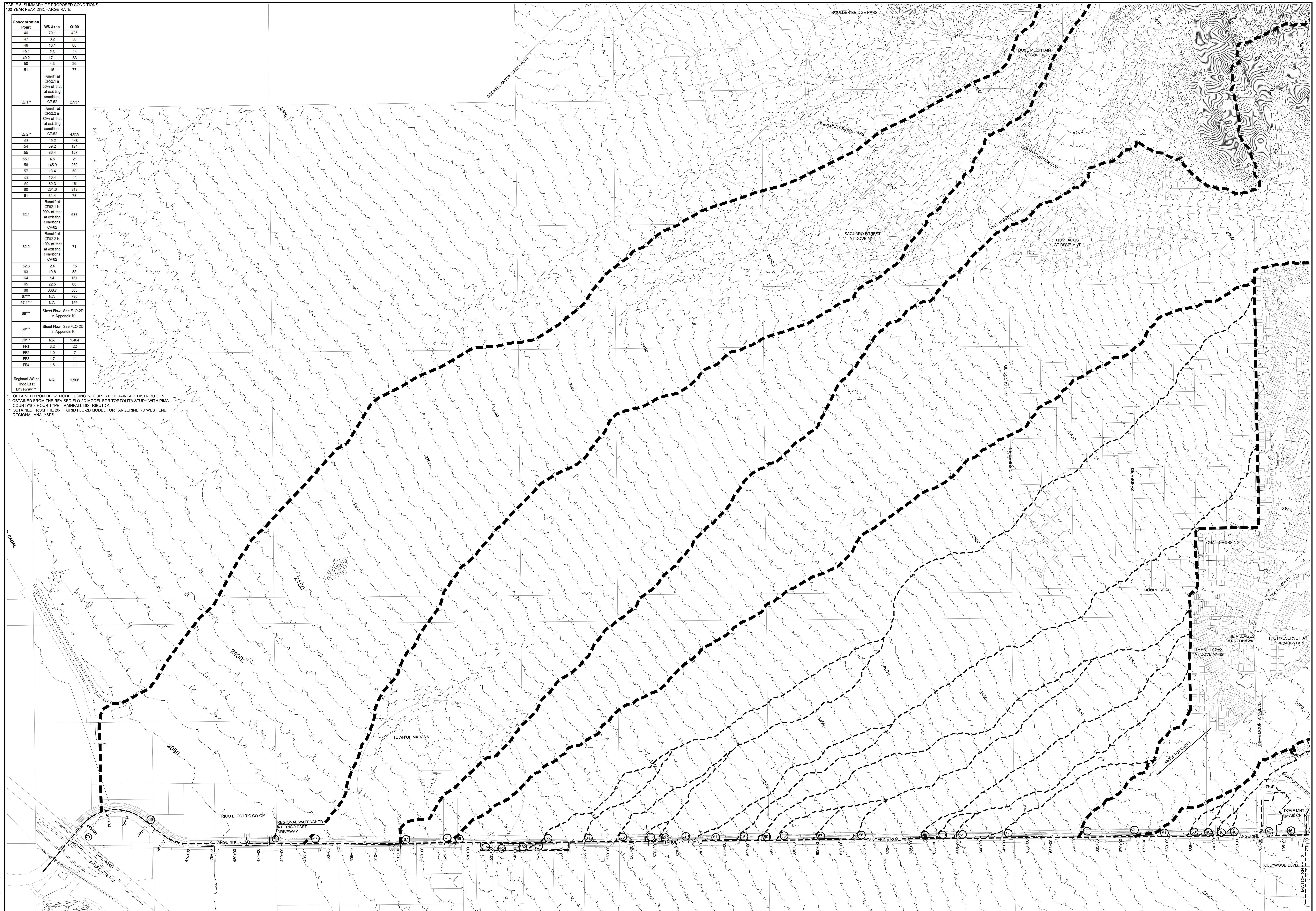


TABLE 6: SUMMARY OF PROPOSED CONDITIONS
100-YEAR PEAK DISCHARGE RATE

Concentration Point	WS Area	Q100
46	79.1	435
47	8.2	50
48	13.1	88
49.1	2.3	14
49.2	17.1	83
50	4.3	28
51	15	77
52.1**	Runoff at CP52.1 is 50% of that at existing conditions CP-52	2,537
52.2**	Runoff at CP52.2 is 80% of that at existing conditions CP-52	4,059
53	49.2	148
54	59.2	124
55	88.4	157
55.1	4.5	21
56	145.9	232
57	13.4	52
58	12.4	41
59	89.3	161
60	231.6	312
61	31.4	73
62.1	Runoff at CP62.1 is 90% of that at existing conditions CP-62	637
62.2	Runoff at CP62.2 is 10% of that at existing conditions CP-62	71
62.3	2.4	15
63	19.8	58
64	94	161
65	22.5	60
66	638.7	563
67**	N/A	785
67.1**	N/A	156
68**	Sheet Flow - See FLO-2D in Appendix K	
69**	Sheet Flow - See FLO-2D in Appendix K	
70**	N/A	1,404
FR1	3.2	22
FR2	1.0	7
FR3	1.7	11
FR4	1.6	11
Regional WS at Trico East Driveway**	N/A	1,508

* OBTAINED FROM HEC-1 MODEL USING 3 HOUR TYPE II RAINFALL DISTRIBUTION
 ** OBTAINED FROM THE REVISED FLO-2D MODEL FOR TORTOLITA STUDY WITH PIMA COUNTY'S 3-HOUR TYPE II RAINFALL DISTRIBUTION
 *** OBTAINED FROM THE 20-FT GRID FLO-2D MODEL FOR TANGERINE RD WEST END REGIONAL ANALYSES



SCALE: 1"=600'

NOTES
 1. HORIZONTAL PROJECTION IS NAD 1983 HARN ARIZONA CENTRAL STATE PLANE TOPOGRAPHY-PAG 2000 NAVD88 10-FT CONTOUR INTERVAL

LEGEND

	REGIONAL WATERSHED BOUNDARIES
	LOCAL WATERSHED BOUNDARIES
	HEC-1 SUBWATERSHED BOUNDARIES
	CONCENTRATION POINT
	TANGERINE RD STATION

PROJECT NO.	10-027
DESIGN	JKW
CHECKER	JLC
DRAWN	BJK
DATE	12/18/2012
REV. DATE	
REV. DATE	

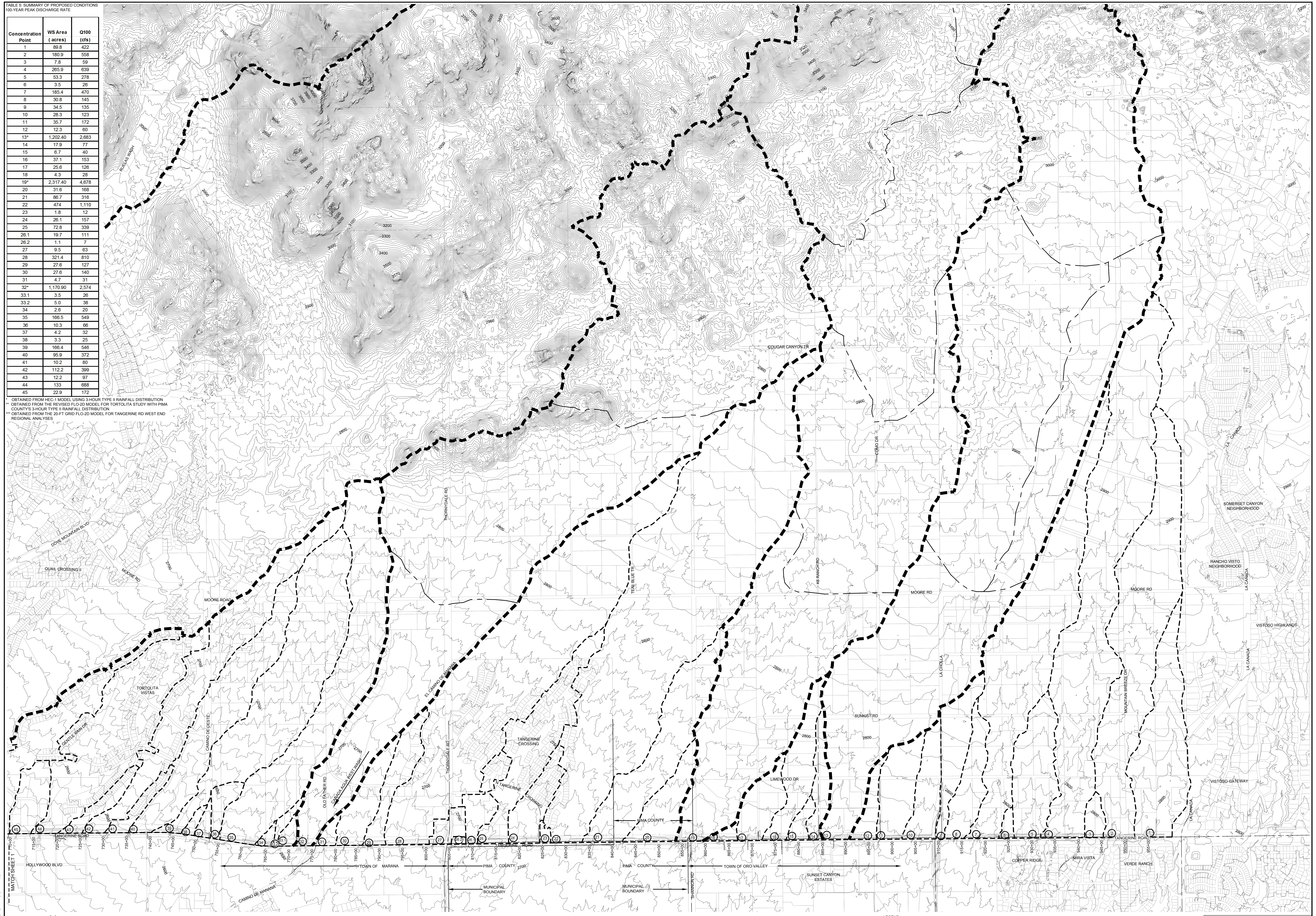
CMG DRAINAGE ENGINEERING, INC.
 3555 N. Mountain Ave. Tucson, Arizona 85719
 Phone (520) 882-4244 Fax (520) 888-1421

FIGURE 6:
 PROPOSED CONDITIONS
 OFFSITE WATERSHED MAP
 FOR LOCAL WATERSHEDS

TABLE 5. SUMMARY OF PROPOSED CONDITIONS
100-YEAR PEAK DISCHARGE RATE

Concentration Point	WS Area (acres)	Q100 (cfs)
1	89.8	422
2	180.9	558
3	7.8	59
4	265.9	639
5	53.3	278
6	3.5	26
7	185.4	470
8	30.8	145
9	34.5	135
10	28.3	123
11	35.7	172
12	12.3	60
13*	1,202.40	2,683
14	17.9	77
15	6.7	40
16	37.1	153
17	25.6	126
18	4.3	28
19*	2,317.40	4,678
20	31.6	168
21	86.7	316
22	474	1,110
23	1.8	12
24	26.1	157
25	72.8	339
26.1	19.7	111
26.2	1.1	7
27	9.5	63
28	321.4	810
29	27.6	127
30	27.6	140
31	4.7	31
32*	1,170.90	2,574
33.1	3.5	26
33.2	5.0	38
34	2.6	20
35	166.5	549
36	10.3	66
37	4.2	32
38	3.3	25
39	166.4	546
40	95.9	372
41	10.2	80
42	112.2	399
43	12.2	97
44	133	688
45	22.9	172

* OBTAINED FROM HEC-1 MODEL USING 3-HOUR TYPE II RAINFALL DISTRIBUTION
 ** OBTAINED FROM THE REVISED FLO-2D MODEL FOR TORTOLITA STUDY WITH PIMA COUNTY'S 3-HOUR TYPE II RAINFALL DISTRIBUTION
 *** OBTAINED FROM THE 20-FT GRID FLO-2D MODEL FOR TANGERINE RD WEST END REGIONAL ANALYSES



NORTH
 SCALE: 1"=600'

NOTES
 1. HORIZONTAL PROJECTION IS NAD 1983 HARN ARIZONA CENTRAL STATE PLANE TOPOGRAPHY MAG 3000 NAVD83 10-FT CONTOUR INTERVAL.

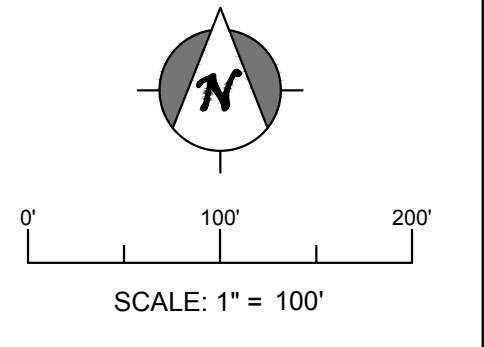
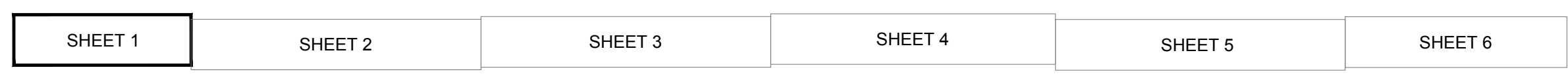
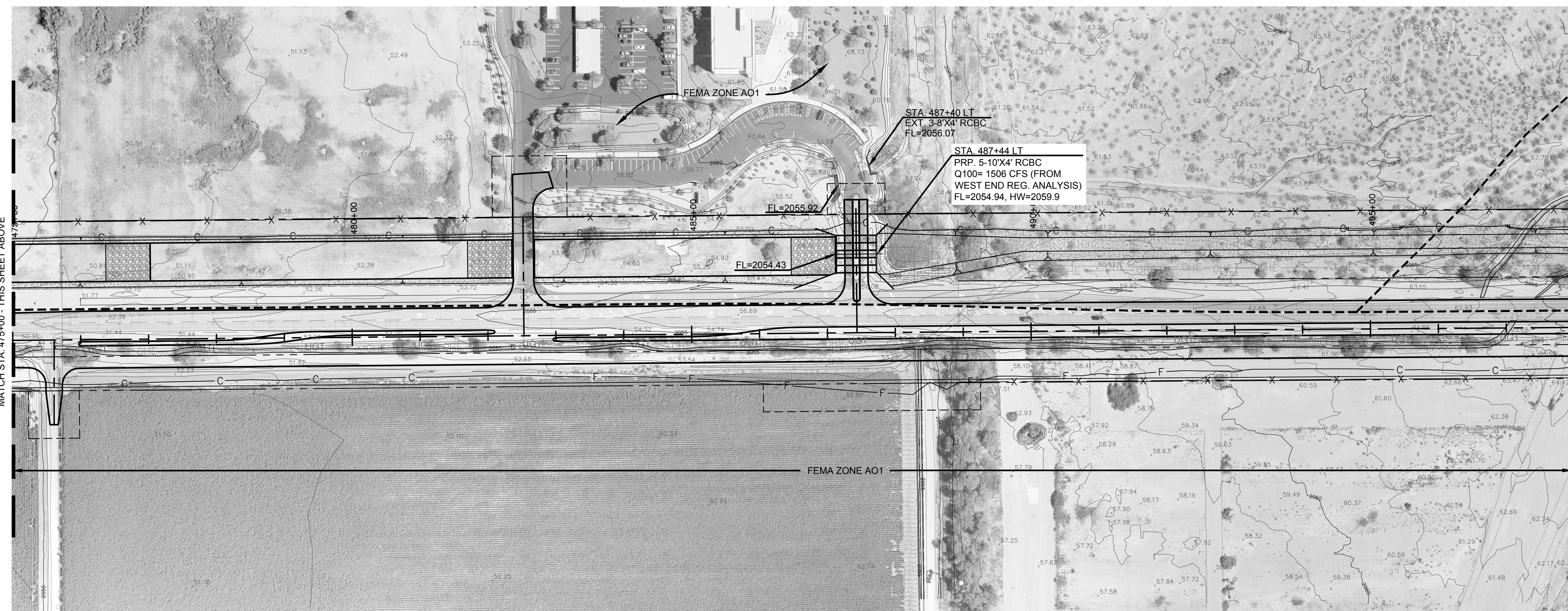
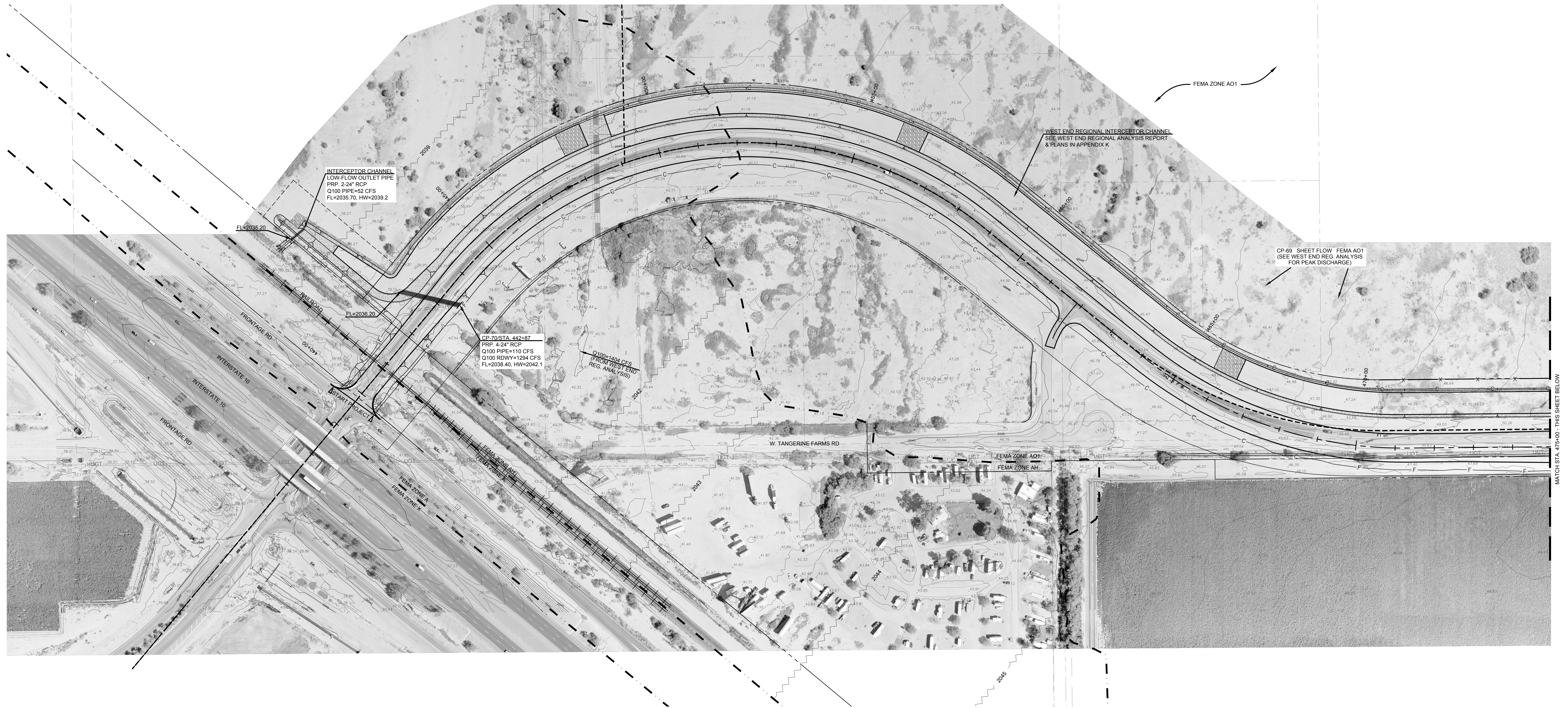
LEGEND
 - - - - - REGIONAL WATERSHED BOUNDARIES
 - - - - - LOCAL WATERSHED BOUNDARIES
 - - - - - HEC-1 SUBWATERSHED BOUNDARIES
 (20) CONCENTRATION POINT
 - - - - - TANGERINE RD STATION

PROJECT NO.: 10-027
 DESIGN: JKW
 CHECKER: JLC
 DRAWN: BJK
 DATE: 12/18/2012
 REV. DATE: -
 REV. DATE: -

CMG DRAINAGE ENGINEERING, INC.
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FIGURE 6:
 PROPOSED CONDITIONS
 OFFSITE WATERSHED MAP
 FOR LOCAL WATERSHEDS

SHEET 2/2



LEGEND

	FEMA FLOODPLAIN LIMITS
	WATERSHED BOUNDARY
	PONDING/BACKWATER LIMIT/100-YR FLOODPLAIN
	CROSS-SECTION ID WITH 100-YR WATER SURFACE ELEVATION
	RIGHT OF WAY LINE
	EXISTING EASEMENT LINES
	PROPERTY BOUNDARY
	404 JURISDICTIONAL WATERS
	FEMA FIRM 100-YR BASE FLOOD ELEVATIONS
	TRAINING BERM, TOP OF BERM ELEVATION
	TRAINING BERM, T.O.B. ELEV.

- NOTES:**
1. VERTICAL DATUM = NAVD88
 2. AERIAL PHOTO, TOPOGRAPHY (1 FT. CONTOUR INTERVAL) AND FIELD SURVEY INFORMATION PROVIDED BY PSOMAS.
 3. SECTION 404 WATERS OF THE U.S. JURISDICTIONAL LIMITS PROVIDED BY THE TOWN OF MARANA.
 4. FEMA FLOODPLAIN INFORMATION PER FEMA FIRM PANELS: 04019C1045L, 04019C1065L, 04019C1070L AND 04019C1090L
 5. PROPOSED ROADWAY FILES PROVIDED BY PSOMAS AND KITTELSON.
 6. DIMENSIONS OF THE ROADSIDE CHANNELS AND INTERCEPTOR CHANNELS ARE SHOWN IN APPENDIX H.
 7. UNLESS OTHERWISE NOTED, CULVERT OUTLET TREATMENTS ARE:
 - FOR CULVERTS LARGER THAN 24-INCH DIAMETER, HEC-14 WIRE-TIED RIPRAP DISSIPATOR BASINS (3'-6" RIPRAP)
 - FOR 24-INCH DIAMETER CULVERTS, LOOSE RIPRAP 50#-6", 1FT THICK, UNDERLAIN BY FILTER FABRIC (MIRAF 180N OR EQUIV.)
 OUTLET TREATMENT DIMENSIONS PER DRAINAGE REPORT TABLE 8 & AS SHOWN ON CULVERT PLAN & PROFILE SHEETS.

PRELIMINARY

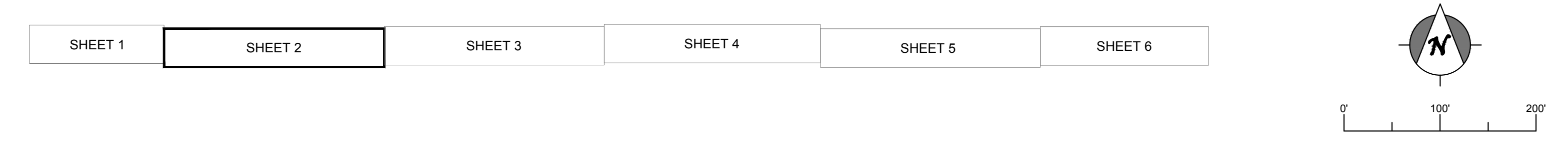
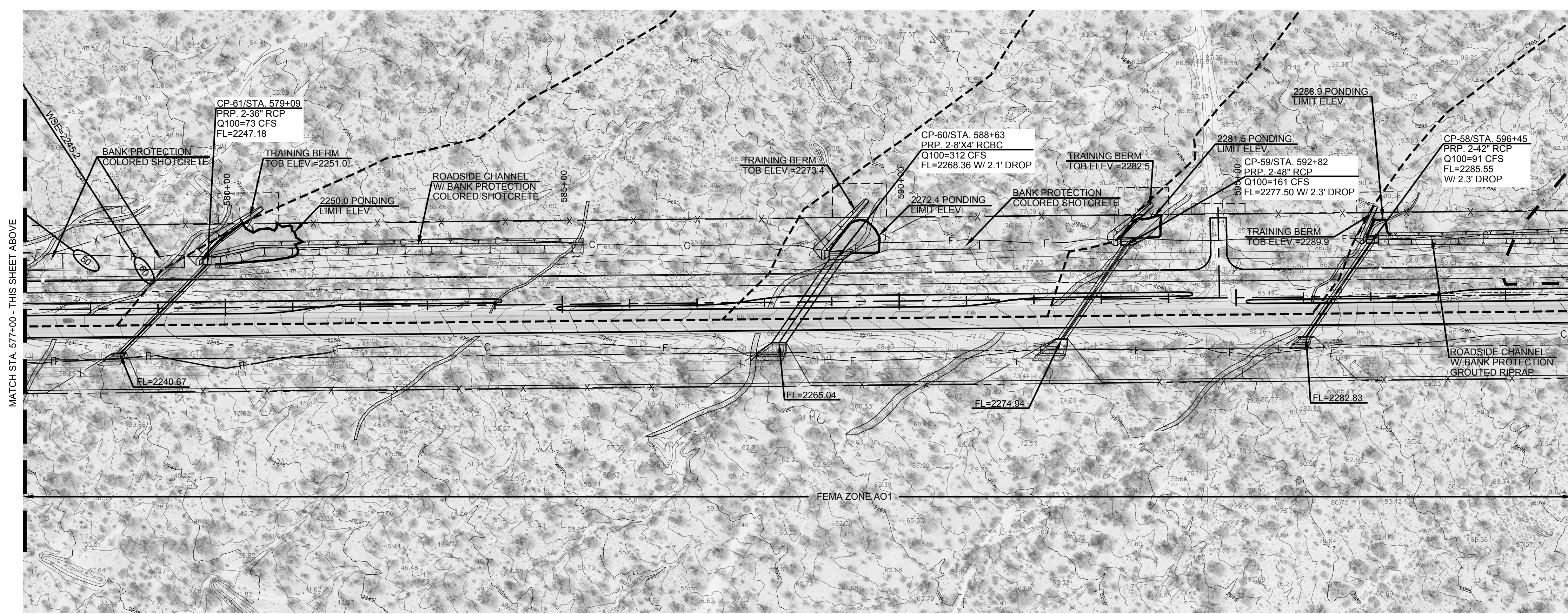
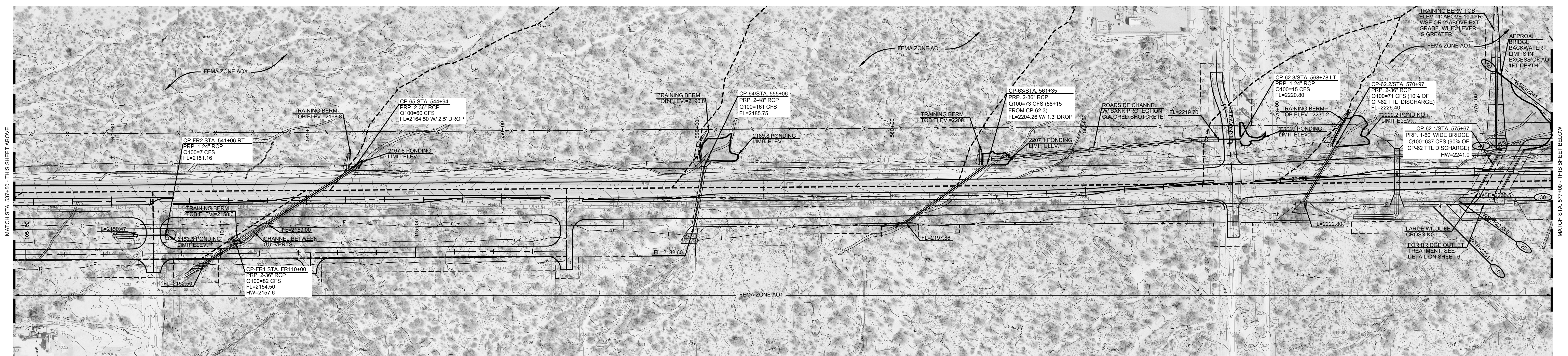
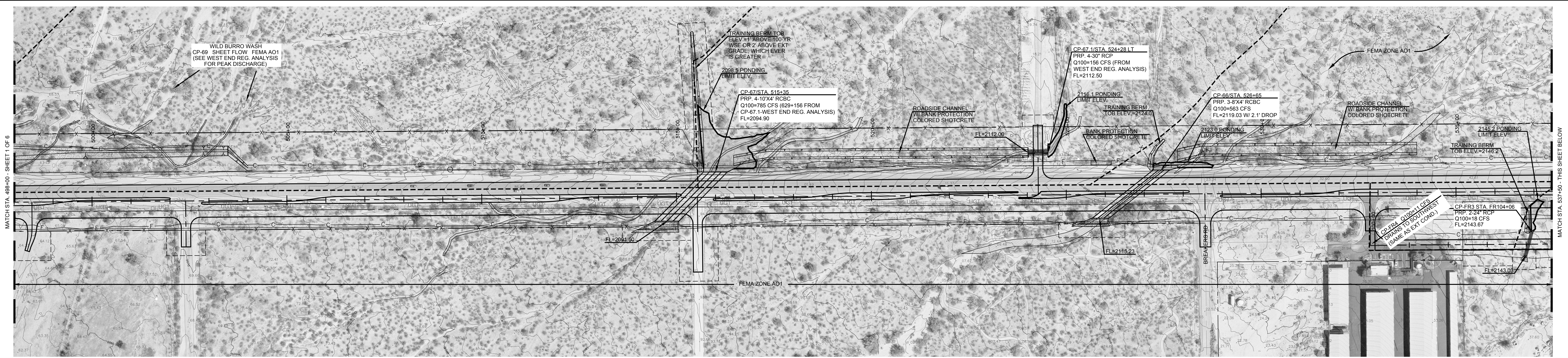
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**FIGURE 7
 PROPOSED DRAINAGE
 CONDITIONS**

TANGERINE ROAD
 I-10 TO LA CANADA DR.

SHEET 1 OF 6

PROJECT NO:	10-027
DESIGN:	JKW
CHECKED:	JLC
DRAWN:	CRB
DATE:	02/28/2012
REV. DATE:	12/20/2012
REV. DATE:	01/31/2013
REV. DATE:	



LEGEND

	FEMA FLOODPLAIN LIMITS
	WATERSHED BOUNDARY
	PONDING/BACKWATER LIMIT/100-YR FLOODPLAIN
	CROSS-SECTION ID WITH 100-YR WATER SURFACE ELEVATION
	RIGHT OF WAY LINE
	EXISTING EASEMENT LINES
	PROPERTY BOUNDARY
	404 JURISDICTIONAL WATERS
	FEMA FIRM 100-YR BASE FLOOD ELEVATIONS
	TRAINING BERM T.O.B. ELEV.
	TRAINING BERM, TOP OF BERM ELEVATION

- NOTES:**
1. VERTICAL DATUM = NAVD88
 2. AERIAL PHOTO, TOPOGRAPHY (1 FT. CONTOUR INTERVAL) AND FIELD SURVEY INFORMATION PROVIDED BY PSOMAS.
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 - FOR 24-INCH DIAMETER CULVERTS, LOOSE RIPRAP D50=6", 1FT THICK, UNDERLAIN BY FILTER FABRIC (MIRAFIL 180N OR EQUIV.)
- OUTLET TREATMENT DIMENSIONS PER DRAINAGE REPORT TABLE 8 & AS SHOWN ON CULVERT PLAN & PROFILE SHEETS.

PRELIMINARY

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**FIGURE 7
 PROPOSED DRAINAGE
 CONDITIONS**

TANGERINE ROAD
 I-10 TO LA CANADA DR.

SHEET 2 OF 6

PROJECT NO:	10-027
DESIGN:	JKW
CHECKED:	JLC
DRAWN:	CRB
DATE:	02/28/2012
REV. DATE:	12/20/2012
REV. DATE:	01/31/2013
REV. DATE:	

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