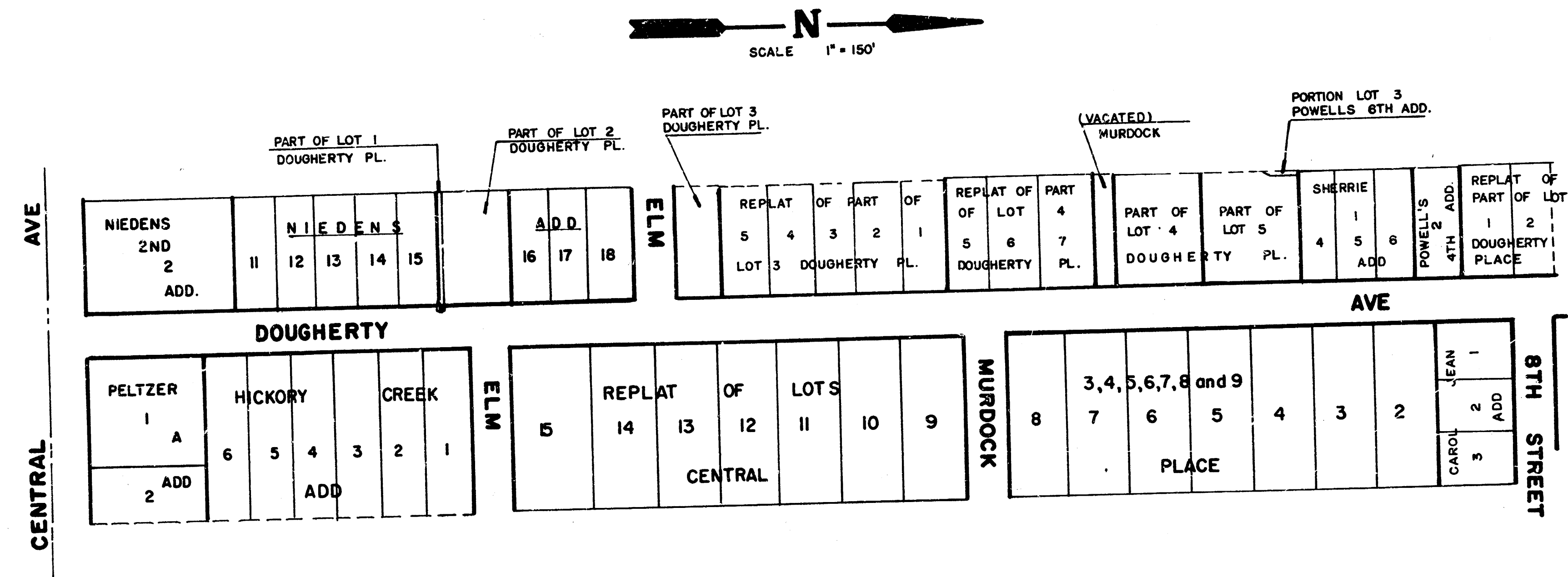
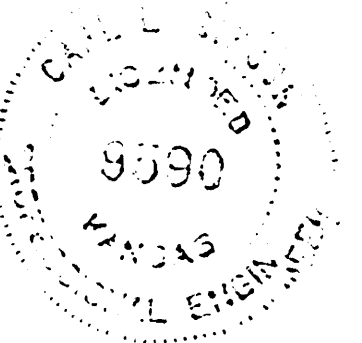


STREET IMPROVEMENTS
DOUGHERTY
N.L. CENTRAL TO N.L. 8TH STREET
PROJECT NO. 472 76 245 80685 000 000 001

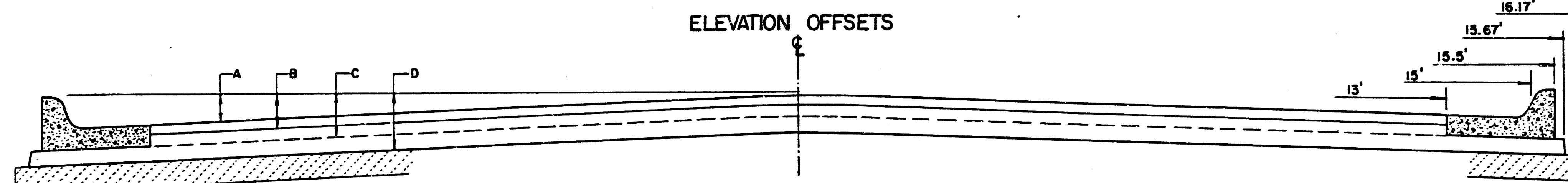
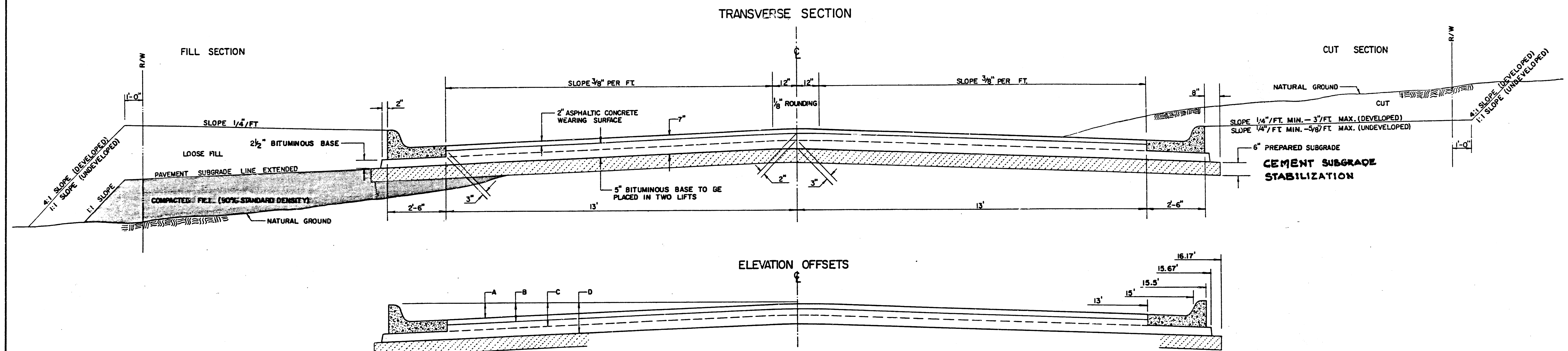


SHEET No.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION 31' B-B ASPHALTIC CONCRETE PAVMT.
3-6	PAVING PLANS
7	VALLEY GUTTERS & JOINT DETAILS
8	STD. DRIVEWAY ENTRANCE DETAILS
9	MANHOLE ADJUSTMENT DETAIL
10-13	CROSS SECTIONS

CITY OF WICHITA, KS.
M.E. LINDEBAK CITY ENGINEER

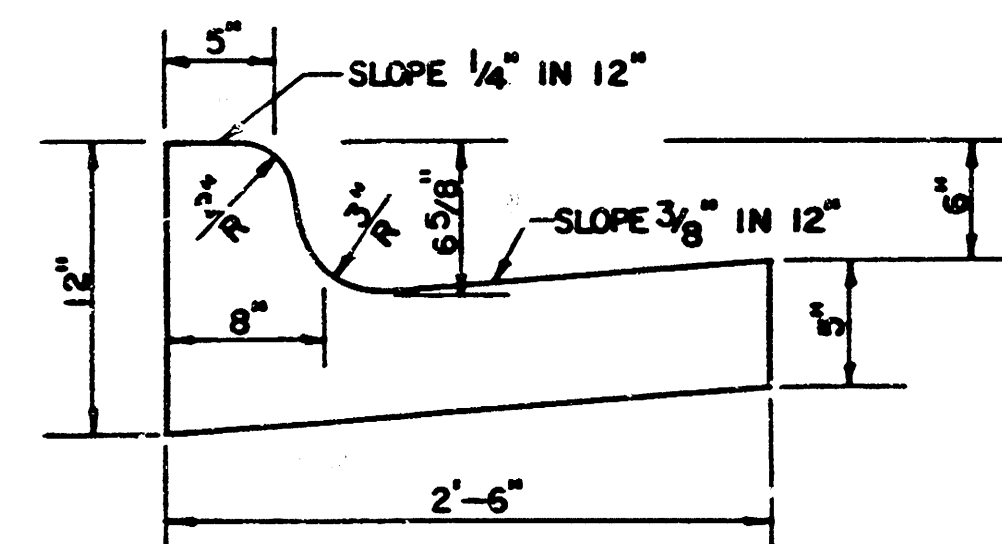


TYPICAL 31' PAVEMENT DETAILS

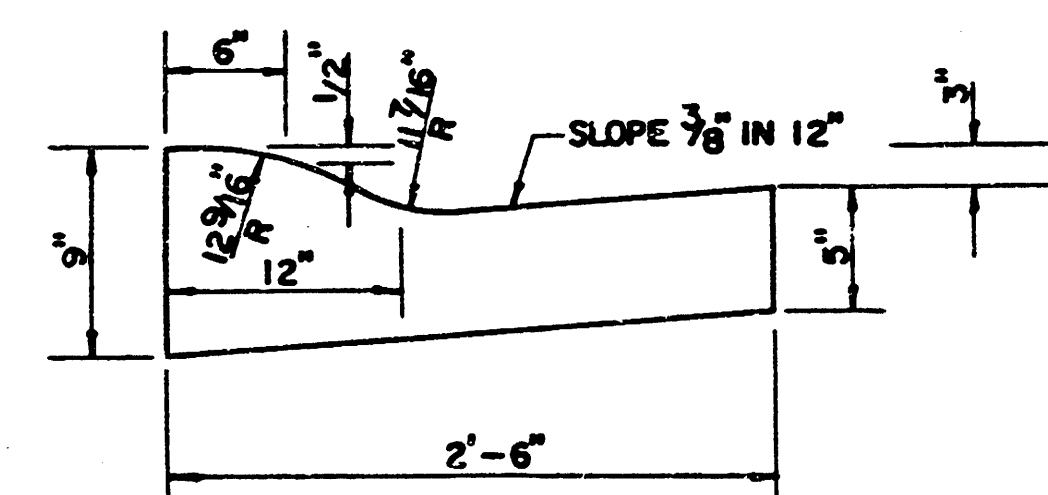


	DISTANCE FROM CENTERLINE (LT. & RT.)												
	0'	2'	4'	6'	7.5'	10'	12'	13'	15'	15.5'	15.67'	16.17'	
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.10	0.14	0.21	0.27	0.32	0.39	0.46	0.49	—	—	—	—	
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.27	0.31	0.38	0.44	0.49	0.56	0.63	0.66	—	—	—	—	
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.44	0.49	0.57	0.64	0.70	0.79	0.87	0.90	0.94	1.00	1.00	—	
D: TOP OF CURBS TO TOP OF SUBGRADE	0.69	0.73	0.80	0.87	0.93	1.01	1.08	1.12	1.19	1.21	1.21	1.23	

COMBINED CURB & GUTTER



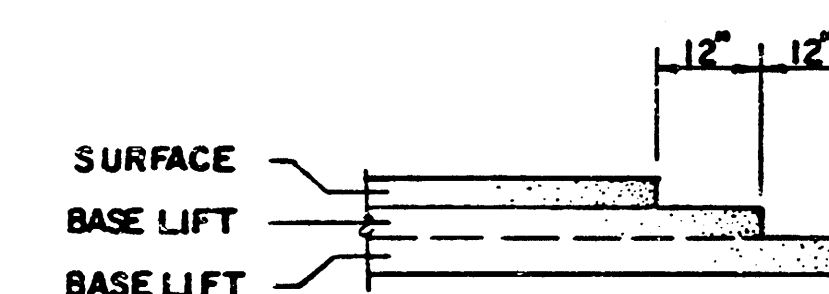
ROLL TYPE COMBINED CURB & GUTTER



GENERAL NOTES

- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).
- 2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.
- 3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.
- 4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.
- 5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.
- 6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINTS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

7 INCH RESIDENTIAL ASPHALTIC CONCRETE
PAVEMENT WITH 5 INCH BITUMINOUS BASE
CITY OF WICHITA, KANSAS
PROJECT NUMBER
PROJ No. 472-76-245-80685-000-000-001

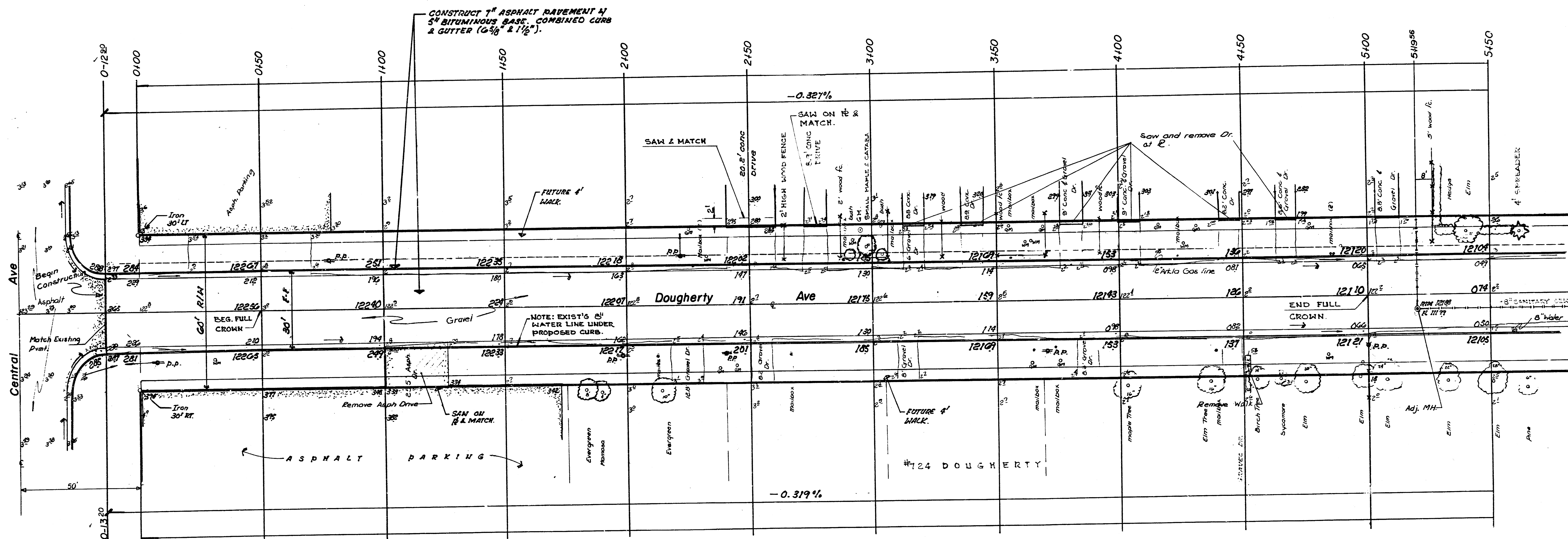
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AVAILABLE COPY.....

BM 12200 West and Central, city bm. disc 44' N and 52' W. of C both.
BM 12189 West and 9th, city bm. disc 24' S. and 52' W. of C both.
C is C of Dougherty.

B.M. 124.42 R.R. SPIKE ON N. SIDE R.P. ON S. SIDE CENTRAL AT DOUGHERTY
B.M. 124.29 S.W. COR. CONC. PORCH. #124 DOUGHERTY.

N
Scale: 1" = 20'

Survey Chappelle JPC-110
Plan: Planning
Ck: Checked



— GENERAL NOTES —
THE CONTRACTOR SHALL CONTACT THE NECESSARY UTILITY COMPANIES FOR ANY UNDERGROUND LINE LOCATIONS TO BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION OF THE PAVEMENT.

•• PROPERTY IRONS ••
THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A PROFESSIONAL ENGR. IN ACCORDANCE WITH STATE LAWS.

•• MAILBOXES ••
MAILBOXES WITHIN THE LIMITS OF THIS PROJECT SHALL BE REMOVED & REPLACED BY THE CONTRACTOR AS APPROVED BY THE ENGR. CONTRACTOR WILL BE REQUIRED TO MAKE SATISFACTORY PROVISIONS FOR MAIL DELIVERY TO PROPERTIES AFFECTED BY THIS PROJECT DURING ITS CONSTRUCTION.

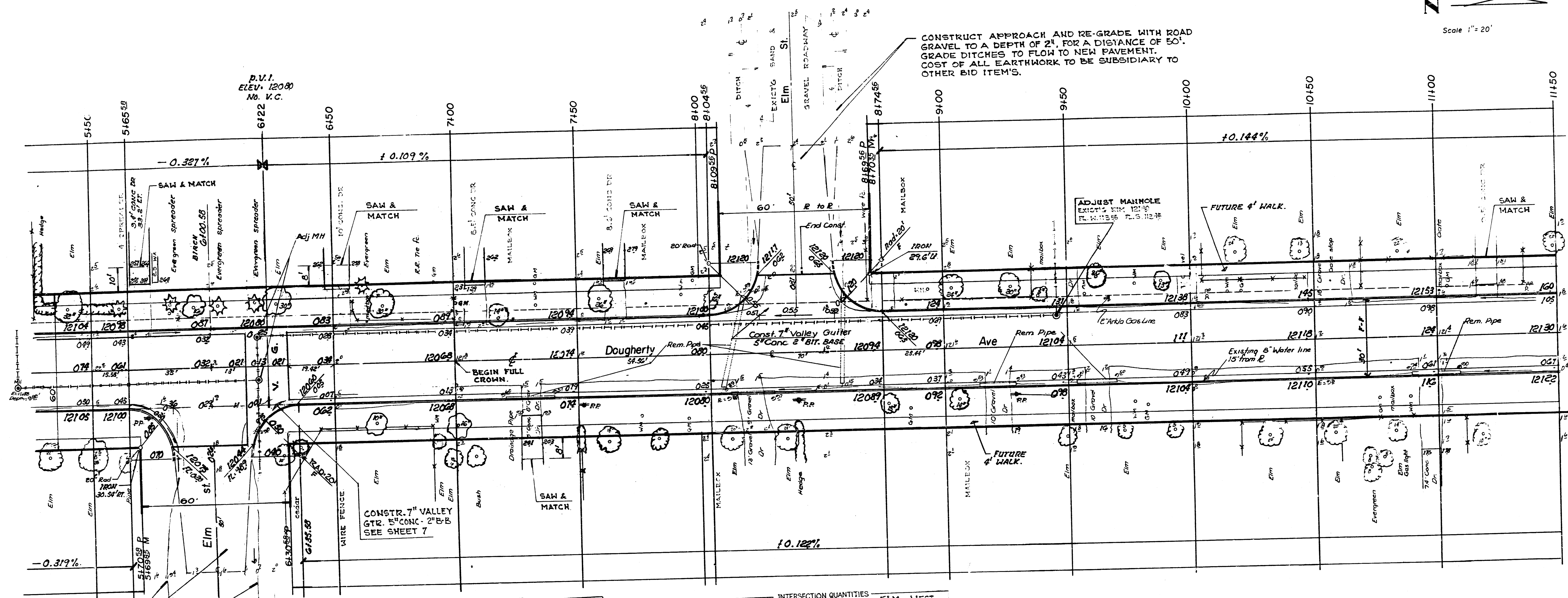
• EARTHWORK •
EXCAVATION
4253.4 CU YDS
10% 425.3 " "
4678.7 CU YDS

8023 SQ YDS MANIPULATION

Dougherty Ave
from NL Central to NL 8th st. North
Proj. no. 472-76-245-80685-000-000-001

B.M. 124.05 N.E. COR. CONC. PORCH AT #743 DOUGHERTY

N
Scale 1" = 20'



INTERSECTION QUANTITIES ELM - EAST.

213.5 S.Y. 7" Asphaltic Conc. Pavement (5" Bituminous Base)
 233.9 S.Y. 2 1/2" Bituminous Base
 54.1 L.F. Combined Curb & Gutter
 32.2 L.F. MONOLITHIC EDGE CURB (6 5/8")

317.8 S.Y. Manipulation
 6.2 TONS CEMENT
 71.4 S.Y. V.G. 5" Concrete & 2" Asphaltic Concrete Base.

INTERSECTION QUANTITIES ELM - WEST

101.1 S.Y. 7" Asphaltic Conc. Pavement (5" Bituminous Base)
 S.Y. 2 1/2" Bituminous Base
 52.7 L.F. MONOLITHIC EDGE CURB (6 5/8")

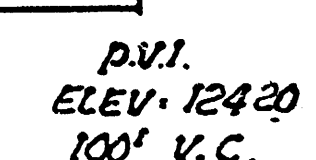
192.1 S.Y. Manipulation
 3.6 TONS CEMENT
 81.2 S.Y. V.G. 5" Concrete & 2" Asphaltic Concrete Base

CONSTRUCT APPROACH & REGRADE WITH ROAD GRAVEL TO A DEPTH OF 2" FOR A DISTANCE OF 50'. GRADE DITCHES TO FLOW TO INLETS AT W.L. NEVADA ST. COST OF ALL EARTHWORK, GRADING & RE-SETTING EXISTING CULVERT PIPES TO BE SUBSIDIARY TO OTHER BID ITEMS.

PROJ. No. 472-76-245-80645-000-000-001

N

Scale: 1" = 20'



Concrete Pavement

S67 S.Y. 7 * Asphaltic Conc. Pavement () Bituminous Base)

Asphaltic Concrete & Cement

471 MONOLITHIC EDGE CURB (G_s)

Asphalt Paving

Pavement Materials

Gravel Roads

Cement Concrete

Asphalt Concrete

Asphalt Concrete

V667 S.Y. MANIPULATION

30 TONS CEMENT

30 S.Y.G. 5 * Concrete & 2 * Asphaltic Concrete Base.

PROJ No. 472-76-245-80685-000-000-001

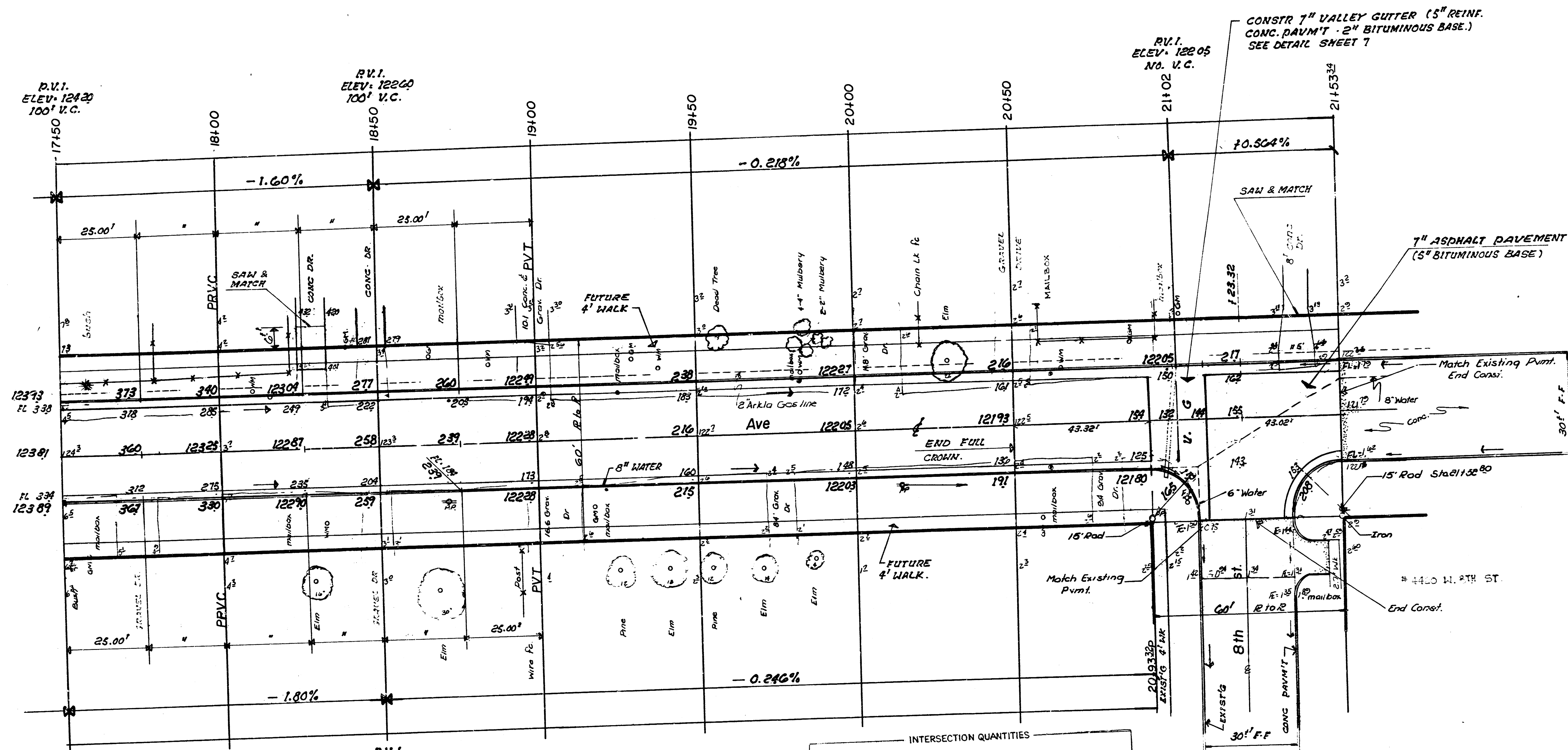
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B.M. 12550 S.W. COR. CONCRETE PORCH STEP AT #4420 W. 5TH ST.

6 13



Scale 1" = 20'



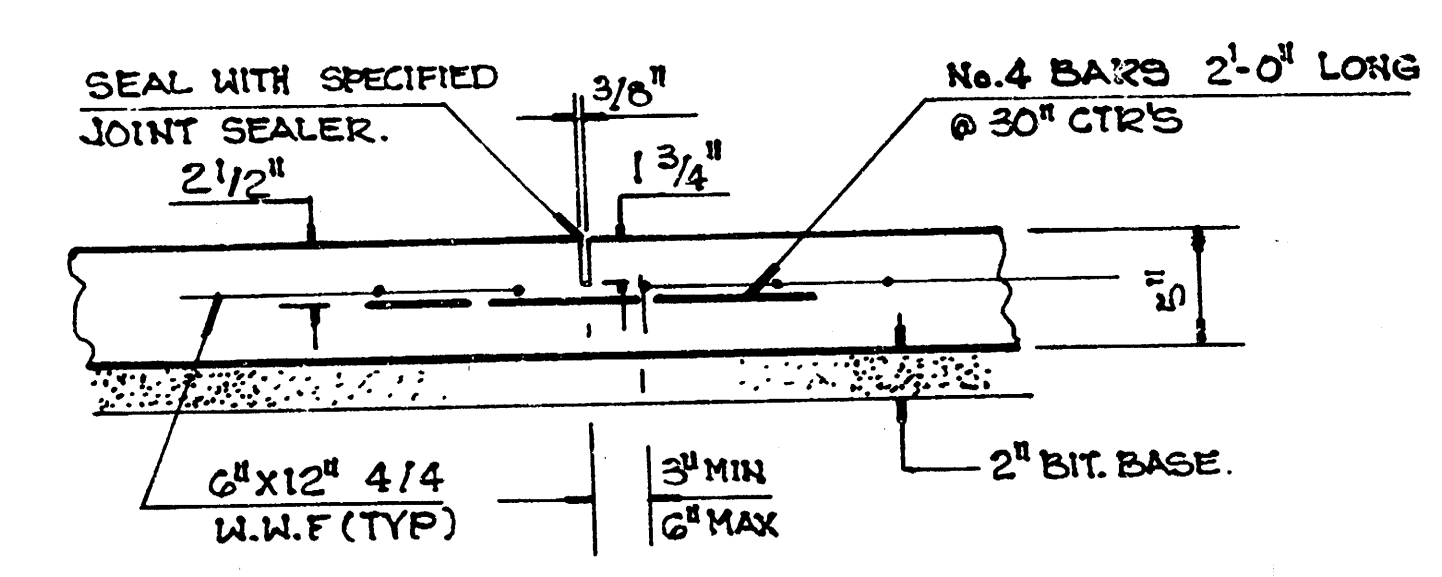
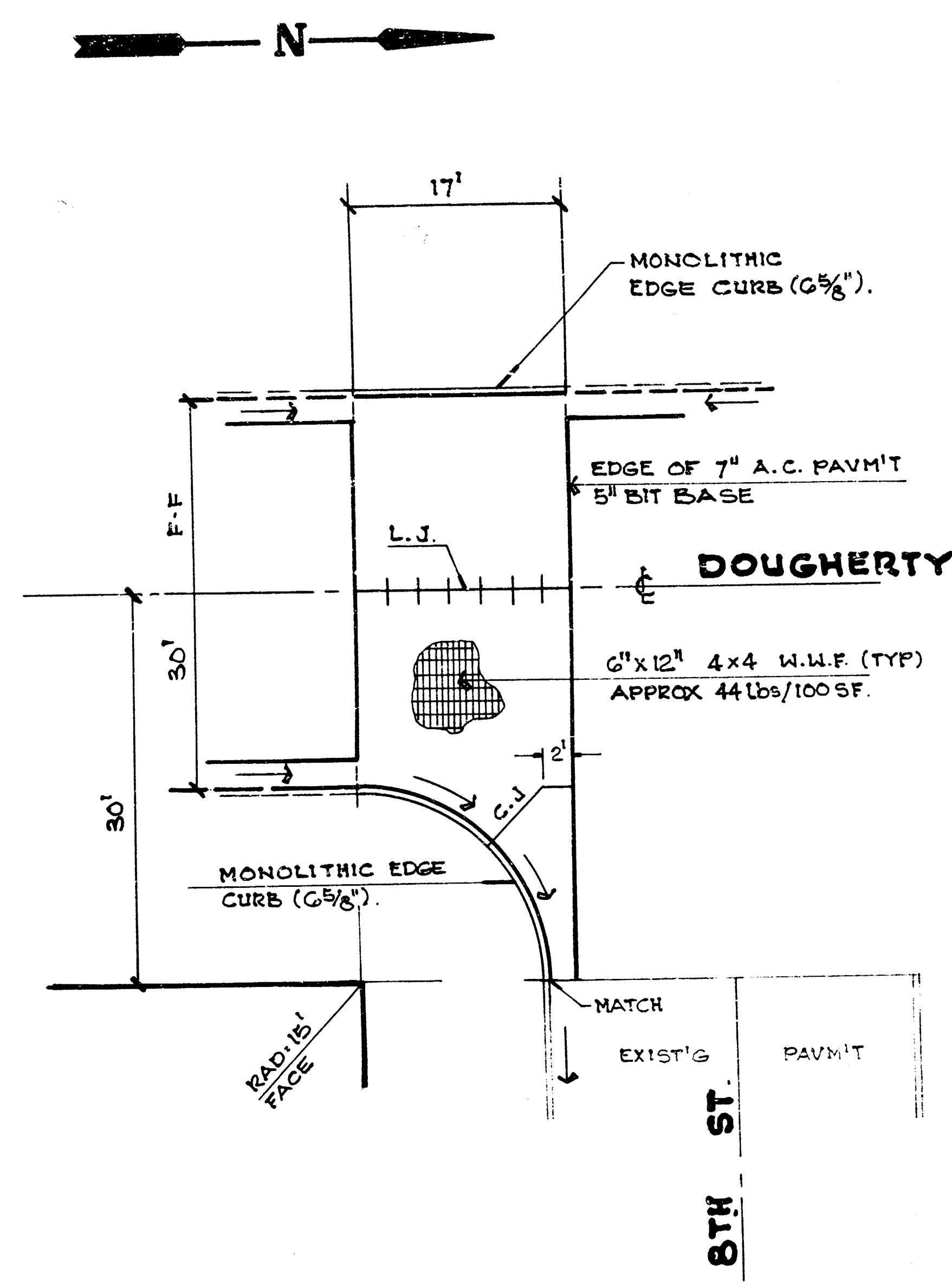
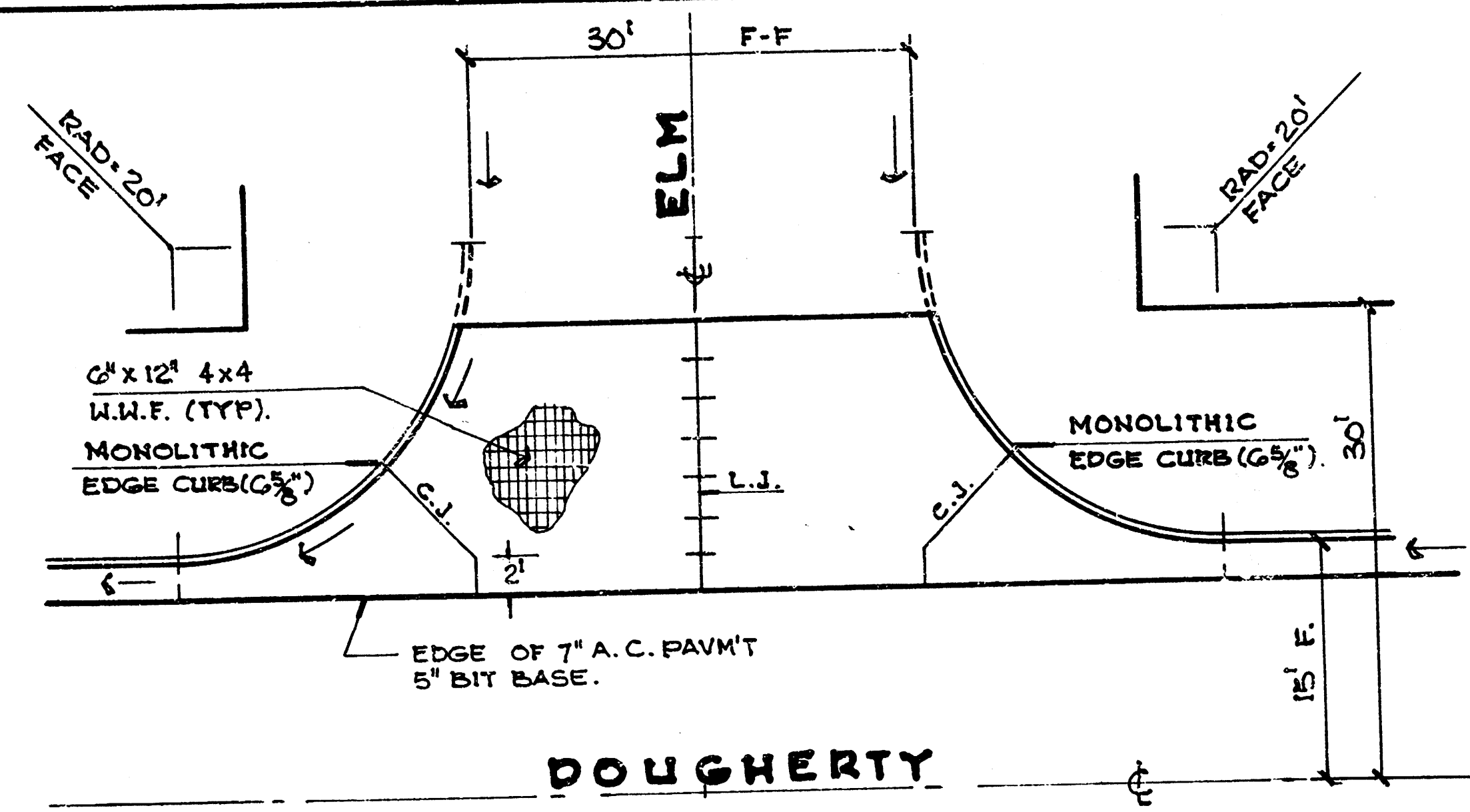
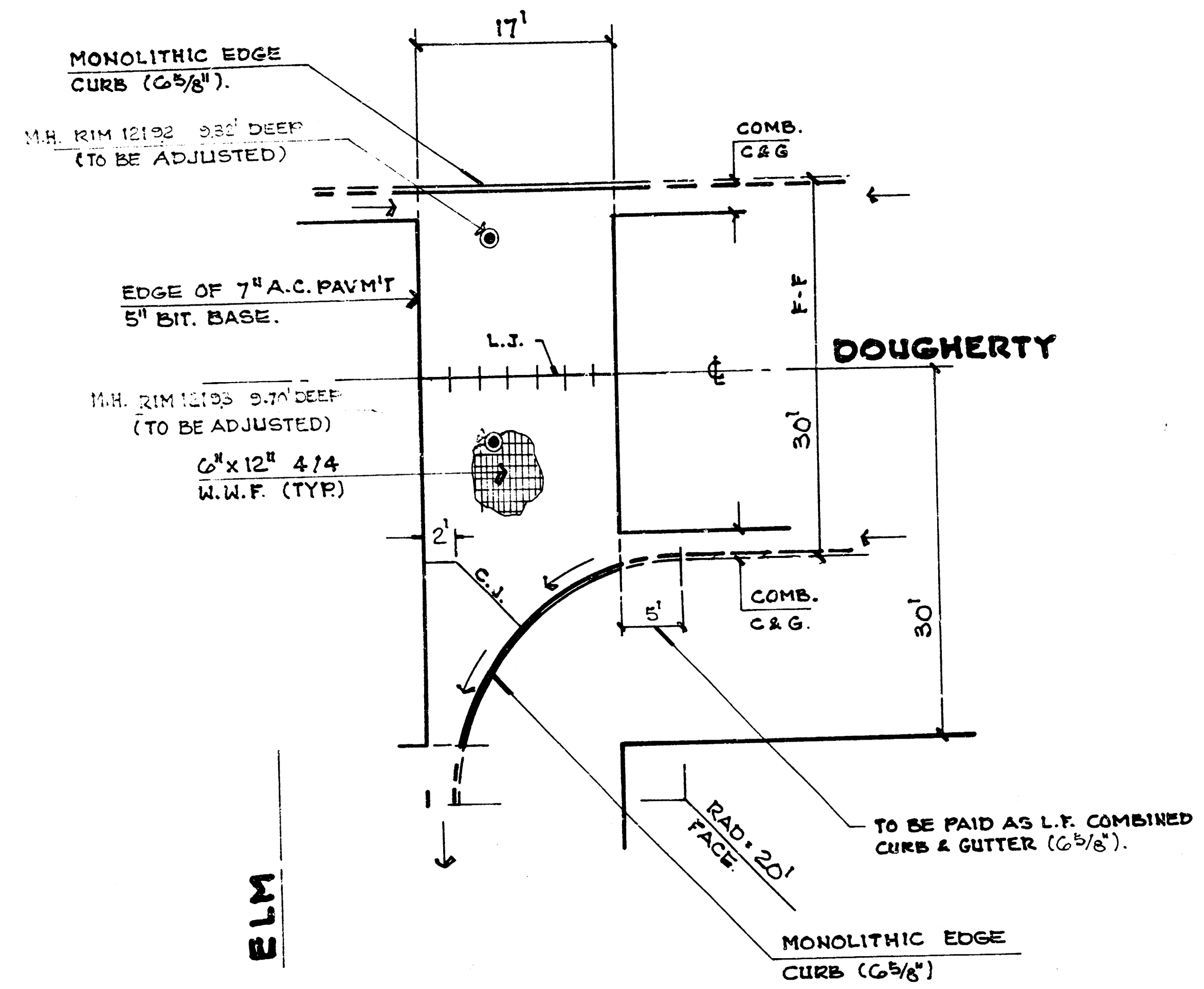
INTERSECTION QUANTITIES

180.3 S.Y.	7"	Asphaltic Conc. Pavement (5" Bituminous Base)
20.1 S.Y.	2 1/2"	Bituminous Base
66.6 L.F.		Combined Curb & Gutter
40.6 L.F.		MONOLITHIC EDGE CURB (6 5/8")
		Concrete Rump
		Extension
		Compacted Fill
		Reinforcing Steel
274.4 S.Y.		Manipulation
5.2 TONS		CEMENT
67.6 S.Y.	5"	Concrete & 2" Asphaltic Concrete Base

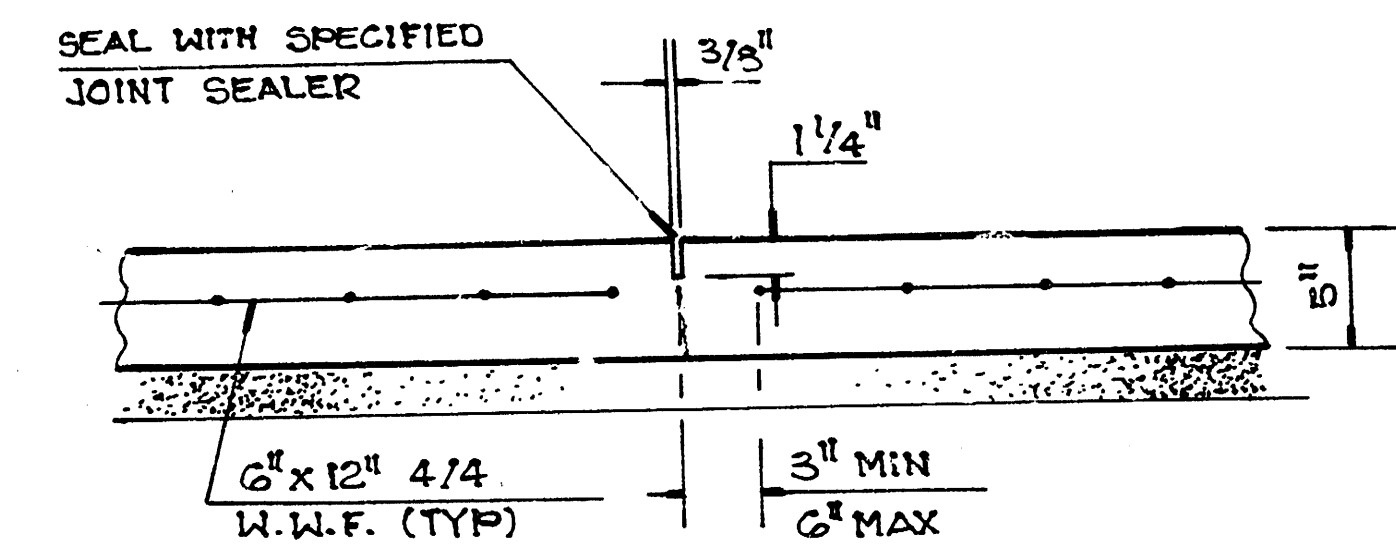
PROJ No. 472-76-245-80685-000-000-001

6/
13

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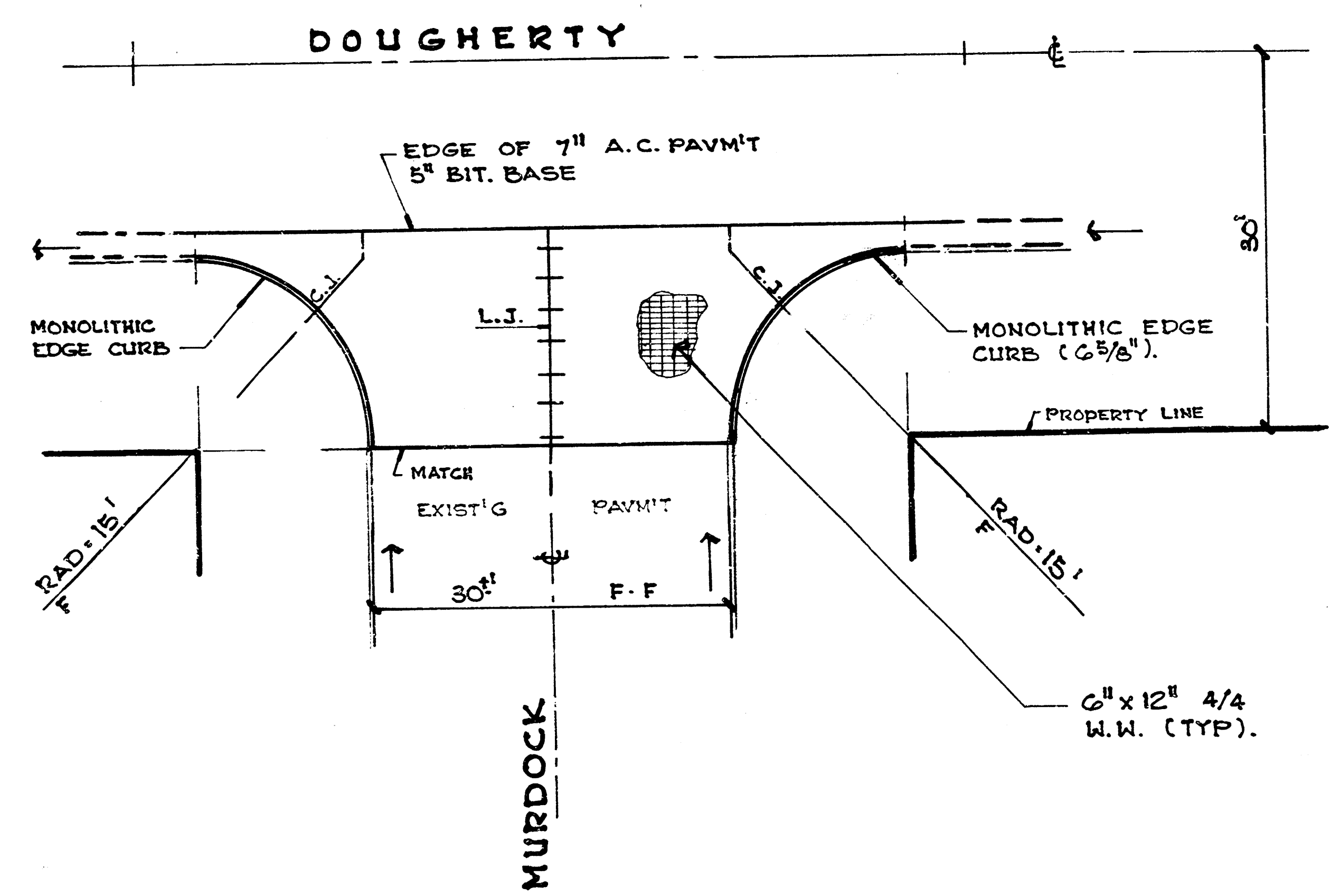
LONGITUDINAL SAWED JOINT



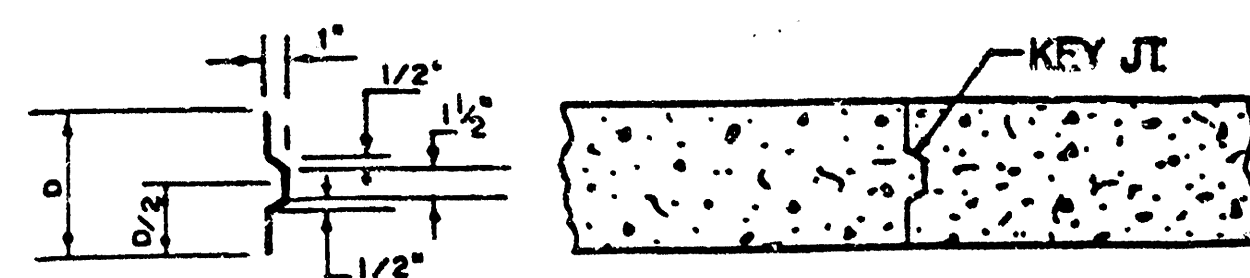
SAWED CONTRACTION JOINT

L.J. = LONGITUDINAL SAWED JOINT
C.J. = SAWED CONTRACTION JOINT

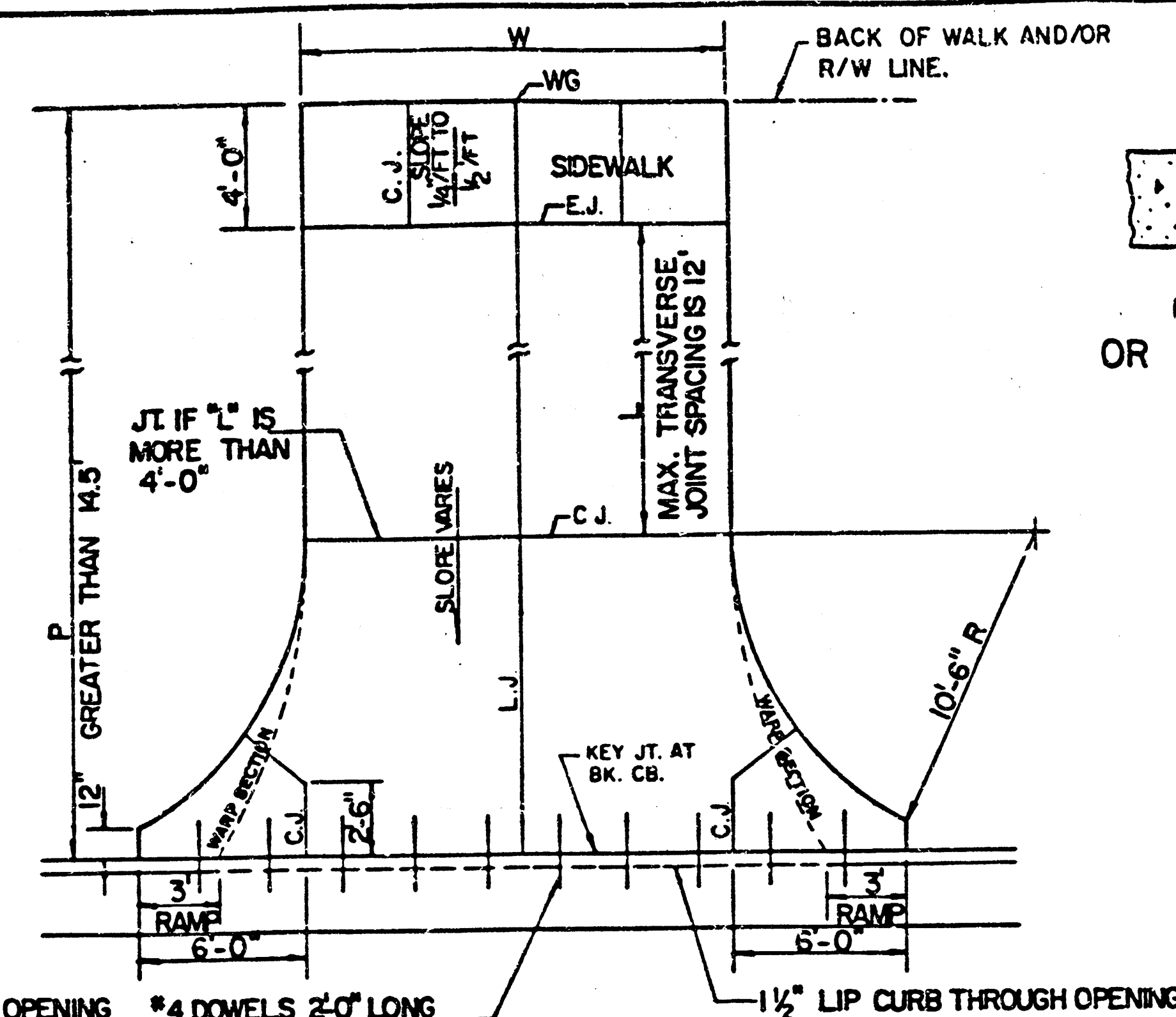
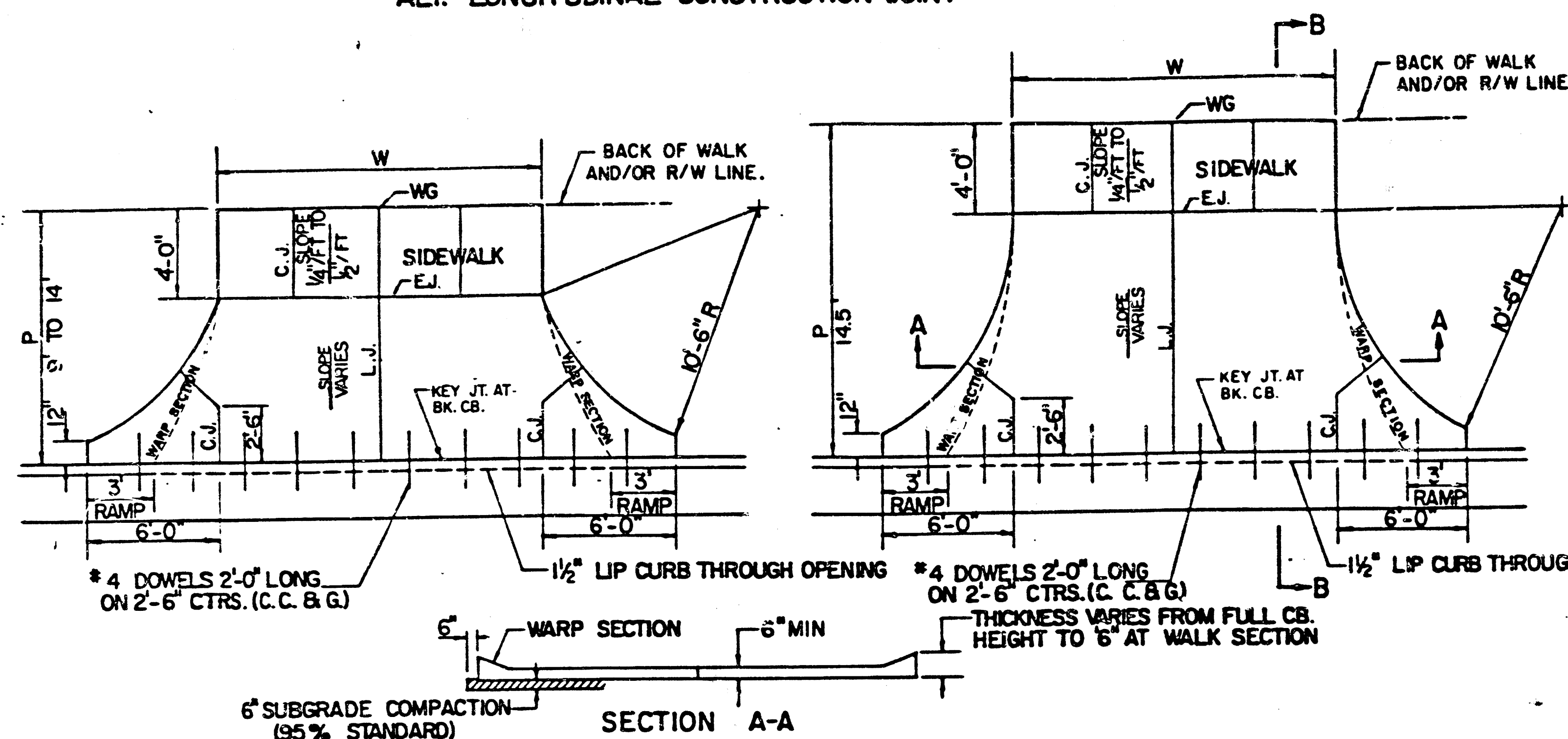
- 7\"/>



VALLEY GUTTER AND JOINT DETAILS.	
PROJECT DESCRIPTION	
DOUGHERTY AVE	
N.L. CENTRAL TO N.L. 8TH STREET	
PROJECT NUMBER	
PROJ. No. 472-76-245-80685-000-000-001	

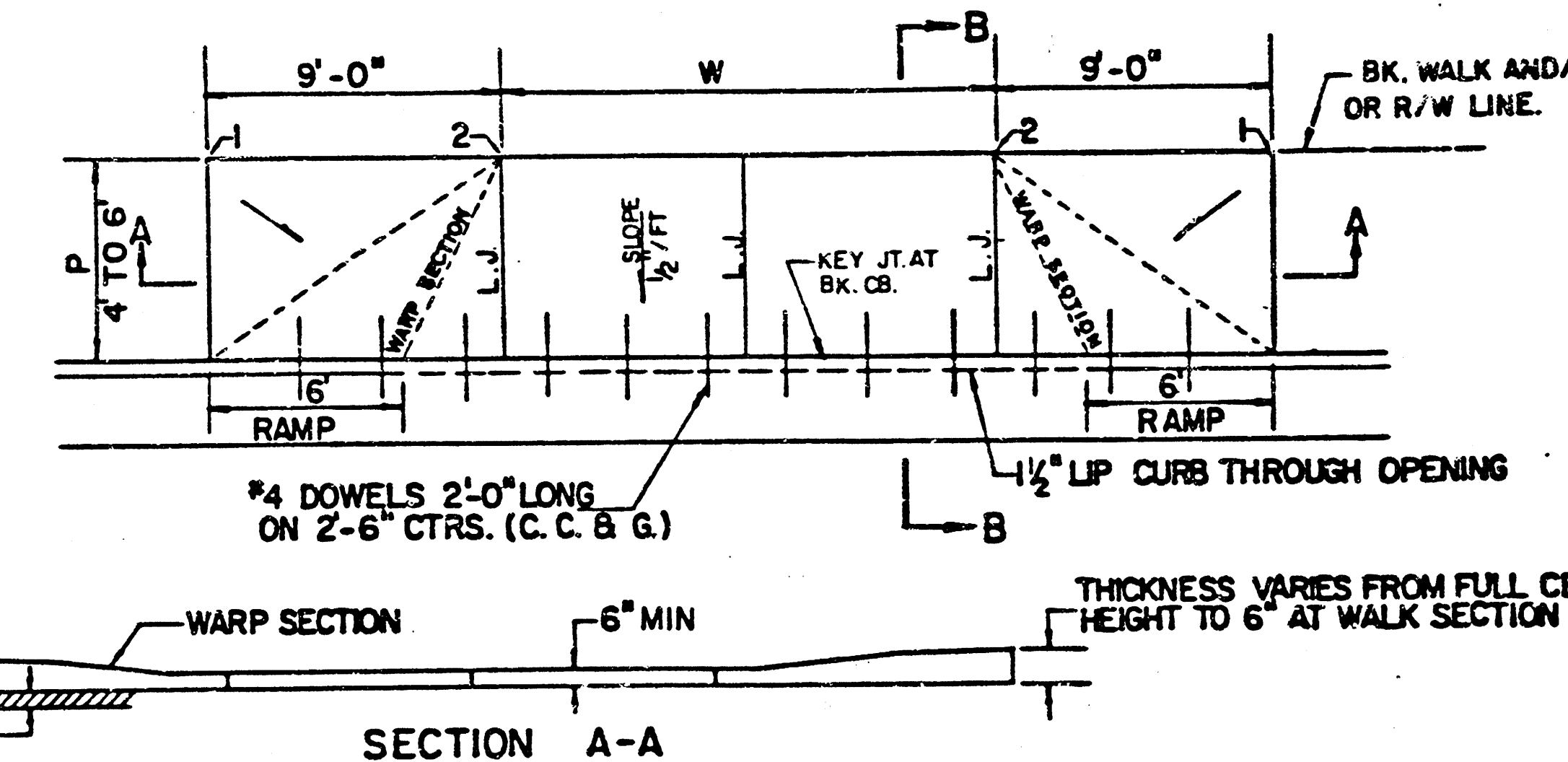


ALT. LONGITUDINAL CONSTRUCTION JOINT



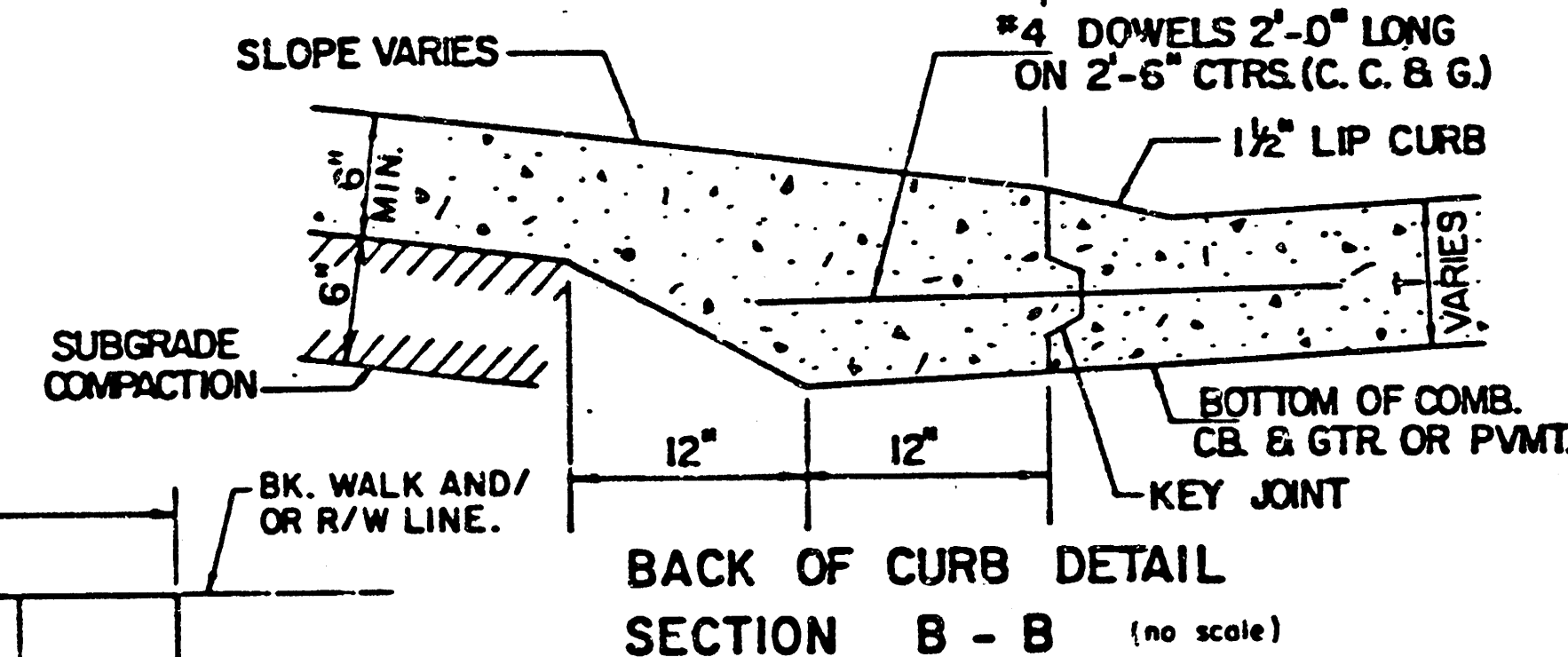
CONTRACTION JOINT (C.J.)
OR LONGITUDINAL JOINT (L.J.)
NO SAWN JOINTS WILL
BE ALLOWED.

EXPANSION JOINT (E.J.)



PARKING WIDTH "P"	9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	0.70'	1.04'	1.30'	1.56'	1.82'	2.08'	2.34'	2.60'
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CURB	0.19'	0.21'	0.23'	0.25'	0.27'	0.30'	0.42'	0.52'	0.62'	0.72'	0.82'	0.92'	1.02'
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CURB	-1.9'	-1.6'	-1.3'	-1.0'	-0.6'	0.00'	0.00'	0.15'	0.25'	0.35'	0.45'	0.55'	0.65'

RADIUS RAMP DRIVES (P=9.0' & GREATER)

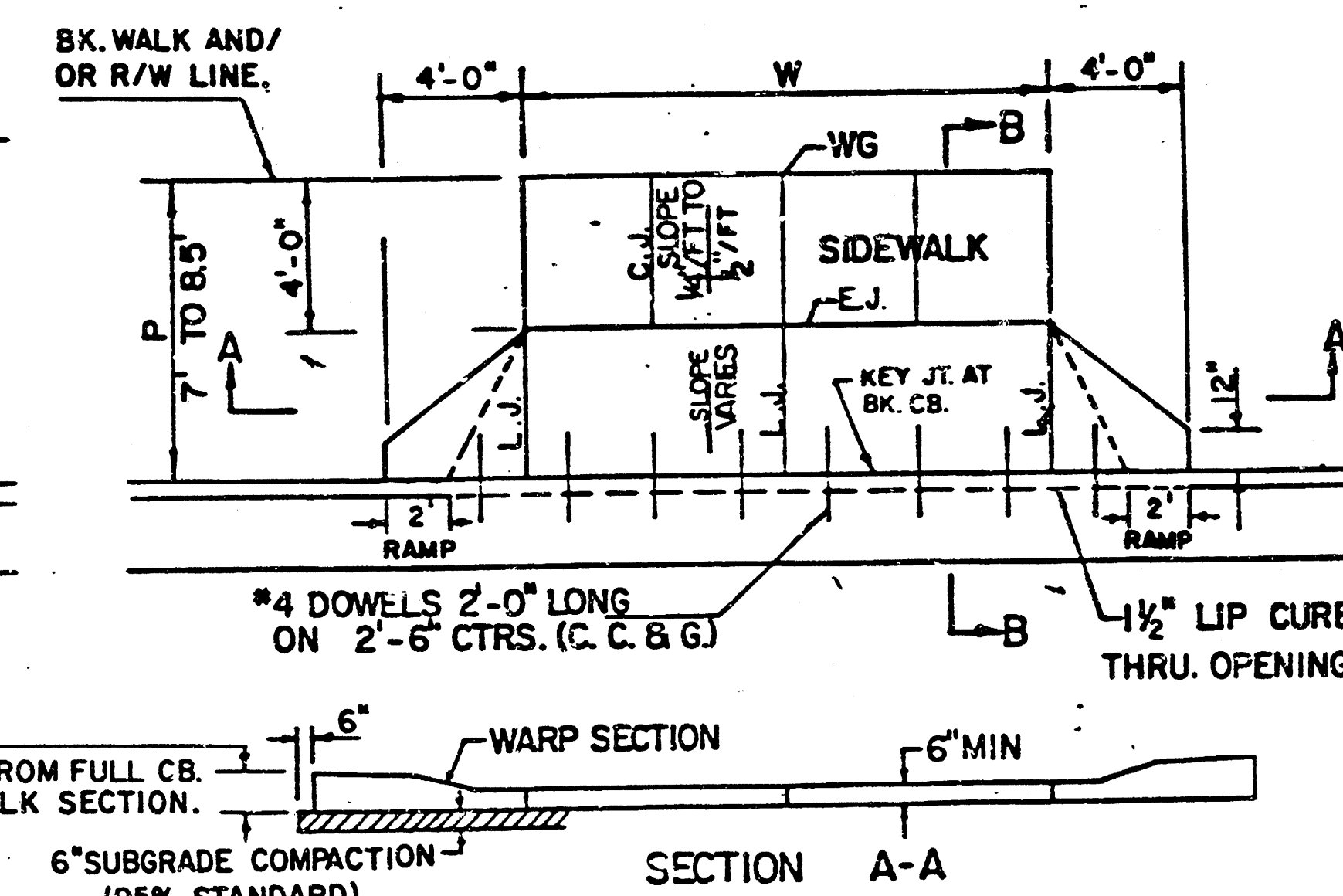
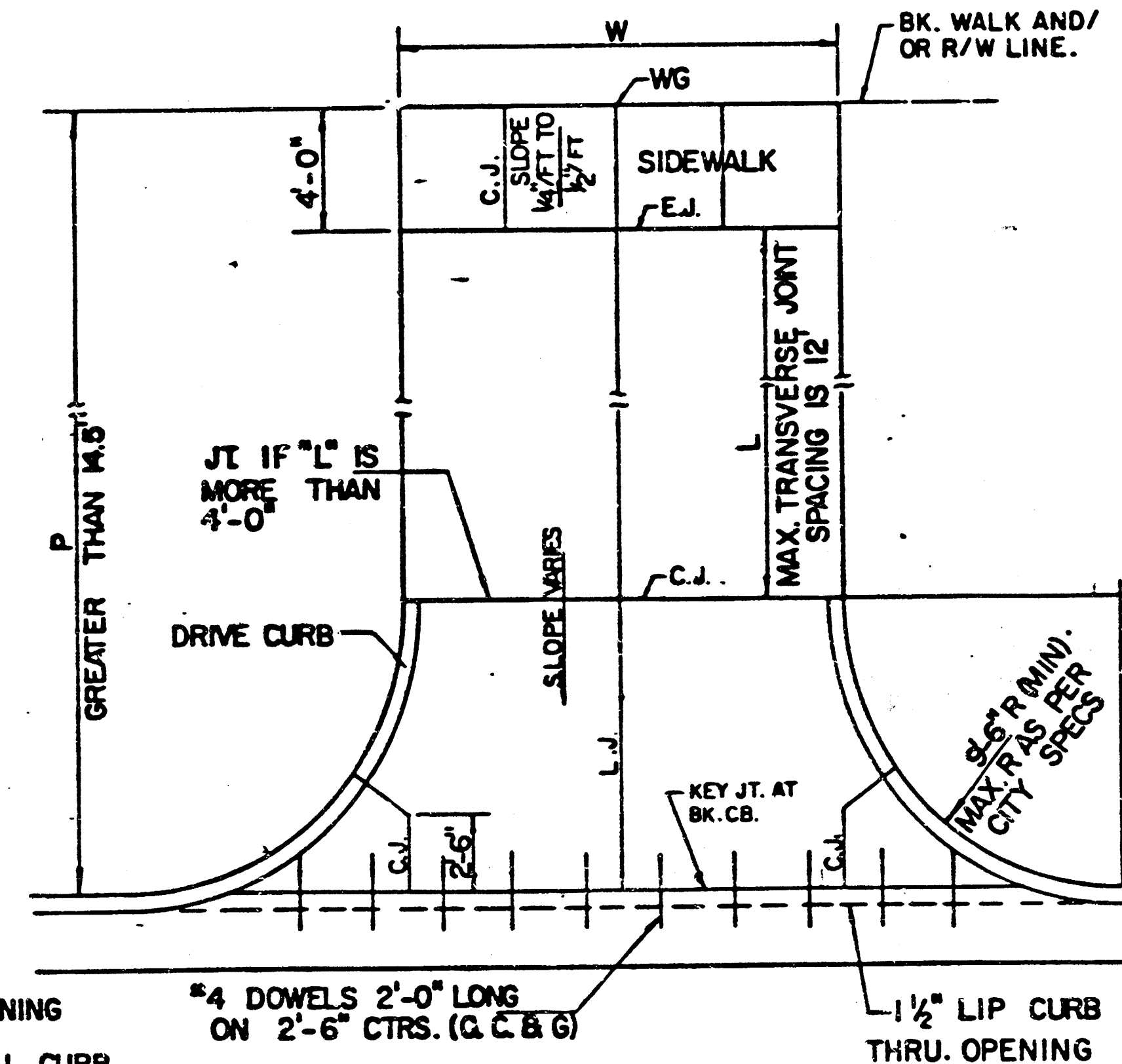
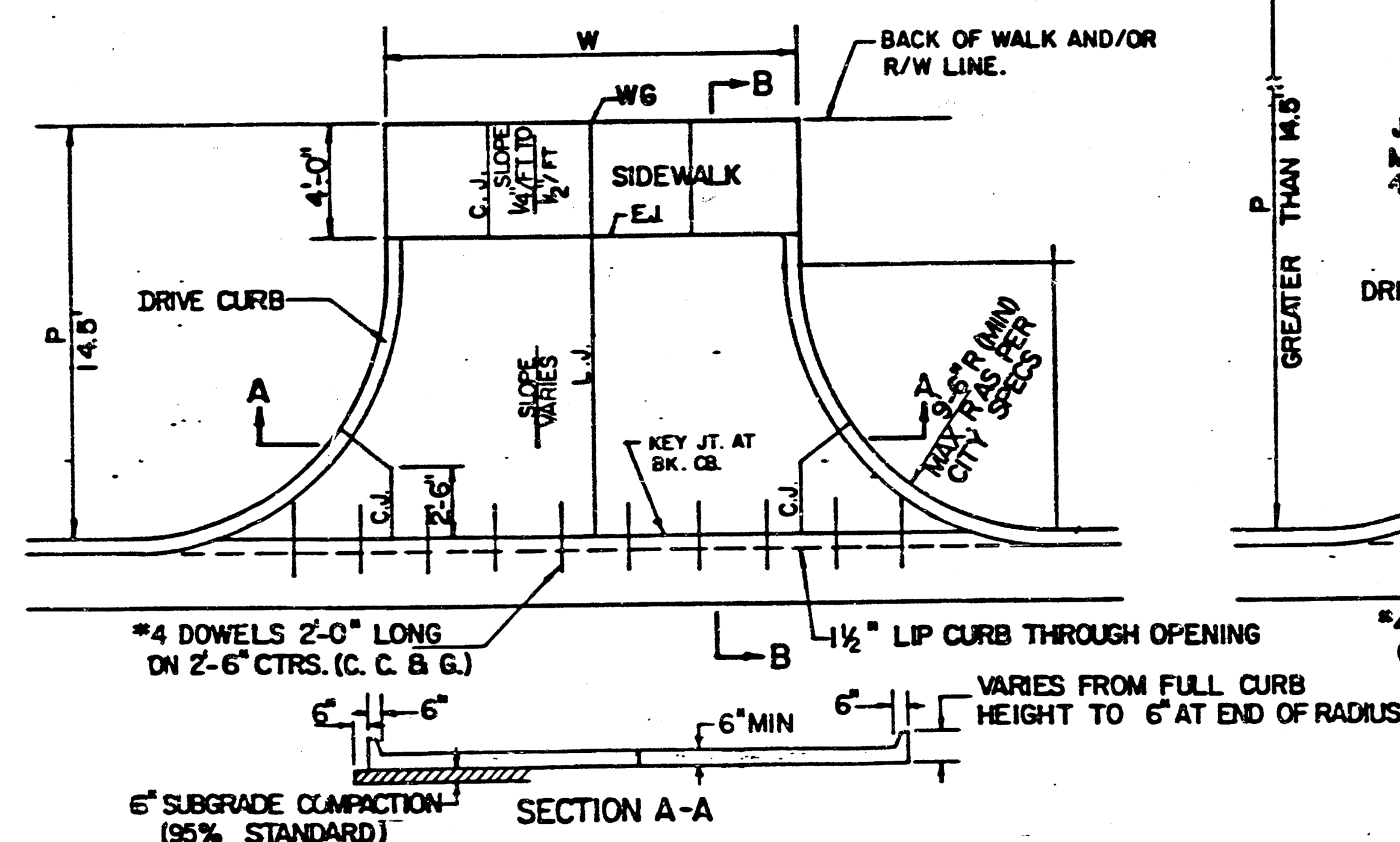


PARKING WIDTH "P"	4'	4.5'	5'	5.5'	6'	6.5'
DIST. OF PT. "L" ABOVE TOP OF FULL CB.	0.08'	0.09'	0.10'	0.12'	0.13'	0.14'
DIST. OF PT. "L" BELOW TOP OF FULL CB.	-0.26'	-0.24'	-0.22'	-0.20'	-0.18'	-0.16'

FULL RAMP DRIVE (P=4.0' TO 6.5')

GENERAL NOTES

- DRIVEWAY CONSTRUCTION DETAILED ON THIS SHEET IS FOR USE WITH FULL HEIGHT STREET CURBS AND IN AREAS WITHOUT FULL WALK CONSTRUCTION IN THE PARKING. SEE OTHER DETAIL SHEETS FOR DRIVEWAY CONSTRUCTION WITH ROLL CURB AND/OR FULL WALK.
- ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A "W" DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A "W" DIMENSION GREATER THAN 24'.
- DRIVEWAY WIDTH DENOTED AS "W" ON THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 10' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 52' AT THE STREET CURB LINE.
- CONSTRUCTION JOINT SPACING IN THE DRIVEWAY WALK SECTION SHALL BE A MINIMUM OF 3' AND A MAXIMUM OF 6' AND ARE TO BE EQUALLY SPACED WITHIN THIS RANGE. WALK SECTION SHALL BE CONSTRUCTED TO THE SAME THICKNESS AS THE DRIVEWAY.
- DOWEL BARS SHALL BE OMITTED FROM THE KEYED CONSTRUCTION JOINT ALONG THE BACK OF THE STREET CURB LINE WHEN DRIVEWAYS ARE CONSTRUCTED IN CONJUNCTION WITH NEW CONCRETE PAVEMENT CONSTRUCTION.
- ADDITIONAL THICKNESS OF DRIVE AS INDICATED IN THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE DRIVEWAY CONSTRUCTION.
- ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHENEVER DRIVE CONSTRUCTION ABUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ABUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSION.
- ALL DRIVEWAYS SHALL BE A MINIMUM OF 6" IN THICKNESS AND SHALL BE WITHOUT REINFORCEMENT. DRIVEWAYS MAY BE CONSTRUCTED THICKER THAN 6" AND THEY MAY BE REINFORCED WITH 6"x12" W-W-M HELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONFORMANCE.
- OPTIMUM DRIVEWAY ELEVATIONS SHOWN IN THE TABLES ARE TO BE USED WHEREVER POSSIBLE. ABSOLUTE MAXIMUM AND MINIMUM ELEVATIONS ARE TO BE USED ONLY WHEN THESE VALUES WILL PERMIT NEW CONSTRUCTION TO MATCH EXISTING DRIVES OR PARKING LOTS. VALUES SHOWN IN THE TABLES ARE BASED ON A FULL CURB HEIGHT ELEVATION OF 0.55' ABOVE THE GUTTER FLOW LINE AND MUST BE ADJUSTED ACCORDINGLY FOR OTHER CURB HEIGHTS. VALUES SHOWN IN THE TABLES WITH NEGATIVE SIGNS INDICATE ELEVATIONS BELOW TOP OF FULL HEIGHT CURB.



PARKING WIDTH "P"	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.70'	1.04'	1.30'	1.56'	1.82'	2.08'	2.34'	2.60'
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.30'	0.42'	0.52'	0.62'	0.72'	0.82'	0.92'	1.02'
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00'	0.00'	0.15'	0.25'	0.35'	0.45'	0.55'	0.65'

FULL RADIUS DRIVES (P=14.5' & GREATER)

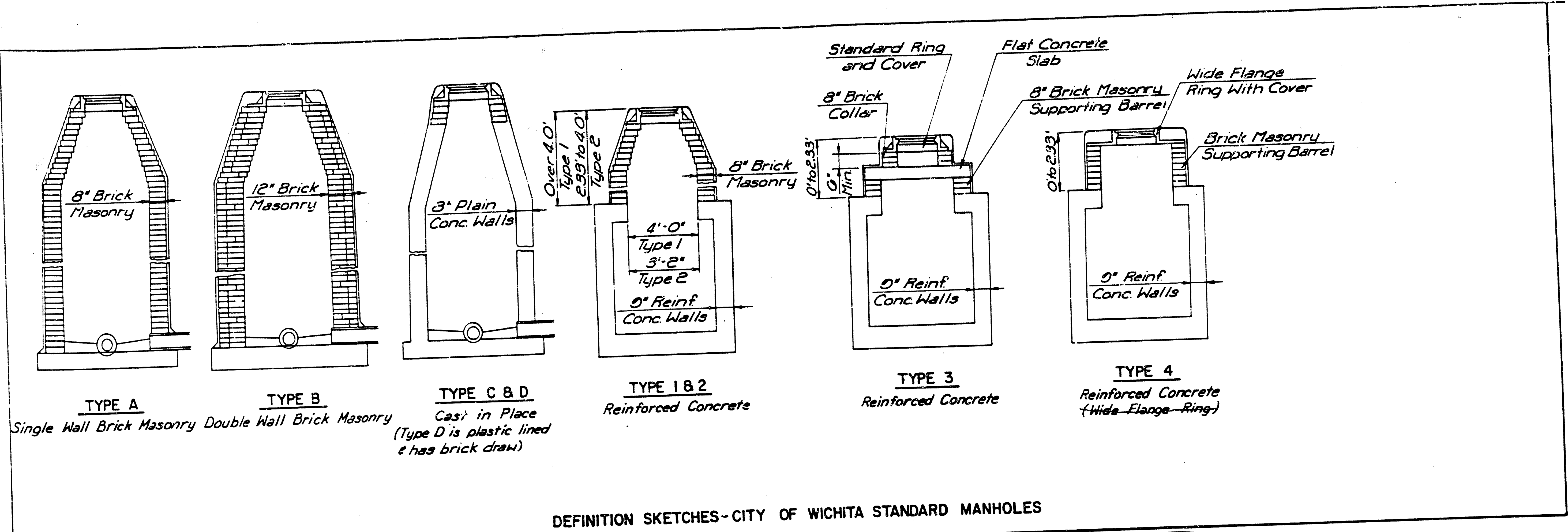
PARKING WIDTH "P"	7'	7.5'	8'	8.5'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00'	0.10'	0.20'	0.30'
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00'	0.10'	0.20'	0.30'
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.15'	0.16'	0.17'	0.17'
ABSOLUTE MAX. DIST. OF PT. "WG" BELOW TOP OF FULL CB.	-0.25'	-0.20'	-0.20'	-0.20'

FULL RAMP DRIVE (P=7.0' TO 8.5')

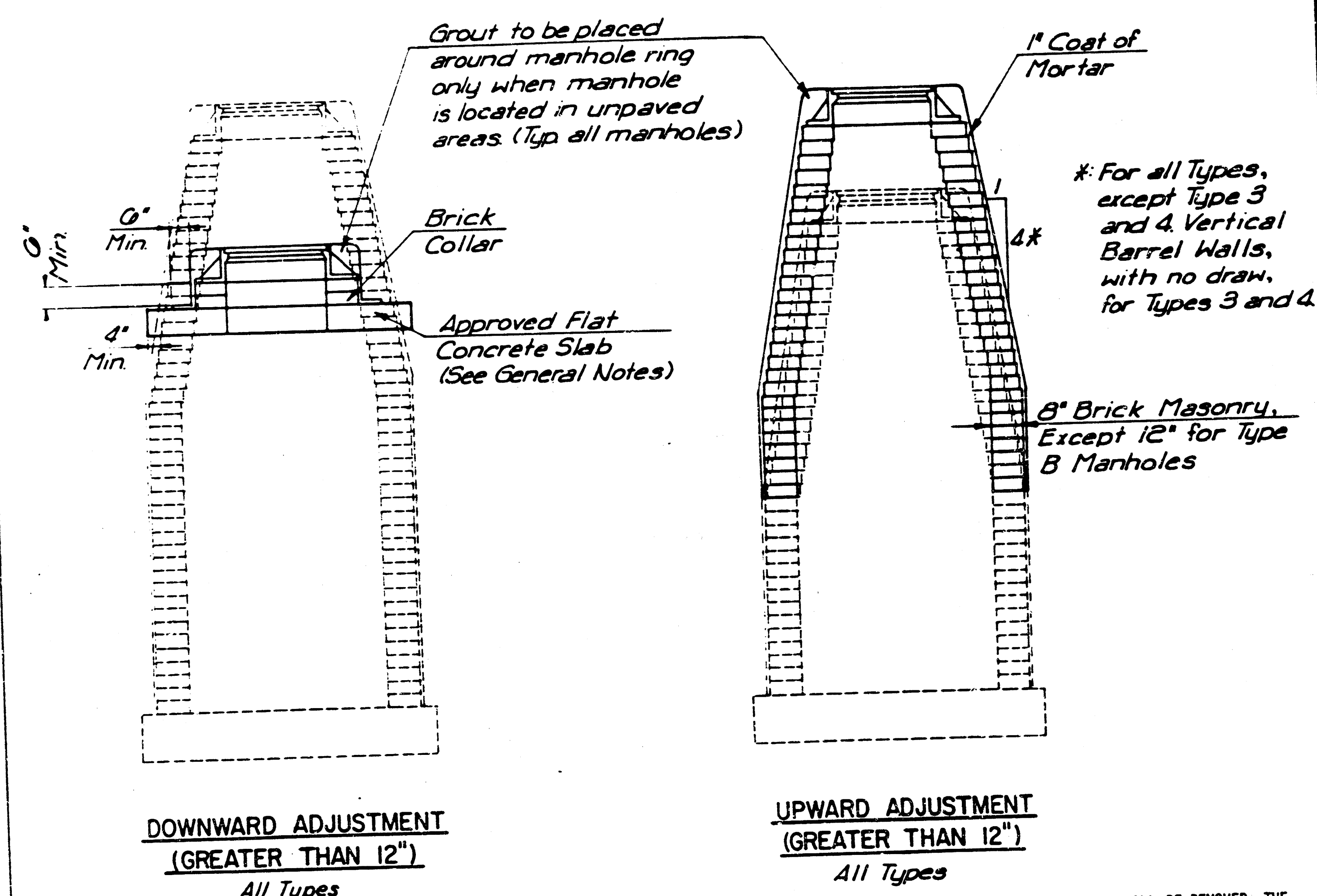
SCALE: 1"=5'

STANDARD DRIVE ENTRANCES
FULL HEIGHT CURB
CITY OF WICHITA, KANSAS

PROJECT NUMBER
472-76-245-80685-000-000-001

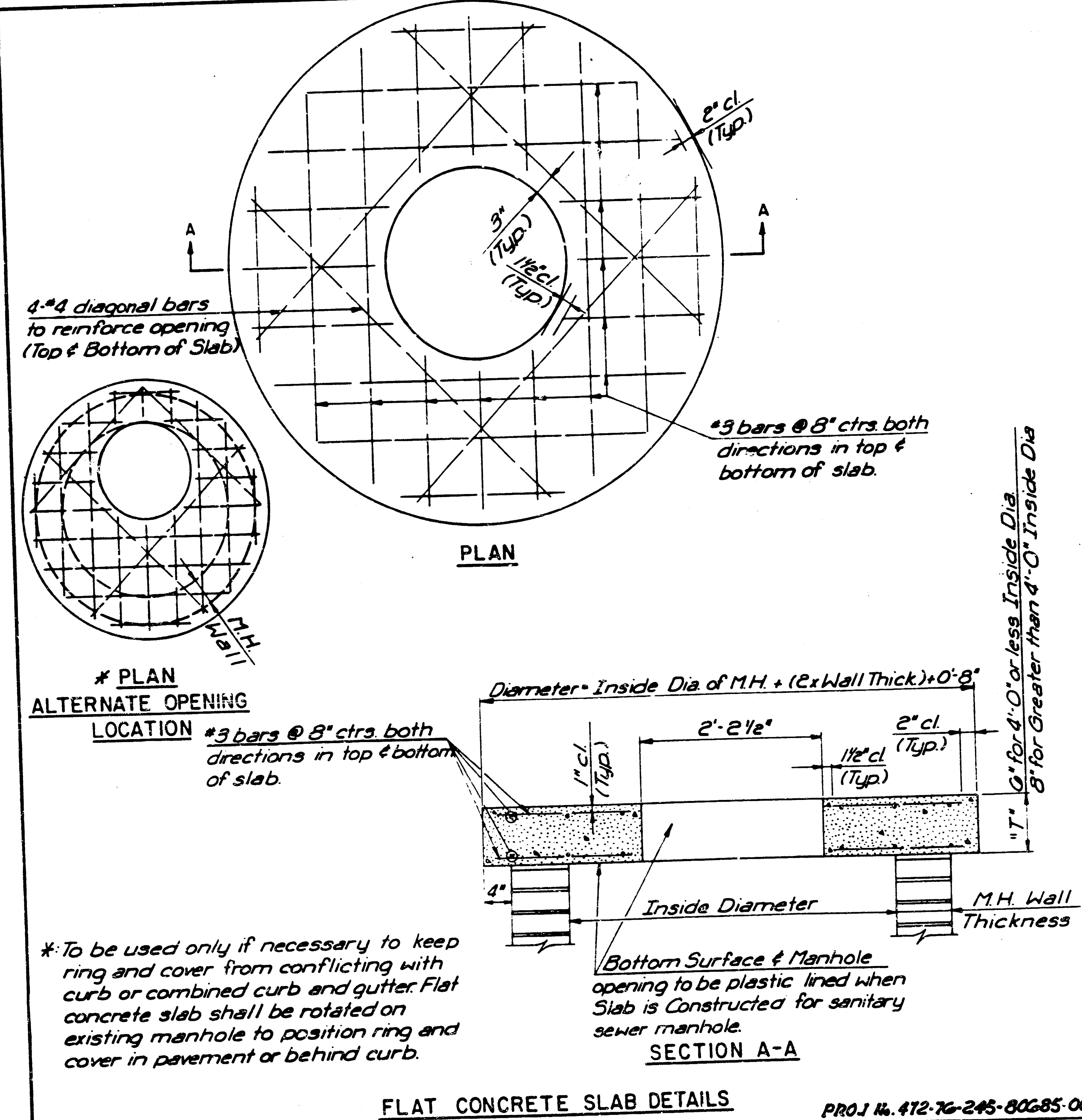


DEFINITION SKETCHES-CITY OF WICHITA STANDARD MANHOLES



THE APPROPRIATE PORTIONS OF THE DRAW AND BARREL OF TYPE A, B, C, D, 1 AND 2 MANHOLES SHALL BE REMOVED. A NEW DRAW CONSTRUCTED, AND THE RING AND COVER RESET. THE UPPER PORTION OF TYPE 3 MANHOLES SHALL BE REMOVED TO THE BOTTOM OF THE FLAT CONCRETE SLAB, THE BRICK MASONRY BARREL REMOVED TO THE BOTTOM OF THE FLAT CONCRETE SLAB, AND THE SLAB SUPPORTING THE SLAB SHALL BE RAISED THE APPROPRIATE AMOUNT, AND THE SLAB AND RING AND COVER RESET. THE WIDE FLANGE RING AND COVER OF TYPE 4 MANHOLES SHALL BE REMOVED, THE BRICK MASONRY BARREL SUPPORTING THE RING SHALL BE RAISED THE APPROPRIATE AMOUNT AND THE RING AND COVER RESET. ALL WORK REQUIRED FOR A GREATER THAN TWELVE INCH (12") UPWARD ADJUSTMENT OF ANY MANHOLE SHALL BE ACCOMPLISHED WITH BRICK MASONRY IN ACCORDANCE WITH THE DETAILS SHOWN AND THE GENERAL NOTES.

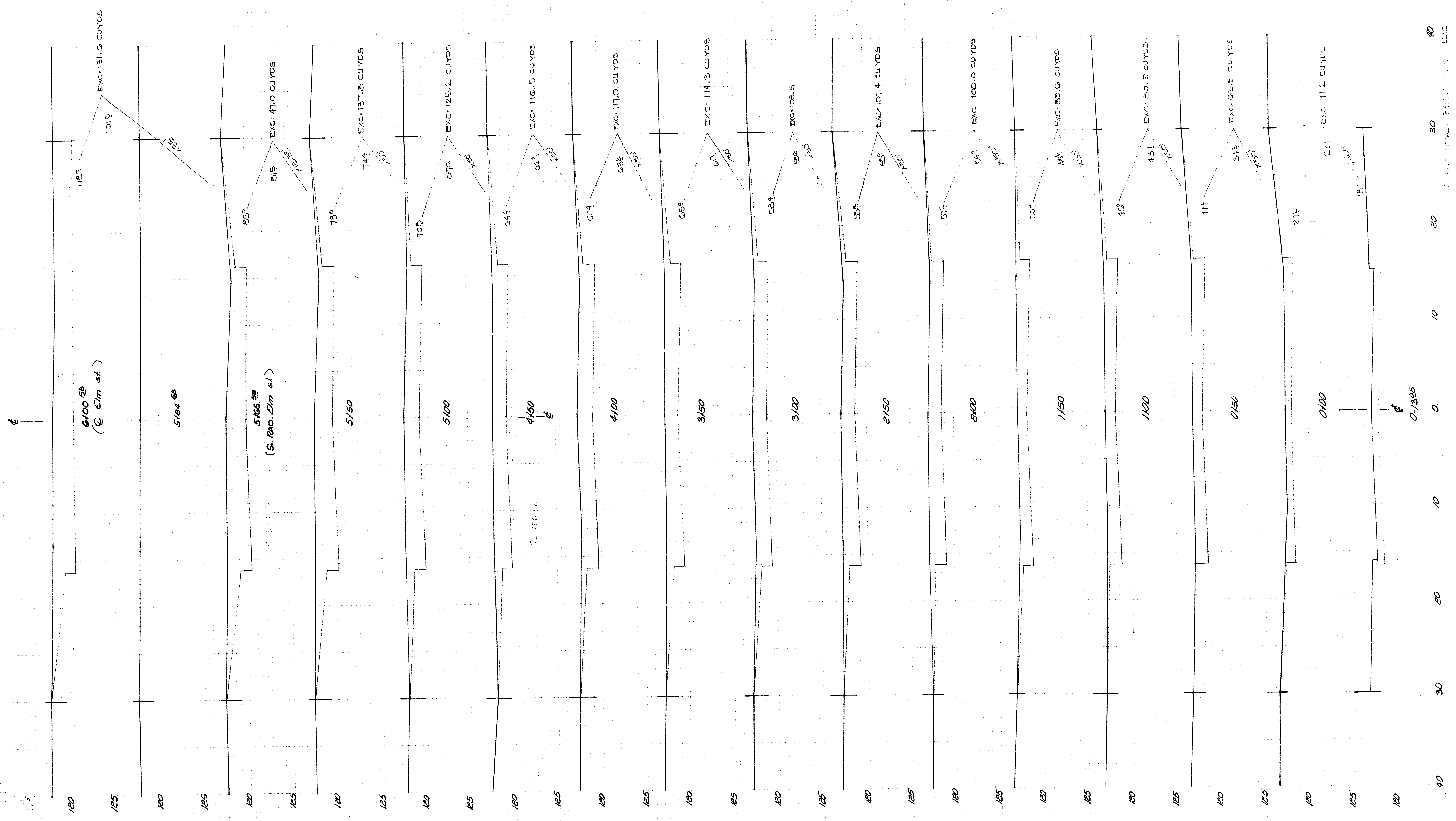
THE ENTIRE DRAW OF TYPES A, B, C, D, 1 AND 2 MANHOLES SHALL BE REMOVED, THE MANHOLE BARREL RAISED THE APPROPRIATE AMOUNT, A NEW DRAW CONSTRUCTED, AND THE RING AND COVER RESET. THE UPPER PORTION OF TYPE 3 MANHOLES SHALL BE REMOVED TO THE BOTTOM OF THE FLAT CONCRETE SLAB, THE BRICK MASONRY BARREL REMOVED TO THE BOTTOM OF THE FLAT CONCRETE SLAB, AND THE SLAB SUPPORTING THE SLAB SHALL BE RAISED THE APPROPRIATE AMOUNT, AND THE SLAB AND RING AND COVER RESET. THE WIDE FLANGE RING AND COVER OF TYPE 4 MANHOLES SHALL BE REMOVED, THE BRICK MASONRY BARREL SUPPORTING THE RING SHALL BE RAISED THE APPROPRIATE AMOUNT AND THE RING AND COVER RESET. ALL WORK REQUIRED FOR A GREATER THAN TWELVE INCH (12") UPWARD ADJUSTMENT OF ANY MANHOLE SHALL BE ACCOMPLISHED WITH BRICK MASONRY IN ACCORDANCE WITH THE DETAILS SHOWN AND THE GENERAL NOTES.



* To be used only if necessary to keep ring and cover from conflicting with curb or combined curb and gutter. Flat concrete slab shall be rotated on existing manhole to position ring and cover in pavement or behind curb.

MANHOLE ADJUSTMENT DETAILS			
CITY OF WICHITA, KANSAS			
M. E. LINDEBAK - CITY ENGINEER			
Designed by	Checked by	Date	JOB No.
			9/13

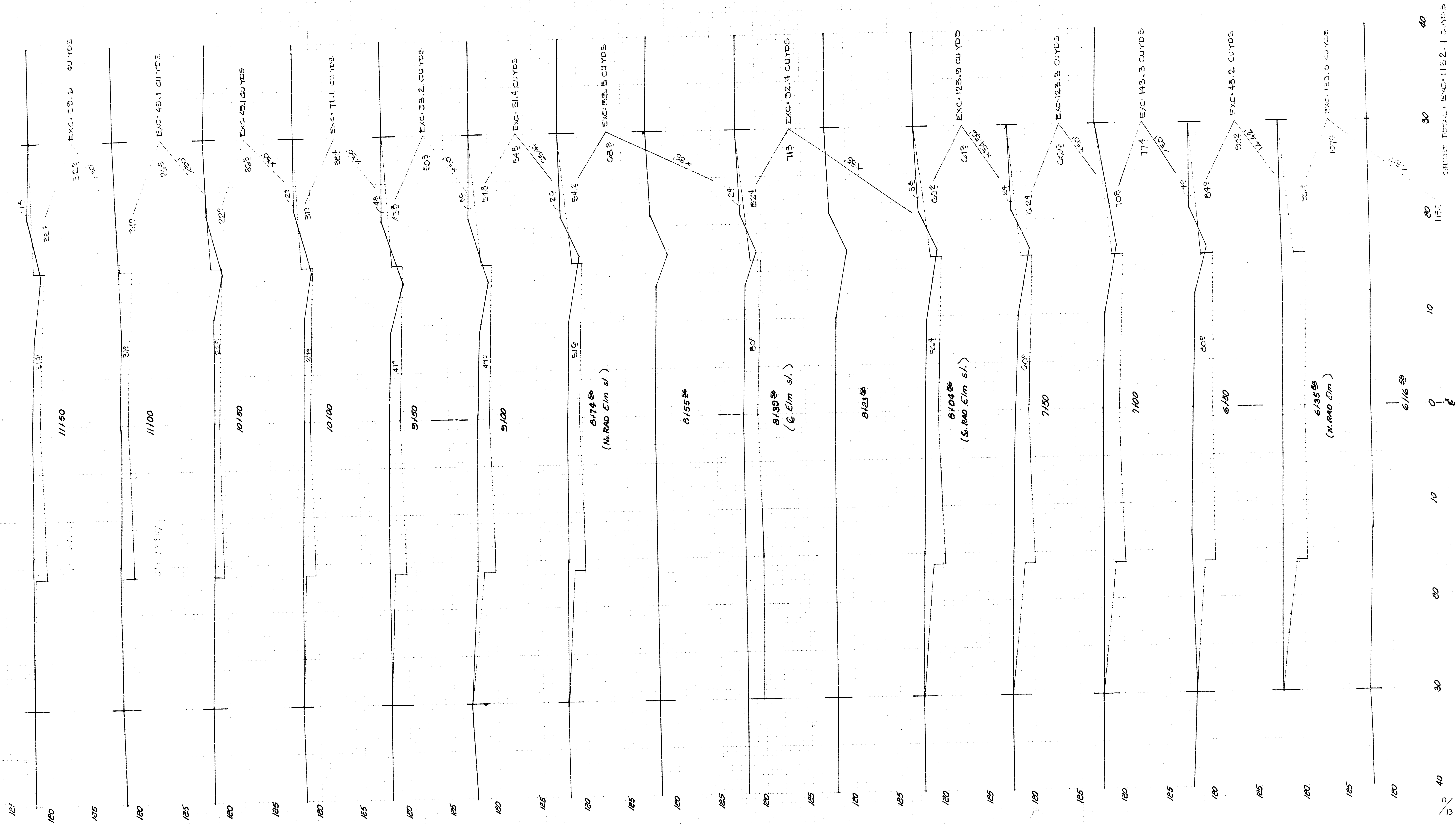
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Daugherty
from All Central to All 8th St.
4/2-16-245-24455-000-000-001

TOTAL ELEVATION: 425.34

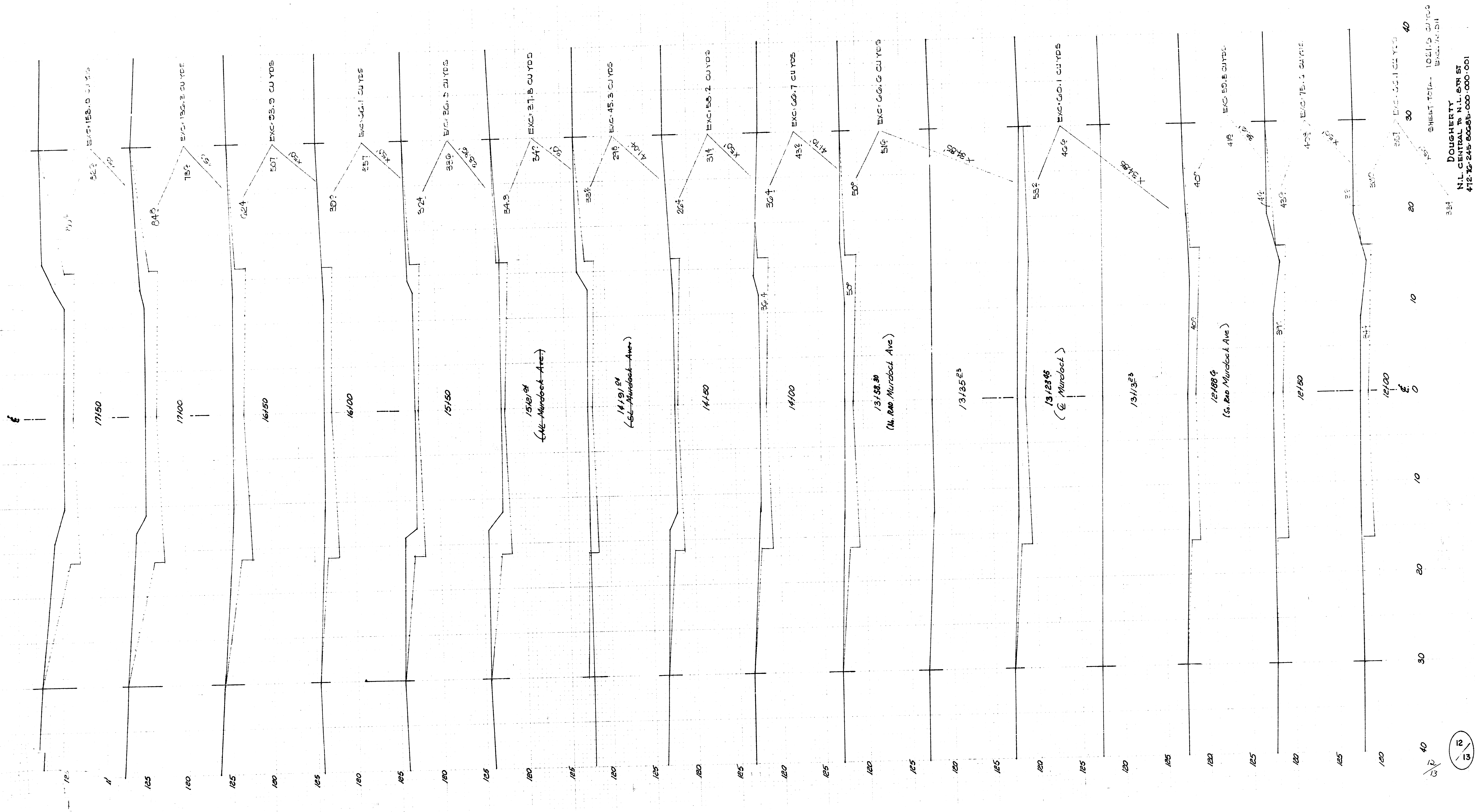
10/13



DOUGHERTY
N.L. CENTRAL TO N.L. 8TH ST
412-76-245 80655-000-001

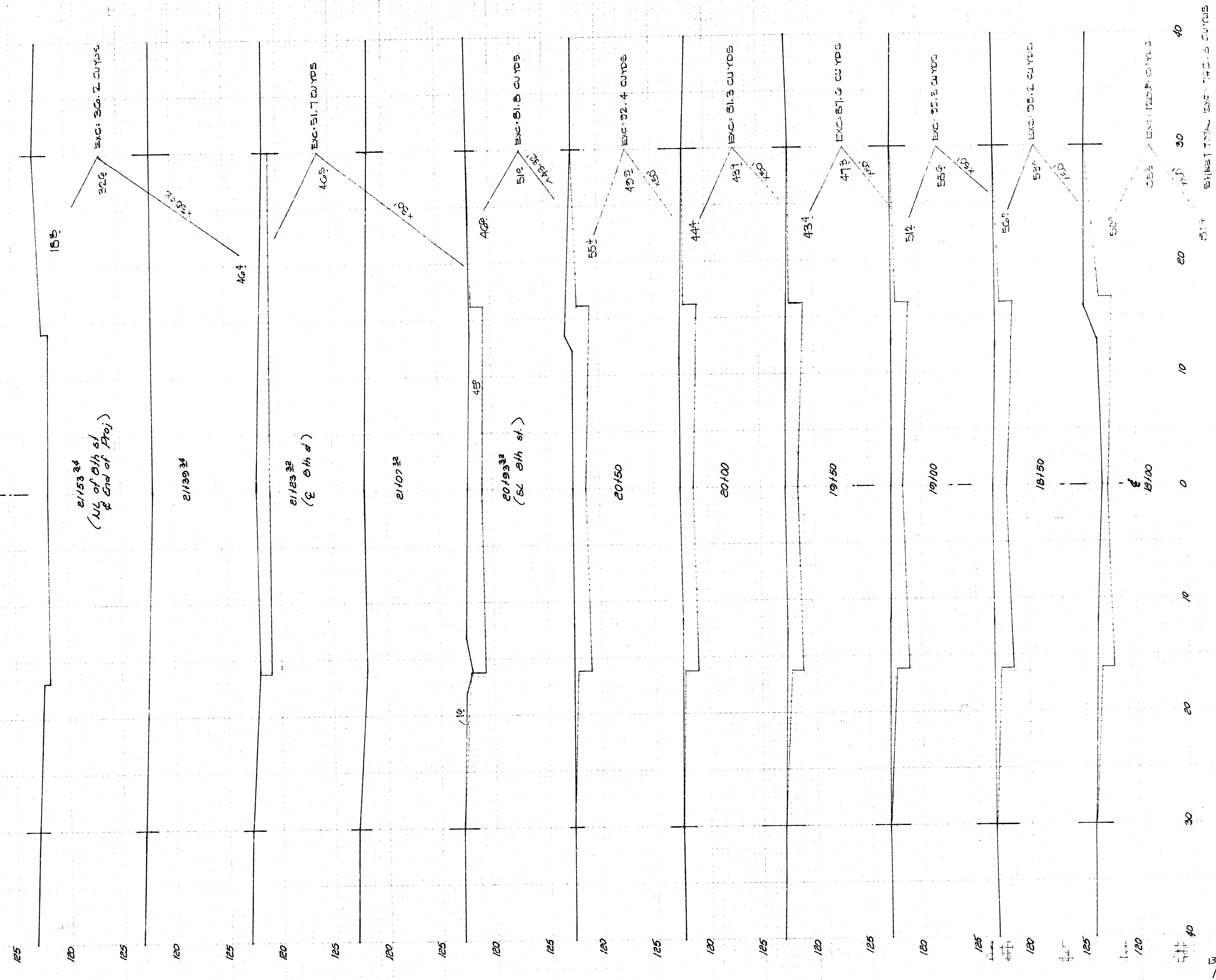
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