FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87N 0064-01	1997	42	130

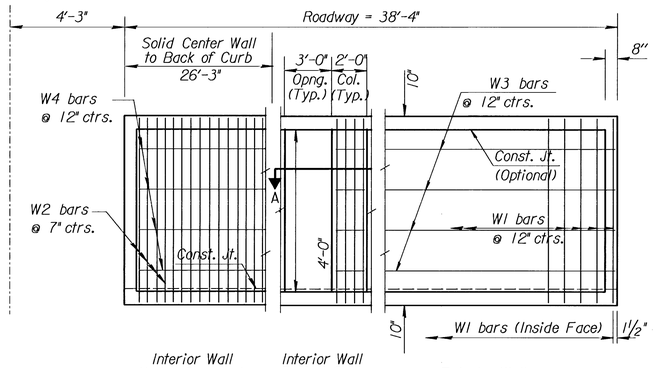
VERSION:5.1.0 COMPILED:03/01/95
VERSION:5.1.0 COMPILED:03/01/95

ORIG. FROM BRAD. PROJ. CO.

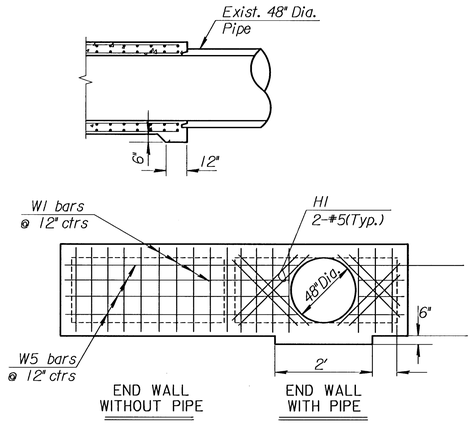
	DESIGN	DATE	CHECK	DATE
DESIGN		DATE		DATE
DETAIL		DATE		DATE
QUANTITIES		DATE		DATE
TYPING		DATE		DATE
METHOD		DATE		DATE

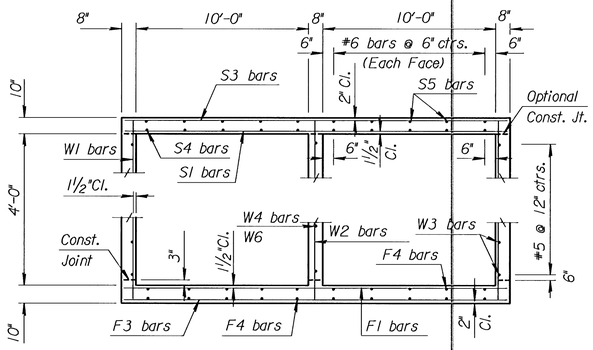
Drawn By :$$USERNAME$$
DGN File :$$$$$$$$$$$$$$$$DGNSPEC$$$$$$$$$$$$$$$$
Plotted :$$$$$$STIME$$$$$$ View=

℄ Project

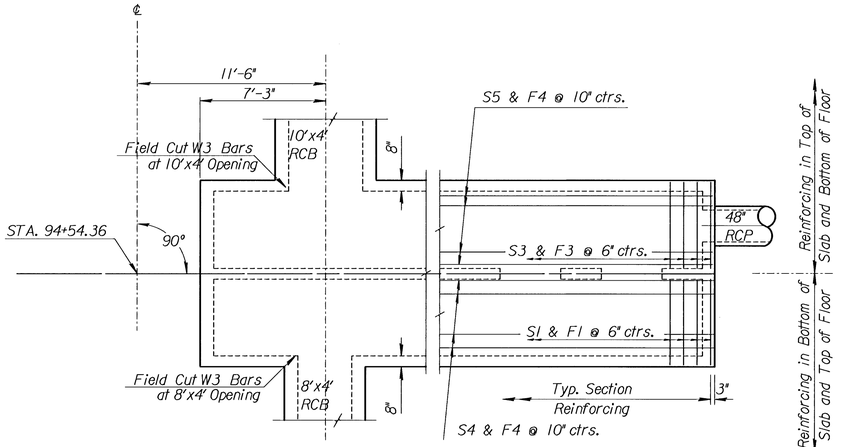


SECTION AND ELEVATION
(Normal to ℄ Roadway)

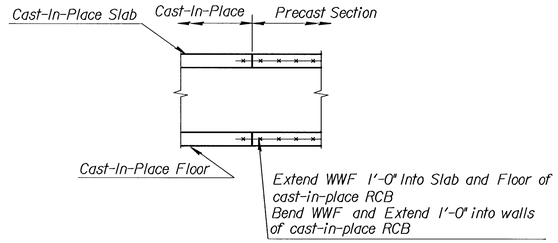


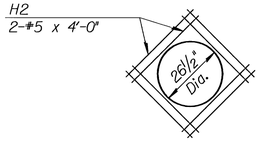


TYPICAL SECTION

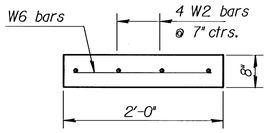


SHOWING CONCRETE — PLAN — SHOWING REINFORCING





MANHOLE OPENING DETAIL



SECTION A
PLAN OF INTERIOR WALL

GENERAL NOTES

LOADING: HS20-44 AASHTO Specifications, 1996 Edition.
UNIT STRESSES: Class AAA Concrete; f'c = 4,000 p.s.i.
Reinforcing Steel; fy = 60,000 p.s.i.
FILL HEIGHT: Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and shall include the surfacing.
CONCRETE: Class AAA Concrete shall be used throughout. Bevel all exposed edges with a ¾inch triangular moulding. Where Class AAA Concrete (AE) is specified, it shall be placed in the top slab above the Construction Joint.
REINFORCING: All reinforcing shall conform to ASTM A615, Grade 60. All dimensions relative to reinforcing steel shall be to centerline of bar unless otherwise noted.
EXCAVATION: Excavation for culverts less than bridge length shall not be paid for directly but shall be subsidiary to Class AAA Concrete. Excavation for RCB Bridges shall be paid for as Class III Excavation.
SEAL COURSE: A Seal Course may be required by the Engineer. The Seal Course shall be unreinforced Concrete (Commercial Grade) to a minimum depth of 3 inches or as determined by the Engineer. Concrete for the seal course shall be paid for at the unit price of Class AAA Concrete.
FOUNDATION STABILIZATION: Foundation Stabilization may be required as directed by the Engineer. The depth of Foundation Stabilization shall be determined by the Engineer. Foundation Stabilization shall be paid for at the determined Unit Price set for Foundation Stabilization. See Auxiliary Details.
QUANTITIES: The quantities shown in the Culvert Summary include apron and/or soil saver quantities when their construction is required by the plans. Payment for additional quantities that result from including seal course and/or floating apron, as a change in original plans, shall be made at the Unit Price bid for the various items involved.

CULVERT SUMMARY

Flow Line Elev.	Crown Gr. Elev.	Design Fill Ht.	Skew	Wings	Scour Apron	Soil Saver	Granular Backfill	Concrete Barrel (Cu.Yds.)	Concrete Wings (Cu.Yds.)	Concrete Total (Cu.Yds.)	Reinf. Steel (Gr. 60) Barrel (Lbs.)	Reinf. Steel (Gr. 60) Wings (Lbs.)	Reinf. Steel (Gr. 60) Total (Lbs.)
1279.48	1286.24	2	0		NO	NO	NO	64.80		64.80	15,630		15,340
1279.40													

BAR SCHEDULE

F1 Size	F1 Spa.	F1 No.	F1 Length					F3 Size	F3 Spa.	F3 No.	F3 Length	F4 Size	F4 No.	F4 Length	S1 Size	S1 Spa.	S1 No.	S1 Length					S3 Size	S3 Spa.	S3 No.	S3 Length	S4 Size	S4 No.	S4 Length	S5 Size	S5 No.	S5 Length
6	6"	77	21'-9"	-	-	-	-	6	6"	77	21'-9"	5	54	37'-10"	6	6"	77	21'-9"	-	-	-	-	6	6"	77	21'-9"	5	24	37'-10"	5	24	37'-10"

H1 Size	H1 Spa.	H1 No.	H1 Length	H2 Size	H2 Spa.	H2 No.	H2 Length	W1 Size	W1 Spa.	W1 No.	W1 Length	W2 Size	W2 Spa.	W2 No.	W2 Length	W3 Size	W3 No.	W3 Length	W4 Size	W4 Spa.	W4 No.	W4 Length	W5 Size	W5 Spa.	W5 No.	W5 Length	W6 Size	W6 Spa.	W6 No.	W6 Length
5	-	8	5'-8"	5	-	8	4'-0"	5	12"	102	5'-5"	6	7"	32	5'-5"	5	8	38'-1"	5	12"	4	26'-0"	5	12"	8	21'-9"	5	12"	12	1'-9"

Minimum Splice Lengths	
#4	1'-4"
#5	1'-8"
#6	2'-0"

* Class III Excavation Subsidiary to Class AAA Concrete

SUMMARY OF QUANTITIES

Class AAA Concrete	64.8	C.Y.
Class AAA Concrete (AE)		C.Y.
Class III Excavation *	2.08	C.Y.
Reinforcing Steel (Gr. 60)	15,630	Lbs.
Reinforcing Steel (Epoxy Coated)		Lbs.
Foundation Stabilization (Set)	1	C.Y.
Granular Backfill (Wingwalls) (Set)	1	C.Y.

KANSAS DEPARTMENT OF TRANSPORTATION

Sta. 94+54.36

DOUBLE 10'x4' RCB

PROJECT NO. 87N 0064-01 SEDGWICK CO.

MID-KANSAS ENGINEERING CONSULTANTS, INC.
WICHITA, KANSAS

DESIGNED BY:	KJS	CHECKED BY:	PAF
DRAWN BY:	WNJ	DATE: 1/97	SHEET 42 OF 131