

**DRAIN CURTAIN NOTES**

1. DRAINAGE AGGREGATE USED IN THE DRAIN CURTAIN SHALL BE BUCKET TAMPED EVERY 12 INCHES, WITHIN THE LIMITS OF DRAIN CURTAIN. PAYMENT FOR DRAINAGE AGGREGATE WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.640 SPECIAL PROVISION (8 INCH UNDERDRAIN PIPE) AND PAYMENT FOR GEOTEXTILE WILL BE MADE UNDER ITEM 900.675 SPECIAL PROVISION (INSTALL GEOTEXTILE UNDER STONE FILL).

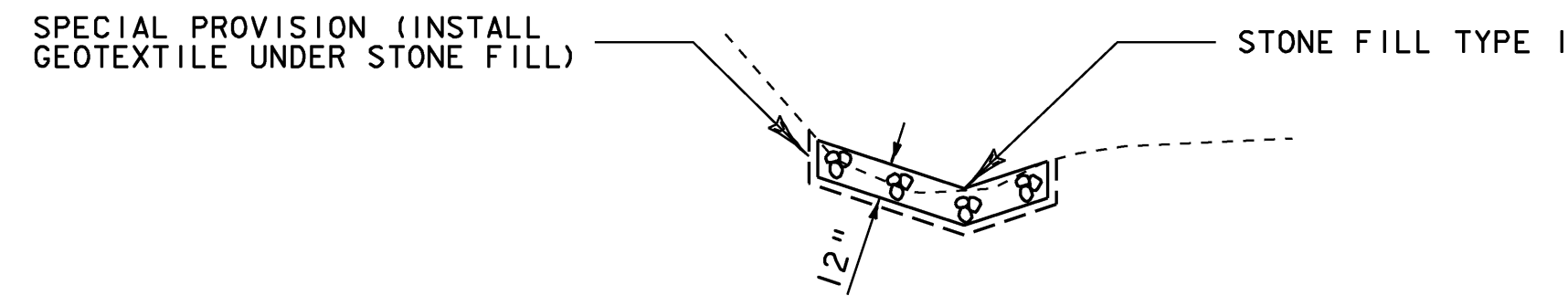
2. SPECIAL PROVISION (INSTALL GEOTEXTILE UNDER STONE FILL) SHALL NOT BE DAMAGED BY THE CONTRACTOR'S TEMPORARY BRACING OF THE DRAIN CURTAIN.

3. SPECIAL PROVISION (8 INCH UNDERDRAIN PIPE) WILL CONNECT TO THE EIGHT INCH UNDERDRAIN CARRIER PIPE BY TWO EIGHT INCH 45 DEGREE COUPLERS AND AN EIGHT INCH Y.

4. ANY SLOPE STABILIZATION, SILTATION CONTROL AND FINAL GRADING DUE TO SLOPE STABILIZATION WITHIN THE DRAIN CURTAIN AREA SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 204.25 STRUCTURE EXCAVATION.

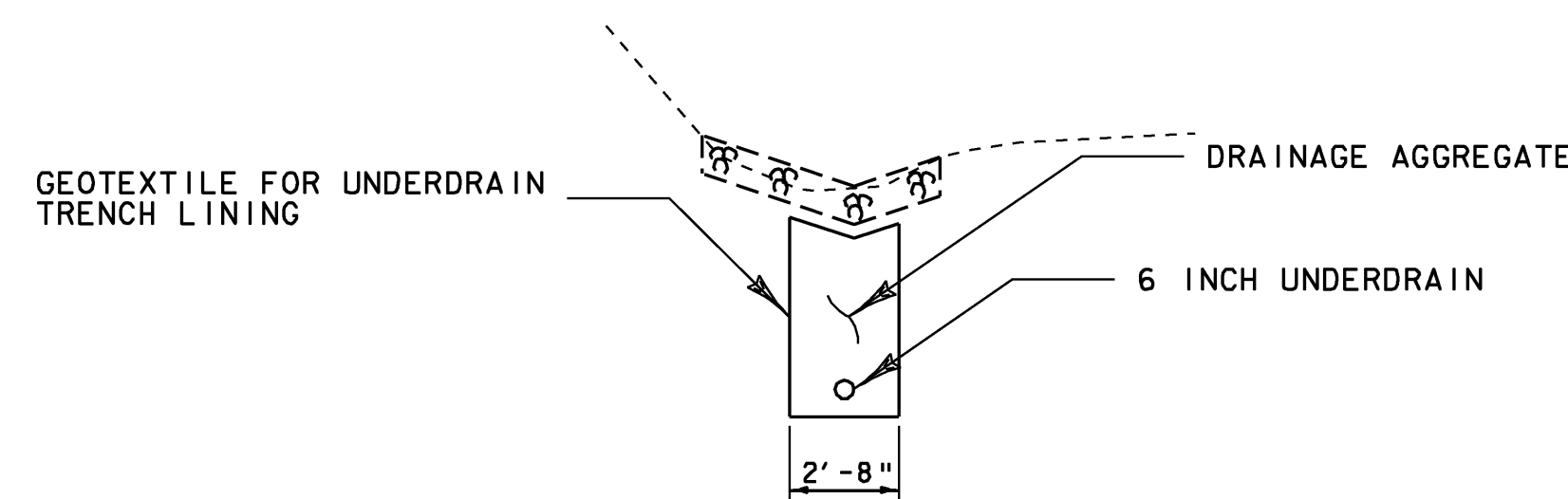
5. UNDERDRAIN PIPE, UNDERDRAIN CARRIER PIPE AND FITTINGS FOR DRAIN CURTAIN CONSTRUCTION SHALL BE RATED TO CARRY THE COVER INDICATED IN THE PLANS.

6. THE PROPOSED WASH PAD FOR DEWATERING EFFLUENT SHALL BE CONSTRUCTED WITH GEOTEXTILE FOR STONE FILL AND STONE FILL TYPE I AS DIRECTED BY THE ENGINEER.



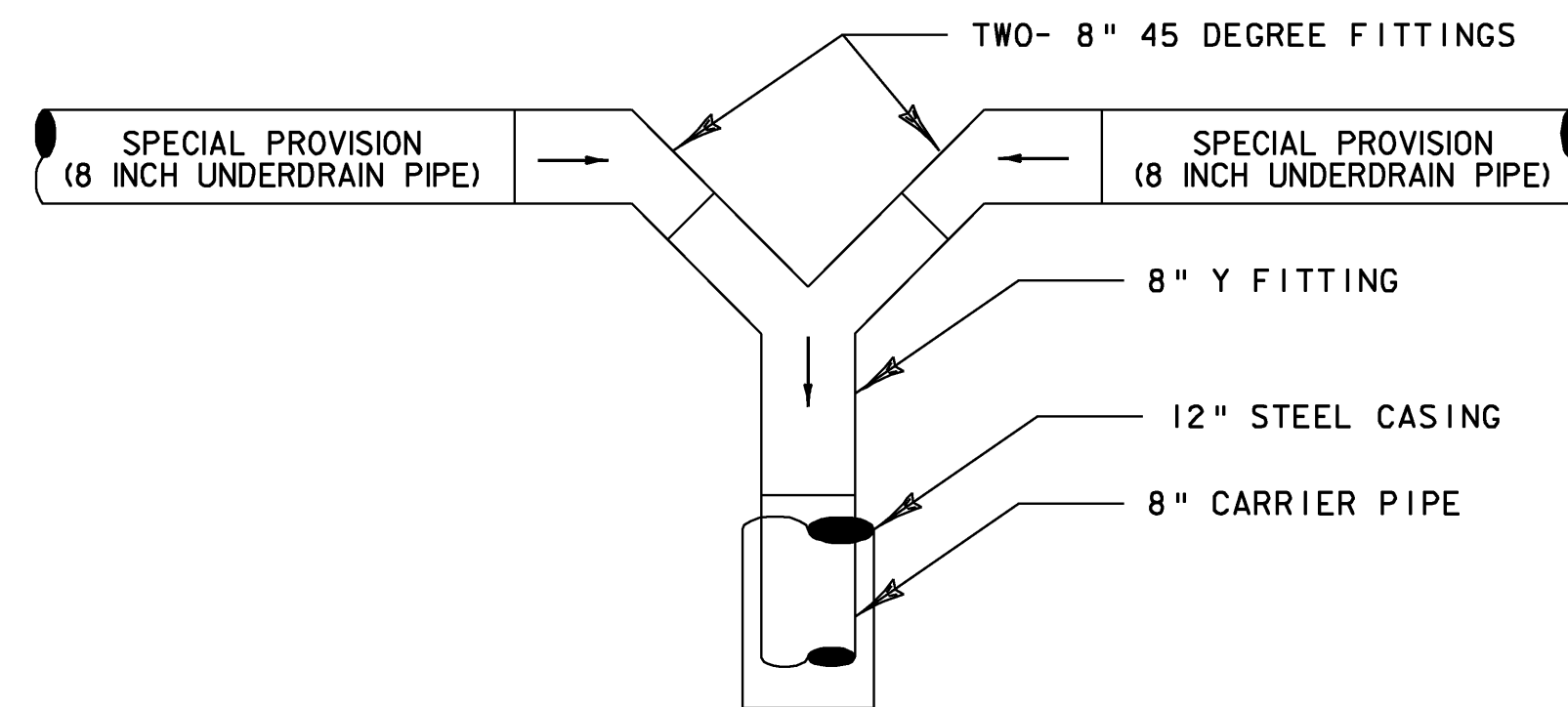
**STONE FILL TYPE I DITCH**

STA 14+50 LT TO 19+50 LT  
NOTE: DITCH SLOPES VARY PER CROSS SECTION.



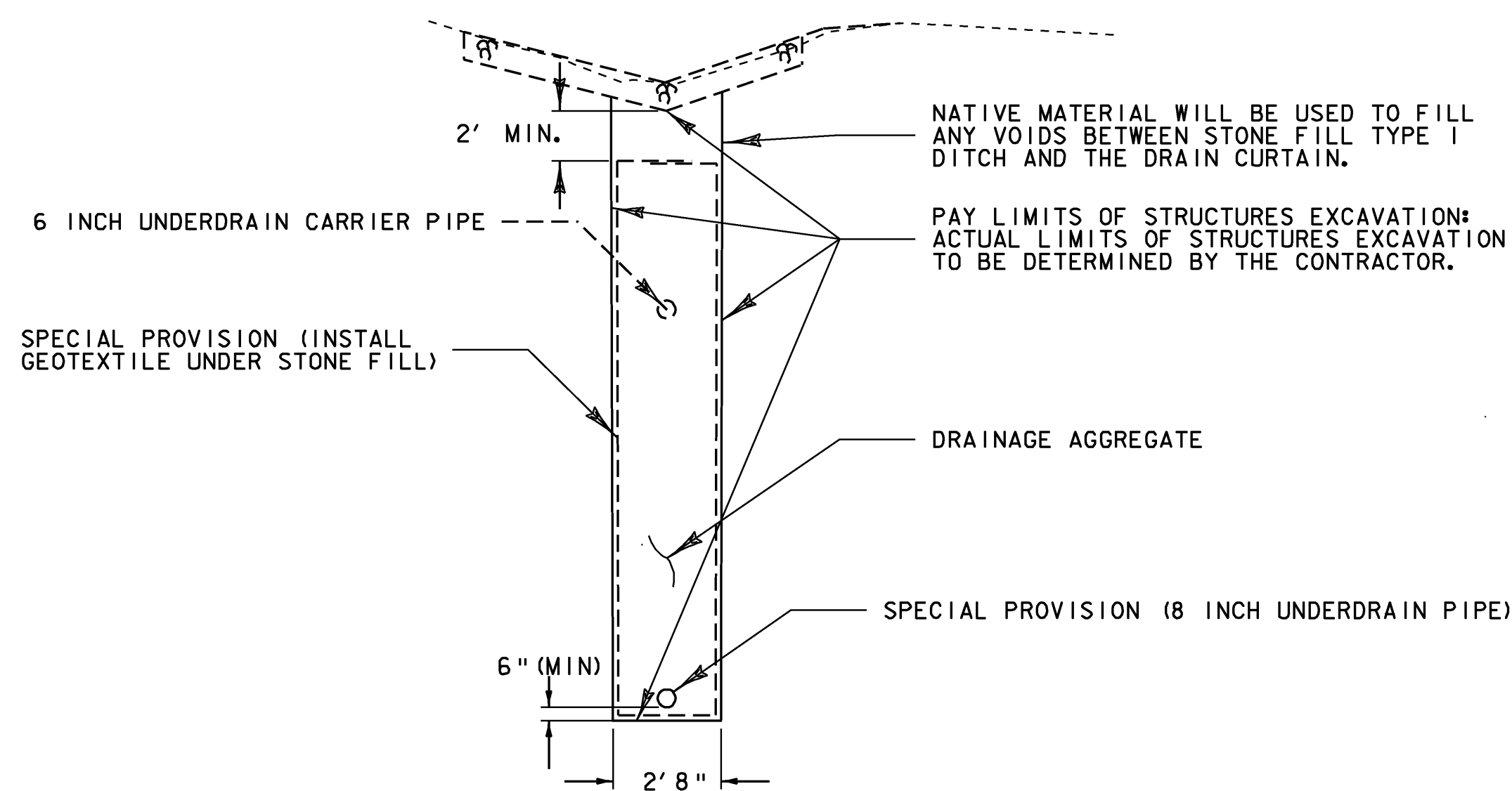
**6 INCH UNDERDRAIN TYPICAL**

STA 14+50 LT TO STA 16+75 LT



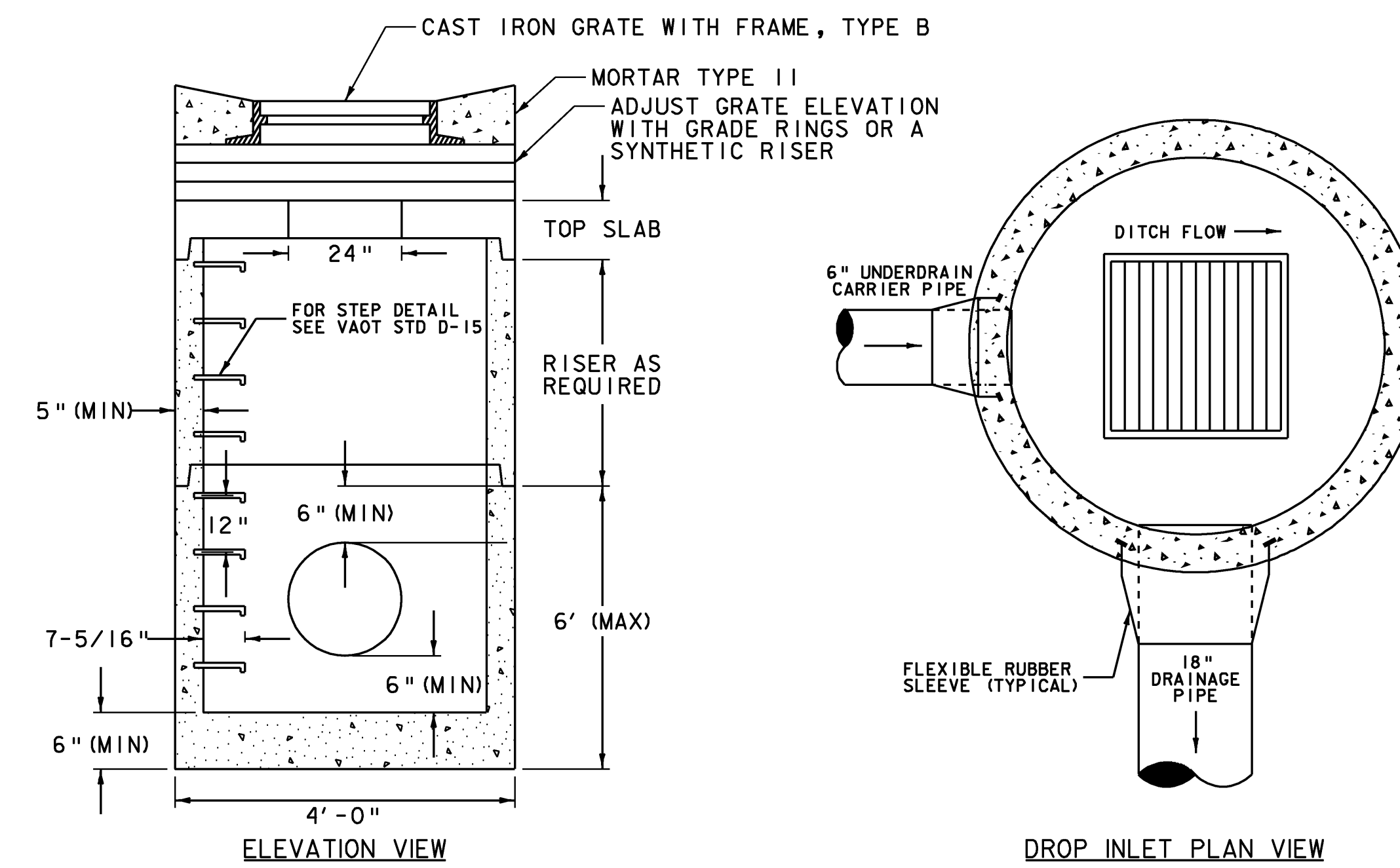
**DRAIN CURTAIN OUTLET DETAIL**

STA 18+50 LT



**DRAIN CURTAIN TYPICAL**

STA 16+75 LT TO 18+75 LT



**PRECAST CONCRETE DROP INLET TYPICAL**

**PRECAST CONCRETE DROP INLET NOTES:**

1. PRECAST CONCRETE SECTIONS SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND ASTM C-478.
2. MINIMUM CONCRETE COMPRESSIVE STRENGTH: 4,000 PSI AT 28-DAYS.
3. STEEL REINFORCING SHALL CONFORM TO ASTM A185 OR A82 FOR HS25 LOADING.
4. STEPS SHALL BE 14 INCHES WIDE STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC CONFORMING TO ASTM C-478 AND SHALL BE CAST INTO DROP INLET SECTIONS BY THE PRECAST CONCRETE MANUFACTURER.
5. FACE OF PIPE SHALL NOT PROJECT MORE THAN TWO INCHES OR LESS THAN ONE INCH FROM INSIDE WALL OF STRUCTURE.
6. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12 INCHES OF OUTSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS-SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN THREE INCH TO JOINTS.
7. FITTING FRAME TO FINAL GRADE MAY BE DONE WITH A SYNTHETIC RISER OR WITH PRECAST CONCRETE GRADE RINGS OF APPROPRIATE THICKNESS (3 COURSES MAX).
8. ALL PIPE INVERTS AND PENETRATION ANGLES SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
9. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT AND BE ASSEMBLED USING A BUTYL RUBBER OR APPROVED EQUAL SEALANT.
10. PROVIDE FLEXIBLE RUBBER SLEEVES CONFORMING TO ASTM C-923, RESILIENT, OF SIZE REQUIRED, FOR EACH PIPE CONNECTING TO STRUCTURE. SLEEVES SHALL BE CAST INTO PRECAST STRUCTURE BY THE MANUFACTURER FOR ALL PIPE PENETRATIONS.
11. DROP INLET GRATE ORIENTATION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING D-16 FOR TYPE B GRATES.
12. PAYMENT FOR INSTALLATION OF THE DROP INLET SHALL BE MADE UNDER ITEM 604.18 - PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE.

TYPICAL SHEET 2

PROJECT NAME:	CAMBRIDGE
PROJECT NUMBER:	STP 0235(9)
FILE NAME:	d087c152_frm.DGN
PROJECT LEADER:	K. ROBIE
DESIGNED BY:	N. PAPPAS
IPARM:	d07x152_typ_02.i
PLOT DATE:	04-AUG-2009
DRAWN BY:	N. PAPPAS
CHECKED BY:	S. MENARD
SHEET	5 OF 28

NOT TO SCALE