

# JOINT TECHNICAL DOCUMENT

## Volume III

Drawings

Gregory Canyon Landfill

San Diego County, California

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September 2010, January 2011

### **Prepared For:**

GREGORY CANYON LIMITED  
160 Industrial Street, Suite 200  
San Marcos, CA 92708

### **Prepared By:**

BRYAN A. STIRRAT & ASSOCIATES  
1360 Valley Vista Drive  
Diamond Bar, California 91765  
(909) 860-7777



## **Joint Technical Document**

Gregory Canyon Landfill  
San Diego County, California

---

September 2010, January 2011

Volume III



## **Joint Technical Document**

Gregory Canyon Landfill  
San Diego County, California

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September 2010, January 2011

Volume III

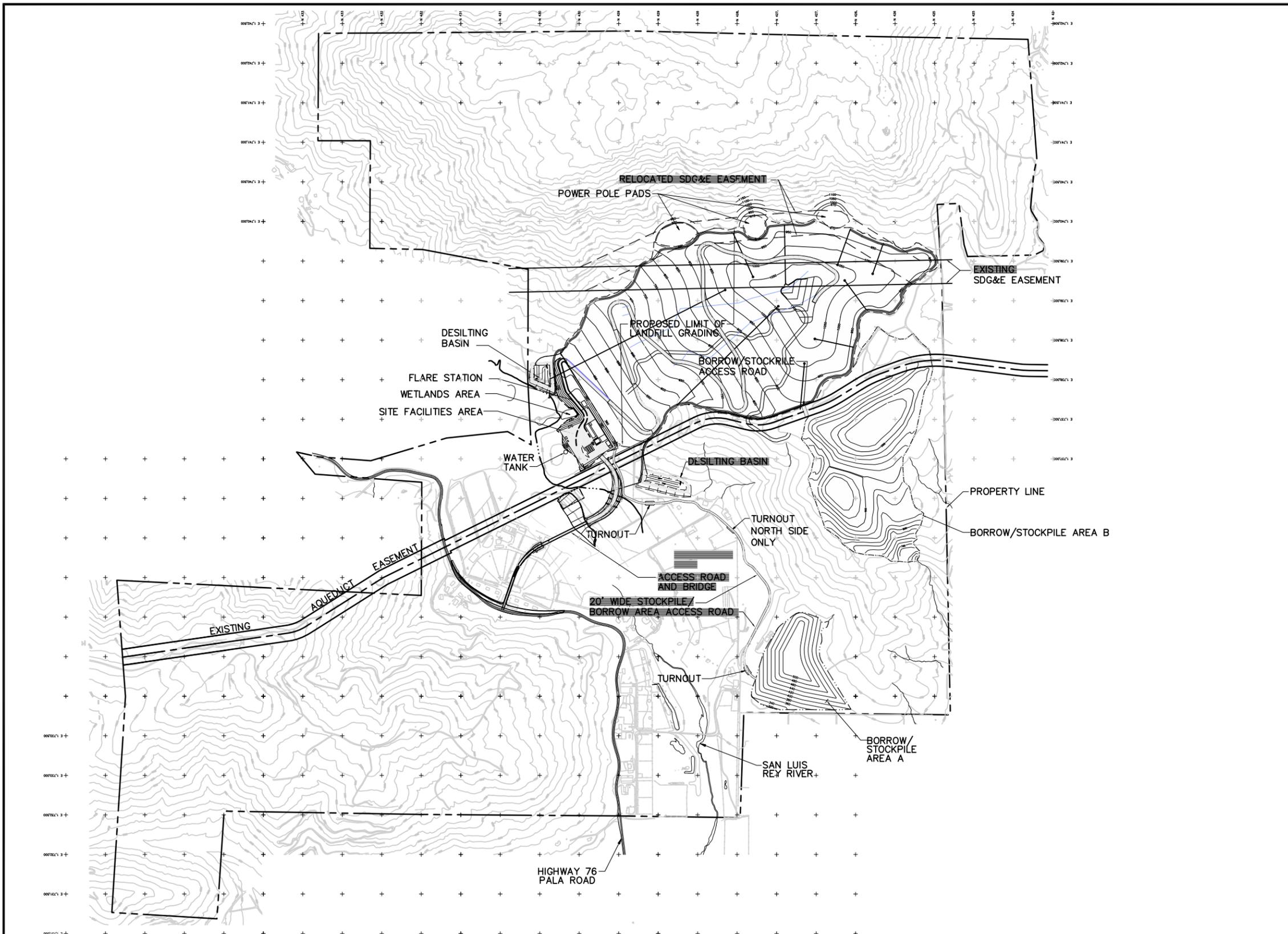
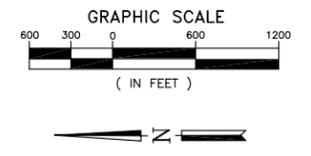
**JOINT TECHNICAL DOCUMENT  
FOR THE  
GREGORY CANYON LANDFILL  
VOLUME III**

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**LEGEND**

---	PROPERTY LINE
- - - - -	APPROXIMATE LIMIT OF LANDFILL GRADING
---	BORROW/STOCKPILE AREA LIMITS
---	FINAL CONTOUR
---	EXISTING CONTOUR
---	ACCESS/HAUL ROAD

PRELIMINARY

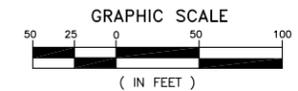
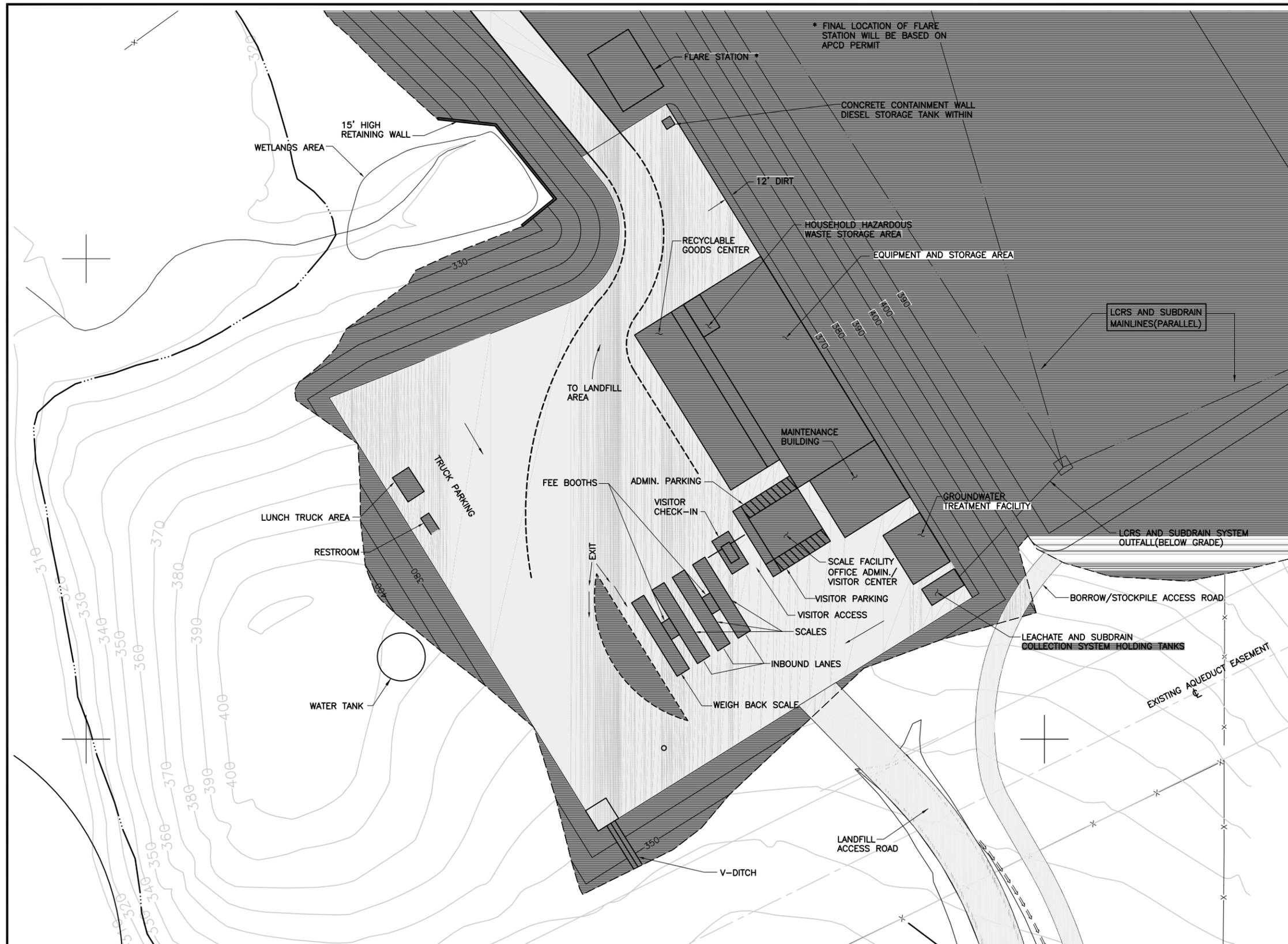
NO.	REVISION DESCRIPTION	BY:


**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

**GREGORY CANYON LANDFILL  
 SITE MAP**

DESIGNED BY : E.L.S.	SCALE : AS SHOWN
DRAWN BY : M.T.B.	DATE : 3-2002 FILE NO.: 26047DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 2**



**LEGEND**

- LIMIT OF WORK AREA
- 900 — FINAL CONTOUR
- 900 — EXISTING CONTOUR
- ▬ ACCESS/HAUL ROAD OR PAVED AREA
- FLOWLINE
- DIRECTION OF FLOW

PRELIMINARY

NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAT & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

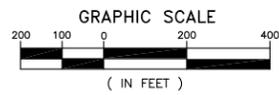
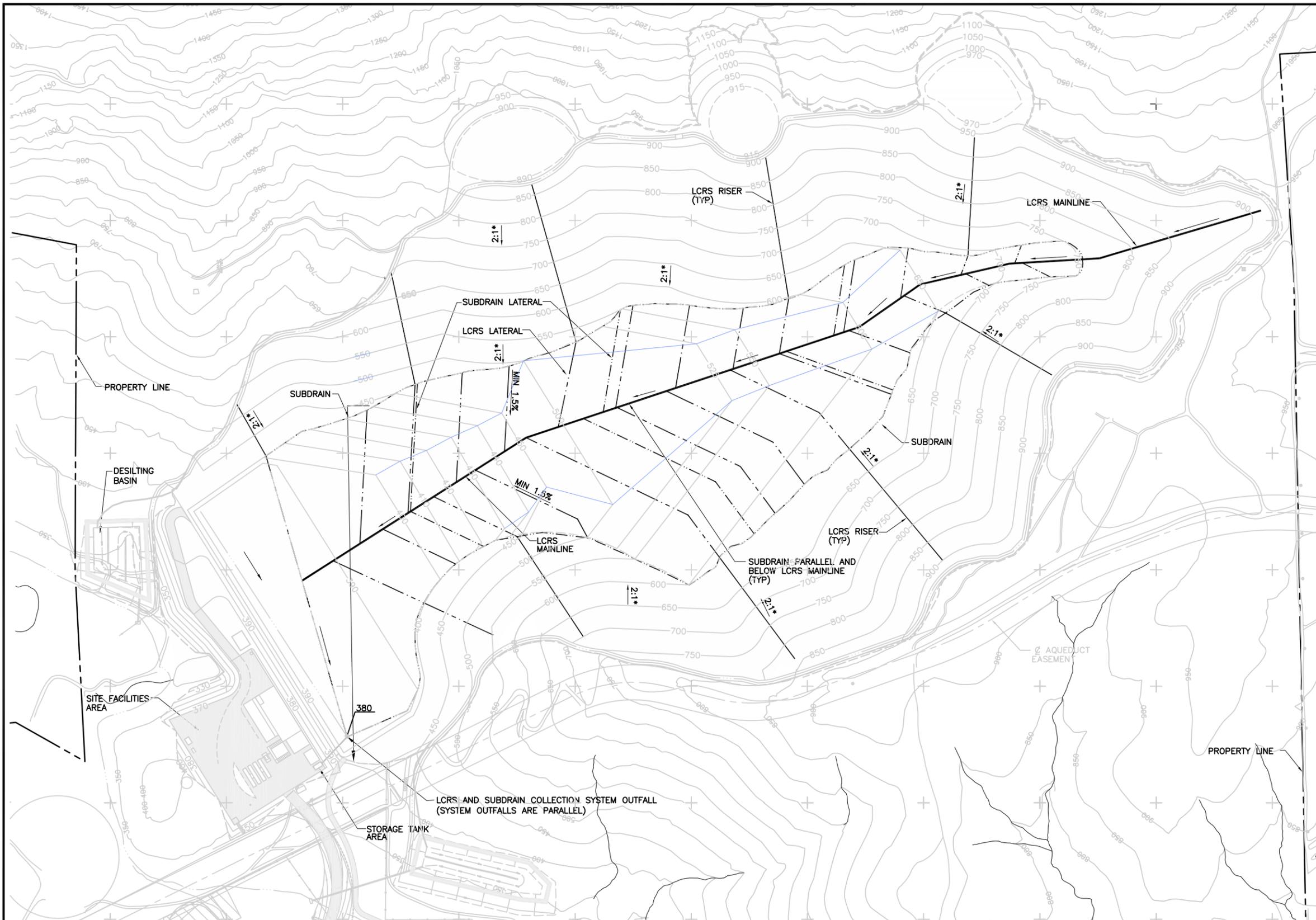
**GREGORY CANYON LANDFILL  
 SITE FACILITIES PLAN**

DESIGNED BY : E.L.S.	SCALE : AS SHOWN
DRAWN BY : M.T.B./J.P.J.	DATE : 5-2003 FILE NO.: 26048DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 3**

FOR PERMIT PURPOSES ONLY - NOT FOR CONSTRUCTION





**NOTES:**  
 1. CONCEPTUAL LAYOUT ONLY. CHANGES WILL BE MADE WITH EACH PHASE OF DEVELOPMENT.

**LEGEND**

	LCRS RISER/CLEANOUT
	LCRS LATERAL
	SUBDRAIN
	PROPERTY LINE
	600 EXISTING GROUND CONTOUR

PRELIMINARY

NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

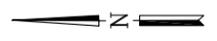
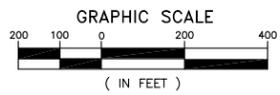
**GREGORY CANYON LANDFILL  
 LCRS/SUBDRAIN SYSTEM LAYOUT PLAN**

DESIGNED BY : T.W.	SCALE : AS SHOWN
DRAWN BY : J.P.J.	DATE : 3-2002 FILE NO. 25098DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 5**

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**LEGEND**

- ⊕ POWER POLE
- PROPERTY LINE
- LIMIT OF GRADING
- 850- EXISTING CONTOUR
- 950- FINAL CONTOUR
- APPROXIMATE LIMIT OF WASTE
- △ SETTLEMENT MONUMENT
- SURVEY MONUMENT
- ACCESS/HAUL ROAD
- BURIED PERIMETER DRAIN PIPE

\*3.5:1 SLOPE WILL INCLUDE BENCHES AT 40' VERTICAL INTERVALS

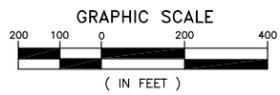
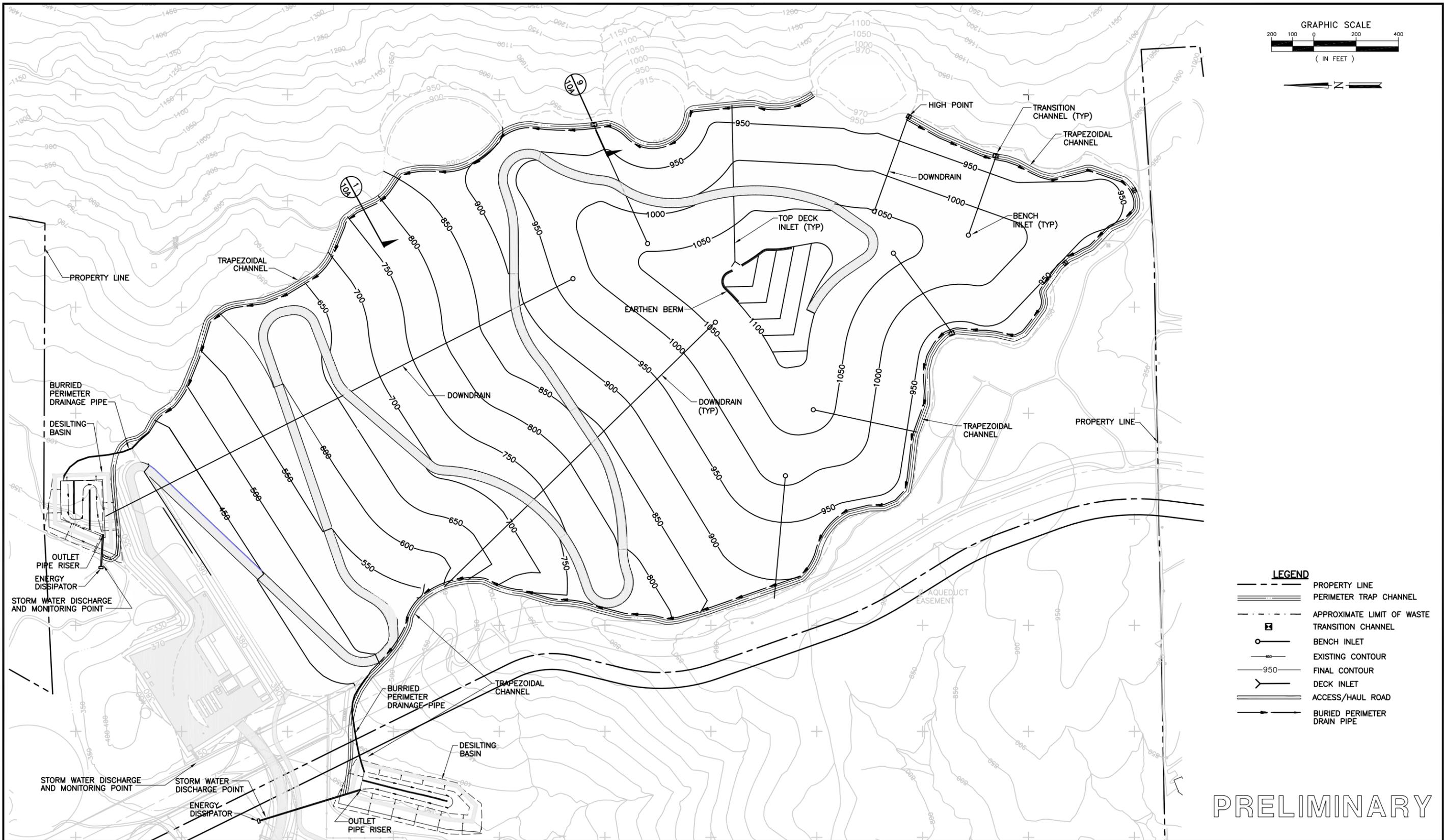
**PRELIMINARY**

NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAAT & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

<b>GREGORY CANYON LANDFILL</b>		
<b>MASTER FILL PLAN</b>		
DESIGNED BY : E.L.S.	SCALE : AS SHOWN	
DRAWN BY : M.T.B.	DATE : 8-2000	FILE NO.: 27349DB.DWG
CHECKED BY :	DATE :	
APPROVED BY :	DATE :	<b>DRAWING 6</b>

FOR PERMIT PURPOSES ONLY - NOT FOR CONSTRUCTION



- LEGEND**
- PROPERTY LINE
  - ==== PERIMETER TRAP CHANNEL
  - - - - APPROXIMATE LIMIT OF WASTE
  - ▣ TRANSITION CHANNEL
  - BENCH INLET
  - EXISTING CONTOUR
  - 950- FINAL CONTOUR
  - Y DECK INLET
  - ==== ACCESS/HAUL ROAD
  - BURIED PERIMETER DRAIN PIPE

PRELIMINARY

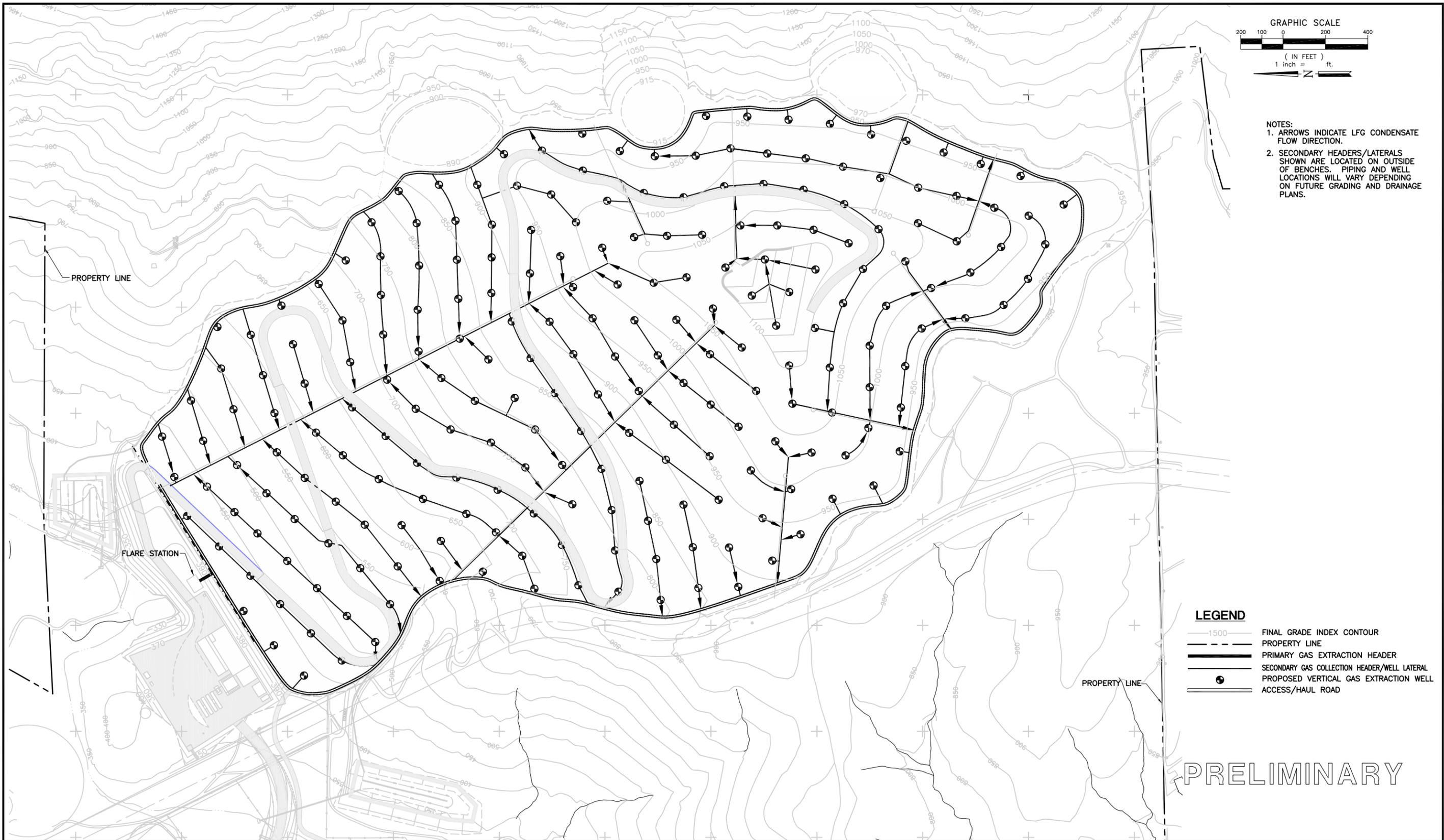
**GREGORY CANYON LANDFILL  
 FINAL DRAINAGE PLAN**

**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

DESIGNED BY : C.M.	SCALE : AS SHOWN
DRAWN BY : J.P.J.	DATE : 4-2002 FILE NO.: 34057DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 7**

NO.	REVISION DESCRIPTION	BY:



NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

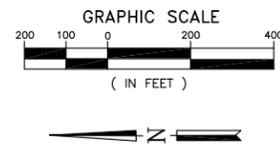
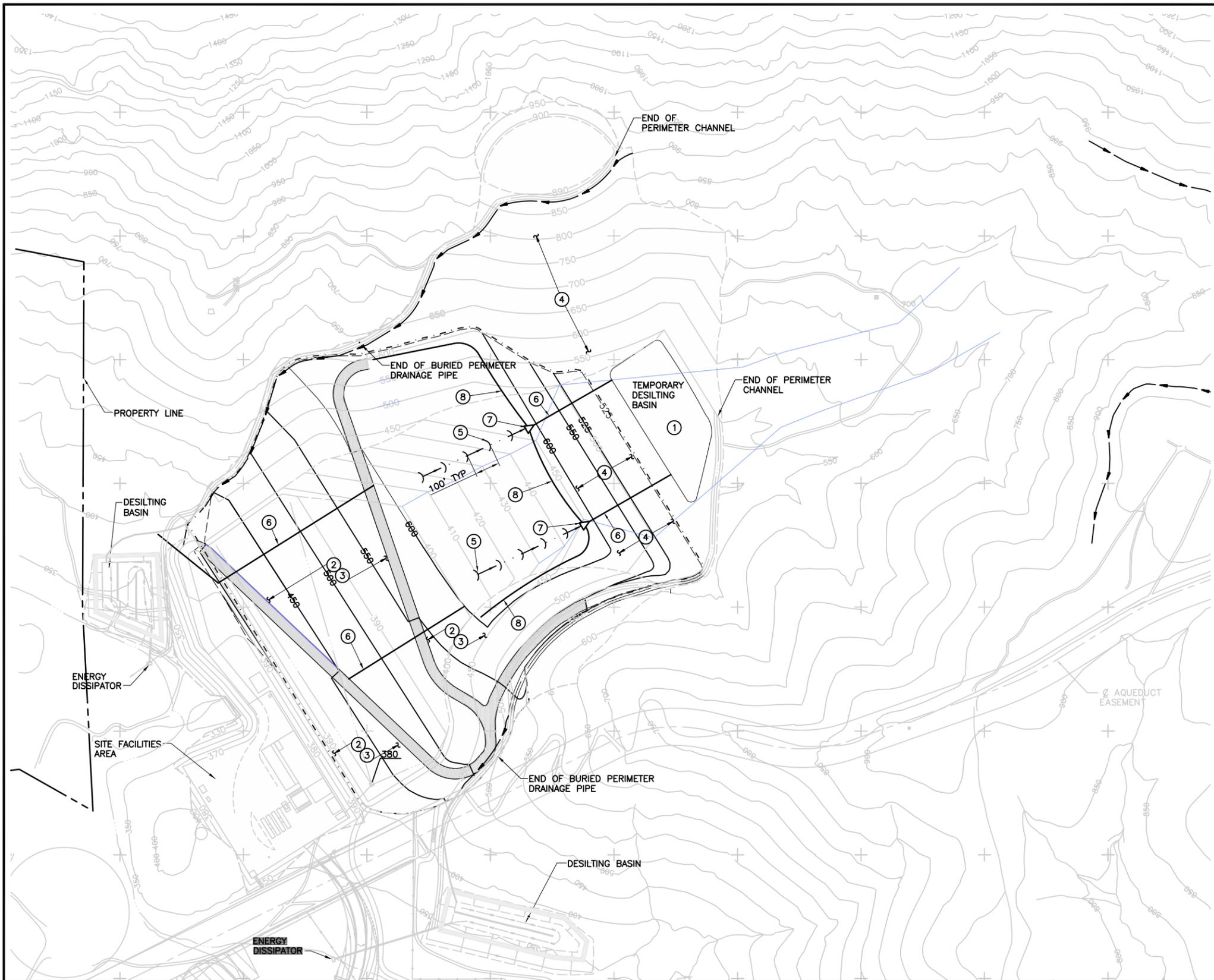
DESIGNED BY : SNA	SCALE : AS SHOWN
DRAWN BY : SNA	DATE : SEPT-03 FILE NO.: GASPLAN2.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**GREGORY CANYON LANDFILL  
 GAS CONTROL PLAN**

**DRAWING 8**

FOR PERMIT PURPOSES ONLY - NOT FOR CONSTRUCTION





**BMP NOTES**

- ① CONSTRUCT TEMPORARY DESILTING BASIN
- ② INSTALL STRAW MULCH <sup>⑥</sup>/<sub>10A</sub>
- ③ APPLY HYDROSEED TO PROMOTE VEGETATION
- ④ TRACKING OF SLOPES <sup>⑦</sup>/<sub>10A</sub>
- ⑤ INSTALL BIO LOG CHECK DAMS <sup>④</sup>/<sub>10A</sub>
- ⑥ INSTALL METAL FLUME DOWNDRAIN <sup>⑪</sup>/<sub>10A</sub>
- ⑦ INSTALL TOP DECK INLET <sup>⑤</sup>/<sub>10A</sub>
- ⑧ INSTALL TOP DECK BERM <sup>⑤</sup>/<sub>10A</sub>

**LEGEND**

- PROPERTY LINE
- - - - - EXISTING GROUND CONTOUR
- — — — — PROPOSED GROUND CONTOUR
- - - - - TOP/TOE OF SLOPE
- ==== ACCESS/HAUL ROAD
- ⊠ POWER POLES
- - - - - LIMIT OF PHASE I FILL
- BURIED PERIMETER DRAIN PIPE
- ==== PERIMETER TRAP CHANNEL

PRELIMINARY

NO.	REVISION DESCRIPTION	BY:


**BRYAN A. STIRRAT & ASSOCIATES**  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

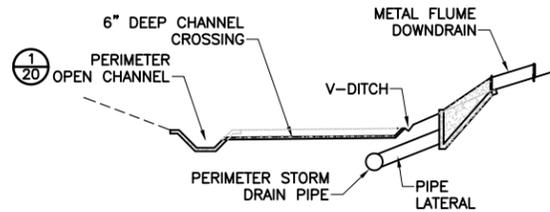
**GREGORY CANYON LANDFILL**  
**PHASE I FILL PLAN AND**  
**TYPICAL BMP IMPLEMENTATION**

DESIGNED BY : T.W.	SCALE : AS SHOWN
DRAWN BY : J.P.J.	DATE : 10-2001 FILE NO. 171047DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

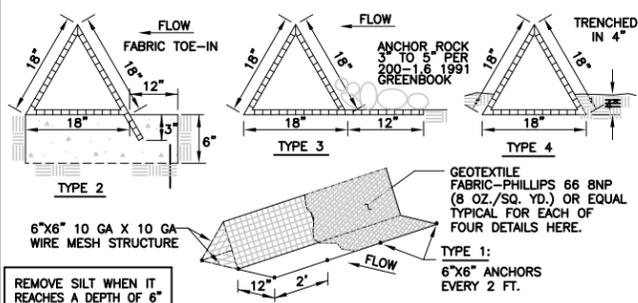
**DRAWING 10**

**NOTE:**

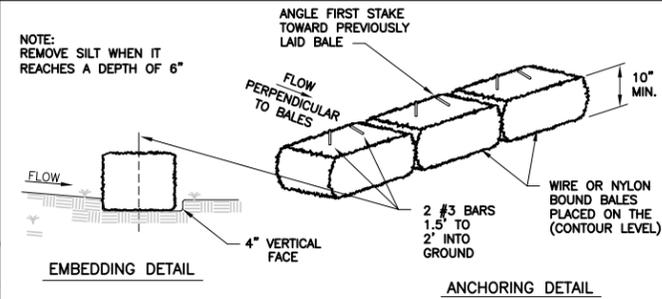
- 1) THE PERIMETER OPEN CHANNEL SHALL CONVEY RUNOFF FROM NATURAL UNDISTURBED AREAS AND DISTURBED AREAS THAT HAVE ESTABLISHED VEGETATION FOR MORE THAN TWO YEARS. RUNOFF FROM THIS CHANNEL SHALL BYPASS PROPOSED DESILTING BASINS.
- 2) THE PERIMETER STORM DRAIN PIPE SHALL CONVEY RUNOFF FROM DISTURBED AREAS AND WILL DISCHARGE TO PROPOSED DESILTING BASINS.
- 3) RUNOFF FROM THE METAL FLUME MAY BE DIVERTED TO THE CHANNEL CROSSING AND INTO THE PERIMETER OPEN CHANNEL ONCE THE TRIBUTARY AREAS TO THE METAL FLUME HAVE ESTABLISHED VEGETATION FOR MORE THAN TWO YEARS.



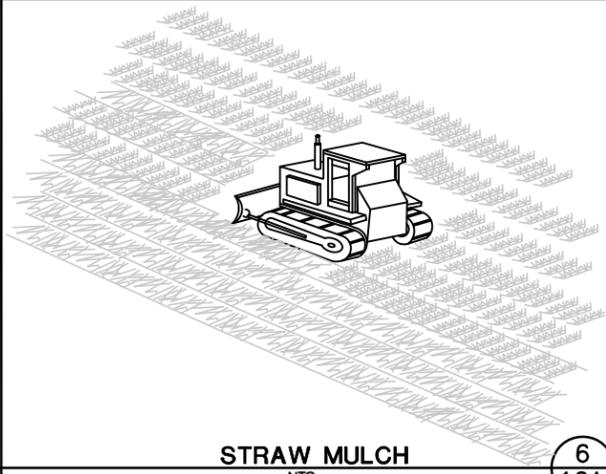
**SECTION B-B**  
NTS



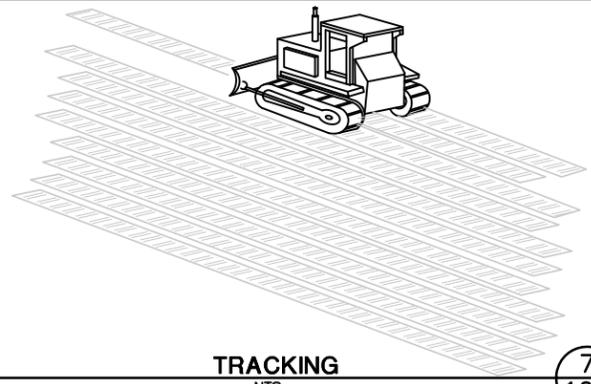
**TRIANGULAR SEDIMENT FILTER DIKE**  
NTS



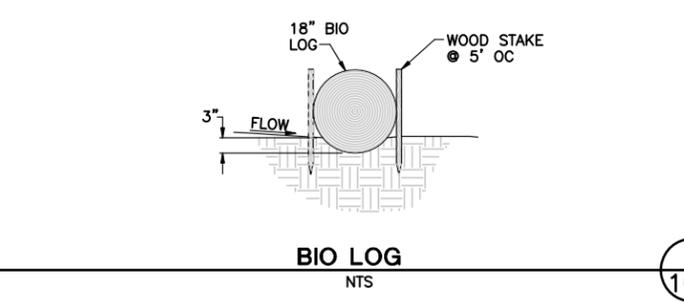
**HAY BALE DIKE**  
NTS



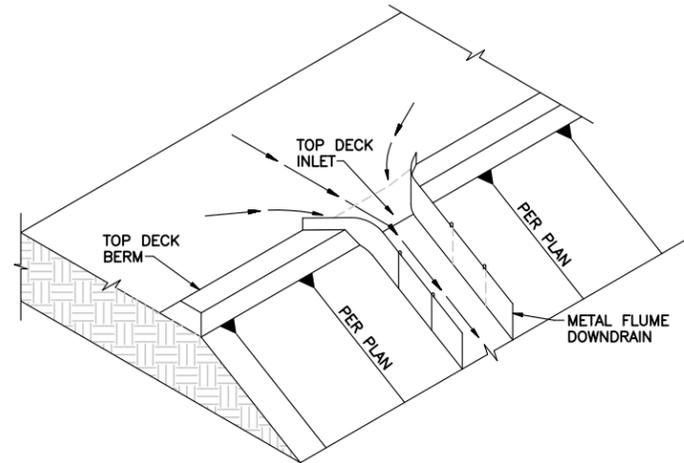
**STRAW MULCH**  
NTS



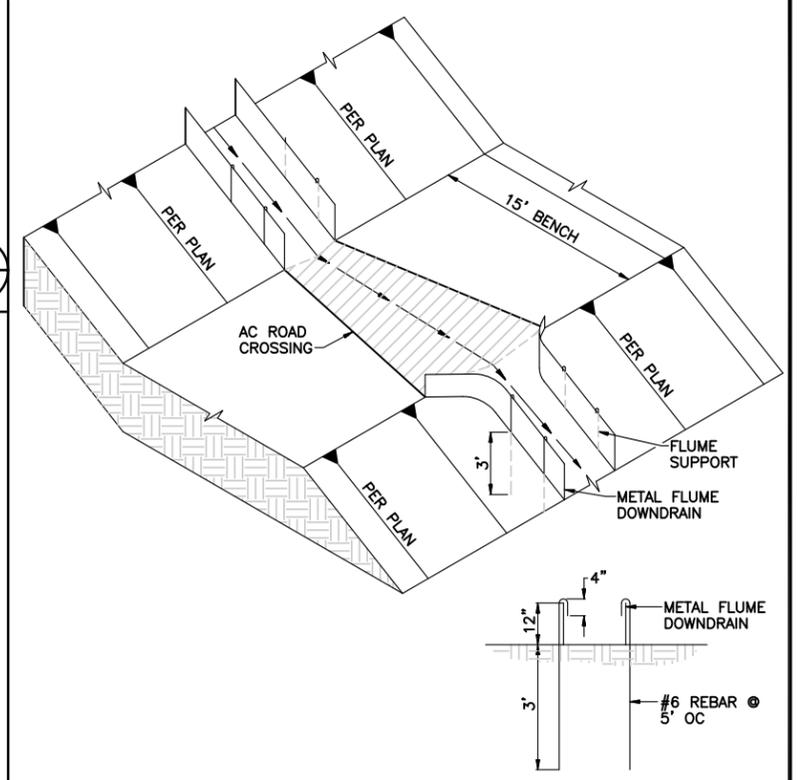
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NTS



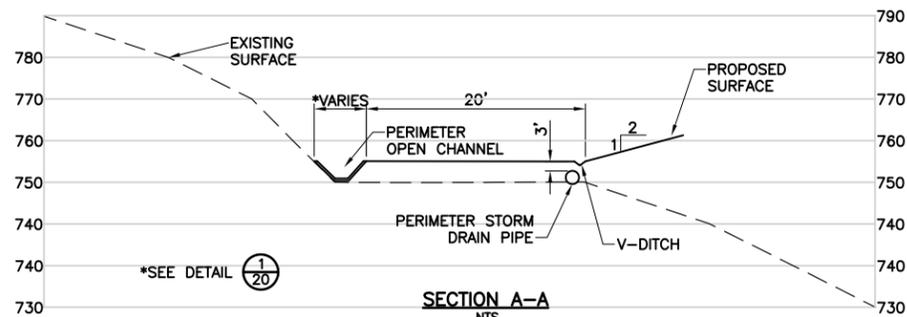
**BIO LOG**  
NTS



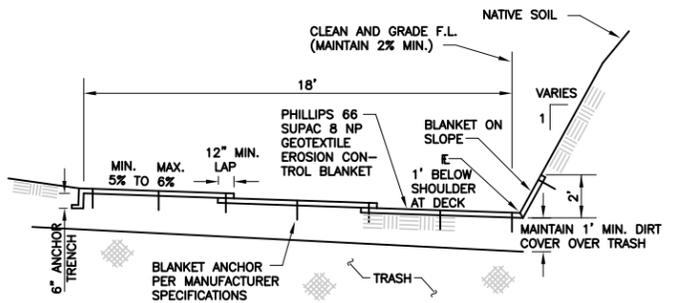
**TOP DECK INLET AND BERM**  
NTS



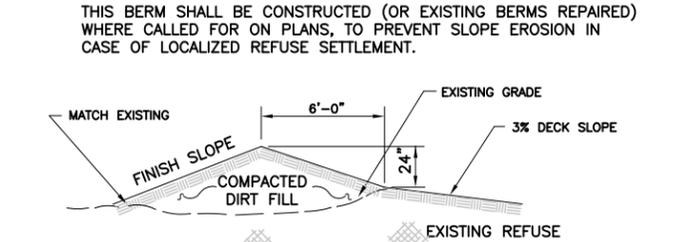
**SECTION B-B'**  
**PRELIMINARY**  
TYPICAL BENCH CROSSING DETAIL  
NTS



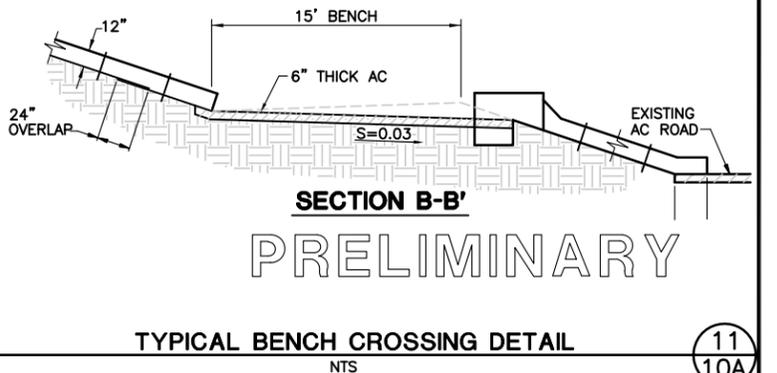
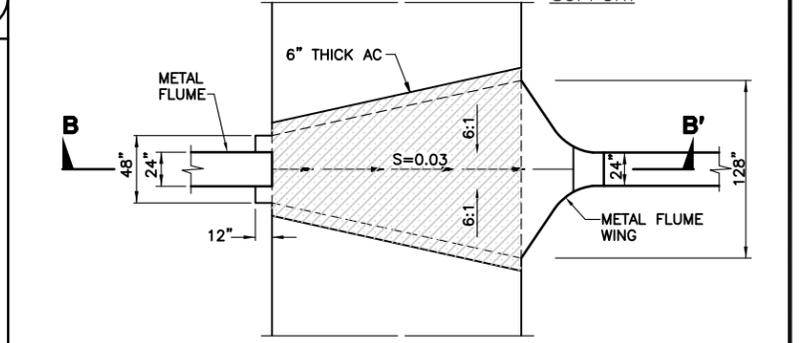
**TYP. BERM @ TOP OF FILL SLOPES**  
NTS



**EROSION CONTROL BLANKET**  
NTS



**TYP. BERM @ TOP OF FILL SLOPES**  
NTS



**SECTION B-B'**  
**PRELIMINARY**  
TYPICAL BENCH CROSSING DETAIL  
NTS

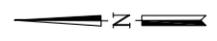
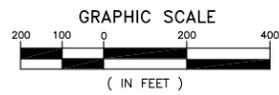
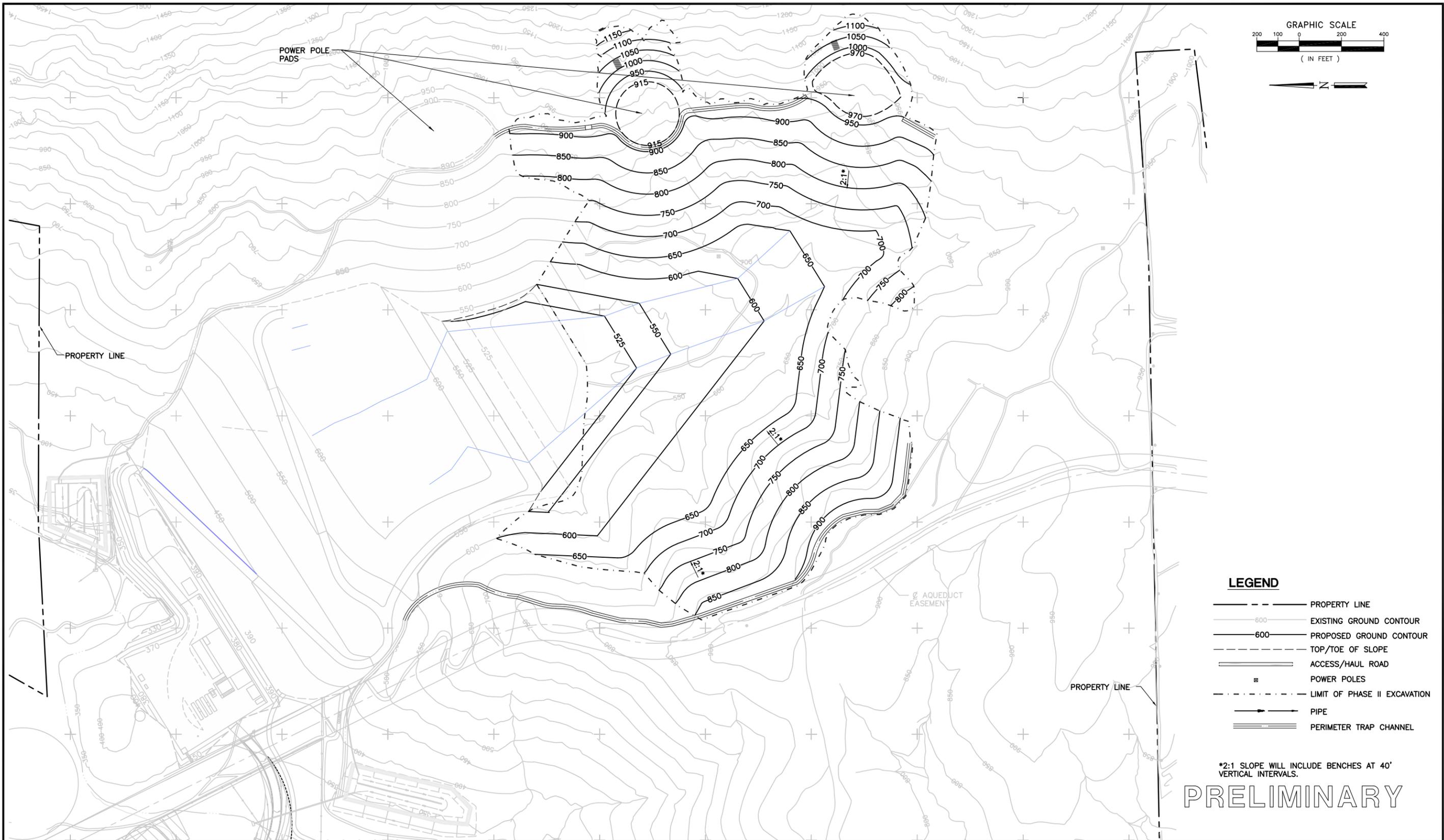
NO.	REVISION DESCRIPTION	BY:

**BAS**  
BRYAN A. STIRRAAT & ASSOCIATES  
CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
1360 E. VALLEY VISTA DRIVE  
DIAMOND BAR, CALIFORNIA 91765  
(909) 860-7777

**GREGORY CANYON LANDFILL  
BMP DETAILS AND SECTIONS**

DESIGNED BY : A.C.R.	SCALE : AS SHOWN
DRAWN BY : C.A.L.	DATE : 4-2002 FILE NO.: 29402DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 11**



**LEGEND**

- — — — — PROPERTY LINE
- 600 — EXISTING GROUND CONTOUR
- 600 — PROPOSED GROUND CONTOUR
- - - - - TOP/TOE OF SLOPE
- — — — — ACCESS/HAUL ROAD
- POWER POLES
- - - - - LIMIT OF PHASE II EXCAVATION
- — — — — PIPE
- — — — — PERIMETER TRAP CHANNEL

\*2:1 SLOPE WILL INCLUDE BENCHES AT 40' VERTICAL INTERVALS.

**PRELIMINARY**

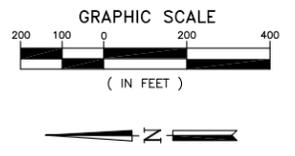
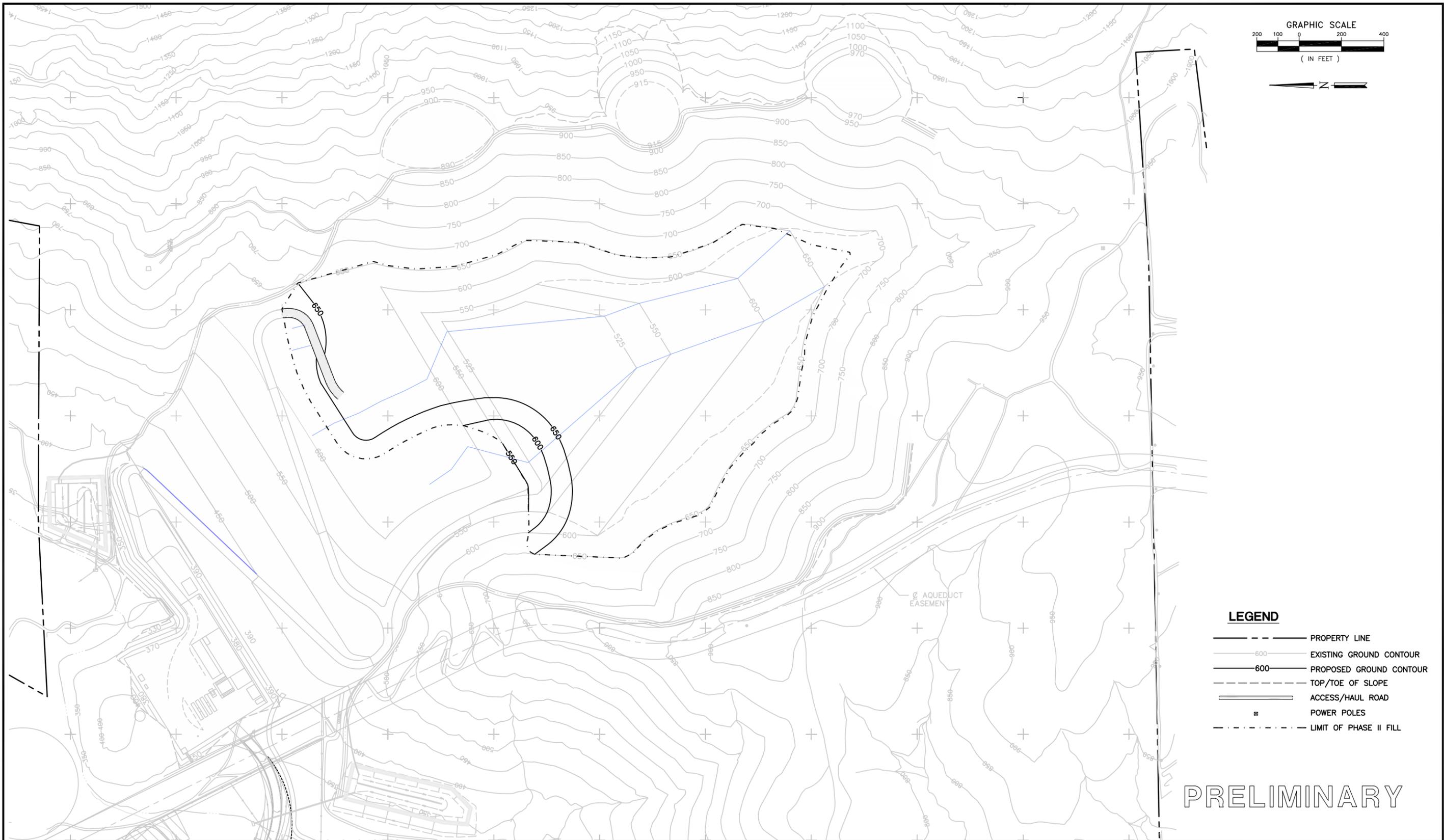
NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

<b>GREGORY CANYON LANDFILL PHASE II EXCAVATION PLAN</b>		
DESIGNED BY : T.W.	SCALE : AS SHOWN	
DRAWN BY : J.P.J.	DATE : 6-2001	FILE NO. 171048DB.DWG
CHECKED BY :	DATE :	<b>DRAWING 12</b>
APPROVED BY :	DATE :	

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FOR PERMIT PURPOSES ONLY - NOT FOR CONSTRUCTION



- LEGEND**
- PROPERTY LINE
  - 600 EXISTING GROUND CONTOUR
  - 600 PROPOSED GROUND CONTOUR
  - TOP/TOE OF SLOPE
  - ACCESS/HAUL ROAD
  - ⊕ POWER POLES
  - LIMIT OF PHASE II FILL

PRELIMINARY

NO.	REVISION DESCRIPTION	BY:


**BAS**  
 BRYAN A. STIRRAT & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

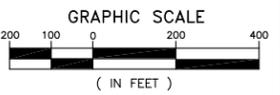
**GREGORY CANYON LANDFILL  
 PHASE II FILL PLAN**

DESIGNED BY : T.W.	SCALE : AS SHOWN
DRAWN BY : J.P.J.	DATE : 6-2001 FILE NO. 171049DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 13**

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**LEGEND**

- PROPERTY LINE
- LIMIT OF REFUSE
- FINAL CONTOUR
- EXISTING CONTOUR
- LIMIT OF PHASE III EXCAVATION
- RIDGE

\*2:1 SLOPE WILL INCLUDE BENCHES AT 40' INTERVALS

PRELIMINARY

NO.	REVISION DESCRIPTION	BY:


**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

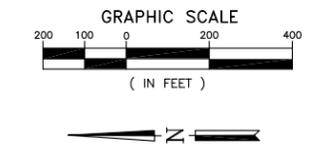
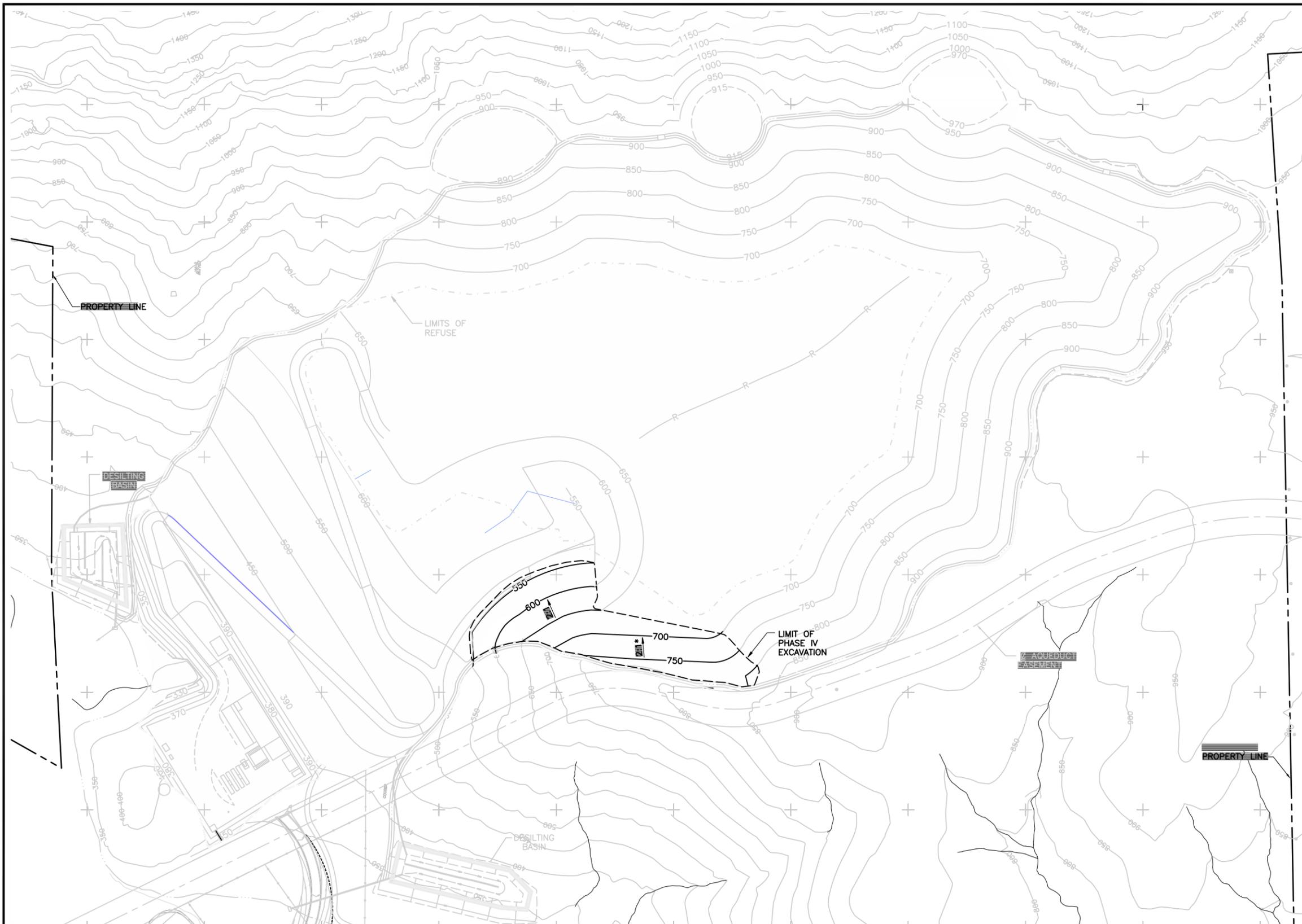
**GREGORY CANYON LANDFILL  
 PHASE III EXCAVATION**

DESIGNED BY : E.L.S.	SCALE : AS SHOWN
DRAWN BY : M.T.B.	DATE : 8-2000 FILE NO.: 28038DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 14**

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FOR PERMIT PURPOSES ONLY - NOT FOR CONSTRUCTION



**LEGEND**

	PROPERTY LINE
	LIMIT OF REFUSE
	LIMIT OF PHASE IV EXCAVATION
	FINAL CONTOUR
	EXISTING CONTOUR
	RIDGE

\*2:1 SLOPE WILL INCLUDE BENCHES AT 40' INTERVALS

PRELIMINARY

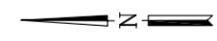
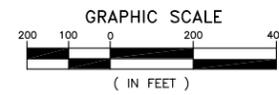
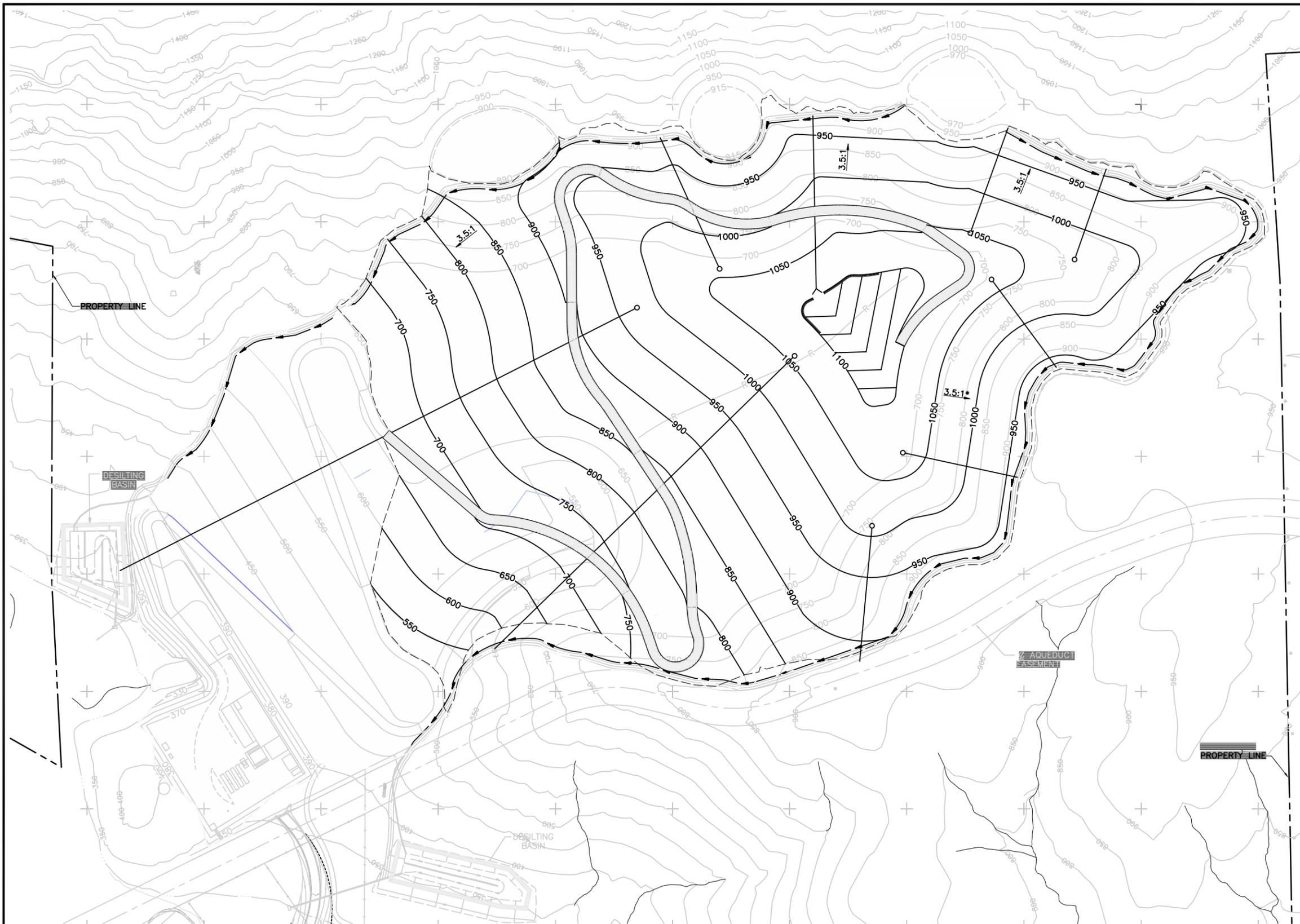
NO.	REVISION DESCRIPTION	BY:


**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

<b>GREGORY CANYON LANDFILL PHASE IV EXCAVATION</b>		
DESIGNED BY : E.L.S.	SCALE : AS SHOWN	
DRAWN BY : M.T.B.	DATE : 7-2000	FILE NO.: 28039DB.DWG
CHECKED BY :	DATE :	
APPROVED BY :	DATE :	<b>DRAWING 15</b>

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FOR PERMIT PURPOSES ONLY - NOT FOR CONSTRUCTION



**LEGEND**

- PROPERTY LINE
- - - - - LIMIT OF REFUSE
- - - - - LIMIT OF PHASE III FILL
- 900— FINAL CONTOUR
- 900— EXISTING CONTOUR
- R— RIDGE
- >>> BURIED PERIMETER DRAIN PIPE

\*3.5:1 SLOPE WILL INCLUDE BENCHES AT 40' INTERVALS

**PRELIMINARY**

NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

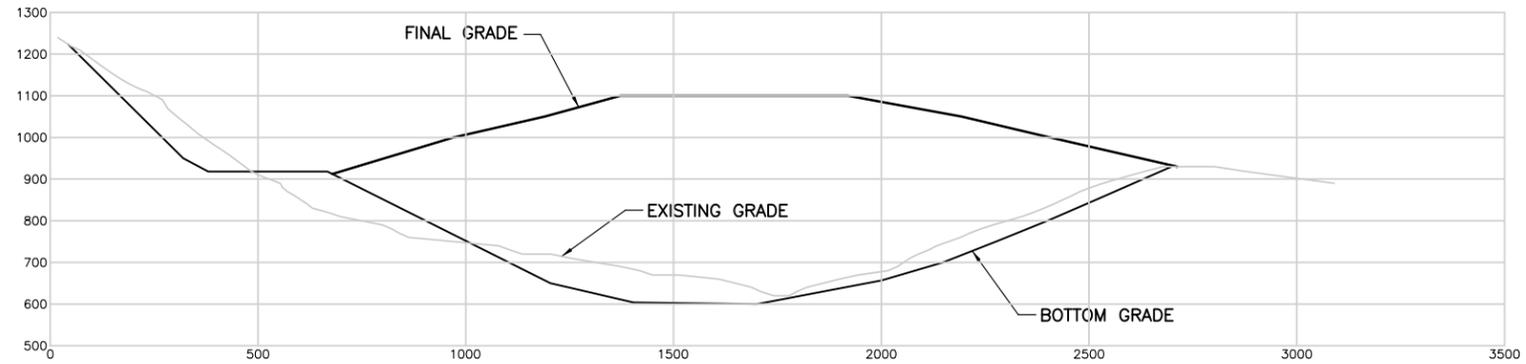
**GREGORY CANYON LANDFILL  
 PHASE III FILL**

DESIGNED BY : E.L.S.	SCALE : AS SHOWN
DRAWN BY : M.T.B./J.P.J.	DATE : 7-2000 FILE NO.: 27348DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

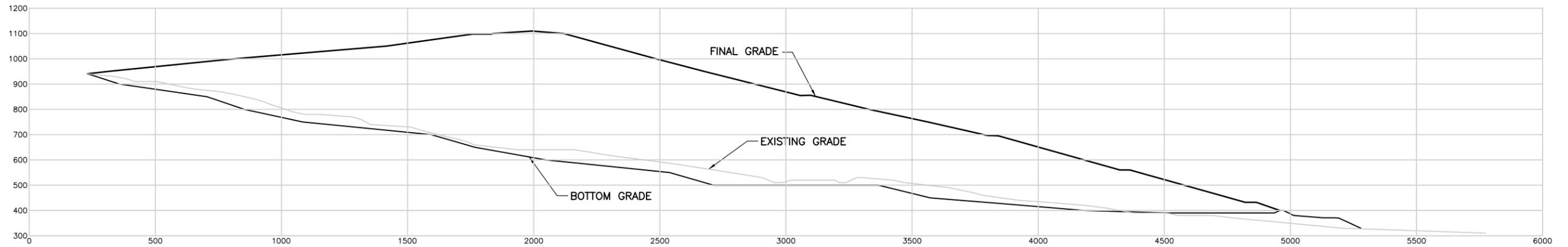
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FOR PERMIT PURPOSES ONLY - NOT FOR CONSTRUCTION



**SECTION B**  
SCALE: 1"=200'



**SECTION A**  
SCALE: 1"=200'

PRELIMINARY

**GREGORY CANYON LANDFILL  
CROSS SECTIONS**

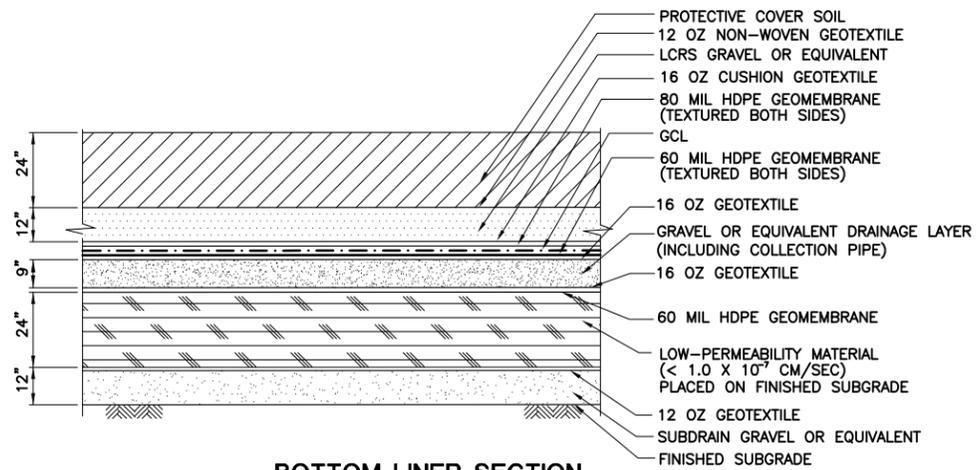
**BAS**  
BRYAN A. STIRRAT & ASSOCIATES  
CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
1360 E. VALLEY VISTA DRIVE  
DIAMOND BAR, CALIFORNIA 91765  
(909) 860-7777

DESIGNED BY : J.I.	SCALE : AS SHOWN
DRAWN BY : J.P.J.	DATE : 6-2001 FILE NO.: 38169DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 17**

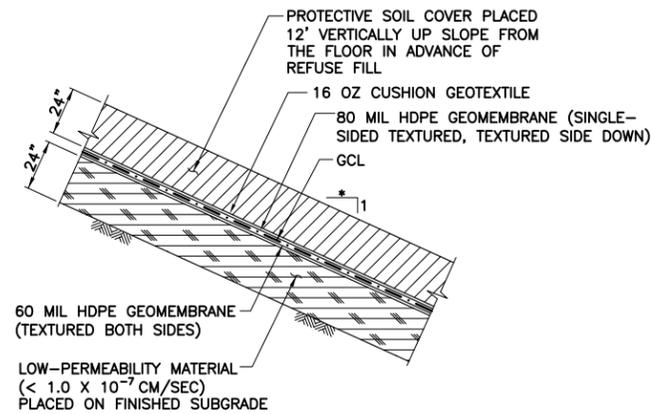
NO.	REVISION DESCRIPTION	BY:

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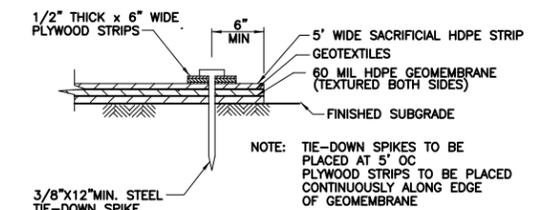
**BOTTOM LINER SECTION**  
NTS

1  
17



**SLOPE LINER SECTION**  
NTS

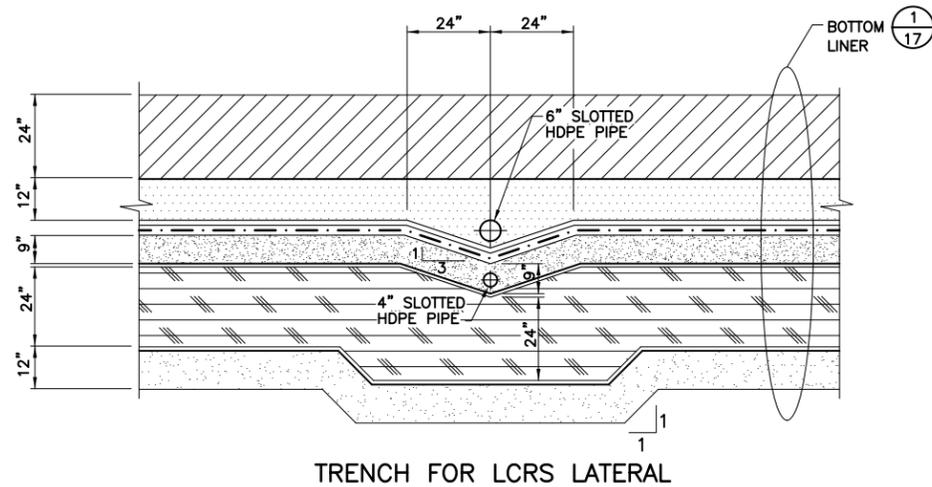
2  
17



**TIE-DOWN FOR SLOPE**

**TIE-DOWN FOR LINER TERMINATION ALONG SLOPE**  
NTS

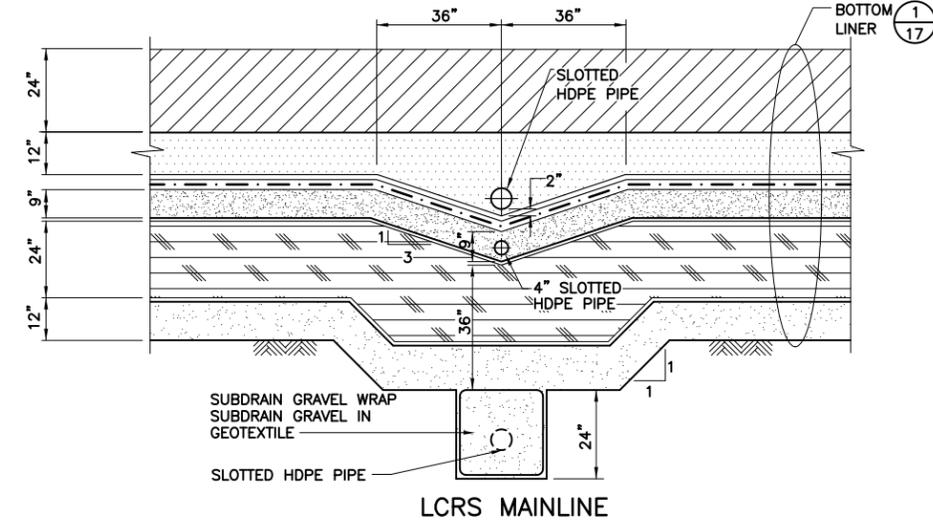
3  
17



**TRENCH FOR LCRS LATERAL**

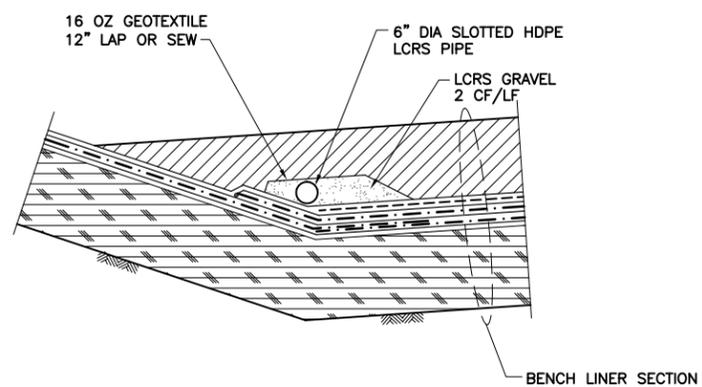
**LCRS SECTIONS**  
NTS

1  
17



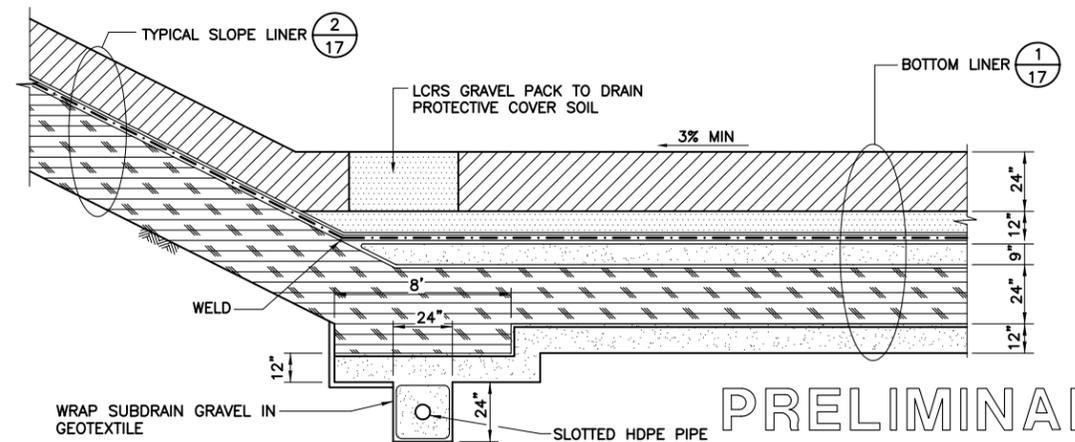
**LCRS MAINLINE**

4  
17



**LCRS BENCH COLLECTOR**  
NTS

5  
17



**TYPICAL BOTTOM AND SLOPE LINER TRANSITION**  
NTS

6  
17

**PRELIMINARY**

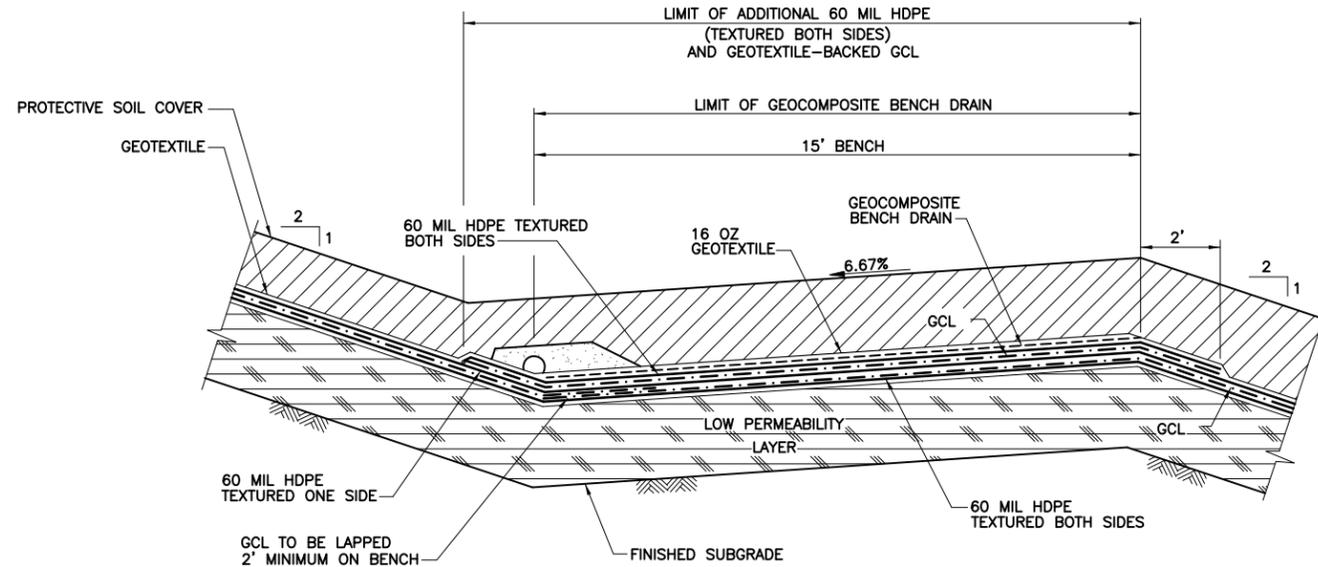
NO.	REVISION DESCRIPTION	BY:

**BAS**  
BRYAN A. STIRRAAT & ASSOCIATES  
CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
1360 E. VALLEY VISTA DRIVE  
DIAMOND BAR, CALIFORNIA 91765  
(909) 860-7777

**GREGORY CANYON LANDFILL  
DETAIL SHEET**

DESIGNED BY : T.W.	SCALE : AS SHOWN
DRAWN BY : J.P.J.	DATE : REV 1-05 FILE NO.: 29159DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

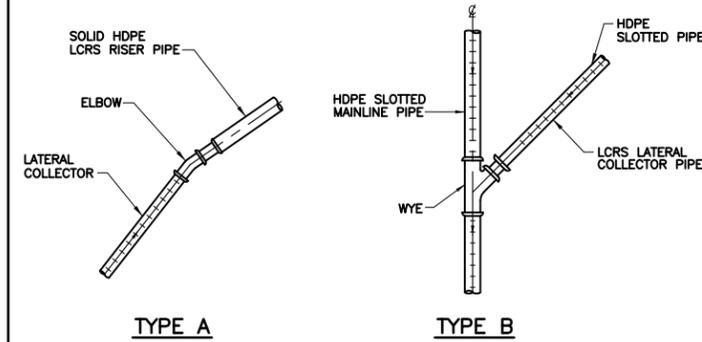
**DRAWING 18**



TYPICAL BENCH SECTION

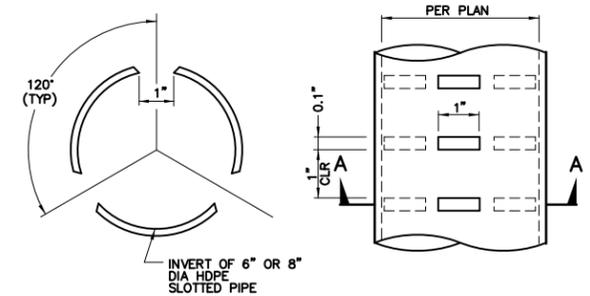
- NOTE:
1. TYPICAL BENCH SECTION LOCATED EVERY 40' VERTICALLY FROM TOE
  2. SINGLE-SIDED TEXTURED GEOMEMBRANES MAY BE USED IN SOME AREAS

1  
18



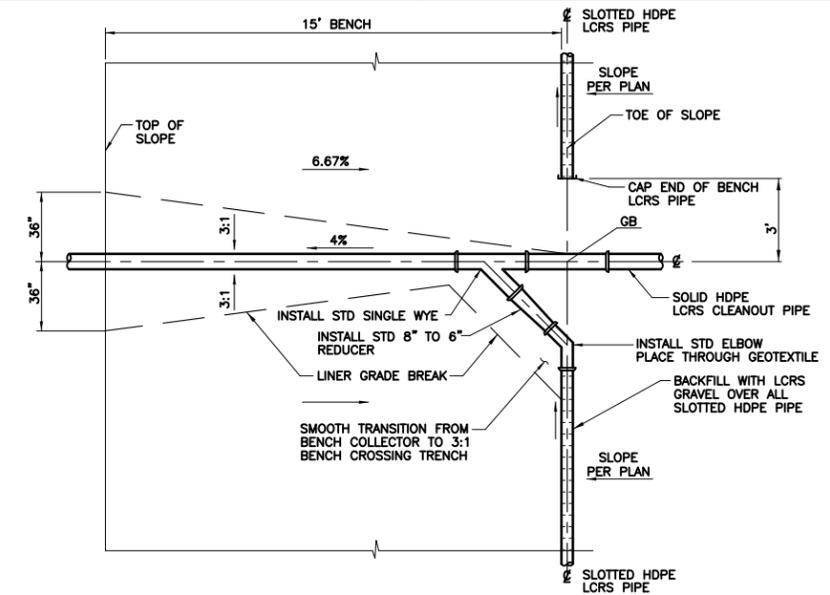
LCRS LATERAL COLLECTOR JUNCTION

2  
18



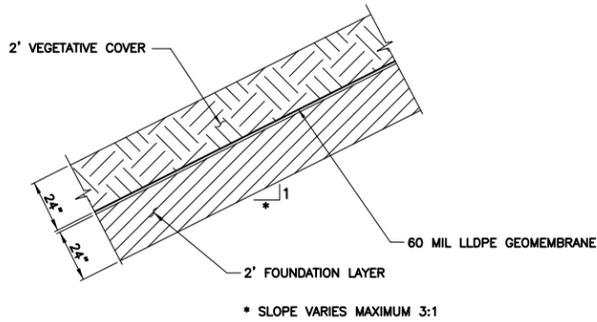
SLOTTED LCRS PIPE

3  
18



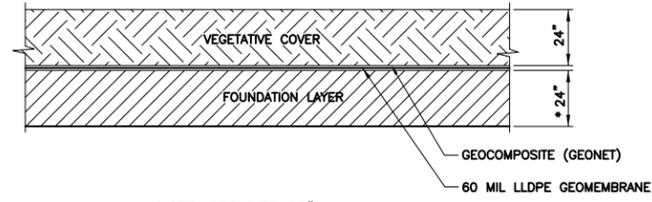
LCRS BENCH COLLECTOR AND RISER JUNCTION

4  
18



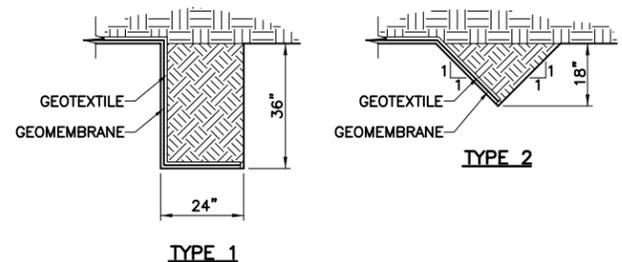
TYPICAL SLOPE COVER SECTION

5  
18



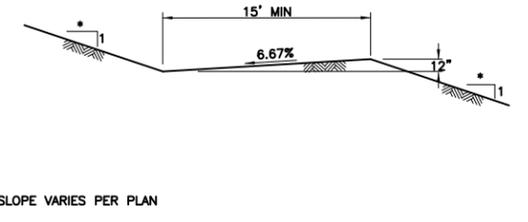
TYPICAL DECK COVER SECTION

6  
18



TYPICAL ANCHOR TRENCH

7  
18



TYPICAL BENCH

8  
18

PRELIMINARY

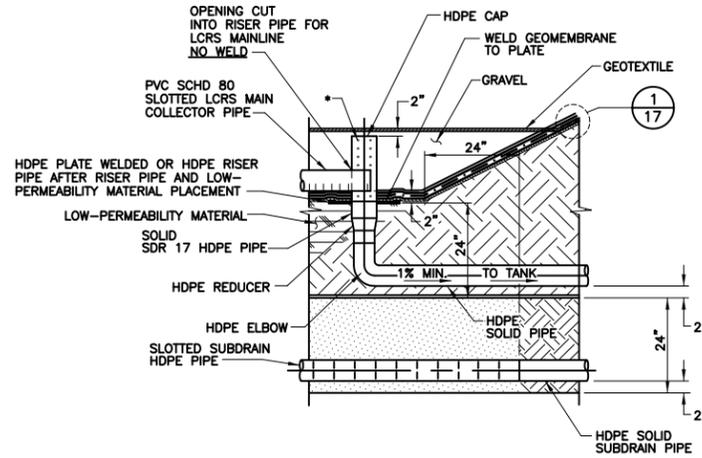
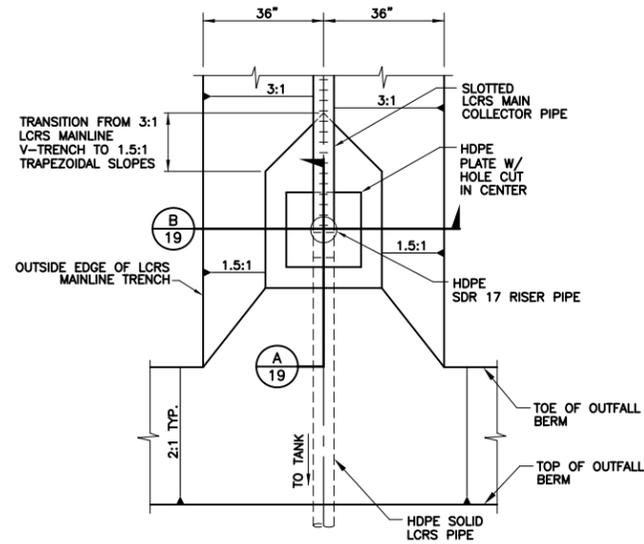
NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAT & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

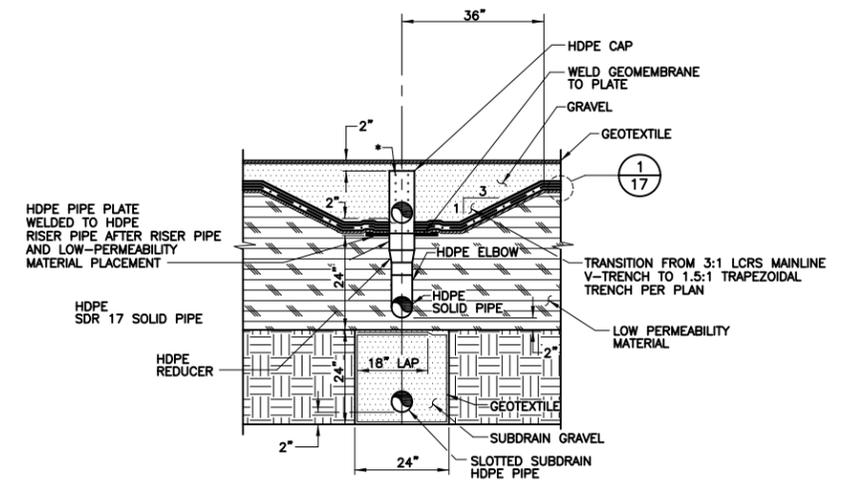
**GREGORY CANYON LANDFILL  
 DETAIL SHEET**

DESIGNED BY : G.V.N.	SCALE : AS SHOWN
DRAWN BY : T.J.S./J.P.J.	DATE : 9-2001 FILE NO.: 29160DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 19**



SECTION A  
NTS 1/17



SECTION B  
NTS 1/17

LCRS AND SUBDRAIN OUTFALL PLAN  
NTS

1/19

PRELIMINARY

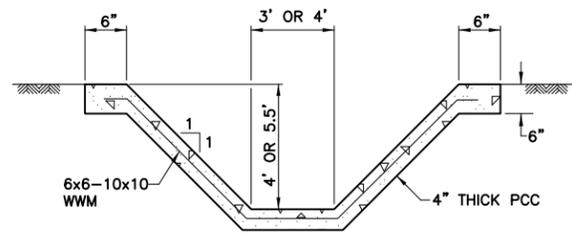
NO.	REVISION DESCRIPTION	BY:

**BAS**  
BRYAN A. STIRRAT & ASSOCIATES  
CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
1360 E. VALLEY VISTA DRIVE  
DIAMOND BAR, CALIFORNIA 91765  
(909) 860-7777

GREGORY CANYON LANDFILL DETAIL SHEET		
DESIGNED BY : T.W.	SCALE : AS SHOWN	
DRAWN BY : J.P.J.	DATE : 9-2001	FILE NO.: 29161DB.DWG
CHECKED BY :	DATE :	
APPROVED BY :	DATE :	<b>DRAWING 20</b>

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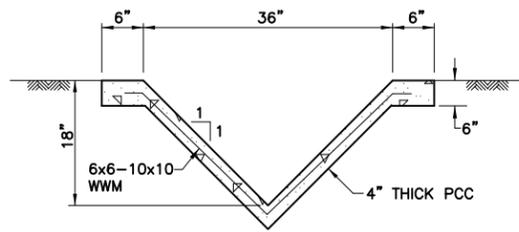
FOR PERMIT PURPOSES ONLY - NOT FOR CONSTRUCTION



**PCC TRAPEZOIDAL CHANNEL**

NTS

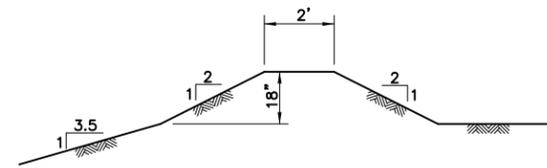
1  
20



**PCC V-DITCH**

NTS

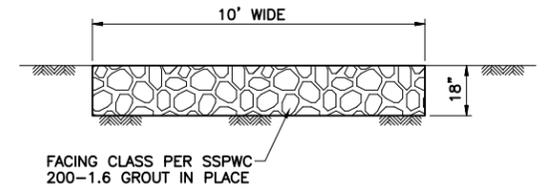
2  
20



**TOP DECK EARTHEN BERM**

NTS

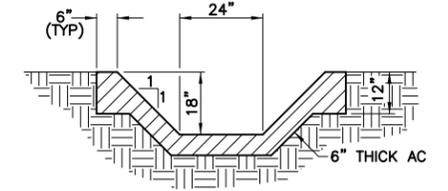
3  
20



**GRADED RIPRAP**

NTS

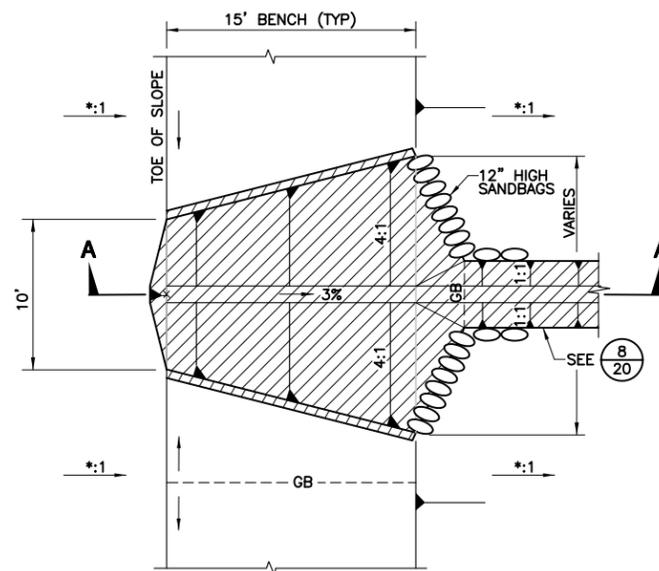
4  
20



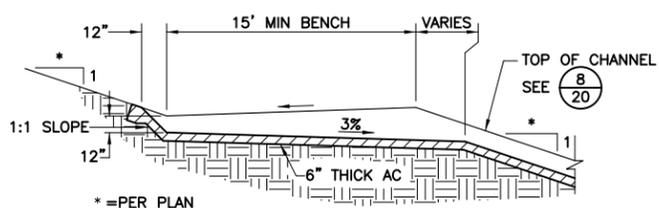
**AC DOWNDRAIN TRAPEZOIDAL CHANNEL**

NTS

8  
20



**PLAN**

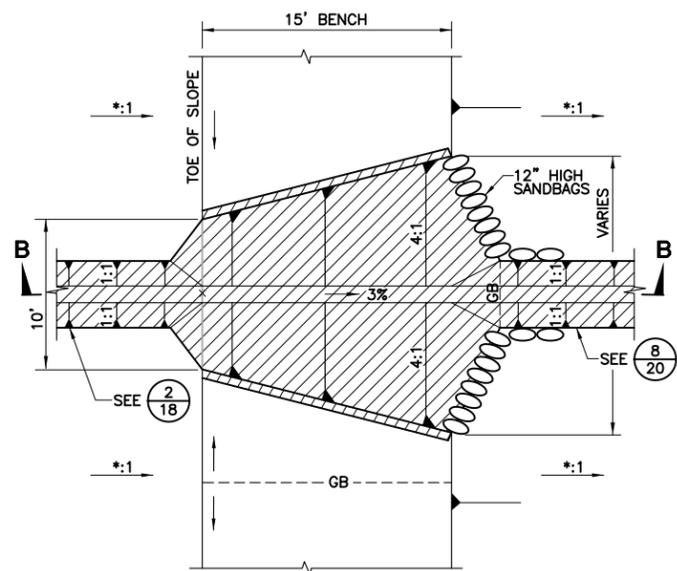


**SECTION A-A**

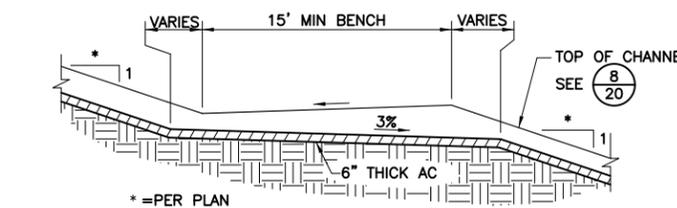
**TYPICAL BENCH INLET**

NTS

5  
20



**PLAN**

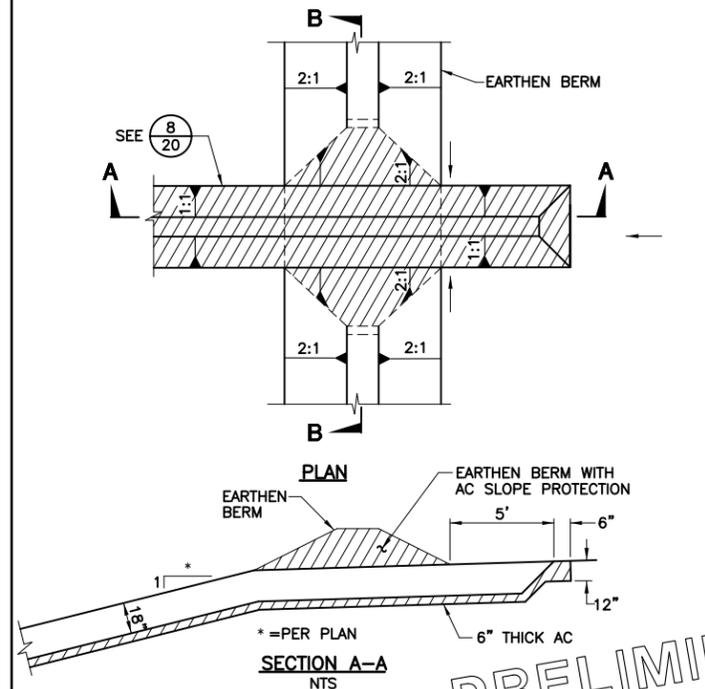


**SECTION B-B**

**AC DOWNDRAIN BENCH CROSSING**

NTS

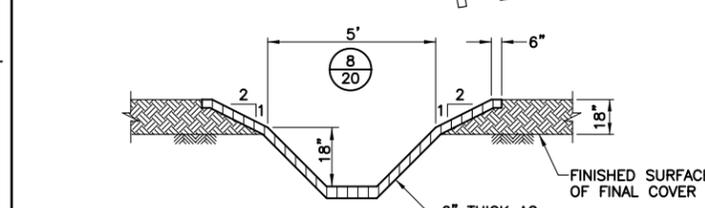
6  
20



**PLAN**

**SECTION A-A**

NTS



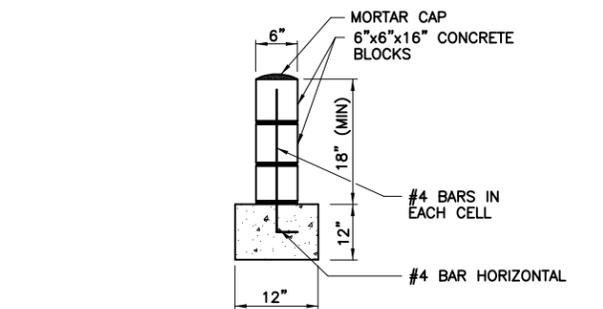
**SECTION B-B**

NTS

**TOP DECK INLET**

NTS

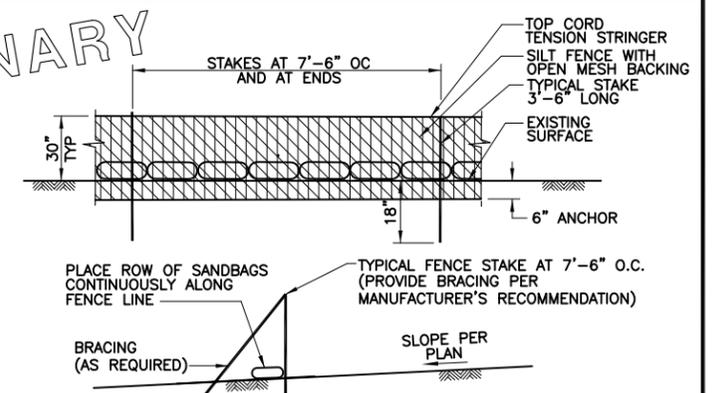
7  
20



**SPLASH WALL**

NTS

9  
20



**SILT FENCE DETAIL**

NTS

10  
20

NO.	REVISION DESCRIPTION	BY:

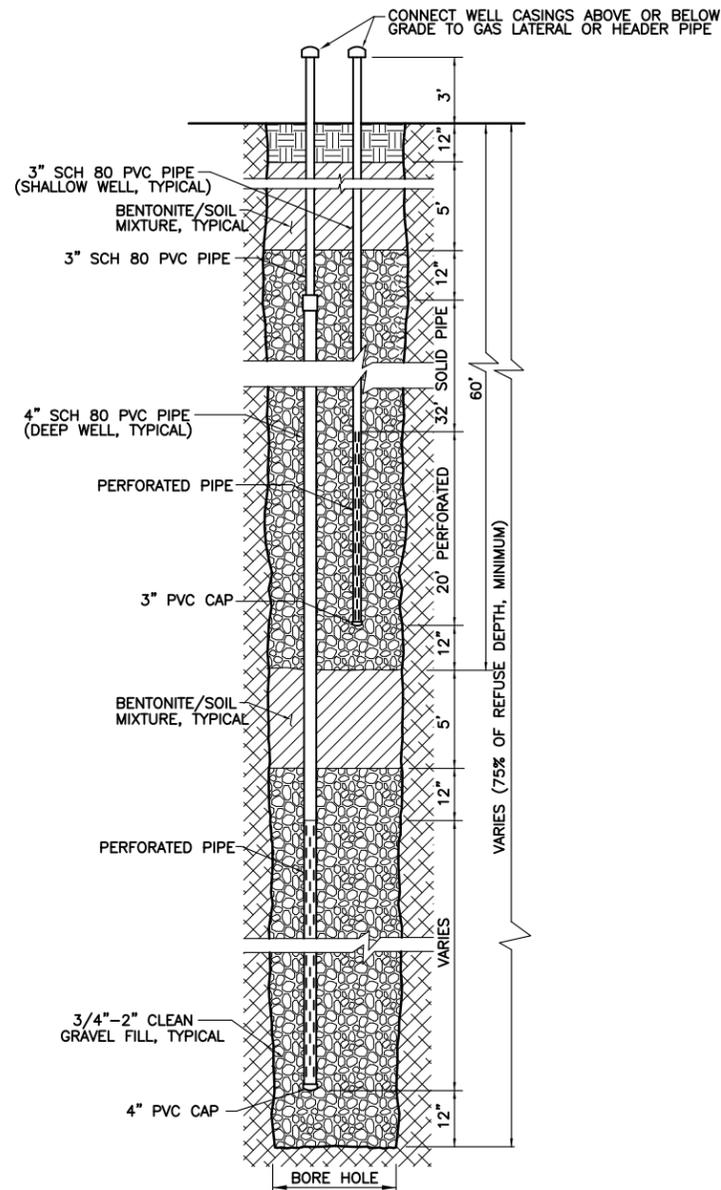
**BAS**  
BRYAN A. STIRRAAT & ASSOCIATES  
CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
1360 E. VALLEY VISTA DRIVE  
DIAMOND BAR, CALIFORNIA 91765  
(909) 860-7777

**GREGORY CANYON LANDFILL  
DETAIL SHEET**

DESIGNED BY : G.V.N.	SCALE : AS SHOWN
DRAWN BY : T.J.S.	DATE : 8-1998 FILE NO.: 29158DB
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 21**



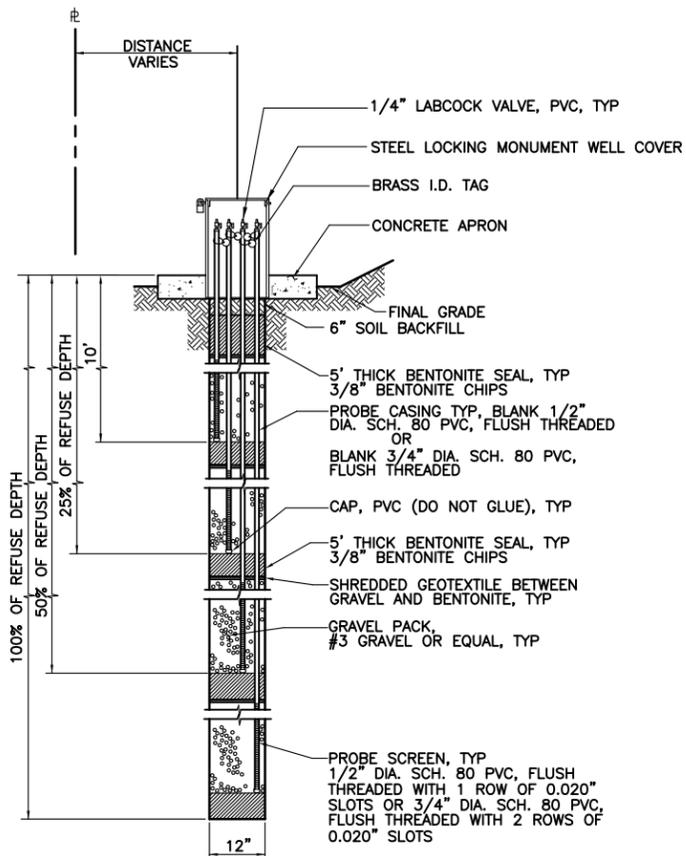


TYPICAL GAS EXTRACTION WELL DETAIL

NTS

1

22

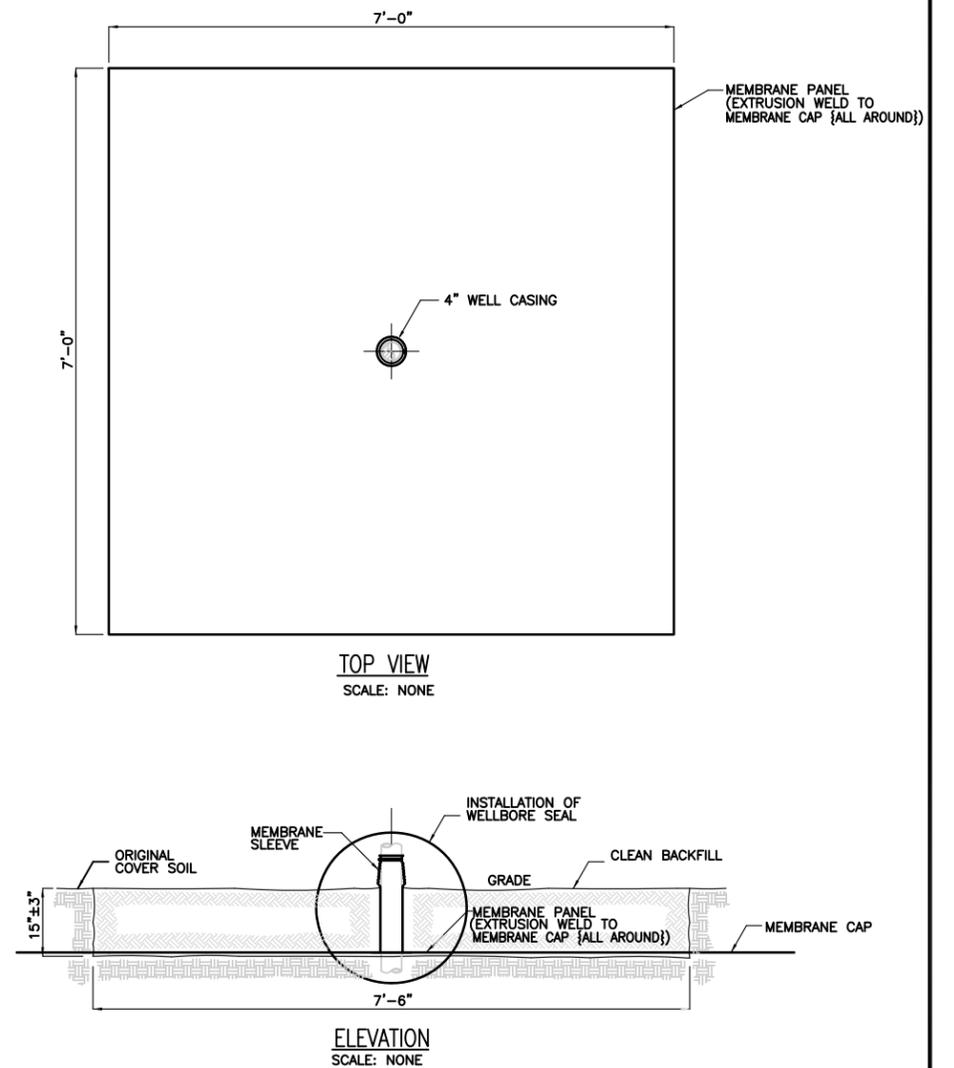


TYPICAL GAS MONITORING PROBE

NTS

2

22



TYPICAL WELLBORE SEAL TO MEMBRANE CAP CONNECTION DETAIL

NTS

3

22

PRELIMINARY

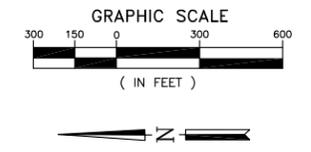
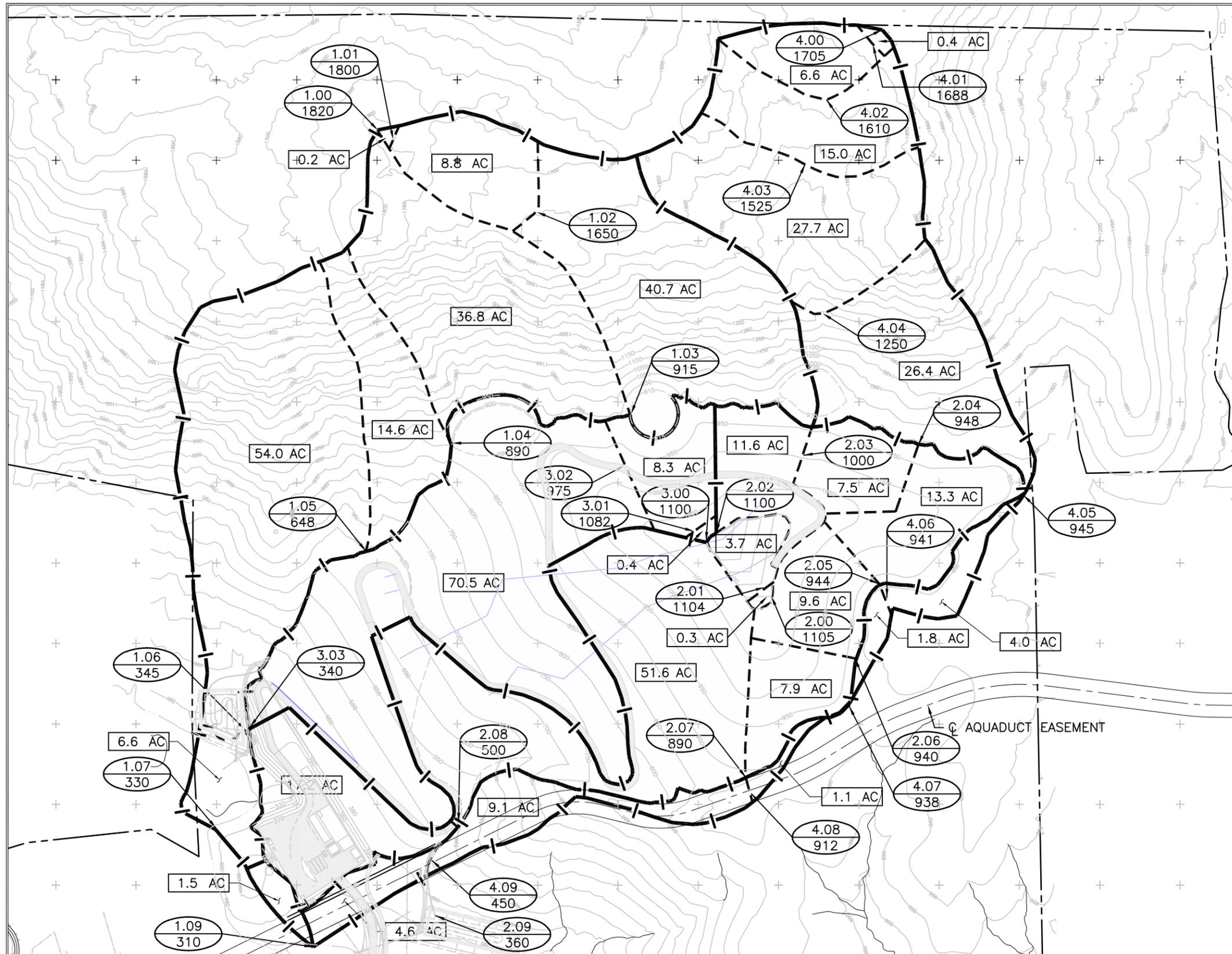
NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAT & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

GREGORY CANYON LANDFILL  
 GAS SYSTEM DETAIL SHEET

DESIGNED BY : G.V.N.	SCALE : AS SHOWN
DRAWN BY : T.J.S.	DATE : 8-1998 FILE NO.: 29163DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

DRAWING 23



**GREGORY CANYON LANDFILL  
100-YEAR RUNOFF SUMMARY TABLE**

NODES NO.	SUB AREA (ACRES)	RUNOFF (CFS)	SUBAREA (ACRES)	RUNOFF (CFS)	COMMENTS
1.00-1.01	0.20	0.56	0.20	0.56	INITIAL
1.01-1.02	8.80	18.88	9.00	19.31	
1.02-1.03	40.70	79.14	49.70	96.64	
1.03-1.04	36.80	66.36	86.50	155.99	
1.04-1.05	14.60	25.50	101.10	176.61	
1.05-1.06	54.00	91.66	155.10	263.26	
1.06-1.07	6.60	10.74	161.70	263.26	CONFLUENCE
1.07			161.70	263.26	
4.00-4.01	0.40	1.12	0.40	1.12	INITIAL
4.01-4.02	6.60	15.84	7.00	16.80	
4.02-4.03	15.00	33.96	22.00	49.81	ADDITIONAL CONFLUENCE
4.03-4.04	27.70	58.49	49.70	104.94	
4.04-4.05	26.40	51.04	76.10	147.12	
4.05-4.06	4.00	6.81	80.10	147.12	
4.06-4.07	1.80	2.88	81.90	147.12	
4.07-4.08	1.10	1.71	83.00	147.12	
4.08-4.09	9.10	13.56	92.10	147.12	
4.09-4.09	4.60	6.85	96.70	147.12	
1.09			96.70	147.12	
2.00-2.01	0.30	0.62	0.30	0.62	INITIAL
2.01-2.02	3.70	5.84	4.00	6.31	
2.02-2.03	11.60	17.04	15.60	22.92	ADDITIONAL CONFLUENCE
2.03-2.04	7.50	10.25	23.10	31.57	
2.04-2.05	13.30	14.81	36.40	40.53	
2.05-2.06	9.60	10.44	46.00	50.04	
2.06-2.07	7.90	8.40	53.90	57.28	
2.07-2.08	51.60	53.48	105.50	109.35	
2.08-2.09	17.20	17.70	122.70	150.06	
3.00-3.01	0.40	1.12	0.40	1.12	INITIAL
3.01-3.02	8.30	19.78	8.70	20.73	
3.02-3.03	70.50	132.06	79.20	148.36	

**LEGEND**

- DRAINAGE TRIBUTARY AREA
- DRAINAGE SUB-AREA
- NODE NAME ELEVATION NODE DESCRIPTION
- AREA IN ACRES

**PRELIMINARY**

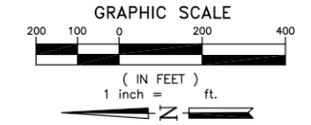
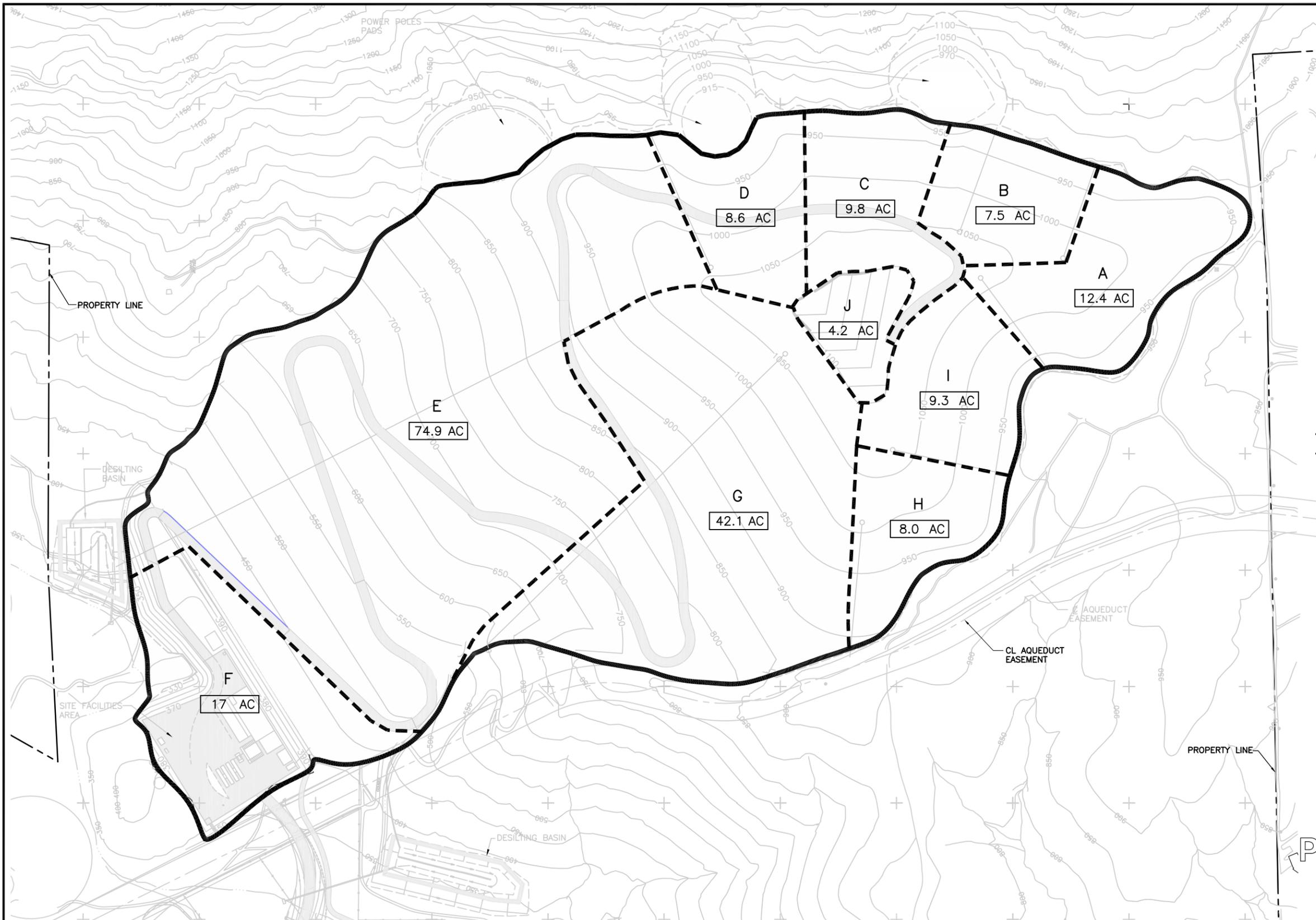
NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

DESIGNED BY : C.M.	SCALE : AS SHOWN
DRAWN BY : J.P.J.	DATE : 9-2004 FILE NO.: 24185DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**GREGORY CANYON LANDFILL  
100-YEAR DEVELOPED CONDITION  
HYDROLOGY MAP**

**DRAWING 24**



- STUDY AREA BOUNDARY
- - - - STUDY SUBAREA BOUNDARY
- PROPERTY LINE
- A SUBAREA NAME
- 0.5 AC AREA IN ACRES

**GREGORY CANYON LANDFILL  
SOIL LOSS SUMMARY TABLE**

STUDY AREA	AREA (ACRES)	ANNUAL SOIL LOSS (TONS/YR)	VOLUME (CY)
A	12.4	23.5	17.19
B	7.5	14.0	10.40
C	9.8	18.3	13.59
D	8.6	16.1	11.93
E	74.9	140.2	103.86
F	17.0	31.8	23.57
G	42.1	78.8	58.38
H	8.0	15.0	11.09
I	9.3	17.4	12.90
J	4.2	7.9	5.82
<b>TOTAL</b>	<b>193.8</b>	<b>362.8</b>	<b>268.7</b>

AVERAGE SOIL LOSS = 1.9 tons/ac/yr

**PRELIMINARY**

NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

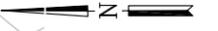
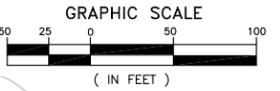
**GREGORY CANYON LANDFILL  
SOIL LOSS  
ANALYSIS MAP**

DESIGNED BY : G.V.N.	SCALE : AS SHOWN
DRAWN BY : J.P.J.	DATE : 6-2001 FILE NO.: 44027DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

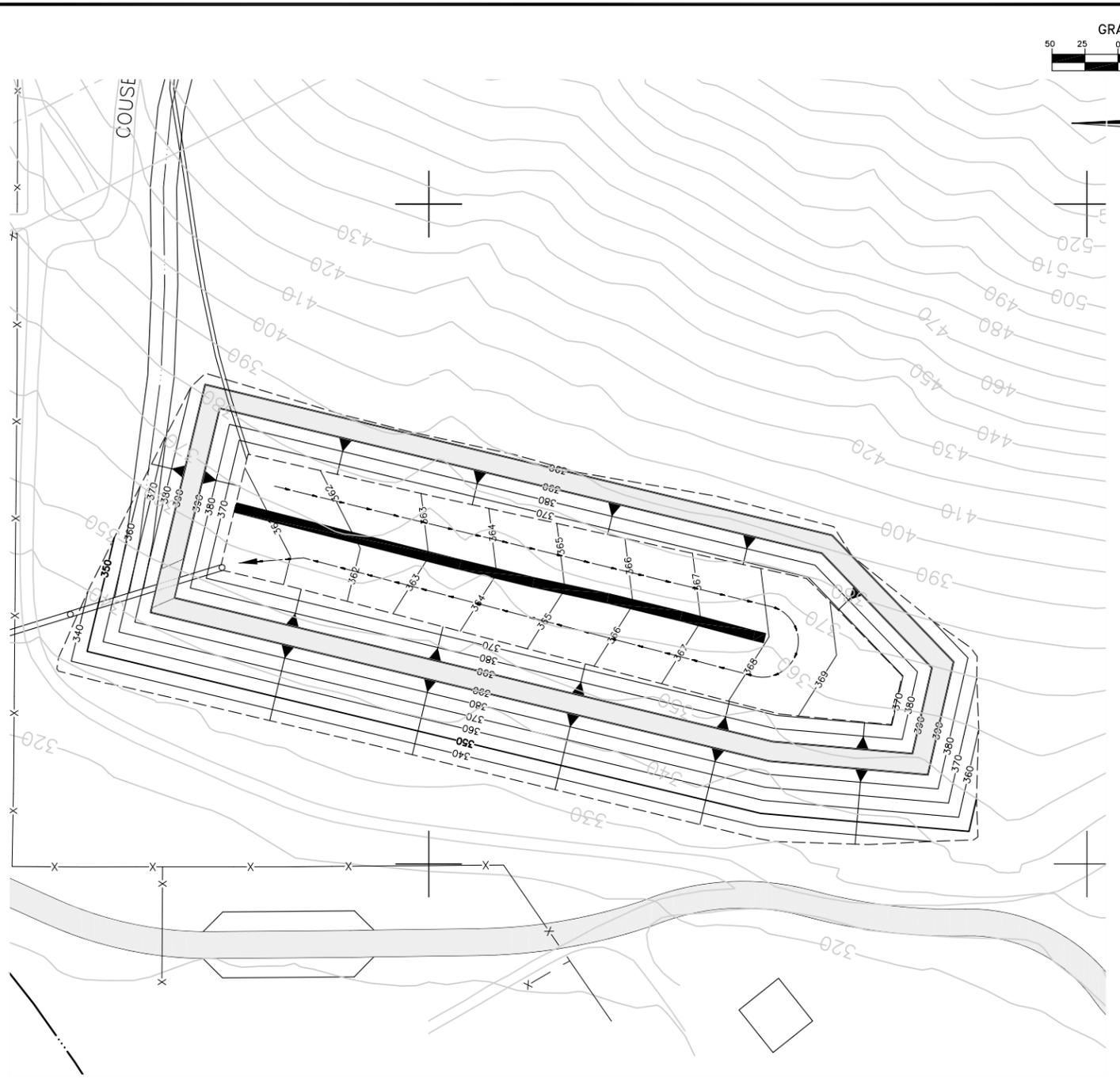
**DRAWING 25**

H:\dwg\gregory\2001\44027db.dwg XREFs: H:\dwg\gregory\98\32040db.dwg; H:\dwg\gregory\2001\4503808.DWG; H:\dwg\gregory\2001\45118db.dwg; H:\dwg\gregory\2001\PH1-FILL.DWG; H:\dwg\gregory\2001\PH2-FILL.DWG; H:\dwg\gregory\2001\ph3fill.dwg 05/21/2003 09:28

FOR PERMIT PURPOSES ONLY - NOT FOR CONSTRUCTION



**EASTERN DESILTING BASIN**



**WESTERN DESILTING BASIN**

**PRELIMINARY**

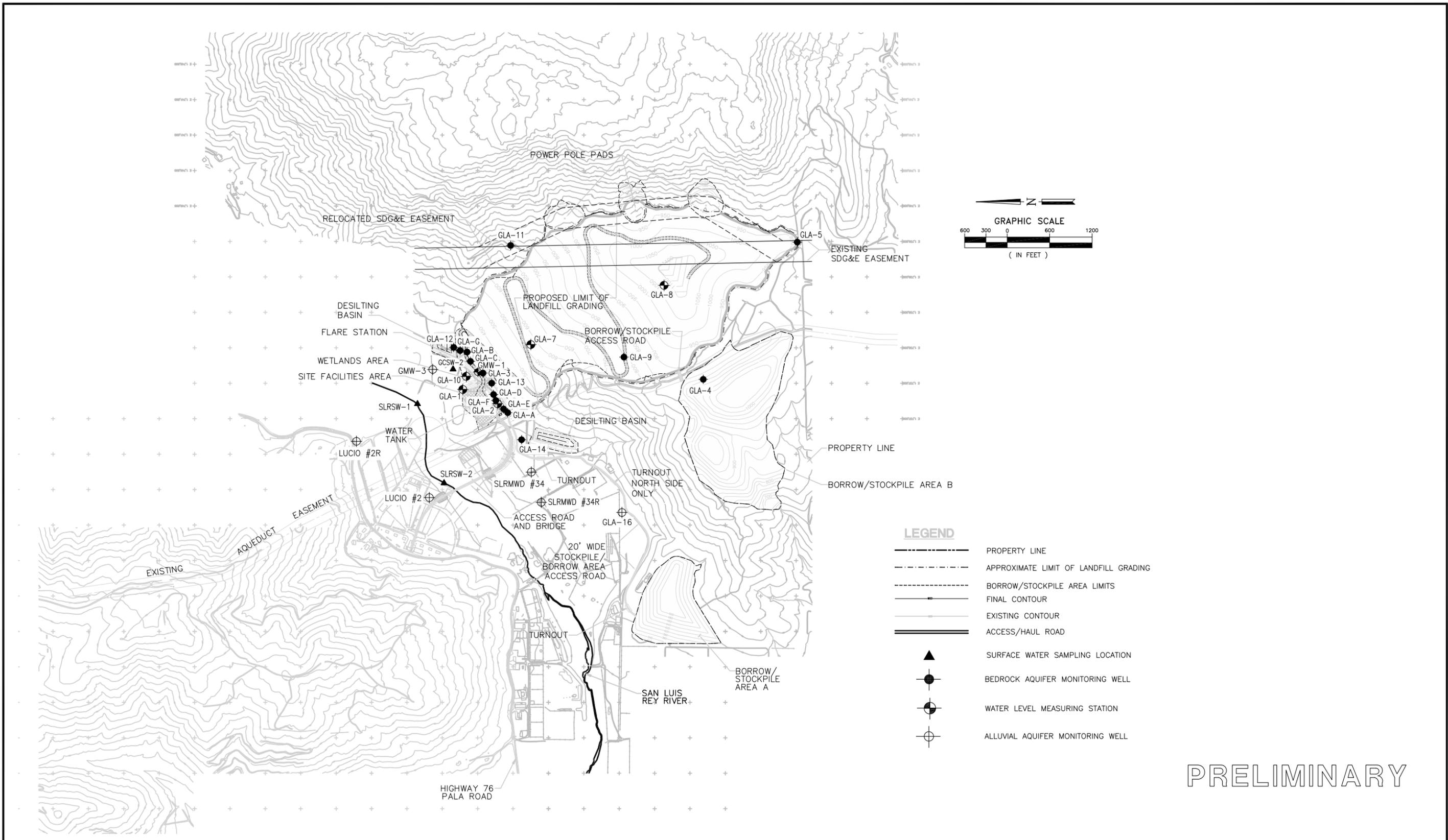
**LEGEND**

---	PROPERTY LINE
- . - . -	LIMIT OF REFUSE/PHASE I EXCAVATION
- - -	TOP/TOE OF SLOPE
—900—	FINAL CONTOUR
—900—	EXISTING CONTOUR
==	ACCESS/HAUL ROAD

NO.	REVISION DESCRIPTION	BY:

**BAS**  
 BRYAN A. STIRRAT & ASSOCIATES  
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS  
 1360 E. VALLEY VISTA DRIVE  
 DIAMOND BAR, CALIFORNIA 91765  
 (909) 860-7777

<b>GREGORY CANYON LANDFILL DESILTING BASIN GRADING PLAN</b>		
DESIGNED BY : E.L.S.	SCALE : AS SHOWN	
DRAWN BY : M.T.B.	DATE : 11-1999	FILE NO. : 27498DB.DWG
CHECKED BY :	DATE :	
APPROVED BY :	DATE :	<b>DRAWING 26</b>



PRELIMINARY

NO.	REVISION DESCRIPTION	BY:

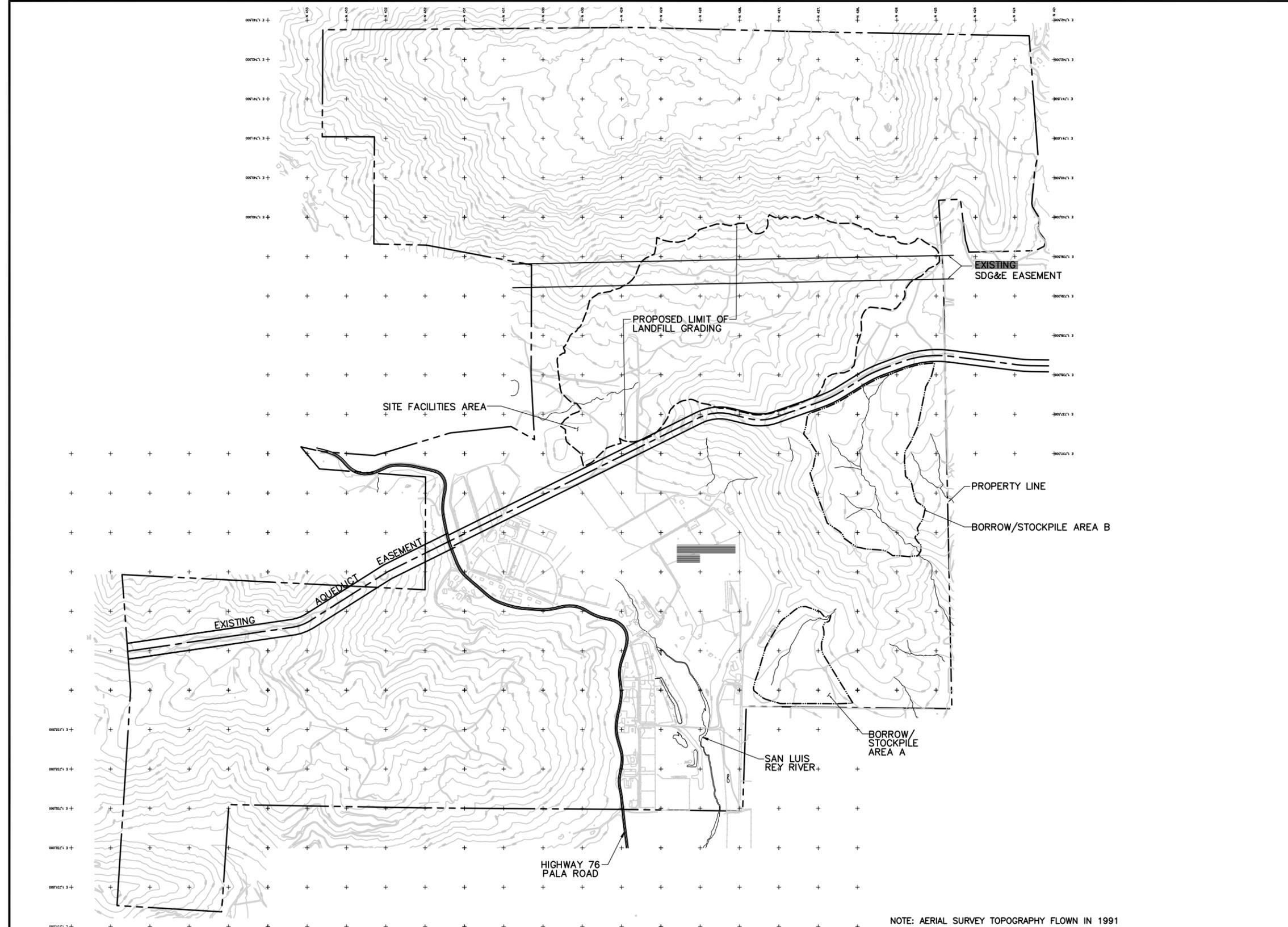
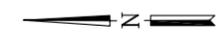
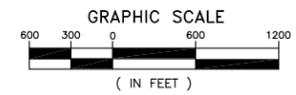

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**GREGORY CANYON LANDFILL  
 PROPOSED DETECTION  
 MONITORING NETWORK**

DESIGNED BY : S.B.	SCALE : AS SHOWN
DRAWN BY : C.A.L.	DATE : 10-2004 FILE NO.: 171991DB.DWG
CHECKED BY :	DATE :
APPROVED BY :	DATE :

**DRAWING 27**

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**LEGEND**

---	PROPERTY LINE
- - - - -	APPROXIMATE LIMIT OF LANDFILL GRADING
---	BORROW/STOCKPILE AREA LIMITS
---	EXISTING CONTOUR
---	ACCESS/HAUL ROAD

PRELIMINARY

NOTE: AERIAL SURVEY TOPOGRAPHY FLOWN IN 1991

NO.	REVISION DESCRIPTION	BY:


**BAS**  
 BRYAN A. STIRRAI & ASSOCIATES  
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<b>GREGORY CANYON LANDFILL PRE-DEVELOPMENT TOPOGRAPHY</b>		
DESIGNED BY : E.L.S.	SCALE : AS SHOWN	
DRAWN BY : J.P.J.	DATE : 10-2002	FILE NO.: 171743DB.DWG
CHECKED BY :	DATE :	
APPROVED BY :	DATE :	<b>DRAWING 28</b>

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