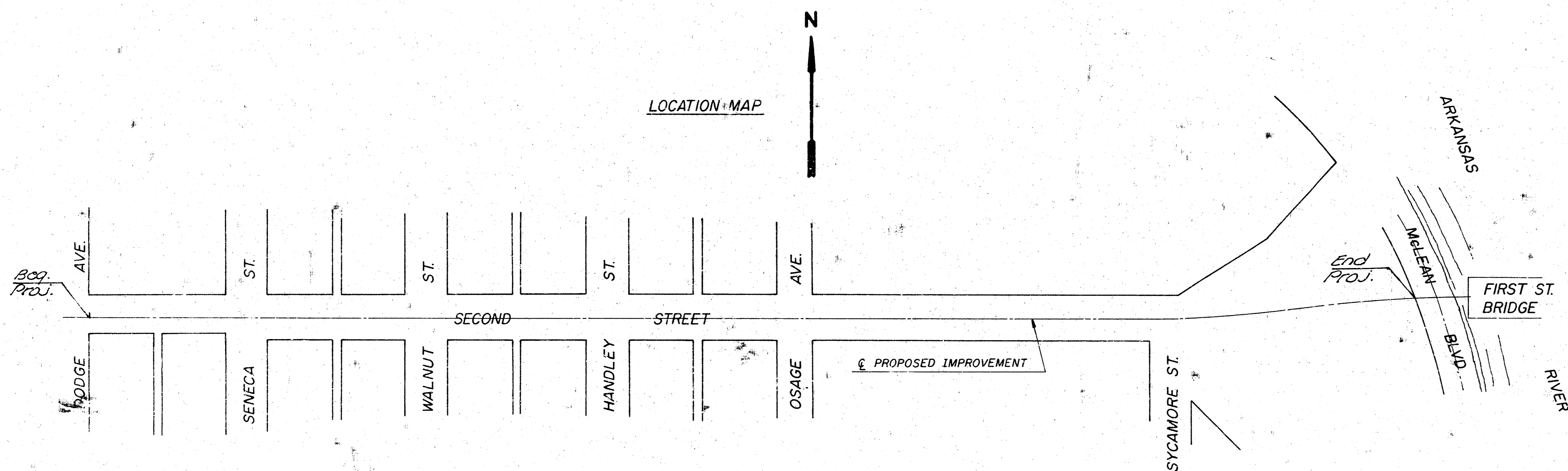


IMPROVING & REIMPROVING SECOND STREET

E.L. DODGE - ARKANSAS RIVER
PROJECT NO. DAKM576084
CITY OF WICHITA, KANSAS
R.W. LINN - CITY ENGINEER



Pg. **INDEX**

- 1. Title Sheet
- 2. Typical Section
- 3-7 Plan Sheets
- 8-15 Cross-Sections

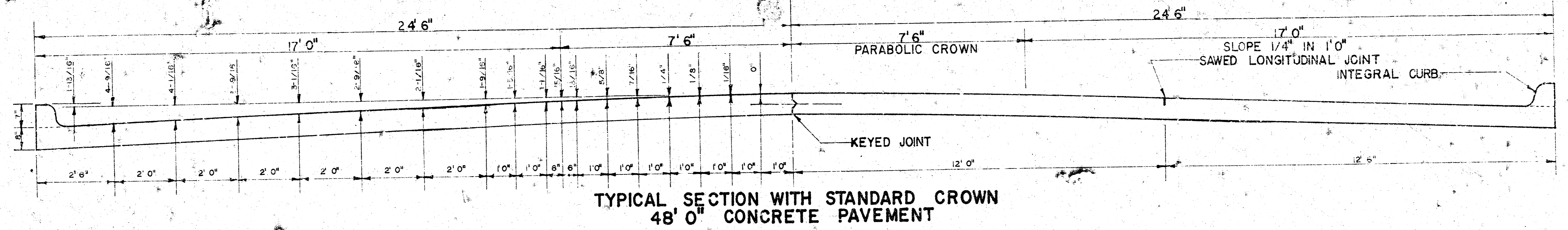
GENERAL NOTES

1. COORDINATE PAVING CONSTRUCTION WITH ALL UTILITY CONSTRUCTION.
2. NO DRIVE APPROACHES TO BE CONSTRUCTED LESS THAN MINIMUM STANDARD CITY SPECIFICATION.
3. ALL "IRONS AND THIMBLES" SHALL BE TIED DOWN AND REPLACED ON PROJECT.
4. RAZING OF EXISTING BUILDINGS AT CITY MATERIAL YARDS TO BE DONE BY "OTHERS." CONTRACTOR TO REMOVE ASPHALT MAT AND CONCRETE SLABS.
5. INTERSECTIONS OF SENECA, SYCAMORE, AND MCLEAN BOULEVARD TO BE COMPLETED AS SOON AS CONSTRUCTION ALLOWS, WITH SENECA STREET BEING FIRST TO BE COMPLETED. *A Minimum of Two Lanes of Traffic Flow is to be Maintained at All Times on Seneca Street.*
6. FIELD ENGINEER TO DETERMINE IN FIELD THE PREFERENCE OF LOCATION OF WHEELCHAIR RAMPS. WHEELCHAIR RAMP LOCATIONS ARE SO DESIGNATED (1).
7. TEMPORARY 4" A.C. ACCESS ROAD BETWEEN STAS. 19+80 TO 23+00 LT. OF CENTERLINE TO BE CONSTRUCTED IN PARKING FOR PEPSI-COLA BOTTLING COMPANY. ALLOW SUFFICIENT CLEARANCE OF PROPOSED CONSTRUCTION. REMOVAL OF ACCESS ROAD IS A PART OF "ASPHALT MAT REMOVAL BID."
8. THE FOLLOWING MANHOLES ARE TO BE ADJUSTED BY THE PAVING CONTRACTOR:

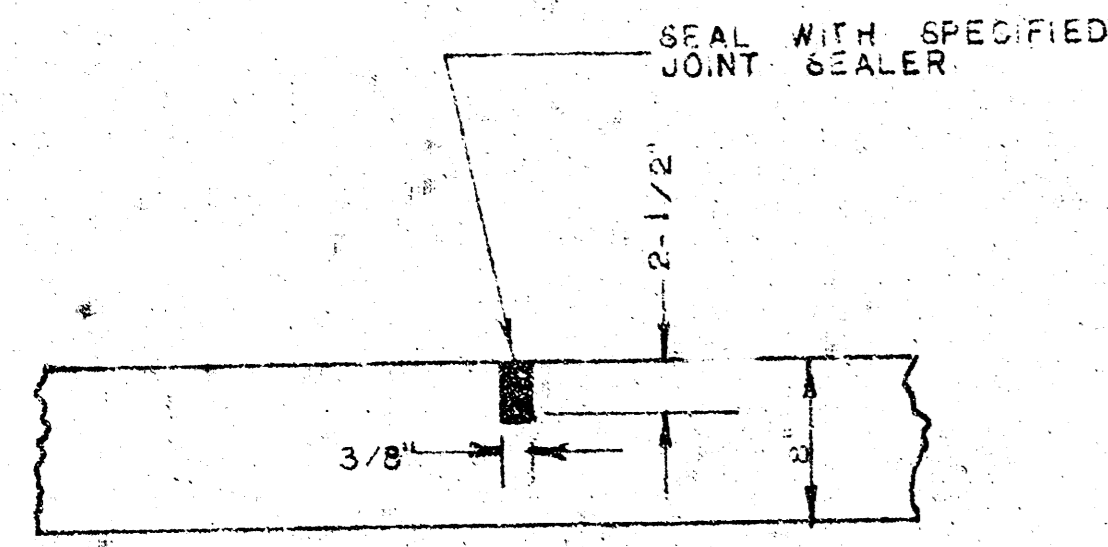
STA. 8+83 ; 33 FT. RT OF CENTERLINE
STA. 10+45 ; 33 FT. RT OF CENTERLINE
STA. 10+51 ; 33 FT. RT OF CENTERLINE
STA. 12+31 ; 33 FT. RT OF CENTERLINE
STA. 12+44 ; 33 FT. RT OF CENTERLINE
STA. 14+43 ; 34 FT. RT OF CENTERLINE
STA. 14+84 ; 33 FT. RT OF CENTERLINE
STA. 17+23 ; 33 FT. RT OF CENTERLINE
STA. 17+75 ; 33 FT. RT OF CENTERLINE
STA. 19+08 ; 31 FT. LT OF CENTERLINE
STA. 19+13 ; 36 FT. RT OF CENTERLINE
STA. 20+99 ; 40 FT. RT OF CENTERLINE

**SECOND STREET
E.L. DODGE - W.L. ARKANSAS RIVER
PROJ. NO. DAKM576084
CITY OF WICHITA, KANSAS
R.W. LINN, CITY ENGINEER**

SYMETRICAL ABOUT CENTERLINE

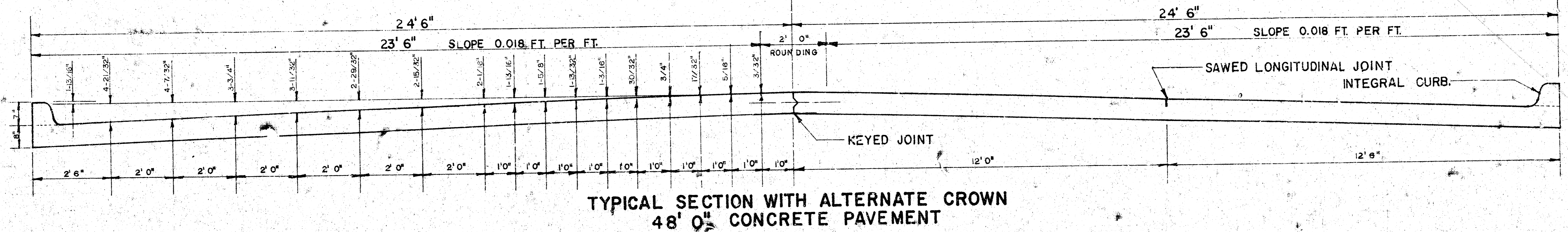


SAWED CONTRACTION JOINTS ARE TO BE CONSTRUCTED AT 30" INTERVALS EXCEPT WHERE AN EXPANSION JOINT IS USED.

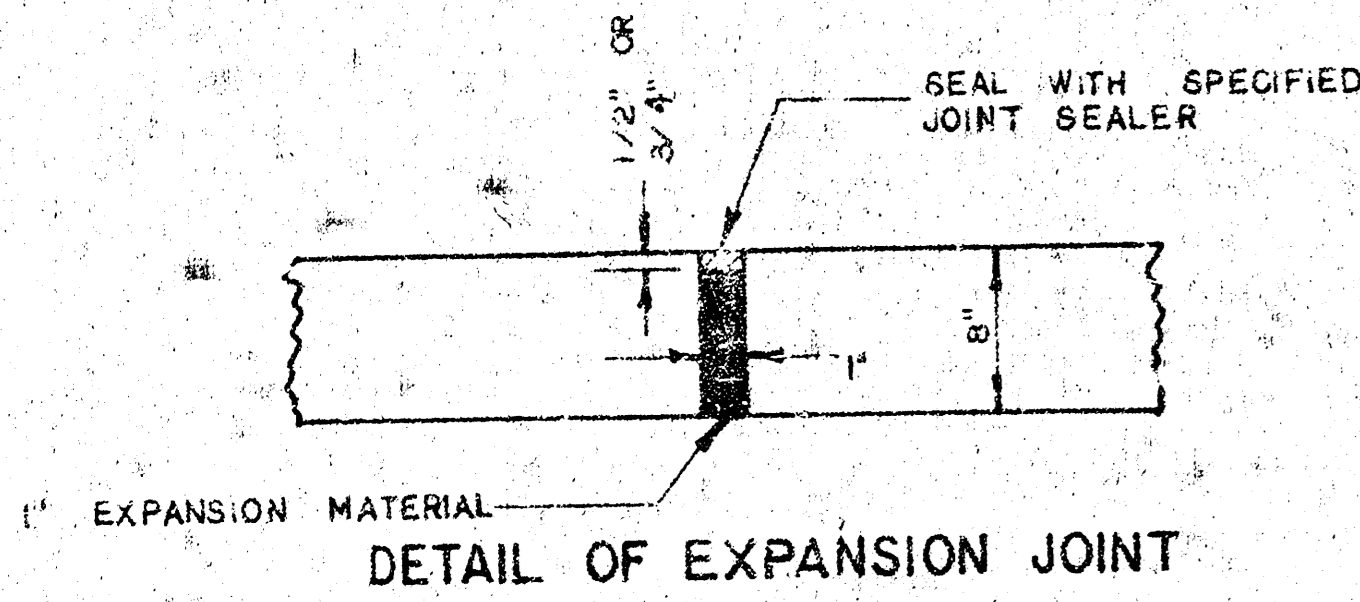


DETAIL OF SAWED CONTRACTION AND LONGITUDINAL JOINTS

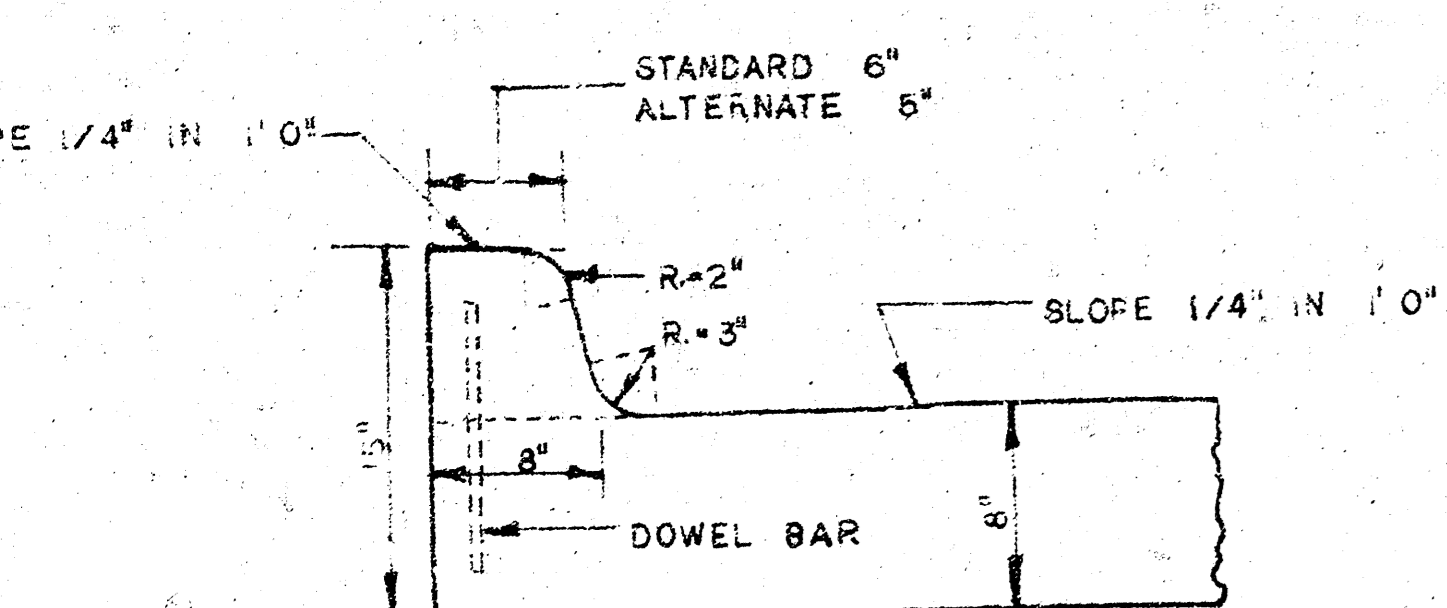
SYMETRICAL ABOUT CENTERLINE



EXPANSION JOINTS ARE TO BE CONSTRUCTED AT MAXIMUM INTERVALS OF 120' 0".

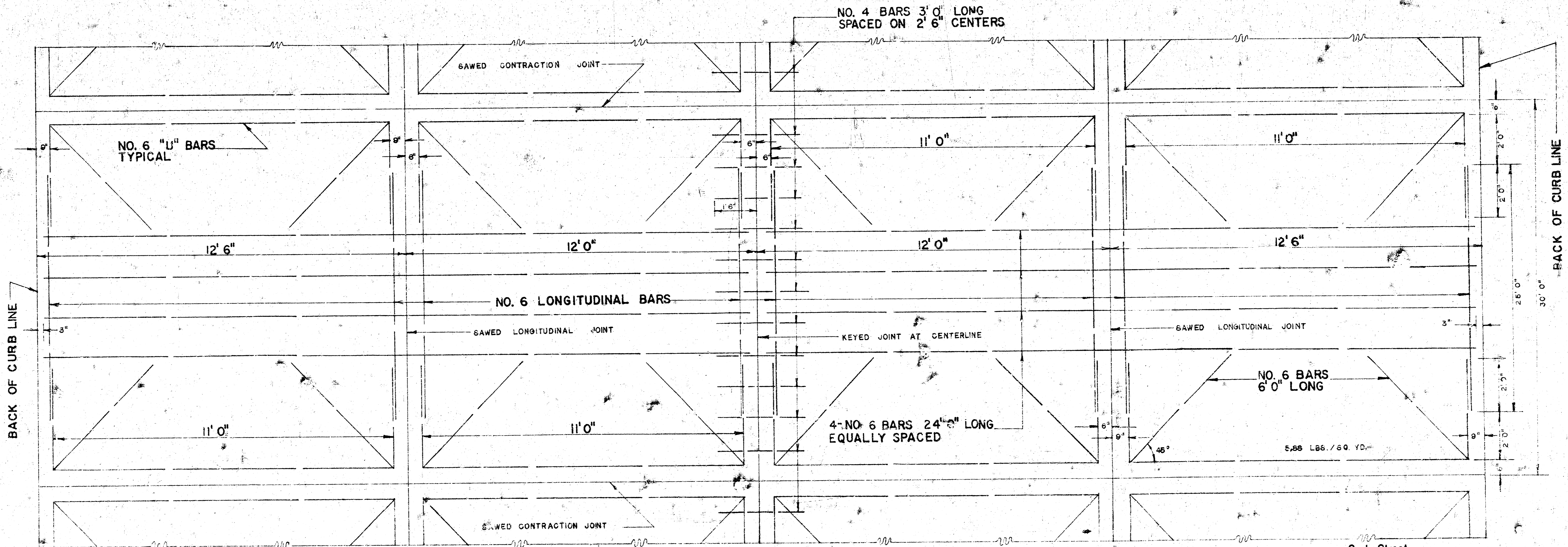


DETAIL OF EXPANSION JOINT



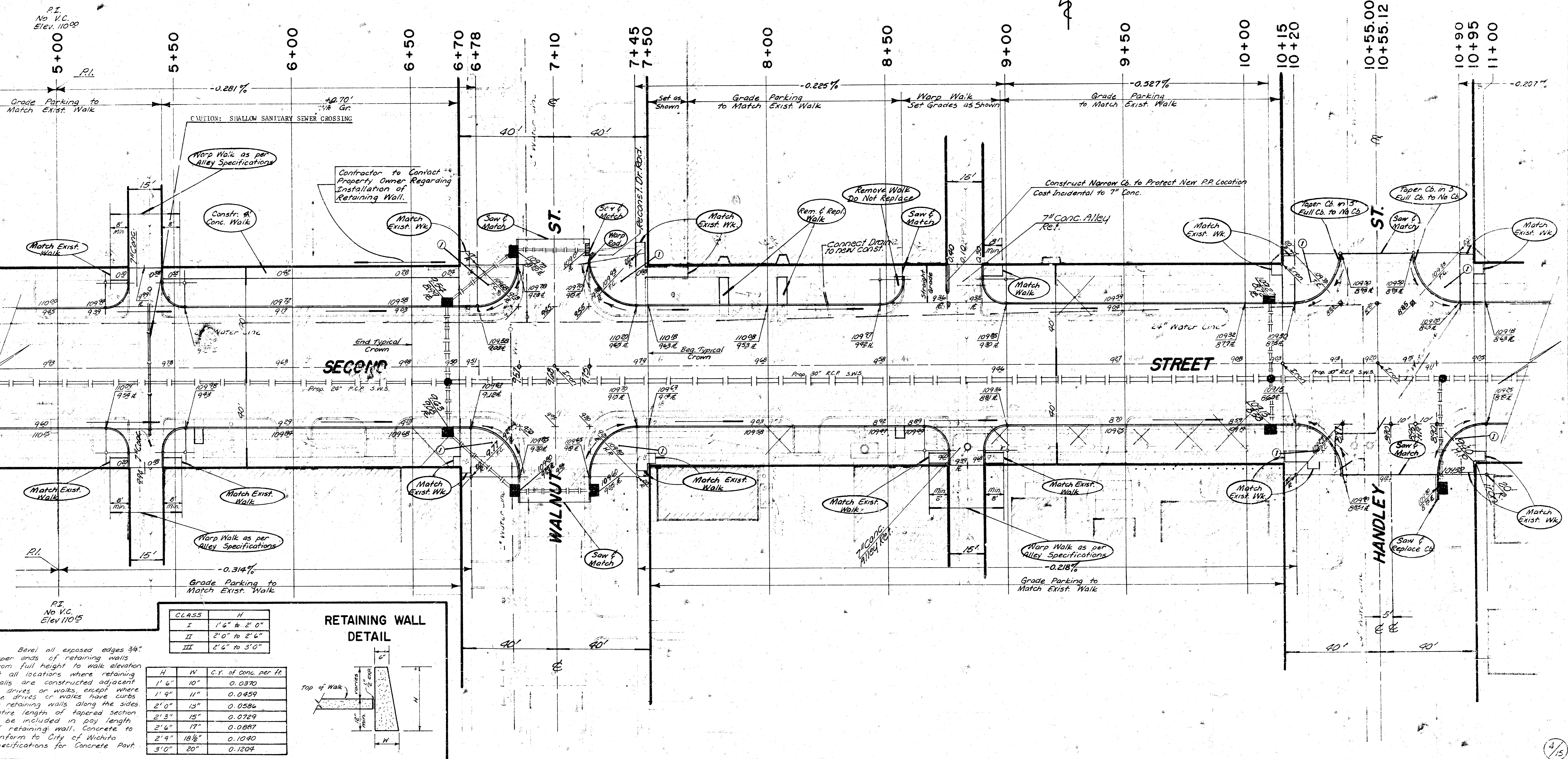
DETAIL OF INTEGRAL CURB

INTEGRAL CURB SHALL BE CUT THROUGH TO THE PAVEMENT IN UNIFORM LENGTHS OF NOT MORE THAN TEN FOOT INTERVALS BETWEEN EXPANSION JOINTS. EXPANSION JOINTS HAVING THE SAME THICKNESS AS THE EXPANSION JOINTS IN THE PAVEMENT SHALL BE CONSTRUCTED IN THE INTEGRAL CURB AT THE SPECIFIED LOCATIONS. NUMBER 4 OR NUMBER 6 DOWELS SHALL BE INSTALLED IN THE INTEGRAL CURB AS SHOWN ON APPROXIMATELY 2' 6" CENTERS. PAVEMENT GRADES SHOWN ON PLANS ARE FOR STANDARD CROWN.

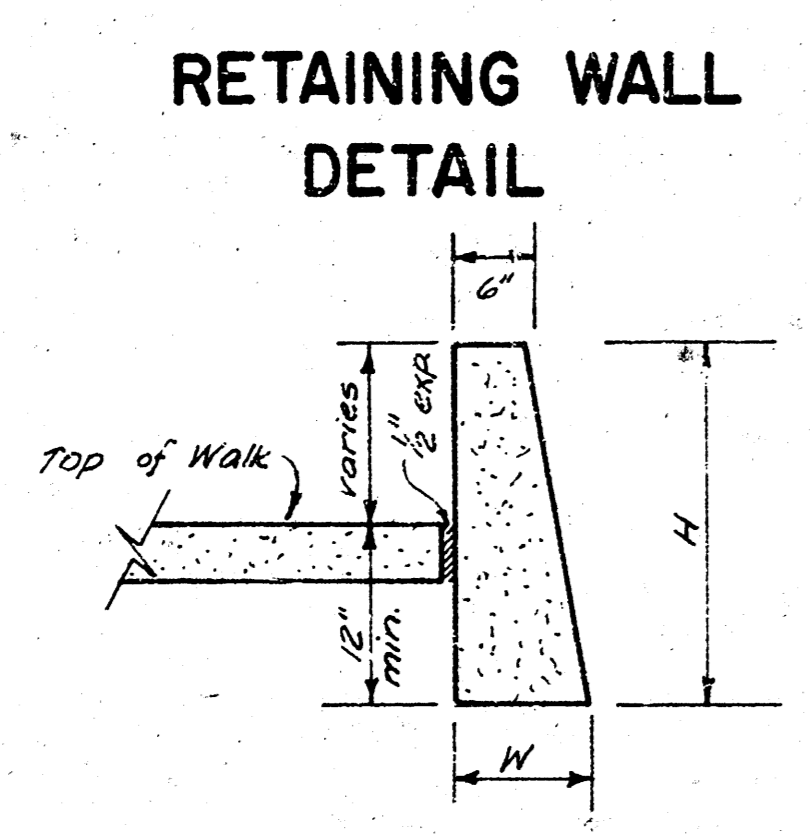


B.M. = III.50 N.E. Cor. Top Conc. Step @ Ho. # 909 W. 2nd

Scale: 1" = 20'



CLASS	H
I	1' 6" to 2' 0"
II	2' 0" to 2' 6"
III	2' 6" to 3' 0"



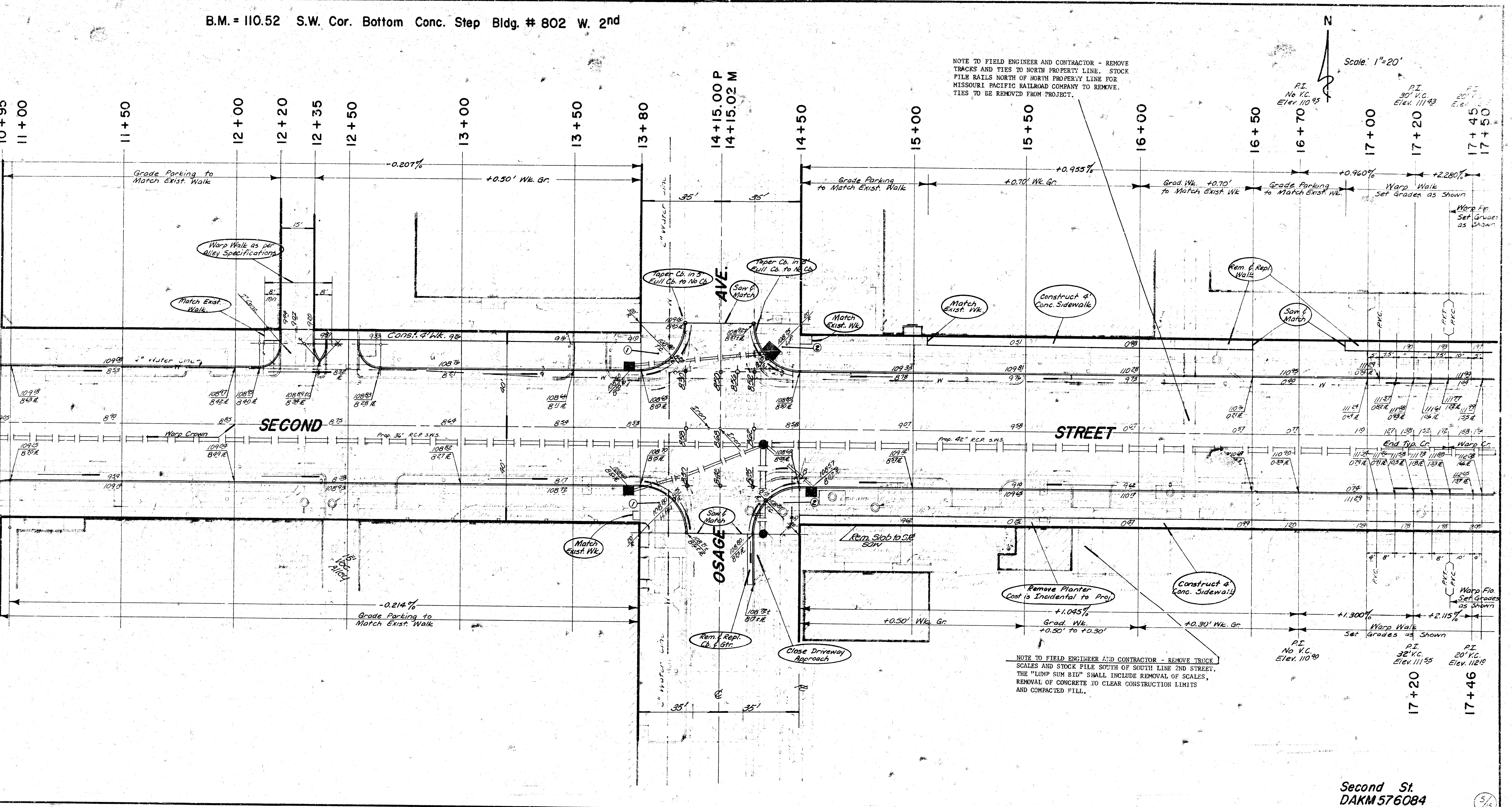
Bare all exposed edges 3/4" per ends of retaining walls from full height to walk elevation. At all locations where retaining walls are constructed adjacent to drives or walks, except where retaining walls along the sides, entire length of tapered section be included in pay length of retaining wall. Concrete to conform to City of Wichita specifications for Concrete Pavt.

H	W	C.Y. of conc. per ft.
1' 6"	10"	0.0370
1' 9"	11"	0.0459
2' 0"	13"	0.0586
2' 3"	15"	0.0729
2' 6"	17"	0.0887
2' 9"	18 1/2"	0.1040
3' 0"	20"	0.1204

B.M. = 110.52 S.W. Cor. Bottom Conc. Step Bldg. # 802 W. 2nd

NOTE TO FIELD ENGINEER AND CONTRACTOR - REMOVE TRACKS AND TIES TO NORTH PROPERTY LINE. STOCK PILE RAILS NORTH OF NORTH PROPERTY LINE FOR MISSOURI PACIFIC RAILROAD COMPANY TO REMOVE. TIES TO BE REMOVED FROM PROJECT.

Scale: 1"=20'

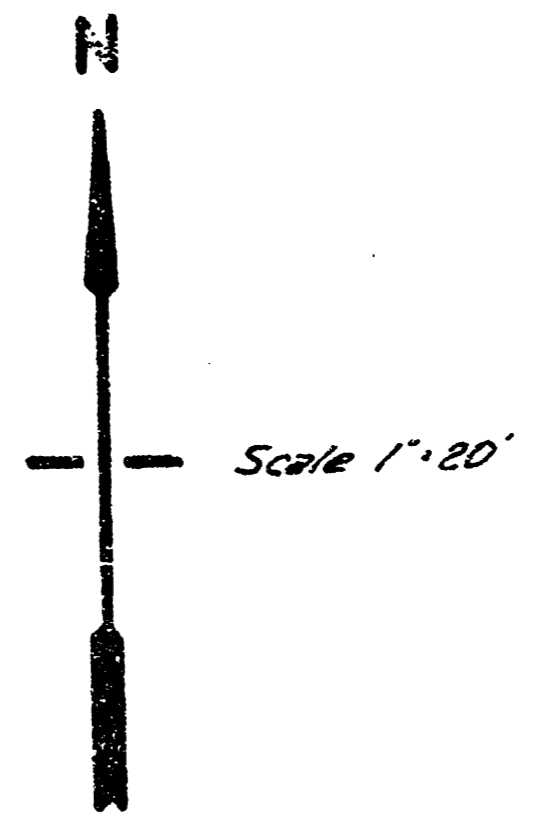


NOTE TO FIELD ENGINEER AND CONTRACTOR - REMOVE TRUCK SCALES AND STOCK PILE SOUTH OF SOUTH LINE 2ND STREET. THE "LUMP SUM BID" SHALL INCLUDE REMOVAL OF SCALES, REMOVAL OF CONCRETE TO CLEAR CONSTRUCTION LIMITS AND COMPACTED FILL.

Second St.
DAKM576084

5/15

B.M. = 115.33 "□" Cut Top West End of Medial on 2nd St. @ E. Side McLeon



Curve Data for South Curb
(Sta. 24+75=0+00 to Sta. 1+00)

$\Delta = 5^{\circ}10'26''$, $R = 1107.42'$, $T = 50.03'$, $L = 100.00'$, $LC = 99.97'$

CURVE DATA BASED ON $R.A.C.$ RAD. $\Delta = 2^{\circ}35'13''$

STA.	ARC	CHORD LENGTH	DEFLECTION	TOTAL DEFLECTION
24+75 = 0+00			0°00'00"	0°00'00"
0+25	25.00	24.82'	0°38'48"	0°38'48"
0+50	"	"	0°38'48"	1°17'36"
0+75	"	"	0°38'48"	1°56'25"
1+00	25.00	24.82'	0°38'48"	2°35'13"

Defl. = 1.552142 Min./ft

$\Delta = 7^{\circ}18'06''$, $R = 2600'$, $T = 165.90'$, $L = 331.35'$, $LC = 331.13'$

CURVE DATA BASED ON $R.A.C.$ RAD. $\Delta = 3^{\circ}39'03''$

STA.	ARC	CHORD LENGTH	DEFLECTION	TOTAL DEFLECTION
20+50			0°00'00"	0°00'00"
20+75	25.00'	24.70'	0°16'32"	0°16'32"
21+00	"	"	0°16'32"	0°33'03"
21+25	"	"	0°16'32"	0°49'35"
21+50	"	"	0°16'32"	1°06'07"
21+75	"	"	0°16'32"	1°22'38"
22+00	"	"	0°16'32"	1°39'10"
22+25	"	"	0°16'32"	1°55'42"
22+50	"	"	0°16'32"	2°12'13"
22+75	"	"	0°16'32"	2°28'45"
23+00	"	"	0°16'32"	2°45'17"
23+25	"	"	0°16'32"	3°01'48"
23+50	"	"	0°16'32"	3°18'20"
23+75	25.00'	24.70'	0°16'32"	3°34'52"
23+81.35	6.35'	6.27'	0°04'14"	3°39'03"

Defl. = 0.6611052 Min./ft

$\Delta = 2^{\circ}03'50''$, $R = 2600'$, $T = 46.83'$, $L = 93.65'$, $LC = 93.64'$

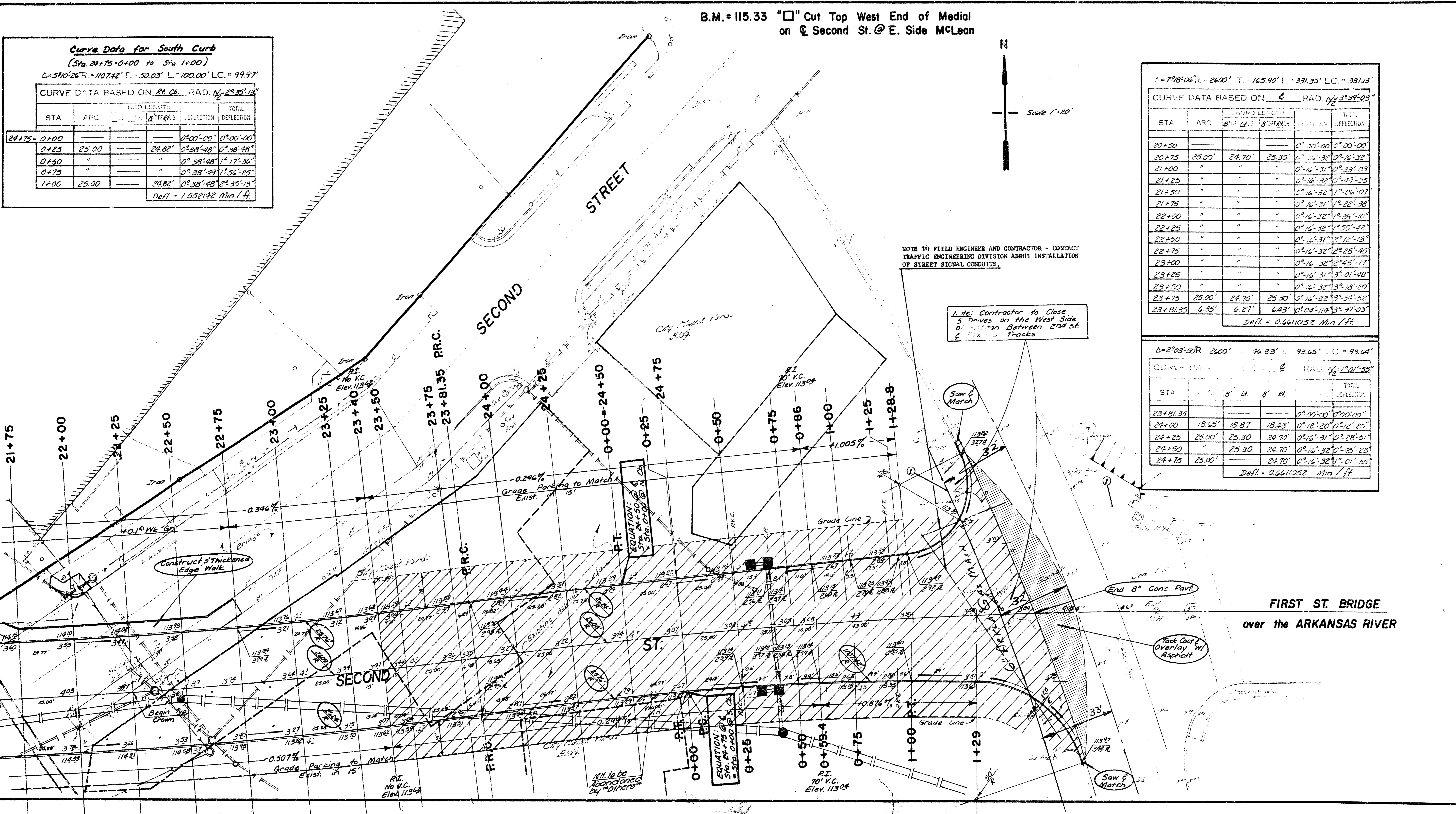
CURVE DATA BASED ON $R.A.C.$ RAD. $\Delta = 1^{\circ}01'55''$

STA.	ARC	CHORD LENGTH	DEFLECTION	TOTAL DEFLECTION
23+81.35			0°00'00"	0°00'00"
24+00	18.65'	18.87'	0°12'20"	0°12'20"
24+25	25.00'	25.30'	0°16'31"	0°28'51"
24+50	"	25.30'	0°16'32"	0°45'23"
24+75	25.00'	24.70'	0°16'32"	1°01'55"

Defl. = 0.6611052 Min./ft

NOTE TO FIELD ENGINEER AND CONTRACTOR - CONTACT TRAFFIC ENGINEERING DIVISION ABOUT INSTALLATION OF STREET SIGNAL CONDUITS.

Note: Contractor to Close 5 Drives on the West Side of Second St. Between 2nd St. & Railroad Tracks



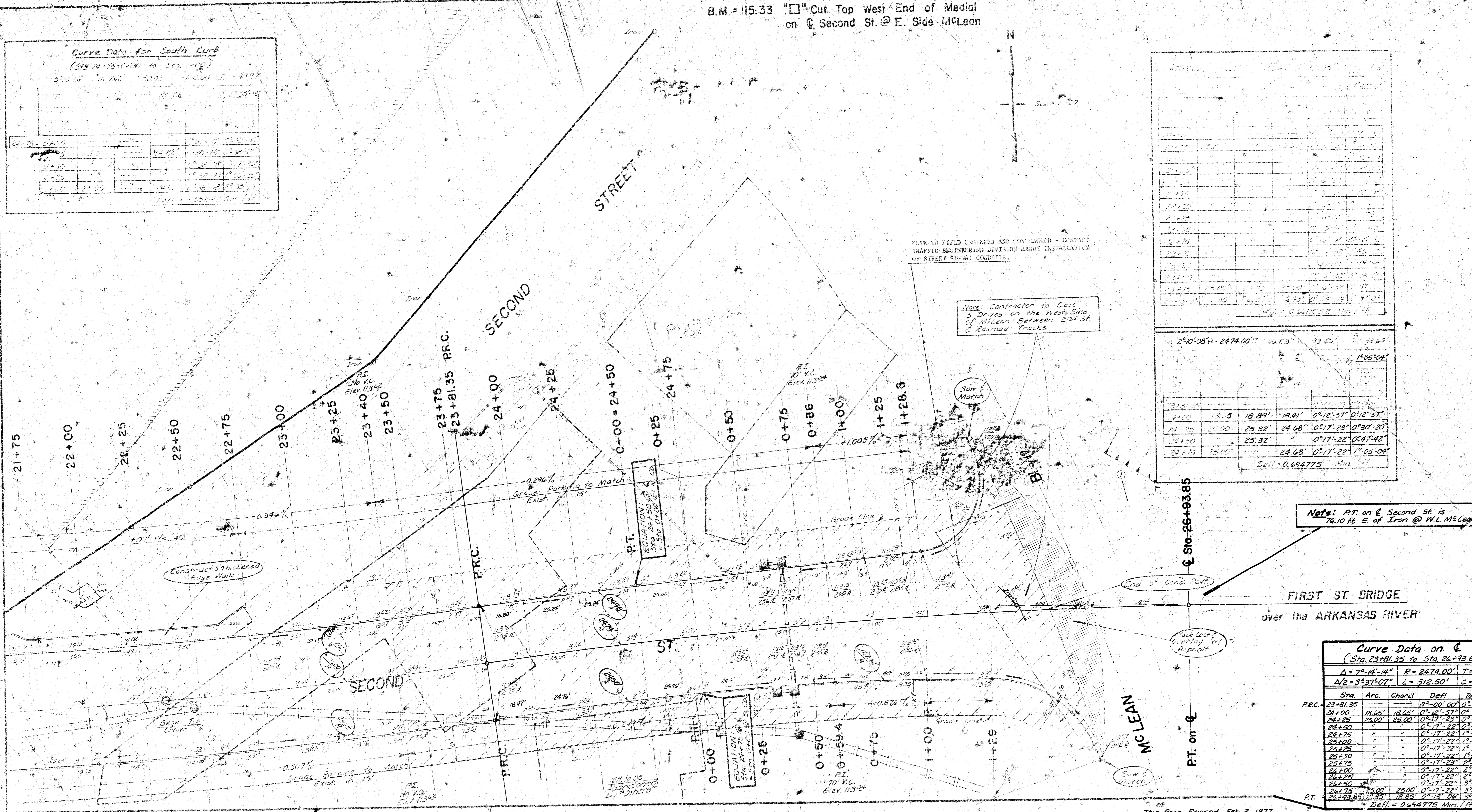
FIRST ST. BRIDGE over the ARKANSAS RIVER

B.M. = 115.33 "□" Cut Top West End of Median on @ Second St. @ E. Side McLean

Curve Data for South Curve
(Sta. 24+75 - 24+00 in Sta. 1+00)

Sta.	Chord	Defl.	Total
24+75	18.65	0°-17'-22"	1°-05'-04"
24+50	25.00	0°-17'-22"	1°-05'-04"
24+25	25.00	0°-17'-22"	1°-05'-04"
24+00	18.65	0°-17'-22"	1°-05'-04"
Total = 1°-05'-04" Min./ft.			

Sta.	Chord	Defl.	Total
23+75	18.65	0°-17'-22"	1°-05'-04"
23+50	25.00	0°-17'-22"	1°-05'-04"
23+25	25.00	0°-17'-22"	1°-05'-04"
23+00	18.65	0°-17'-22"	1°-05'-04"
Total = 1°-05'-04" Min./ft.			



NOTE TO FIELD ENGINEER AND CONTRACTOR - CONTACT TRAFFIC ENGINEERING DIVISION ABOUT INSTALLATION OF STREET SIGNAL CONDUITS.

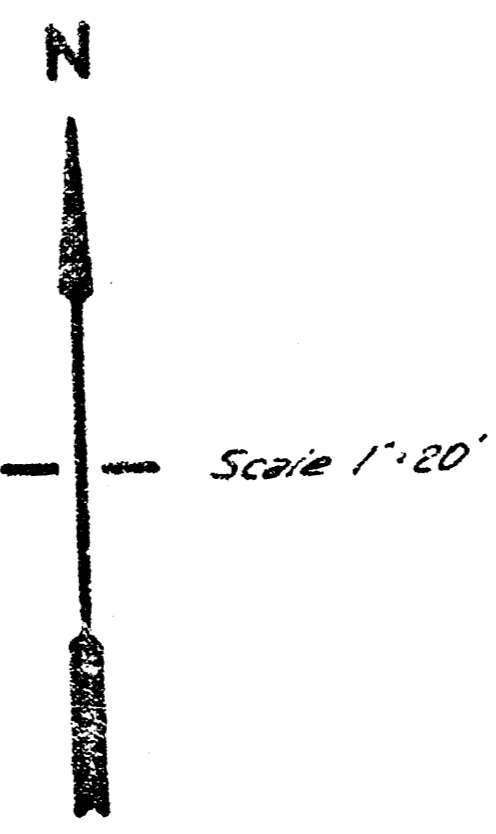
Note: Contractor to Close 5 Drives on the West Side of McLean Between 2nd St & Railroad Tracks

Note: P.T. on E Second St. is 76.10 ft. E. of Iron @ W.L. McLean

Curve Data on E
(Sta. 23+81.35 to Sta. 26+93.85)

Sta.	Arc	Chord	Defl.	Total
23+81.35	18.65	18.65	0°-00'-00"	0°-00'-00"
24+00	18.65	18.65	0°-17'-22"	0°-17'-22"
24+25	25.00	25.00	0°-17'-22"	0°-34'-44"
24+50	"	"	0°-17'-22"	0°-51'-66"
24+75	"	"	0°-17'-22"	1°-08'-88"
25+00	"	"	0°-17'-22"	1°-25'-10"
25+25	"	"	0°-17'-22"	1°-42'-32"
25+50	"	"	0°-17'-22"	1°-59'-54"
25+75	"	"	0°-17'-22"	2°-17'-16"
26+00	"	"	0°-17'-22"	2°-34'-38"
26+25	"	"	0°-17'-22"	2°-51'-60"
26+50	"	"	0°-17'-22"	3°-08'-22"
26+75	25.00	25.00	0°-17'-22"	3°-25'-44"
P.T. 26+93.85	18.65	18.65	0°-17'-22"	3°-43'-06"
Defl. = 0.694775 Min./ft.				

B.M. = 115.33 "□" Cut Top West End of Medial on E Second St. @ E. Side McLean



Curve Data for South Curb
(Sta. 24+75-0+00 to Sta. 1+00)

$\Delta = 55^{\circ}02'26''$ $R = 1107.42'$ $T = 50.03'$ $L = 100.00'$ $LC = 99.97'$

CURVE DATA BASED ON P.C. RAD. $\Delta = 55^{\circ}02'26''$

STA.	ARC	CHORD	DEFLECTION	TOTAL DEFLECTION
24+75 = 0+00			0°00'00"	0°00'00"
0+25	25.00	24.82'	0°38'48"	0°38'48"
0+50	"	"	0°38'48"	0°77'36"
0+75	"	"	0°38'48"	0°116'24"
1+00	25.00	24.82'	0°38'48"	0°155'13"

Defl. = 1.552142 Min./ft.

CURVE DATA BASED ON P.C. RAD. $\Delta = 3^{\circ}37'03''$

STA.	ARC	CHORD	DEFLECTION	TOTAL DEFLECTION
20+50			0°00'00"	0°00'00"
20+75	25.00'	24.70'	0°16'32"	0°16'32"
21+00	"	"	0°16'32"	0°33'04"
21+25	"	"	0°16'32"	0°49'36"
21+50	"	"	0°16'32"	0°66'08"
21+75	"	"	0°16'32"	0°82'40"
22+00	"	"	0°16'32"	0°99'12"
22+25	"	"	0°16'32"	0°115'44"
22+50	"	"	0°16'32"	0°132'16"
22+75	"	"	0°16'32"	0°148'48"
23+00	"	"	0°16'32"	0°165'20"
23+25	"	"	0°16'32"	0°181'52"
23+50	"	"	0°16'32"	0°198'24"
23+75	25.00'	24.70'	0°16'32"	0°214'56"
23+81.35	6.35'	6.27'	0°04'12"	0°219'08"

Defl. = 0.6611033 Min./ft.

$\Delta = 10^{\circ}08'38''$ $R = 2474.00'$ $T = 46.83'$ $L = 73.65'$ $LC = 73.64'$

CURVE DATA BASED ON P.C. RAD. $\Delta = 10^{\circ}08'38''$

STA.	ARC	CHORD	DEFLECTION	TOTAL DEFLECTION
23+81.35			0°00'00"	0°00'00"
24+00	18.65'	18.57'	0°17'57"	0°17'57"
24+25	25.00'	24.72'	0°17'57"	0°35'54"
24+50	"	"	0°17'57"	0°53'51"
24+75	25.00'	24.72'	0°17'57"	0°71'48"

Defl. = 0.22175 Min./ft.

Note: P.T. on E Second St. is 16.10 ft. E. of Iron @ W.L. McLean

MEASURE PATCH
Asph. Using Chords & M.O.'s needed.

FIRST ST. BRIDGE over the ARKANSAS RIVER

Curve Data on E
(Sta. 23+81.35 to Sta. 26+93.85)

$\Delta = 7^{\circ}14'14''$ $R = 2474.00'$ $T = 15.36'$
 $\Delta/2 = 3^{\circ}37'07''$ $L = 312.50'$ $LC = 312.24'$

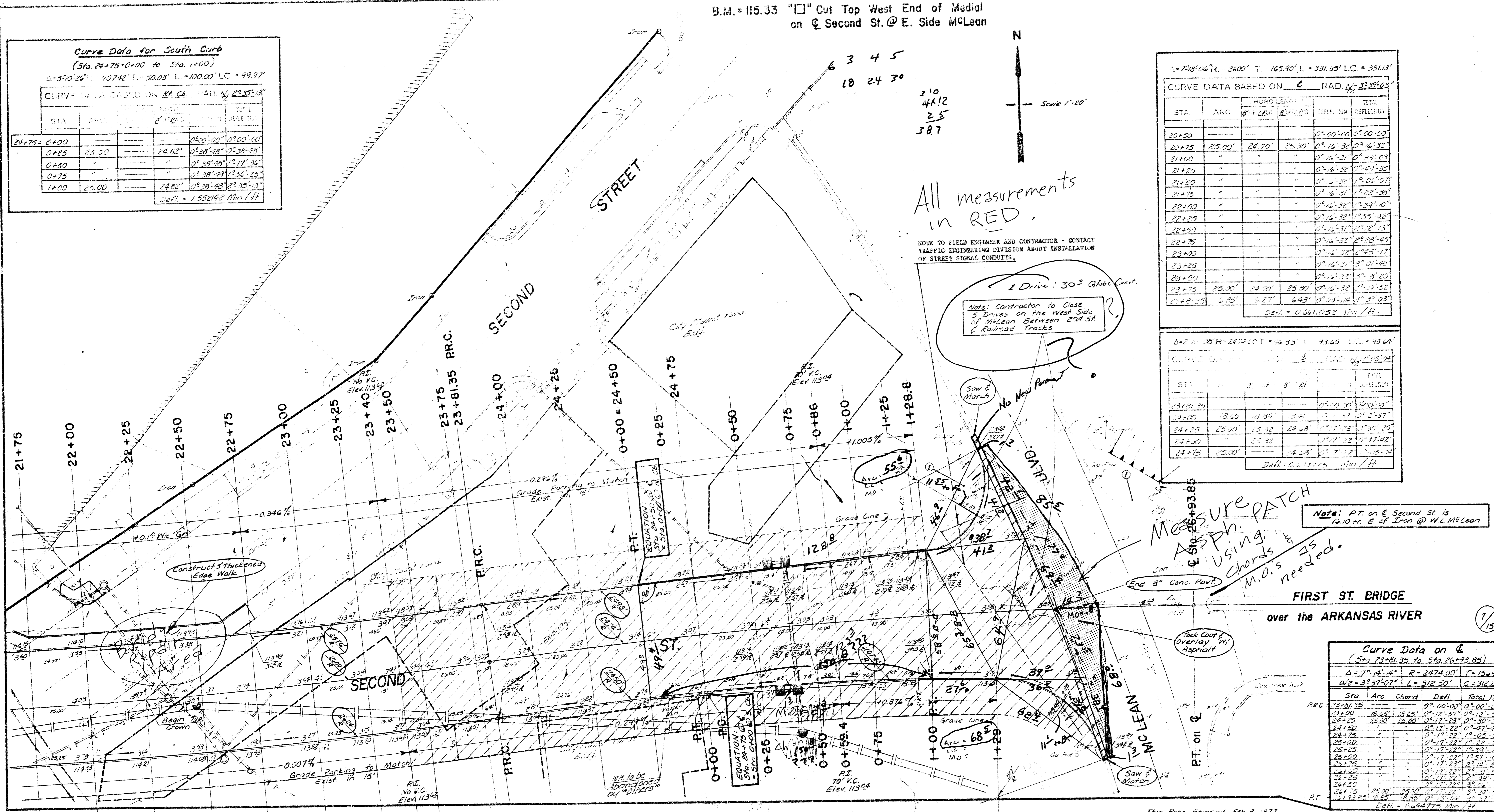
Sta.	Arc	Chord	Defl.	Total Defl.
23+81.35			0°00'00"	0°00'00"
24+00	18.65'	18.65'	0°17'57"	0°17'57"
24+25	25.00'	25.00'	0°17'57"	0°35'54"
24+50	"	"	0°17'57"	0°53'51"
24+75	"	"	0°17'57"	0°71'48"
25+00	"	"	0°17'57"	0°89'45"
25+25	"	"	0°17'57"	0°107'42"
25+50	"	"	0°17'57"	0°125'39"
25+75	"	"	0°17'57"	0°143'36"
26+00	"	"	0°17'57"	0°161'33"
26+25	"	"	0°17'57"	0°179'30"
26+50	"	"	0°17'57"	0°197'27"
26+75	25.00'	25.00'	0°17'57"	0°215'24"
26+93.85	18.50'	18.35'	0°04'12"	0°219'36"

Defl. = 0.694775 Min./ft.

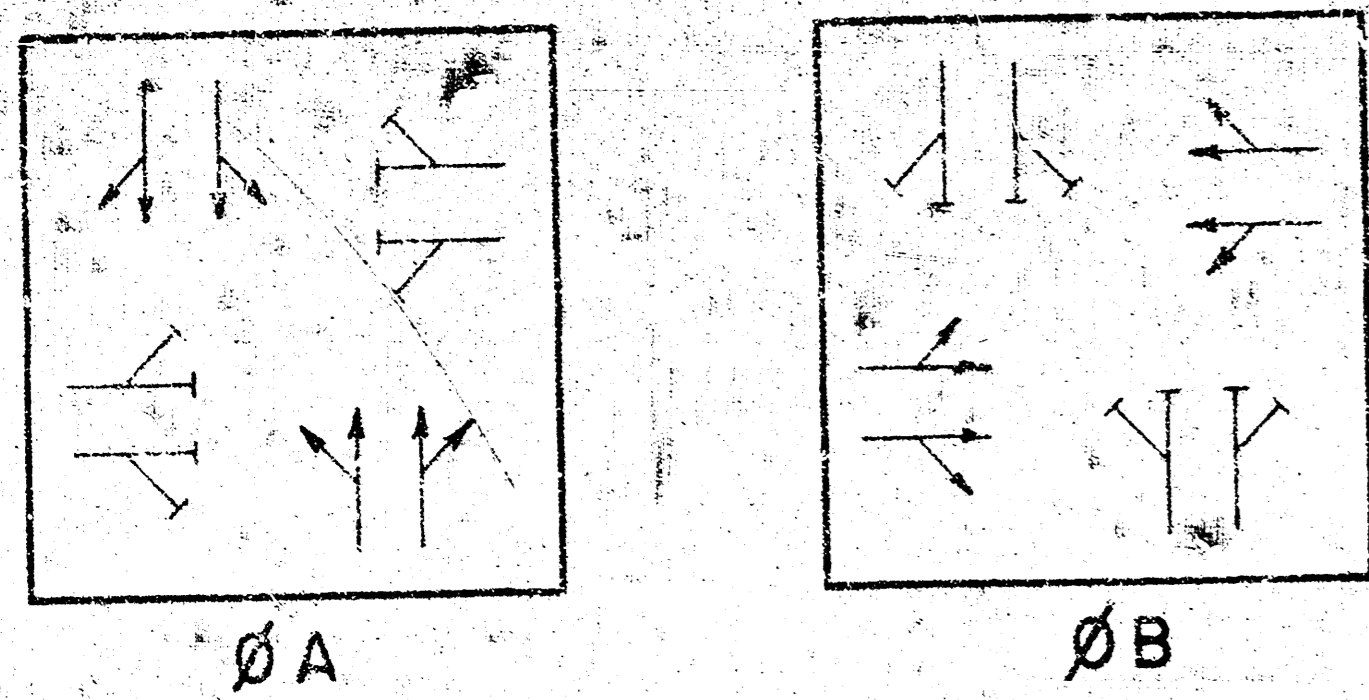
All measurements in RED.

NOTE TO FIELD ENGINEER AND CONTRACTOR - CONTACT TRAFFIC ENGINEERING DIVISION ABOUT INSTALLATION OF STREET SIGNAL CONTROLS.

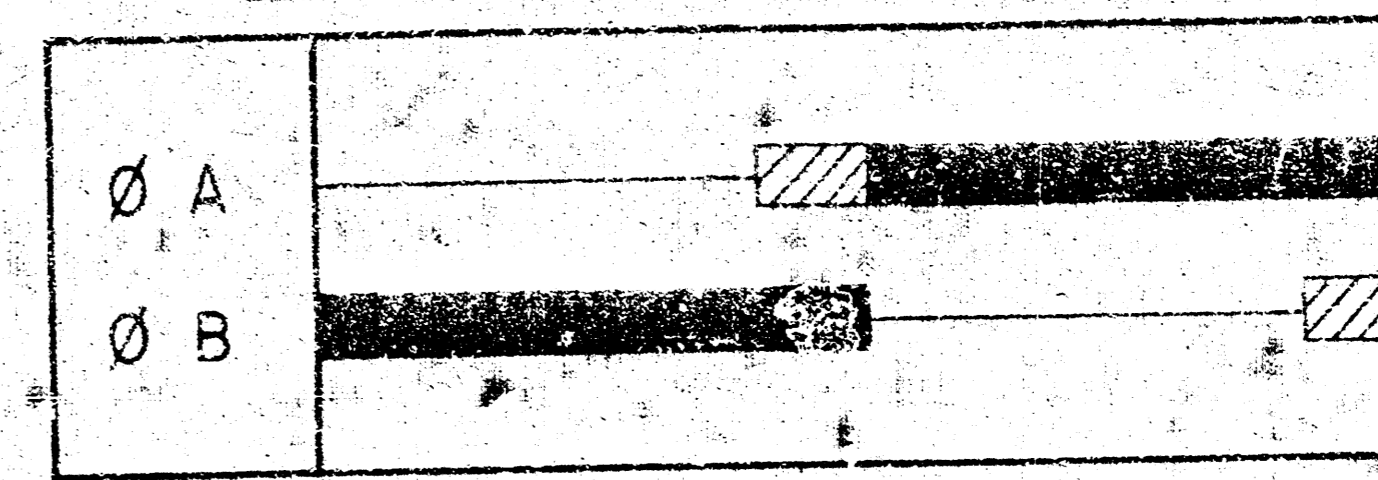
2 Drives: 30" Blue Coat.
Note: Contractor to Close 5 Drives on the West Side of McLean Between 2nd St & Railroad Tracks



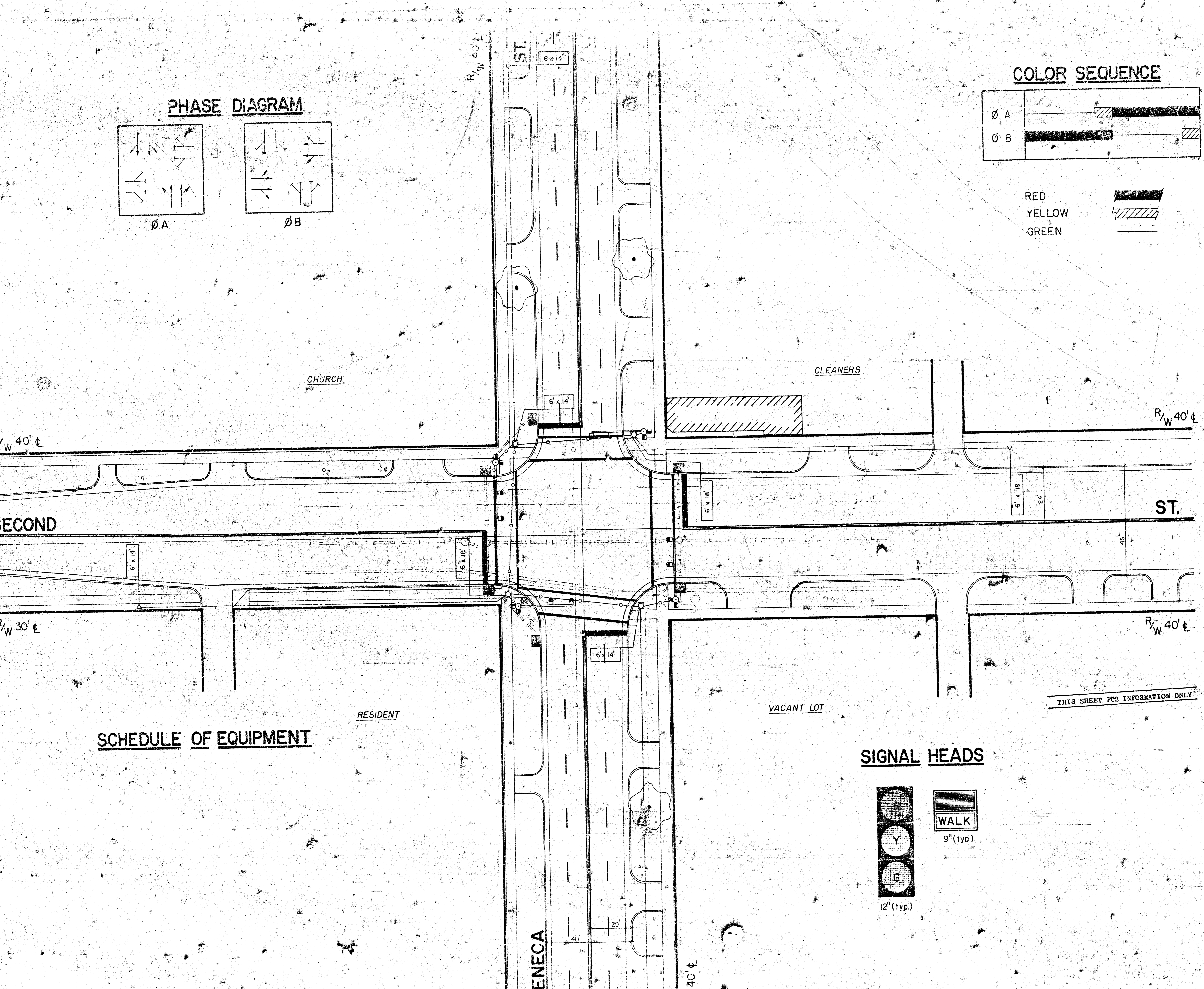
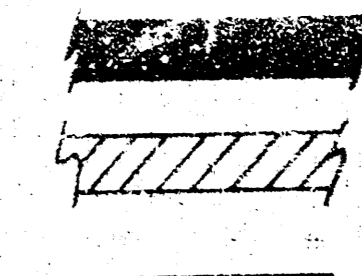
PHASE DIAGRAM



COLOR SEQUENCE

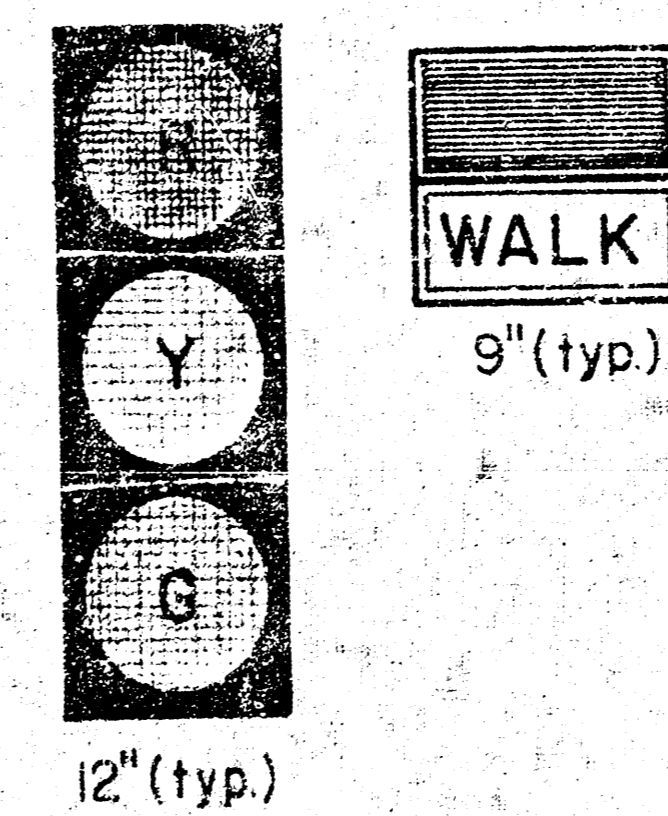


RED
YELLOW
GREEN



SCHEDULE OF EQUIPMENT

SIGNAL HEADS



THIS SHEET FOR INFORMATION ONLY

- DETECTOR LOOP
- CONTROLLER
- SIGNAL HEAD
- MASTARM
- SERVICE BOX
- CONDUIT 2"
- CONDUIT .75"
- CENTERLINE
- CURLINE
- RIGHT OF WAY
- PEDESTRIAN SIGNAL
- JUNCTION BOX

