

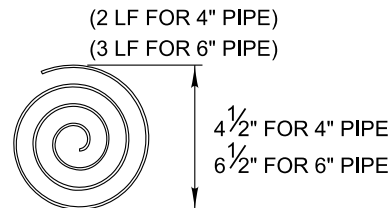
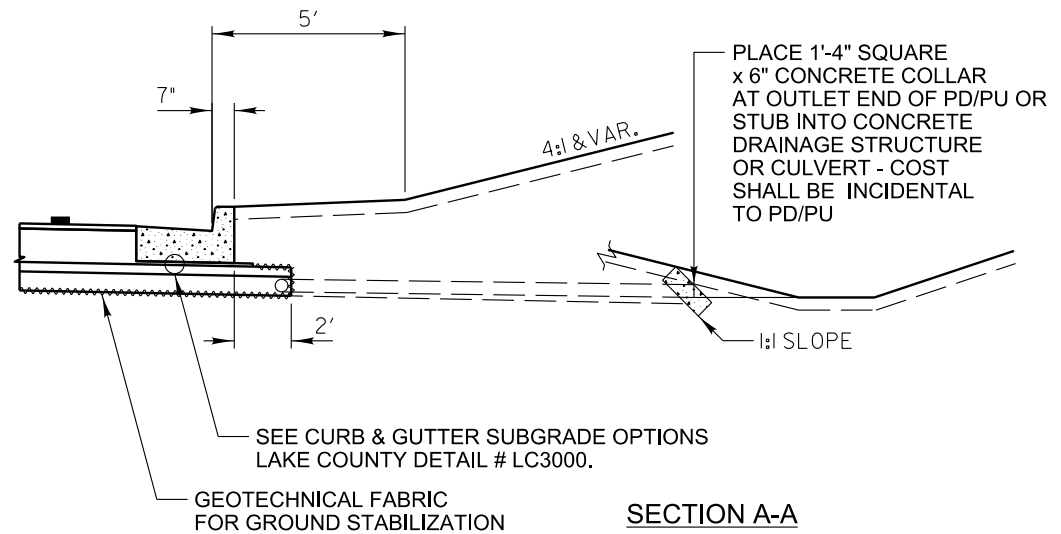
**TYPICAL PIPE DRAIN/ PIPE UNDERDRAIN OUTLET**

**DESIGN NOTES:**

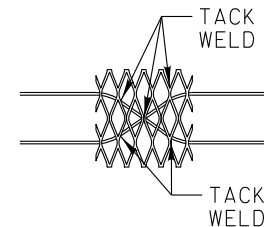
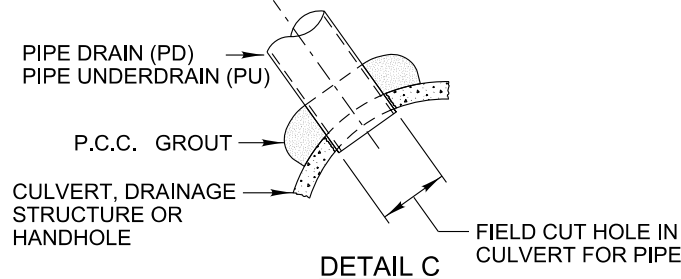
All work shall be according to the applicable portions of the "Standard Specifications" except as modified hereon.

In addition to the requirements of Article 601.08 of the "Standard Specifications", the contract unit price per foot for pipe drains 4" & 6" and pipe underdrains 4" shall include the cost of furnishing and placing the rodent shield.

The removable rodent shield shall be furnished and installed in accordance with one of the configurations shown. The shield shall be fabricated from steel wire, or expanded metal, as detailed above and shall be galvanized after fabrication in accordance with AASHTO M-111. Other submitted designs for a removable rodent shield will be allowed with the approval of the Engineer.



$\frac{3}{16}$ " WIRE STOCK BENT TO A SPIRAL CONFIGURATION. TO INSTALL, TWIST INTO PD/PU END. (FOR CORRUGATED CIRCULAR METAL PIPE)



6"x6" EXPANDED METAL SHIELD WITH TWO 2'-6" LONG PREFABRICATED 6 GAGE STEEL STRUTS FOR SNUG FIT INTO THE PD/PU END.

**RODENT SHIELDS DETAIL**

(ALTERNATES) NOT TO SCALE

REVISIONS	DATE
Pipe Drain Added to Labels	5/19/2009
Revised Type A to Type B Aggregate	12/20/12
Removed HMA Shldr & Agg	11/20/13



APPROVED BY: M. G. ZEMAITIS  
DATE: APRIL 1, 2007

**SUB-SURFACE DRAINS**

LC6020