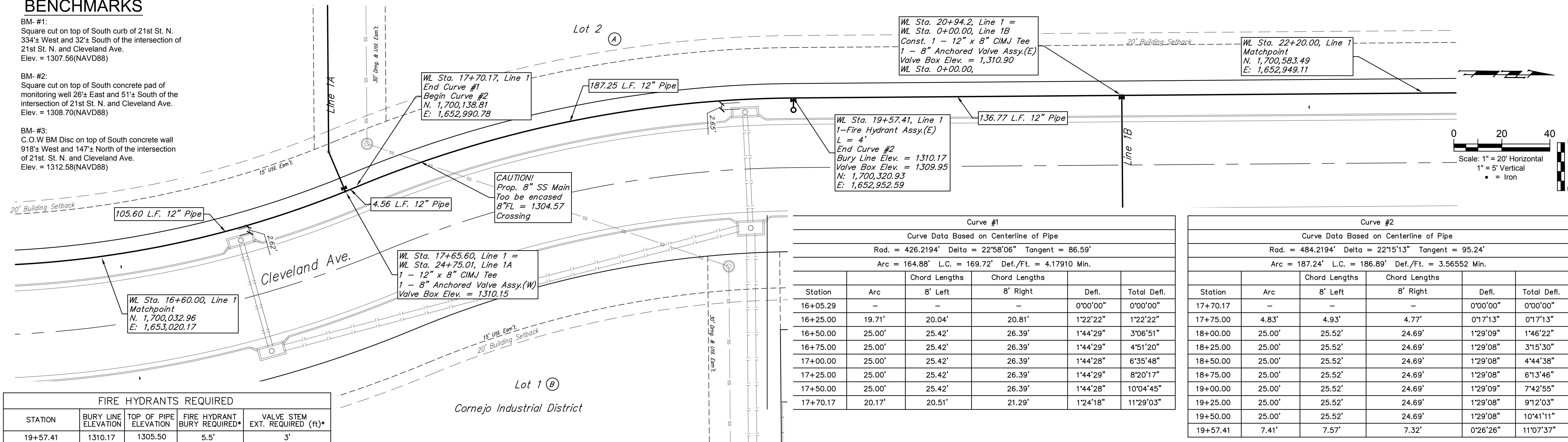


# BENCHMARKS

BM- #1:  
Square cut on top of South curb of 21st St. N.  
334± West and 32± South of the intersection of  
21st St. N. and Cleveland Ave.  
Elev. = 1307.56(NAVD88)

BM- #2:  
Square cut on top of South concrete pad of  
monitoring well 26± East and 51± South of the  
intersection of 21st St. N. and Cleveland Ave.  
Elev. = 1308.70(NAVD88)

BM- #3:  
C.O.V BM Disc on top of South concrete wall  
918± West and 147± North of the intersection  
of 21st St. N. and Cleveland Ave.  
Elev. = 1312.58(NAVD88)



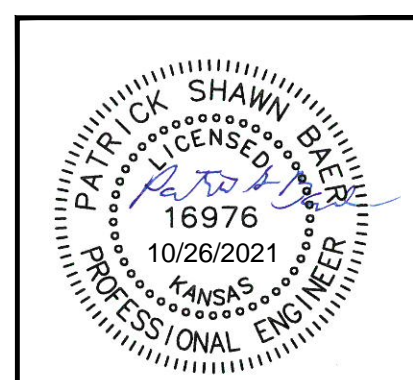
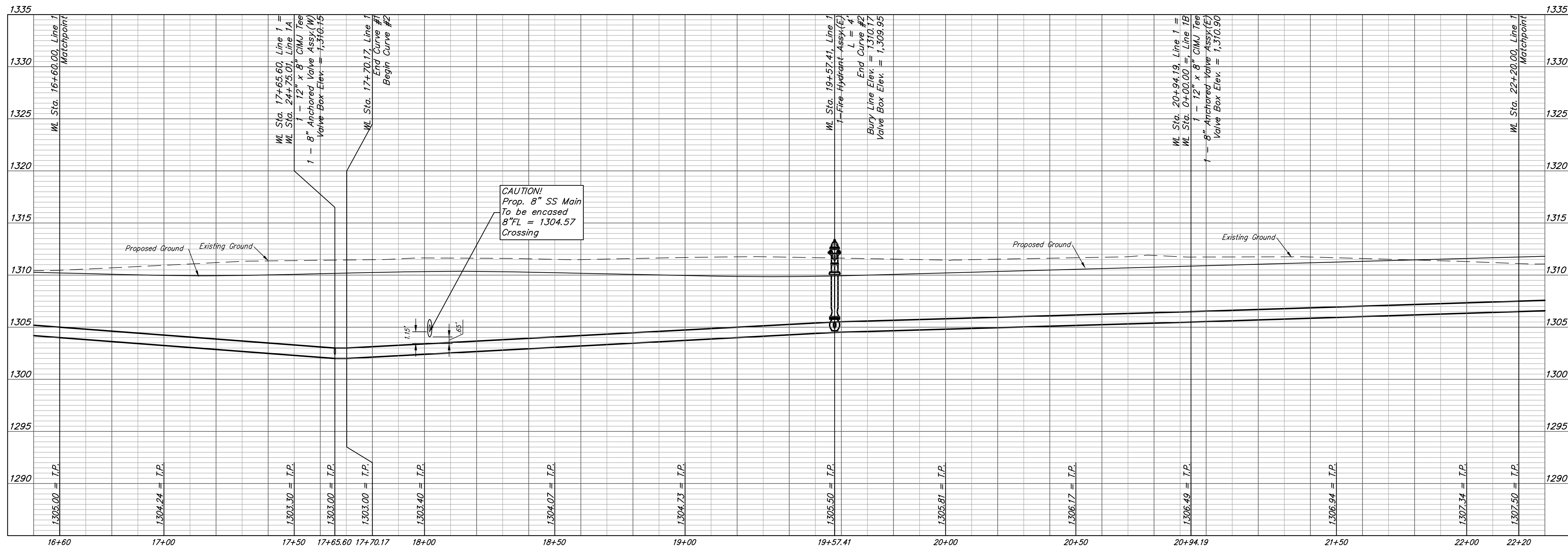
### FIRE HYDRANTS REQUIRED

STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED*	VALVE STEM EXT. REQUIRED (ft)*
19+57.41	1310.17	1305.50	5.5'	3'

Curve #1					
Curve Data Based on Centerline of Pipe					
Rad. = 426.2194' Delta = 22°58'06" Tangent = 86.59'					
Arc = 164.88' L.C. = 169.72' Def./Ft. = 4.17910 Min.					
Station	Arc	Chord Lengths 8' Left	Chord Lengths 8' Right	Defl.	Total Defl.
16+05.29	-	-	-	0'00'00"	0'00'00"
16+25.00	19.71'	20.04'	20.81'	1'22'22"	1'22'22"
16+50.00	25.00'	25.42'	26.39'	1'44'29"	3'06'51"
16+75.00	25.00'	25.42'	26.39'	1'44'29"	4'51'20"
17+00.00	25.00'	25.42'	26.39'	1'44'28"	6'35'48"
17+25.00	25.00'	25.42'	26.39'	1'44'29"	8'20'17"
17+50.00	25.00'	25.42'	26.39'	1'44'28"	10'04'45"
17+70.17	20.17'	20.51'	21.29'	1'24'18"	11'29'03"

Curve #2					
Curve Data Based on Centerline of Pipe					
Rad. = 484.2194' Delta = 22°15'13" Tangent = 95.24'					
Arc = 187.24' L.C. = 186.89' Def./Ft. = 3.56552 Min.					
Station	Arc	Chord Lengths 8' Left	Chord Lengths 8' Right	Defl.	Total Defl.
17+70.17	-	-	-	0'00'00"	0'00'00"
17+75.00	4.83'	4.93'	4.77'	0'17'13"	0'17'13"
18+00.00	25.00'	25.52'	24.69'	1'29'09"	1'46'22"
18+25.00	25.00'	25.52'	24.69'	1'29'08"	3'15'30"
18+50.00	25.00'	25.52'	24.69'	1'29'08"	4'44'38"
18+75.00	25.00'	25.52'	24.69'	1'29'08"	6'13'46"
19+00.00	25.00'	25.52'	24.69'	1'29'09"	7'42'55"
19+25.00	25.00'	25.52'	24.69'	1'29'08"	9'12'03"
19+50.00	25.00'	25.52'	24.69'	1'29'08"	10'41'11"
19+57.41	7.41'	7.57'	7.32'	0'26'26"	11'07'37"

# LINE 1



**BAUGHMAN COMPANY**  
 315 Ellis St.  
 Wichita, KS 67211  
 316-262-7271  
 BaughmanCo.com

Cornejo Industrial District  
**Water Line 1  
 Sta. 16+60  
 to  
 Sta. 22+20**  
 Water Line Improvements  
 PROJECT NUMBER:  
 448-2021-017262  
 DESIGN: PSB DRAWN: JA  
 DATE: Oct. 26, 2021  
 SHEET **5** OF **26**

File: E:\Projects\Cornejo Industrial District\_20-11-P603\Engineering\Phase 1 (only if Multiple Phases)\PPW\CID PPW\Fellion.dwg