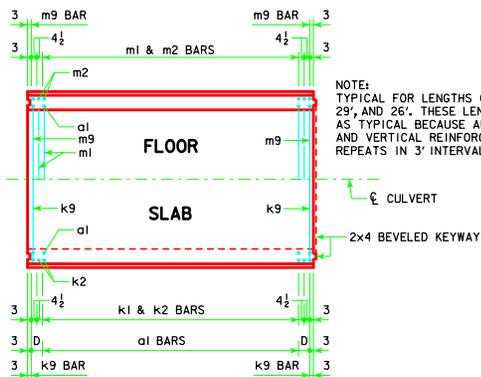


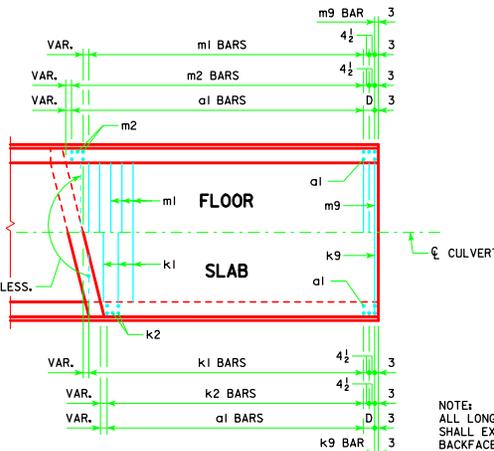
ENGL\SHURFD\DESIGN\ING\CULVERTS.DGN - RCB G2-12 - THIS SHEET ISSUED 04-12.



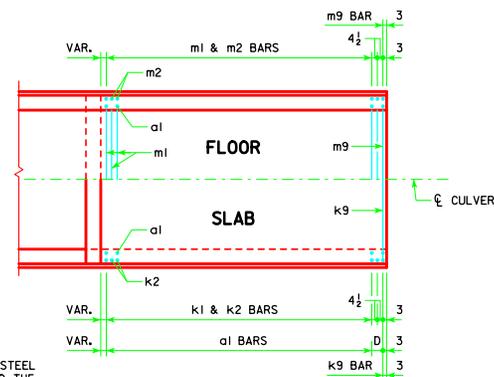
NOTE:  
TYPICAL FOR LENGTHS OF 38', 35', 32',  
29', AND 26'. THESE LENGTHS ARE SHOWN  
AS TYPICAL BECAUSE ALL TRANSVERSE  
AND VERTICAL REINFORCING STEEL SPACING  
REPEATS IN 3' INTERVALS.

CUT & RELOCATE BARS AS  
REQUIRED. k1 BARS ALL FILLS &  
k2 BARS OF FILL ONLY. m1 BARS  
TO EXTEND INTO HEADWALL APRON.  
DISCARD CUT LENGTHS OF 2'-0" OR  
LESS.

**STANDARD SECTION PLAN VIEW**  
(KEYWAY IS TO BE OMITTED WHEN BELL JOINTS ARE USED)



**TYPICAL SKEW**



**0° SKEW**

NOTE:  
ALL LONGITUDINAL BARREL STEEL  
SHALL EXTEND AT LEAST TO THE  
BACKFACE OF PARAPET.

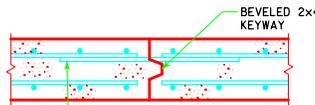
**END SECTION PLAN VIEWS**  
(KEYWAYS NOT SHOWN)

NOTE:  
END SECTION DETAILS SHOWN ARE FOR A 15° SKEW BARREL.  
USE FOR SKEWS OF 30° & 45° BY INCREASING THE NUMBER  
OF TRANSVERSE REINFORCING BARS REQUIRED TO BE CUT  
AND RELOCATED.

NOTE:  
DIMENSIONS LISTED ON THIS SHEET TO BE USED IN  
CONJUNCTION WITH DIMENSIONS AND QUANTITIES FOR  
BARREL SECTION SHEETS.

**5r1 BARS - ONE  
CONST. JT.**

SPAN	NO.	WEIGHT (LB)
3'-0"	4	15
4'-0"	5	18
5'-0"	6	22
6'-0"	7	26
8'-0"	9	33
10'-0"	11	40
12'-0"	13	47



ONE SET OF 5r1 x 3'-6" DOWEL BARS @ 1'-0"  
SPACING REQUIRED IN SLAB AT ALL CULVERT  
BARREL JOINTS, EXCEPT JOINTS WITH BELL JOINTS.  
SEE TABLE FOR NUMBER REQUIRED AND TOTAL WEIGHT.

**TOP SLAB CONSTRUCTION JOINT DETAIL**

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER		<b>Iowa Department of Transportation</b> Highway Division STANDARD DESIGN <b>SINGLE REINFORCED CONCRETE</b> <b>BOX CULVERTS</b> APRIL, 2012
	TYPICAL CULVERT BARREL DETAILS		RCB G2-12