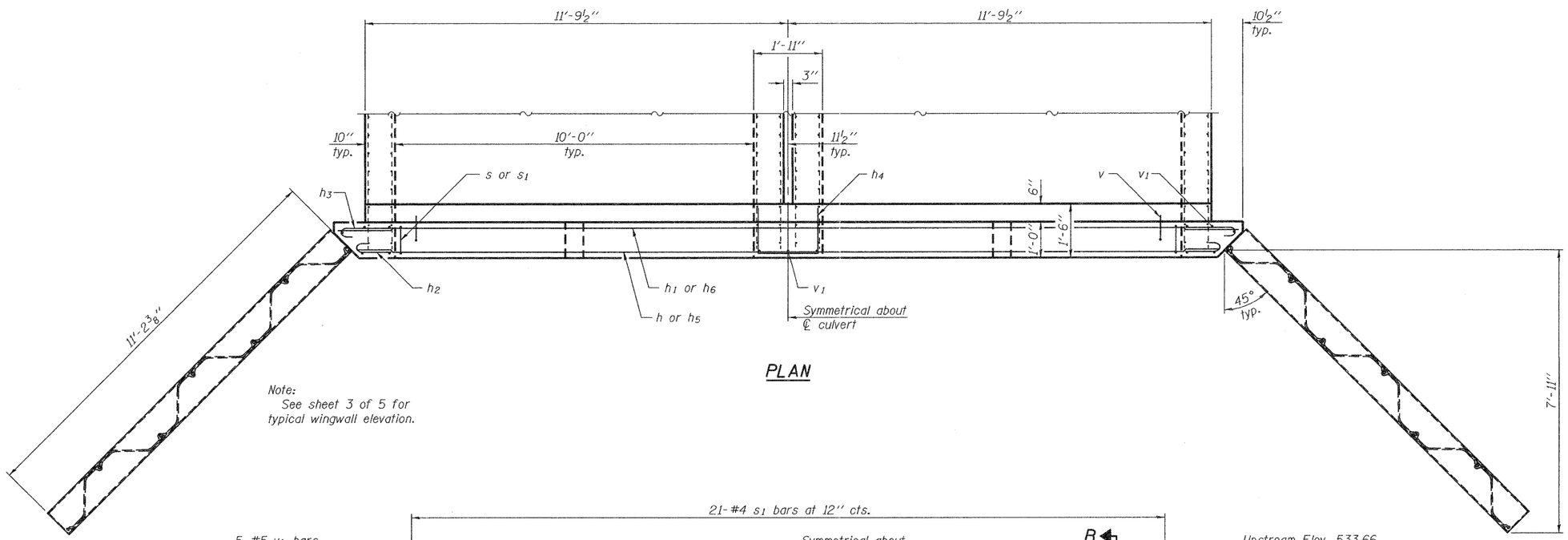
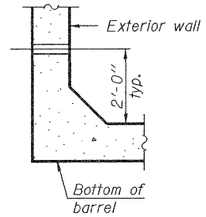


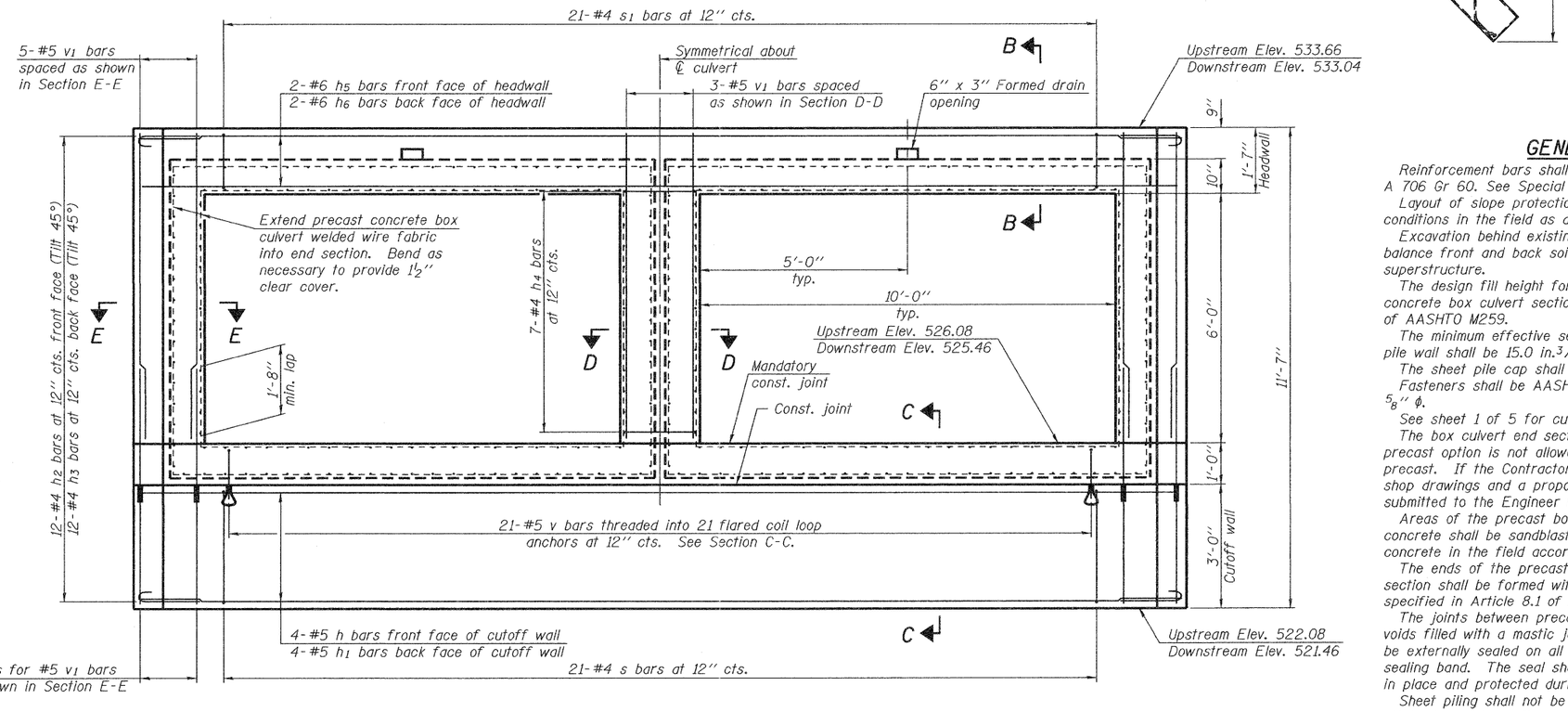
PLAN

Note:
See sheet 3 of 5 for typical wingwall elevation.



DRAIN DETAIL

Provide 3" ϕ drain holes in exterior walls at ±8' cts. See Article 503.11 of the Standard Specifications.



END ELEVATION

Wingwalls omitted in this view for clarity. See sheet 3 of 5 for additional wingwall details.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

The design fill height for this structure is 2 feet. The precast concrete box culvert sections shall conform to the requirements of AASHTO M259.

The minimum effective section modulus of the permanent sheet pile wall shall be 15.0 $in.^3/ft.$

The sheet pile cap shall be AASHTO M270 Grade 50W.

Fasteners shall be AASHTO M164 Type 3. Bolts ½" ϕ, holes ⅝" ϕ.

See sheet 1 of 5 for culvert construction sequence.

The box culvert end section shall be built in the field and a precast option is not allowed except the cutoff wall may be precast. If the Contractor elects to use a precast cutoff wall, shop drawings and a proposed construction sequence shall be submitted to the Engineer for approval.

Areas of the precast box culvert in contact with cast-in-place concrete shall be sandblasted, cleaned, and wetted prior to placing concrete in the field according to Article 503.09(b).

The ends of the precast box sections adjacent to the end section shall be formed without the male and female shapes specified in Article 8.1 of AASHTO M259.

The joints between precast box sections shall be sealed, all voids filled with a mastic joint sealer. In addition, the joints shall be externally sealed on all four sides with a 13 inch wide external sealing band. The seal shall be centered over the joint, secured in place and protected during the backfilling process.

Sheet piling shall not be driven until the concrete strength has attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

DESIGNED - DAVID L. GREIFZU	EXAMINED	Thomas J. Domagalski, ENGINEER OF BRIDGE DESIGN	DATE - MARCH 9, 2011	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BOX CULVERT END SECTION DETAILS STRUCTURE NO. 013-2012
CHECKED - MICHAEL D. ROLAPE	PASSED	D. Carl Preuss, ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 2 OF 5 SHEETS
DRAWN - MICHAEL B. MOSSMAN					
CHECKED - D.L.G. / M.D.R.					

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2704	12B-1(1)	CLAY	39	19
		CONTRACT NO. 74116		
		ILLINOIS FED. AID PROJECT		