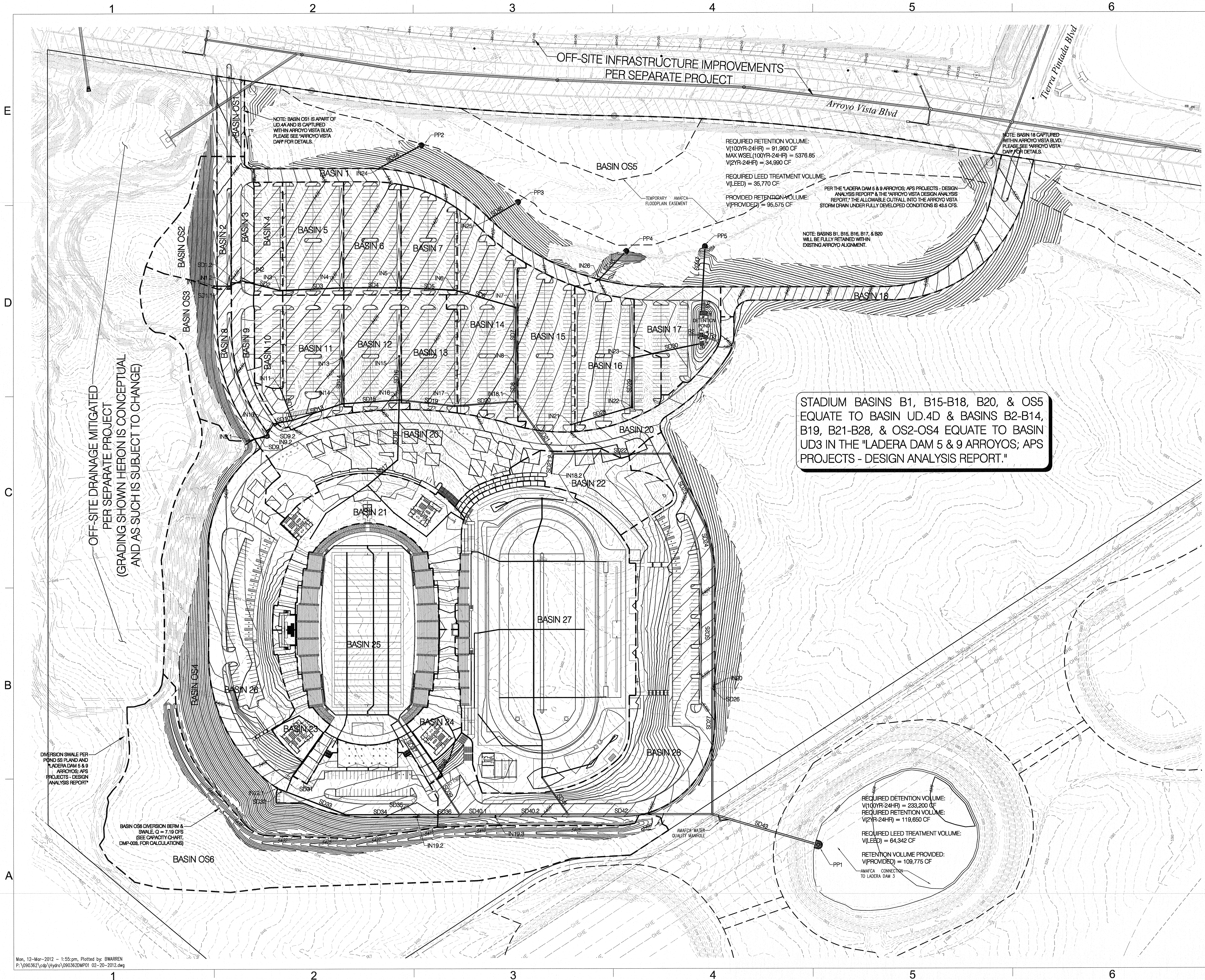




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APS

ARROYO VISTA BLVD.,
NW
ALBUQUERQUE, NM

N

0 40 80 160

1" = 80'

NO	DATE	DESCRIPTION
1	12/20/2011	INCLUDED REVISIONS (SHOWN WITH RODS) 1-4
DATE:	DECEMBER 20, 2011	
PROJECT #:	11009	
DRAWN BY:	BHW	
CHD BY:	JLM	
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SHEET TITLE		
DRAINAGE MANAGEMENT PLAN		
DMP-002		
SHEET 2 OF 3		

Mon, 12-Mar-2012 - 1:55:pm, Plotted by: BWARREN
P:\090362\cdp\Hydro\090362DMP01 02-20-2012.dwg

E

1				2				3				4				5				6			
BASIN 1 - STREET SECTION CAPACITY				BASIN 3 - STREET SECTION CAPACITY @ INLET 2				BASIN 9 - STREET SECTION CAPACITY @ INLET 10				BASIN 20 - STREET SECTION CAPACITY				BASIN 26 - STREET SECTION CAPACITY				BASIN 28 - STREET SECTION CAPACITY			
MANNING'S N =		0.016		MANNING'S N =		0.016		MANNING'S N =		0.016		MANNING'S N =		0.016		MANNING'S N =		0.016		MANNING'S N =		0.016	
STEET SLOPE =		3.25%		STEET SLOPE =		2.00%		STEET SLOPE =		2.35%		STEET SLOPE =		1.15%		STEET SLOPE =		0.90%		STEET SLOPE =		1.31%	
POINT	DIST	ELEV		POINT	DIST	ELEV		POINT	DIST	ELEV		POINT	DIST	ELEV		POINT	DIST	ELEV		POINT	DIST	ELEV	
1.00	0.00	5431.43		1.00	0.00	5435.50		1.00	0.00	5426.73		1.00	0.00	5406.73		1.00	0.00	5410.97		1.00	0.00	5395.59	
2.00	0.17	5430.93		2.00	0.17	5435.00		2.00	0.17	5426.23		2.00	0.17	5406.23		2.00	0.17	5410.47		2.00	0.17	5395.09	
3.00	32.17	5431.70		3.00	24.17	5434.35		3.00	24.17	5425.88		3.00	24.17	5406.44		3.00	24.17	5411.09		3.00	24.17	5394.49	
				4.00	24.33	5434.85		4.00	24.33	5426.38		4.00	24.33	5406.94		4.00	24.33	5411.59		4.00	24.33	5394.99	
WSEL (FT)	DEPTH (FT)	FLOW RATE (CFS)	FLOW VELOCITY (FPS)	WSEL (FT)	DEPTH (FT)	FLOW RATE (CFS)	FLOW VELOCITY (FPS)	WSEL (FT)	DEPTH (FT)	FLOW RATE (CFS)	FLOW VELOCITY (FPS)	WSEL (FT)	DEPTH (FT)	FLOW RATE (CFS)	FLOW VELOCITY (FPS)	WSEL (FT)	DEPTH (FT)	FLOW RATE (CFS)	FLOW VELOCITY (FPS)	WSEL (FT)	DEPTH (FT)	FLOW RATE (CFS)	FLOW VELOCITY (FPS)
5430.93	0.00	0.00	0.00	5434.35	0.00	0.00	0.00	5425.88	0.00	0.00	0.00	5406.23	0.00	0.00	0.00	5410.47	0.00	0.00	0.00	5394.49	0.00	0.00	0.00
5430.98	0.05	0.07	1.42	5434.40	0.05	0.05	1.11	5425.93	0.05	0.10	1.21	5406.28	0.05	0.12	0.85	5410.52	0.05	0.05	0.75	5394.54	0.05	0.06	0.90
5431.03	0.10	0.45	2.25	5434.45	0.10	0.33	1.76	5425.98	0.10	0.66	1.92	5406.33	0.10	0.77	1.35	5410.57	0.10	0.31	1.19	5394.59	0.10	0.38	1.43
5431.08	0.15	1.34	2.94	5434.45	0.15	0.97	2.31	5426.03	0.15	2.31	2.51	5406.38	0.15	2.28	1.76	5410.62	0.15	0.91	1.55	5394.64	0.15	1.13	1.87
5431.13	0.20	2.88	3.56	5434.50	0.20	2.08	2.79	5426.08	0.20	4.20	3.05	5406.43	0.20	4.90	2.14	5410.67	0.20	1.95	1.88	5394.69	0.20	2.44	2.27
5431.18	0.25	4.14	4.14	5434.55	0.25	3.77	3.24	5426.13	0.25	7.61	3.53	5406.48	0.25	9.54	2.73	5410.72	0.25	3.54	2.18	5394.74	0.25	4.42	2.63
5431.23	0.30	8.48	4.67	5434.60	0.30	6.13	3.66	5426.18	0.30	12.37	3.99	5406.53	0.30	15.59	3.32	5410.77	0.30	5.76	2.47	5394.79	0.30	7.18	2.97
5431.28	0.35	12.79	5.18	5434.65	0.35	9.25	4.06	5426.23	0.35	18.66	4.42	5406.58	0.35	22.76	3.86	5410.82	0.35	8.69	2.73	5394.84	0.35	10.83	3.30
5431.33	0.40	18.26	5.66	5434.70	0.40	13.21	4.43	5426.28	0.40	28.30	5.22	5406.63	0.40	30.96	4.35	5410.87	0.40	12.41	2.99	5394.89	0.40	15.46	3.60
5431.38	0.45	25.00	6.12	5434.75	0.45	18.08	4.80	5426.33	0.45	39.45	5.95	5406.68	0.45	40.12	4.82	5410.92	0.45	16.99	3.23	5394.94	0.45	21.17	3.90
5431.43	0.50	33.11	6.57	5434.85	0.50	23.95	5.14	5426.38	0.50	52.00	6.63	5406.73	0.50	50.18	5.26	5410.97	0.50	22.50	3.46	5394.99	0.50	28.04	4.18

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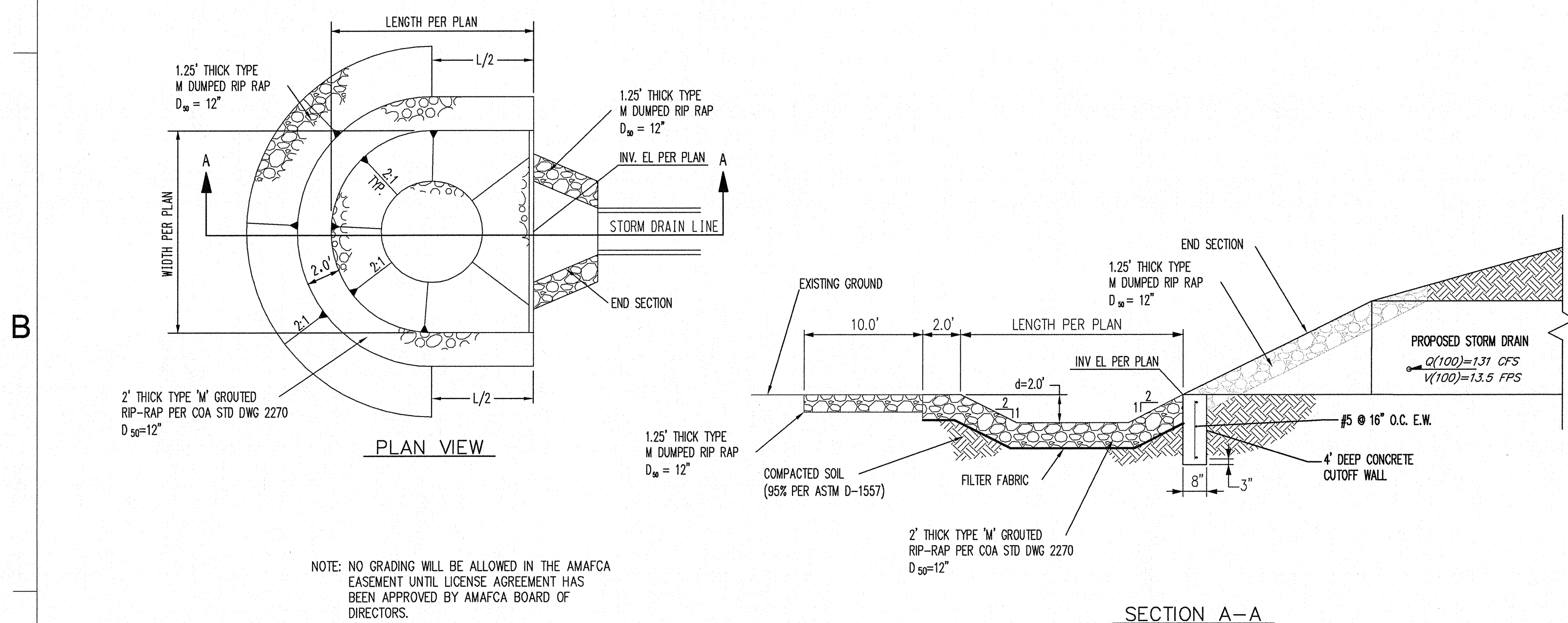
Bohannan

Huston

BASIN OS6 DIVERSION SWALE					
MANNING'S N = 0.22			MINIMUM SLOPE= 2.02%		
POINT	DISTANCE (X)	ELEVATION (Y)	POINT	DISTANCE (X)	ELEVATION (Y)
1	0.0	2.0	3	10.0	0.0
2	6.0	0.0	4	16.0	2.0
WSEL (FT)	FLOW DEPTH (FT)	FLOW AREA (SQ. FT)	FLOW RATE (CFS)	WETTED PERIMETER (FT)	FLOW VELOCITY (FPS)
0.05	0.05	0.21	0.26	4.32	1.27
0.15	0.15	0.67	1.69	4.95	2.53
0.25	0.25	1.19	4.06	5.58	3.42
0.35	0.35	1.74	7.19	6.19	4.12
0.35	0.35	1.77	7.34	6.21	4.15
0.45	0.45	2.41	11.52	6.85	4.78
0.55	0.55	3.11	16.81	7.48	5.35
0.65	0.65	3.87	22.66	8.11	5.86
0.75	0.75	4.69	29.70	8.74	6.34
0.85	0.85	5.57	37.76	9.38	6.78
0.95	0.95	6.51	46.89	10.01	7.21
1.05	1.05	7.51	57.12	10.64	7.61
1.15	1.15	8.57	68.50	11.27	8.00
1.25	1.25	9.69	81.06	11.91	8.37
1.35	1.35	10.87	94.84	12.54	8.73
1.45	1.45	12.11	109.89	13.17	9.08
1.55	1.55	13.41	126.24	13.80	9.42
1.65	1.65	14.77	143.93	14.44	9.75
1.75	1.75	16.19	163.01	15.07	10.07
1.85	1.85	17.67	183.49	15.70	10.39
1.95	1.95	19.21	205.44	16.33	10.70

C2 DIVERSION SWALE CAPACITY CHART

NOT TO SCALE



PIPE OUTFALL STORM PLUNGE POOL TABLE												
Plunge Pool ID	Contributing SD ID	SD Size (in)	Slope	PEAK DISCHARGE cfs	Flow Velocity ft/s	Flow Depth ft	Pool Basin Length (ft)	Pool Basin Width (ft)	Pool Basin Depth (ft)	Pool RipRap Parameter	RipRap Type Required	RipRap Layer Thickness (in)
PP1	SD43	42	2.00%	127.12	16.75	2.58	16	14	2	19.83	M	24.00
PP2	SD44	18	3.51%	2.82	8.10	0.40	6	6	1	10.67	L	18.00
PP3	SD45	18	9.98%	2.82	11.65	0.30	7	6	1	13.57	M	24.00
PP4	SD46	18	5.00%	2.82	9.15	0.36	6	6	1	11.49	L	18.00
PP5	SD47	18	5.27%	15.30	14.50	0.87	9	6	1	16.08	M	24.00

A1 STORM DRAIN OUTFALL RIP-RAP EROSION CONTROL

NOT TO SCALE

Single D inlet, in sump condition:				
Open Area (for orifice calc in sq. ft.):				3.93
Length of Weir (feet):				8.40
Head (ft)	Head (in)	Weir Q	Orifice Q	Control Q
0.05	0.6	0.25	4.23	0.25
0.10	1.2	0.71	5.99	0.71
0.15	1.8	1.31	7.33	1.31
0.20	2.4	2.01	8.47	2.01
0.25	3.0	2.81	9.46	2.81
0.30	3.6	3.70	10.37	3.70
0.35	4.2	4.68	11.20	4.66
0.40	4.8	5.70	11.97	5.70
0.45	5.4	6.80	12.70	6.80
0.50	6.0	7.96	13.39	7.96
0.55	6.6	9.18	14.04	9.18
0.60	7.2	10.46	14.66	10.46
0.65	7.8	11.80	15.26	11.80
0.67	8.0	12.25	15.46	12.25
0.70	8.4	13.18	15.84	13.18
0.75	9.0	14.62	16.39	14.62

C4 COA TYPE 'D' - SINGLE GRATE

NOT TO SCALE

Single C inlet, in sump condition with curb openings on both sides:				
Open Area (for orifice calc in sq. ft.):				3.9314236
Length of Weir (feet):				5.3541667
Head (ft)	Head (in)	Weir Q	Orifice Q	Control Q
0.05	0.6	0.16	4.23	0.16
0.10	1.2	0.45	5.99	0.45
0.15	1.8	0.83	7.33	0.83
0.20	2.4	1.28	8.47	1.28
0.25	3	1.79	9.46	1.79
0.30	3.6	2.36	10.37	2.36
0.35	4.2	2.97	11.20	2.97
0.40	4.8	3.63	11.97	3.63
0.45	5.4	4.33	12.70	4.33
0.50	6	5.07	13.39	5.07
0.55	6.6	5.85	14.04	5.85
0.60	7.2	6.67	14.66	6.67
0.65	7.8	7.52	15.26	7.52
0.67	8	7.81	15.46	7.81

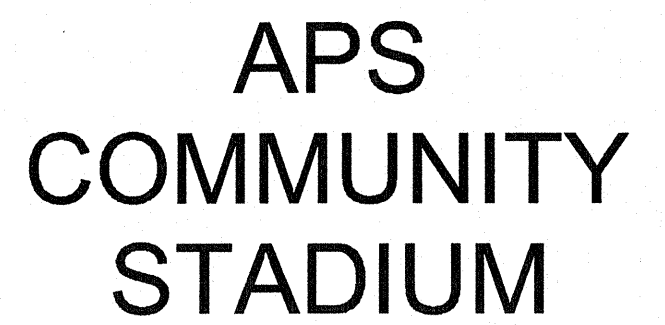
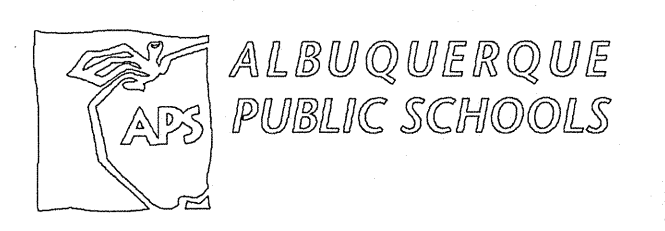
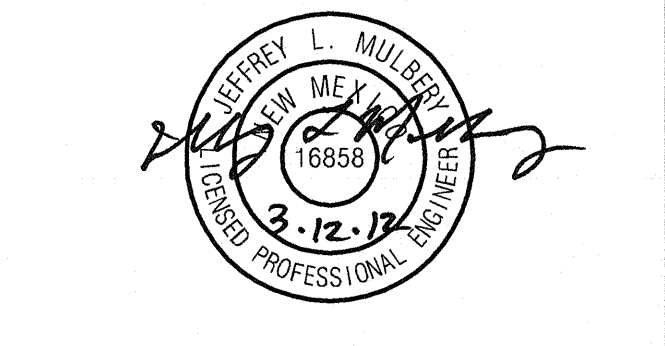
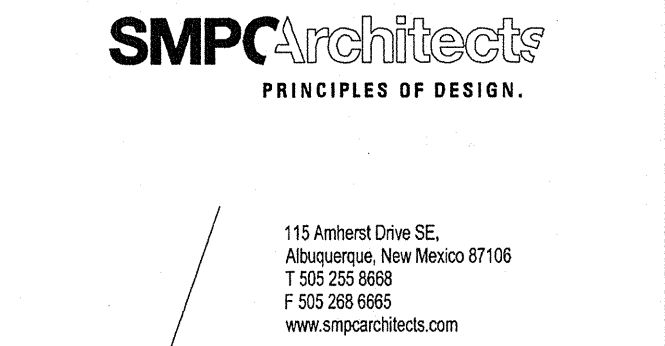
C5 COA TYPE 'C' - SINGLE GRATE

NOT TO SCALE

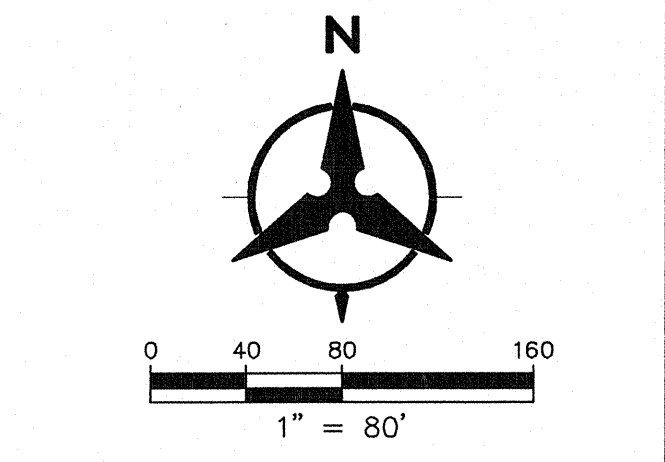
Double A inlet, in sump condition:				
Open Area (for orifice calc in sq. ft.):				7.7977431
Length of Weir (feet):				7.9791667
Orifice Coefficient				0.6
Weir Coefficient				3
Head (ft)	Head (in)	1 Wing Weir Q (cfs)	Grate Weir Q (cfs)	Control Q (cfs)
0.05	0.6	0.13	0.27	0.40
0.10	1.2	0.38	0.76	1.14
0.15	1.8	0.70	1.39	2.09
0.20	2.4	1.07	2.14	3.21
0.25	3	1.50	2.99	4.49
0.30	3.6	1.97	3.93	5.91
0.35	4.2	2.48	4.96	7.44
0.40	4.8	3.04	6.06	9.09
0.45	5.4	3.62	7.23	10.85
0.50	6	4.24	8.46	12.71
0.55	6.6	4.89	9.76	14.66
0.60	7.2	5.58	11.13	16.70
0.65	7.8	6.29	12.54	18.83
0.67	8.0	6.54	13.04	19.58
0.70	8.4	7.03	14.02	21.05
0.75	9	7.79	15.55	23.34
0.80	9.6	8.58	17.13	25.71
0.85	10.2	9.40	18.75	28.16
0.90	10.8	10.25	20.44	30.68
0.95	11.4	11.11	22.16	33.28
1.00	12	12.00	23.94	35.94
1.05	12.6	12.91	25.76	38.67
1.10	13.2	13.84	27.62	41.46
1.15	13.8	14.80	29.52	44.32
1.20	14.4	15.77	31.47	47.24
1.25	15	16.77	33.45	50.22

A5 COA TYPE 'A' - DOUBLE GRATE, DOUBLE WING

NOT TO SCALE



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1	12/20/2011	INCLUDES REVISIONS ISSUED WITH ADDENDUMS 1-4
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