

ITEM 10605.1412 M - PERFORATED REINFORCED CONCRETE PIPE - 300 MM DIAMETER
ITEM 10605.1415 M - PERFORATED REINFORCED CONCRETE PIPE - 375 MM DIAMETER
ITEM 10605.1418 M - PERFORATED REINFORCED CONCRETE PIPE - 450 MM DIAMETER
ITEM 10605.1424 M - PERFORATED REINFORCED CONCRETE PIPE - 600 MM DIAMETER
ITEM 10605.1430 M - PERFORATED REINFORCED CONCRETE PIPE - 750 MM DIAMETER
ITEM 10605.1436 M - PERFORATED REINFORCED CONCRETE PIPE - 900 MM DIAMETER
ITEM 10605.1448 M - PERFORATED REINFORCED CONCRETE PIPE - 1200 MM DIAMETER

Description. The Contractor shall furnish and install perforated reinforced concrete pipe at the location shown on the plans or as directed by the Engineer.

Materials. The perforated reinforced concrete pipe shall meet the requirements specified in Subsection 706-02, "Reinforced Concrete Pipe - Classes II, III, IV, V", except for the following modifications:

Pipe less than 600 mm in diameter shall be bell and spigot type and pipe 600 mm in diameter and larger may be either bell and spigot or slip joint construction.

Perforations shall be staggered and arranged equally spaced in parallel rows along one half of the circumference of the pipe.

Internal Diameter of Pipe (mm)	Max. Laying Length (m)	Min. Wall Thickness (mm)
300	2.44	51
375	2.44	51
450	2.44	51
600	2.44	76
750	2.44	89
900	2.44	102
1200	2.44	127

Size	Reinforcement Sq. mm Per Linear Meter		Requirements Ultimate Strength Test 3 Edge Bearing Method kN/m of Pipe
	Circ.	Long.	
300 mm	184	78	27.6
375 mm	184	78	36.5
450 mm	184	78	39.0
600 mm	184	78	42.0
750 mm	506	78	59.0

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CONCRETE PIPE - 600 MM DIAMETER

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PERFORATED REINFORCED CONCRETE PIPE - 750 MM DIAMETER

ITEM 10605.1436 M - PERFORATED REINFORCED CONCRETE PIPE - 900 MM

DIAMETER

ITEM 10605.1448 M - PERFORATED REINFORCED CONCRETE

PIPE - 1200 MM DIAMETER

900 mm	506	78	66.0
1200 mm	506	78	74.5

Size	Min. Size Perforation	Min. Number of Perforations per 2.44 m Laying Length	Total Area of Perforation per 2.44 m Laying Length in Square Meters (minimum)
300 mm	64 x 16 mm	40	0.040
375 mm	64 x 16 mm	40	0.040
450 mm	64 x 16 mm	40	0.040
600 mm	64 x 16 mm	50	0.050
750 mm	64 x 16 mm	60	0.060
900 mm	115 x 25 mm	42	0.122
1200 mm	115 x 25 mm	42	0.122

The Geotextile (underdrain) shall provide a permeable layer between the crushed stone and the select granular fill which will allow water, but not soil particles, to pass through. Geotextile (underdrain) shall conform to the requirements of Subsection 207-2.

Construction Details. The perforated pipe shall be installed as shown on the contract plans or as directed by the Engineer.

The pipe shall be bedded on a layer of #1 and #2 sizes crushed stone; this crushed stone shall extend around the pipe to a height of 150 mm above the center of the pipe. The crushed stone shall be covered with one layer of Geotextile (underdrain) before placing the select granular fill thereon. The Geotextile shall be installed as indicated in the Plans and in accordance with Subsection 207-3.01. All seams shall be at right angles to the centerline of the pipe.

Pipe shall be laid with slotted holes placed below the horizontal diameter of the pipe. The use of water for settling of backfill in trenches will not be permitted.

Caulking of joints will not be required.

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Method of Measurement. Perforated reinforced concrete pipe will be measured by the number of linear meters (laying length) of each size pipe incorporated in the work.

Basis of Payment. The price bid per meter shall include the cost of furnishing, delivering, handling, laying, and all work and material necessary to complete the work, except that Trench and Culvert Excavation, Crushed Stone, and Select Granular Fill will be paid for under their respective items.

No separate payment will be made for furnishing and replacing Geotextile (underdrain); the cost thereof shall be included in the unit prices bid for the perforated reinforced concrete pipe items.