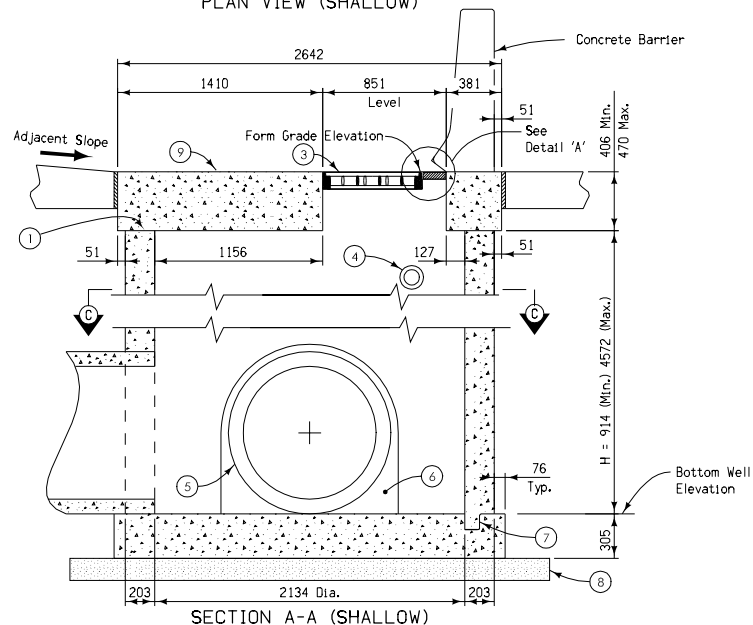


PLAN VIEW (SHALLOW)



SECTION A-A (SHALLOW)

- ① Trowel smooth and place 2 layers of 13.6 kg roofing felt to prevent bond.
- ② Cast frame into intake top. See Standard Road Plan RA-66D for frame and grate details.
- ③ Depress grate a minimum of 5 mm below Form Grade Elevation.
- ④ Possible subdrain. See plans for location and elevation. See Standard Road Plan RF-19C for connection details.
- ⑤ 914 mm maximum concrete pipe.
- ⑥ Oversized hole for pipe opening to be field grouted. See Standard Road Plan RA-56.
- ⑦ Intake base may be cast in place or precast. If precast, the base and first wall section may be cast separately with a keyway or as one unit.
- ⑧ If intake base is precast, it shall be placed on a 150 mm bed of sand. This bedding shall be compacted and provide uniform support for the entire area of the base and shall extend 305 mm outside the edge of the base.
- ⑨ Slope of top shall vary to match elevation of adjacent pavement.

Remove cover plate
before constructing
concrete barrier.

Shallow intake option:
H = 914 to 4572
2134 barrel diameter

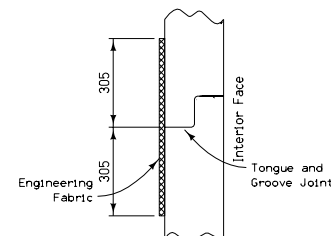
Deep intake option:
H = 4572 to 8534
1219 and 2134 barrel diameters

Steps, when specified, shall meet the requirements of ASTM C478. The top step shall be located a maximum of 711 mm below the form grade elevation.

Contract Items:

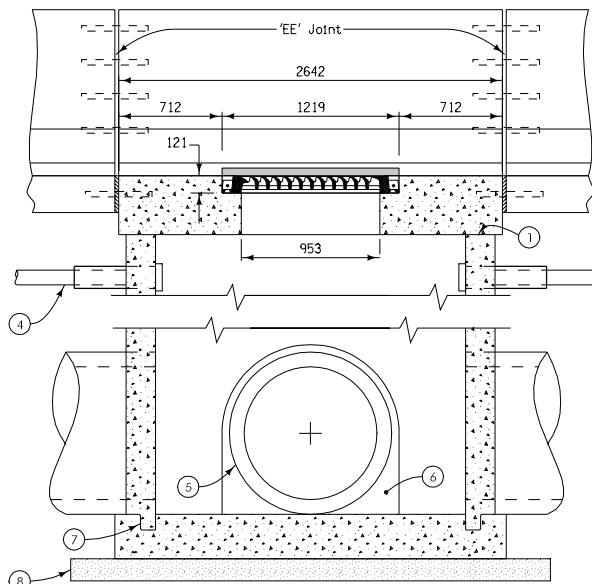
Barrier Intake, RA-48B

Tabulation: 104-5B



WALL JOINT DETAIL

For joint details,
see Standard Road Plans
RH-50, RH-51 and RH-52.



SECTION B-B (SHALLOW)

All dimensions given in millimeters unless noted.

METRIC VERSION	M	Iowa Department of Transportation Highway Division	
		STANDARD ROAD PLAN RA-48B(1)	
		REVISION: NEW	REVISION NO. NEW
		<i>Deanna Mayhew</i> APPROVED BY DESIGN METHODS ENGINEER	REVISION DATE 04-18-06
		SINGLE GRATE BARRIER INTAKE, CIRCULAR (Sheet 1 of 5)	