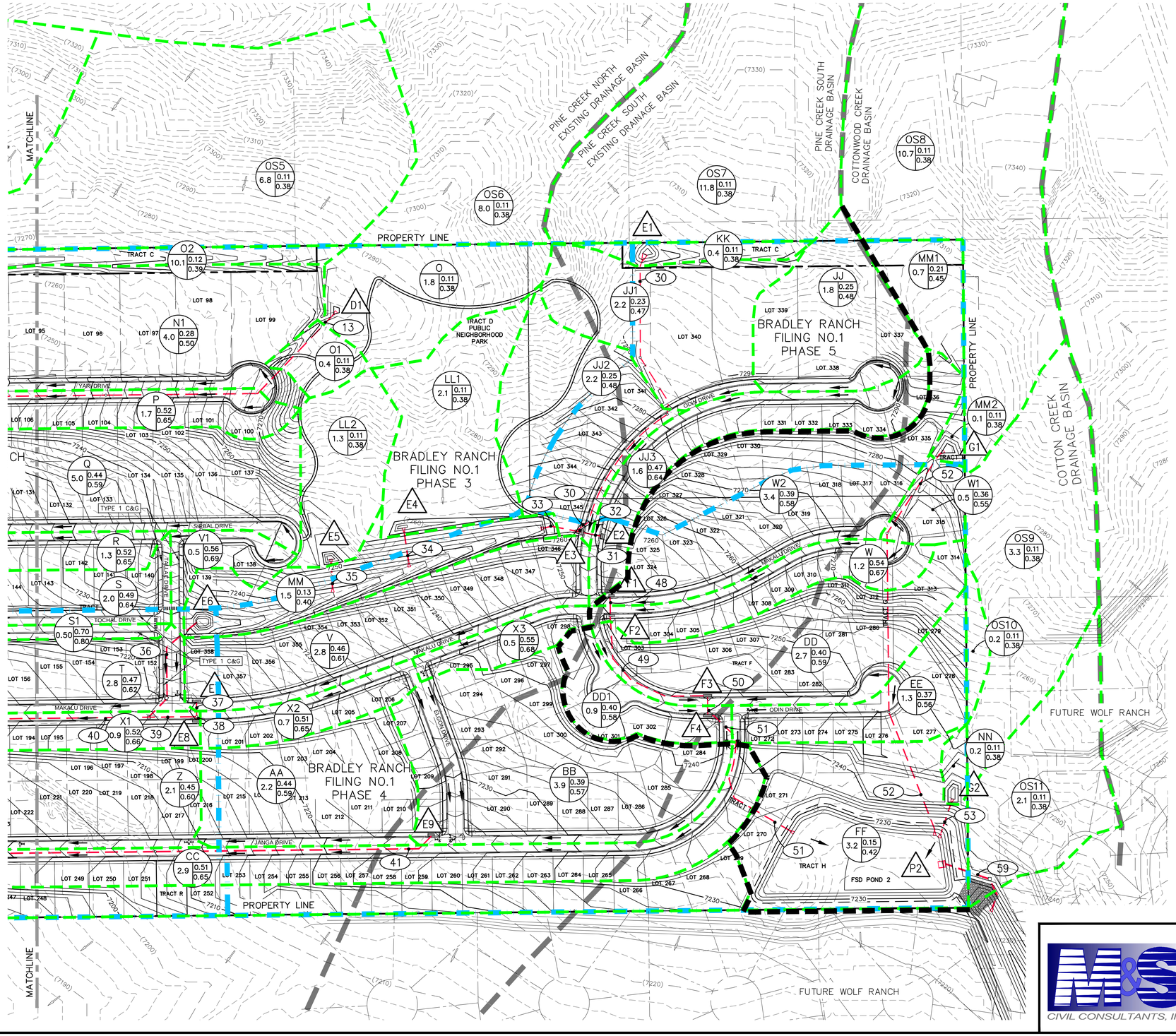
BRADLEY RANCH

MASTER DEVELOPMENT DRAINAGE PLAN MAP

AUGUST 2017



LEGEND

- 200 — PIPE RUN REFERENCE LABEL
- A1 — SURFACE DESIGN POINT
- BASIN DESIGNATION — Z / 25 / .25 / .35 / C5 / C100 / ACRES
- BASIN BOUNDARY
- (6920) — EXISTING CONTOUR
- 6920 — PROPOSED CONTOUR
- PROP STORM SEWER PIPE
- PROP CROSSPAN
- PROP INLET
- EXISTING MAJOR DRAINAGE BASIN BOUNDARY LINE
- PHASE LINE
- EXISTING FLOW DIRECTION ARROW
- EMERGENCY OVERFLOW DIRECTION
- PROP FLOW DIRECTION
- PROP FLARED END SECTION
- PROP PERIMETER SWALE
- PROPERTY LINE
- 11 — LOT NUMBER
- 2.5% — STREET GRADE W/DIRECTION
- H.P. — HIGH POINT
- L.P. — LOW POINT

1" = 100'

0 50 100 200

Scale in Feet

DESIGN POINT SUMMARY

DESIGN POINT	Q_5	Q_{100}	BASIN, FB, PR	STRUCTURE
D1	3.9	22.5	O,OS6	CULVERT
E1	4.9	28.4	KK,OS7	CULVERT
E2	3.0	13.7	JJ3	14' D-10-R @ GRADE INLET
E3	6.1	13.2	JJ,JJ1,JJ2	14' D-10-R @ GRADE INLET
E4	0.9	5.5	LL1	CULVERT
E5	0.6	3.6	LL2	CULVERT
E6	13.6	54.1	MM PR33,PR34,PR35	CULVERT
E7	5.3	12.1	V DPF1,DPE2,DPE3	16' D-10-R @ GRADE INLET
E8	2.7	11.9	X2,X3 DPF2	16' D-10-R @ GRADE INLET
E9	5.5	13.4	BB	14' D-10-R @ GRADE INLET
F1	6.0	10.1	W1,W2	14' D-10-R @ GRADE INLET
F2	3.1	12.4	W	14' D-10-R @ GRADE INLET
F3	4.6	10.2	DD	8' D-10-R SUMP INLET
F4	3.5	9.9	DD1,EE,OS10	8' D-10-R SUMP INLET
P2	22.9	79.5	FF,OS11,PR51,PR52,PR53, FSD POND 2	OUTLET STRUCTURE

STORM SEWER SUMMARY

PIPE RUN	Q_5	Q_{100}	PIPE SIZE
13	3.9	22.5	24" RCP
30	4.9	28.4	30" RCP
30	4.9	28.4	30" RCP
31	3.0	11.5	24" RCP
32	9.0	22.4	24" RCP
33	13.5	49.9	36" RCP
34	0.9	5.5	18" RCP
35	0.6	3.6	18" RCP
36	13.6	54.1	36" RCP
37	5.3	11.2	24" RCP
38	2.7	11.1	24" RCP
39	7.9	22.2	36" RCP
40	19.7	70.8	42" RCP
41	5.5	11.0	18" RCP
48	6.0	9.3	18" RCP
49	9.0	18.9	24" RCP
50	12.9	27.6	30" RCP
51	16.3	37.3	30" RCP
52	4.3	23.9	30" RCP
53	1.2	7.1	18" RCP
55	12.3	27.3	30" RCP
59	3.4	31.9	30" RCP

BASIN SUMMARY

BASIN	AREA (ACRES)	Q_5	Q_{100}
AA	2.16	3.7	8.3
BB	3.88	5.5	13.4
CC	2.91	5.8	12.4
DD	2.73	4.6	11.2
DD1	0.86	1.4	3.4
EE	1.28	1.9	4.9
FF	3.17	1.8	8.5
JJ	1.83	2.2	7.2
JJ1	2.23	2.0	6.8
JJ2	2.23	2.5	7.8
JJ3	1.57	3.0	6.8
KK	0.35	0.2	0.9
LL1	2.11	0.9	5.5
LL2	1.33	0.6	3.6
MM	1.54	0.8	4.1
MM1	0.72	0.6	2.3
MM2	0.13	0.1	0.4
N1	4.01	3.7	12.0
NN	0.15	0.1	0.4
O	1.76	0.8	4.7
O1	0.39	0.2	1.1
O2	0.63	0.3	1.5
P	1.69	3.7	8.0
Q	4.96	8.6	19.5
R	1.31	2.9	6.2
S	2.01	4.4	9.5
S1	0.50	1.7	3.2
T	2.84	6.0	13.2
V	2.75	5.4	11.9
V1	0.53	1.4	2.9
W	1.18	3.1	6.5
W1	0.47	0.7	1.9
W2	3.42	5.5	13.6
X1	0.88	2.1	4.4
X2	0.74	1.7	3.7
X3	0.51	1.3	2.7
Z	2.13	3.6	8.1
OS5	6.81	3.2	18.6
OS6	7.99	3.3	19.3
OS7	11.84	4.8	27.6
OS8	10.69	3.8	22.3
OS9	3.32	1.3	7.5
OS10	0.22	0.1	0.6
OS11	2.07	0.9	5.2

POND 2 FULL SPECTRUM DETENTION BASIN DATA

WQ WATER SURFACE EL=7226.09
WQ VOLUME=0.303 AC-FT
EURV WATER SURFACE EL=7226.78
EURV VOLUME=0.688 AC-FT
100-YR WATER SURFACE EL=7229.34
SPILLWAY CREST EL=7228.44
TOP OF EMBANKMENT EL=7230.68
100-YR VOLUME=2.111 AC-FT
100-YR INFLOW=79.5 CFS
100-YR RELEASE=31.9 CFS

NOTE:

ALL CURB AND GUTTER ARE TYPE 5 UNLESS OTHERWISE NOTED.

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20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485

BRADLEY RANCH

MDDP MAP (PROPOSED CONDITIONS)

PROJECT NO. 43-093	SCALE: HORIZONTAL: 1"=100' VERTICAL: N/A	DATE: 06/16/2017	
DESIGNED BY: CN		SHEET 2 OF 2	D2
DRAWN BY: CN			
CHECKED BY: DM			

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