APPENDIX F: SUMMARY OF ASSUMPTIONS AND RECOMMENDATIONS

- All pipe from the block map is assumed as steel with the following pipe specifications:

Pipe Diameter	Wall Thickness	Note	Outside Diameter	Inside Diameter	Weight Per Foot	Weight Per mile	Transverse Area	Pipe Volume/Foot Cubic	Surface Area/Foot I.D.	Surface Area/Foot O.D.	Metal Cross Section	Equivalent 3 in.
(in)	(in)		(in)	(in)	(lbs)	(tons)	(sq. in)	Feet	(sq. ft.)	(sq. ft.)	(sq. in.)	factor
0.50	0.109	STD - 40	0.840	0.622	0.85	2.2	0.30	0.002	0.16	0.22	0.25	0.203
0.75	0.113	STD - 40	1.050	0.824	1.13	3.0	0.53	0.004	0.22	0.27	0.33	0.269
1.00	0.133	STD - 40	1.315	1.049	1.68	4.4	0.86	0.006	0.27	0.34	0.49	0.342
1.25	0.140	STD - 40	1.660	1.380	2.27	6.0	1.50	0.010	0.36	0.43	0.67	0.450
2.00	0.154	STD - 40	2.375	2.067	3.65	9.6	3.36	0.023	0.54	0.62	1.07	0.674
3.00	0.156		3.500	3.188	5.57	14.7	7.98	0.055	0.83	0.92	1.64	1.039
4.00	0.156		4.500	4.188	7.24	19.1	13.77	0.096	1.10	1.18	2.13	1.365

- Mains that were added in the color map (i.e., not in the block map but present in the color map), are assumed as polyethylene except in the downtown Castroville area where all mains are assumed as steel. For polyethylene pipe specifications, see the following table:

Nominal Size	SDR	Weight	Min Wall	Average OD
(in)		(lb/100 ft)	(in)	(in)
½" CTS	7.0	6.4	0.09	0.625
1	11.0	19	0.12	1.315
2	11.0	63	0.216	2.375
3	11.0	137	0.318	3.5
4	11.5	217	0.391	4.5

- Assumed pipe sizes are detailed in Appendix B, but also summarized in the following table:

Location	**Assumed Size**	**Report Page Number**
Athens St South of Gentilz St	2" steel	43
Lisbon St from West of Jackson St to Athens St	2" steel	43
System from Berlin St at Constantinople St to North and West Limits	2" poly	43
Amelia St and Houston St	2" steel	44
System off of FM 471 North of Provident Ave	2" poly	44
Lorenzo St South of Houston St	2" steel	45
LaFayette St East of Alamo St	2" poly	47

- All added mains are assumed as 2" diameter, with mains in the downtown Castroville area assumed as steel and all other locations assumed as polyethylene.
- All service tap locations are assumed. Service lines are assumed to not cross lot lines.
- Recommend updating model with georeferenced meter data, if available, to increase confidence in added mains. Then field verify all mains needed to supply gas to all known customer locations.
- Field verify all map/GIS discrepancies listed in this report.
- Field verify high pressure line route as we suspect it is possible the line does not run along CR 483 but cuts through the cornfield as noted in Figure 103 on report page 70. A key suggestion is to locate pipeline markers 19 through 23 in addition to locating and toning the lines in and out of the stations.
- Field verify all stations and update/create reports as needed to ensure RRC compliance.

- Research all map and documents provided by CPS Energy; consider discussing location concerns with CPS field personnel.
- Increase outlet pressure at Pear Tree DRS if the two new loads evaluated by our team are added.
- Monitor system end points for model refinement.
- Add a monitoring system for all stations.
- Update GIS with our team's findings.
- Develop and maintain a system of routinely updating the GIS and model so that both represent the real-world system.
- Continue to rely on the model for new loads and system improvements to ensure system performance is properly anticipated during system peaks.
- Develop a system master plan for both capital improvement projects as well as maintenance projects.
- Evaluate DIMP processes and incorporate findings in a master plan.