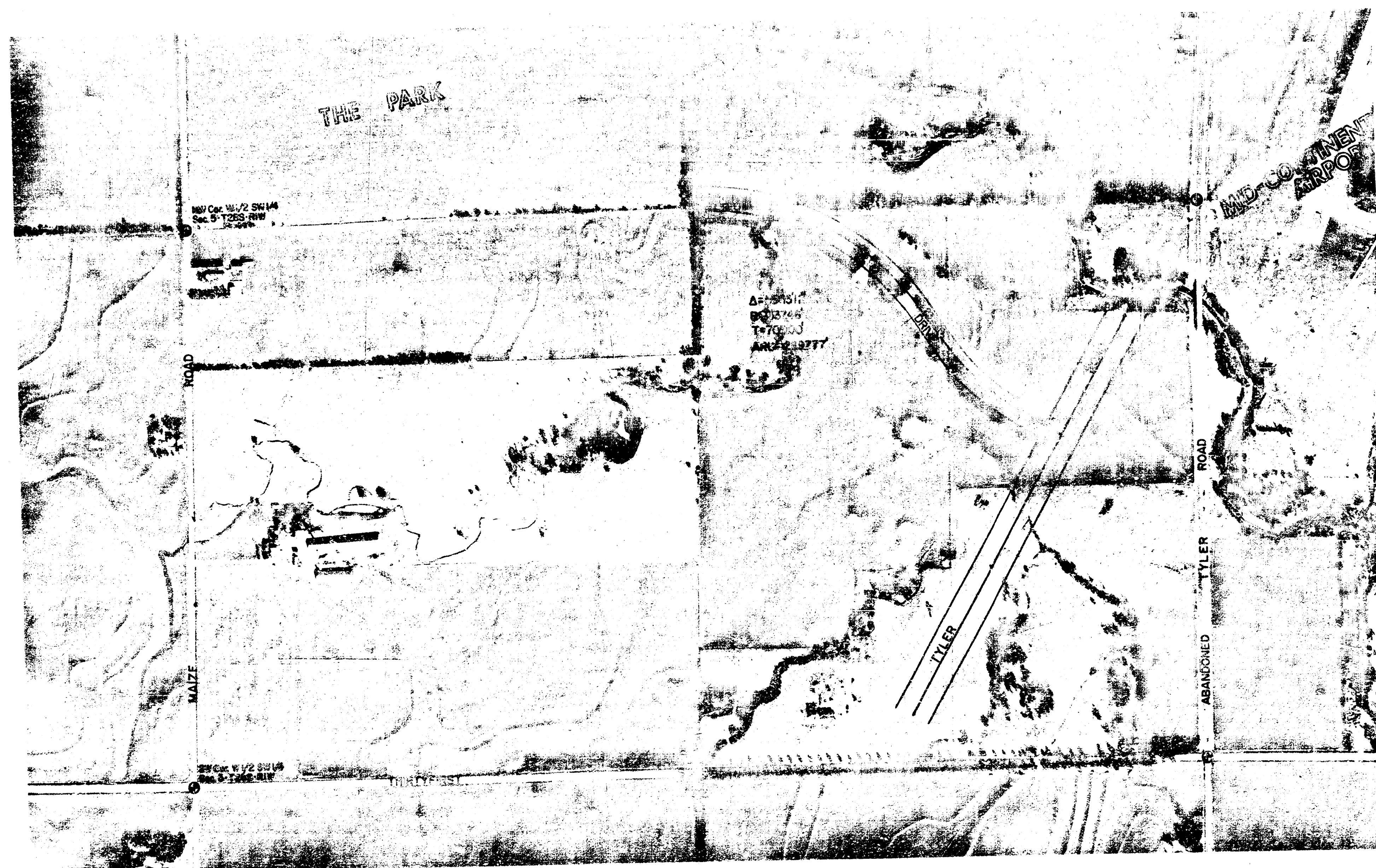
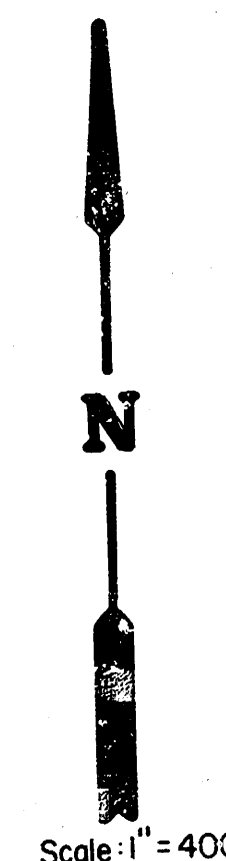


YOSEMITE DRIVE, FROM THE EAST LINE OF THE PARK TO THE WEST LINE OF TYLER ROAD PROJECT NO. 472-76-245-80908-000-000-001



INDEX TO SHEET NO.	DRAWINGS DESCRIPTION
1	TITLE SHEET
2	PAVING DETAILS
3-4	YOSEMITE DRIVE
5-8	CROSS SECTIONS
9	BOX CULVERT LAYOUT
10-11	BOX CULVERT DETAIL
12	WASH CHECK DETAIL

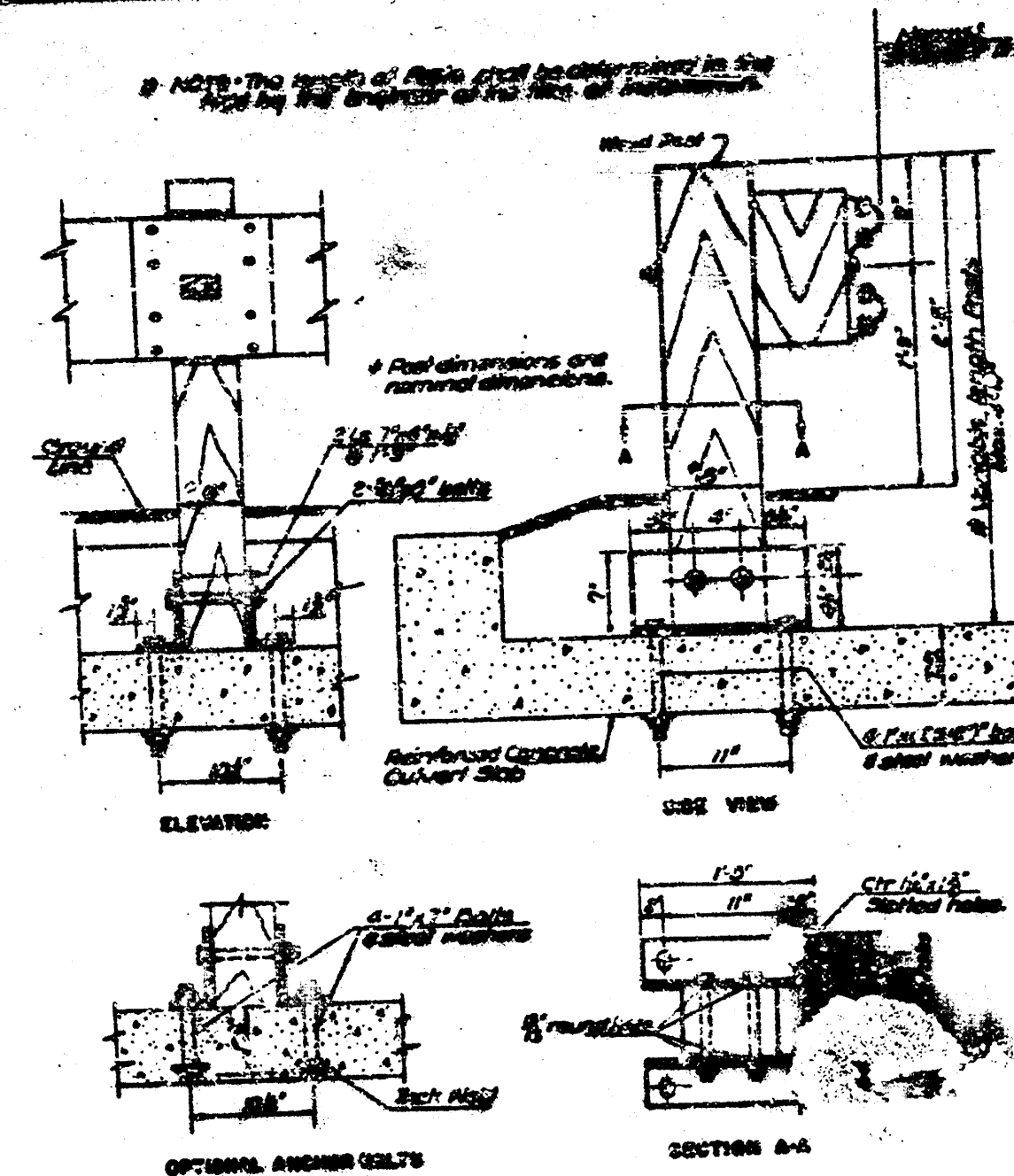
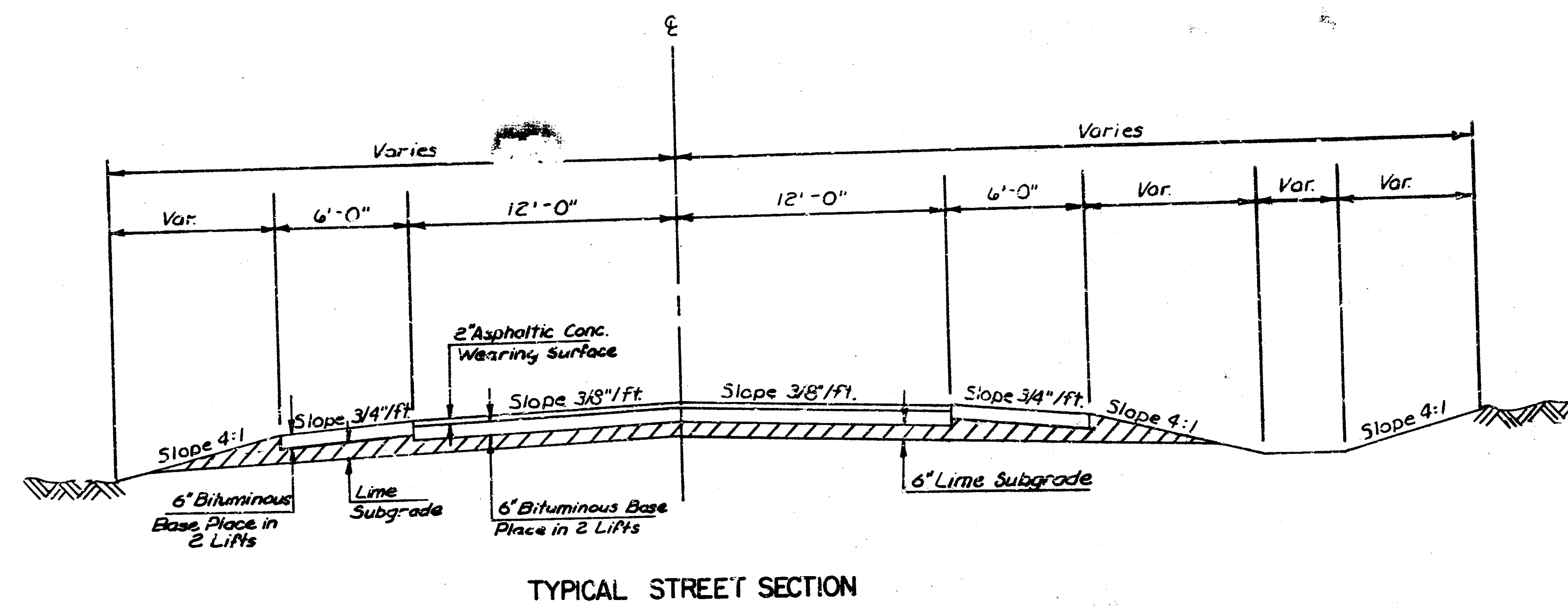


CITY OF WICHITA, KANSAS
DEAN SELLERS, ACTING CITY ENGINEER

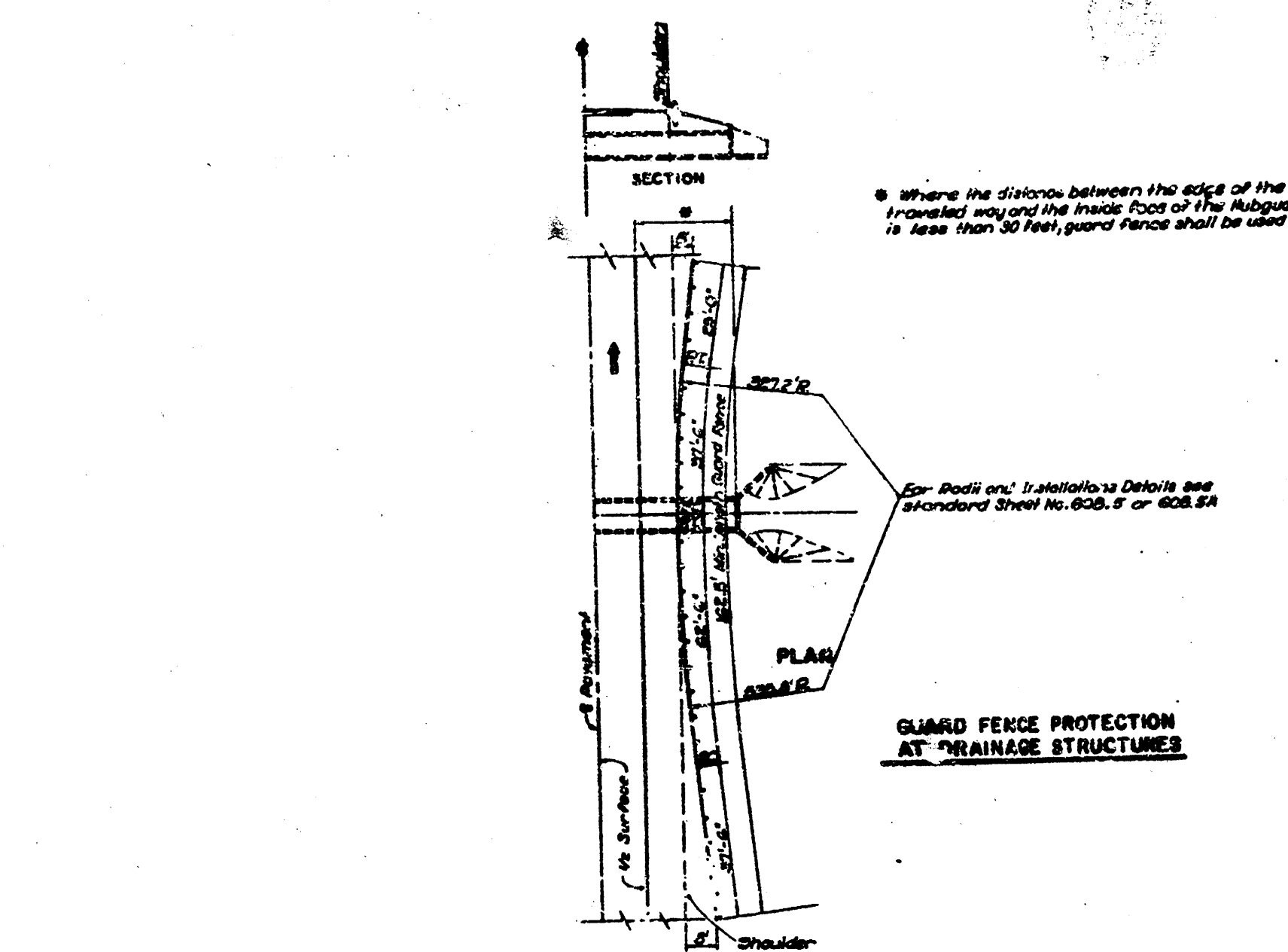
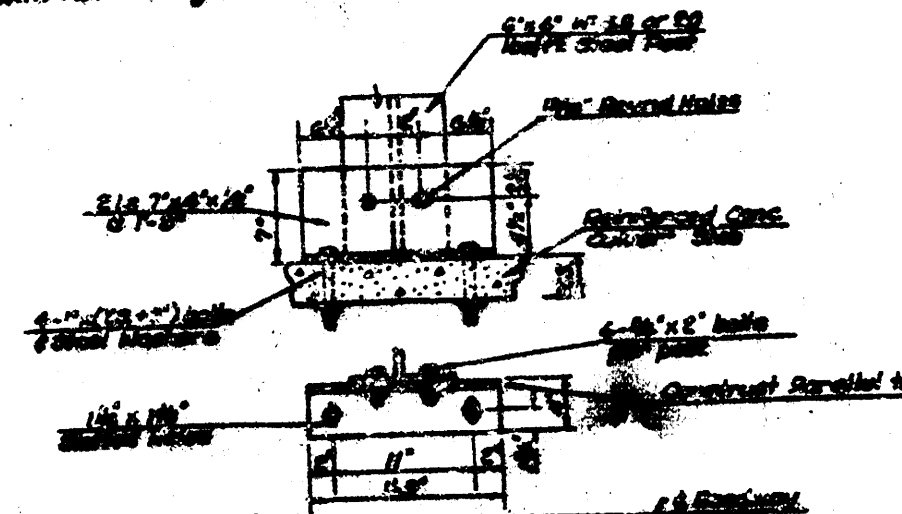


Van Doren - Hazard - Stallings
Architects • Engineers • Planners
Topeka Wichita Minneapolis

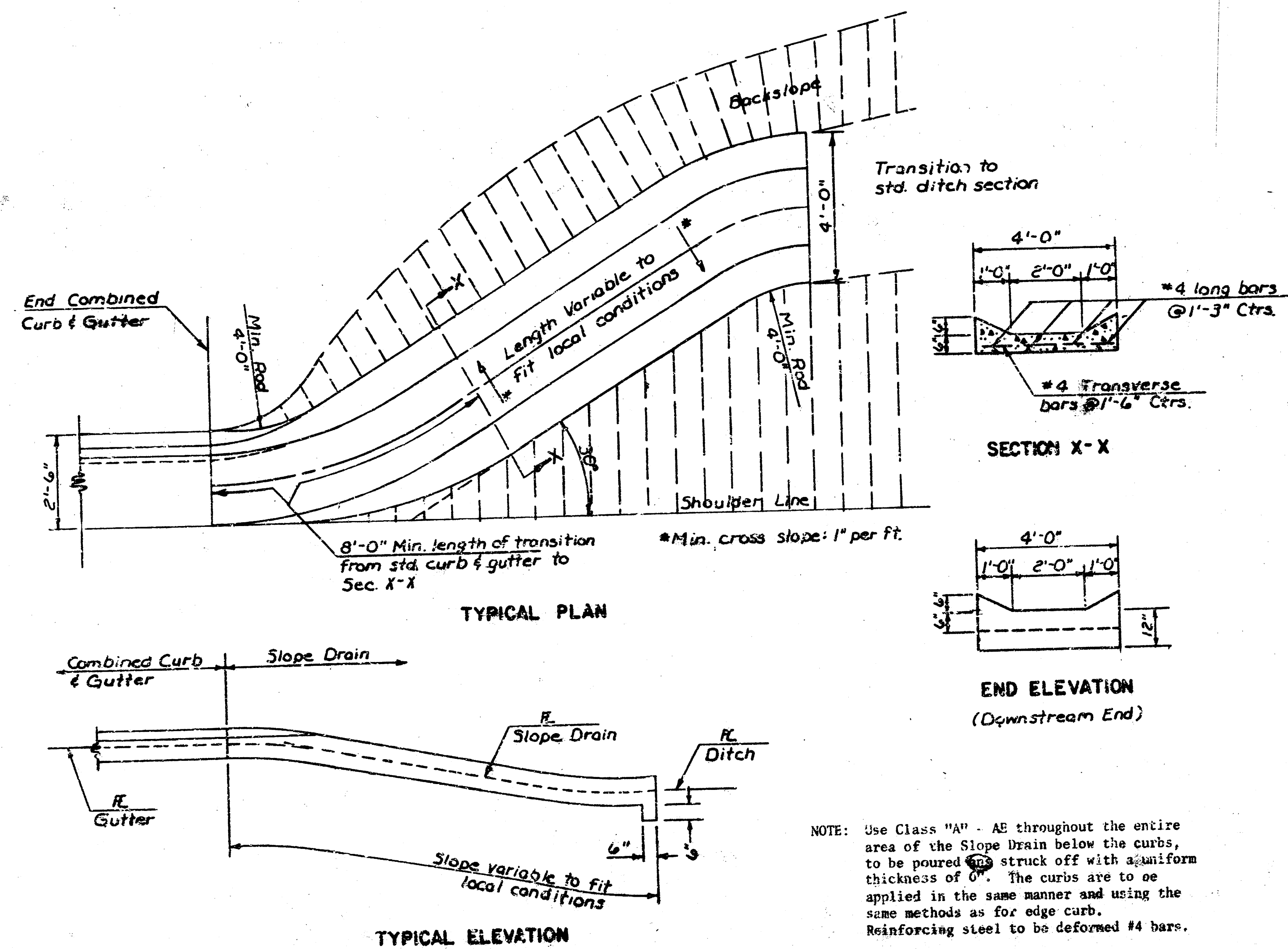
Sheet 1
of 12



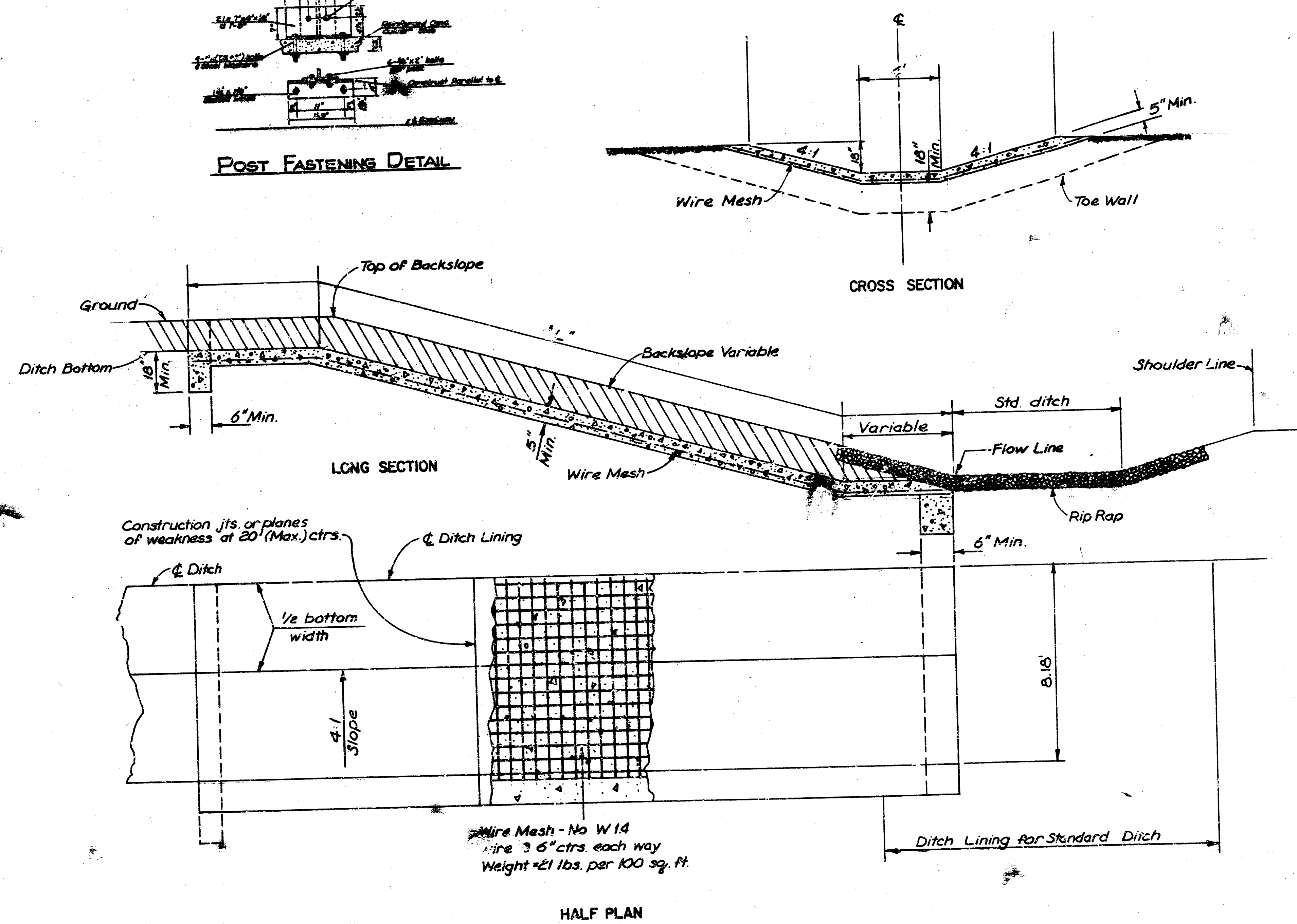
NOTE: The contractor installing the guard fence shall furnish and install the anchor assembly to the extent that the anchor shall be installed in accordance with the details shown. All anchor assembly parts shall be galvanized in accordance with ASTM specification A153-66.



GUARD FENCE DETAILS



NOTE: Use Class "A" - AE throughout the entire area of the Slope Drain below the curbs, to be poured and struck off with a uniform thickness of 6". The curbs are to be applied in the same manner and using the same methods as for edge curb. Reinforcing steel to be deformed #4 bars.

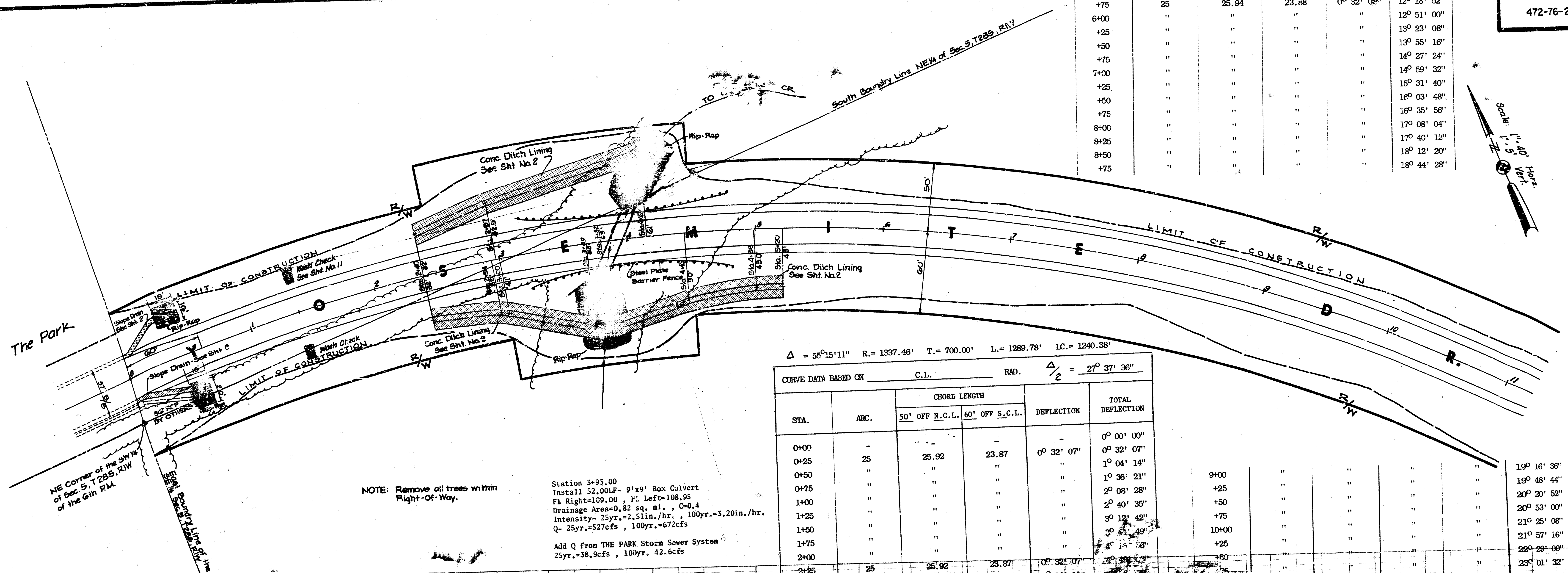


Construction jts. or planes of weakness at 20' (Max.) ctrs.

Wire Mesh - No W14
Wire 3/8" ctrs. each way
Weight 21 lbs. per 100 sq. ft.

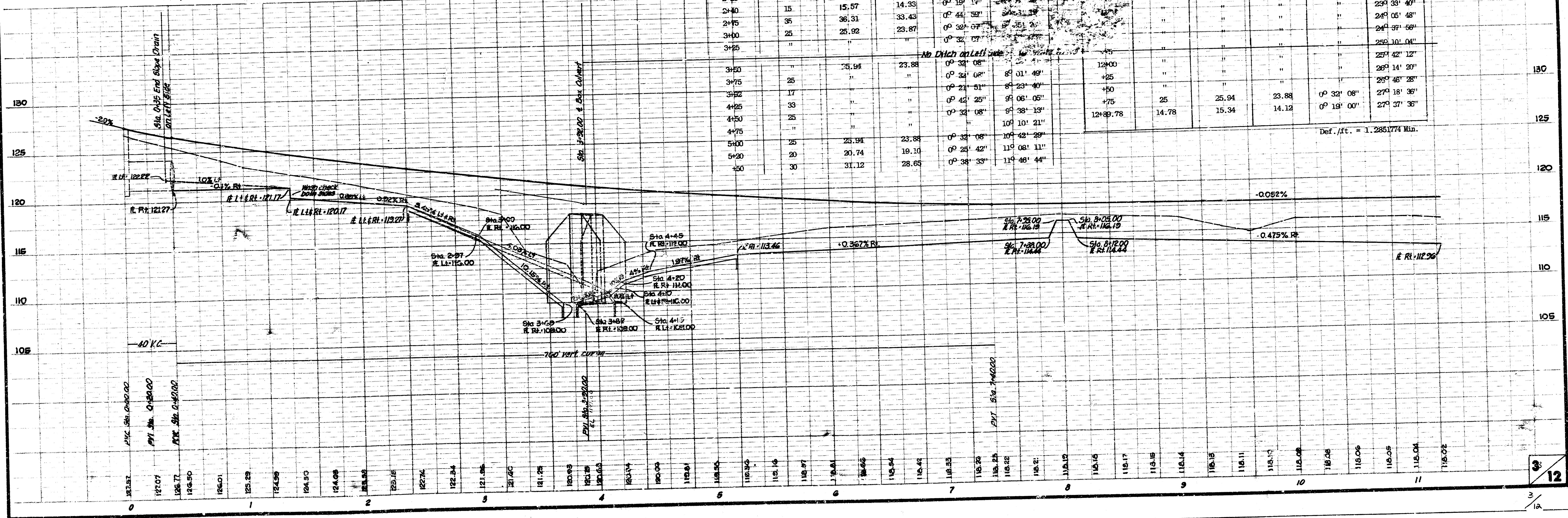
HALF PLAN

YOSEMITE DRIVE
472-76-245-80908-000-000-001

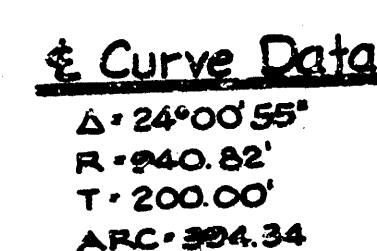
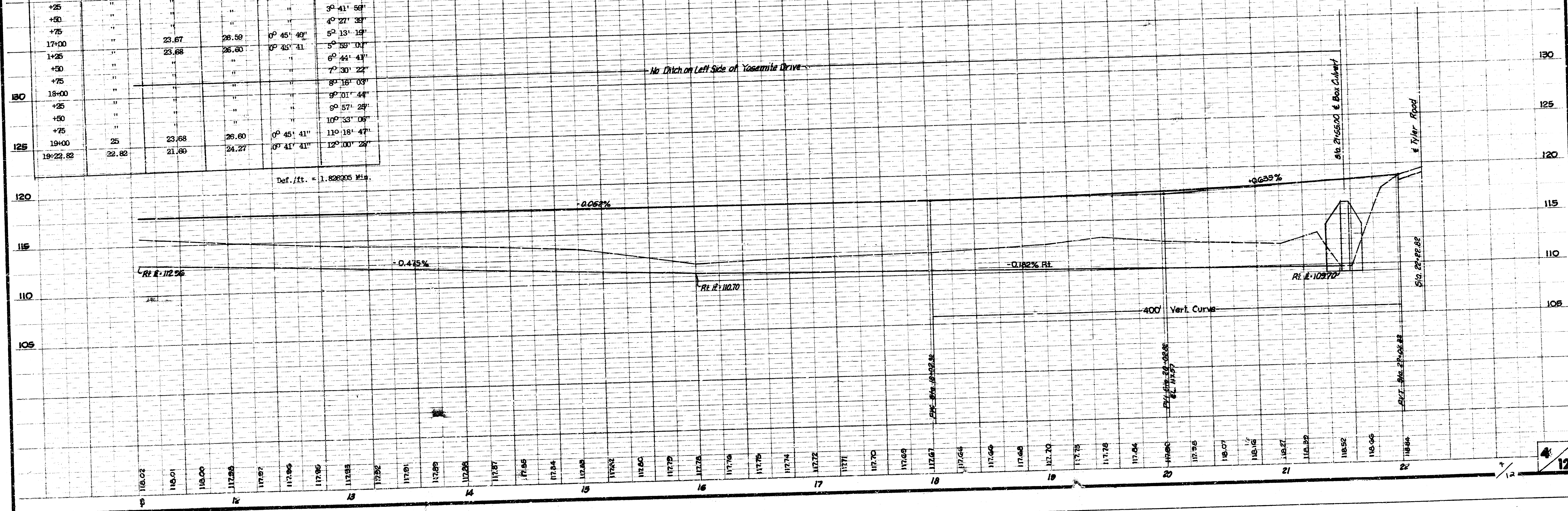


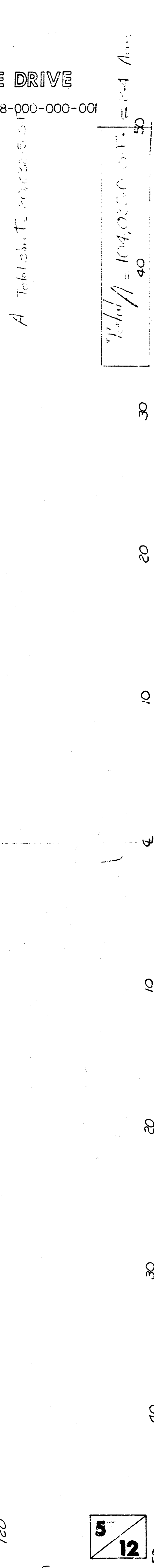
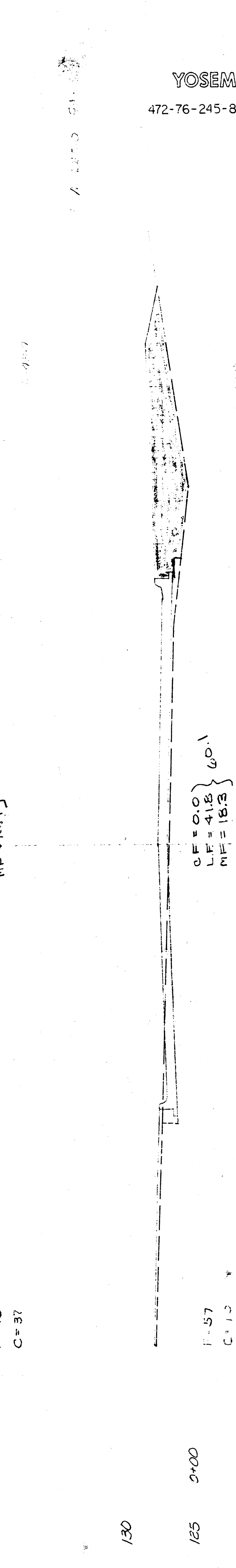
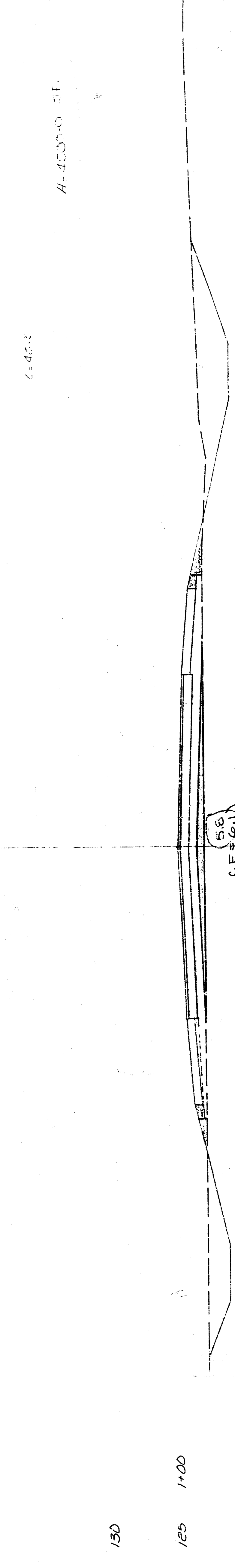
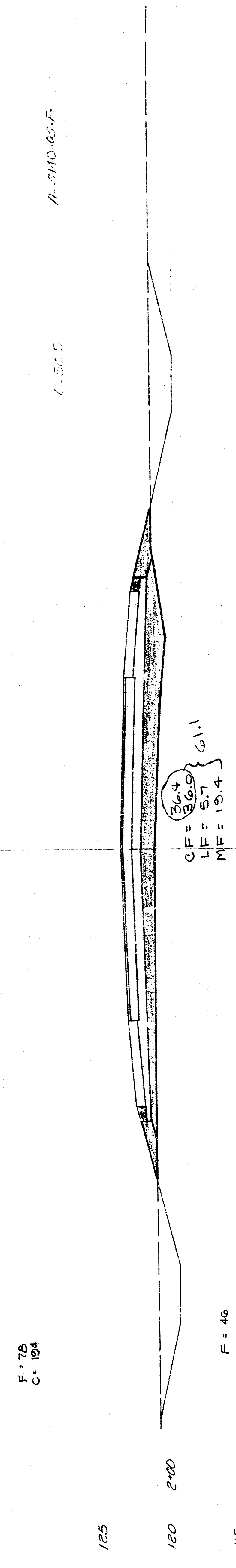
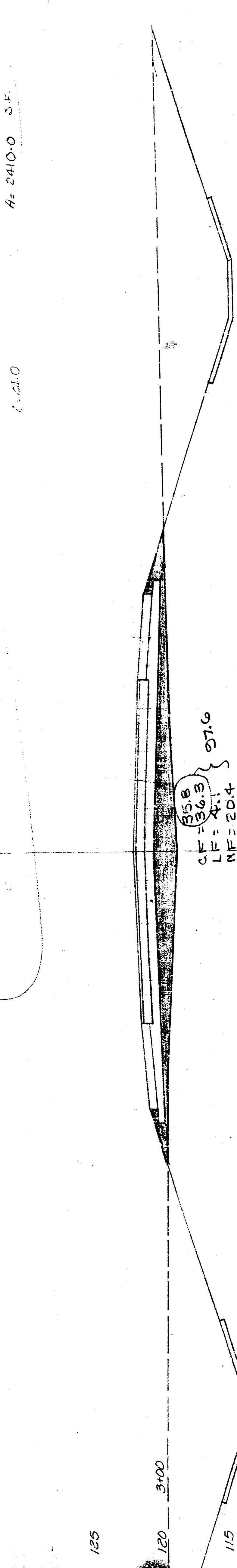
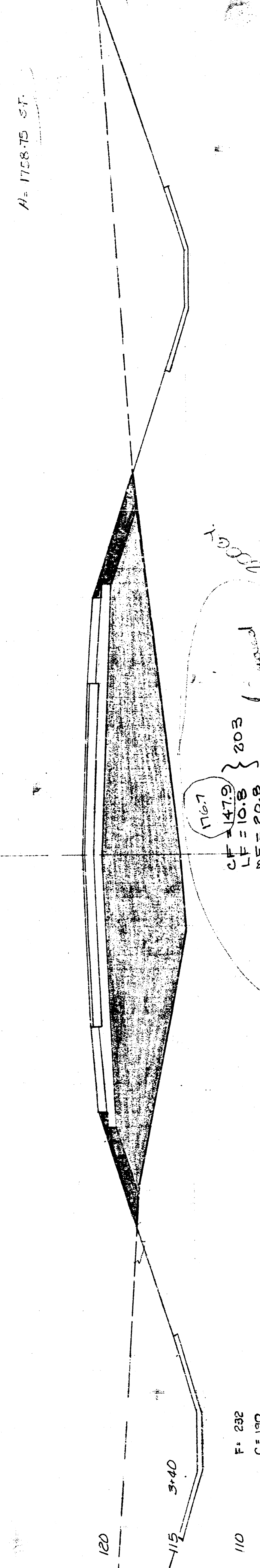
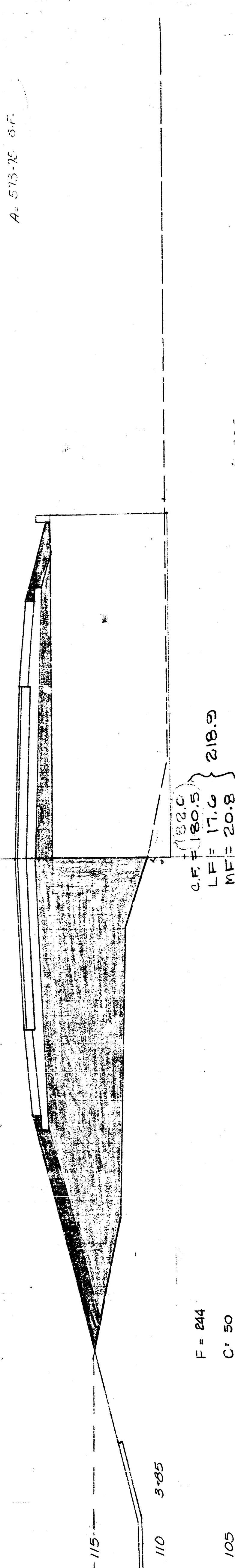
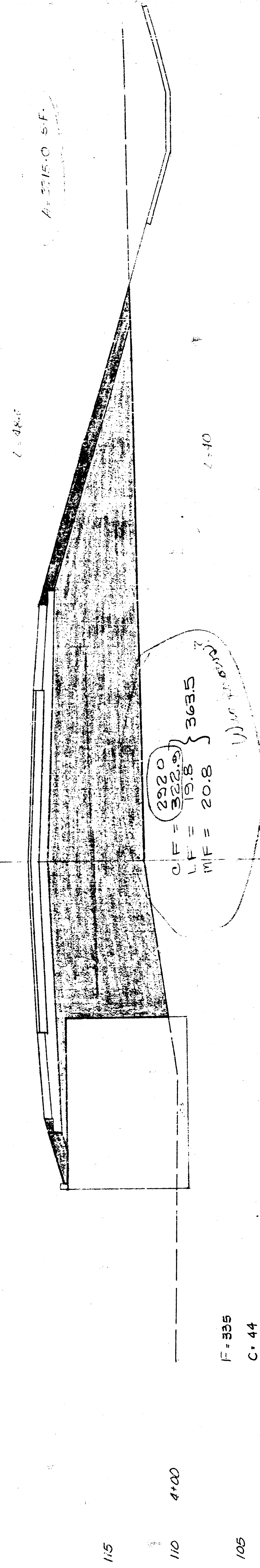
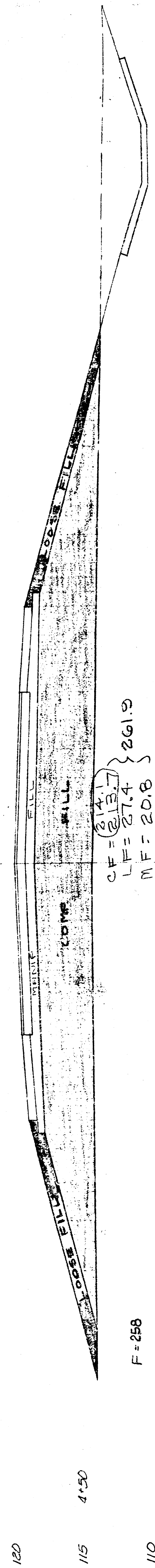
$\Delta = 55^\circ 15' 11''$ $R = 1337.46'$ $T = 700.00'$ $L = 1289.78'$ $LC = 1240.38'$

STA.	ARC.	CHORD LENGTH		DEFLECTION	TOTAL DEFLECTION
		50' OFF N.C.L.	60' OFF S.C.L.		
0+00	-	-	-	0° 00' 00"	0° 00' 00"
0+25	25	25.92	23.87	0° 32' 07"	0° 32' 07"
0+50	"	"	"	1° 04' 14"	1° 04' 14"
0+75	"	"	"	1° 36' 21"	2° 40' 35"
1+00	"	"	"	2° 08' 28"	4° 49' 03"
1+25	"	"	"	2° 40' 35"	7° 29' 38"
1+50	"	"	"	3° 12' 42"	10° 42' 20"
1+75	"	"	"	3° 44' 49"	14° 27' 09"
2+00	"	"	"	4° 16' 56"	18° 44' 05"
2+25	25	25.92	23.87	0° 32' 07"	19° 16' 12"
2+50	15	15.57	14.33	0° 19' 19"	20° 05' 31"
2+75	35	36.31	33.43	0° 44' 53"	20° 50' 24"
3+00	25	25.92	23.87	0° 32' 07"	21° 22' 31"
3+25	"	"	"	0° 32' 07"	21° 54' 38"
3+50	"	"	"	0° 32' 07"	22° 26' 45"
3+75	25	25.92	23.87	0° 32' 07"	22° 58' 52"
4+00	17	17.00	15.00	0° 21' 51"	23° 20' 43"
4+25	33	33.00	30.00	0° 45' 25"	23° 46' 08"
4+50	25	25.00	23.00	0° 33' 08"	24° 19' 16"
4+75	"	"	"	0° 33' 08"	24° 52' 24"
5+00	25	25.92	23.87	0° 32' 07"	25° 24' 31"
5+25	20	20.74	19.10	0° 26' 42"	25° 51' 13"
5+50	30	31.12	28.65	0° 38' 33"	26° 29' 46"



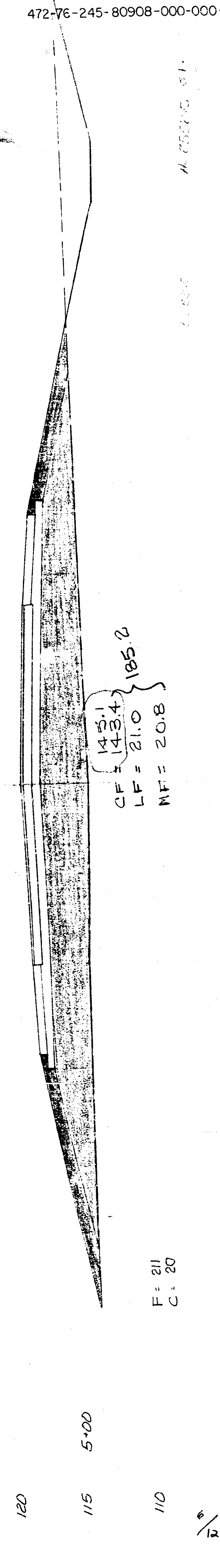
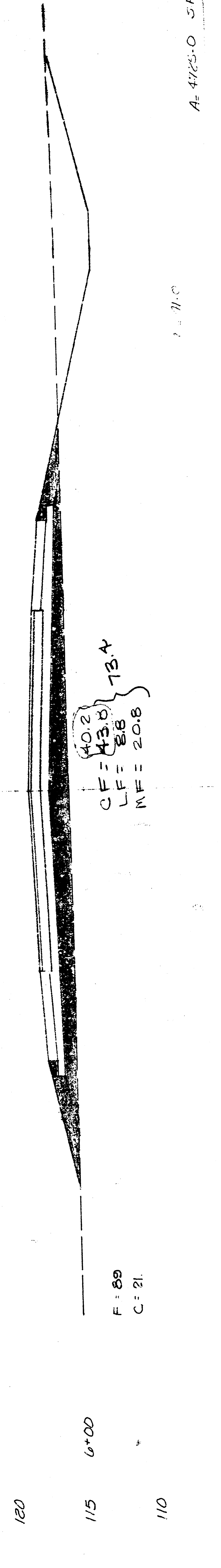
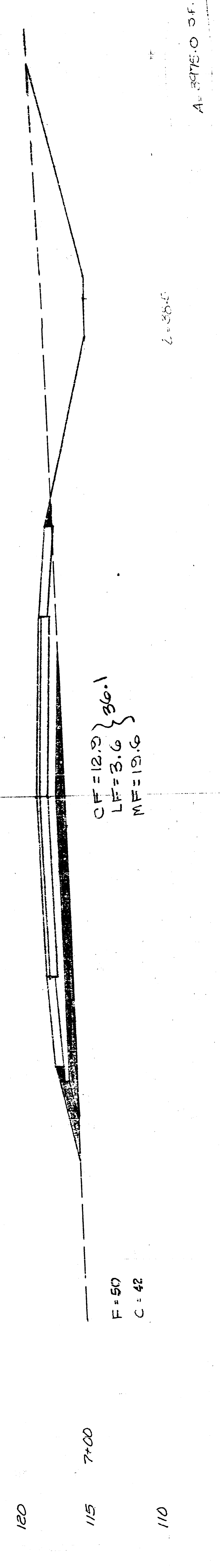
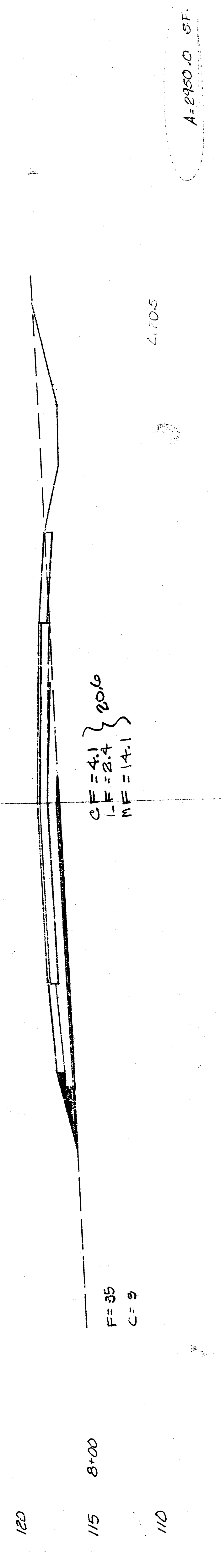
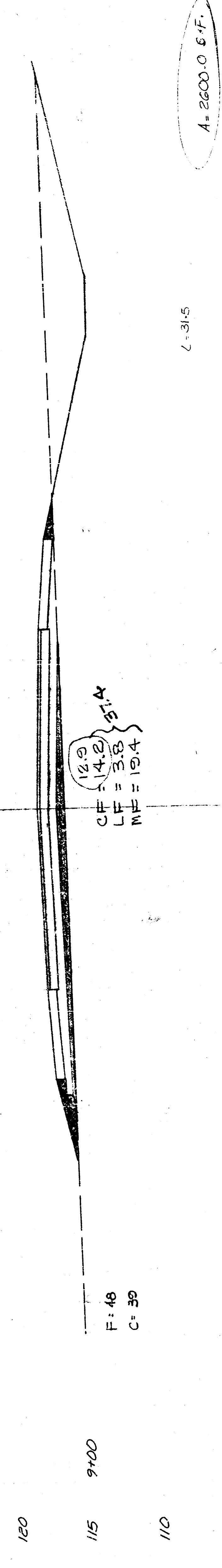
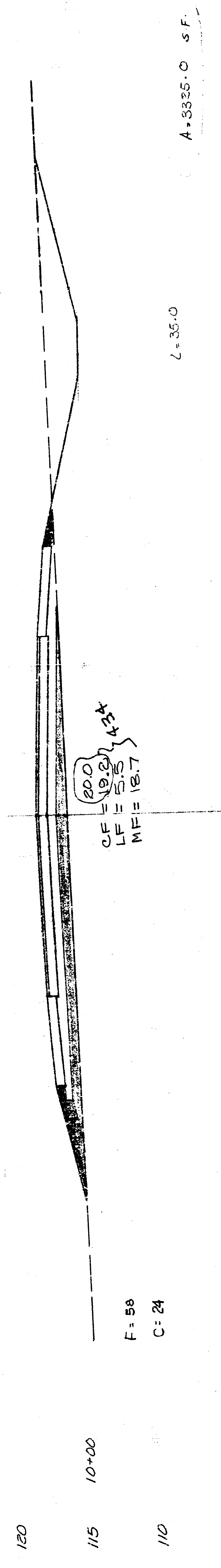
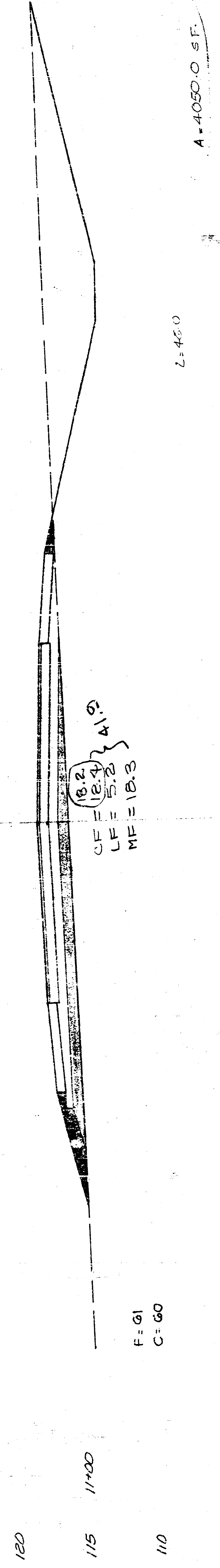
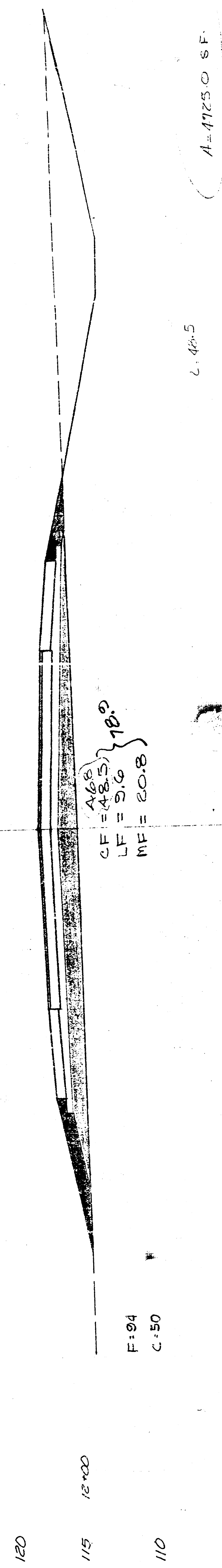
472-76-245-80908-000-000-001


$$\text{Def./ft.} = 1.826995 \text{ Min}$$


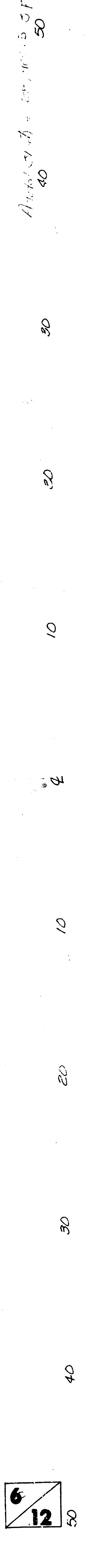


YOSEMITE DRIVE
472-76-245-80908-000-000-001

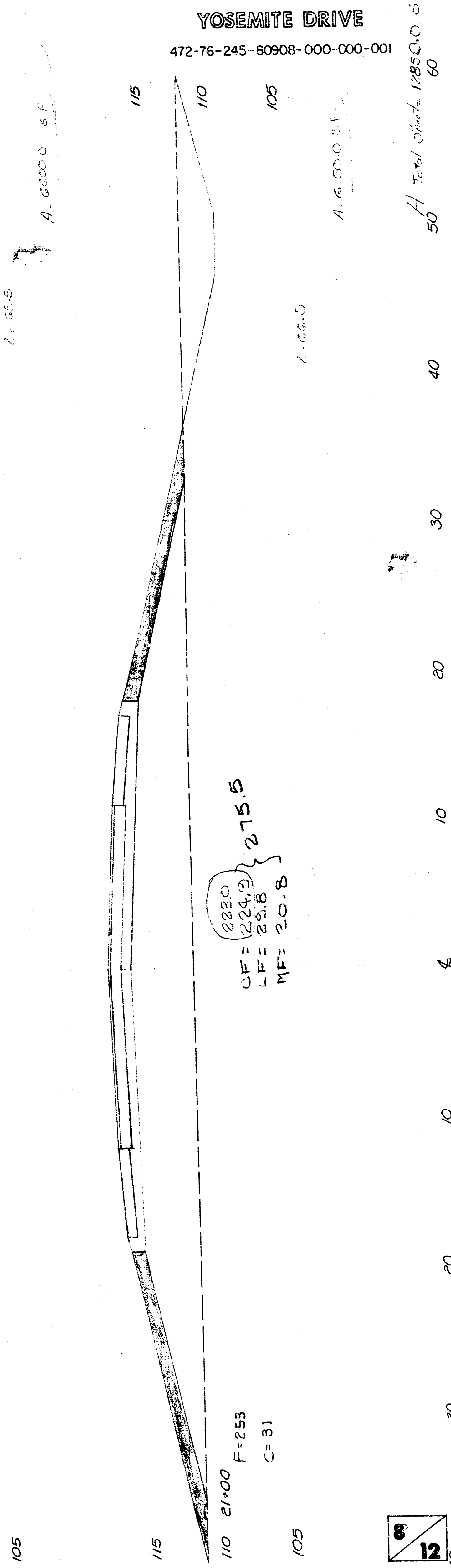
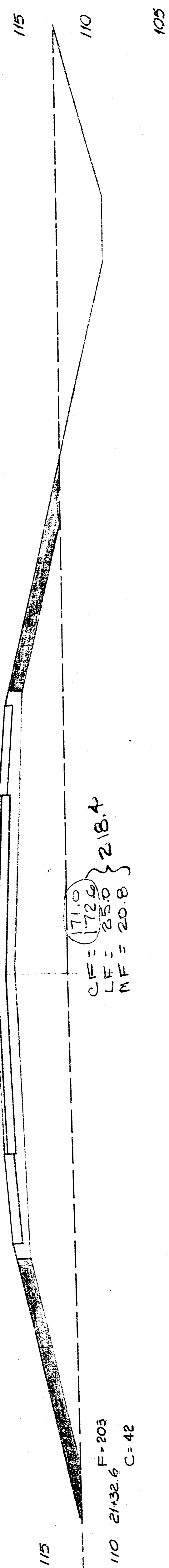
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A = 1128.75 SF
A = 513.75 SF
A = 2410.0 SF
A = 5140.0 SF
A = 4500.0 SF



YOSEMITE DRIVE
472-76-245-80908-000-000-001

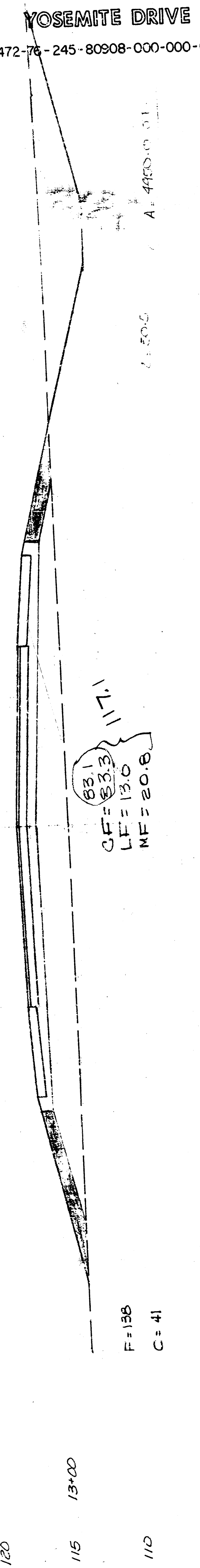
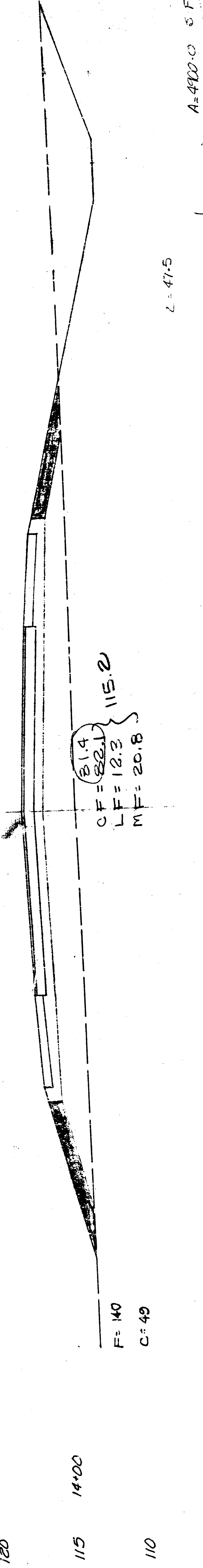
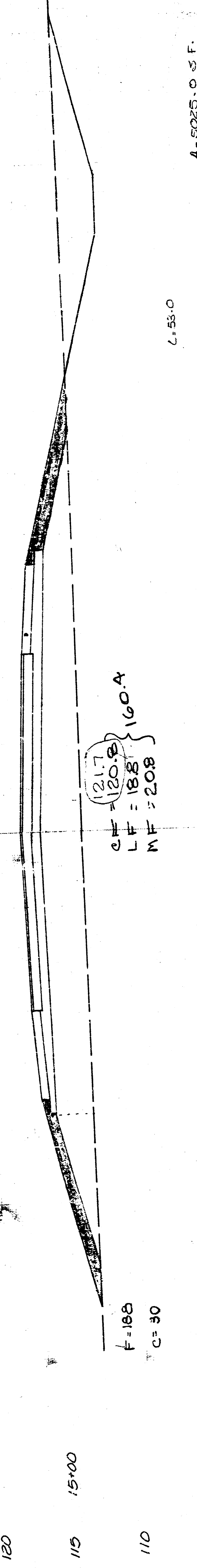
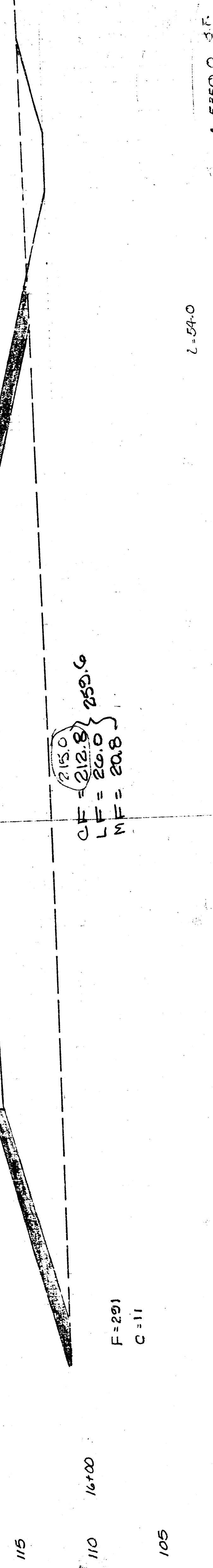
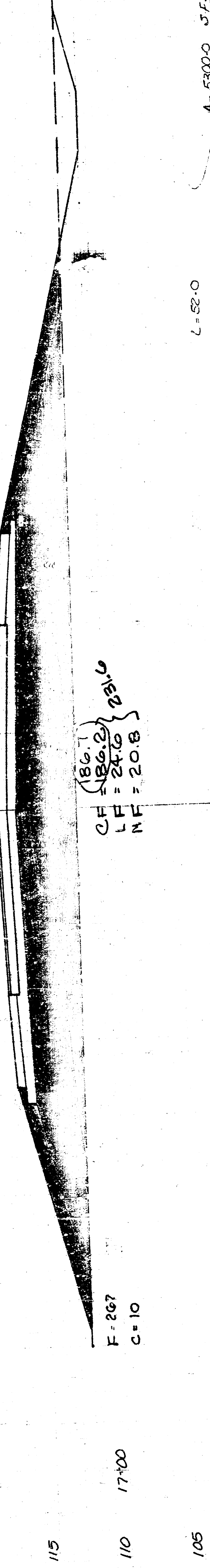
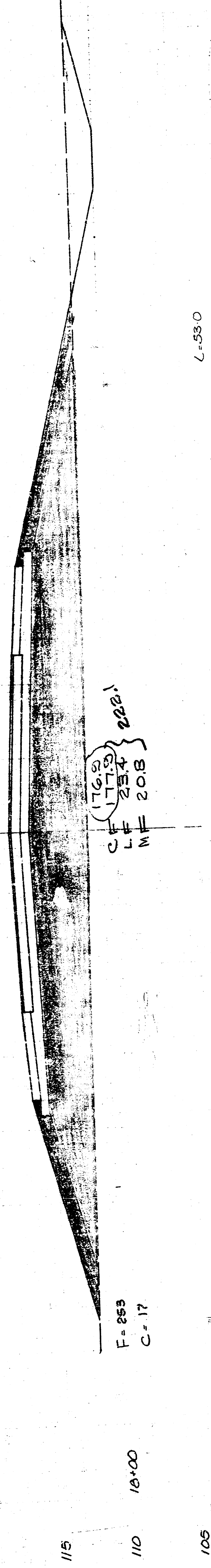
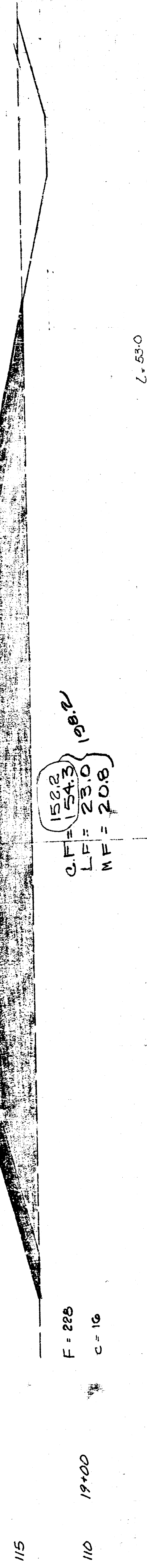
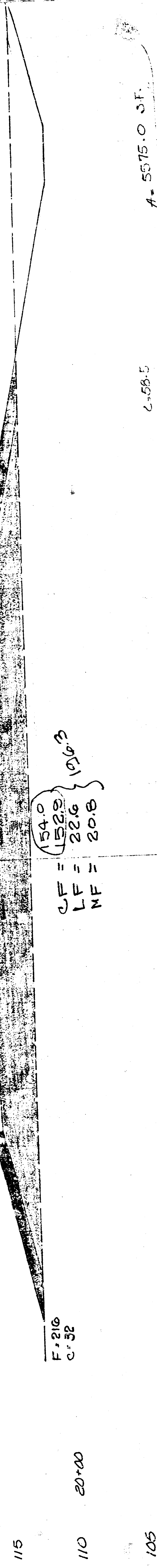


Hook-up
CF =
MF =



YOSEMITE DRIVE
472-76-245-60908-000-000-001

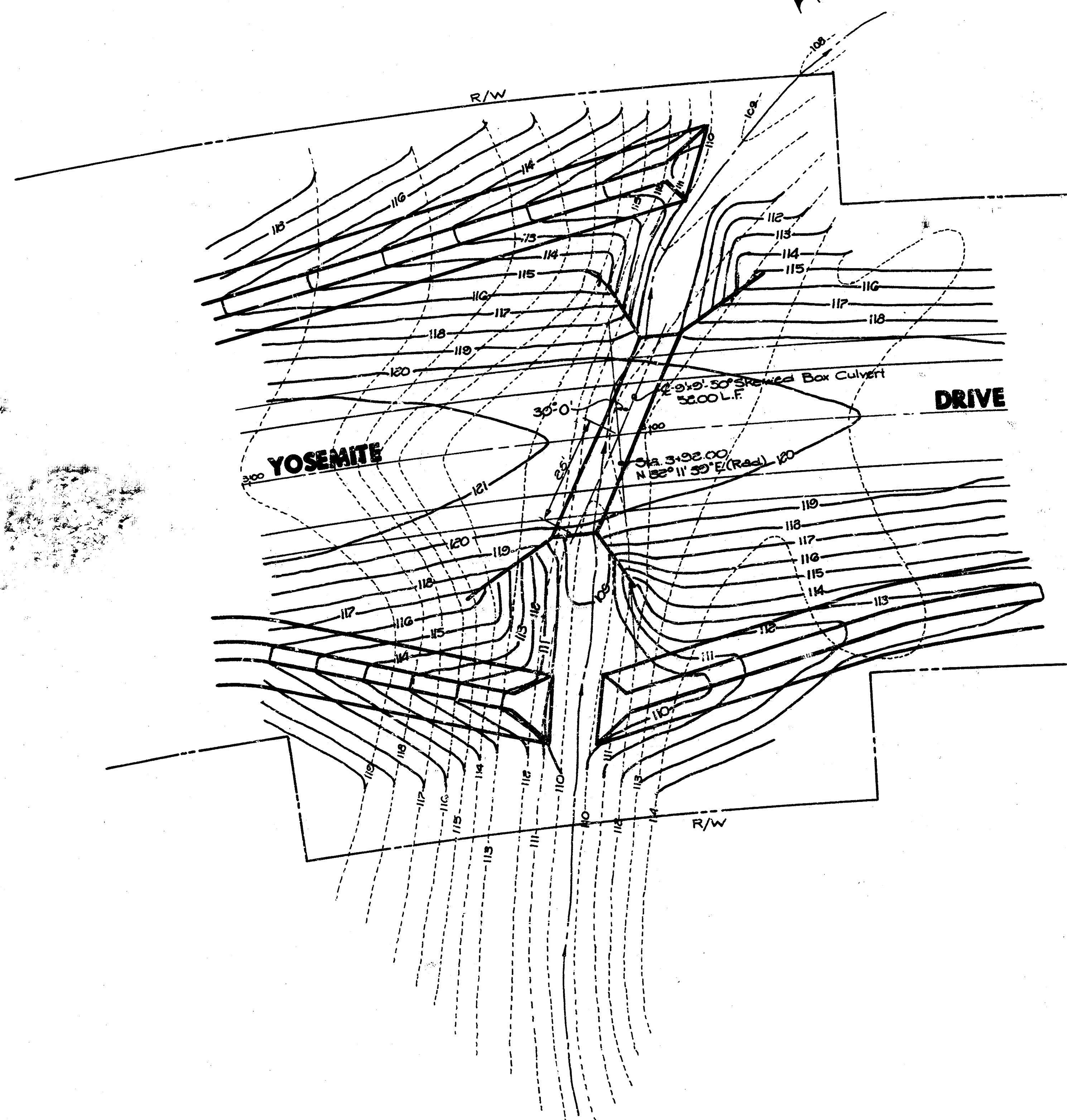
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50 60



YOSEMITE DRIVE
472-76-245-80908-000-000-001

9' x 9' - 30° Skewed Box Culvert			
Description	North Coordinate	East Coordinate	Elev.
Sta. 4+00.00 - Yosemite Drive	1000.000	1000.000	120.63
4' Box Culvert - South Flow Line	996.480	995.511	108.00
4' Box Culvert - North Flow Line	1020.785	1005.507	128.95
T.O.W. - SE Wing Wall - South End	990.040	970.014	115.14
T.O.W. - SE Wing Wall - North End	994.040	965.070	118.21
T.O.W. - SW Wing Wall - South End	996.234	953.711	115.14
T.O.W. - SW Wing Wall - North End	998.313	957.555	118.21
T.O.W. - NE Wing Wall - North End	1020.980	1035.507	115.09
T.O.W. - NE Wing Wall - South End	1018.255	1015.065	118.16
T.O.W. - NW Wing Wall - North End	1037.174	1004.404	115.09
T.O.W. - NW Wing Wall - South End	1023.174	1003.948	118.16

Note: Coordinate System Used In This Table Is For This Layout Only

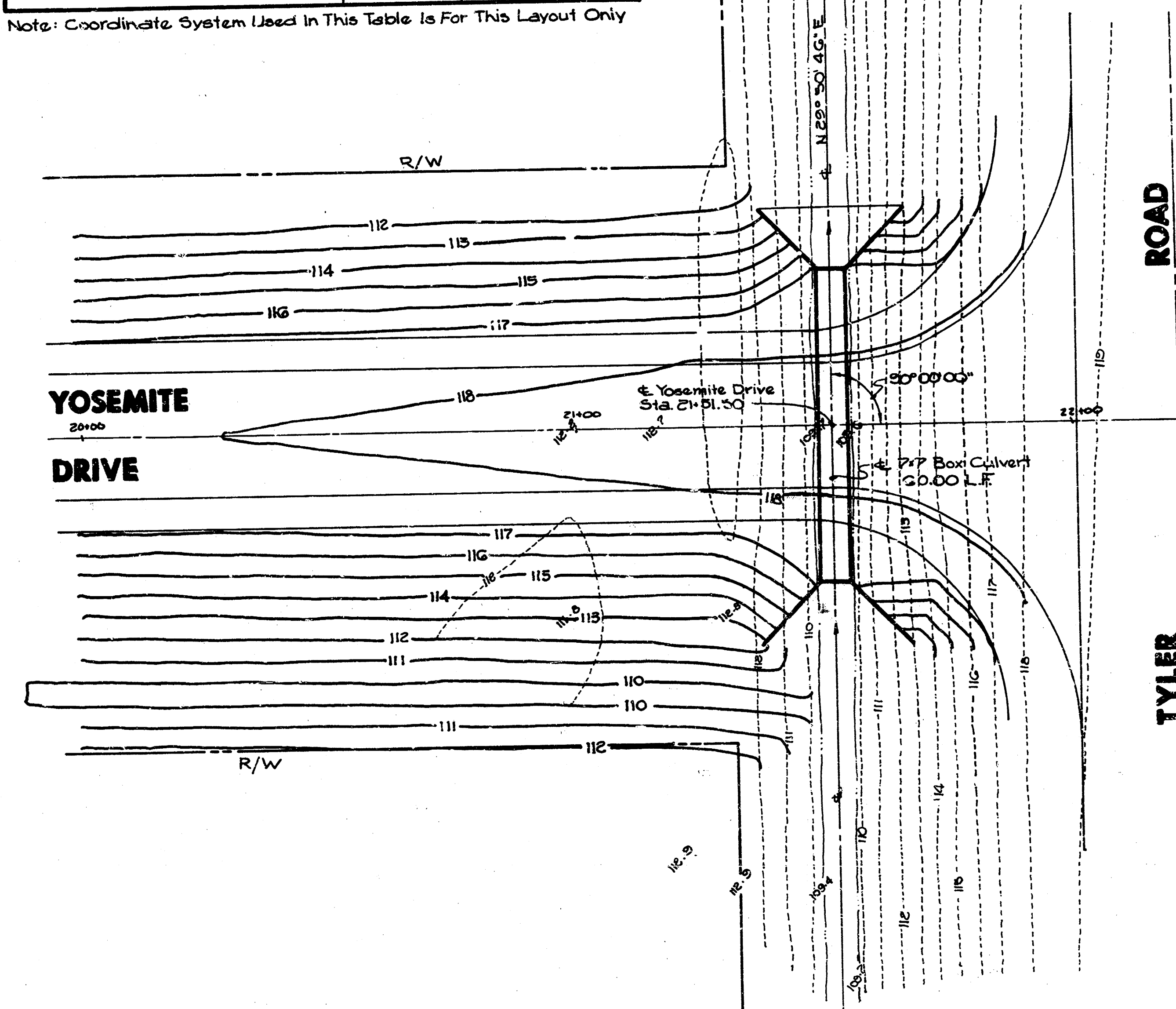


SITE LAYOUT

9' x 9' - 30° SKEWED BOX CULVERT

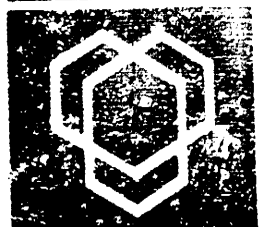
7' x 7' Box Culvert			
Description	North Coordinate	East Coordinate	Elev.
Sta. 21+51.50 - Yosemite Drive	1000.0000	1000.0000	118.53
7' Box Culvert - South Flow Line	973.979	985.070	109.20
7' Box Culvert - North Flow Line	1026.021	1014.930	109.14
T.O.W. - SE Wing Wall - South End	956.319	988.935	114.05
T.O.W. - SE Wing Wall - North End	971.904	988.687	117.33
T.O.W. - SW Wing Wall - South End	971.907	965.709	114.05
T.O.W. - SW Wing Wall - North End	976.054	981.453	117.33
T.O.W. - NE Wing Wall - North End	1028.193	1034.231	113.99
T.O.W. - NE Wing Wall - South End	1023.946	1018.547	117.27
T.O.W. - NW Wing Wall - North End	1043.781	1007.066	113.99
T.O.W. - NW Wing Wall - South End	1038.096	1011.313	117.27

Note: Coordinate System Used In This Table Is For This Layout Only

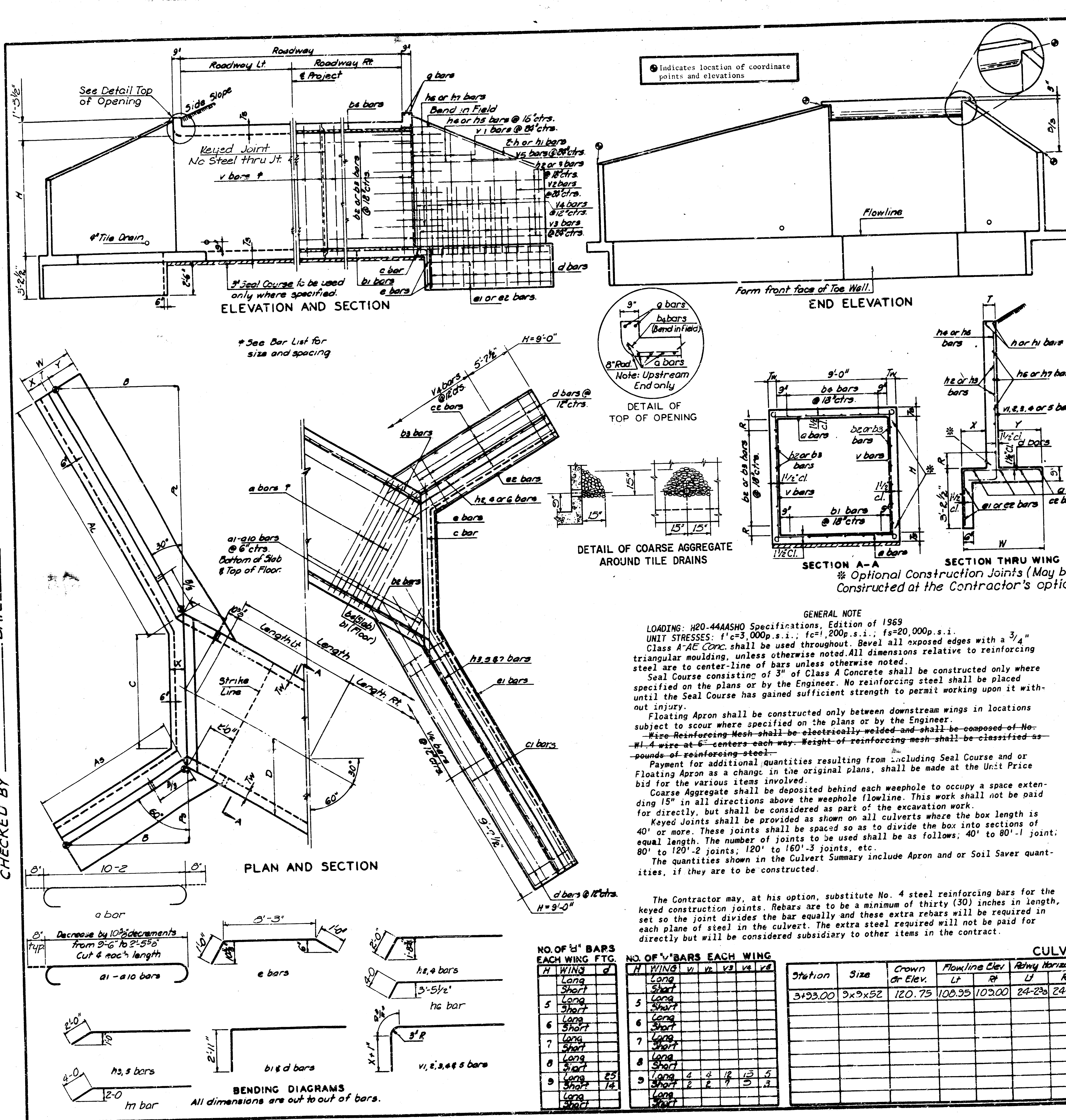


SITE LAYOUT
7' x 7' BOX CULVERT

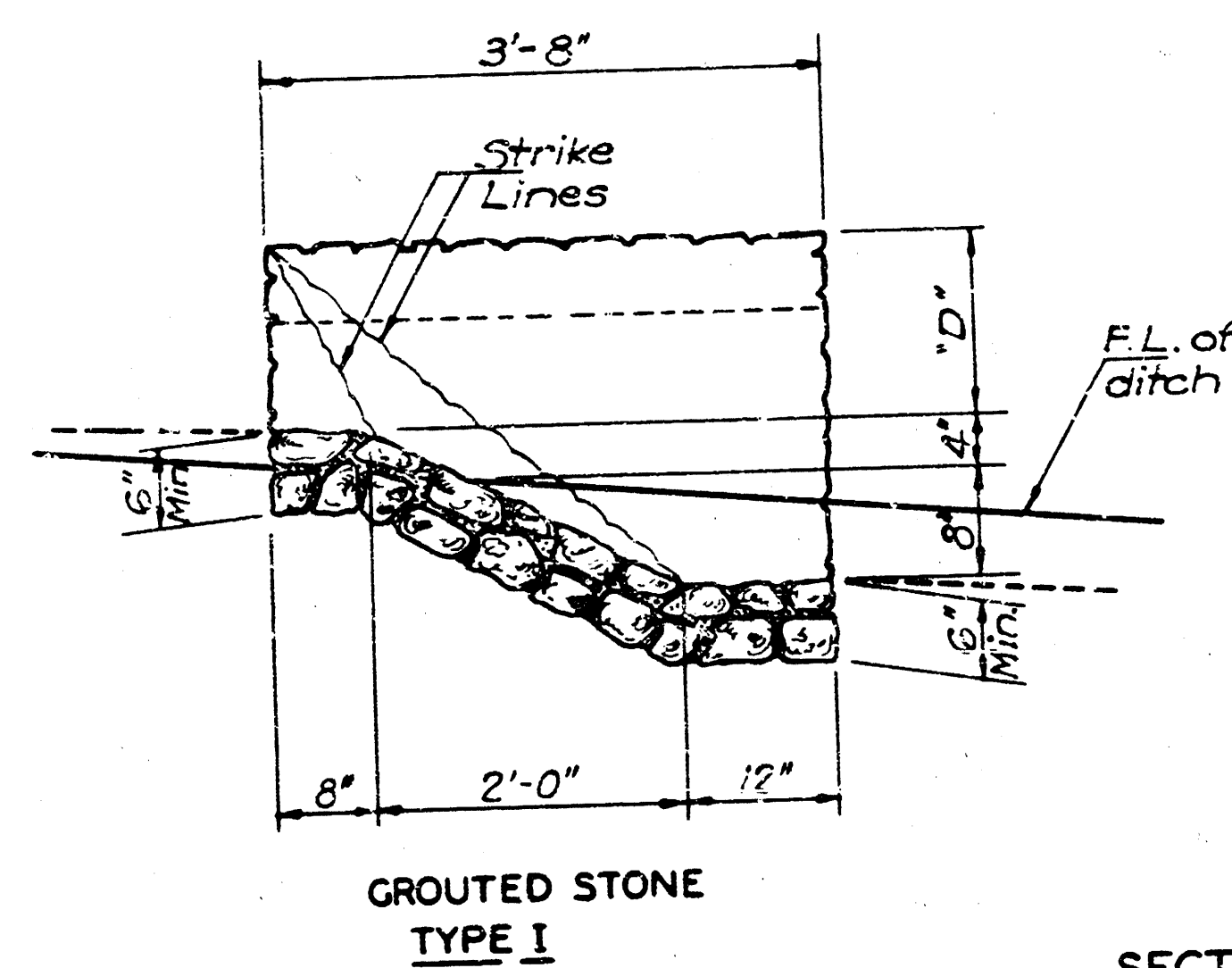
Note: For location of coordinate points and elev. for Box Culverts see Box Culvert Details Sheets

BOX CULVERT LAYOUTS  Van Doren - Hazard - Stallings Architects • Engineers • Planners Topeka Wichita Minneapolis		Design
		Drawn by
		Checked by
		Date
		Job no.
		Sheet
		of 12

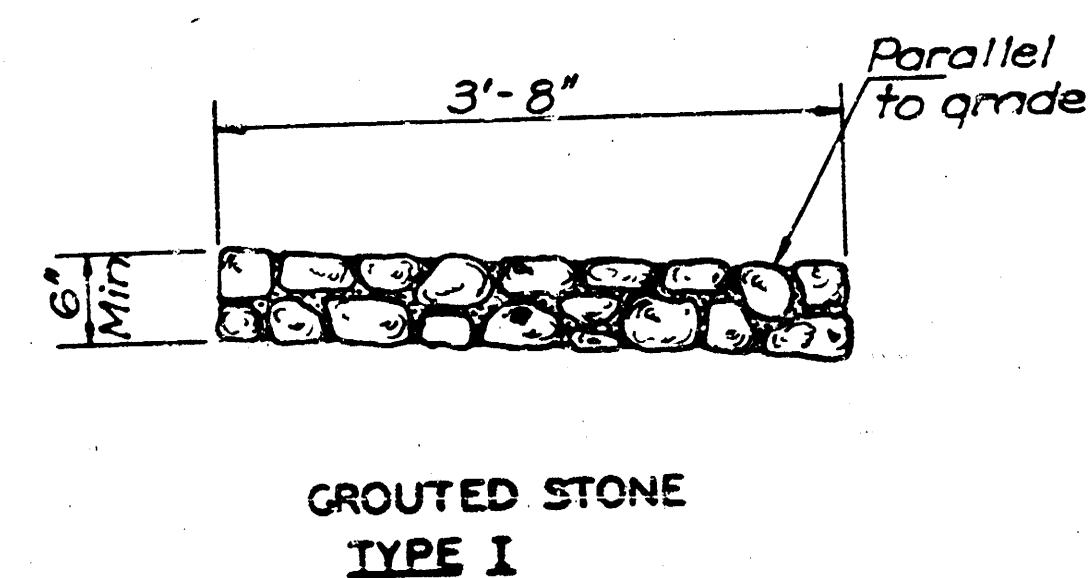
CALCULATED BY _____ DATE _____
CHECKED BY _____ DATE _____



LIST OF BARS AND DIMENSIONS										FWMA REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Apron Concrete (One)										CY	Apron Seal Course	CY	Concrete per Ft. of Box						C.Y.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Letter										AL	AS	B	C	D	H	A	Pa	R	T	Ja	TW	W	X	Y	Bar	a	v																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Dimension										14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-6"	14'-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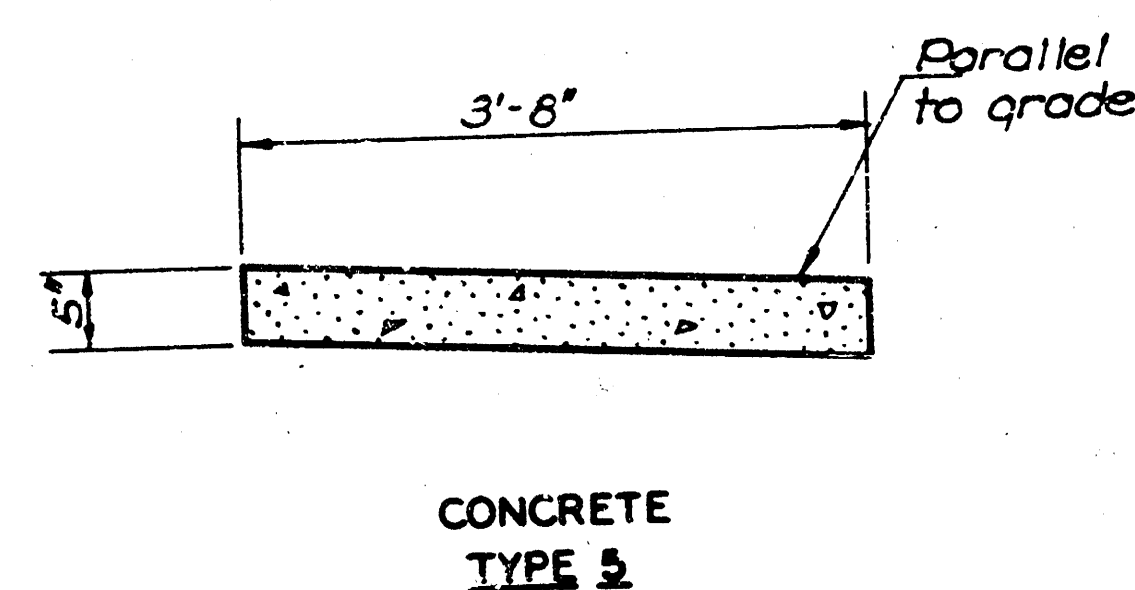
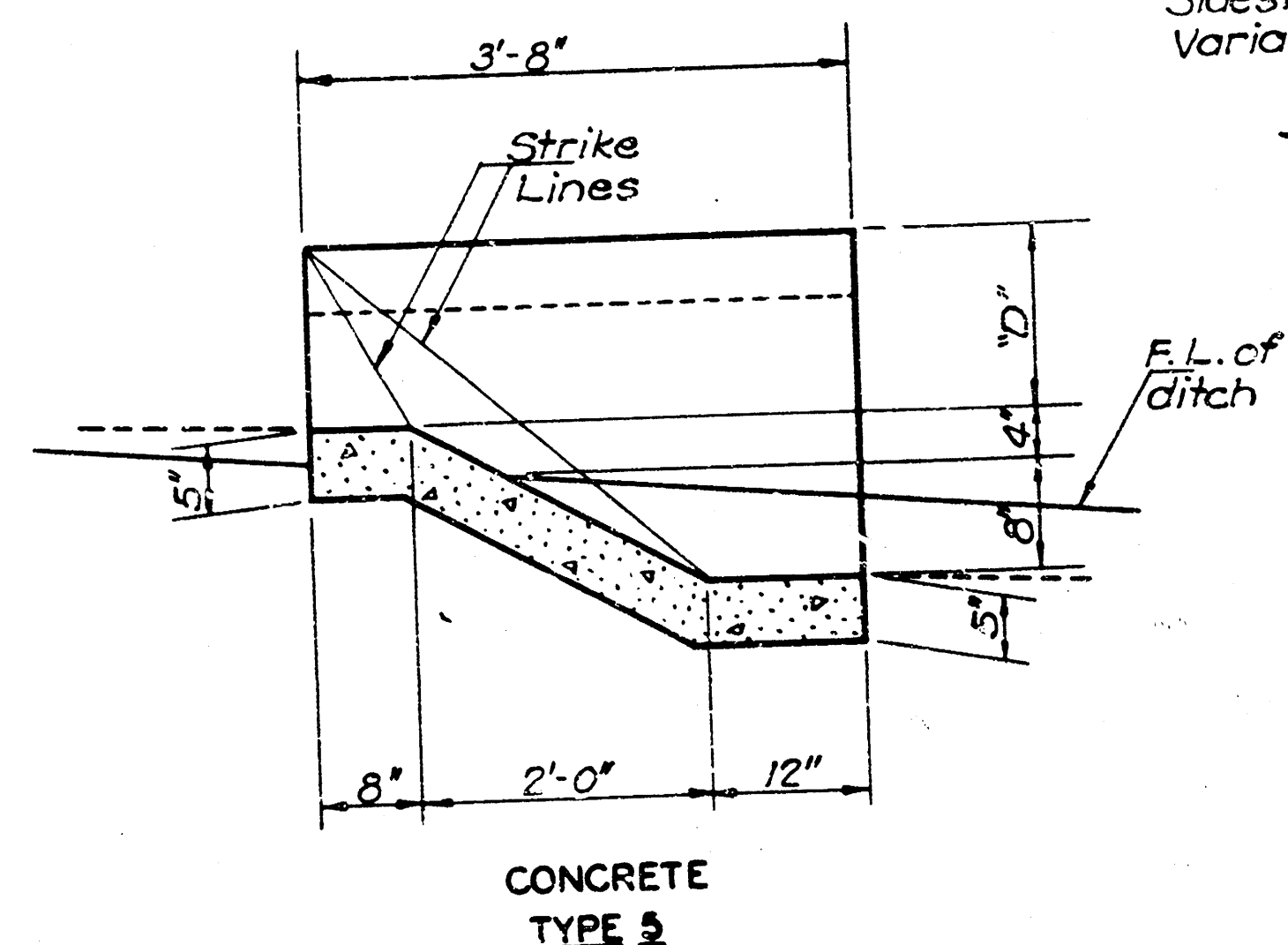


SECTION A-A
Without Toe Wall.

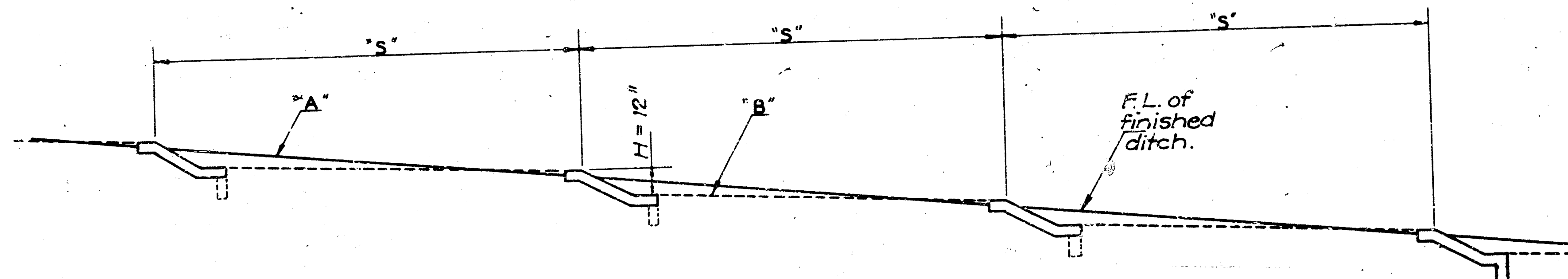


SECTION B-B
Same section at each end of unit.
Without Toe Wall.

Note: The stone in all stone wash checks shall be laid in a 3" mortar bed and the spaces between stones shall be filled with mortar.



Note: Use Class "A" concrete thruout for Type 5 & 5-T Wash Checks.



SPACING DIAGRAM
Same for each type.

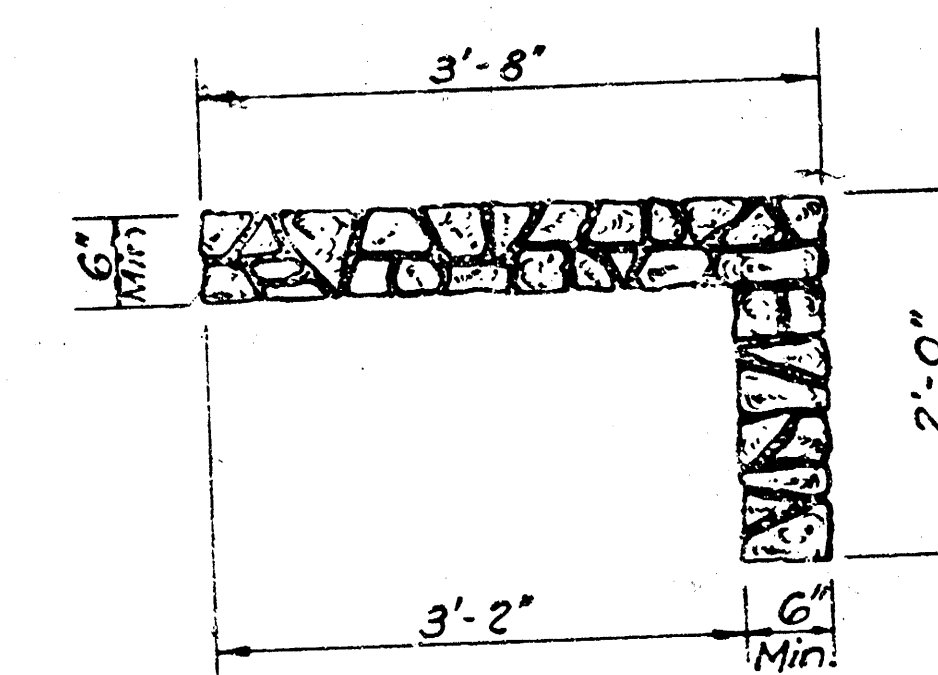
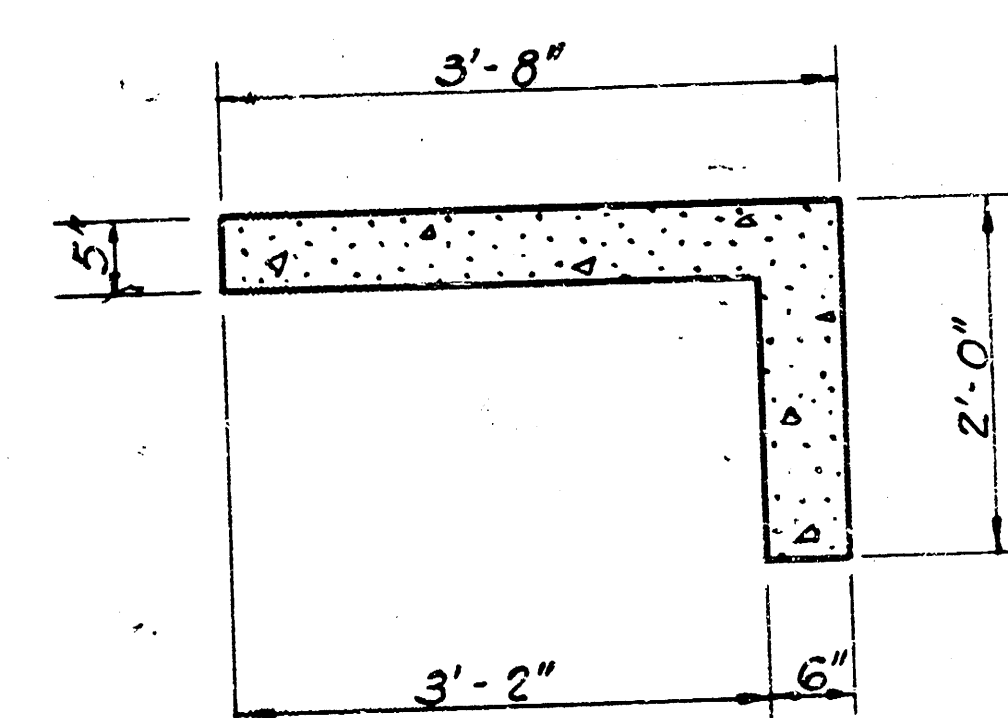
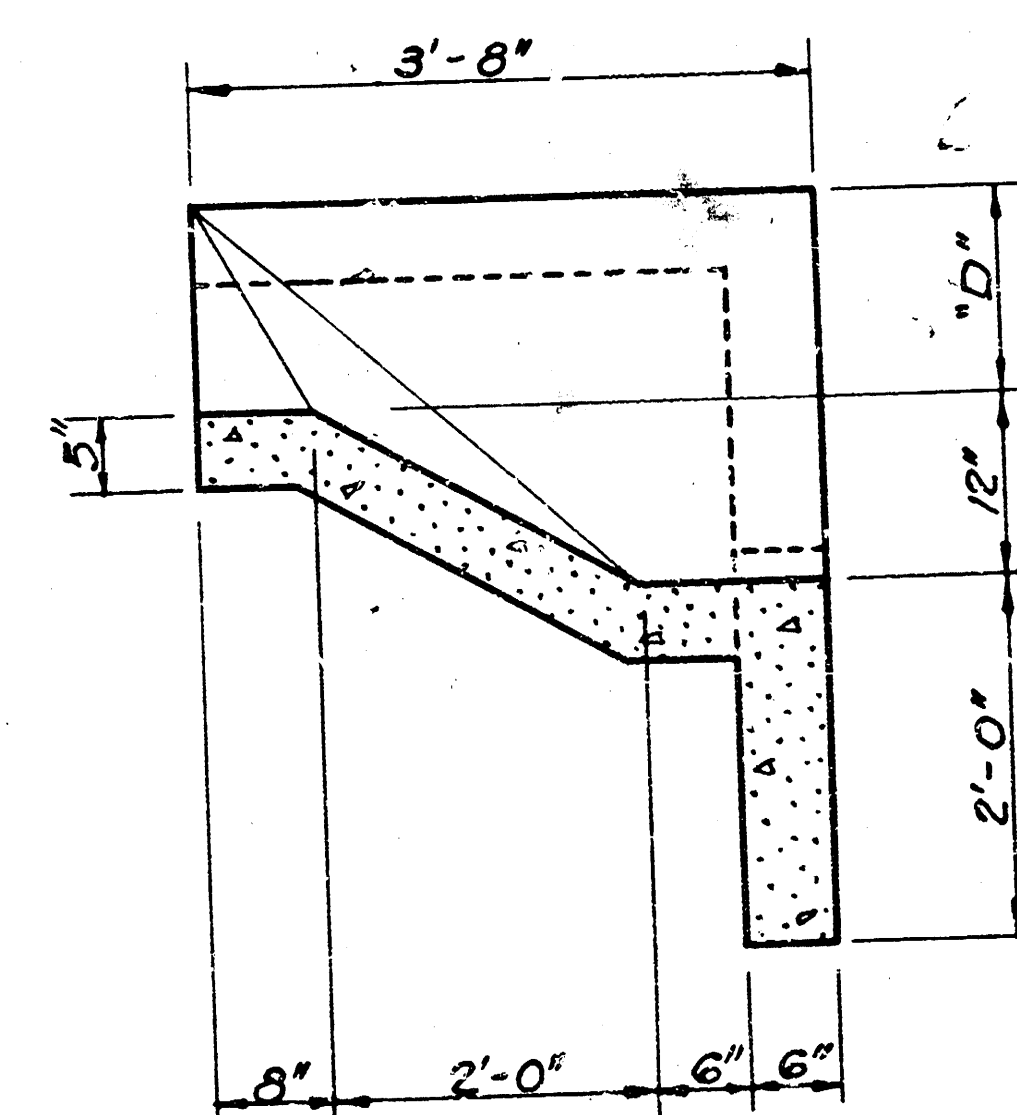
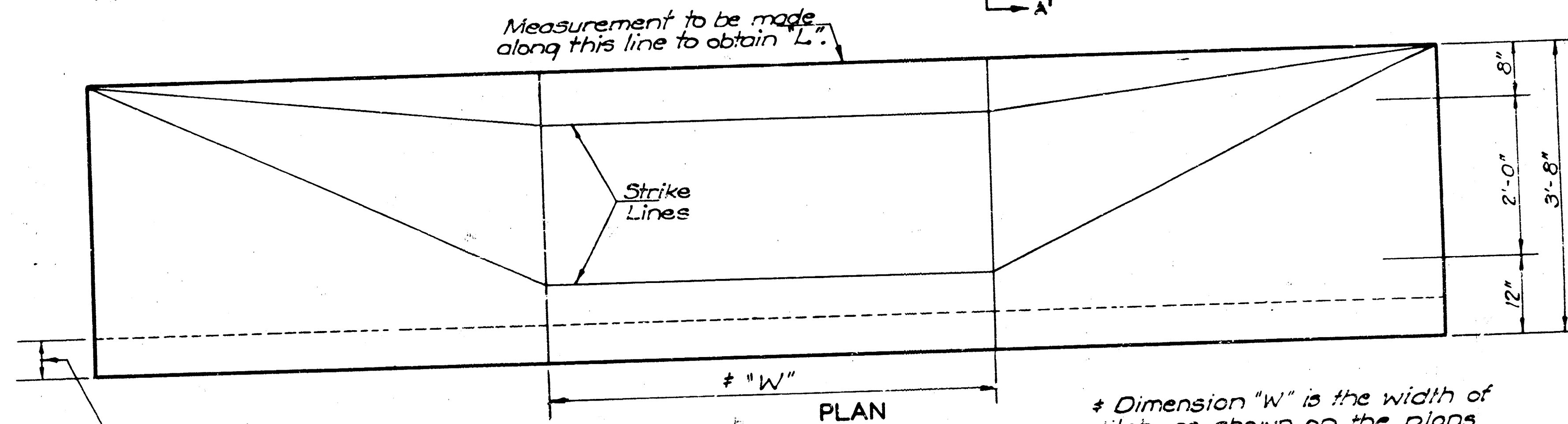
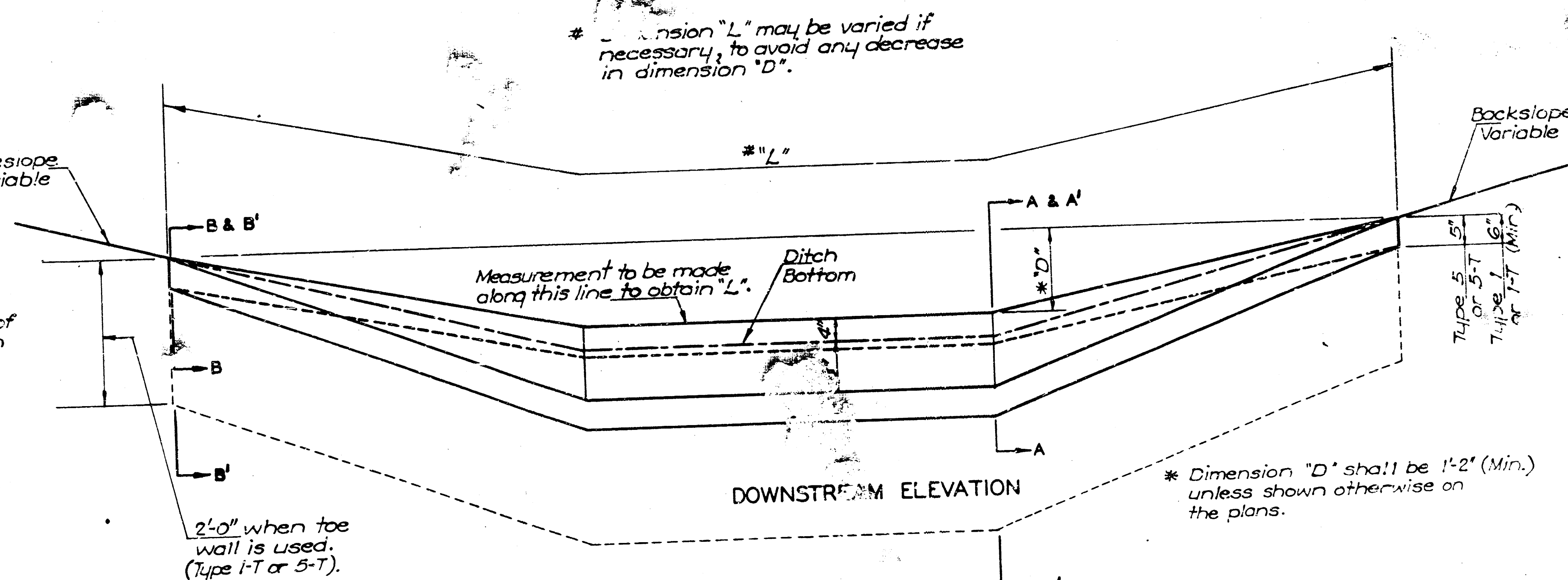
S = Spacing of units in feet (10' min.).
A = Per cent grade of ditch.
B = Per cent at which washing is expected to stop. This will vary with the type of soil, etc.
H = Height of drop at each unit.

$$S = \frac{100H}{(A-B)}, (10' \text{ min.})$$

FORMULA

TABLE OF SPACING Same for each type			
(A-B)	Spacing	(A-B)	Spacing
1	100'	6	17'
1.5	67'	6.5	15.5'
2	50'	7	14'
2.5	40'	7.5	13'
3	33'	8	12.5'
3.5	29'	8.5	12'
4	25'	9	11'
4.5	22'	9.5	10.5'
5	20'	10	10'
5.5	18'		

Note: Type 1-T or 5-T wash checks shall be used on the lowest unit in each row. Additional locations where these units are to be constructed shall be designated by the Engineer.



Note: Unless otherwise noted, either of these types may be used.



Van Doren - Hazard - Stallings

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