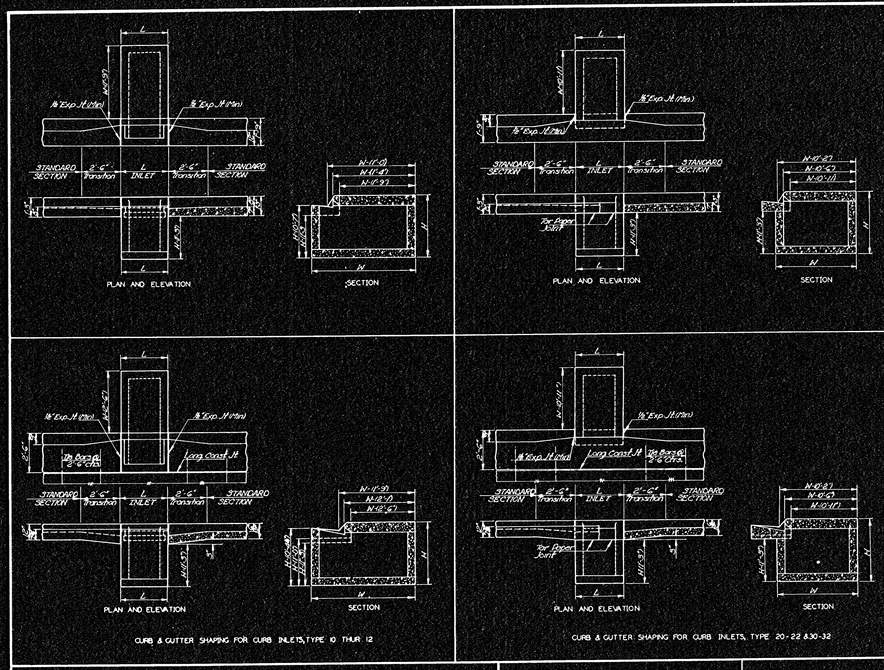
FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	BT-ER-164(1)	1974	7	28

OAKB 574005



CURB & GUTTER SHAPING FOR CURB INLETS, TYPE 10 THUR 12

CURB & GUTTER SHAPING FOR CURB INLETS, TYPE 20-22 & 30-32

FEDERAL AID PROJECT NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS		1974		

GENERAL NOTES

FOREWORD

Curb and Gutter Shaping shall be placed when required by the installation of curb inlets.

In the shaping of curb and gutter quantities shall be made for gutter shaping only for sections of curb and gutter which are contiguous to inlet connections.

CONCRETE

Class A Concrete (AE) shall be used exclusively in gutter shaping.

TRANSVERSE CONTRACTION JOINTS

Transverse contraction joints shall be constructed to coincide with those of the adjacent concrete pavement or concrete base course, except:

Transverse contraction joints shall be constructed at intervals not to exceed 10'-0" except:

EXCEPTION: Transverse contraction joints shall not be constructed within the full portion of L-dimension of the gutter shaping.

TRANSVERSE EXPANSION JOINTS

Transverse expansion joints shall be constructed to coincide with those of the adjacent concrete pavement or concrete base course, except:

Transverse expansion joints shall be constructed at intervals not to exceed 250 feet except:

Transverse expansion joints shall be constructed at the ends of all curb returns, except:

EXCEPTION: Transverse expansion joints shall not be constructed within the full portion of L-dimension of the gutter shaping.

Transverse expansion joints shall be filled with premolded expansion joint filler (conforming to ASTM D 994) the cross sectional dimension of the joint, and the surface of the joint shall be

CONSTRUCTION JOINTS

Longitudinal construction joint shall be constructed between the curb and gutter section and the adjacent concrete pavement or concrete base course.

Transverse tie bars shall be installed at 2'-6" centers along the length of the longitudinal construction joint, at locations where bottom

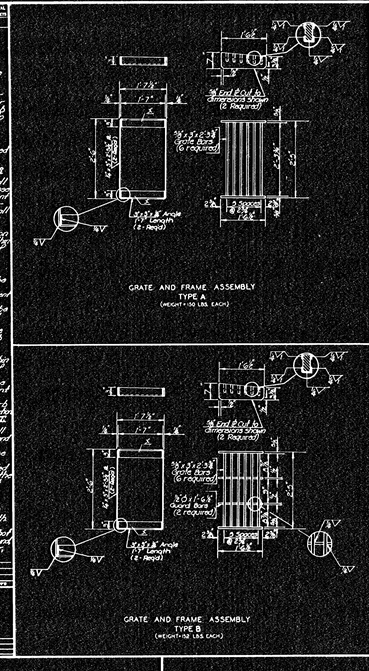
TRANSVERSE TIE BARS

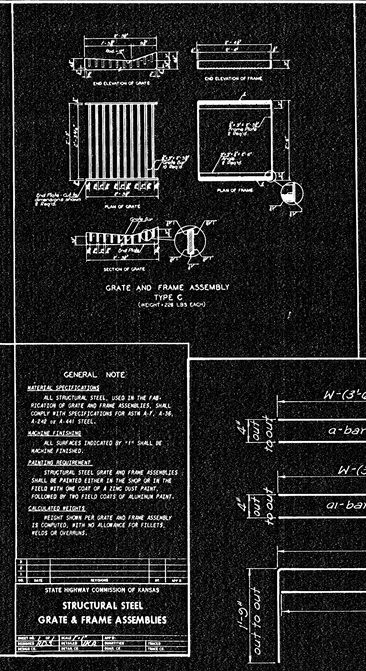
Transverse tie bars shall be #4 deformed steel bars, 3'-0" in length, spaced 2'-6" apart.

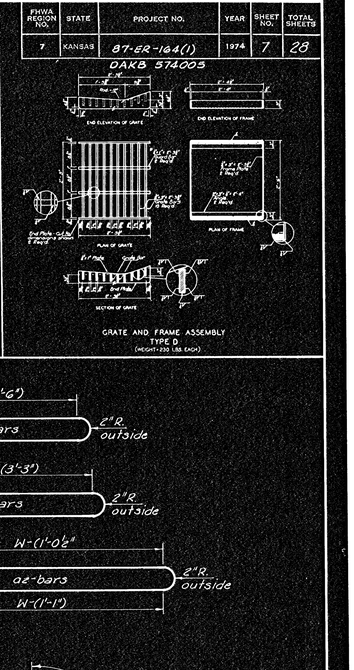
#4 Dr. Bar (smooth) shall be laid in cold poured joint sealing material or Premolded Expansion Joint Filler (conforming to ASTM D 994).

STATE HIGHWAY COMMISSION OF KANSAS

TYPICAL GUTTER SHAPING FOR CURB INLETS







GENERAL NOTE

MATERIAL SPECIFICATIONS

ALL STRUCTURAL STEEL, USED IN THE FABRICATION OF GRATE AND FRAME ASSEMBLIES, SHALL COMPLY WITH SPECIFICATIONS FOR ASTM A-7, A-36, A-242 or A-441 STEEL.

MACHINE FINISHING

ALL SURFACES INDICATED BY ▽▽▽ SHALL BE MACHINE FINISHED.

PAINTING REQUIREMENT

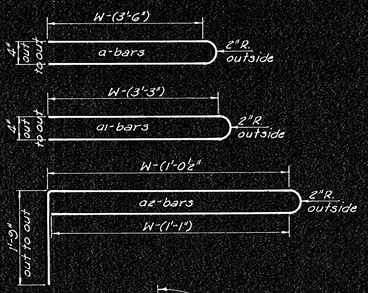
STRUCTURAL STEEL GRATE AND FRAME ASSEMBLIES SHALL BE PAINTED EITHER IN THE SHOP OR IN THE FIELD WITH ONE COAT OF A ZINC DUST PAINT, FOLLOWED BY TWO FIELD COATS OF ALUMINUM PAINT.

CALCULATED WEIGHTS

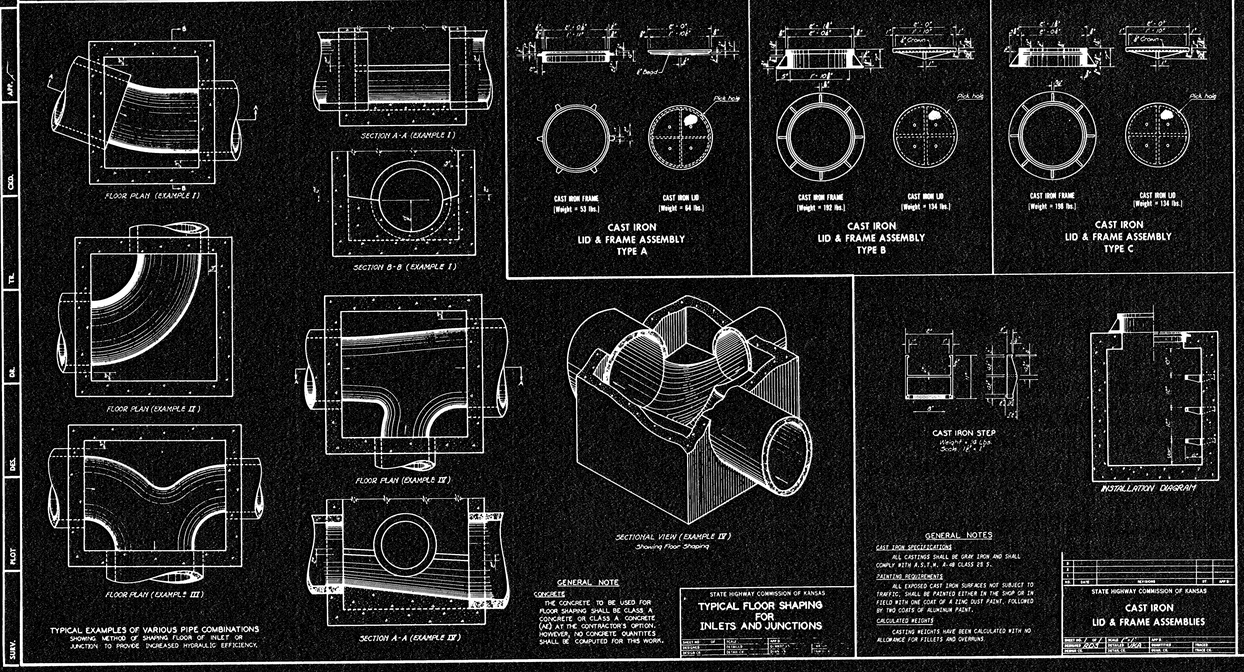
WEIGHT SHOWN PER GRATE AND FRAME ASSEMBLY IS COMPUTED, WITH NO ALLOWANCE FOR FILLETS, WELDS OR OVERRUNS.

STATE HIGHWAY COMMISSION OF KANSAS

STRUCTURAL STEEL GRATE & FRAME ASSEMBLIES



BENDING DIAGRAMS
Curb Inlet - Type 22



TYPICAL EXAMPLES OF VARIOUS PIPE COMBINATIONS
SHOWING METHOD OF SHAPING FLOOR OF INLET OR JUNCTION TO PROVIDE INCREASED HYDRAULIC EFFICIENCY.

GENERAL NOTE

CONCRETE

THE CONCRETE TO BE USED FOR FLOOR SHAPING SHALL BE CLASS A CONCRETE OR CLASS A CONCRETE (AE) AT THE CONTRACTOR'S OPTION. HOWEVER, NO CONCRETE QUANTITES SHALL BE COMPUTED FOR THIS WORK.

STATE HIGHWAY COMMISSION OF KANSAS

TYPICAL FLOOR SHAPING FOR INLETS AND JUNCTIONS

GENERAL NOTES

CAST IRON SPECIFICATIONS

ALL CASTINGS SHALL BE GRAY IRON AND SHALL COMPLY WITH A.S.T.M. A-48 CLASS 25 B.

PAINTING REQUIREMENTS

ALL EXPOSED CAST IRON SURFACES NOT SUBJECT TO TRAFFIC, SHALL BE PAINTED EITHER IN THE SHOP OR IN FIELD WITH ONE COAT OF A ZINC DUST PAINT, FOLLOWED BY TWO COATS OF ALUMINUM PAINT.

CALCULATED WEIGHTS

CASTING WEIGHTS HAVE BEEN CALCULATED WITH NO ALLOWANCE FOR FILLETS AND OVERRUNS.

STATE HIGHWAY COMMISSION OF KANSAS

CAST IRON LID & FRAME ASSEMBLIES

CURB INLET TYPE 22 CURB RADIUS 100 FEET			
LEGEND	DIMENSIONS	LEGEND	DIMENSIONS
L	3'-0"	L1	
W	2'-6"	W1	
H	3'-6"	H1	

BILL OF MATERIALS

BAR SYMBOLS	BAR SIZES	BAR TOTALS	BAR LENGTHS
A	4	2	2'-5 7/8"
A1	4	2	2'-11 1/2"
A2	4	4	5'-0 3/8"
~~A3~~	~~4~~	—	—
~~A4~~	~~4~~	—	—
B	4	14	1'-3"
B1	4	2	3'-9"
C	4	22	4'-9"
C1	4	4	2'-6"
C2	4	4	2'-3"
V	4	8	2'-0"
V1	4	22	3'-3"
~~V2~~	~~4~~	—	—
~~V3~~	~~4~~	—	—
~~U~~	~~4~~	—	—
X	4	2	5'-0"

INLET LOCATIONS

Sta. 7+85 Rt.

*Cast Iron	117 Lbs.
Reinforcing Steel	223 Lbs.
Class A Concrete (Misc.)	1.48 Cu. Yds.
Class III Excavation	5.90 Cu. Yds.

*Type A Lid & Frame Assembly

CITY OF WICHITA, KANSAS
R.W. LINN, P.E., CITY ENGINEER

FIRST STREET BRIDGE OVER THE ARKANSAS RIVER

AUXILIARY INLET DETAILS

DELAMATER, FREUND & SCHERER, P.A.
CONSULTING ENGINEERS
WICHITA KANSAS

SCALE — DATE June, 1974 DWG. NO. 89-G-7