

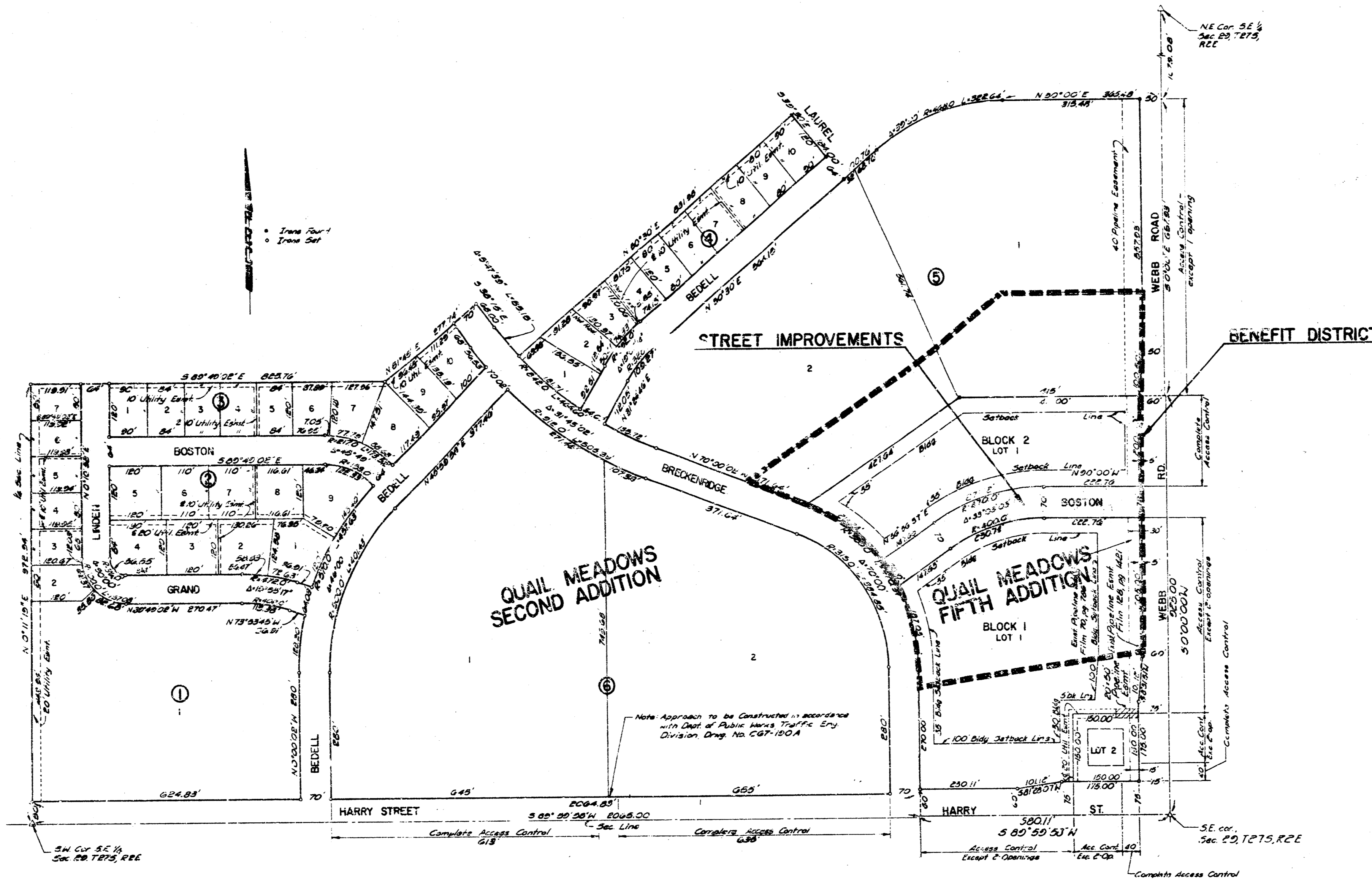
CITY OF WICHITA, KANSAS
BOSTON STREET IMPROVEMENTS
E.L. BRECKENRIDGE TO THE W.L. WEBB ROAD
 (QUAIL MEADOWS 5th ADDITION)
 PROJECT NO. 472-76-245-80505 -000-000-001

BENCH MARKS

- B.M. 1** Webb Rd. & Harry: C.O.W. disc.
 43' South & 46' West of
 & Both. Elev. = 172.03
- B.M. 2** R.R. Spike W. Face P.P. @
 NW Corner Coventry Apartments.
 Elev. = 172.45
- B.M. 3** Chis "s" on T.C., N. of 2nd
 Drive Entrance to Quail
 Meadows Apts., 2nd Drive N.
 of Harry Str. W. side Breckenridge.
 Elev. = 173.50

INDEX OF SHEETS

1. Title Sheet
2. Typical Section
3. Miscellaneous Detail
- 4+5. Plan Sheets
6. Driveway Details
- 7-9. X-Sections



Note:
 All excess excavated material from this project shall be wasted on site. No excess material shall be placed within street rights-of-way. The Contractor shall contact the Owner's Engineer @ 262-2621 for information pertaining to the disposition of waste material.

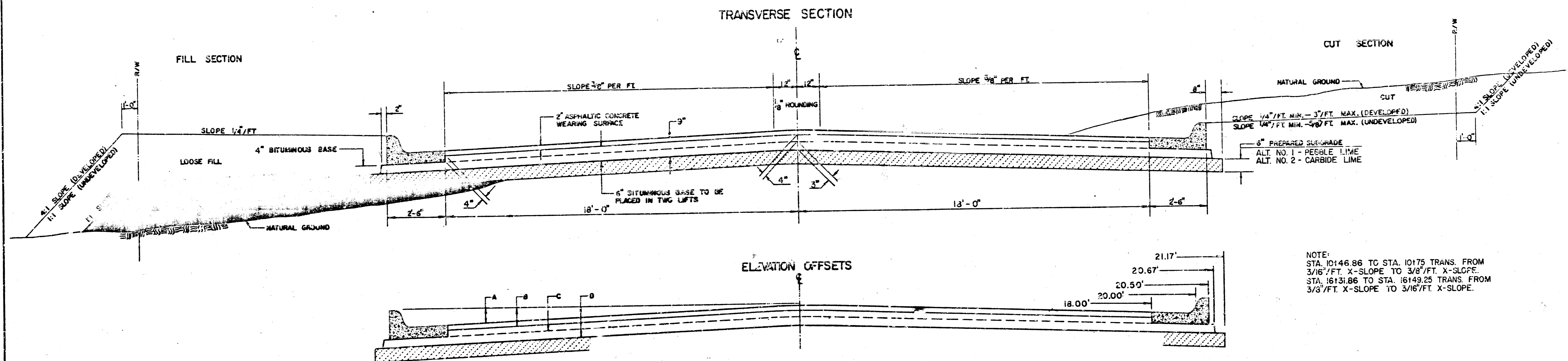
No MORE THAN 1-27 FOOT DRIVE TO BE CONSTRUCTED AS A PART OF THIS CONTRACT

JULY, 1984

	Revision	By	Date
	CITY OF WICHITA, KANSAS		
	TITLE SHEET		
	BOSTON STREET IMPROVEMENTS		
PROJ. NO. 472-76-245-80505-000-000-001 PROFESSIONAL ENGINEERING CONSULTANTS, P.A.			
ENGINEER WICHITA, KANSAS			
Designed by	Job No. 84263	Sht. 1 of 9	
Drawn by BS	Date June 1984		

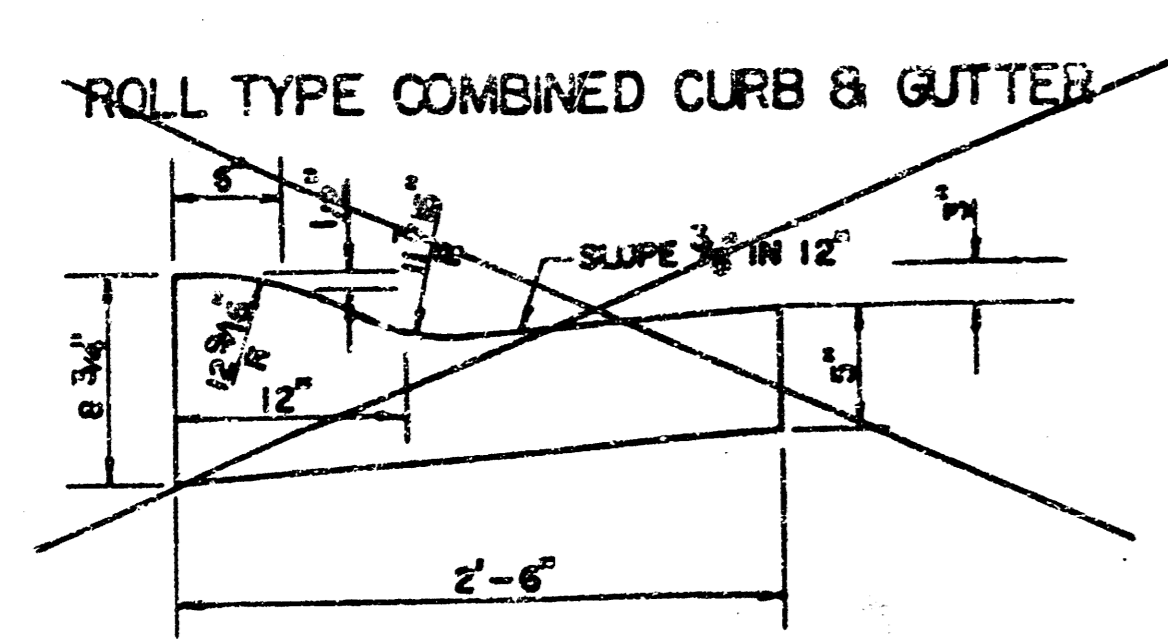
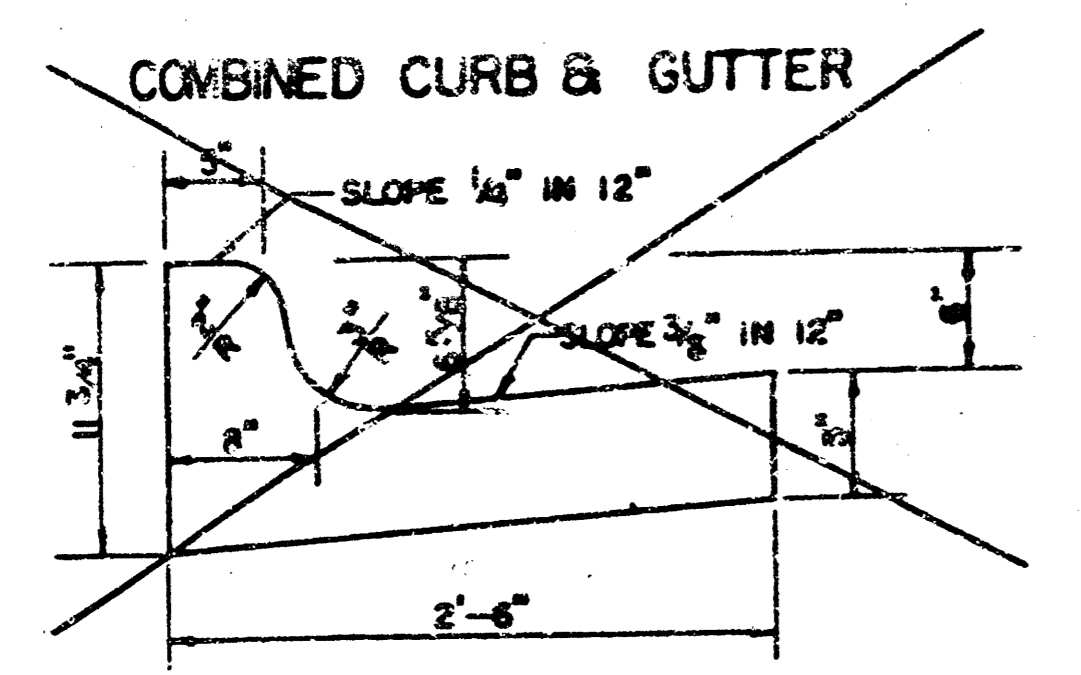
TYPICAL 4' PAVEMENT DETAILS

SHEET NO.	TOTAL SHEETS
2	5



NOTE:
 STA. 10146.86 TO STA. 10175 TRANS. FROM 3/16"/FT. X-SLOPE TO 3/8"/FT. X-SLOPE.
 STA. 16131.86 TO STA. 16149.25 TRANS. FROM 3/8"/FT. X-SLOPE TO 3/16"/FT. X-SLOPE.

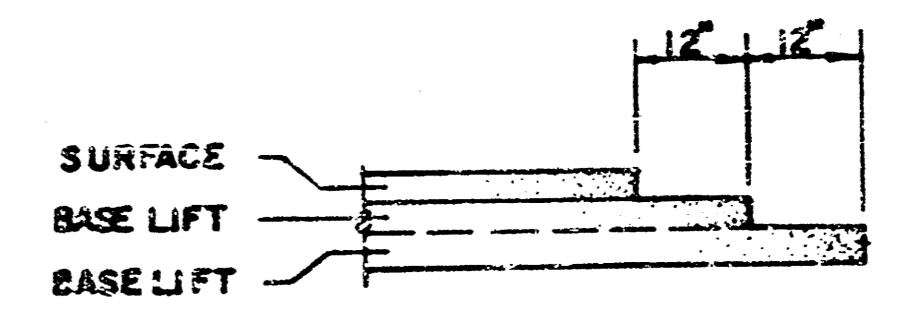
	DISTANCE FROM CENTERLINE (LT. & RT.)													
	0	2	4	6	8	10	12	14	16	18	20	20.5	20.67	21.17
A: TOP OF CURBS TO TOP OF SURFACE LIFT	-.05	-.01	.05	.11	.18	.24	.30	.36	.43	.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	.11	.16	.22	.28	.34	.40	.47	.53	.59	.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	.44	.50	.57	.63	.69	.75	.82	.88	.94	1.00	1.07	1.08	1.09	—
D: TOP OF CURBS TO TOP OF SUBGRADE	.69	.74	.80	.86	.92	.98	1.05	1.11	1.17	1.23	1.30	1.31	1.32	1.33



GENERAL NOTES

- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 9" ASPHALTIC CONCRETE (7" BITUMINOUS BASE).
- 2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 3" BITUMINOUS BASE.
- 3) A TACK COAT OF EMULSIFIED ASPHALT (SS-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROPRIATE 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.

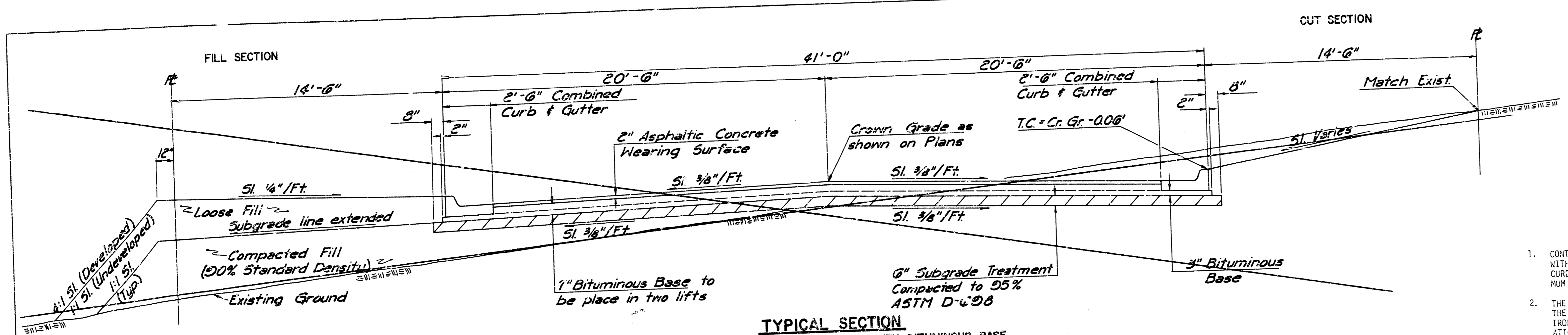
TRANSVERSE CONSTRUCTION JOINTS



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 9" ASPHALTIC CONCRETE (7" BITUMINOUS BASE).

9 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 7 INCH BITUMINOUS BASE
 CITY OF WICHITA, KANSAS
 PROJECT NUMBER 472-76-245-80505-000-000-001

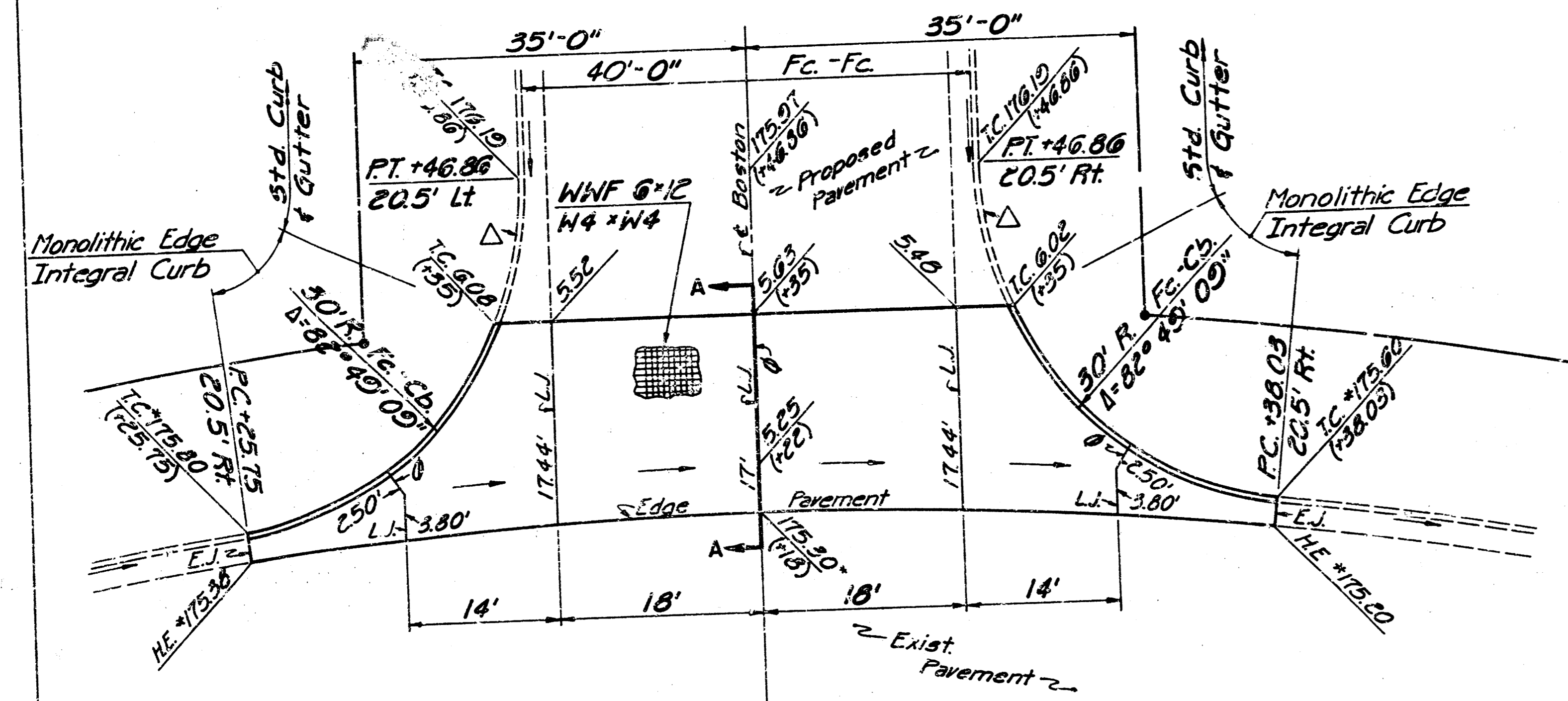
SHEET NO.	TOTAL SHEETS
3	9



TYPICAL SECTION
 4" ASPHALTIC CONCRETE PAVEMENT WITH BITUMINOUS BASE
 Sta. 10+46.86 to Sta. 10+75 Trans. from 3/8" / Ft. X-Slope to 1/4" / Ft. X-Slope.
 Sta. 16+31.86 to Sta. 16+49.25 Trans. from 3/8" / Ft. X-Slope to 1/4" / Ft. X-Slope.

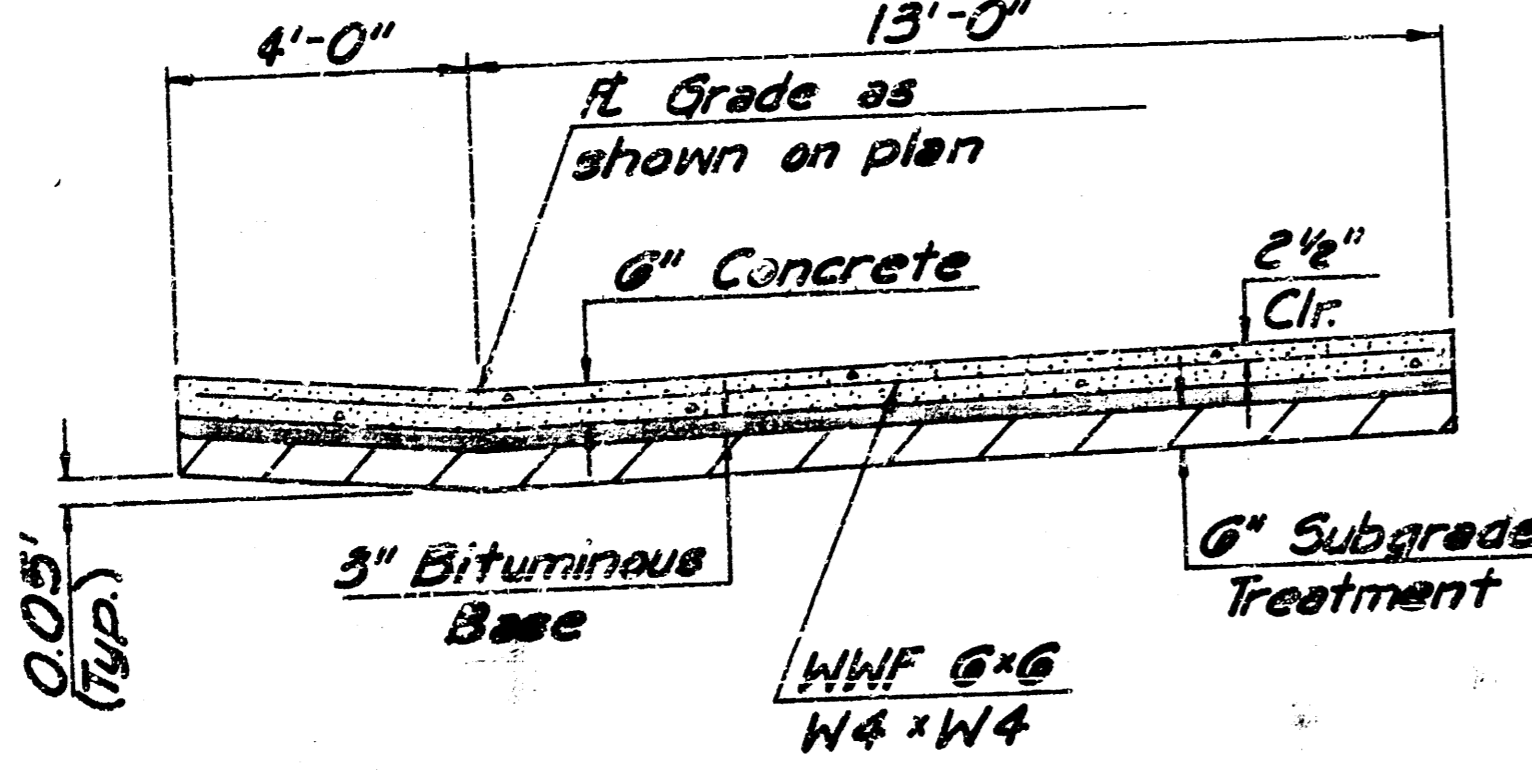
GENERAL NOTES

- CONTRACTION JOINTS MAY BE CONSTRUCTED IN INTEGRAL CURB BY SAWING WITH AN APPROVED CONCRETE SAW. THE SAW SHALL EXTEND THROUGH THE CURB TO THE PAVEMENT. SAWED CONTRACTION JOINTS SHALL HAVE A MAXIMUM SPACING OF 10'.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH APPLICABLE STATE LAWS.
- CONTRACTOR SHALL VERIFY DRIVE WIDTH AND LOCATION WITH PROPERTY OWNER PRIOR TO CONSTRUCTION OF DRIVE SHOWN AT STA. 13+29 LT.
- ADEQUATE TRAFFIC CONTROL SHALL BE PROVIDED ON BRECKENRIDGE AND ON WEBB ROAD IN THE VICINITY OF BOSTON STREET DURING CONSTRUCTION.
- THE 15" CMP TO BE INSTALLED AT STA. 16+79 SHALL BE 16 GAUGE (MINIMUM).

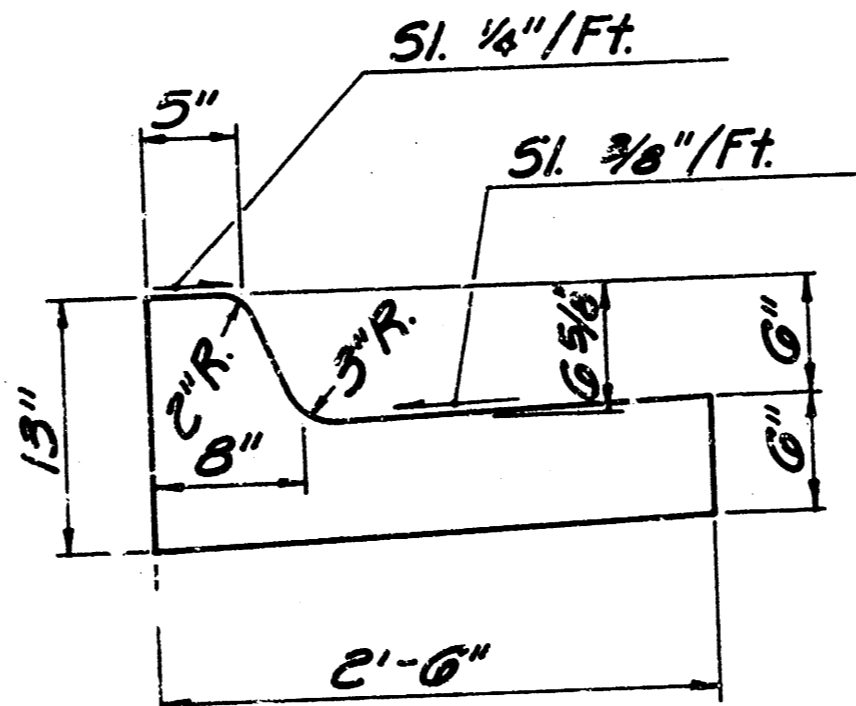


VALLEY GUTTER

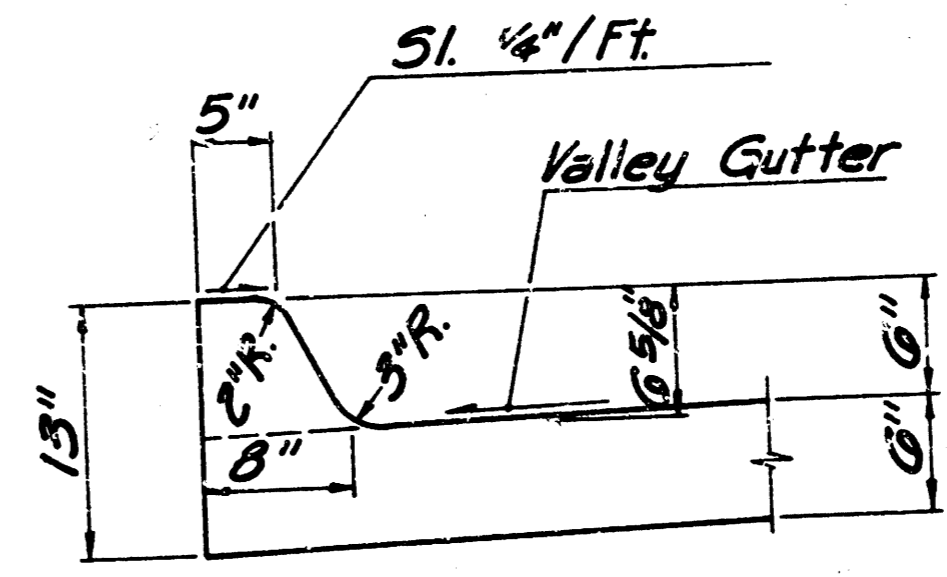
*Match Exist Elevations
 †Omit tie bars
 Δ Sta. 10+35 to Sta. 10+46.86
 Curb & Gutter Lt & Rt shall be paid for as Std. Combined Curb & Gutter.



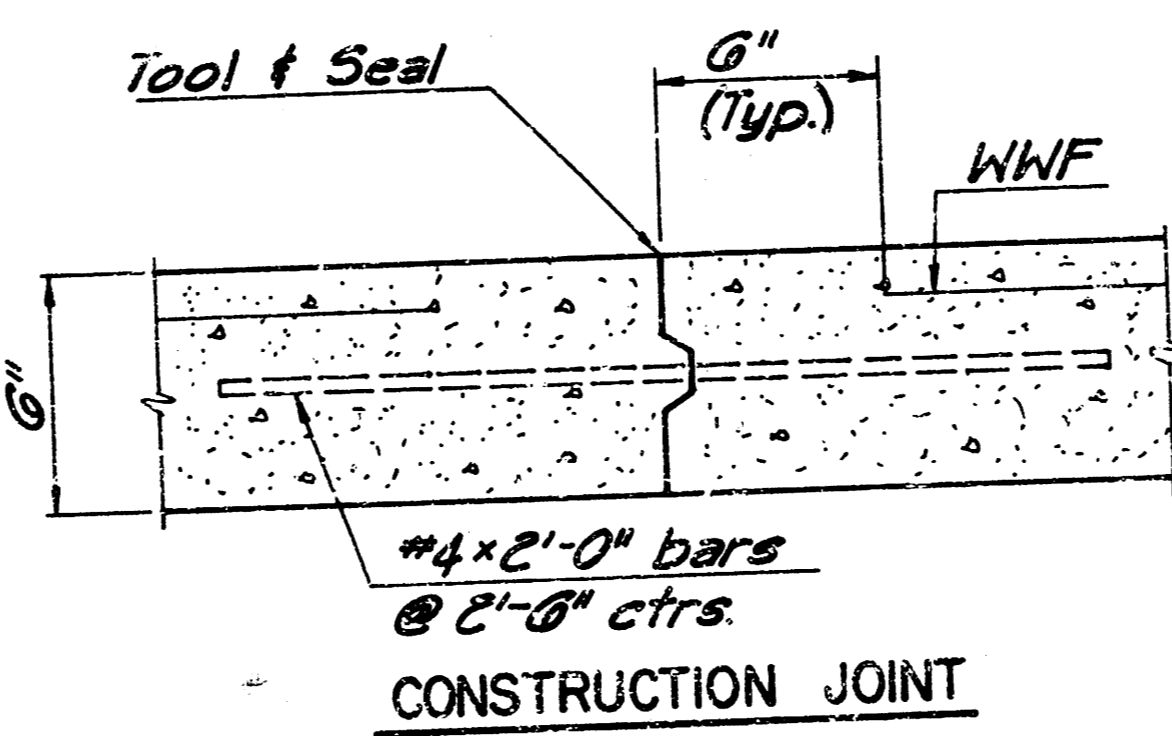
SECTION A-A



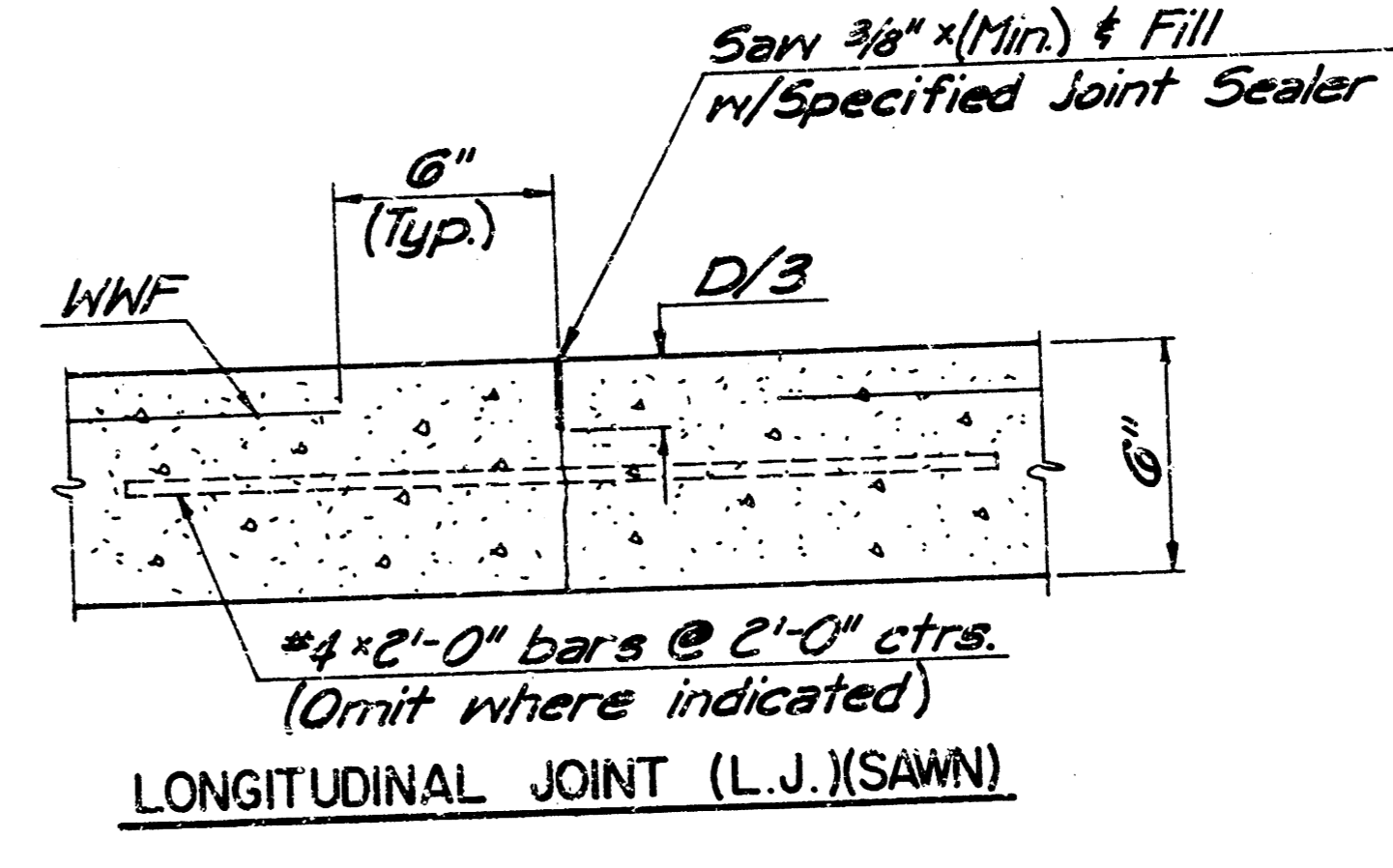
STANDARD CURB & GUTTER DETAIL



STANDARD INTEGRAL CURB DETAIL (Monolithic Edge)



CONSTRUCTION JOINT



LONGITUDINAL JOINT (L.J.) (SAWN)

VALLEY GUTTER JOINT DETAILS

CITY OF WICHITA, KANSAS

MISCELLANEOUS DETAILS

STREET IMPROVEMENTS

PROJ. NO. 472-76-245-80505-000-000-001

ENGINEERS
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 WICHITA, KANSAS

3/9

Designed by _____ Checked by _____
 Drawn by B5 Date July, 1984 Job No. 84263

INTERSECTION QUANTITIES

- Concrete Pavement
- Asphaltic Conc. Pavement (7" Bituminous Base)
- Bituminous Base
- Manhole Curb & Gutter
- Monolithic Edge Curb
- 4" Wheelchair Ramp
- 4" Walk
- Excavation
- Compacted Fill
- Reinforcing Steel
- Manhole
- Manhole
- Concrete
- Asphaltic Concrete Base

Scale: 1" = 20'

Const. 9" Valley Gutter See Sheet No. 3

Sta. 10+00 Boston Sta. 4+81.89 & Breckenridge

See Sheet No. 3 for Spot Elevations

Curb & Gutter Removal

UTILITIES
 Water City of Wichita
 San Sewer City of Wichita
 Gas Gas Services Co.

CURVE DATA BASED ON RADIUS Δ/2 = 16° 51' 32"

STATION	ARC LENGTH	CHORD LENGTH	DEFLECTION ANGLE	TOTAL DEFLECTION
		Δ OFF LEFT FACE CURB	Δ OFF RIGHT FACE CURB	
11+81.06				0° 00' 00"
12+00	18.94	20.16'	17.7E'	1° 14' 50"
12+25	25.00	26.61'	23.30'	2° 53' 38"
12+50	"	"	"	4° 32' 25"
12+75	"	"	"	6° 11' 12"
13+00	"	"	"	7° 49' 59"
13+25	"	"	"	9° 28' 46"
13+50	"	"	"	11° 07' 33"
13+75	"	"	"	12° 46' 20"
14+00	"	"	"	14° 25' 08"
14+25	25.00'	26.61'	23.30'	16° 03' 55"
14+51.99	6.99'	7.46'	6.54'	16° 31' 32"

Curve Data
 Δ = 33° 03' 03"
 D = 13° 10' 17"
 R = 435.00'
 T = 129.06'
 L = 250.93'
 E = 18.78'

CITY OF WICHITA, KANSAS

BOSTON
 STA. 10+00 TO STA. 14+31.99

PROJ. NO. 472-76-245-80505-000-C00-001

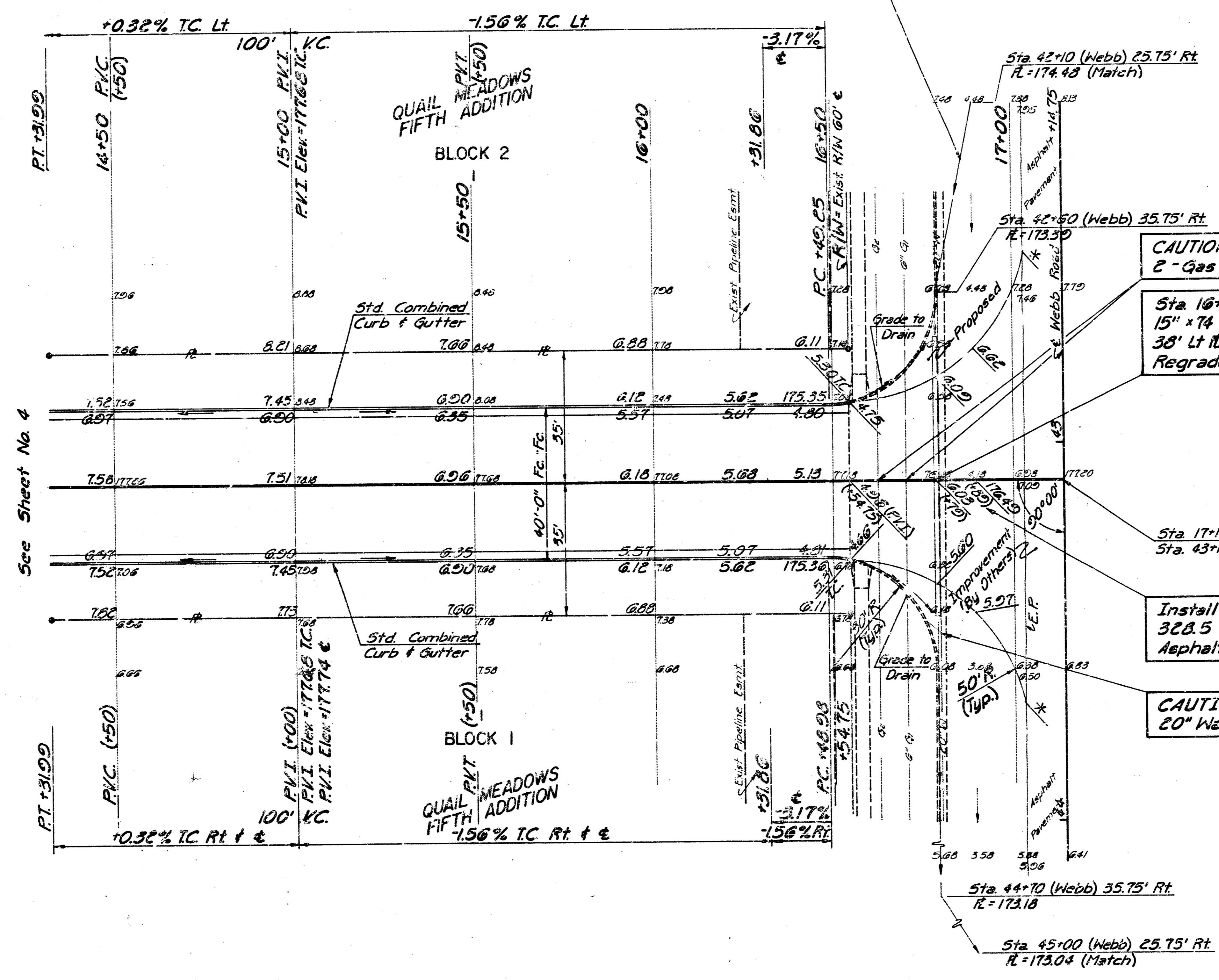
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

ENGINEERS
 WICHITA, KANSAS

Designed by **BB, BER** Checked by
 Drawn by **BS** Date **July, 1984** Job No. **84263**

SHEET NO.	TOTAL SHEETS
5	9

Scale: 1"=20'



Grade Ditch to Drain.
This work to be subsidiary to C.M.P.

CAUTION!
2" Gas Lines

Sta 16+10, Install
15" x 14 L.F. C.M.P.
38' Lt R=173.38, 38' Rt R=173.30
Regrade Dt. Lt. & Rt.

CAUTION!
20" Water Line

NOTE: 15" C.M.P. MAY BE 1/2 GAUGE.
15" R.C.P. MAY BE SUBSTITUTED
FOR 15" C.M.P. AT CONTRACTOR'S
OPTION.

See Sheet No. 4

* Match Exist.

UTILITIES

Water City of Wichita
San Sewer City of Wichita
Gas Gas Service Co
Cable Cities Service

CITY OF WICHITA, KANSAS

BOSTON
STA. 14+31.99 TO STA. 17+14.75

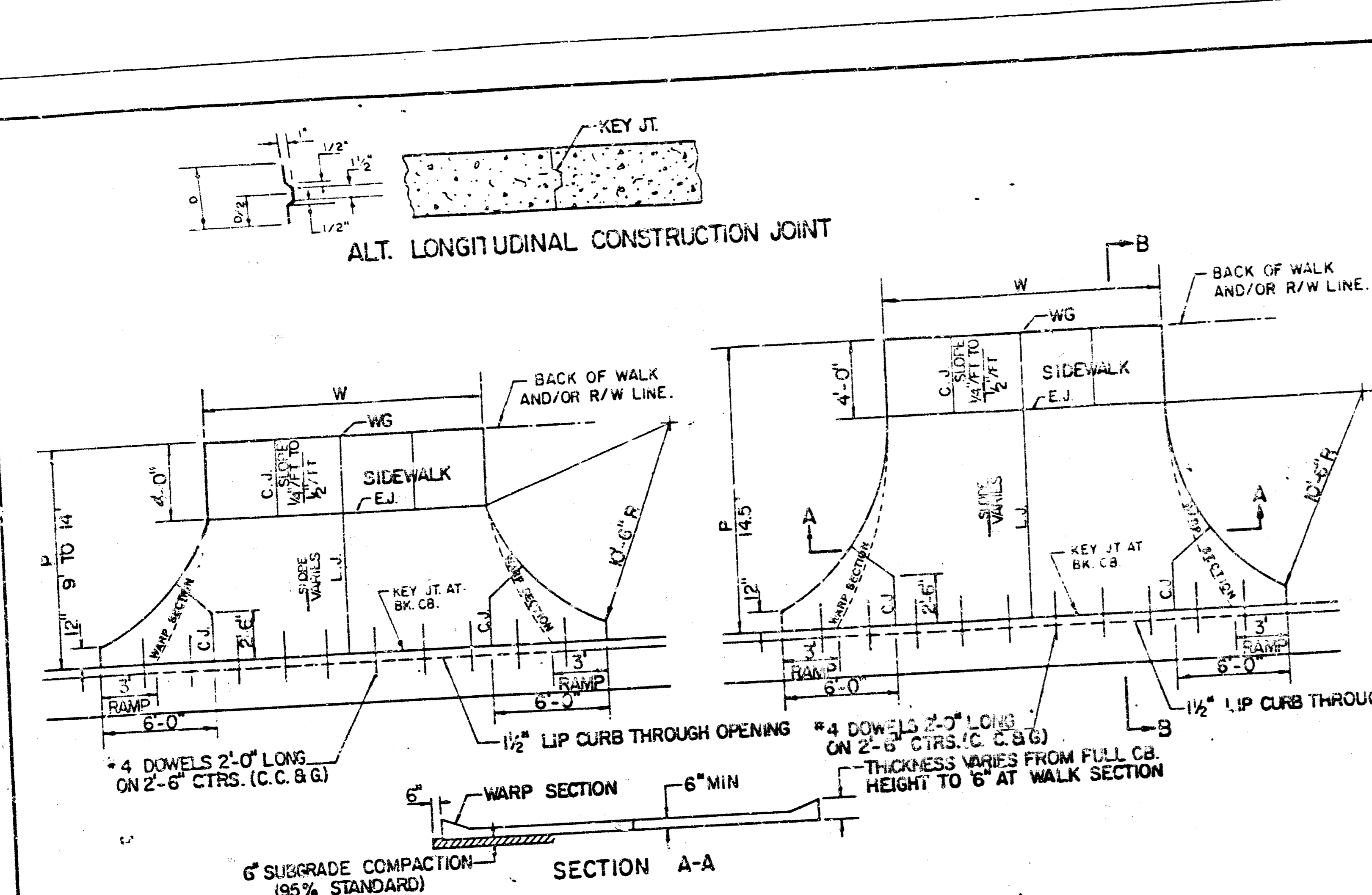
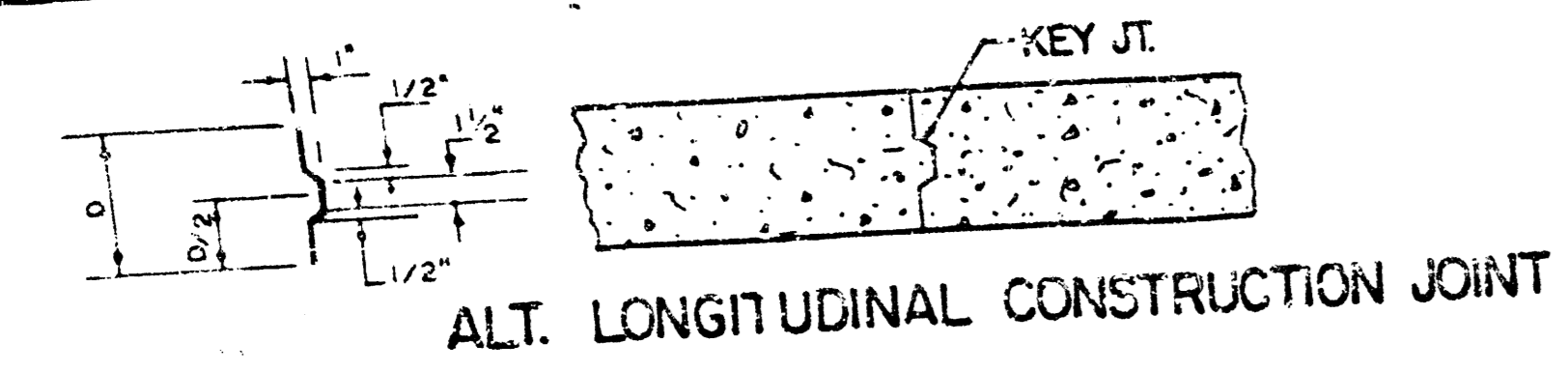
PROJ. NO. 472-76-245-80503-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed by	BB, BER	Checked by	
Drawn by	BS	Date	July, 1964

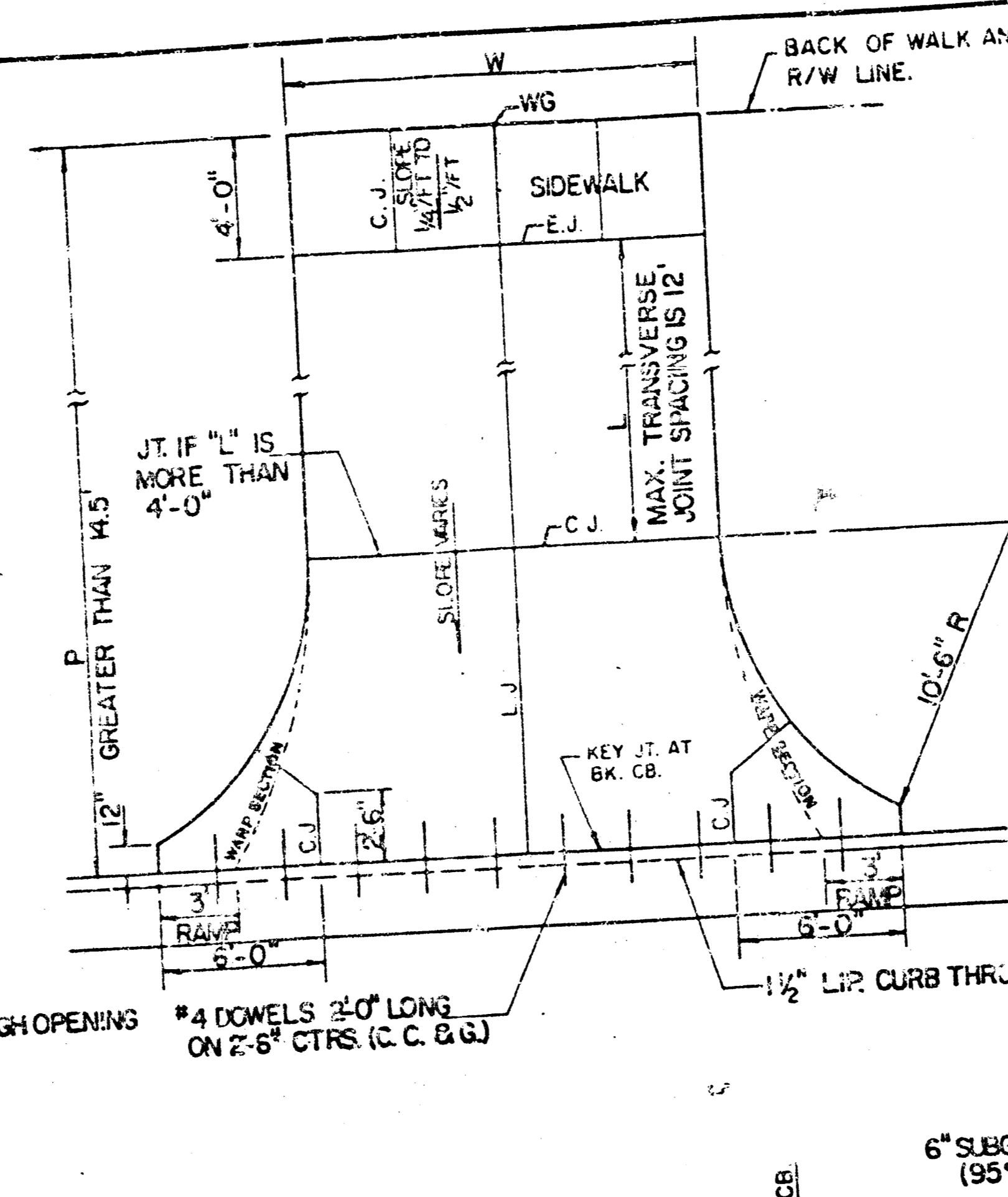
Job No. 64263

SHEET NO.	TOTAL SHEETS
6	9



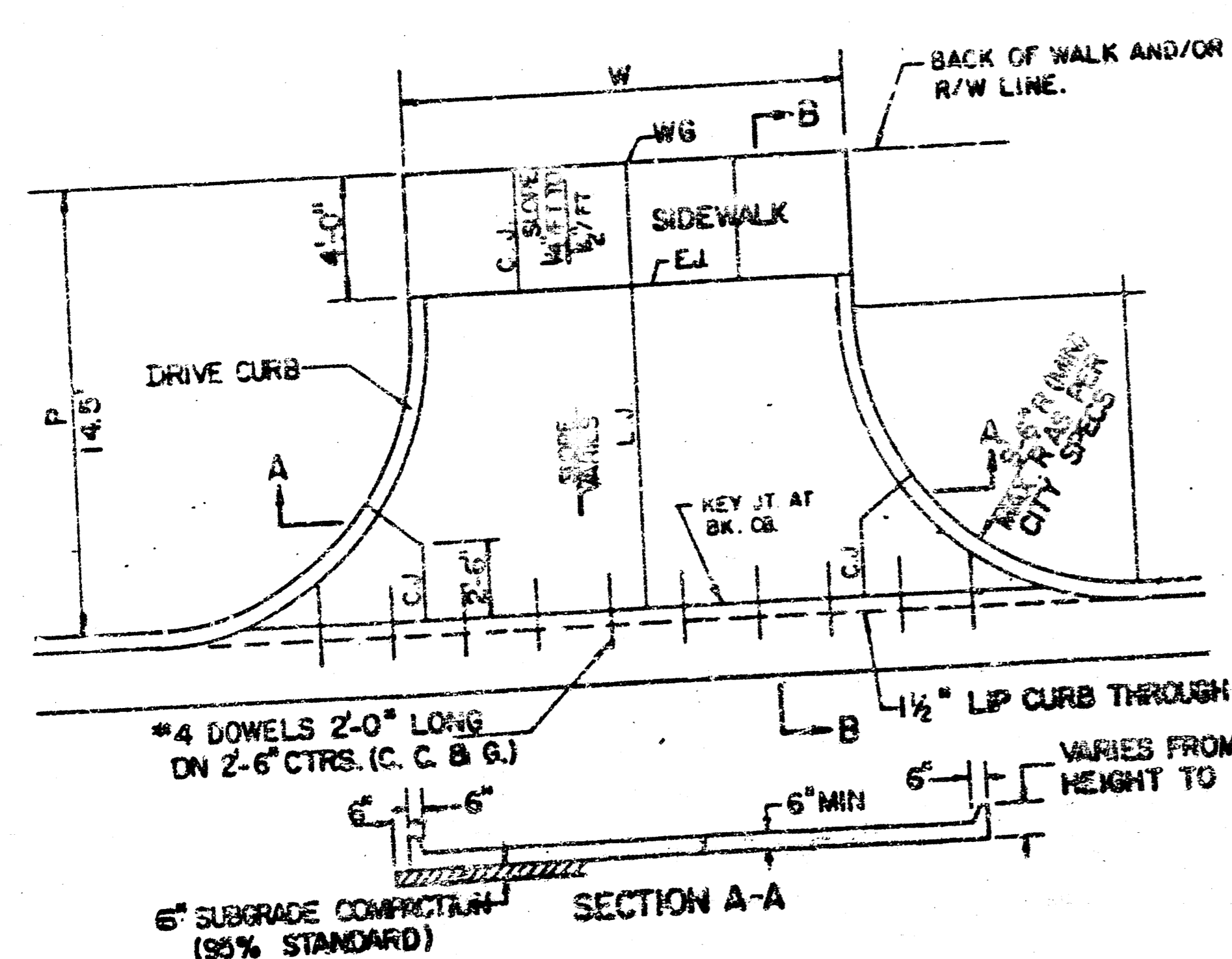
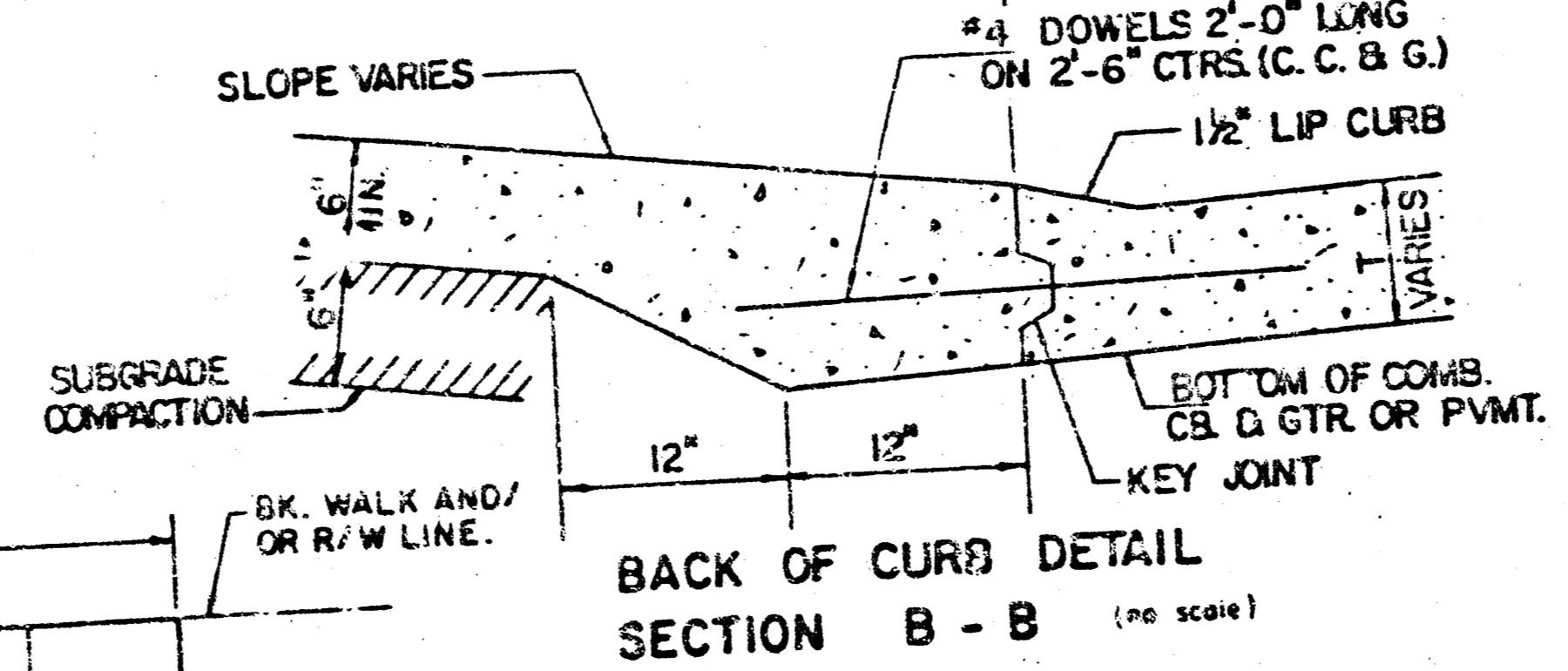
PARKING WIDTH "P"	9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CURB	0.35	0.35	0.40	0.45	0.50	0.60	1.35	1.85	2.35	2.85	3.35	3.85	4.35
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CURB	0.19	0.21	0.23	0.25	0.27	0.30	1.04	1.30	1.56	1.82	2.08	2.34	2.60
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CURB	-1.9	-1.8	-1.7	-1.6	-1.5	-1.4	0.00	0.00	0.15	0.25	0.35	0.45	0.55
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CURB	-1.9	-1.8	-1.7	-1.6	-1.5	-1.4	0.00	0.00	0.15	0.25	0.35	0.45	0.55

RADIUS RAMP DRIVES (P=9.0' & GREATER)



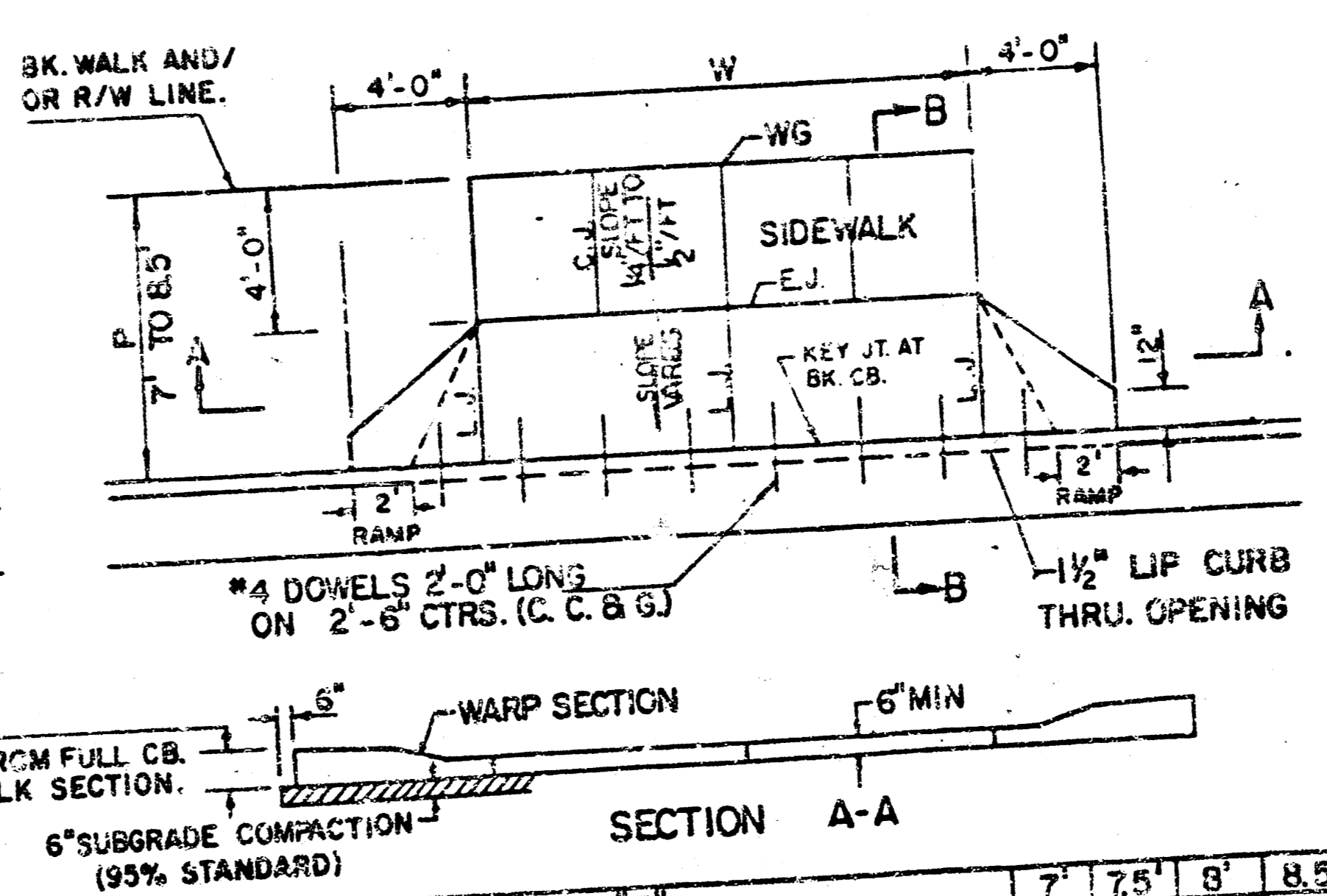
PARKING WIDTH "P"	4'	4.5'	5'	5.5'	6'	6.5'
DIST. OF PT. "T" ABOVE TOP OF FULL CB.	0.08	0.09	0.10	0.12	0.13	0.14
DIST. OF PT. "T" BELOW TOP OF FULL CS.	-0.26	-0.24	-0.22	-0.20	-0.18	-0.16

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



PARKING WIDTH "P"	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.60	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.	0.10	0.42	0.62	0.82	1.02	1.22	1.42	1.62
OPTIMUM 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
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.	0.50	1.00	1.50	2.00
OPTIMUM MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00	0.17	0.20	0.30
OPTIMUM MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.15	0.18	0.17	0.17
ABSOLUTE MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	-0.25	-0.20	-0.20	-0.20

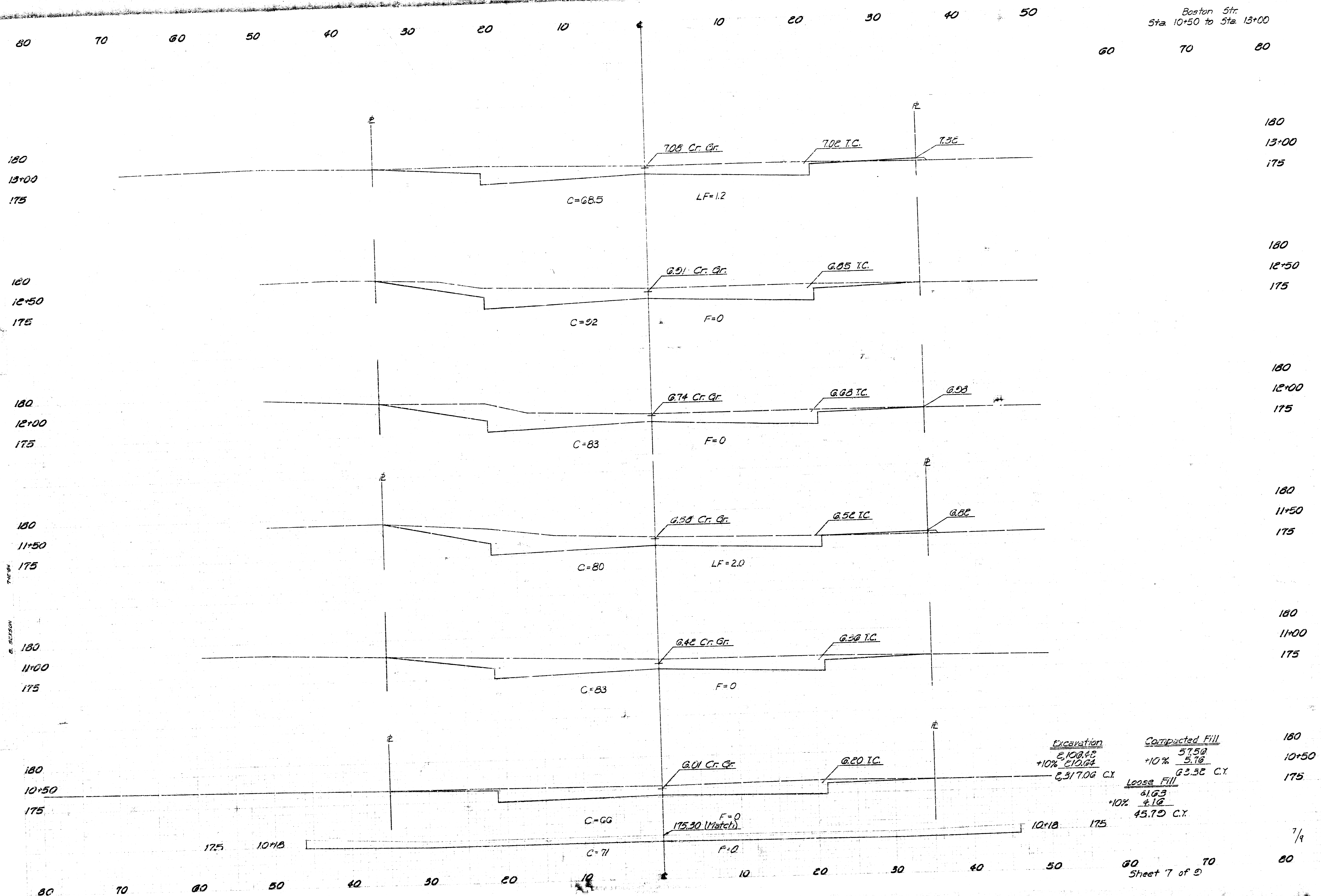
FULL RAMP DRIVE (P=7.0' TO 8.5')

- 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 "P" DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A "P" DIMENSION GREATER THAN 24'.
 - DRIVEWAY WIDTH (DIMENSION "P" 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 5/2' 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 WHEREVER DRIVE CONSTRUCTION ADJUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ADJUTS THIS LINE ADJUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSIONS.
 - 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 #3 BARS HELD 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 WHENEVER 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.

SCALE: 1"=5'

STANDARD DRIVE ENTRANCES
FULL HEIGHT CURB
 CITY OF WICHITA, KANSAS
 PROJECT NUMBER
 472-76-245-80505-000-000-001

Boston Str
Sta 10+50 to Sta 13+00



D. ANDERSON
 & S. J. BROWN
 CIVIL ENGINEERS
 100 N. BOSTON ST.
 BOSTON, MASS.

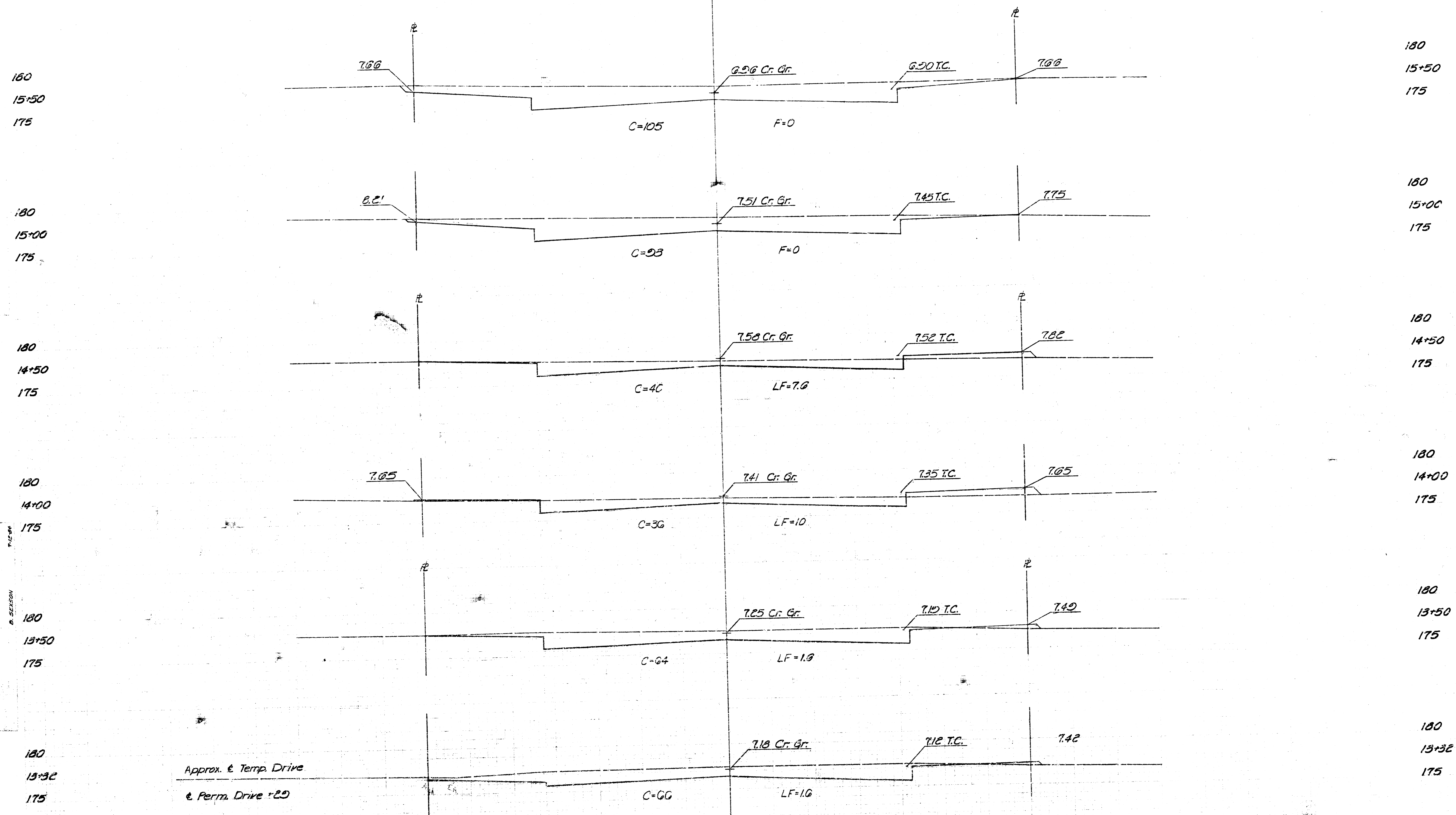
Sheet 7 of 9

FILMED FROM THE BEST

Easton Str.
Sta. 13+32 to Sta. 15+50

80 70 60 50 40 30 20 10 0 10 20 30 40 50

60 70 80



SUPERVISOR
 S. SECTION
 8-5-50
 P. 10-10-50

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

