

EUCLID AVE  
SLM 0.09=  
MM 186.10

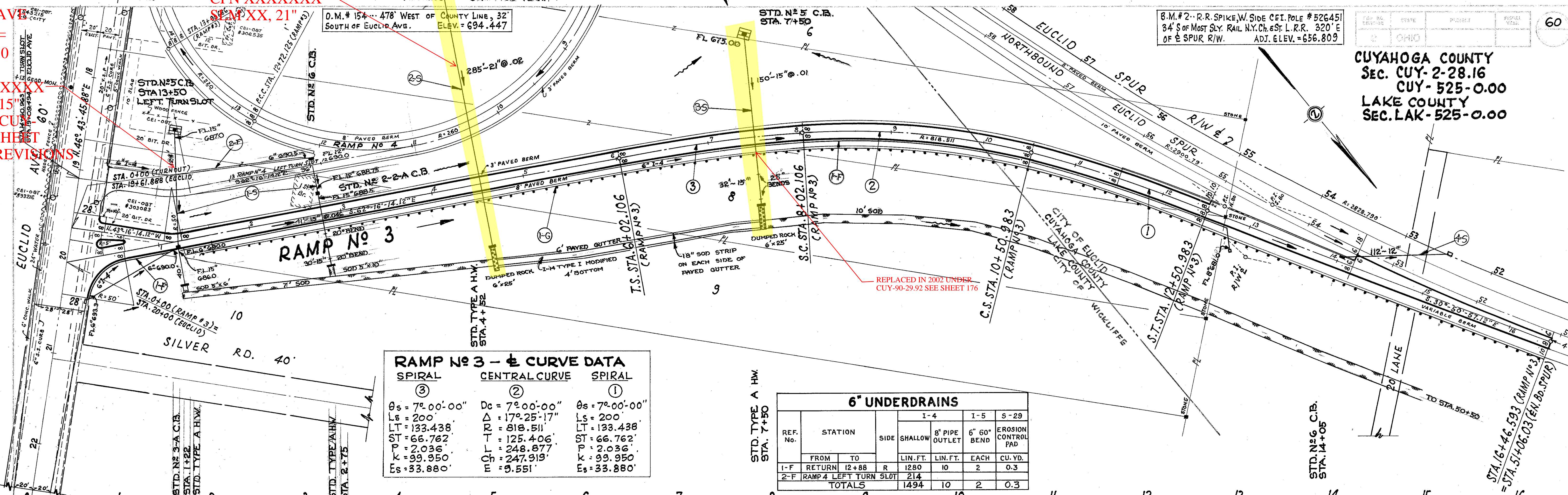
CFN XXXXXX  
SLM XX, 15'  
SEE 2002 CU  
90-29.92 SHEET  
176 FOR REVISIONS

CFN XXXXXX  
SLM XX, 21'

D.M.# 154... 478' WEST OF COUNTY LINE, 32'  
SOUTH OF EUCLID AVE. ELEV. = 694.447

B.M.# 2... R.R. SPIKE, W. SIDE CFI. POLE # 526451  
34' S of Most SLY. RAIL N.Y. Ch. sT. L.R.R. 320' E  
OF E SPUR R/W. ADJ. ELEV. = 656.809

CUYAHOGA COUNTY  
SEC. CUY-2-28.16  
LAKE COUNTY  
SEC. LAK-525-0.00

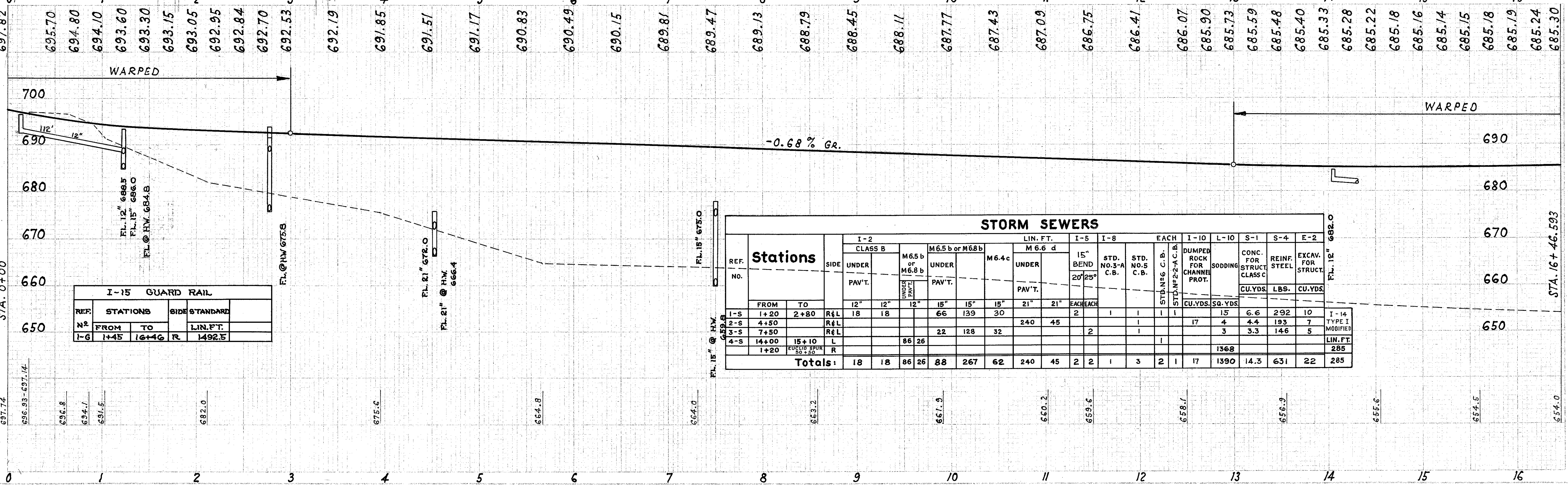


**RAMP No 3 - e CURVE DATA**

SPIRAL	CENTRAL CURVE	SPIRAL
③	②	①
$\theta_s = 7^\circ 00' 00''$	$D_c = 7^\circ 00' 00''$	$\theta_s = 7^\circ 00' 00''$
$L_s = 200'$	$\Delta = 17^\circ 25' 17''$	$L_s = 200'$
$LT = 133.438'$	$R = 818.511'$	$LT = 133.438'$
$ST = 66.762'$	$T = 125.406'$	$ST = 66.762'$
$P = 2.036'$	$Ch = 248.877'$	$P = 2.036'$
$K = 99.950'$	$E = 247.919'$	$K = 99.950'$
$E_s = 33.880'$	$E = 9.551'$	$E_s = 33.880'$

**6" UNDERDRAINS**

REF. NO.	STATION	SIDE	I-4			I-5		S-29	
			SHALLOW	8" PIPE OUTLET	6" 60° BEND	EROSION CONTROL PAD	EROSION CONTROL PAD		
FROM	TO		LIN. FT.	LIN. FT.	EACH	CU. YD.	CU. YD.	CU. YD.	
1-F	RETURN	R	1280	10	2	0.3			
2-F	RAMP 4 LEFT TURN SLOT		214						
TOTALS			1494	10	2	0.3			



**I-15 GUARD RAIL**

REF. NO.	STATIONS	SIDE	STANDARD
N#	FROM	TO	LIN. FT.
1-G	1+45	16+46	R 1492.5

**STORM SEWERS**

REF. NO.	Stations	SIDE	I-2 CLASS B		M6.5 b or M6.8 b		M6.4 c		I-5		I-8		EACH	I-10	L-10	S-1	S-4	E-2						
			UNDER	PAV'T.	UNDER	PAV'T.	UNDER	PAV'T.	15" BEND	20" 25°	STD. NO. 3-A C.B.	STD. NO. 5 C.B.							STD. NO. 6 C.B.	STD. NO. 2-A C.B.	DUMPED ROCK FOR CHANNEL PROT.	GODDING	CONC. FOR STRUCT. CLASS	REINF. STEEL
FROM	TO		12"	12"	12"	15"	15"	15"	21"	21"	EACH	EACH		CU. YDS.	SQ. YDS.	CU. YDS.	LBS.	CU. YDS.						
1-S	1+20	2+80	R&L	18	18		66	139	30						15	6.6	292	10						
2-S	4+50		R&L						240	45				17	4	4.4	193	7						
3-S	7+50		R&L				22	128	32						3	3.3	146	5						
4-S	14+00	15+10	L																					
	1+20	EUCLID SPUR 50+50	R				86	26																
TOTALS:				18	18	86	26	88	267	62	240	45	2	2	1	3	2	1	17	1390	14.3	631	22	285