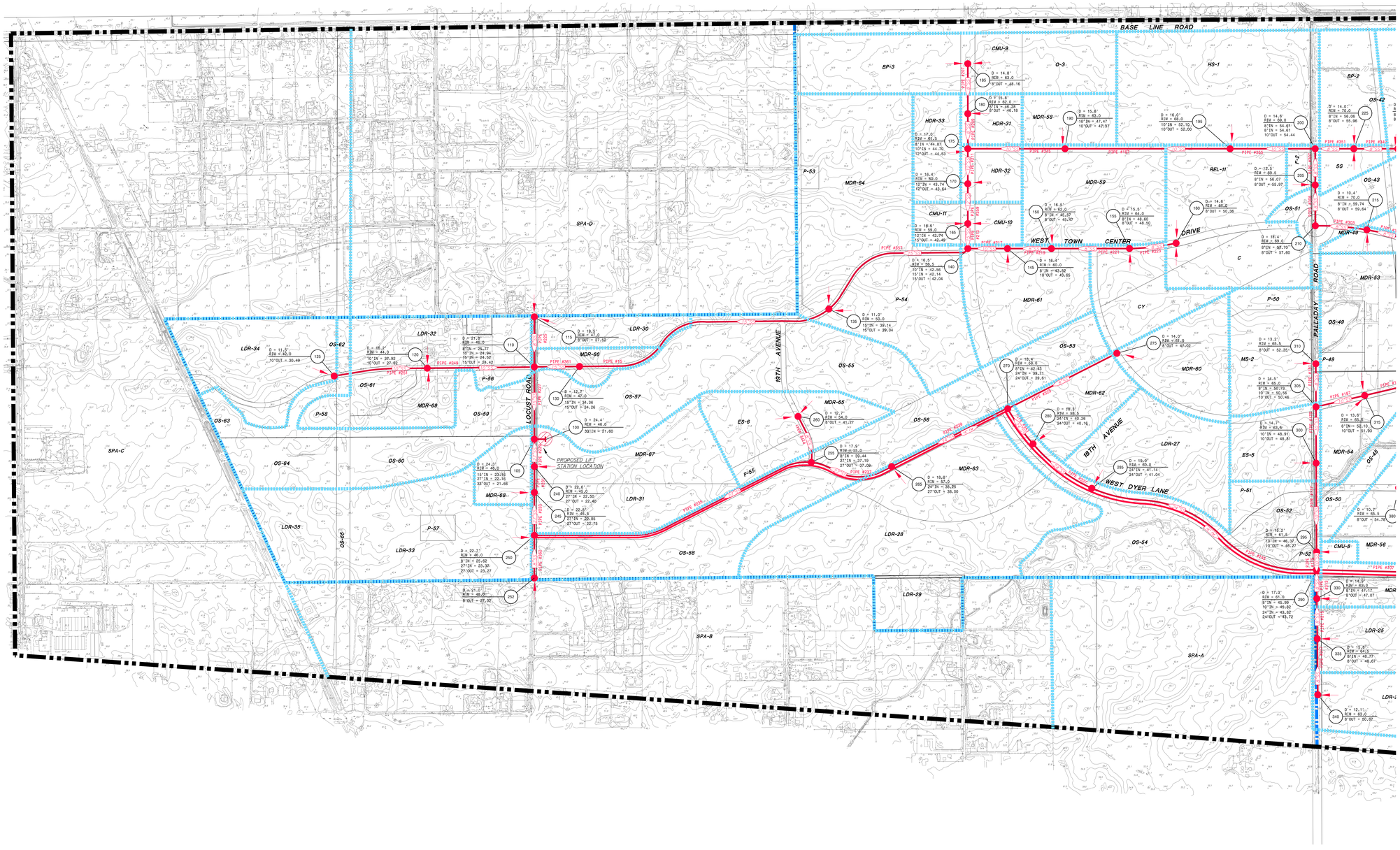

PIPE DATA

PIPE ID	DIAMETER	LENGTH	SLOPE
15	15	2,673	0.0015
175	10	180	0.0025
177	10	887	0.0025
179	10	562	0.0025
181	8	431	0.0035
197	10	1,649	0.0025
207	8	500	0.0035
209	8	350	0.0035
211	12	350	0.0020
213	15	250	0.0015
217	10	396	0.0025
219	8	439	0.0035
221	8	780	0.0035
223	8	469	0.0035
225	8	380	0.0243
227	15	722	0.0015
229	27	274	0.0007
231	27	259	0.0007
233	27	443	0.0007
235	27	2,933	0.0047
237	27	851	0.0007
239	24	1,295	0.0008
245	24	2,454	0.0008
249	10	1,046	0.0025
251	10	935	0.0025
305	8	408	0.0035
307	8	362	0.0035
313	8	288	0.0035
315	8	401	0.0035
317	8	560	0.0035
325	8	1,223	0.0035
331	33	-	0.00060
337	24	741	0.0008
341	8	488	0.0035
343	24	433	0.0008
345	10	972	0.0025
355	10	850	0.0025
357	15	1,660	0.0015
359	12	398	0.0020
361	15	452	0.0215
362	8	400	0.0035

PRELIMINARY SEWER MANHOLE DATA
WASTEWATER SHED A (WESTERLY PORTION)
PLACER VINEYARDS SPECIFIC PLAN

Scale: 1" = 300'

November 25, 2013

LEGEND

- SPECIFIC PLAN AREA BOUNDARY
- MAJOR SHED BOUNDARY
- MINOR SHED BOUNDARY
- LDR-12 — PARCEL ID AND LAND USE DESIGNATION
- NODE POINT
- 12"FM — PROPOSED SEWER FORCE MAIN
- 12"SS — PROPOSED GRAVITY SEWER LINE
- 12"SS — EXISTING SEWER LINE
- SHED FLOW DIRECTION

325 — D = 20.2' / RIM = 96.2' / 8"IN = 100.87 / 8"OUT = 100.77 — NODE NUMBER

NOTES

1. PIPES DOWN STREAM FROM NODES 105, 110, 130, 135, 240, 245, 250, 255, 265, 270, 280, 285, AND 290 HAVE BEEN SIZED BASED ON HYDRAULIC MODELING.
2. RIM GRADES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING THE IMPROVEMENT PLAN DESIGN AND APPROVAL PROCESS.
3. PIPE INVERTS HAVE BEEN CALCULATED BASED ON MINIMUM SLOPES TO MAXIMIZE THE AREA WHICH CAN BE SERVED BY GRAVITY FLOW. PIPE INVERTS ARE SUBJECT TO CHANGE DURING THE IMPROVEMENT PLAN DESIGN AND APPROVAL PROCESS. PIPE INVERTS MAY BE RAISED TO REDUCE PIPE DEPTHS PROVIDED WASTEWATER SHEDS ARE NOT AFFECTED.
4. MINOR WASTEWATER SHED BOUNDARY ADJUSTMENTS WILL BE ALLOWED DURING FINAL UTILITY AND GRADING DESIGN, SUBJECT TO THE REVIEW AND APPROVAL OF PLACER COUNTY.

Table 1 - Pipeline Capacity Summary

Pipe Slope	Minimum Slope	0.7 Full mgd	1.0 Full mgd
6"	0.005	0.21	0.25
8"	0.0035	0.38	0.46
10"	0.0025	0.59	0.70
12"	0.002	0.86	1.02
15"	0.0015	1.35	1.61
18"	0.0012	1.96	2.35
21"	0.001	2.71	3.23
24"	0.0008	3.46	4.13
27"	0.0007	4.43	5.29
30"	0.0006	5.43	6.49
33"	0.0006	7.00	8.37
36"	0.00045	7.65	9.14
42"	0.00037	10.47	12.50

= USED FOR PRELIMINARY DESIGN

NORTH
0 300 600

MACKAY & SOMPS
CIVIL ENGINEERS, INC.
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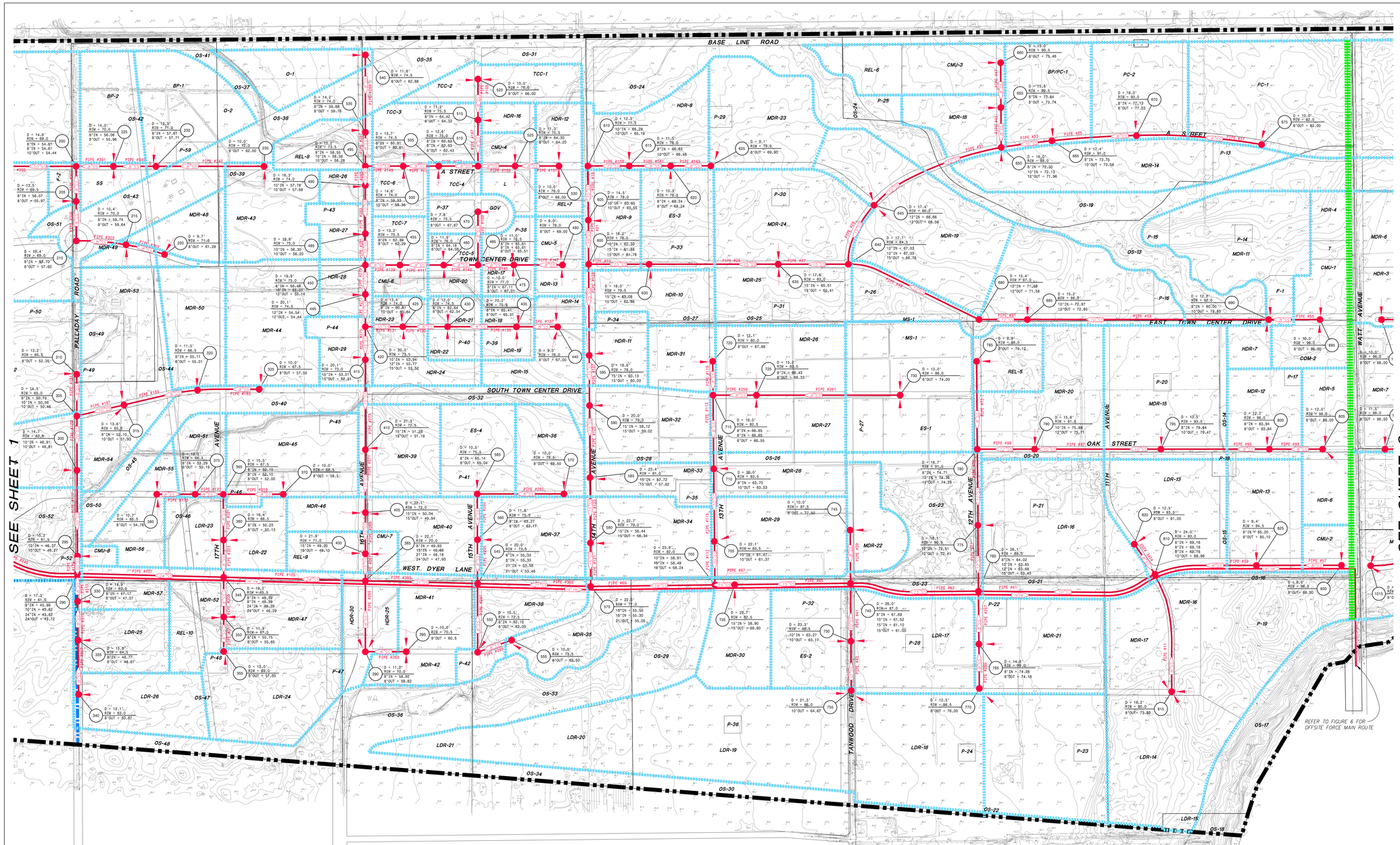
ROSEVILLE, CALIFORNIA

EXHIBIT SS-2
SHEET 1 OF 3



PIPE DATA

PIPE ID	DIAMETER	LENGTH	SLOPE
11	8	1,242	0.0035
19	10	560	0.0025
21	10	455	0.0025
23	15	626	0.0015
25	15	1,334	0.0015
27	15	725	0.0015
29	12	681	0.0020
31	12	1,466	0.0020
33	10	529	0.0025
35	8	876	0.0035
37	8	1,300	0.0035
39	8	550	0.0287
41	10	599	0.0025
43	10	510	0.0025
45	8	412	0.0035
47	8	464	0.0035
49	12	1,477	0.0031
51	12	500	0.0020
53	10	2,494	0.0025
55	8	531	0.0113
57	8	879	0.0035
59	8	1,061	0.0150
61	10	1,868	0.0025
63	15	1,332	0.0015
65	15	1,198	0.0015
67	15	204	0.0015
69	18	1,272	0.0023
73	8	908	0.0049
75	12	786	0.0020
77	12	663	0.0128
93	8	550	0.0035
95	8	1,121	0.0035
97	10	1,306	0.0025
99	12	592	0.0020
105	24	1,465	0.00080
107	24	1,513	0.0016
113	8	761	0.0035
115	10	750	0.0025
117	10	450	0.0055
119	8	350	0.0035
121	15	450	0.0015
123	15	675	0.0015
125	15	744	0.0015
127	15	519	0.0015
129	15	942	0.0015
131	10	388	0.0173
133	8	462	0.0035
135	8	712	0.0035
137	8	425	0.0035
139	8	358	0.0190
141	8	452	0.0035
143	8	354	0.0035
145	8	371	0.0035
147	8	503	0.0035
149	10	391	0.0025
151	8	367	0.0035
153	8	406	0.0035
155	8	384	0.0043
157	8	454	0.0035
159	10	427	0.0025
161	8	428	0.0035
163	8	415	0.0035
165	8	423	0.0035
167	8	477	0.0035
169	8	550	0.0035
171	8	290	0.0035
173	8	397	0.0035
175	10	180	0.0025
177	10	887	0.0025
179	10	562	0.0025
181	8	431	0.0035
183	8	638	0.0035
185	8	776	0.0035
187	10	500	0.0025
195	8	362	0.0035
253	8	378	0.0313
255	8	458	0.0035
257	8	546	0.0186
259	8	448	0.0035
261	8	1,486	0.0035
263	8	422	0.0035
265	8	733	0.0121
267	15	280	0.0015
269	15	425	0.0015
271	15	650	0.0015
273	15	930	0.0015
275	15	341	0.0015
277	12	334	0.0020
279	12	302	0.0020
281	10	325	0.0025
283	10	500	0.0025
285	10	198	0.0025
287	8	350	0.0035
289	8	800	0.0035
291	8	896	0.0035
293	8	473	0.0035
295	8	454	0.0173
297	8	710	0.0094
299	8	373	0.0035
303	8	517	0.0035
305	8	408	0.0035
307	8	362	0.0035
309	8	411	0.0177
311	8	357	0.0035
313	8	288	0.0035
315	8	401	0.0035
317	8	560	0.0035
319	8	620	0.0103
321	8	473	0.0035
323	8	384	0.0045
347	8	1,117	0.0035
349	8	439	0.0035
351	8	386	0.0035
353	8	411	0.0035
363	21	1,161	0.0046
365	21	1,180	0.0010

PRELIMINARY SEWER MANHOLE DATA
WASTEWATER SHED A (EASTERLY PORTION)
PLACER VINEYARDS SPECIFIC PLAN

Scale: 1" = 300'

November 25, 2013

LEGEND

- SPECIFIC PLAN AREA BOUNDARY
- MAJOR SHED BOUNDARY
- MINOR SHED BOUNDARY
- LDR-12 — PARCEL ID AND LAND USE DESIGNATION
- NODE POINT
- 12"SS — PROPOSED SEWER FORCE MAIN
- 12"SS — PROPOSED GRAVITY SEWER LINE
- 12"SS — EXISTING SEWER LINE
- SHED FLOW DIRECTION
- 325 — D = 20.2' / RIM = 96.2' / 8"IN = 100.87 / 8"OUT = 100.77 — NODE NUMBER

NOTES

1. PIPES DOWN STREAM FROM NODES 290, 345, 385, 545, 575, 580, 585, 590, 595, 600, 630, 635, 700, 735, AND 740 HAVE BEEN SIZED BASED ON HYDRAULIC MODELING.
2. RIM GRADES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING THE IMPROVEMENT PLAN DESIGN AND APPROVAL PROCESS.
3. PIPE INVERTS HAVE BEEN CALCULATED BASED ON MINIMUM SLOPES TO MAXIMIZE THE AREA WHICH CAN BE SERVED BY GRAVITY FLOW. PIPE INVERTS ARE SUBJECT TO CHANGE DURING THE IMPROVEMENT PLAN DESIGN AND APPROVAL PROCESS. PIPE INVERTS MAY BE RAISED TO REDUCE PIPE DEPTHS PROVIDED WASTEWATER SHEDS ARE NOT AFFECTED.
4. MINOR WASTEWATER SHED BOUNDARY ADJUSTMENTS WILL BE ALLOWED DURING FINAL UTILITY AND GRADING DESIGN, SUBJECT TO THE REVIEW AND APPROVAL OF PLACER COUNTY.

Table 1 - Pipeline Capacity Summary

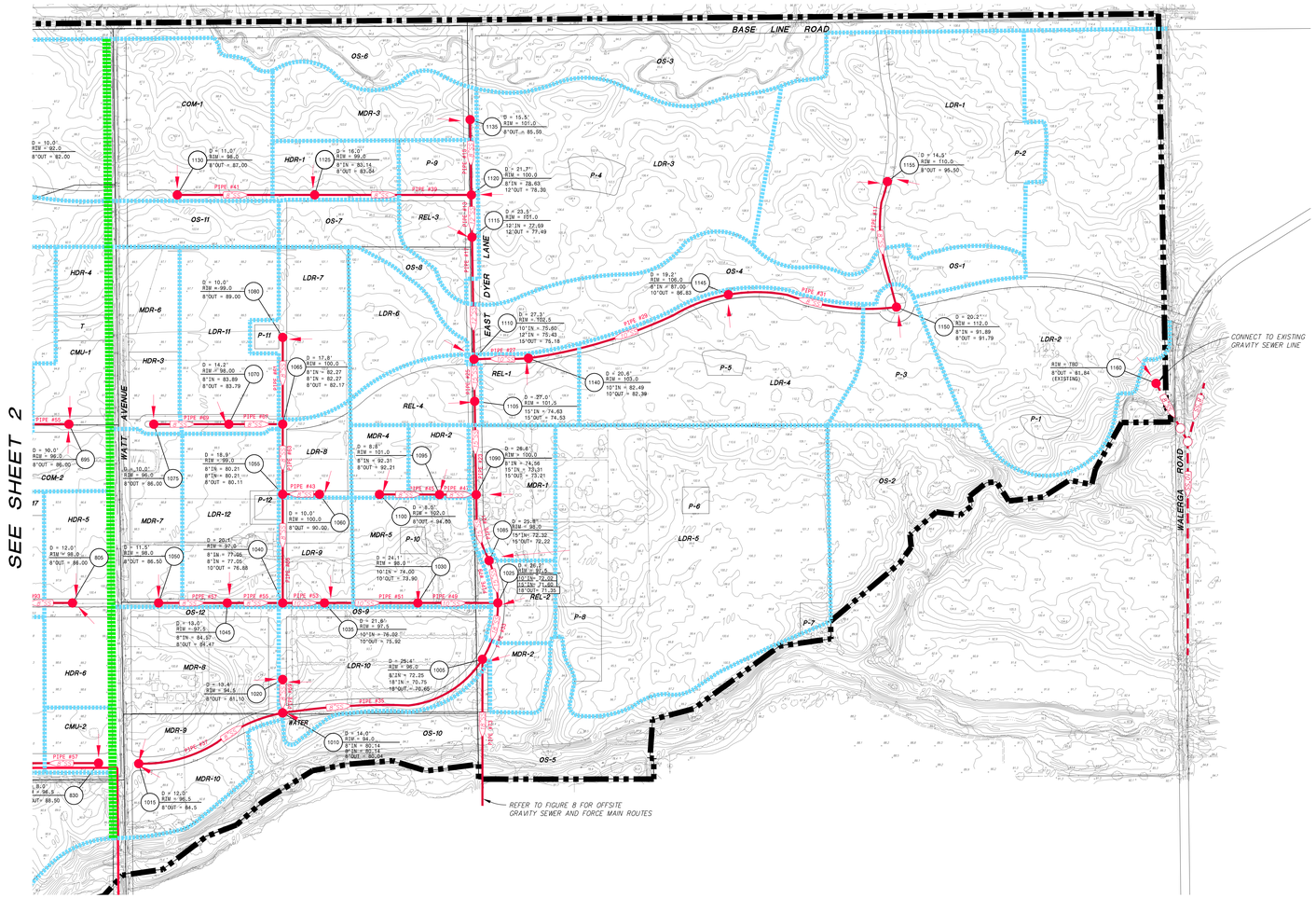
Pipe Slope	Minimum Slope	0.7 Full mgd	1.0 Full mgd
6"	0.005	0.21	0.25
8"	0.0035	0.38	0.46
10"	0.0025	0.59	0.70
12"	0.002	0.86	1.02
15"	0.0015	1.35	1.61
18"	0.0012	1.96	2.35
21"	0.001	2.71	3.23
24"	0.0008	3.46	4.13
27"	0.0007	4.43	5.29
30"	0.0006	5.43	6.49
33"	0.0006	7.00	8.37
36"	0.00045	7.65	9.14
42"	0.00037	10.47	12.50

= USED FOR PRELIMINARY DESIGN

NORTH
0 300 600

MACKAY & SOMPS
CIVIL ENGINEERS, INC.
CIVIL ENGINEERING AND PLANNING AND SURVEYING
ROSEVILLE, CALIFORNIA

EXHIBIT SS-2
SHEET 2 OF 3



PIPE DATA

PIPE ID	DIAMETER	LENGTH	SLOPE
11	8	962	0.0035
13	12	316	0.0020
15	8	564	0.0122
17	12	915	0.0020
21	15	510	0.0015
23	15	700	0.0015
25	15	315	0.0015
27	10	409	0.0166
29	10	1,580	0.0025
31	8	1,275	0.0035
33	18	414	0.0012
35	8	1,623	0.0048
37	8	1,162	0.0035
39	8	1,175	0.0035
41	8	1,030	0.0035
43	8	276	0.0355
45	8	450	0.0035
47	8	275	0.0642
49	10	600	0.0031
51	10	700	0.0025
53	10	313	0.0025
55	8	415	0.0179
57	8	515	0.0035
59	8	251	0.0035
61	8	650	0.0104
63	8	524	0.0035
65	8	815	0.0035
67	8	404	0.0035
69	8	563	0.0035
73	18	-	0.0012
79	15	355	0.0015

PRELIMINARY SEWER MANHOLE DATA
WASTEWATER SHED B
PLACER VINEYARDS SPECIFIC PLAN

Scale: 1" = 300'

November 25, 2013

LEGEND

- SPECIFIC PLAN AREA BOUNDARY
- MAJOR SHED BOUNDARY
- MINOR SHED BOUNDARY
- LDR-12 — PARCEL ID AND LAND USE DESIGNATION
- NODE POINT
- 12"SS — PROPOSED SEWER FORCE MAIN
- 12"SS — PROPOSED GRAVITY SEWER LINE
- 12"SS — EXISTING SEWER LINE
- SHED FLOW DIRECTION

325 — D = 20.2' / RIM = 96.2' / 8"IN = 100.87 / 8"OUT = 100.77 — NODE NUMBER

NOTES

1. THE PIPE DOWN STREAM FROM NODE 1005 HAS BEEN SIZED BASED ON HYDRAULIC MODELING.
2. RIM GRADES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING THE IMPROVEMENT PLAN DESIGN AND APPROVAL PROCESS.
3. PIPE INVERTS HAVE BEEN CALCULATED BASED ON MINIMUM SLOPES TO MAXIMIZE THE AREA WHICH CAN BE SERVED BY GRAVITY FLOW. PIPE INVERTS ARE SUBJECT TO CHANGE DURING THE IMPROVEMENT PLAN DESIGN AND APPROVAL PROCESS. PIPE INVERTS MAY BE RAISED TO REDUCE PIPE DEPTHS PROVIDED WASTEWATER SHEDS ARE NOT AFFECTED.
4. MINOR WASTEWATER SHED BOUNDARY ADJUSTMENTS WILL BE ALLOWED DURING FINAL UTILITY AND GRADING DESIGN, SUBJECT TO THE REVIEW AND APPROVAL OF PLACER COUNTY.

Table 1 - Pipeline Capacity Summary

Pipe Slope	Minimum Slope	0.7 Full mgd	1.0 Full mgd
6"	0.005	0.21	0.25
8"	0.0035	0.38	0.46
10"	0.0025	0.59	0.70
12"	0.002	0.86	1.02
15"	0.0015	1.35	1.61
18"	0.0012	1.96	2.35
21"	0.001	2.71	3.23
24"	0.0008	3.46	4.13
27"	0.0007	4.43	5.29
30"	0.0006	5.43	6.49
33"	0.0006	7.00	8.37
36"	0.00045	7.65	9.14
42"	0.00037	10.47	12.50

= USED FOR PRELIMINARY DESIGN

NORTH
0 300 600

MacKay & Somps
CIVIL ENGINEERS, INC.
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ROSEVILLE, CALIFORNIA

EXHIBIT SS-2
SHEET 3 OF 3

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