

**LEGEND**

- ON1 SUBBASIN NAME
- ON1A PRORATED SUBBASIN NAME
- SUBBASIN BOUNDARY
- CP1 CONCENTRATION POINT
- FLOW DIRECTION
- A—A CROSS SECTION
- PRORATED SUBBASIN BOUNDARY

**SUMMARY OF PROPOSED CONDITIONS HEC-1 MODEL - 2RTC**

SB OR CP	AREA (AC)	100 YR (CFS)	10 YR (CFS)
OFF1	6.9	12	4
OFF3R	4.7	9	3
OFFD3*	3.1	6	2
ON2C*	3.8	7	2
OFF2	10.4	20	6
ON1	5.4	10	3
CP1	-	53	16
OFF11	2.6	5	4
OFF3A	6.6	15	5
ON2	2.1	4	1
OFF4R	57.0	160	69
CP2A	-	187	79
OFFEX1**	9.8	25	10
OFFEX2**	8.0	20	8
OFFEX3**	10.3	28	11
OFFEX4**	3.3	8	3
OFFEX5**	1.9	5	2
OFFEX6**	5.6	13	5
OFF5	1.4	5	2
OFF6R	61.1	159	69
OFF7R	35.1	80	30
CP3**	-	388 (250)	216 (108)
OFF8	3.1	8	3
OFF9	31.4	105	47
OFF10	22.2	68	30
<b>TOTAL</b>	<b>169</b>	<b>61.1</b>	<b>26.6</b>

**ULTIMATE CONDITIONS - 2RTC PRORATED FLOW SUMMARY**

Subbasin	Q <sub>100</sub> (cfs)	Area (acres)	cfs/acre
ON1	10	5.4	1.85
ON2	4	2.1	1.90

**Ultimate Onsite Prorated Basins**

Subbasin	Q <sub>100</sub> (cfs)	Area (acres)	cfs/acre
ON1A	2	1.0	1.85
ON1B	2	0.9	1.85
ON1C	2	0.9	1.85
ON1D	3	1.9	1.85
ON1E	1	0.7	1.85
<b>TOTAL</b>	<b>10</b>	<b>5.4</b>	<b>NA</b>
ON2A	2	1.2	1.90
ON2B	2	0.9	1.90
<b>TOTAL</b>	<b>4</b>	<b>2.1</b>	<b>NA</b>

**100-YEAR STREET/ONSITE FLOW CHARACTERISTICS**

Location	Slope (%)	Q <sub>100</sub> (cfs)	Depth (ft)	Velocity (ft/s)	D/V
A-A	1.50	3	0.38	1.60	0.1
B-B	3.45	3	0.29	3.27	0.2

**100-YEAR CULVERT CROSSING CHARACTERISTICS - 2RTC**

Culvert	Facility	Station	Slope (%)	Q <sub>100</sub> (cfs)	Ponding Depth (ft)	Outlet Velocity (ft/s)	Req'd Outlet d <sub>50</sub> (in)	Tributary Subbasins
OFF3A	30" RCP	50+00	1.00	24	N/A	8.88	12	OFF3A + OFF11
OFF4R	(3) - 42" RCP	26+50	2.15	187	3.99	14.69	SG 14	CP2A
OFF5	18" RCP	23+00	-	5	1.27	9.05	6	OFF5
OFF6C3R	(5) - 30" RCP	110+85	1.80	293	7.32	12.61	SG 14	OFF6AR + OFF6BR + OFF6C1R + OFF6C2R + OFF6C3R + OFF7AR + OFF7BR + OFF7D1R + OFF7D2R + OFF7D3R + OFF7D4R + OFF7D5R + (24cfs + 18cfs + 13cfs + 5cfs + 17cfs + 31cfs)***
OFF6DR	12" HDPE	112+35	7.55	3	1.21	10.96	SG 6	OFF6DR
OFF7AR	12" HDPE	80+20	3.62	1	0.58	6.18	6	OFF7AR
OFF7BR	12" HDPE	84+20	7.03	3	1.21	10.67	SG 6	OFF7BR
OFF7D1R	30" RCP	86+00	3.85	26	2.76	14.62	SG 12	OFF7D1R + 24cfs***
OFF7D5R	(4) - 30" RCP	496+90	2.80	107	2.83	13.11	SG 12	OFF7D5R + (18cfs + 13cfs + 5cfs + 17cfs + 31cfs)***
OFF8A	18" RCP	114+75	2.00	5	1.28	7.58	6	OFF8A
OFF8C	12" HDPE	3+00	1.00	2	0.92	4.67	6	OFF8C
OFF9A1	(4) - 36" RCP	60+50	4.13	160	3.24	16.68	SG 12	OFF9A1 + OFF9A2 + OFF9B + OFF10A + OFF10B + OFF10C + EX OFF10
OFF10A	30" RCP	74+55	1.00	19	2.23	8.19	18	OFF10A + EX OFF10
OFF10B	24" RCP	72+50	2.19	17	2.48	10.70	SG 18	OFF10B
OFF10C	(2) - 12" HDPE	71+60	7.73	5	1.04	10.51	SG 6	OFF10C
OFF10D	(2) - 12" HDPE	70+05	6.62	4	0.89	9.34	6	OFF10D
OFF10E	24" RCP	68+75	3.43	10	1.66	10.94	SG 6	OFF10E
OFF11	(2) - 18" RCP	55+60	15.88	9	1.09	15.47	SG 6	OFF11
OFFEX1	(2) - 24" RCP	209+75	1.00	25	1.96	7.38	6	OFFEX1
OFFEX2	(2) - 24" RCP	210+75	1.00	20	1.68	6.98	6	OFFEX2
OFFEX3	18" RCP	213+65	5.83	8	1.77	12.72	SG 12	OFFEX3
OFFEX4R	18" RCP	215+50	4.37	5	1.26	10.08	SG 6	OFFEX4R
OFFEX4B	(2) 24" RCP	216+80	0.50	21	1.74	5.43	6	OFFEX4B
OFFEX5R	12" HDPE	19+10	4.15	5	2.25	9.96	6	OFFEX5R
OFFEX6A	18" RCP	21+65	8.58	10	2.22	15.55	SG 12	OFFEX6A
OFFEX6B	12" HDPE	22+40	5.85	3	1.22	9.98	6	OFFEX6B

**ULTIMATE CONDITIONS - 2RTC PRORATED FLOW SUMMARY**

Subbasin	Q <sub>100</sub> (cfs)	Area (acres)	cfs/acre
OFF2	20	16.4	1.92
OFF3R	3	4.7	1.59
OFF4R	160	57.0	2.81
OFF5	5	61.1	2.60
OFF6R	61	35.1	2.88
OFF6C3R	293	110.85	2.64
OFF6DR	3	3.1	2.58
OFF7AR	187	80.20	3.34
OFF7BR	69	23.20	3.34
OFF7D1R	9	2.6	3.48
OFF7D2R	26	10.3	2.52
OFF7D3R	5	1.8	2.88
OFF7D4R	5	1.8	2.88
OFF7D5R	107	49.69	2.16
OFF8A	5	5.8	2.32
OFF8C	2	3.0	2.32
OFF9A1	11	5.9	1.92
OFF9A2	5	4.2	1.92
OFF9B	160	61.1	2.60
OFF10A	20	16.4	NA
OFF10B	19	15.1	1.91
OFF10C	5	2.8	1.91
OFF10D	4	4.7	NA
OFF10E	12	4.2	2.81
OFF11	9	2.4	2.81
OFFEX1R	22	7.8	2.81
OFFEX2R	54	19.1	2.81
OFFEX3R	160	57.0	NA
OFFEX4R	14	5.2	2.60
OFFEX5R	25	23.7	2.60
OFFEX6R	29	11.3	2.60
OFFEX7R	20	7.7	2.60
OFFEX8R	31	11.9	2.60
OFFEX9R	3	1.3	2.60
OFFEX10R	3	1.3	2.60
OFFEX11R	3	1.3	2.60
OFFEX12R	3	1.3	2.60
OFFEX13R	3	1.3	2.60
OFFEX14R	3	1.3	2.60
OFFEX15R	3	1.3	2.60
OFFEX16R	3	1.3	2.60
OFFEX17R	3	1.3	2.60
OFFEX18R	3	1.3	2.60
OFFEX19R	3	1.3	2.60
OFFEX20R	3	1.3	2.60
OFFEX21R	3	1.3	2.60
OFFEX22R	3	1.3	2.60
OFFEX23R	3	1.3	2.60
OFFEX24R	3	1.3	2.60
OFFEX25R	3	1.3	2.60
OFFEX26R	3	1.3	2.60
OFFEX27R	3	1.3	2.60
OFFEX28R	3	1.3	2.60
OFFEX29R	3	1.3	2.60
OFFEX30R	3	1.3	2.60
OFFEX31R	3	1.3	2.60
OFFEX32R	3	1.3	2.60
OFFEX33R	3	1.3	2.60
OFFEX34R	3	1.3	2.60
OFFEX35R	3	1.3	2.60
OFFEX36R	3	1.3	2.60
OFFEX37R	3	1.3	2.60
OFFEX38R	3	1.3	2.60
OFFEX39R	3	1.3	2.60
OFFEX40R	3	1.3	2.60
OFFEX41R	3	1.3	2.60
OFFEX42R	3	1.3	2.60
OFFEX43R	3	1.3	2.60
OFFEX44R	3	1.3	2.60
OFFEX45R	3	1.3	2.60
OFFEX46R	3	1.3	2.60
OFFEX47R	3	1.3	2.60
OFFEX48R	3	1.3	2.60
OFFEX49R	3	1.3	2.60
OFFEX50R	3	1.3	2.60
OFFEX51R	3	1.3	2.60
OFFEX52R	3	1.3	2.60
OFFEX53R	3	1.3	2.60
OFFEX54R	3	1.3	2.60
OFFEX55R	3	1.3	2.60
OFFEX56R	3	1.3	2.60
OFFEX57R	3	1.3	2.60
OFFEX58R	3	1.3	2.60
OFFEX59R	3	1.3	2.60
OFFEX60R	3	1.3	2.60
OFFEX61R	3	1.3	2.60
OFFEX62R	3	1.3	2.60
OFFEX63R	3	1.3	2.60
OFFEX64R	3	1.3	2.60
OFFEX65R	3	1.3	2.60
OFFEX66R	3	1.3	2.60
OFFEX67R	3	1.3	2.60
OFFEX68R	3	1.3	2.60
OFFEX69R	3	1.3	2.60
OFFEX70R	3	1.3	2.60
OFFEX71R	3	1.3	2.60
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OFFEX85R	3	1.3	2.60
OFFEX86R	3	1.3	2.60
OFFEX87R	3	1.3	2.60
OFFEX88R	3	1.3	2.60
OFFEX89R	3	1.3	2.60
OFFEX90R	3	1.3	2.60
OFFEX91R	3	1.3	2.60
OFFEX92R	3	1.3	2.60
OFFEX93R	3	1.3	2.60
OFFEX94R	3	1.3	2.60
OFFEX95R	3	1.3	2.60
OFFEX96R	3	1.3	2.60
OFFEX97R	3	1.3	2.60
OFFEX98R	3	1.3	2.60
OFFEX99R	3	1.3	2.60
OFFEX100R	3	1.3	2.60

**ULTIMATE CONDITIONS - 2RTC PRORATED FLOW SUMMARY**

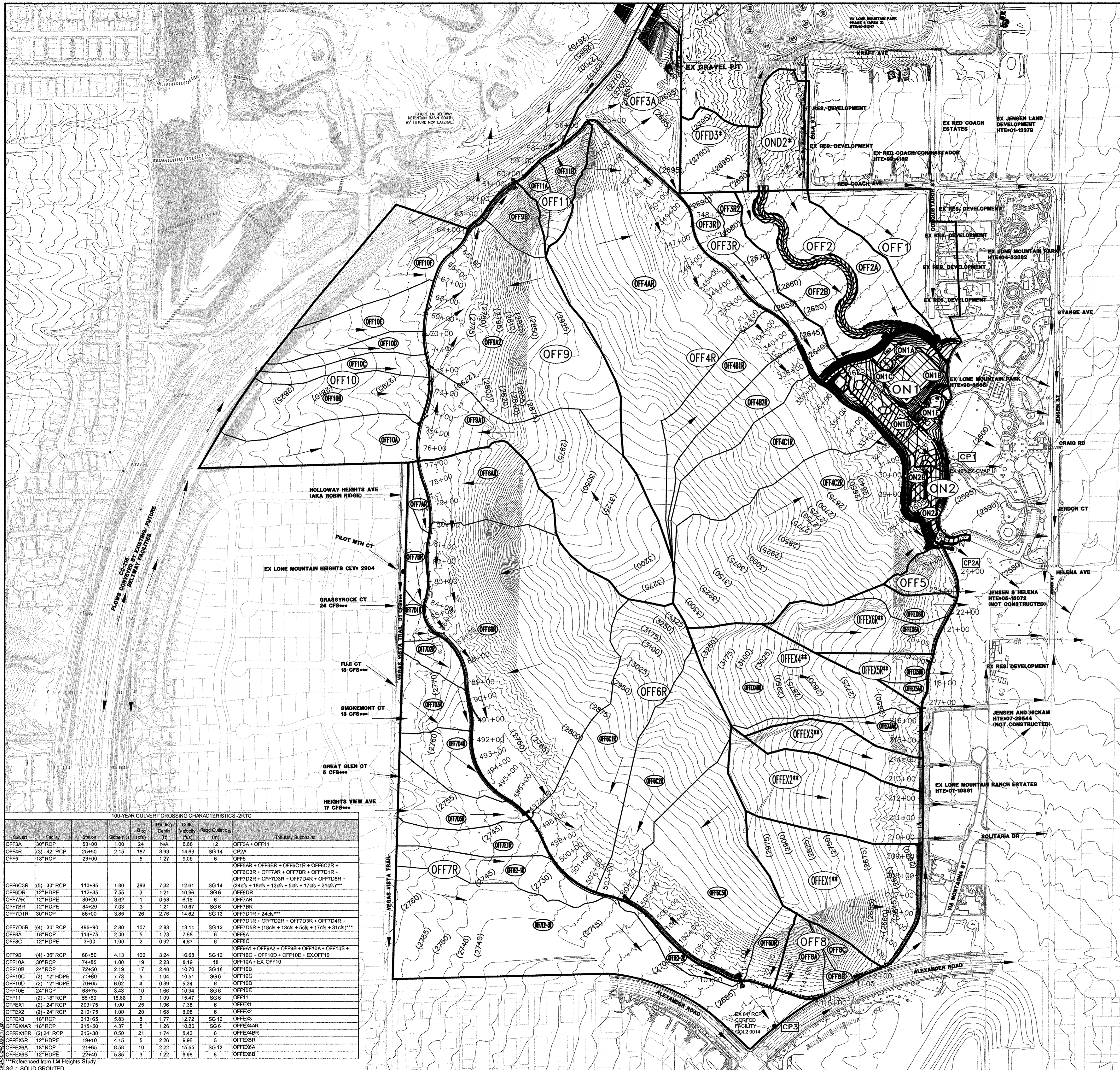
Subbasin	Q <sub>100</sub> (cfs)	Area (acres)	cfs/acre
ON1	10	5.4	1.85
ON2	4	2.1	1.90

**100-YEAR STREET/ONSITE FLOW CHARACTERISTICS**

Location	Slope (%)	Q <sub>100</sub> (cfs)	Depth (ft)	Velocity (ft/s)	D/V
A-A	1.50	3	0.38	1.60	0.1
B-B	3.45	3	0.29	3.27	0.2

**100-YEAR CULVERT CROSSING CHARACTERISTICS - SUPP**

Subbasin	Slope (%)	Q <sub>100</sub> (cfs)	Depth (ft)	Velocity (ft/s)	Bottom Width (ft)	Type	Site Slopes	Req'd d <sub>50</sub> (in)	Tributary Subbasins
OFF1	20.00	12	0.56	N/A	N/A	SLOPE	0.1	NA	OFF1
OFF2A (max)	0.94	18	0.67	N/A	2.0	2.36	0	V	ON2C + OFF2A
OFF2B (max)	2.45	18	0.70	N/A	4.12	6.12	0	V	OFF2B + OFF2C + OFF3R
OFF3R (max)	1.88	24	1.59	N/A	2.5	4.34	0	V	OFF3R
OFF4R (max)	1.02	24	1.94	N/A	3.37	6.17	0	V	OFF4R + OFF5 + OFF6R
OFF5 (max)	1.34	5	0.99	N/A	2.0	2.85	0	V	OFF5
OFF6AR (max)	4.62	4	0.63	N/A	1.0	4.02	0	V	OFF6AR
OFF6BR (max)	10.10	87.1	0.13	N/A	1.45	3.19	1.46	V	OFF6BR + OFF6C1R + OFF6C2R + OFF6C3R + OFF6C4R + OFF6C5R + OFF6C6R + OFF6C7R + OFF6C8R + OFF6C9R + OFF6C10R + OFF6C11R + OFF6C12R + OFF6C13R + OFF6C14R + OFF6C15R + OFF6C16R + OFF6C17R + OFF6C18R + OFF6C19R + OFF6C20R + OFF6C21R + OFF6C22R + OFF6C23R + OFF6C24R + OFF6C25R + OFF6C26R + OFF6C27R + OFF6C28R + OFF6C29R + OFF6C30R + OFF6C31R + OFF6C32R + OFF6C33R + OFF6C34R + OFF6C35R + OFF6C36R + OFF6C37R + OFF6C38R + OFF6C39R + OFF6C40R + OFF6C41R + OFF6C42R + OFF6C43R + OFF6C44R + OFF6C45R + OFF6C46R + OFF6C47R + OFF6C48R + OFF6C49R + OFF6C50R + OFF6C51R + OFF6C52R + OFF6C53R + OFF6C54R + OFF6C55R + OFF6C56R + OFF6C57R + OFF6C58R + OFF6C59R + OFF6C60R + OFF6C61R + OFF6C62R + OFF6C63R + OFF6C64R + OFF6C65R + OFF6C66R + OFF6C67R + OFF6C68R + OFF6C69R + OFF6C70R + OFF6C71R + OFF6C72R + OFF6C73R + OFF6C74R + OFF6C75R + OFF6C76R + OFF6C77R + OFF6C78R + OFF6C79R + OFF6C80R + OFF6C81R + OFF6C82R + OFF6C83R + OFF6C84R + OFF6C85R + OFF6C86R + OFF6C87R + OFF6C88R + OFF6C89R + OFF6C90R + OFF6C91R + OFF6C92R + OFF6C93R + OFF6C94R + OFF6C95R + OFF6C96R + OFF6C97R + OFF6C98R + OFF6C99R + OFF6C100R
OFF6DR (max)	4.88	99	0.17	N/A	1.5	4.07	140	V	OFF6DR
OFF7AR (max)	0.40	187	0.40	N/A	2.0	2.03	44	V	OFF7AR + OFF7BR + OFF7D1R + OFF7D2R + OFF7D3R + OFF7D4R + OFF7D5R + OFF7D6R + OFF7D7R + OFF7D8R + OFF7D9R + OFF7D10R + OFF7D11R + OFF7D12R + OFF7D13R + OFF7D14R + OFF7D15R + OFF7D16R + OFF7D17R + OFF7D18R + OFF7D19R + OFF7D20R + OFF7D21R + OFF7D22R + OFF7D23R + OFF7D24R + OFF7D25R + OFF7D26R + OFF7D27R + OFF7D28R + OFF7D29R + OFF7D30R + OFF7D31R + OFF7D32R + OFF7D33R + OFF7D34R + OFF7D35R + OFF7D36R + OFF7D37R + OFF7D38R + OFF7D39R + OFF7D40R + OFF7D41R + OFF7D42R + OFF7D43R + OFF7D44R + OFF7D45R + OFF7D46R + OFF7D47R + OFF7D48R + OFF7D49R + OFF7D50R + OFF7D51R + OFF7D52R + OFF7D53R + OFF7D54R + OFF7D55R + OFF7D56R + OFF7D57R + OFF7D58R + OFF7D59R + OFF7D60R + OFF7D61R + OFF7D62R + OFF7D63R + OFF7D64R + OFF7D65R + OFF7D66R + OFF7D67R + OFF7D68R + OFF7D69



**LEGEND**

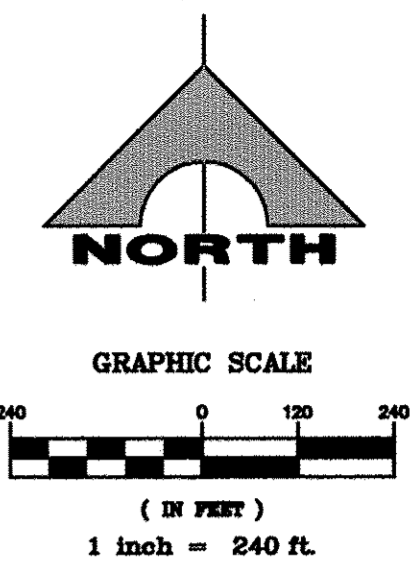
- ON1 SUBBASIN NAME
- ON1A PRORATED SUBBASIN NAME
- SUBBASIN BOUNDARY
- CP1 CONCENTRATION POINT
- FLOW DIRECTION
- CROSS SECTION
- PRORATED SUBBASIN BOUNDARY

**ULTIMATE CONDITIONS - 2RTC**

Subbasin	Q <sub>100</sub> (cfs)	Area (acres)	cfs/acre
OFF2	20	10.4	1.92
OFF3R	4	4.7	0.81
OFF4R	160	57.0	2.81
OFF5	160	61.1	2.60
OFF6R	90	35.1	2.56
OFF7R	160	21.4	7.48
OFF8	160	22.2	7.20
OFF9	160	22.2	7.20
OFF10	160	22.2	7.20
OFF11	160	22.2	7.20
OFF2A	28	13.3	2.12
OFF2B	28	13.3	2.12
OFF3A	5	1.8	2.86
OFF3R	13	4.0	3.25

**PRORATED FLOW SUMMARY**

Subbasin	Q <sub>100</sub> (cfs)	Area (acres)	cfs/acre
OFF2A	11	5.0	2.20
OFF2B	9	4.5	2.00
TOTAL	20	10.4	1.92
OFF3A	4	1.8	2.22
OFF3R	12	4.2	2.81
OFF4R	160	57.0	2.81
OFF5	160	61.1	2.60
OFF6R	90	35.1	2.56
OFF7R	160	21.4	7.48
OFF8	160	22.2	7.20
OFF9	160	22.2	7.20
OFF10	160	22.2	7.20
OFF11	160	22.2	7.20



**SUMMARY OF PROPOSED CONDITIONS HEC-1 MODEL - 2RTC**

SB OR CP	AREA (AC)	100 YR (CFS)	10 YR (CFS)
OFF1	6.9	12	4
OFF3R	4.7	9	3
OFF3A	3.1	6	2
OFF2	3.8	7	2
ON1	5.4	10	3
CP1	-	53	15
OFF11	2.6	9	4
OFF3A	6.6	15	6
ON2	2.1	4	1
OFF4R	57.0	160	69
CP2A	-	167	79
OFFEX1**	9.8	25	10
OFFEX2**	8.0	20	8
OFFEX3**	3.3	8	3
OFFEX4**	10.3	26	11
OFFEX5**	1.9	5	2
OFFEX6**	5.6	13	5
OFF5	1.4	5	2
OFF6R	61.1	150	69
OFF7R	35.1	90	39
CP3**	-	358 (250)	216 (106)
OFF8	3.1	8	3
OFF9	31.4	105	47
OFF10	22.2	68	30

\*\*Referenced from LM Park Area 2 Study  
 \*\*\*Referenced from LM Heights Study  
 \*\*\*\*Referenced from LM Heights Study  
 \*\*\*\*\*Combined HEC-1 flow CP3 + 108 cfs referenced from LM Heights Study  
 HEC-1 Flow

**ULTIMATE CONDITIONS - 2RTC**

**PRORATED FLOW SUMMARY**

Subbasin	Q <sub>100</sub> (cfs)	Area (acres)	cfs/acre
ON1	10	5.4	1.85
ON2	4	2.1	1.90

**Ultimate Onsite Prorated Basins**

Subbasin	Q <sub>100</sub> (cfs)	Area (acres)	cfs/acre
ON1A	2	1.0	1.85
ON1B	2	0.9	1.85
ON1C	2	0.9	1.85
ON1D	3	1.9	1.85
ON1E	1	0.7	1.85
TOTAL	10	5.4	NA
ON2A	2	1.2	1.90
ON2B	2	0.9	1.90
TOTAL	4	2.1	NA

**SUMMARY DROP INLET CALCULATIONS - Revised**

DI	Q <sub>100</sub>	Slope (%)	Flow Depth (ft)	Inlet	Queue	DI Type
ON1A	2	SUMP	0.24	2	0	NDOT Type 2
ON1B	2	SUMP	0.24	2	0	NDOT Type 2
ON1C	2	SUMP	0.24	2	0	NDOT Type 2
ON1D	3	SUMP	0.29	3	0	10-Type CM2
OFF2A	18	SUMP	0.72	18	0	Dual (2) NDOT Type 2
OFF2B	24	SUMP	1.27	24	0	Dual (2) NDOT Type 2

**100-YEAR STREET/ONSITE FLOW CHARACTERISTICS**

**ULTIMATE CONDITIONS**

Location	Slope (%)	Q <sub>100</sub> (cfs)	Depth (ft)	Velocity (ft/s)	D/V
A-A	1.50	3	0.38	1.60	0.1
B-B	3.45	3	0.29	3.27	0.2

**100-YEAR CULVERT CROSSING CHARACTERISTICS - 2RTC**

Culvert	Facility	Station	Slope (%)	Q <sub>100</sub> (cfs)	Flow Depth (ft)	Outlet Velocity (ft/s)	Reed Outlet dia (in)	Tributary Subbasins
OFF3A	30" RCP	50+00	1.00	24	N/A	8.88	12	OFF3A + OFF11
OFF4R	(3) - 42" RCP	25+50	2.15	187	3.99	14.69	SG 14	CP2A
OFF5	18" RCP	23+00	5	129	9.05	6	OFF5	
OFF6R	(5) - 30" RCP	110+85	1.80	293	7.32	12.61	SG 14	OFF6R + OFF8BR + OFF6C1R + OFF6C2R + OFF6C3R + OFF7AR + OFF7BR + OFF7D1R + OFF7D2R + OFF7D3R + OFF7D4R + OFF7D5R + OFF7D6R
OFF7AR	12" HDPE	80+20	3.62	25	0.58	6.16	6	OFF7AR
OFF7BR	12" HDPE	84+20	7.03	3	1.21	10.67	SG 6	OFF7BR
OFF7D1R	30" RCP	86+00	3.85	26	2.76	14.62	SG 12	OFF7D1R + 24cfs***
OFF7D5R	(4) - 30" RCP	496+90	2.80	107	2.83	13.11	SG 12	OFF7D1R + OFF7D2R + OFF7D3R + OFF7D4R + OFF7D5R + (18cfs + 13cfs + 5cfs + 17cfs + 31cfs)***
OFF8A	18" RCP	114+75	2.00	5	2.28	7.58	6	OFF8A
OFF8C	12" HDPE	3+00	1.00	2	0.92	4.97	6	OFF8C
OFF9B	(4) - 36" RCP	60+50	4.13	160	3.24	16.68	SG 12	OFF9A1 + OFF9A2 + OFF9B + OFF10A + OFF10B + OFF10C + OFF10D + OFF10E + OFF10F + EX-OFF10
OFF10A	30" RCP	74+50	1.00	19	2.23	8.19	6	OFF10A + EX-OFF10
OFF10B	24" RCP	72+50	2.19	17	2.48	10.70	SG 18	OFF10B
OFF10C	(2) - 12" HDPE	71+60	7.73	5	1.04	10.51	SG 6	OFF10C
OFF10D	(2) - 12" HDPE	70+05	6.62	4	0.89	9.34	6	OFF10D
OFF10E	24" RCP	68+75	3.43	10	1.66	10.94	SG 6	OFF10E
OFF11	(2) - 18" RCP	55+80	15.88	9	1.09	15.47	SG 6	OFF11
OFFEX1	(2) - 24" RCP	209+75	1.00	28	1.96	7.38	6	OFFEX1
OFFEX2	(2) - 24" RCP	210+75	1.00	20	1.68	6.98	6	OFFEX2
OFFEX3	18" RCP	213+65	5.83	8	1.77	12.72	SG 12	OFFEX3
OFFEX4R	18" RCP	215+50	4.37	5	1.26	10.06	SG 6	OFFEX4R
OFFEX4BR	(2) 24" RCP	216+80	0.50	21	1.74	5.43	6	OFFEX4BR
OFFEX5R	12" HDPE	19+10	4.15	5	2.26	9.86	6	OFFEX5R
OFFEX6A	18" RCP	21+65	8.58	10	2.22	15.55	SG 12	OFFEX6A
OFFEX6B	12" HDPE	22+40	5.85	3	1.22	9.98	6	OFFEX6B

\*\*\*Referenced from LM Heights Study.  
 SG = SOLID GROUTED

**100-YEAR DITCH/CHANNEL CHARACTERISTICS - SURF**

Ditch	Slope (%)	Q <sub>100</sub> (cfs)	Depth of Flow (ft)	Depth of Superelevation (ft)	Total Depth (ft)	Bottom Width (ft)	Type	Side Slopes	Reed dia (in)	Tributary Subbasins	
OFF1	0.00	12	N/A	N/A	4.04	50	V	3:1	12	OFF1	
OFF2A (max)	6.94	18	0.67	N/A	2.0	3.36	0	V	10:18:1	6	ON2 + OFF2A
OFF2B (max)	3.48	18	0.70	N/A	2.0	4.13	0	V	10:18:1	6	ON2 + OFF2B
OFF3A (max)	1.90	24	1.36	N/A	2.5	4.34	0	V	4:12:1	6	OFF3A + OFF3B + OFF3R
OFF3B (max)	1.02	24	1.84	N/A	3.0	3.57	0	V	3:12:1	6	OFF3A + OFF3B + OFF3R
OFF3R (max)	1.26	9	0.98	N/A	2.0	3.68	0	V	4:12:1	6	OFF3R
OFF3R1	4.62	4	0.63	N/A	1.0	4.02	0	V	3:12:1	6	OFF3R1
OFF4AR (max)	10.10	87	0.13	N/A	1.5	4.76	140	V	3:12:1	N/A	OFF4A + OFF4AR + OFF4BR
OFF4BR (max)	4.88	89	0.17	N/A	1.5	4.07	140	V	3:12:1	N/A	OFF4A + OFF4AR + OFF4BR
OFF4BR1 (max)	3.00	0.89	N/A	N/A	1.5	3.50	140	V	3:12:1	N/A	OFF4A + OFF4AR + OFF4BR + OFF4BR1
OFF4BR2 (max)	4.33	100	0.49	N/A	2.0	4.72	45	V	3:12:1	12	OFF4A + OFF4AR + OFF4BR + OFF4BR2
OFF4AR2 (max)	5.34	130	0.52	N/A	2.0	5.38	45	V	3:14:1	12	OFF4A + OFF4AR + OFF4AR2 + OFF4BR2 + OFF4AR3
OFF4AR3 (max)	2.00	0.89	N/A	N/A	2.0	2.89	45	V	3:14:1	12	OFF4A + OFF4AR + OFF4AR3 + OFF4BR2 + OFF4AR3
OFF4AR2R (max)	11.99	187	2.43	1.04	5.0	12.87	0	V	3:12:1	SG 24	CP2A
OFF4AR2R1 (max)	1.65	187	3.40	N/A	4.5	3.47	0	V	3:12:1	12	CP2A
OFF4AR2R2 (max)	4.66	2	0.48	N/A	1.0	4.13	0	V	3:12:1	12	CP2A
OFF5 (max)	1.51	5	0.69	N/A	1.0	3.48	0	V	3:12:1	N/A	OFF5
OFF6R (max)	7.28	1.41	N/A	N/A	1.5	4.43	0	V	3:12:1	14	OFF6R
OFF6R1 (max)	0.47	44	2.59	N/A	3.0	2.76	0	V	3:12:1	14	OFF6R + OFF7AR + OFF7BR + OFF7D1R + 24cfs***
OFF6R2 (max)	3.39	262	3.43	N/A	3.5	8.89	0	V	3:12:1	18	OFF6R + OFF7AR + OFF7BR + OFF7D1R + 24cfs***
OFF6R3 (max)	4.44	293	3.48	N/A	4.0	9.77	0	V	3:12:1	24	OFF6R + OFF7AR + OFF7BR + OFF7D1R + 24cfs***
OFF6R4 (max)	3.33	293	3.59	N/A	4.0	9.09	0	V	3:12:1	18	31cfs***
OFF6R5 (max)	1.46	3	0.62	N/A	1.0	3.11	0	V	3:12:1	N/A	OFF6R5
OFF6R6 (max)	1.31	0.41	N/A	1.0	2.40	0	V	3:12:1	N/A	OFF6R6	
OFF6R7 (max)	1.31	0.83	N/A	1.0	3.00	0	V	3:12:1	N/A	OFF6R7	
OFF6R8 (max)	6.98	29	1.24	N/A	1.5	8.77	0	V	3:12:1	12	OFF6R8 + 24cfs***
OFF6R9 (max)	2.18	28	1.47	N/A	1.5	4.82	0	V	3:12:1	6	OFF6R9 + 24cfs***
OFF6R10 (max)	2.76	3	0.51	N/A	1.0	4.55	0	V	3:12:1	6	OFF6R10
OFF6R11 (max)	4.96	3	0.97	N/A	1.0	3.73	0	V	3:12:1	6	OFF6R11
OFF6R12 (max)	0.51	40	2.38	N/A	2.5	3.13	0	V	3:12:1	6	OFF6R12
OFF6R13 (max)	2.51	48	1.77	N/A	2.5	5.89	0	V	3:12:1	6	OFF6R13
OFF6R14 (max)	0.48	24	2.41	N/A	2.5	3.11	0	V	3:12:1	6	OFF6R14
OFF6R15	2.32	107	2.59	N/A	3.0	6.99	0	V	3:12:1	12	OFF6R15 + OFF7AR + OFF7BR + OFF7D1R + OFF7D2R + OFF7D3R + OFF7D4R + OFF7D5R + OFF7D6R
OFF6R16 (max)	3.26	6	0.69	N/A	1.0	5.03	0	V	3:12:1	N/A	OFF6R16
OFF6R17 (max)	0.50	6	0.98	N/A	1.0	2.49	0	V	3:12:1	N/A	OFF6R17
OFF6R18 (max)	3.10	1.12	N/A	1.5	4.62	0	V	3:12:1	N/A	OFF6R18 + OFF6R19	
OFF6R19 (max)	2.11	15	1.20	N/A	1.5	4.17	0	V	3:12:1	6	OFF6R19 + OFF6R20
OFF6R20 (max)	0.48	0.48	N/A	1.0	2.91	0	V	3:12:1	N/A	OFF6R20	
OFF6A (max)	8.33	5	0.81	N/A	1.0	5.31	0	V	3:12:1	6	OFF6A
OFF6B (max)	1.50	5	0.75	N/A	1.0	3.59	0	V	3:12:1	N/A	OFF6B
OFF6C (max)	1.50	2	0.41	N/A	1.0	2.76	0	V	3:12:1	N/A	OFF6C
OFF6D (max)	0.46	2	0.69	N/A	1.0	1.82	0	V	3:12:1	N/A	OFF6D
OFF6E (max)	7.31	65	1.64	N/A	2.0	9.08	0	V	3:12:1	18	OFF6E + EX-OFF10 + OFF6A1
OFF6F (max)	1.46	65	2.36	N/A	3.0	3.61	0	V	3:12:1	N/A	OFF6F + OFF6A1 + OFF6B + 5cfs + 17cfs + 31cfs***
OFF6G	8.10	190	2.80	N/A	4.0	9.45	0	V	3:12:1	24	OFF6G + OFF6A1 + OFF6B + OFF6C + OFF6D + OFF6E + OFF6F + OFF6G + OFF6H + OFF6I + OFF6J + OFF6K + OFF6L + OFF6M + OFF6N + OFF6O + OFF6P + OFF6Q + OFF6R + OFF6S + OFF6T + OFF6U + OFF6V + OFF6W + OFF6X + OFF6Y + OFF6Z
OFF6H	1.36	19	1.25	N/A	1.0	4.83	0	V	3:12:1	N/A	OFF6H + EX-OFF10
OFF6I (max)	4.40	24	0.50	N/A	1.0	4.73	0	V	3:12:1	N/A	OFF6I
OFF6J (max)	1.10	25	0.67	N/A	1.0	2.97	0	V	3:12:1	N/A	OFF6J
OFF6K (max)	5.39	5	0.67	N/A	1.0	4.51	0	V	3:12:1	6	OFF6K + EX-OFF10
OFF6L (max)	0.49	9	0.82	N/A	1.0	2.36	0	V	3:12:1	N/A	OFF6L
OFF6M (max)	1.27	16	1.01	N/A	1.5	3.22	0				