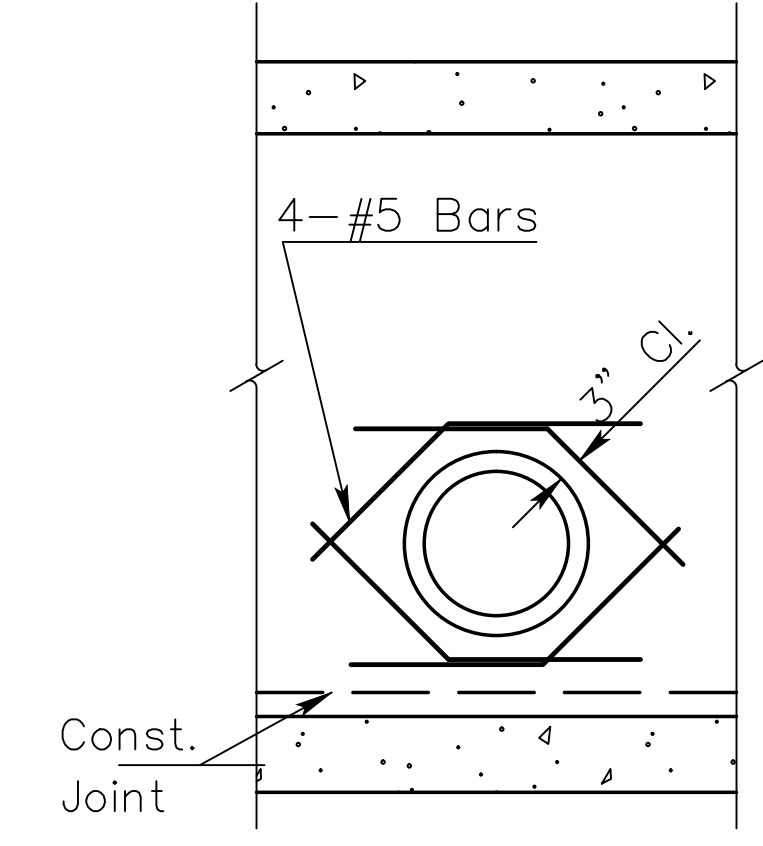
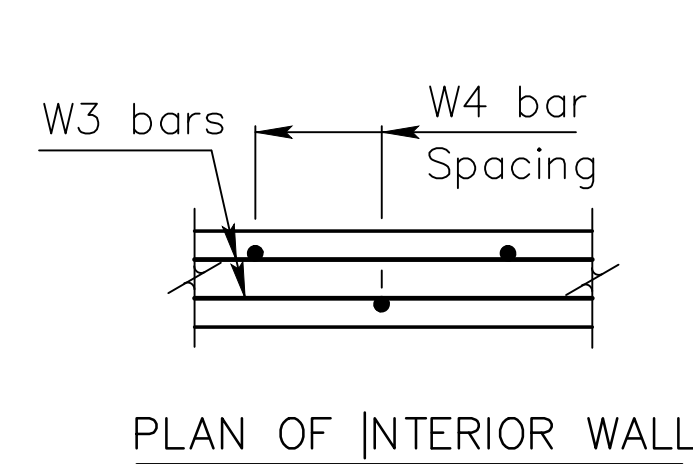


See RCB Auxiliary Details for Optional Splice.

Note:
 1) Contractor has the option to use cast-in-place or precast construction at this location.
 2) 1' of soil to be placed along the floor of the RCB. This is subsidiary to the RCBC (3-8'x5').



GENERAL NOTES

DESIGN SPECIFICATION: AASHTO LRFD Spec., 2007 Ed., 2009 Int.

DESIGN LOADING: HL93

UNIT STRESSES: Grade 4.0 Concrete $f'_c = 4,000$ p.s.i.
Reinforcing Steel $f_y = 60,000$ p.s.i.

FILL HEIGHT: Unless otherwise noted, the Design Fill Height is measured from the riding surface at the culvert and includes the surfacing.

CONCRETE: Use concrete conforming to Grade 4.0 Concrete. Bevel all exposed edges with a 1/2" triangular molding. Where Grade 4.0(AE) is specified, place this concrete in the top slab above the Construction Joint.

REINFORCING: Use reinforcing steel conforming to ASTM A615, Grade 60. All dimensions relative to reinforcing steel are to the centerline of the bar unless otherwise noted.

EXCAVATION: Excavation for culverts less than bridge length shall not be paid for directly but shall be Subsidiary to the RCBC (3-8'x5').

SEAL COURSE: The Engineer may require a seal course. The seal course shall be unreinforced Concrete (Commercial Grade) with a minimum depth of 3 inches or as determined by the Engineer. Concrete for the seal course shall be Subsidiary to the RCBC (3-8'x5').

FOUNDATION STABILIZATION: The Foundation Stabilization quantity has been calculated to the limits shown on the "RCB Auxiliary Details" sheet. The depth may be increased by the Engineer. The Contractor may underrun Foundation Stabilization under the barrel if founded on firm material and with the Engineer's approval. Use Foundation Stabilization on all wingwalls unless founded on rock or granular material.

GRANULAR BACKFILL (WINGWALLS): See the "Auxiliary Details" sheet.

STRIKE LINE: Construct the wingwalls and that portion of the RCB outside the Strike Line level. Construct the wingwall footings with the culvert floor. See the wingwall detail sheets.

BRIDGE BACKWALL PROTECTION SYSTEM: For structures with two foot of fill or less that have this bid item in the Summary of Quantities. See the "Auxiliary Details" sheet.

For design purposes ONLY. Do NOT use for Construction. Includes any welded wire fabric.

| CULVERT SUMMARY | | | | | | | | | | | | | LRFR RATING FACTORS | | | |
|-----------------|-----------------|-----------------|-----------------|------|------------|-------------|-------------|------------|----------------------------|---------------------------|---------------------------|-------------------------------------|------------------------------------|---------------------------|-----------|-----------|
| Floor Elev. | Floor Elev. Rt. | Crown Gr. Elev. | Design Fill Ht. | Skew | Left Wings | Right Wings | Scour Apron | Soil Saver | Concrete Barrel (Cu. Yds.) | Concrete Wings (Cu. Yds.) | Total Concrete (Cu. Yds.) | Reinf. Steel (Gr. 60) Barrel (Lbs.) | Reinf. Steel (Gr. 60) Wings (Lbs.) | Total Reinf. Steel (Lbs.) | Inventory | Operating |
| 1335.00 | 1334.90 | 1343.48 | 2.5 | 0 | Flared | Flared | Yes | No | 103.40 | N/A | N/A | 20094 | N/A | N/A | 1.46 | 1.87 |

| BAR SCHEDULE | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|------|-----|------|------|---------|------|-------|-----|------|-------|-----|------|-------|-----|------|-------|-----|------|-------|-----|------|-------|-----|---------|-------|-----|
| Δ F3 | | | Δ F4 | | | Δ S1 | | | Δ S3 | | | Δ S4 | | | Δ S5 | | | Δ W1 | | | Δ W3 | | | | | |
| Size | Spa. | No. | Size | Spa. | No. | Size | Spa. | No. | Size | Spa. | No. | Size | Spa. | No. | Size | Spa. | No. | Size | Spa. | No. | Size | Spa. | No. | Size | Spa. | No. |
| 6 | 6" | 101 | 5 | 6" | 109 | 6 | 6" | 101 | 5 | 6" | 109 | 5 | 6" | 109 | 5 | 24 | 4 | 36 | 4 | 9" | 146 | 4 | 36 | 28'-10" | | |
| Δ W4 | | | Δ G1 | | | Δ G3 | | | | | | | | | | | | | | | | | | | | |
| 4 | 9" | 146 | 5 | 18 | 25'-10" | 5 | 1'-0" | 96 | 5 | 1'-0" | 96 | 5 | 1'-0" | 96 | 5 | 1'-0" | 96 | 5 | 1'-0" | 96 | 5 | 1'-0" | 96 | 5 | 1'-0" | |

Note: Field Cut Typical Reinforcing where necessary. No deductions in Steel and Concrete Quantities in the RCB. All labor, equipment and materials shall not be paid for directly but shall be Subsidiary to the bid item 36" RCP.

| PIPE | STA. | OFFSET | FLOWLINE |
|---------|-----------|------------|----------|
| 36" RCP | 123+12.66 | 19.89' Lt. | 1336.00' |

| Minimum Splice Lengths | |
|------------------------|-------|
| #4 | 1'-5" |
| #5 | 1'-9" |

CITY OF WICHITA

Sta. 123+00
TRIPLE 8 ft x 5 ft RCB

BR 3.8.5 P Sedgwick Co.

8615 W. Frazier Lane, Suite 2
Wichita, KS 67212
Phone: 316-722-4472

| | | | | | |
|----------|------|-------|----------|-------|-----------|
| DESIGNED | JUM | DRAWN | SRS | SCALE | SHEET NO. |
| CHECKED | DATE | 02/14 | No Scale | 29 | |