

# Smartstream Mini Manhole and Maintenance Shaft

Technical Guide D4.9

Rotomolded LMDPE Mini Manhole is a lightweight one piece unit for sewer or stormwater.



02.25 | DRAINAGE | D4.9 SMARTSTREAM MINI MANHOLE

## Applications

Sewer systems  
Stormwater drainage systems

## Product Attributes

Welded one piece unit eliminates root intrusion and groundwater ingress  
Does not suffer from gas attack (internal or external)  
Manufactured to suit all types of pipes up to DN 300 mm (larger sizes on request)  
Does not require concrete encasement  
Base allows multiple inlets

## Approvals/Standards

ASTM F1759-97, Standard Practice for Design of Manholes for Subsurface Applications  
WSA 137-2013 Maintenance Shafts and Maintenance Chambers for Sewerage

## Quality/Environment/Health & Safety

ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018

As part of the Smartstream family of products, the Mini Manhole and Maintenance Shaft is an excellent and durable option for sewer and wastewater applications.

### Product Overview

- Durable and lightweight, the unit reduces transport and handling costs.
- With Mini Manhole any combination is possible. Base allows multiple inlets to be attached at any angle between 45 ° and 315 ° from the downstream and at specified grades.

### Design Specifications

- One piece rotomolded polyethylene construction.
- Very robust 13 mm wall thickness.
- 600 mm spherical base has excellent hydraulic properties.
- Typical installation from 500 mm invert to 2.4 m invert.
- All units are hydro tested prior to dispatch.
- Range of fittings available to accommodate most sewer line types including: PVC, PE, Clay and AC.
- In order to manufacture the product to customer requirements, a drill order sheet must be completed and sent to Hynds Fabrication through your local branch.

### Installation

- Bedding material must be in accordance with local council requirements.
- Connect downstream and ensure that the top of the chamber is level
- Pack/tamp to support product
- Connect upstream
- Backfill and compact
- Install concrete cover slab and access cover

### Cover Options

- Hynds offers a wide variety of cover and frames. Refer to our Streetware catalogue or contact your local branch for more details.



**FIG. 1** Assembled view of the Riser and the Base Unit. The custom-built unit allows multiple entry points.

**TABLE 1** Configuration Examples (\*)

Product Code	Description
SMT01602310	100 mm PVC Outlet
SMT01602311	100 mm PVC 2 Way
SMT01602312	100 mm PVC 3 Way
SMT01602320	150 mm PVC Outlet
SMT01602321	150 PVC Outlet & 1 x 100 Inlet
SMT01602322	150 PVC Outlet & 2 x 100 Inlet
SMT01602323	150 PVC Outlet & 3 x 100 Inlet
SMT01602330	150 mm PVC 2 Way

**TABLE 2** Concrete Slab Options

Product Code	Description
SMTLD1050200645	Lid M/H Mini 600 Ø1050 x 200 mm Thick c/w 645 mm Hole

(\*) Inlet and angle configuration is custom made to provide complete versatility



**FIG. 2** Precast Concrete Slab and Class D Cover

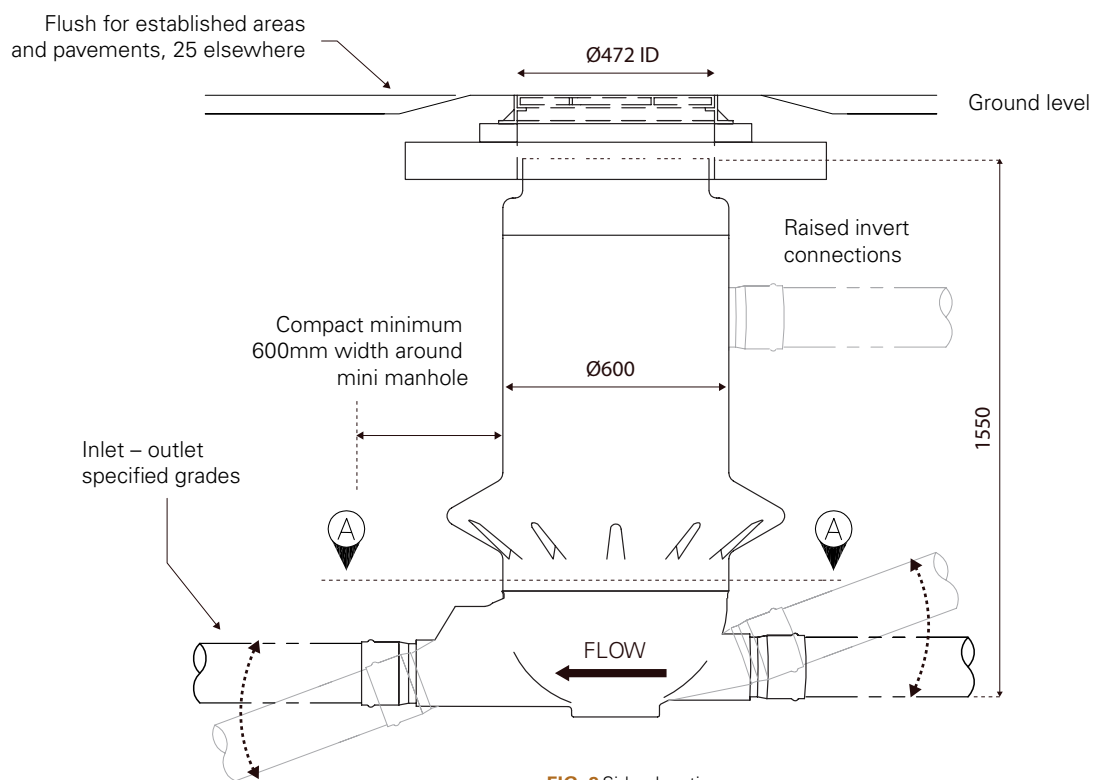


FIG. 3 Side elevation

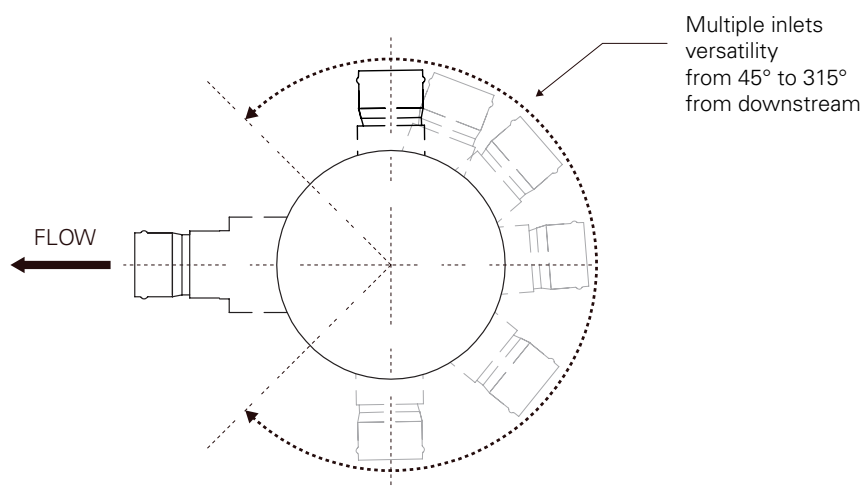
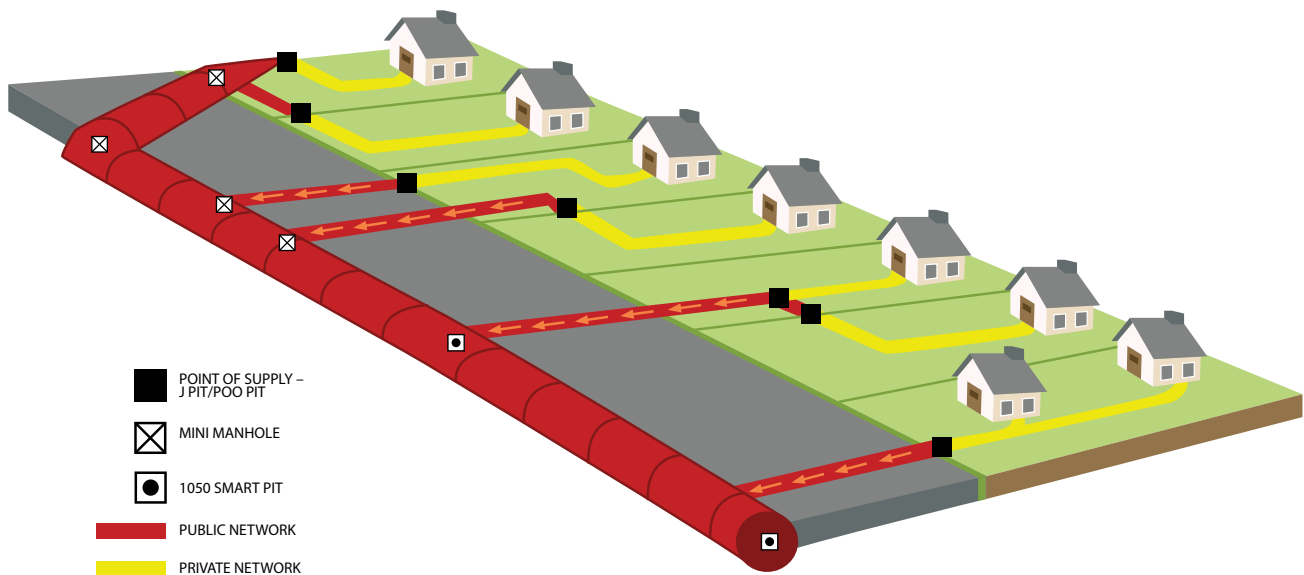


FIG. 4 Section A-A Base inlet and outlet connections

## Typical Smartstream Application



## Smartstream Family of Products

The Mini Manhole is part of the Smartstream family of products, the most complete portfolio of PE solutions for drainage and sewer applications.

**J Pit**



**Poo Pit**



**Mini Manhole**



**1050 Smart Pit**



Branches Nationwide Support Office & Technical Services 09 274 0316

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