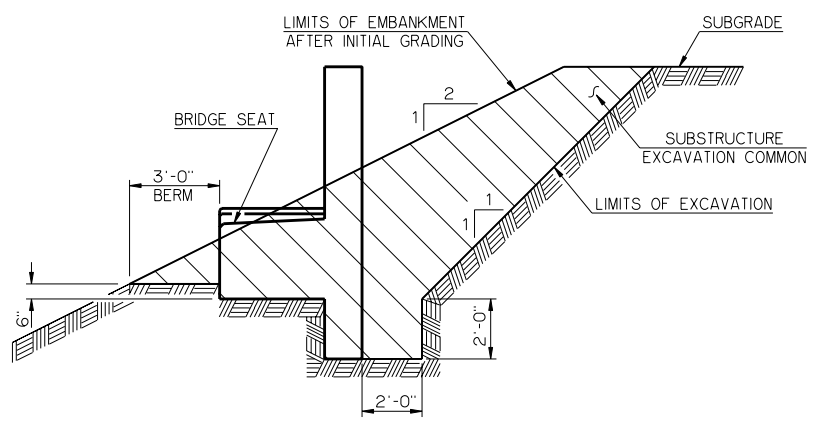
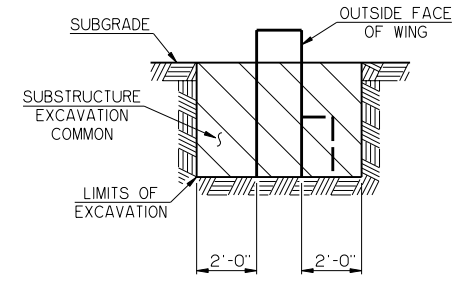


EXCAVATION PLAN
LEFT FORWARD SKEW SHOWN, RIGHT FORWARD SKEW OPPOSITE HAND

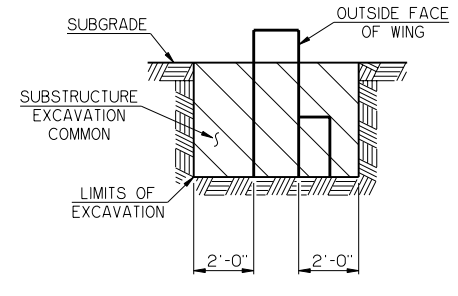
PIPE UNDERDRAIN PLAN
LEFT FORWARD SKEW SHOWN, RIGHT FORWARD SKEW OPPOSITE HAND



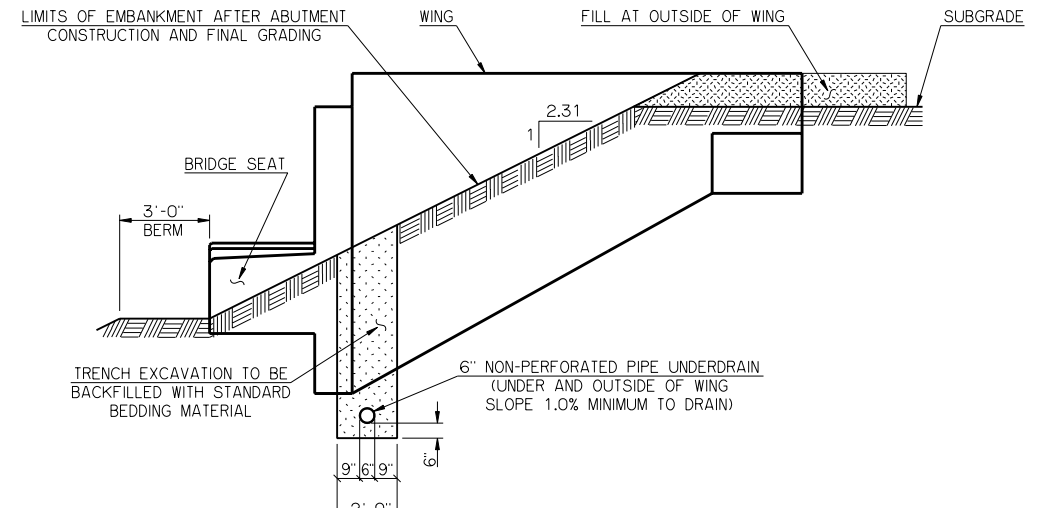
SECTION A-A



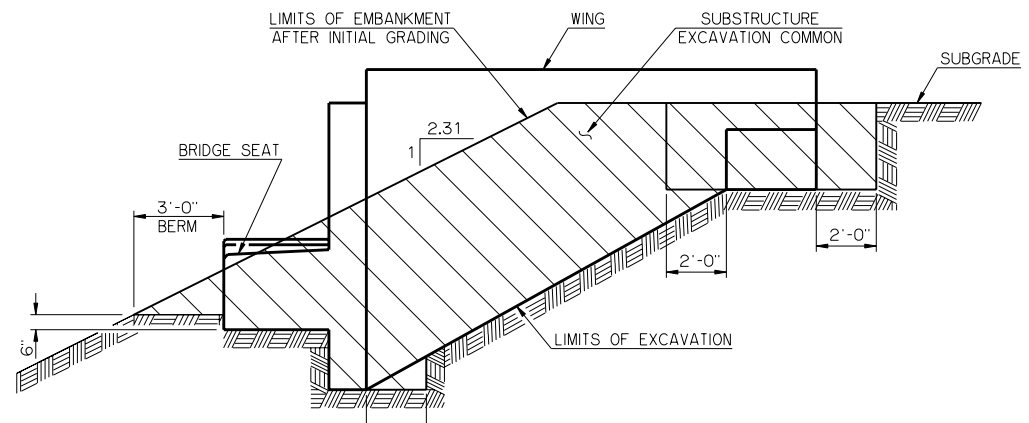
SECTION C-C



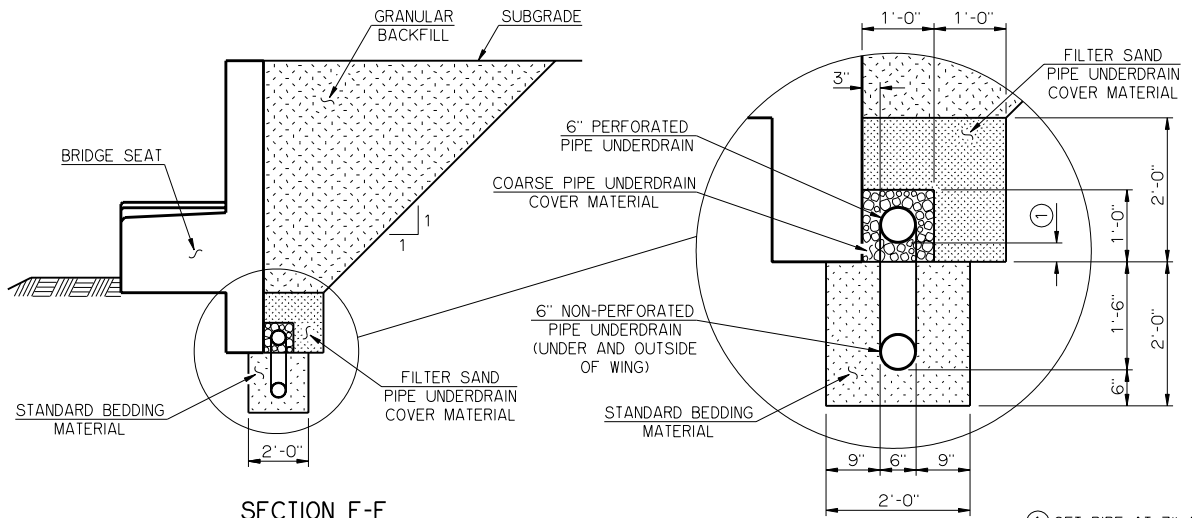
SECTION D-D



SECTION F-F



SECTION B-B



SECTION E-E

NOTES

CONCRETE MAY BE PLACED AGAINST THE LIMITS OF EXCAVATION IF THE MATERIAL IS EXCAVATED TO THE NEAT LINES OF THE ABUTMENT AND APPROVED BY THE ENGINEER. IF NECESSARY, FORMS SHALL BE USED ON THE BACK VERTICAL FACE OF THE ABUTMENT AND REMOVED AFTER CONCRETE IS SET. MEASUREMENT AND PAYMENT FOR "SUBSTRUCTURE EXCAVATION COMMON" AT ABUTMENTS SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS.

THE EXTENT, LOCATION AND DEPTH OF THE 6" NON-PERFORATED PIPE UNDERDRAIN MAY BE ADJUSTED BY THE ENGINEER DURING CONSTRUCTION. ALL COST OF THE PIPE UNDERDRAIN COVER MATERIAL (BOTH FINE AND COARSE), TRENCH EXCAVATION, STANDARD BEDDING MATERIAL AND THE EQUIPMENT AND LABOR FOR THEIR INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FEET OF "6" PERFORATED PIPE UNDERDRAIN ROUND" AND "6" NON-PREF. PIPE UNDERDRAIN RND." INSTALLATION SHALL BE AS SHOWN IN THE PLANS AND ON ROADWAY STANDARD PUD-2.

GRANULAR BACKFILL SHALL NOT BE PLACED UNTIL THE ABUTMENT WINGS HAVE ATTAINED A STRENGTH OF 3,000 PSI.

APPROVED BY BRIDGE ENGINEER *Robert A. Rusch* DATE 10/16/06
 OKLAHOMA DEPARTMENT OF TRANSPORTATION
 COUNTY BRIDGE STANDARD (ENGLISH)
**SUBSTRUCTURE EXCAVATION AND
 PIPE UNDERDRAIN ASSEMBLY DETAILS**
 26' AND 32' CLEAR ROADWAY - CONVENTIONAL - SKEWED 30°
 1999 STANDARD SPECIFICATIONS CB26..32-C-SK30-ABUT-MISC OOE
 CB-938E

① SET PIPE AT 3" ABOVE THE BOTTOM OF THE ABUTMENT AT THE LOW END.