

Construction notes.

Dig out the bank of the watercourse to take the size of the headwall making sure that the Headwall will not protrude into the path of the water flow. The angle of the excavation to the rear of the Headwall should be roughly the same as the existing bank profile.

Dig out sufficient size trench to take the toe along the front of the foundation.

Dig out sufficient to take gabion mattress in bed of watercourse, ensuring that top of gabion is level with existing watercourse bed level. Line with geotextile.

Line toe foundation with Geotextile then place selected, uniformly graded granular fill in the base and compact well. Lift Toe into position using the 4 threaded inserts and lifting eyes, and level then fill around the toe with selected, uniformly graded granular fill and compact well. Insert supplied threaded rod into the sockets cast into the top of the toe.

Install gabion and fill with selected material, close and tie down gabion lid. Backfill around edges with as dug material and compact.

Line the base of the rest of excavation with Geotextile then place a minimum bed of 150mm Class 6A or 6K* Selected Well Graded Granular Material on the base & compact well, especially around the back of the toe, then a 50mm topping of fine material (Class 6L*) to ensure units are level and stable. Lift Headwall into position, using all 3 of the threaded inserts and lifting eyes, and place over the end of the pipe & locate over threaded rod protruding from the toe and level. Place washer over threaded rod in recess in Headwall apron and tighten nut. Fill recess with high strength non-shrink grout.

The pipe should be protruding by 50mm from the front of the back wall to permit fitting the flap valve.

Shim the pipe until it is central within the opening then fill void with sand cement mortar or high strength non-shrink grout.

Gun a good quality sealant around the mating face of the flap valve, then install using stainless steel fixing bolts into cast in sockets, taking care when tightening these fixing bolts not to over tighten them or distortion may occur resulting in the valve not seating correctly.

Backfill pipe section first then backfill all around the headwall with as dug material. Make good at the front with as dug material ensuring river bank is returned to its original profile.

Excavate east bank following the existing bank profile, lay mortar bed and then lay paving slabs on top of mortar bed. Ensure that upper edge beam is cast according to minimum dimensions shown.

*(*Manual of Contract Documents for Highway Works: Volume 1 (MCHW1), Specification for Highway Works, Series 600), Nov 09).*