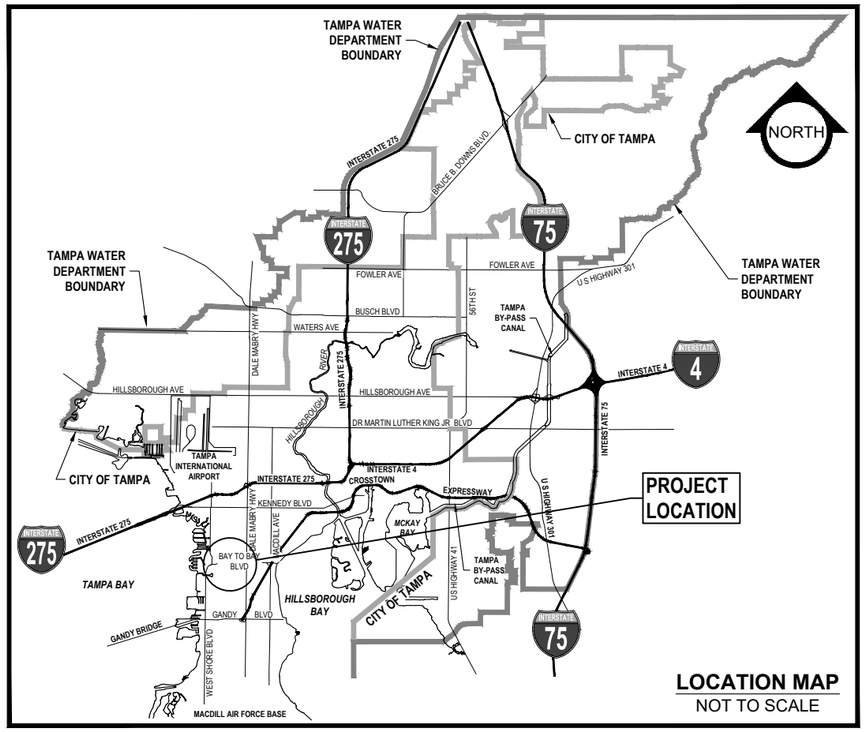
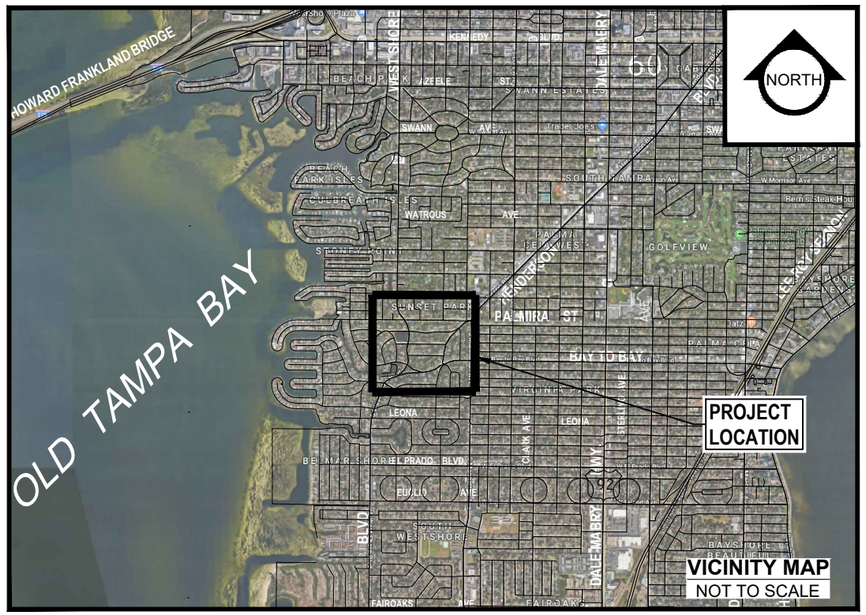




© GOOGLE

City of Tampa Florida

Water Department

PLANS FOR:

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

TAMPA WATER DEPARTMENT

WORK ORDER NO. :

8406

INDEX

	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, SPECIFIC NOTES & LEGEND
3	KEY SHEET
4	SURVEY SHEET
5-6	MILL & OVERLAY SHEETS
7-27	PLAN & PROFILE SHEETS
28-33	DETAIL SHEETS

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG

It's fast. It's free. It's the law.

www.callsunshine.com

PERMITS

■ CITY ☐ COUNTY ☐ STATE ■ DEP

CONTRACTOR:

RORY A. JONES LICENSE No. 79453 STATE OF FLORIDA PROFESSIONAL ENGINEER

Printed copies of this document are not considered signed and sealed and the authentication code must be verified on any electronic copies.

Rory Jones 2020.02.11 06:43:42 -05'00'

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED	NPP
DRAWN	SV
CHECKED	RAJ
DATE	04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

COVER SHEET

City of Tampa Florida Water Department

100% PLANS

WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 01 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_Cover_Notes_Key_Survey.dwg, Feb 10, 2020 - 1:06pm

CITY OF TAMPA NOTES

GENERAL

1. ALL WATER WORK FOR THE CITY OF TAMPA (CITY) SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT'S TECHNICAL SPECIFICATIONS, CONSTRUCTION DETAILS, AND THE TAMPA WATER DEPARTMENT TECHNICAL MANUAL (LATEST EDITION). IN THE EVENT OF A DISCREPANCY, THE MOST STRINGENT CRITERIA SHALL APPLY.
2. WATER MAIN TAPS SHALL BE PERFORMED BY THE CITY WATER DEPARTMENT ONLY. CONTRACTOR SHALL EXCAVATE, INSTALL TAPPING SLEEVE AND VALVE, CONDUCT PRESSURE TEST (WITNESSED BY INSPECTOR) AND COORDINATE PERFORMANCE OF TAP WITH THE CITY INSPECTOR. CONTRACTOR SHALL PROVIDE NOTICE TO THE CITY INSPECTOR AT A MINIMUM OF 5 WORKING DAYS NOTICE PRIOR TO NECESSARY WORK.
3. NORMAL WORKING HOURS SHALL BE WEEKDAYS FROM 7:30 AM TO 4:00 PM UNLESS OTHERWISE APPROVED BY THE ENGINEER/INSPECTOR.
4. ELEVATION INFORMATION SHOWN ON THESE PLANS IS REFERENCED TO N.A.V.D. 1988 UNLESS OTHERWISE STATED.
5. CONSTRUCTION OF WATER FACILITIES SHALL BE COORDINATED WITH THE WATER DEPARTMENT PRIOR TO THE START OF THE CONSTRUCTION. CONTRACTOR TO CONTACT CITY OF TAMPA CONTRACT ADMINISTRATION DEPARTMENT @ 813-635-3432 TO COORDINATE/SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY FOR REVIEW OF INSTALLATION TECHNIQUES AND PROCEDURES A MINIMUM OF 10 WORKING DAYS PRIOR TO THE PLANNED CONSTRUCTION.
6. EXISTING UTILITIES, BUILDINGS, GROUND ELEVATIONS, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. ALL CONDITIONS, DIMENSIONS, AND QUANTITIES AFFECTING REQUIRED WORK SHALL BE VERIFIED BY CONTRACTOR BEFORE BEGINNING WORK OR ORDERING MATERIALS.
7. VALVES ON EXISTING PUBLIC WATER MAINS TO BE OPERATED BY CITY PERSONNEL ONLY.
8. ALL PROPOSED WATER LINES SHALL BE MANUFACTURED AND INSTALLED PER THE STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA) AS PRESCRIBED BY FAC-62-555.320.
9. SHOP DRAWINGS SHALL BE SUBMITTED AND APPROVED BY THE CITY FOR ALL PROPOSED ITEMS. ALL SUBMITTALS AND SHOP DRAWINGS SHALL BE HIGH QUALITY PDF DOCUMENTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR RESTRAINING ALL EXISTING PIPE NECESSARY TO MAINTAIN A SAFE CONSTRUCTION AREA AND PERFORM THE WORK SHOWN IN THE PLANS. EXISTING PIPE REQUIRING RESTRAINTS SHALL UTILIZE EXTERIOR BELL RESTRAINTS.

PERMITS

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY RIGHT-OF-WAY PERMITS AND ROADWAY CLOSURES ASSOCIATED WITH THE WORK SHOWN IN THE PLANS.
2. IN ORDER TO OBTAIN ROADWAY CLOSURES OR RIGHT-OF-WAY PERMITS, AT MINIMUM, THE CONTRACTOR MUST SUBMIT DETAILED MAINTENANCE OF TRAFFIC (MOT) PLANS ALONG WITH APPLICATIONS TO THE APPROPRIATE AGENCY. THE MOT(S) SHALL CONFORM TO APPLICABLE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DRAWINGS (MOST CURRENT EDITION). THE GOVERNING AGENCIES MAY REQUIRE ADDITIONAL INFORMATION AND DICTATE SPECIFIC WORK TIME DURING NON-PEAK TRAFFIC HOURS.

PIPE CLEARANCES

1. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES AND SHALL MAINTAIN A MINIMUM OF THREE (3) FEET HORIZONTAL SEPARATION FROM OTHER UTILITIES, EXCEPT STORM, SANITARY, AND GAS, WHICH SHALL MAINTAIN TEN (10) FEET HORIZONTAL SEPARATION, UNLESS OTHERWISE NOTED.
2. WATER MAIN SHALL CROSS ABOVE OTHER PIPES. WHEN WATER MUST BE BELOW, PROVIDE 12" MINIMUM VERTICAL SEPARATION UNLESS OTHERWISE NOTED.
3. CENTER ONE FULL JOINT OF PIPE UNDER/OVER ALL SANITARY, STORM, OR RECLAIMED PIPE CROSSINGS.

MATERIAL

1. ALL VALVES SHALL BE RIGHT HAND OPEN.
2. POLYWRAP ALL DUCTILE IRON PIPE (D.I.P) FITTINGS AND APPURTENANCES.
3. ALL HARDWARE SHALL BE 304 STAINLESS STEEL, UNLESS OTHERWISE NOTED.
4. ALL BELOW GROUND BENDS SHALL BE MECHANICAL JOINT (MJ).
5. RESTRAIN ALL JOINTS AND FITTINGS.
6. CONCRETE THRUST BLOCKS SHALL NOT BE USED TO PROVIDE THRUST RESTRAINT. RESTRAINT OF PUSH-ON DIP (OTHER THAN FOR FITTINGS & VALVES) SHALL BE WITH APPROVED PUSH-ON "GRIPPER-TYPE" RESTRAINTS. FITTINGS AND VALVES SHALL BE CONNECTED TO PIPE WITH MEGALUGS, OR APPROVED EQUAL.
7. ALL POTABLE WATER SERVICE LATERAL, AIR RELEASE VALVES, AND TEMPORARY SAMPLE POINTS SHALL BE CONSTRUCTED OF BLUE SDR-9 HIGH DENSITY POLYETHYLENE (HDPE) TUBING. ALL HDPE TUBING SHALL BE INSTALLED WITHIN A CASING AS DEFINED IN THE SPECIFICATIONS AND DETAILS.

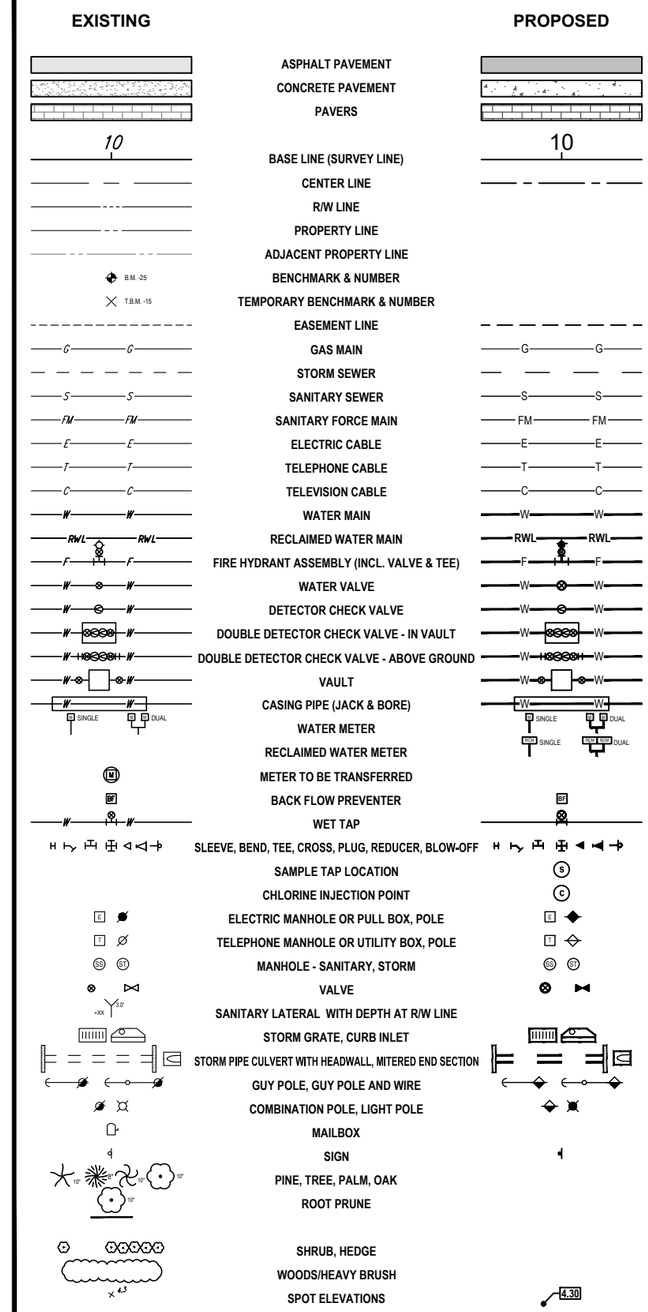
TESTING

1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL BE PROPERLY PRESSURE TESTED, WITNESSED AND ACCEPTED BY THE CITY. PRESSURE TESTS TO BE PERFORMED IN ACCORDANCE WITH WATER DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY THE ASSIGNED CITY INSPECTOR A MINIMUM OF THREE (3) WORKING DAYS IN ADVANCE OF PERFORMING TESTS. CONTRACTOR SHALL PRESSURE TEST WATER MAINS AT A MINIMUM OF 150 PSI FOR A PERIOD OF 2 HOURS IN ACCORDANCE WITH AWWA C600-87 STANDARDS. THE CONTRACTOR SHALL MAKE ALL NECESSARY APPLICATIONS AND ARRANGEMENTS.
2. ALL SAMPLE, PRESSURE TEST, AND CHLORINATION POINT PIPING SHALL BE COMPLETELY REMOVED PRIOR TO FINAL ACCEPTANCE. THE CORPORATION STOP SHALL BE CLOSED AND PLUGGED AT THE MAIN.
3. CONTRACTOR SHALL PERFORM CHLORINATION AND HIRE INDEPENDENT FIRMS TO CONDUCT BACTERIOLOGICAL TESTING AS DEFINED IN F.A.C. 62-555.340. CONTRACTOR TO SUPPLY THE CITY WITH AS-BUILTS AND SAMPLE RESULTS NECESSARY TO OBTAIN DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) CLEARANCES.

RESTORATION

1. ROADWAY RESTORATION SHALL BE IN CONFORMANCE WITH CORRESPONDING JURISDICTION'S LATEST STANDARDS.
2. DISTURBANCE TO ANY PROPERTY, PUBLIC OR PRIVATE, SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

LEGEND



RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

GENERAL NOTES & LEGEND

City of Tampa Florida Water Department

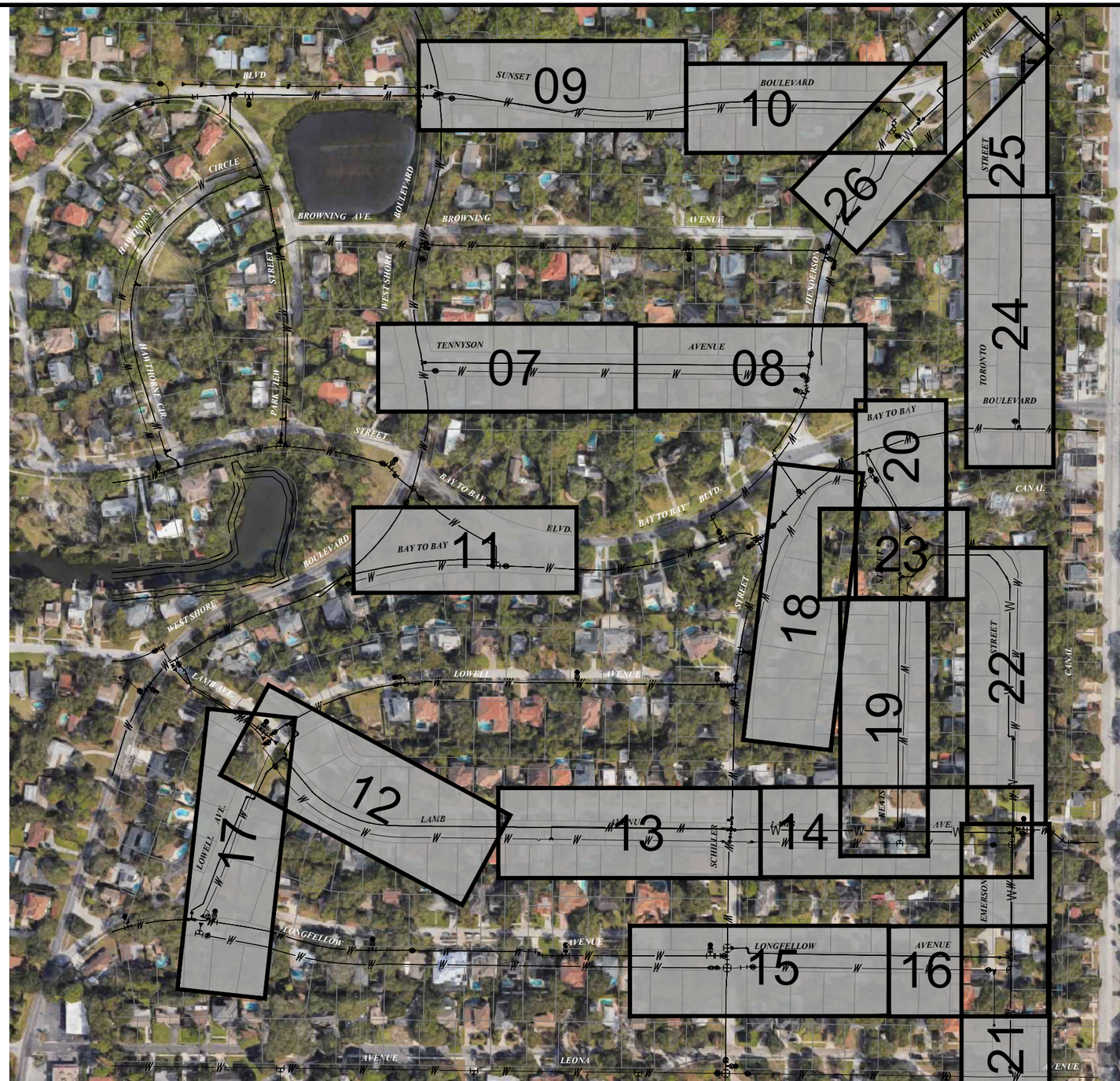
100% PLANS

WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 02 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406 Cover Notes Key Survey.dwg Feb 10, 2020 - 1:06pm



NORTH

S32-T29S-R18E

KEY MAP

1" = 300'

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_Cover_Notes_Key_Survey.dwg Feb 10, 2020 - 1:07pm

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED	NPP
DRAWN	SV
CHECKED	RAJ
DATE	04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

KEY SHEET

City of Tampa Florida
Water Department

100% PLANS

WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 03 OF 33

BENCHMARKS/CONTROL POINTS

LABEL	SHEET	EASTING	NORTHING	STATION	OFFSET	TYPE	ELEVATION
214	2L	486568.45	1302693.67	20+34.63	-7.87	SPKD	2.69
199	2R	487729.42	1302583.34	44+83.34	-9.57	SPKD	5.98
198	3	487922.67	1302380.26	60+58.20	-9.87	SPKD	5.53
230	3	488620.81	1302555.35	107+40.09	12.61	SPKD	6.15
231	3	488233.63	1302579.12	49+87.56	-10.06	SPKD	6.84
232	3	487956.87	1302583.05	47+10.77	-11.32	SPKD	5.76
215	4	486746.54	1303050.22	24+34.45	10.36	SPKD	2.70
216	5	487032.62	1302887.99	35+16.75	9.40	SPKD	3.06
217	5	487504.20	1302881.34	39+87.38	10.04	SPKD	3.00
218	6	487925.12	1302869.73	44+08.39	17.93	SPKD	4.44
219	6	488387.63	1302892.06	48+70.67	-8.98	SPKD	6.31
220	6	488632.89	1302891.17	51+15.93	-10.52	SPKD	5.66
233	6	487963.41	1303291.85	69+71.77	10.24	SPKD	7.89
242	6	488345.93	1303221.39	93+37.87	6.65	SPKD	6.55
243	6	488340.57	1303052.02	91+68.46	2.58	SPKD	6.10
11229	6	488627.05	1303213.48	113+98.21	11.68	SPKD	6.45
209	7	487410.48	1303595.44	166+49.84	-7.41	SPKD	3.51
210	7	487112.08	1303727.73	203+24.90	22.86	SCIR	4.95
211	7	486837.96	1303479.15	160+55.54	36.75	SPKD	4.75
272	7	486986.67	1303565.60	162+25.02	-3.64	FPKD COT	4.59
208	8	487746.86	1303624.30	169+92.22	-15.83	SCIR	4.84
207	8	488181.69	1303815.51	75+59.82	4.76	SPKD	6.02
239	8	488341.75	1303685.71	97+99.66	10.35	SPKD	7.65
240	8	488591.97	1303545.75	117+39.41	-8.15	SPKD	7.32
241	8	488349.57	1303448.70	95+65.19	8.55	SPKD	7.44
225	9	487106.16	1304374.18	209+69.19	-20.09	SPKD	4.83
228	9	487649.38	1304082.43	225+22.24	-10.10	SPKD	4.92
229	9	487190.32	1304086.53	220+63.16	-8.72	SPKD	4.10
269	9	487404.66	1304064.24	222+77.75	11.01	SPKD	4.18
270	9	487103.86	1304079.36	206+80.52	-22.54	SCIR	5.12
268	9	487840.17	1304062.96	227+13.25	7.08	SPKD	5.37
205	10	488179.71	1304358.65	179+39.68	-22.79	SPKD	6.01
206	10	488144.79	1304090.71	176+74.02	-15.84	SPKD	5.63
235	10	488609.74	1303969.35	150+42.83	-10.90	SPKD	7.86
245	10	488613.65	1304275.87	153+49.38	-9.74	SPKD	8.38
223	11	487537.10	1304712.62	243+73.88	9.73	SPKD	3.16
224	11	487237.92	1304767.83	240+70.77	-10.32	SPKD	4.18
201	12	488704.54	1304977.38	187+50.93	-14.13	SPKD	9.16
202	12	488607.15	1304790.62	158+64.06	-20.85	SPKD	8.38
203	12	488424.21	1304741.36	252+61.35	-4.67	SPKD	6.31
204	12	488345.54	1304611.30	182+38.51	-3.18	SPKD	6.75
222	12	487906.41	1304749.36	247+44.07	-9.92	SPKD	4.88
236	12	488635.87	1304477.22	155+50.92	10.68	SPKD	8.76
267	12	488231.93	1304728.31	250+69.21	10.31	SPKD	5.70
100	OFF SITE	488918.92	1304966.12			HV-02 0051	11.27
101	OFF SITE	488950.31	1302386.20			HV-02 0052	6.43
102	OFF SITE	486131.02	1302262.98			HV-02 0016	4.92

VALVES

LABEL	SHEET	EASTING	NORTHING	STATION	OFFSET	COVER	NUT	TYPE
3604	2L	486605.29	1302674.23	11+72.58	-17.69	3.89	2.42	POTABLE
20768	2L	486391.42	1302654.93	9+63.10	-15.78	4.26	2.82	POTABLE
3307	3	487915.62	1302582.06	46+69.54	-9.95	5.82	5.22	POTABLE
3308	3	487908.56	1302583.44	62+61.08	-26.15	5.55	4.86	POTABLE
10585	3	488578.44	1302550.71	139+32.63	15.01	6.83	5.48	POTABLE
12733	4	486771.66	1303059.90	32+04.38	19.09	3.17	2.56	POTABLE
13040	4	486761.51	1303137.81	25+25.16	-21.92	3.46	1.92	POTABLE
13042	4	486753.62	1303139.92	31+32.95	-21.27	3.71	2.03	POTABLE
6380	6	487917.02	1303257.37	69+32.49	-31.90	8.62	7.11	POTABLE
6386	6	487927.24	1303263.39	69+39.42	-22.36	8.48	7.92	POTABLE
6387	6	487924.67	1303264.84	69+40.57	-25.07	8.60	7.48	POTABLE
6388	6	487933.58	1303267.35	69+43.97	-16.48	8.56	8.16	POTABLE
11055	6	488632.97	1302905.02	51+15.88	-24.37	6.34	4.68	POTABLE
11056	6	488644.66	1302904.71	51+27.57	-24.17	6.61	4.79	POTABLE
11380	6	488372.47	1302857.61	48+55.86	25.62	7.00	5.68	POTABLE
11654	6	487906.18	1302871.86	43+89.43	15.97	4.91	4.82	POTABLE
11690	6	487968.85	1302870.80	44+52.12	16.44	5.37	4.26	POTABLE
11854	6	487921.67	1302906.11	44+04.62	-18.42	4.63	4.51	POTABLE
8201	7	487082.43	1303783.94	203+66.42	-25.44	4.15	3.26	POTABLE
8206	7	487058.93	1303800.95	203+76.36	-53.03	3.68	3.30	POTABLE
8261	7	487157.64	1303728.09	190+76.98	15.37	5.13	3.21	POTABLE
8905	7	486909.52	1303509.73	161+37.01	21.60	4.50	3.41	POTABLE
3020	8	488286.23	1303789.52	99+15.11	16.83	8.03	6.81	POTABLE
4299	8	488395.79	1303622.74	119+55.44	30.57	8.19	6.94	POTABLE
5178	8	487928.82	1303660.23	171+73.88	20.09	5.86	4.97	POTABLE
5280	8	488008.49	1303674.65	73+47.95	-42.75	6.45	5.62	POTABLE
5284	8	487979.52	1303648.73	73+15.85	-58.96	6.76	5.88	POTABLE
2227	10	488159.62	1304343.64	179+19.47	-37.23	6.35	4.62	POTABLE
2228	10	488162.99	1304361.13	179+36.82	-39.45	6.31	4.55	POTABLE
2229	10	488147.28	1304362.20	179+32.94	-54.71	6.24	4.87	POTABLE
2504	10	488114.80	1304092.39	229+87.51	-25.64	6.16	1.99	POTABLE
2661	10	488109.27	1304049.14	229+82.50	17.68	5.79	3.36	POTABLE
2662	10	488104.93	1304048.61	229+78.16	18.26	5.91	4.35	POTABLE
1986	12	488365.25	1304683.44	183+02.77	-40.02	7.05	6.52	POTABLE
10120	12	488656.51	13014820.19	158+94.07	28.21	9.75	7.56	POTABLE
1492	12	488489.16	1304823.55	184+89.29	-54.05	7.57	6.95	POTABLE

STORMWATER STRUCTURES

LABEL	SHEET	EASTING	NORTHING	STATION	OFFSET	COVER EL	PIPE SIZE	MAT TYPE	INVERT PIPE	TYPE
51021	2L	486589.932	1302681.427	20+31.66	16.67	3.29		COLLAPSED		DMH
3488	2L	486559.858	1302683.284	20+21.73	-11.77	3.35	12"	RCP E	0.71	DMH
12757	4	486758.409	1303062.831	24+51.40	13.89	3.19	15"	PVC E	0.42	DMH
12757	4	-	-	-	-	-	15"	RCP N	-0.01	-
12759	4	486734.622	1303077.314	24+51.32	-13.96	3.33	15"	PVC E	0.88	DMH
12870	4	486789.283	1303113.132	25+27.27	15.18	3.04	15"	RCP S	0.08	DMH
12870	4	-	-	-	-	-	15"	RCP W	0.07	-
12870	4	-	-	-	-	-	15"	RCP N	0.02	-
13057	4	486769.905	1303135.06	25+28.99	-14.04	2.95	12"	RCP E	0.13	DMH
5835	5	487517.889	1302876.386	40+01.12	14.88	3.21	14"X23"	ERCP N	0.01	DMH
6048	5	487517.555	1302905.814	40+00.52	-14.55	3.19	19"X30"	ERCP N	-0.01	DMH
6048	5	-	-	-	-	-	19"X30"	ERCP S	0.19	-
339	6	488588.48	1302865.41	50+71.79	15.67'	5.97	12"	RCP E	2.89	DMH
339	6	-	-	-	-	-	18"	RCP N	2.91	-
340	6	488639.4	1302895.092	51+22.40	-14.5	5.36	15"	RCP W	2.22	DMH
4508	6	488323.282	1303063.109	91+79.41	-14.7	6.42	12"	RCP S	2.93	DMH
4511	6	488351.265	1303063.286	91+79.80	13.19	6.5	12"	RCP S	2.98	DMH
4953	6	488630.426	1303050.338	112+35.11	16.65	6.67	3'X8'	BOX CULVERT	1.32	DMH
4953	6	-	-	-	-	-	15"	CMP N	1.34	-
4954	6	488601.232	1303050.455	112+34.94	-12.55	6.72	3'X8'	BOX CULVERT	1.38	DMH
10867	6	488627.562	1302849.777	110+34.57	15.8	6.18	12"	RCP W	3.69	DMH
11036	6	488587.509	1302895.992	50+70.50	-14.89	5.94	24"	RCP E	2.34	DMH
11036	6	-	-	-	-	-	18"	RCP S	2.37	-
11047	6	488611.81	1302894.93	50+94.81	-14.07	5.99	24"	RCP N	2.26	DMH
11047	6	-	-	-	-	-	24"	RCP W	2.29	-
11047	6	-	-	-	-	-	15"	RCP E	2.48	-
11707	6	487962.474	1302870.427	44+45.75	16.88	5.25	18"	RCP N	0.99	DMH
11840	6	487914.809	1302902.673	43+97.79	-14.92	4.52	15"	RCP S	0.63	DMH
11840	6	-	-	-	-	-	15"	RCP E	0.53	-
11876	6	487933.775	1302905.5	65+83.54	-5.88	4.83	24"	RCP E	-0.02	DMH
11876	6	-	-	-	-	-	15"	RCP W	-0.06	-
11876	6	-	-	-	-	-	24"	RCP N	-0.09	-
11895	6	487962.461	1302903.405	44+45.41	-16.1	5.09	18"	RCP S	0.83	DMH
11895	6	-	-	-	-	-	24"	RCP W	0.53	-
11936	6	487914.921	1302871.234	43+98.18	16.52	4.57	INACCESSABLE			DMH
12506	6	487937.411	1303042.672	67+20.74	-3.37	6.17	24"	RCP S	-0.75	DMH
8347	7	487326.248	1303625.933	165+66.06	-44.18	3.39	12"X18"	ERCP N	-0.13	DMH
8347	7	-	-	-	-	-	18"	RCP S	-0.38	-
8685	7	487115.922	1303623.783	163+60.39	-50.31	4.28	24"	RCP E	-1.56	-
8685	7	-	-	-	-	-	24"	RCP W	-1.52	-
8982	7	487318.363	1303611.658	165+57.98	-30.01	3.32	18"	RCP N	-0.58	DMH
8982	7	-	-	-	-	-	24"	RCP W	-0.79	-
8982	7	-	-	-	-	-	18"	RCP E	-1.07	-
8982	7	-	-	-	-	-	18"	RCP S	0.26	-
8983	7	487316.832	1303603.724	165+56.36	-22.08	3.36	18"	RCP N	0.31	DMH
8983	7	-	-	-	-	-	15"	RCP S	-0.44	-
8984	7	487301.523	1303612.045	165+41.11	-30.54	3.67	24"	RCP E	-0.73	DMH
8984	7	-	-	-	-	-	24"	RCP W	-0.87	-
9092	7	487340.462	1303651.052	192+73.79	-14.87	3.35	12" X18"	ERCP S	0.18	DMH
9208	7	487698.02	1303589.363	169+36.61	7.72	4.3	INACCESSABLE			DMH
9321	7	4874470.36	1303582.303	167+0962	1.94	3.82	18"	RCP E	0.38	DMH
9321	7	-	-	-	-	-	18"	RCP W	-0.68	-
9372	7	487314.993	1303558.916	165+54.02	54.03	3.64	15"	RCP N	0.15	DMH
9539	7	487715.265	1303585.96	169+52.64	14.28	4.72	15"	RCP W	1.67	DMH
9539	7	-	-	-	-	-	15"	RCP N	1.65	-
9585	7	487711.99	1303614.76	169+55.22	-14.60'	4.71	15"	RCP S	1.69	DMH
2849	8	488167.094	1303848.353	75+66.88	-30.44	6.38	15"	PVC W	2.91	DMH
2849	8	-	-	-	-	-	15"	PVC S	2.92	-
2934	8	488192.066	1303820.555	75+71.37	6.64	6.41	15"	RCP W	4.11	DMH
2948	8	488172.65	1303816.11	75+52.90	-1.12	5.89	15"	PVC N	2.96	GTI
2948	8	-	-	-	-	-	15"	PVC E	3.01	-
2948	8	-	-	-	-	-	15"	PVC S	3.01	-
2952	8	488178.488	1303784.214	75+37.21	27.5	6.82	15"	PVC SW	3.22	DMH
2952	8	-	-	-	-	-	15"	PVC N	3.17	-
2953	8	488124.138	1303749.784	74+70.68	14.35	6.34	15"	PVC N	3.34	DMH

STORMWATER STRUCTURES

LABEL	SHEET	EASTING	NORTHING	STATION	OFFSET	COVER EL	PIPE SIZE	MAT TYPE	INVERT PIPE	TYPE
4653	8	488605.949	1303478.451	116+62.97	-11.98	7.66	12"	RCP E	5.05	DMH
4770	8	488634.559	1303482.232	116+67.02	16.59	7.42	12"	RCP W	4.08	DMH
4770	8	-	-	-	-	-	15"	CMP S	3.61	-
9738	8	488112.3	1303858.19	174+38.03	13.24'	6.16	INACCESSABLE	-	-	DMH
9861	8	488061.42	1303827.68	173+85.22	-13.96	5.71	INACCESSABLE	-	-	DMH
7879	9	487158.154	1304083.811	206+73.67	31.51'	4.32	15"	PVC N	0.54	DMH
7879	9	-	-	-	-	-	15"	RCP E	0.56	-
7881	9	487314.101	1304089.668	221+86.90	-13.33	4.29	12"	PVC N	1.37	DMH
7881	9	-	-	-	-	-	12"	METAL S	1.23	-
7882	9	487313.832	1304080.21	221+86.74	-3.87	4.23	15"	RCP W	1.28	DMH
7882	9	-	-	-	-	-	12"	METAL N	1.28	-
7882	9	-	-	-	-	-	12"	METAL S	1.29	-
7883	9	487314.629	1304061.208	221+87.77	15.12	4.85	12"	METAL N	1.26	DMH
7883	9	-	-			-	-	COLLAPSED	-	-
2097	10	488209.476	1304416.813	180+03.25	-13.76	6.55	15"	PVC E	2.76	DMH
2097	10	-	-	-	-		15"	PVC S	1.8	-
2099	10	488214.793	1304387.634	179+78.20	1.16	6.37	INACCESSABLE		2.07 BOTTOM	DMH
2153	10	488123.735	1303950.911	175+27.77	-13.28	5.63	15"	PVC E	2.42	DMH
2154	10	488152.531	1303943.956	175+30.06	16.25	5.62	15"	PVC W	2.34	DMH
2155	10	488141.711	1303949.648	175+32.14	4.21	5.38	15"	PVC W	2.47	DMH
2155	10	-	-	-	-	-	15"	PVC E	2.45	-
2155	10	-	-	-	-	-	24"	PVC N	2.24	-
2155	10	-	-	-	-	-	18"	PVC S	2.36	-
2156	10	488175.022	1304088.647	176+72.52	14.43	5.9	15"	PVC W	2.72	DMH
2157	10	488162.512	1304092.322	176+75.93	1.86	5.62	15"	PVC E	2.12	DMH
2157	10	-	-	-	-	-	15"	PVC W	2.1	-
2157	10	-	-	-	-	-	24"	PVC S	2.01	-
2157	10	-	-	-	-	-	24"	PVC N	2	-
2158	10	488133.799	1304088.297	230+06.55	-21.77	5.89	15"	PVC W	2.19	DMH
2158	10	-	-	-	-	-	15"	PVC E	2.12	-
2161	10	488176.497	1304230.907	178+16.02	5.83	5.96	24"	PVC N	1.74	DMH
2161	10	-	-	-	-	-	24"	PVC S	1.71	-
2192	10	488237.285	1304407.05	180+04.76	15.12	6.48	15"	PVC W	3.16	DMH
2563	10	488057.231	1304083.22	229+30.05	-15.78	5.72	15"	PVC E	2.57	DMH
6951	10	488655.698	1303927.612	80+56.24	-0.25	8.18	12"X18"	ERCP W	5.32	DMH
6951	10	-	-	-	-	-	15"	RCP S	5.15	-
6951	10	-	-	-	-	-	15"	RCP N	5.12	-
6998	10	488584.242	1303940.206	79+85.17	-14.79	8.01	15"	RCP S	5.02	DMH
7052	10	488635.165	1303958.919	150+32.64	14.62	8.22	12"	RCP SE	6.11	DMH
7070	10	488652.162	1303942.061	80+53.05	-14.78	8.51	12"	RCP NW	5.85	DMH
7070	10	-	-	-	-	-	15"	RCP S	5.26	-
7167	10	488654.381	1303913.495	80+54.60	13.83	8.17	-	FULL DEBRIS	-	DMH
7195	10	488586.296	1303911.364	79+86.42	14.1	7.88	15"	RCP N	5.38	DMH
7195	10	-	-	-	-	-	12"X18"	ECMP E	5.24	-
20863	10	488794.75	1303943.66	81+94.90	-16.47	8.75	15"	RCP S	5.14	DMH
20868	10	488795.63	1303928.97	81.96.14	-1.81	8.81	15"	RCP N	4.96	DMH
20868	10	-	-	-	-	-	24"	RCP S	4.99	-
20868	10	-	-	-	-	-	14"X23"	ERCP W	4.96	-
20869	10	488792.91	1303912.94	81+93.82	14.28	8.84	24"	RCP N	4.74	DMH
20869	10	-	-	-	-	-	21"	HDPE S	4.77	-
20183	11	487426.9	1304724.6	242+63.29	15.19	3.33	18"	RCP N	-1.61	DMH
20184	11	487423.06	1304738.24	242+57.52	2.23	3.27	18"	RCP S	-1.54	DMH
20184	11	-	-	-	-	-	18"	RCP N	-1.54	-
20184	11	-	-	-	-	-	24"	RCP W	-1.70	-
20215	11	487305.13	1304746.46	241+39.08	7	3.61	24"	RCP W	-2.03	DMH
20215	11	-	-	-	-	-	INACCESSABLE	BOTTOM	-5.95	-
20216	11	487309.85	1304746.4	241+43.81	6.69	3.61	INACCESSABLE	BOTTOM	-5.93	DMH
20217	11	487314.49	1304746.16	241+48.47	6.55	3.61	24"	RCP E	-2.01	DMH
20217	11	-	-	-	-	-	INACCESSABLE	BOTTOM	-4.26	-
20218	11	487367.01	1304744.78	242+01.01	2.82	3.59	24"	RCP E	-1.68	DMH
20218	11	-	-	-	-	-	24"	RCP W	-1.67	-
20357	11	487429.76	1304753.28	242+61.99	-13.6	3.36	18"	RCP S	-1.47	DMH
20475	11	487135.39	1304751.77	213+59.89	-31.92	3.95	SEE NOTE 12	-	-	DMH
20535	11	487123.65	1304775.22	213+86.06	-40.89	4.11	INACCESSABLE	-	-	DMH
2048	12	488242.46	1304538.34	181+21.93	-4.72	7.02	INACCESSABLE	-	-	YARD DRAIN

WASTEWATER MANHOLES

LABEL	SHEET #	EASTING	NORTHING	MANHOLE COVER ELEV	SIZE	TYPE	INVERT	STRUCTURE
3422	2L	486429.3328	1302645.077	3.73	8"	CLAY	-6.37 E	SMH
3422	2L	-	-	-	8"	CLAY	-6.48 W	
3499	2L	486561.9123	1302660.896	3.28	8"	CLAY	-5.84 W	SMH
3499	2L	-	-	-	8"	CLAY	-5.62 E	
3499	2L	-	-	-	8"	CLAY	-5.62 N	
12256	2R	487682.8769	1302574.607	5.65	8"	CLAY	0.00 E	SMH
12256	2R	-	-	-	8"	CLAY	-0.01 W	
3303	3	487933.5765	1302572.487	5.96	8"	CLAY	0.64 E	SMH
3303	3	-	-	-	8"	CLAY	0.61 W	
3303	3	-	-	-	8"	CLAY	0.61 N	
10784	3	488607.5328	1302566.18	6.65	8"	CLAY	2.80 W	SMH
10784	3	-	-	-	8"	CLAY	2.85 S	
10785	3	488607.0523	1302460.971	7.02	8"	CLAY	3.30 N	SMH
10785	3	-	-	-	8"	CLAY	3.80 S	
11998	3	488272.4697	1302569.057	7.28	8"	CLAY	1.92 W	SMH
11998	3	-	-	-	8"	CLAY	1.94 E	
12594	4	486658.6407	1302883.287	3.24	8"	CLAY	-5.02 N	SMH
12594	4	-	-	-	8"	CLAY	-5.02 S	
12779	4	486755.8373	1303100.771	2.94	8"	CLAY	-4.30 S	SMH
12779	4	-	-	-	8"	CLAY	-4.36 NE	
12779	4	-	-	-	8"	CLAY	-4.34 SE	
12908	4	486868.6588	1303193.234	3.09	8"	CLAY	-3.53 NE	SMH
12908	4	-	-	-	8"	CLAY	-3.59 SW	
5692	4	486853.6244	1302973.62	3.17	8"	CLAY	-3.77 W	SMH
5692	4	-	-	-	8"	CLAY	-3.79 E	
5518	5	487320.8365	1302893.903	3.49	8"	CLAY	-2.33 E	SMH
5518	5	-	-	-	8"	CLAY	-2.37W	
5640	5	487005.8741	1302898.073	3.38	8"	CLAY	-3.22 E	SMH
5640	5	-	-	-	8"	CLAY	-3.24 W	
5874	5	487632.6224	1302890.673	3.66	8"	CLAY	-1.56W	SMH
5874	5	-	-	-	8"	CLAY	-1.50 E	
4966	6	488615.7933	1303133.769	7.11	8"	CLAY	3.19 N	SMH
4186	6	488338.44'	1303134.91'	6.43'	8"	CLAY	3.18 N	SMH
4187	6	488339.7148	1303320.9	7.13	8"	CLAY	2.59 N	SMH
4187	6	-	-	-	8"	CLAY	2.62 S	
6157	6	487941.3719	1303242.509	7.93	8"	CLAY	0.89 N	SMH
6157	6	-	-	-	8"	CLAY	0.88 S	
6157	6	-	-	-	8"	CLAY	0.98 W	
4701	6	488618.2416	1303323.26	7.49	8"	CLAY	2.54 N	SMH
4701	6	-	-	-	8"	CLAY	2.59 S	
10996	6	488472.3023	1302880.593	6.29	8"	CLAY	1.02 W	SMH
10996	6	-	-	-	8"	CLAY	1.03 E	
11508	6	488206.3783	1302883.82	6.27	8"	CLAY	0.37 E	SMH
11508	6	-	-	-	8"	CLAY	0.35 W	
11686	6	487940.1581	1302887.163	5.01	8"	CLAY	-0.43 E	SMH
11686	6	-	-	-	8"	CLAY	-0.47 W	
11686	6	-	-	-	6"	CLAY	-0.45 S	
11686	6	-	-	-	8	CLAY	-0.44 N	
8352	7	487225.2823	1303689.796	3.92	8"	CLAY	-2.44 NW	SMH
8352	7	-	-	-	8"	CLAY	-2.40 SE	
8566	7	487120.9111	1303797.053	5.17	SEE NOTE 12			SMH
8948	7	486910.9886	1303530.632	4.55	SEE NOTE 12			SMH
9209	7	487699.6547	1303597.767	4.63	SEE NOTE 12			SMH
9322	7	487483.4569	1303588.106	3.97	8"	CLAY	-1.10 E	SMH
9322	7	-	-	-	8"	CLAY	-1.07 W	
9355	7	487330.8098	1303549.724	4.03	6"	CLAY	0.07 S	SMH
9355	7	-	-	-	6"	CLAY	0.13 N	
9355	7	-	-	-	6"	CLAY	0.23 SW	
21212	7	486992.02	1303858.91	3.34	8"	CLAY	-2.86 W	SMH
		-	-	-	8"	CLAY	-2.89 E	
5093	8	487978.728	1303444.714	7.97	8"	CLAY	1.82 N	SMH
5093	8	-	-	-	8"	CLAY	1.88 S	
5286	8	488029.2686	1303608.559	7.33	8"	CLAY	2.73 NW	SMH
5286	8	-	-	-	8"	CLAY	2.47 S	
2835	8	488291.095	1303883.4	6.68	SEE NOTE 12			SMH
2946	8	488255.1088	1303795.902	7.48	8"	CLAY	0.40 N	SMH
2946	8	-	-	-	8"	CLAY	0.49 S	
4188	8	488339.7275	1303506.104	7.92	8"	CLAY	1.70 N	SMH
4188	8	-	-	-	8"	CLAY	1.73 S	
4188	8	-	-	-	6"	CLAY	4.10 NW	
4333	8	488407.8027	1303590.817	8.40	8"	CLAY	1.21 SW	SMH
4333	8	-	-	-	8"	CLAY	1.32 NW	
4333	8	-	-	-	8"	CLAY	1.28 E	
4636	8	488620.4095	1303514.147	7.73	8"	CLAY	2.21 NW	SMH
4636	8	-	-	-	8"	CLAY	2.30 S	
4827	8	488565.1774	1303589.385	8.02	8"	CLAY	1.73 W	SMH
4827	8	-	-	-	8"	CLAY	1.47 SE	
7468	9	487413.0411	1304074.169	4.82	8"	CLAY	-0.65 E	SMH
					8"	CLAY	-0.63 W	
7469	9	487699.1856	1304071.394	5.46	8"	CLAY	0.52 E	SMH
					8"	CLAY	0.56W	
7880	9	487128.9051	1304078.083	5.05	SEE NOTE 12			SMH
21333	9	487110.31	1304277.39	5.42	SEE NOTE 12			
6547	10	488623.2174	1304245.487	8.90	8"	CLAY	-1.73 N	SMH
6547	10	-	-	-	8"	CLAY	-1.99 S	
6954	10	488619.9004	1303937.088	8.17	12"	IRON	-0.93 N	SMH
6954	10	-	-	-	12"	IRON	-0.90 W	
2159	10	488156.68'	1304116.26'	5.71	8"	PVC	0.55 N	SMH
2160	10	488167.27'	1304216.39'	5.90	8"	PVC	0.18 N	SMH
2160	10	-	-	-	8"	PVC	0.27 S	
2578	10	487987.1075	1304068.353	5.87	6"	CLAY	1.81 W	SMH
2098	10	488198.89	1304380.78	6.31	8"	PVC	-0.88 W	SMH
2098	10	-	-	-	8"	PVC	-0.33 S	
20358	11	487387.29	1304749.48	3.50	18"	CLAY	-5.91 W	SMH
	11	-	-	-	18"	CLAY	-5.80 E	
20421	11	487163.98	1304808.03	4.93	SEE NOTE 12			SMH
20422	11	487177.3	1304758.22	5.12	SEE NOTE 12			SMH
21085	11	487173.16	1304569.56	4.47	SEE NOTE 12			SMH
13304	11	487635.7088	1304713.099	3.93	18"	IRON	-5.37 E	SMH
13304	11	-	-	-	18"	IRON	-5.49 W	
1167	12	488717.934	1304945.805	9.09	18"	IRON	-7.05 NE	SMH
1167	12	-	-	-	18"	IRON	-7.14 SW	
1448	12	488629.4036	1304859.945	8.59	8"	CLAY	-3.98 S	SMH
1448	12	-	-	-	18"	IRON	-6.87 NE	
1448	12	-	-	-	18"	IRON	-6.97 SW	
1550	12	488513.8779	1304747.281	7.43	18"	IRON	-6.67 NE	SMH
1550	12	-	-	-	18"	IRON	-6.62 W	
6501	12	488625.9563	1304555.133	9.41	8"	CLAY	-2.68 N	SMH
6501	12	-	-	-	8"	CLAY	-2.84 S	
7375	12	488249.17	1304743.76	5.94	18"	CLAY	-6.38 W	SMH
7375	12	-	-	-	18"	CLAY	-6.42 E	
13339	12	487983.8445	1304741.258	5.78	18"	CLAY	-5.85 E	SMH
13339	12	-	-	-	18"	CLAY	-6.01 W	

Survey Done By:

NSI Northwest Surveying Inc.
Certificate of Authorization Number LB0005122
8409 Sunstate Street, Tampa, Florida 33634
813-889-9236 Fax 813-886-3315

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_Cover_Notes_Key_Survey.dwg Feb 10, 2020 - 1:07pm

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

SURVEY SHEET

City of Tampa Florida Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

MILL & OVERLAY SHEET 1

City of Tampa Florida
Water Department

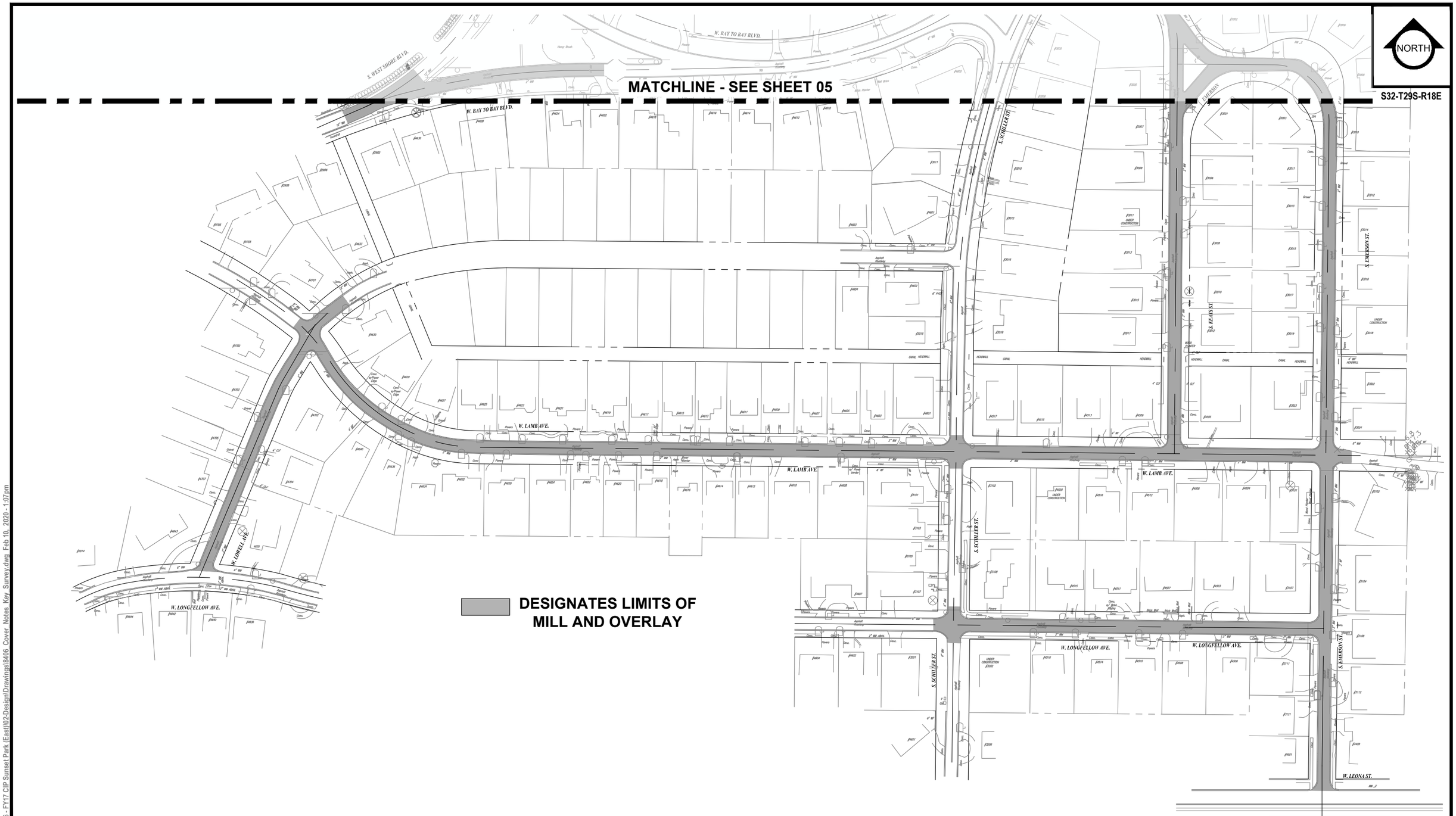
100% PLANS

WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 05 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406 Cover Notes Key Survey.dwg, Feb 10, 2020 - 1:07pm



K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_Cover_Notes_Key_Survey.dwg Feb 10, 2020 - 1:07pm

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

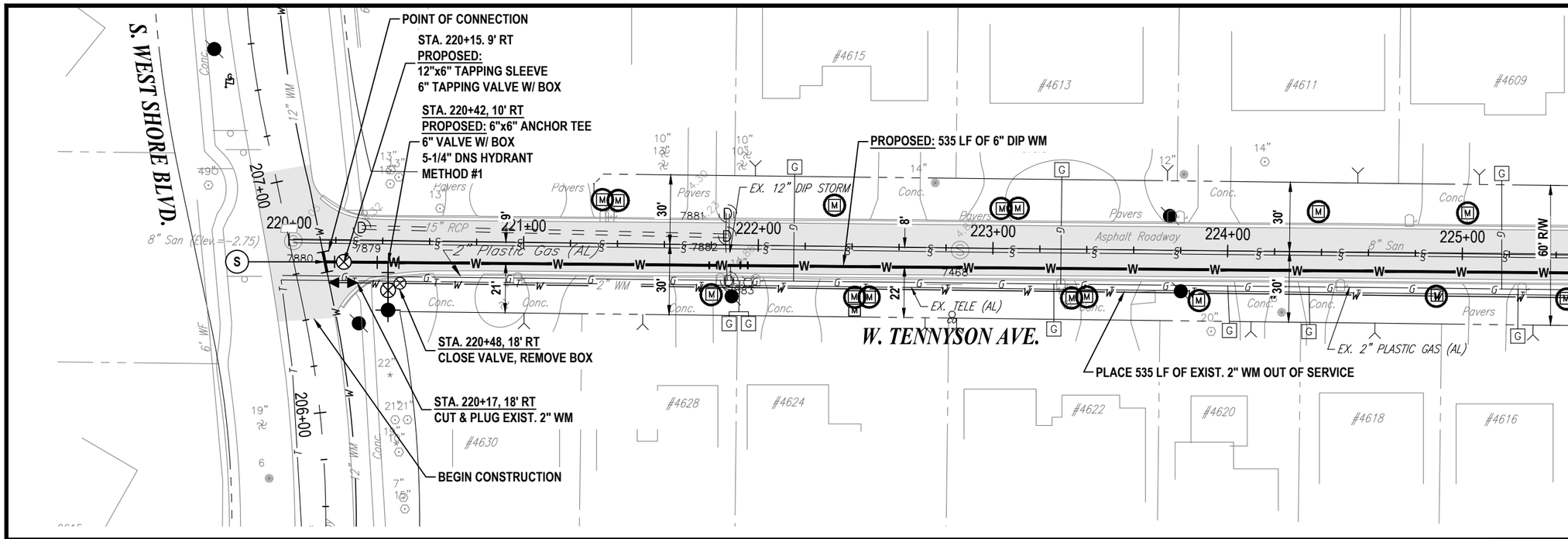
DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

MILL & OVERLAY SHEET 2

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 06 OF 33



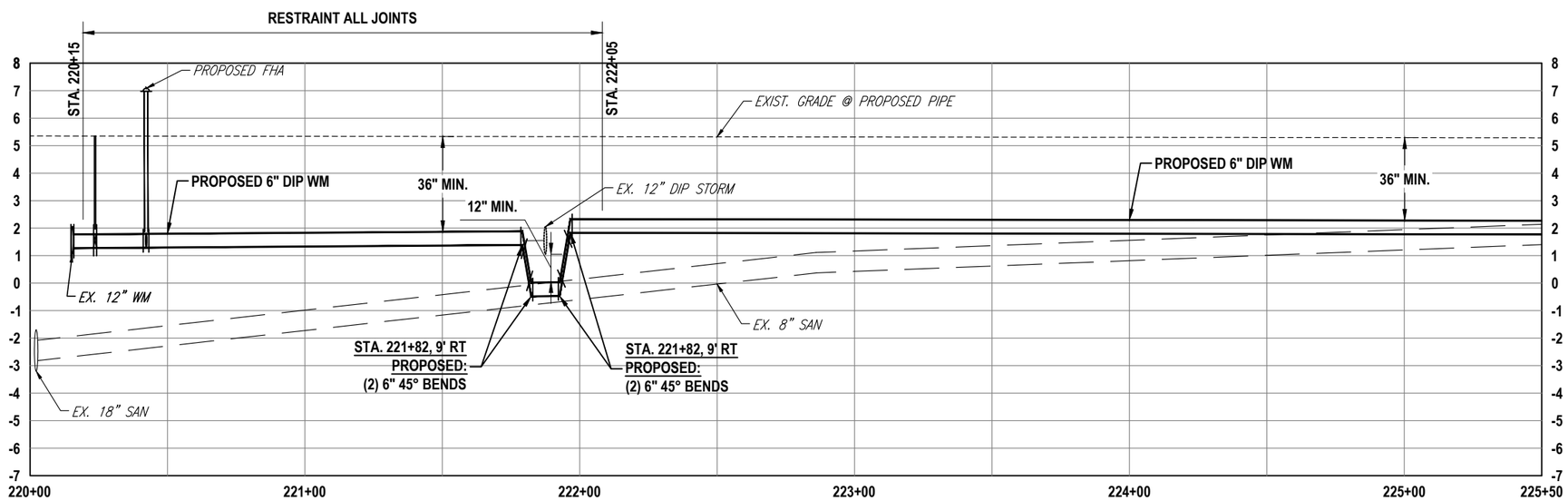
STA. 225+50
MATCHLINE - SEE SHEET 08

NORTH

S32-T29S-R18E

0 25' 50'
SCALE - HORIZONTAL

0 5' 10'
SCALE - VERTICAL



RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

PLAN AND PROFILE SHEET
W. TENNYSON AVE. (1)

City of Tampa Florida
Water Department

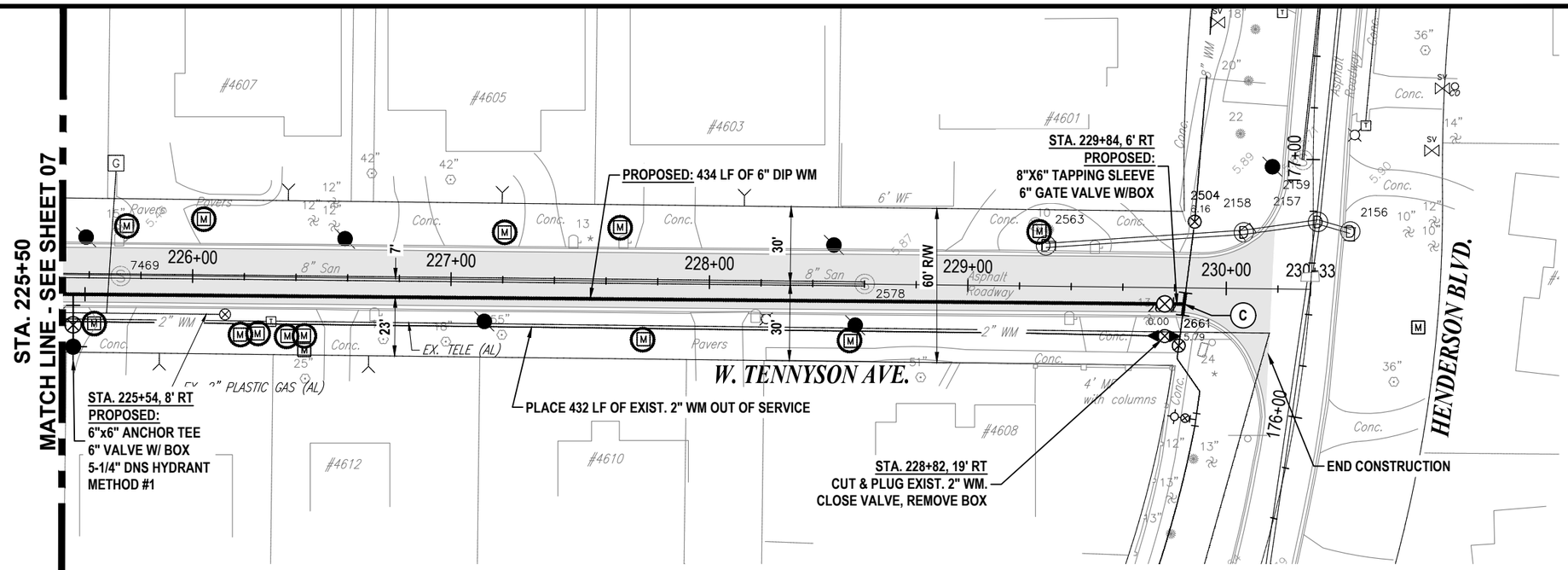
100% PLANS

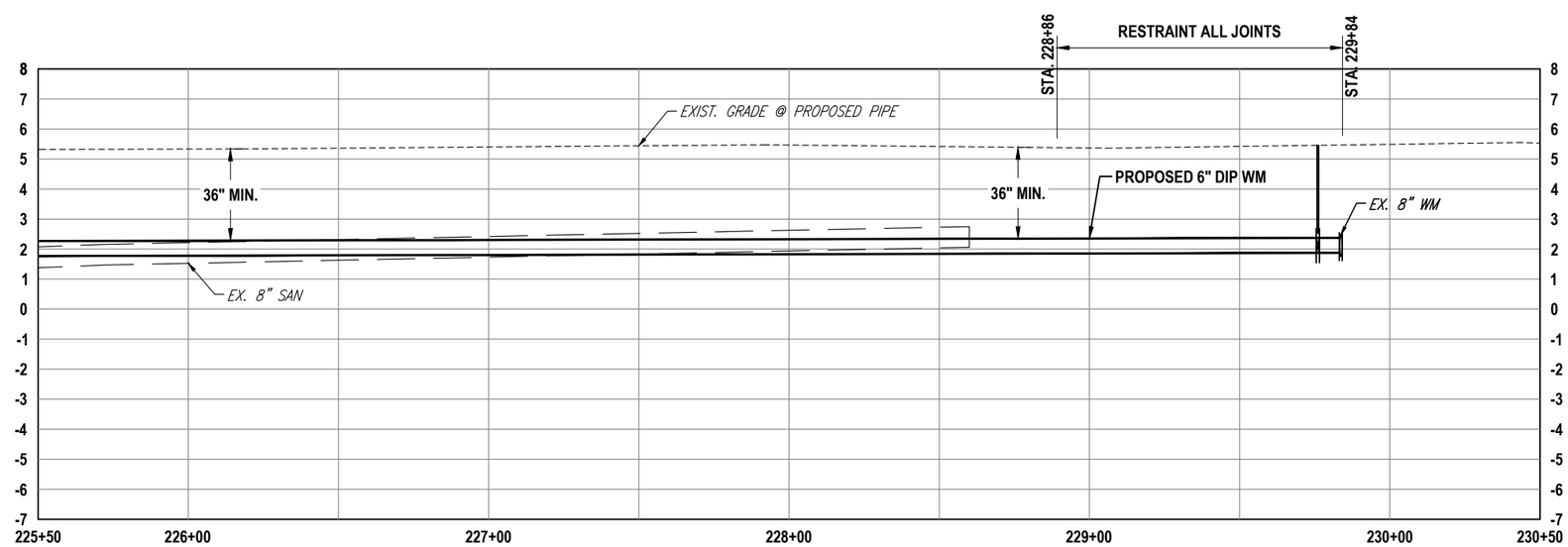
WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 07 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_TENNYSON & SUNSET.dwg, Feb 10, 2020 - 1:07pm





RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

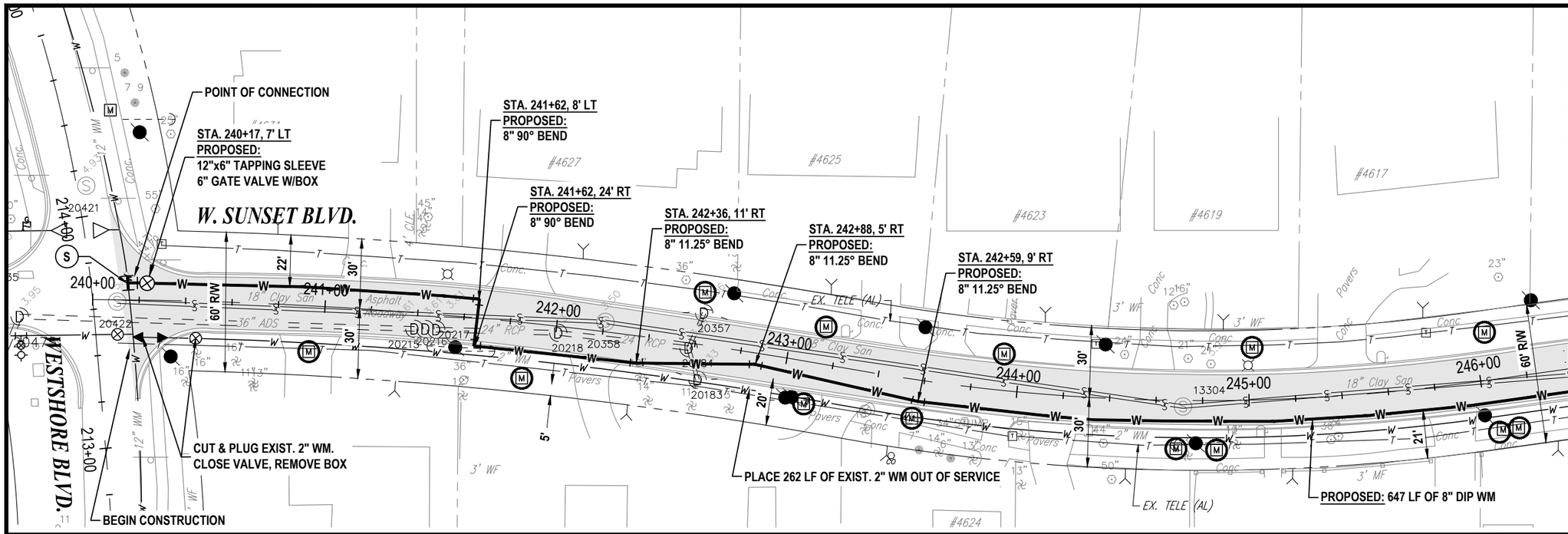
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

PLAN AND PROFILE SHEET
W. TENNYSON AVE. (2)

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 08 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_TENNYSON & SUNSET.dwg, Feb 10, 2020 - 1:07pm



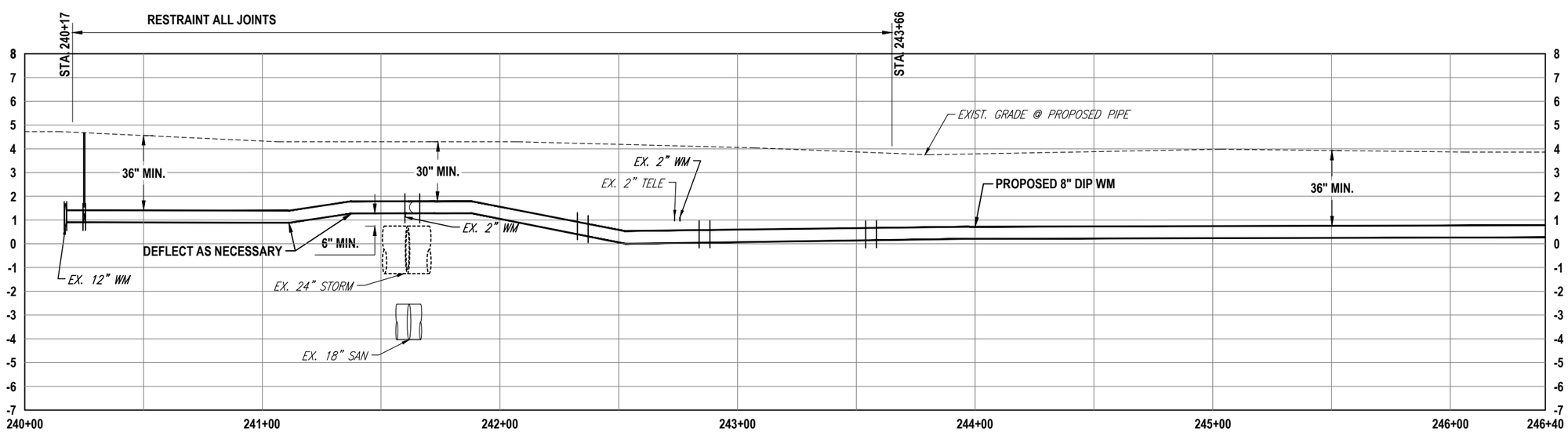
STA. 246+40
MATCH LINE - SEE SHEET 10

NORTH

S32-T29S-R18E

0 25' 50'
SCALE - HORIZONTAL

0 2.5' 5'
SCALE - VERTICAL



RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

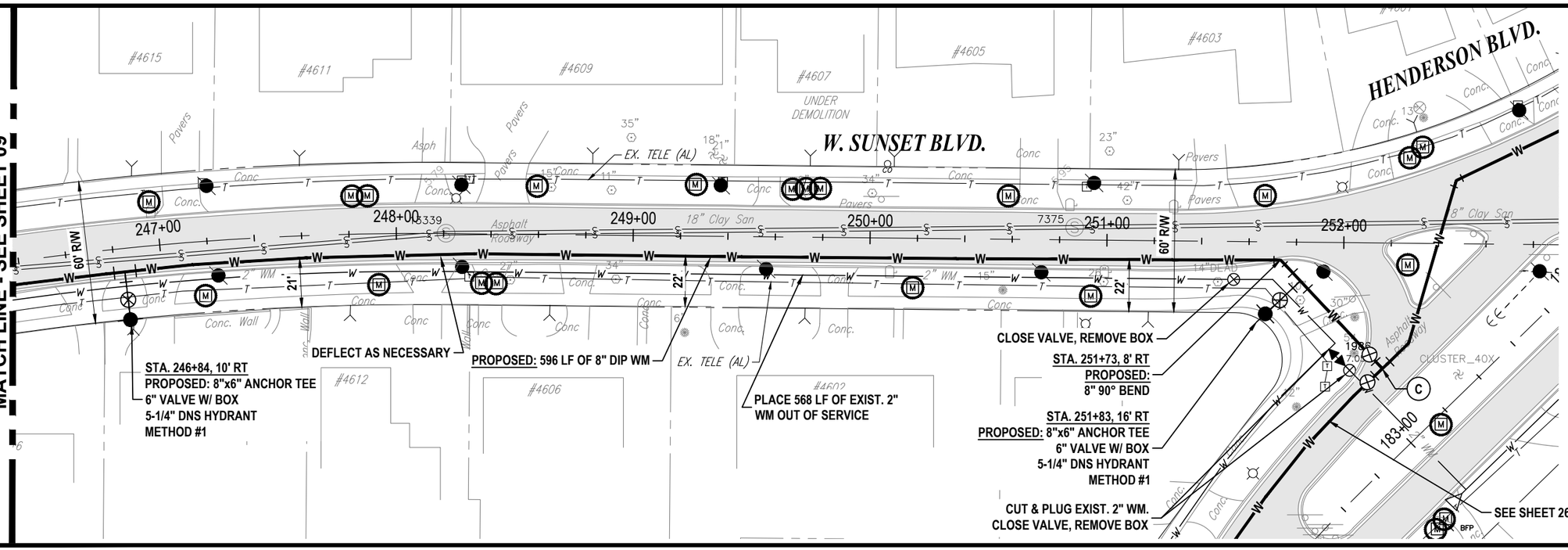
PLAN AND PROFILE SHEET
W. SUNSET BLVD. (1)

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 09 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_TENNYSON & SUNSET.dwg, Feb 10, 2020 - 1:07pm

STA. 246+40
MATCH LINE - SEE SHEET 09

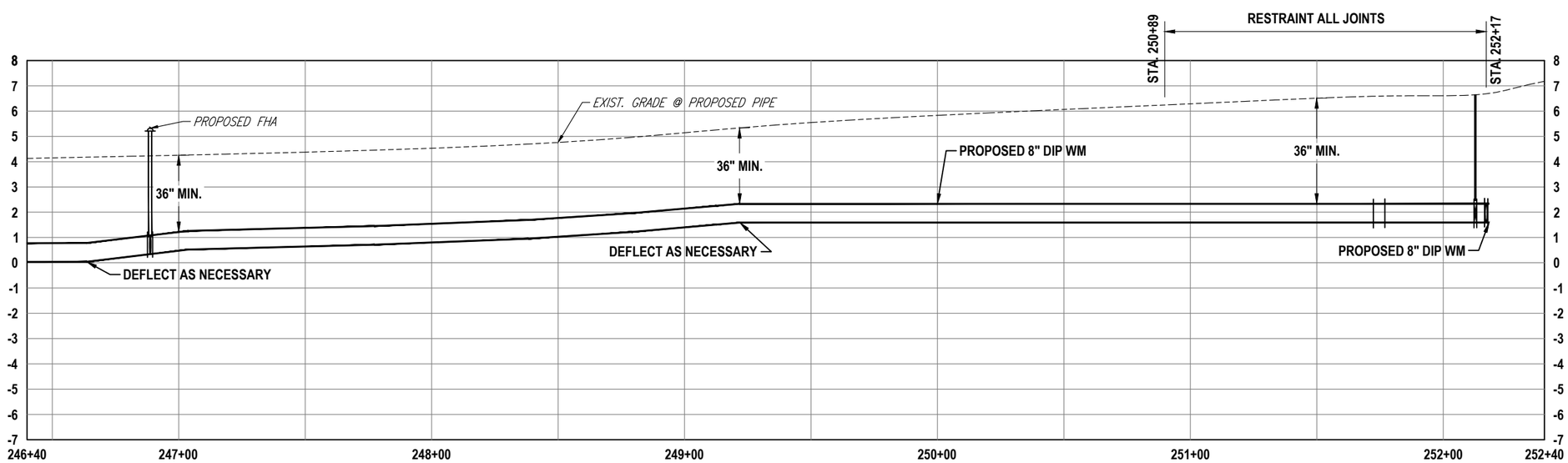


NORTH

S32-T29S-R18E

0 25' 50'
SCALE - HORIZONTAL

0 2.5' 5'
SCALE - VERTICAL



RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

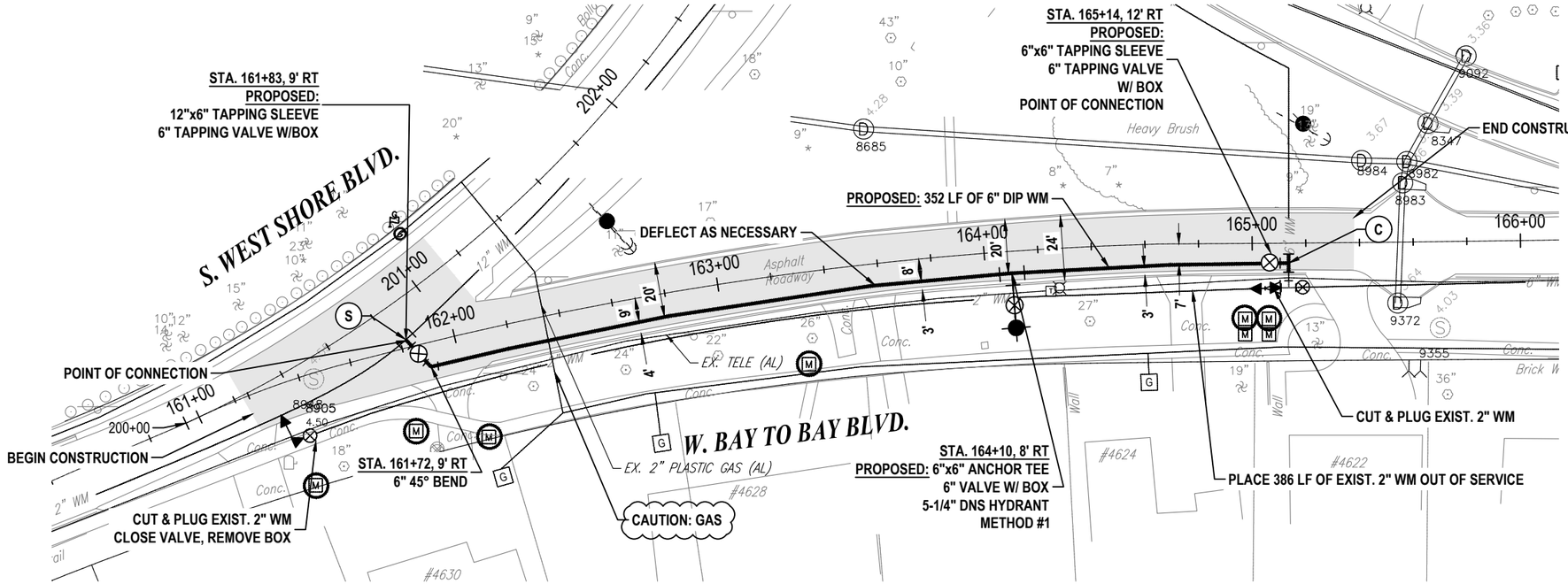
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

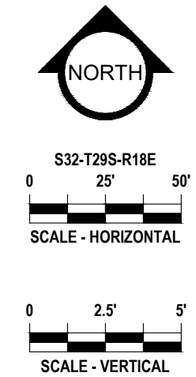
PLAN AND PROFILE SHEET
W. SUNSET BLVD. (2)

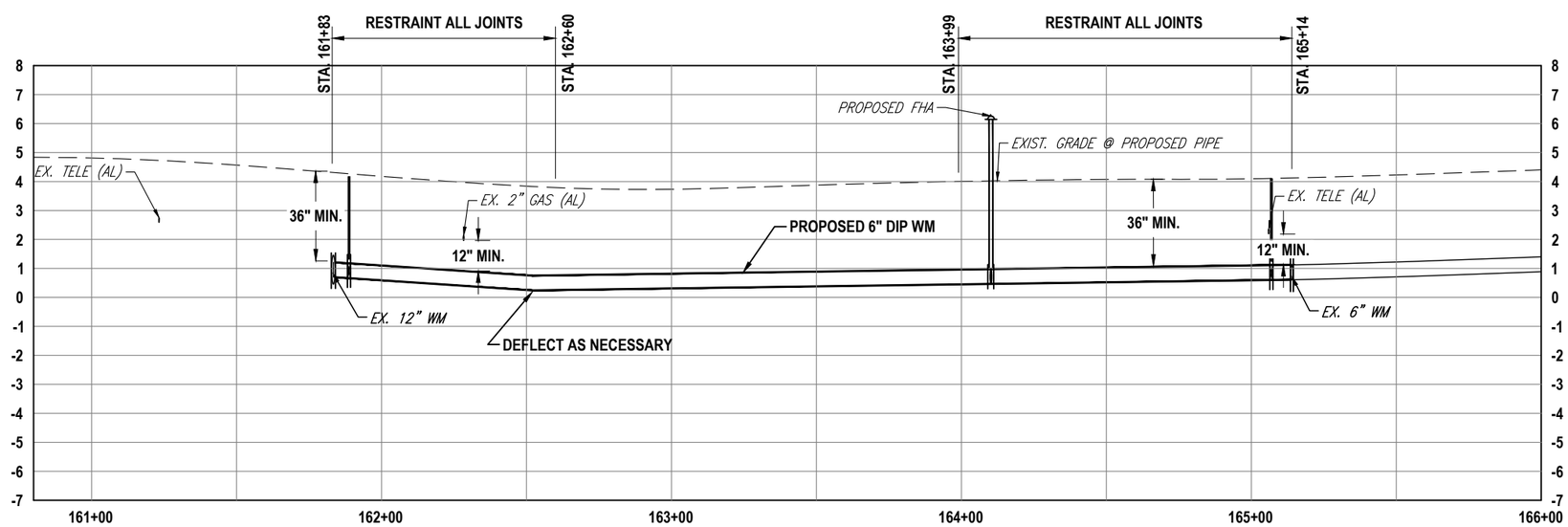
City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 10 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_TENNYSON & SUNSET.dwg, Feb 10, 2020 - 1:08pm







RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

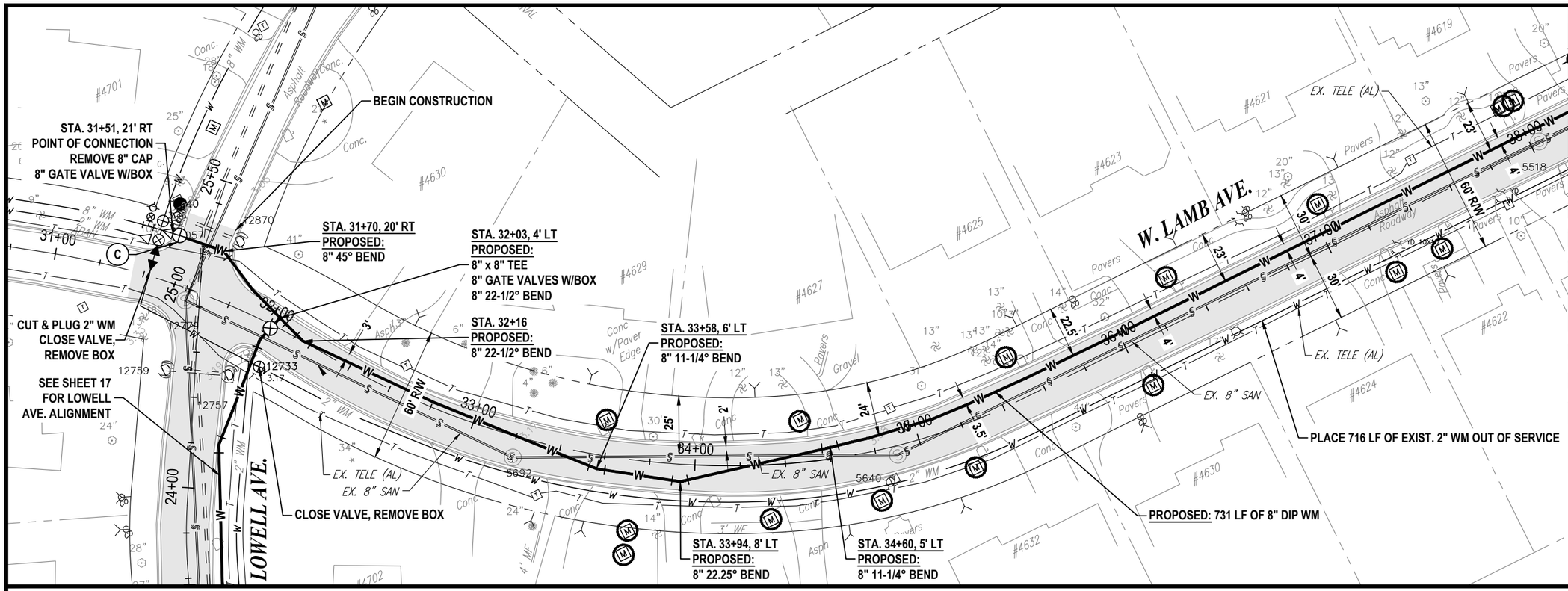
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

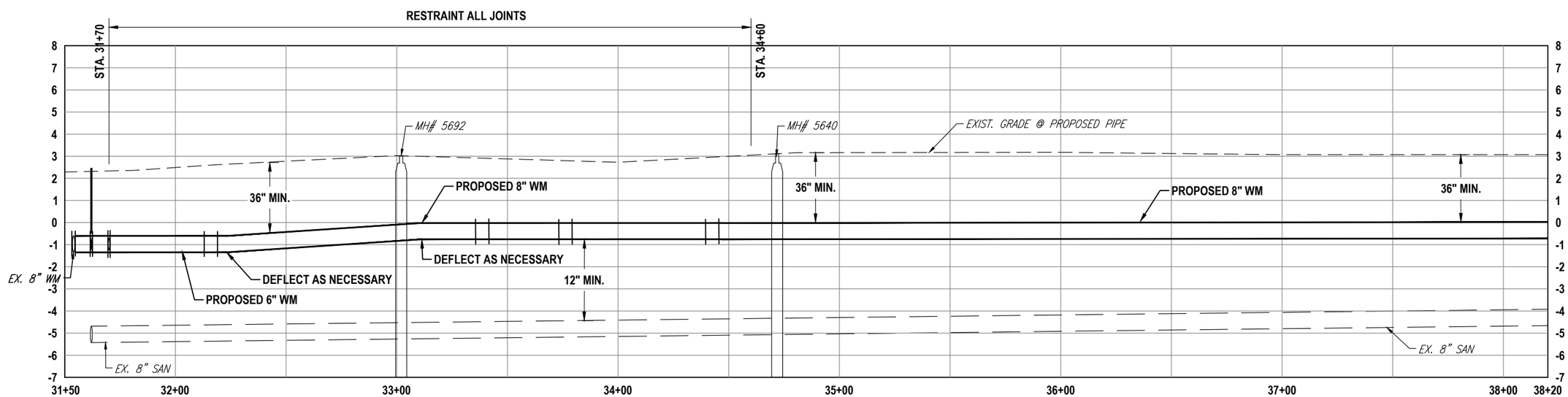
PLAN AND PROFILE SHEET
W. BAY TO BAY BLVD.

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 11 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406 BAY TO BAY & LAMB.dwg Feb 10, 2020 - 1:08pm





RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

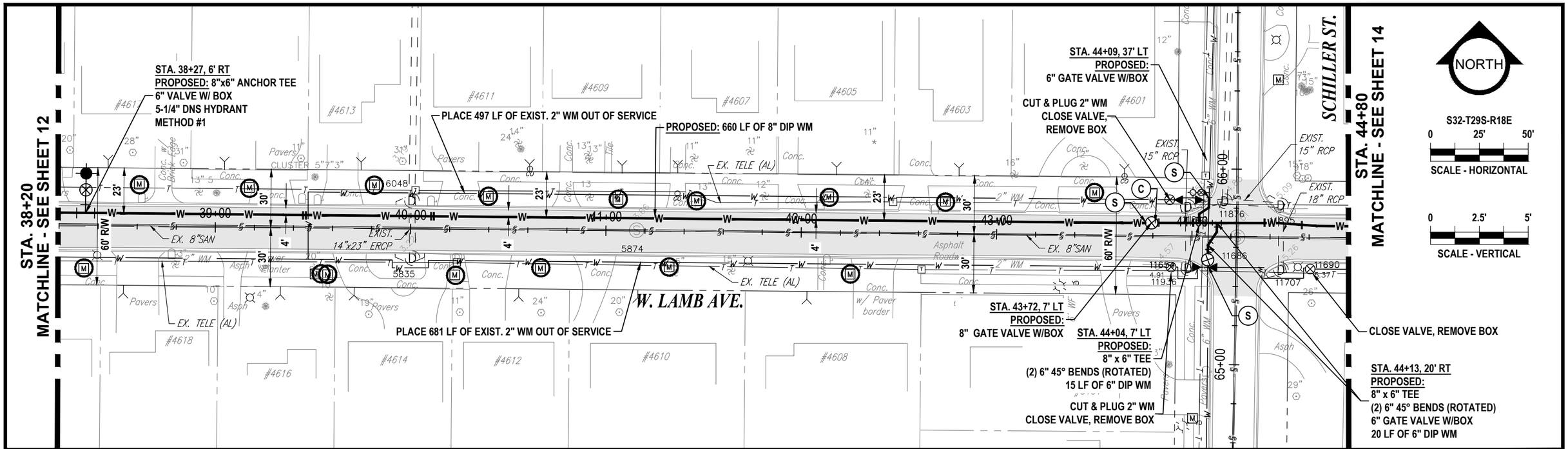
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

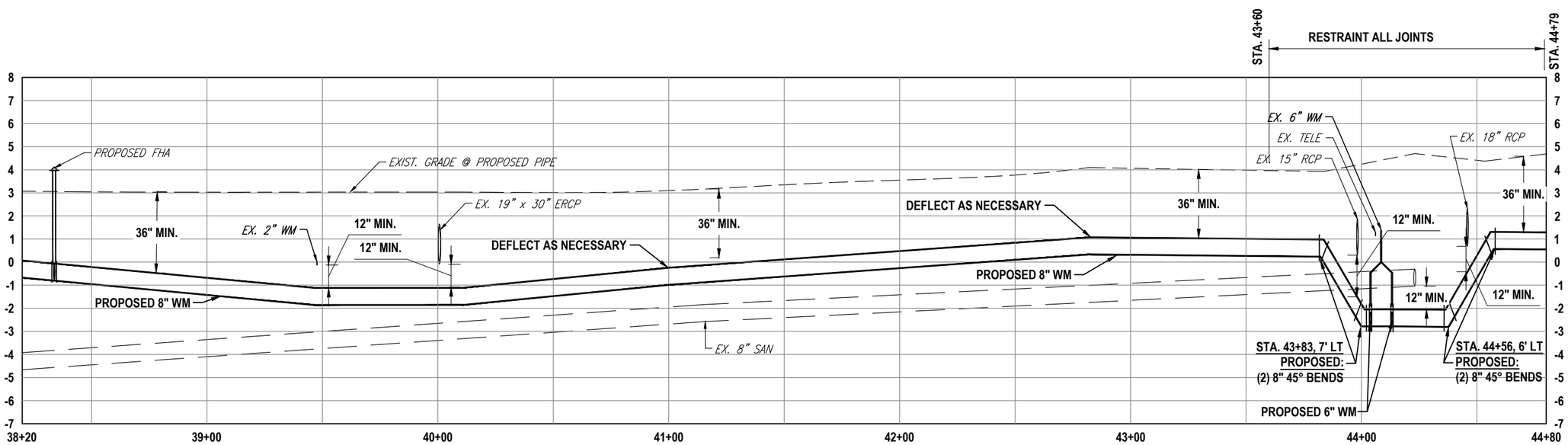
PLAN AND PROFILE SHEET
W. LAMB AVE. (1)

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 12 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_BAY TO BAY & LAMB.dwg, Feb 10, 2020 - 1:08pm





RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

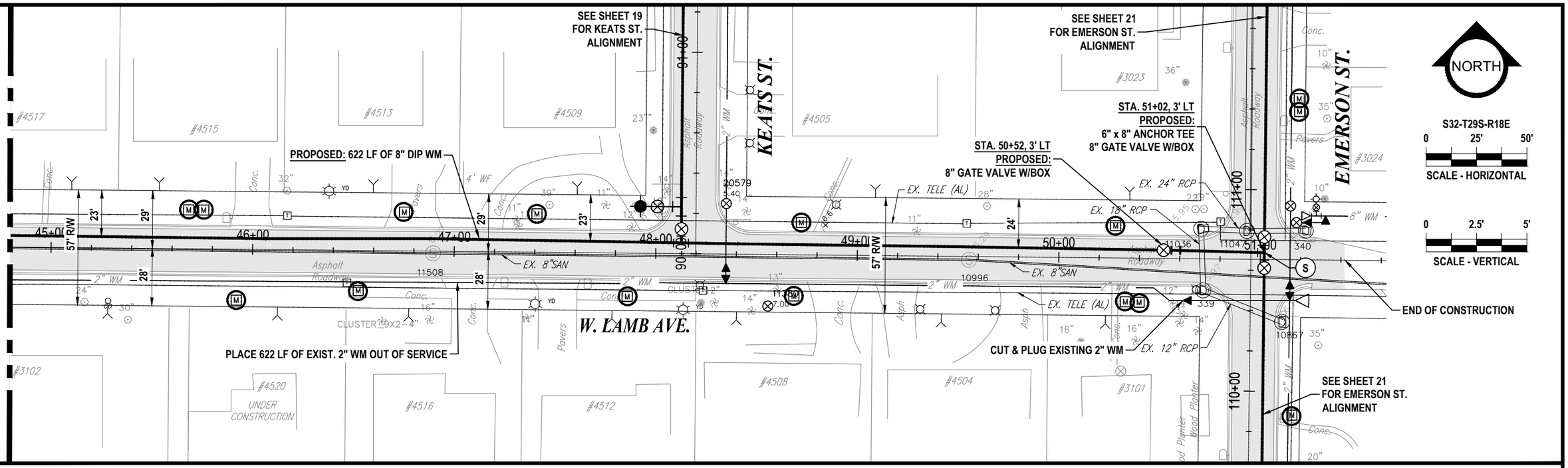
PLAN AND PROFILE SHEET
W. LAMB AVE. (2)

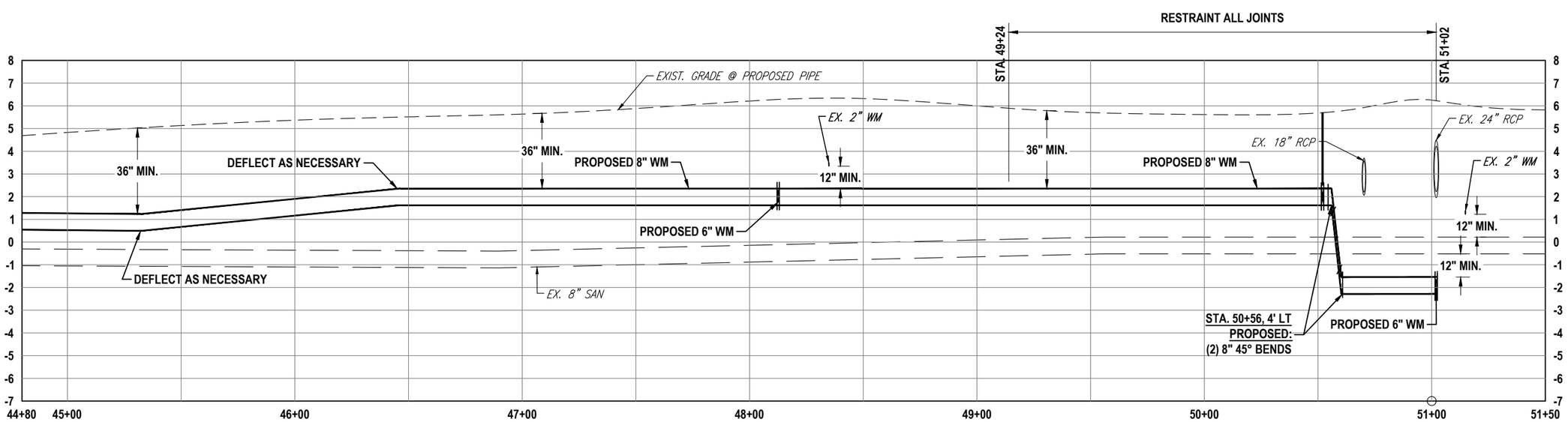
City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 13 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406 BAY TO BAY & LAMB.dwg Feb 10, 2020 - 1:08pm

STA. 44+80
MATCHLINE - SEE SHEET 13





RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

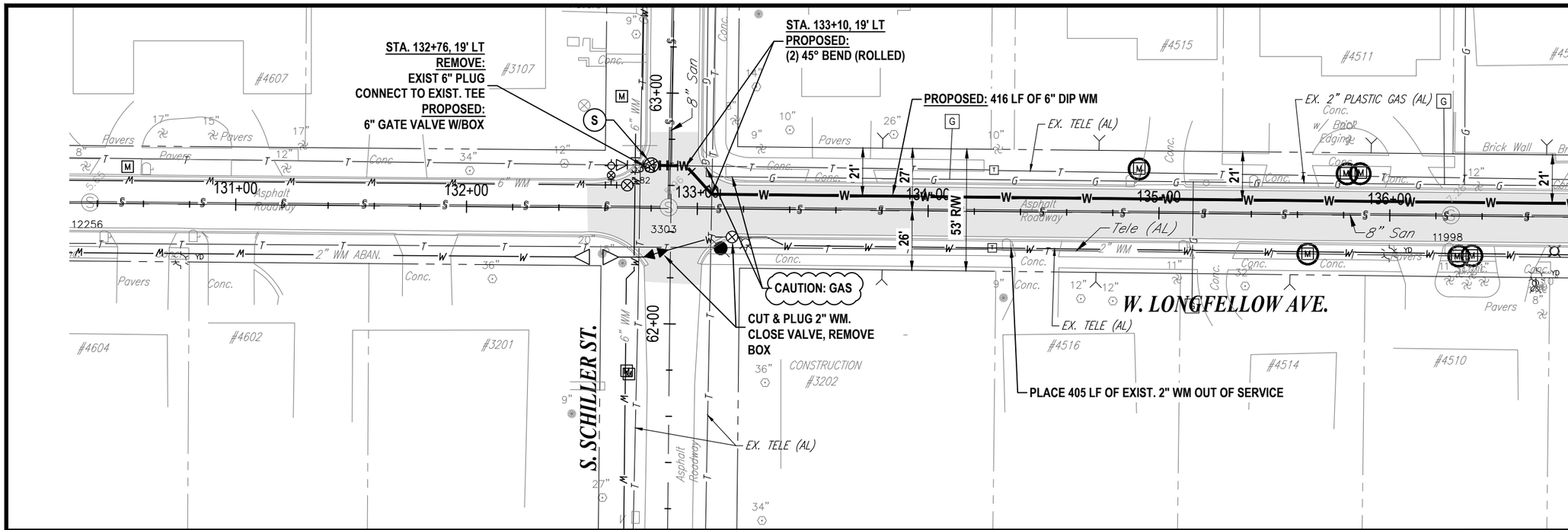
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

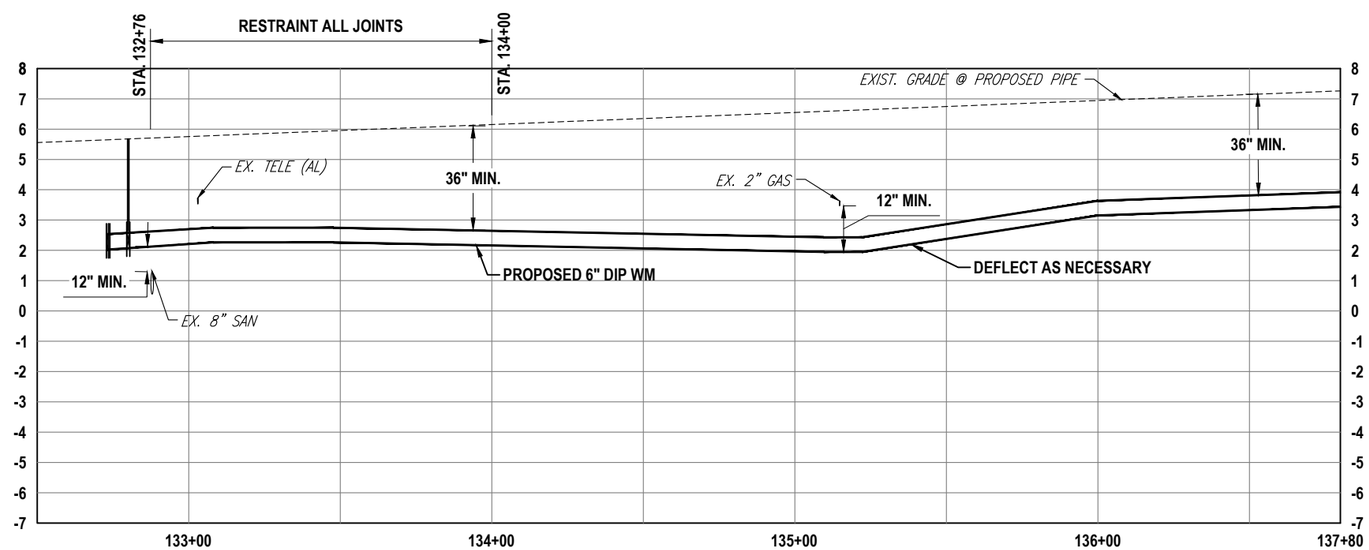
PLAN AND PROFILE SHEET
W. LAMB AVE. (3)

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 14 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_BAY TO BAY & LAMB.dwg Feb 10, 2020 - 1:08pm





RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

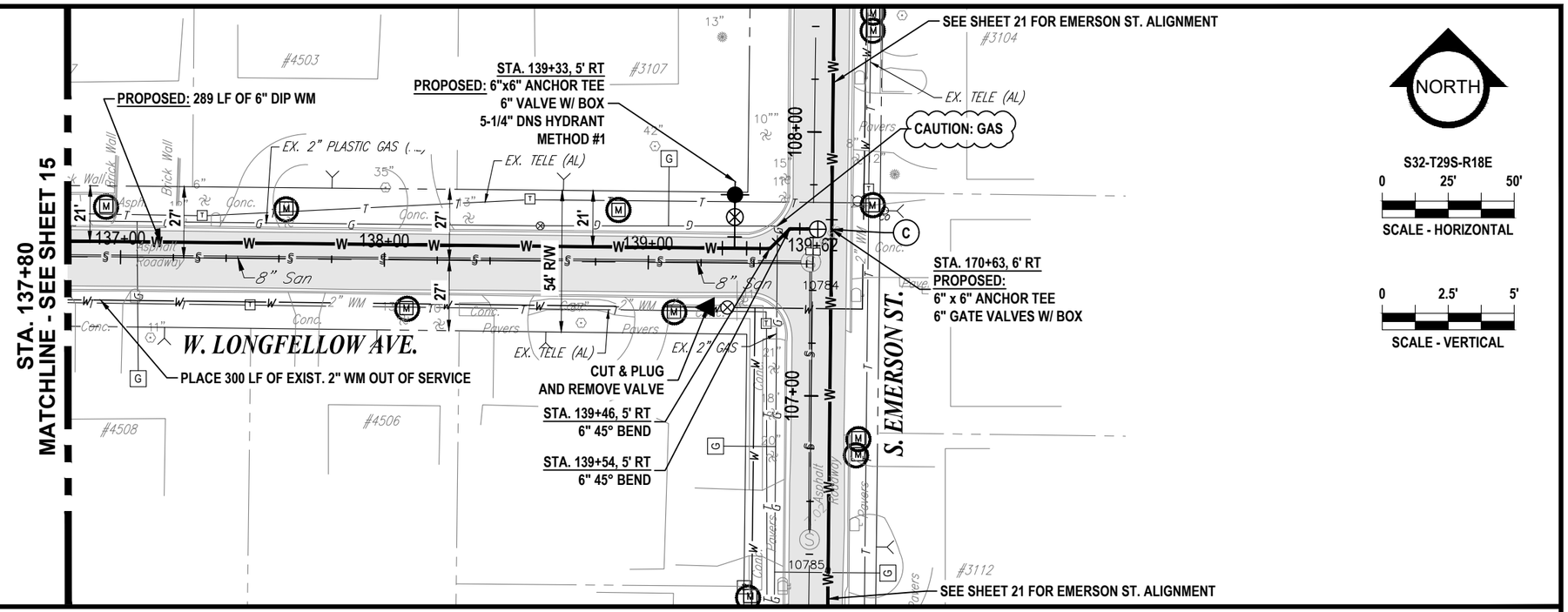
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

PLAN AND PROFILE SHEET
LONGFELLOW AVE. (1)

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 15 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_LONGFELLOW & LOWELL.dwg Feb 10, 2020 - 1:09pm



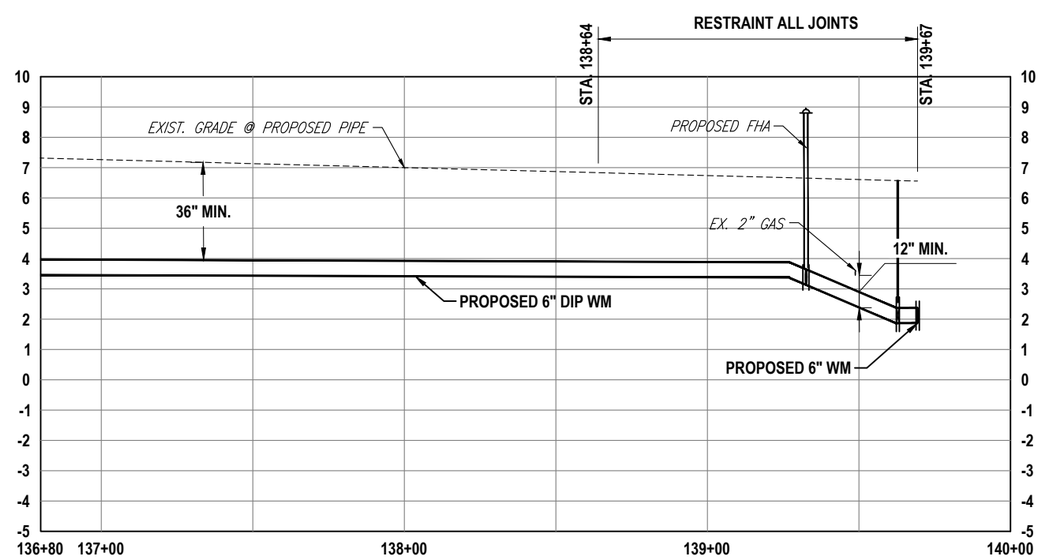
S32-T29S-R18E

0 25' 50'

SCALE - HORIZONTAL

0 2.5' 5'

SCALE - VERTICAL



RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

PLAN AND PROFILE SHEET
LONGFELLOW AVE. (2)

City of Tampa Florida
Water Department

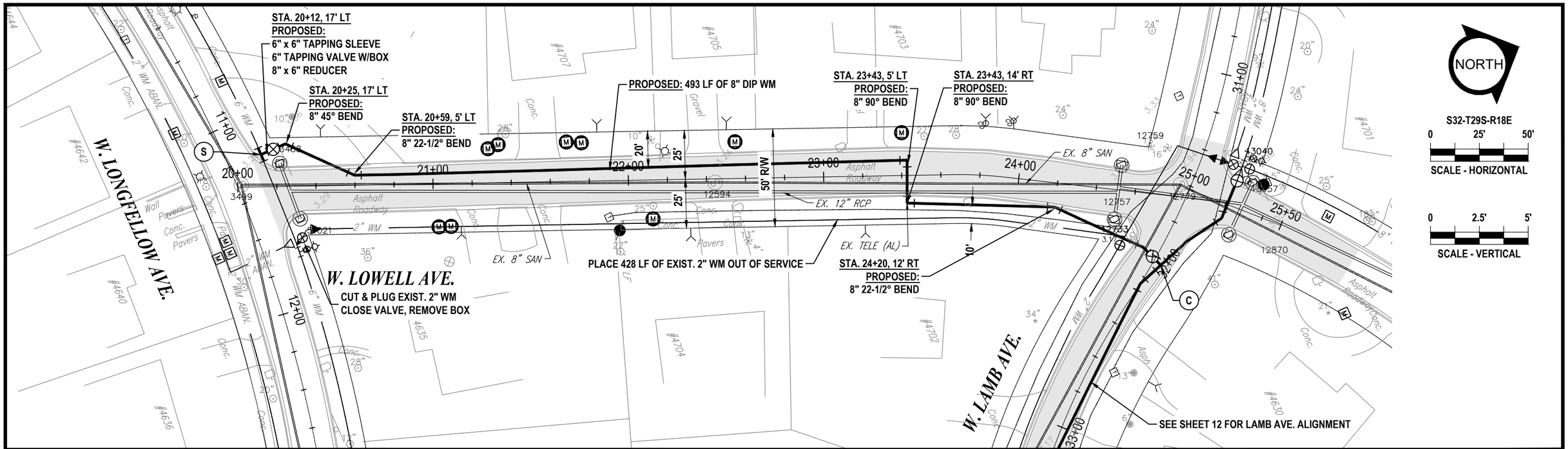
100% PLANS

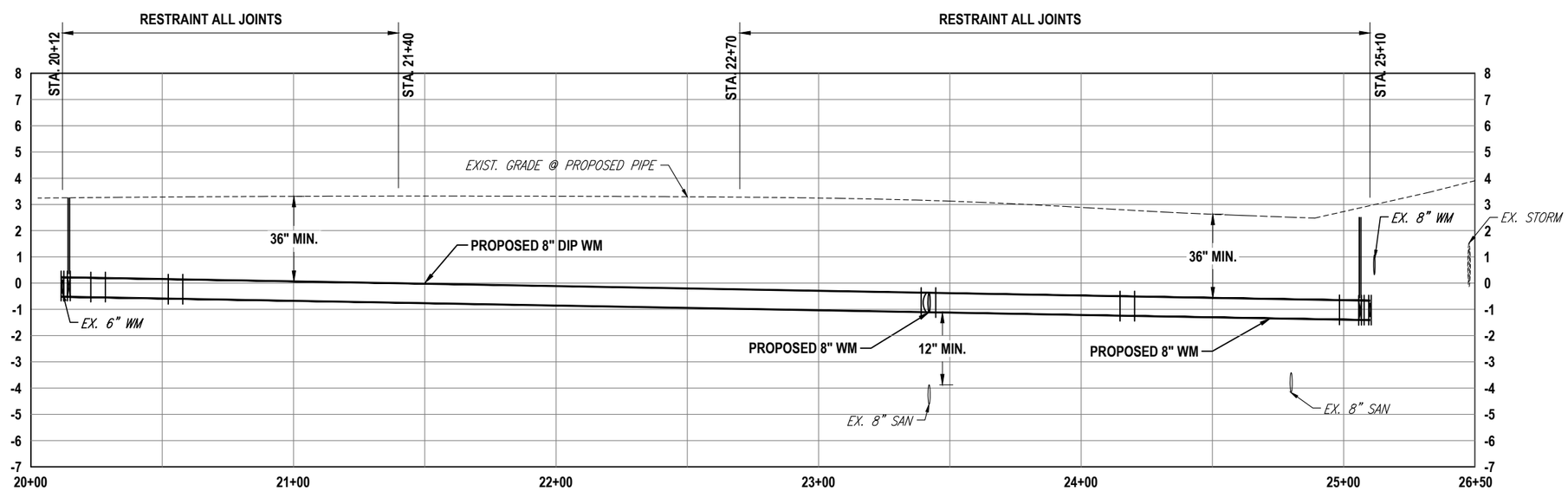
WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 16 OF 33

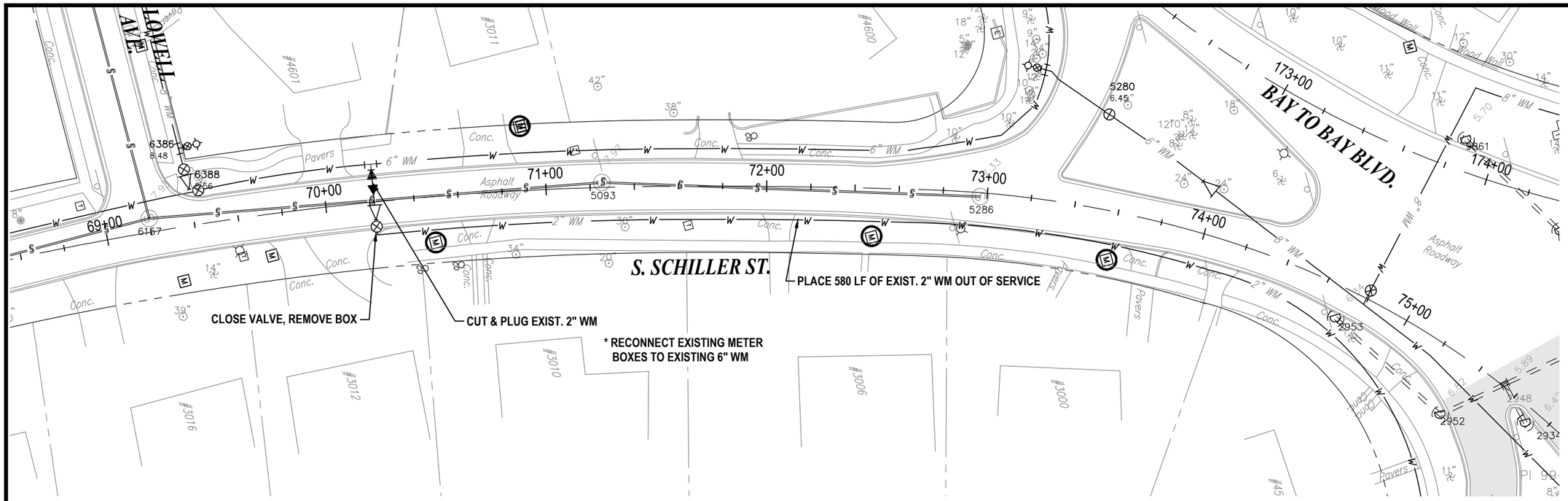
K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_LONGFELLOW & LOWELL.dwg Feb 10, 2020 - 1:09pm





RORY A. JONES, P.E. CITY OF TAMPA WATER DEPT. 306 E. JACKSON ST., 5E TAMPA, FLA. 33602 P.E. #79453	REV NO.	DATE	DESCRIPTION	BY	DESIGNED NPP DRAWN SV CHECKED RAJ DATE 04/18/2019	SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST PLAN AND PROFILE SHEET LOWELL AVE.	City of Tampa Florida Water Department	100% PLANS WORK ORDER NO. 8406 RECORD DRAWING NO. ATLAS PAGE K-08 SHEET 17 OF 33
	.	.	.	.				
	.	.	.	.				
	.	.	.	.				
	.	.	.	.				

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_LONGFELLOW & LOWELL.dwg Feb 10, 2020 - 1:09pm



NORTH

S32-T29S-R18E

0 25' 50'

SCALE - HORIZONTAL

0 2.5' 5'

SCALE - VERTICAL

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_SCHILLER & KEATS.dwg Feb 10, 2020 - 1:09pm

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

PLAN AND PROFILE SHEET SCHILLER ST.

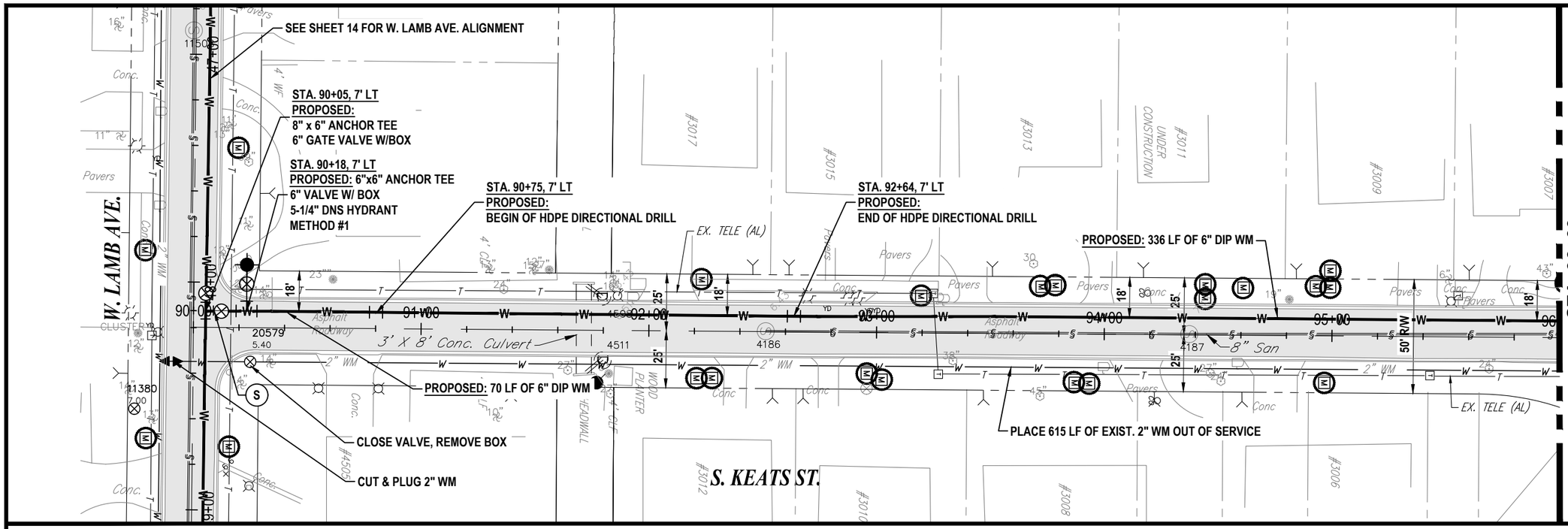
City of Tampa Florida
Water Department

100% PLANS

WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 18 OF 33



STA. 96+00
MATCHLINE - SEE SHEET 20

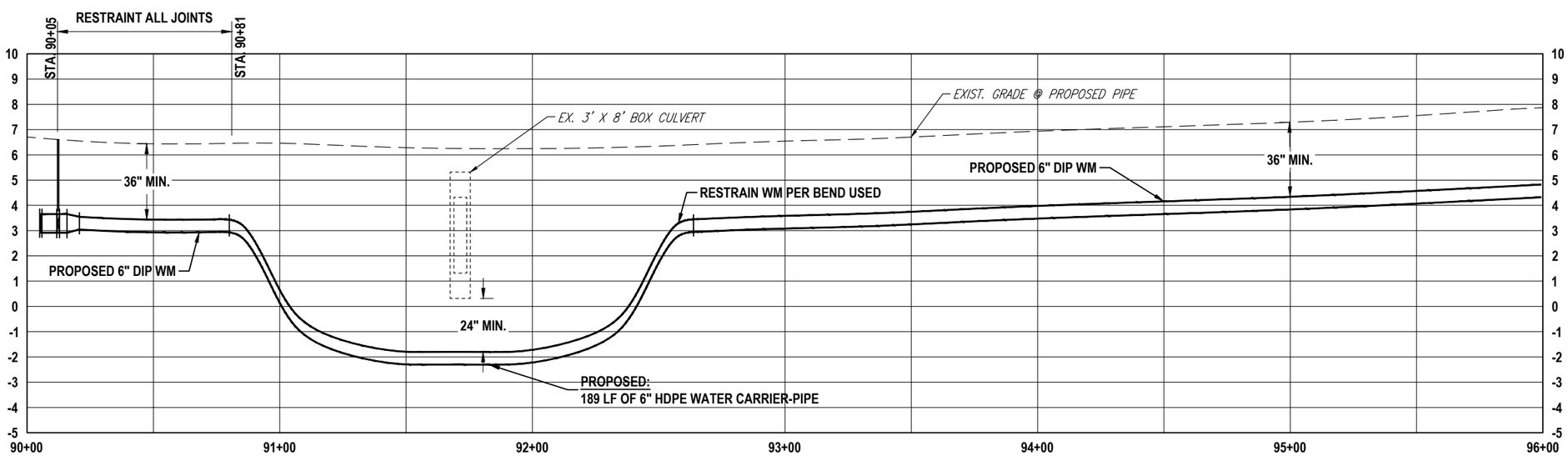
NORTH

S32-T29S-R18E

0 25' 50'
SCALE - HORIZONTAL

0 2.5' 5'
SCALE - VERTICAL

NOTE:
MANUFACTURED STAINLESS STEEL IS TO BE INSERTED IN HDPE FOR CONNECTION.



RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

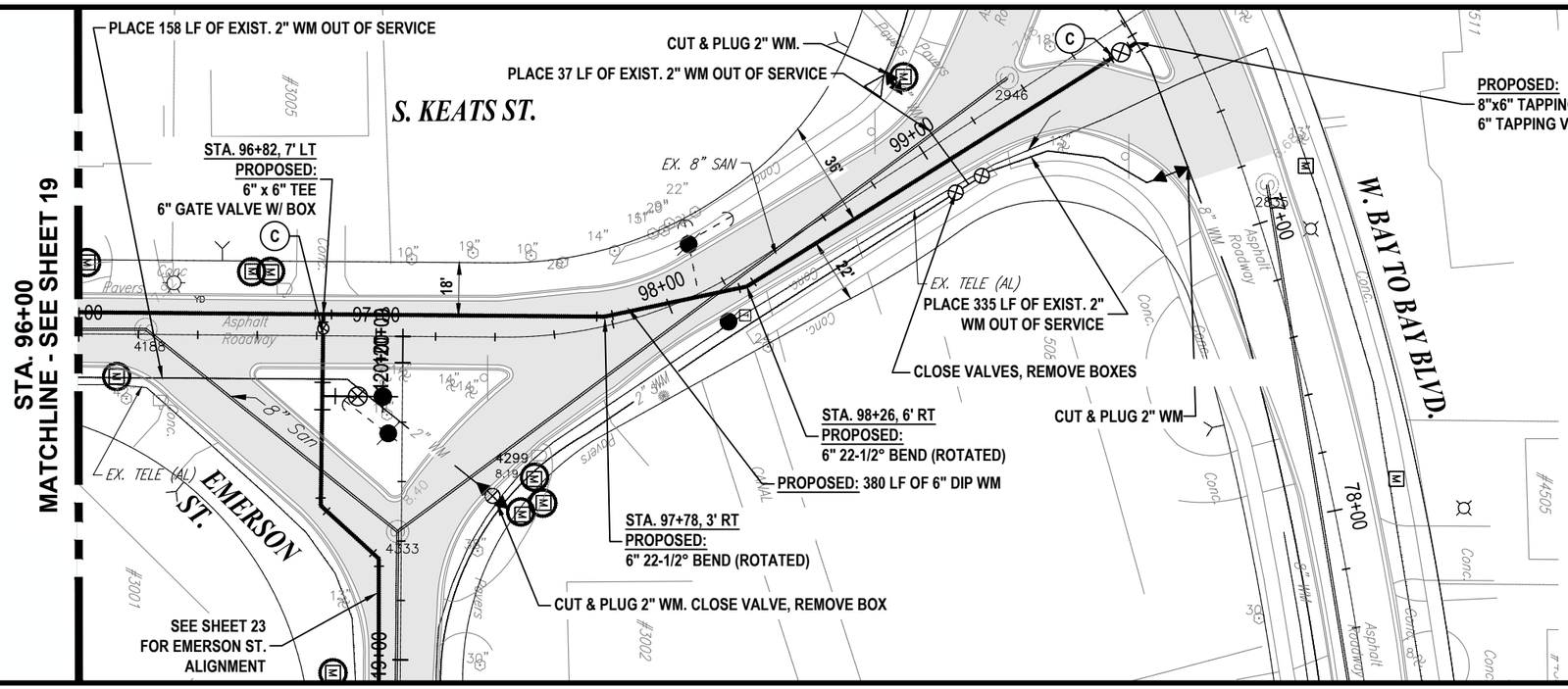
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

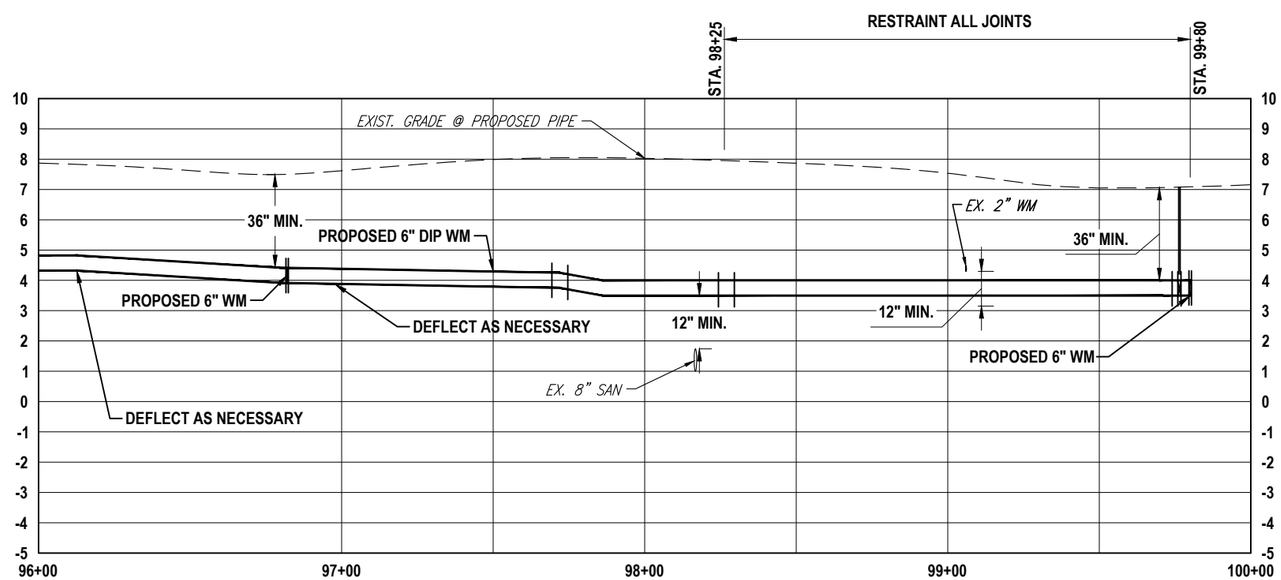
PLAN AND PROFILE SHEET KEATS ST. (1)

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 19 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_SCHILLER & KEATS.dwg Feb 10, 2020 - 1:09pm





RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

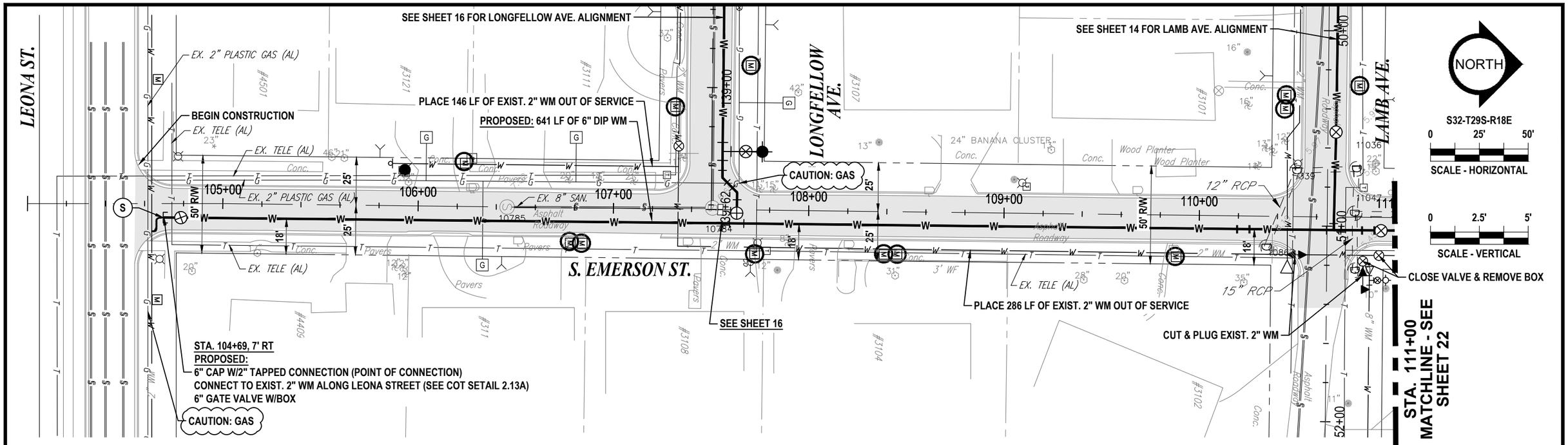
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

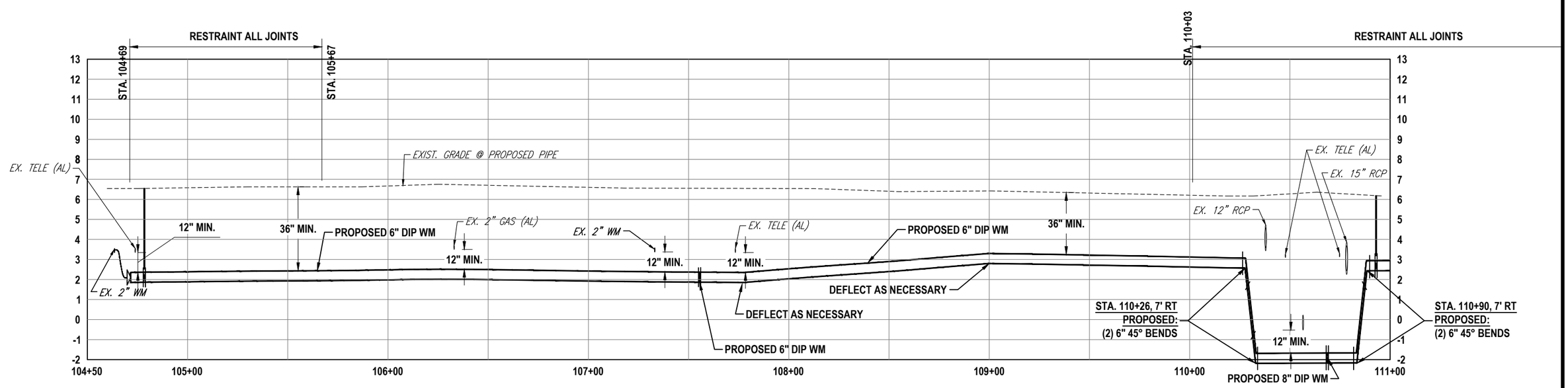
PLAN AND PROFILE SHEET KEATS ST. (2)

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 20 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406 SCHILLER & KEATS.dwg Feb 10, 2020 - 1:09pm





RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

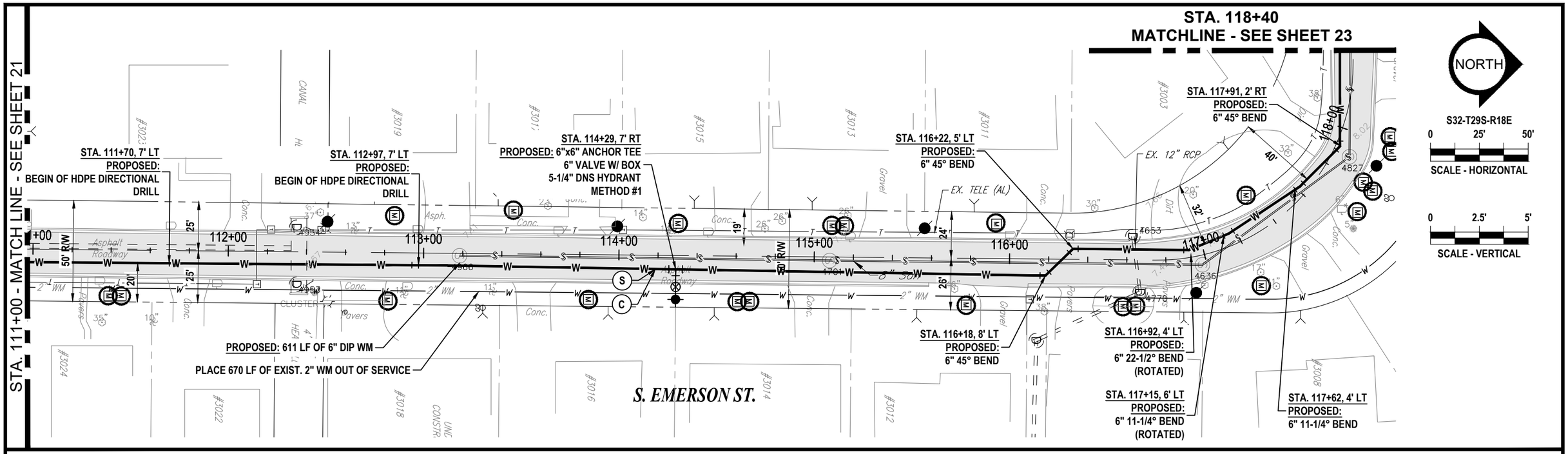
PLAN AND PROFILE SHEET
S. EMERSON ST. (1)

City of Tampa Florida
Water Department

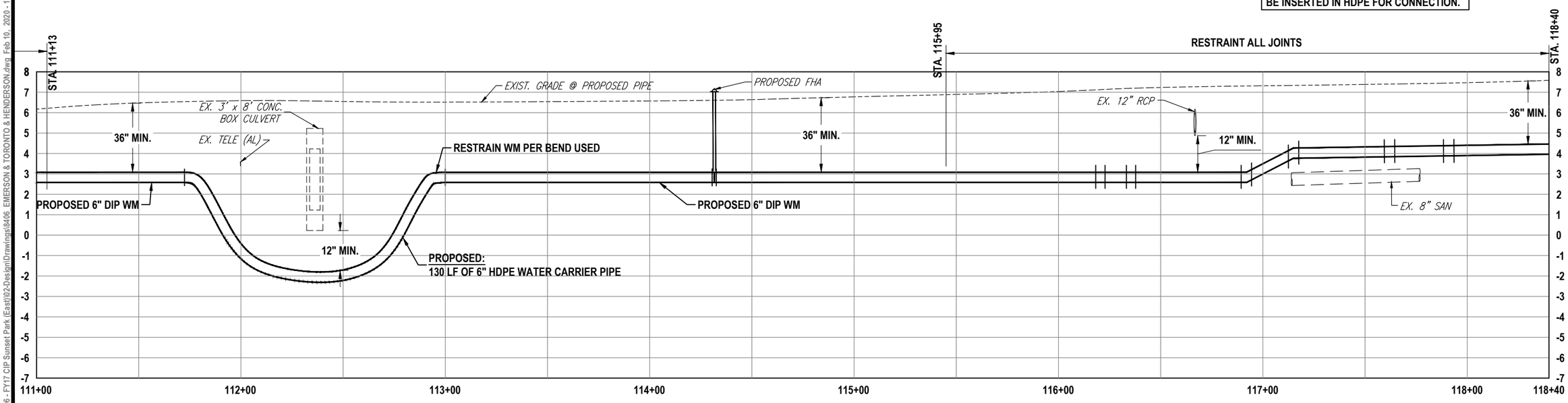
100% PLANS

WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 21 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_EMERSON & TORONTO & HENDERSON.dwg Feb 10, 2020 - 1:10pm



NOTE:
MANUFACTURED STAINLESS STEEL IS TO BE INSERTED IN HDPE FOR CONNECTION.



RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

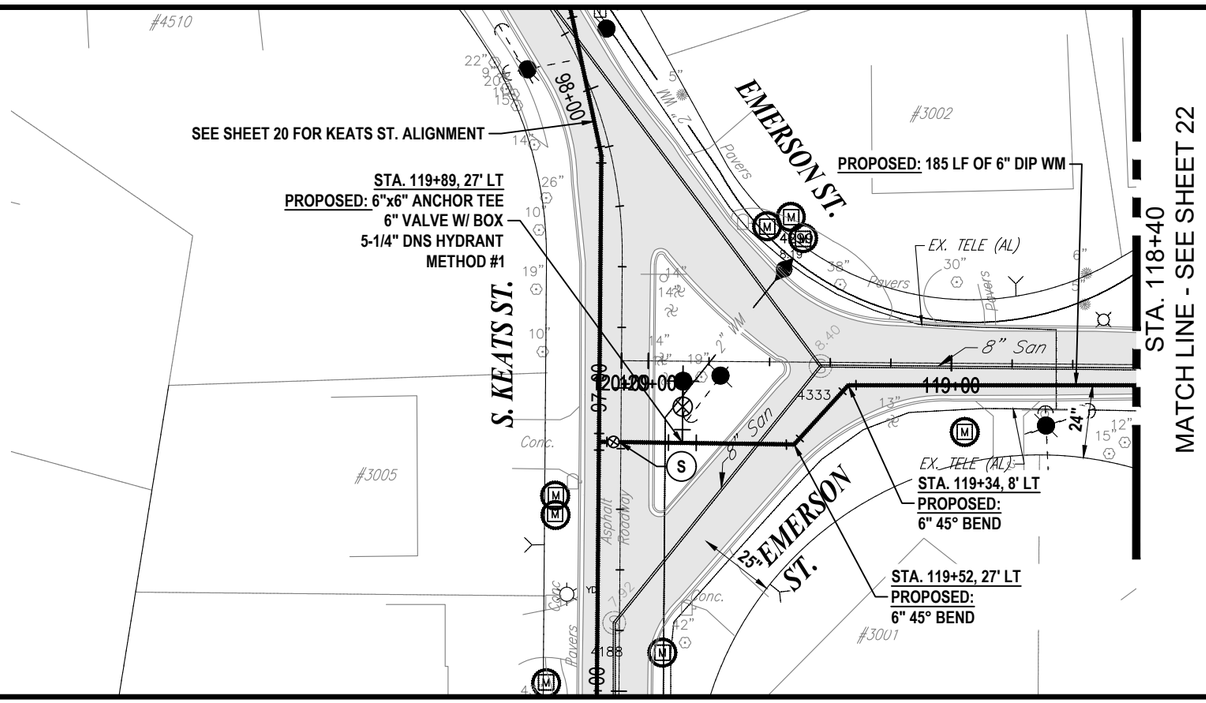
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

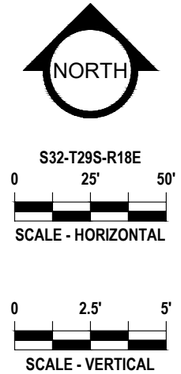
PLAN AND PROFILE SHEET
S. EMERSON ST. (2)

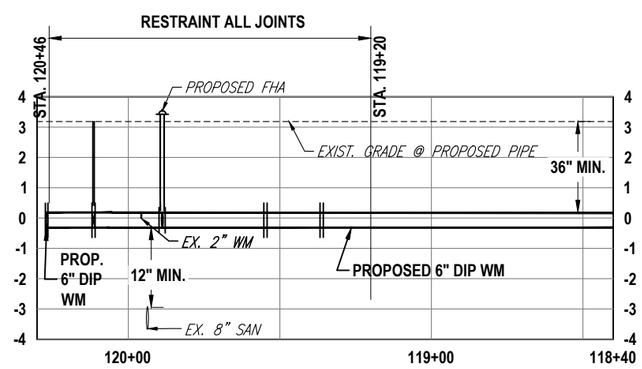
City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 22 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406 EMERSON & TORONTO & HENDERSON.dwg Feb 10, 2020 - 1:10pm







RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

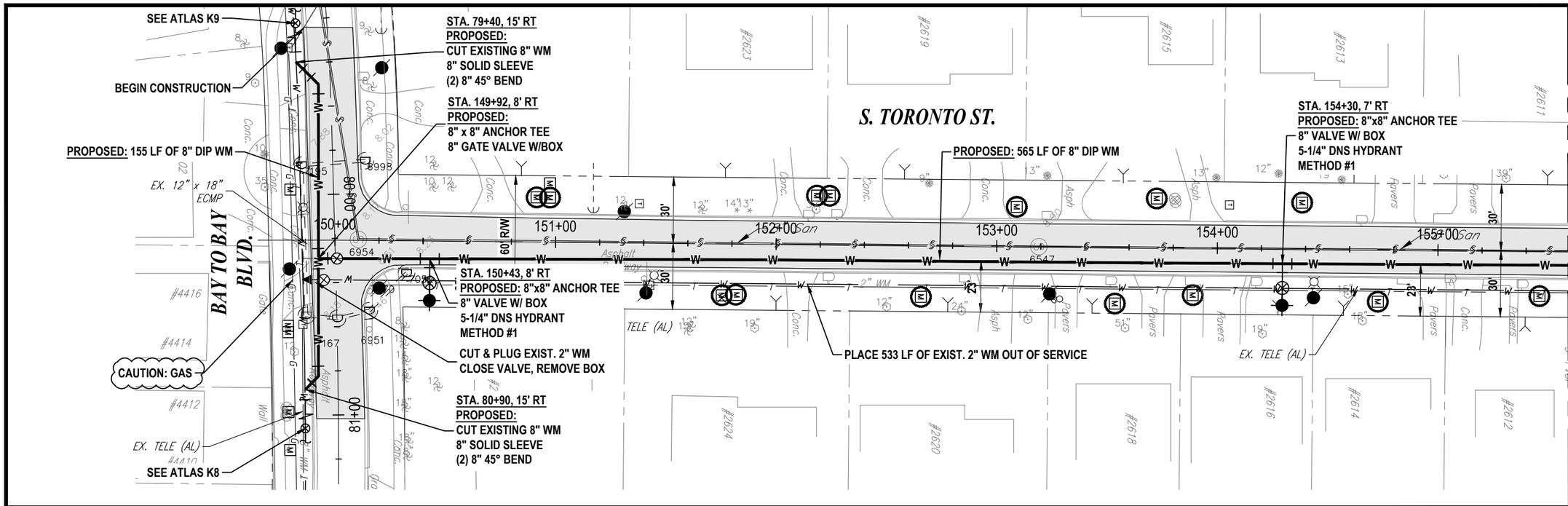
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

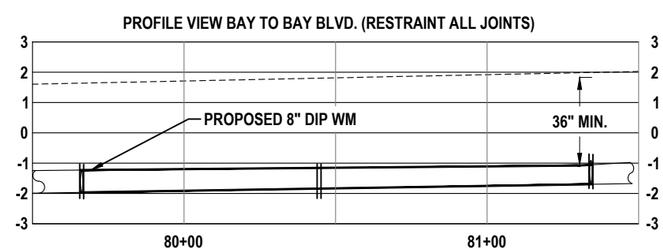
PLAN AND PROFILE SHEET
S. EMERSON ST. (3)

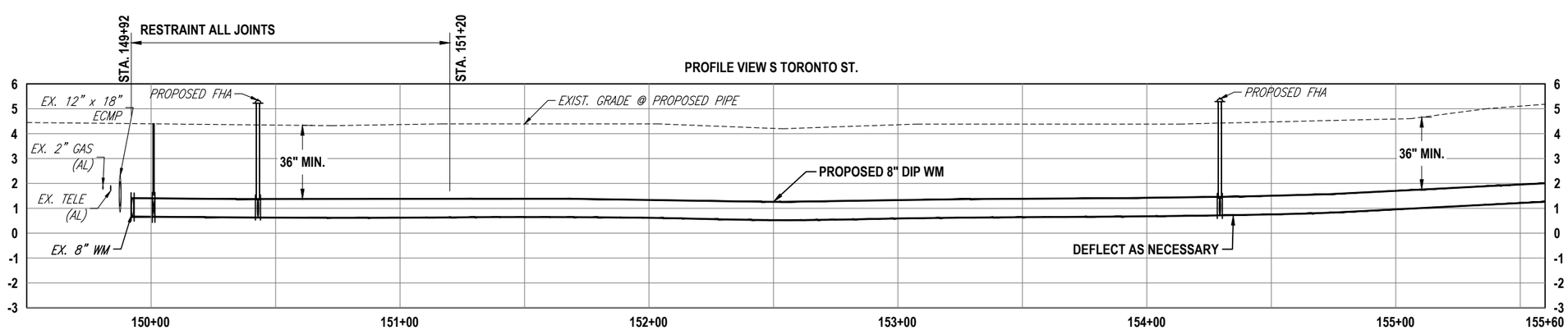
City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 23 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_EMERSON & TORONTO & HENDERSON.dwg Feb 10, 2020 - 1:10pm







RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

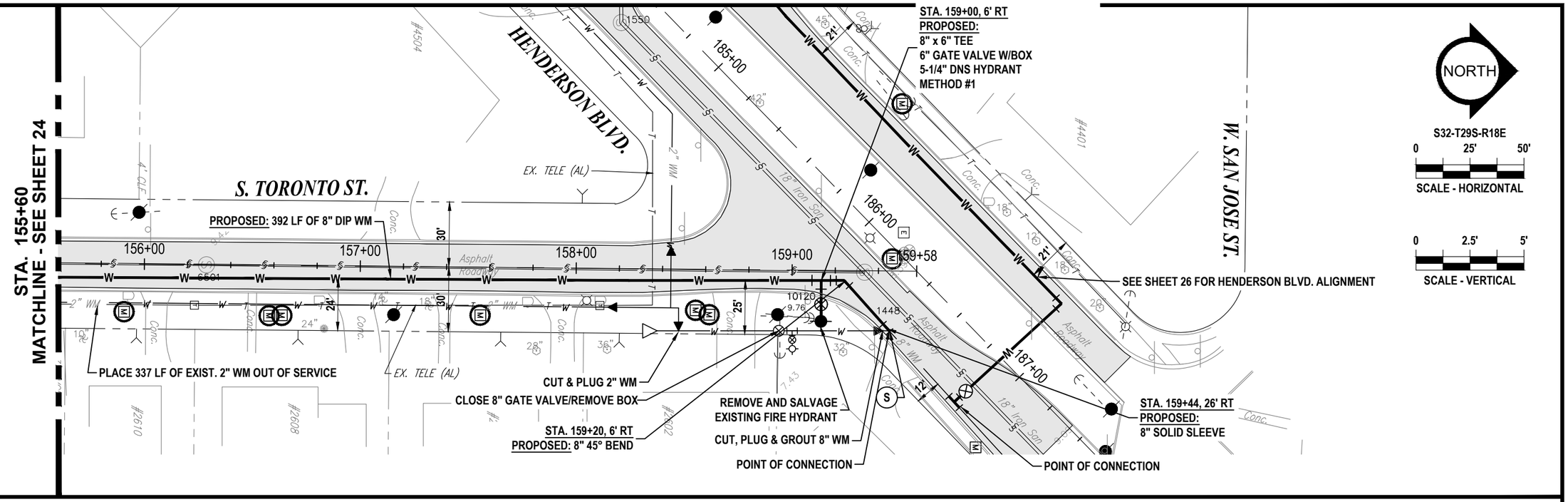
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

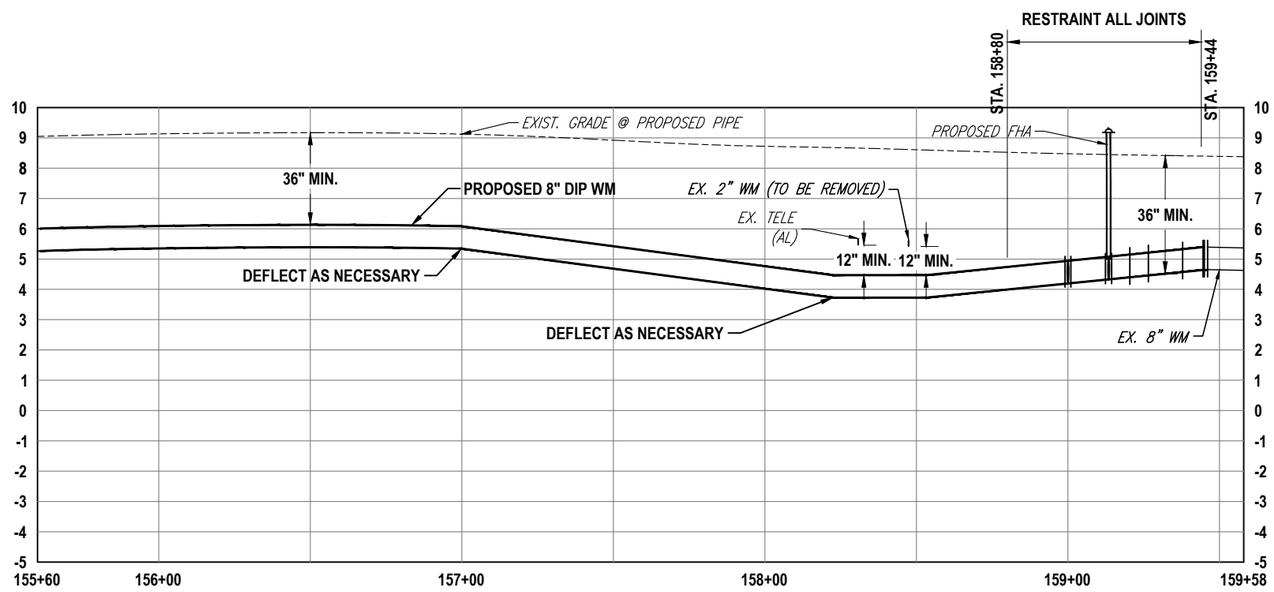
PLAN AND PROFILE SHEET
S. TORONTO ST. (1)

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 24 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_EMERSON & TORONTO & HENDERSON.dwg Feb 10, 2020 - 1:10pm





RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

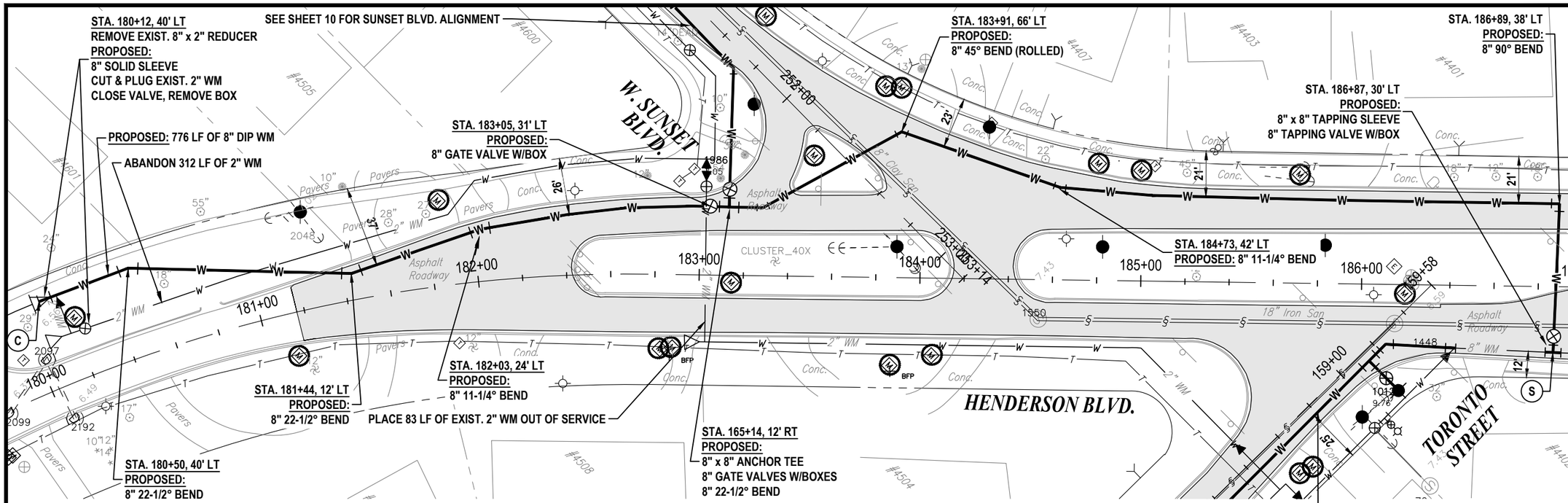
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

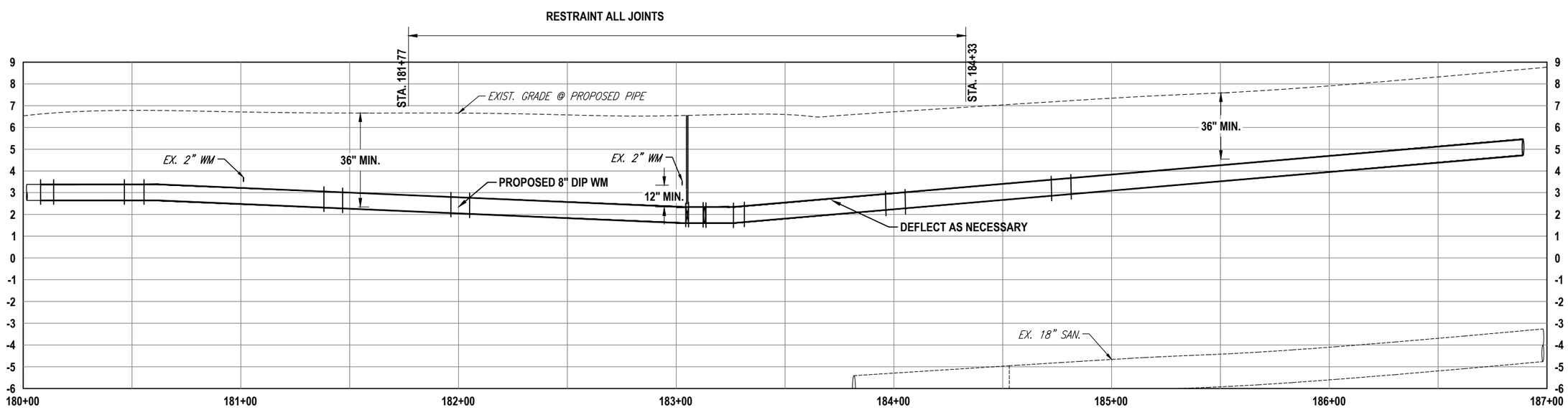
PLAN AND PROFILE SHEET
S. TORONTO ST. (2)

City of Tampa Florida
Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 SHEET 25 OF 33

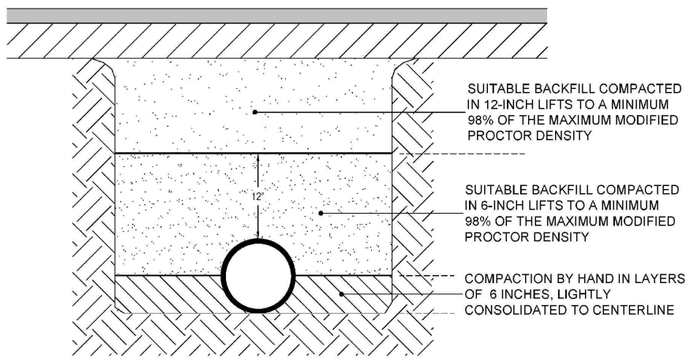
K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_EMERSON & TORONTO & HENDERSON.dwg Feb 10, 2020 - 1:10pm





RORY A. JONES, P.E. CITY OF TAMPA WATER DEPT. 306 E. JACKSON ST., 5E TAMPA, FLA. 33602 P.E. #79453	REV NO. / DATE / DESCRIPTION / BY	DESIGNED NPP DRAWN SV CHECKED RAJ DATE 04/18/2019	**SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST** PLAN AND PROFILE SHEET HENDERSON BLVD.	City of Tampa Florida Water Department	100% PLANS WORK ORDER NO. 8406 RECORD DRAWING NO. ATLAS PAGE K-08 SHEET 26 OF 33

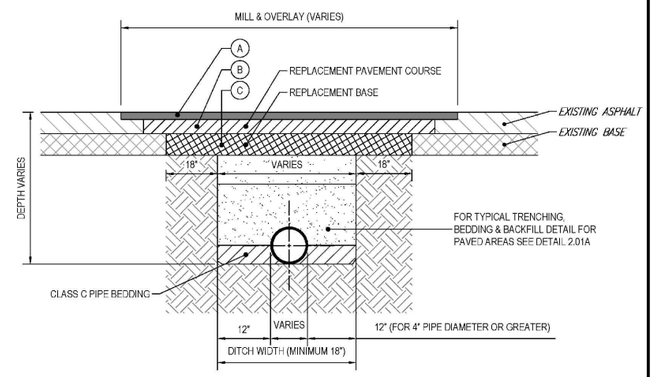
K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_EMERSON & TORONTO & HENDERSON.dwg Feb 10, 2020 - 1:11pm



NOTES:

1. TYPE 2 TRENCH IS DEFINED AS A FLAT-BOTTOM TRENCH. LIGHTLY CONSOLIDATE BACKFILL TO CENTERLINE OF PIPE.
2. THIS STANDARD SHALL BE UTILIZED IN THE ABSENCE OF SPECIFIC STANDARDS. THE STANDARD OF THE AGENCY CONTROLLING THE RIGHT-OF-WAY SHALL GOVERN UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
3. SUITABLE BACKFILL SHALL BE DEFINED AS MATERIAL FREE FROM CINDERS, ASHES, REFUSE, CLAY, ORGANIC MATTER, BOULDERS, ROCKS OR STONES, OR OTHER MATERIAL THAT IN THE OPINION OF THE CITY ENGINEER IS UNSUITABLE.
4. NON-PERVIOUS AREAS SHALL MEAN ANY CONCRETE OR ASPHALT CURB, SIDEWALK, TRAIL, DRIVEWAY, OR ROADWAY.

City of Tampa Florida Water Department	LAST REVISION		
	JAN 2018	TRENCHING, BEDDING AND BACKFILL DETAIL FOR NON-PERVIOUS (PAVED) AREAS	2.01A



PAVEMENT LAYERS (SEE SPECIFICATIONS)

A. TYPE SP 9.5 ASPHALT (1") MILL & OVERLAY
B. TYPE SP 9.5 OR SP 12.5 ASPHALT (1" FOR CLASS I, 2" FOR CLASS II)
C. CRUSHED CONCRETE BASE (8" FOR CLASS I, 12" FOR CLASS II)

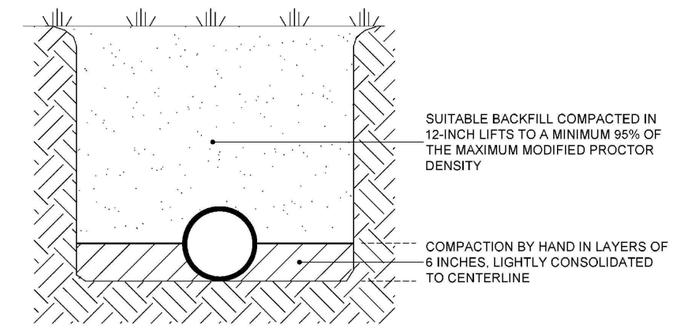
NOTES:

1. PAVEMENT SHALL BE MECHANICALLY SAWED.
2. CLASS I = RESIDENTIAL ROAD AND CLASS II = COLLECTOR/ARTERIAL ROAD.
3. THE MILL AND OVERLAY COURSE (A) SHALL BE 1" THICK AND FDOT TYPE SP 9.5 ASPHALT SHALL BE USED. LIFT TO BE ¾" MIN. AND 1 ½" MAX. FOR CLASS I AND CLASS II ROADS.

   WHEN TRENCH IS PERPENDICULAR TO THE ROAD: THE WIDTH OF THE REPLACEMENT BASE LIMIT ± 10' ON EACH SIDE

   WHEN TRENCH IS PARALLEL TO THE ROAD: THE FULL WIDTH OF THE ROAD (CURB TO CURB)
4. THE REPLACEMENT PAVEMENT COURSE (B) SHALL EXTEND ± 12" ON EACH SIDE OF THE REPLACEMENT BASE LIMIT AND BE FDOT TYPE SP 9.5 OR SP 12.5 WITH A THICKNESS EQUAL TO THE EXISTING OR AS INDICATED, WHICHEVER IS GREATER. LIFT TO BE ¾" MIN. AND 1 ½" MAX. FOR SP 9.5 AND 1 ¼" MIN. TO 3" MAX. FOR SP 12.5.
5. THE REPLACEMENT BASE (C) MATERIALS SHALL BE EITHER OF THE SAME TYPE AND COMPOSITION AS THE MATERIALS REMOVED OR OF EQUAL OR GREATER STRUCTURAL ADEQUACY. BASE SHALL BE INSTALLED TO A THICKNESS OF THE EXISTING BASE OR AS INDICATED, WHICHEVER IS GREATER. BASE SHALL EXTEND 18" IN EACH SIDE OF THE TRENCH LIMIT. CRUSHED CONCRETE BASE SHALL FOLLOW FDOT STANDARD SPECIFICATIONS FOR RECYCLED CONCRETE AGGREGATES, LATEST EDITION. LAYER COEFFICIENT (SN) SHALL BE 0.18 WITH LIMEROCK BEARING RATIO (LBR) 150 OR GREATER. GRADATION AND SIZE REQUIREMENTS SHALL CONFORM TO FDOT LATEST SPECIFICATIONS.

City of Tampa Florida Water Department	LAST REVISION		
	JAN 2020	STANDARD DETAIL FOR RESTORATION WITHIN COT ROADWAY - FLEXIBLE PAVEMENT	2.01B



NOTES:

1. TYPE 2 TRENCH IS DEFINED AS A FLAT-BOTTOM TRENCH. LIGHTLY CONSOLIDATE BACKFILL TO CENTERLINE OF PIPE.
2. THIS STANDARD SHALL BE UTILIZED IN THE ABSENCE OF SPECIFIC STANDARDS. THE STANDARD OF THE AGENCY CONTROLLING THE RIGHT-OF-WAY SHALL GOVERN UNLESS OTHERWISE DIRECTED BY CITY ENGINEER.
3. SUITABLE BACKFILL SHALL BE DEFINED AS MATERIAL FREE FROM CINDERS, ASHES, REFUSE, CLAY, ORGANIC MATTER, BOULDERS, ROCKS OR STONES, OR OTHER MATERIAL THAT IN THE OPINION OF THE CITY ENGINEER IS UNSUITABLE.
4. NON-PAVED AREA IS A PERVIOUS AREA. IF ANY PART OF THE TRENCH IS WITHIN A CONCRETE OR ASPHALT CURB, SIDEWALK, DRIVEWAY, OR ROADWAY, THEN STANDARD DETAIL 2.01 APPLIES.

City of Tampa Florida Water Department	LAST REVISION		
	JUL 2018	TRENCHING, BEDDING, AND BACKFILL DETAIL FOR PERVIOUS (NON-PAVED) AREAS	2.02

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

DETAIL SHEET (1)

City of Tampa Florida Water Department

100% PLANS

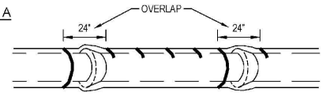
WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 27 OF 33

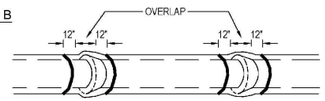
K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_DETAILS.dwg, Feb 10, 2020 - 1:11pm

METHOD A



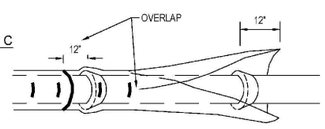
POLYETHYLENE TUBE IS CUT INTO LENGTHS APPROXIMATELY TWO FEET LONGER THAN THE PIPE SECTION AND PLACED AROUND IT. AFTER THE PIPE JOINT IS ASSEMBLED, THE POLYETHYLENE TUBE IS MADE TO OVERLAP THE JOINT AND THE OVERLAP SECURED IN PLACE. SINCE THE TUBE IS CONSIDERABLY LARGER THAN THE BARREL OF PIPE, IT IS MADE TO FIT SNUGLY BY FOLDING OVER AT THE TOP AND SECURING WITH TAPE EVERY 24" ALONG THE PIPE SECTION.

METHOD B



POLYETHYLENE TUBE IS CUT ONE FOOT SHORTER THAN THE LENGTH OF THE PIPE SECTION. AFTER PLACEMENT OF THE PIPE, IT IS FOLDED AND SECURED SNUGLY OVERALL. A THREE FOOT LENGTH OF POLYETHYLENE TUBE PLACED OVER THE END OF THE PRECEEDING SECTION IS THEN PULLED IN PLACE OVER THE JOINT AFTER ASSEMBLY AND SECURED.

METHOD C

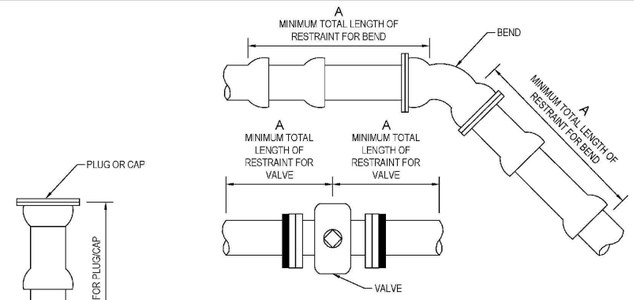


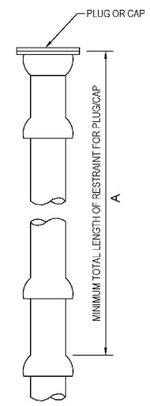
POLYETHYLENE SHEET IS CUT TO A LENGTH TWO FEET LONGER THAN THE PIPE SECTION. THE SHEET IS WRAPPED AROUND THE PIPE SO THAT IT OVERLAPS CIRCUMFERENTIALLY OVER THE TOP QUADRANT OF THE PIPE, THEN SECURED. AFTER JOINT ASSEMBLY, THE SURPLUS LENGTH OF POLYETHYLENE FILM IS SECURED AROUND THE JOINT, PROVIDING AN OVERLAP OF EACH JOINT. TAPE AT EACH JOINT AND AT 3' INTERVALS IN BETWEEN.

NOTES:

1. USE BLUE POLYETHYLENE FILM AND TAPE ONLY.
2. POLYETHYLENE FILM SHALL BE A MINIMUM OF 8 MIL. THICKNESS.
3. SPIRAL WRAP NOT REQUIRED WITH POLYWRAP.

City of Tampa Florida Water Department	LAST REVISION JUL 2018	POLYETHYLENE ENCASEMENT INSTALLATION DETAIL	2.05



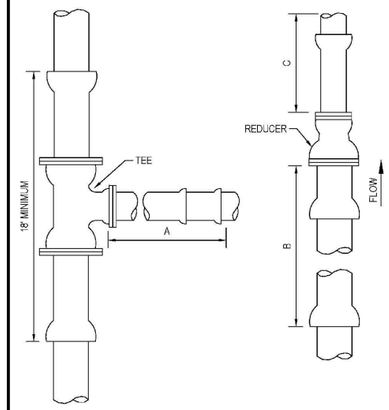


RESTRAIN "A" (LF)									
FITTING / PIPE	4"	6"	8"	12"	16"	20"	24"	30"	36"
11-1/4*	4	5	8	10	11	13	15	19	21
22-1/2*	8	11	15	20	21	26	31	38	44
45*/OFFSET	16	23	30	43	45	55	65	78	91
90*	39	55	73	103	109	133	156	189	220
PLUG/CAP/VALVE*	69	98	128	179	179	218	255	306	356
A = MINIMUM FOOTAGE OF PIPE TO BE RESTRAINED									
* = FOR IN-LINE VALVE, RESTRAINT LENGTH 'A' REQUIRED BOTH WAYS FROM VALVE									

NOTES:

1. THIS TABLE IS BASED ON:
   a. MAXIMUM TEST PRESSURE OF 190 PSI
   b. LAYING CONDITION TYPE 2 (SEE DETAILS 2.01 AND 2.02)
   c. POOR SOIL CONDITIONS
   d. USING D.I.P.
   e. 3 FEET OF COVER FOR 12" AND SMALLER MAINS; 4 FEET OF COVER FOR 16" AND LARGER MAINS
   f. HORIZONTAL BENDS ONLY - ENGINEER TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS
2. "RESTRAINED" PIPE SHALL BE MANUFACTURED RESTRAINED JOINT PIPE, PUSH-ON JOINT PIPE RESTRAINED W/GASKET-TYPE "GRIPPER RESTRAINTS", OR MECHANICAL JOINT PIPE RESTRAINED BY MEGALUG (OR APPROVED EQUIVALENT).
3. ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.

City of Tampa Florida Water Department	LAST REVISION JUL 2018	RESTRAINED JOINT STANDARD FOR BENDS, PLUGS, CAPS, AND VALVES	2.11



FITTING SIZE	RESTRAIN (LF)		UNRESTRAINED STRAIGHT RUN (LF)
	TEE "A"	REDUCER "B"	REDUCER "C"
4x4	31	*	*
6x4	14	50	74
6x6	60	*	*
8x4	A.T.	91	178
8x6	48	54	70
8x8	90	*	*
12x4	A.T.	155	455
12x6	24	130	260
12x8	71	95	144
12x12	143	*	*
16x6	A.T.	151	401
16x8	34	130	265
16x12	96	76	103
16x16	148	*	*
20x6	A.T.	195	659
20x8	18	180	461
20x12	85	136	233
20x16	139	76	96
20x20	186	*	*
24x6	A.T.	236	971
24x8	A.T.	224	700
24x12	74	188	391
24x16	130	139	215
24x20	180	76	93
24x24	224	*	*
30x6	A.T.	293	1534
30x8	A.T.	283	1130
30x12	56	255	678
30x16	118	216	426
30x20	169	188	260
30x24	215	108	138
30x30	275	*	*
36x6	A.T.	345	2230
36x8	A.T.	336	1660
36x12	38	314	1030
36x16	104	283	689
36x20	159	244	466
36x24	206	195	306
36x30	269	108	133
36x36	326	*	*
A.T. = RESTRAINT REQUIRED AT TEE ONLY. * = NOT APPLICABLE			

NOTES:

1. THIS TABLE IS BASED ON:
   a. MAXIMUM TEST PRESSURE OF 190 PSI
   b. LAYING CONDITION TYPE 2 (SEE DETAILS 2.01 AND 2.02)
   c. POOR SOIL CONDITIONS
   d. USING D.I.P.
   e. 3 FEET OF COVER FOR 12" AND SMALLER MAINS; 4 FEET OF COVER FOR 16" AND LARGER MAINS
   f. HORIZONTAL BENDS ONLY - ENGINEER TO SUBMIT CALCULATIONS FOR VERTICAL RESTRAINTS
2. RESTRAINT FOR REDUCERS: IF "C" STRAIGHT RUN OF PIPE DOWNSTREAM OF REDUCER NOT AVAILABLE, THE RESTRAIN "B" UPSTREAM OF REDUCER.
3. "RESTRAINED" PIPE SHALL BE MANUFACTURED RESTRAINED JOINT PIPE, PUSH-ON JOINT PIPE RESTRAINED W/GASKET-TYPE "GRIPPER RESTRAINTS", OR MECHANICAL JOINT PIPE RESTRAINED BY MEGALUG (OR APPROVED EQUIVALENT).
4. ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.

City of Tampa Florida Water Department	LAST REVISION JUL 2018	RESTRAINED JOINT STANDARD FOR TEES AND REDUCERS	2.12A

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

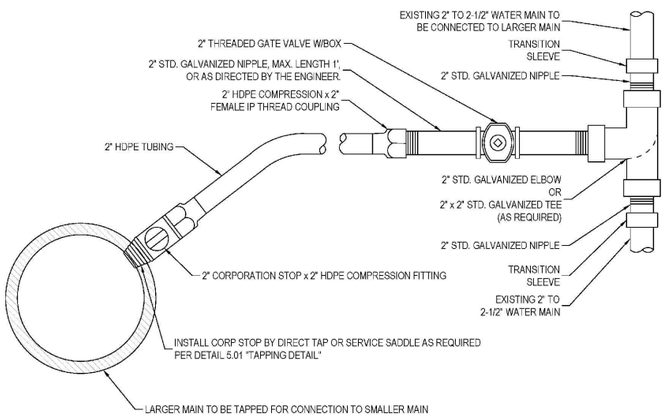
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

DETAIL SHEET (2)

City of Tampa Florida Water Department

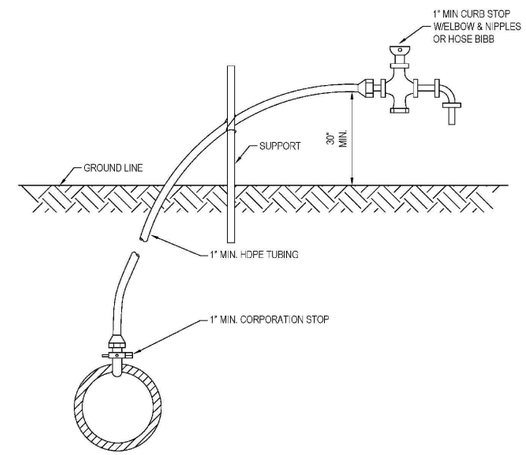
100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08
SHEET 28 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_DETAILS.dwg Feb 10, 2020 - 1:11pm



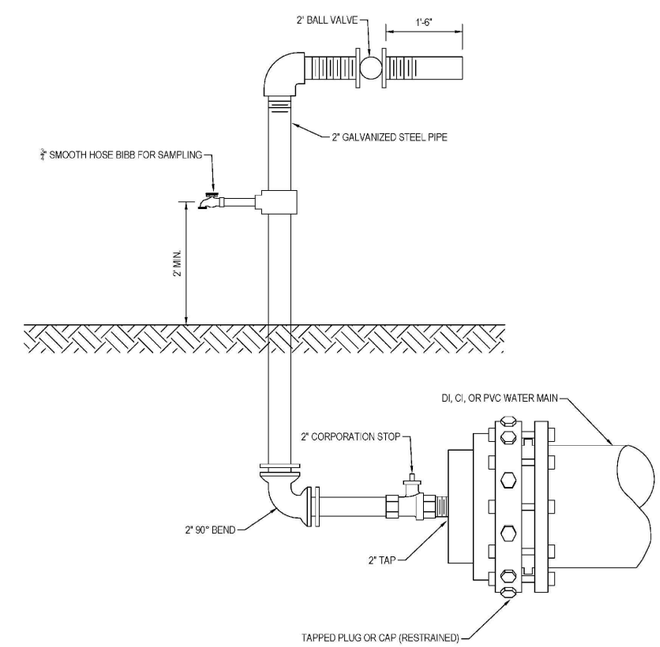
NOTE:
SEE DETAIL 5.01 TO DETERMINE WHEN SADDLES ARE REQUIRED FOR CORP INSTALLATION. VALVE SHALL BE SET IN ACCORDANCE WITH DETAIL 3.01.

City of Tampa Florida Water Department	LAST REVISION JUL 2018	TAPPED CONNECTION FROM DI, CI, OR PVC PIPE TO <4" WATER MAINS	2.13A



NOTES:
1. WATER OUTLET SHALL BE HELD UP OFF THE GROUND SO AS NOT TO INTERFERE WITH THE SAMPLING PROCESS.
2. CORPORATION STOP TO BE REMOVED AND BRASS PLUG INSTALLED IN TAPPED MAIN AFTER OPERATION.

City of Tampa Florida Water Department	LAST REVISION JUL 2018	TEMPORARY SAMPLE TAP INSTALLATION W/DI, CI, OR PVC PIPE	2.18A



NOTES:
1. FOR DEAD-END MAINS, SAMPLE TAP TO BE INSTALLED ON A 2" TAPPED CAP/PLUG.
2. FLUSHING/SAMPLING ARRANGEMENT TO BE REMOVED AFTER DISINFECTION OF MAIN LINE.
3. AFTER OPERATION COMPLETE, INSTALL BRASS PLUG AT CORPORATION STOP.

City of Tampa Florida Water Department	LAST REVISION JUL 2018	TEMPORARY SAMPLE TAP INSTALLATION FOR END OF LINE W/DI, CI, OR PVC PIPE	2.19A

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

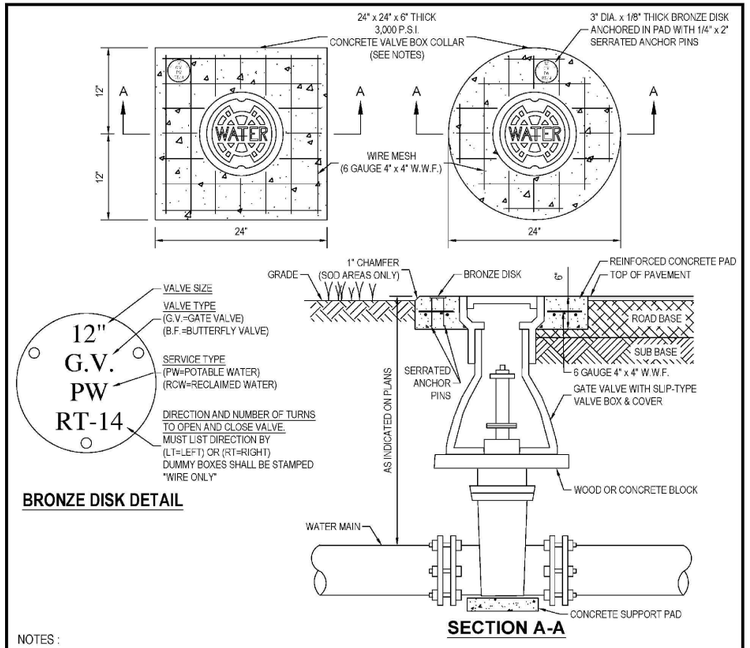
SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

DETAIL SHEET (3)

City of Tampa Florida Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08
SHEET 29 OF 33

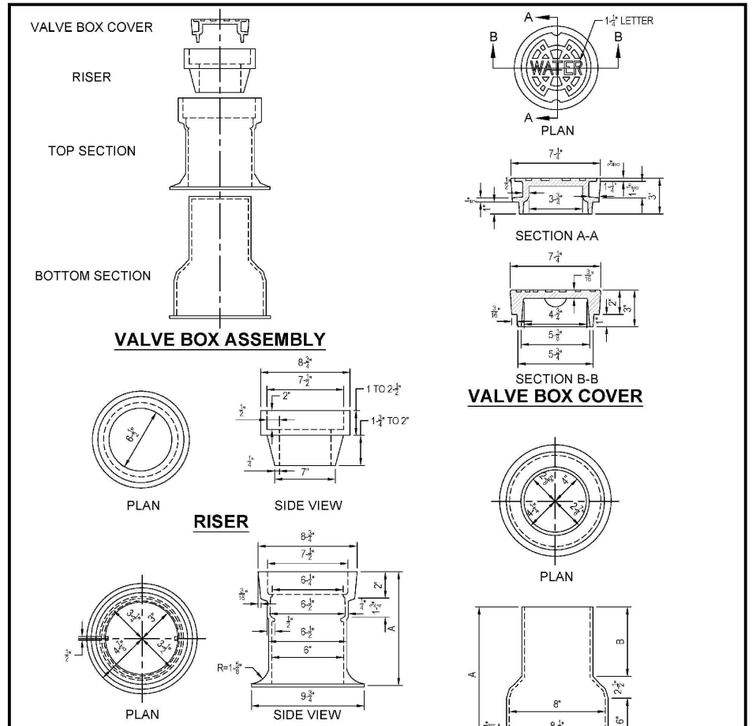
K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_DETAILS.dwg Feb 10, 2020 - 1:11pm



NOTES :

1. CIRCULAR OR SQUARE CONCRETE PAD REQUIRED FOR ALL VALVE BOX INSTALLATIONS.
2. CAST IRON VALVE BOXES SHALL BE FIRMLY SUPPORTED AND CENTERED AND PLUMB OVER THE OPERATING NUT OF THE VALVE. VALVE BOX COVER SHALL BE FLUSH WITH THE SURFACE OF THE FINISHED PAVEMENT, OR GRADE OR AT SUCH OTHER LEVEL AS MAY BE DIRECTED BY THE DEPARTMENT.
3. "BLUE" WATER VALVE LOCATE MARKERS REQUIRED FOR ALL VALVE INSTALLATIONS.
4. EMBED BRONZE VALVE INFO DISK INTO CONCRETE VALVE BOX COLLAR.
5. ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST T.W.D. APPROVED MATERIAL SPECIFICATIONS.
6. IF VALVE IS LOCATED WITHIN A SIDEWALK CONCRETE COLLAR MAY BE ELIMINATED AND DISK SET FLUSH DIRECTLY IN SIDEWALK.
7. BRONZE DISK REQUIRED FOR ALL VALVES AND DUMMY BOXES.

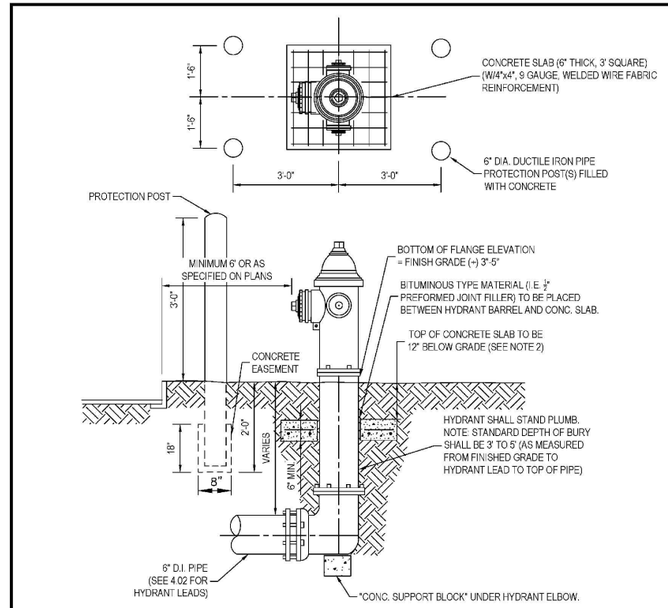
City of Tampa Florida Water Department	LAST REVISION		
	JUL 2018	VALVE INSTALLATION W/VALVE BOX & PAD FOR DI OR CI PIPE	3.01



TOP SECTION	SIZE	A
	10"	10"
	16"	16"

BOTTOM SECTION	SIZE	A	B
	15"	15"	6-1/2"
	24"	24"	15-1/2"
	36"	36"	27-1/2"

City of Tampa Florida Water Department	LAST REVISION		
	JUL 2018	VALVE BOX, SLIP TYPE	3.04



NOTES:

1. FIRE HYDRANT BARREL ABOVE THE GROUND LINE SHALL BE PAINTED WITH A HIGH-GRADE ENAMEL PAINT, FEDERAL SAFETY YELLOW (OSHA APPROVED), AND THE HYDRANT BONNET SHALL BE PAINTED OSHA GREEN.
2. CONCRETE SLAB MAY BE ELIMINATED IN AREAS WHERE HYDRANT IS SET IN SIDEWALK AND SIDEWALK HAS BEEN INSTALLED PRIOR TO FINAL ACCEPTANCE OF THE HYDRANT.
3. THRUST RESTRAINT FOR HYDRANT:
   a) HYDRANT SHALL BE FIRMLY SUPPORTED UNDER ELBOW IN ALL METHODS BY SUPPORT BLOCK
   b) ALL BACKFILL SHALL BE THOROUGHLY COMPACTED UNDER SUPPORT BLOCK AND UNDER THRUST COLLAR
   c) ALL HYDRANT LEADS SHALL BE RESTRAINED BY MEGALUGS OR EQUIVALENT MECHANICAL RESTRAINTS
4. PROTECTION POSTS ARE REQUIRED WHEN HYDRANT IS LESS THAN 6 FEET FROM EDGE OF PAVEMENT, OR AS DIRECTED BY THE ENGINEER.
5. FOR PVC MAINS, INSTALL CONCRETE SUPPORT BLOCK UNDER ALL HYDRANT TEES.

City of Tampa Florida Water Department	LAST REVISION		
	JUL 2018	FIRE HYDRANT INSTALLATION	4.01

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

DETAIL SHEET (4)

City of Tampa Florida Water Department

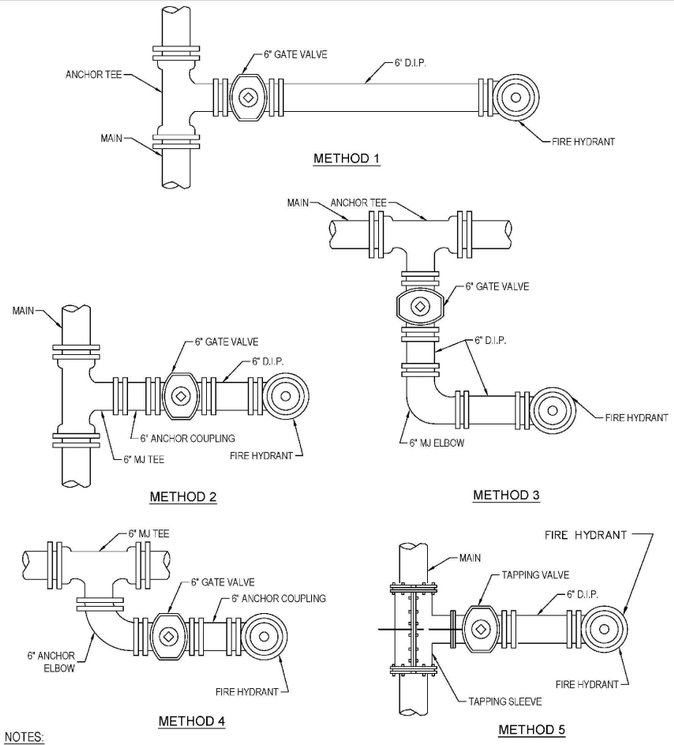
100% PLANS

WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 30 OF 33

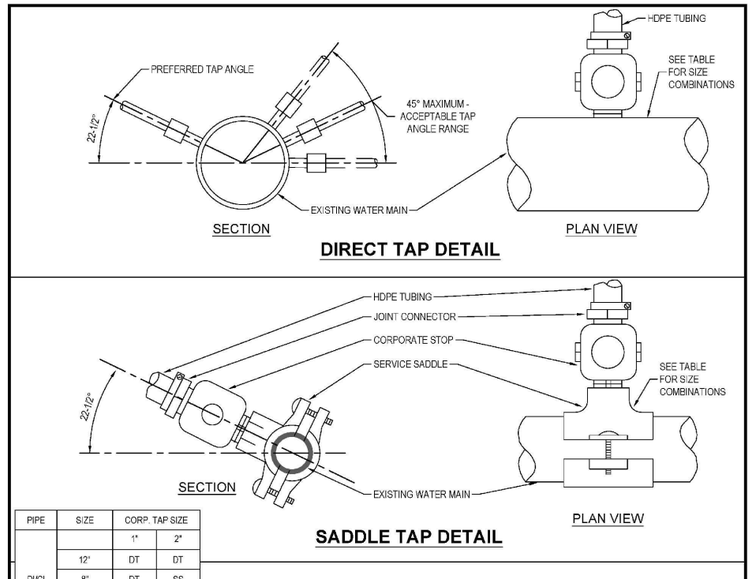
K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_DETAILS.dwg Feb 10, 2020 - 1:11pm



NOTES:

1. VALVE SHALL BE SET IN ACCORDANCE WITH DETAIL 3.01. FOR HYDRANT SET, SEE DETAIL 4.01.
2. ALL VALVES SHALL BE ANCHORED TO BRANCH OF TEE ON ALL HYDRANT INSTALLATIONS.
3. ALL HYDRANT LEADS SHALL BE RESTRAINED BY MEGALUGS OR EQUIVALENT.
4. FOR PVC MAINS, INSTALL CONCRETE SUPPORT BLOCK UNDER HYDRANT TEES.

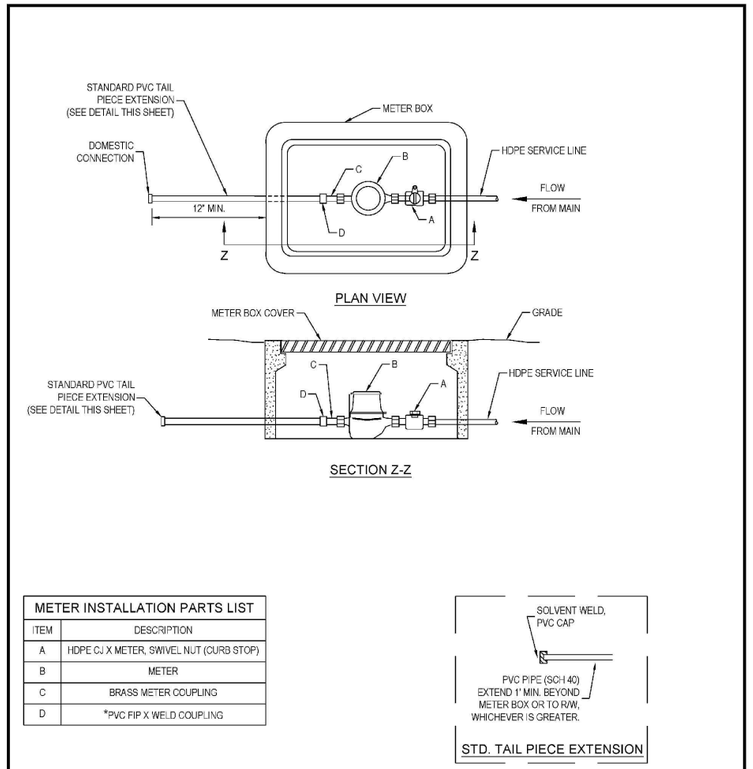
City of Tampa Florida Water Department	LAST REVISION JUL 2018	FIRE HYDRANT METHODS OF INSTALLATION	4.02



PIPE	SIZE	CORP. TAP SIZE 1"	CORP. TAP SIZE 2"
DI/CI	12"	DT	DT
	8"	DT	SS
	6"	DT	SS
	4"	SS	SS
PVC	2", 2-1/2"	SS	NA
	8", C-900	SS	SS
	6", C-900	SS	SS
	2"-SDR21	SS	NA
OTHER*	12"	SS	SS
	10"	SS	SS
	8"	SS	SS
	6"	SS	SS
	4"	SS	NA
	3"	SS	NA
	2", 2-1/2"	SS	NA

LEGEND
DT- DIRECT TAP CAN BE ALLOWED SS- SERVICE SADDLE IS REQUIRED NA- NOT ALLOWED
*ASBESTOS CEMENT, STEEL, GALVANIZED IRON PIPE, NON STD PVC, ETC.

City of Tampa Florida Water Department	LAST REVISION JUL 2018	TAPPING DETAIL FOR 3/4", 1", 1-1/2" & 2" W/DI, CI, OR PVC PIPE	5.01A



METER INSTALLATION PARTS LIST	
ITEM	DESCRIPTION
A	HDPE CJ X METER, SWIVEL NUT (CURB STOP)
B	METER
C	BRASS METER COUPLING
D	*PVC FIP X WELD COUPLING

* ALL PVC PIPE AND FITTINGS SHALL BE SCH 80 EXCEPT FOR STANDARD TAIL PIECE SECTION WHICH WILL BE SCH 40.

NOTE: PARTS LIST IS FOR STANDARD INSTALLATION; ACTUAL PARTS REQUIRED MAY VARY AS DIRECTED BY THE ENGINEER.

City of Tampa Florida Water Department	LAST REVISION JUL 2018	SINGLE METER SET DETAIL 3/4", 1", 1-1/2", 2"	5.02

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

DETAIL SHEET (5)

City of Tampa Florida Water Department

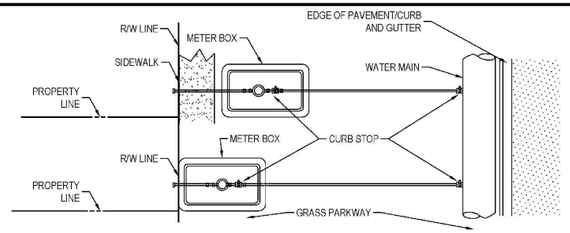
100% PLANS

WORK ORDER NO. 8406

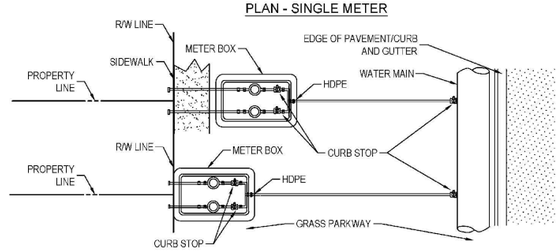
RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 31 OF 33

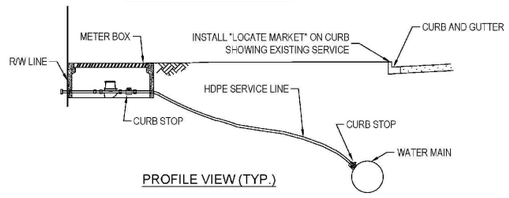
K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_DETAILS.dwg Feb 10, 2020 - 1:11pm



PLAN - SINGLE METER



PLAN VIEW - DUAL METER



DO NOT INSTALL METER WITHIN SIDEWALK. WHEN SIDEWALK EXISTS, INSTALL METER ON STREET SIDE OF SIDEWALK OR WHERE DIRECTED BY CITY ENGINEER.

PROFILE VIEW (TYP.)

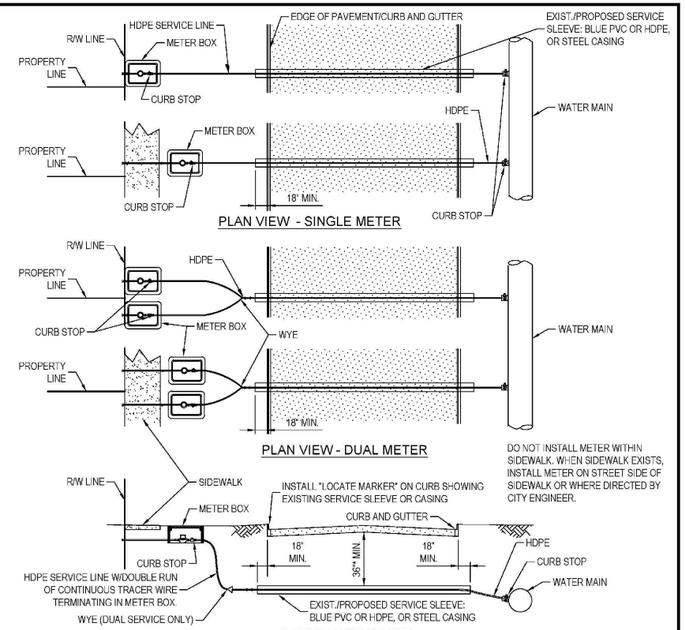
* LINE SIZE APPLICABLE FOR DDCVA

SINGLE METER SIZE (INCHES)	SERVICE LINE SIZE (INCHES) (0-15')
3/4	1
1	1
1 1/2	2
2*	2

DUAL METER SIZE (INCHES)	SERVICE LINE SIZE (INCHES) (0-15')
3/4	2
1	2
1 1/2	N/A
2*	N/A

(FEET REFER TO DISTANCE FROM WATER MAIN TO METER)

City of Tampa Florida Water Department | LAST REVISION JUL 2018 | SINGLE & DUAL METERED SERVICE - SHORT SIDE 3/4", 1", 1-1/2" & 2" | 5.04A



PLAN VIEW - SINGLE METER

PLAN VIEW - DUAL METER

DO NOT INSTALL METER WITHIN SIDEWALK. WHEN SIDEWALK EXISTS, INSTALL METER ON STREET SIDE OF SIDEWALK OR WHERE DIRECTED BY CITY ENGINEER.

PROFILE VIEW (TYP.)

CASING SPECIFICATION:
1. IF PUSHED-SCH 40 STEEL PIPE (MIN.)
2. IF LAYED IN OPEN TRENCH-SCH 40 STEEL PIPE OR SCH 80 PVC SOLVENT WELD PIPE.

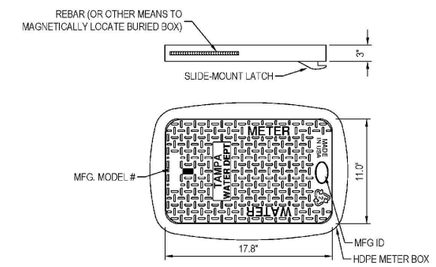
* OR GREATER, IF REQUIRED BY ROW CONTROLLING AGENCY
** LINE SIZES APPLICABLE FOR 2" DDCV

SINGLE METER SIZE (INCHES)	SERVICE LINE SIZE (INCHES)		CASING SIZE (INCHES)
	(15'-80')	(80'-150')	
3/4	1	2	2 / 4
1	1	2	4
1 1/2	2	2	4
2**	4" D.I.P.	4" D.I.P.	12

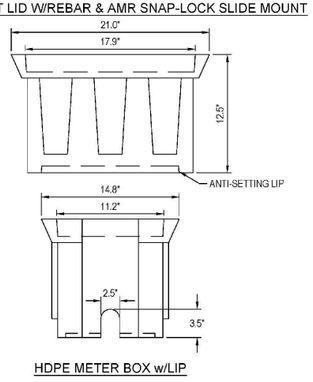
DUAL METER SIZE (INCHES)	SERVICE LINE SIZE (INCHES)		CASING SIZE (INCHES)
	(15'-80')	(80'-150')	
3/4	2	2	4
1	2	4" D.I.P.	4 / 12
1 1/2	N/A	N/A	N/A
2*	N/A	N/A	N/A

(FEET REFER TO DISTANCE FROM WATER MAIN TO METER)

City of Tampa Florida Water Department | LAST REVISION JUL 2018 | SINGLE & DUAL METERED SERVICE - LONG SIDE 3/4", 1", 1-1/2" & 2" | 5.05A



ANTI-FLOAT LID W/REBAR & AMR SNAP-LOCK SLIDE MOUNT



HDPE METER BOX w/LIP

#37 HDPE METER BOX W/COVER

N.T.S.

City of Tampa Florida Water Department | LAST REVISION JUL 2018 | 3/4" OR 1" SINGLE SERVICE HDPE METER BOX | 5.10

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

DETAIL SHEET (6)

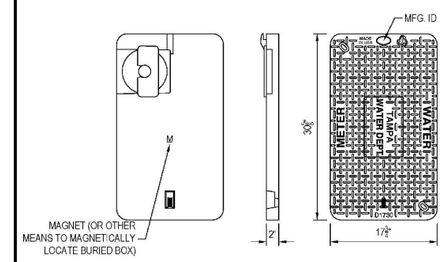
City of Tampa Florida Water Department

100% PLANS
WORK ORDER NO. 8406
RECORD DRAWING NO.
ATLAS PAGE K-08 | SHEET 32 OF 33

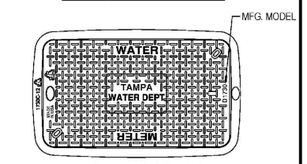
K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_DETAILS.dwg, Feb 10, 2020 - 1:11pm

BODY KEY	
H	HEAVY WALL $\frac{1}{2}$"

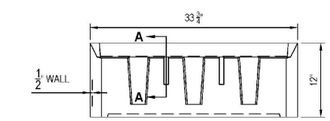
LID KEY	
AF	ANTI-FLOAT MATERIAL
1	BLACK COLOR
M	MAGNET
A	AMR SLIDE MOUNT
TPA	TAMPA WATER



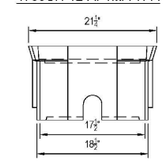
1730C-AF1MA TPA-LID

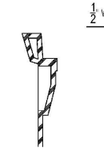


1730CH-12-AF1MA TPA

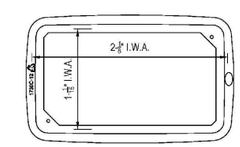


1730CH-12-BODY

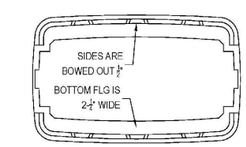




LIFT STRUCTURE
SECTION A-A



1730CH-12-BODY



BOTTOM VIEW

NOTES
1) DIM'S ± 1/8" U.N.O.
2) LID MATERIAL: HDPE
3) BODY MATERIAL: LLDPE
4) WALL THICKNESS: 1/2" MINIMUM
5) I.W.A. = INSIDE WORK AREA.
6) SNAP LOCK POCKET WILL RECEIVE AMR/AMI DEVICE ENDPOINT. SNAP LOCK SLOT IS 1.80" ± .015" TO ALLOW FOR A FINGER FORCE INSTALL. POCKET HEIGHT IS 15/16" FOR MIN 1/8" AIR GAP.

N.T.S.

#66 HDPE METER BOX W/COVER

City of Tampa Florida Water Department	LAST REVISION JUL 2018	1-1/2" & 2" SINGLE SERVICE HDPE METER BOX	5.12

RORY A. JONES, P.E.
CITY OF TAMPA WATER DEPT.
306 E. JACKSON ST., 5E
TAMPA, FLA. 33602
P.E. #79453

REV NO.	DATE	DESCRIPTION	BY
.	.	.	.
.	.	.	.
.	.	.	.
.	.	.	.

DESIGNED NPP
DRAWN SV
CHECKED RAJ
DATE 04/18/2019

SUNSET PARK DISTRIBUTION LINE REPLACEMENT - EAST

DETAIL SHEET (7)

City of Tampa Florida Water Department

100% PLANS

WORK ORDER NO. 8406

RECORD DRAWING NO.

ATLAS PAGE K-08 SHEET 33 OF 33

K:\Projects\Pre FY18 Projects\8406 - FY17 CIP Sunset Park (East)\02-Design\Drawings\8406_DETAILS.dwg Feb 10, 2020 - 1:11pm