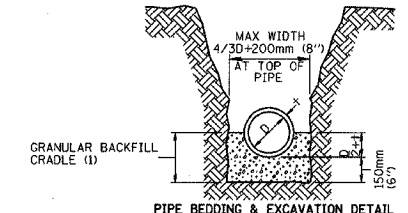
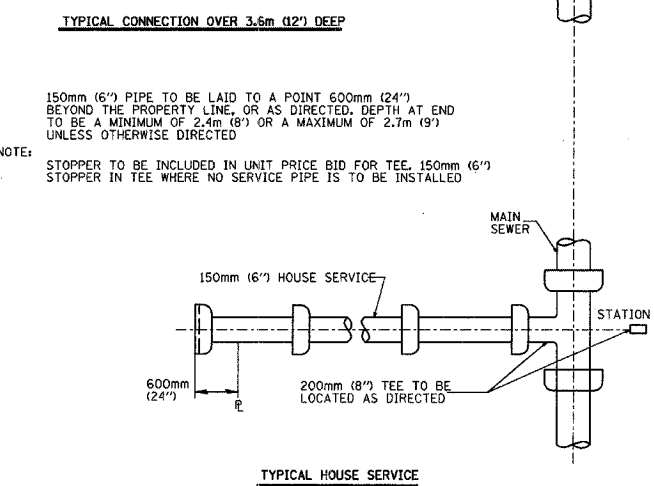
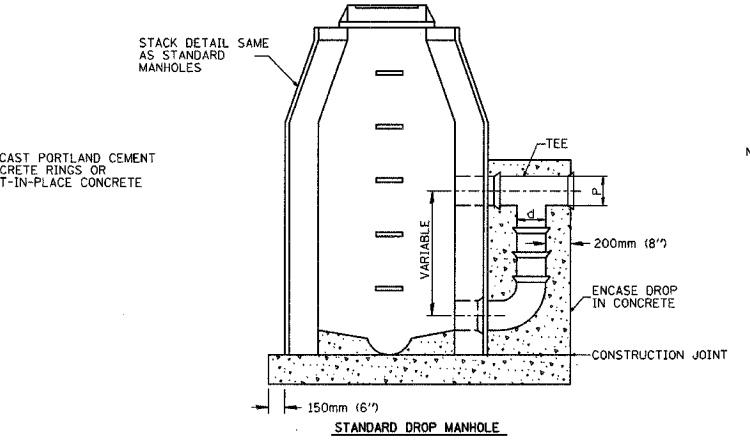
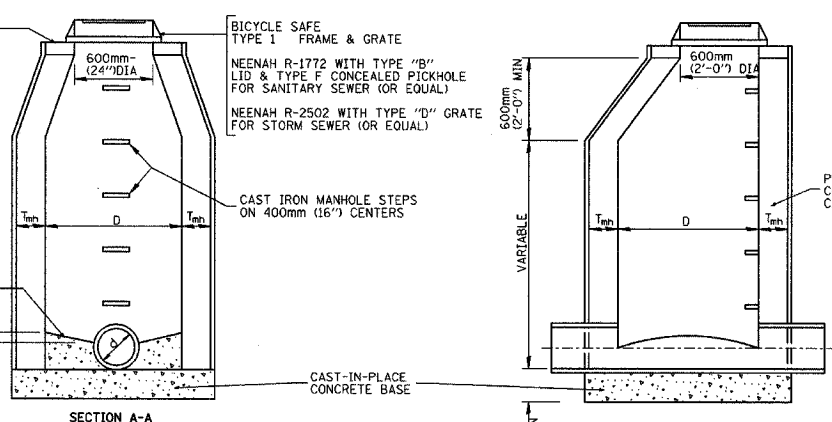


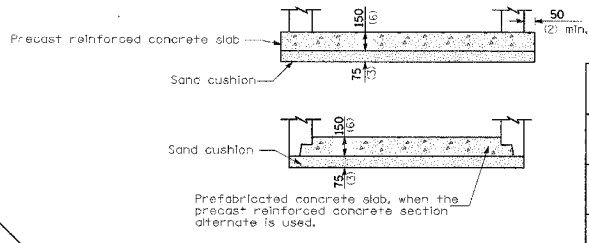
FINAL ADJUSTMENT TO BE MADE WITH PRECAST ADJUSTING RINGS OR WITH BRICKS LAID RADIALY & MORTARED  
ADJUSTMENT RANGE: 100mm (4") MIN 400mm (16") MAX  
MASTIC IS NOT PERMITTED ON ADJUSTING RINGS

DIA OF SEWER	DIA OF MANHOLE	PRECAST T <sub>min</sub>
THRU 760mm (30")	1.2m (4')	100mm (4")
THRU 1.2m (48")	1.5m (5')	125mm (5")
1.3m (54")	1.8m (6')	150mm (6")

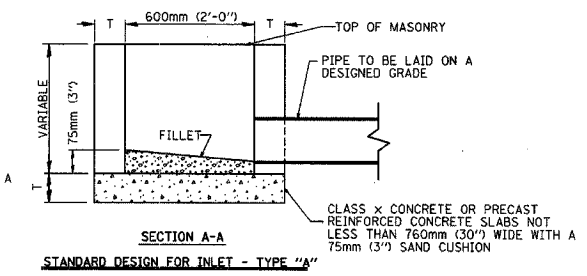
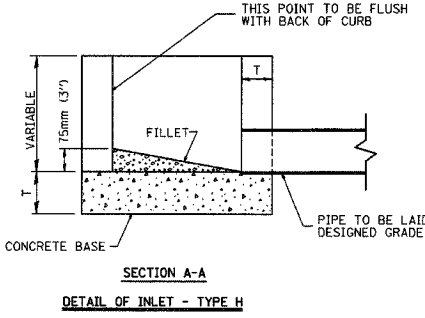
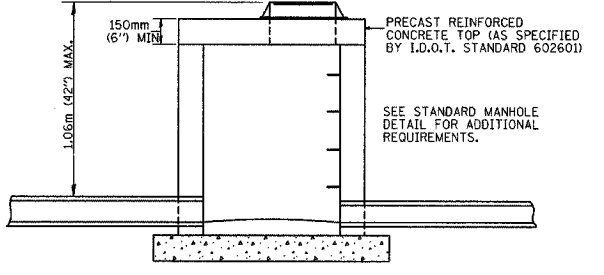
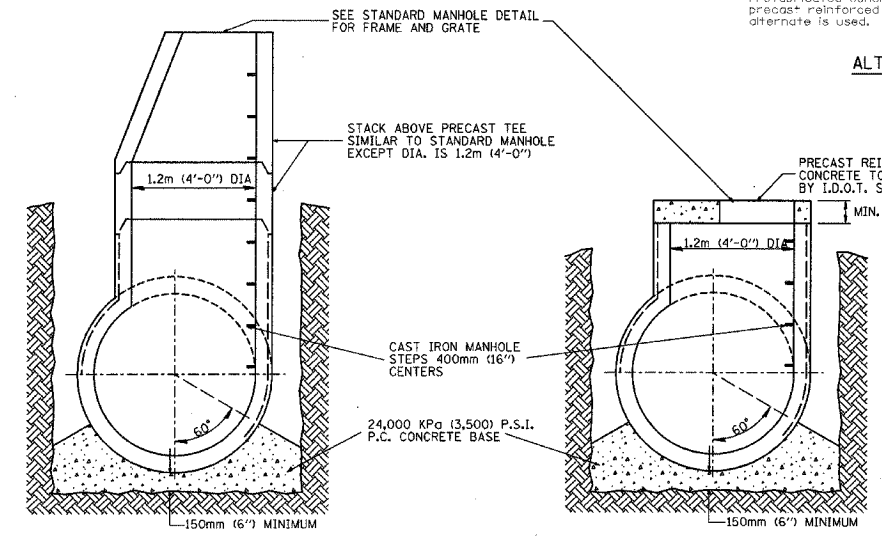
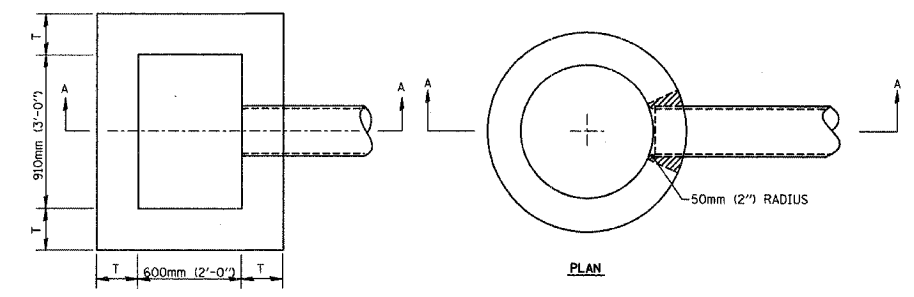
CAST-IN-PLACE MANHOLES SHALL BE A MINIMUM OF T<sub>min</sub> = 150mm (6") THICK TROWELED SURFACE



NOTE (1): Pipe Bedding (granular cradle) shall extend to virgin ground when sewer is constructed in fill areas.



BICYCLE SAFE FRAME AND GRATE	
TYPE 3	NEENAH R-3010 WITHOUT BARS IN FRONT OF CURB BOX WITH TYPE A GRATE & 38mm (1-1/2") VERTICAL RADIUS
TYPE 3L	NEENAH R-3010 WITHOUT BARS IN FRONT OF CURB BOX WITH TYPE L GRATE & 38mm (1-1/2") VERTICAL RADIUS
TYPE 50	NEENAH R-3067 WITHOUT BARS IN FRONT OF CURB BOX WITH TYPE C GRATE & 50mm (2") VERTICAL RADIUS
TYPE 50L	NEENAH R-3067 WITHOUT BARS IN FRONT OF CURB BOX WITH TYPE L GRATE & 50mm (2") VERTICAL RADIUS
DITCH GRATE	NEENAH R-4342



MATERIALS PERMITTED FOR INLETS	T MINIMUM
PRECAST REINFORCED CONCRETE SECTIONS	75mm (3")
CAST-IN-PLACE CONCRETE	150mm (6")

BRICKS AND MORTAR SHALL BE USED ONLY FOR ADJUSTMENTS

STORM/SANITARY SEWER DESIGN DETAILS  
FELL AVENUE BRIDGE REPLACEMENT

DRAWN MH 10-6-03 DESIGNED MH 10-6-04  
CHECKED LDK 10-25-04 CHECKED LDK 10-25-04  
FILE: 03S2019 DATE: 2-2-05

