

*INSTRUCTION SHEET
FOR MISSOURI STANDARD DRAWINGS
29-L-431 thru 29-L-436*

Missouri Construction Specification 657, Wetland Restoration, will be used for all these drawings. Any special requirements may be added to additional details of Construction Specification 657.

Pipe requirements shall be shown on drawings.

For plastic pipe and other light pipe, there may be a tendency for the inlet and outlet ends to float up. Measures may be needed to prevent this. These measures shall be shown on drawings. Uplift is normally not a problem on the stream side of the levee unless a flap gate is installed or water is flowing from the stream side into the wetland. Normally most of the uplift problem is on the wetland side when water is flowing out of the wetland. Uplift is greater when a water control structure is placed at inlet on wetland side. Some protective measures include covering the pipe with soil or rock or using cable and soil anchor. Steeper side slopes are permitted for extra soil or rock used to weigh down pipe end.

Before crossing with equipment, Missouri Construction Specification calls for a minimum of 2 feet of soil cover over steel pipe and 3 feet over plastic pipe.

When required by Missouri Standard Practice 657, use Standard Drawing 29-L-431B, 29-L-432B, 29-L-436B or 29-L-436D with anti-seep collars in lieu of Standard Drawing 29-L-431A, 26-L-432A, 29-L-436A or 29-L-436C.

If needed for clarity, any "L" size drawing can be printed to "N" size.

Show animal guard on outlet end of pipe if needed. Use an animal guard that will not catch trash and plug up pipe.

Side slopes of levees and excavation shall conform to Practice Standard 657.

*Excavation - 6:1 or flatter side slopes
Levee - 4:1 or flatter in non-overflow areas
6:1 or flatter in overflow areas*

If a trash rack is not needed at outlet of Standard Drawing 29-L-436A or 29-L-436B, cross out or delete note 6.

If anti-seep collars are required, they shall conform to Standard Drawings 29-L-225, 29-L-226 or equivalent as approved by responsible engineer.