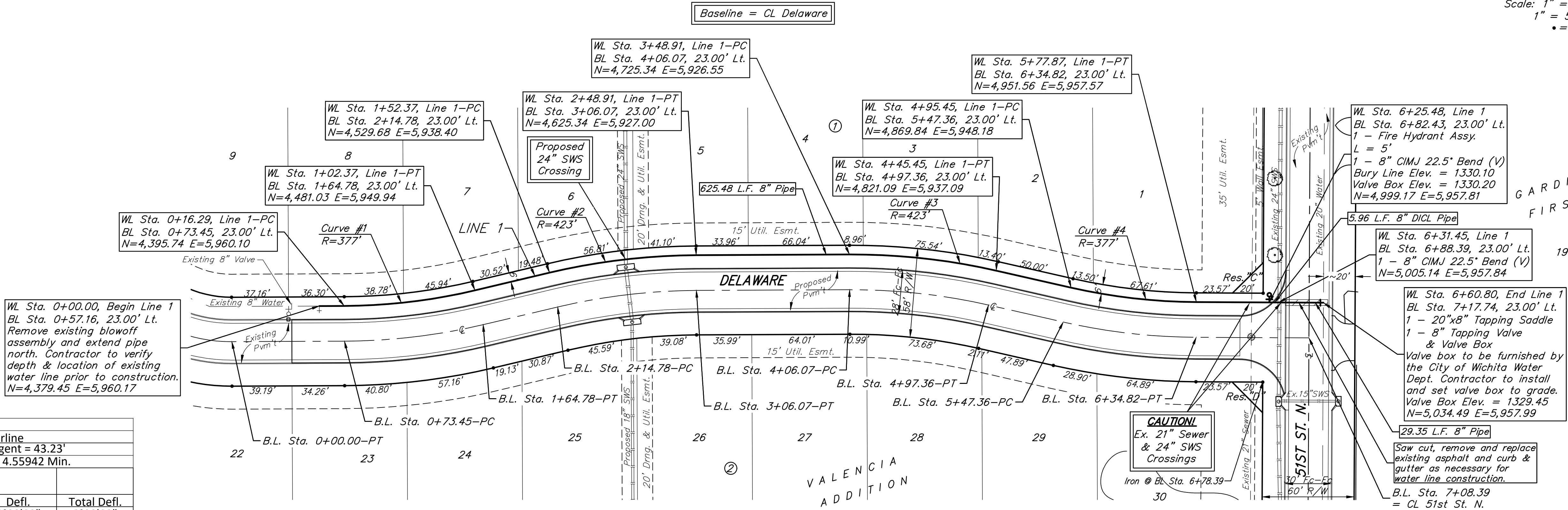
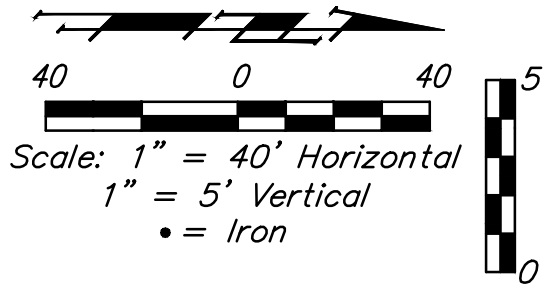


BENCHMARKS:

BM #1: "□" Cut in top of curb on south side of 51st St. N., near the NW corner of Lot 1, Block 1, Valencia Addition. Elev. = 1329.89 NAVD88

BM #2: COW disc set in curb on west side of Delaware St., near SE corner of Lot 8, Block 1, Valencia Addition. Elev. = 1322.70 NAVD88

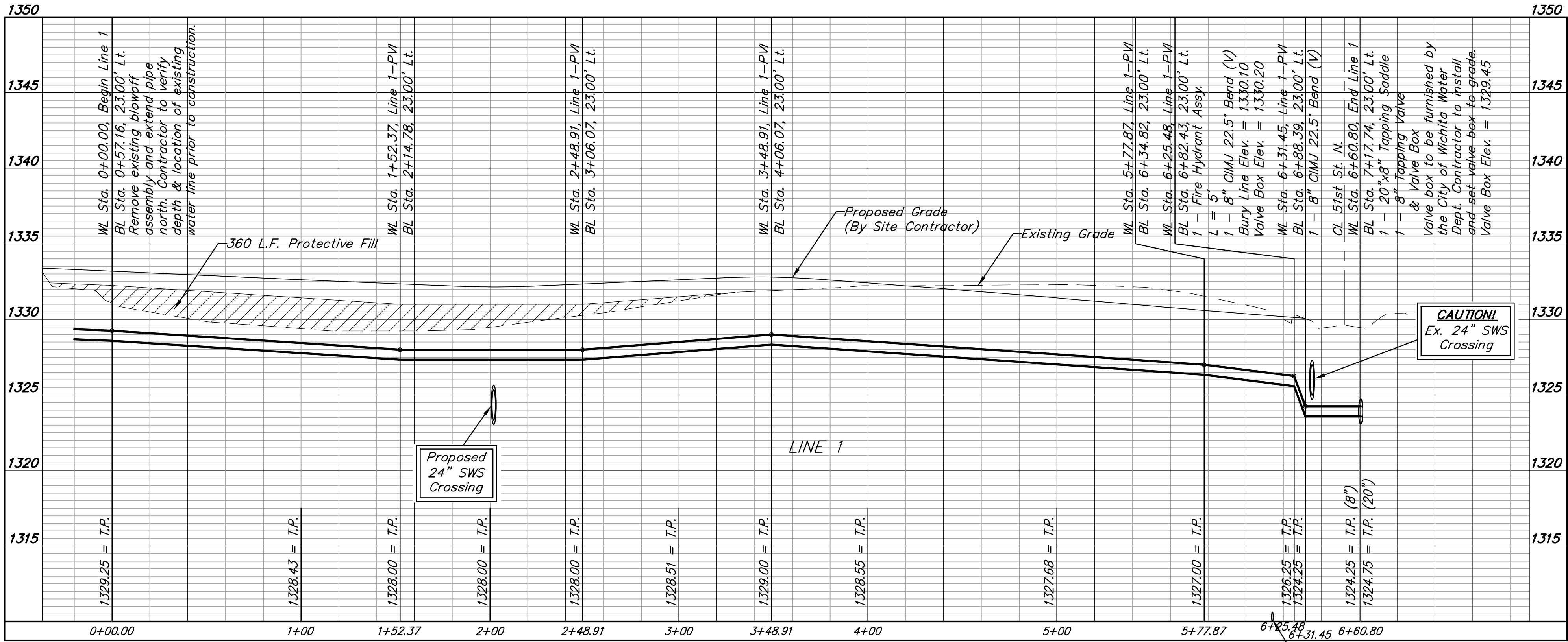


Curve #1				
Curve Data Based on Waterline				
Rad. = 377' Delta = 13°04'57" Tangent = 43.23'				
Arc = 86.08' L.C. = 85.89' Def./Ft. = 4.55942 Min.				
Chord Lengths	Station	Arc	8' Left	Defl.
0+16.29	-	-	-	0°00'00"
0+25.00	8.71'	8.53'	0°39'43"	0°39'43"
0+50.00	25.00'	24.47'	1°53'59"	2°33'42"
0+75.00	25.00'	24.47'	1°53'59"	4°27'41"
1+00.00	25.00'	24.47'	1°53'59"	6°21'40"
1+02.37	2.37'	2.32'	0°10'48"	6°32'28"

Curve #2				
Curve Data Based on Waterline				
Rad. = 423' Delta = 13°04'35" Tangent = 48.48'				
Arc = 96.54' L.C. = 96.33' Def./Ft. = 4.06351 Min.				
Chord Lengths	Station	Arc	8' Left	Defl.
1+52.37	-	-	-	0°00'00"
1+75.00	22.63'	23.06'	1°31'57"	1°31'57"
2+00.00	25.00'	25.47'	1°41'36"	3°13'33"
2+25.00	25.00'	25.47'	1°41'35"	4°55'08"
2+48.91	23.91'	24.36'	1°37'10"	6°32'18"

Curve #3				
Curve Data Based on Waterline				
Rad. = 423' Delta = 13°04'36" Tangent = 48.48'				
Arc = 96.54' L.C. = 96.33' Def./Ft. = 4.06360 Min.				
Chord Lengths	Station	Arc	8' Left	Defl.
3+48.91	-	-	-	0°00'00"
3+50.00	1.09'	1.11'	0°04'26"	0°04'26"
3+75.00	25.00'	25.47'	1°41'35"	1°46'01"
4+00.00	25.00'	25.47'	1°41'36"	3°27'37"
4+25.00	25.00'	25.47'	1°41'35"	5°09'12"
4+45.45	20.45'	20.84'	1°23'06"	6°32'18"

Curve #4				
Curve Data Based on Waterline				
Rad. = 377' Delta = 12°31'35" Tangent = 41.38'				
Arc = 82.42' L.C. = 82.26' Def./Ft. = 4.55947 Min.				
Chord Lengths	Station	Arc	8' Left	Defl.
4+95.45	-	-	-	0°00'00"
5+00.00	4.55'	4.45'	0°20'45"	0°20'45"
5+25.00	25.00'	24.47'	1°53'59"	2°14'44"
5+50.00	25.00'	24.47'	1°53'59"	4°08'43"
5+75.00	25.00'	24.47'	1°53'59"	6°02'42"
5+77.87	2.87'	2.81'	0°13'05"	6°15'47"



DEPTH UNKNOWN
Contractor to Verify
Depth & Location of
Existing 20" Water Line
Prior to Construction.

