



PIPE, RCBC (8'x8') (CAST-IN-PLACE)
TRANSITION SECTION
SEE SHEET NO. 11

GENERAL NOTES

LOADING: HS20-44 A.A.S.H.T.O. Specification, 2004 Edition.

UNIT STRESSES:
Concrete $F'_c = 4,000$ p.s.i.
Reinforcing Steel $F_y = 60,000$ p.s.i.

JOINTS: Construction Joints shall only be formed at locations shown or as approved by the Engineer.

EXCAVATION: All excavation and backfill shall extend 2 feet beyond the sides of the box and wingwall.

CONFLICT: If R.C.B. plan notes conflict with the General Notes from this sheet, then these General Notes will govern.

PAYMENT: Each item required for the R.C. Box construction shall be bid as depicted and shall include all labor, material, excavation, concrete, reinforcing steel, foundation stabilization and other incidentals necessary to complete the work for the RCB. For quantities of each bid item see the corresponding sheet. Quantities shown are for information only.

PRECAST P.I. SECTION: The contractor has the option of using cast in place construction at the P.I. section. If the cast in place option is chosen then drawings of the proposed layout of the reinforcing shall be submitted to the engineer for approval.

EXISTING STRUCTURE: At the existing headwall, the wings and floor are to be removed, salvaging as much horizontal steel protruding from the headwall as possible. If the horizontal steel is damaged then the contractor shall drill and grout tie bars a minimum of 9" into the existing headwall. See Miscellaneous Details Sheet for existing structure removal extent.

MANHOLE OPENINGS: At each of the manhole opening locations in the precast concrete box sections a distribution slab must be attached to the top of the RCB at the manhole opening. See Miscellaneous Detail Sheet for more details. Distribution Slabs shall be included in the bid item "Pipe, RCBC (8'x8') (Precast)".

SECURITY GRATE: A Security Grate is to be installed as shown in the plans to the upstream end of the 96" CMP and at the downstream end of the 8'x8' RCB Headwall. Padlocks are to be supplied and maintained by Others.

HEADWALL: The Lump Sum bid item "Headwall, RC (w/ Energy Dissipators)", shall include the item "Pipe, RCBC (8'x8') (Cast-In-Place)" shown on this sheet.

SUMMARY OF QUANTITIES		
Item	Quantity	Unit
Pipe, RCBC (8'x8') (Precast)	618.38	L.F.
Pipe, RCBC (8'x8') (Precast PI Section)	6.00	L.F.
Pipe, RCBC (8'x8') (Cast-In-Place Transition)	1	L.S.
MH, Reinforced Concrete (Transition)	1	L.S.
Headwall, RC (w/ Energy Dissipators)	1	L.S.
Security Grate	2	Each

PRECAST NOTES

PRECAST CONCRETE: Precast Box Sections shall meet the appropriate design and inspection requirements of A.S.T.M. Designation C850, Table 2 or C789, Table 2 whichever is critical and the Loading Specifications. The intermediate joints shall be sealed with a mastic compound which shall be provided for approval with the shop detail submittal. The Contractor shall furnish, to the Engineer, detail plans and shop drawings showing the proposed precast layout and all other details for manufacture and delivery of any precast items to be incorporated into the work.

FOUNDATION STABILIZATION: Foundation Stabilization shall be provided below the R.C.B. as shown in the Plans. The Foundation Stabilization below Precast Sections shall consist of a 6 inch Granular Base (ASTM 67). No reinforcing shall be placed until the Foundation Stabilization has gained sufficient strength to permit working upon it without injury. Seal Course shall be redefined as Foundation Stabilization as described above.

PAYMENT: The Linear Foot bid item "Pipe, RCBC (8'x8') (Precast)" shall include all material, labor, excavation, concrete, reinforcing, mechanical ties and any other incidentals necessary to complete the work.

REINFORCING STEEL: All dimensions relative to reinforcing are to centerline of bars unless otherwise noted. Bar bending and dimensions shall be as shown and noted on the Bar Bending Diagrams. Reinforcing used in the Precast Sections is not required to be epoxy coated. The concrete cover for all reinforcing shall be 1 1/2" minimum unless otherwise noted.

Doweling details between pre-cast and cast-in-place ends must be submitted for approval by the Engineer.

MECHANICAL TIES: All precast RCB joints are to be mechanically tied along the wall side only. As a minimum, one tie per wall section per side of the RCB shall be provided. The ties shall be located +/- 2'-6" above the RCB E. Mechanical Ties will only be placed on the earth side of the RCB and shall be galvanized. The Contractor shall furnish, to the Engineer, detail plans and shop drawings showing the proposed method of connection. Mechanical ties shall be included in the Linear Foot bid item "Pipe, RCBC (8'x8') (Precast)".

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HEARTLAND PREPAREDNESS CENTER SINGLE 8' X 8' REINFORCED CONCRETE BOX GENERAL NOTES AND LAYOUT JAMES L. ARMOUR, P.E. - CITY ENGINEER CITY OF WICHITA PROJ. NO. 472-84830			
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Designed by	RJM	Job No.	35-09307
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