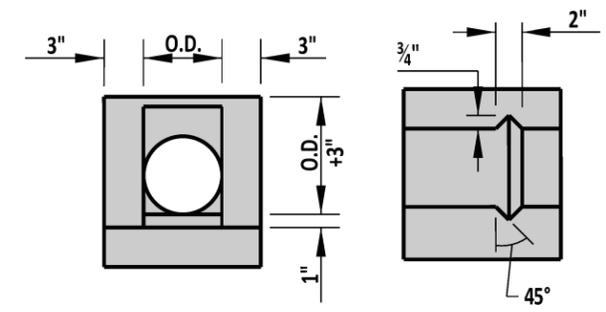
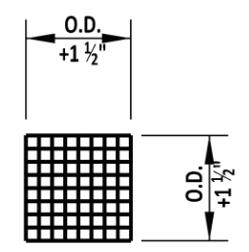


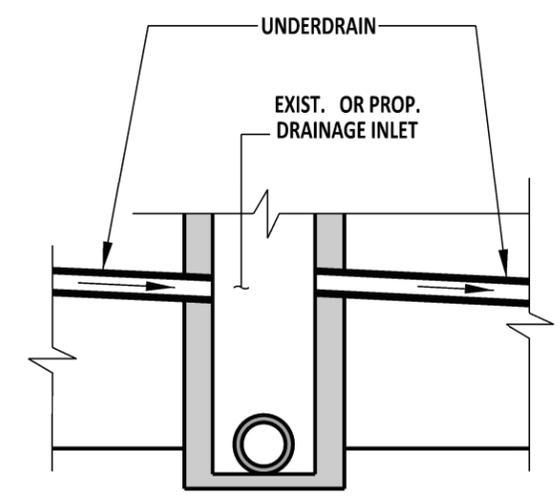
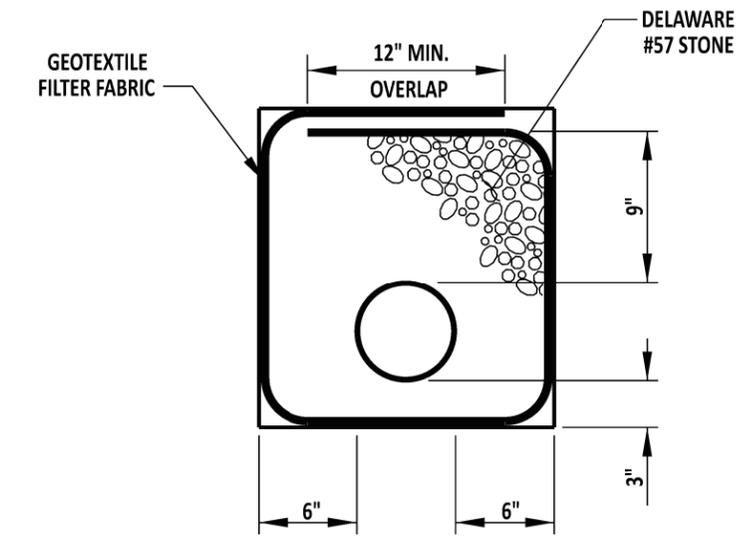
UNDERDRAIN OUTLET



SLOTTED HEADWALL DETAIL



RODENT SCREEN



PERFORATED PIPE UNDERDRAIN

- NOTES:**
- 1). THE PERFORATED PIPE UNDERDRAIN SHALL BE LOCATED AS SHOWN ON THE TYPICAL SECTIONS OF THE CONSTRUCTION PLANS.
 - 2). GEOTEXTILE FILTER FABRIC SHALL BE PLACED ENTIRELY OVER THE TOP OF UNDERDRAIN TRENCH AND LAPPED AS SHOWN.
 - 3). SLOPE OF UNDERDRAINS SHALL MATCH ROADWAY GRADE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - 4). OUTLET PIPE CONFIGURATIONS SHALL USE 45 DEGREE ELBOWS OR SHALL USE STRAIGHT PIPE WITH A MINIMUM RADIUS OF 3' TO DIRECT UNDERDRAIN PIPE INTO SIDE OF DRAINAGE INLET OR TO POSITIVE GRADE. PIPE SHALL ALSO BE NON-PERFORATED AND HAVE A SMOOTH INTERIOR.
 - 5). RODENT SCREEN SHALL SNUGLY FIT THE PROVIDED SLOT WITH THE SCREEN LIP FITTING TIGHT TO THE BOTTOM FLOW LINE.
 - 6). A DELINEATOR SHALL BE INSTALLED ADJACENT TO THE CONCRETE APRON OF THE UNDERDRAIN OUTFALL IN THE UPSTREAM DIRECTION OF VEHICULAR TRAVEL. THE DELINEATOR SHALL BE GALVANIZED TELESCOPING STEEL SIGN POST AND INSTALLED IN ACCORDANCE WITH STANDARD T-15 SHEET 1 OF 1. THE DELINEATOR SHALL EXTEND 4' ABOVE GROUND ELEVATION AND SHALL HAVE A 4" x 8" x 0.08" ALUMINUM RETROREFLECTIVE BLUE REFLECTOR BOLTED TO BOTH SIDES OF THE POST WITH HARDWARE COMPATIBLE WITH THE SIGN POST.
 - 7). WHEN TWO LINES OF PIPE UNDERDRAIN DRAIN TO A LOW POINT, EACH PIPE MUST HAVE ITS OWN OUTLET.
 - 8). PERFORATED PIPE UNDERDRAIN SHALL NOT BE PLACED UNDER GUARDRAIL IN ORDER TO AVOID PUNCTURING.