STREET & STORM SEWER IMPROVEMENTS

31ST STREET SOUTH

Project Number

472-76-245-82056-000-000-001

Index Code

763862

CITY OF WICHITA, KANSAS

Michael E. Lindebak, City Engineer

August, 1996

General Notes

1. Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

   Kansas One-Call 687-2470

   The Contractor must notify the following in case of an emergency:

Cablevision	262-4270
or	263-2061
K.P.L. Gas Service Company	263-7511
Kansas Gas & Electric Company	264-1141
Peoples Nat. Gas Company	942-8350
Southwestern Bell Telephone Company	1-571-2611
City of Wichita Water Department	268-4908
City of Wichita Sewer Maintenance	268-4071

2. Utility service lines, poles, valve boxes, meters, and etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

3. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiles or disposed of in a flood plain would a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.

4. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

5. Limits of earthwork shall match existing ground elevations at the right-of-way line unless otherwise noted on the plans with a new finished grade elevation. When a new finished grade elevation is shown, the earthwork shall extend one foot beyond the right-of-way line and then sloped up or down using permissible slopes to match the existing ground surface.

6. No more than 2 drives 30 feet in width are to be constructed with this project. Driveway locations shown on the plan are tentative. The Contractor will be required to obtain a properly executed driveway request form signed by the property owner or his authorized representative verifying such driveway locations. Such forms shall be submitted to the Engineer for his review & approval.

7. Prior to excavation removal from the site, the Contractor shall contact Marvin Knetter at 943-1229 for placement of excess excavation.

8. The Contractor shall make every effort to maintain business access during construction by means of special provisions, phasing, or other accomodations necessary to carry traffic through construction. Subject to the Engineer's approval.

9. All areas disturbed by the Contractor's construction operations shall be seeded with Rye Grass at the rate of 2 lbs. per 1000 sq. ft. and mulched at the standard rate. Contractor to prepare the ground for seeding as per City Specifications.

10. The Contractor shall be responsible for preserving property irons. The Contractor will 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 in accordance with state law.

11. The Contractor shall give all property owners and/or tenants of developed property abutting the project limits a minimum of five (5) days notice prior to the start of construction.

12. A saw cut of at least one-half the depth of existing surface courses or one-fourth the depth of the existing total pavement thickness shall be provided at locations where proposed construction abuts an an existing surface course or pavement for which partial removal of that surface or pavement is required. Sawed joint to facilitate removal within three (3) feet of existing joints will not be permitted and for such instances the limits of removal shall extend to the existing joint. Such saw cuts will not be paid for directly and this cost shall be considered as subsidiary to the removal of the surface or pavement.

The Paving Contractor who is awarded the project is responsible for:

1) Purchasing all materials necessary for the at grade crossing either through direct acquisition or reimbursement to Kansas Southwestern Railway (KSW) at an approximate cost of One hundred & twenty-five dollars ($125.00) per linear foot of crossing measured along the tracks. Such material shall be approved by Mr. Ron Price of KSW Railway or his authorized representative.

2) Reimbursement to KSW Railway for a flagman at a rate of Twenty-five dollars ($25.00) per hour for all times that the Contractor is required to work within fifteen (15) feet of either rail.

3) Coordinating the project construction with KSW Railway including

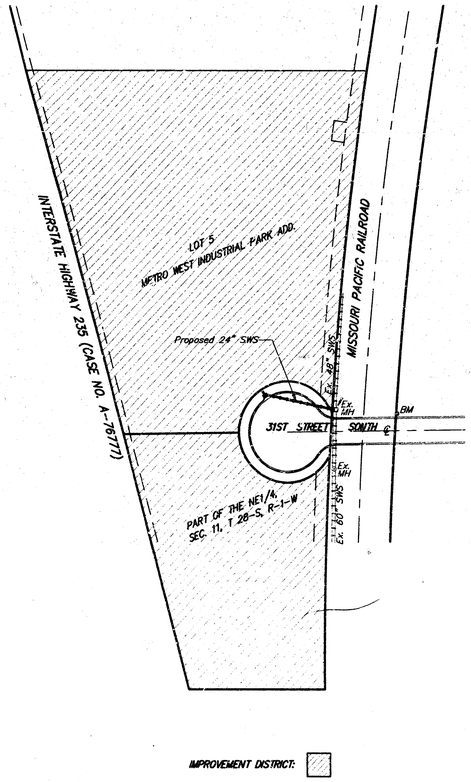
- a: 48 hours minimum notification
- b: Submittal of the Contractor's proposed work schedule
- c: Immediate notification to KSW Railway in an emergency

Kansas Southwestern Railway shall be responsible for:

1) Installation of the crossing material including all labor & equipment necessary to perform such operations

2) Providing the Paving Contractor with a Flagman when required.

3) Providing the Paving Contractor a telephone number to contact KSW Railway in the event of an emergency.



IMPROVEMENT DISTRICT:

BENCHMARKS:

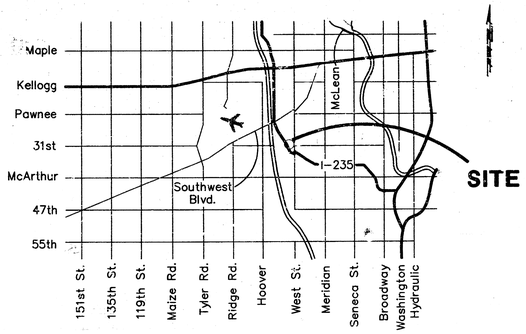
#1 R.R. Spike in S. Side of Power Pole 51.5' E. of ℄ Railroad Tracks & 25.0' N. of ℄ 31st Street S. Elev= 103.83 City Datum

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3 Standard Drive Details
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5 Storm Water Sewer Plan
6 RR Crossing Detail Sheet
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8 Curb Inlet Details
9 Earthwork

Scale: 1" = 100'

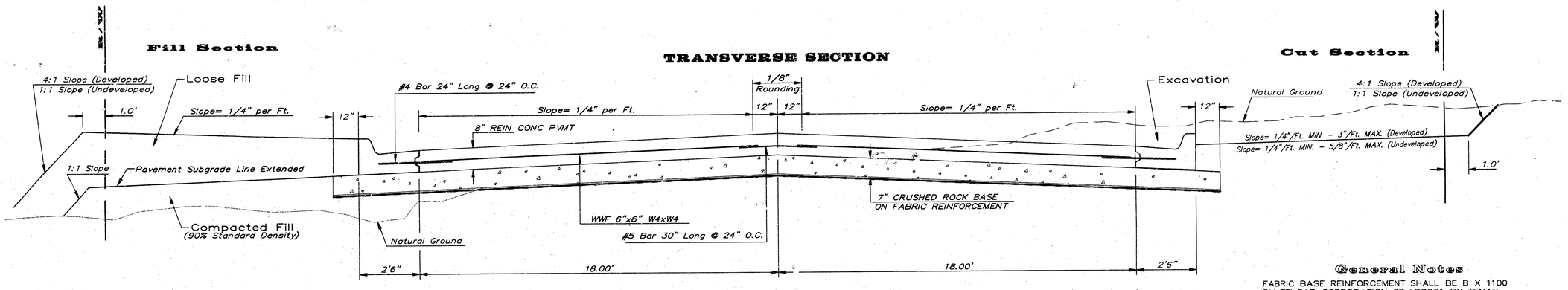
Location Map





BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

TYPICAL 41' B-B PAVEMENT DETAILS



General Notes

FABRIC BASE REINFORCEMENT SHALL BE B X 1100 BY TENSAR CORPORATION OR LBO201 BY TENAX CORPORATION OR APPROVED EQUAL. FABRIC BASE REINFORCEMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

ROCK BASE IS TO BE COMPACTED AND SMOOTHED WITH A STEEL FACED ROLLER PROIR TO PLACEMENT OF CONCRETE.

CONCRETE USED IN PAVING SHALL CONFORM TO CITY OF WICHITA STANDARD SPECIFICATIONS FOR CONCRETE PAVEMENT.

REINFORCING STEEL SHALL CONFORM TO THE RQMTS. ESTABLISHED IN THE LATEST REVISION OF A.S.T.M. DESIGNATION A-615. WELDED STEEL WIRE FABRIC USED AS REINFORCEMENT FOR CONCRETE SHALL CONFORM TO THE LATEST REVISION OF A.S.T.M. DESIGNATION A-185

BAR & FABRIC REINFORCEMENT WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE INCLUDED IN THE BID PRICE FOR THE CONCRETE WORK INVOLVED.

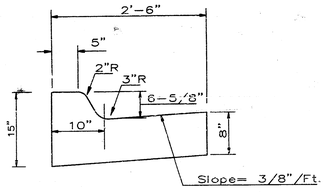
BAR REINFORCEMENT ALONG CURB & GUTTER MAY BE OMITTED IF THE CURB SECTION IS POURED MONOLITHICALLY WITH THE PAVEMENT OR WITH ENGINEER'S APPROVAL.

CRUSHED ROCK GRADATION REQUIREMENTS

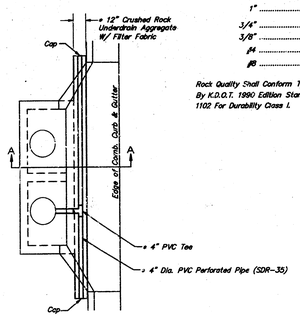
PERCENT BY AGGREGATE RETAINED

2-1/2"	0
3/4"	20 - 60
#4	50 - 80
#40	80 - 94
#200	90 - 98

ROCK QUALITY SHALL CONFORM TO THE REQUIREMENTS SPECIFIED BE THE KDOT 1990 EDITION STANDARD SPECIFICATION SUBSECTION 1102 FOR DURABILITY CLASS I.



COMBINED CURB & GUTTER



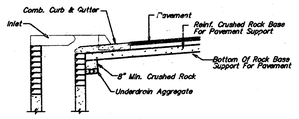
PLAN

* UNDERDRAIN AGGREGATE
Percent of Aggregate Retained

1"	0
3/4"	0 to 10
3/8"	45 to 00
#4	90 to 100
#8	95 to 100

Rock Quality Shall Conform To The Requirements Specified By K.D.O.T. 1990 Edition Standard Specification Subsection 1102 For Durability Class I.

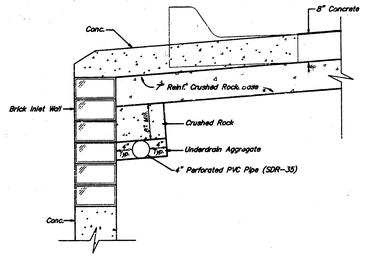
NOTE: Place 4" PVC Perforated Pipe at all drainage pump locations.
Cost of Underdrain System to be incidental to the Reinforced Crushed Rock Subgrade.
Inlet Type May Vary From That Shown.



(Min. 16 Perforations Per Lin. Ft. @ 1/4" Dia.) Perforations To Be on Bottom Half

SECTION A--A

PAVEMENT UNDERDRAIN DETAIL
NOT TO SCALE



TRENCH DRAIN DETAIL
NOT TO SCALE

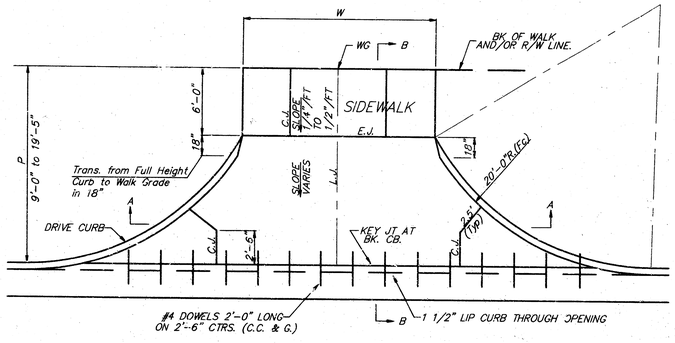
8 INCH REINF. CONCRETE PAVEMENT
w/ 7" Crushed Rock Base on Fabric Reinforcement
City of Wichita, Kansas

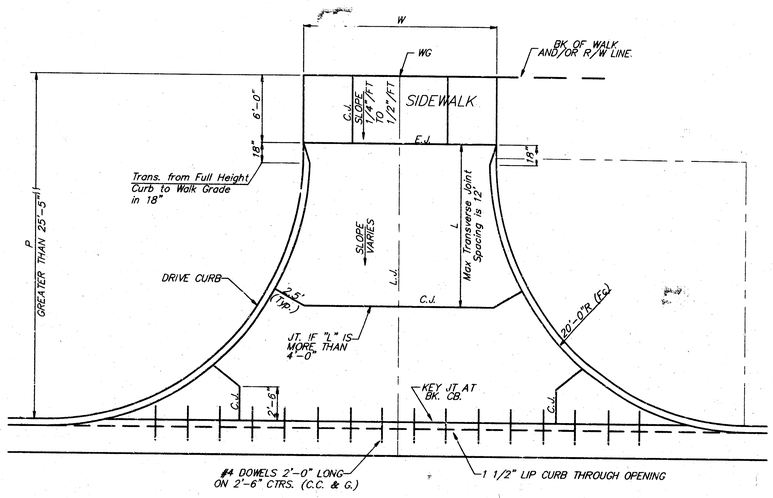
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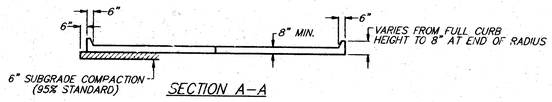
PROJECT NUMBER				SHEET
472-78-245-82058				2 OF 9
DESIGN: Staff	DRAWN: Staff	APPROVED	DATE	SCALE

TYPICAL DRIVE ENTERANCES

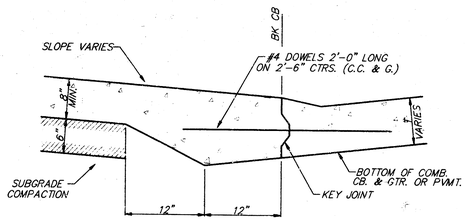
RADIUS RAMP DRIVES (P = 9.0' & GREATER)







SECTION A–A



BACK OF CURB DETAIL
SECTION B–B (NO SCALE)

PARKING WIDTH "P"	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE MAX. DIST. OF P.T. "WG" ABOVE TOP OF FULL CURB	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM MAX. DIST. OF P.T. "WG" ABOVE TOP OF FULL CURB	0.70'	1.04'	1.30'	1.56'	1.82'	2.08'	2.34'	2.60'
OPTIMUM MIN. DIST. OF P.T. "WG" ABOVE TOP OF FULL CURB	0.30'	0.42'	0.52'	0.62'	0.72'	0.82'	0.92'	1.02'
ABSOLUTE MIN. DIST. OF P.T. "WG" ABOVE TOP OF FULL CURB	0.00'	0.00'	0.15'	0.25'	0.35'	0.45'	0.55'	0.65'

FULL RADIUS DRIVES (P = 14.5' & GREATER)

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.
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 24' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 70' AT THE STREET CURB LINE.~~
4. 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.
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 8" IN THICKNESS AND SHALL BE WITH REINFORCEMENT. DRIVEWAYS MAY BE CONSTRUCTED THICKER THAN 8" WITH 6"X12" W4–W4 WELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEERS CONCURRENCE. NO EXTRA PAYMENT WILL BE MADE FOR DRIVEWAYS THICKER THAN 8".
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.

Standard Detail Drawing

TYPICAL DRIVE ENTRANCES
FULL HEIGHT CURB
SCALE: 1" – 5'
City of Wichita, Kansas
Project Description: 3
31ST STREET SOUTH 9

BENCHMARK:

#1 R.R. Spike in S. Side of Power Pole 51.5' E of ℄ Railroad Tracks & 25.0' N. of ℄ 31st Street S. Elev= 103.83 City Datum

SECTION 1
MO PAC INDUSTRIAL PARK ADD.

LOT 5
METRO WEST INDUSTRIAL PARK ADD.

SCALE:
1" = 20'
• = IRON

Sta. 2+56.64
Sta. 3+34.10
Sta. 3+71.61 End Pavm't
Sta. 3+75.54 ℄ Tracks

+ 1.18%
+ 1.56%
+ 1.68%
+ 0.50%
+ 0.77%

45°
54°37'24"
26°37'27"

50' Rail Road R.O.W
50' Rail Road R.O.W
KANSAS SOUTHWESTERN RAILWAY
75'R. R.O.W
50' ROW
30' UTIL ESMT
60'R. Fc.
30'R
40' fc-fc

INTERSTATE HIGHWAY 235

Sta. 0+00
Iron @
R.O.W Line

31ST ST. SO. CIR.

Install 50 L.F. Precast Concrete Crossing Planks as Approved by KSW Railway to Match Crossing Grade. Crossing to be Installed by Kansas Southwestern Railway. Contractor Shall Purchase or Reimburse KSW RR for Crossing Material. Contact Ron Price, Rail Master @ 263-3240 a Minimum of 5 Days Prior to Construction.

Construct 6" Temp. Asphalt Pavement Hook-Up Section to Match Existing Pavement. Saw & Remove 6" Existing Pavement. Saw Cutting & Removal INCIDENTAL to 6" Temp. Pavement

STA 4+76, 15' LT
Install 1 W14-2
See Detail

Const. Std. Type 1A Inlet Hook-Ups

Construct Std. Combined Curb & Gutter (6 5/8")

60d Nail in Top Fence Post
N20000
E20000

Construct 30' Wide 8" Reinforced Concrete Drive Approoch as Shown

Remove A.C. Pavement as Necessary Cost to be INCIDENTAL to bid item "ROW CLEARING & SITE PREPARATION"

Depress Curb Thru Walk Section

Construct 30' Wide 8" Reinforced Concrete Drive Approach as Shown

Construct 8" Reinforced Concrete Pavement over 7" Reinf. Crushed Rock Base

Remove 10'± Section of Asphalt Pavement as Shown. Construct Reinf. Concrete Approach Section to Crossing. (See Detail) Cost of Asphalt Removal Shall be INCIDENTAL to Project Cost.

Transition: From Full Height Curb to Zero Height Curb in 10' as Shown (Typical Both Sides) Paid for as L.F. CURB & GUTTER

CAUTION!
2" Peoples Gas Line
16" A.C. Water L..s
Verify Location

Telephone Pole to be Relocated by "Others" Prior to Construction. Contact John Short @ SWB Telephone @ 268-2102 for Relocation.

N19961.54
E19672.46
N19964.24
E19928.96

PART OF THE NE1/4,
SEC. 11, T 28-S, R-1-W

SIGN DETAIL

NO OUTLET
W14-2
(30"x30")

31st Street South
PAVING PLAN
Cul D Sac

BAUGHMAN COMPANY P. A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

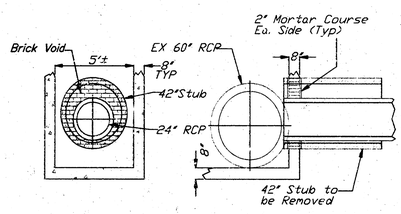
PROJECT NUMBER	SHEET
472-76-245-82056	4 OF 9

DESIGN	DRAWN	APPROVED	DATE	SCALE
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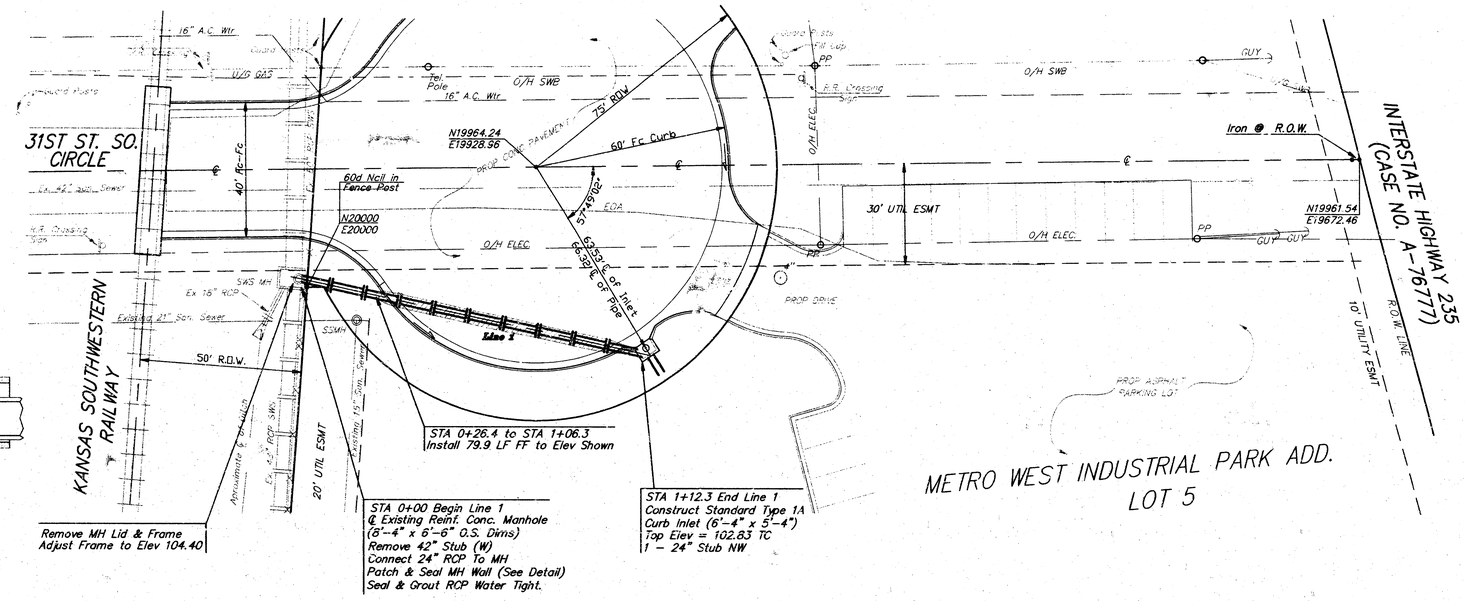
96-104-E.DGN
Microstation Ver.4

BENCHMARK:

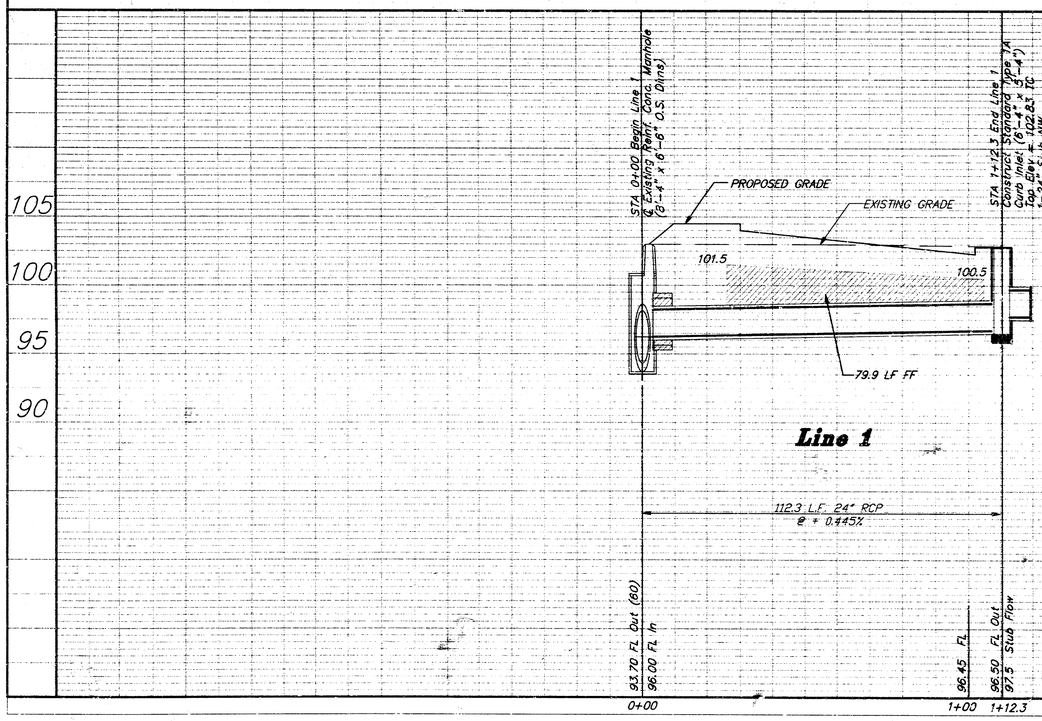
#1 R.R. Spike in S. Side of Power Pole
51.5' E of ℄ Railroad Tracks
& 25.0' N. of ℄ 31st Street S.
Elev= 103.83 City Datum



CONNECTION DETAIL



SCALE:
1" = 20' Horiz.
1" = 5' Vert.
● = IRON



31st STREET SOUTH

SWS PLAN

BAUGHMAN COMPANY P. A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7221 • 319 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER	SHEET
472-76-245-82056	5 OF 8

DESIGN	DRAWN	APPROVED	DATE	SCALE
JFB	TAZ		7/96	NOTED

96-04-e305
31st&Ellis\SWS

SPECIAL NOTES

CONCRETE

~~RUBBERIZED~~ CROSSING MATERIAL SUPPLIER SHALL FURNISH ALL MATERIALS AND FASTENERS NECESSARY TO PROPERLY INSTALL THE ~~RUBBERIZED~~ MATERIAL, INCLUDING RUBBER OR WOOD TIE SHIM CAP BOARD, AND ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION. ALL SUCH MATERIALS SUPPLIED BY THE ~~RUBBERIZED~~ CROSSING MANUFACTURER SHALL BE INSTALLED BY THE INVOLVED RAILROAD COMPANY OR REPRESENTATIVE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MATERIAL SUPPLIER.

INDIVIDUAL PIECES OF RUBBER OR WOOD CAP BOARDS SHALL NOT BE LESS THAN SIX (6) FEET LONG EXCEPT WHERE NECESSARY TO FURNISH ADDITIONAL PIECES TO MATCH THE ~~RUBBERIZED~~ CROSSING LENGTH. SHORTER LENGTHS OF INSTITUTIONAL PACKAGED CAP BOARD MATERIAL SHALL NOT BE LESS THAN THREE (3) FEET. RUBBER OR WOOD CAPBOARDS SHALL BE INSTALLED SUCH THAT VOIDS THAT EXISTING TIE HANGER IS CONNECTED, THERE WILL BE SMOOTH VERTICAL SURFACES FORMED AT THE JUNCTURE BETWEEN THE PAVEMENT AND THE CAP BOARD FOR THE FULL DEPTH OF THE PAVEMENT WITHOUT ANY PORTION OF CURING COMPD BEING DIRECT CONTACT WITH THE RAILROAD CROSS TIES. ONE THICKNESS OF TARPAPER SHALL BE INSTALLED BY THE PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN THE PAVEMENT AND THE RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN THE PAVEMENT AND THE RAILROAD CROSSING MATERIAL.

LOCATION OF RUBBER OR WOOD TIE SHIM CAP BOARD AS SHOWN ON DETAIL DRAWING WILL REQUIRE INSTALLATION OF REMOVED SHIMS ON THE ENDS OF RAILROAD CROSS TIES WHICH ARE LESS THAN 4' -3" FROM 8' - 6" TIES AND 4' - 6" FROM 9' - 0" TIES FROM CENTERLINE OF THE TRACK. LOCATION OF RUBBER OR WOOD TIE SHIM CAP BOARD AS SHOWN ON DETAIL DRAWINGS WILL ALSO REQUIRE SAWING ENDS OF RAILROAD CROSS TIES BE CUT OFF WHERE ENDS OF SUCH TIES ARE MORE THAN 4' - 3" FOR 8' - 6" TIES AND 4' - 6" FOR 9' - 0" TIES FROM THE CENTERLINE OF THE TRACK.

EXISTING PAVEMENT SHALL BE REMOVED BY THE PAVING CONTRACTOR. PAVEMENT IMMEDIATELY ADJACENT TO AND WITHIN THREE (3) FEET OF THE CROSSING SHALL BE REMOVED PRIOR TO THE INSTALLATION OF NEW RAILROAD CROSSING MATERIALS. PAVING CONTRACTOR SHALL COORDINATE THE ADJACENT REMOVAL AT EACH CROSSING LOCATION WITH THE INVOLVED RAILROAD COMPANY. ALL EXPANSION JOINTS BETWEEN NEW CONSTRUCTION AND EXISTING PAVEMENT, WALK OR DRIVES SHALL BE TO NEAT LINES FORMED EITHER BY SAW CUT OR EXISTING JOINT.

CONCRETE

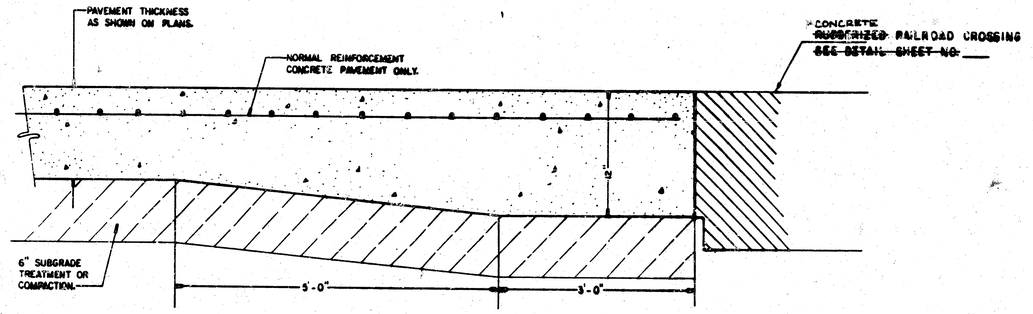
LENGTHS OF ~~RUBBERIZED~~ CROSSING MATERIAL SHOWN ON THE PLANS IN MOST CASES ARE TO EXTEND THREE (3) FEET BEYOND BOTH SIDES OF THE PAVED ROAD SURFACE AT EACH LOCATION. WOOD PLANKING SHALL BE INSTALLED BY THE INVOLVED RAILROAD COMPANY OUTSIDE THE LIMITS OF THE ~~RUBBERIZED~~ INSTALLATION FOR SIDEWALK, DRIVEWAY AND SHOULDER CROSSING WHERE NECESSARY. THE INVOLVED RAILROAD COMPANY SHALL ADJUST TRACK RAILS TO ELEVATIONS AS SHOWN ON THE PLANS FOR EACH CROSSING LOCATION. VARIATIONS FROM THE TOP OF RAIL ELEVATIONS SHOWN WILL BE PERMITTED ONLY WHEN APPROVED BY THE FIELD ENGINEER FOR ANTICIPATED TRACK SETTLEMENT.

CONCRETE

SURFACE OF NEW PAVEMENT AND ~~RUBBERIZED~~ CROSSING MATERIAL SHALL BE SET TO IDENTICAL ELEVATIONS AT THEIR POINT OF JUNCTURE ONLY WHEN THE RAILROAD COMPANY USES APPROVED MECHANICAL EQUIPMENT TO COMPACT RAILROAD FILL AND BALLAST SUCH TO PRECLUDE TRACK SETTLEMENT. RAILROAD TRACK AND ~~RUBBERIZED~~ CROSSING MATERIAL ELEVATIONS OR PAVEMENT ELEVATIONS SHALL BE ADJUSTED IN A RANGE OF ONE-FOURTH (1/4) INCH TO ONE (1) INCH TO ALLOW FOR TRACK SETTLEMENT WHEN THE RAILROAD COMPANY USES HAND METHODS FOR COMPACTION OF RAILROAD FILL AND BALLAST OR USE OF OTHER COMPACTION METHODS WHICH MAY NOT PRECLUDE TRACK SETTLEMENT. THE EXACT ELEVATION DIFFERENTIAL BETWEEN CROSSING MATERIAL AND PAVEMENT SHALL BE DETERMINED BY THE RAILROAD BASED ON THEIR EXPERIENCE FOR TRACK SETTLEMENT WITH CONCURRENCE BY THE ENGINEER.

CONCRETE

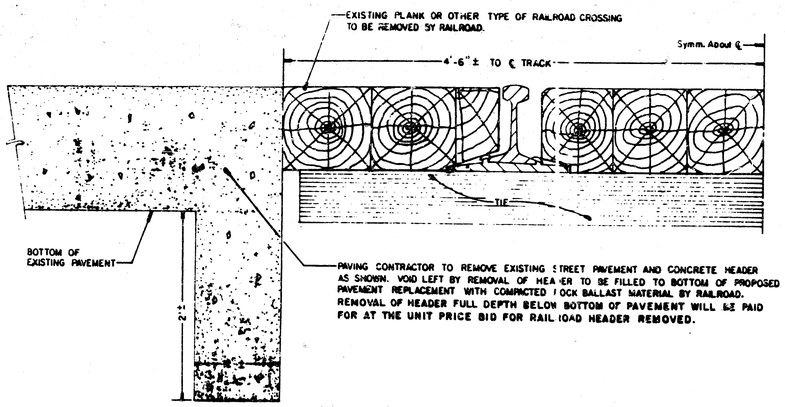
INDIVIDUAL SECTIONS OF THE ~~RUBBERIZED~~ CROSSING MATERIAL SHALL BE OFFSET AT LEAST ONE TIE SPACE FROM EACH OTHER SUCH THAT THE ENDS OF THE ~~RUBBERIZED~~ CROSSING WILL MORE CLOSELY CONFORM TO SIDEWALK OR PAVEMENT CURB ALIGNMENTS WHERE RAILROAD CROSSINGS ARE SKEWED THIRTY (30) DEGREES OR MORE TO THE STREET.



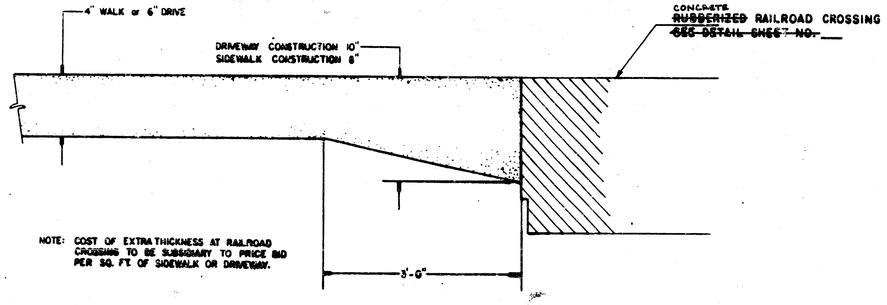
NOTE: COST OF EXTRA THICKNESS AT RAILROAD CROSSING TO BE SUBSIDIARY TO PRICE BID PER SQ. YD. OF PAVEMENT.

NOTE: ONE THICKNESS OF TAR PAPER SHALL BE INSTALLED BY PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN PAVEMENT AND RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN PAVEMENT AND RAILROAD CROSSING MATERIAL.

CROSS-SECTION DETAIL
NEW PAVEMENT CONSTRUCTION
ABUTTING ~~RUBBERIZED~~ RAILROAD CROSSING
CONCRETE NO SCALE



CROSS-SECTION DETAIL
PAVEMENT REMOVAL ABUTTING TRACKS
TO FACILITATE INSTALLATION OF
~~RUBBERIZED~~ CROSSING
CONCRETE NO SCALE



NOTE: COST OF EXTRA THICKNESS AT RAILROAD CROSSING TO BE SUBSIDIARY TO PRICE BID PER SQ. FT. OF SIDEWALK OR DRIVEWAY.

NOTE: ONE THICKNESS OF TAR PAPER SHALL BE INSTALLED BY PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN SIDEWALK OR DRIVEWAY CONSTRUCTION AND RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN THE SIDEWALK OR DRIVEWAY PAVEMENT AND RAILROAD CROSSING MATERIAL.

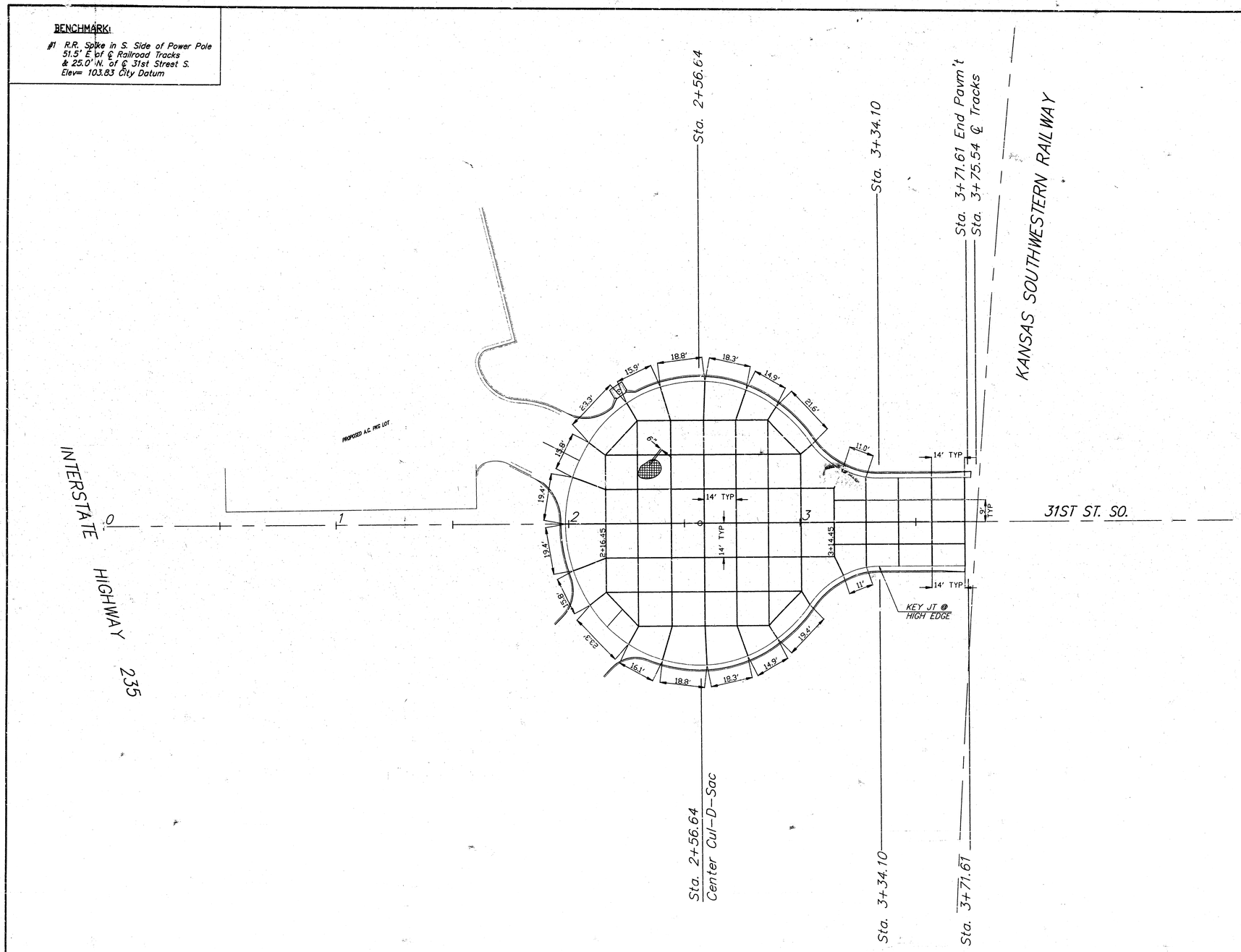
CROSS-SECTION DETAIL
NEW SIDEWALK AND DRIVEWAY CONSTRUCTION
ABUTTING ~~RUBBERIZED~~ RAILROAD CROSSING
CONCRETE
NO SCALE

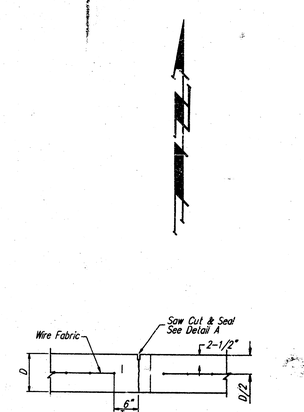
CITY OF WICHITA, KANSAS
STANDARDS FOR PAVING MODIFICATION IN CONNECTION WITH ~~RUBBERIZED~~ RAILROAD CROSSING INSTALLATION AT LOCATIONS WHERE ALL EXISTING ABUTTING PAVEMENT IS REMOVED AND RECONSTRUCTED
8" REINFORCED CONCRETE PAVEMENT

10 1 5, 52

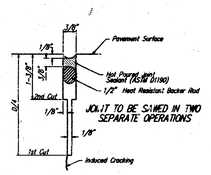
BENCHMARK:

#1 R.R. Spike in S. Side of Power Pole
51.5' E. of ℄ Railroad Tracks
& 25.0' N. of ℄ 31st Street S.
Elev= 103.83 City Datum





* All Construction Joints Shall Match Longitudinal and/or Contraction Joints As Shown On This Plan.



31st Street South

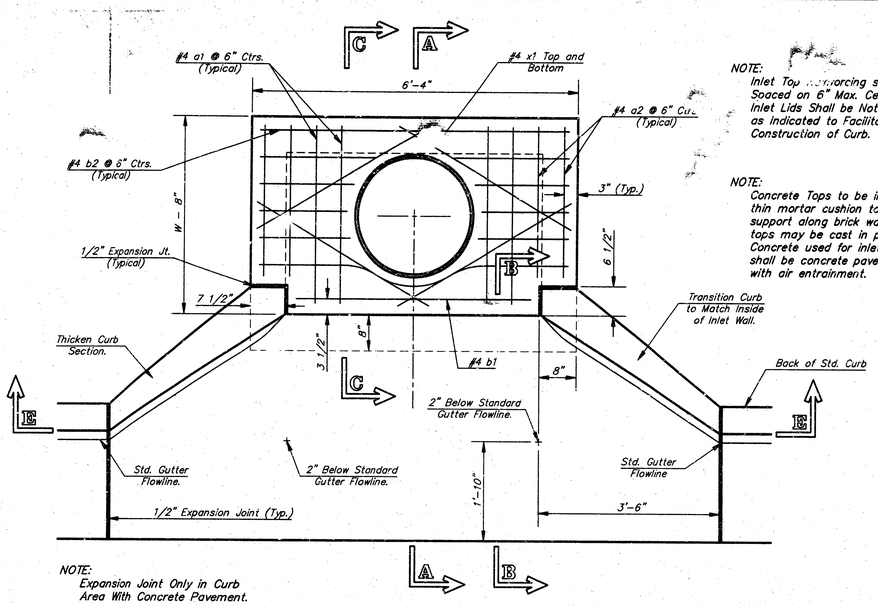
JOINT PATTERN

Cul D Sac

BAUGHMAN COMPANY P. A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER					SHEET
472-78-245-82056					7 OF 9
DESIGN JFB	DRAWN TAz	APPROVED	DATE 7/96	SCALE 1" = 20'	

96-04-E305
3/stcdc.dgn

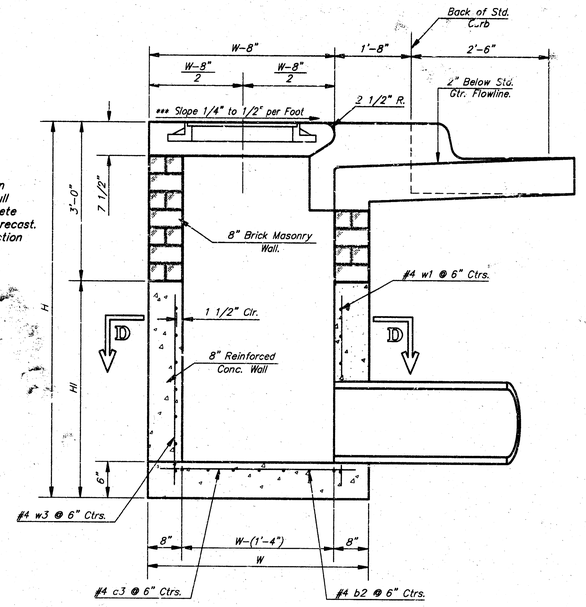


NOTE:
Expansion Joint Only in Curb Area With Concrete Pavement.

PLAN

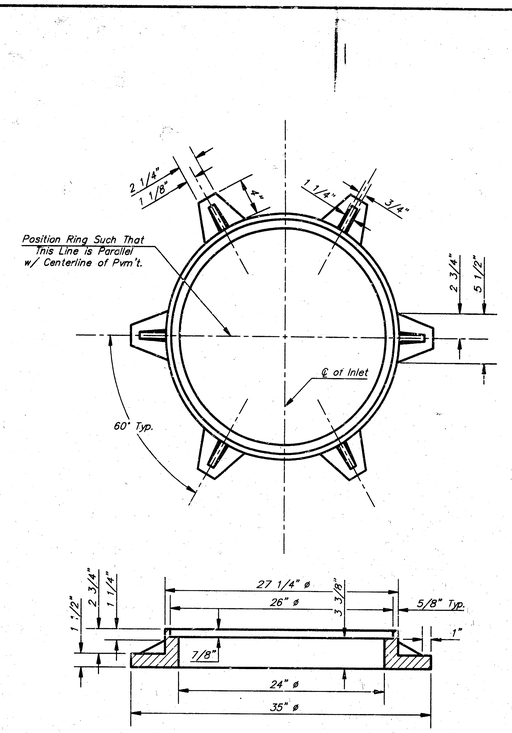
NOTE:
Inlet Top reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids Shall be Notched Out as Indicated to Facilitate Construction of Curb.

NOTE:
Concrete Tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast. Concrete used for inlet construction shall be concrete pavement mix with air entrainment.



SECTION A-A

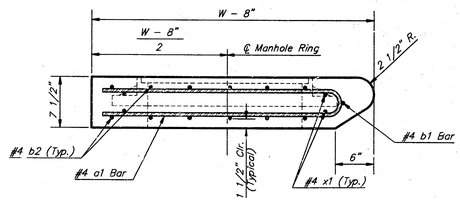
***NOTE: Slope of Inlet tops to Match Sidewalk or Parking Slopes within Limits Indicated.



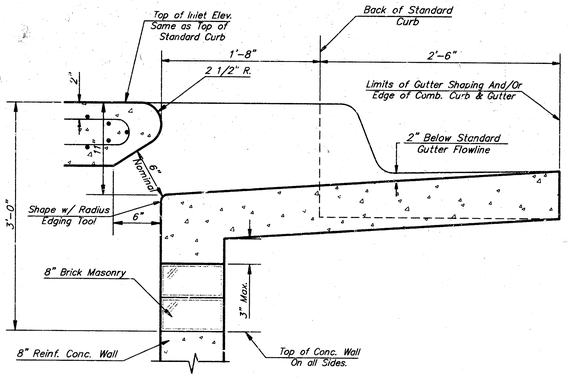
MANHOLE RING AND COVER

Weight = 180 Lbs.

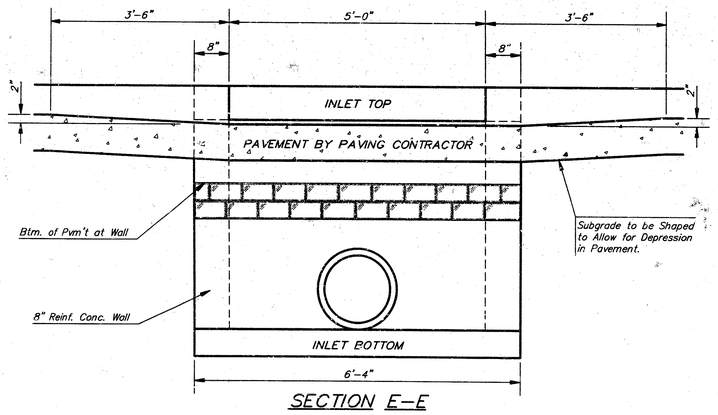
*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.



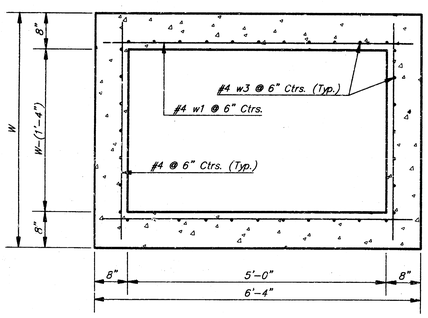
SECTION A-A



SECTION B-B



SECTION E-E



SECTION D-D

NOTE: Contractor shall have the option of constructing 8" brick masonry walls between the concrete inlet base and top on this inlet when W=6'-4" and H=7'-0" or less.

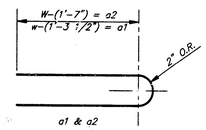
Additional curb and gutter construction necessary to connect set-back inlet to pavement will be paid for at the unit price bid for each inlet hookup.

Inlet invert shall be shaped with 8 sack sand mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self-cleaning between all inlet and/or outlet pipes.

The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall

PRECAST SLAB AND FLOOR REINFORCING												
		W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
* a1	#4	6	6'-7"	6	8'-7"	6	10'-7"	6	12'-7"	6	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1	13	8'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
* b2	#4	23	6'-1"	29	6'-1"	35	6'-1"	41	6'-1"	47	6'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-6"	8	4'-10"	8	5'-2"
WALL REINFORCING											
		W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
w1	#4	②	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"
w2	#4	①	4'-1"	①	5'-1"	①	5'-1"	①	7'-1"	①	8'-1"
w3	#4	32	②	36	②	40	②	44	②	48	②

* Field Bend or Cut Reinforcing as Required for Clearance.
① 4 (HI - 12") (HI - 21") Rounded down to nearest 0.5'
② HI - 3"



BENDING DIAGRAM

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-4"	3'-8" x 6'-4" x 7 1/2"	21" & SMALLER	0.38±
5'-4"	4'-8" x 6'-4" x 7 1/2"	24" & 30"	0.51±
6'-4"	5'-8" x 6'-4" x 7 1/2"	36" & 42"	0.64±
7'-4"	6'-8" x 6'-4" x 7 1/2"	48" & 54"	0.77±
8'-4"	7'-8" x 5'-4" x 7 1/2"	60" & 66"	0.90±

Revised - Feb. 16, 1989

CITY OF WICHITA STANDARD TYPE 1A

Curb Inlet Details

INLET OPENING = 6" x 5'-0"

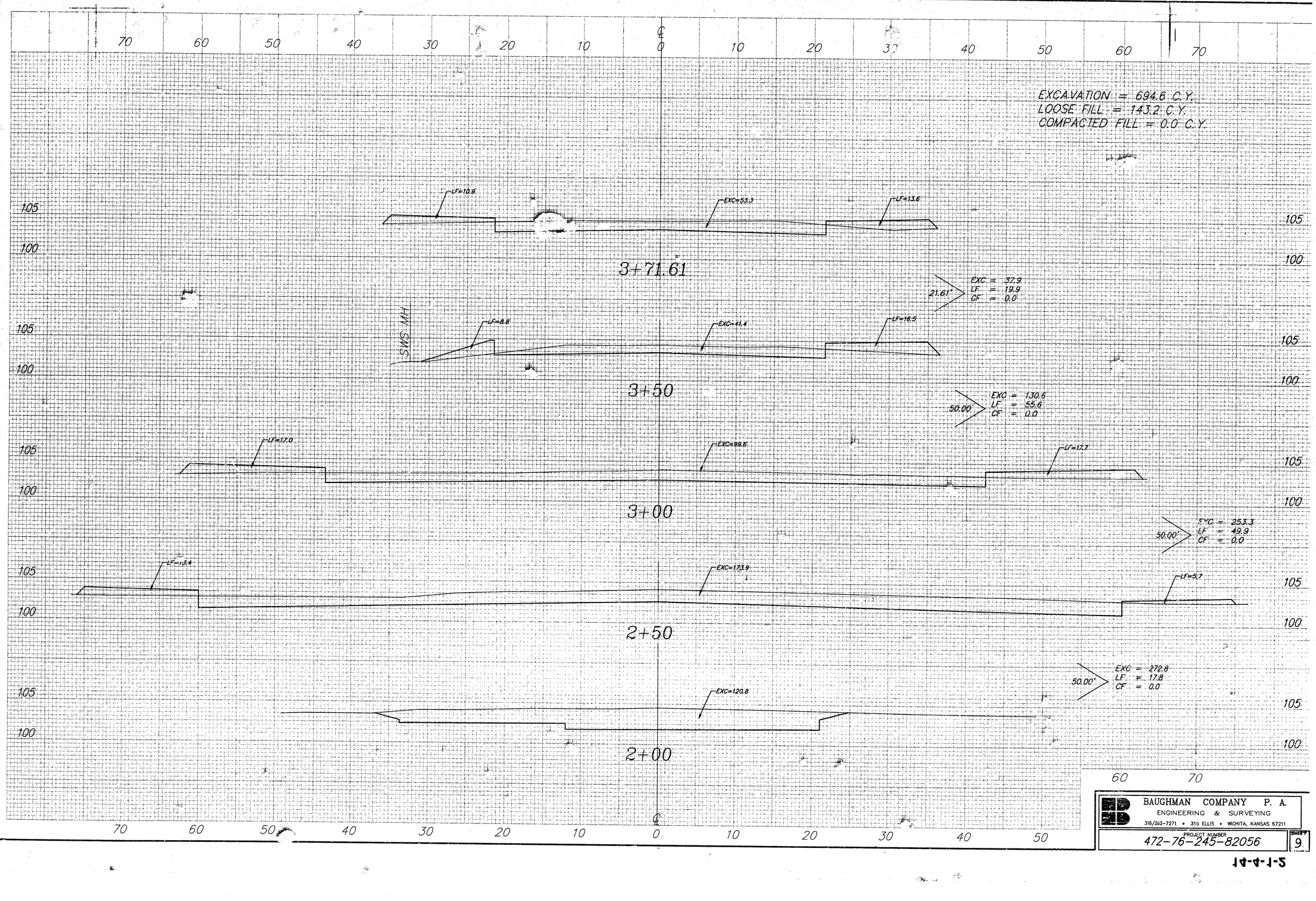
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PROJECT NUMBER				SHEET 8 OF 9
DESIGN C.O.W.	DRAWN Staff	APPROVED	DATE	SCALE None

1jw14-5

5-1-4-4F

EXCAVATION = 694.6 C.Y.
LOOSE FILL = 143.2 C.Y.
COMPACTED FILL = 0.0 C.Y.



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PROJECT NUMBER 472-76-245-82056

SHEET 9