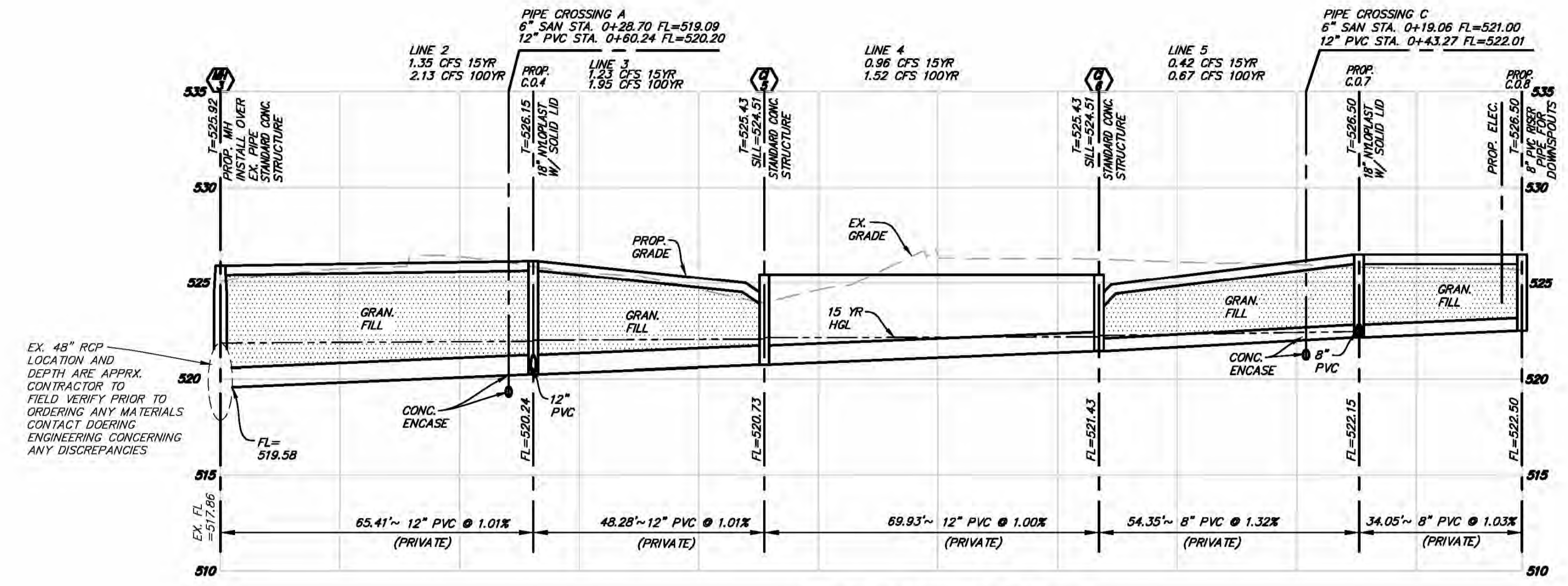


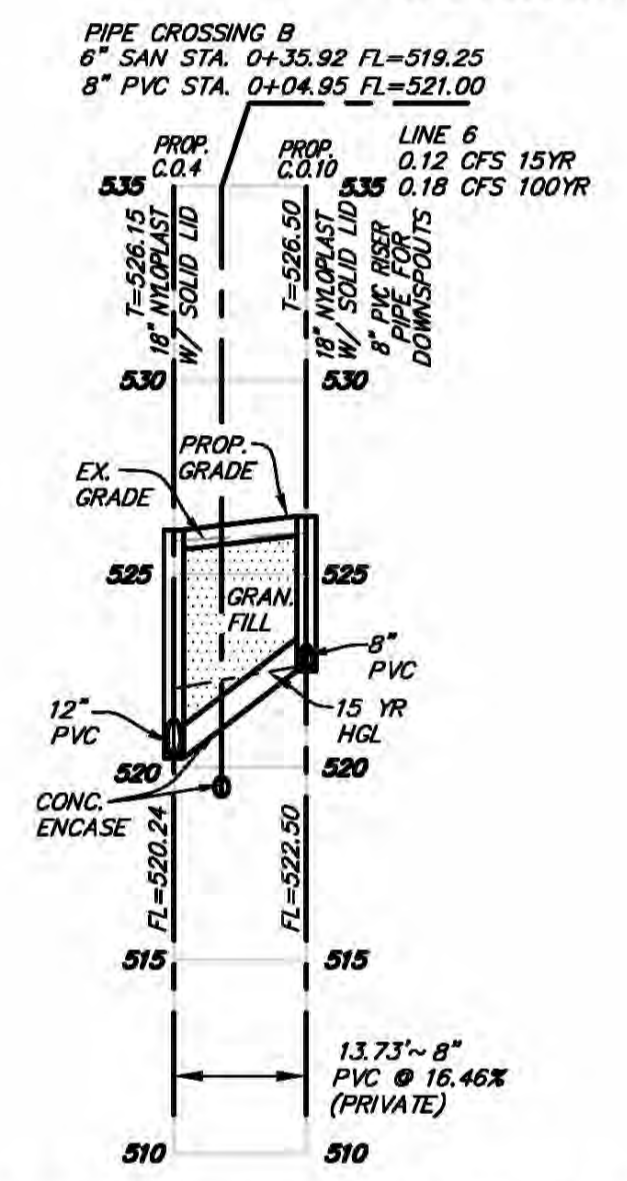
STORM SEWER PROFILE

SCALE 1"=5' VERT.
SCALE 1"=20' HORIZ.



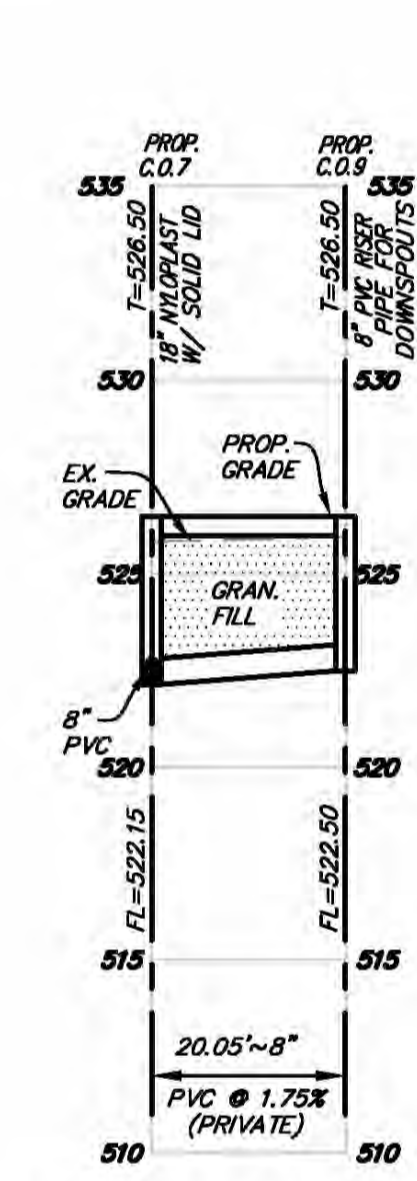
STORM SEWER PROFILE

SCALE 1"=5' VERT.
SCALE 1"=20' HORIZ.



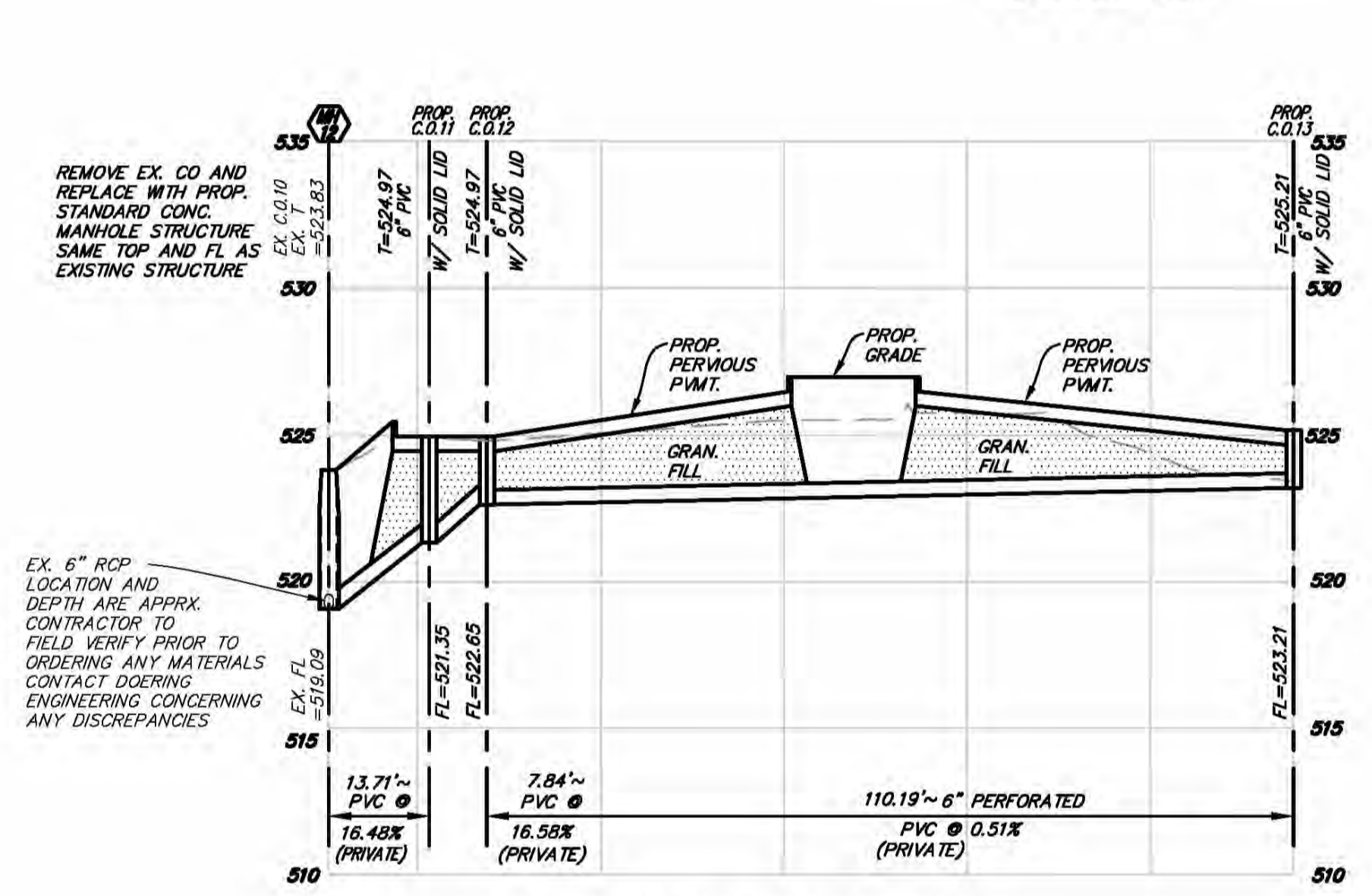
STORM SEWER PROFILE

SCALE 1"=5' VERT.
SCALE 1"=20' HORIZ.



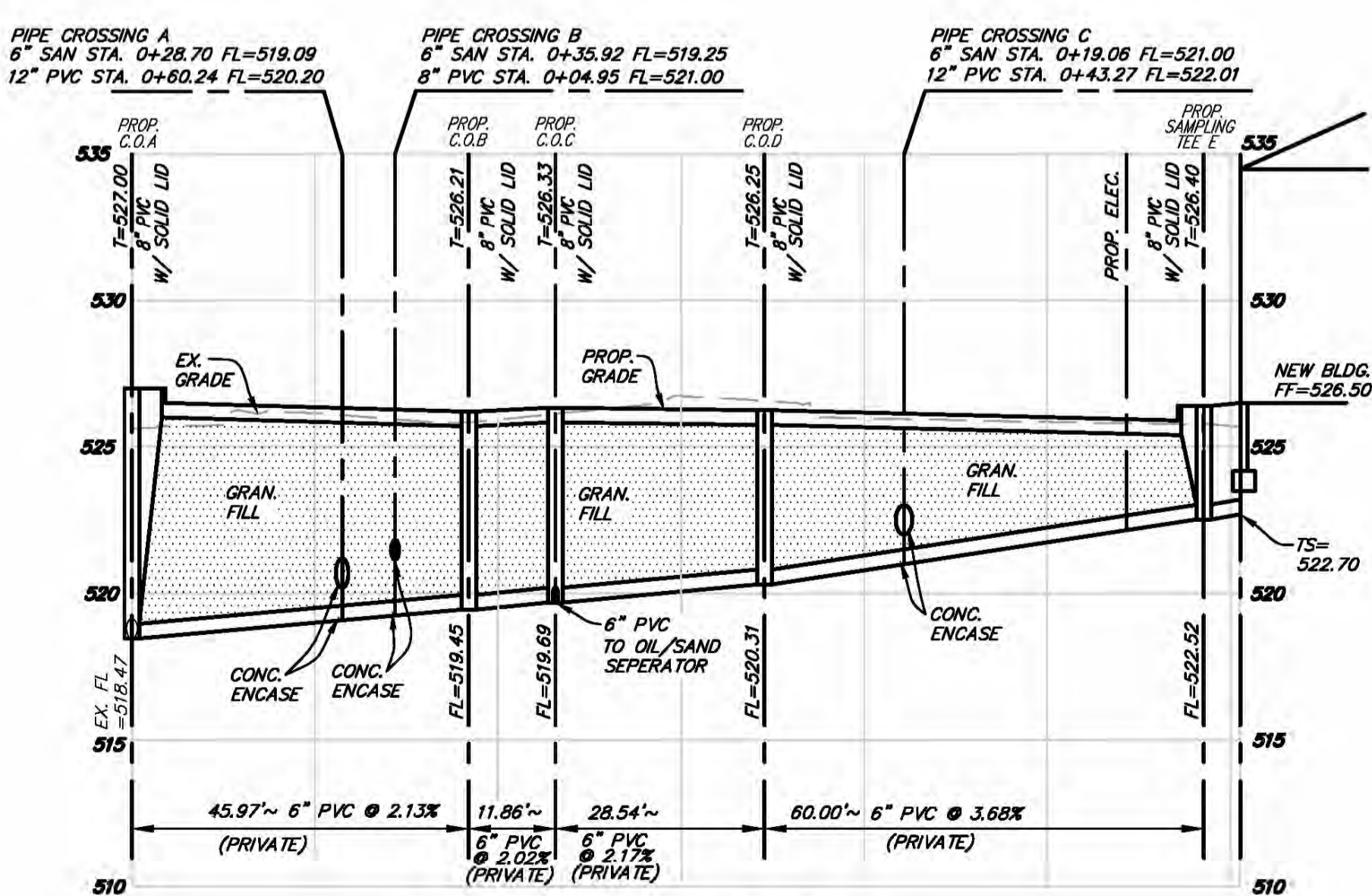
STORM SEWER PROFILE

SCALE 1"=5' VERT.
SCALE 1"=20' HORIZ.



STORM SEWER PROFILE

SCALE 1"=5' VERT.
SCALE 1"=20' HORIZ.



SANITARY SEWER PROFILE

SCALE 1"=5' VERT.
SCALE 1"=20' HORIZ.

15 YR. EVENT HYDRAFLOW STORM SEWER 2005 VER.																					
LINE NO.	LINE ID	LINE LENGTH (FT.)	LINE SIZE (IN.)	LINE SLOPE (%)	KNOWN Q (CFS)	FLOW RATE Q (CFS)	CAPACITY FULL (CFS)	CRITICAL DEPTH (FT.)	INVERT (FT.)	INVERT (FT.)	GRND. RIM (FT.)	GRND. RIM (FT.)	HGL (FT.)	HGL (FT.)	HGL (FT.)	VEL (FT/S)	VEL (FT/S)	N-VALUE	MINOR LOSS (FT.)	DEF. ANGLE (DEG.)	FREE-BOARD
1	MH 1 TO CI 2	78.3	12	1.72	0.34	0.34	4.68	0.25	519.86	521.21	525.85	524.29	521.86	521.87	521.87	0.43	0	0.013	0.01	80.7	2.42
2	MH 3 TO C.O. 4	65.41	12	1.01	0	1.35	3.58	0.49	519.58	520.24	525.92	526.15	521.86	521.95	522	1.72	0.05	0.013	0.05	-4.7	4.15
3	C.O. 4 TO CI 5	48.28	12	1.01	0.27	1.29	3.69	0.47	520.24	520.73	526.15	524.51	522.01	522.07	522.12	1.57	0.04	0.013	0.06	5.5	2.39
4	CI 5 TO CI 6	69.93	12	1	0.54	0.96	3.56	0.42	520.73	521.43	524.51	524.51	522.14	522.18	522.23	1.22	0.02	0.013	0.05	90	2.28
5	CI 6 TO C.O. 7	54.35	8	1.32	0.42	0.42	1.39	0.31	521.43	522.15	524.51	526.5	522.25	522.48	522.48	1.2	0.02	0.013	n/a	89.6	4.04
6	C.O. 4 TO C.O. 10	13.73	8	16.46	0.12	0.12	4.9	0.16	520.24	522.5	526.15	526.5	522.04	522.66	522.66	0.34	0	0.013	n/a	89	3.84

100 YR. EVENT HYDRAFLOW STORM SEWER 2005 VER.																					
LINE NO.	LINE ID	LINE LENGTH (FT.)	LINE SIZE (IN.)	LINE SLOPE (%)	KNOWN Q (CFS)	FLOW RATE Q (CFS)	CAPACITY FULL (CFS)	CRITICAL DEPTH (FT.)	INVERT (FT.)	INVERT (FT.)	GRND. RIM (FT.)	GRND. RIM (FT.)	HGL (FT.)	HGL (FT.)	HGL (FT.)	VEL (FT/S)	VEL (FT/S)	N-VALUE	MINOR LOSS (FT.)	DEF. ANGLE (DEG.)	FREE-BOARD
1	MH 1 TO CI 2	78.3	12	1.72	0.54	0.54	4.68	0.31	519.86	521.21	525.85	524.29	521.86	521.88	521.89	0.69	0.01	0.013	0.01	80.7	2.42
2	MH 3 TO C.O. 4	65.41	12	1.01	0	2.13	3.58	0.62	519.58	520.24	525.92	526.15	521.86	522.09	522.21	2.71	0.11	0.013	0.11	-4.7	3.94
3	C.O. 4 TO CI 5	48.28	12	1.01	0.43	1.95	3.69	0.59	520.24	520.73	526.15	524.51	522.23	522.32	522.46	1.1	0.1	0.013	0.14	5.5	1.96
4	CI 5 TO CI 6	69.93	12	1	0.85	1.52	3.59	0.52	520.73	521.43	524.51	524.51	522.25	522.28	522.71	1.94	0.06	0.013	0.09	90	1.74
5	CI 6 TO C.O. 7	54.35	8	1.32	0.67	0.67	1.39	0.39	521.43	522.15	524.51	526.5	522.77	522.94	522.99	1.52	0.06	0.013	0.06	89.6	3.51
6	C.O. 4 TO C.O. 10	13.73	8	16.46	0.18	0.18	4.9	0.2	520.24	522.5	526.15	526.5	522.32	522.7	522.7	0.52	0	0.013	n/a	89	3.80

NOTE
A 5/8" TRASH BAR SHALL BE CENTERED WITHIN THE OPENING OF ALL INLETS.

Revised	Comment
2/17/16	1ST SUB TO CITY
2/23/16	REV. PER CITY CHECK LIST
4/7/16	REV. PER CITY COMMENTS
5/12/16	REV. PER CITY COMMENTS
6/13/16	REV. PER CITY COMMENTS

Missouri Office
5000 Grinn Rd.
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Fax: (314) 843-1718

DOERING ENGINEERING, INC.
CIVIL ENGINEERING • PLANNING • SURVEYING

Seal
STATE OF MISSOURI
Professional Engineer
Mark A. Doering
6/13/16
184-003035

MARK A. DOERING
CIVIL ENGINEER E-23069
6/13/16
MO. EXPIRATION DATE: DECEMBER 31 2014
IL. EXPIRATION DATE: DECEMBER 31 2013
MO. CORPORATE LICENSE NO. 001347
IL. CORPORATE LICENSE NO. 184.003035

PLAZA TIRE
1000 N MAIN ST.
O'FALLON, MO 63366
SEWER PROFILES

Date: 2/17/16
Project Number: 15030
File Name: 15030CD
Drawn By: JAB
Check By: MAD

C7