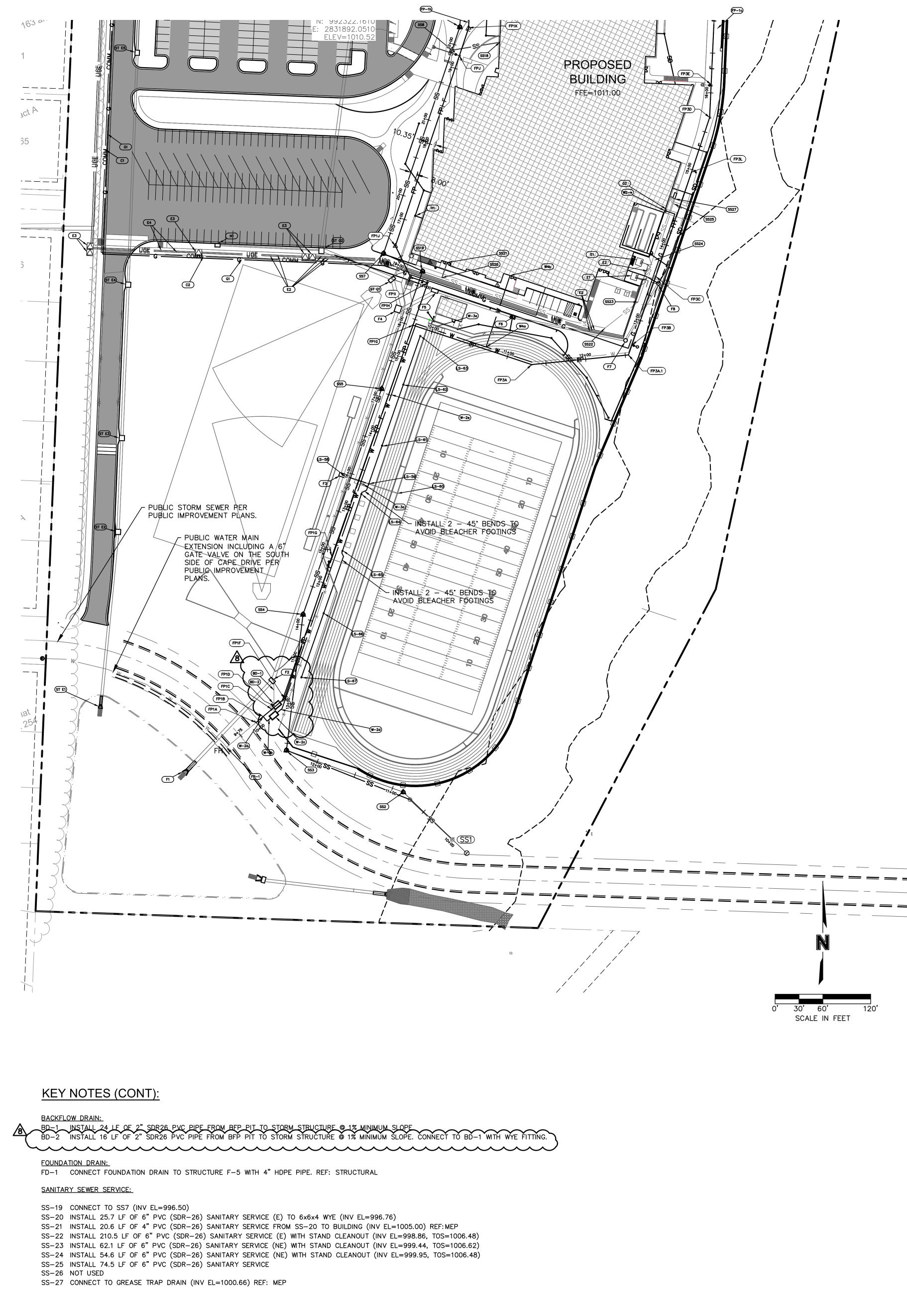
### EAST TRAILS MIDDLE SCHOOL - PRECAST 3" METER VAULT CONSTRUCTION DRAWING REVISIONS RESPONSE TO CITY COMMENTS FEBRUARY 7, 2022

#	CITY COMMENT (2-4-2022 EMAIL FROM GENE WILLIAMS)	OLSSON RESPONSE
1	In the future, the City shall not review revisions that are unsealed and unsigned, unless they are specifically labeled as "Preliminary Not for Construction".	Understood.
2	Please review the approved 3 inch meter vault (attached) on Sheet C1050 of the approved Final Development Plan. Not sure what has changed, since this item underwent extensive review in 2020, including the requirement that a hatch and steps be provided.	A new sheet has been added to the set. The sheet is C1050A. The details for the water meter vault have been moved to this sheet. A new view has been added to show the rebar in the top of the vault. Rebar details have also been added to the sections per the detail uploaded to the portal on 01-29-2022. The meter vault detail has been removed from C1050.
3	The 3 foot callout from the bottom of the top slab to the centerline of the pipe appears somewhat questionable. Is this sufficient clearance for all appurtenances within the vault including the meter and valves?	The plumber on the project indicates this is sufficient clearance. If the city has other information please, their input would be appreciated. The 36" dimension plus the 8" lid thickness give 44" of depth over the pipe from finish grade.
4	Since this is cast in place, where is the leveling mat? A granular leveling mat appears warranted rather than bare earth foundation.	The detail on Sheet C1050A has been revised to include a 2" AB-3 leveling layer under the vault slab.
5	Sump has no mechanism to drain. In a similar fashion to backflow vaults, provide the method to drain the meter vault either by daylighting, connection to a private storm inlet or box, or infiltration gallery. Provide notation on the revision showing how this will be accomplished, and revise the utility plan sheet to reflect the change as appropriate.	A sump has been added to the detail on the new Sheet C1050A. Sheet C1027 has been updated to show a 2" PVC drain connection to this sump (Keynote BD-2). This drain is being wyed into the drain for the Backflow Preventor Vault.



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## **KEY NOTES**:

### DOMESTIC WATER

- W2. WATERLINE TO MIDDLE SCHOOL a. INSTALL 6x6x4 CUT IN TEE ON 6" PUBLIC CITY MAIN. b. INSTALL 10 LF OF 4" AWWA C900 FROM TEE TO METER.
- c. INSTALL 3" METER AND PIT PER DETAIL ON C1050.
- d. INSTALL A MINIMUM 10 LF 4" AWWA C900 FROM METER TOWARDS BUILDING

- e. CONTINUE BUILDING SERVICE CONNECTION WITH 996± LF OF 4" AWWA C900 PIPE RE: MEP FOR CONNECTION AT BLDG AND BACKFLOW
- PREVENTION.
- W3. HOSE BIB CONNECTION

- a. 者 TAP WITH HOSE BIB

a. INSTALL 4×4×2 TEE ON 4" SERVICE LINE

FIRE PROTECTION:

DUCTILE IRON PIPE

SANITARY SEWER:

E1. TRANSFORMER LOCATION.

E3. SECTIONALIZER LOCATION.

COMMUNICATIONS:

ROOF DRAIN SYSTEM:

<u>GAS SERVICE</u>

ELECTRICAL:

- W4. 2" SERVICE LINE TO SCHOOL

# EXISTING CONDITIONS LEGEND

	PROPER
	RIGHT-0
	EASEME
P_OH	OVERHE
———— P-UG ————	UNDERG
TEL	UNDERG
——— FO ———	UNDERG
G	GAS LIN
W	WATER
<u></u>	STORM
22	CANUTAR

# PROPOSED CONDITIONS LEGEND

———— E ————	PR			
——— FO ———	PR			
— w —	PR			
FP	PR			
SD SD	PR			
T	PR			
SS	PR			

ALL FIRE PROTECTION LINE SHALL BE 6" AWWA C900 U.N.O. ALL PUBLIC FITTINGS AND FIRE PROTECTION LINE FITTINGS MUST BE ZINC COATED

REFERENCE SHEETS C1028A AND C1028B FOR PROFILES AND KEYNOTE DESCRIPTIONS

FP1. INSTALL TEMPORARY IN-LINE FIRE HYDRANT ASSEMBLY ON SOUTH SIDE OF PROPOSED CAPE DRIVE

REF: SHEET C1028C FOR PROFILES AND KEYNOTE DESCRIPTIONS

b. INSTALL 94 L) 2" AWWA C900 FROM TEE TOWARDS BUILDING. CONNECT TO BLDG.

INSTALL ELECTRICAL SERVICE PER EVERGY DRAWING FILE NO. 977368-1. CONTRACTOR TO INSTALL TRANSFORMER AND SECTIONALIZER PADS AND CONDUIT PER UTILITY COMPANY STANDARDS AND SPECIFICATIONS. VERIFY CONDUIT SIZE AND ROUTING WITH EVERGY PRIOR TO INSTALLATION. ELECTRICAL DESIGN IS BY EVERGY. SEE MEP PLANS FOR LIGHTING AND LIGHTING CONDUIT.

E2. INSTALL 4" PVC CONDUIT (5300 LF TOTAL FOR SHEETS C1026 AND C1027)

C2 INSTALL 2110± LF OF 3-4" PVC CONDUIT W/PULL STRING. COORDINATE CONNECTION AND LOCATION WITH COMMUNICATIONS COMPANY.

G1 INSTALL 2340± LF OF GAS SERVICE LINE (SIZE AND MATERIAL TO BE DETERMINED). COORDINATE LOCATION WITH GAS SERVICE COMPANY. G2 PROPOSED METER LOCATION

RD108 INSTALL 6" INSERTA-TEE AND 56 LF 6" HDPE (S.) @ 1.00% MIN. RD109 CONNECT TO BUILDING. RE: MAP

### LANDSCAPE AND ROOF DRAINS:

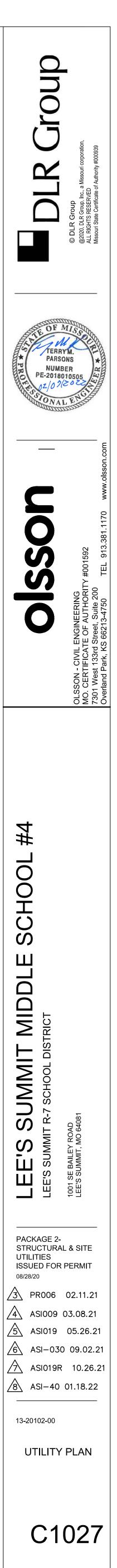
													ENGTH OF TH					INEAL FEET										
	20.072110				N	1		NE			E	1		SE			S			SW			w	1		NW		SLOPI
KEYNOTE	DS STRUC G8	CONNECTION TO G9	TS 1016.20	IE	SIZE	LEN	IE	SIZE	LEN	IE	SIZE	LEN	IE	SIZE	LEN	IE	SIZE	LEN	IE	SIZE	LEN	IE 1009.58	51ZE 15	LEN	IE	SIZE	LEN	
LS-2	G9 (LS-1)	24" NYLOPLAST BASIN W GRATED LID	1016.30							1009.84	15	24.4										1009.84	15		<u> </u> '			1.07%
LS-3	LS-2	24" NYLOPLAST BASIN W GRATED LID	1016.70	1010.58	12					1010.58	15	73.5										1010.58	12		'	<b> </b> '	<u> </u>	1.01%
LS-4 LS-5	LS-3 LS-4	24" NYLOPLAST BASIN W GRATED LID 24" NYLOPLAST BASIN W GRATED LID	1016.69 1016.69							1011.66	12	45.9				1011.18 1011.66	12 6	60				1011.18 1011.66	12 12			<u> </u>	<u> </u>	1.00% 1.05%
LS-6	LS-5	24" NYLOPLAST BASIN W GRATED LID	1016.53							1012.05	12	38.6				1012.05	6					1012.05	12					1.01%
LS-7	LS-6	24" NYLOPLAST BASIN W GRATED LID	1016.51							1012.35	12	35.8													1012.35	12	<b>—</b>	0.84%
LS-8 LS-9	LS-7 LS-8	24" NYLOPLAST BASIN W GRATED LID 24" NYLOPLAST BASIN W SOLID LID	1015.85 1016.00	1012.67	10					1013.11	10		1012.67	12	40.6	1012.80	10	16.9							1012.80	8	├───┤	0.79%
LS-10	LS-9	24" NYLOPLAST BASIN W GRATED LID	1014.60							1015.11	10		1012.95	8	15.3	1012.80	10	10.5							1012.80			0.98%
LS-11	LS-3	24" NYLOPLAST BASIN W GRATED LID	1016.70	1011.51	6					1011.01	12	48.2										1011.01	12			'		0.89%
LS-12 LS-13	LS-11 LS-12	24" NYLOPLAST BASIN W GRATED LID 24" NYLOPLAST BASIN W GRATED LID	1016.72	1011.85	6 b					1011.35	12	38.6							1012.02			1011.35	10		<b>├</b> ──′	'	⊢ – –	0.88%
LS-13	LS-12	24" NYLOPLAST BASIN W GRATED LID	1014.81 1013.86		n		1012.52	8	78.3	1012.02	10	73.2							1012.02	8						<u> </u>	<b> </b>	0.52/0
LS-17	E6	CONNECTION TO E7	1020.05				1009.32	8																				
LS-18	E7 (LS-17)	24" NYLOPLAST BASIN W GRATED LID	1014.50										1010.46	8					1010.46	8	64				1010.45	8	ļ]	1. <b>78%</b>
LS-19	LS-18	24" NYLOPLAST BASIN W GRATED LID	1013.36										1011.35	8	89.2											<u> </u>		1.01%
LS-20 LS-21	LS-18 G3	24" NYLOPLAST BASIN W GRATED LID CONNECTION TO GG1	1014.50 1008.63							1003.73	12														1011.34	8	87.64	1.00%
LS-22	GG1 (LS-21)	24" NYLOPLAST BASIN W GRATED LID	1010.40	1003.84	8					10001/10						1003.84	10					1003.84	12	81.3				0.14%
LS-23	LS-22	24" NYLOPLAST BASIN W GRATED LID	1010.67							1008.21	8					1008.21	8	57.2							'	[]	<b></b>	7.64%
LS-24 LS-25	LS-22 LS-24	24" NYLOPLAST BASIN W GRATED LID	1010.47	1004.32	10	48.1										1004.32	6					1004.32	8		<b> '</b>	<b> </b>	⊢−−−	1.000
LS-25 LS-26	LS-24 G1	24" NYLOPLAST BASIN W GRATED LID CONNECT TO H1	1010.83 1008.46	1005.27	6	95.1	1002.60	12														1005.27	6			<u> </u>	<u> </u>	1.00%
LS-27	H1 (LS-26)	24" NYLOPLAST BASIN W GRATED LID	1010.55				1002.94	8					1008.00	10					1002.94	12	33.8				<b> </b>	'		1.01%
LS-28	LS-27	24" NYLOPLAST BASIN W GRATED LID	1007.00				1003.34	8					1003.34	8	40.4										'			0.99%
LS-29	LS-28	24" NYLOPLAST BASIN W GRATED LID	1007.00																1003.88	8	53.5				<b> </b> '	'	⊢	1.01%
LS-30 LS-31	K2 K3	CONNECTION TO K3 CONNECTION TO K4	1007.79 1009.74																			1005.95 1005.95	8		<u>                                     </u>	<u> </u>		
LS-32	K4	CONNECTION TO K5	1009.74													1008.48	6					1005.95	8					. <u> </u>
LS-33	F7	CONNETION TO F8	1006.41				1003.65	12																	1003.65	6		
LS-34	F8 (LS-33)	24" NYLOPLAST BASIN W GRATED LID	1006.08												~				1003.74	12	24.6				1003.76	12	⊢]	0.37%
LS-35 LS-36	LS-34 LS-35	24" NYLOPLAST BASIN W GRATED LID 24" NYLOPLAST BASIN W GRATED LID	1006.63 1009.76				1003.96 1004.23	12 10					1003.96	12	22.1				1004.23	12	94.9				1003.96	8	┌───┤	0.90%
LS-36 LS-37	LS-35 LS-36	24" NYLOPLAST BASIN W GRATED LID	1009.76				1004.23	6											1004.23	12	94.9 56.1				1004.23	10		2.44%
LS-38	F5	CONNECTION TO F6	1006.52													1002.26	12											
LS-39	LS-38	24" NYLOPLAST BASIN W GRATED LID	1004.95	1002.35	12	17.3	┝──┤			1002.35	8											1002.35	8		<b> </b> '	<u> </u> '	⊢]	0.52%
LS-40 LS-41	LS-39 LS-40	24" NYLOPLAST BASIN W SOLID LID 24" NYLOPLAST BASIN W GRATED LID	1004.70 1004.76									н	1002.61 1002.94	8								1002.61	8	52.8	1002.94	8	66.6	0.49%
LS-41 LS-42	LS-40 LS-41	24" NYLOPLAST BASIN W GRATED LID	1004.76									n	1002.94	0											1002.94	8 6	57.2	0.50%
LS-44	LS-39	24" NYLOPLAST BASIN W GRATED LID	1003.48							1002.55	8	40.3							1002.55	8								0.50%
LS-45	LS-44	24" NYLOPLAST BASIN W GRATED LID	1004.92				1002.68	8	27.1																1002.68	8	┥───┤	0.50%
LS-46 LS-47	LS-45 LS-46	24" NYLOPLAST BASIN W GRATED LID 24" NYLOPLAST BASIN W GRATED LID	1004.92 1004.61										1002.84 1002.91	8	41.3 14.5										1002.84	8	┌──┤	0.48%
LS-47 LS-48	A4	CONNECTION TO A5	1004.61							1010.04	10		1005.91	0	14.5										<b> </b> '			0.39%
LS-49	A5 (LS-48)	24" NYLOPLAST BASIN W SOLID LID	1015.96							1012.80	10	92.5				1013.11	10								1013.00	6		
LS-49A	LS-49	CONNECT TO RET WALL FOUND DRAIN	1022.86										1020.80	6	38.2										<u> </u>		┥───┤	2.98%
LS-50 LS-51	A2 A3 (LS-50)	CONNECTION TO A3 24" NYLOPLAST BASIN W SOLID LID	1016.37 1014.00				1011.30	12	85.7							1011.90	10		1010.45	12		1011.90	10		<b> </b> '	<u> </u> '	<u>├</u> ──┤	20.42% 0.99%
LS-51 LS-54	G7	CONNECTION TO G8	1014.00				1011.30	14	رده (	1010.50	6					1011.90	10					1011.90	10 6		<b></b>			0.33%
LS-55	G8 (LS-54)	24" NYLOPLAST BASIN W SOLID LID	1016.55	1013.20	6					1013.00	8	49.2										1013.20	6					5.08%
LS-55A	G8 (LS-54)	24" NYLOPLAST BASIN W SOLID LID	1016.93	1013.60	6											1014.02	6					1013.00	8	48.5	<b>↓</b> '			5.15%
LS-56		INSERT-A-TEE W/ 8" FIELD DRAIN	1014.92																						<b> </b> '	<u> </u>	⊢]	
LS-57 LS-58	LINE A F2	INSERT-A-TEE W/ 8" FIELD DRAIN CONNECTION TO F3	1014.05 1003.68										998.88	12											<u> </u> '	<u> </u>		
LS-59	F3 (LS-58)	24" NYLOPLAST BASIN W GRATED LID	1003.63				999.43	8					999.43	10					999.43	8					999.43	12	27.4	
LS-60	LS-59	10x 10x 10 TEE	1005.00				1000.27	10	41.9																			2.00%
LS-61	LS-59	24" NYLOPLAST BASIN W GRATED LID	1003.00				999.95	8											999.95	8	51.1				<b>{</b> '	'	⊢	1.02%
LS-62		24" NYLOPLAST BASIN W GRATED LID	1003.00				1000.76												1000.76		81.1							1.00%
LS-64	▲ ▲LS-59	24" NYLOPLAST BASIN W GRATED LID	1003.00		• •	• •	<b>9</b> 99.61	8	17.2	• •	• •		•••			• •	• •		1001.50 999.61	8	🕶	· •	• •	• •			· · · ·	1.05%
				$\sim$	~~	~~	000.			$\sim$			$\sim$	$\sim$	$\sim$	$\sim$		$\sim$	-00		$\sim$	$\sim$	$\sim$	$\sim$		$\sim$		
LS-66	LS-65	24" NYLOPLAST BASIN W GRATED LID	1003.00				1000.82	8	82.8										1000.82	6					<u> </u>		T	0.82%
				$\sim$	$\sim$		1001.00			$\sim$	$\sim$					$\sim$	$\sim$	$\sim$		$\sim$	$\sim$		$\sim$		$ \rightarrow $	$\sim$	$\rightarrow$	
LS-68 LS-69	LS-72 LS-68	18" NYLOPLAST BASIN W GRATED LID 18" NYLOPLAST BASIN W GRATED LID	1006.90 1006.80				1005.03	8					1005.03	8	16.2				1005.13	8	25.4				<u> </u> '	<u> </u>	<u>├</u> ───┤	0.49%
LS-89 LS-70	LS-73	18 NYLOPLAST BASIN W GRATED LID	1006.80																1005.13	8	25.4						<del> </del>	0.98%
LS-71	LS-72	18" NYLOPLAST BASIN W GRATED LID	1006.80																1005.13	8	25.4							0.71%
LS-72	LS-73	8x8x8 TEE	NA				1004.95	8					1004.95	8	16.2										1004.95	8	T	0.43%
LS-73	LS-35	8x8x8 TEE	NA				1004.88	8					1004.88	8	9.5										1004.88	8	⊢]	6.84%
LS-74 LS-75	LS-48 LINE A	INSERT-A-TEE W/ 8" FIELD DRAIN INSERT-A-TEE W/ 8" FIELD DRAIN	1014.60 1015.00																						{'	<u> </u>	<u> </u>	
	LINE A	INVENTATELY V/ O FIELD URAIN	1012:00																									
RD-1	LS-5	ROOF DRAIN CONNECTION		1013.40	6	5																						34.80%
RD-2	LS-6	ROOF DRAIN CONNECTION		1013.40	6	5																			↓'			27.00%
RD-3 RD-4	LS-11	ROOF DRAIN CONNECTION														1013.40	6	3							<b> </b> '	'	⊢	51.679
RD-4 RD-5	LS-12 LS-23	ROOF DRAIN CONNECTION ROOF DRAIN CONNECTION														1013.40	6	3				1008.39	8	17.7	<u> </u>	<u> </u>	<del> </del>	51.679 1.029
RD-6	LS-25	ROOF DRAIN CONNECTION																				1008.67	6	17.7				19.219
RD-7	LS-24	ROOF DRAIN CONNECTION																				1008.39	8	17.7				22.99
RD-8	LS-26	ROOF DRAIN CONNECTION																							1008.25	8	10	56.509
RD-9 RD-10	LS-27 K3 (LS-30)	ROOF DRAIN CONNECTION ROOF DRAIN CONNECTION					$\left  \right $			1006.00	8	10													1008.26	10	10	2.60%
RD-10	K4 (LS-31)	ROOF DRAIN CONNECTION								1006.00	8	10																0.50%
RD-12	K5 (LS-32)	ROOF DRAIN CONNECTION								1008.67	8	10																0.50%
RD-13	K5 (LS-32)	ROOF DRAIN CONNECTION		1008.67	6	65							4.67												<b>{</b> '	<u> </u> '	⊢]	0.29%
RD-14 RD-15	LS-37 LS-36	ROOF DRAIN CONNECTION ROOF DRAIN CONNECTION											1006.00 1005.38	6 8	40.4 25.17										<b>├</b> ──┘	<u> </u> '	┌──┤	0.99% 4.57%
RD-15 RD-16	LS-36 LS-35	ROOF DRAIN CONNECTION								1004.38	10	44.3	1005.38	8	25.1/										<u> </u>			4.57%

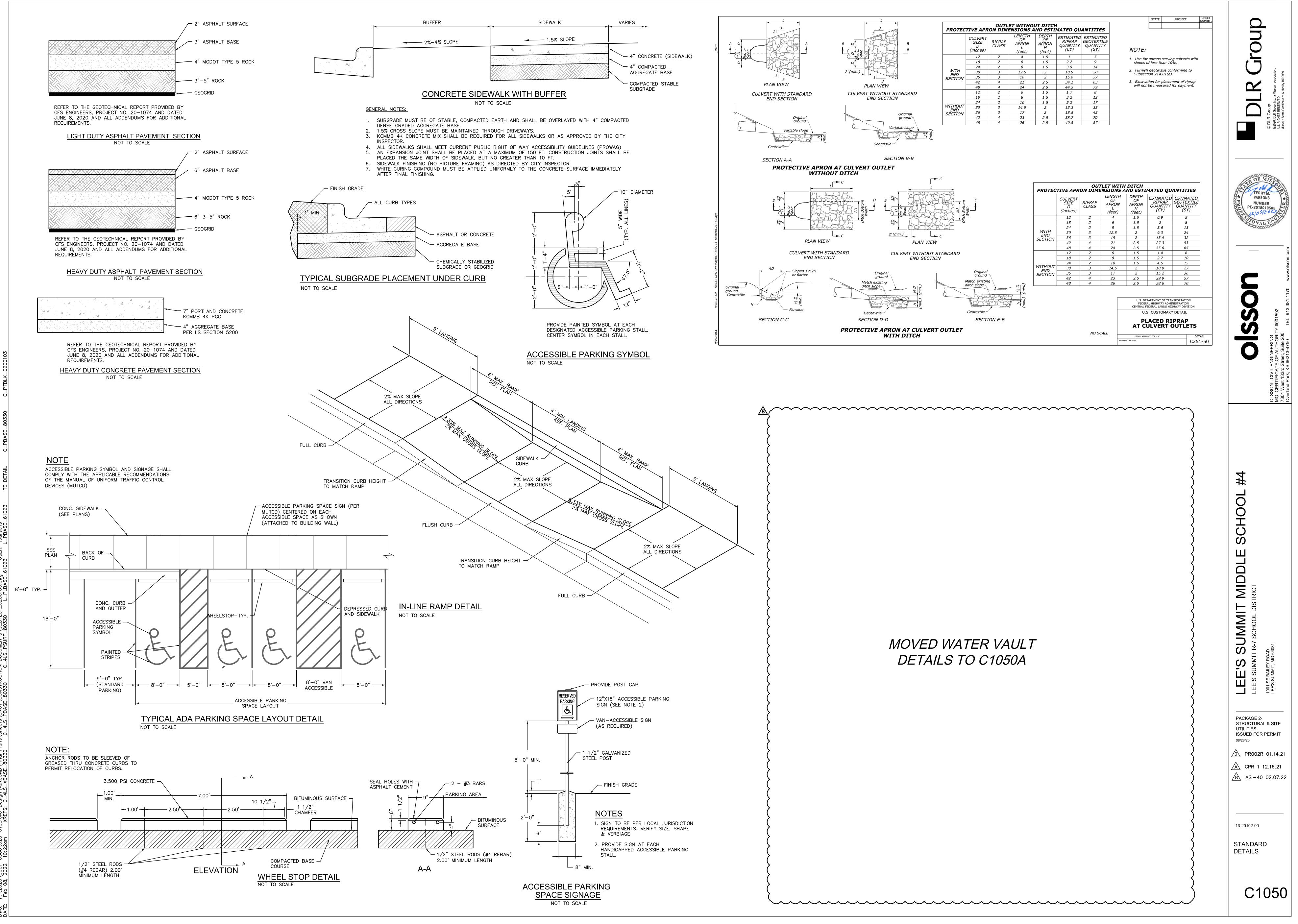
PROPERTY LINES -OF-WAY LINES ENT LINES EAD ELECTRIC GROUND ELECTRIC GROUND TELEPHONE GROUND FIBER OPTIC

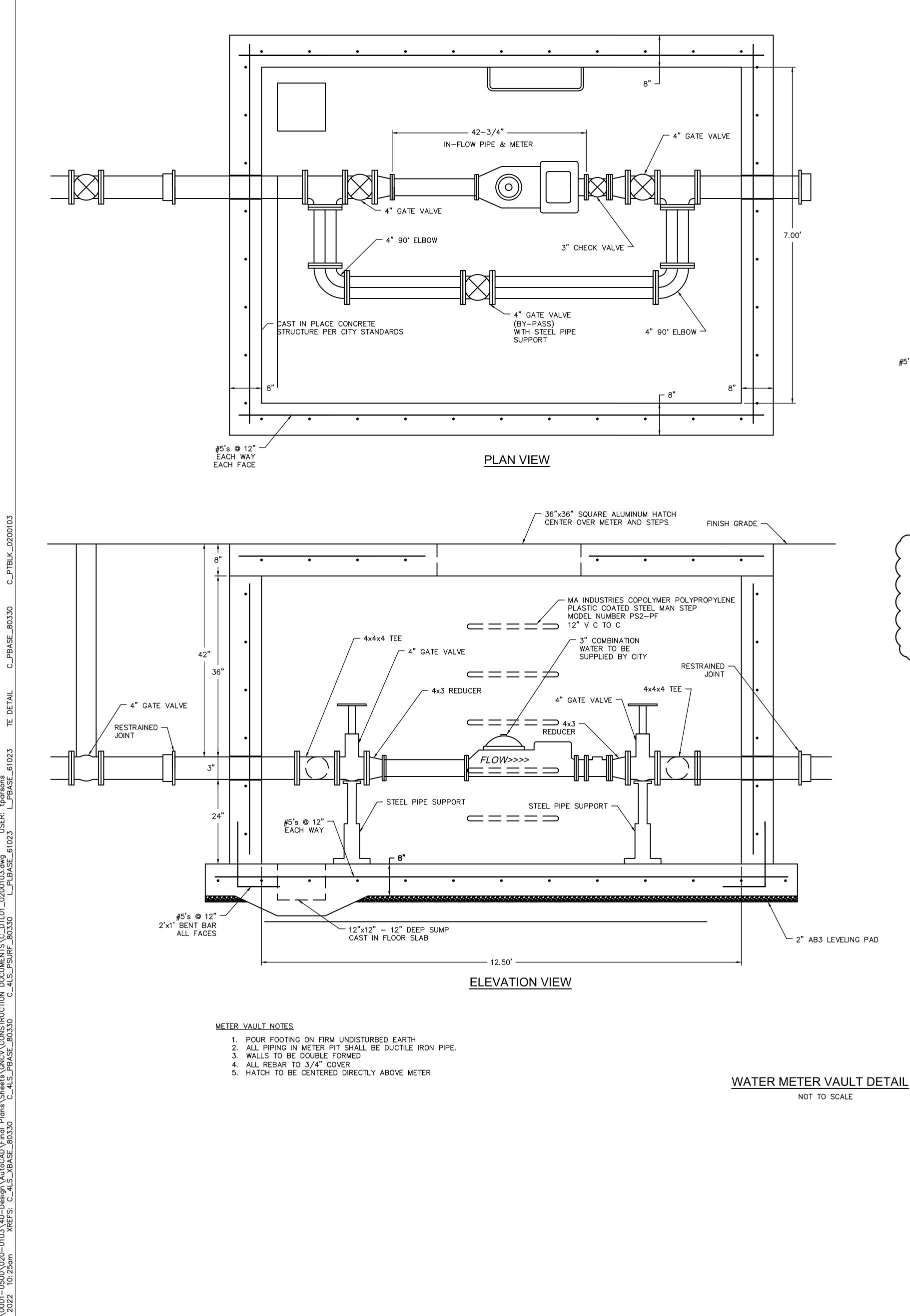
> LINE SEWER LINE

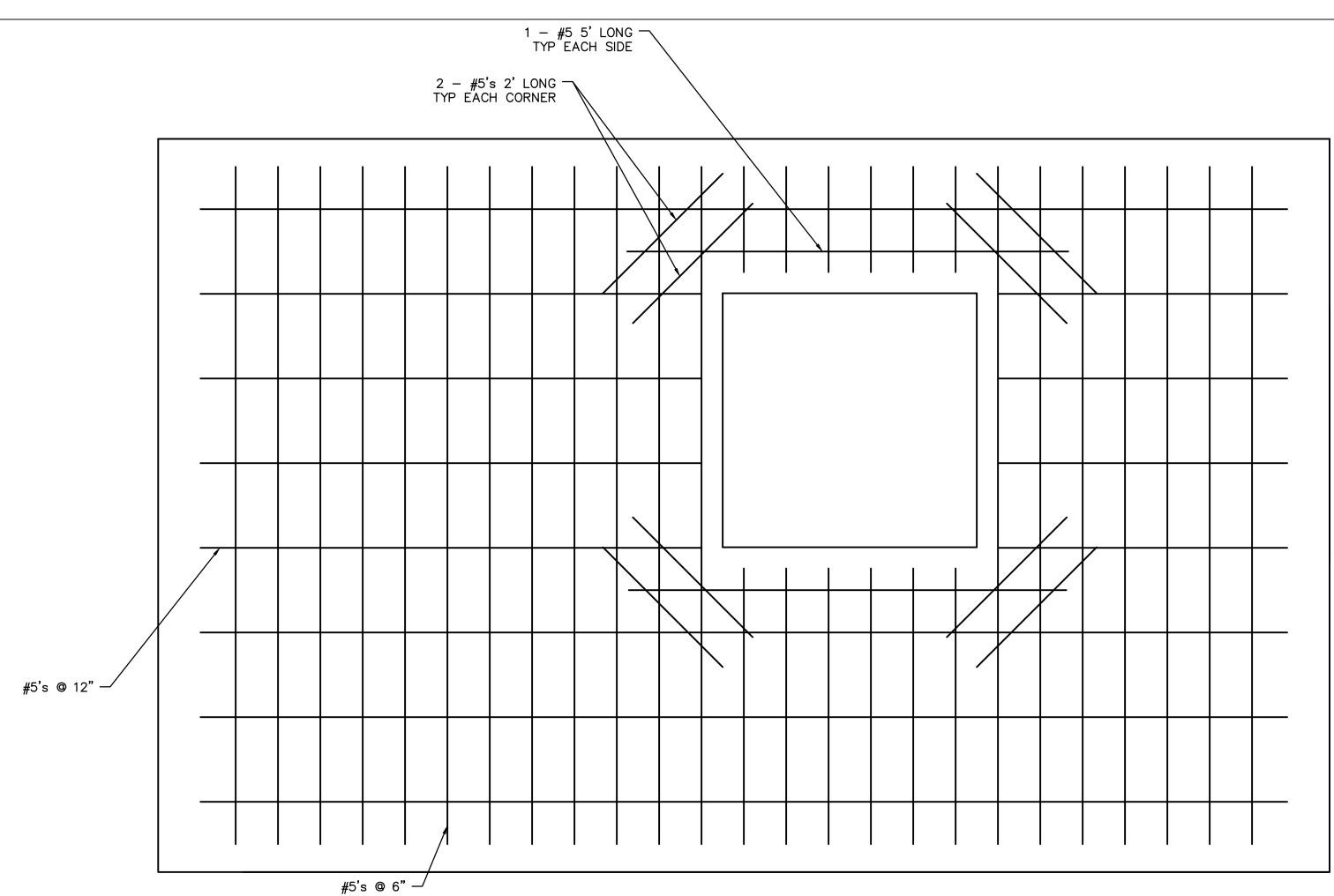
------ SS ------ SANITARY SEWER LINE

- ROPOSED UNDERGROUND ELECTRIC
- ROPOSED FIBER OPTIC
- ROPOSED WATER LINE ROPOSED FIRE PROTECTION LINE
- ROPOSED STORM SEWER LINE
- ROPOSED TURF DRAIN LINE ROPOSED SANITARY SEWER SERVICE
- ONCRETE CURB & GUTTER
- PROPOSED BUILDING











TOP REINFORCEMENT

