

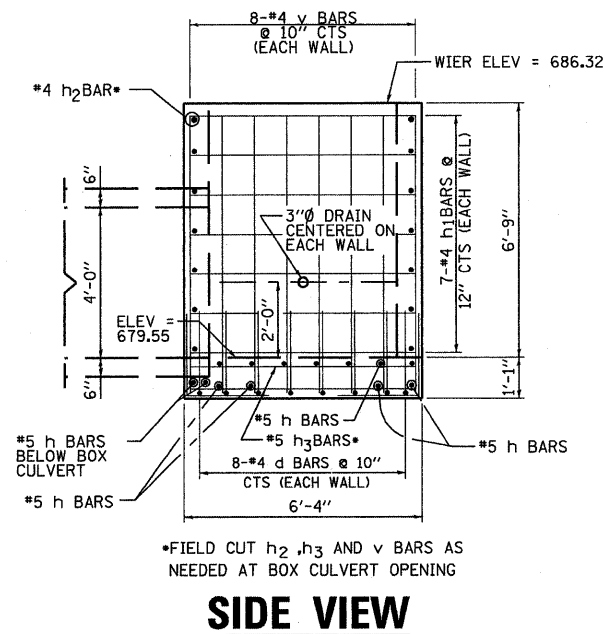
DROP BOX NO. 4

SN 071-1204 - LT STA. 747+50 (IL RTE 2)
CULVERT @ 0° SKEW TO RDWY

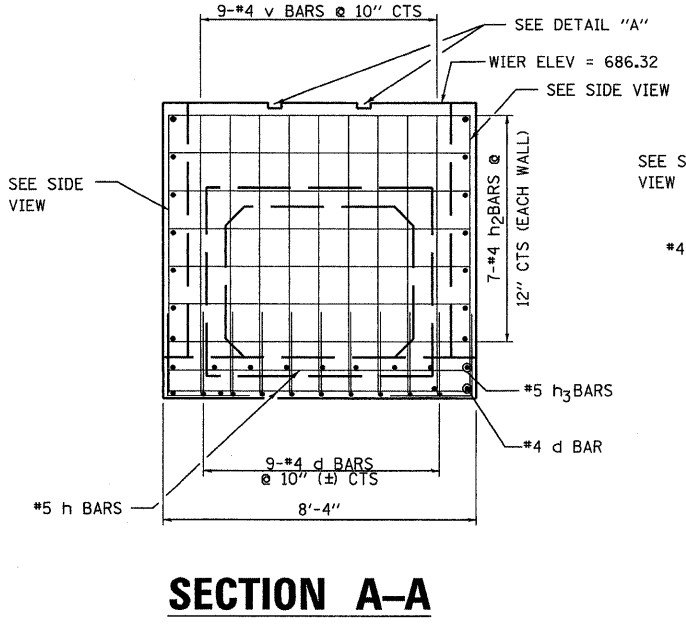
BILL OF MATERIALS (FOR INFORMATION ONLY)

| BAR | SIZE | NO. | LENGTH | SHAPE |
|----------------|------|-----|--------|-------|
| d | #4 | 29 | 4'-4" | L |
| h | #5 | 13 | 8'-1" | — |
| h ₁ | #4 | 14 | 6'-1" | — |
| h ₂ | #4 | 10 | 8'-1" | — |
| h ₃ | #5 | 15 | 6'-1" | — |
| u | #4 | 7 | 4'-5" | U |
| v | #4 | 27 | 7'-5" | — |

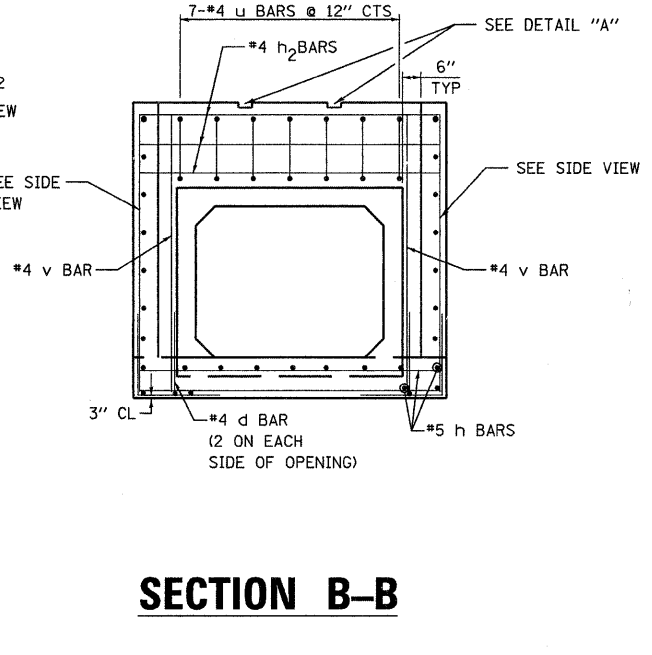
| DESCRIPTION | UNIT | QTY |
|-------------------------------------|-------|--------|
| CONCRETE BOX CULVERTS | CU YD | 6.3 |
| REINFORCEMENT BARS | LB | 550 |
| 3 1/2" I.D. GALV STEEL PIPE | FOOT | 13'-4" |
| 3 1/2" GALV PIPE CAPS | EACH | 4 |
| 1/4" GALV. STEEL PLATE (9" NOMINAL) | EACH | 4 |
| 1/2" X 4" X 14" GALV. STEEL PLATE | EACH | 4 |
| EXPANSION BOLTS 1/2"Ø | EACH | 8 |



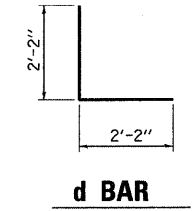
SIDE VIEW



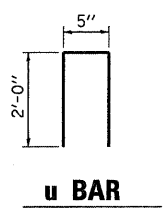
SECTION A-A



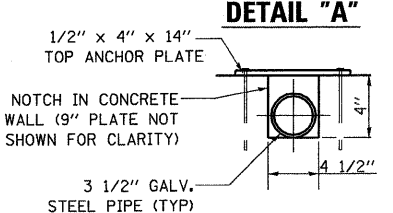
SECTION B-B



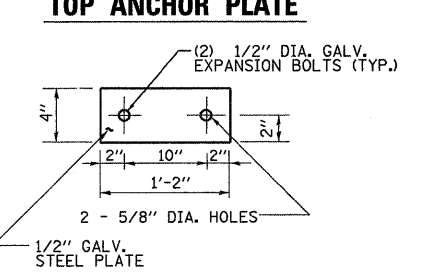
d BAR



u BAR



DETAIL "A"



TOP ANCHOR PLATE

GENERAL NOTES:

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER "EACH" FOR **DROP BOX NO. 4**. THIS WORK SHALL INCLUDE THE GALVANIZED PIPE, ANCHOR PLATES, & CAPS, CONCRETE BOX CULVERTS, REINFORCEMENT BARS, BOLTS, NUTS, WASHERS, INSTALLATION ON THE PROPOSED CULVERT, PIPE GRATING, EARTH EXCAVATION AND DIVERTING WATER WHERE REQUIRED, AND ANY NECESSARY GRADING TO FIT THE DROP BOX, AS SHOWN IN THE CROSS SECTIONS OR TO SLOPE.

EXPOSED EDGES SHALL BE BEVELED 3/4".

SLOPE FLOW LINE FOR DROP BOX NO. 4 IS THE SAME RATE AS THE FLOW LINE OF THE PIPE.

BOLTS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, AND SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120. CONTRACTOR SHALL FIELD VERIFY PIPE LENGTH.

STEEL PLATES SHALL CONFORM TO AASHTO M-270 GRADE 36 AND SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 GR. 60 (IL MODIFIED).

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DIVERTING THE WATER FLOW FROM THE CONSTRUCTION AREA USING A METHOD MEETING THE APPROVAL OF THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLE 503 OF THE STANDARD SPECIFICATION. COST INCLUDED WITH "DROP BOX NO. 4."

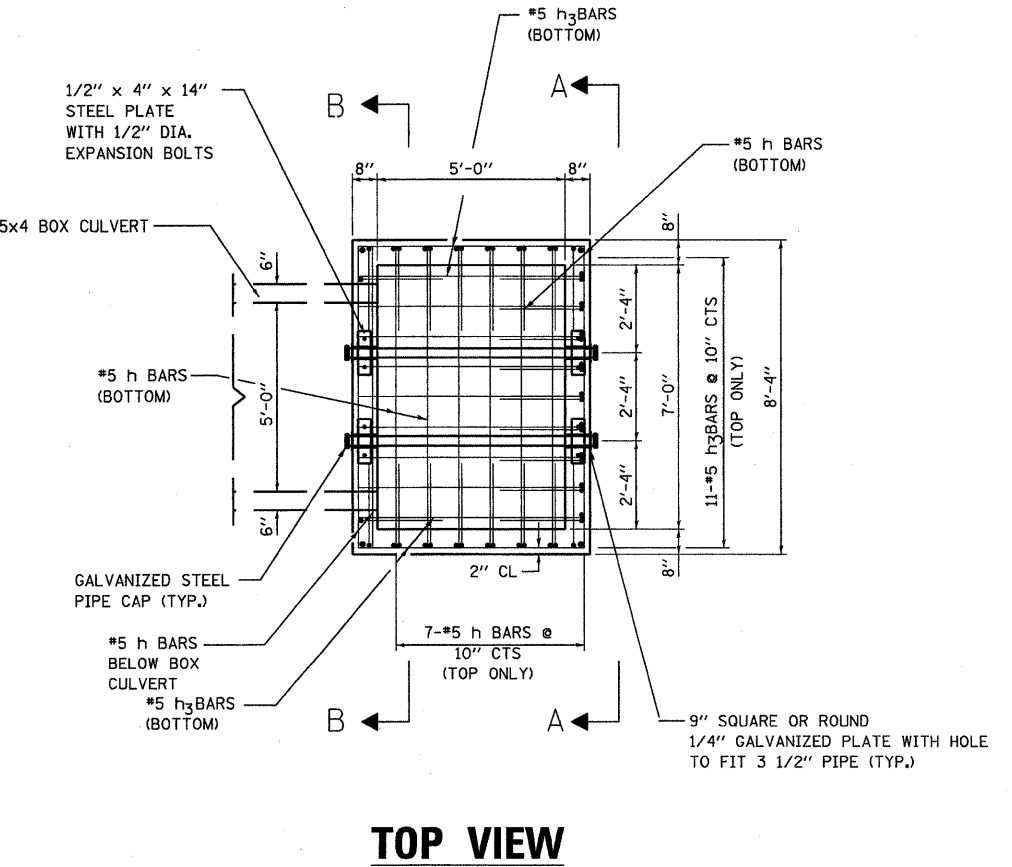
SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION.

SEE CROSS SECTION SHEET FOR MORE INFORMATION INCLUDING INVERT ELEVATIONS.

DESIGN STRESSES

f_y = 60,000 psi

f'_c = 3,500 psi



TOP VIEW



David F. Maxwell, S.E. Reg. No. 081-005455
Date: 3/3/10
My registration expires November 30, 2010.

| | | | | | | | | | | | | |
|----------------------|-----------------|-----------------|-----------|---|---|-------------------------|-----------------|--------------------|-------------|------------------|---------------|--|
| FILE NAME = | USER NAME = | DESIGNED - GSS | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DROP BOX NO. 4 | | F.A.P. RTE. 742 | SECTION 37 R-4 | COUNTY OGLE | TOTAL SHEETS 867 | SHEET NO. 161 | |
| PLOT SCALE = | CHECKED - CTH | DATE - 3/2/2010 | REVISED - | | SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | CONTRACT NO. 64E17 | | | | |
| PLOT DATE = 3/2/2010 | DATE - 3/2/2010 | REVISED - | REVISED - | | FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT | | | | | | | |