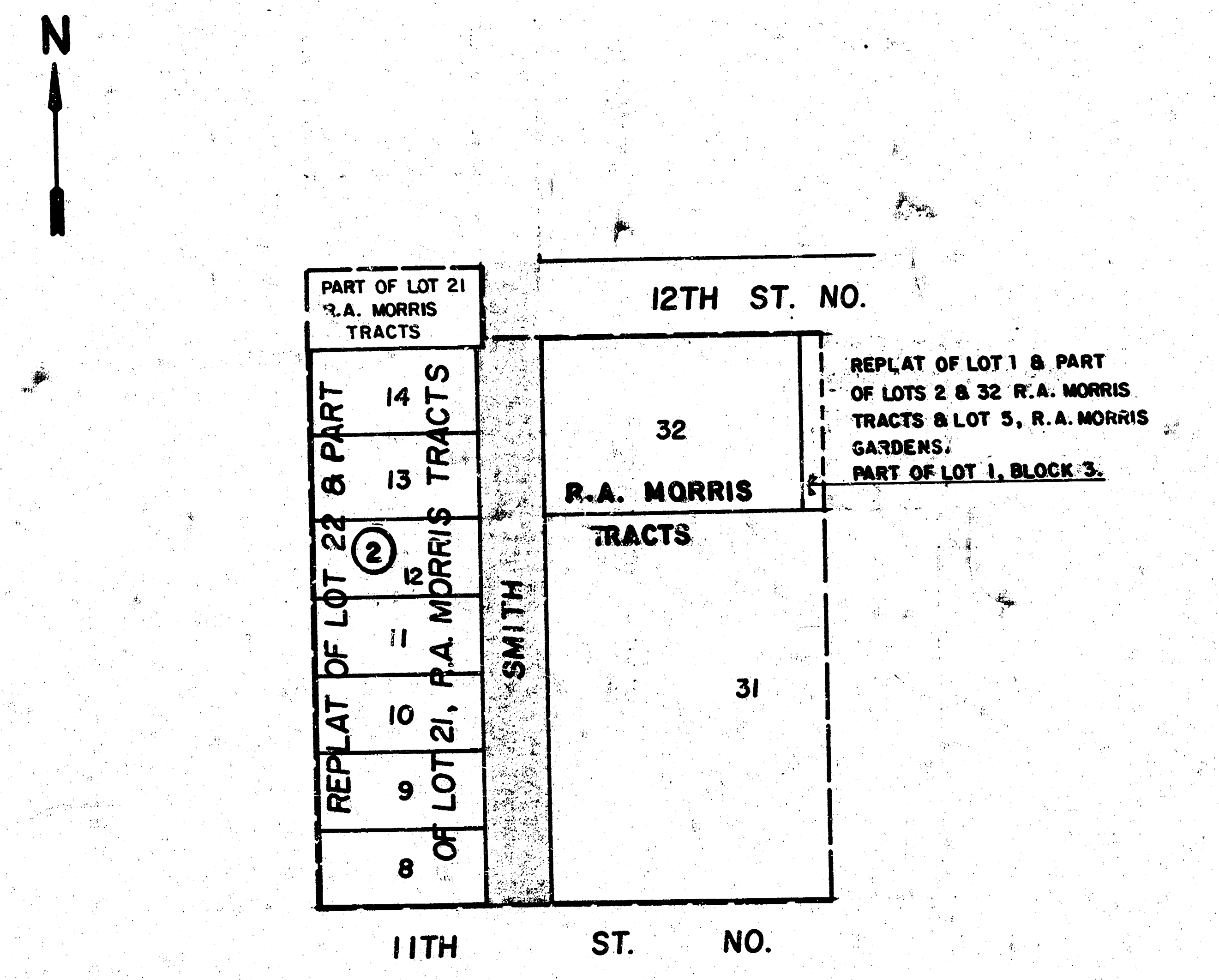
# SMITH

## N.L. 11TH NO. TO N.L. 12TH NO.


N
PART OF LOT 21 R.A. MORRIS TRACTS
12TH ST. NO.
REPLAT OF LOT 22 & PART OF LOT 21, R.A. MORRIS TRACTS
②
14
13
12
11
10
9
8
SMITH
32
R.A. MORRIS TRACTS
31
REPLAT OF LOT 1 & PART OF LOTS 2 & 32 R.A. MORRIS TRACTS & LOT 5, R.A. MORRIS GARDENS.
PART OF LOT 1, BLOCK 3.
11TH ST. NO.

CARL L. GIPSON
9590

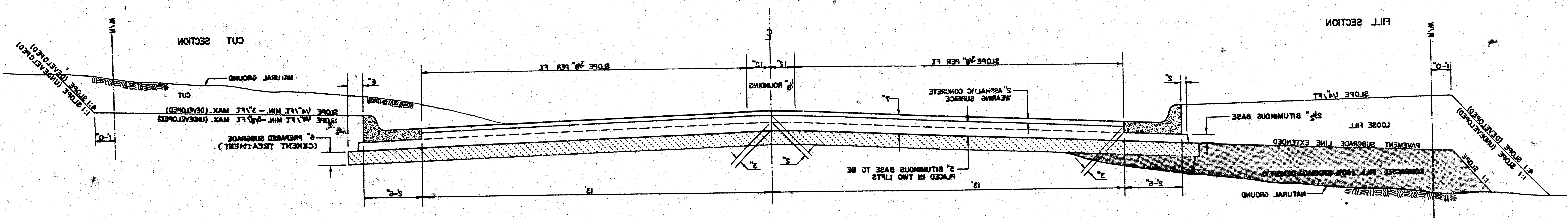
| | | |
|---|---|---|
| PROJECT DESCRIPTION<br>SMITH - N.L. 11TH NO. to N.L. 12TH NO. | | |
| PROJECT NUMBER<br>472-76-245-81278-000-000-001 | | |
| BOOK NO. DCD 303 | APPROVED BY | DATE |
| DRAWN BY VRH | | REVISED |
| CITY OF WICHITA<br>DEPARTMENT OF ENGINEERING | | |
| CITY ENGINEER<br>M.E. LINDEBAK | | SCALE<br>1" = 100' |

1/5

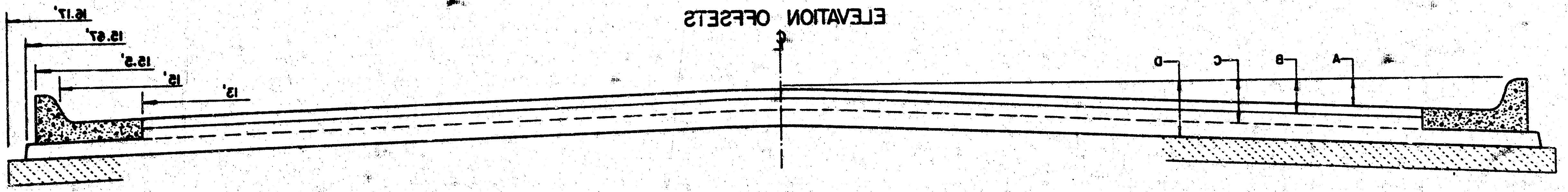
2/5

# TYPICAL 31' PAVEMENT DETAILS

## TRANSVERSE SECTION

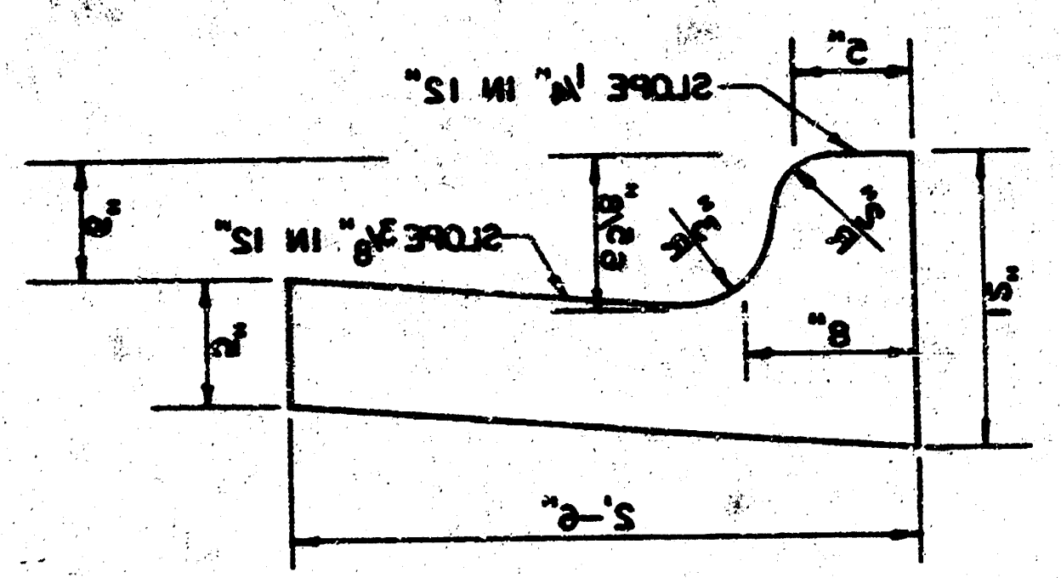

CUT SECTION
FILL SECTION
R/W
NATURAL GROUND
CUT
4:1 SLOPE (DEVELOPED)
1:1 SLOPE (UNDEVELOPED)
SLOPE 1/4"/FT MIN. – 3"/FT MAX. (DEVELOPED)
SLOPE 1/4"/FT MIN. – 5/8"/FT MAX. (UNDEVELOPED)
1'-0"
6" PREPARED SUBGRADE (CEMENT TREATMENT)
6"
SLOPE 3/8" PER FT
12"
12"
1/8" ROUNDING
2" ASPHALTIC CONCRETE WEARING SURFACE
7"
5" BITUMINOUS BASE TO BE PLACED IN TWO LIFTS
3"
2"
2'-6"
13'
2"
SLOPE 1/4"/FT
2½" BITUMINOUS BASE
LOOSE FILL
PAVEMENT SUBGRADE LINE EXTENDED
COMPACTED FILL (90% STANDARD DENSITY)
1:1 SLOPE
NATURAL GROUND

## ELEVATION OFFSETS

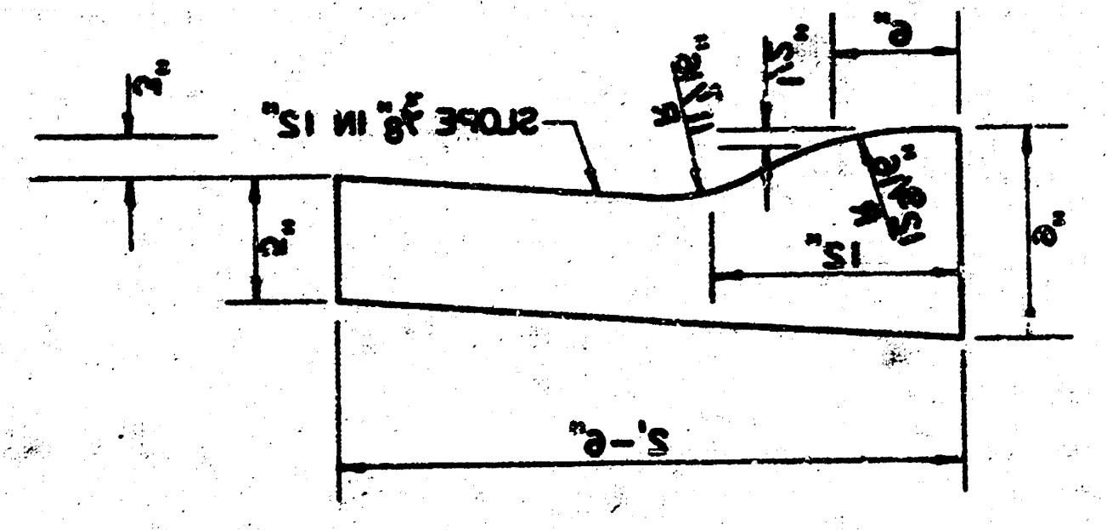


| | DISTANCE FROM CENTERLINE (LT. & RT.) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0' | 2' | 4' | 6' | 7.5' | 10' | 12' | 13' | 15' | 15.5' | 15.67' | 16.17' |
| A: TOP OF CURBS TO TOP OF SURFACE LIFT | 0.10 | 0.14 | 0.21 | 0.27 | 0.32 | 0.39 | 0.46 | 0.49 | — | — | — | — |
| 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 | 0.48 | 0.57 | 0.64 | 0.70 | 0.79 | 0.87 | 0.90 | 0.98 | 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 |

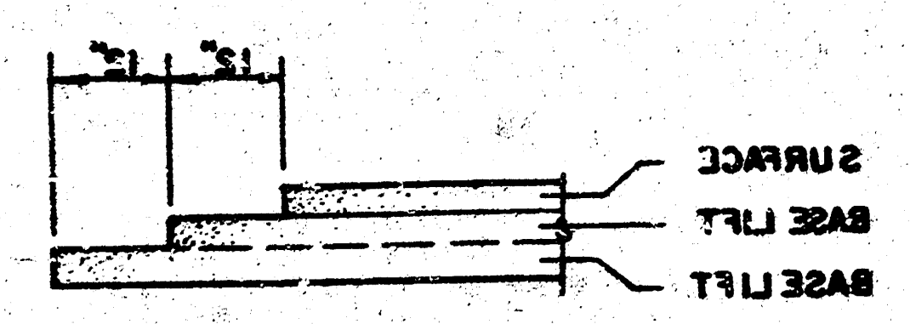
## COMBINED CURB & GUTTER



## ROLL TYPE COMBINED CURB & GUTTER



## TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS 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).

## 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.

7 INCH RESIDENTIAL ASPHALTIC CONCRETE
PAVEMENT WITH 5 INCH BITUMINOUS BASE
CITY OF WICHITA, KANSAS
PROJECT NUMBER
472-76-245-81278-000-000-001

(2/5

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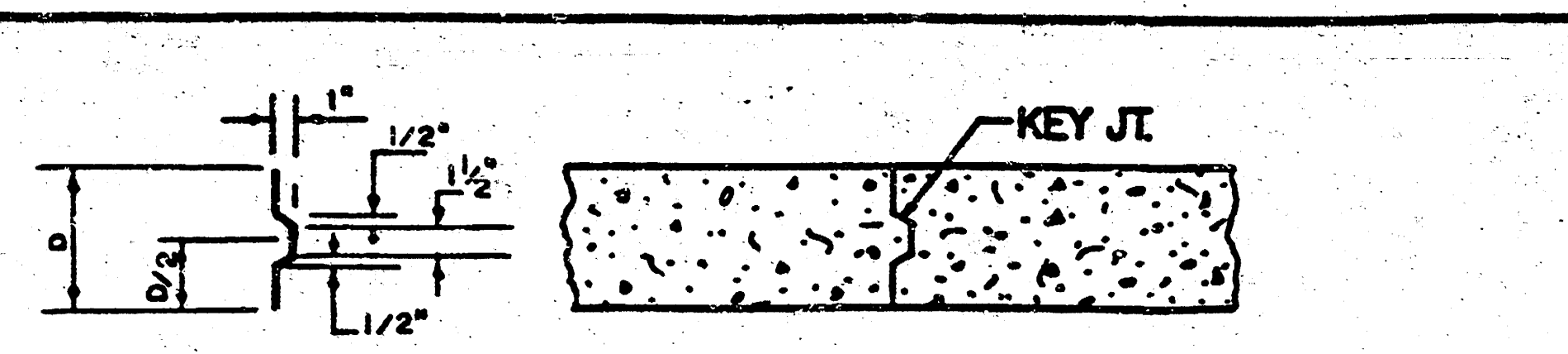
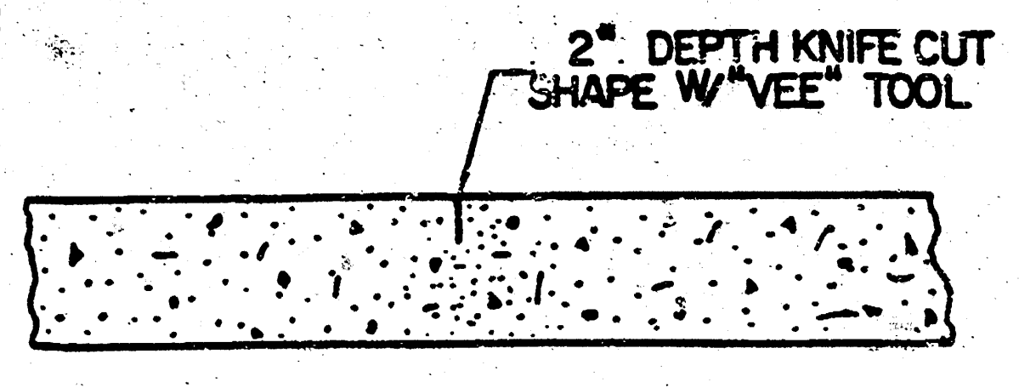
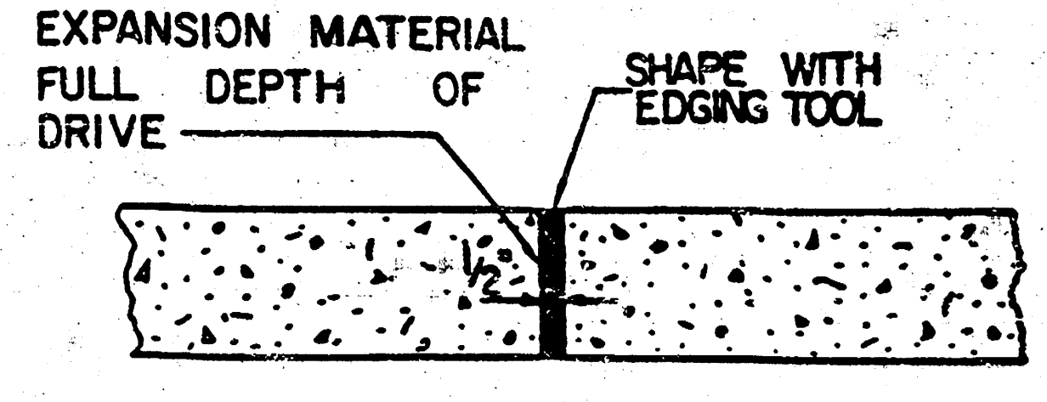


ALT. LONGITUDINAL CONSTRUCTION JOINT

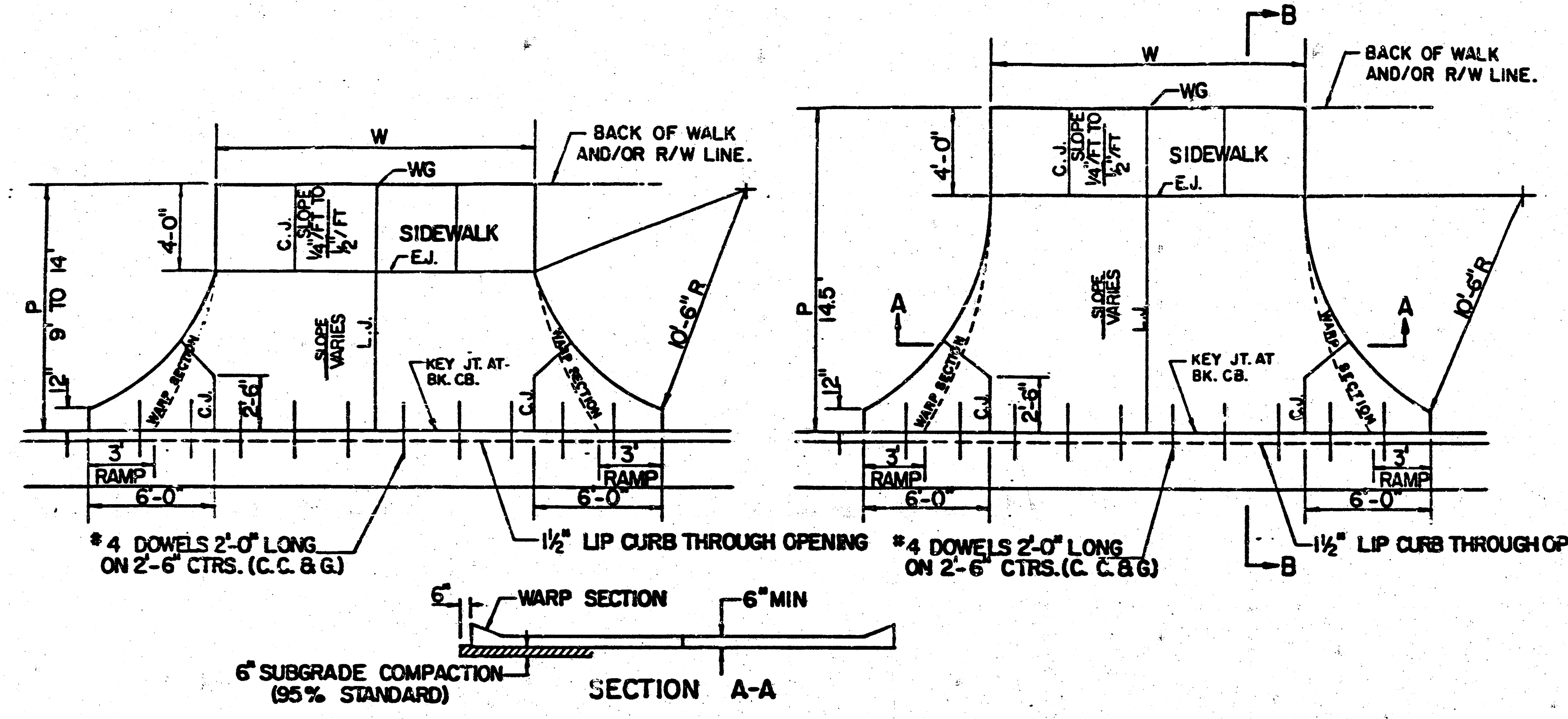


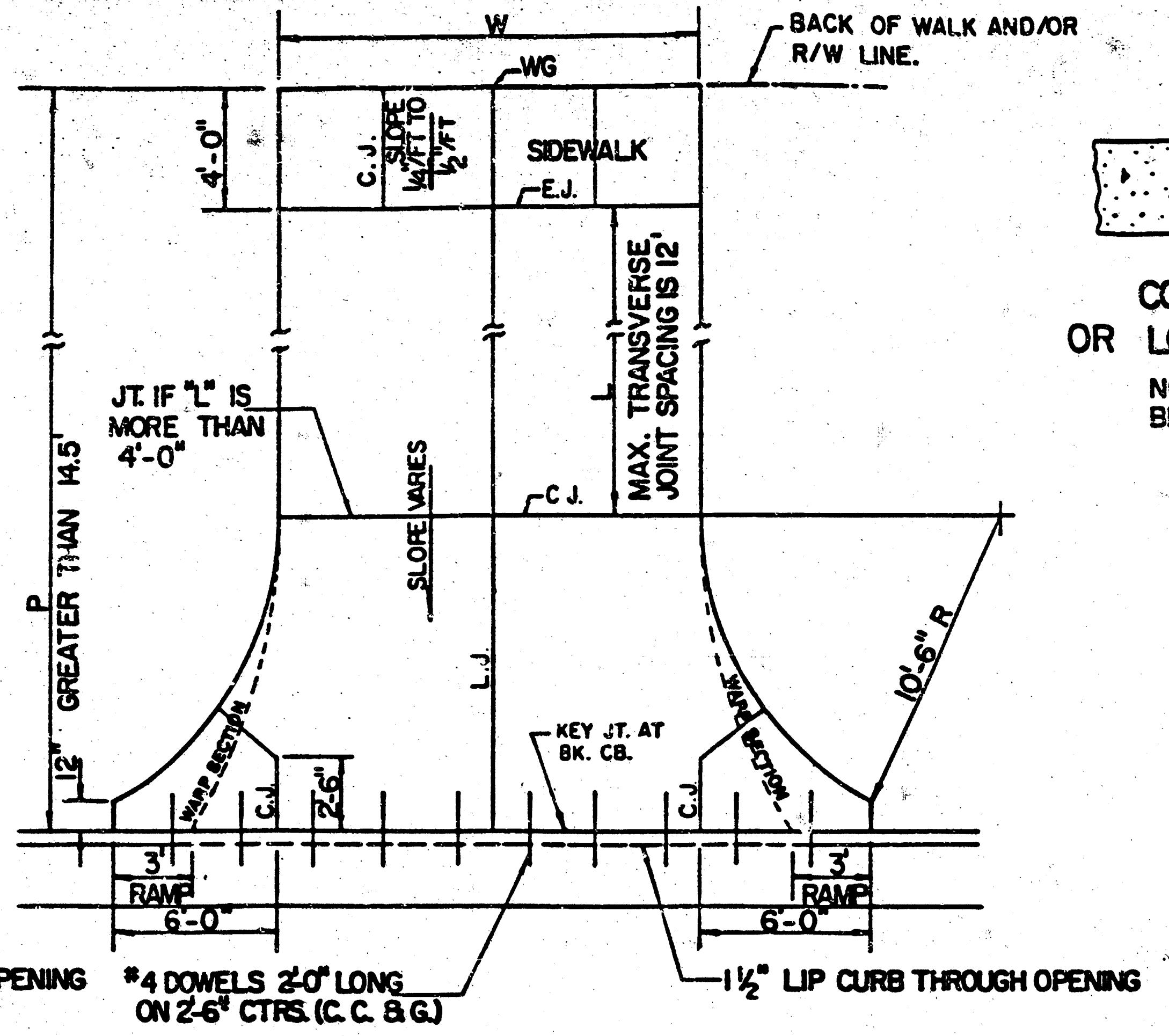
CONTRACTION JOINT (C.J.) OR LONGITUDINAL JOINT (L.J.)

NO SAWN JOINTS WILL BE ALLOWED.



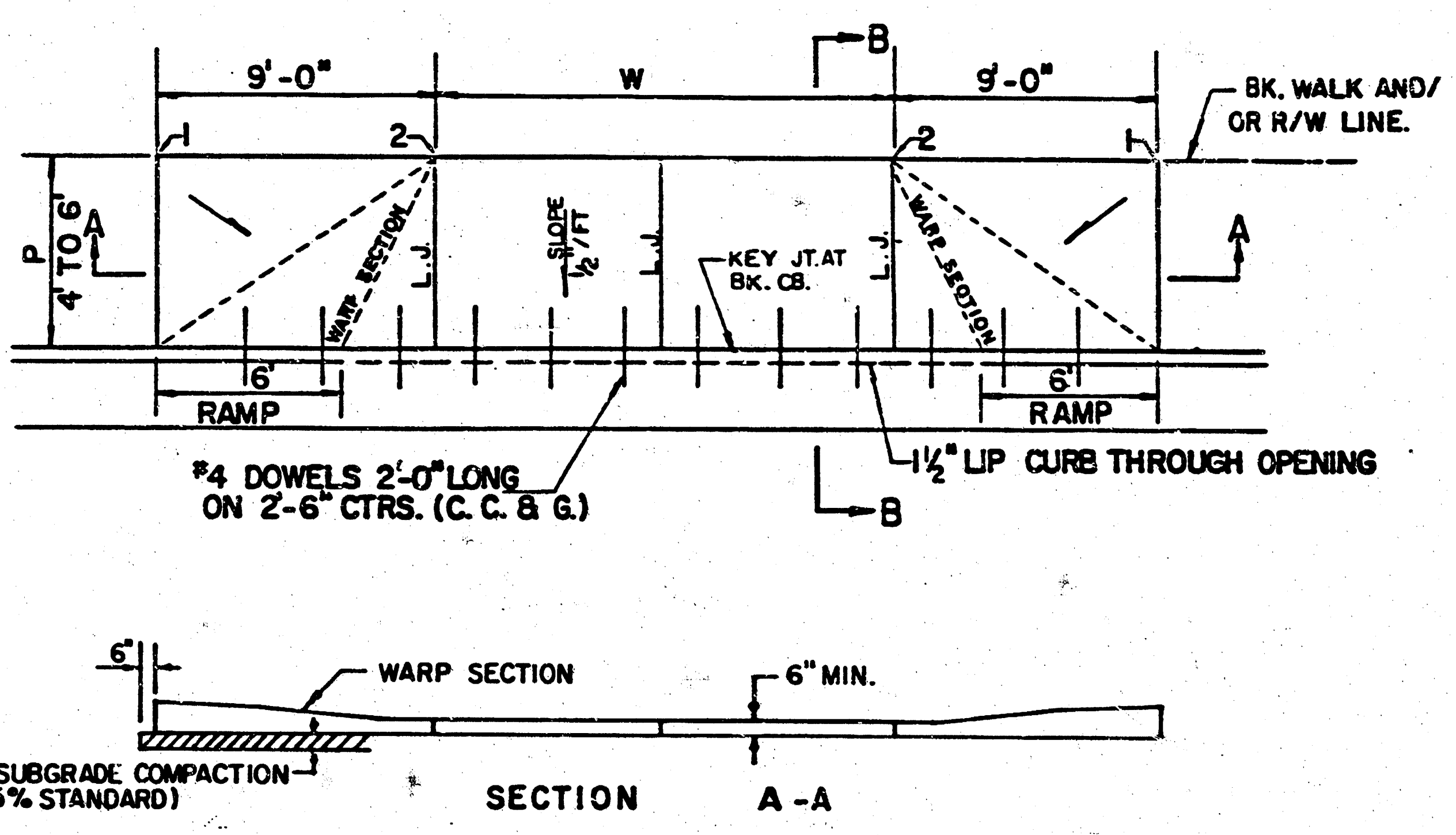
EXPANSION JOINT (E.J.)




W
WG
BACK OF WALK AND/OR R/W LINE.
C.J.
SLOPE 1/4"/FT TO 1/2"/FT
SIDEWALK
E.J.
4'-0"
JT. IF "L" IS MORE THAN 4'-0"
MAX. TRANSVERSE JOINT SPACING IS 12'
P GREATER THAN 14.5'
SLOPE VARIES
L.J.
KEY JT. AT BK. CB.
12"
2'-6"
10'-6" R
3'
RAMP
6'-0"
#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C.C. & G.)
1 1/2" LIP CURB THROUGH OPENING

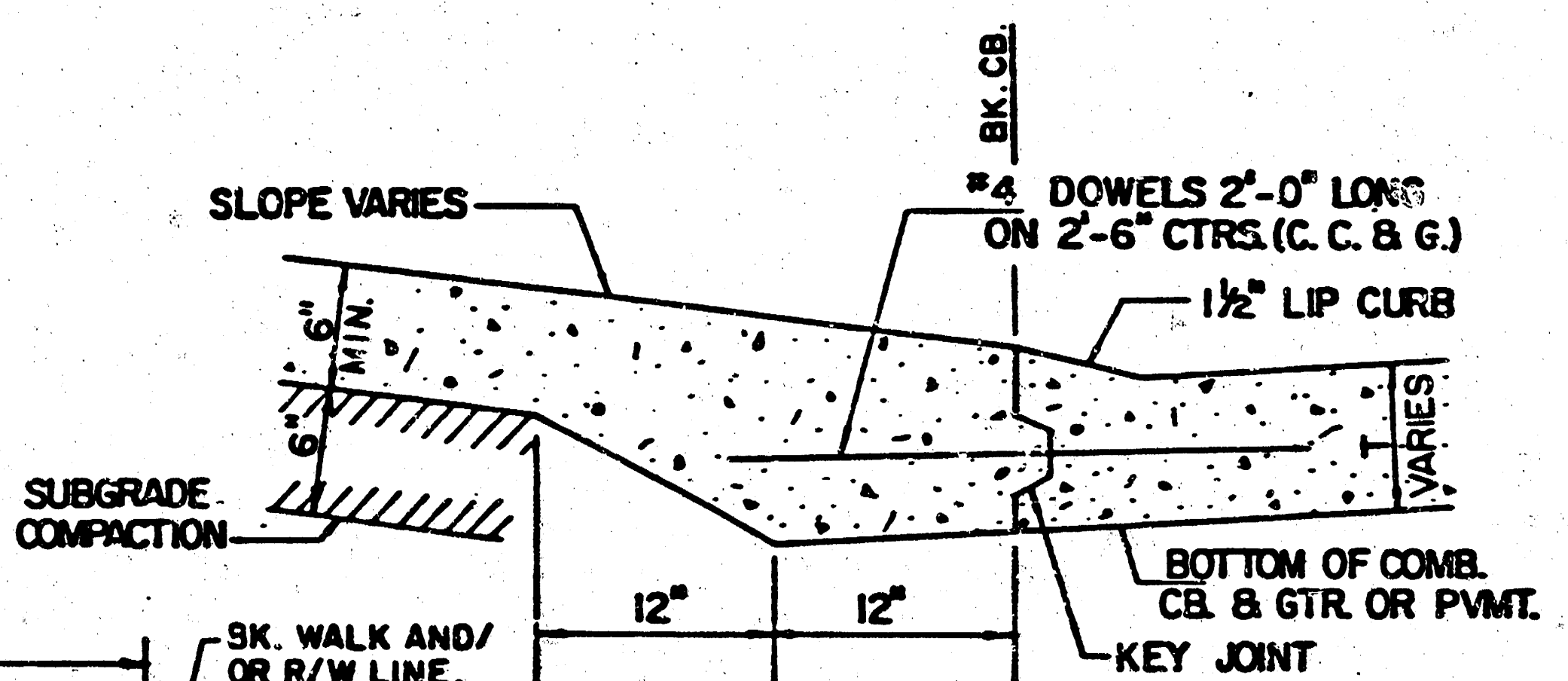
| PARKING WIDTH "P" | 9' | 10' | 11' | 12' | 13' | 14.5' | 20' | 25' | 30' | 35' | 40' | 45' | 50' |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB | 0.35' | 0.35' | 0.40' | 0.45' | 0.60' | 0.80' | 1.35' | 1.85' | 2.35' | 2.85' | 3.35' | 3.85' | 4.35' |
| OPTIMUM MAX. DIST. OF PT. "WG" ABOVE OR BELOW 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 OR BELOW 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 OR BELOW TOP OF FULL CURB | -.19' | -.16' | -.13' | -.10' | -.06' | 0.00' | 0.00' | 0.15' | 0.25' | 0.35' | 0.45' | 0.55' | 0.65' |

## RADIUS RAMP DRIVES (P= 9.0' & GREATER)


9'-0"
W
9'-0"
B
BK. WALK AND/ OR R/W LINE.
1
2
2
1
A
P 4' TO 6'
SLOPE 1/2"/FT
L.J.
KEY JT. AT BK. CB.
WARP SECTION
6'
RAMP
#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C.C. & G.)
1 1/2" LIP CURB THROUGH OPENING
6"
WARP SECTION
6" MIN.
6" SUBGRADE COMPACTION (95% STANDARD)
SECTION A-A

| PARKING WIDTH "P" | 4' | 4.5' | 5' | 5.5' | 6' | 6.5' |
|---|---|---|---|---|---|---|
| DIST. OF PT. "1" ABOVE TOP OF FULL CB. | 0.08' | 0.09' | 0.10' | 0.12' | 0.13' | 0.14' |
| DIST. OF PT. "2" BELOW TOP OF FULL CB. | -.26' | -.24' | -.22' | -.20' | -.18' | -.16' |

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



BACK OF CURB DETAIL
SECTION · B - B (no scale)

### GENERAL NOTES

1. 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.

2. 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'.

3. 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.

4. CONTRACTION 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.

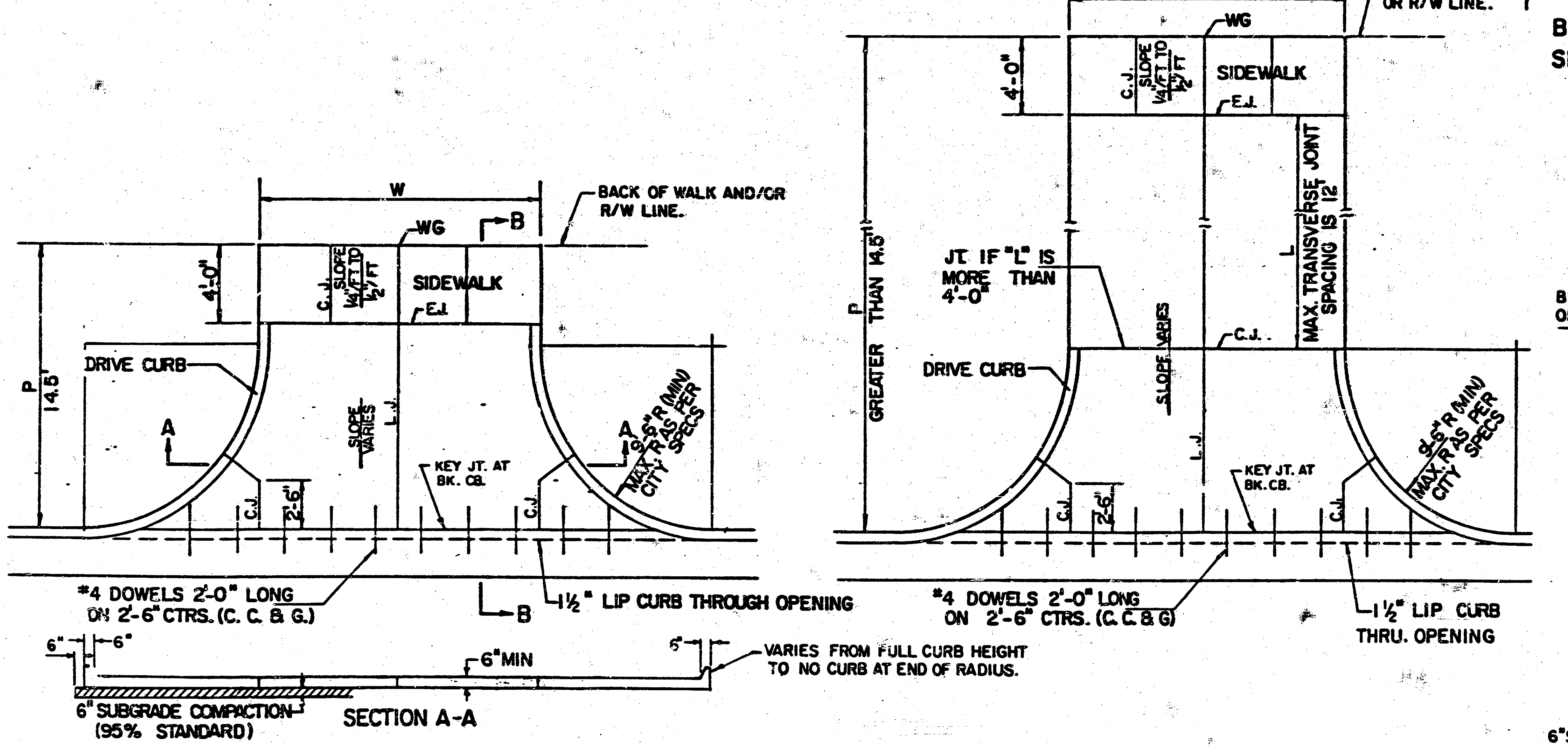
5. DOWEL BARS SHALL BE OMITTED FROM THE KEYED CONSTRUCTION JOINT ALONG THE BACK OF THE STREET CURB LINE WHEN DRIVEWAYS ARE CONSTRUCTED IN CONJUNCTION WITH NEW CONCRETE PAVEMENT CONSTRUCTION.

6. 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.

7. ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHEREVER 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.

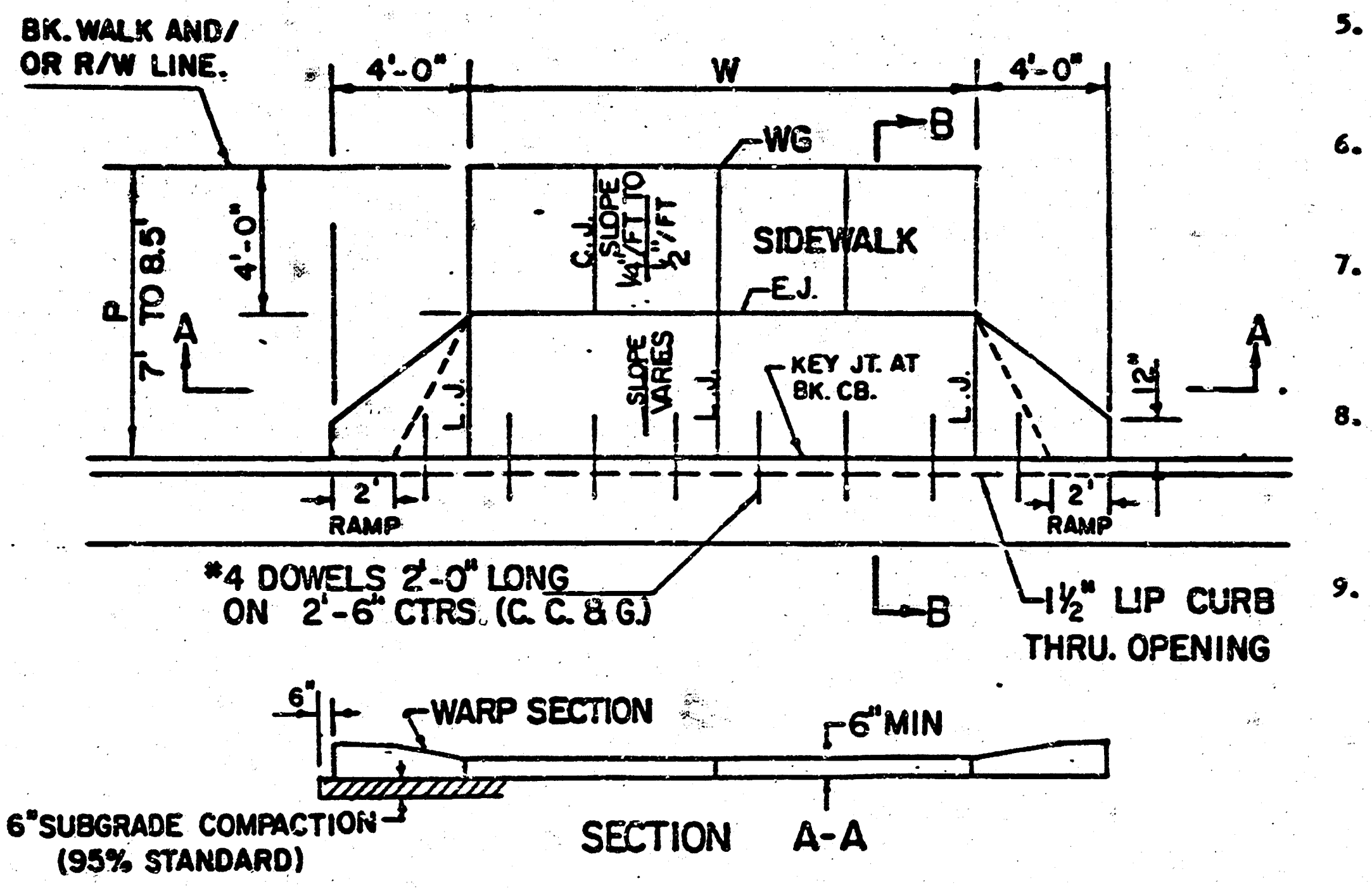
8. ALL DRIVEWAYS SHALL BE A MINIMUM OF 6" IN THICKNESS AND SHALL BE WITHOUT REINFORCEMENT. DRIVEWAYS MAY BE CONSTRUCTED THICKER THAN 6" AND THEY MAY BE REINFORCED WITH 6"x12" W4-W4 WELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONCURRENCE.

9. 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 MINUS SIGNS INDICATE ELEVATIONS BELOW TOP OF FULL HEIGHT CURB.


W
WG
B
BACK OF WALK AND/OR R/W LINE.
C.J.
SLOPE 1/4"/FT TO 1/2"/FT
SIDEWALK
E.J.
4'-0"
P 14.5'
DRIVE CURB
A
SLOPE VARIES
L.J.
KEY JT. AT BK. CB.
2'-6"
12.5' R (MIN) MAX. 15' R AS PER CITY SPECS
#4 DOWELS 2'-0" LONG ON 2'-6" CTRS. (C.C. & G.)
1 1/2" LIP CURB THROUGH OPENING
6"
6" MIN
VARIES FROM FULL CURB HEIGHT TO NO CURB AT END OF RADIUS.
6" SUBGRADE COMPACTION (95% STANDARD)
SECTION A-A
JT. IF "L" IS MORE THAN 4'-0"
P GREATER THAN 14.5'
MAX. TRANSVERSE JOINT SPACING IS 12'
L
1 1/2" LIP CURB THRU. OPENING

| 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 | -.25' | -.20' | -.20' | -.20' |

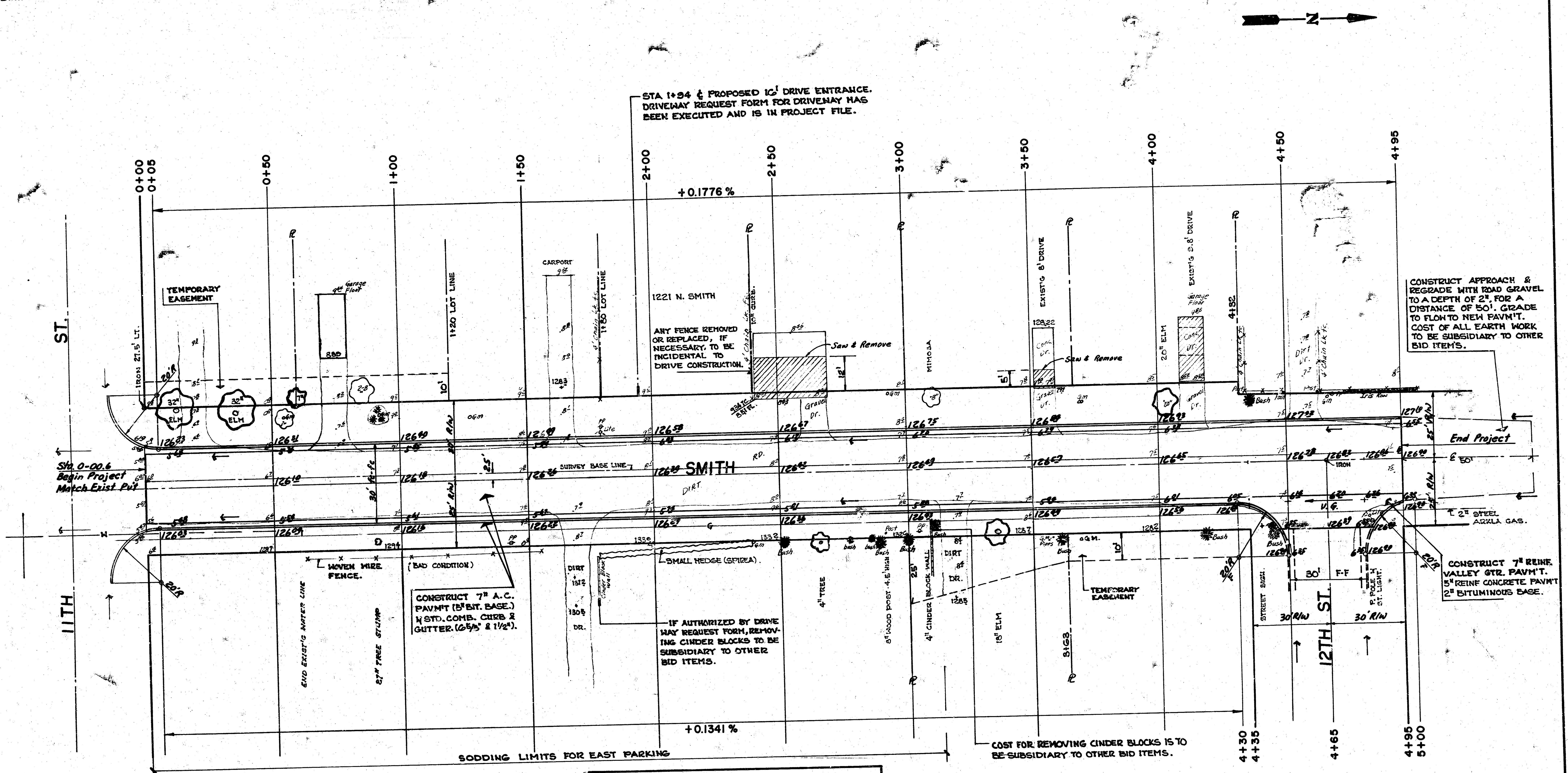
## FULL RAMP DRIVE (P=7.0' TO 8.5')

SCALE: 1"= 5'

STANDARD DRIVE ENTRANCES
FULL HEIGHT CURB
CITY OF WICHITA, KANSAS

PROJECT NUMBER
472-76-245-81278-000-000-001

B.M. 129.15 City Std. Disc, ℄ Curtis Extended & 2' South of S. ℞ of I-235 R.O.W.
B.M. 128.49 "M" Mueller Fire Hydrant, NE Cor. Anna & 11TH NO.
B.M. 128.36 RR Spk. S-fc. PP at NE Cor. Smith & 12TH NO.



STA 1+94 ℄ PROPOSED 16' DRIVE ENTRANCE. DRIVEWAY REQUEST FORM FOR DRIVEWAY HAS BEEN EXECUTED AND IS IN PROJECT FILE.

ANY FENCE REMOVED OR REPLACED, IF NECESSARY, TO BE INCIDENTAL TO DRIVE CONSTRUCTION.

CONSTRUCT APPROACH & REGRADE WITH ROAD GRAVEL TO A DEPTH OF 2", FOR A DISTANCE OF 50'. GRADE TO FLOW TO NEW PAVM'T. COST OF ALL EARTH WORK TO BE SUBSIDIARY TO OTHER BID ITEM'S.

CONSTRUCT 7" A.C. PAVM'T (5" BIT. BASE.) W STD. COMB. CURB & GUTTER. (6⅝" & 1½").

IF AUTHORIZED BY DRIVE WAY REQUEST FORM, REMOVING CINDER BLOCKS TO BE SUBSIDIARY TO OTHER BID ITEMS.

COST FOR REMOVING CINDER BLOCKS IS TO BE SUBSIDIARY TO OTHER BID ITEMS.

CONSTRUCT 7" REINF. VALLEY GTR. PAVM'T. 5" REINF CONCRETE PAVM'T 2" BITUMINOUS BASE.

### GENERAL NOTES

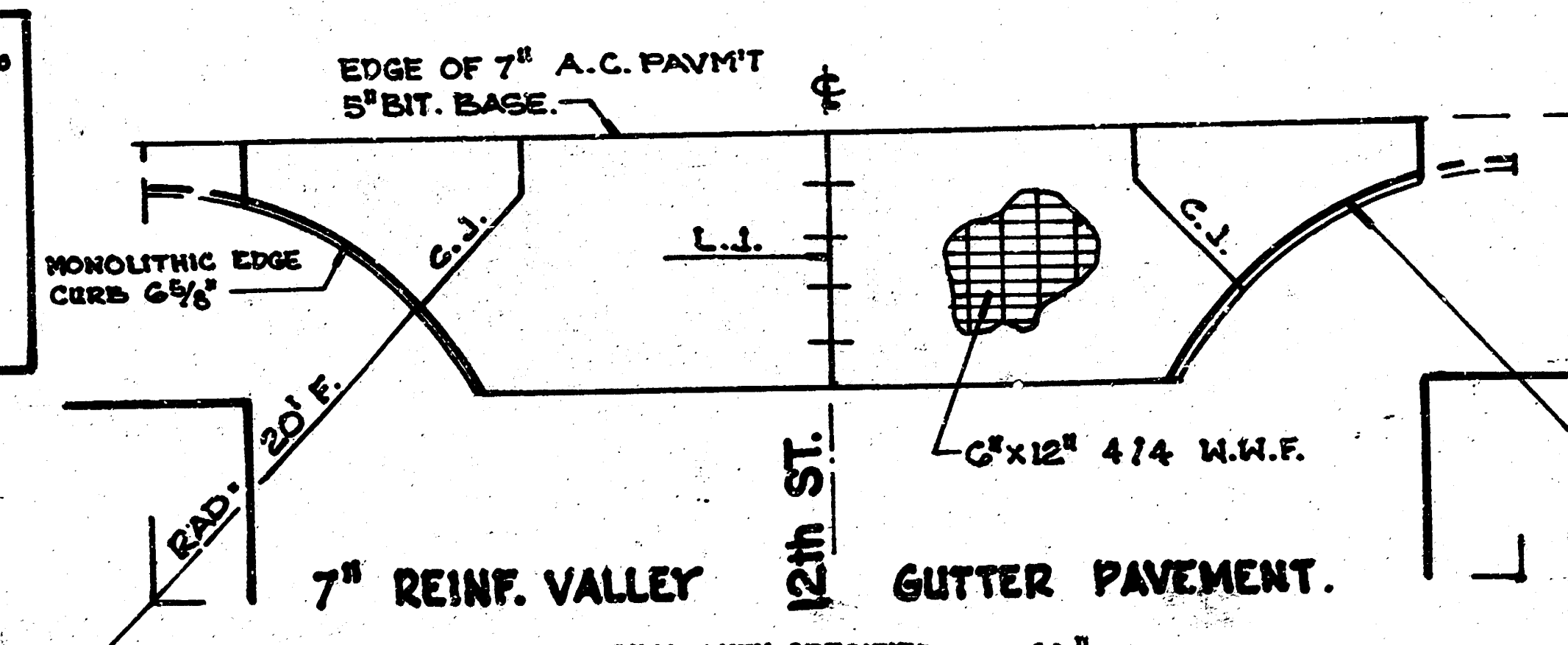
1. WIDENED GUTTER SECTION OF COMBINED CURB & GUTTER AT INTERSECTIONS WILL NOT BE PAID DIRECTLY, AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE OTHER CONTRACT PAY ITEMS OF WORK.
2. COST FOR POST REMOVAL TO BE SUBSIDIARY TO THE OTHER CONTRACT PAY ITEM'S OF WORK.
3. MAIL BOXES WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AS APPROVED BY THE ENGINEER.

CONTRACTOR WILL BE REQUIRED TO MAKE SATISFACTORY PROVISIONS FOR MAIL DELIVERY TO PROPERTIES AFFECTED BY THIS PROJECT DURING CONSTRUCTION.

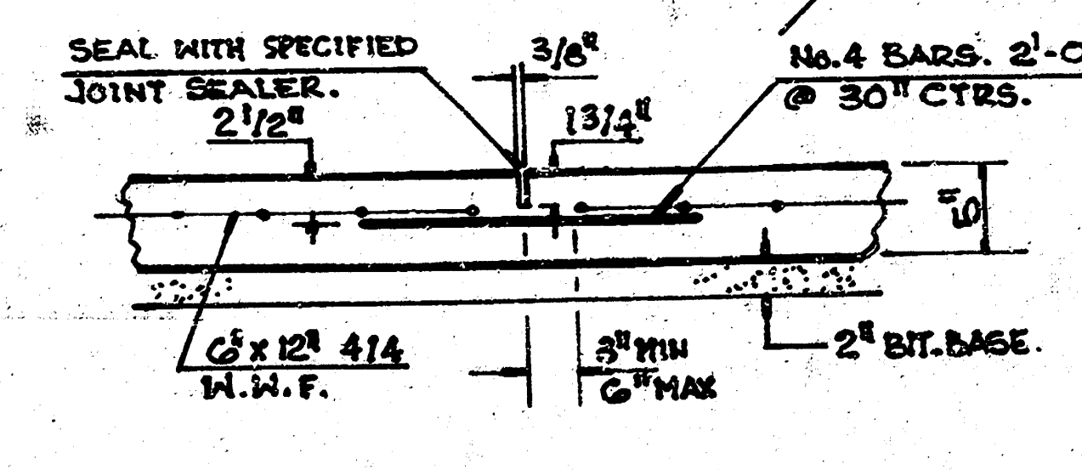
4. ALL PARKING AND TEMPORARY EASEMENT [illegible] NOT SODDED TO BE SEEDED WITH K-31 FESCUE, FERTILIZED AND MULCHED IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS.

### INTERSECTION QUANTITIES

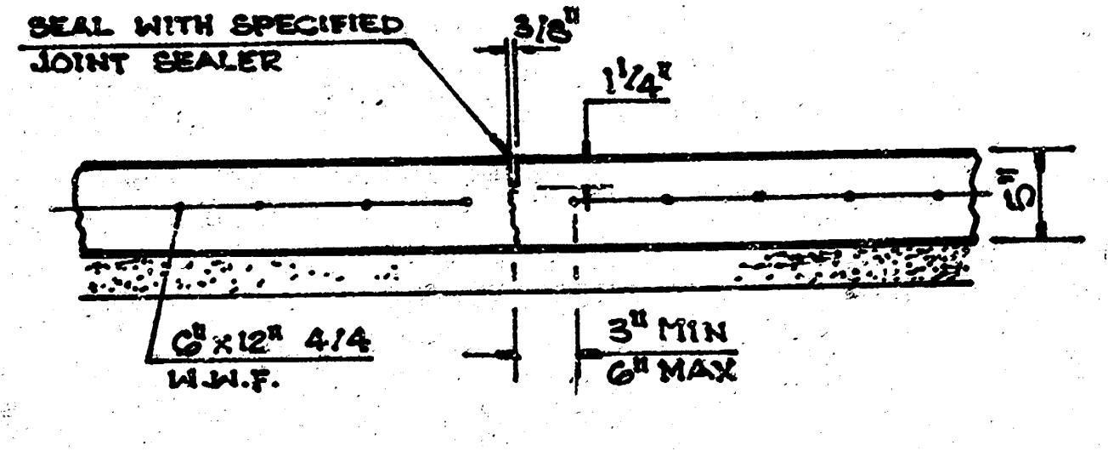
86.7 SQ YDS 7" ASPHALTIC CONC. PAVM'T (5" BIT. BASE.)
65.3 SQ YDS 7" REINF. VALLEY GUTTER PAVEMENT. (5" REINF. CONC. PAVM'T - 2" BITUMINOUS BASE.)
31.8 L.F. MONOLITHIC EDGE CURB (6⅝").
152.8 SQ YDS MANIPULATION
3.1 TONS CEMENT



7" REINF. VALLEY GUTTER PAVEMENT.


SEAL WITH SPECIFIED JOINT SEALER.
3/8"
2½"
1¾"
No. 4 BARS. 2'-0" LONG @ 30" CTRS.
5"
6"x12" 4/4 W.W.F.
5" MIN 6" MAX
2" BIT. BASE.

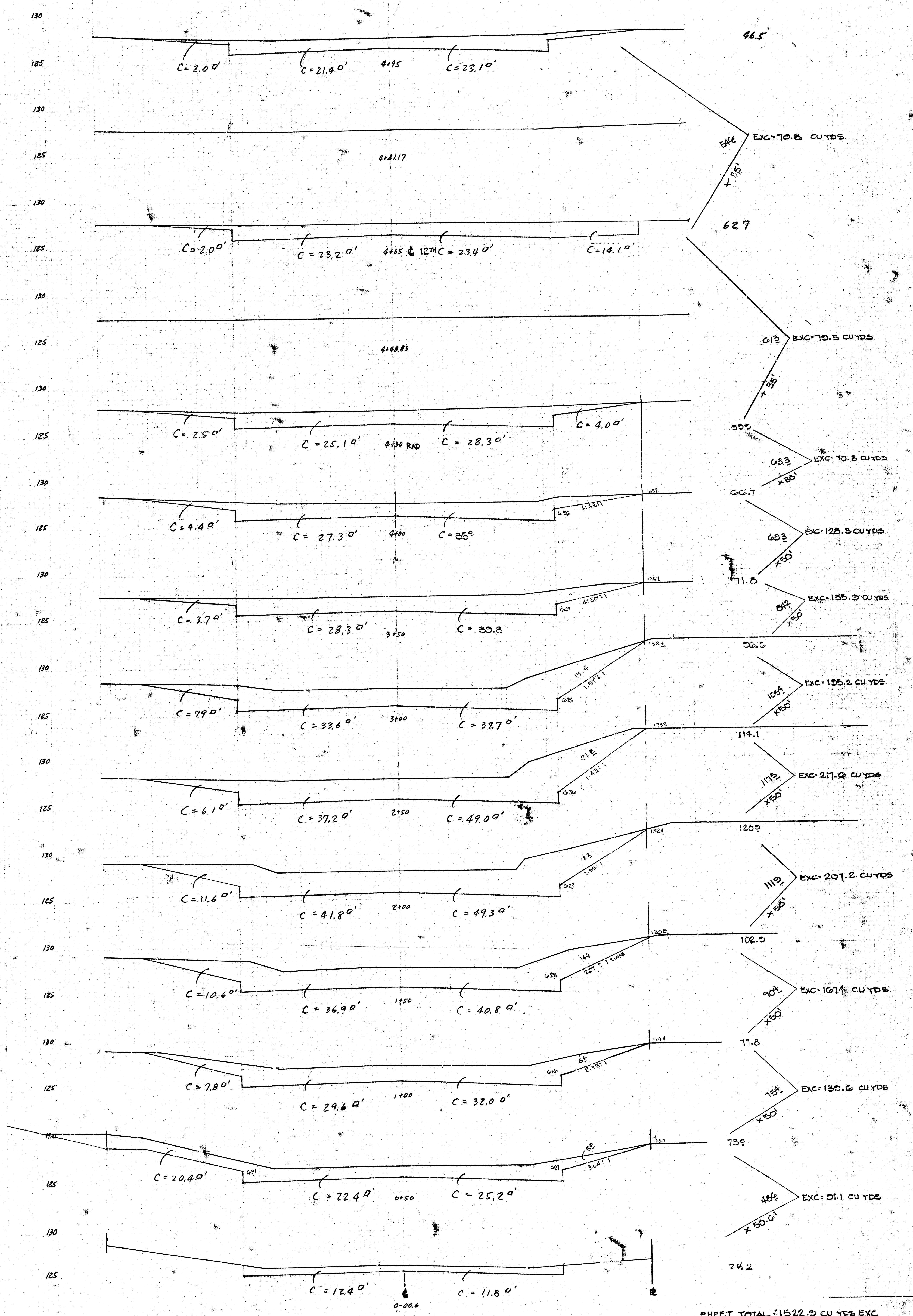
LONGITUDINAL SAWED JOINT



SAWED CONTRACTION JOINT

EXCAVATION 1522.9 CU YDS
+10% = 152.3 " "
TOTAL 1675.2 " "
SQ YDS MANIPULATION = 1824

PROJECT DESCRIPTION
SMITH - N.L. 11TH NO. to N.L. 12TH NO.
PROJECT NUMBER
472-76-245-81278-000-000-001
BOOK NO. DCD303
DRAWN BY VRH
APPROVED BY
DATE
REVISED
CITY ENGINEER
M.E. LINDEBAK
SCALE
1" = 20'



SHEET TOTAL = 1522.9 CU YDS EXC

SMITH STREET
N.L. 11TH ST TO N.L. 12TH ST.
PROJ. No. 472-76-245-81278-000-000-001