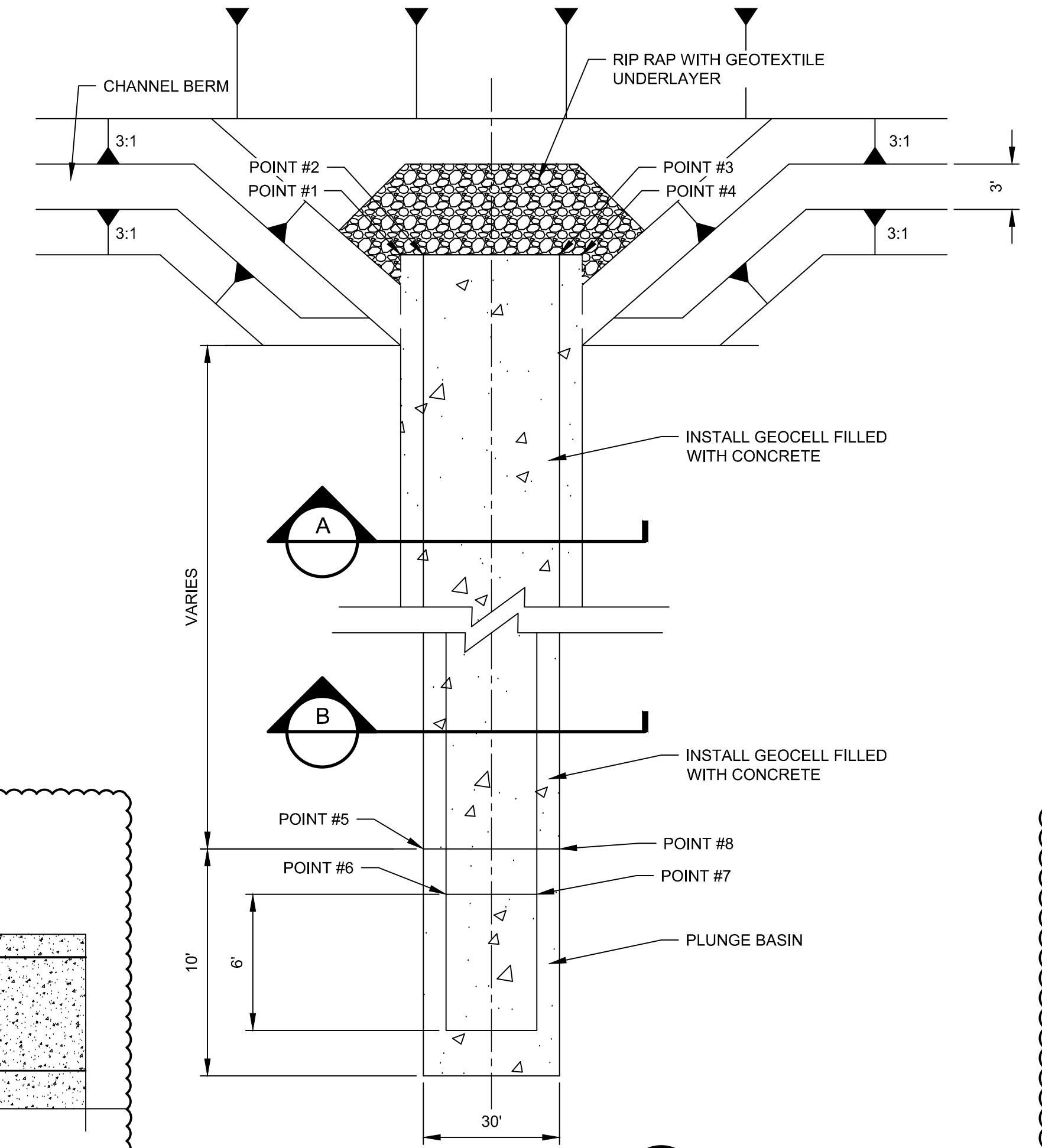
PERIMETER BERM CLOSURE CONSTRUCTION  
1"=5' (1)



LINER DETAIL  
NOT TO SCALE (2)



EXISTING CONTAINMENT DIKE  
NOT TO SCALE (3)



DOWN CHUTE "B" & "G"  
NOT TO SCALE (7)

DOWNCHUTE "B" POINT TABLE

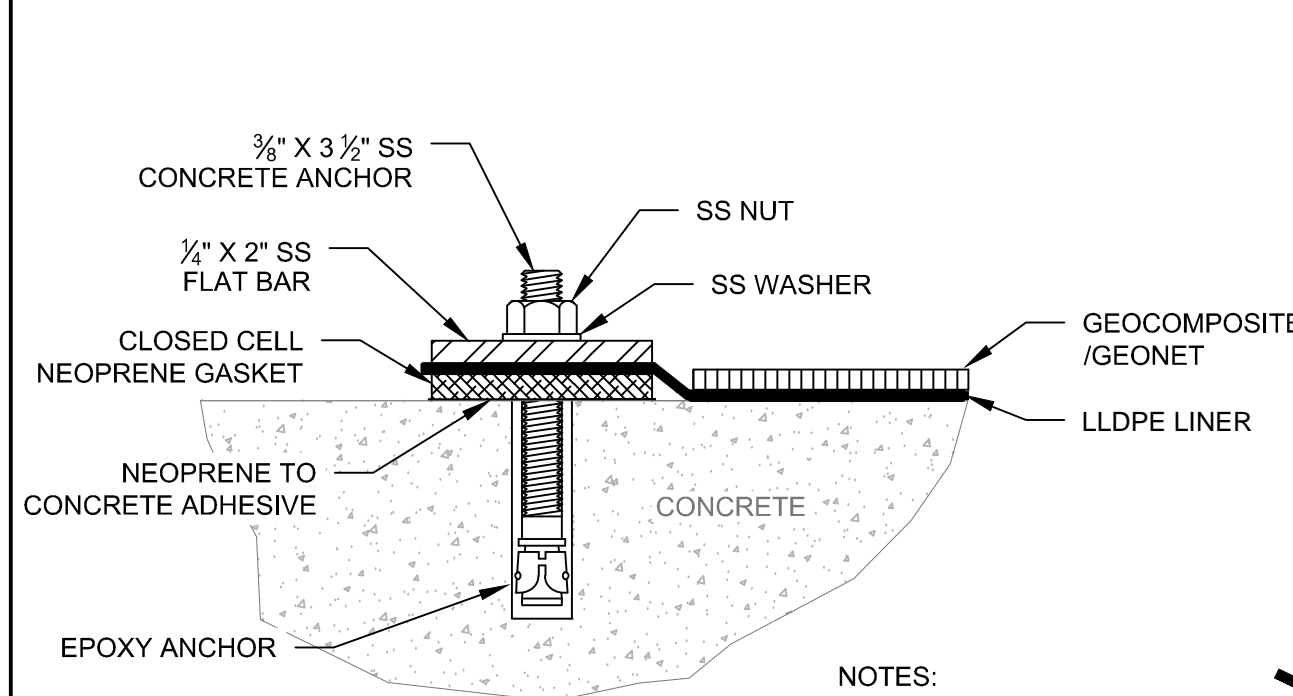
POINT NO.	NORTHING	EASTING	ELEVATION
1	10221576.98	3637607.93	338.11
2	10221573.86	3637610.50	337.93
3	10221556.83	3637630.15	337.00
4	10221554.14	3637633.12	338.01
5	10221497.88	3637536.19	316.76
6	10221489.55	3637539.42	314.70
7	10221477.45	3637552.76	315.01
8	10221475.04	3637561.37	317.10

DOWNCHUTE "G" POINT TABLE

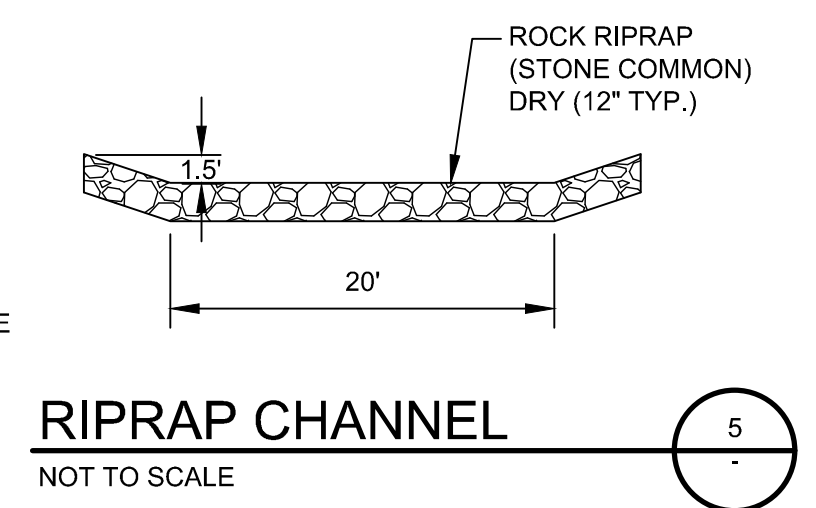
POINT NO.	NORTHING	EASTING	ELEVATION
1	10221653.02	3639017.31	327.97
2	10221651.87	3639021.14	326.88
3	10221644.38	3639046.04	326.74
4	10221643.23	3639049.87	327.74
5	10221496.73	3638970.34	309.18
6	10221490.60	3638976.85	307.12
7	10221485.41	3638994.09	307.65
8	10221486.94	3639002.90	310.00

DOWNCHUTE "F" POINT TABLE

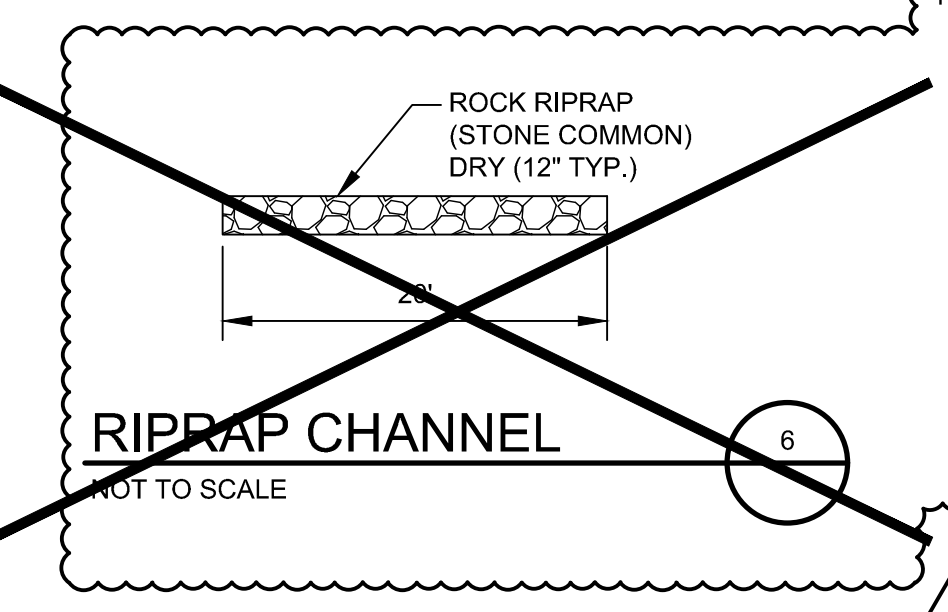
POINT NO.	NORTHING	EASTING	ELEVATION
1	10220728.58	3638510.42	283.39
2	10220730.85	3638513.71	282.41
3	10220780.94	3638586.02	282.95
4	10220783.22	3638589.31	284.00
5	10220675.39	3638547.20	263.14
6	10220675.96	3638551.66	260.87
7	10220726.59	3638627.61	260.38
8	10220730.41	3638629.72	263.04



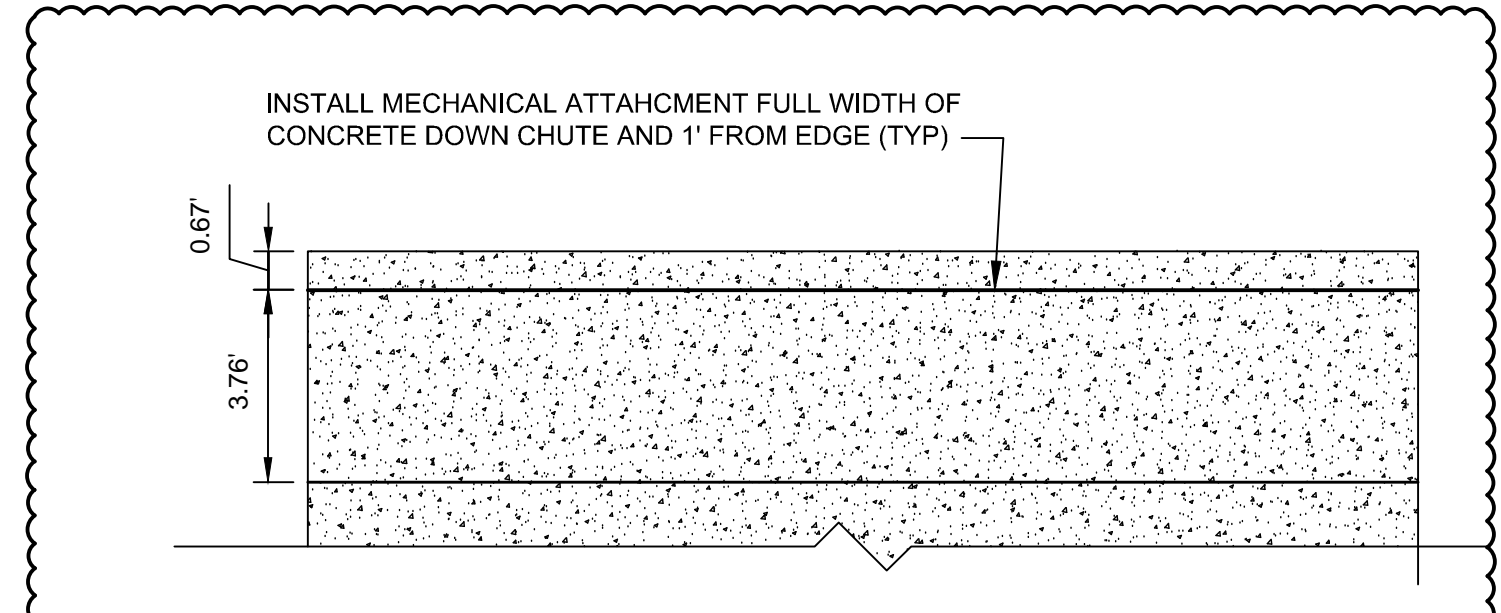
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NOT TO SCALE (4)



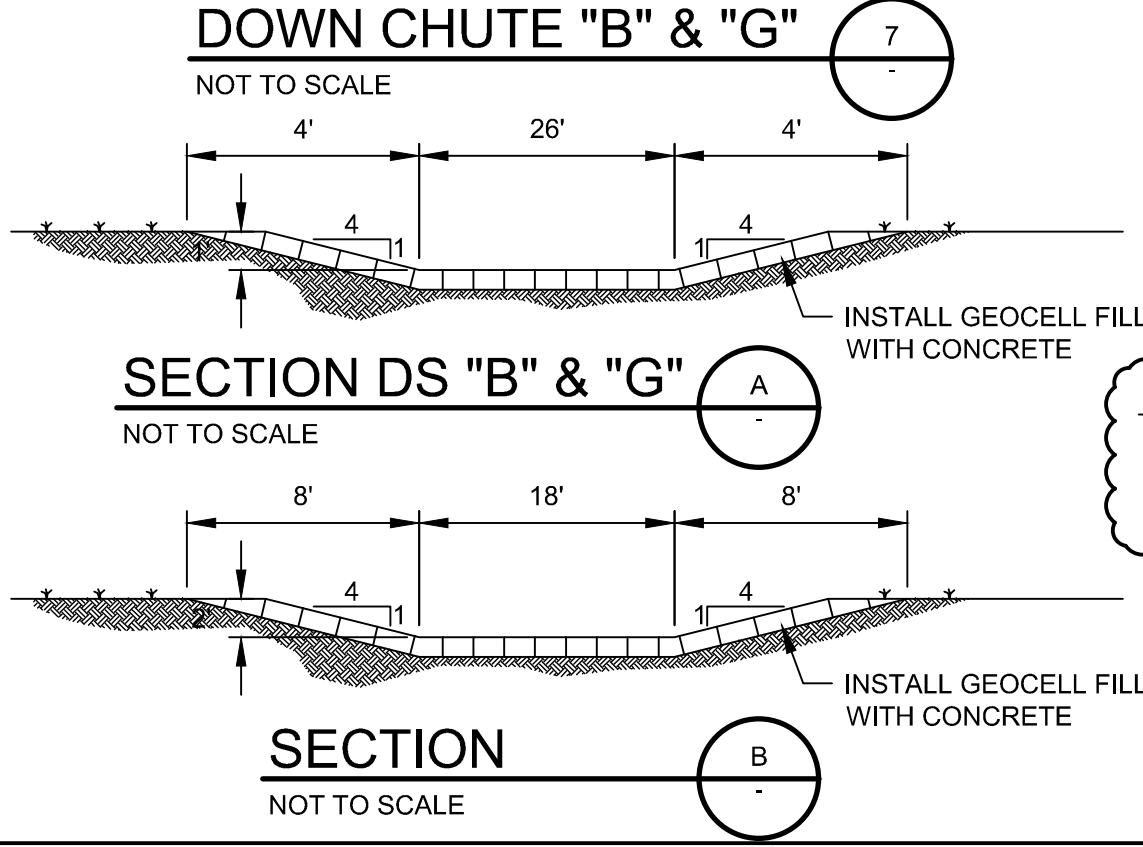
RIPRAP CHANNEL  
NOT TO SCALE (5)



RIPRAP CHANNEL  
NOT TO SCALE (6)



MECHANICAL ATTACHMENT AT DOWN CHUTES (TYP)  
NOT TO SCALE (8)



SECTION DS "B" & "G"  
NOT TO SCALE (A)

SECTION DS "F"  
NOT TO SCALE (A)

SECTION  
NOT TO SCALE (B)

ISSUED FOR CONSTRUCTION

**HDR**  
Firm Registration No. F-754  
17111 Preston Road, Suite 300  
Dallas, Texas 75248-1229  
972.960.4400

PROJECT MANAGER: D. VOGT, P.E.

PROJECT NUMBER: 10290148

DAVID C. VOGT  
93905  
LICENSED PROFESSIONAL ENGINEER  
8-20-21

**GCERG**  
Gibbons Creek Environmental Redevelopment Group, LLC  
SITE F LANDFILL CLOSURE  
Anderson, Texas

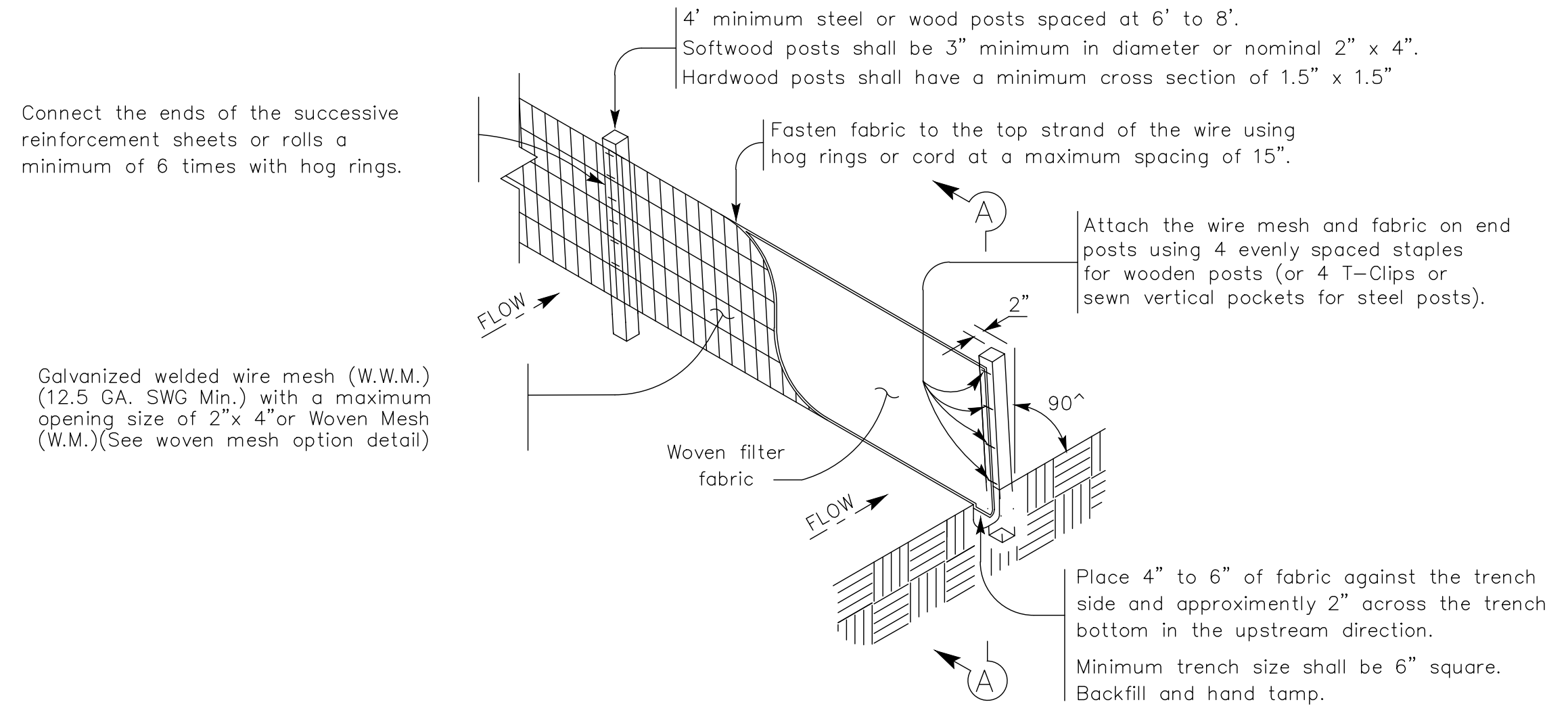
MISCELLANEOUS DETAILS

FILENAME: 00C-14.dwg  
SCALE: AS SHOWN

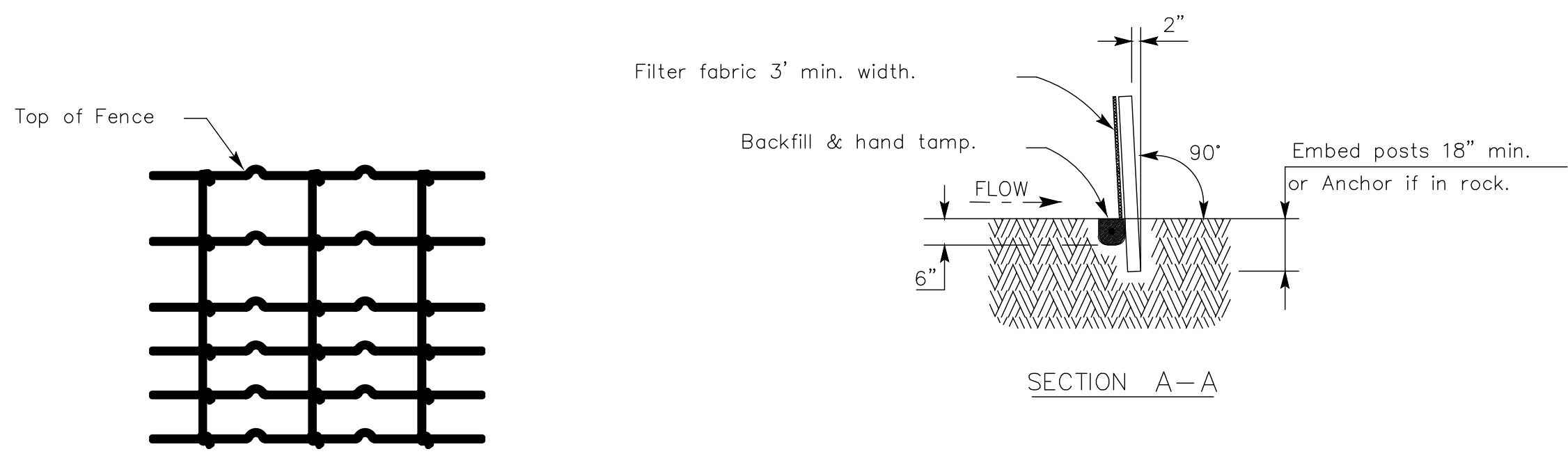
SHEET: 00C-14

ISSUE: 1  
DATE: 08/20/21  
DESCRIPTION: ISSUED FOR BID





TEMPORARY SEDIMENT CONTROL FENCE



HINGE JOINT KNOT WOVEN MESH (OPTION) DETAIL

Galvanized hinge joint knot woven mesh (12.5 GA. SWG Min.) requires a minimum of five horizontal wires spaced at a maximum of 12 inches apart and all vertical wires spaced at a maximum of 12 inches apart.

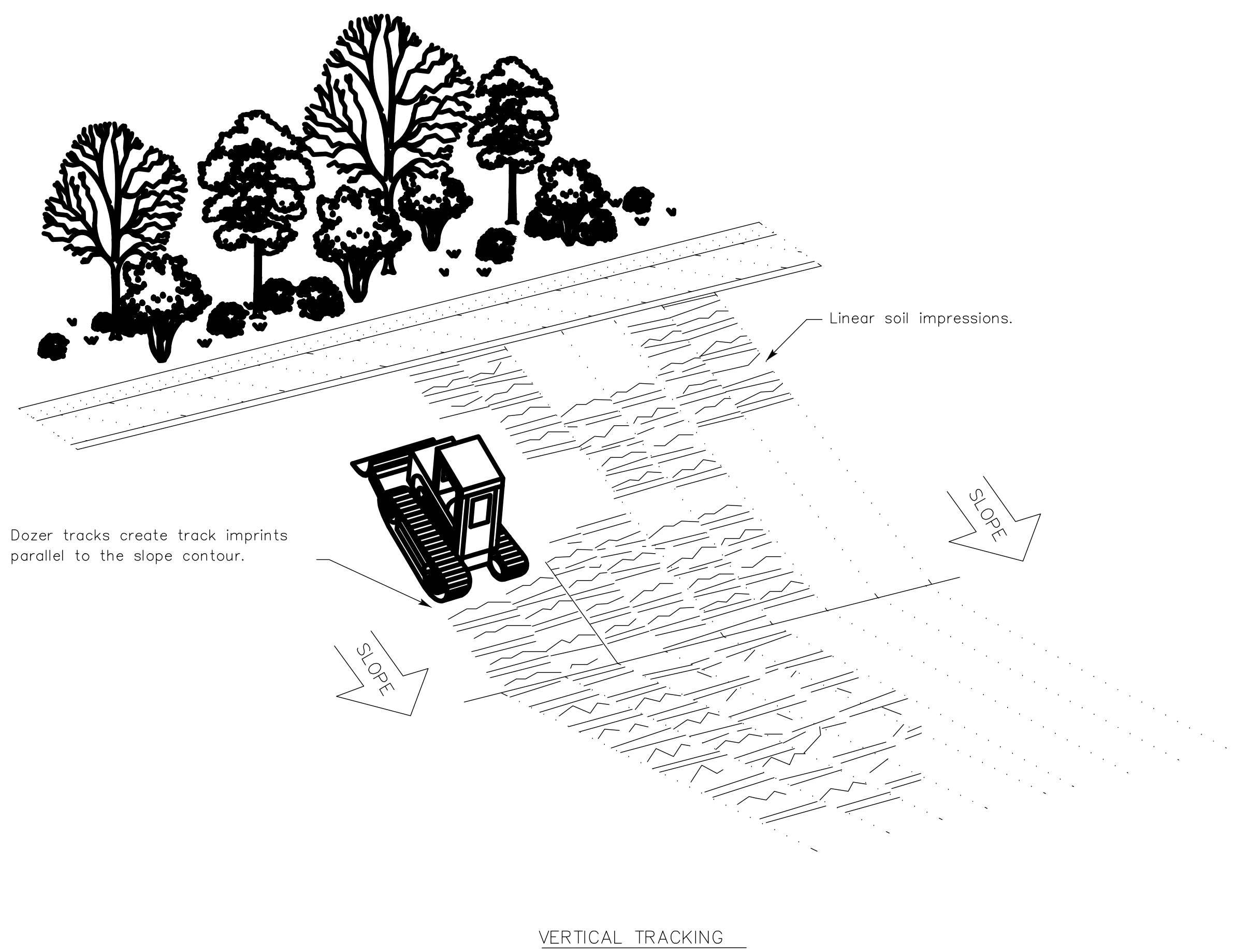
SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a maximum flow through rate of 100 GPM/FT. <sup>2</sup>Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

GENERAL NOTES

1. Vertical tracking is required on projects where soil distributing activities have occurred unless otherwise approved.
2. Perform vertical tracking on slopes to temporarily stabilize soil.
3. Provide equipment with a track undercarriage capable of producing linear soil impressions measuring a minimum of 12" in length by 2" to 4" in width by 1/2" to 2" in depth.
4. Do not exceed 12" between track impressions.
5. Install continuous linear track impressions where the minimum 12" length impressions are perpendicular to the slope or direction of water flow.



ISSUED FOR CONSTRUCTION

HDR  
Firm Registration No. F-754

17111 Preston Road, Suite 300  
Dallas, Texas 75248-1229  
972.960.4400

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1	08/20/21	ISSUED FOR BID

PROJECT MANAGER	D. VOGT, P.E.
PROJECT NUMBER	10290148



Gibbons Creek Environmental  
Redevelopment Group, LLC

SITE F LANDFILL CLOSURE  
Anderson, Texas

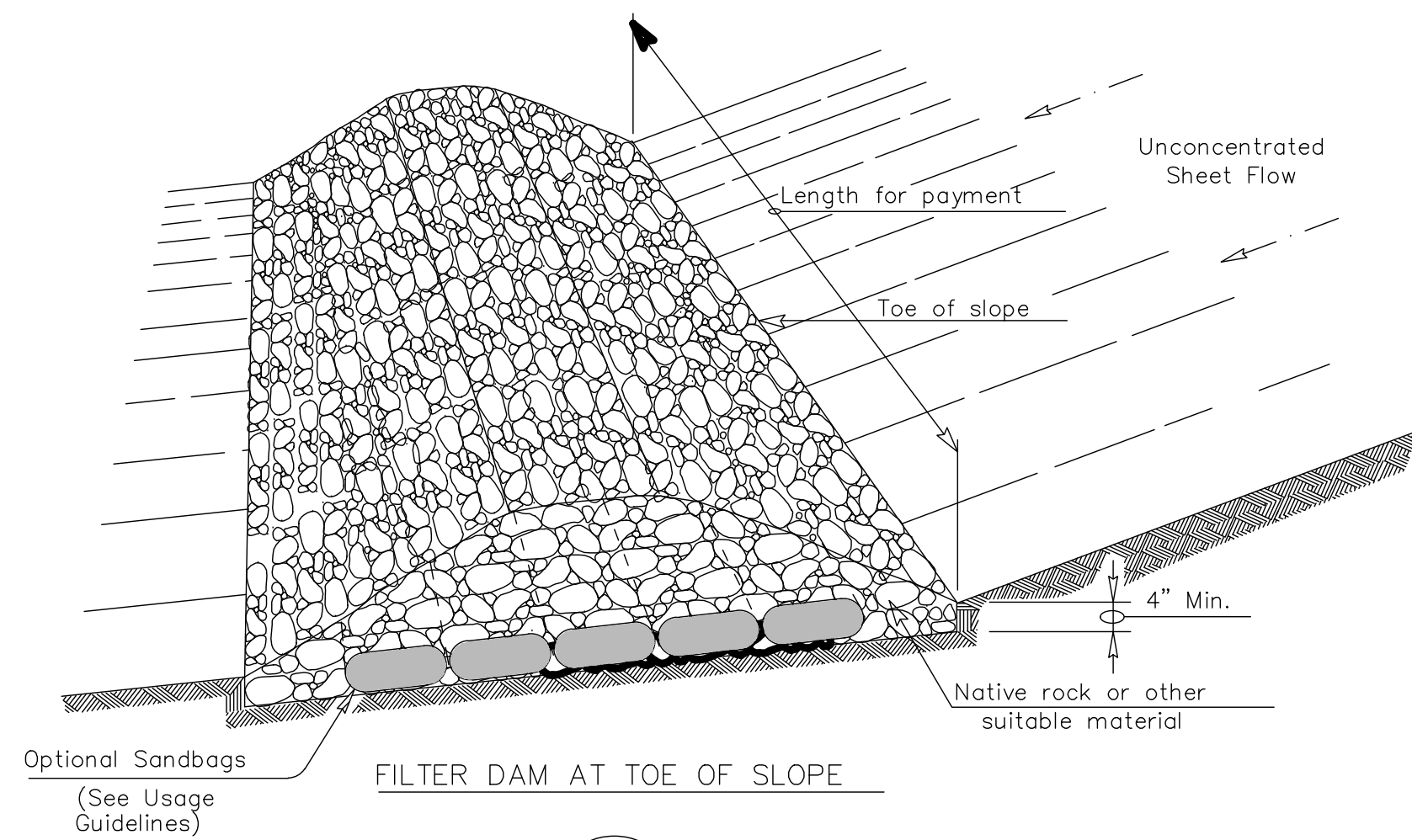
EROSION CONTROL DETAILS  
SILT FENCE

0 1" 2"

FILENAME | 00C-15.dwg  
SCALE | AS SHOWN

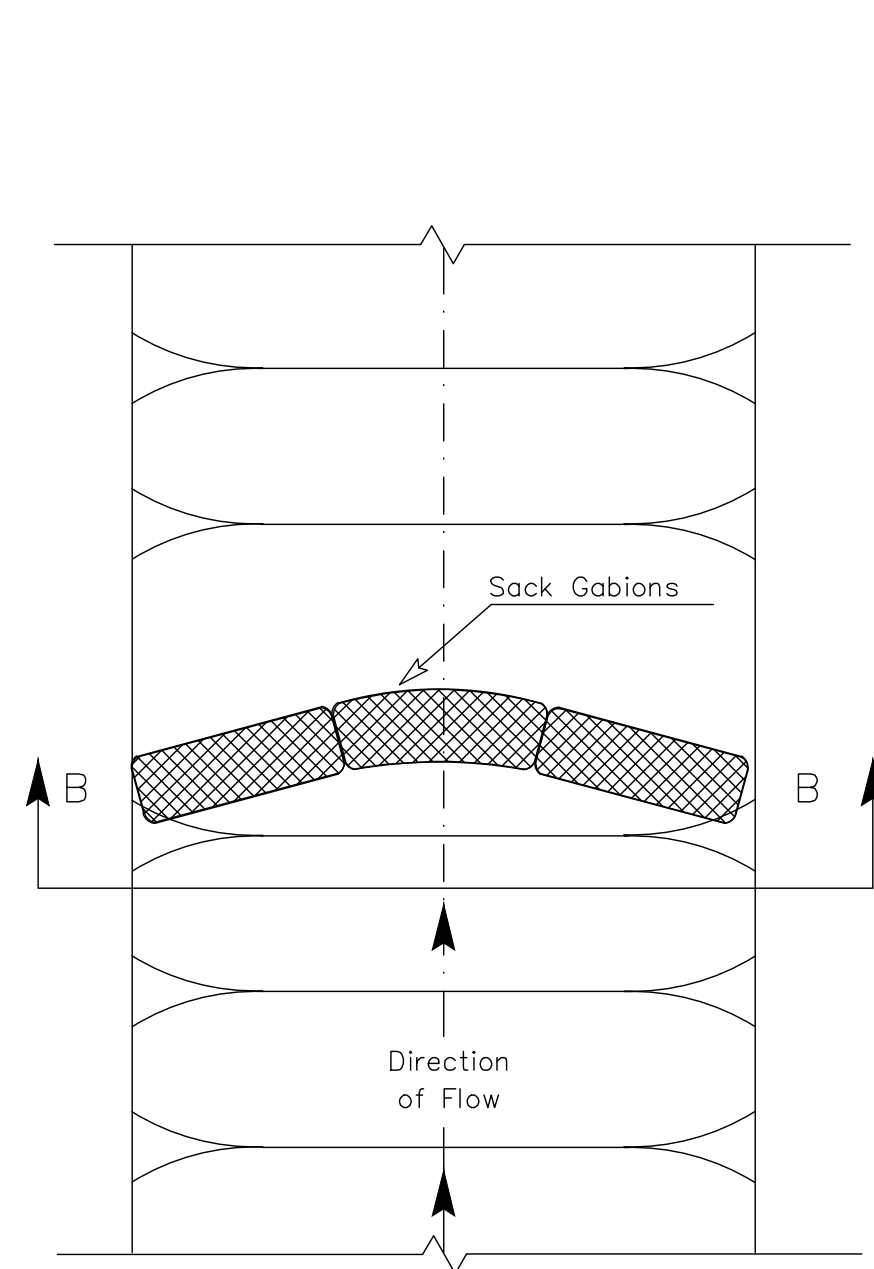
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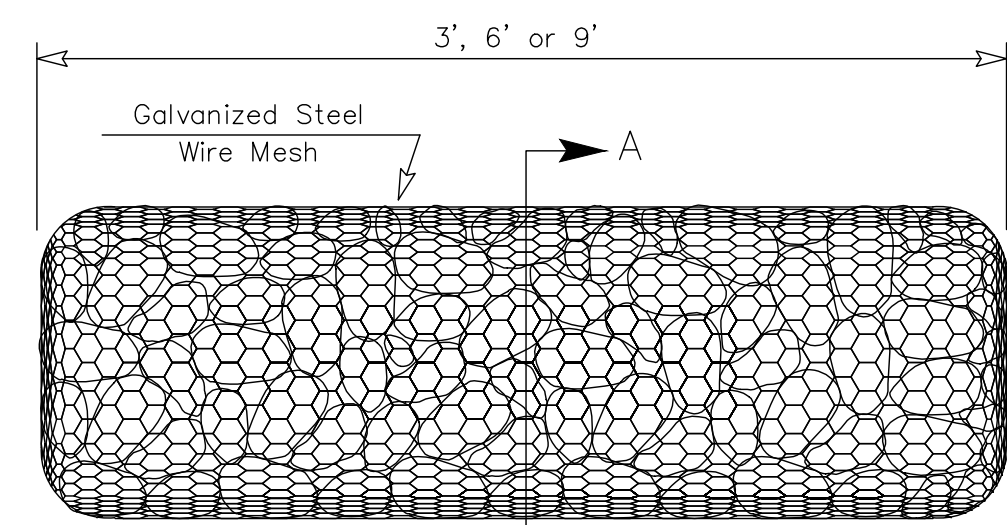


FILTER DAM AT TOE OF SLOPE

(RFD1)

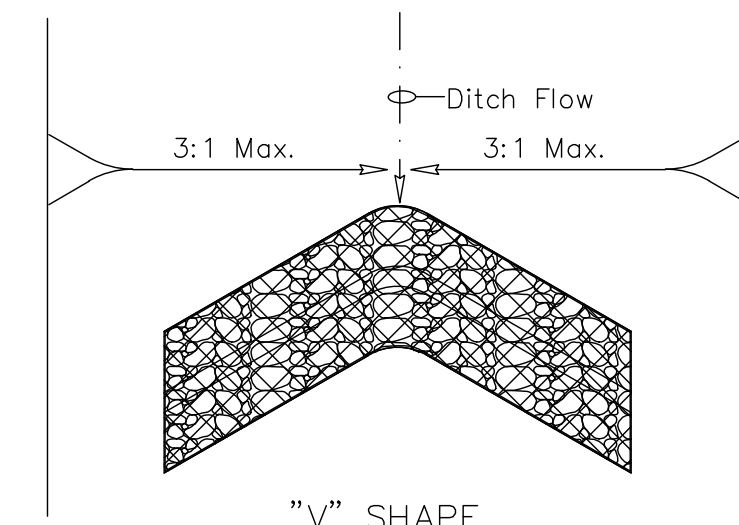


PLAN VIEW

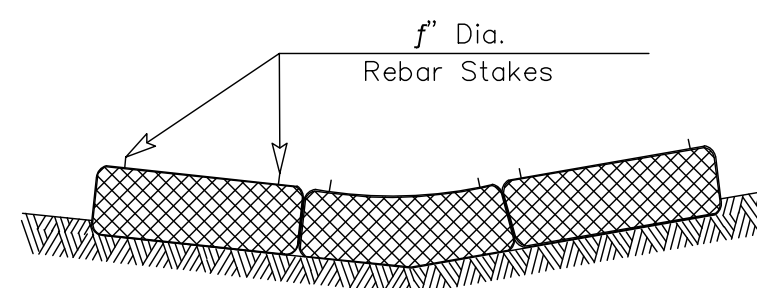


TYPE 4 (SACK GABIONS)

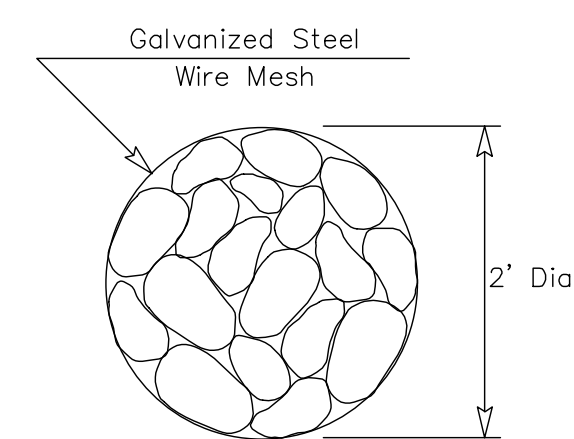
(RFD4)



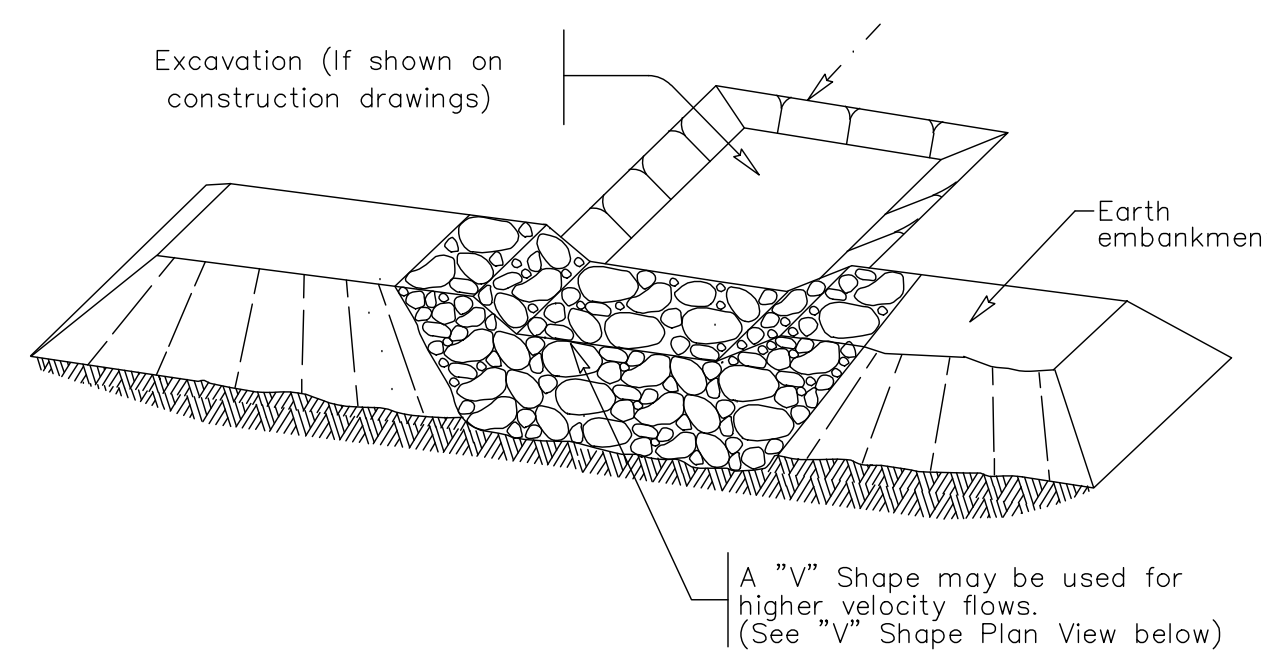
"V" SHAPE PLAN VIEW



SECTION B-B

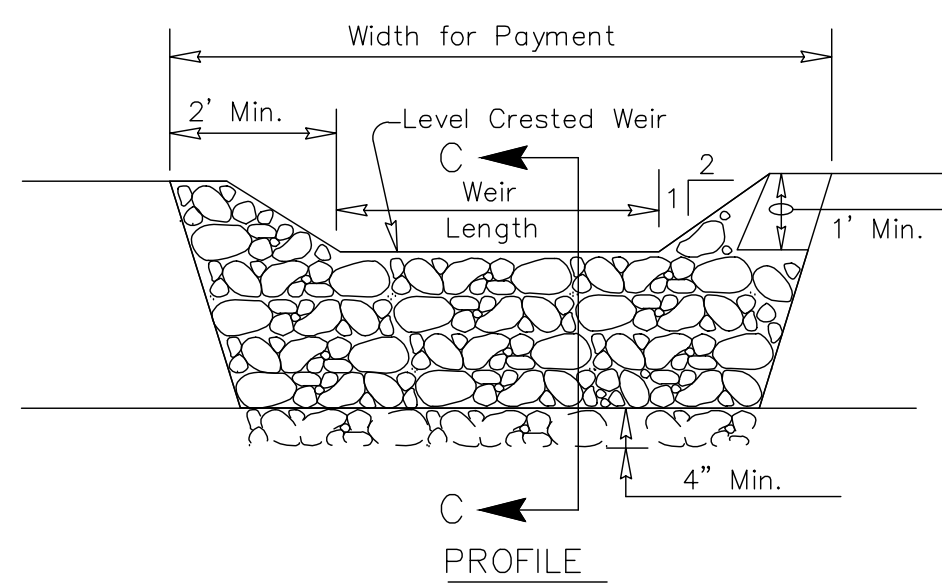


SECTION A-A

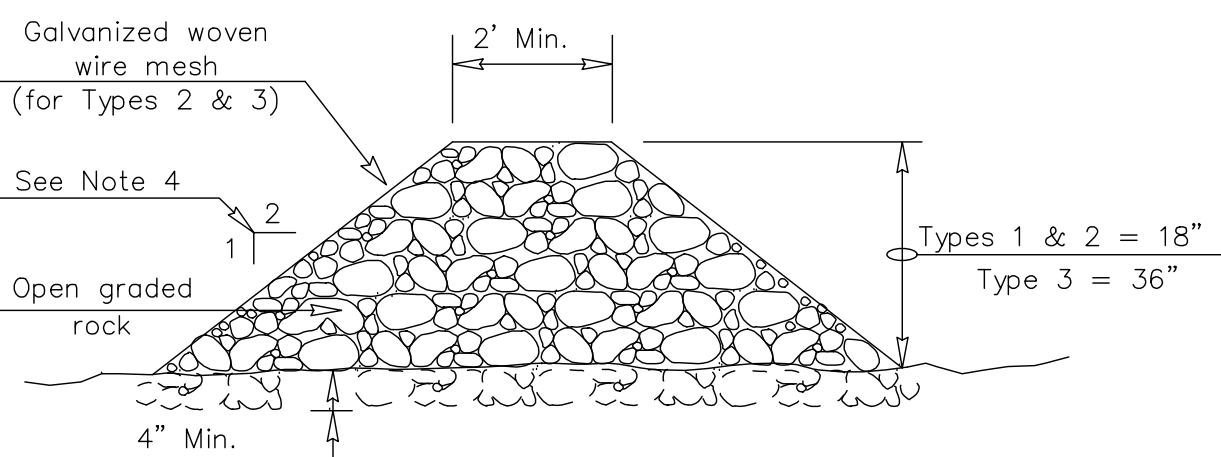


FILTER DAM AT SEDIMENT TRAP

(RFD1) OR (RFD2)



PROFILE



SECTION C-C

**ROCK FILTER DAM USAGE GUIDELINES**

Rock Filter Dams should be constructed downstream from disturbed areas to intercept sediment from overland runoff and/or concentrated flow. The dams should be sized to filter a maximum flow through rate of 60 GPM/SQR FOOT of cross sectional area. A 2 year storm frequency may be used to calculate flow rate.

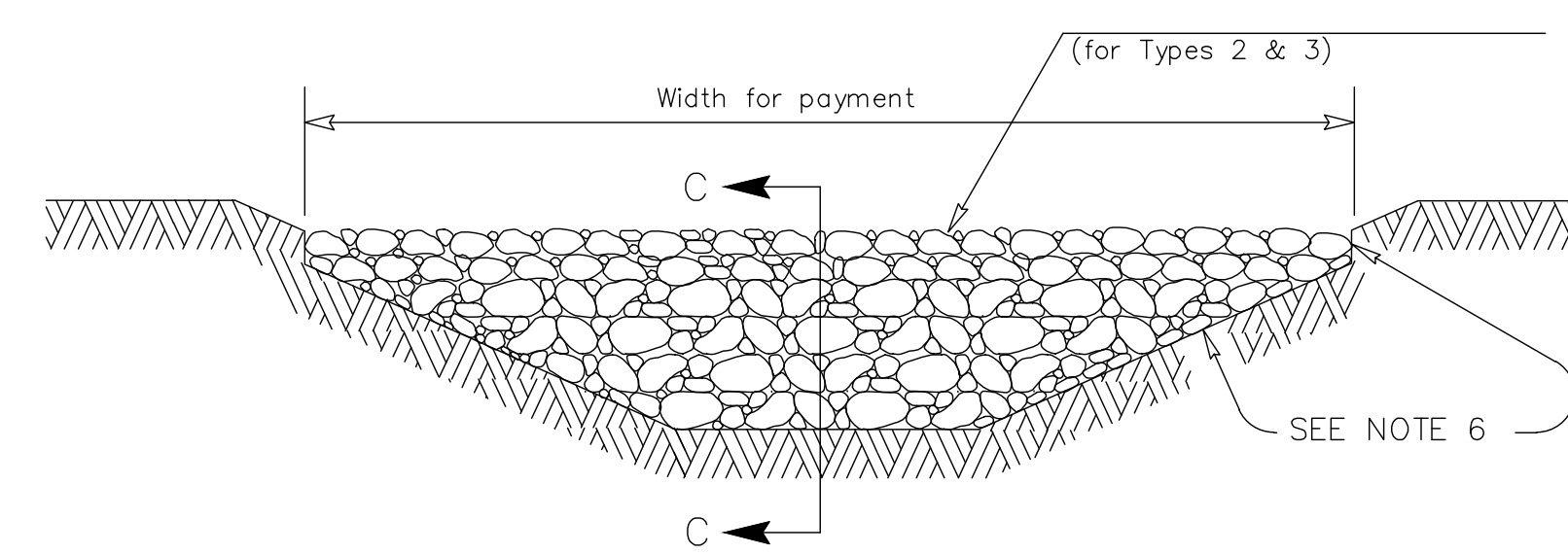
**Type 1 (18" high with no wire mesh)(3" to 6" aggregate):**  
Type 1 may be used at the toe of slopes, around inlets, in small ditches, and at dike or swale outlets. This type of dam is recommended to control erosion from a drainage area of 5 acres or less. Type 1 may not be used in concentrated high velocity flows (approximately 8 Ft/Sec or more) in which aggregate wash out may occur. Sandbags may be used at the embedded foundation (4" deep min.) for better filtering efficiency of low flows if called for on the plans or directed by the Engineer.

**Type 2 (18" high with wire mesh)(3" to 6" aggregate):**  
Type 2 may be used in ditches and at dike or swale outlets.

**Type 3 (36" high with wire mesh)(4" to 8" aggregate):**  
Type 3 may be used in stream flow and should be secured to the stream bed.

**Type 4 (Sack gabions)(3" to 6" aggregate):**  
Type 4 may be used in ditches and smaller channels to form an erosion control dam.

**Type 5:** Provide rock filter dams as shown on plans.



FILTER DAM AT CHANNEL SECTIONS

(RFD1) OR (RFD2) OR (RFD3)

**GENERAL NOTES**

1. If shown on the plans or directed by the Engineer, filter dams should be placed near the toe of slopes where erosion is anticipated, upstream and/or downstream at drainage structures, and in roadway ditches and channels to collect sediment.
2. Materials (aggregate, wire mesh, sandbags, etc.) shall be as indicated by the specification for "Rock Filter Dams for Erosion and Sedimentation Control".
3. The rock filter dam dimensions shall be as indicated on the SW3P plans.
4. Side slopes should be 2:1 or flatter. Dams within the safety zone shall have sideslopes of 6:1 or flatter.
5. Maintain a minimum of 1' between top of rock filter dam weir and top of embankment for filter dams at sediment traps.
6. Filter dams should be embedded a minimum of 4" into existing ground.
7. The sediment trap for ponding of sediment laden runoff shall be of the dimensions shown on the plans.
8. Rock filter dam types 2 & 3 shall be secured with 20 gauge galvanized woven wire mesh with 1" diameter hexagonal openings. The aggregate shall be placed on the mesh to the height & slopes specified. The mesh shall be folded at the upstream side over the aggregate and tightly secured to itself on the downstream side using wire ties or hog rings. For in stream use, the mesh should be secured or staked to the stream bed prior to aggregate placement.
9. Sack Gabions should be staked down with f" dia. rebar stakes, and have a double-twisted hexagonal weave with a nominal mesh opening of 2" x 3."
10. Flow outlet should be onto a stabilized area (vegetation, rock, etc.).
11. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

**PLAN SHEET LEGEND**

- Type 1 Rock Filter Dam (RFD1)
- Type 1 Rock Filter Dam (RFD2)
- Type 1 Rock Filter Dam (RFD3)
- Type 1 Rock Filter Dam (RFD4)



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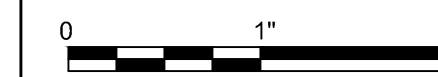
PROJECT NUMBER	10290148
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Gibbons Creek Environmental  
Redevelopment Group, LLC

SITE F LANDFILL CLOSURE  
Anderson, Texas

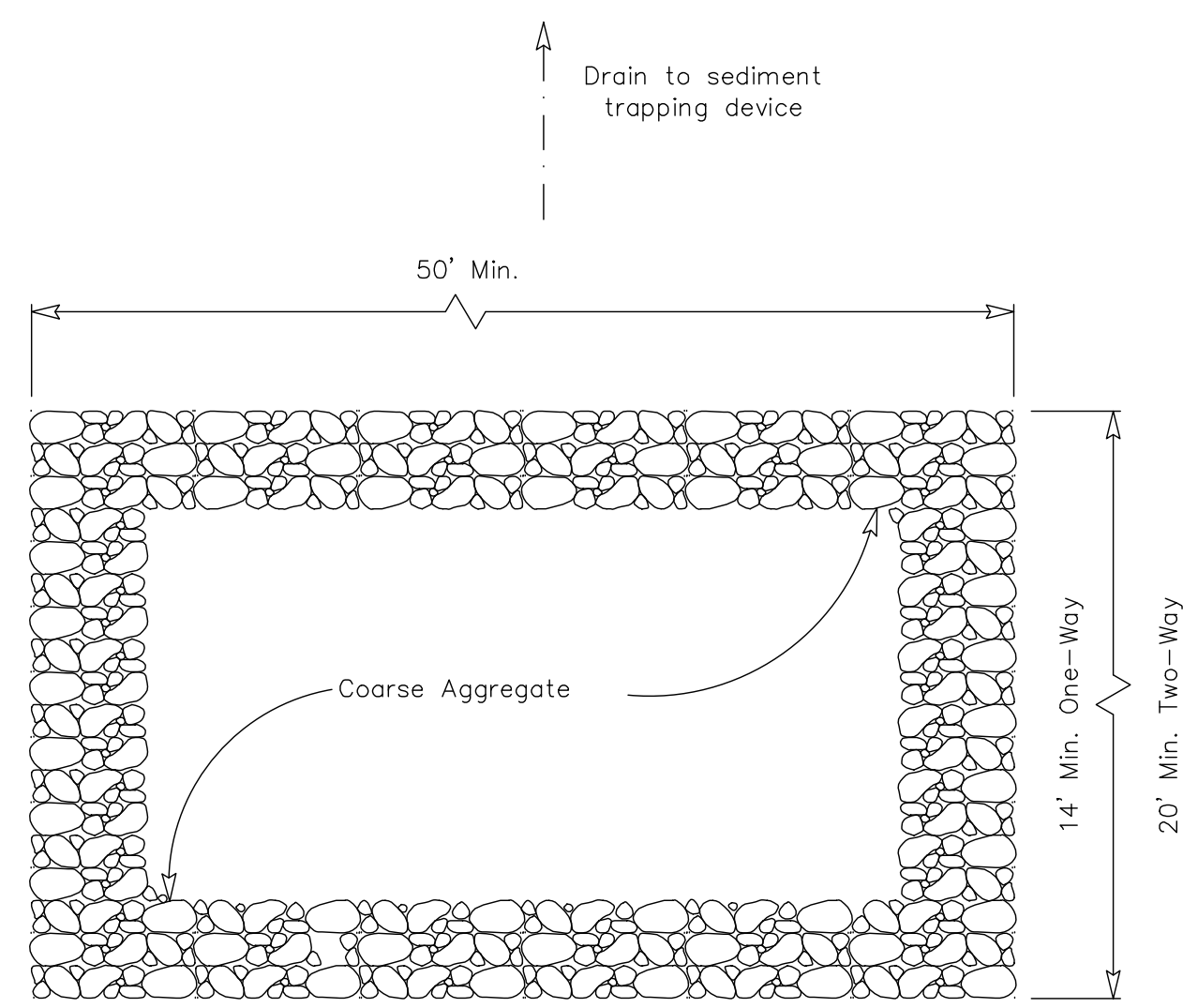
**EROSION CONTROL DETAILS  
ROCK FILTER DAM**



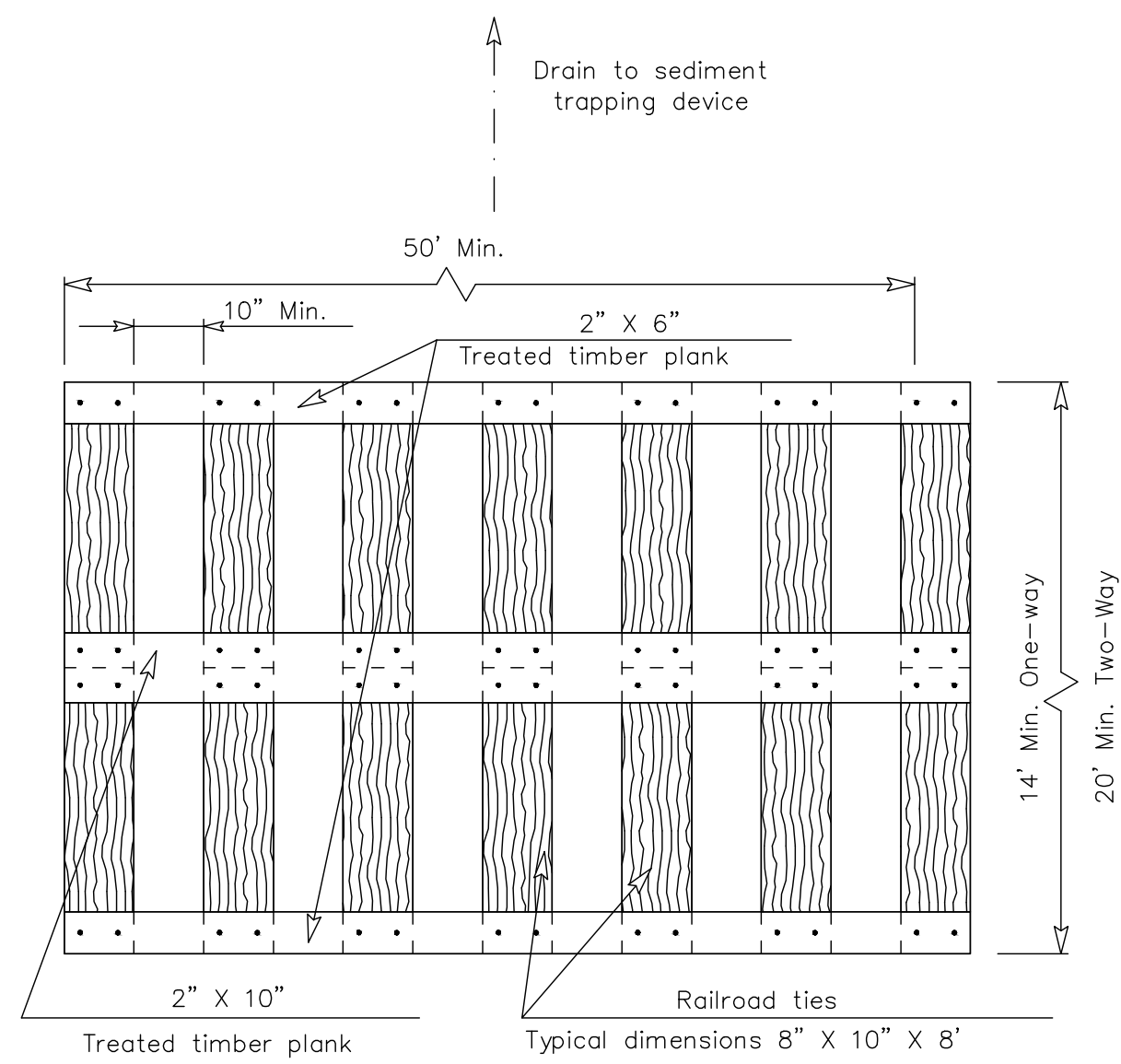
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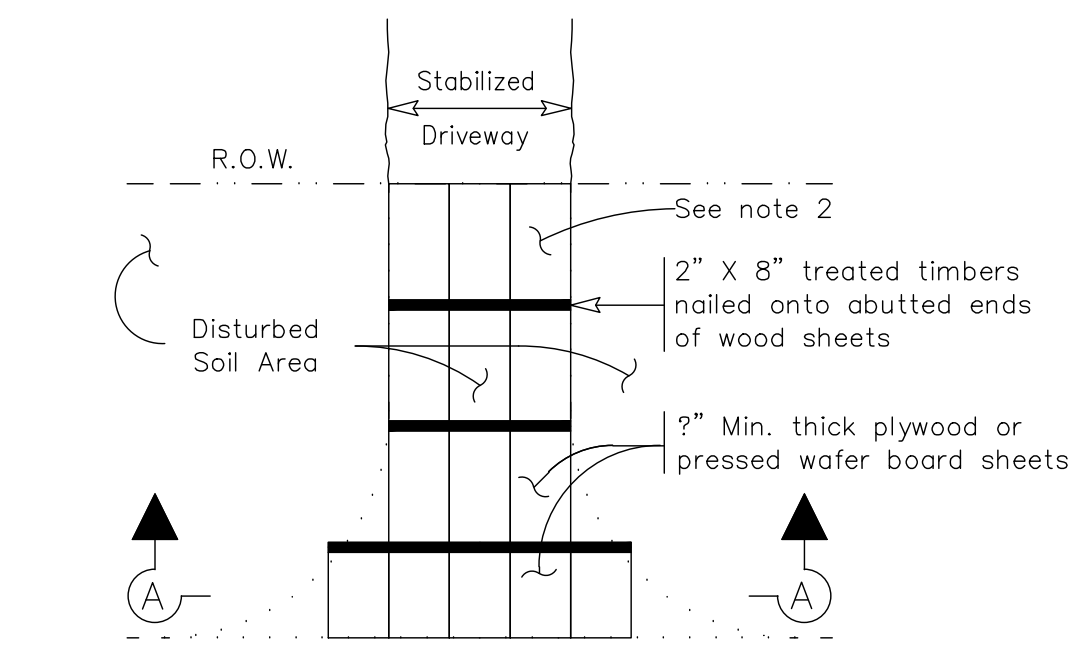




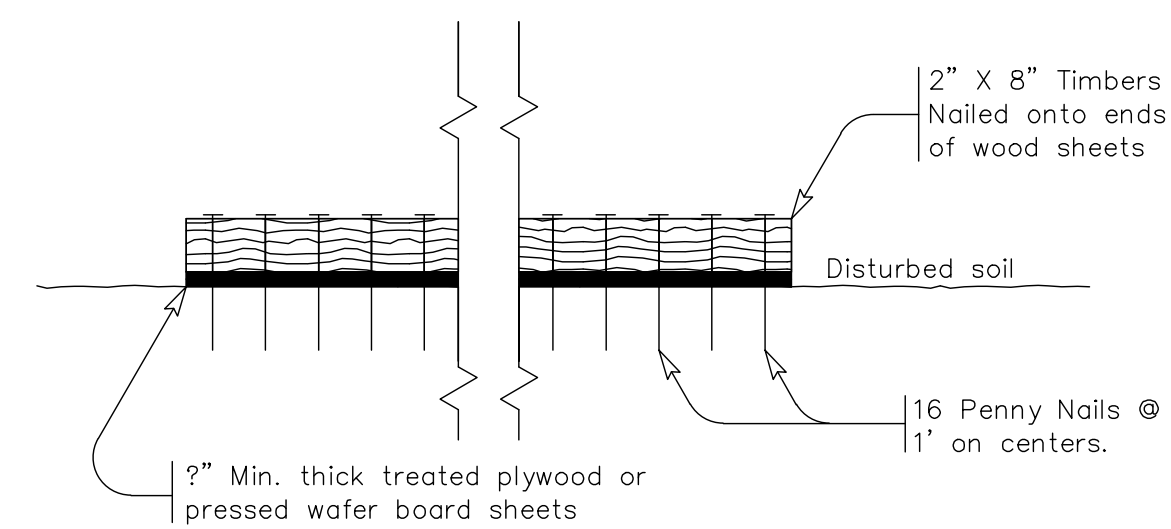
PLAN VIEW



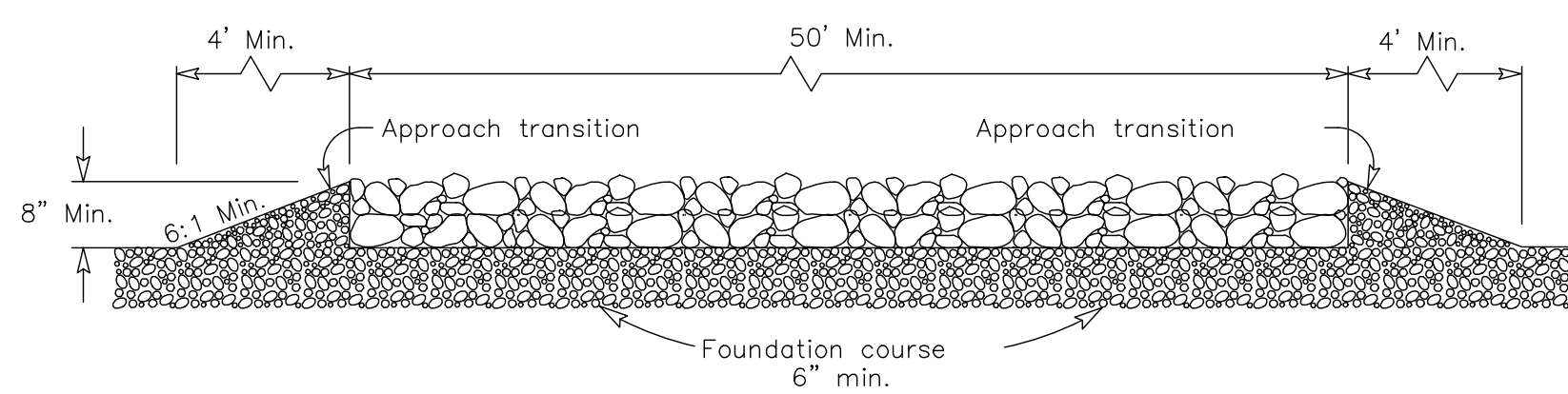
PLAN VIEW



Paved Roadway  
PLAN VIEW

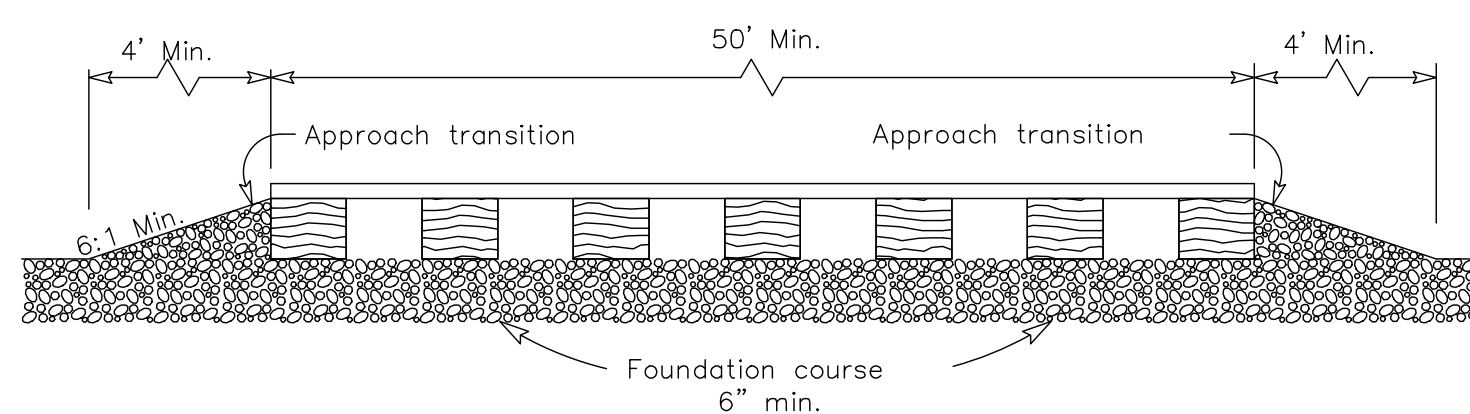


SECTION A-A  
CONSTRUCTION EXIT (TYPE 3)  
SHORT TERM



ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 1)  
ROCK CONSTRUCTION (LONG TERM)



ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 2)  
TIMBER CONSTRUCTION (LONG TERM)

GENERAL NOTES (TYPE 3)

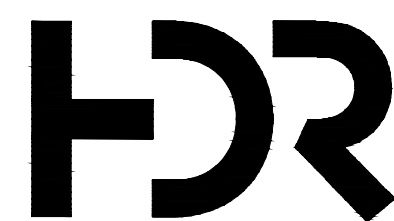
1. The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
2. The type 3 construction exit may be constructed from open graded crushed stone with a size of two to four inches spread a min. of 4" thick to the limits shown on the plans.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

GENERAL NOTES (TYPE 1)

1. The length of the type 1 construction exit shall be as indicated on the plans, but not less than 50'.
2. The coarse aggregate should be open graded with a size of 4" to 8".
3. The approach transitions should be no steeper than 6:1 and constructed as directed by the Engineer.
4. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other materials approved by the Engineer.
5. The construction exit shall be graded to allow drainage to a sediment trapping device.
6. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
7. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.

GENERAL NOTES (TYPE 2)

1. The length of the type 2 construction exit shall be as indicated on the plans, but not less than 50'.
2. The treated timber planks shall be attached to the railroad ties with 2" x 6" min. lag bolts. Other fasteners may be used as approved by the engineer.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The approach transitions shall be no steeper than 6:1 and constructed as directed by the engineer.
5. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
6. The construction exit should be graded to allow drainage to a sediment trapping device.
7. The guidelines shown hereon are suggestion only and may be modified by the Engineer.
8. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.



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PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER	10290148



Gibbons Creek Environmental  
Redevelopment Group, LLC  
SITE F LANDFILL CLOSURE  
Anderson, Texas

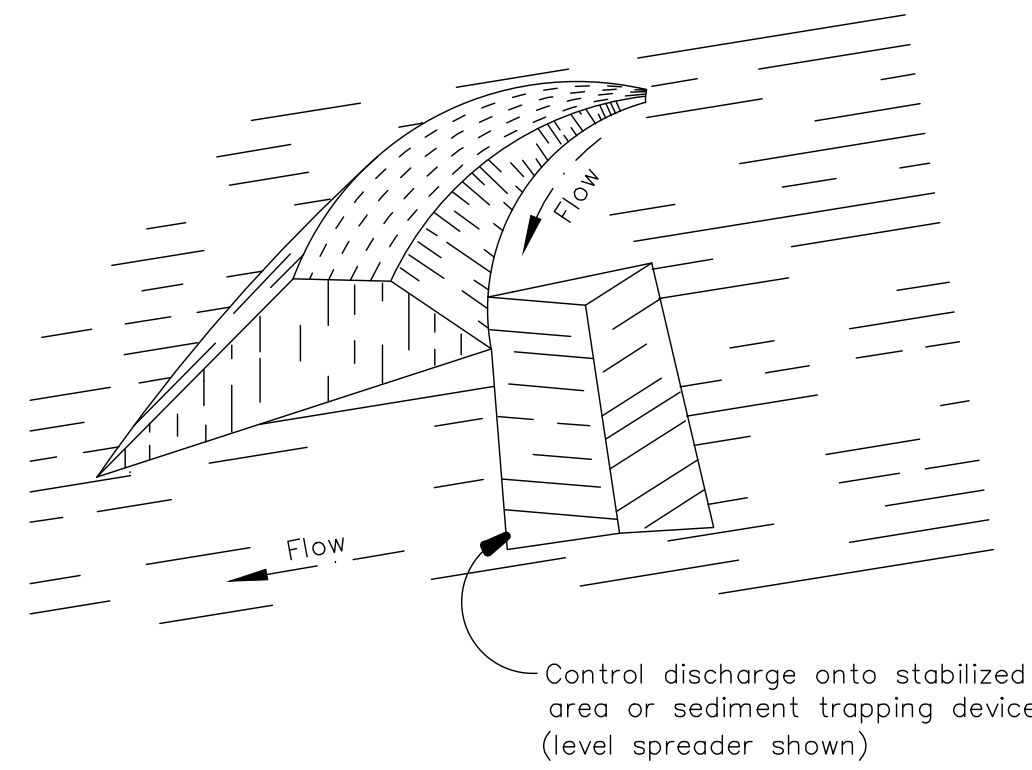
EROSION CONTROL DETAILS  
CONSTRUCTION EXITS



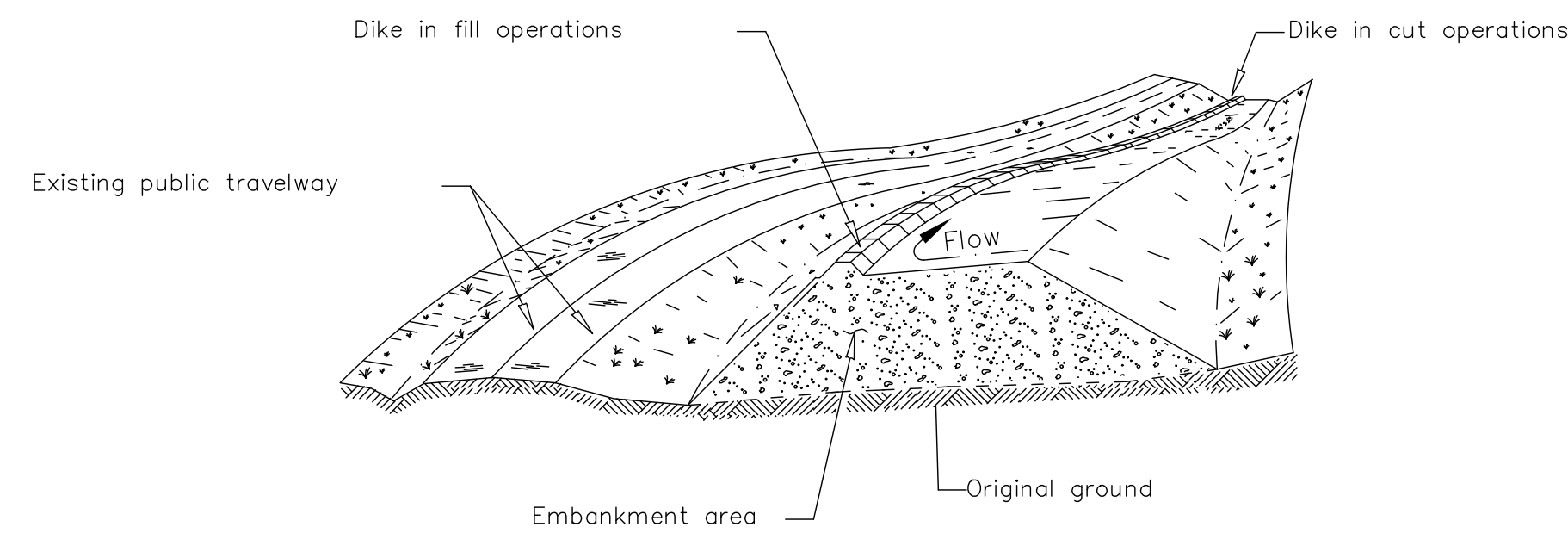
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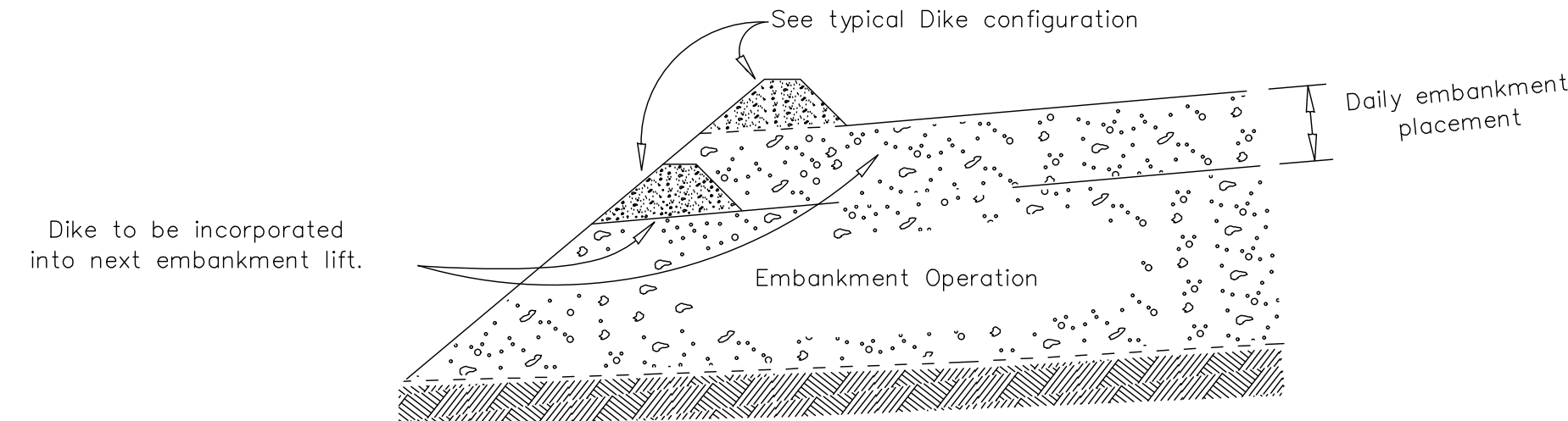




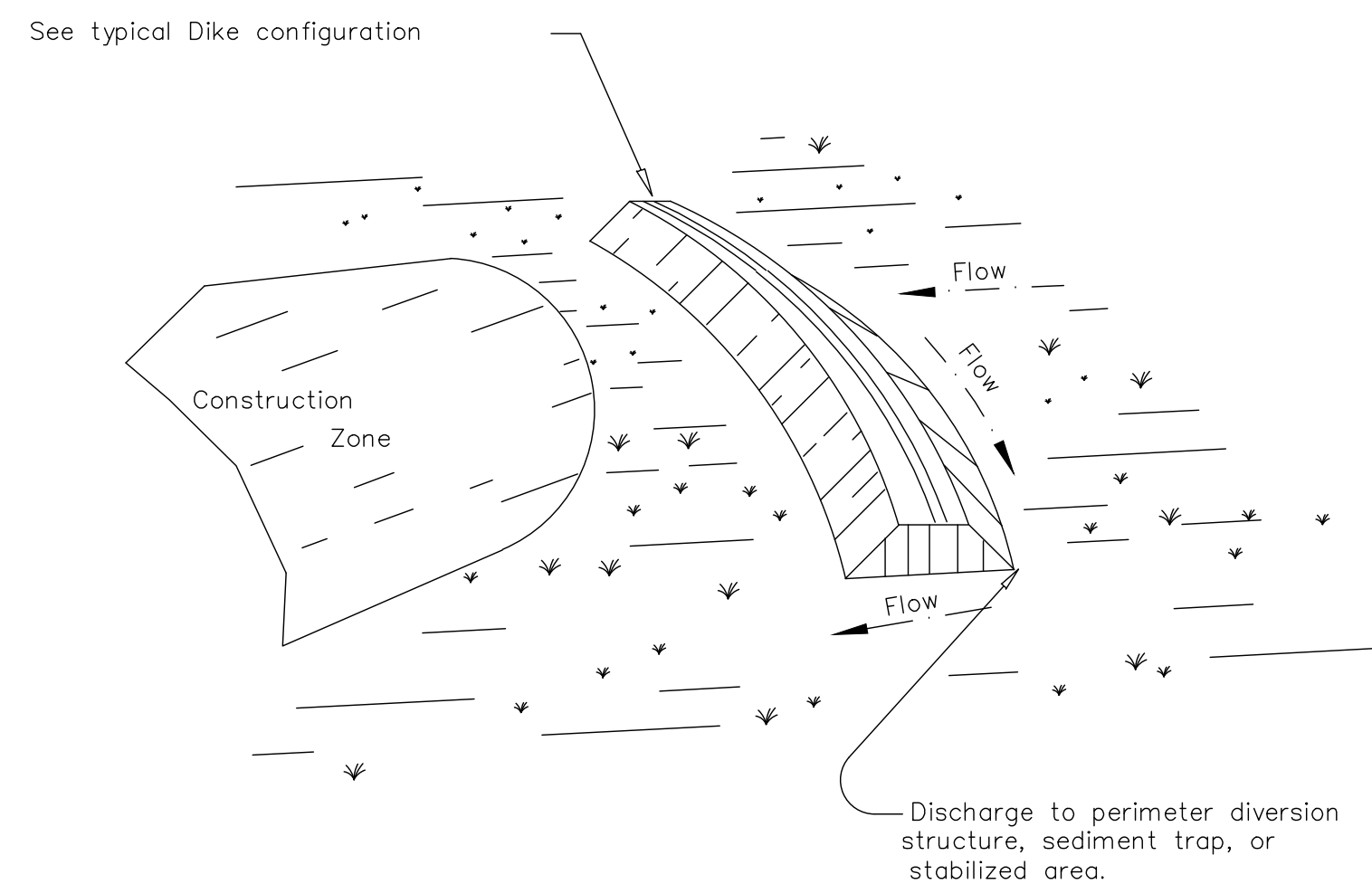
PERIMETER DIKE



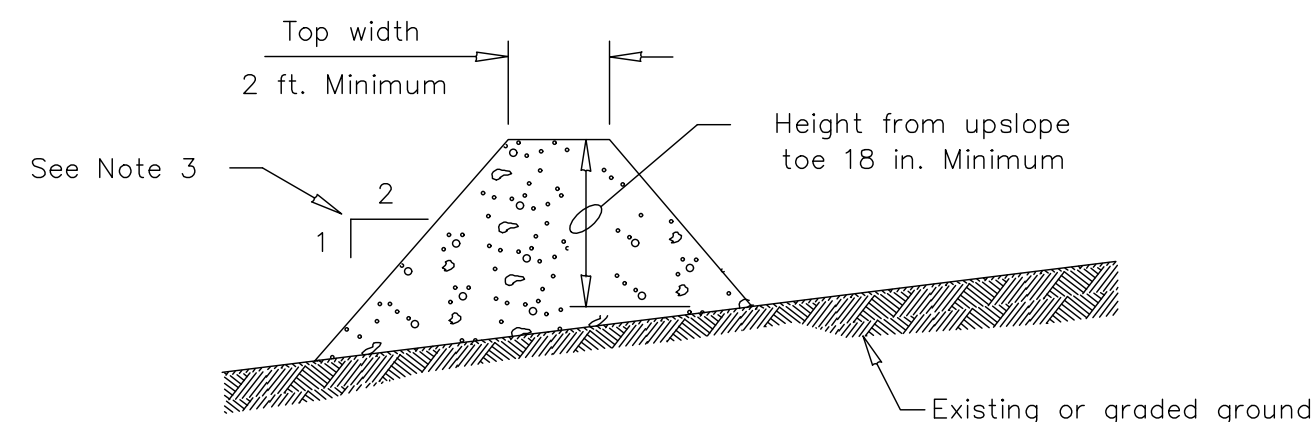
DIVERSION DIKE



EMBANKMENT SECTION - DIVERSION DIKE



INTERCEPTOR DIKE



TYPICAL DIKE CONFIGURATION



GENERAL NOTE

1. Soil used in dike construction shall be machine compacted.
2. Top width and height of dike may be modified with prior approval of the Engineer.
3. Side slopes within the safety clear zone of a roadway shall be 6:1 or flatter.
4. Grading shall be shown elsewhere in the plans or as directed by the Engineer.
5. The Engineer reserves the right to modify the dimensions shown for the dike dependent on runoff volume characteristics.
6. Dikes that are in place for more than 14 calendar days should be stabilized to prevent sediment runoff.
7. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
8. Remove sediment and debris when accumulation affects the performance of the devices, after a rain and when directed by the engineer.

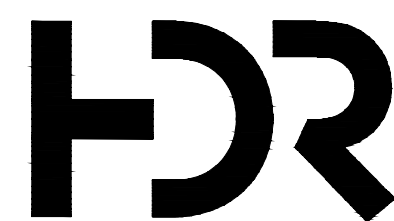
DIKE USAGE GUIDELINES

A Dike may be used to intercept runoff and divert it around unstabilized areas or to divert sediment laden runoff to an erosion control device (sediment basin or trap, rock filter dam, etc.).

The drainage area contributing runoff to a dike should not exceed 5 acres. The spacing of dikes should be as follows:

Slope of disturbed areas above dike	greater than 10%	5 - 10%	less than 5%
	Maximum distance between dikes	100'	200'

Intercepted runoff flowing along a dike should outlet to a stabilized area (vegetation, rock, etc.).



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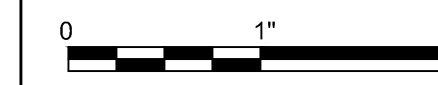
PROJECT MANAGER D. VOGT, P.E.

PROJECT NUMBER	10290148
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Gibbons Creek Environmental Redevelopment Group, LLC  
SITE F LANDFILL CLOSURE  
Anderson, Texas

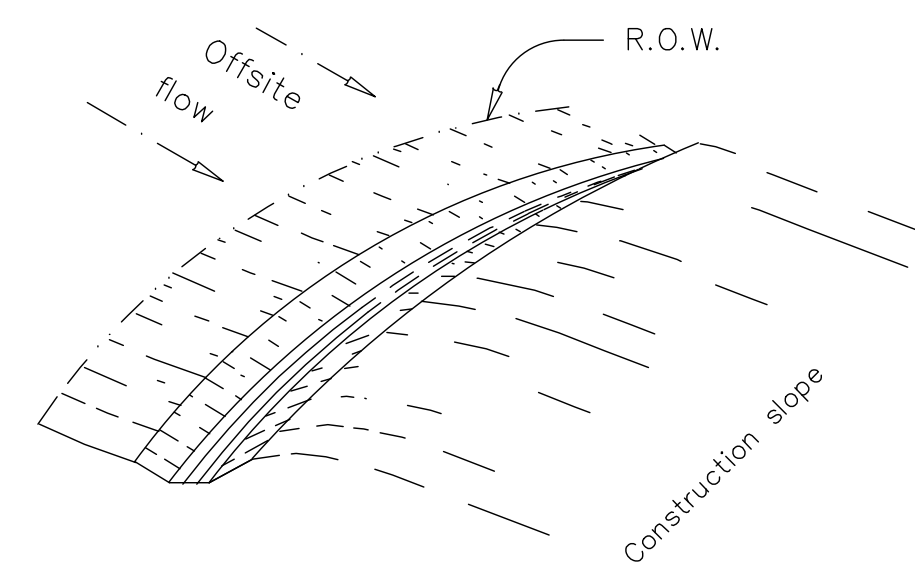
EROSION CONTROL DETAILS  
DIKES



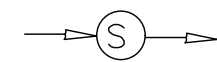
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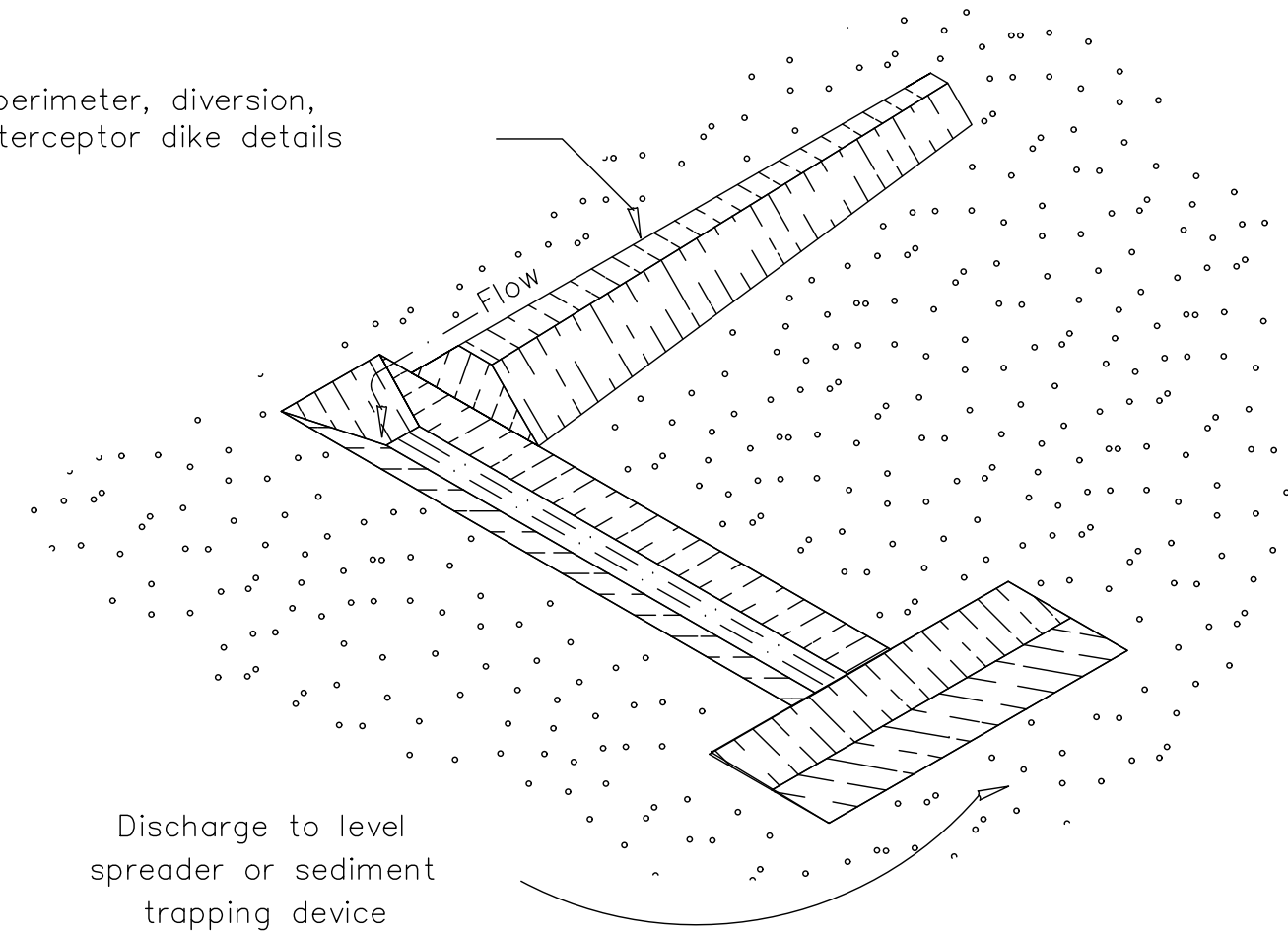




PERIMETER SWALE



See perimeter, diversion, or interceptor dike details



DIVERSION SWALE



GENERAL NOTE

1. Dimensions of swale may be modified with prior approval of the Engineer.
2. Side slopes within the safety clear zone of a roadway shall be 6:1 or flatter.
3. Grading shall be shown elsewhere on the plans or as directed by the Engineer.
4. The Engineer reserves the right to modify the dimensions shown for the swale dependent on runoff volume characteristics.
5. Swales that are in place for more than 14 calendar days should be stabilized through seeding or other measures to control sediment runoff.
6. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
7. Remove sediment and debris when accumulation affects the performance of the devices, after a rain and when directed by the Engineer.

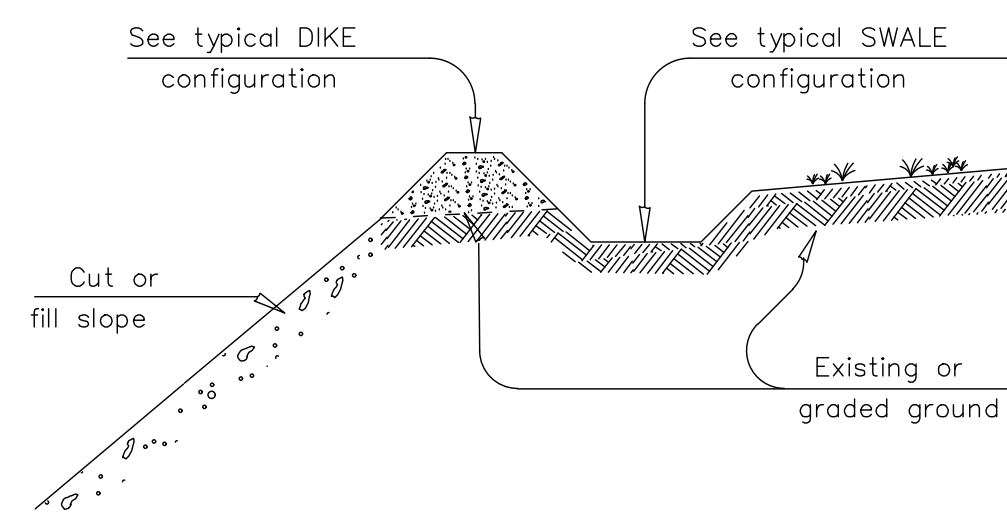
SWALE AND DIKE/SWALE USAGE GUIDELINES

A swale or dike/swale may be used to intercept runoff and divert it around unstabilized areas or to divert sediment laden runoff to an erosion control device (sediment basin or trap, rock filter dam, etc.).

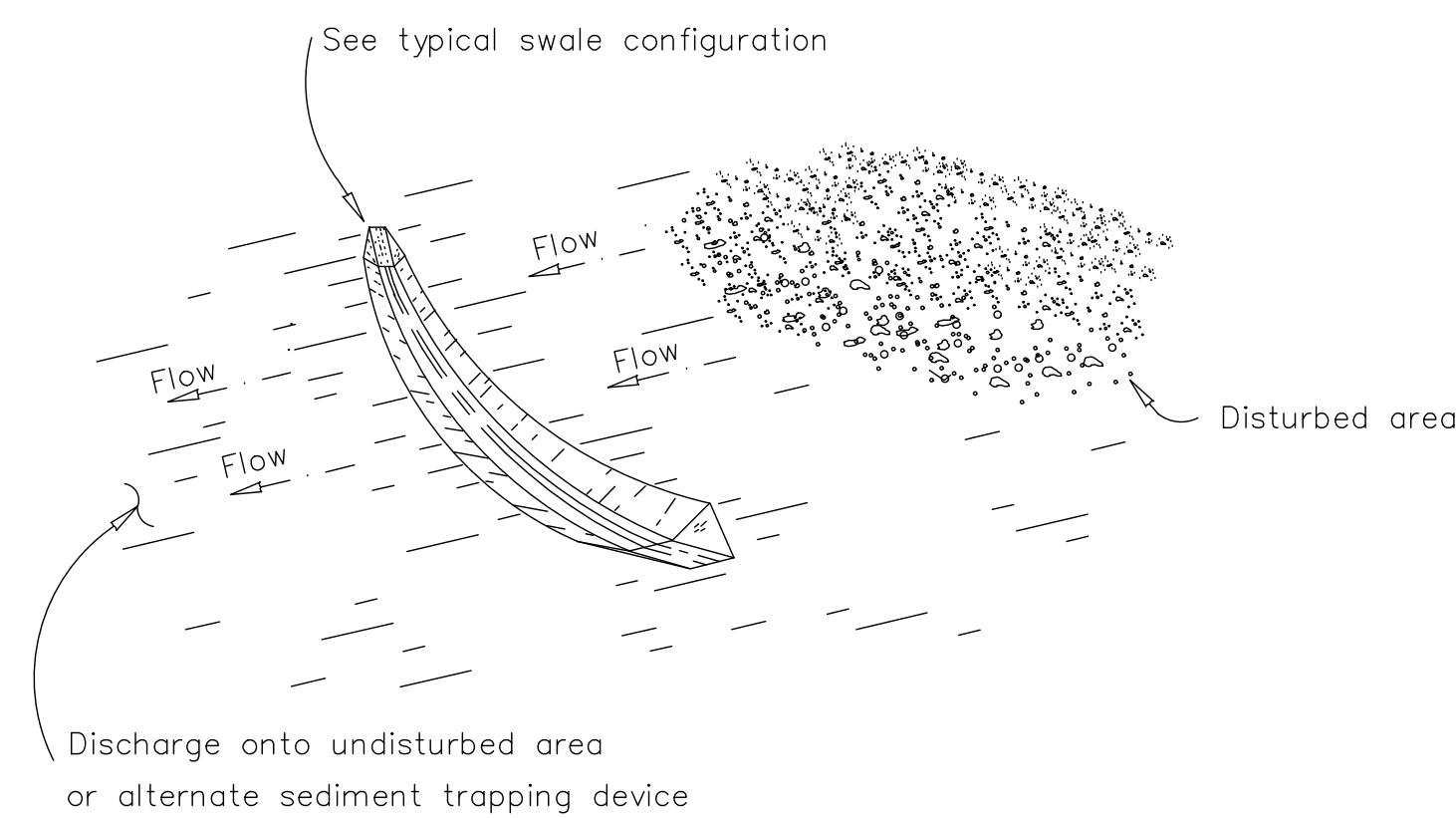
The drainage area contributing runoff to a swale or dike/swale should not exceed 5 acres. The spacing of swales and dike/swales should be as follows:

Slope of disturbed areas above dike	greater than 10%		5 - 10%		less than 5%	
	100'	200'	100'	200'	300'	300'
Maximum distance between dikes						

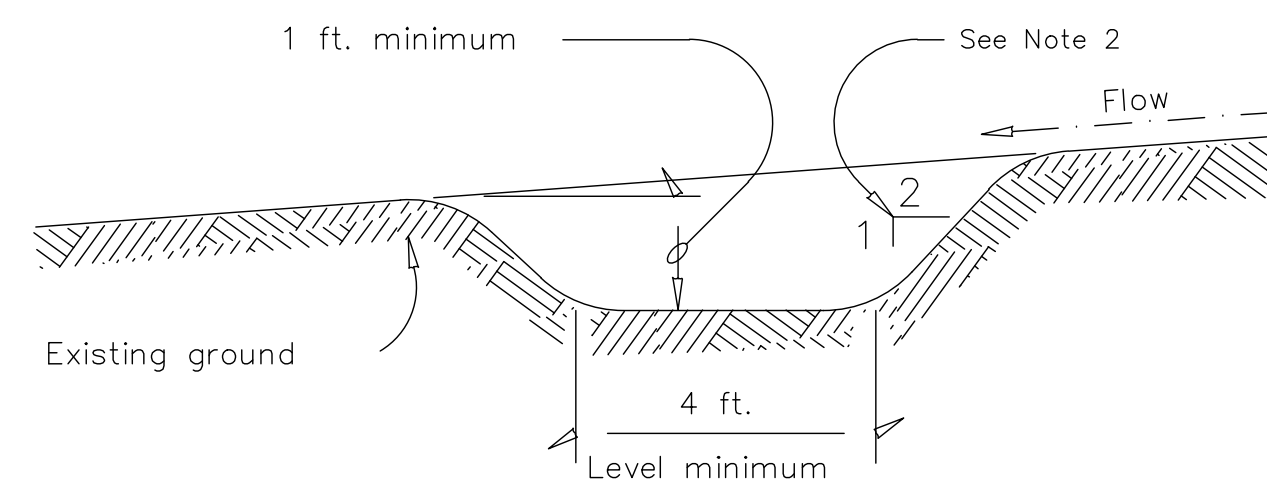
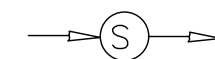
Intercepted runoff flowing in a swale or dike/swale should outlet to a stabilized area (vegetation, rock, etc.).



DIVERSION DIKE WITH SWALE

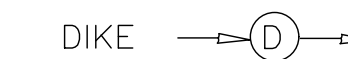
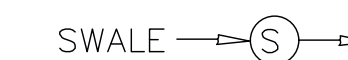


INTERCEPTOR SWALE



TYPICAL SWALE CONFIGURATION

PLAN SHEET LEGEND



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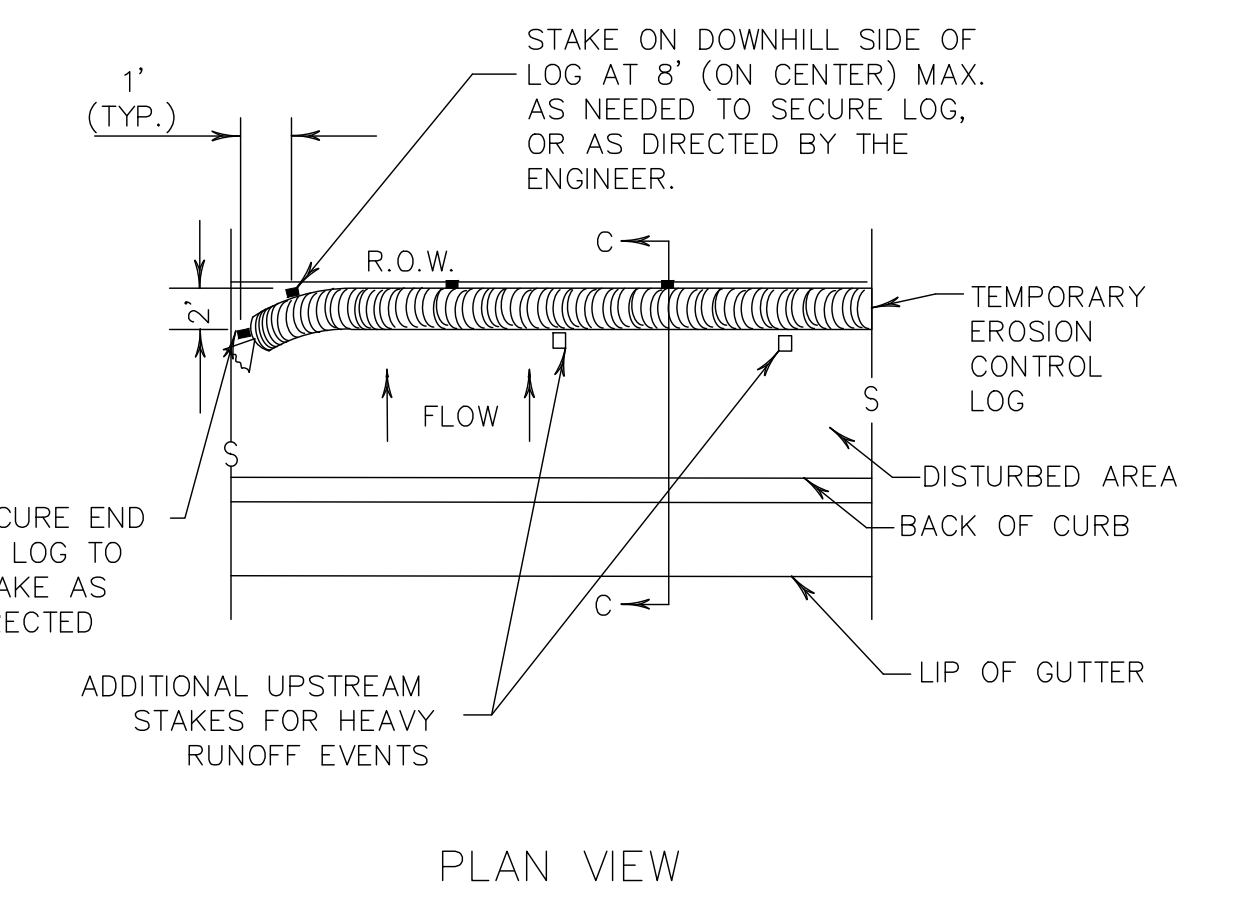
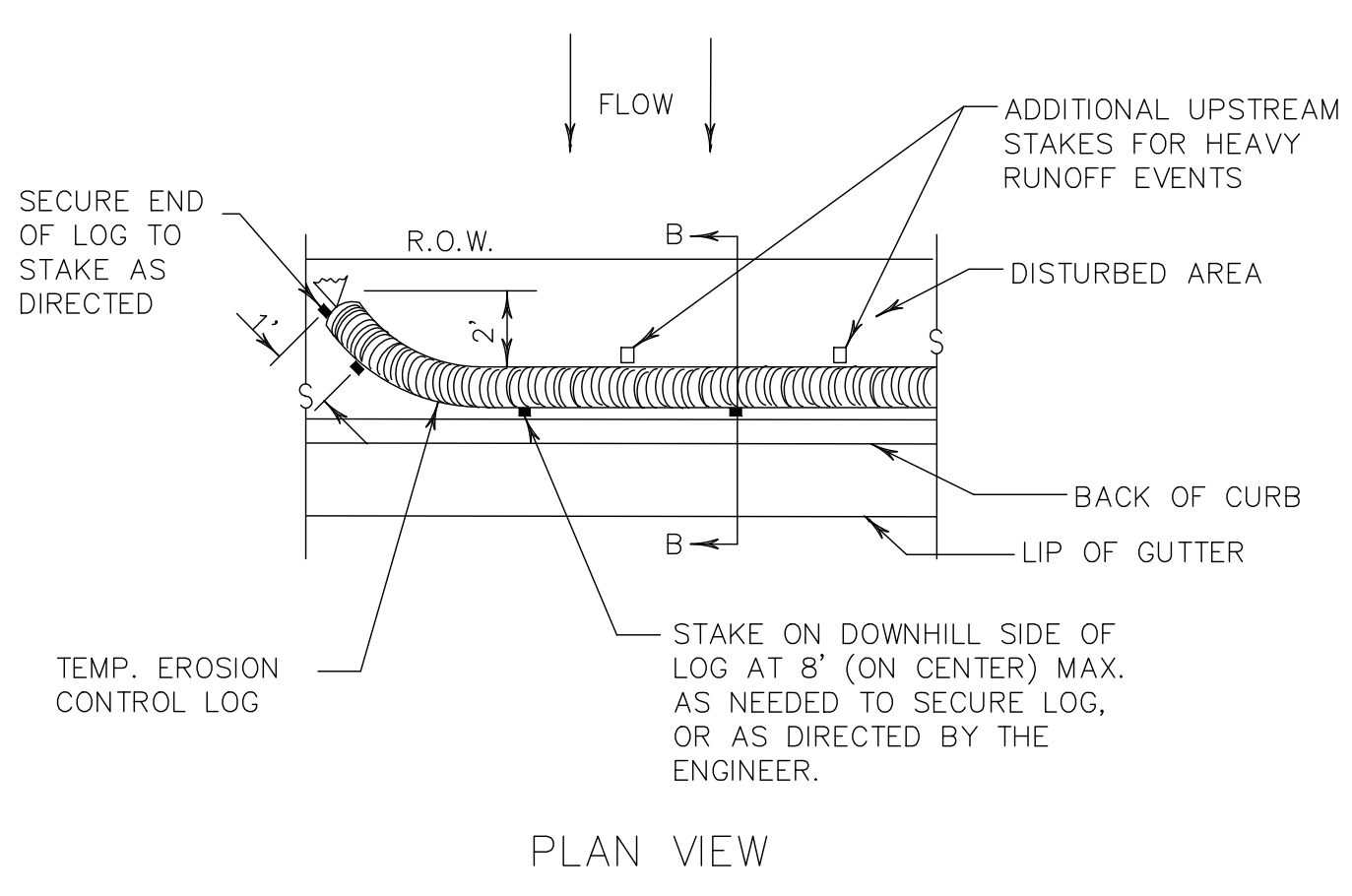
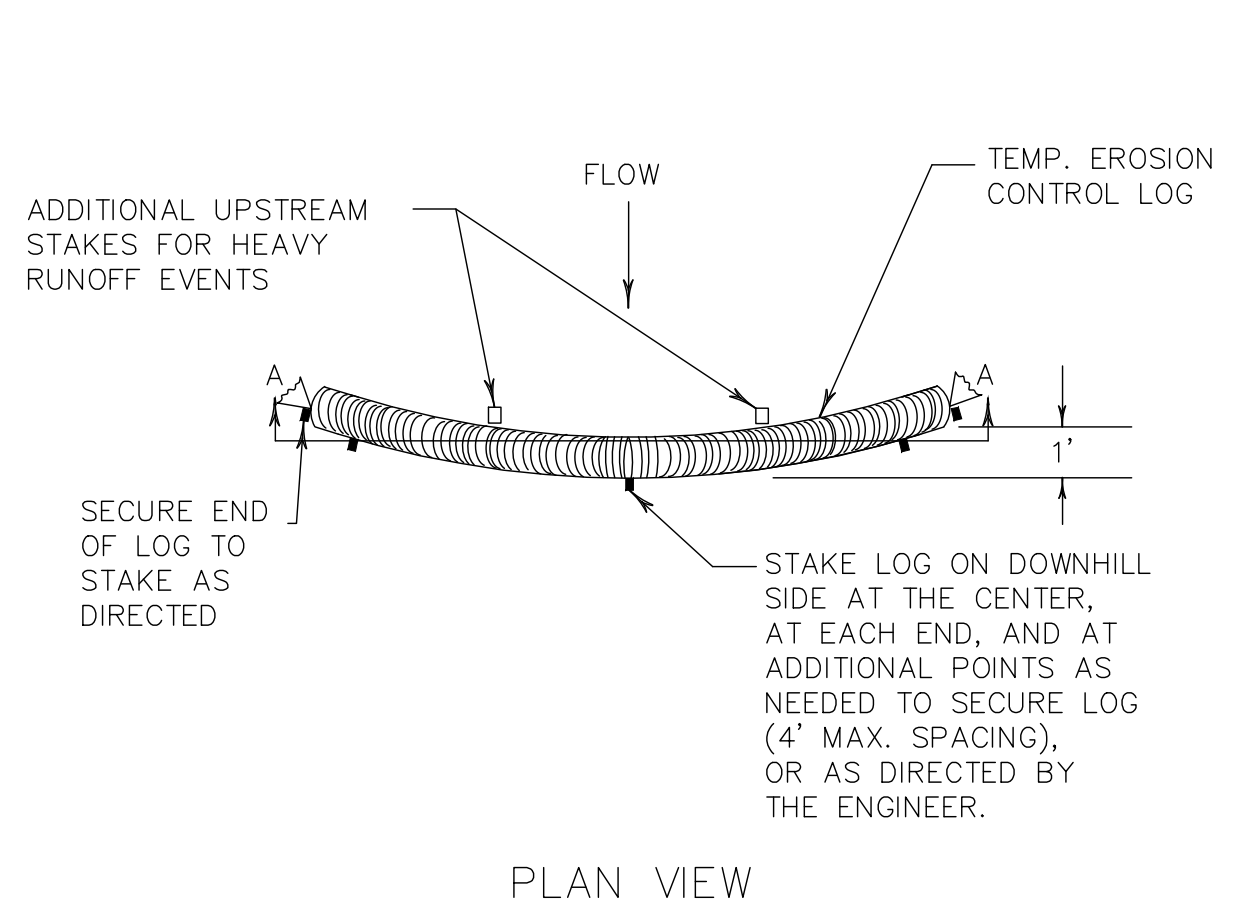
EROSION CONTROL DETAILS  
SWALES



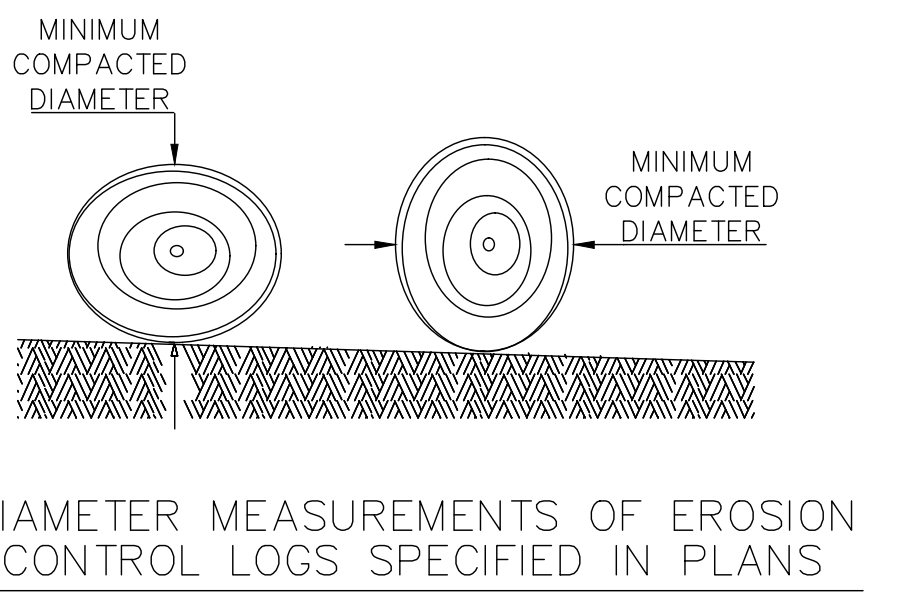
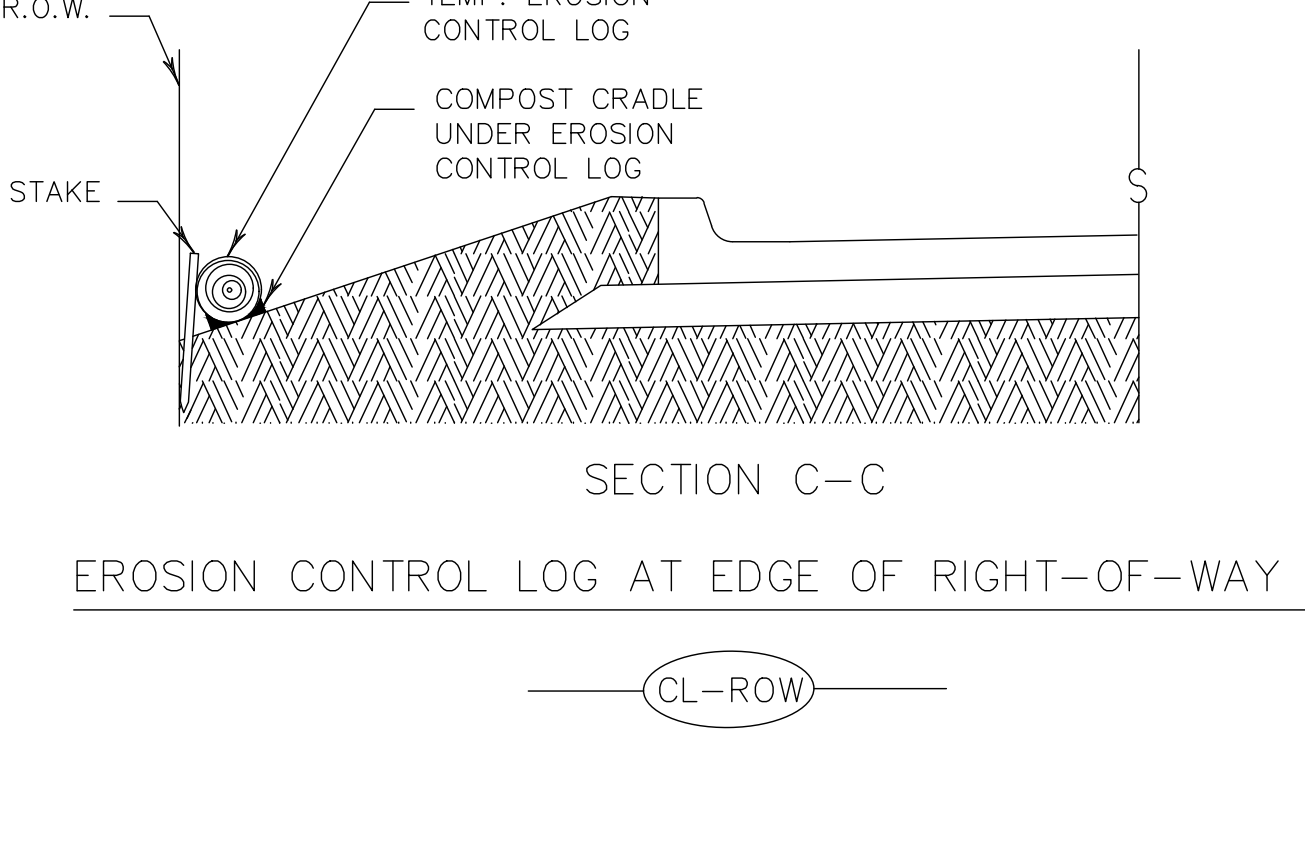
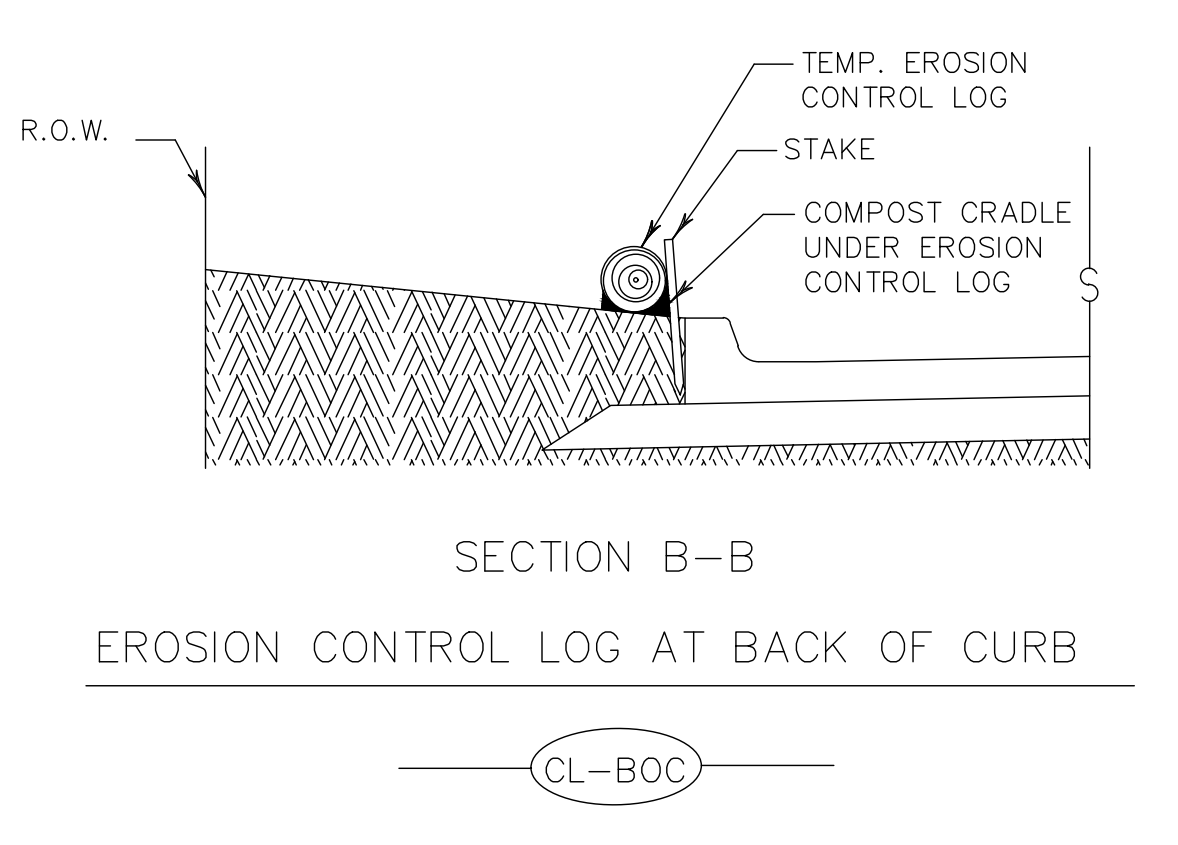
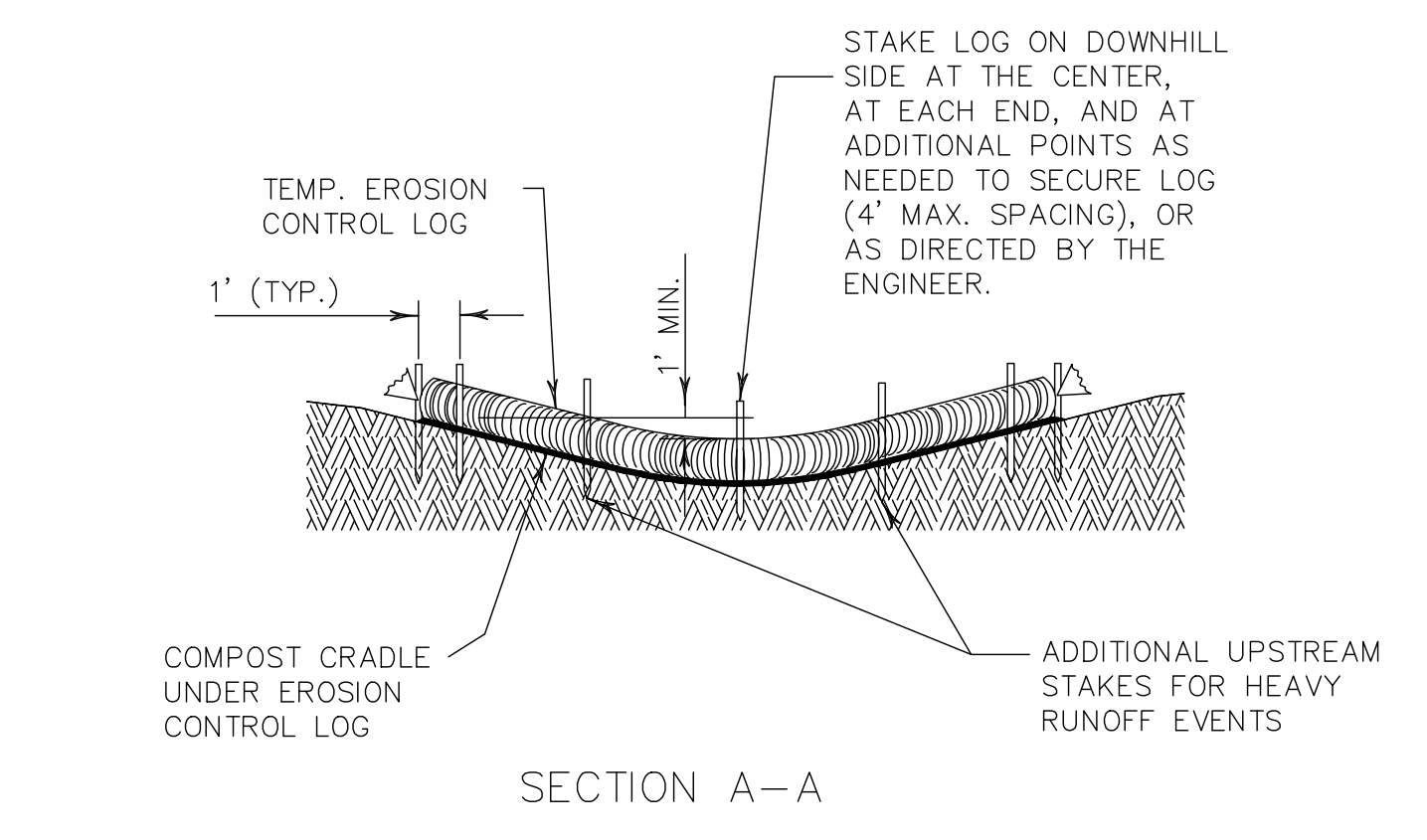
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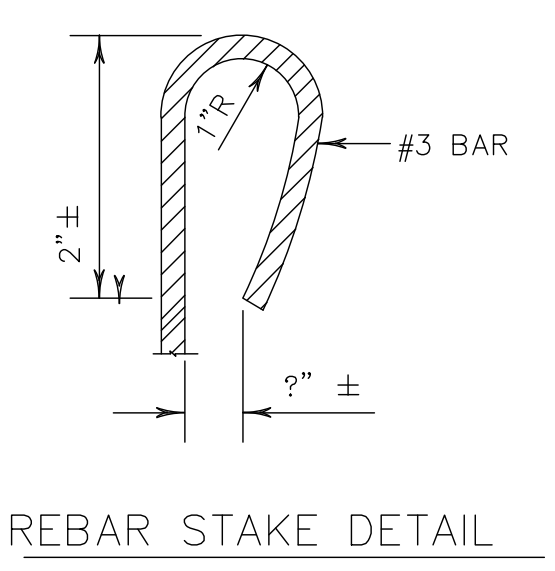




- GENERAL NOTES:**
1. EROSION CONTROL LOGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, OR AS DIRECTED BY THE ENGINEER.
  2. LENGTHS OF EROSION CONTROL LOGS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED.
  3. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE OR PHOTODEGRADABLE CONTAINMENT MESH ONLY WHERE LOG WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM. FOR TEMPORARY INSTALLATIONS, USE RECYCLABLE CONTAINMENT MESH.
  4. FILL LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE THE MINIMUM COMPACTED DIAMETER SPECIFIED IN THE PLANS WITHOUT EXCESSIVE DEFORMATION.
  5. STAKES SHALL BE 2" X 2" WOOD OR #3 REBAR, 2'-4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE LOG, OR AS DIRECTED BY THE ENGINEER.
  6. DO NOT PLACE STAKES THROUGH CONTAINMENT MESH.
  7. COMPOST CRADLE MATERIAL IS INCIDENTAL & WILL NOT BE PAID FOR SEPARATELY.
  8. SANDBAGS USED AS ANCHORS SHALL BE PLACED ON TOP OF LOGS & SHALL BE OF SUFFICIENT SIZE TO HOLD LOGS IN PLACE.
  9. TURN THE ENDS OF EACH ROW OF LOGS UPSLOPE TO PREVENT RUNOFF FROM FLOWING AROUND THE LOG.
  10. FOR HEAVY RUNOFF EVENTS, ADDITIONAL UPSTREAM STAKES MAY BE NECESSARY TO KEEP LOG FROM FOLDING IN ON ITSELF.



- LEGEND**
- CL-D EROSION CONTROL LOG DAM
  - CL-BOC EROSION CONTROL LOG AT BACK OF CURB
  - CL-ROW EROSION CONTROL LOG AT EDGE OF RIGHT-OF-WAY
  - CL-SST EROSION CONTROL LOGS ON SLOPES STAKE AND TRENCHING ANCHORING
  - CL-SSL EROSION CONTROL LOGS ON SLOPES STAKE AND LASHING ANCHORING
  - CL-DI EROSION CONTROL LOG AT DROP INLET
  - CL-CI EROSION CONTROL LOG AT CURB INLET
  - CL-GI EROSION CONTROL LOG AT CURB & GRATE INLET



**SEDIMENT BASIN & TRAP USAGE GUIDELINES**

An erosion control log sediment trap may be used to filter sediment out of runoff draining from an unstabilized area.

Log Traps: The drainage area for a sediment trap should not exceed 5 acres. The trap capacity should be 1800 CF/Acre (0.5" over the drainage area).

Control logs should be placed in the following locations:

1. Within drainage ditches spaced as needed or min. 500' on center
2. Immediately preceding ditch inlets or drain inlets
3. Just before the drainage leaves the right of way
4. Just before the drainage leaves the construction limits where drainage flows away from the project.

The logs should be cleaned when the sediment has accumulated to a depth of 1/2 the log diameter.

Cleaning and removal of accumulated sediment deposits is incidental and will not be paid for separately.



ISSUED FOR CONSTRUCTION

HDR  
Firm Registration No. F-754

17111 Preston Road, Suite 300  
Dallas, Texas 75248-1229  
972.960.4400

ISSUE	DATE	DESCRIPTION
1	08/20/21	ISSUED FOR BID

PROJECT MANAGER D. VOGT, P.E.	
PROJECT NUMBER	10290148



**Gibbons Creek Environmental Redevelopment Group, LLC**

**SITE F LANDFILL CLOSURE**  
Anderson, Texas

**EROSION CONTROL DETAILS**  
**EROSION CONTROL LOG**

0 1" 2"

FILENAME | 00C-20.dwg  
SCALE | AS SHOWN

SHEET  
**00C-20**