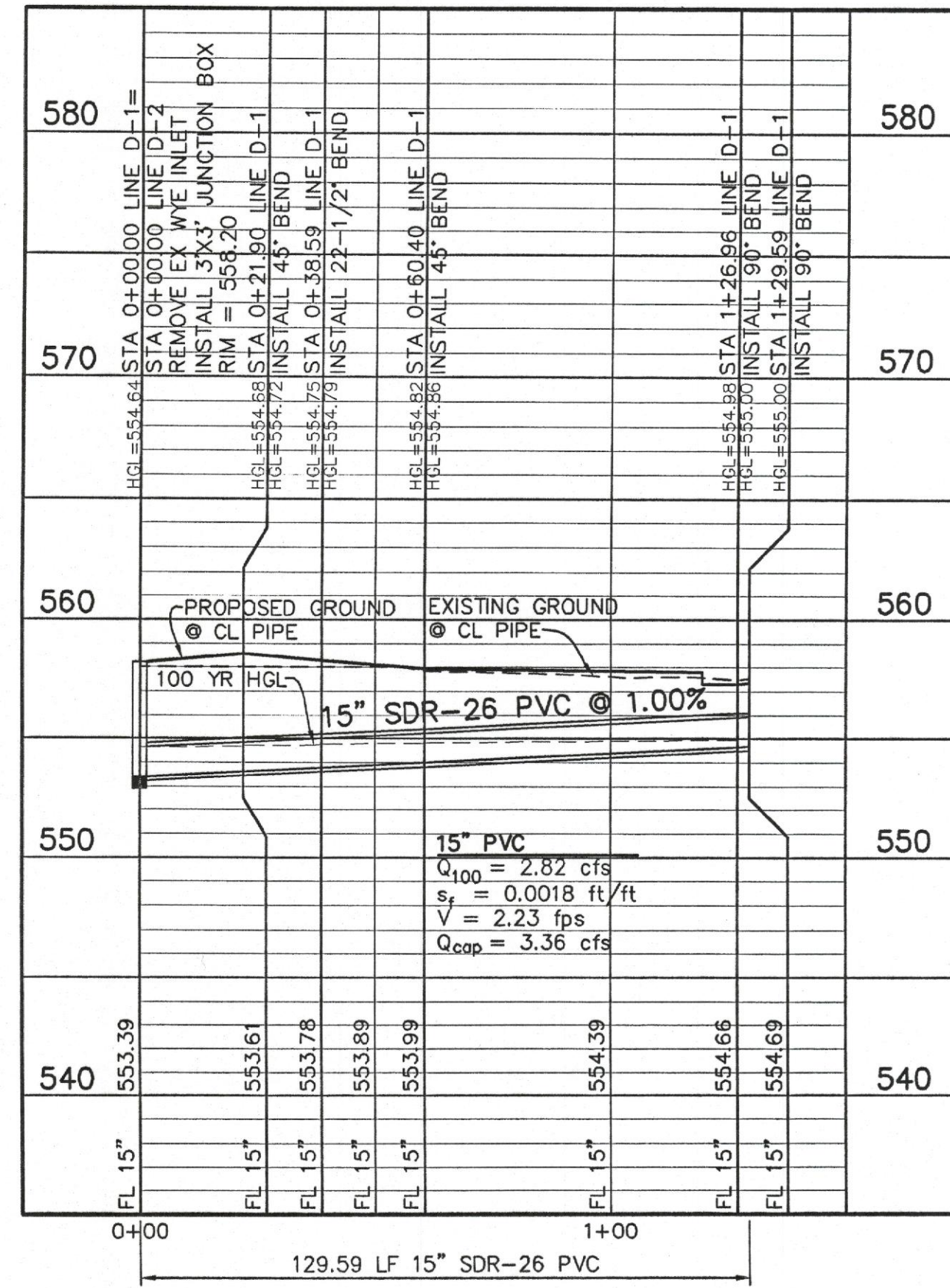


PRIVATE
LINE D-1



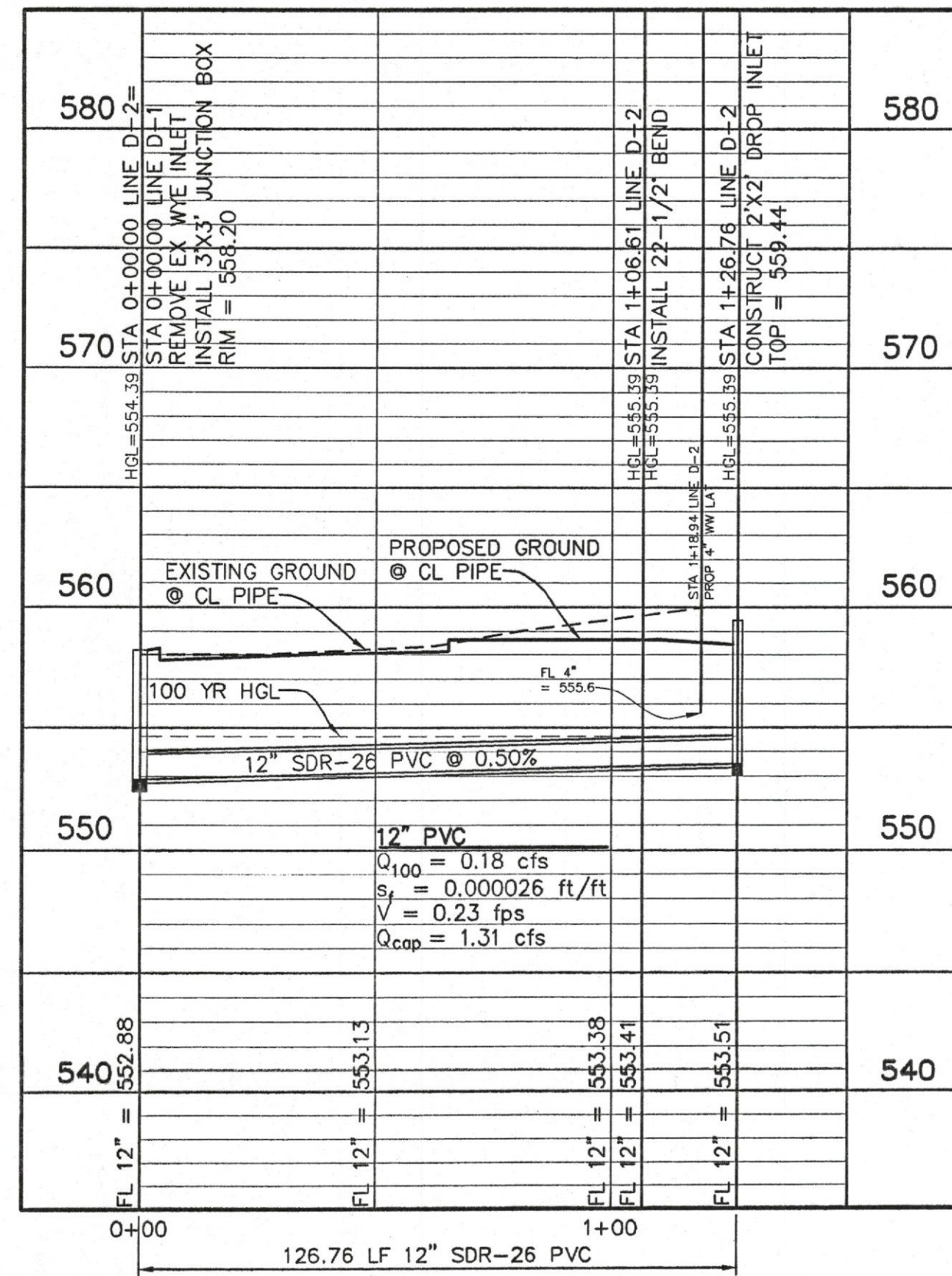
SCALE:
HORIZONTAL: 1" = 30'
VERTICAL: 1" = 6'

NOT FOR CONSTRUCTION

REVIEW
COPY

HYDRAULIC CALCULATIONS																			
Sta From	Sta To	Dist. (ft)	Pipe Size (in.)	Pipe Slope (ft/ft)	Pipe Elev. Out (ft)	Diff. (ft)	Pipe Elev. In (ft)	Discharge Q_{100} (cfs)	Velocity V (fps)	Pipe Area (sf)	Wetted Perimeter (P_w) (ft)	Hydraulic Radius R (ft)	S_f (ft/ft)	k (ds)	Hydraulic Jump ($V_{u1}^2/2g$) - ($k \times (V_{u1}^2/2g)$)	HGL Out	S_f Dist	HGL In	Comment
D-1																			
126.96	129.59	2.63	15	0.0100	554.66	0.03	554.69	2.82	2.30	1.23	3.93	0.31	0.0019	0.80	0.02	555.02	0.0050	555.03	15'-90° Bend
60.40	126.96	66.56	15	0.0100	553.99	0.67	554.66	2.82	2.30	1.23	3.93	0.31	0.0019	0.50	0.04	554.88	0.1270	555.01	15'-45° Bend
38.59	60.40	21.81	15	0.0100	553.78	0.22	553.99	2.82	2.30	1.23	3.93	0.31	0.0019	0.50	0.04	554.80	0.0416	554.84	15'-22-1/2° Bend
21.90	38.59	16.69	15	0.0100	553.61	0.17	553.78	2.82	2.30	1.23	3.93	0.31	0.0019	0.50	0.04	554.72	0.0318	554.75	15'-45° Bend
0.00	21.90	21.9	15	0.0100	553.39	0.22	553.61	2.82	2.30	1.23	3.93	0.31	0.0019	n/a	n/a	554.64	0.0416	554.66	n/a

PRIVATE
LINE D-2

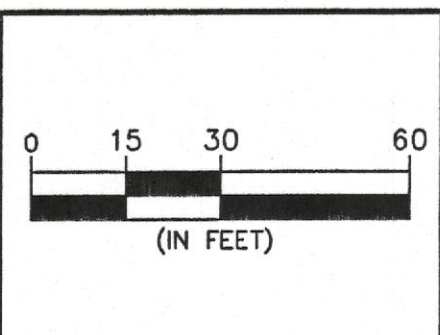
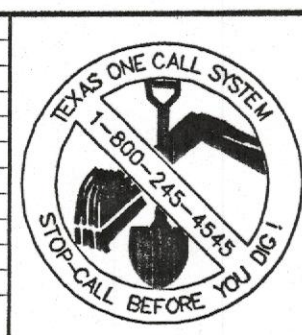


SCALE:
HORIZONTAL: 1" = 30'
VERTICAL: 1" = 6'

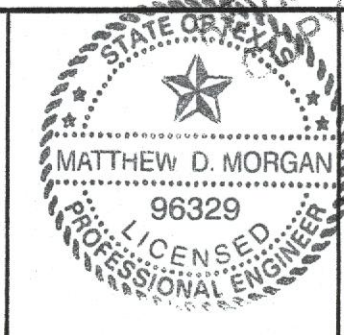
HYDRAULIC CALCULATIONS																			
Sta From	Sta To	Dist. (ft)	Pipe Size (in.)	Pipe Slope (ft/ft)	Pipe Elev. Out (ft)	Diff. (ft)	Pipe Elev. In (ft)	Discharge Q_{100} (cfs)	Velocity V (fps)	Pipe Area (sf)	Wetted Perimeter (P_w) (ft)	Hydraulic Radius R (ft)	S_f (ft/ft)	k (ds)	Hydraulic Jump ($V_{u1}^2/2g$) - ($k \times (V_{u1}^2/2g)$)	HGL Out	S_f Dist	HGL In	Comment
D-2																			
106.61	126.76	20.15	12	0.0050	553.41	0.10	553.51	0.18	0.23	0.79	3.14	0.25	0.000026	0.50	0.00	554.64	0.0005	554.64	12'-22-1/2° Bend
0.00	106.61	106.61	12	0.0050	552.88	0.53	553.41	0.18	0.23	0.79	3.14	0.25	0.000026	n/a	n/a	554.64	0.0027	554.64	n/a

NOT FOR CONSTRUCTION

REV	DATE	BY	DESCRIPTION



DESIGNED: _____
DRAWN: _____
CHECKED: _____



"THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MATTHEW D. MORGAN ON THE DATE SHOWN ON THE DASTAMP. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE 'TEXAS ENGINEERING PRACTICE ACT'"

DATE _____ NAME _____

ENGINEERS ARCHITECTS SURVEYORS PLANNERS

THE WALLACE GROUP INC.

PBA WEST RETAIL BUILDING
ROCKWALL CROSSING
STORM SEWER PROFILES
LINE D-1 & LINE D-2