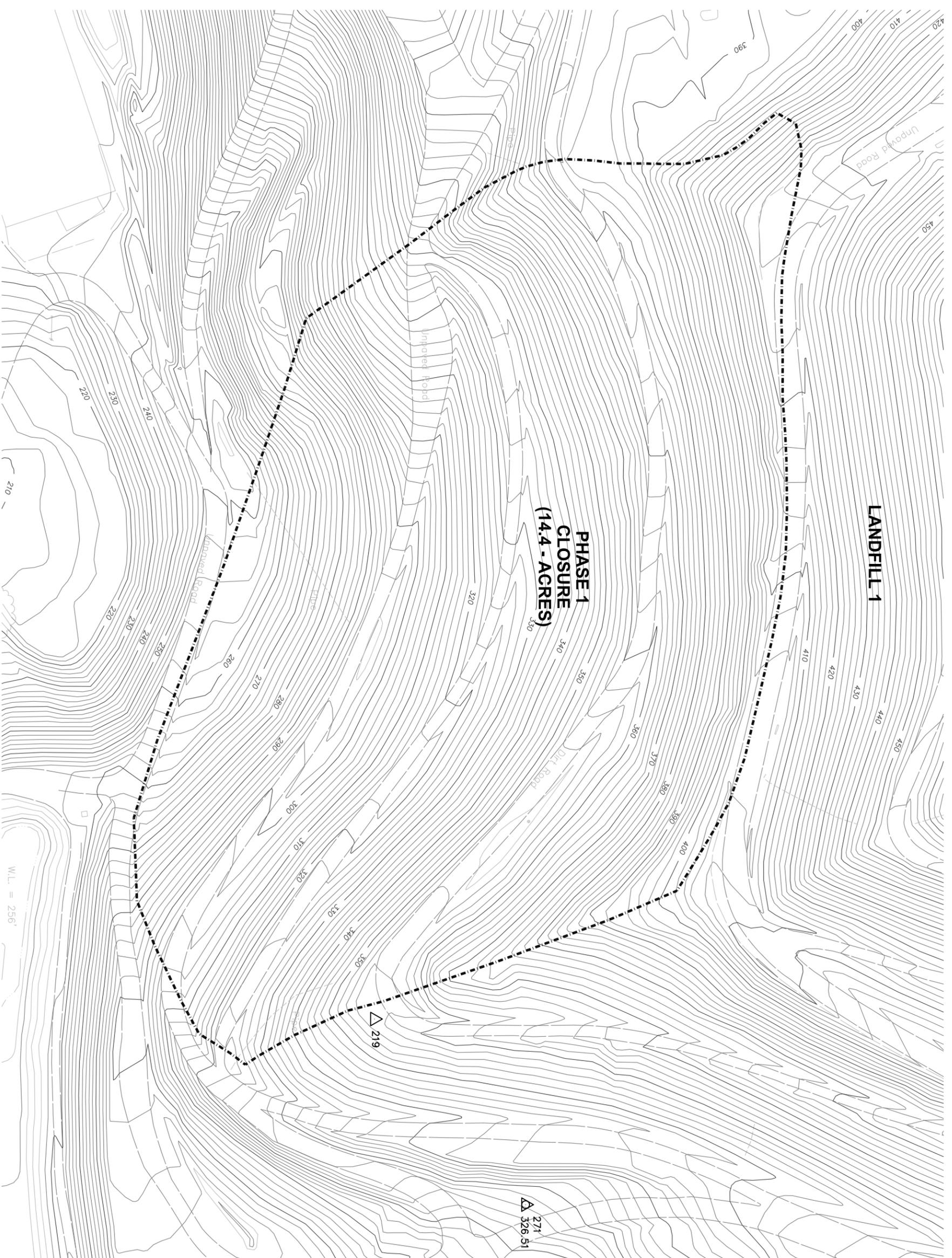


APPENDIX A  
PRELIMINARY DESIGN DRAWINGS

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**LEGEND:**

-  PHASE 1 CLOSURE
-  SURVEY CONTROL
-  EXISTING DRAIN PIPE
-  EXISTING MAJOR CONTOURS
-  EXISTING MINOR CONTOURS

**NOTES:**

1. AERIAL TOPOGRAPHY PROVIDED BY THE COUNTY, TOPOGRAPHY ORIGINATED IN 2007 AND MODIFIED ON 1/7/11.

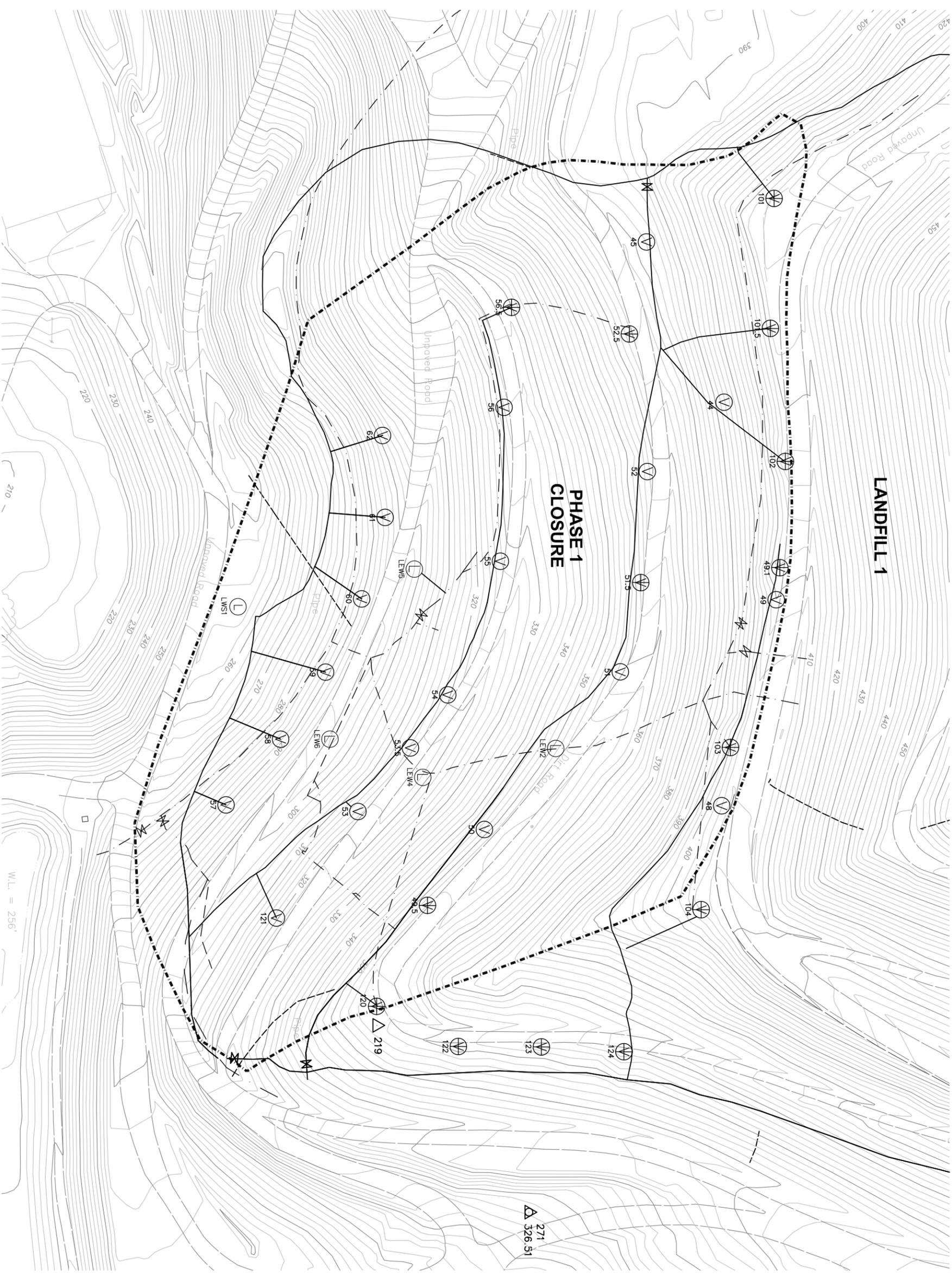
**PHASE 1 CLOSURE (14.4 - ACRES)**

**LANDFILL 1**

**PRELIMINARY**

**NOT FOR CONSTRUCTION**

<p><b>SCS ENGINEERS</b>                  STEARNS, CONRAD, AND SCHMIDT                  CONSULTING ENGINEERS, INC.                  6601 KOLL CENTER PARKWAY, SUITE 140                  PLEASANTON, CA 94566                  PH. (925) 426-0080 FAX. (925) 426-0707</p>	CLIENT		<p>COUNTY OF SONOMA                  DEPARTMENT OF TRANSPORTATION                  AND PUBLIC WORKS                  PETALUMA, CA 94952</p>	<p>SHEET TITLE                  EXISTING TOPOGRAPHY                  AND SURVEY CONTROL                  PHASE 1 CLOSURE</p>	REV	DATE	DESCRIPTION	CK. BY
	<p>PROJECT TITLE                  PHASE 1 PARTIAL FINAL CLOSURE                  SONOMA CENTRAL LANDFILL</p>	<p>▲ 02-17-11</p> <p>▲ 03-24-11</p> <p>▲</p> <p>▲</p> <p>▲</p> <p>▲</p>			<p>PM REVIEW</p> <p>CLIENT COMMENTS</p>	<p>AAM</p> <p>AAM</p>		
<p>PROJ. NO. 01210155.00                  DSN. BY: MJE</p>	<p>DWN. BY: MJE                  CHK. BY: AAM</p>	<p>ACAD FILE: FIG-1                  APP. BY: JJM</p>						
<p>CADD FILE: PHASE 1 EC_FIG_1</p>	<p>DATE: 12-29-10</p>	<p>SCALE: AS SHOWN</p>						
<p>SHEET: 1</p>								



**LEGEND:**

- PHASE 1 CLOSURE
- SURVEY CONTROL
- SURVEY CONTROL
- EXISTING DRAIN PIPE
- EXISTING MAJOR CONTOURS
- EXISTING LFG VERTICAL EXTRACTION WELL
- EXISTING LFG VERTICAL EXTRACTION WELL
- EXISTING DUAL LFG/LEACHATE VERTICAL EXTRACTION WELL
- EXISTING VERTICAL LEACHATE EXTRACTION WELL
- EXISTING LFG HEADER/LATERAL LINE
- EXISTING LEACHATE LINE (BURIED)
- EXISTING CONTROL VALVE

**NOTES:**

1. EXISTING ENVIRONMENTAL CONTROL SYSTEMS LOCATIONS SHOWN ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. LOCATIONS TAKEN FROM PACIFIC GEOSCIENCE, FIGURE 1.
2. IN SOME CASES, LATERAL EXTENSIONS WERE PLACED TO SHOW CONNECTIVITY TO HEADER.

**PRELIMINARY**

**NOT FOR CONSTRUCTION**

REV	DATE	DESCRIPTION	CK. BY
▲	02-17-11	PM REVIEW	AAM
▲	03-24-11	CLIENT COMMENTS	AAM
▲			
▲			
▲			

**SHEET TITLE**  
EXISTING ENVIRONMENTAL CONTROL SYSTEMS PHASE 1 CLOSURE

**PROJECT TITLE**  
PHASE 1 PARTIAL FINAL CLOSURE SONOMA CENTRAL LANDFILL

**CLIENT**

COUNTY OF SONOMA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS  
PETALUMA, CA 94952

**SCS ENGINEERS**

STEARNS, CONRAD, AND SCHMIDT CONSULTING ENGINEERS, INC.  
6601 KOLL CENTER PARKWAY, SUITE 140  
PLEASANTON, CA 94566  
PH. (925) 426-0080 FAX. (925) 426-0707

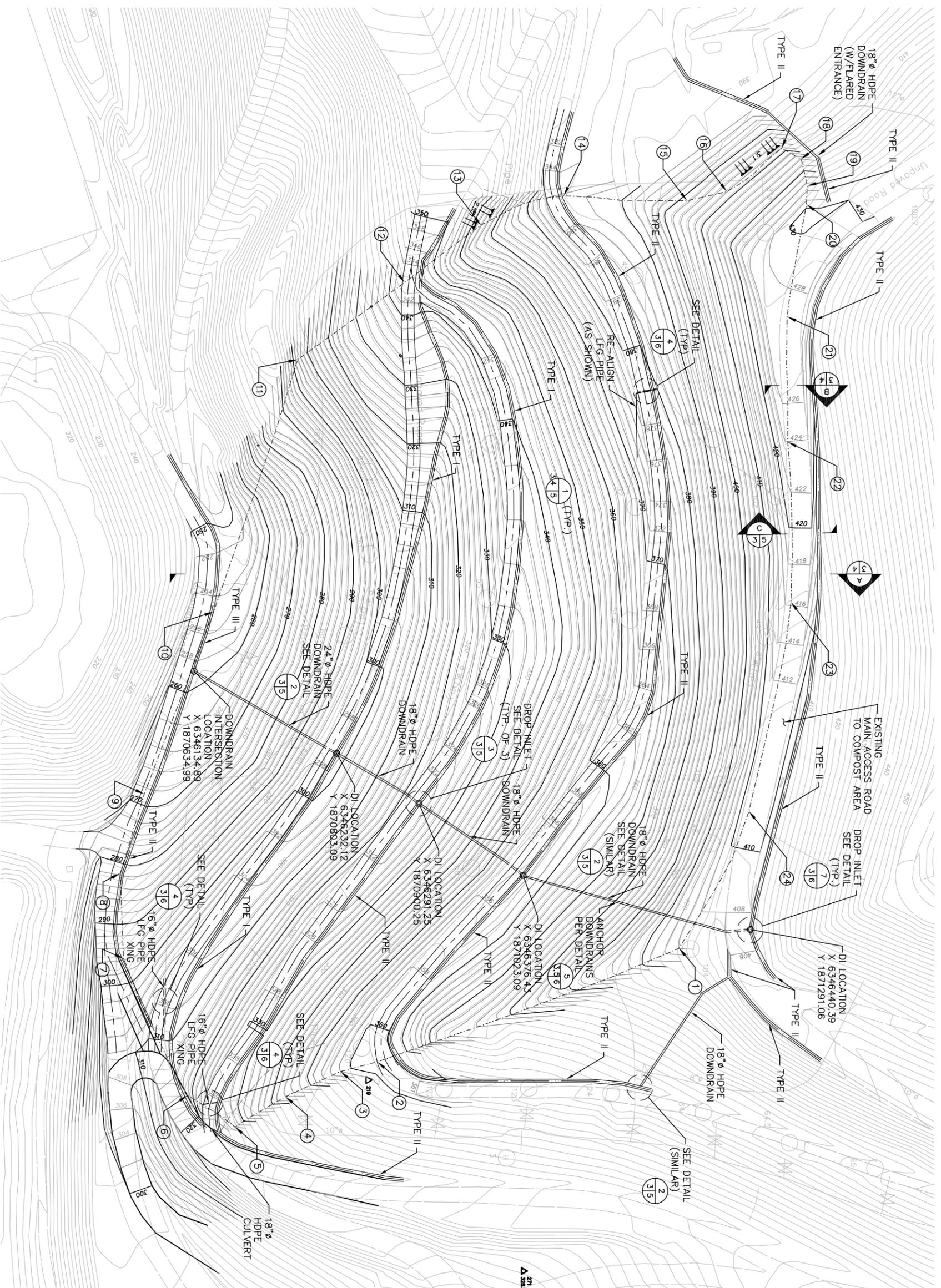
PROJ. NO. 01210155.00	DWN. BY: MJE	ACAD FILE: FIG_2
DSN. BY: MJE	CHK. BY: AAM	APP. BY: JUM

**CADD FILE:**  
PHASE 1 ECOS\_FIG\_2

**DATE:**  
12-29-10

**SCALE:**  
AS SHOWN

**SHEET:**  
2



**LEGEND:**

- EXISTING LFG WELL
- PHASE I CLOSURE
- EXISTING MAJOR CONTOURS
- NEW FINAL MAJOR CONTOURS
- NEW FINAL MINOR CONTOURS
- DRAINAGE/LFG PIPE CULVERT
- DRAINAGE
- DRAINAGE DITCH
- △ 271 SURVEY CONTROL POINT
- △ 328.51

**BOUNDARY SURVEY INFO:**

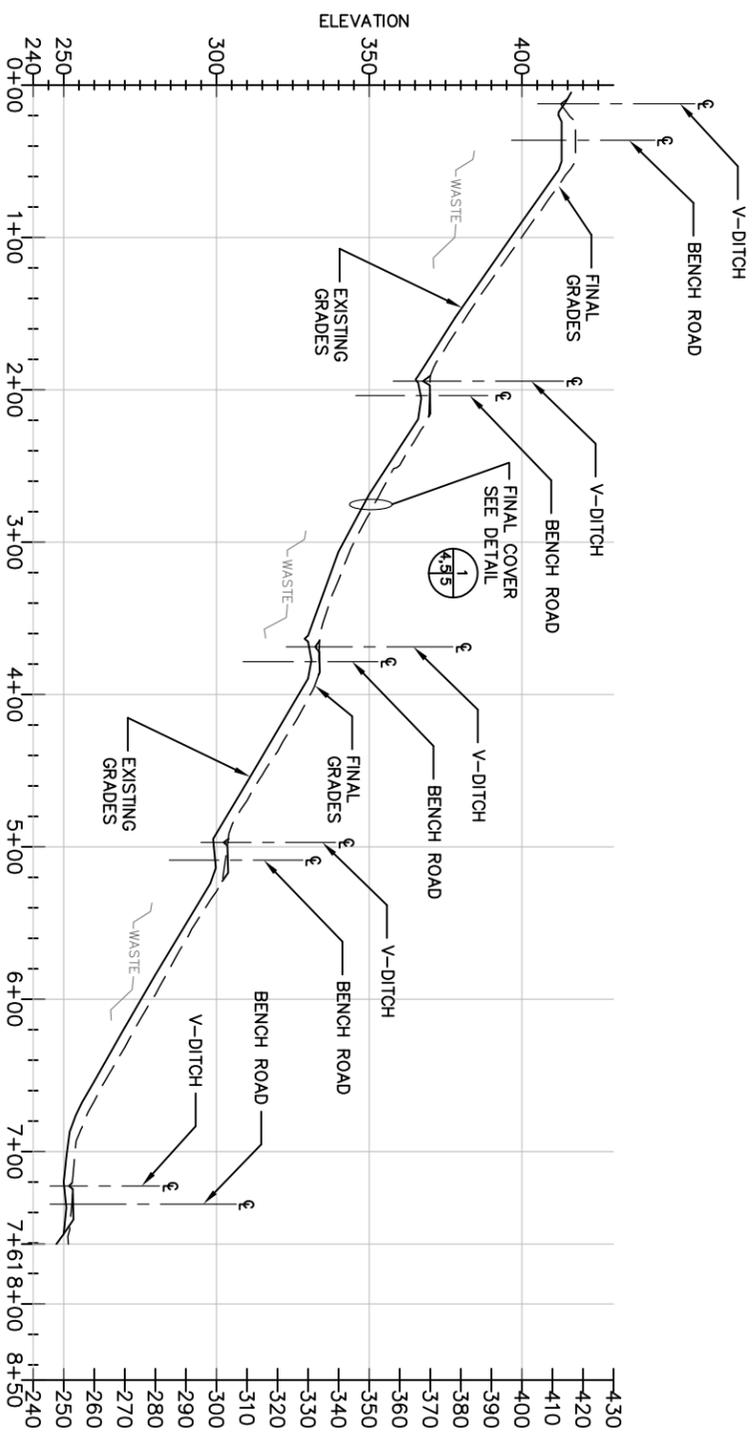
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2	1870851.0464'	6346596.8835'
3	1870807.5976'	6346608.3315'
4	1870742.8056'	6346638.0962'
5	1870683.3493'	6346673.9664'
6	1870627.3309'	6346636.5513'
7	1870551.8672'	6346474.7537'
8	1870548.0559'	6346374.0117'
9	1870576.2595'	6346280.1385'
10	1870658.0172'	6346064.7361'
11	1870757.1110'	6345766.3262'
12	1870883.2817'	6345675.3010'
13	1870973.2284'	6345607.3765'
14	1871070.9858'	6345572.5876'
15	1871216.3672'	6345578.4716'
16	1871263.2603'	6345567.6605'
17	1871328.0007'	6345516.4931'
18	1871350.7433'	6345529.1749'
19	1871358.0423'	6345560.7106'
20	1871357.2801'	6345582.8433'
21	1871334.4123'	6345715.6395'
22	1871335.1746'	6345863.6997'
23	1871338.9507'	6346053.1665'
24	1871289.2643'	6346300.4596'

NOT FOR CONSTRUCTION

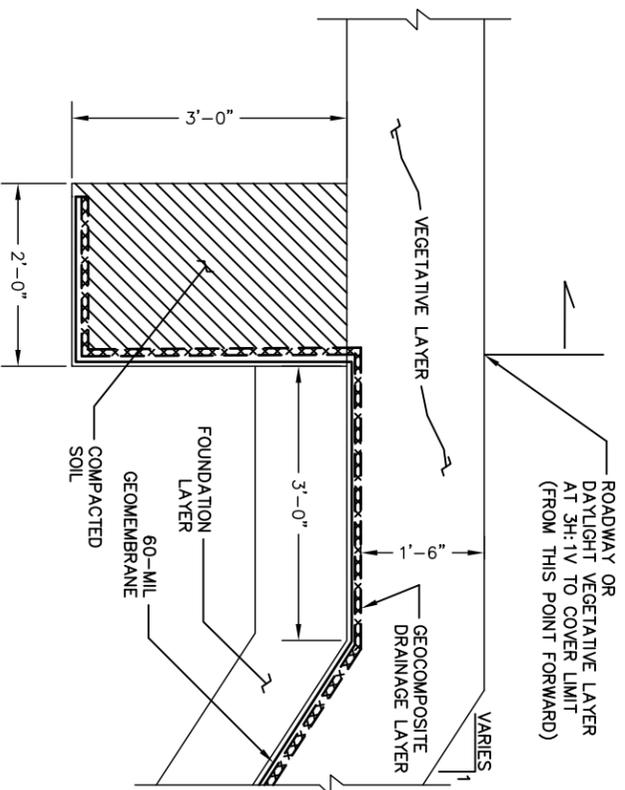
PRELIMINARY

<b>SCS ENGINEERS</b> STEARNS, CONRAD, AND SCHMIDT CONSULTING ENGINEERS, INC. 6601 KOTI CENTER PARKWAY, SUITE 140 PLEASANTON, CA 94566 PH. (925) 426-0080 FAX. (925) 426-0707	CLIENT  COUNTY OF SONOMA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PETALUMA, CA 94952	SHEET TITLE FINAL GRADING AND DRAINAGE PLAN PHASE 1 CLOSURE	REV	DATE	DESCRIPTION	CK. BY.
		PROJECT TITLE PHASE 1 PARTIAL FINAL CLOSURE SONOMA CENTRAL LANDFILL	▲	02-17-11	PM REVIEW	AAM
			▲	03-24-11	CLIENT COMMENTS	AAM
			▲			
			▲			
			▲			

CADW FILE: PHASE 1 FG.FIG_3	PWN. BY: MJE ACAD FILE: FIG_3
DATE: 01-11-11	APP. BY: JJM
SCALE: AS SHOWN	
SHEET: 3	



SECTION --- FINAL GRADING 1 / 314  
 SCALE: H: 1"=60'  
 V: 1"=30'

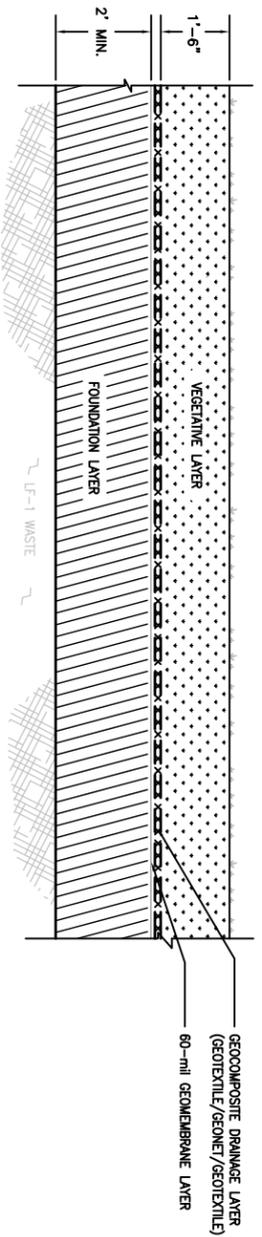


SECTION -- LINER ANCHOR B / 314  
 SCALE: 1"=1'

PRELIMINARY

NOT FOR CONSTRUCTION

	CLIENT	COUNTY OF SONOMA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PETALUMA, CA 94952	SHEET TITLE	REV	DATE	DESCRIPTION	CK. BY
	STEARNS, CONRAD, AND SCHMIDT CONSULTING ENGINEERS, INC. 6601 KOLL CENTER PARKWAY, SUITE 140 PLEASANTON, CA 94566 PH. (925) 426-0080 FAX. (925) 426-0707		SECTIONS PHASE 1 CLOSURE	02-17-11 03-24-11	PM REVIEW CLIENT COMMENTS	AAM	
PROJ. NO. 01210155.00	DWN. BY: MJE CHK. BY: AAM	ACAD FILE: FIG_4 APP. BY: JJM	PROJECT TITLE PHASE 1 PARTIAL FINAL CLOSURE SONOMA CENTRAL LANDFILL	[Empty]	[Empty]	[Empty]	[Empty]
CADD FILE: PH. 1 SECTION_FIG_4	DATE: 12-29-10	SCALE: AS SHOWN	SHEET: 4	[Empty]	[Empty]	[Empty]	[Empty]



DETAIL -- FINAL COVER SYSTEM CONFIGURATION (1)  
SCALE: N.T.S.

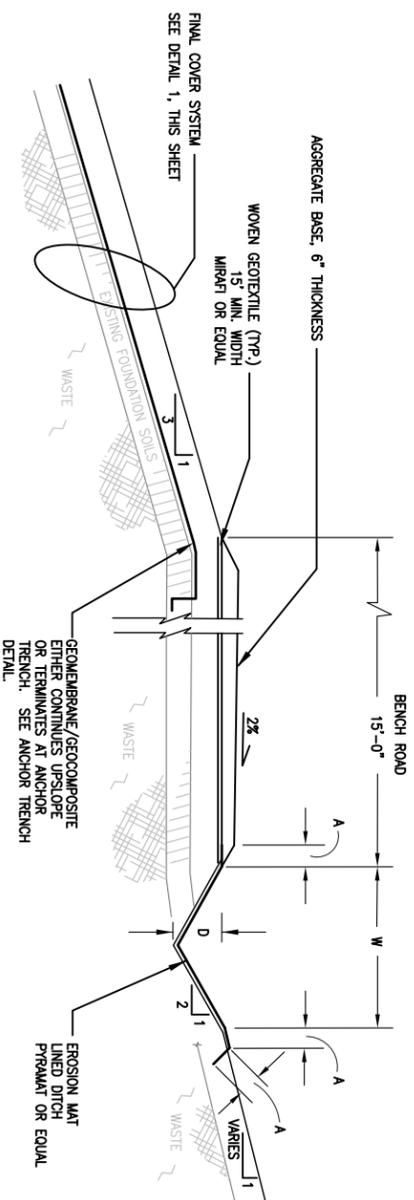
3/15

1

3/15

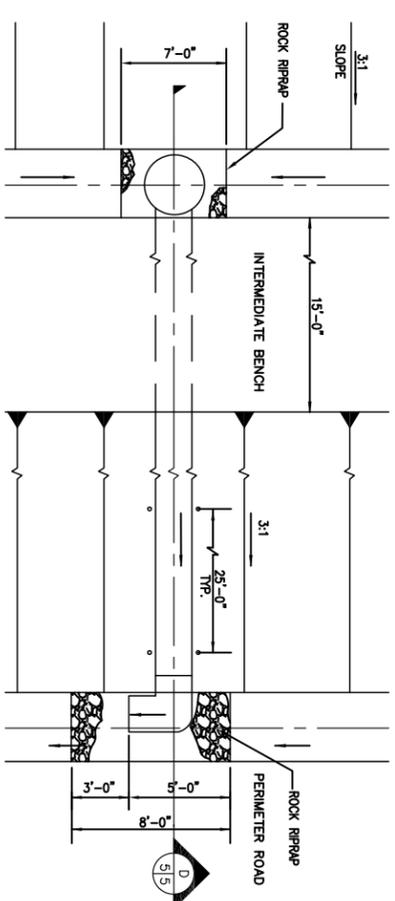
DRAINAGE TABLE

TYPE	W (ft.)	D (ft.)	Bottom Width (ft.)	A (Inches)
I	2'-0"	0'-6"	0	4"
II	4'-0"	1'-0"	0	4"
III	7'-0"	2'-0"	1'-0"	4"

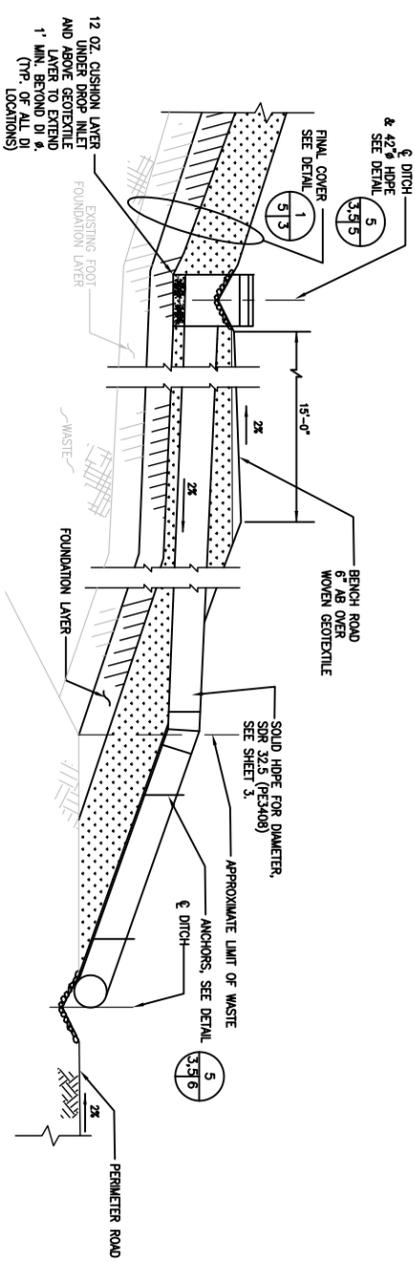


- NOTES:
- CONSTRUCT 6 IN. X 12 IN ANCHOR TRENCH AT UPSLOPE END OF INSTALLATION TO INHIBIT UNDERMINING FROM STRAY SURFACE WATER. ANCHOR 4 IN. X 4 IN. AT TOP OF EACH SIDE SLOPE. ADDITIONAL PINS REQUIRED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR APPROVED MATERIAL SUBMITTAL.
  - SECURE THE EROSION MAT TO CHANNEL BOTTOM WITH METAL PINS, 0.20 IN. DIA. X 12 IN. LONG AT A FREQUENCY OF 3 ANCHORS PER SQUARE YARD.

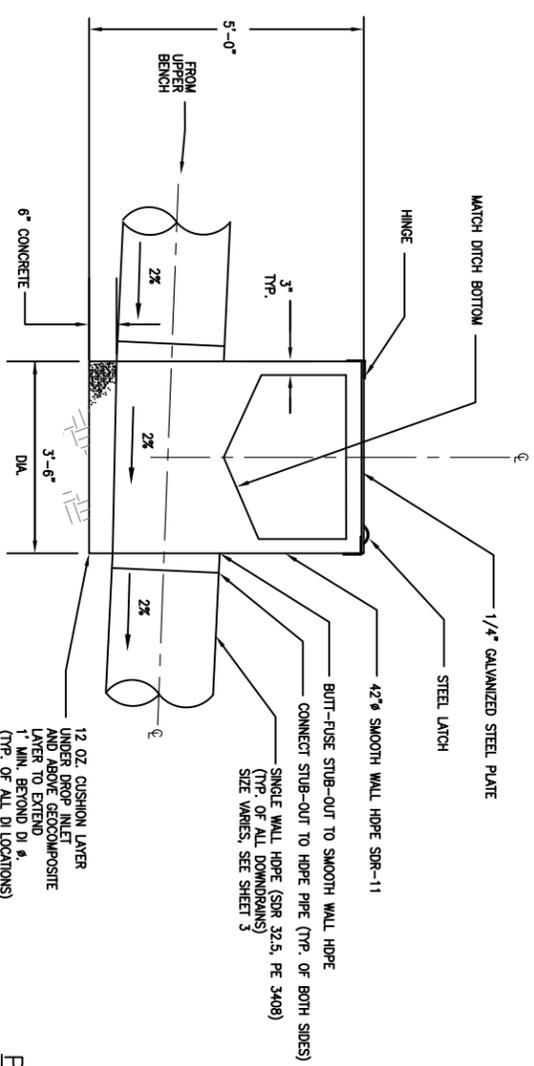
SECTION -- BENCH ROAD WITH DRAINAGE DITCH (C)  
SCALE: N.T.S.



DETAIL -- DOWNDRAIN (2)  
SCALE: N.T.S.



SECTION -- DROP INLET AND DOWNDRAIN (D)  
SCALE: N.T.S.



DETAIL -- DROP INLET (3)  
SCALE: N.T.S.

PRELIMINARY

NOT FOR CONSTRUCTION

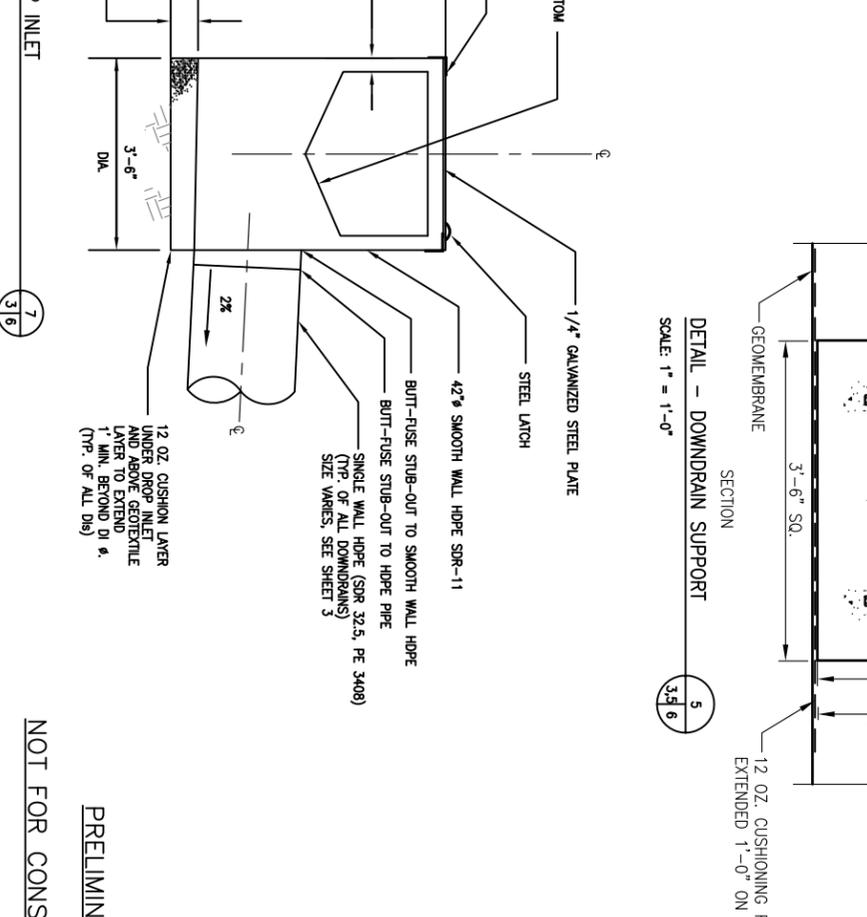
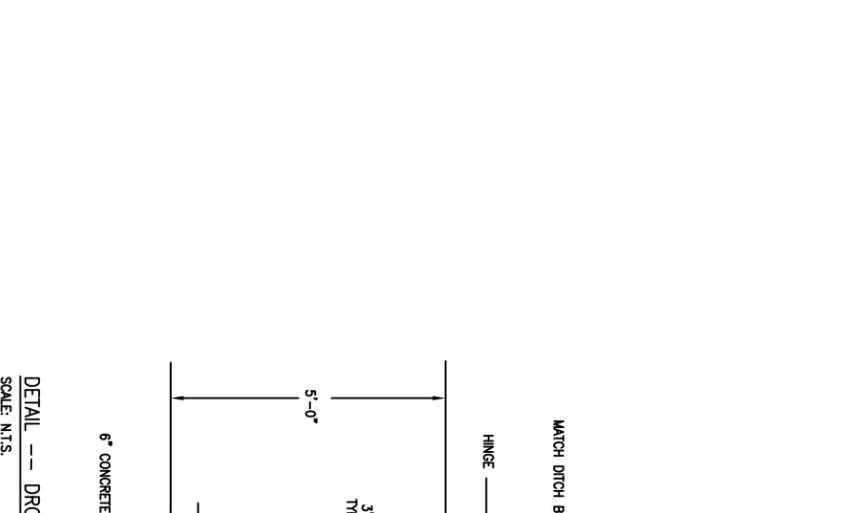
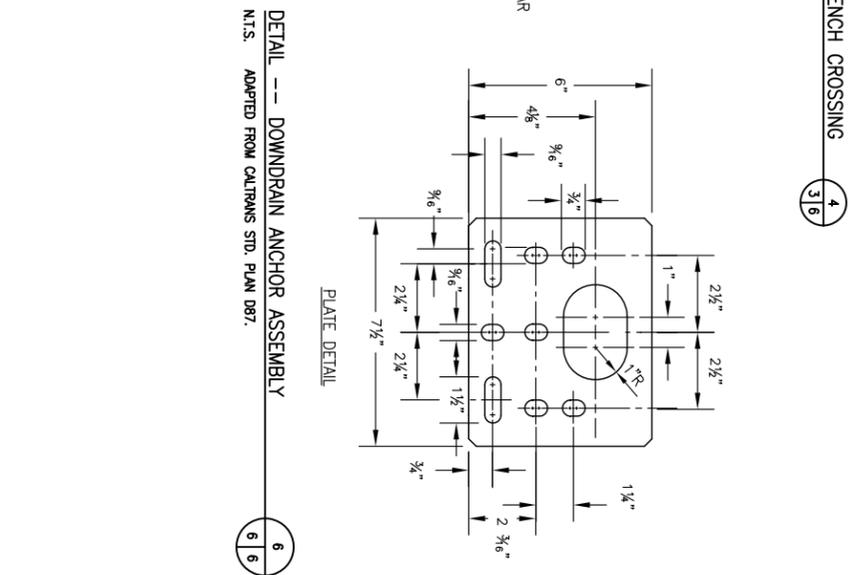
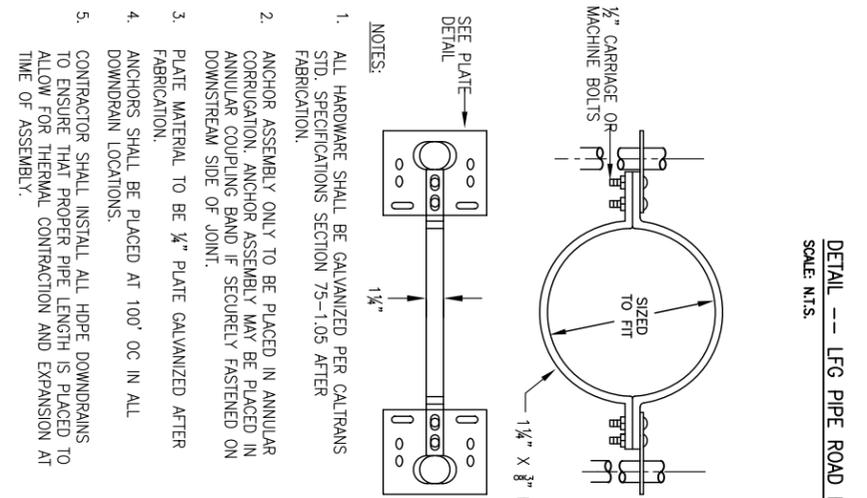
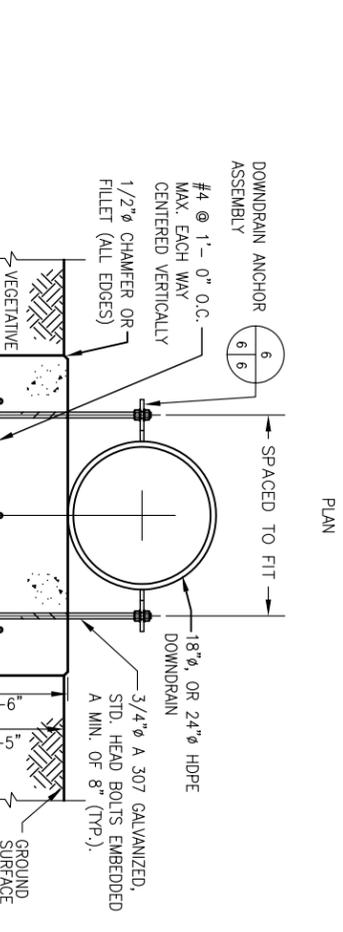
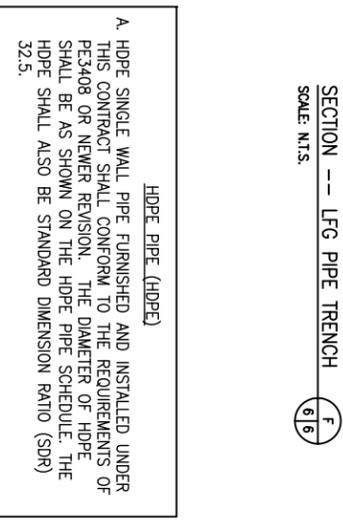
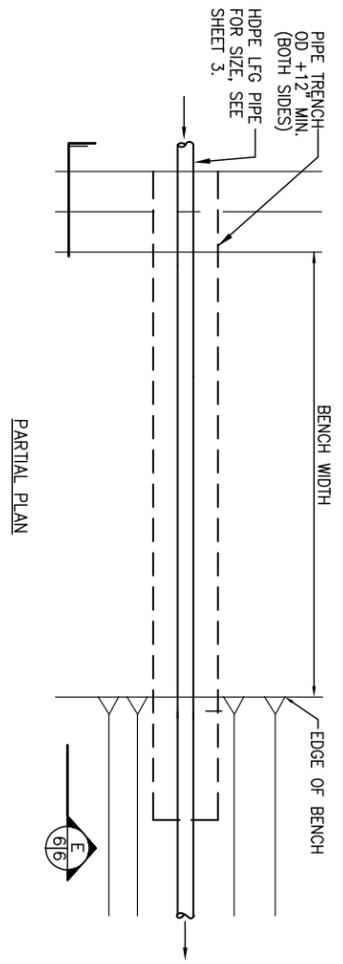
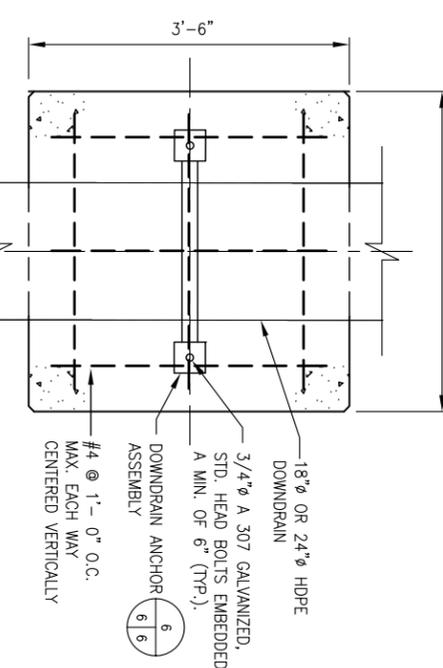
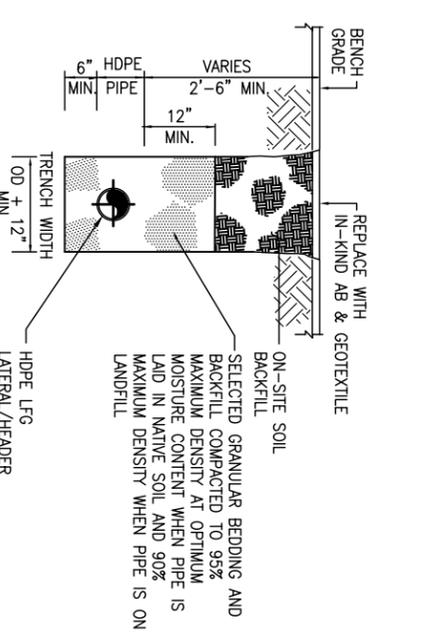
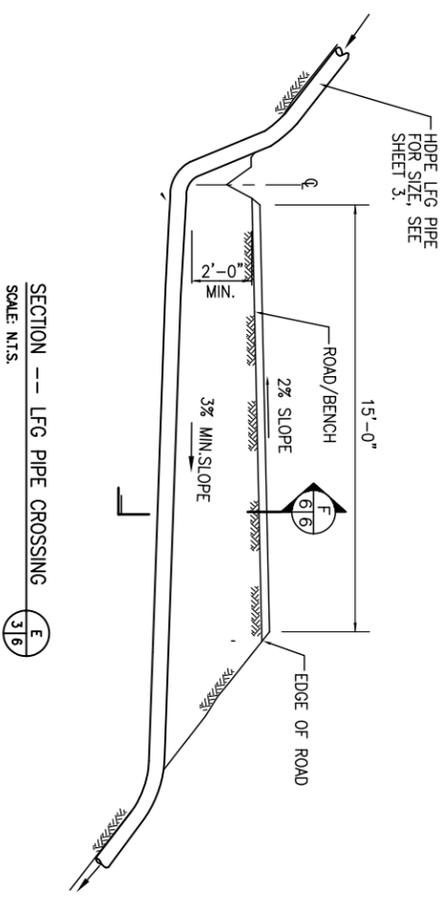
<p>PROJECT TITLE PHASE 1 PARTIAL FINAL CLOSURE SONOMA CENTRAL LANDFILL</p>	<p>CK. BY AAM</p>
	<p>DESCRIPTION PM REVIEW</p>
<p>DATE 02-17-11</p>	<p>CK. BY AAM</p>
<p>REV 03-24-11</p>	<p>DESCRIPTION CLIENT COMMENTS</p>
<p>SHEET TITLE SECTIONS AND DETAILS PHASE 1 CLOSURE</p>	<p>CLIENT COUNTY OF SONOMA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PETALUMA, CA 94952</p>
<p>SCALE: AS SHOWN</p>	<p>DATE: 12-29-10</p>
<p>SHEET: 5</p>	<p>SCALE: AS SHOWN</p>

**SCS ENGINEERS**

STEARNS, CONRAD, AND SCHMIDT  
CONSULTING ENGINEERS, INC.  
6601 KOLL CENTER PARKWAY, SUITE 140  
PLEASANTON, CA 94566  
PH. (925) 426-0080 FAX. (925) 426-0707

PROJ. NO. 01210155.00  
DWN. BY: MJE  
ACAD FILE: FIG\_5  
APP. BY: JJM

DATE: 12-29-10  
PHASE 1 SECTS--DETS.  
DATE: 12-29-10  
DWN. BY: MJE  
CHK. BY: AAM



NOT FOR CONSTRUCTION

PRELIMINARY

REV	DATE	DESCRIPTION	CK. BY
▲	02-17-11	PM REVIEW	AAM
▲	03-24-11	CLIENT COMMENTS	AAM
▲			
▲			
▲			
▲			

SHEET TITLE		DETAILS PHASE 1 CLOSURE	
PROJECT TITLE		PHASE 1 PARTIAL FINAL CLOSURE SONOMA CENTRAL LANDFILL	

CLIENT			
COUNTY OF SONOMA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PETALUMA, CA 94952			

SCS ENGINEERS			
STEARN'S, CONRAD, AND SCHMIDT CONSULTING ENGINEERS, INC. 6601 KOLL CENTER PARKWAY, SUITE 140 PLEASANTON, CA 94566 PH. (925) 426-0080 FAX. (925) 426-0707			
PROJ. NO. 01210155.00	DWN. BY: MJE	ACAD FILE: FIG_6	APP. BY: JJM
DSN. BY: MJE	CHK. BY: AAM		

SCALE:	AS SHOWN
DATE:	02-21-11
PHASE:	1 DETS, FIG. 6.
CADD FILE:	
SHEET:	6

A HDPE SINGLE WALL PIPE FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL CONFORM TO THE REQUIREMENTS OF PE3408 OR NEWER REVISION. THE DIAMETER OF HDPE SHALL BE AS SHOWN ON THE HDPE PIPE SCHEDULE. THE HDPE SHALL ALSO BE STANDARD DIMENSION RATIO (SDR) 32.5.

1. ALL HARDWARE SHALL BE GALVANIZED PER CALTRANS STD. SPECIFICATIONS SECTION 75-1.05 AFTER FABRICATION.
2. ANCHOR ASSEMBLY ONLY TO BE PLACED IN ANNUAL CORRUGATION ANCHOR ASSEMBLY MAY BE PLACED IN ANNUAL COUPLING BAND IF SECURELY FASTENED ON DOWNSTREAM SIDE OF JOINT.
3. PLATE MATERIAL TO BE 1/4" PLATE GALVANIZED AFTER FABRICATION.
4. ANCHORS SHALL BE PLACED AT 100' OC IN ALL DOWNDRAIN LOCATIONS.
5. CONTRACTOR SHALL INSTALL ALL HDPE DOWNDRAINS TO ENSURE THAT PROPER PIPE LENGTH IS PLACED TO ALLOW FOR THERMAL CONTRACTION AND EXPANSION AT TIME OF ASSEMBLY.

1. ALL HARDWARE SHALL BE GALVANIZED PER CALTRANS STD. SPECIFICATIONS SECTION 75-1.05 AFTER FABRICATION.
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