

	STATION	OFFSET	ELEVATION
①	STA 13+40.00	49.30' LT	2731.00
②	STA 13+40.00	61.84' RT	2731.00
③	STA 13+40.00	92.05' RT	2731.00
④	STA 13+65.00	51.71' LT	2730.95
⑤	STA 13+65.00	60.85' RT	2730.95
⑥	STA 13+65.00	64.19' RT	2732.64
⑦	STA 13+65.00	94.25' RT	2732.64
⑧	STA 13+86.31	54.33' LT	2730.91
⑨	STA 13+86.31	58.86' RT	2730.91
⑩	STA 13+86.31	65.08' RT	2734.02
⑪	STA 13+86.31	95.09' RT	2734.02
⑫	STA 14+00.00	55.76' LT	2730.88
⑬	STA 14+00.00	56.99' RT	2730.88
⑭	STA 14+00.00	65.38' RT	2735.08
⑮	STA 14+00.00	95.39' RT	2735.08
⑯	STA 14+50.00	58.59' LT	2730.78
⑰	STA 14+50.00	50.25' RT	2730.78
⑱	STA 14+50.00	66.58' RT	2738.94
⑲	STA 14+50.00	96.59' RT	2738.94
⑳	STA 15+00.00	57.74' LT	2730.69
㉑	STA 15+00.00	50.12' RT	2730.69
㉒	STA 15+00.00	67.93' RT	2739.59
㉓	STA 15+00.00	94.18' RT	2739.77

	STATION	OFFSET	ELEVATION
㉔	STA 15+54.85	51.48' LT	2730.59
㉕	STA 15+54.85	50.14' RT	2730.59
㉖	STA 15+54.85	69.55' RT	2740.29
㉗	STA 15+56.01	89.51' RT	2740.69
㉘	STA 16+00.00	43.92' LT	2730.49
㉙	STA 16+00.00	46.33' RT	2730.49
㉚	STA 16+00.00	66.92' RT	2740.79
㉛	STA 16+00.00	86.96' RT	2741.18
㉜	STA 16+15.55	41.74' LT	2730.46
㉝	STA 16+15.55	45.01' RT	2730.46
㉞	STA 16+15.55	66.02' RT	2740.96
㉟	STA 16+15.55	86.05' RT	2741.35
㊱	STA 16+50.00	37.65' LT	2730.38
㊲	STA 16+50.00	42.10' RT	2730.38
㊳	STA 16+50.00	64.01' RT	2741.34
㊴	STA 16+50.00	84.05' RT	2741.73
㊵	STA 16+65.55	36.14' LT	2730.35
㊶	STA 16+65.55	40.79' RT	2730.35
㊷	STA 16+65.55	63.11' RT	2741.52
㊸	STA 16+65.55	83.14' RT	2741.90
㊹	STA 16+78.00	39.16' LT	2734.50
㊺	STA 16+78.00	48.08' RT	2734.50

	STATION	OFFSET	ELEVATION
㊻	STA 16+78.00	62.38' RT	2741.65
㊼	STA 16+78.00	82.42' RT	2742.04
㊽	STA 16+87.12	39.07' LT	2734.48
㊾	STA 16+87.12	47.32' RT	2734.48
㋀	STA 16+87.12	61.85' RT	2741.75
㋁	STA 16+87.12	81.89' RT	2742.14
㋂	STA 17+03.00	38.78' LT	2734.45
㋃	STA 17+03.00	46.05' RT	2734.45
㋄	STA 17+03.00	61.01' RT	2741.94
㋅	STA 17+03.00	81.03' RT	2742.33
㋆	STA 17+50.00	36.52' LT	2734.35
㋇	STA 17+50.00	43.84' RT	2734.35
㋈	STA 17+50.00	60.07' RT	2742.49
㋉	STA 17+50.00	80.08' RT	2742.89
㋊	STA 18+00.00	33.62' LT	2734.25
㋋	STA 18+00.00	44.04' RT	2734.25
㋌	STA 18+00.00	61.66' RT	2743.08
㋍	STA 18+00.00	81.69' RT	2743.49
㋎	STA 18+24.42	32.84' LT	2734.21
㋏	STA 18+24.42	45.08' RT	2734.21
㋐	STA 18+24.42	63.40' RT	2743.36
㋑	STA 18+24.42	83.46' RT	2743.78

	STATION	OFFSET	ELEVATION
㋒	STA 18+50.00	32.82' LT	2734.16
㋓	STA 18+50.00	46.44' RT	2734.16
㋔	STA 18+50.00	65.43' RT	2743.65
㋕	STA 18+50.00	85.49' RT	2744.06
㋖	STA 19+00.00	34.87' LT	2734.06
㋗	STA 19+00.00	49.10' RT	2734.06
㋘	STA 19+00.00	69.39' RT	2743.65
㋙	STA 19+00.00	89.46' RT	2744.62
㋚	STA 19+36.15	37.05' LT	2733.98
㋛	STA 19+36.15	51.02' RT	2733.98
㋜	STA 19+36.15	72.26' RT	2744.60
㋝	STA 19+36.15	92.33' RT	2745.02
㋞	STA 19+65.54	39.26' LT	2733.92
㋟	STA 19+65.54	52.58' RT	2733.92
㋠	STA 19+65.54	74.60' RT	2744.93
㋡	STA 19+65.54	94.66' RT	2745.34
㋢	STA 19+86.15	41.34' LT	2733.89
㋣	STA 19+86.15	53.42' RT	2733.89
㋤	STA 19+86.15	75.91' RT	2745.14
㋥	STA 19+86.15	95.95' RT	2745.55
㋦	STA 20+00.00	47.40' LT	2738.50
㋧	STA 20+00.00	63.01' RT	2738.50

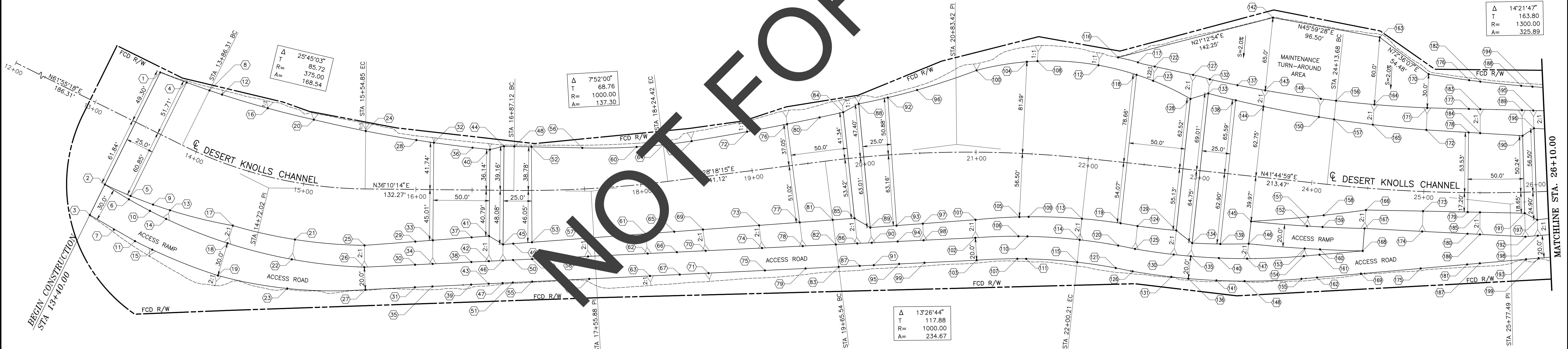
	STATION	OFFSET	ELEVATION
㋨	STA 20+00.00	76.57' RT	2745.28
㋩	STA 20+00.00	96.59' RT	2745.69
㋪	STA 20+25.00	50.88' LT	2738.45
㋫	STA 20+25.00	63.16' RT	2738.45
㋬	STA 20+25.00	77.32' RT	2745.54
㋭	STA 20+25.00	97.32' RT	2745.94
㋮	STA 20+50.00	56.19' LT	2738.40
㋯	STA 20+50.00	62.73' RT	2738.40
㋰	STA 20+50.00	77.48' RT	2745.79
㋱	STA 20+50.00	97.48' RT	2746.19
㋲	STA 21+00.00	72.69' LT	2738.30
㋳	STA 21+00.00	60.09' RT	2738.30
㋴	STA 21+00.00	76.09' RT	2746.30
㋵	STA 21+01.50	96.04' RT	2746.70
㋶	STA 21+41.37	81.59' LT	2738.22
㋷	STA 21+41.37	56.50' RT	2738.22
㋸	STA 21+41.37	73.69' RT	2746.81
㋹	STA 21+41.37	93.71' RT	2747.20
㋺	STA 21+50.00	82.65' LT	2738.20
㋻	STA 21+50.00	55.93' RT	2738.20
㋼	STA 21+50.00	73.36' RT	2746.92
㋽	STA 21+50.00	93.38' RT	2747.31

	STATION	OFFSET	ELEVATION
㋾	STA 22+00.21	83.46' LT	2738.10
㋿	STA 22+00.21	53.75' RT	2738.10
㌀	STA 22+00.21	72.62' RT	2747.55
㌁	STA 22+00.21	92.62' RT	2747.94
㌂	STA 22+16.79	92.24' LT	2748.00
㌃	STA 22+34.79	89.79' LT	2748.29
㌄	STA 22+34.79	78.66' LT	2738.03
㌅	STA 22+34.79	54.07' RT	2738.03
㌆	STA 22+34.79	74.00' RT	2748.01
㌇	STA 22+34.79	94.06' RT	2748.43
㌈	STA 22+50.00	87.68' LT	2748.41
㌉	STA 22+50.00	74.96' LT	2738.00
㌊	STA 22+50.00	54.94' RT	2738.00
㌋	STA 22+50.00	75.37' RT	2748.21
㌌	STA 22+50.00	95.13' RT	2748.64
㌍	STA 22+84.79	85.94' LT	2748.64
㌎	STA 22+84.79	62.52' LT	2748.93
㌏	STA 22+84.79	85.13' RT	2748.93
㌐	STA 22+84.79	73.78' RT	2748.68
㌑	STA 22+84.79	96.06' RT	2749.08
㌒	STA 23+00.00	81.62' LT	2749.30
㌓	STA 23+00.00	51.11' RT	2743.00

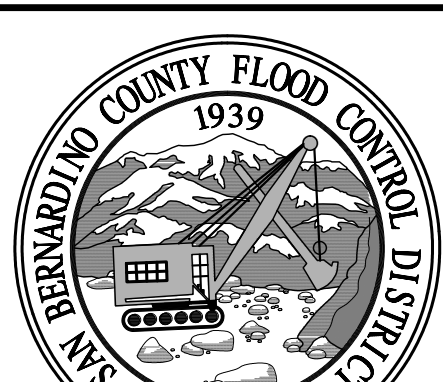
	STATION	OFFSET	ELEVATION
㌔	STA 23+00.00	64.75' RT	2743.00
㌕	STA 23+00.00	76.51' RT	2748.88
㌖	STA 23+00.00	96.51' RT	2749.28
㌗	STA 23+25.00	79.09' LT	2749.70
㌘	STA 23+25.00	65.59' LT	2742.95
㌙	STA 23+25.00	62.90' RT	2742.95
㌚	STA 23+25.00	75.44' RT	2749.22
㌛	STA 23+25.00	95.48' RT	2749.60
㌜	STA 23+50.00	142.14' LT	2751.40
㌝	STA 23+50.00	77.14' LT	2750.10
㌞	STA 23+50.00	62.75' LT	2742.90
㌟	STA 23+50.00	39.97' RT	2742.90
㌠	STA 23+50.00	59.97' RT	2742.90
㌡	STA 23+50.00	73.27' RT	2749.55
㌢	STA 23+50.00	93.38' RT	2749.93
㌣	STA 24+00.00	74.97' LT	2750.89
㌤	STA 24+00.00	58.79' LT	2742.80
㌥	STA 24+00.00	30.57' RT	2742.80
㌦	STA 24+00.00	38.81' RT	2746.92
㌧	STA 24+00.00	58.83' RT	2746.85
㌨	STA 24+00.00	65.58' RT	2750.23
㌩	STA 24+00.00	85.96' RT	2750.58

	STATION	OFFSET	ELEVATION
㌪	STA 24+13.68	74.77' LT	2751.11
㌫	STA 24+13.68	58.10' LT	2742.77
㌬	STA 24+13.68	27.64' RT	2742.77
㌭	STA 24+13.68	38.12' RT	2747.99
㌮	STA 24+13.68	58.15' RT	2747.93
㌯	STA 24+13.68	62.89' RT	2750.41
㌰	STA 24+13.68	83.27' RT	2750.76
㌱	STA 24+50.00	134.55' LT	2752.85
㌲	STA 24+50.00	74.55' LT	2751.65
㌳	STA 24+50.00	56.63' LT	2742.70
㌴	STA 24+50.00	19.47' RT	2742.70
㌵	STA 24+50.00	35.92' RT	2750.93
㌶	STA 24+50.00	55.96' RT	2750.93
㌷	STA 24+50.00	76.24' RT	2751.29
㌸	STA 25+00.00	104.43' LT	2753.00
㌹	STA 24+50.00	74.43' LT	2752.40
㌺	STA 25+00.00	54.82' LT	2742.60
㌻	STA 25+00.00	17.43' RT	2742.60
㌼	STA 25+00.00	35.49' RT	2751.64
㌽	STA 25+00.00	68.41' RT	2752.00
㌾	STA 25+39.26	99.98' LT	2753.53
㌿	STA 25+39.26	74.47' LT	2752.99

	STATION	OFFSET	ELEVATION
㍀	STA 25+39.26	53.53' LT	2742.52
㍁	STA 25+39.26	17.20' RT	2742.52
㍂	STA 25+39.26	36.49' RT	2752.18
㍃	STA 25+39.26	63.73' RT	2752.56
㍄	STA 25+50.00	98.81' LT	2753.68
㍅	STA 25+50.00	74.28' LT	2753.16
㍆	STA 25+50.00	52.98' LT	2742.50
㍇	STA 25+50.00	17.35' RT	2742.50
㍈	STA 25+50.00	37.00' RT	2752.33
㍉	STA 25+50.00	62.67' RT	2752.71
㍊	STA 25+89.26	94.63' LT	2754.21
㍋	STA 25+89.26	72.89' LT	2753.75
㍌	STA 25+89.26	50.24' LT	2742.42
㍍	STA 25+89.26	18.65' RT	2742.42
㍎	STA 25+89.26	39.57' RT	2752.88
㍏	STA 25+89.26	59.61' RT	2753.26
㍐	STA 26+00.00	93.53' RT	2754.36
㍑	STA 26+00.00	72.32' LT	2753.91
㍒	STA 26+00.00	56.50' LT	2746.00
㍓	STA 26+00.00	24.90' RT	2746.00
㍔	STA 26+00.00	38.96' RT	2753.03
㍕	STA 26+00.00	58.98' RT	2753.41



PLAN
HORIZONTAL SCALE 1"=40'



REVISIONS			
MARK	DATE	DESCRIPTION	BY

SUBMITTED BY: <i>Shy Rana</i> 9/19/2023			
ELOY RUVALCABA, P.E. DATE			
RECOMMENDED BY: <i>David Drake</i> 9/19/23			
DAVID DRAKE, P.E. DATE			
APPROVED BY: <i>Mervat Mikhail</i> 09/19/2023			
MERVAT MIKHAIL, P.E. DEPUTY DIRECTOR DATE			
PROJ. ENGR. ER	DESIGNED BY DJN	REV'D BY DD	DRAWN BY DJN

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT		DATE Sept. 2023
APPLE VALLEY DRAINAGE SYSTEM		SCALE AS SHOWN
DESERT KNOLLS WASH		FILE NO.
SURVEY MAP/ GEOMETRY CONTROL		4-201-
STA. 12+00.00 – STA. 26+10.00		SHEET NO. 4 of 14

	STATION	OFFSET	ELEVATION
209	STA 26+25.00	91.03' LT	2754.70
207	STA 26+25.00	70.65' LT	2754.29
202	STA 26+25.00	53.98' LT	2745.95
203	STA 26+25.00	23.04' RT	2745.95
204	STA 26+25.00	37.89' RT	2753.37
205	STA 26+25.00	57.90' RT	2753.77
208	STA 26+52.08	88.43' LT	2755.07
207	STA 26+50.00	68.52' LT	2754.67
208	STA 26+50.00	50.99' LT	2745.90
209	STA 26+50.00	21.68' RT	2745.90
210	STA 26+50.00	37.32' RT	2753.72
211	STA 26+50.00	57.32' RT	2754.12
212	STA 27+00.00	84.54' LT	2755.82
213	STA 27+00.00	64.49' LT	2755.43
214	STA 27+00.00	45.26' LT	2745.80
215	STA 27+00.00	20.80' RT	2745.80
216	STA 27+00.00	38.68' RT	2754.74
217	STA 27+00.00	58.71' RT	2755.17
218	STA 27+39.57	82.03' LT	2756.45
219	STA 27+39.57	61.99' RT	2756.02
220	STA 27+39.57	41.39' LT	2745.72
221	STA 27+39.57	22.17' RT	2745.72
222	STA 27+39.57	41.85' RT	2755.55
223	STA 27+39.57	61.93' RT	2755.98
224	STA 27+50.00	81.48' LT	2756.62
225	STA 27+50.00	61.46' LT	2756.19
226	STA 27+50.00	40.49' LT	2745.70
227	STA 27+50.00	22.69' RT	2745.70
228	STA 27+50.00	42.82' RT	2755.75
229	STA 27+50.00	62.90' RT	2756.19
230	STA 28+00.00	80.77' LT	2757.46
231	STA 28+00.00	60.77' LT	2756.99

	STATION	OFFSET	ELEVATION
232	STA 28+00.00	37.99' LT	2745.60
233	STA 28+00.00	25.15' RT	2745.60
234	STA 28+00.00	47.47' RT	2756.74
235	STA 28+00.00	67.55' RT	2757.18
236	STA 28+22.28	80.57' LT	2757.82
237	STA 28+22.28	60.55' LT	2757.37
238	STA 28+22.28	36.88' LT	2745.56
239	STA 28+22.28	26.27' RT	2745.56
240	STA 28+22.28	49.54' RT	2757.19
241	STA 28+22.28	69.63' RT	2757.62
242	STA 28+40.64	79.95' LT	2758.17
243	STA 28+40.64	59.94' LT	2757.73
244	STA 28+40.64	35.50' LT	2745.52
245	STA 28+40.64	26.79' RT	2745.52
246	STA 28+40.64	50.77' RT	2757.51
247	STA 28+40.64	70.80' RT	2757.94
248	STA 28+57.77	79.37' LT	2758.49
249	STA 28+57.77	59.37' LT	2758.06
250	STA 28+57.77	34.23' LT	2745.48
251	STA 28+57.77	26.70' RT	2745.48
252	STA 28+57.77	51.37' RT	2757.82
253	STA 28+57.77	71.38' RT	2758.23
254	STA 28+90.64	77.47' LT	2759.02
255	STA 28+90.64	57.39' LT	2758.63
256	STA 28+90.64	30.97' LT	2745.42
257	STA 28+90.64	26.01' RT	2745.42
258	STA 28+90.64	52.09' RT	2758.46
259	STA 28+90.64	72.09' RT	2758.88
260	STA 29+00.00	76.58' LT	2759.18
261	STA 29+00.00	56.47' LT	2758.79
262	STA 29+00.00	35.97' LT	2748.54
263	STA 29+00.00	32.07' RT	2748.54

	STATION	OFFSET	ELEVATION
264	STA 29+00.00	52.29' RT	2758.65
265	STA 29+00.00	72.30' RT	2759.06
266	STA 29+31.00	95.27' LT	2763.28
267	STA 29+31.00	72.97' LT	2759.62
268	STA 29+30.00	52.95' LT	2759.24*
269	STA 29+30.00	31.67' LT	2759.24*
270	STA 29+30.00	31.67' RT	2759.24*
271	STA 29+30.00	52.95' RT	2759.24*
272	STA 29+31.00	72.97' RT	2759.67
273	STA 29+31.00	94.00' RT	2761.90
274	STA 29+69.00	99.40' LT	2764.20
275	STA 29+69.00	65.30' LT	2760.40
276	STA 29+70.00	31.67' LT	2760.00*
277	STA 29+70.00	31.67' RT	2760.00*
278	STA 29+69.00	71.33' RT	2760.40
279	STA 29+69.00	94.72' RT	2762.19
280	STA 30+05.76	71.03' LT	2760.50
281	STA 30+01.61	50.51' LT	2760.00*
282	STA 29+98.54	30.56' LT	2749.95
283	STA 29+92.32	32.47' RT	2749.95
284	STA 29+90.99	52.51' RT	2760.00*
285	STA 29+89.87	72.45' RT	2760.40
286	STA 30+19.89	71.68' LT	2760.67
287	STA 30+19.89	51.67' LT	2760.26
288	STA 30+19.89	31.45' LT	2749.90
289	STA 30+19.89	35.58' RT	2749.90
290	STA 30+19.89	57.38' RT	2760.73
291	STA 30+19.89	77.71' RT	2761.20
292	STA 30+34.88	72.02' LT	2760.96
293	STA 30+34.88	52.01' LT	2760.55
294	STA 30+34.88	31.11' LT	2749.87
295	STA 30+34.88	37.66' RT	2749.87

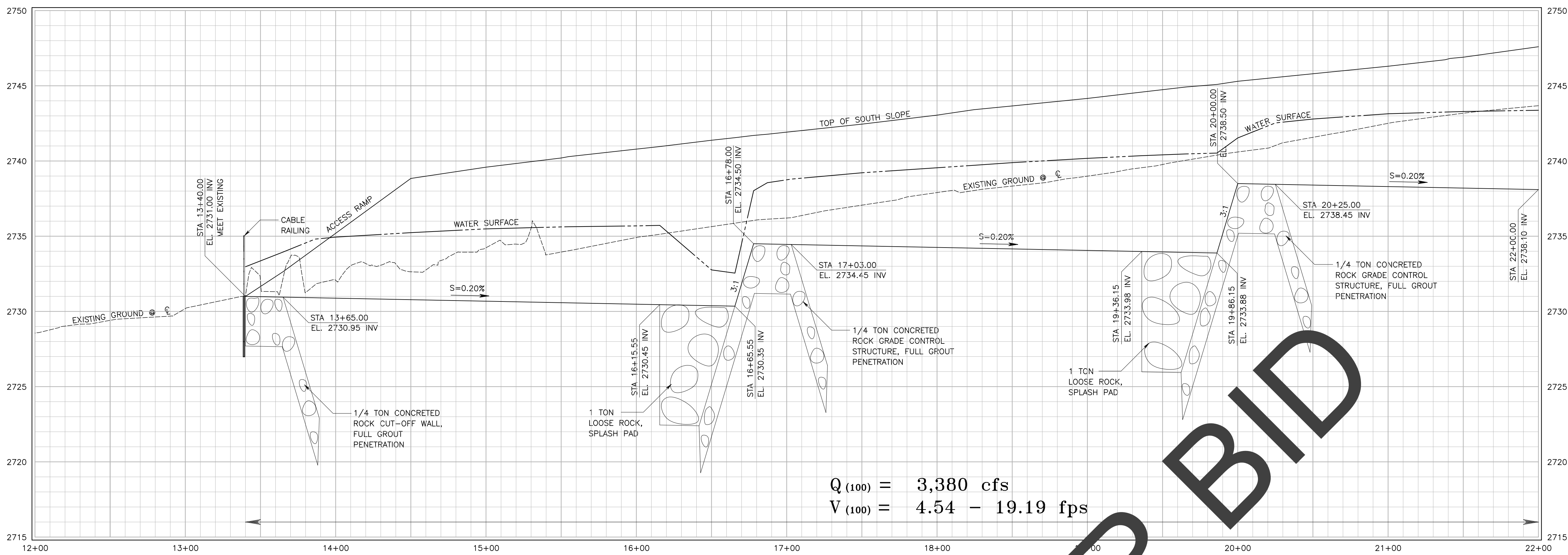
	STATION	OFFSET	ELEVATION
296	STA 30+34.88	60.02' RT	2761.03
297	STA 30+34.88	80.29' RT	2761.49
298	STA 30+50.00	72.36' LT	2761.28
299	STA 30+50.00	52.36' LT	2760.87
300	STA 30+50.00	30.70' LT	2749.84
301	STA 30+50.00	39.14' RT	2749.84
302	STA 30+50.00	61.94' RT	2761.29
303	STA 30+50.00	82.08' RT	2761.74
304	STA 31+00.00	74.93' LT	2762.36
305	STA 31+00.00	54.89' LT	2761.94
306	STA 31+00.00	30.70' LT	2749.74
307	STA 31+00.00	39.44' RT	2749.74
308	STA 31+00.00	63.98' RT	2762.15
309	STA 31+00.00	83.98' RT	2762.54
310	STA 31+09.36	75.66' LT	2762.56
311	STA 31+09.36	55.61' LT	2762.14
312	STA 31+09.36	30.94' LT	2749.72
313	STA 31+09.36	38.71' RT	2749.72
314	STA 31+09.36	63.63' RT	2762.31
315	STA 31+09.36	83.67' RT	2762.69
316	STA 31+50.00	77.68' LT	2763.33
317	STA 31+50.00	57.67' LT	2762.92
318	STA 31+50.00	31.14' LT	2749.64
319	STA 31+50.00	33.69' RT	2749.64
320	STA 31+50.00	60.41' RT	2763.11
321	STA 31+50.00	80.51' RT	2763.47
322	STA 31+59.36	77.89' LT	2763.50
323	STA 31+59.36	57.88' LT	2763.10
324	STA 31+59.36	30.92' LT	2749.62
325	STA 31+59.36	32.25' RT	2749.62
326	STA 31+59.36	59.54' RT	2763.30

	STATION	OFFSET	ELEVATION
327	STA 31+59.36	79.62' RT	2763.74
328	STA 31+80.00	78.07' LT	2763.89
329	STA 31+80.00	58.07' LT	2763.49
330	STA 31+80.00	44.09' LT	2756.50
331	STA 31+80.00	43.39' RT	2756.50
332	STA 31+80.00	57.79' RT	2763.70
333	STA 31+80.00	77.86' RT	2764.14
334	STA 32+05.00	77.67' LT	2764.36
335	STA 32+05.00	57.66' LT	2763.97
336	STA 32+05.00	42.62' LT	2756.45
337	STA 32+05.00	40.47' RT	2756.45
338	STA 32+05.00	55.96' RT	2764.19
339	STA 32+05.00	76.00' RT	2764.14
340	STA 32+50.00	75.24' LT	2765.20
341	STA 32+50.00	55.18' LT	2764.83
342	STA 32+50.00	38.23' LT	2756.36
343	STA 32+50.00	36.01' RT	2756.36
344	STA 32+50.00	53.45' RT	2765.08
345	STA 32+50.00	73.47' RT	2765.52
346	STA 33+00.00	71.58' LT	2766.17
347	STA 33+00.00	51.55' LT	2765.80
348	STA 33+00.00	32.48' LT	2756.26
349	STA 33+00.00	32.25' RT	2756.26
350	STA 33+00.00	51.85' RT	2766.06
351	STA 33+00.00	71.86' RT	2766.49
352	STA 33+28.31	70.25' LT	2766.73
353	STA 33+28.31	50.24' LT	2766.34
354	STA 33+28.31	29.96' LT	2766.20
355	STA 33+28.31	30.68' RT	2756.20
356	STA 33+28.31	51.50' RT	2766.63
357	STA 33+28.31	71.50' RT	2767.03

	STATION	OFFSET	ELEVATION
358	STA 33+50.00	69.60' LT	2767.15
359	STA 33+50.00	49.59' LT	2766.76
360	STA 33+50.00	28.39' LT	2756.16
361	STA 33+50.00	29.75' RT	2756.16
362	STA 33+50.00	51.51' RT	2767.04
363	STA 33+50.00	71.51' RT	2767.47
364	STA 33+78.31	69.23' LT	2767.70
365	STA 33+78.31	49.23' LT	2767.31
366	STA 33+78.31	26.81' LT	2756.10
367	STA 33+78.31	28.89' RT	2756.10
368	STA 33+78.31	51.86' RT	2767.59
369	STA 33+78.31	71.87' RT	2768.02
370	STA 33+90.00	69.23' LT	2767.93
371	STA 33+90.00	49.23' LT	2767.53
372	STA 33+90.00	34.49' LT	2767.00
373	STA 33+90.00	34.49' RT	2767.00
374	STA 33+90.00	52.13' RT	2767.62
375	STA 33+90.00	72.14' RT	2767.33
376	STA 34+00.00	51.55' LT	2765.12
377	STA 34+15.00	49.59' LT	2756.01
378	STA 34+15.00	33.42' LT	2759.95
379	STA 34+15.00	30.20' RT	2759.95
380	STA 34+15.00	52.14' RT	2768.31
381	STA 34+15.00	72.94' RT	2768.74
382	STA 34+50.00	70.71' LT	2769.10
383	STA 34+50.00	50.69' LT	2768.69
384	STA 34+50.00	33.07' LT	2759.88
385	STA 34+50.00	36.33' RT	2759.88
386	STA 34+50.00	54.57' RT	2769.00
387	STA 34+50.00	74.60' RT	2769.43
388	STA 35+00.00	73.80' LT	2770.07

	STATION	OFFSET	ELEVATION
389	STA 35+00.00	53.74' LT	2769.65
390	STA 35+00.00	33.99' LT	2759.78
391	STA 35+00.00	37.58' RT	2759.78
392	STA 35+00.00	57.98' RT	2769.98
393	STA 35+00.00	78.01' RT	2770.41
394	STA 35+33.84	76.86' LT	2770.74
395	STA 35+33.84	56.76' LT	2770.31
396	STA 35+33.84	35.56' LT	2759.71
397	STA 35+33.84	37.89' RT	2759.71
398	STA 35+33.84	59.77' RT	2770.65
399	STA 35+33.84	79.79' RT	2771.07
400	STA 35+50.00	78.51' LT	2771.05
401	STA 35+50.00	58.48' LT	2770.62
402	STA 35+50.00	36.60' RT	2759.68
403	STA 35+50.00	38.05' RT	2759.68
404	STA 35+50.00	60.62' RT	2770.96
405	STA 35+50.00	80.65' RT	2771.39
406	STA 35+83.84	79.43' LT	2771.68
407	STA 35+83.84	59.43' LT	2771.27
408	STA 35+83.84	36.11' RT	2759.61
409	STA 35+83.84	38.36' RT	2759.61
410	STA 35+83.84	62.40' RT	2771.63
411	STA 35+83.84	82.43' RT	2772.05
412	STA 36+00.00	79.29' LT	2774.65
413	STA 36+00.00	59.29' LT	2771.60
414	STA 36+00.00	46.09' LT	2765.00
415	STA 36+00.00	49.27' RT	2765.00
416	STA 36+00.00	63.13' RT	2771.93
417	STA 36+00.00	83.15' RT	2772.35
418	STA 36+25.00	78.83' LT	2772.51
419	STA 36+25.00	58.82' LT	2772.11

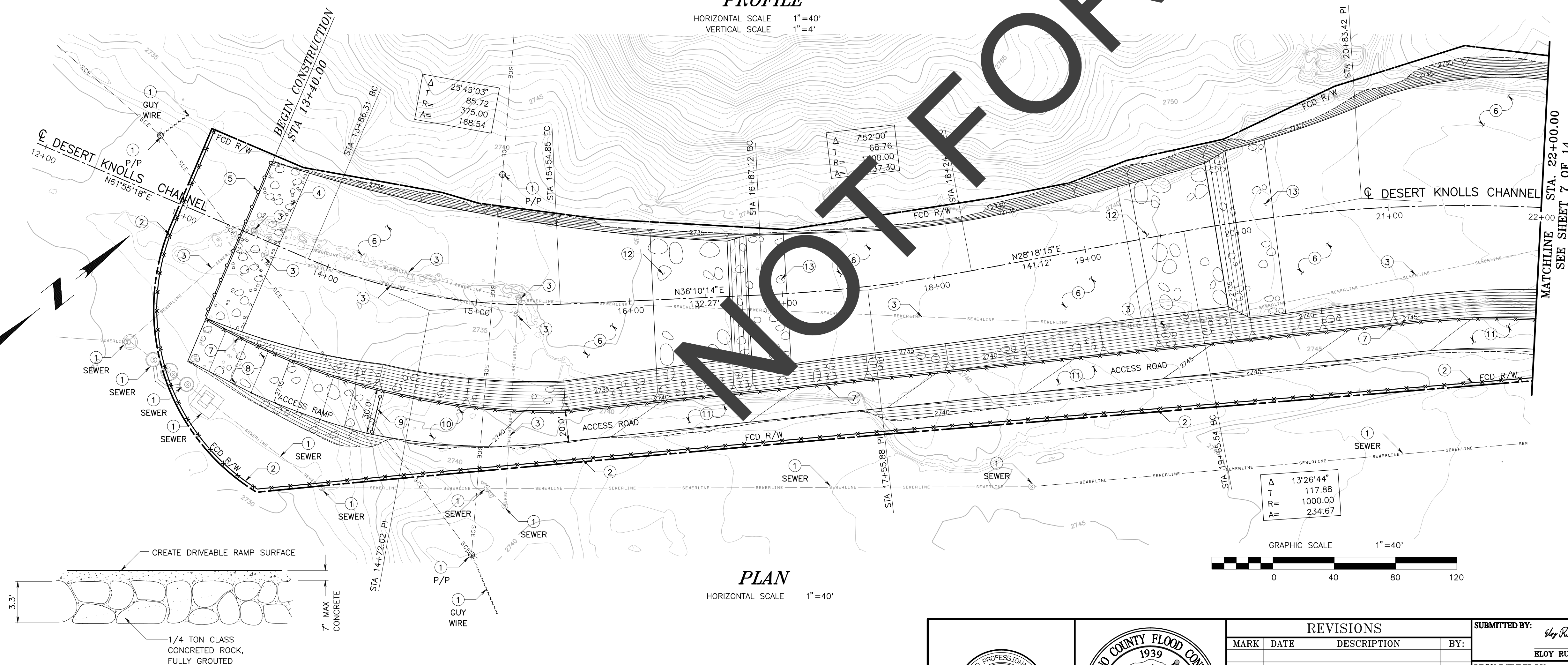
	STATION	OFFSET	ELEVATION
420	STA 36+25.00	44.50' LT	2764.95
421	STA 36+25.00	48.78' RT	2764.95
422	STA 36+25.00	63.63' RT	2772.38
423	STA 36+25.00	83.63' RT	2772.78
424	STA 36+50.00	78.08' LT	2773.02
425	STA 36+50.00	58.07' LT	2772.63
426	STA 36+50.00	42.61' LT	2764.90
427	STA 36+50.00	27.30' RT	2764.90
428	STA 36+50.00	47.51' RT	2764.90
429	STA 36+50.00	63.37' RT	2772.83
430	STA 36+50.00	83.37' RT	2773.22
431	STA 37+00.00	75.77' LT	2774.04
432	STA 37+00.00	55.74' LT	2773.66
433	STA 37+00.00	38.02' LT	2764.80
434	STA 37+00.00	19.65' RT	2764.80
435	STA 37+00.00	32.58' RT	2769.80
436	STA 37+00.00	52.64' RT	2769.80
437	STA 37+00.00	60.56' RT	2773.73
438	STA 37+00.00	80.65' RT	2774.10
439	STA 37+50.00	72.37' LT	2775.06
440	STA 37+50.00	52.31' LT	2774.69
441	STA 37+50.00	32.33' LT	2764.70
442	STA 37+50.00	14.75' RT	2764.70
443	STA 37+50.00	34.64' RT	2774.65
444	STA 37+50.00	54.65' RT	2774.65
445	STA 37+50.00	74.91' RT	2774.98
446	STA 38+00.00	67.90' LT	2776.07
447	STA 38+00.00	47.81' LT	2775.72
448	STA 38+00.00	25.57' RT	2764.60
449	STA 38+00.00	12.47' RT	2764.60
450	STA 38+00.00	34.43' RT	2775.58



PROFILE

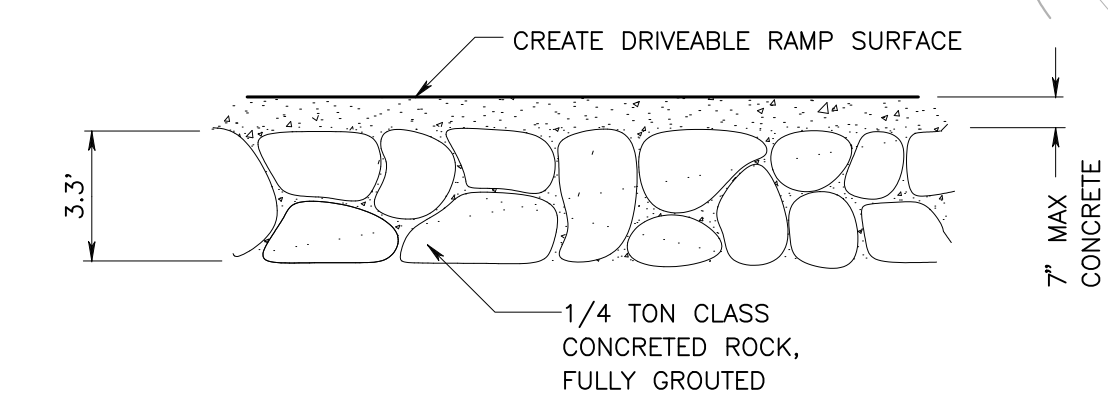
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VERTICAL SCALE 1"=4'

VERTICAL SCALE 1"=4'



PLAN

HORIZONTAL SCALE 1"=40'

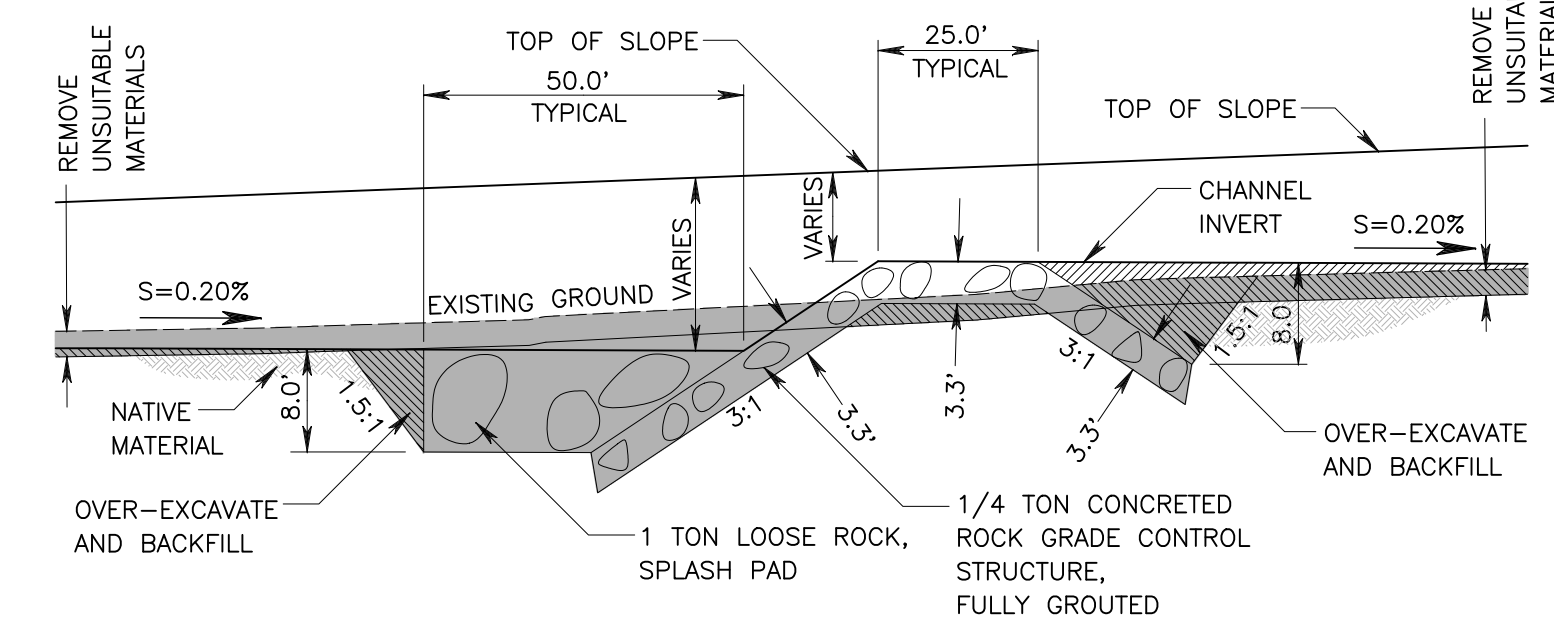


8 17 DRIVEABLE CONCRETED ROCK
ACCESS RAMP PAVING DETAIL

NOT TO SCALE

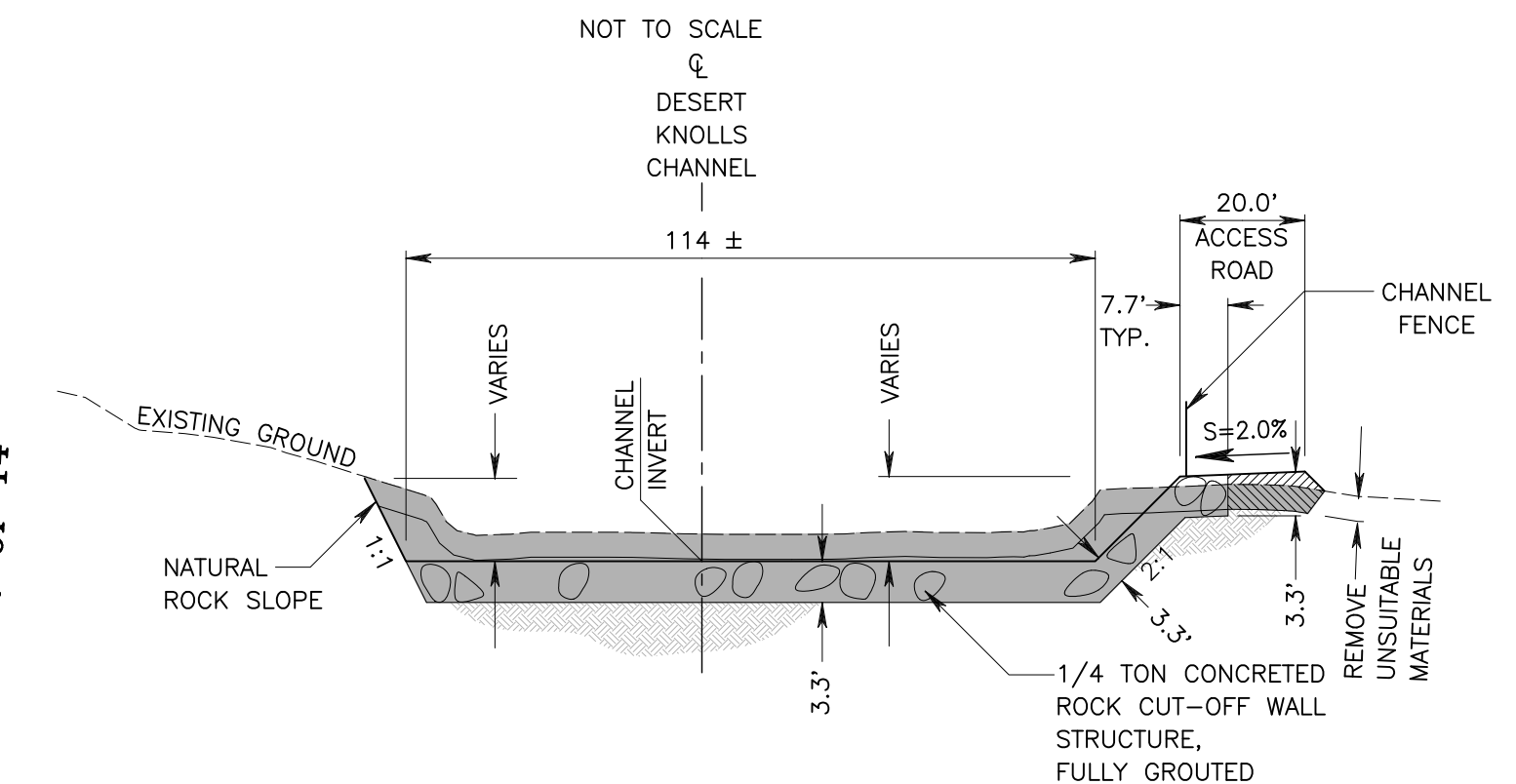


- ① PROTECT-IN--PLACE
- ② INSTALL 6.0" HIGH TEMPORARY CHAIN LINK FENCE WITH SIGHT BLOCK PER PLAN DURING CONSTRUCTION
- ③ REMOVE AND DISPOSE INTERFERING ABANDONED SEWER LINES, MANHOLES AND ITS APPURTENANCES PER PLAN
- ④ CONSTRUCT 1/4 TON CONCRETED ROCK CUT-OFF WALL, METHOD 'A' PLACEMENT, FULL GROUT PENETRATION PER PLAN AND DETAILS ON SHEET NO. 9
- ⑤ INSTALL 4.0" HIGH CABLE RAILING WITH STEEL POSTS AS REMOVABLE PROTECTION BARRIERS PER PLAN, SECTION AND DETAILS ON SHEET NO. 10
- ⑥ CONSTRUCT TRAPEZOIDAL CHANNEL UTILIZING NATURAL ROCK MATERIAL ON THE NORTH SIDESLOPE (1:1); 1/4 TON CONCRETED ROCK FLOE PROTECTION (CRSP) ON SOUTH SIDESLOPE (2:1), 3.3" THICK, METHOD 'A' PLACEMENT, FULL GROUT PENETRATION; AND EARTH INVERT; PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9
- ⑦ INSTALL 6.0" HIGH CHAIN LINK CHANNEL FENCE PER PLAN AND S.B.C.F.C.D. SPECIAL DRAWING II, ON SHEET NO. 14
- ⑧ CONSTRUCT 30.0' WIDE DRIVEABLE CONCRETED ROCK ACCESS RAMP PER PLAN (STA 13+40.00 - STA 14+50.00), SURVEY MAP/GEOMETRY CONTROL ON SHEET NO. 4, AND DETAILS ON SHEET NO. 6
- ⑨ INSTALL 30.0' WIDE DOUBLE DRIVE PIPE GATE PER PLAN (STA 14+50.00) AND S.B.C.F.C.D. STD. DWG. S.P. 209
- ⑩ CONSTRUCT 30.0'--20.0' WIDE COMPACTED NATIVE ACCESS ROAD APPROACH TO ACCESS RAMP, PER PLAN (STA 14+50.00 - STA 15+50.00), SURVEY MAP/GEOMETRY CONTROL ON SHEET NO. 4
- ⑪ CONSTRUCT 20.0' WIDE COMPACTED NATIVE ACCESS ROAD, PER PLAN, SECTION, AND DETAILS ON SHEET NO. 9
- ⑫ CONSTRUCT 1 TON LOOSE ROCK SPLASH PAD, 8.0" THICK, METHOD 'A' PLACEMENT, PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9
- ⑬ CONSTRUCT 1/4 TON CONCRETED ROCK, GRADE CONTROL STRUCTURE, 3.3" THICK, METHOD 'A' PLACEMENT, FULL GROUT PENETRATION, PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9



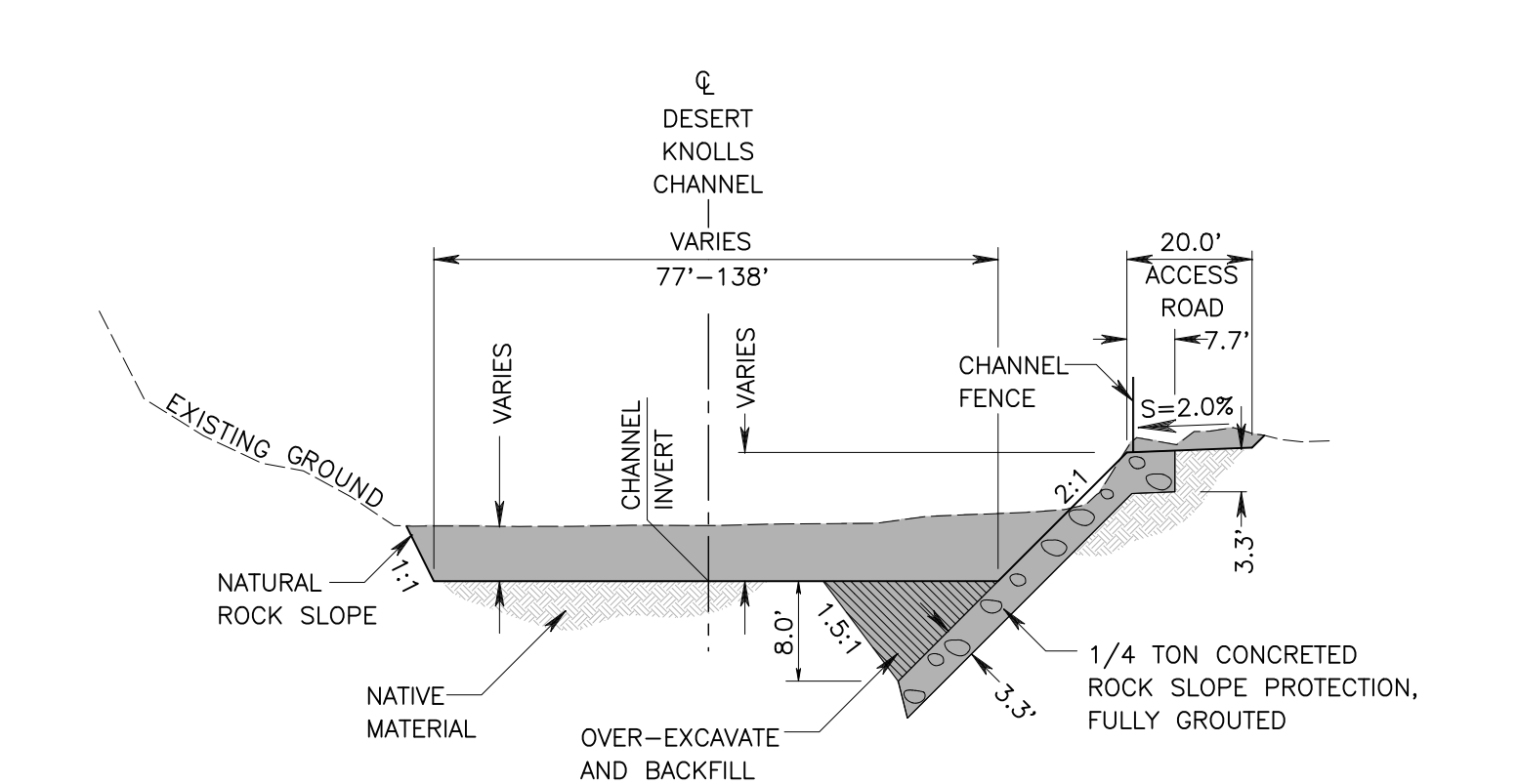
13 *TYPICAL PROFILE CONCRETED ROCK
GRADE CONTROL STRUCTURE*

NOT TO SCALE



4 TYPICAL SECTION CONCRETED ROCK
CUT-OFF WALL STRUCTURE

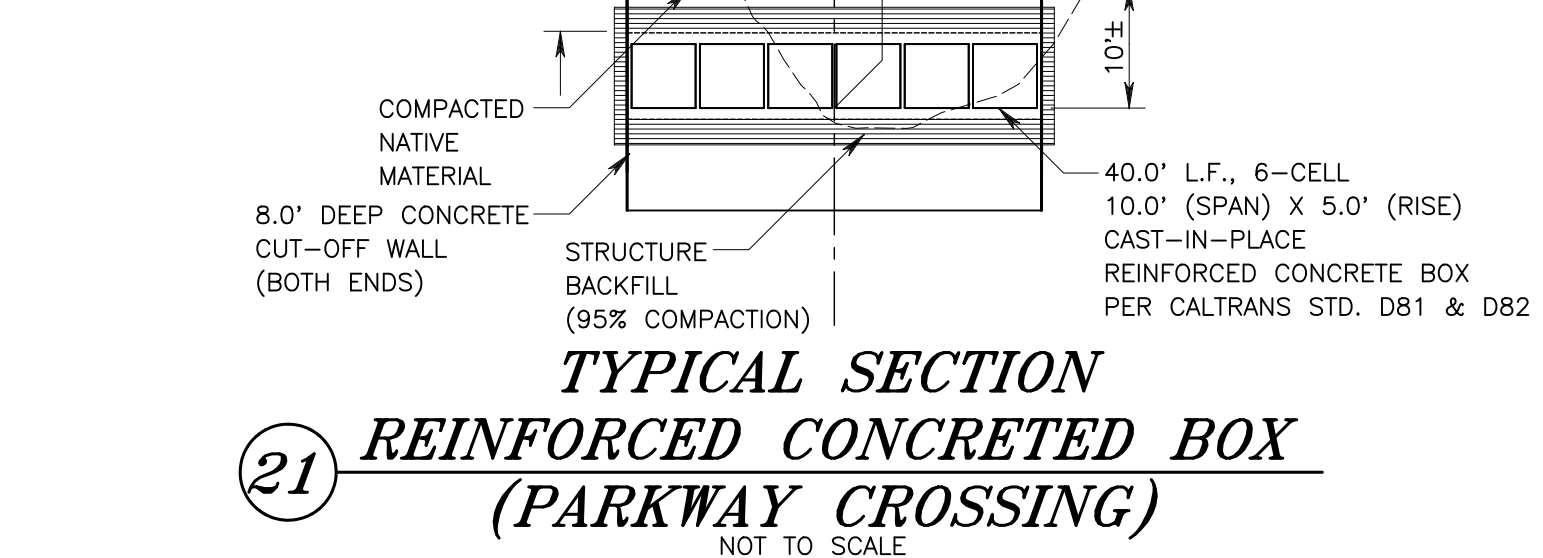
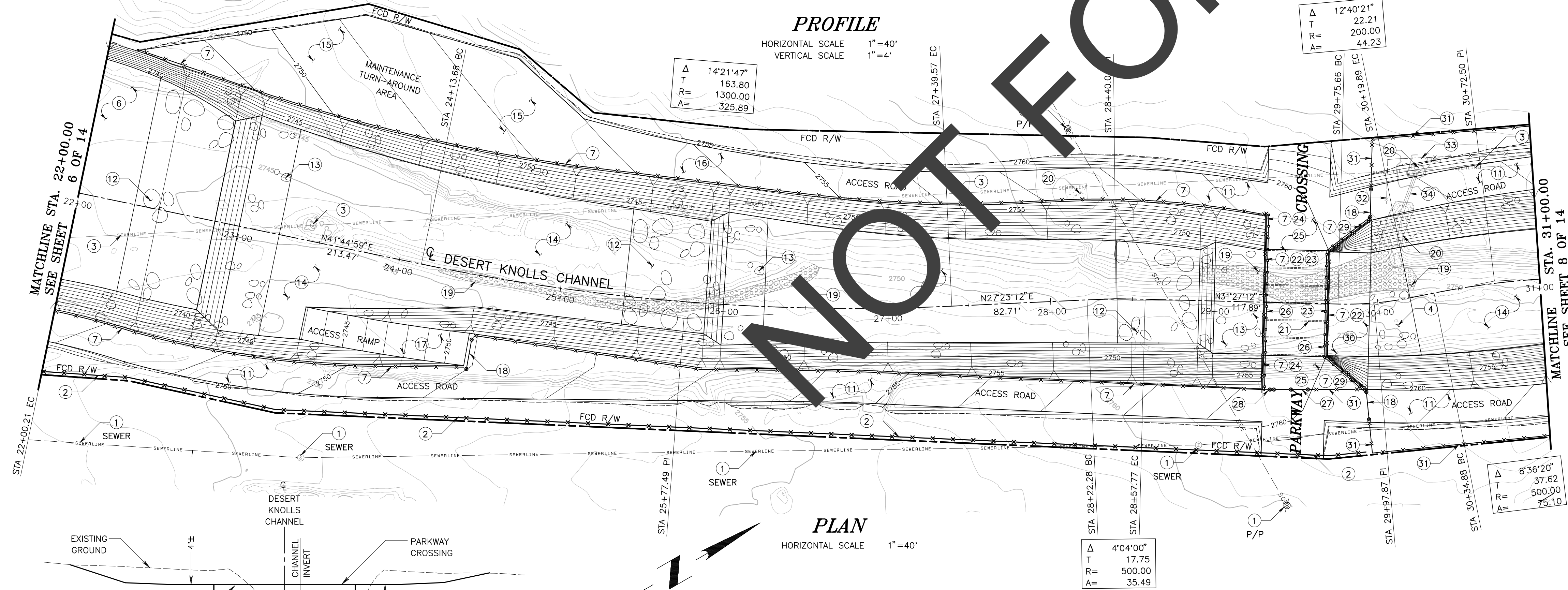
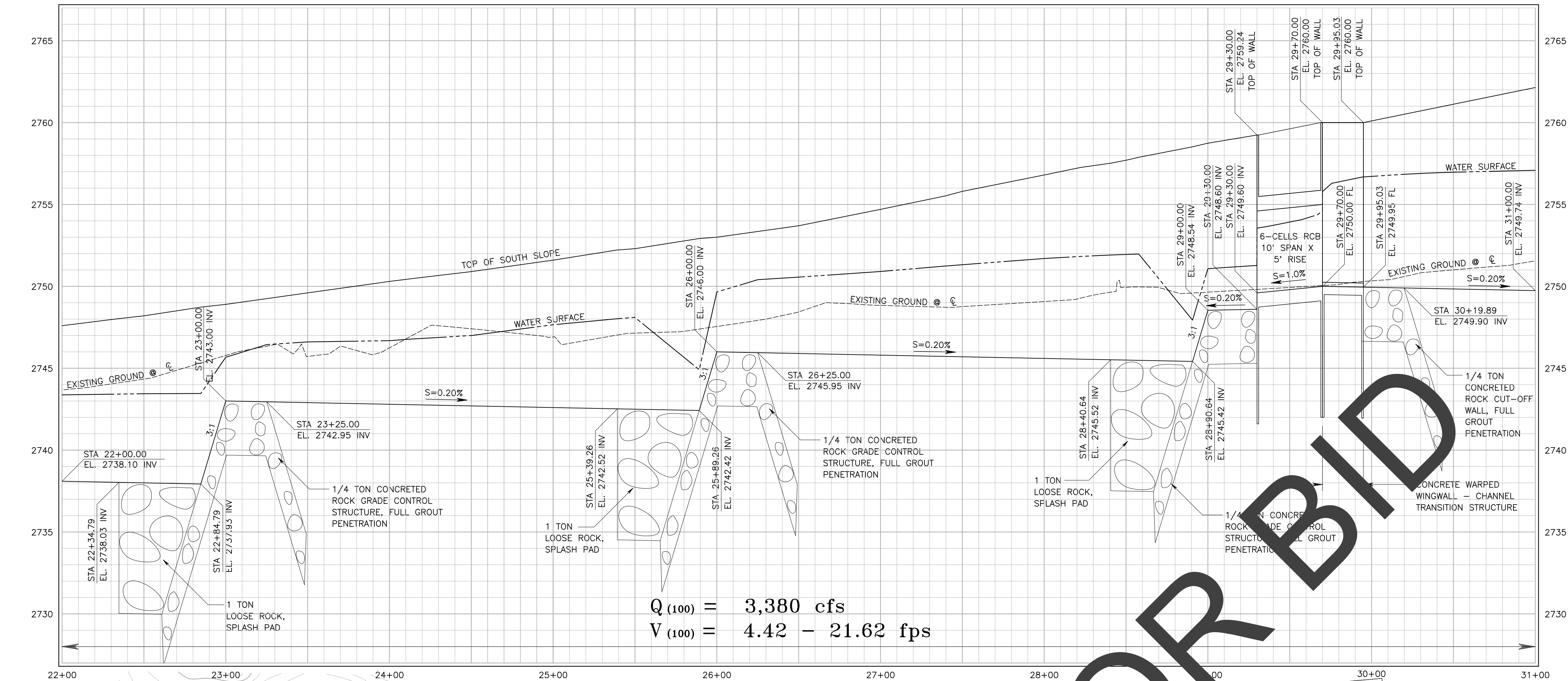
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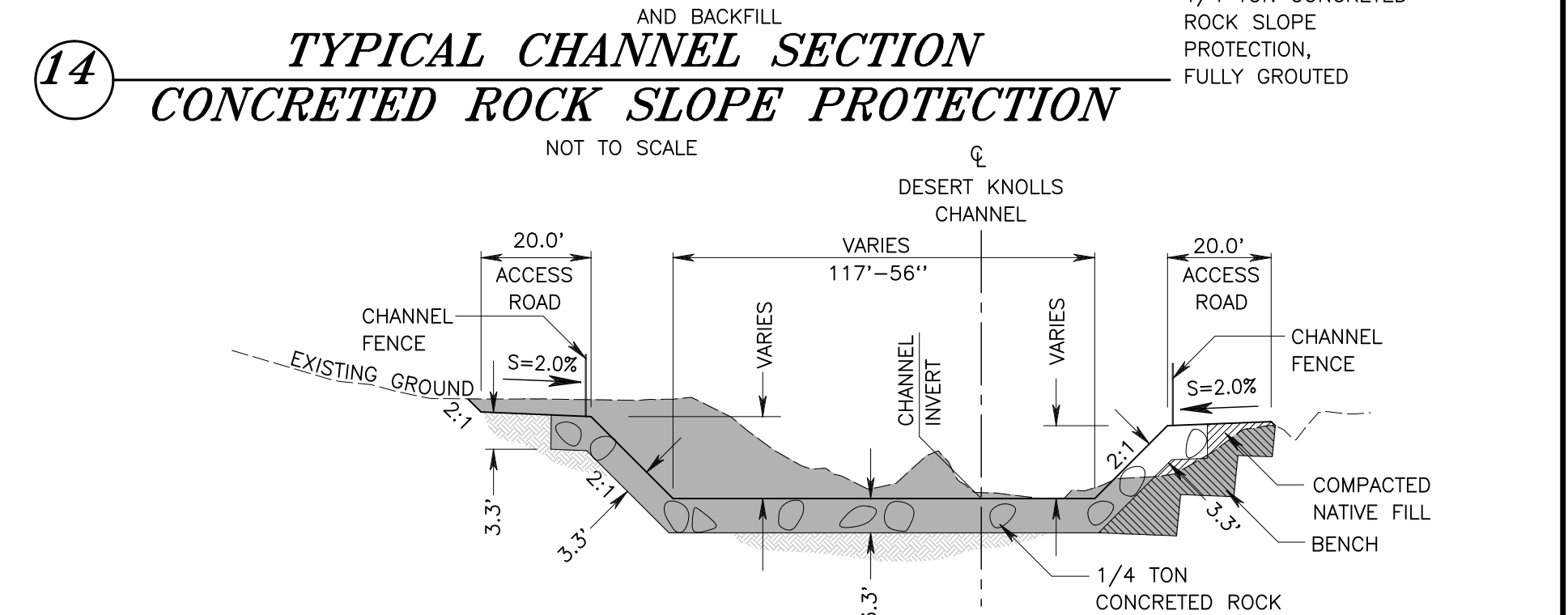
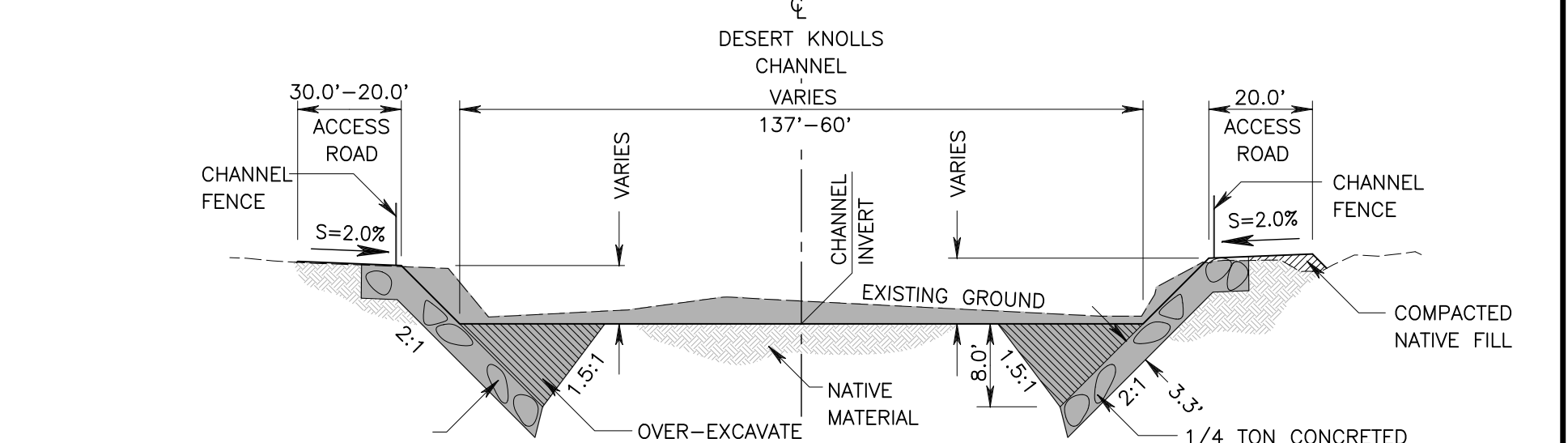
6 TYPICAL CHANNEL SECTION WITH
NORTH SLOPE UTILIZING NATURAL ROCK



NOT TO SCALE

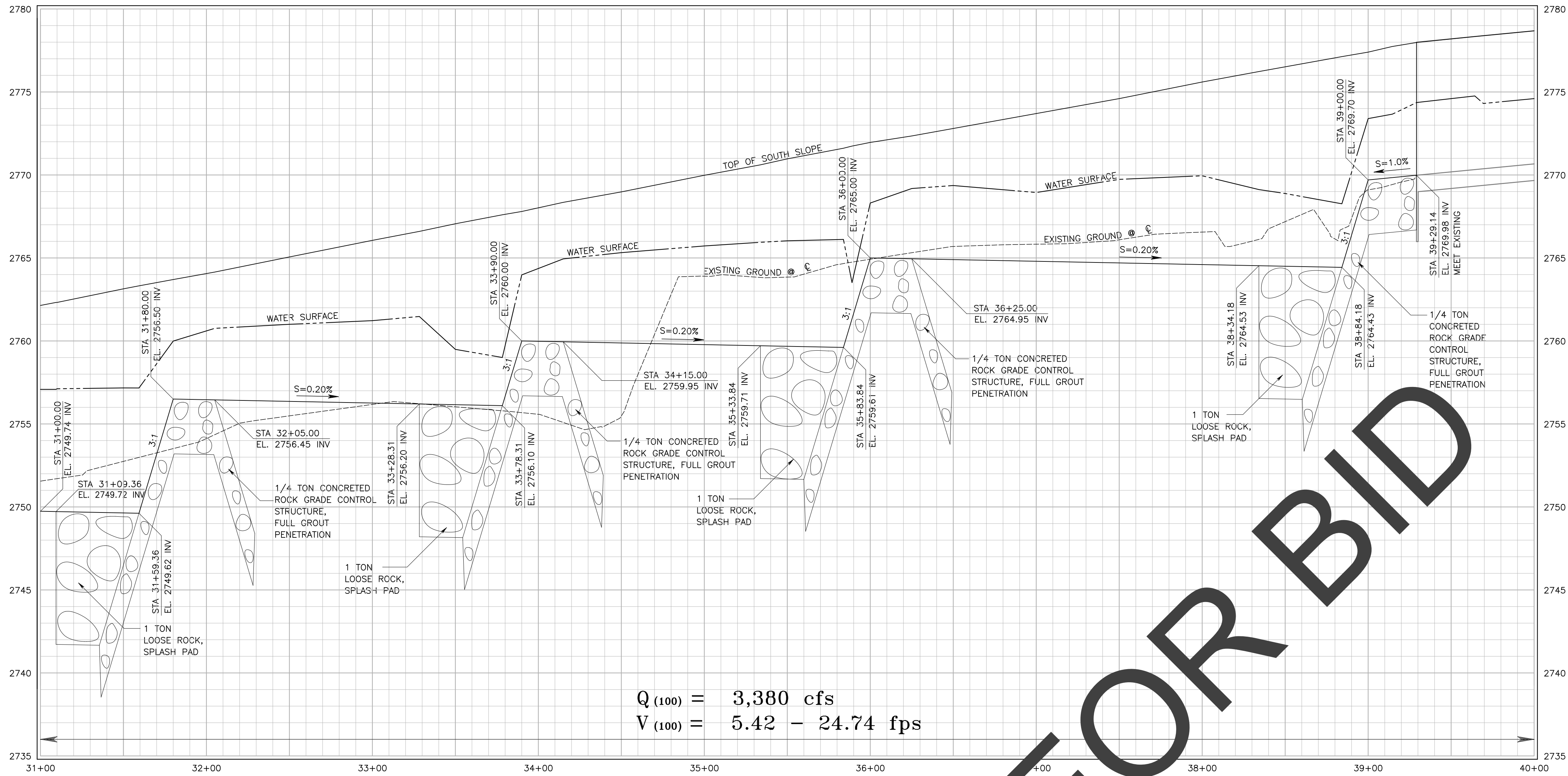
REVISIONS				SUBMITTED BY: <i>[Signature]</i>		9/19/2023		SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT		DATE	
MARK	DATE	DESCRIPTION	BY:	ELOY RUVALCABA, P.E.		DATE		APPLE VALLEY DRAINAGE SYSTEM		Sept. 2023	
				RECOMMENDED BY: <i>[Signature]</i>		9/19/23				SCALE	
				DAVID DRAKE, P.E.		DATE		DESERT KNOLLS WASH		AS SHOWN	
				APPROVED BY: <i>[Signature]</i>		09/19/2023				FILE NO.	
				MERVAT MIKHAIL, P.E. DEPUTY DIRECTOR		DATE				4-201-	
				PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY			SHEET NO.	
				ER	DJN	DD	DJN	PLAN, PROFILE & TYPICAL SECTIONS STA. 12+00.00 - STA. 22+00.00		6 of 14	



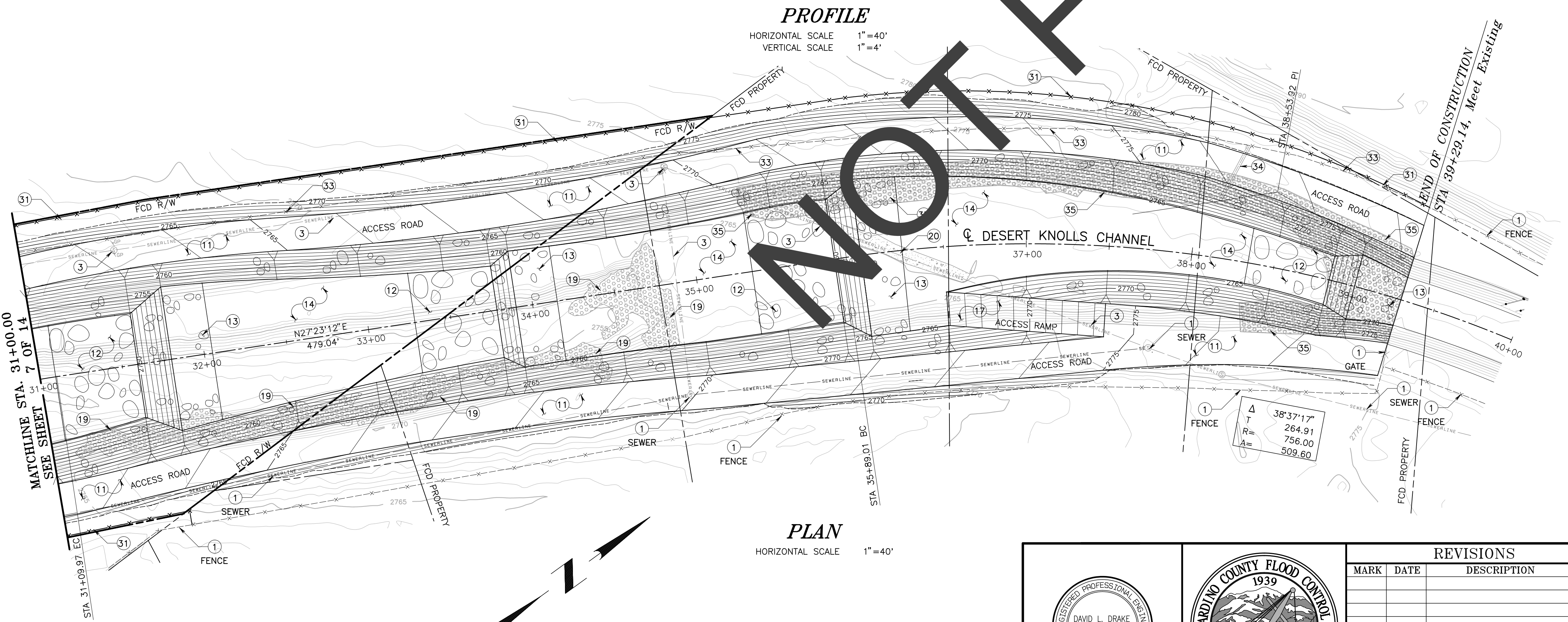
- CONSTRUCTION NOTES:**
- 1 PROTECT-IN-PLACE
 - 2 INSTALL 6.0' HIGH TEMPORARY CHAIN LINK FENCE WITH SIGHT BLOCK PER PLAN DURING CONSTRUCTION
 - 3 REMOVE AND DISPOSE INTERFERING ABANDONED SEWER LINES, MANHOLES AND ITS APPURTENANCES PER PLAN
 - 4 CONSTRUCT 1/4 TON CONCRETED ROCK CUT-OFF WALL, METHOD 'A' PLACEMENT, FULL GROUT PENETRATION PER PLAN AND DETAILS ON SHEET NO. 9
 - 6 CONSTRUCT TRAPEZOIDAL CHANNEL UTILIZING NATURAL ROCK MATERIAL ON THE NORTH SIDESLOPE (1:1); 1/4 TON CONCRETED ROCK SLOPE PROTECTION (CRSP) ON SOUTH SIDESLOPE (2:1), 3.3' THICK, METHOD 'A' PLACEMENT, FULL GROUT PENETRATION; AND EARTH INVERT; PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9
 - 7 INSTALL 6.0' HIGH CHAIN LINK CHANNEL FENCE PER PLAN AND S.B.C.F.C.D. SPECIAL DRAWING II, ON SHEET NO. 14
 - 11 CONSTRUCT 20.0' WIDE COMPACTED NATIVE ACCESS ROAD, PER PLAN, SECTION, AND DETAILS ON SHEET NO. 9
 - 12 CONSTRUCT 1 TON LOOSE ROCK SPLASH PAD, 8.0' THICK, METHOD 'A' PLACEMENT, PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9
 - 13 CONSTRUCT 1/4 TON CONCRETED ROCK, GRADE CONTROL STRUCTURE, 3.3' THICK, METHOD 'A' PLACEMENT, FULL GROUT PENETRATION, PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9
 - 14 CONSTRUCT TRAPEZOIDAL CHANNEL, 1/4 TON CONCRETED ROCK SLOPE PROTECTION (CRSP), SIDE SLOPES (2:1), 3.3' THICK, METHOD 'A' PLACEMENT, FULL GROUT PENETRATION; EARTH INVERT; PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9
 - 15 CONSTRUCT MAINTENANCE TURN-AROUND AREA PER PLAN (STA 22+16.79 - STA 25+00.00), SURVEY MAP/GEOMETRY CONTROL ON SHEET NO. 4
 - 16 CONSTRUCT 30.0'-20.0' WIDE COMPACTED NATIVE ACCESS ROAD APPROACH TO MAINTENANCE TURN-AROUND AREA, PER PLAN (STA 25+00.00 - STA 26+50.00), SURVEY MAP/GEOMETRY CONTROL ON SHEET NOS. 4 & 5
 - 17 CONSTRUCT 20.0' WIDE DRIVEABLE CONCRETED ROCK ACCESS RAMP PER PLAN AND DETAILS ON SHEET NO. 6
 - 18 INSTALL 20.0' WIDE DOUBLE DRIVE CHAIN LINK GATE PER PLAN AND S.B.C.F.C.D. SPECIAL DRAWING I, ON SHEET NO. 13
 - 19 REMOVE AND DISPOSE OR REUSE SUITABLE CLASS ROCKS
 - 20 BREAK, REMOVE AND DISPOSE EXISTING CONCRETE SLAB
 - 21 CONSTRUCT 40.0 L.F., CAST-IN-PLACE 6-CELLS REINFORCED CONCRETE BOX (RCB) 10.0' SPAN X 5.0' RISE, PER PLAN, CALTRANS STD. D81 & D82 AND DETAILS ON SHEET NO. 11
 - 22 CONSTRUCT CONCRETE CUT-OFF WALL, 8.0' DEEP PER PLAN, PROFILE AND DETAILS ON SHEET NO. 12
 - 23 CONSTRUCT BOX CULVERT HEADWALL/PARAPET WALL PER PLAN, AND DETAILS ON SHEET NOS. 11 & 12
 - 24 CONSTRUCT BOX CULVERT STRAIGHT WINGWALLS PER PLAN, CALTRANS STD. D84 AND DETAILS ON SHEET NO. 11
 - 25 PLACE COMPACTED NATIVE FILL ON TOP OF REINFORCED CONCRETE BOX (RCB) AND ITS SURROUNDING AND GRADE TO DRAIN PER PLAN, SURVEY MAP/GEOMETRY CONTROL ON SHEET NO. 5, AND DETAILS ON SHEET NO. 11
 - 26 INSTALL MIDWEST GUARDRAIL SYSTEM STANDARD RAILING SECTION (WOOD POST WITH WOOD BLOCK) ON BOTH SIDES OF PARKWAY CROSSING, (TOTAL 235 L.F.) PER PLAN AND CALTRANS STD. A77L1
 - 27 INSTALL 26.0' WIDE DOUBLE DRIVE CHAIN LINK GATE PER PLAN AND S.B.C.F.C.D. SPECIAL DRAWING I, ON SHEET NO. 13
 - 28 INSTALL 4.0' WIDE CHAIN LINK WALK GATE PER PLAN AND S.B.C.F.C.D. SPECIAL DRAWING I, ON SHEET NO. 13
 - 29 CONSTRUCT BOX CULVERT WARPED WINGWALLS PER PLAN, CALTRANS STD. D86A AND DETAILS ON SHEET NOS. 11 & 12
 - 30 CONSTRUCT CONCRETE APRON WITH CUT-OFF WALL, 8.0' DEEP PER PLAN AND DETAILS ON SHEET NO. 12
 - 31 INSTALL 6.0' HIGH CHAINLINK BOUNDARY FENCE PER PLAN AND S.B.C.F.C.D. SPECIAL DRAWING I, ON SHEET NO. 13
 - 32 REMOVE AND DISPOSE DOUBLE DRIVE CHAIN LINK GATE
 - 33 REMOVE AND DISPOSE EXISTING BOUNDARY CHAIN LINK FENCE PER PLAN
 - 34 REMOVE AND DISPOSE EXISTING CORRUGATED STEEL PIPE (CSP)



		REVISIONS				SUBMITTED BY: <u>Eloy Ruvalcaba</u> 9/19/2023		SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT		DATE
		MARK	DATE	DESCRIPTION	BY:	<u>ELOY RUVALCABA, P.E.</u>	DATE	APPLE VALLEY DRAINAGE SYSTEM		Sept. 2023
								DESERT KNOLLS WASH		SCALE
										AS SHOWN
										FILE NO.
										4-201-
										SHEET NO.
										7 of 14



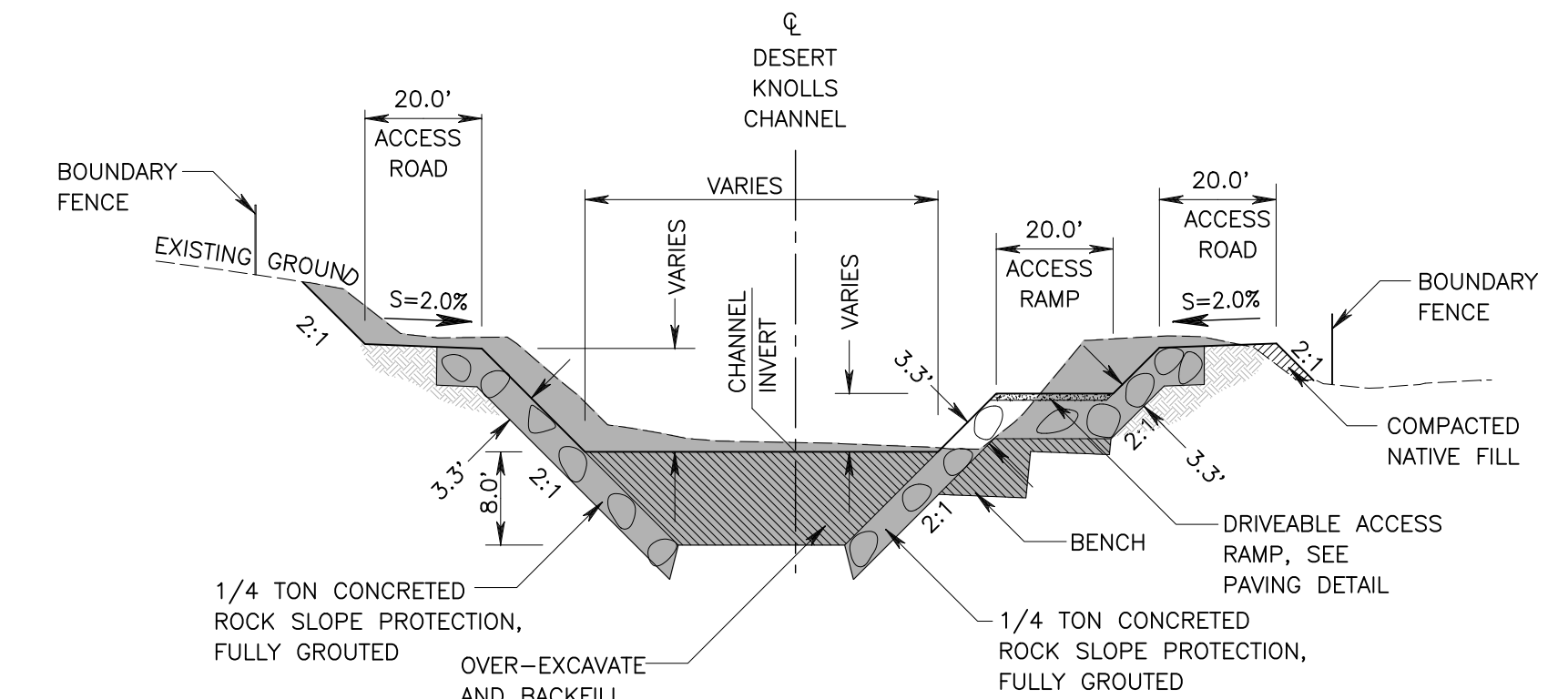
$Q_{(100)} = 3,380 \text{ cfs}$
 $V_{(100)} = 5.42 - 24.74 \text{ fps}$



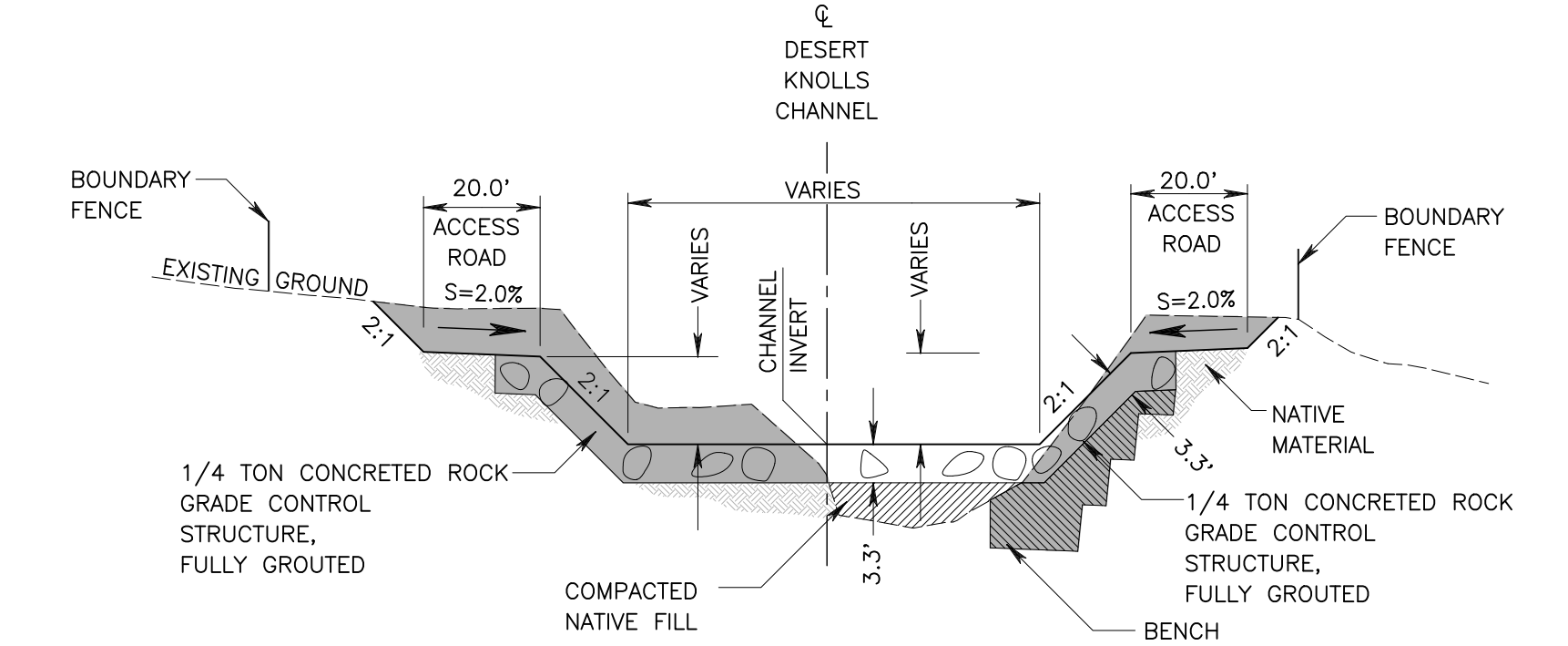
PLAN
HORIZONTAL SCALE 1"=40'

CONSTRUCTION NOTES:

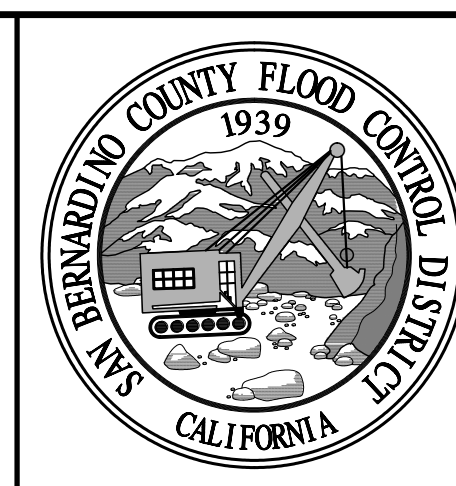
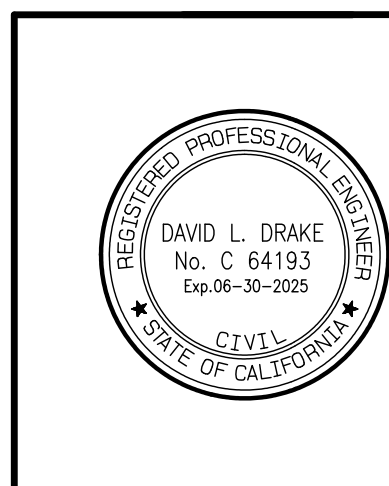
- 1 PROTECT-IN-PLACE
- 3 REMOVE AND DISPOSE INTERFERING ABANDONED SEWER LINES, MANHOLES AND ITS APPURTENANCES PER PLAN
- 11 CONSTRUCT 20.0' WIDE COMPACTED NATIVE ACCESS ROAD, PER PLAN, SECTION, AND DETAILS ON SHEET NO. 9
- 12 CONSTRUCT 1 TON LOOSE ROCK SPLASH PAD, 8.0' THICK, METHOD 'A' PLACEMENT, PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9
- 13 CONSTRUCT 1/4 TON CONCRETED ROCK, GRADE CONTROL STRUCTURE, 3.3' THICK, METHOD 'A' PLACEMENT, FULL GROUT PENETRATION, PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9
- 14 CONSTRUCT TRAPEZOIDAL CHANNEL, 1/4 TON CONCRETED ROCK SLOPE PROTECTION (CRSP), SIDE SLOPES (2:1), 3.3' THICK, METHOD 'A' PLACEMENT, FULL GROUT PENETRATION; EARTH INVERT; PER PLAN, PROFILE, SECTION AND DETAILS ON SHEET NO. 9
- 17 CONSTRUCT 20.0' WIDE DRIVEABLE CONCRETED ROCK ACCESS RAMP PER PLAN AND DETAILS ON SHEET NO. 6
- 19 REMOVE AND DISPOSE OR REUSE SUITABLE CLASS ROCKS
- 20 BREAK, REMOVE AND DISPOSE EXISTING CONCRETE SLAB
- 31 INSTALL 6.0' HIGH CHAINLINK BOUNDARY FENCE PER PLAN AND S.B.C.F.C.D. SPECIAL DRAWING I, ON SHEET NO. 13
- 33 REMOVE AND DISPOSE EXISTING BOUNDARY CHAIN LINK FENCE PER PLAN
- 34 REMOVE AND DISPOSE EXISTING CORRUGATED STEEL PIPE (CSP)
- 35 BREAK, REMOVE AND DISPOSE OR REUSE SUITABLE CLASS CONCRETED ROCK SLOPE PROTECTION



14 **TYPICAL CHANNEL SECTION**
CONCRETED ROCK SLOPE PROTECTION
SIDE SLOPES WITH ACCESS RAMP
NOT TO SCALE



13 **TYPICAL SECTION CONCRETED ROCK**
GRADE CONTROL STRUCTURE
NOT TO SCALE

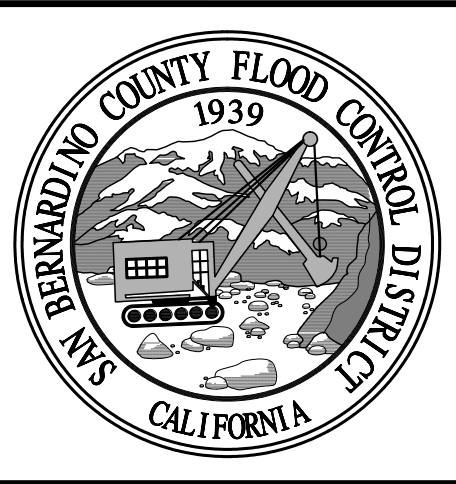
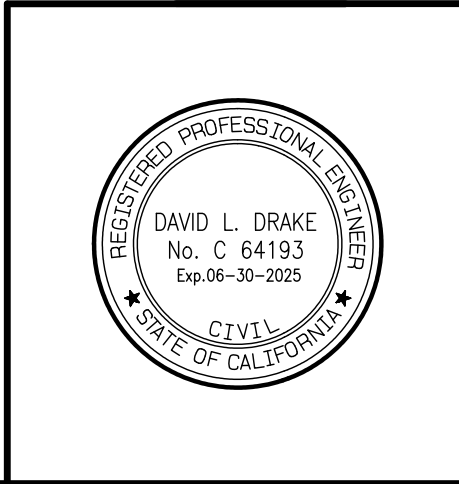
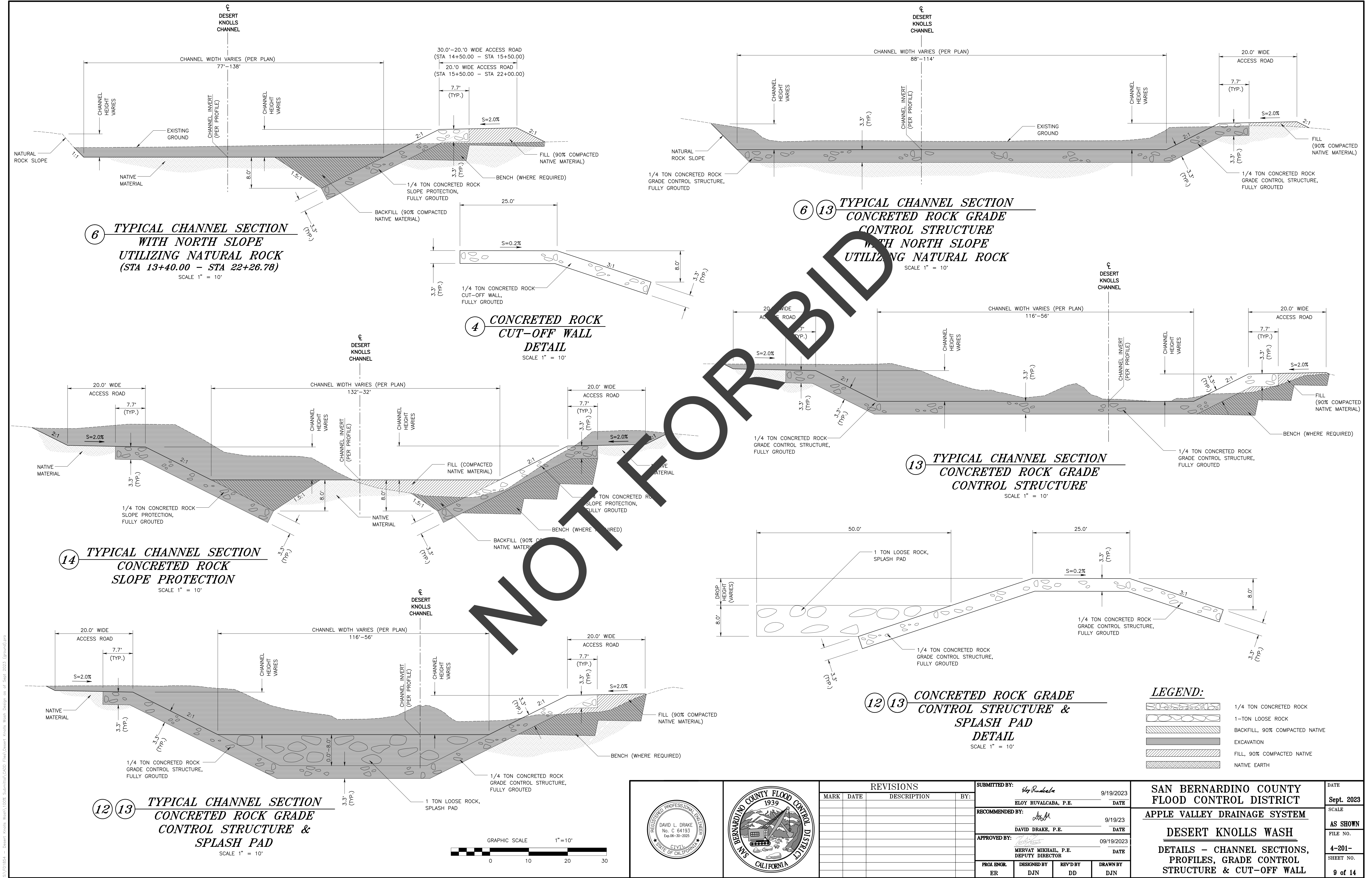


REVISIONS			
MARK	DATE	DESCRIPTION	BY:

SUBMITTED BY:		9/19/2023
ELOY RUVALCABA, P.E.		DATE
RECOMMENDED BY:		9/19/23
DAVID DRAKE, P.E.		DATE
APPROVED BY:		09/19/2023
MERVAT MIKHAIL, P.E.		DATE
DEPUTY DIRECTOR		
PROJ. ENGR.	DESIGNED BY	REV'D BY
ER	DJN	DD

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT		DATE
APPLE VALLEY DRAINAGE SYSTEM		Sept. 2023
DESERT KNOLLS WASH		SCALE
PLAN, PROFILE & TYPICAL SECTIONS		AS SHOWN
STA. 31+00.00 - STA. 39+29.14		FILE NO.
		4-201-
		SHEET NO.
		8 of 14

S:\010184 - Desert Knolls Wash\1002 Submittal\0400 Files\Desert Knolls Wash Design as of Sept. 2023 (Ground).pro

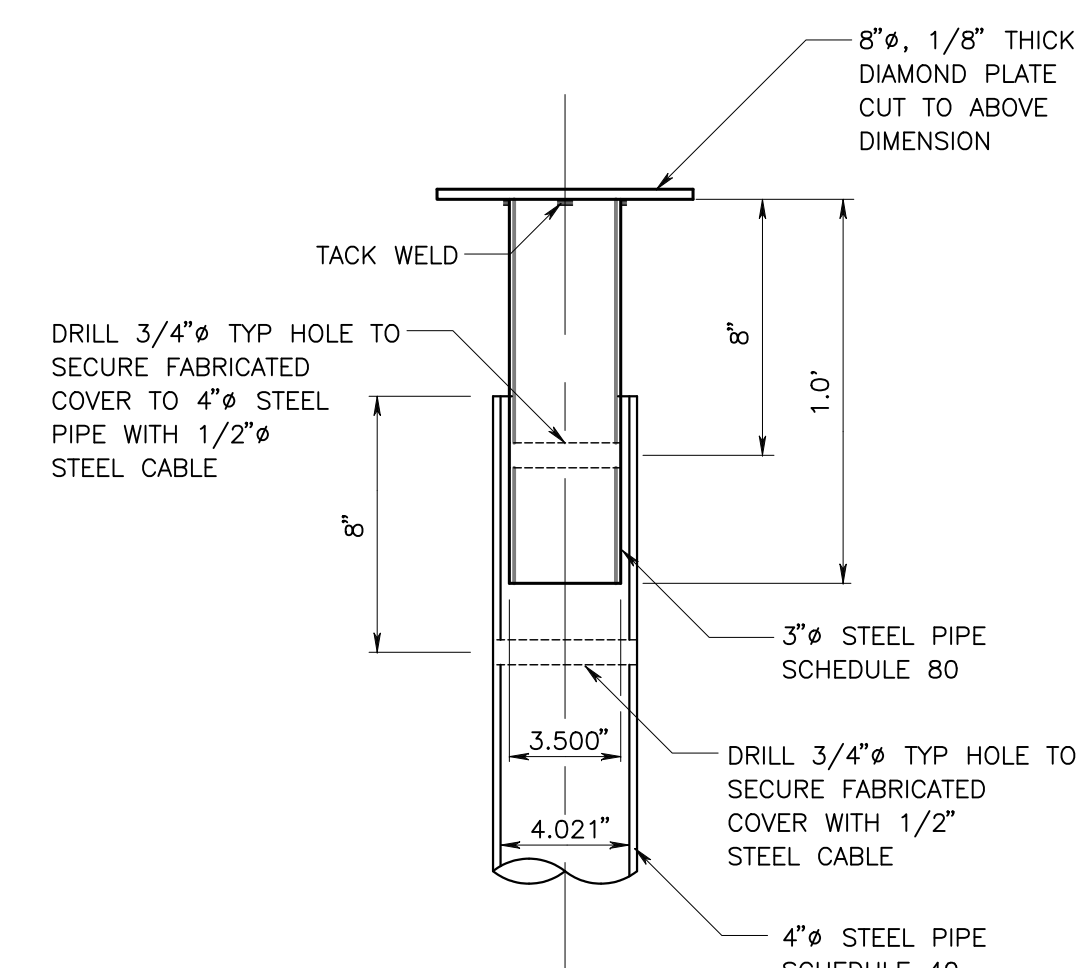
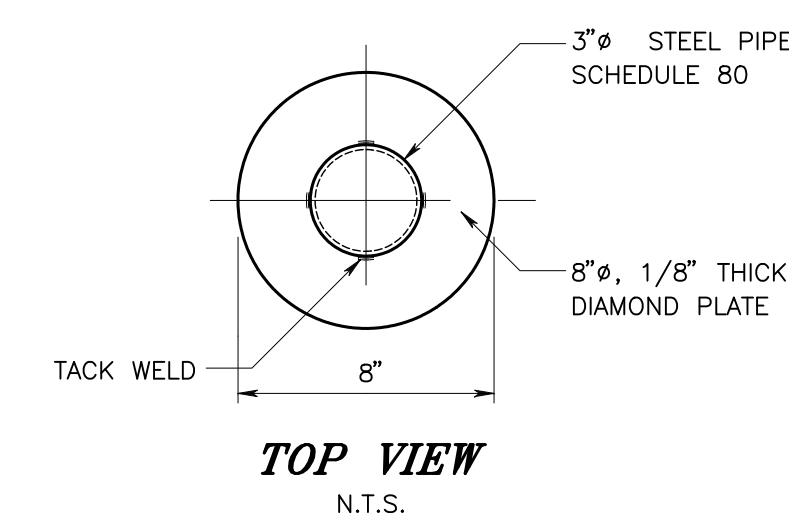
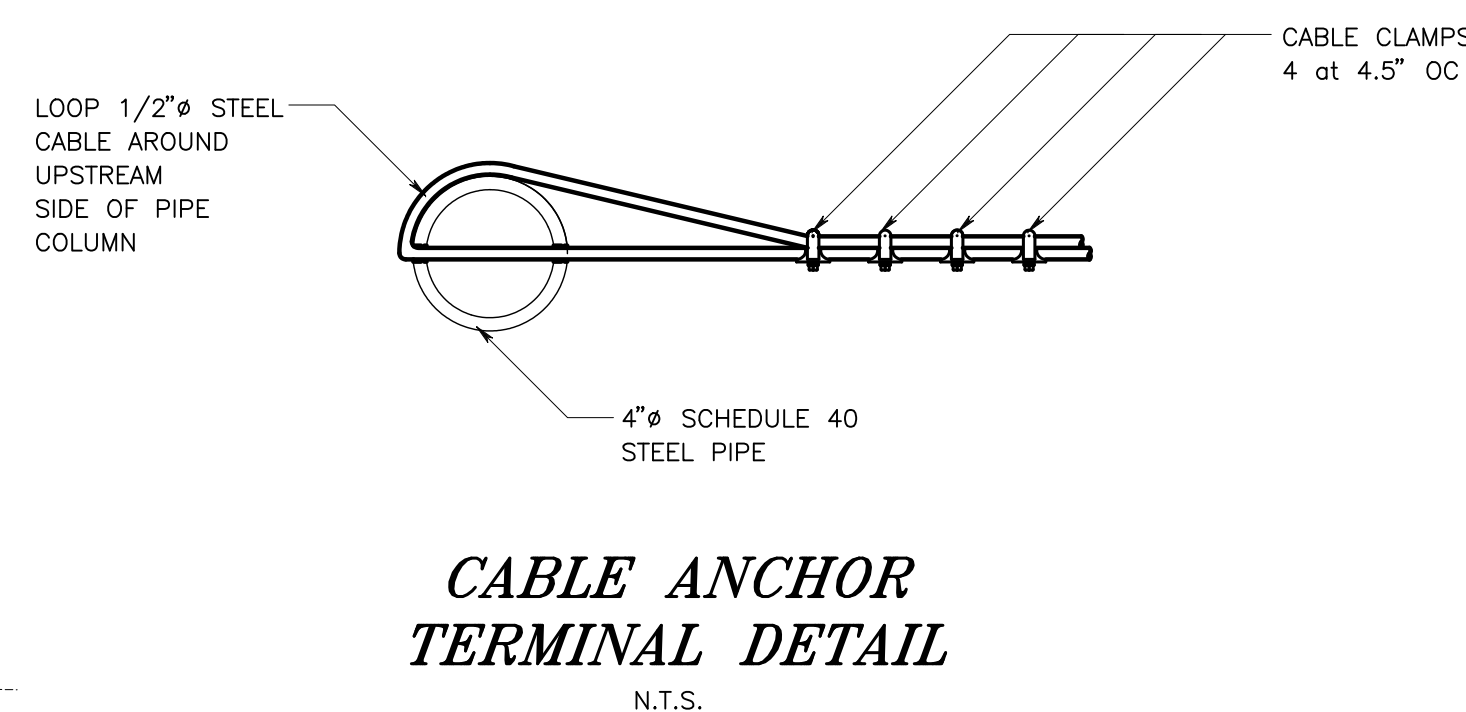


REVISIONS			
MARK	DATE	DESCRIPTION	BY

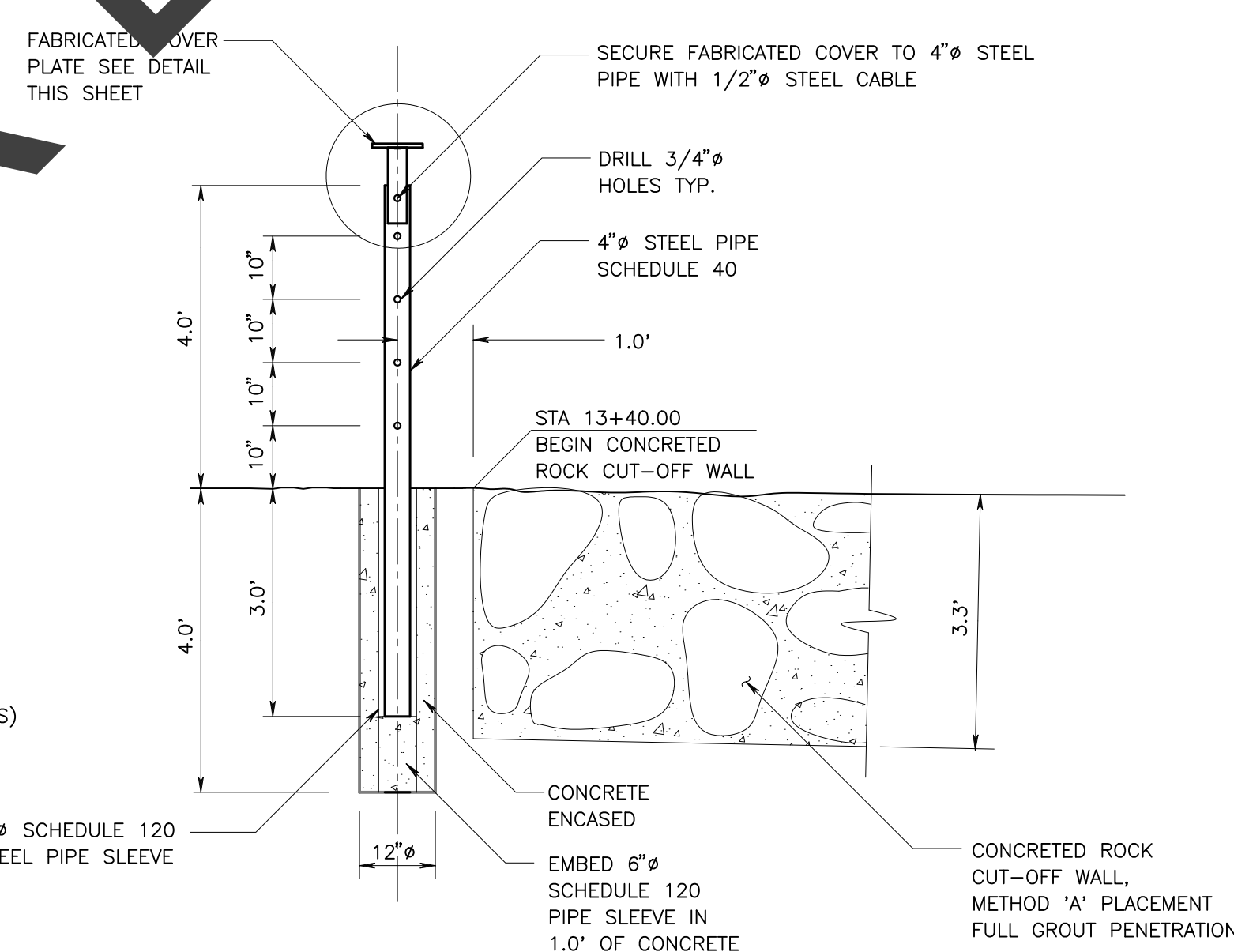
SUBMITTED BY:		9/19/2023
ELOY RUVALCABA, P.E.		DATE
RECOMMENDED BY:		9/19/23
DAVID DRAKE, P.E.		DATE
APPROVED BY:		09/19/2023
MERVAT MIKHAIL, P.E.		DATE
DEPUTY DIRECTOR		
PROJ. ENGR.	DESIGNED BY	REV'D BY
ER	DJN	DD
		DJN

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT	
APPLE VALLEY DRAINAGE SYSTEM	
DESERT KNOLLS WASH	
DETAILS - CHANNEL SECTIONS, PROFILES, GRADE CONTROL STRUCTURE & CUT-OFF WALL	

DATE	Sept. 2023
SCALE	AS SHOWN
FILE NO.	4-201-
SHEET NO.	9 of 14



*FABRICATED COVER
PLATE DETAIL*

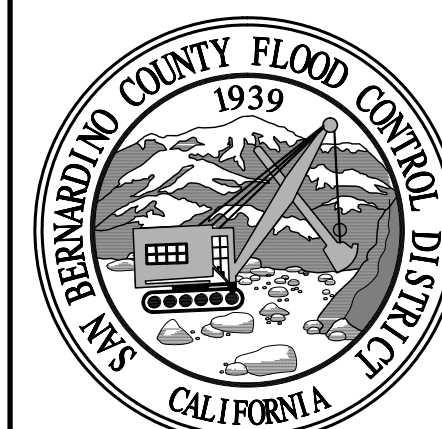


SECTION A-A
SCALE 1" = 2'

ELEVATION
SCALE 1" = 10'

PLAN
SCALE 1" = 10'

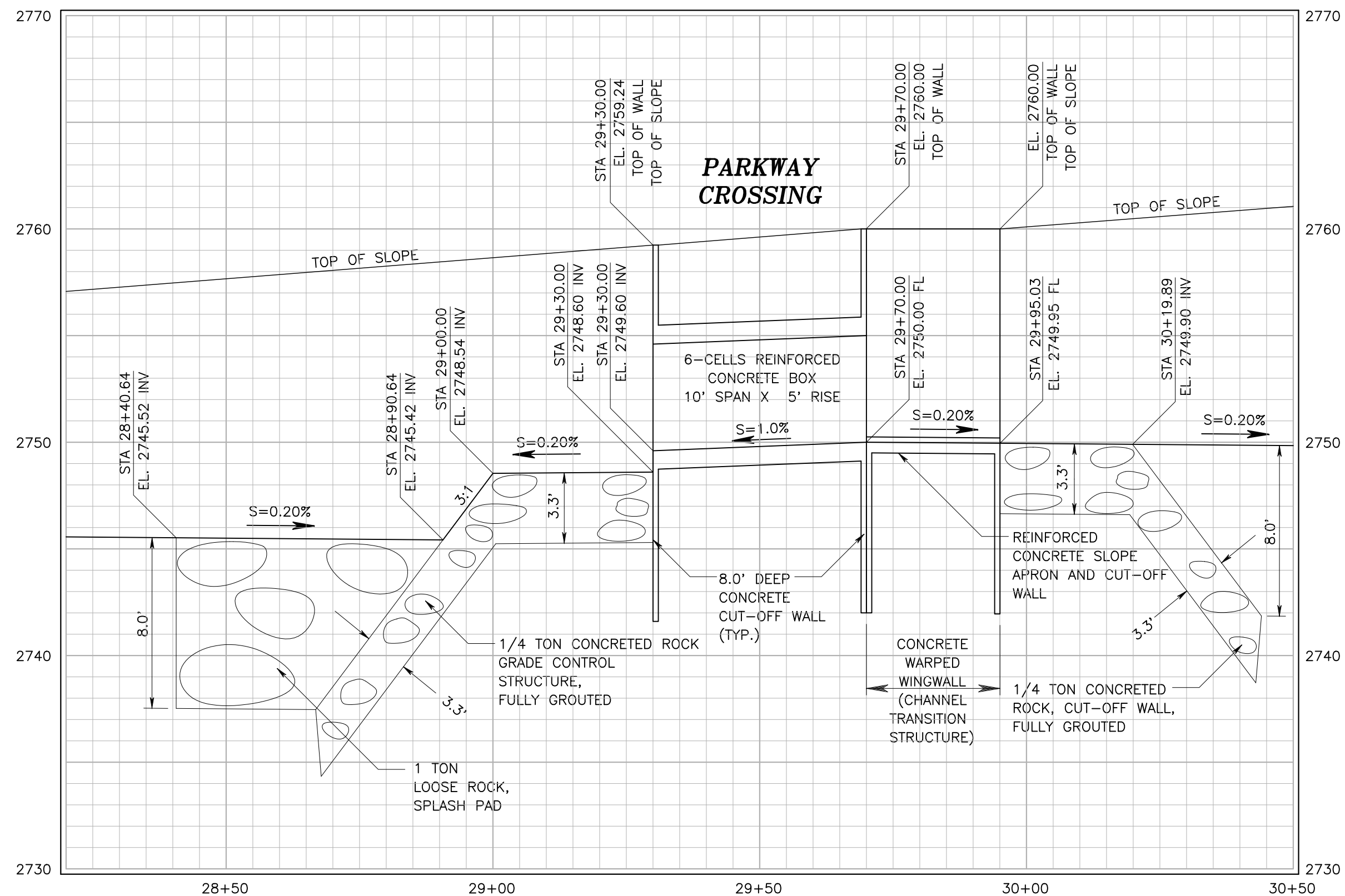
5 *CABLE RAILING DETAILS*
(REMOVABLE PROTECTIVE BARRIERS)

[illegible]

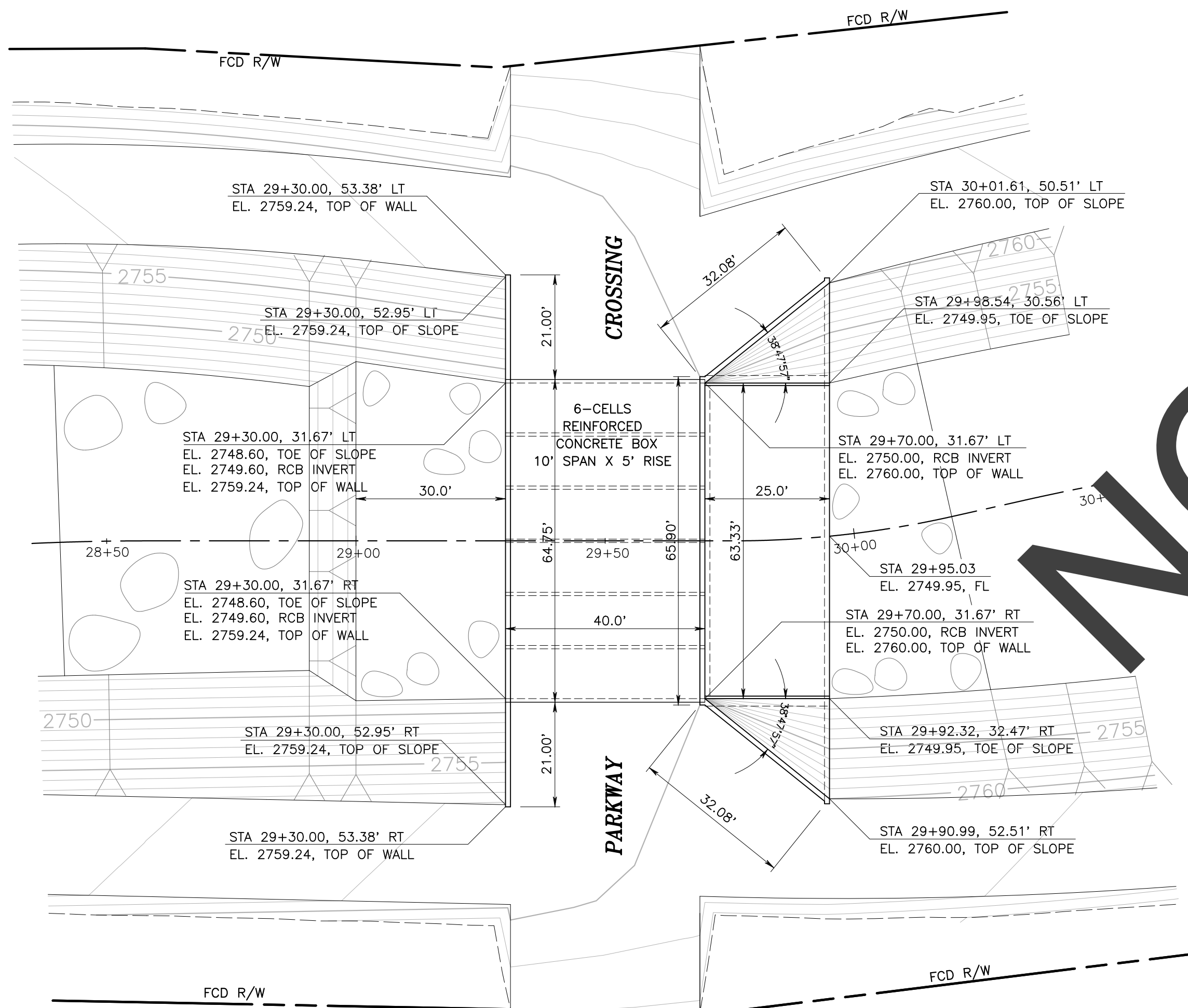
SUBMITTED BY: <i>Shy Ruvaleka</i>		9/19/2021	
ELY RUVALCABA, P.E.		DATE	
RECOMMENDED BY: <i>MDM</i>		9/19/2021	
DAVID DRAKE, P.E.		DATE	
APPROVED BY: <i>David Drake</i>		09/19/2021	
MERVAT MIKHAIL, P.E.		DATE	
DEPUTY DIRECTOR			
PROJ. ENGR.	DESIGNED BY	REV'D BY	DRAWN BY
ED	DIN	DD	DIN

SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT
APPLE VALLEY DRAINAGE SYSTEM
DESERT KNOLLS WASH
DETAILS – CABLE RAILING
(REMOVABLE
PROTECTIVE BARRIERS)

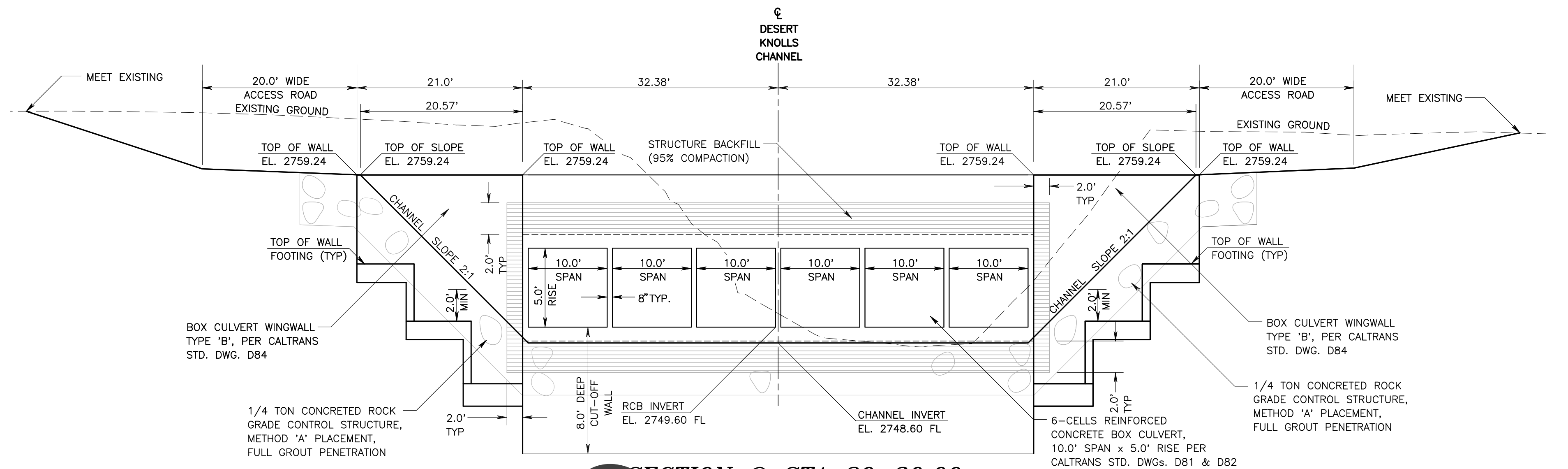
DATE	Sept. 2023
SCALE	AS SHOWN
FILE NO.	4-201-
SHEET NO.	10 of 14



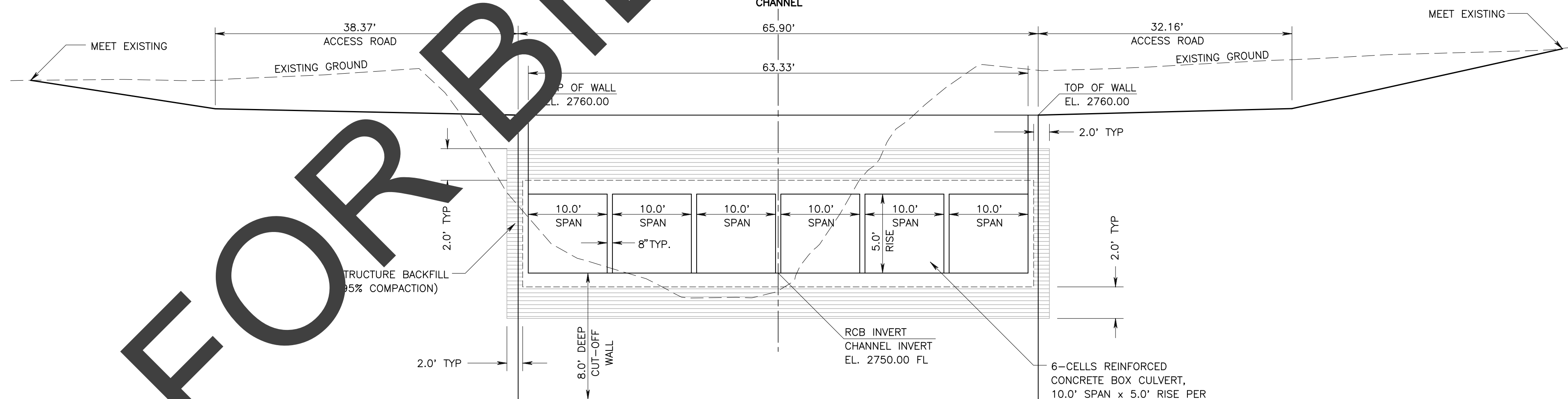
PROFILE
HORIZONTAL SCALE 1"=20'
VERTICAL SCALE 1"=5'



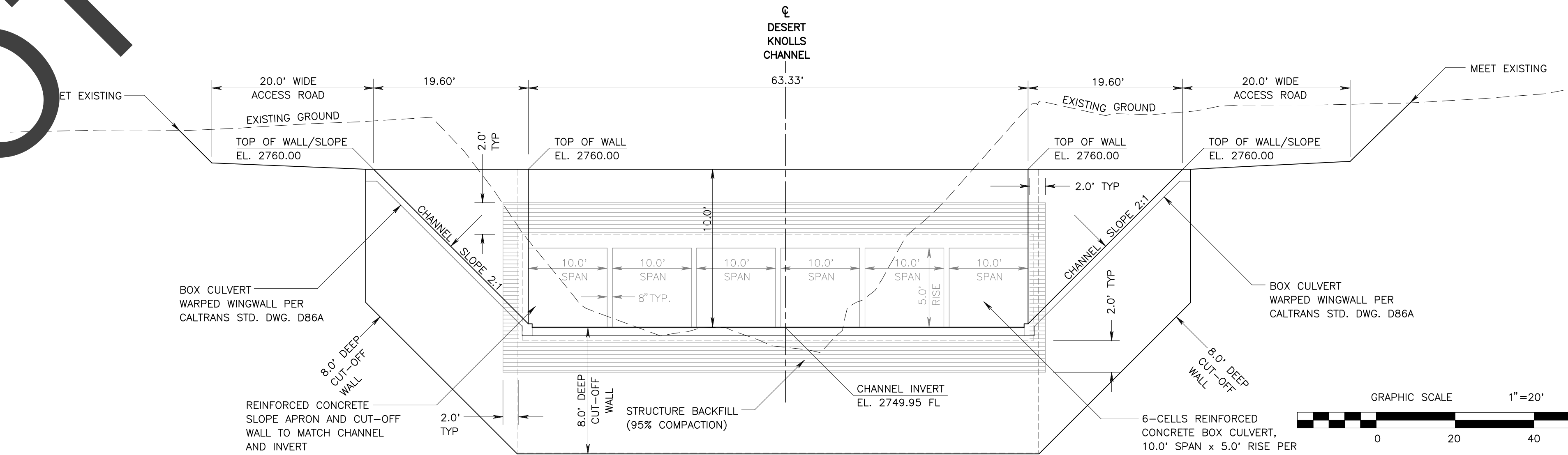
PLAN
HORIZONTAL SCALE 1"=20'



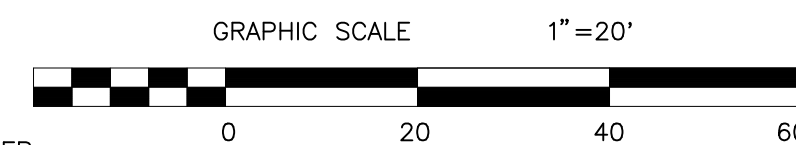
SECTION @ STA 29+30.00
(LOOKING UPSTREAM)
HORIZONTAL SCALE 1"=10'
VERTICAL SCALE 1"=5'



SECTION @ STA 29+70.00
(LOOKING DOWNSTREAM)
HORIZONTAL SCALE 1"=10'
VERTICAL SCALE 1"=5'

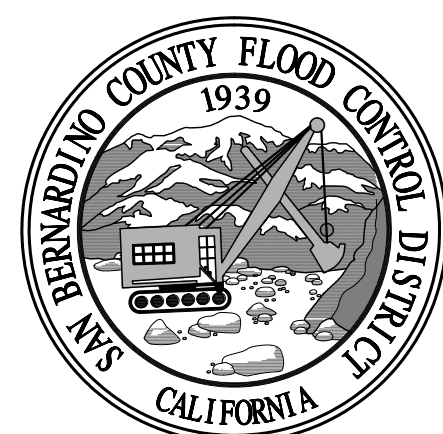


SECTION @ STA 29+95.03
(SKEWED TO BE PERPENDICULAR TO RCB, LOOKING DOWNSTREAM)
HORIZONTAL SCALE 1"=10'
VERTICAL SCALE 1"=5'



21 23 24

**REINFORCED CONCRETE BOX,
HEADWALLS & WINGWALLS
DETAILS**

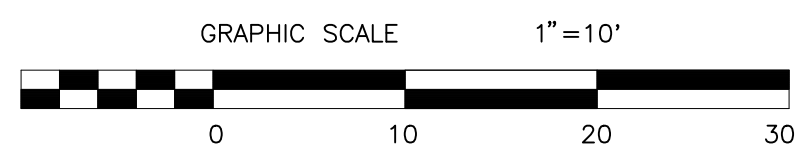
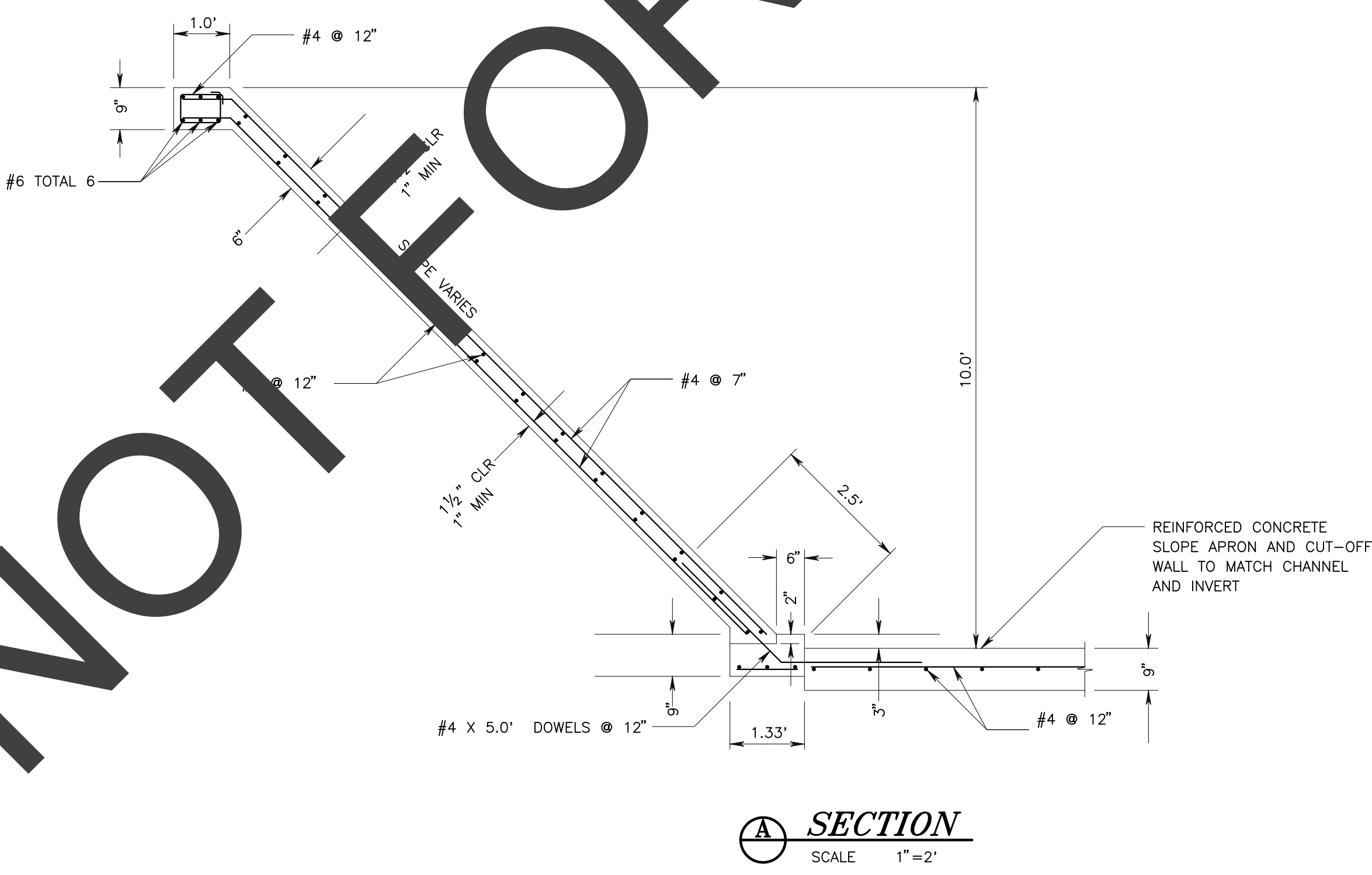
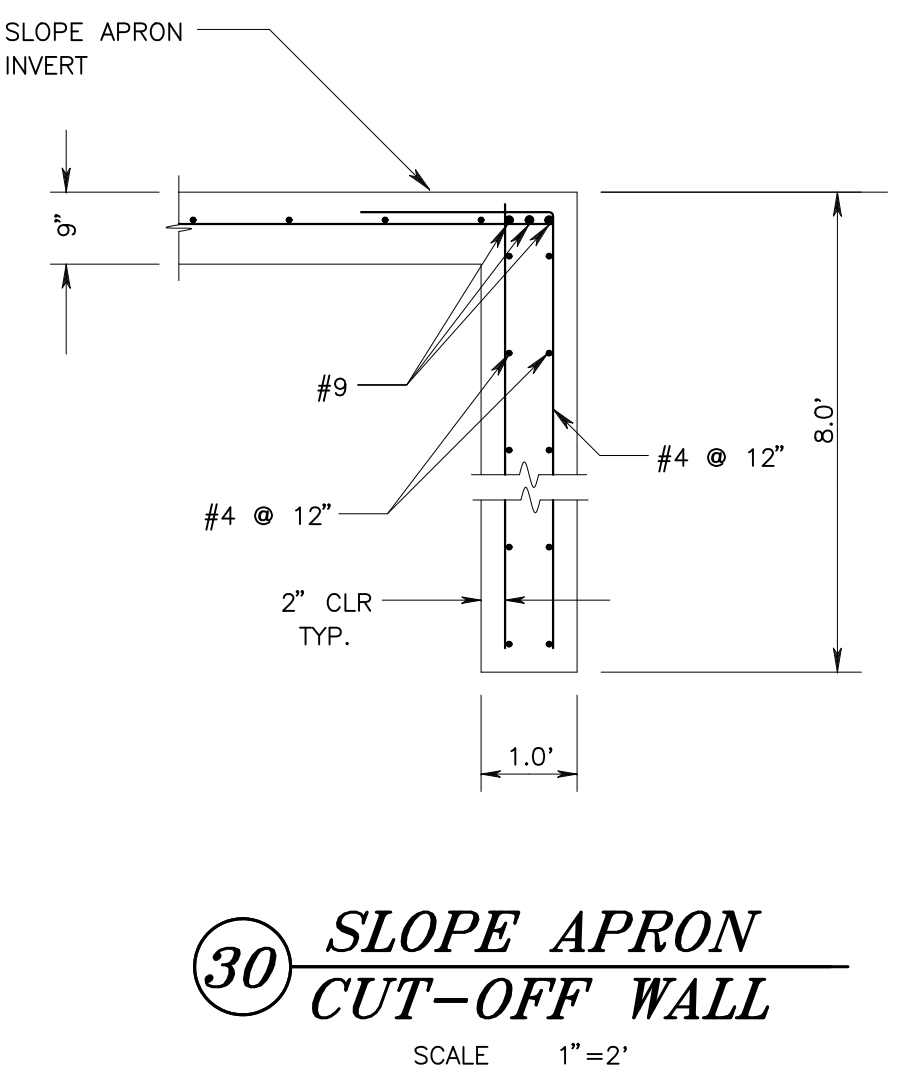
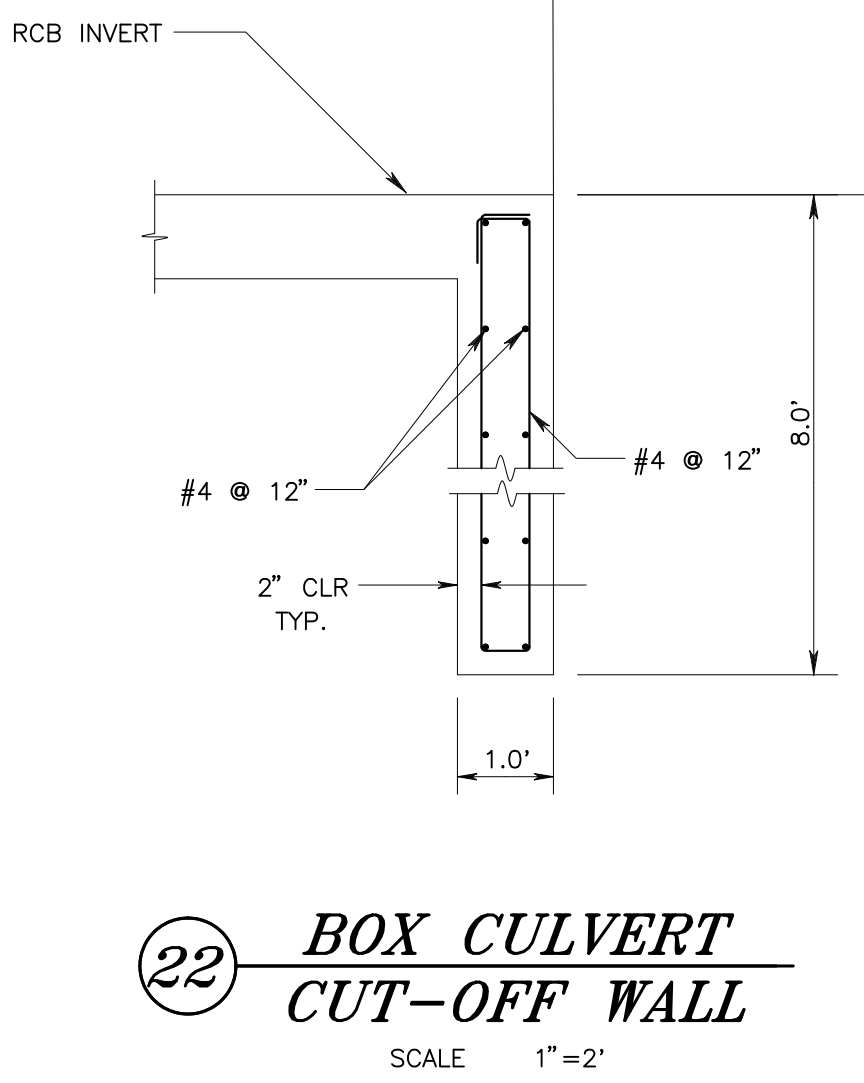
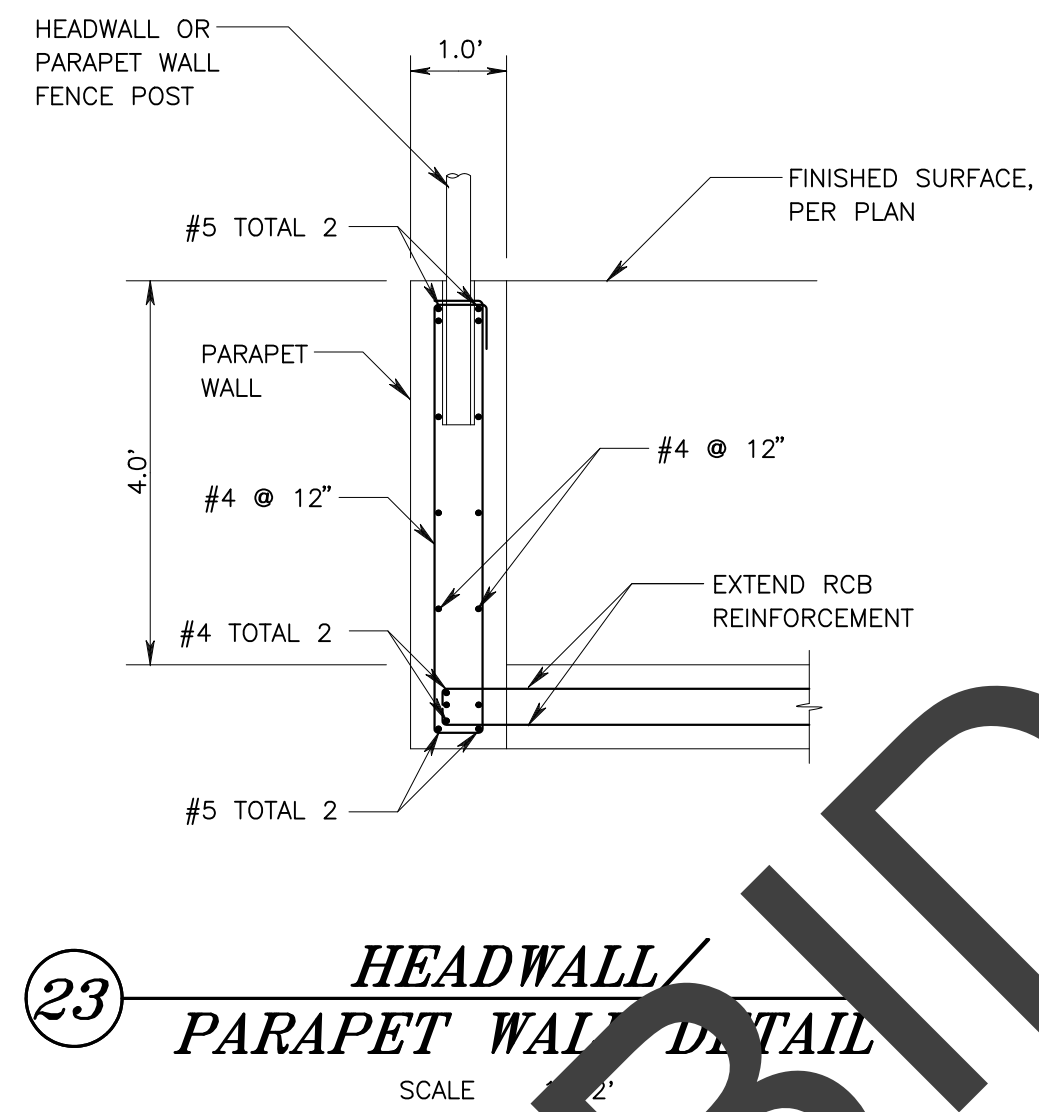
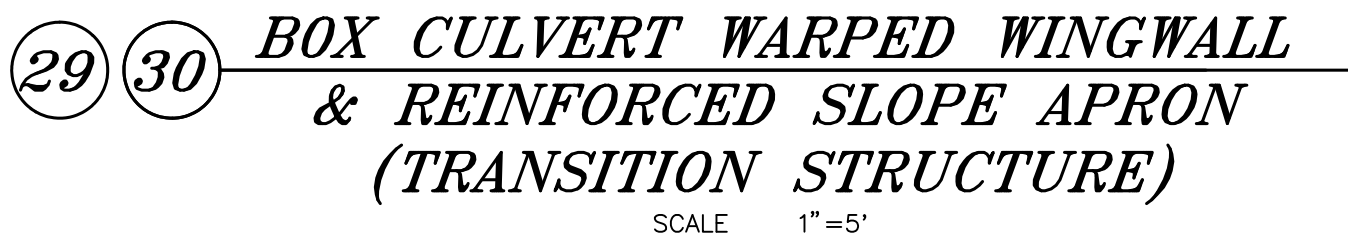


REVISIONS			
MARK	DATE	DESCRIPTION	BY

SUBMITTED BY: <i>Eloy Ruvalcaba</i>			
ELOY RUVALCABA, P.E.		DATE	9/19/2023
RECOMMENDED BY: <i>David Drake</i>			
DAVID DRAKE, P.E.		DATE	9/19/23
APPROVED BY: <i>Mervat Mikhail</i>			
MERVAT MIKHAIL, P.E. DEPUTY DIRECTOR		DATE	09/19/2023
PROJ. ENGR. ER	DESIGNED BY DJN	REV'D BY DD	DRAWN BY DJN

**SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT**
APPLE VALLEY DRAINAGE SYSTEM
DESERT KNOLLS WASH
**DETAILS - PARKWAY
CROSSING**

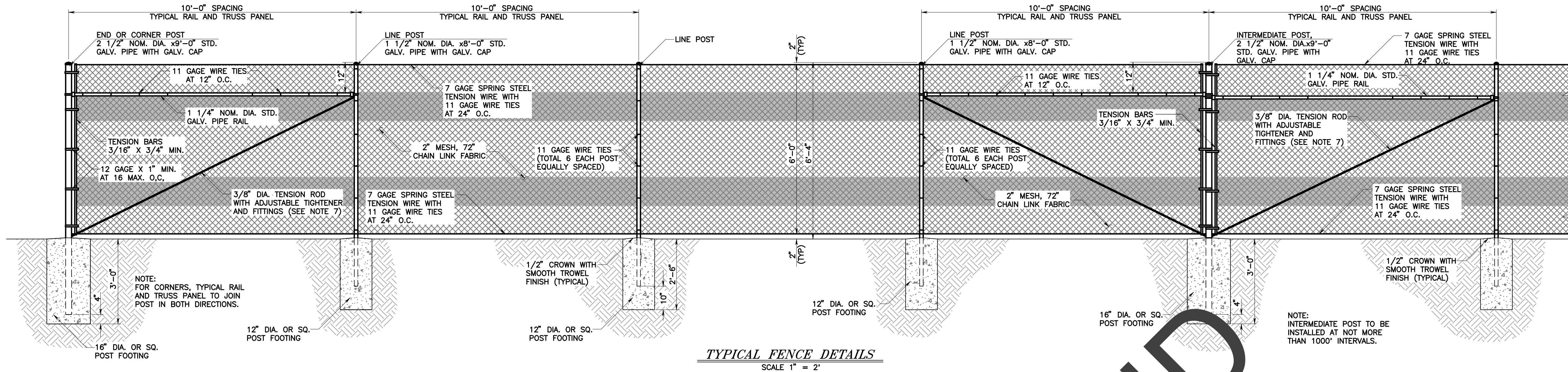
DATE	Sept. 2023
SCALE	AS SHOWN
FILE NO.	4-201-
SHEET NO.	11 of 14

[illegible]

SUBMITTED BY: <i>Greg Rinalda</i>		9/19/2023	
ELOY RUVALCABA, P.E.		DATE	
RECOMMENDED BY: <i>MDM</i>		9/19/23	
DAVID DRAKE, P.E.		DATE	
APPROVED BY: <i>[Signature]</i>		09/19/2023	
MERVAT MIKHAIL, P.E.		DATE	
DEPUTY DIRECTOR			
PROJ. ENGR. ER	DESIGNED BY DJN	REV'D BY DD	DRAWN BY DJN

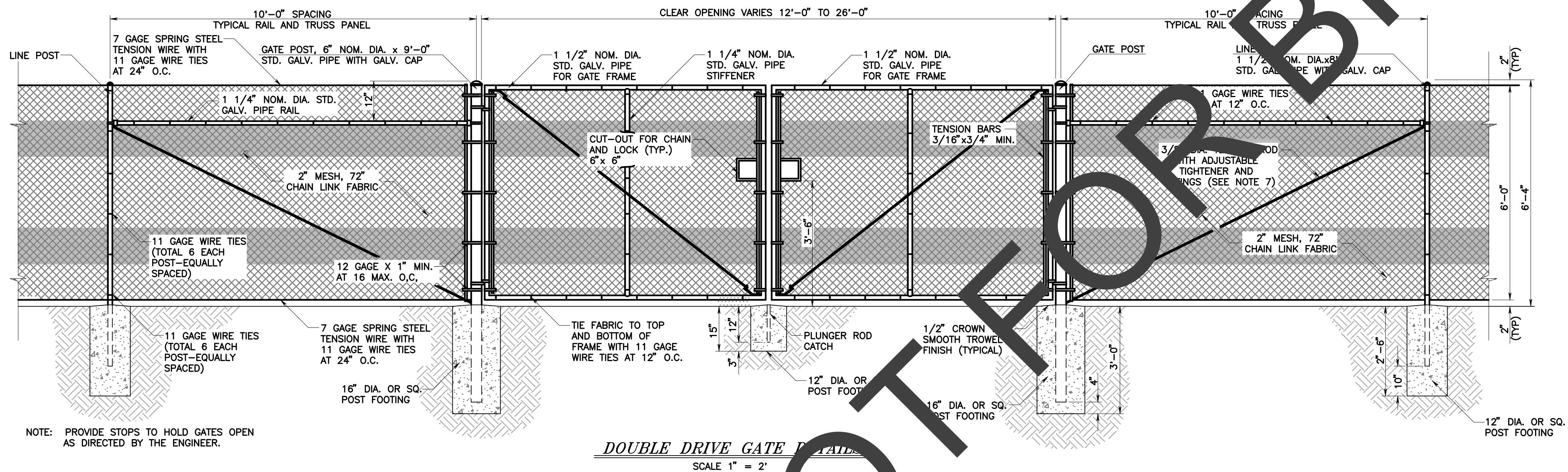
**SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT
APPLE VALLEY DRAINAGE SYSTEM
DESERT KNOLLS WASH
DETAILS - BOX WARPED
WINGWALLS, PARAPET WALLS,
CUT-OFF WALLS & SLOPE APRON**

DATE	Sept. 2023
SCALE	AS SHOWN
FILE NO.	4-201-
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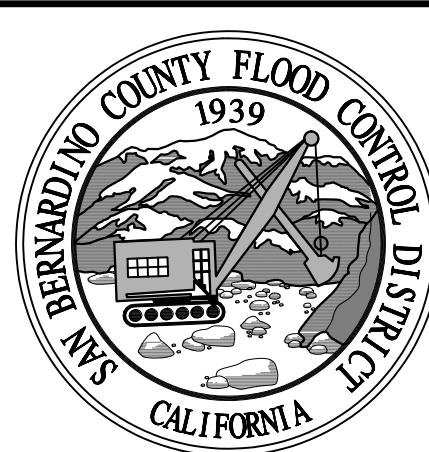
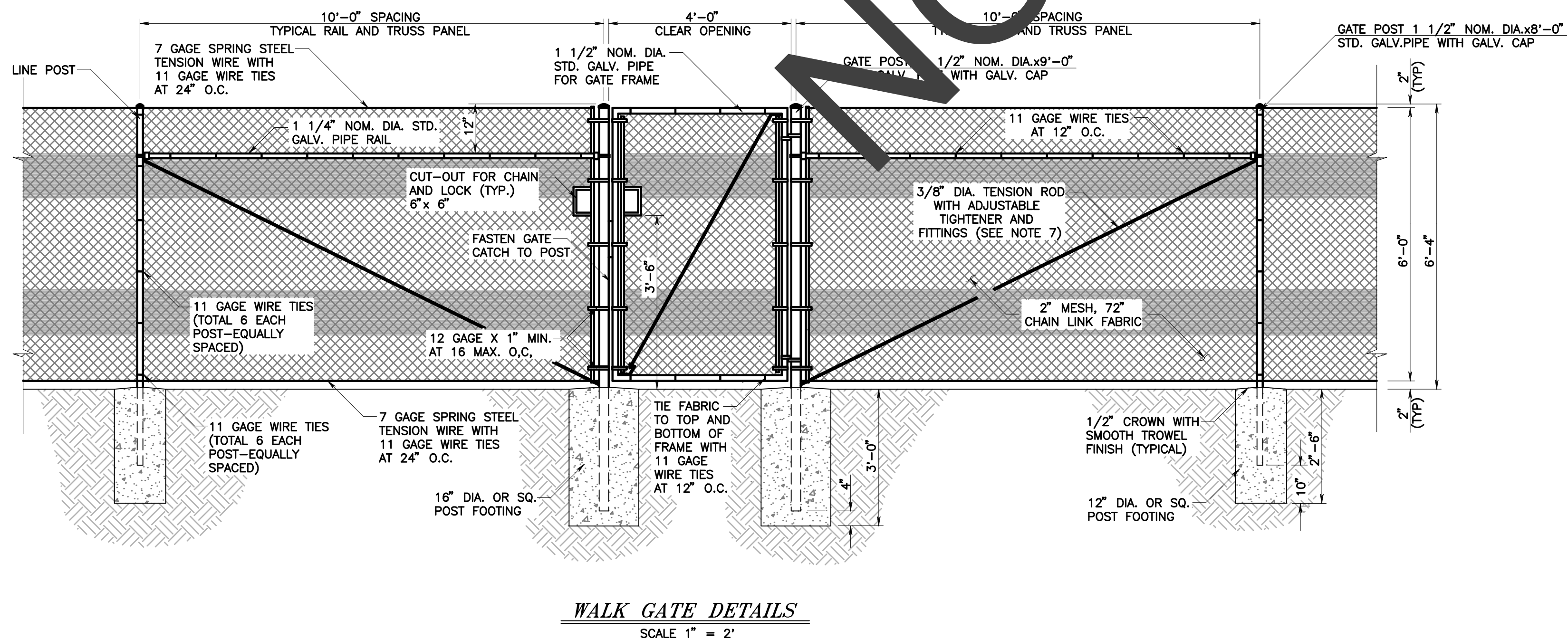
PIPE MATERIAL LIST

Nominal Diameter (Inches)	Outside Diameter (Inches)	Inside Diameter (Inches)	Weight per Foot Lbs.
1 1/4	1.660	1.380	2.270
1 1/2	1.900	1.610	2.720
2	2.375	2.067	3.650
2 1/2	2.875	2.469	5.790
3	3.500	3.068	7.580
3 1/2	4.000	3.548	9.110
4	4.500	4.026	10.790
6	6.625	6.065	18.970
8	8.625	7.981	28.55



GENERAL NOTES

- ALL CHAIN LINK FENCE MATERIALS, FITTINGS AND INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, SECTION 80, "FENCES" AND THIS SPECIAL DRAWING.
- THE FENCE FABRIC SHALL BE PLACED ON THE OUTWARD FACING SIDE OF THE POSTS, STRECHED TAUT, AND SECURELY FASTENED, UNLESS OTHERWISE SHOWN ON THE PLANS.
- CLEARANCE BETWEEN RIGHT-OF-WAY AND FENCE FABRIC SHALL BE 6" UNLESS OTHERWISE SHOWN ON THE PLANS.
- ALL GATES SHALL OPEN INWARD, EXCEPT IF OTHERWISE NOTED IN SPECIAL PROVISIONS.
- SECURE GALVANIZED CAP TO POST WITH 1/4" GALVANIZED ROUND HEAD RIVET, OR TACK WELD.
- ADJUSTABLE TIGHTENER SHALL BE TURNBUCKLE OR EQUIVALENT, HAVING A 6" MINIMUM TAKEUP.
- DIAMETER SIZE OF LINE, INTERMEDIATE, CORNER, END AND GATE POSTS TO BE AS SHOWN ON THIS SPECIAL DRAWING.
- ALL BOLTED HARDWARE ITEMS SHALL ALSO BE TACK WELDED IN SUCH A MANNER AS TO PREVENT REMOVAL BY UNAUTHORIZED INDIVIDUALS.
- ALL FENCE FABRIC SHALL HAVE TWO 12" WIDE HORIZONTALLY PAINTED STRIPES LOCATED FROM 1' TO 2' AND FROM 4' TO 5' ABOVE THE BOTTOM OF THE FABRIC. THE PAINT SHALL BE A REFLECTIVE TYPE ORANGE OR APPROVED EQUAL. AFTER FENCE FABRIC HAS BEEN PAINTED, A SAMPLE OF SAID PAINT SHALL BE GIVEN TO THE SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT, OPERATIONS DIVISION, ALONG WITH MANUFACTURER'S NAME AND PAINT SPECIFICATIONS.
- THE FENCE FABRIC SHALL BE 11 GAUGE UNLESS OTHERWISE SPECIFIED



SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT

BOUNDARY FENCING

SPECIAL DRAWING I

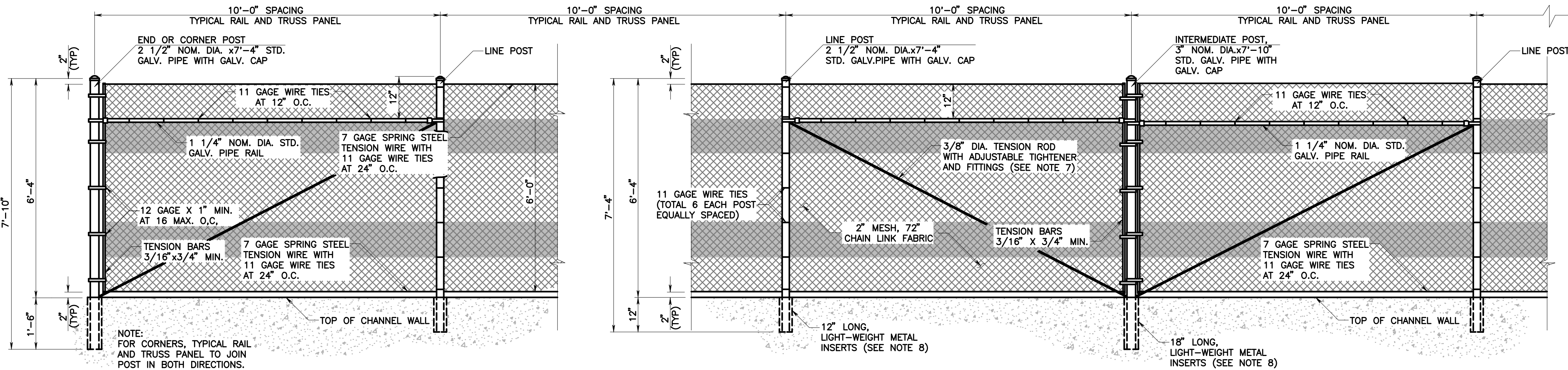
6' CHAIN LINK FENCE
(TYPE CL-6 = 72" FABRIC)

DATE
Sept. 2023

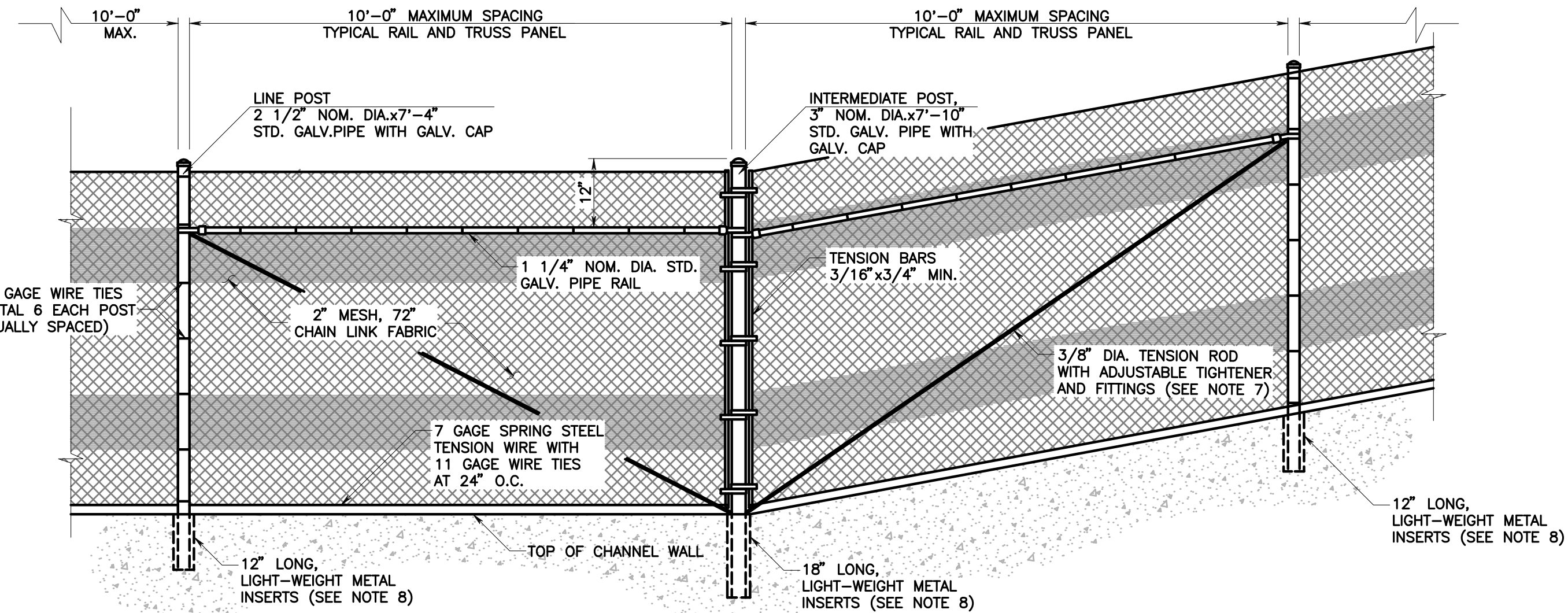
SCALE
AS SHOWN

FILE NO.
4-201-

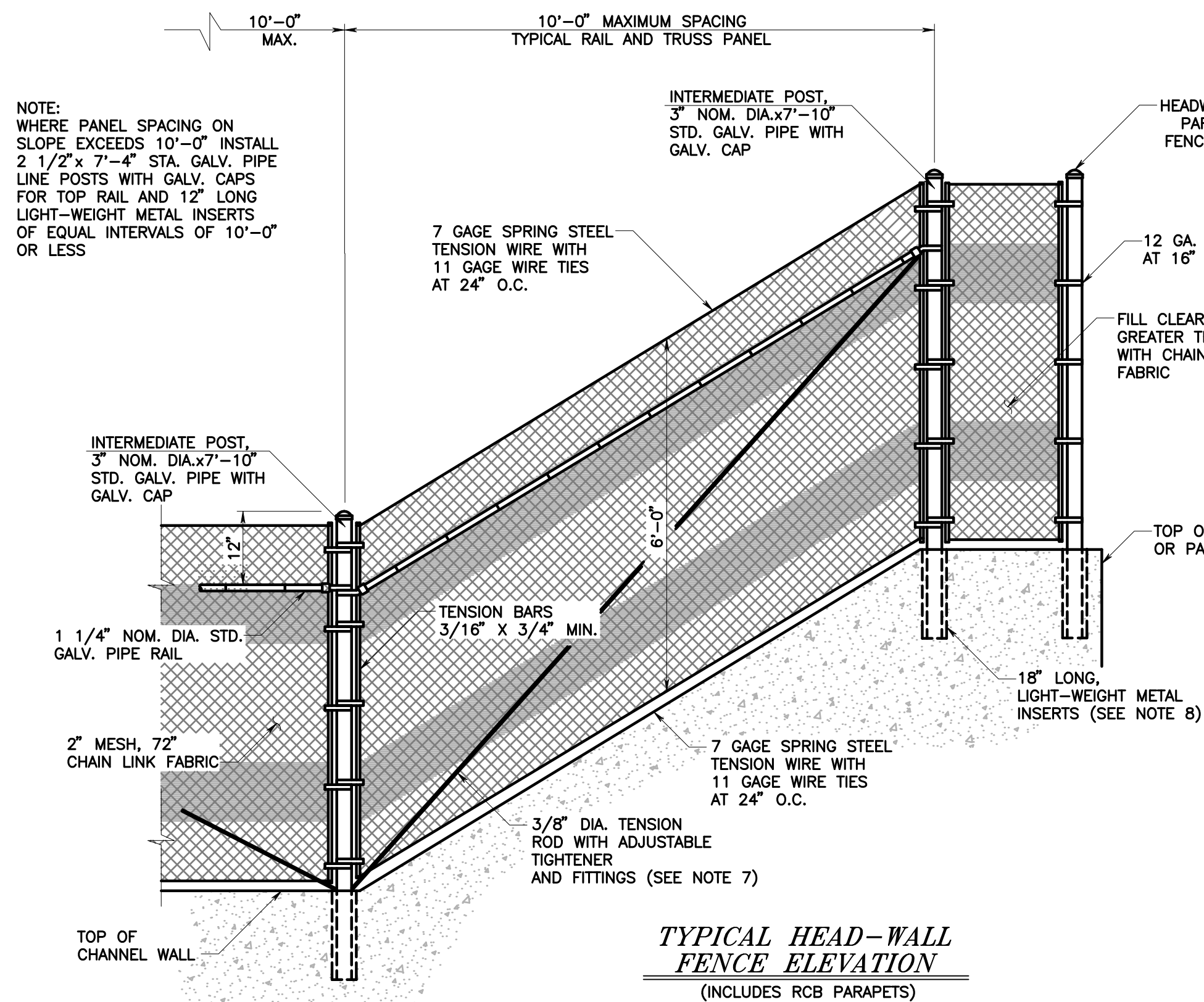
SHEET NO.
13 of 14



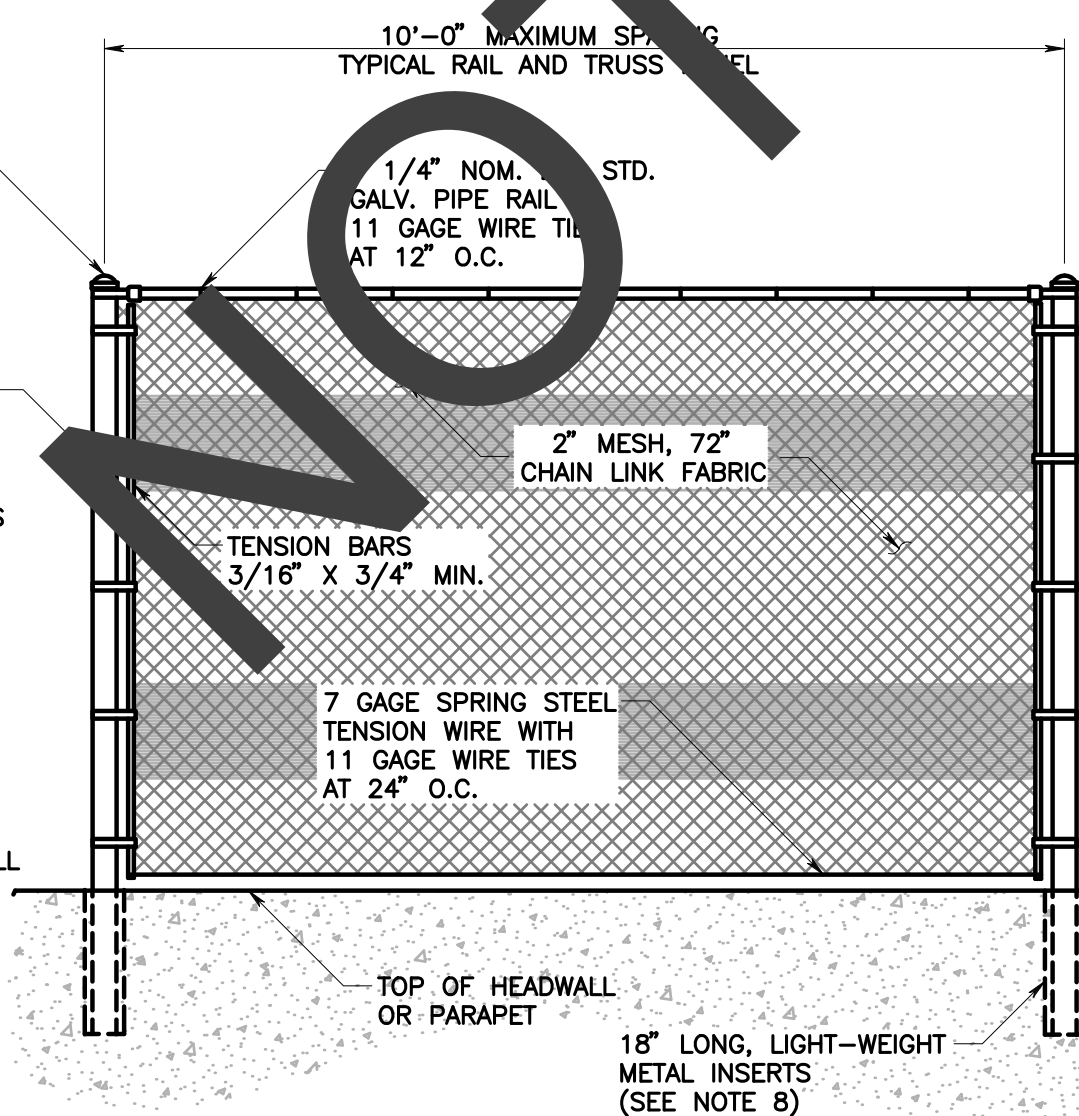
TYPICAL FENCE ELEVATION
SCALE 1" = 2'



TYPICAL FENCE ELEVATION ON SLOPE
SCALE 1" = 2'

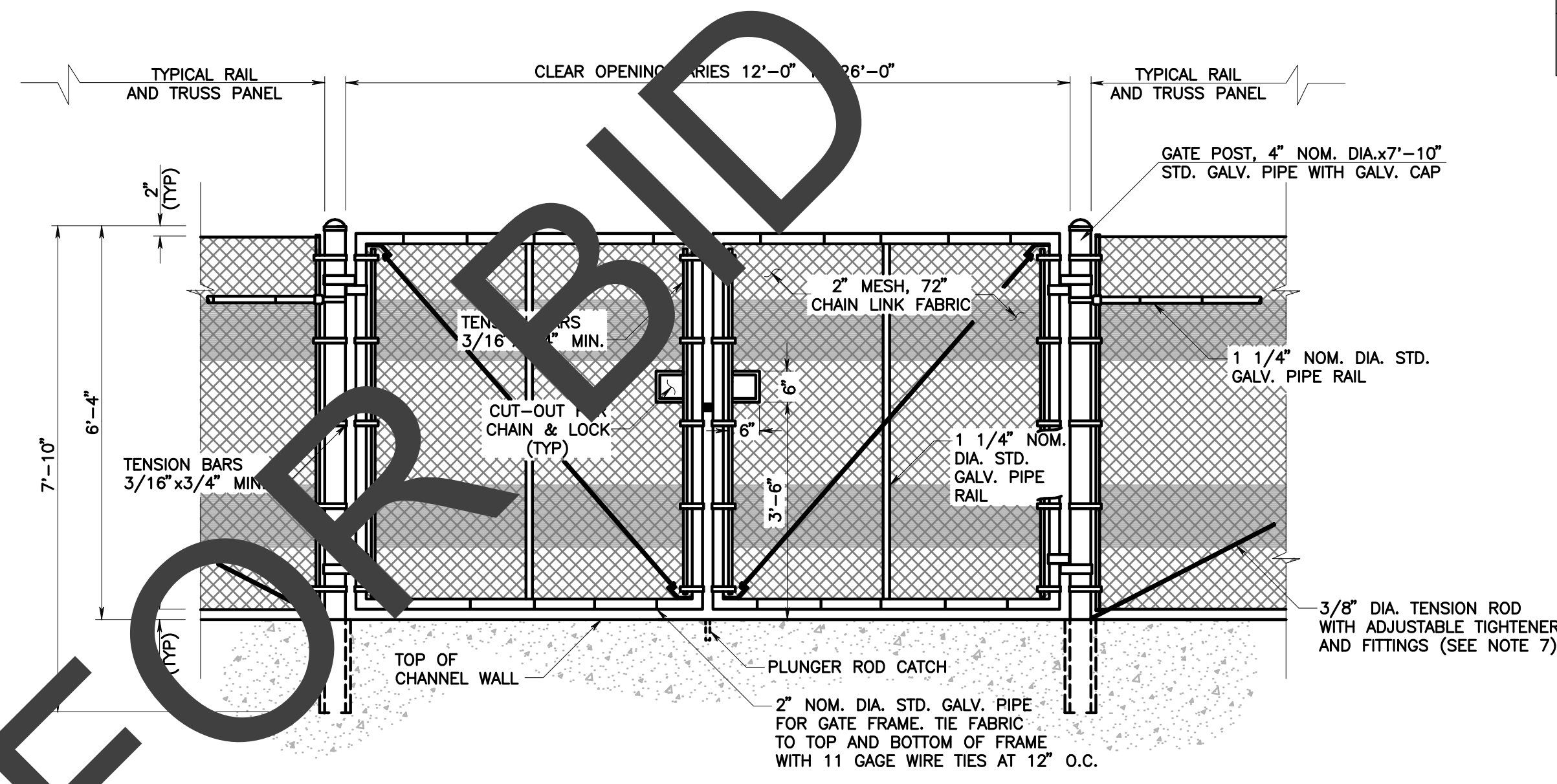


TYPICAL HEAD-WALL FENCE ELEVATION
(INCLUDES RCB PARAPETS)

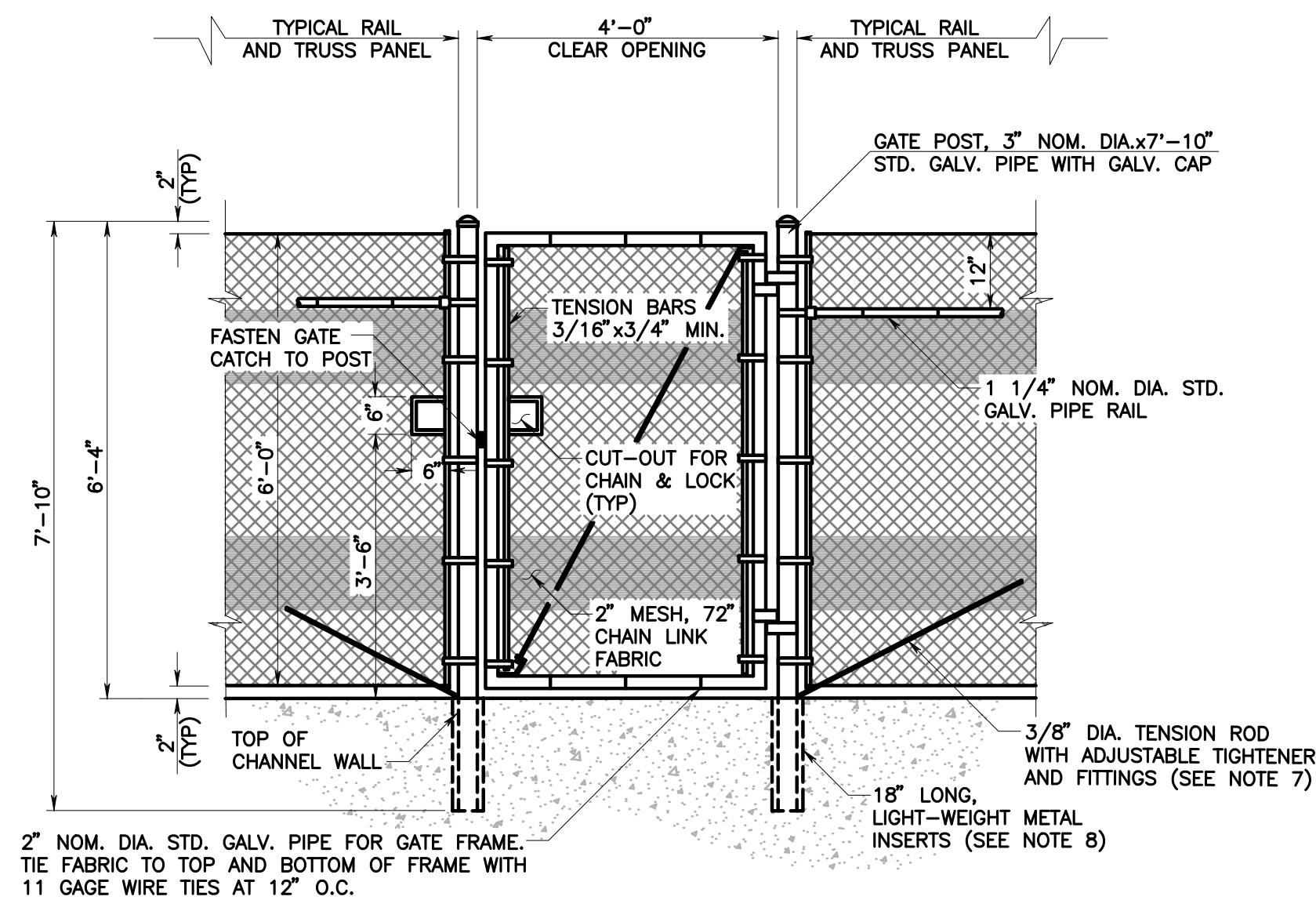


TYPICAL HEAD-WALL FENCE ELEVATION
(INCLUDES RCB PARAPETS)

NOTE:
WHERE SPACING EXCEEDS 10'-0"
INSTALL 2 1/2" x 7'-4" STD. GALV.
PIPE LINE POSTS WITH GALV. CAPS
FOR TOP RAIL AND 12" LONG
LIGHT-WEIGHT METAL INSERTS
OF EQUAL INTERVALS OF 10'-0"
OR LESS



TYPICAL DOUBLE DRIVE GATE
SCALE 1" = 2'



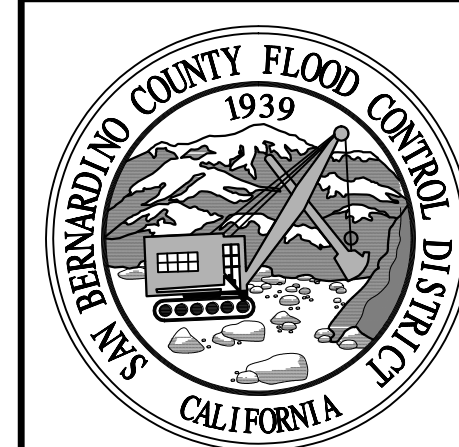
TYPICAL WALK GATE
SCALE 1" = 2'

PIPE MATERIAL LIST

Nominal Diameter (Inches)	Outside Diameter (Inches)	Inside Diameter (Inches)	Weight per Foot Lbs.
1 1/4	1.660	1.380	2.270
1 1/2	1.900	1.610	2.720
2	2.375	2.067	3.650
2 1/2	2.875	2.469	5.790
3	3.500	3.068	7.580
3 1/2	4.000	3.548	9.110
4	4.500	4.026	10.790
6	6.625	6.065	18.970
8	8.625	7.981	28.55

GENERAL NOTES

- ALL CHAIN LINK FENCE MATERIALS, FITTINGS AND INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, SECTION 80, "FENCES" AND THIS SPECIAL DRAWING.
- THE FENCE FABRIC SHALL BE PLACED ON THE OUTWARD FACING SIDE OF THE POSTS, STRETCHED TAUT, AND SECURELY FASTENED, UNLESS OTHERWISE SHOWN ON THE PLANS.
- THE FENCE FABRIC SHALL BE 9 GAUGE UNLESS OTHERWISE SPECIFIED.
- ALL GATES SHALL OPEN INWARD, EXCEPT IF OTHERWISE NOTED IN THE SPECIAL PROVISIONS.
- ALL GATE HINGES SHALL BE HEAVY DUTY MALLEABLE IRON OR STEEL, INDUSTRIAL SERVICE TYPE 270 DEGREE SWING, NON-REMOVABLE OF APPROVED QUALITY AND DESIGN, AND SHALL BE FASTENED FROM THE INSIDE.
- SECURE GALVANIZED CAP TO POST WITH 1/4" GALVANIZED ROUND HEAD RIVET, OR TACK WELD.
- ADJUSTABLE TIGHTENER SHALL BE TURNBUCKLE OR EQUIVALENT, HAVING A 6" MINIMUM TAKEUP.
- LIGHT-WEIGHT METAL INSERTS SHALL BE SHEET METAL TUBES WITH I.D. 3/4" GREATER THAN O.D. OF PIPE USED. POSTS ARE TO BE GROUTED INTO INSERTS USING NEAT GROUT OF 1 PART OF CEMENT AND 2 PARTS OF WATER.
- ALL BOLTED HARDWARE ITEMS SHALL ALSO BE TACK WELDED IN SUCH A WAY MANNER AS TO PREVENT REMOVAL BY UNAUTHORIZED INDIVIDUALS.
- ALL FENCE FABRIC SHALL HAVE TWO 12" WIDE HORIZONTALLY PAINTED STRIPES LOCATED FROM 1' TO 2' AND FROM 4' TO 5' ABOVE THE BOTTOM OF THE FABRIC. THE PAINT SHALL BE A REFLECTIVE TYPE ORANGE OR APPROVED EQUAL. AFTER FENCE FABRIC HAS BEEN PAINTED, A SAMPLE OF SAID PAINT SHALL BE GIVEN TO THE SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT, OPERATIONS DIVISION, ALONG WITH MANUFACTURER'S NAME AND PAINT SPECIFICATIONS.
- FOR WALL THICKNESSES 12" OR GREATER, USE POST SIZES AS SHOWN. FOR WALL THICKNESS LESS THAN 12", USE POST SIZES AS FOLLOWS:
END, CORNER, INTERMEDIATE, HEADWALL, PARAPET & WALK GATE POSTS - 2 1/2" NOM. DIA.
LINE POSTS - 2" NOM. DIA.
DOUBLE DRIVE GATE POSTS - 3" NOM. DIA.



SAN BERNARDINO COUNTY
FLOOD CONTROL DISTRICT

CHANNEL WALL FENCING

SPECIAL DRAWING II

6' CHAIN LINK FENCE
(TYPE CL-6 = 72" FABRIC)

DATE

Sept. 2023

SCALE

AS SHOWN

FILE NO.

4-201-

SHEET NO.

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