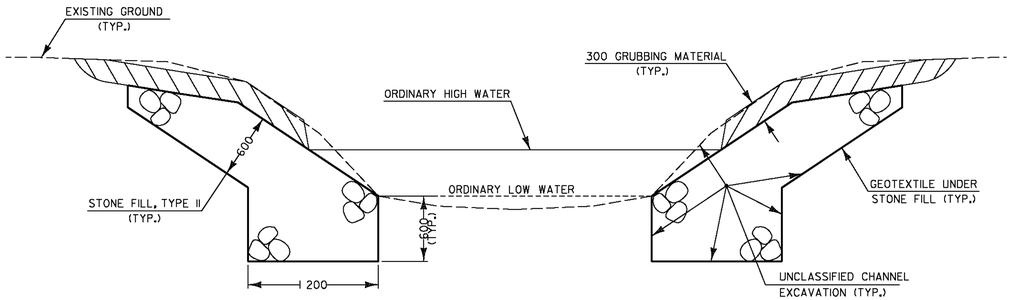
TYPICAL DETAILS

VAOT Metric

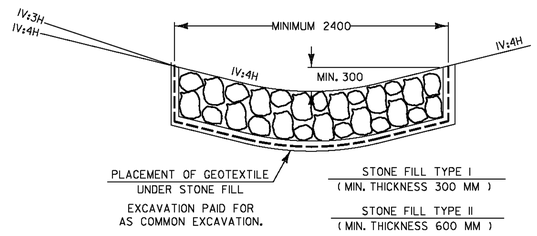


NOTES:

1. GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.
2. THE STONE FILL SHALL BE PLACED TO THE ORDINARY LOW WATER LINE AS SHOWN ON THE CHANNEL CROSS SECTIONS.

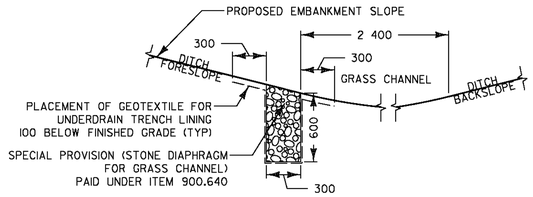
TYPICAL STREAM CHANNEL SECTION

NOT TO SCALE



TYPICAL STONE LINED DITCH

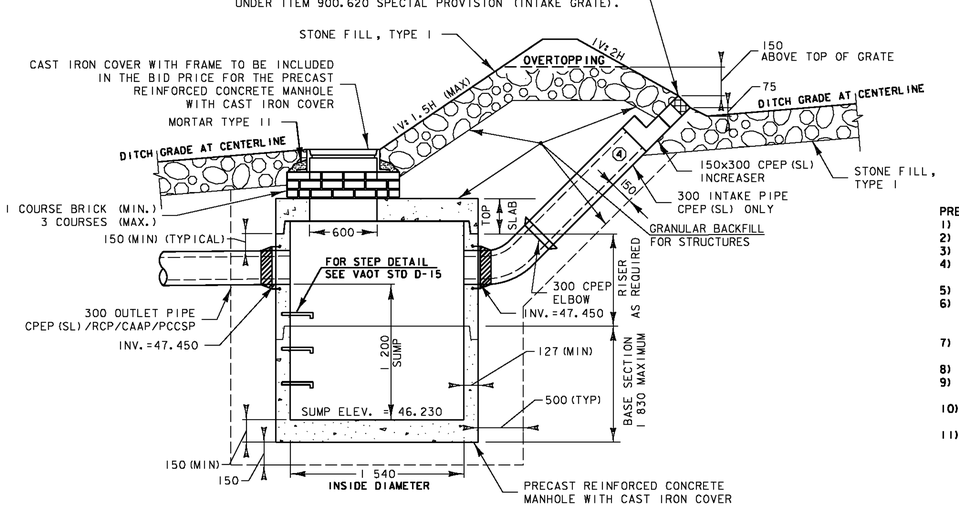
NOT TO SCALE



NOTE:
EXCAVATION SHALL BE PAID UNDER
ITEM 204.20 TRENCH EXCAVATION OF EARTH

SPECIAL PROVISION (STONE DIAPHRAGM FOR GRASS CHANNEL)

NOT TO SCALE



PRECAST CONCRETE MANHOLE NOTES:

1) PRECAST CONCRETE SECTIONS SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND ASTM C-478.
2) MINIMUM CONCRETE COMPRESSIVE STRENGTH: 27.5 MPA (4,000) PSI AT 28-DAYS
3) STEEL REINFORCING SHALL CONFORM TO ASTM A185 OR A82 FOR HS25 LOADING.
4) MANHOLE STEPS SHALL BE 355MM WIDE STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC CONFORMING TO ASTM C-478 AND SHALL BE CAST INTO MANHOLE SECTIONS BY THE PRECAST CONCRETE MANUFACTURER.
5) FACE OF PIPE SHALL NOT PROJECT MORE THAN 50MM OR LESS THAN 25MM FROM INSIDE WALL OF STRUCTURE.
6) ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 300MM 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 75MM TO JOINTS.
7) FITTING FRAME TO FINAL GRADE MAY BE DONE WITH BRICK OR 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) PAYMENT FOR DESIGN, FABRICATION, DELIVERY AND INSTALLATION OF THE PRECAST CONCRETE PRETREATMENT CHAMBER SHALL BE MADE UNDER THE PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER ITEM (604.21). PAYMENT FOR MORTAR TYPE IV, BRICK OR CONCRETE GRADE RINGS, TONGUE AND GROOVE JOINT, BUTYL RUBBER OR EQUIVALENT SEALANT, AND FLEXIBLE RUBBER SLEEVES SHALL BE CONSIDERED INCIDENTAL TO ITEM 604.21.

PRECAST CONCRETE PRETREATMENT CHAMBER

NOT TO SCALE

DATUM
VERTICAL NAVD88
HORIZONTAL NAD83(92)

PROJECT:	PROJECT NO.:
CORNWALL	BRS 0172(6)
DESIGN FILE NAME: z85e042typxs.DGN	
IPARM FILE NAME:	PLOT DATE: 3/15/2010
SURVEYED BY: VTRANS & VT SURVEY	SURVEY DATE: 1996&1999
SQUAD LEADER: MARTHA EVANS-MONGEON	DRAWN BY: E. ATKINS
TYPICAL DETAILS SHEET 4	SHEET: 9 OF 144