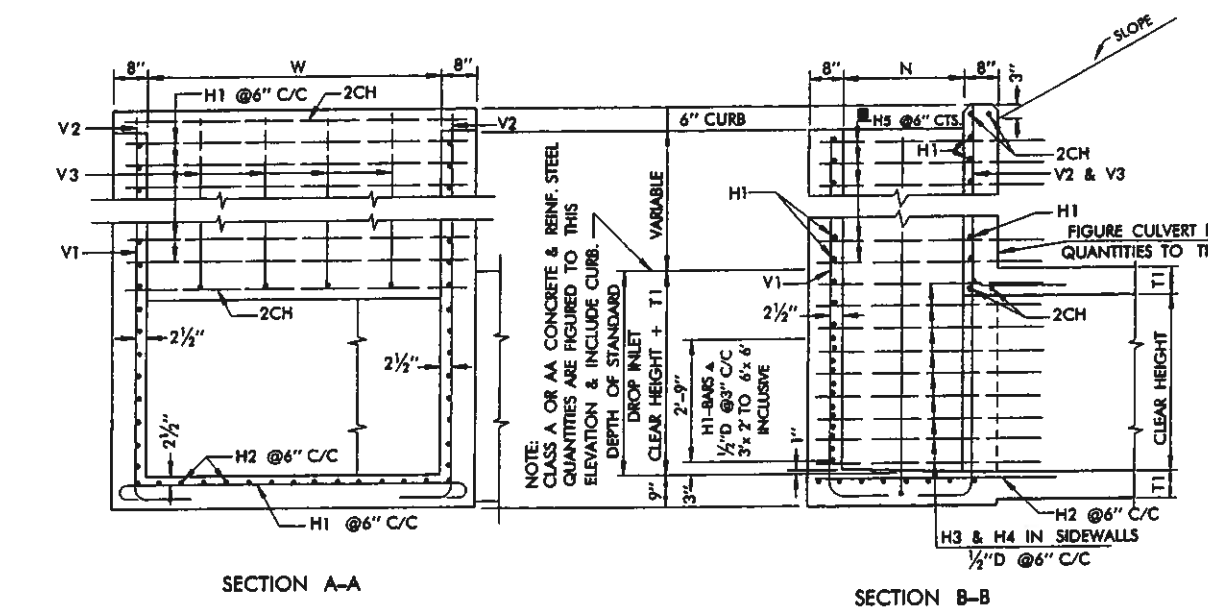
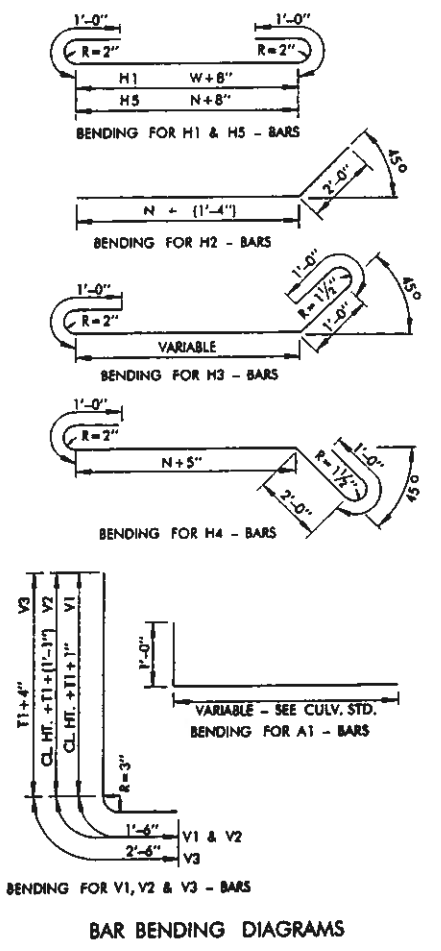
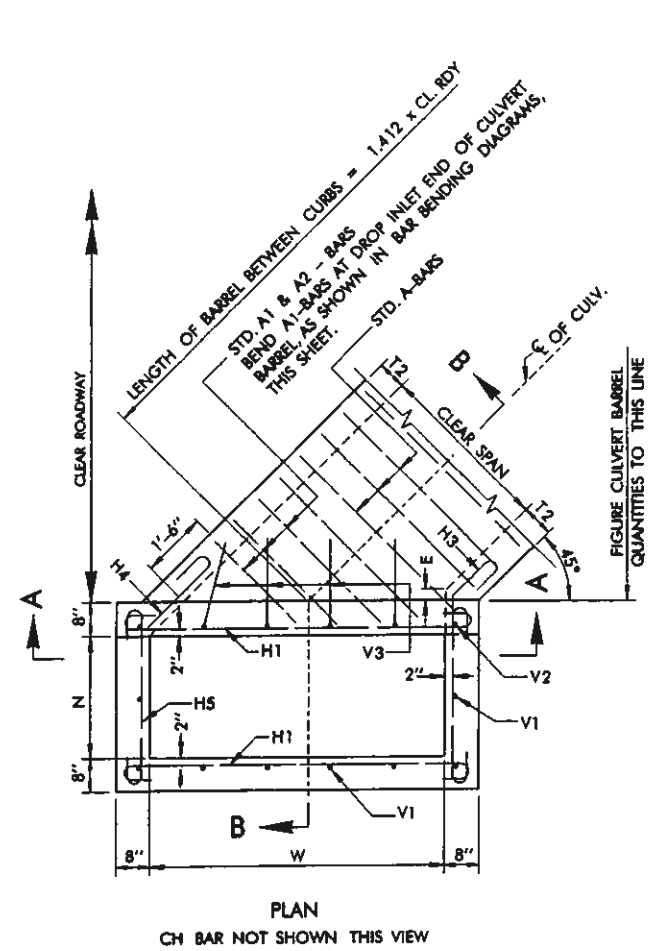
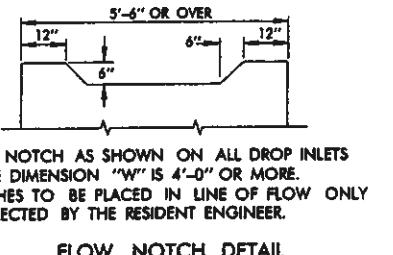
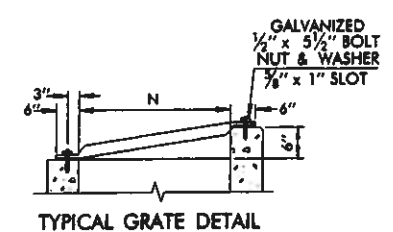


DESCRIPTION	REVISIONS	DATE
RE-ISSUE W/ENGLISH 1999 SPECS., Remove Handrail, Add Pipe Grates		7/99
Add G. Note 10, Symb. Class AA Conc. etc.		8/05



DESIGN NO.	DIMENSIONS						REINFORCING STEEL												CLASS A/AA CONC. CU. YD.		REINFORCING STEEL LBS.		PIPE GRATES						
	CLEAR SPAN	CLEAR HEIGHT	AREA OF OPENING SQ. FT.	N	W	E	CH-BARS STRAIGHT		H1-BARS BENT		H2-BARS STRAIGHT		H3-BARS BENT		H4-BARS BENT		H5-BARS BENT		V1-BARS BENT		V2-BARS BENT		V3-BARS BENT		STANDARD DROP INLET INCLUDING CURB	PER FOOT OF ADDITIONAL DEPTH	STANDARD DROP INLET INCLUDING CURB	PER FOOT OF ADDITIONAL DEPTH	NUMBER OF PIPE GRATES
							NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.					
1	2'-0"	2'-0"	4	1'-6"	3'-6 1/2"	1/2"	4	4'-9"	12	6'-5"	9	4'-10"	5	5'-4"	5	5'-11"	2	4'-4"	6	4'-1"	2	5'-1"	2	3'-4"	1.30	0.363	167	35.50	1
2	3'-0"	2'-0"	6	1'-6"	4'-11 1/2"	1/2"	4	6'-2"	16	7'-10"	12	4'-10"	5	5'-4"	5	5'-11"	2	4'-4"	7	4'-1"	2	5'-1"	3	3'-4"	1.58	0.442	220	40.63	2
3	3'-0"	2'-6"	7.5	1'-9"	4'-11 1/2"	1/2"	4	6'-2"	18	7'-10"	12	5'-1"	6	5'-7"	6	6'-2"	4	4'-7"	7	4'-7"	2	5'-7"	3	3'-4"	1.82	0.456	245	41.30	2
4	3'-0"	3'-0"	9	2'-3"	4'-11 1/2"	1/2"	4	6'-2"	21	7'-10"	12	5'-7"	7	6'-1"	7	6'-8"	5	5'-1"	7	5'-1"	2	6'-1"	3	3'-4"	2.18	0.484	281	42.64	2
5	4'-0"	2'-0"	8	1'-6"	6'-4 1/2"	1/2"	4	7'-7"	16	9'-3"	14	4'-10"	5	5'-4"	5	5'-11"	4	4'-4"	8	4'-2"	2	5'-2"	4	3'-5"	1.90	0.521	253	45.76	3
6	4'-0"	2'-6"	10	1'-9"	6'-4 1/2"	1/2"	4	7'-7"	18	9'-3"	14	5'-1"	6	5'-7"	6	6'-2"	4	4'-7"	8	4'-8"	2	5'-8"	4	3'-5"	2.18	0.535	281	46.43	3
7	4'-0"	3'-0"	12	2'-3"	6'-4 1/2"	1/2"	4	7'-7"	21	9'-3"	14	5'-7"	7	6'-1"	7	6'-8"	5	5'-1"	8	5'-2"	2	6'-2"	4	3'-5"	2.58	0.562	320	47.77	3
8	4'-0"	4'-0"	16	2'-9"	6'-7"	2 1/4"	4	7'-9"	24	9'-5"	15	6'-1"	9	6'-7"	9	7'-2"	5	5'-7"	8	6'-2"	2	7'-2"	4	3'-5"	3.27	0.602	382	49.57	3
9	5'-0"	2'-0"	10	1'-6"	7'-9 1/2"	1/2"	4	9'-0"	17	10'-8"	17	4'-10"	5	5'-4"	5	5'-11"	4	4'-4"	9	4'-3"	2	5'-3"	5	3'-6"	2.24	0.600	296	50.91	4
10	5'-0"	3'-0"	15	2'-3"	7'-9 1/2"	1/2"	4	9'-0"	21	10'-8"	17	5'-7"	7	6'-1"	7	6'-8"	5	5'-1"	9	5'-3"	2	6'-3"	5	3'-6"	2.99	0.641	363	52.91	4
11	5'-0"	4'-0"	20	2'-9"	8'-0"	2 1/4"	4	9'-2"	24	10'-10"	18	6'-1"	9	6'-7"	9	7'-2"	5	5'-7"	9	6'-3"	2	7'-3"	5	3'-6"	3.74	0.681	430	54.70	4
12	5'-0"	5'-0"	25	3'-6"	8'-3"	5 1/4"	4	9'-5"	28	11'-11"	18	6'-10"	11	7'-4"	11	7'-11"	6	6'-4"	11	7'-3"	2	8'-3"	5	3'-6"	4.73	0.736	524	58.72	4
13	5'-0"	6'-0"	30	4'-3"	8'-3"	5 1/4"	4	9'-5"	31	11'-11"	18	7'-7"	13	8'-8"	13	8'-8"	7	7'-1"	11	8'-3"	2	9'-3"	5	3'-6"	5.73	0.778	598	60.73	4
14	6'-0"	2'-0"	12	1'-6"	9'-2 1/2"	1/2"	4	10'-5"	17	12'-11"	20	4'-10"	6	5'-4"	6	5'-11"	4	4'-4"	10	4'-4"	2	5'-4"	6	3'-7"	2.58	0.678	343	56.04	5
15	6'-0"	3'-0"	18	2'-3"	9'-5"	2 1/4"	4	10'-7"	21	12'-3"	21	5'-7"	8	6'-1"	8	6'-8"	5	5'-1"	10	5'-4"	2	6'-4"	6	3'-7"	3.46	0.731	425	58.49	5
16	6'-0"	4'-0"	24	2'-9"	9'-5"	2 1/4"	4	10'-7"	24	12'-3"	21	6'-1"	10	6'-7"	10	7'-2"	5	5'-7"	10	6'-4"	2	7'-4"	6	3'-7"	4.23	0.759	489	59.83	5
17	6'-0"	5'-0"	30	3'-6"	9'-8"	5 1/4"	4	10'-10"	28	12'-6"	21	6'-10"	12	7'-4"	12	7'-11"	6	6'-4"	12	7'-8"	2	8'-4"	6	3'-7"	5.29	0.815	589	63.88	5
18	6'-0"	6'-0"	36	4'-3"	9'-8"	5 1/4"	4	10'-10"	31	12'-6"	21	7'-7"	14	8'-1"	14	8'-8"	7	7'-1"	12	8'-4"	2	9'-4"	6	3'-7"	6.37	0.856	670	65.84	5



▲ NUMBER OF H1-BARS @3" C/C IN FRONT WALL OF DROP INLETS ARE AS FOLLOWS:

SIZE OF CULVERT	3' x 2'	3' x 2 1/2'	4' x 2'	4' x 2 1/2'	5' x 2'	6' x 2'
NO. OF H1@3" C/C	9	11	9	11	10	10

FOR ALL OTHER SIZES, EXCEPT 2' x 2', USE 12 H1-BARS @3" C/C IN FRONT WALL OF DROP INLET AND SPACE ADDITIONAL H1-BARS @6" C/C AS REQUIRED. IN DROP INLET FOR 2' x 2' CULVERT ALL H1-BARS ARE SPACED @6" CENTERS.

■ USE H5-BARS IN SIDEWALLS OF DROP INLETS ONLY WHEN DEPTH OF DROP INLET EXCEEDS CLEAR HEIGHT + T1. "PER FOOT OF ADDITIONAL DEPTH" QUANTITIES INCLUDE THE WEIGHT OF 4 EA. H5-BARS PER FOOT OF ADDITIONAL DEPTH OF DROP INLET.

- ### GENERAL NOTES
- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 1999 ENGLISH STANDARD SPECIFICATIONS.
 - ALL EXPOSED CONCRETE EDGES SHALL HAVE 3/4" CHAMFER.
 - ALL REINFORCING STEEL SHALL BE 1/2" O.D. EXCEPT CH-BARS WHICH ARE 5/8" O.D.
 - ALL HORIZONTAL BARS SHALL BE SPACED AT 6" CENTERS EXCEPT AS OTHERWISE INDICATED. VERTICAL BARS ARE THE BARS SPACED AS SHOWN. (APPROX. 18" CENTERS.)
 - CLASS A OR AA CONCRETE & REINFORCING STEEL QUANTITIES FOR STANDARD DROP INLETS, AS SHOWN IN TABLE, ARE FIGURED TO TOP OF CULVERT SLAB & INCLUDE CURB. FOR DROP INLETS OF GREATER DEPTH, MULTIPLY THE FIGURE IN THE PER FOOT COLUMN BY THE DIFFERENCE IN HEIGHT FROM TOP OF CULVERT SLAB TO TOP OF DROP INLET AND ADD THE RESULTS TO THE STANDARD DROP INLET QUANTITY.
 - MAXIMUM DEPTHS OF DROP INLETS FOR 3' x 2' TO 6' x 6' REINFORCED CONCRETE BOXES SHALL BE AS FOLLOWS:

CLEAR SPAN OF CULVERT	3'-0"	4'-0"	5'-0"	6'-0"
MAX. DEPTH OF DR. INLET	19"	14"	12"	10"
 - UNLESS OTHERWISE SPECIFIED, ALL EXPOSED CONCRETE SURFACES SHALL HAVE A FINISH IN ACCORDANCE WITH THE 1999 ENGLISH STANDARD SPECIFICATIONS.
 - INLET TOP OPENING SHALL HAVE 3" x 7.58 LBS./FT. STD. WEIGHT STEEL, GALVANIZED, SCHEDULE 40, PIPE SAFETY GRATES INSTALLED PERPENDICULAR TO THE DIRECTION OF TRAFFIC AT 12" (MAXIMUM) 1/2" CENTERS. COST OF PIPE SAFETY GRATES & ALL HARDWARE NEEDED FOR INSTALLATION SHALL BE INCLUDED IN THE PRICE BID FOR THE INLET.
 - PIPE GRATE ENDS SHALL BE HELD DOWN WITH 1/2" x 5/8" GALVANIZED BOLT, WASHER & NUT MEETING THE REQUIREMENTS OF ASTM-A-325. BOLT THREADS, 1 3/4", SHALL REMAIN EXPOSED FOR INSTALLING GRATE.
 - DROP INLET WALLS, FLOOR & CURB CONSTRUCTION SHALL CONSIST OF THE SAME CLASS OF CONCRETE USED FOR THE REINFORCED CONCRETE BOX.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
611.06(E)	INLET	EA.
611.06(F)	ADDITIONAL DEPTH IN INLET	V.F.

INLET TYPE AND DESIGN NUMBER SHALL BE SPECIFIED

APPROVED BY ROADWAY ENGINEER *C.M. Sankowski* DATE 6/6/05

OKLAHOMA DEPT. OF TRANSPORTATION
ROADWAY STANDARD (ENGLISH)
REINFORCED CONCRETE DROP INLETS FOR
REINFORCED CONCRETE BOXES (45° SKEW)
2' x 2' TO 6' x 6'

1999 SPECIFICATIONS CD12-1 O1E R-47E