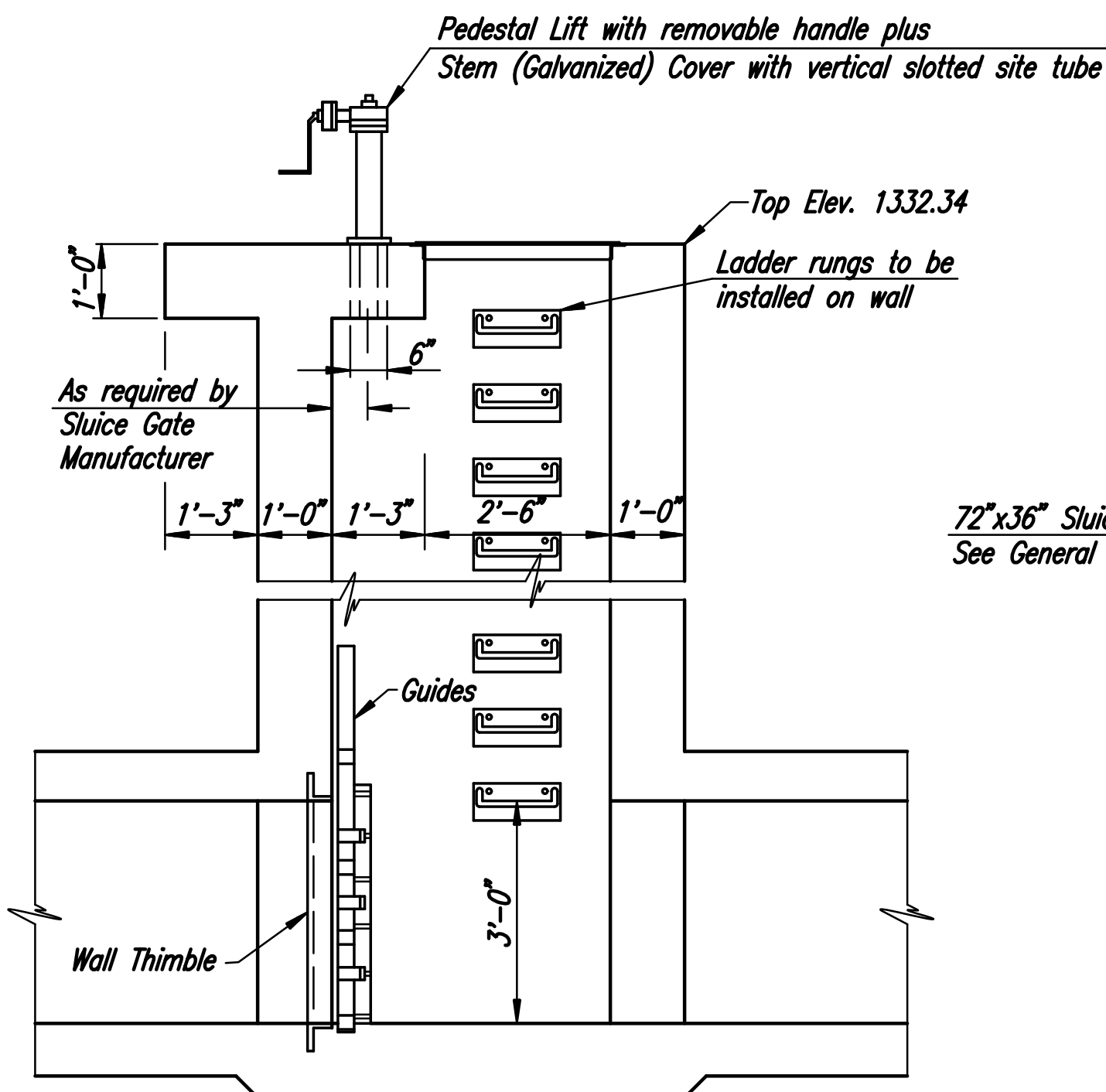
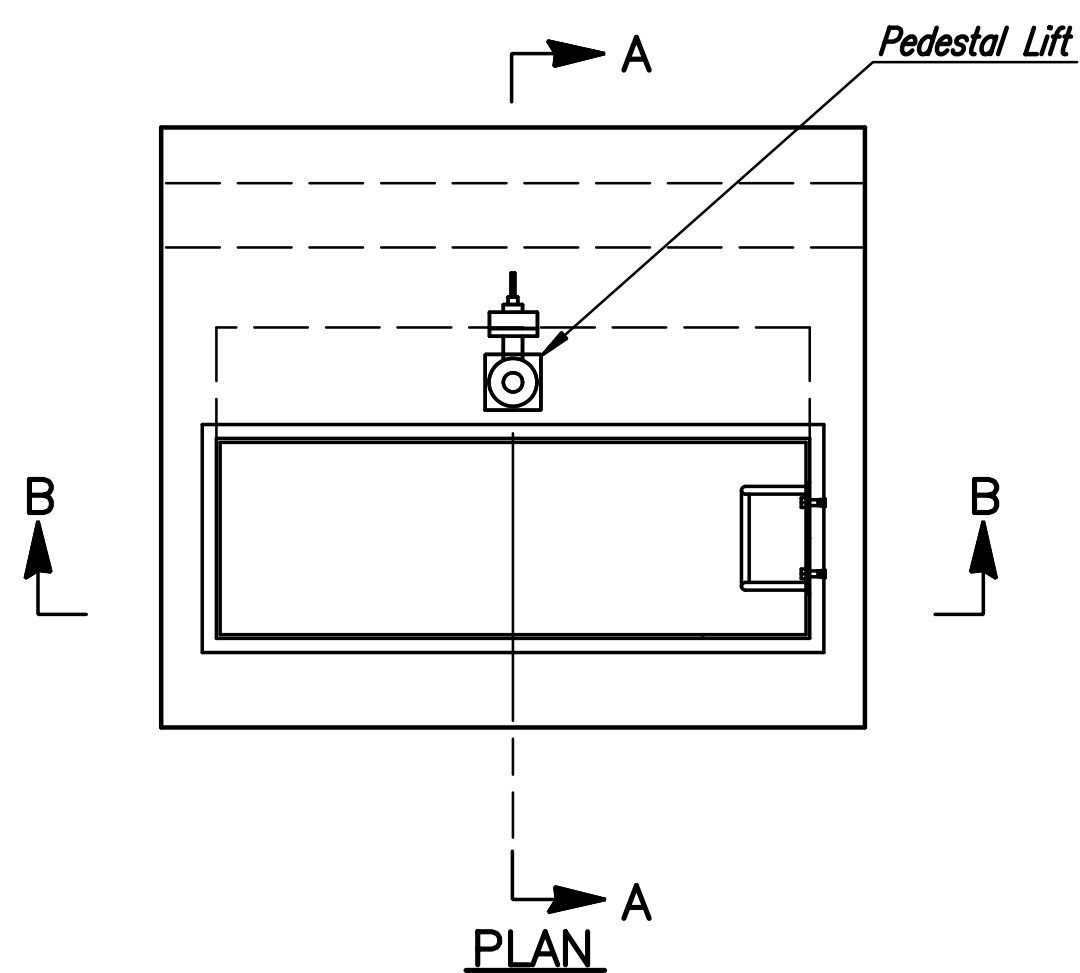


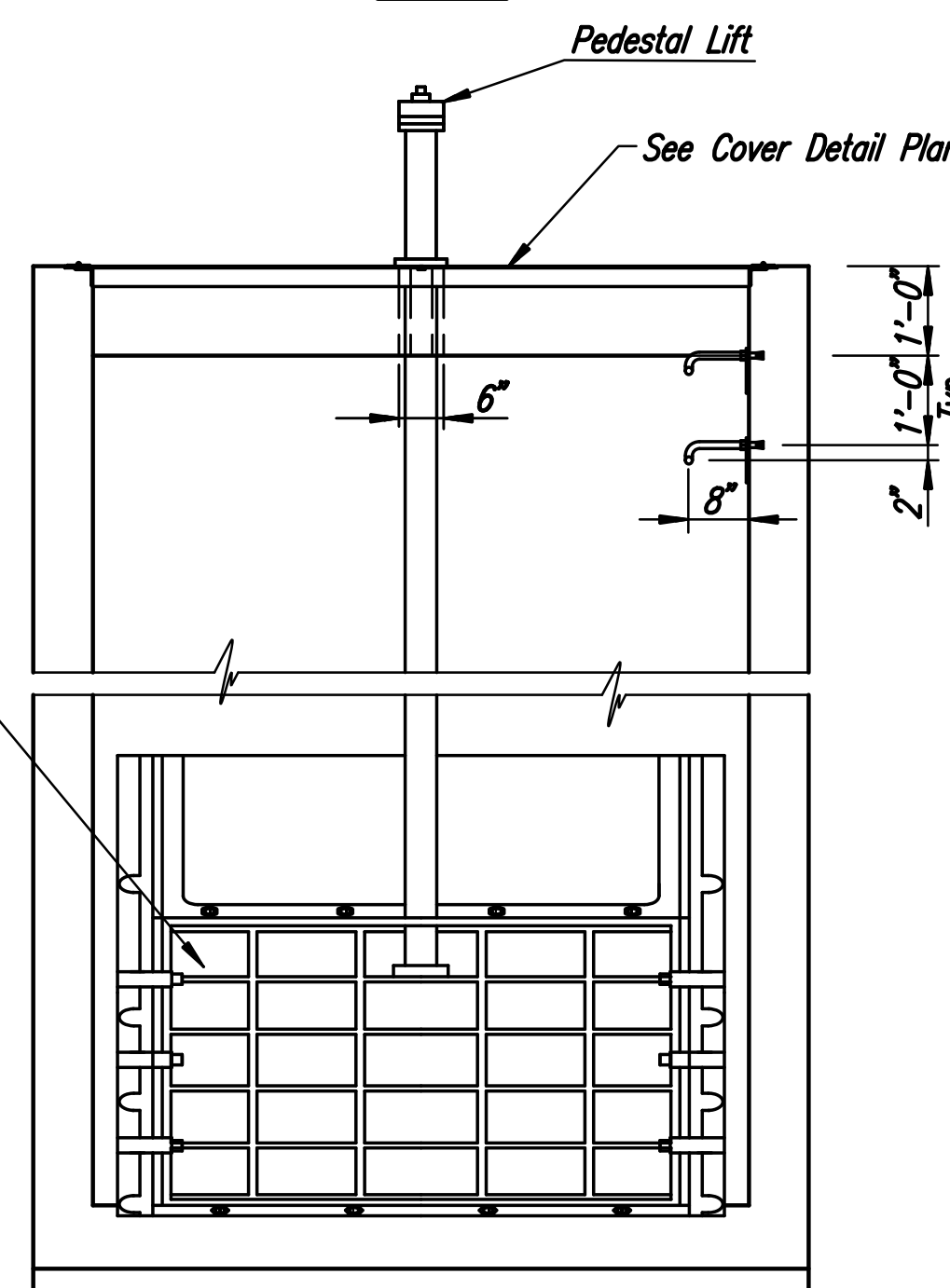
LADDER RUNG DETAILS



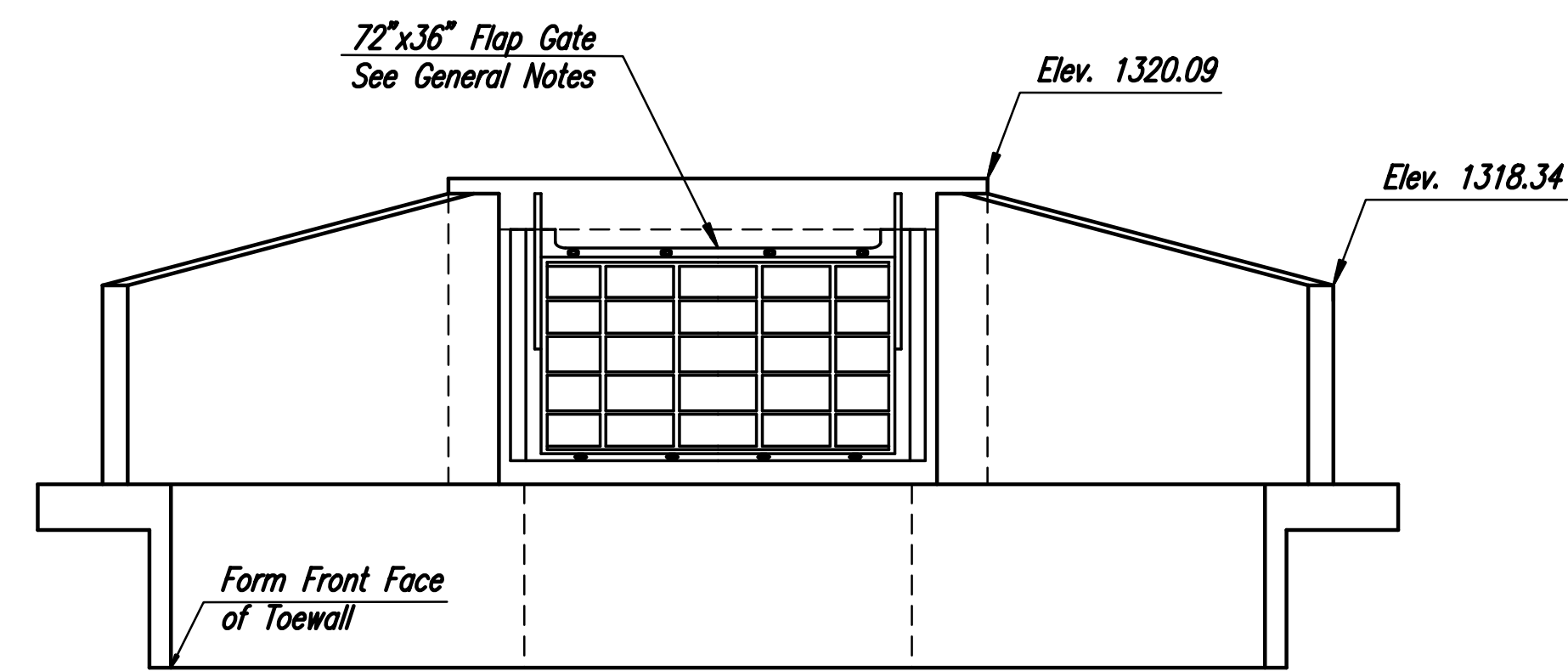
SECTION A-A



PLAN



SECTION B-B



END ELEVATION (Downstream End)

NOTE: Shaft Drive to fit a 2" AWWA square nut drive.

GENERAL NOTES (SLUICE GATE SECTION AND FLAP GATE)

SLIDE GATE AND LIFT: The Slide Gate shall be installed in the Sluice Gate Well as shown. Rodney Hunt Heavy Duty Sluice Gate with Wall Thimble shall be used. The lift shall be Rodney Hunt 4:1 with 1/2" diameter stem, stem guide and Stem Covers. Dimensions and details for the Slide Gate and Wall Thimble shall be obtained from certified installation drawings furnished by the Vendor. Other approved Slide Gates and Lifts may be used in lieu of the Rodney Hunt products listed. Iron and steel components subject to FHWA Buy-America contract provision.

PAINT: The Slide Gate and Drainage Gates shall be given a shop coat of paint in accordance with the manufacturers standard practice

FRAME AND COVER: The frame and cover shall be Halliday Model No. S2R7929 or approved equal. Iron and steel components subject to FHWA Buy-America contract provision.

DRAINAGE GATES: The Flap Gate shall be designed to allow free outflow and prevent backflow for maximum seating heads up to 20 feet. Gates shall be Rodney Hunt Medium Duty Drainage Gate or approved equal.

CONCRETE: Class AAA Concrete shall be used for constructing the Sluice Gate Structure, R.C.B.'s and Wingwalls.

REINFORCING STEEL: Reinforcing Steel shall be A.S.T.M. A-615 Grade 60 (Epoxy Coated). Reinforcing bars shall be bent or field cut around pipe openings.

While materials to be used in this project shall meet the Buy America section revised by Special Provision 07-01018-ROI, the contractor shall insure that all materials proposed for the Flap Gates and the Sluice Gate on this project are in conformance with the special provision. The reference to specific Metals for the Sluice Gate and components associated with it are for conveyance of dimensional intent of material to be supplied and are for information only. Specific shop drawings shall be forwarded to the Engineer for approval with the necessary statements of compliance with "Buy America" as stated in special provision 07-01018-RI.

PEDESTAL DRIVE: Pedestal Drive shall be in compliance with Wichita Valley Center Floodway Control Maintenance.

GENERAL NOTES (R.C.B. AND WINGWALLS)

LOADING: H20-44 A.A.S.H.T.O. Specification, 1983 Edition.

UNIT STRESSES:
Concrete $F_c = 4000$ p.s.i. $F_y = 60,000$ p.s.i.
 $F_c = 1600$ p.s.i. $F_s = 24,000$ p.s.i.

CONSTRUCTION: The Contractor shall construct the RCB and Sluice structures as shown.

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

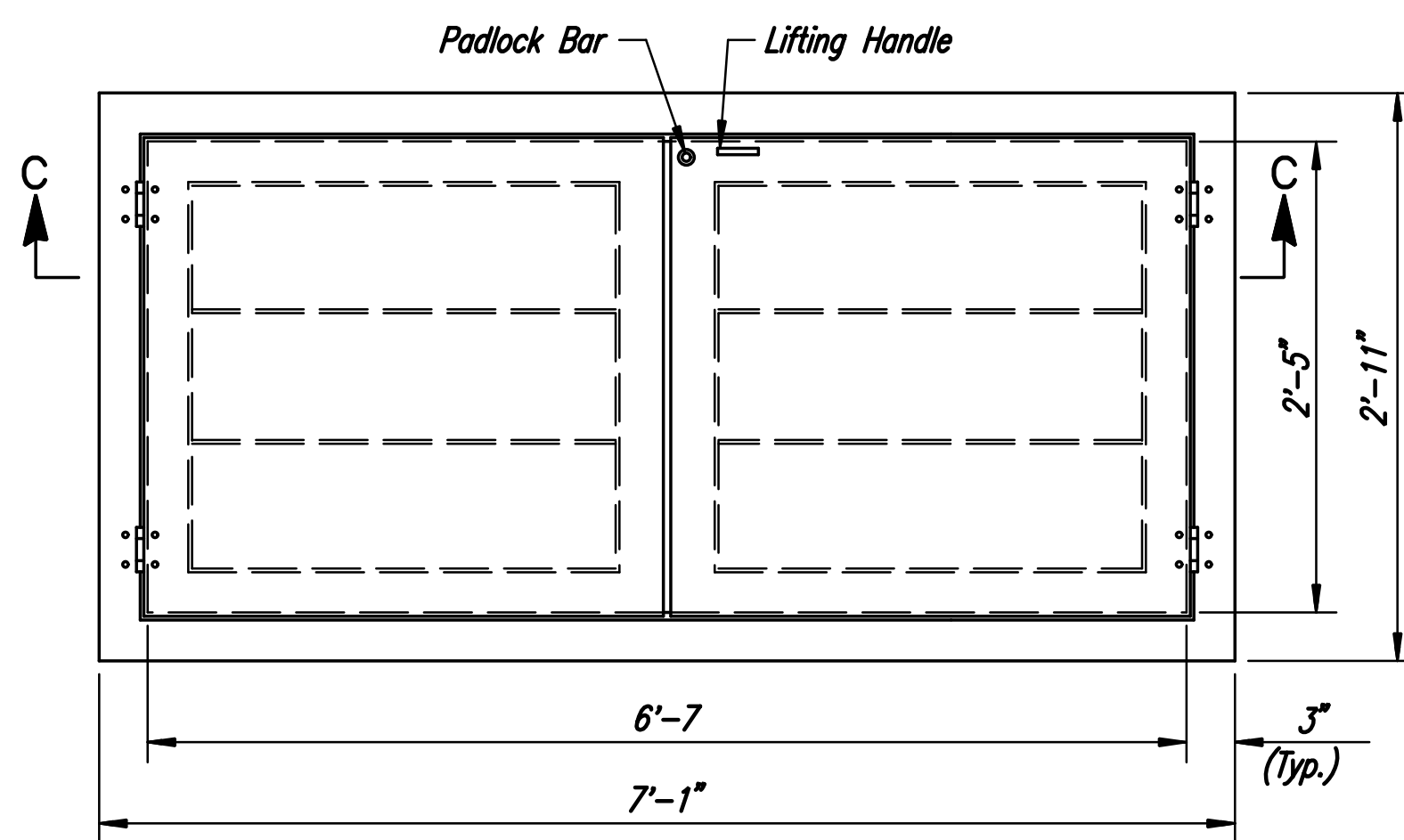
EXCAVATION: All excavation and backfill shall extend two (2) feet beyond the sides of the box and wingwall.

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

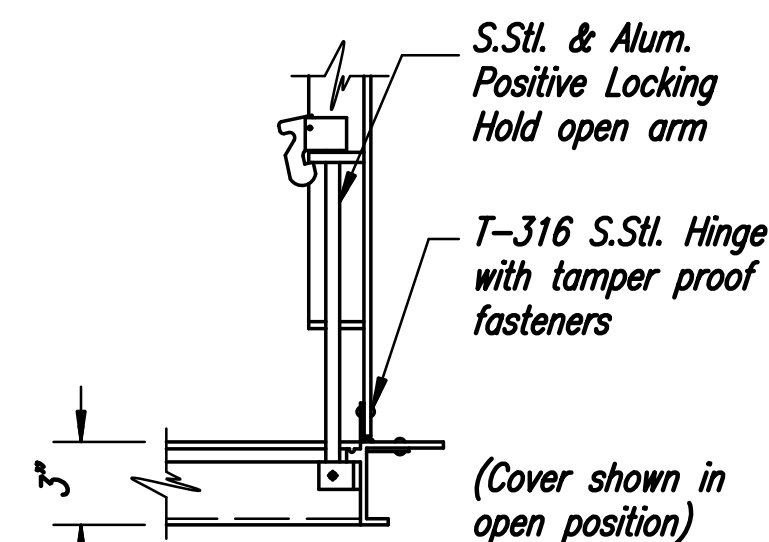
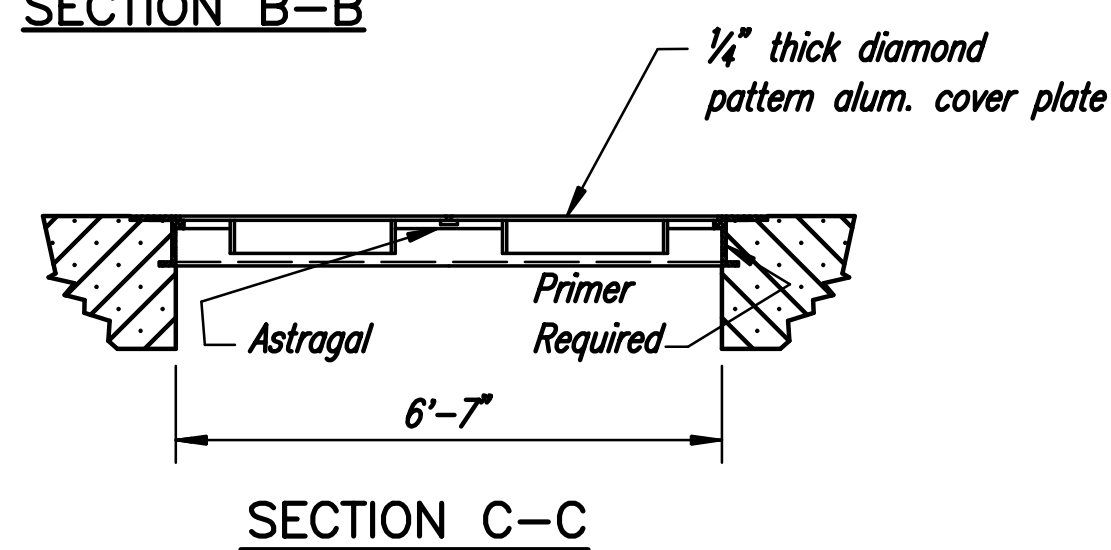
PAYMENT: The 6'-0"x3'-0" R.C. Box shall be bid by Linear Feet measured along ϕ of R.C.B. end to end. Which shall include all labor, material, excavation, backfill, concrete, reinforcing steel, Flap Gate, Sluice Structure, seal course and all other incidentals necessary to complete the work. Quantities shown are for information only.

SEAL COURSE: A Seal Course shall be constructed below the R.C.B. as shown in the Plans. The Seal Course below Precast Sections shall consist of 6" of crushed rock conforming to ASTM C-33, Gradation No. 67, and shall meet the requirements for Portland Cement Concrete Pavement Coarse Aggregate, Section P-501. Cast-in-Place Sections will also require the same seal course as the precast sections.

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 shall be epoxy coated with exception to the precast sections and welded wire fabric. The concrete cover for all reinforcing shall be 1/2" minimum unless otherwise noted. A revised bar schedule will be required at shop detail submittal if the Cast-in-Place portion lengths are adjusted.



COVER DETAIL PLAN



COVER DETAIL

Plotted By: svb Date: 8/19/2013 9:26:52 AM
FILE: I:\2008\0820\Bridg\Final\08207 - Sluice Detail.dgn

No.	Revision	By	Date
37TH STREET NORTH			
GENERAL NOTES, SLUICE GATE AND FLAP GATE DETAILS			
GARY JANZEN, P.E.—CITY ENGINEER CITY OF WICHITA PROJECT NO. 472-84692			
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2691 www.pec1.com			
Designed by	RAS	Job No.	08207
Drawn by	WLL	Date	August, 2013
			Sh. 71 of 193