WARNER RANCH (GOMEZ CREEK) - TM 5508 RPL4

DRAINAGE MANAGEMENT AREA MAP

(sheet 2 of 2)

POST PROJECT LAND USE AREA BREAKDOWN (TREATED) (LID/BMP SUMMARY SIZING CALCULATIONS)

Sub-Basin No.	Basin 1 (ac.)	Basin 2 (ac.)	Basin 3 (ac.)	Basin 4 (ac.)	Basin 5 (ac.)	Basin 6 (ac.)	Basin 7 (ac.)	Basin 8 (ac.)	Basin 9 (ac.)	Basin 10 (ac.)	Basin 15 (ac.)	Total Land Use Area (ac.)
A,Urban Flat (0-5%)	0.00	2.80	0.00	0.00	1.37	0.00	1.71	0.00	0.00	0.26	0.62	6.76 (ac.)
A,Urban Very Steep (>20%)	0.00	0.66	0.00	0.00	0.51	0.00	0.05	0.00	1.44	0.98	0.00	3.63 (ac.)
B,Urban Flat (0-5%)	5.98	3.43	0.25	1.04	8.52	1.45	0.79	0.17	0.00	0.16	0.00	21.78 (ac.)
B,Urban Moderate (5-10%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 (ac.)
B,Urban Very Steep (>20%)	1.84	1.56	0.05	0.43	1.39	0.28	0.39	0.00	0.00	0.00	0.00	5.94 (ac.)
C,Urban Flat (0-5%)	9.89	2.63	0.50	2.05	0.00	0.00	0.00	0.39	0.00	0.00	0.00	15.46 (ac.)
C,Urban Moderate (5-10%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 (ac.)
C,Urban Very Steep (>20%)	1.96	1.97	0.08	0.04	0.00	0.00	0.00	0.11	0.00	0.00	0.00	4.16 (ac.)
D,Urban Flat (0-5%)	0.00	1.57	0.00	1.22	3.97	0.00	0.07	0.00	0.00	0.02	0.03	6.89 (ac.)
D,Urban Very Steep (>20%)	0.00	0.00	0.00	0.79	0.29	0.00	0.06	0.00	0.00	0.00	0.00	1.14 (ac.)
Roads Flat (0-5%)	4.48	3.16	0.46	3.39	7.64	1.07	0.39	0.27	0.00	0.50	2.59	23.93 (ac.)
Roads Moderate (5-10%)	1.70	2.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	3.96 (ac.)
Dwy Flat (0-5%)	2.07	2.07	0.23	1.33	2.51	0.27	0.00	0.00	0.00	0.00	0.00	8.48 (ac.)
Sidewalk Flat (0-5%)	0.70	0.62	0.03	0.91	1.37	0.20	0.07	0.00	0.00	0.07	0.07	4.02 (ac.)
Sidewalk Moderate (5-10%)	0.46	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82 (ac.)
Parking Lots Flat (0-5%)	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.35 (ac.)
Roof Area	8.74	6.66	0.85	2.84	8.55	0.85	0.02	0.49	0.00	0.00	0.00	29.00 (ac.)
B-Shrubs (>20%)	0.00	0.00	0.00	0.00	3.91	0.00	0.00	0.00	0.00	0.00	0.00	3.91 (ac.)
B-Forest (>20%)	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.80 (ac.)
Total Basin Area (ac.)	37.82	29.48	2.45	14.04	40.82	4.12	4.16	1.42	1.44	1.99	3.31	141.06(ac.)
Drains to LID/BMP Type	Detention Pond (BMP 1)	Detention Pond (BMP 2)	Bioretention (BMP 3)	Detention Pond (BMP 4)	Detention Pond (BMP 5)	Bioretention (BMP6)	Bioretention (BMP 7)	Bioretention (BMP8)	Bioswale 2 Self-treated	Bioswale 1 Self-treated	Bioswale 3	N/A
Minimum LID/BMP Area (sqft.)	45,963	36,674	7,760	28,547	67,713	10,048	4,480	3,877	N/A	N/A	N/A	205,062(Sq. Ft.)
Proposed LID/BMP Area (sqft.)	49,100	82,700	6,500	37,500	71,600	10,500	7,900	4,850	N/A	N/A	N/A	270,650(Sq. Ft.)
Minimum Volume 1 (cu. Ft.)	199,908	156,436	6,469	119,642	301,782	8,373	3,734	3,231	N/A	N/A	N/A	799,575 (Cu. Ft.)
Minimum Volume 2 (cu. Ft.)	N/A	N/A	4,183	N/A	N/A	N/A	114	2,095	N/A	N/A	N/A	6,392 (Cu. Ft.)
Minimum Volume Total	199,908	156,436	10,652	119,642	301,782	8,373	3,848	5,326	N/A	N/A	N/A	805,967 (Cu. Ft.)
Proposed Volume 1 (cu. Ft.)	206,150	354,400	8,550	155,200	304,300	12,475	10,200	6,190	N/A	N/A	N/A	1,057,465(Cu. Ft.)
Proposed Volume 2 (cu. Ft.)	N/A	N/A	3,035	N/A	N/A	3,700	3,420	2,100	N/A	N/A	N/A	12,255 (Cu. Ft.)
Proposed Volume Total	206,150	354,400	11,585	155,200	304,300	16,175	13,620	8,290	N/A	N/A	N/A	1,069,720(Cu. Ft.)

LEGEND

- PROJECT BOUNDARY
- BASIN/DRAINAGE MANAGEMENT AREAS
- LID/BMP OUTLINE AREAS BIORETENTION (L.I.D. 3.1.3.4) DRY DETENTION (L.I.D. 3.1.2.1) VEGETATED SWALES (L.I.D. 3.1.3.1)
- STORM DRAIN SYSTEM
- DRAINAGE FLOW TO IMP/BMP'S
- NATURAL DRAINAGE FLOW (REFERENCE)
- PROPOSED CURB-CUTS (L.I.D. 3.3.3)
- ROADS, DRIVEWAYS, PARKING & SIDEWALKS AREAS
- ROOF AREAS
- A-URBAN, LAND TYPE (LANDSCAPE - L.I.D. 2.2.5)
- B-URBAN, LAND TYPE (LANDSCAPE - L.I.D. 2.2.5)
- C-URBAN, LAND TYPE (LANDSCAPE - L.I.D. 2.2.5)
- D-URBAN, LAND TYPE (LANDSCAPE - L.I.D. 2.2.5)
- A-FOREST, LAND TYPE
- A-SHRUBS, LAND TYPE
- A-GRASS, LAND TYPE
- B-FOREST, LAND TYPE
- B-SHRUBS, LAND TYPE
- B-GRASS, LAND TYPE
- C-FOREST, LAND TYPE
- C-SHRUBS, LAND TYPE
- D-FOREST, LAND TYPE
- D-SHRUBS, LAND TYPE
- D-GRASS, LAND TYPE

IMPERVIOUS AREAS

POST-PROJECT LAND USE AREA BREAKDOWN (SELF-TREATED)

Sub-Basin No.	Basin 11 (ac.)	Basin 12 (ac.)	Basin 13 (ac.)	Basin 14 (ac.)	Basin 16 (ac.)	Basin 17 (ac.)	Total Land Use Area (ac.)
A-Forest (0-5%)	0.00	0.00	0.00	0.00	0.13	0.00	0.13
A-Forest (5-10%)	0.00	0.00	0.00	0.00	0.01	0.00	0.01
A-Forest (10-20%)	0.00	0.00	0.00	0.00	0.05	0.00	0.05
A-Forest (>20%)	0.00	0.00	0.00	0.00	2.41	0.00	2.41
A-Shrubs (0-5%)	0.00	0.00	0.00	0.00	0.15	0.00	0.15
A-Shrubs (5-10%)	0.00	0.00	0.00	0.00	0.14	0.00	0.14
A-Shrubs (10-20%)	0.00	0.00	0.00	0.00	1.45	0.00	1.45
A-Shrubs (>20%)	0.00	0.00	0.00	0.00	33.98	0.00	33.98
A-Grass (0-5%)	0.00	0.00	0.00	0.00	0.11	0.61	0.72
B-Forest (0-5%)	0.00	0.08	0.00	0.00	0	0.00	0.08
B-Forest (5-10%)	0.00	0.00	0.01	0.00	0	0.00	0.01
B-Forest (10-20%)	0.00	0.00	0.01	0.00	0	0.00	0.01
B-Forest (>20%)	0.00	0.00	1.40	0.00	0.11	0.00	1.51
B-Grass (0-5%)	0.00	0.00	0.00	0.00	0	0.00	0
B-Grass (5-10%)	0.00	0.00	0.00	0.00	0	0.35	0.35
B-Grass (10-20%)	0.00	0.00	0.00	0.00	0	0.34	0.34
B-Grass (>20%)	0.00	0.00	0.00	0.00	0	0.35	0.35
B-Shrubs (0-5%)	0.04	0.31	0.01	0.00	14.1	0.00	14.46
B-Shrubs (5-10%)	0.23	1.41	0.00	0.00	8.85	0.00	10.49
B-Shrubs (10-20%)	1.81	0.77	0.07	0.00	27.2	0.43	30.28
B-Shrubs (>20%)	0.77	4.16	1.53	0.00	92.68	0.00	99.14
C/D-Forest (0-5%)	0.00	0.00	0.00	0.00	17.49	0.00	17.49
C/D-Forest (5-10%)	0.00	0.00	0.00	0.00	9.02	0.00	9.02
C/D-Forest (10-20%)	0.00	0.00	0.01	0.00	26.56	0.00	26.57
C/D-Forest (>20%)	0.00	0.60	0.30	0.00	46.4	0.00	47.31
C/D-Shrubs (0-5%)	0.03	3.23	0.00	0.00	47.64	0.00	50.90
C/D-Shrubs (5-10%)	0.09	10.44	0.00	0.00	128.81	0.00	139.34
C/D-Shrubs (10-20%)	2.10	34.49	0.00	0.00	481.29	0.00	517.87
C/D-Shrubs (>20%)	7.68	325.79	1.32	0.00	2623.92	0.00	2958.70
C/D-Grass (0-5%)	0.00	0.00	0.00	0.00	0.84	0.00	0.84
C/D-Grass (5-10%)	0.00	0.00	0.00	0.00	0.04	0.00	0.04
B,Urban (0-5%)	0.00	0.15	0.00	0.14	0	0.00	0.29
B,Urban (5-10%)	0.00	0.06	0.00	0.08	0	0.00	0.13
B,Urban (10-20%)	0.01	0.03	0.05	0.05	0	0.00	0.14
B,Urban (>20%)	0.65	1.04	1.26	0.19	0	0.00	3.14
C,Urban (0-5%)	0.00	0.36	0.01	0.00	0	0.00	0.37
C,Urban (5-10%)	0.00	0.06	0.00	0.02	0	0.00	0.08
C,Urban (10-20%)	0.00	0.11	0.00	0.00	0	0.00	0.11
C,Urban (>20%)	0.78	3.00	0.17	0.00	0	0.00	3.95
D,Urban (0-5%)	0.00	0.00	0.00	0.00	0.04	0.00	0.04
D,Urban (5-10%)	0.00	0.00	0.00	0.00	0.01	0.00	0.01
D,Urban (10-20%)	0.00	0.00	0.00	0.00	0.05	0.00	0.05
D,Urban (>20%)	0.00	0.00	0.00	0.00	1.03	0.00	1.03
Sidewalks Flat (0-5%)	0.00	0.00	0.00	0.03	0	0.00	0.03
Total Basin Area (ac.)	14.18	386.09	6.15	0.52	3564.51	2.08	3973.54
Drains Thruough	Bioswale 1	Bioswale 1	Bioswale 1	Bioswale 1	Gomez Creek	Bioswale 2	

SHAPOURI & ASSOCIATES

PROJECT MANAGEMENT SERVICES

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SCALE: 1"=100'

0' 100' 200'

02-27-13

WARNER RANCH (GOMEZ CREEK)
DRAINAGE MANAGEMENT AREA MAP
(sheet 2 of 2)