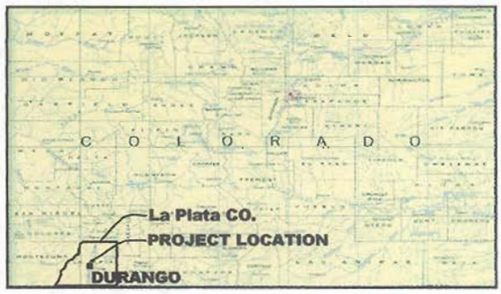
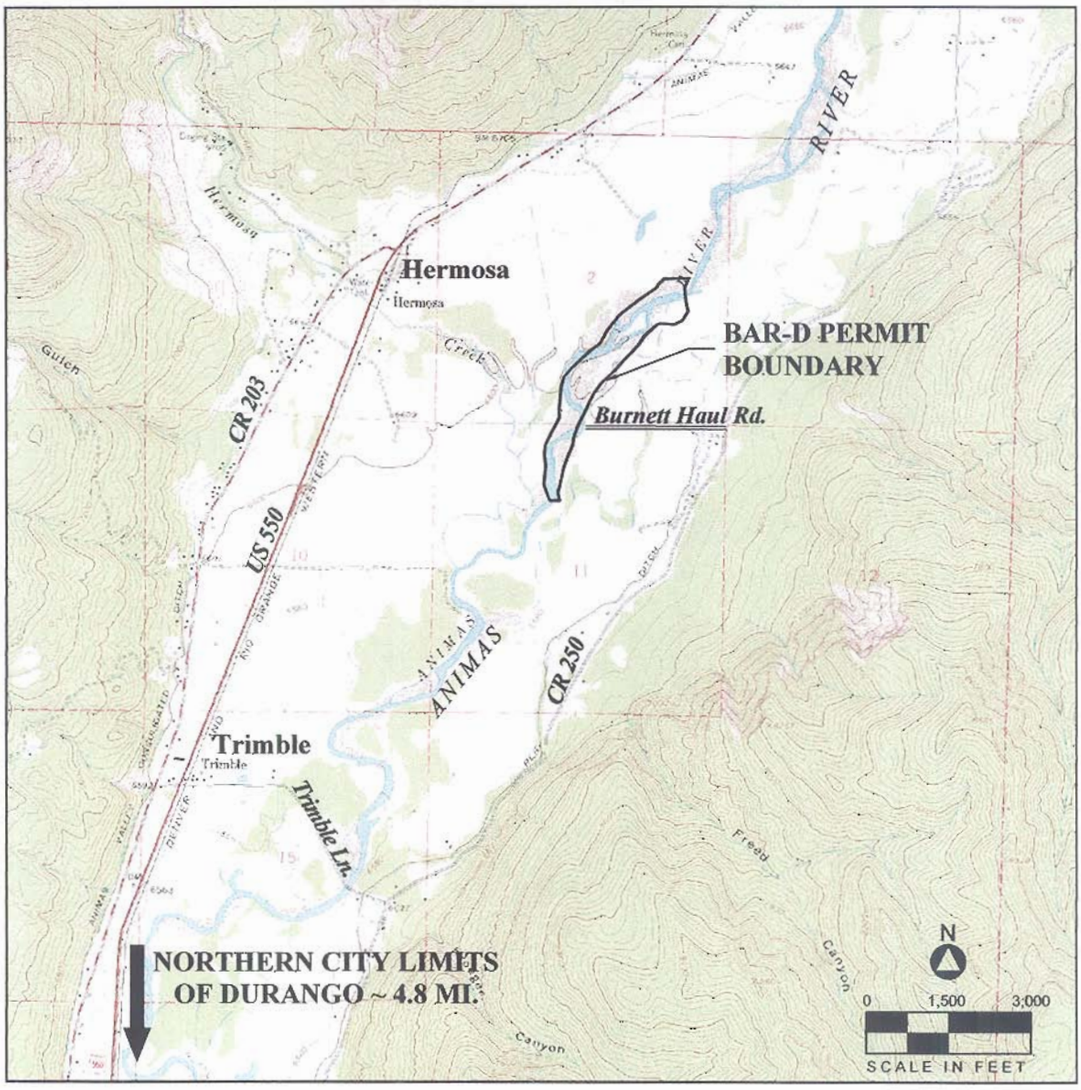
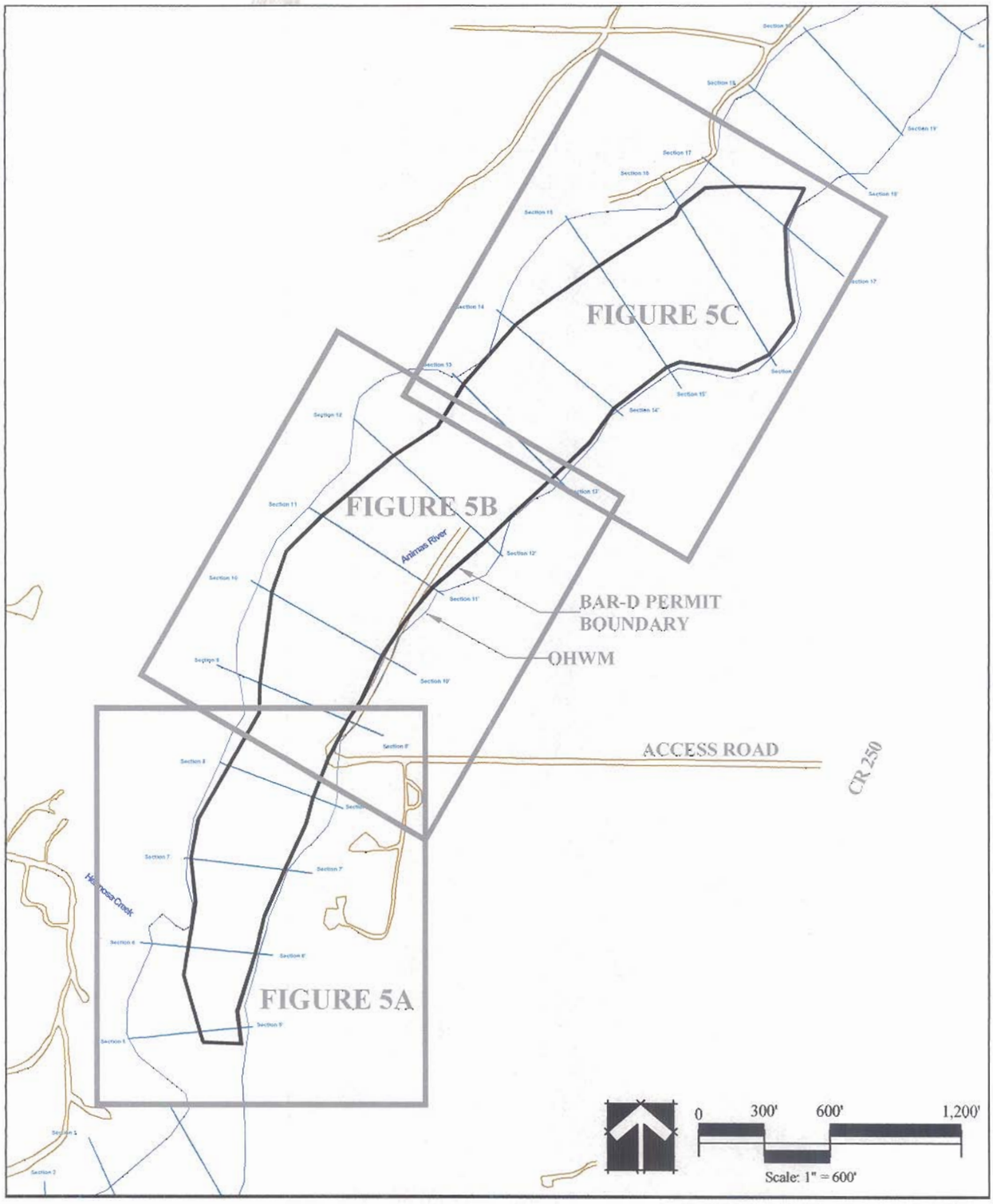
PROJECT LOCATION:

Sections 2 & 11, Township 36 North, Range 9 West. La Plata County, Colorado. New Mexico Principal Meridian.

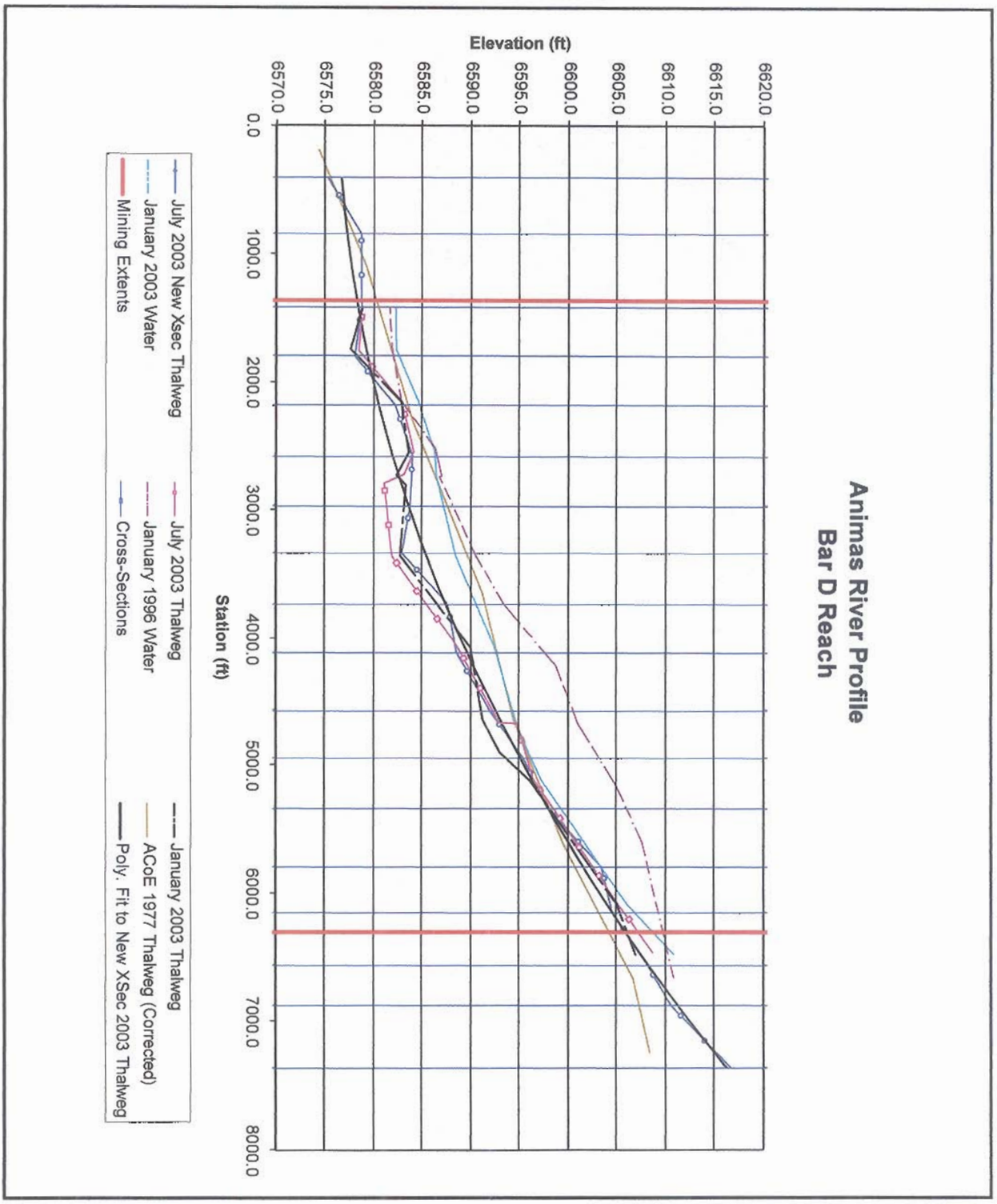




SUGNET ENVIRONMENTAL INC. © 2004	PROJECT LOCATION & VICINITY MAP	FIGURE 1
	BAR-D 404 PERMIT APPLICATION	Source: Hermosa Colo. 7.5' USGS Quadrangle



SUGNET ENVIRONMENTAL INC. © 2004	SHEET LAYOUT	FIGURE 4
	BAR-D 404 PERMIT APPLICATION	*Digital topographic, planimetric and land use data provided by Aerometric, Section data by Greg Lewicki & Associates, and Bechtolt Surveying & Engineering*



SUGNET ENVIRONMENTAL INC. © 2004	**RIVER PROFILES**	**FIGURE 6**
	BAR-D 404 PERMIT APPLICATION	Profile data provided by Greg Lewicki & Associates and Bechtolt Surveying & Engineering

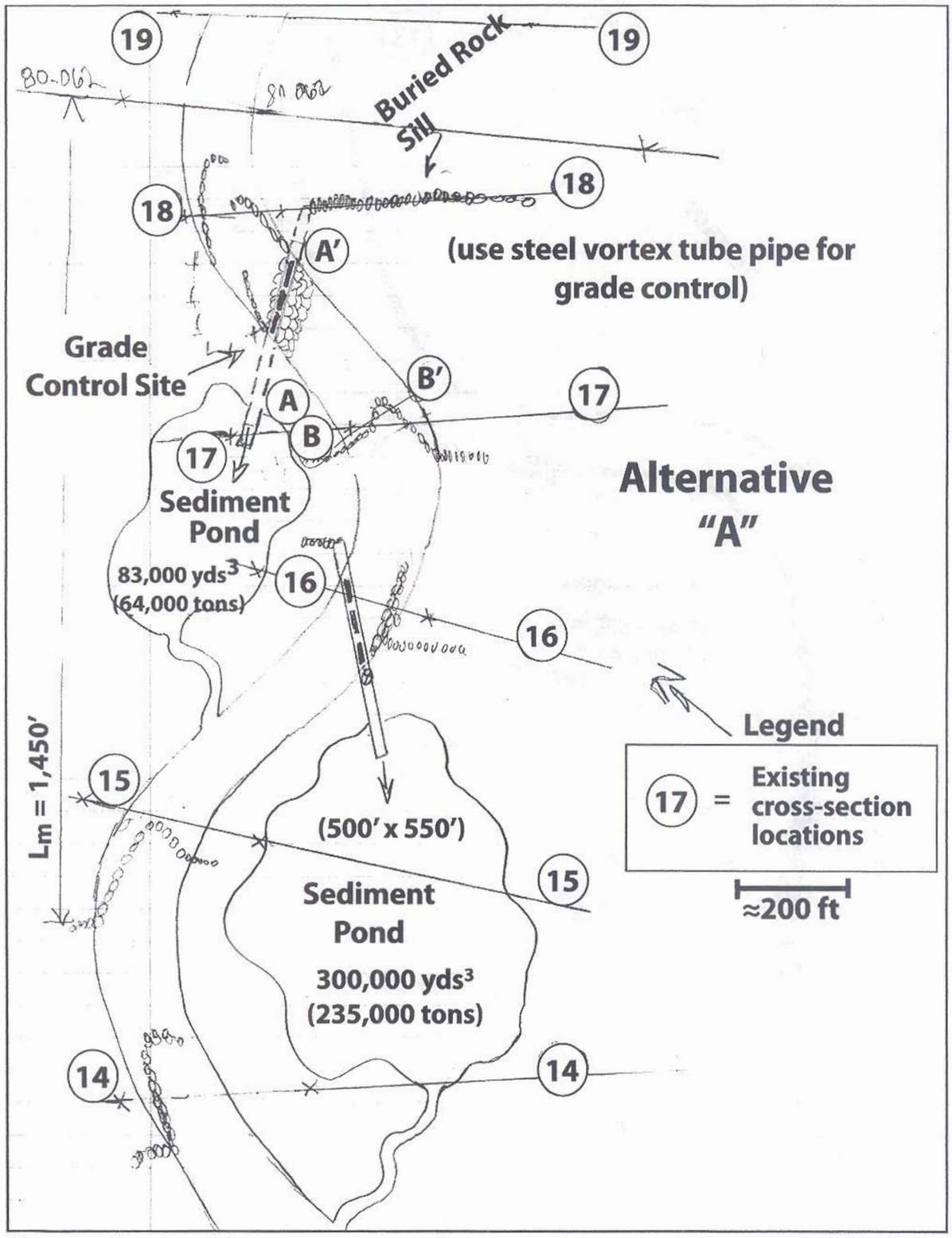
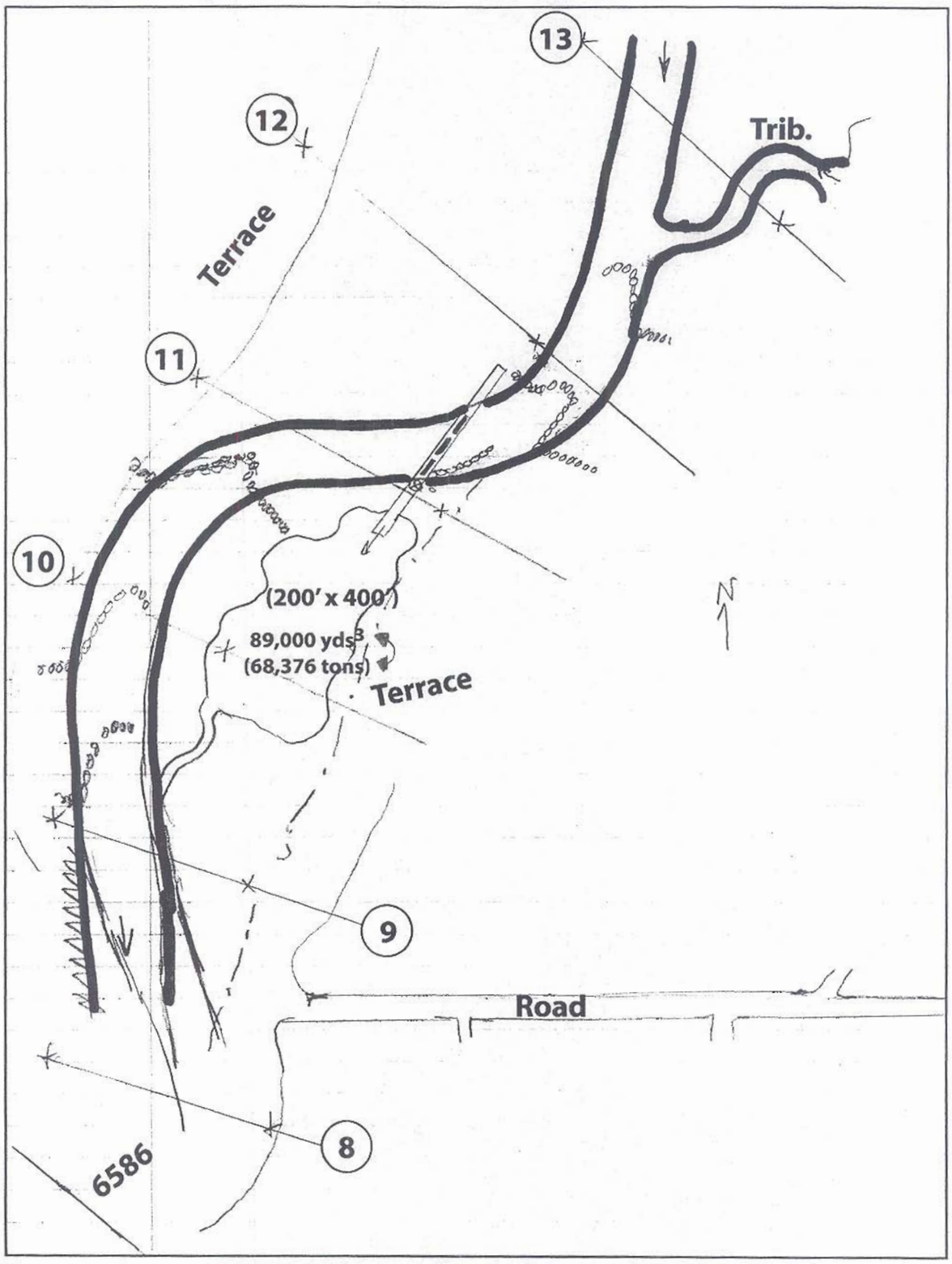


Figure 11. Plan view of the proposed C4 channel alignment, structures, V-SET and detention ponds.



14 **Figure 12.** Plan view of the proposed channel alignment, V-SET and detention ponds, con't.

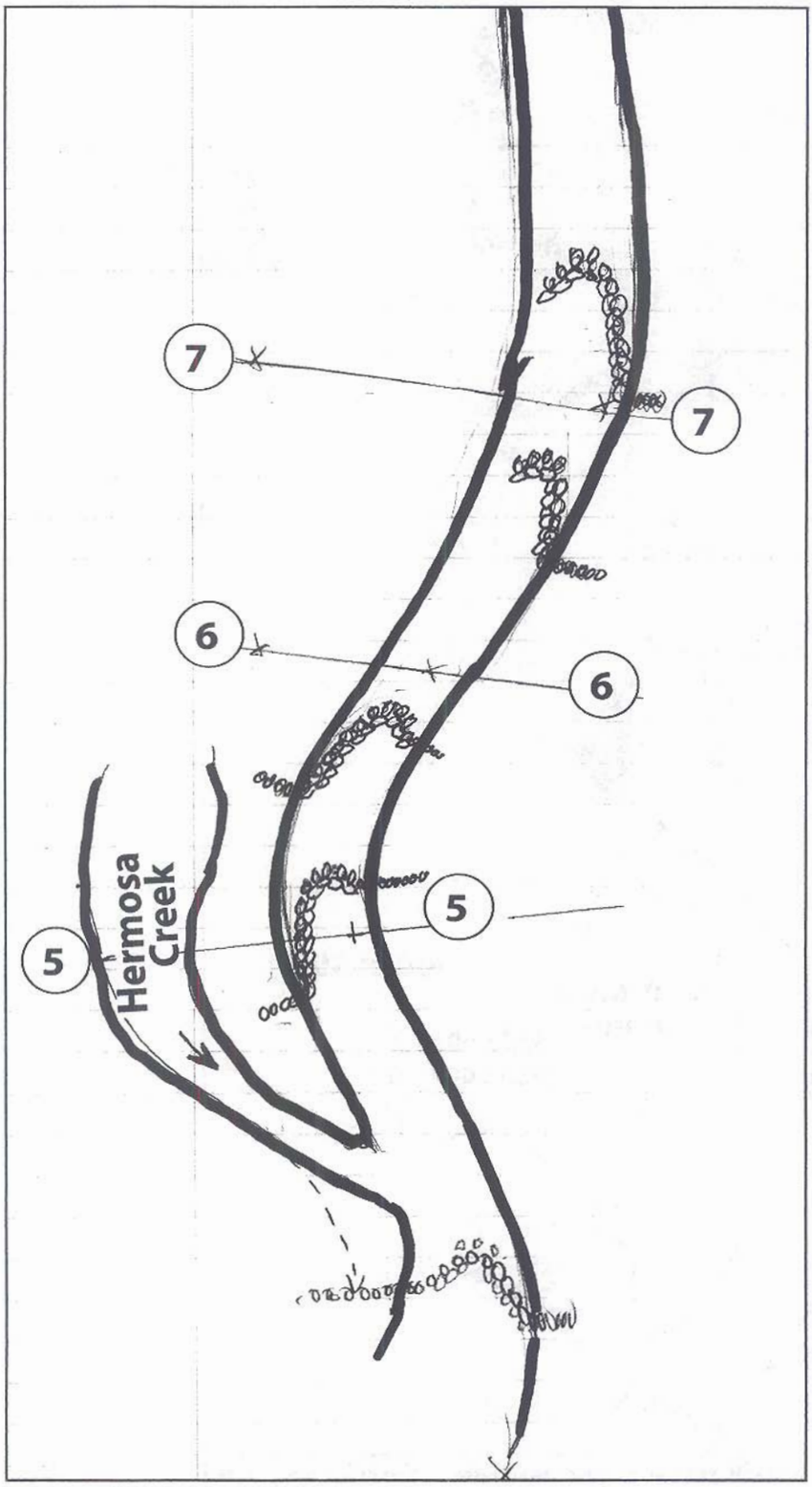


Figure 13. Lower end of the proposed channel alignment and stabilization structures.

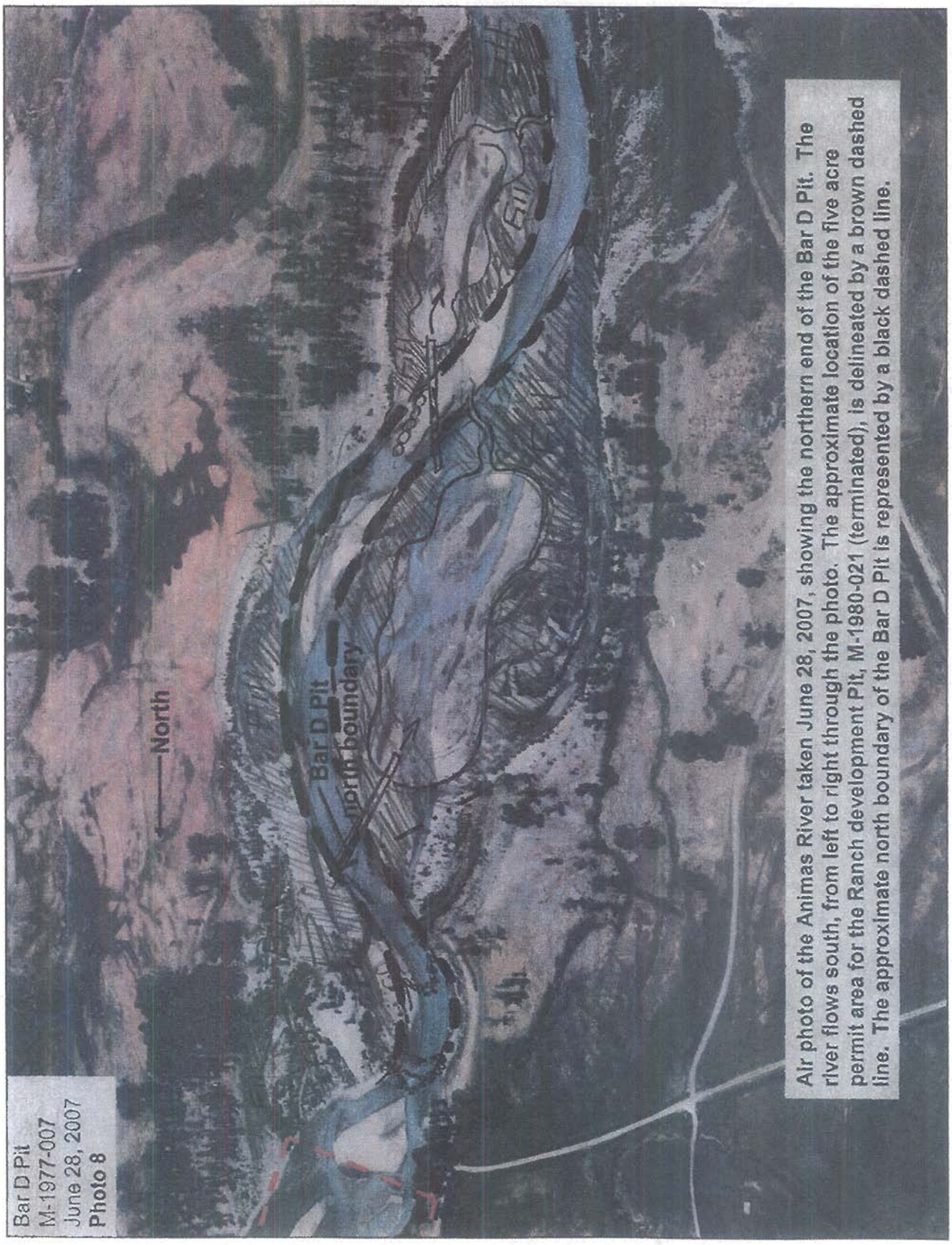
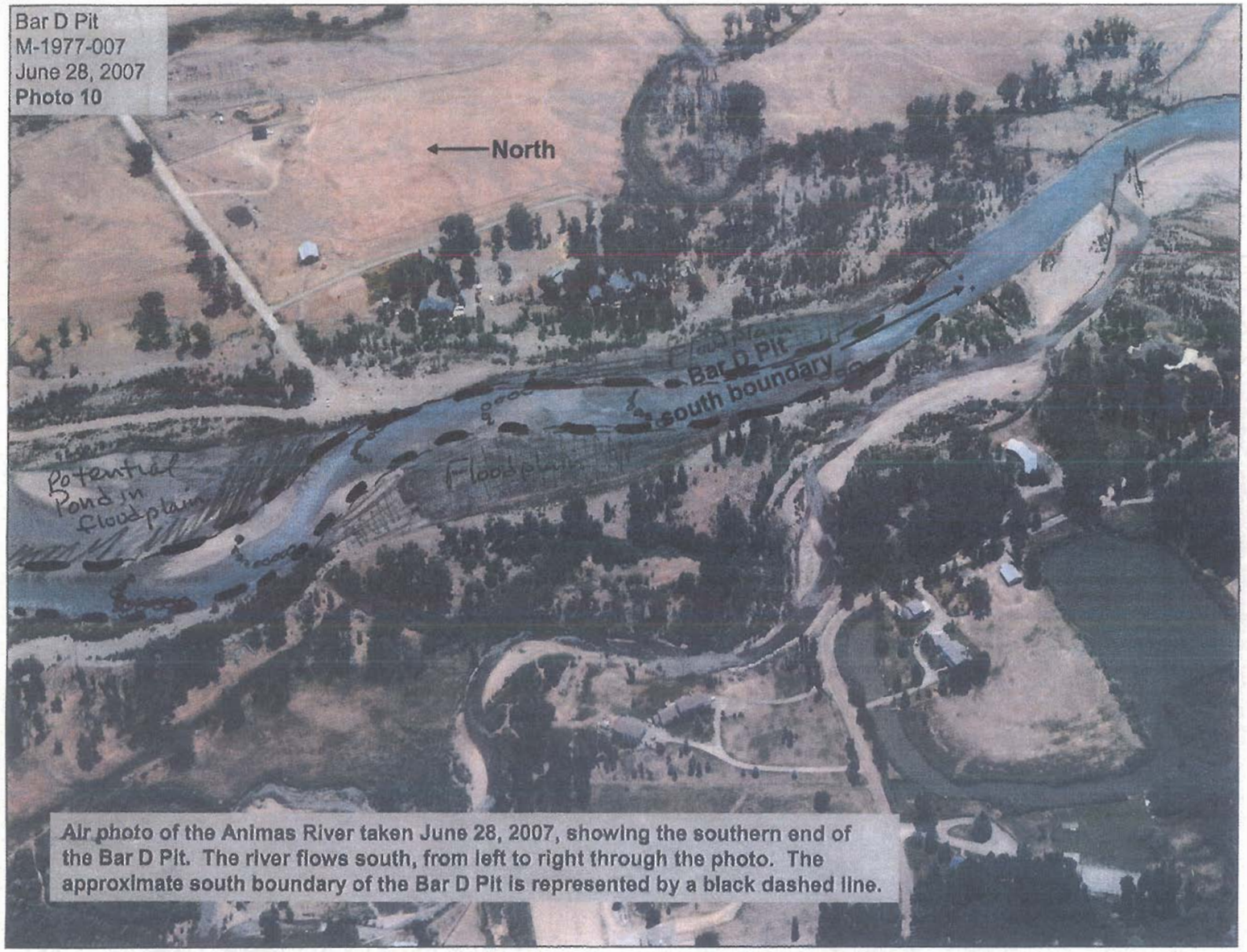


Figure 15. Proposed layout of the upper reach channel alignment, V-SET, structures and sediment detention ponds.

Figure 16. Proposed layout of the middle reach channel alignment, V-SET, structures and sediment detention ponds.



Air photo of the Animas River taken June 28, 2007, showing the southern end of the Bar D Pit. The river flows south, from left to right through the photo. The approximate south boundary of the Bar D Pit is represented by a black dashed line.

Figure 17. Proposed layout of the lower reach channel alignment, V-SET, structures and sediment detention ponds.

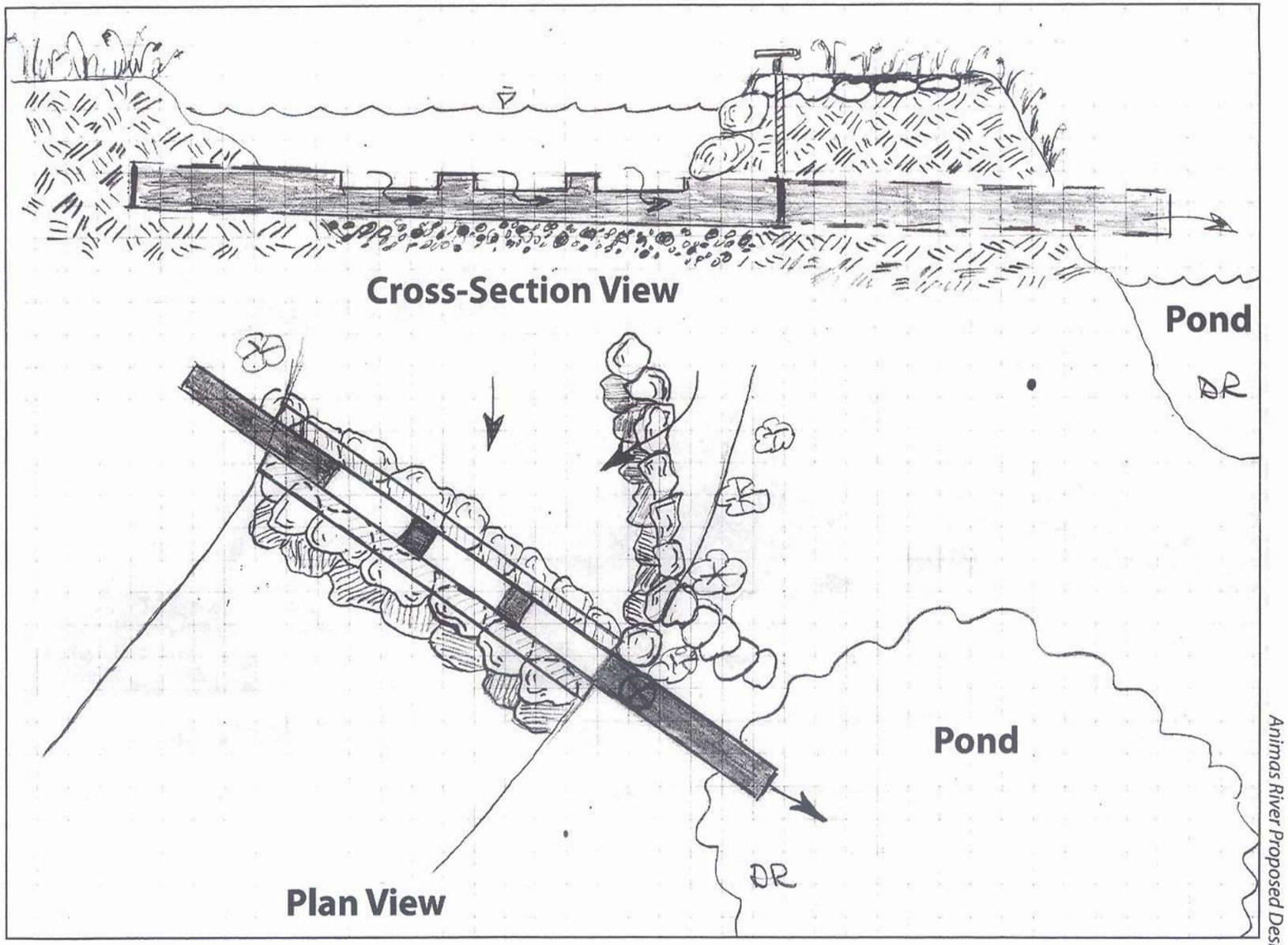


Figure 1. Section and plan view of V-SET.

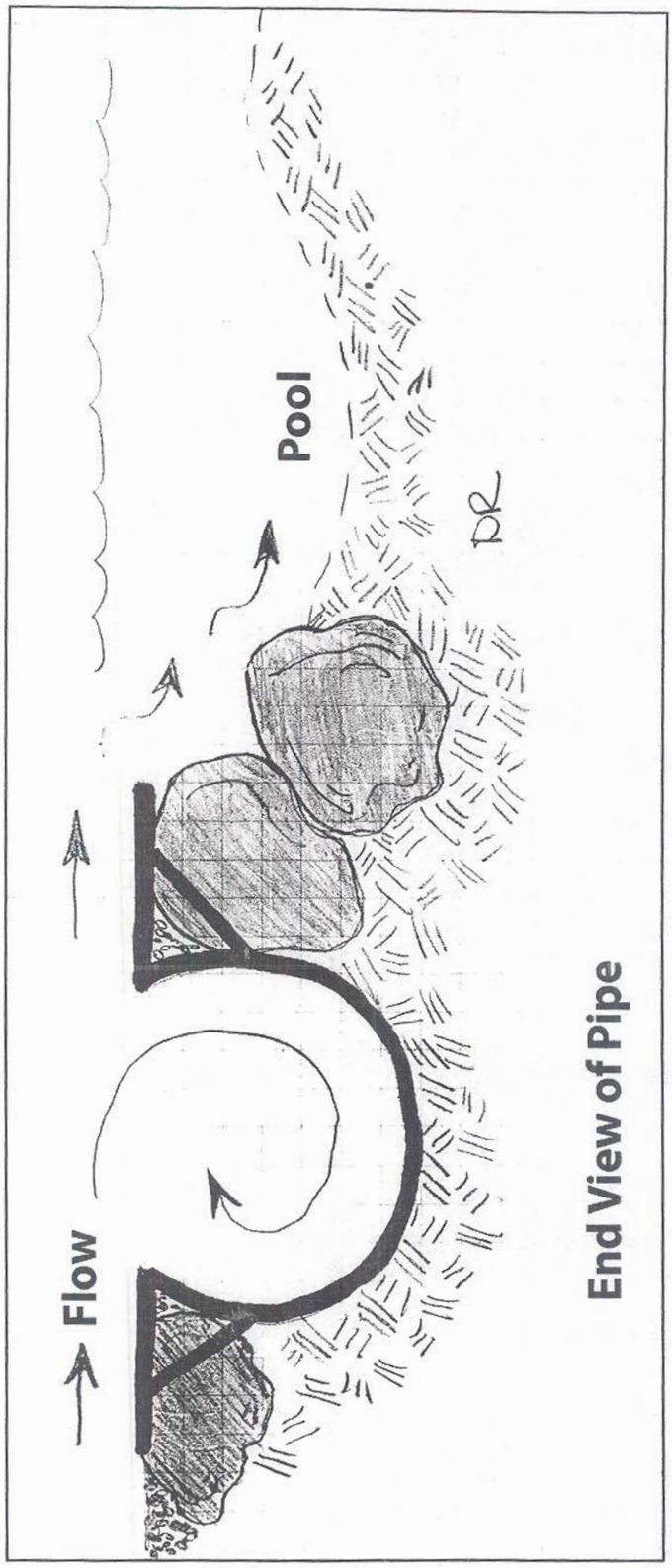


Figure 2. End view of V-SET.

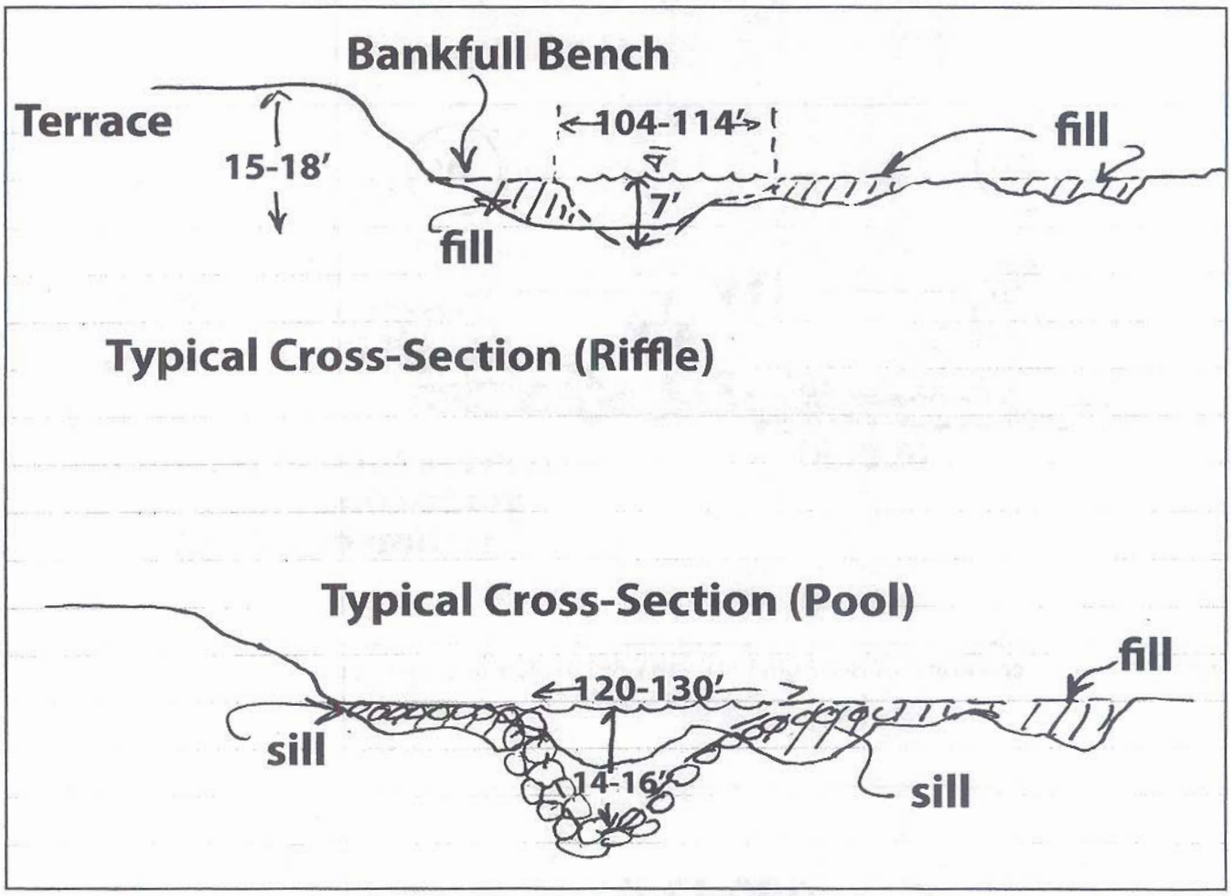


Figure 18. Typical pool cross-section and riffle cross-section of the proposed C4 stream type for the Animas River.

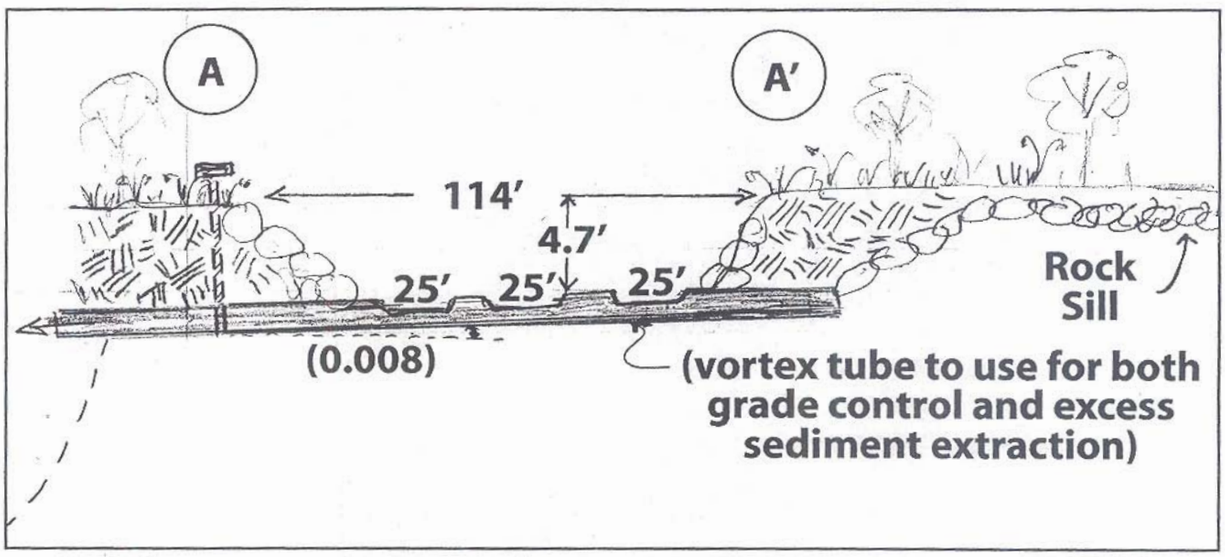


Figure 19. Cross-section at A–A′ (see Figure 11) with V-SET in place and screw gate.

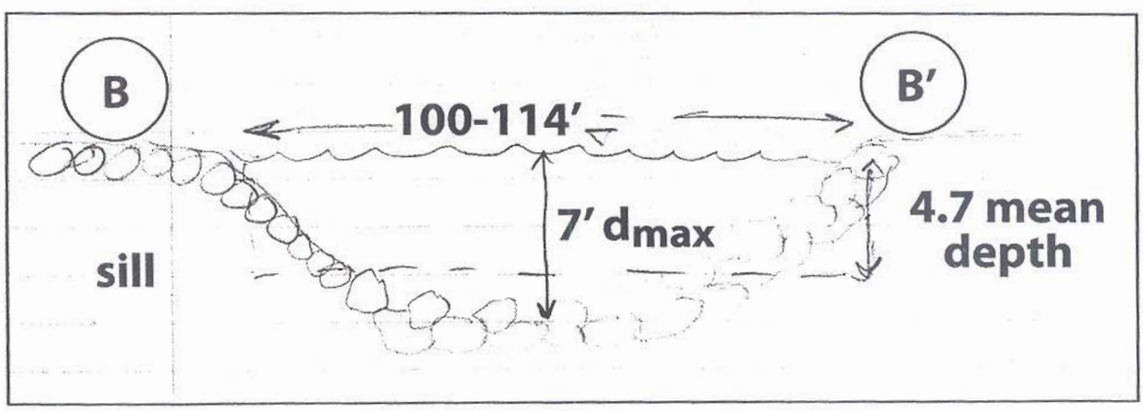


Figure 20. Cross-section at B–B′ (see Figure 11) with cross-vane in place.

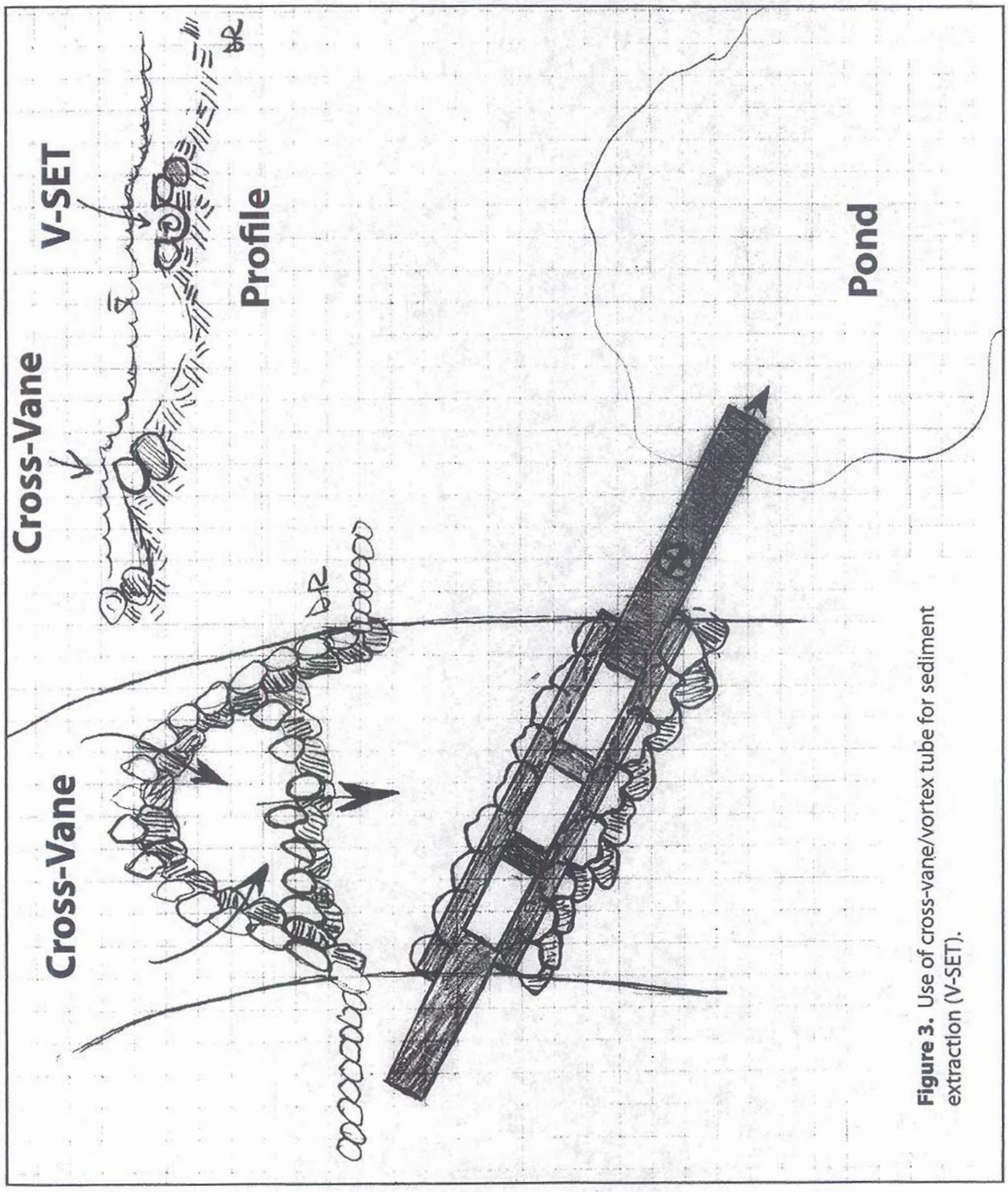


Figure 3. Use of cross-vane/vortex tube for sediment extraction (V-SET).

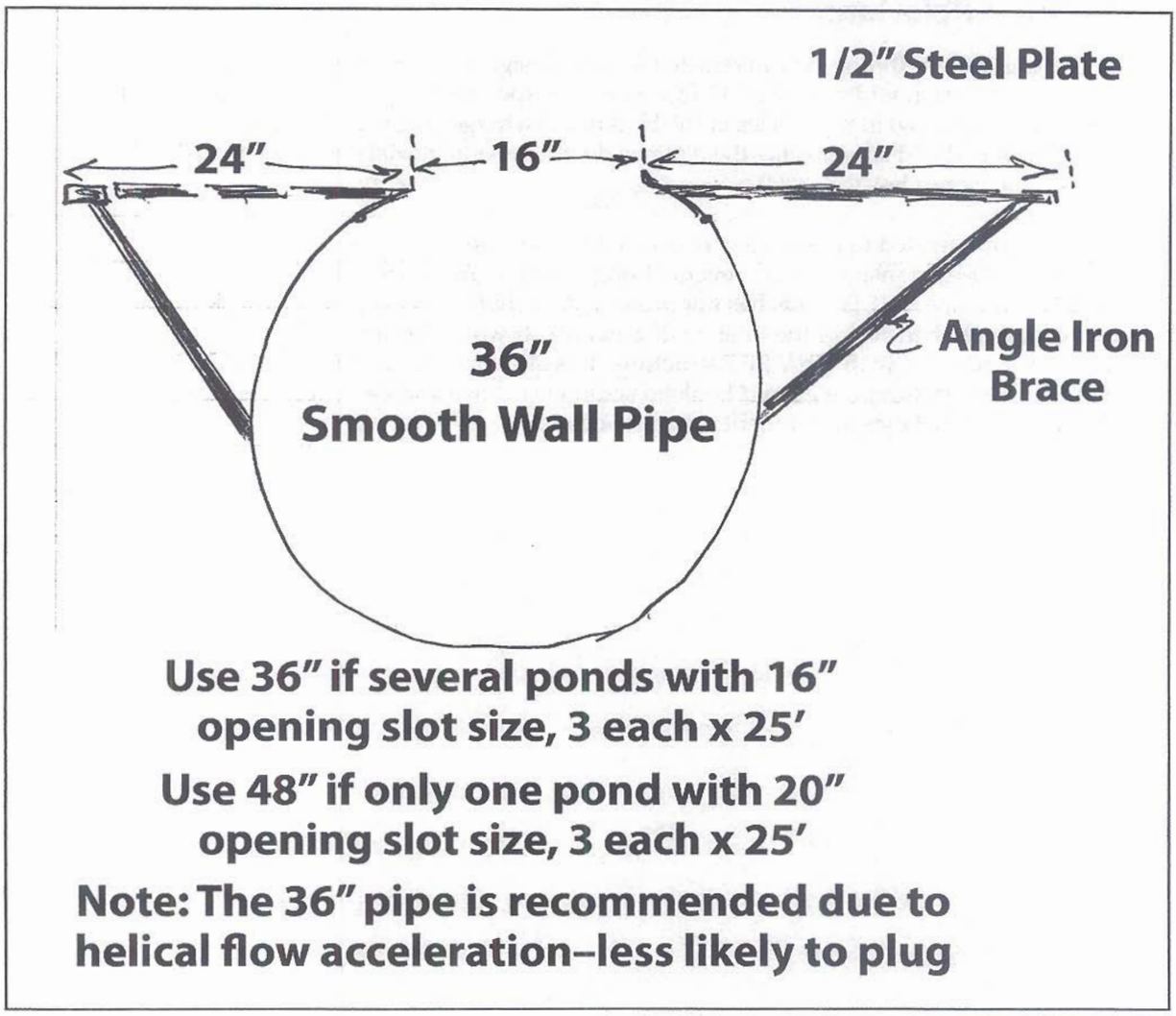


Figure 21. Detail on 36" round pipe with 16" slot. The pipe contains three, 25 ft long slots (note variation in size).