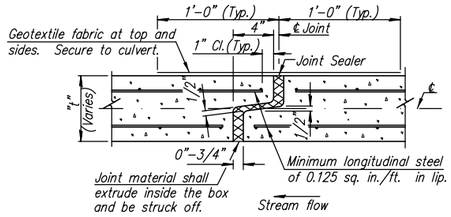
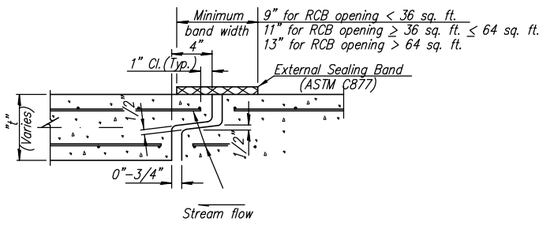
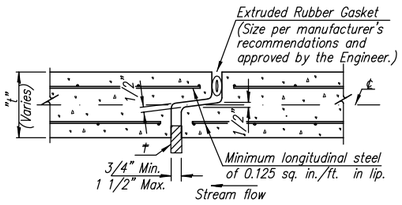


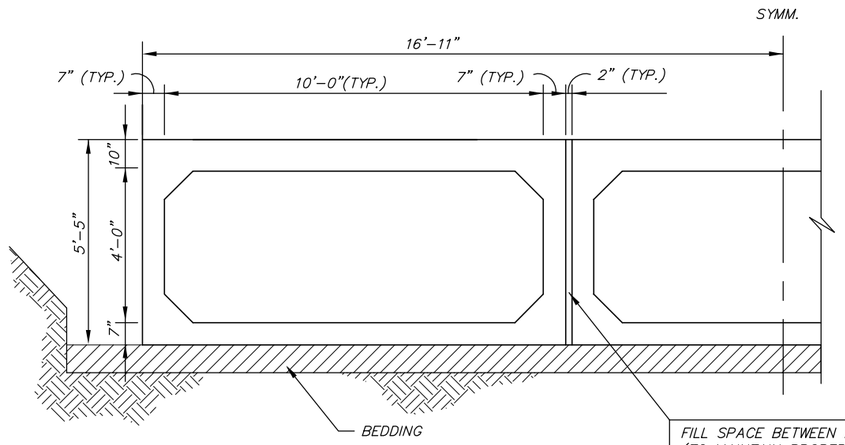
OPTION "A"



OPTION "B"



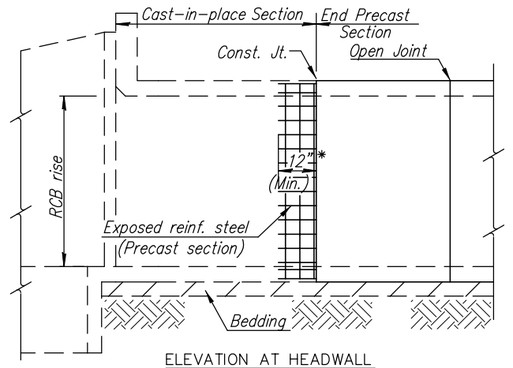
OPEN JOINT DETAIL



SECTION H-H

TYP. PRECAST RCB SECTION

SCALE 1/2"=1'-0"



ELEVATION AT HEADWALL

(End unit using combination of cast-in-place and precast sections.)

✳ EXPOSED REINFORCING STEEL IN THE WALL AND THE TOP & BOTT. SLABS

GENERAL NOTES

PRECAST BOX CULVERTS: If precast box culverts are specified, they shall be constructed at the locations shown in the plans and according to the requirements shown on this sheet. When approved by the Engineer, precast box culverts may be constructed in lieu of cast-in-place box culverts. When the precast option is chosen by the Contractor, the cast-in-place quantities shall be used as the basis of payment which shall include all labor, equipment, materials, and incidentals necessary to complete the installation.

Unless otherwise approved by the Engineer, cast-in-place collars shall be required at horizontal and vertical changes in RCB alignment. Cast-in-place end sections and wingwalls are required except as noted on this sheet. Cast-in-place sections may be required at the direction of the Engineer at junctions of drainage structures.

Cast-in-place concrete work shall be done in accordance with the KDOT Specifications and KDOT's "Guidelines for Structural Design and Detail of Reinforced Concrete Box Culverts". Class AAA (AE) Concrete and Grade 60 Reinforcing Steel shall be used for the cast-in-place construction.

SPECIFICATIONS: Single-cell Precast Concrete Box Culverts shall conform to the requirements of the following specifications except as noted in the KDOT Specifications. Multiple-cell Precast Boxes shall be designed in accordance with the criteria used to develop the single-cell precast boxes. (See the latest AASHTO Specifications.)

Condition	Min. Fill	AASHTO	Equiv. ASTM
2 Ft. or more fill	2 Ft.	M259, Table 2	C789, Table 2
Less than 2 Ft. fill	0 Ft.	M273, Table 2	C850, Table 2

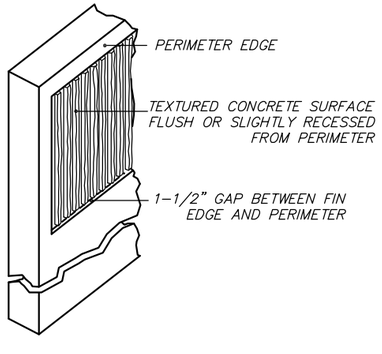
FABRICATION: Prior to fabrication, the Contractor shall furnish shop drawings to the Engineer for review. Shop drawings shall detail all phases of construction including layout, joint details, lifting devices, casting methods, construction placement and details of any cast-in-place segments or transitions that may be required. Copies of overheight and overload permits, when required, shall be submitted with the shop drawings.

The following information shall be legibly marked on an inside face of each box section by waterproof paint or other approved means:

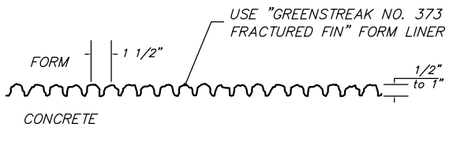
a) Date of manufacture
b) Name or trademark and location of the manufacturer
c) Weight of box section in tons
d) Piece mark
e) The top of the box

CONSTRUCTION REQUIREMENTS: Foundation preparation shall be in accordance with KDOT Specifications except that a minimum 6 inch thickness of crushed stone for backfill or 3 inch seal course shall be provided. Choice of bedding shall be at the Contractor's option and approved by the Engineer.

Precast concrete box culvert shall be laid with the groove end of each section upstream, and the sections shall be tightly joined. Joint shall be sealed with an approved bituminous mastic material and geotextile or sealing band or an extruded rubber gasket, installed in accordance with the recommendations of the manufacturer. Lifting holes shall be plugged with a precast plug, sealed and covered with mastic or mortar.

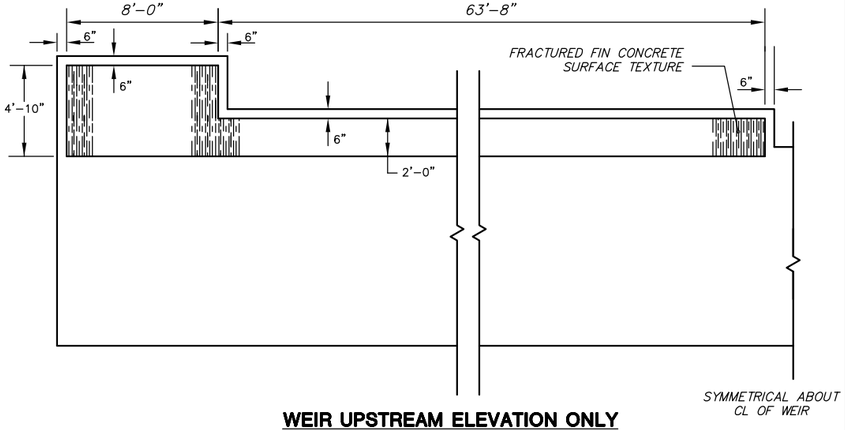


ISOMETRIC DETAIL



FRACTURED FIN DETAIL PATTERN-TYPICAL SECTION

Provide textured concrete surface on both faces of weir structure. Texture shall be formed with "Greenstreak No. 373 Fractured Fin" form liner pattern or equal as shown in the 'Fractured Fin Detail Pattern-Typical Section' this sheet. All written manufacturer's recommendations shall be followed. Pattern shall have a 6" border at the top and sides as shown above. The textured concrete surface shall be flush or slightly recessed behind the face of perimeter surfaces. Cost of textured concrete is subsidiary to RCB Construction.



WEIR UPSTREAM ELEVATION ONLY

NOT TO SCALE

MKEC ENGINEERING CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9600

REEDS COVE ADDITION
STORM WATER DRAIN #585
PROJECT NAME

PRECAST CONC. BOX CULVERT DETAILS & WEIR CONCRETE TEXTURING DETAILS
SHEET TITLE

RR	HAW	GJA
DESIGN BY:	DRAWN BY:	CHECKED BY:
JUNE 2003	02121	12 / 36
DATE	JOB NO.	SHEET/OF

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