Sanitary Sewer

Custodian: The Corporation of the District of Saanich, Underground Services Division

Publish Date: January 1, 2003

Abstract: The sanitary sewer dataset represents a collection of features that convey wastewater.

Purpose: The sanitary sewer dataset is captured to support the management, planning, and maintenance of sewer assets.

Status: Complete

Update Frequency: Weekly

Credits: The Corporation of the District of Saanich, Engineering Department, Public Works Division, Storm and Wastewater Section, Corporate GIS.

Coordinate System: NAD 1983 CSRS UTM Zone 10N (WKID: 3157)

Geometry Type: Point & Line

The 12 Data Layers comprising Sanitary Sewer are:

1. Sewer Abandoned Asset
2. Sewer Abandoned Main
3. Sewer Cleanout
4. Sewer Connection
5. Sewer Control Valve
6. Sewer Fitting
7. Sewer Gravity Main
8. Sewer Lateral
9. Sewer Manhole
10. Sewer Network Structure
11. Sewer Pressurized Main
12. Sewer System Valve

1. Sewer Abandoned Asset

Abstract: The abandoned sewer asset is a decommissioned device that formerly transported, stored or analyzed water through the sanitary sewer network. Abandoned points are comprised of an extensive classification of former junction points including: Cleanout (Main, Lateral), Connection (Standard, Inspection, Cap), Control Valve (Air Release, Simple Check, Drain), Discharge Point, Fitting (Junction, Main cap), Manhole, Meter, Network Structure (Pump Station, Storage Basin Or Tank, Junction Chamber, Overflow Chamber, Transition Chamber, Valve Chamber, Air Release Chamber), Pump, Point (Observation, Vent), Service Valve (Gate).

Geometry Type: Point

Attribution Information

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	14
DECOMASSETTYPE	Type of abandoned asset	Manhole, Fitting (Main Cap)
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SMH004010
SHAPE	Feature geometry	Point

2. Sewer Abandoned Main

Abstract: An abandoned sewer main is a decommissioned pipe that no longer participates in the sanitary sewer network. The abandoned line remains in the ground with the disconnected ends being capped. Types captured include Gravity Main (Collector, Inverted Siphon, Outfall, Overflow, Trunk), Pressure Main, and Service Line.

Geometry Type: Line

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	166
DECOMMAINTYPE	Type of abandoned main	Gravity Main (Collector) Pressure Main Service Line.
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SGM009760
MATERIAL	Pipe material type	Asbestos Cement
DIAMETER	Pipe diameter in millimetres	150mm
SHAPE	Feature geometry	Line
SHAPE.LEN	Length of pipe in metres	89

3. Sewer Cleanout

Abstract: A sewer cleanout provides access to a sewer collection system for the purpose of inserting cleaning tools, such as rods or snakes while cleaning a pipeline or blockage. A cleanout is generally found at the upstream end of a sewer gravity main. Cleanouts are sometimes found on laterals near property line. There are two types captured: Main and Lateral.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	146
SUBTYPE	Type of cleanout	Main, Lateral
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SCT002319
SHAPE	Feature geometry	Point

4. Sewer Connection

Abstract: A sewer connection represents the point location where Saanich's sewer collection system meets the customer's sewer line. These representative points are most commonly located at property line or right of way boundaries. There are three types captured: Standard, Inspection, and Capped.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of connection	Standard, Inspection, Cap
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SCN016108
DEPTHM	Recorded ground to connection depth in metres	1.6
SHAPE	Feature geometry	Point

5. Sewer Control Valve

Abstract: Sewer control valves are devices that operate in special ways. Air control valves relieve the system of trapped air or vacuums that may develop. Check valves are self-activating valves that permit gases and liquids to flow in only one direction, preventing process flow from reversing. They are classified as one-way directional valves. There are three types of valve captured: Air Release, Simple Check, and Drain.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of control valve	Air Release, Simple Check, Drain
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SCV00014
SHAPE	Feature geometry	Point

6. Sewer Fitting

Abstract: A sewer fitting represents the device used to cap sewer main lines.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of fitting	Main Cap
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SFG00212
SHAPE	Feature geometry	Point

7. Sewer Gravity Main

Abstract: A sewer gravity main is a type of pipe that is not pressurized and relies on gravity to move the sanitary wastewater through the pipe. There are five types captured: Collector, Inverted Siphon, Outfall, Overflow, and Trunk.

Geometry Type: Line

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of gravity main	Collector, Inverted Siphon, Outfall, Overflow, Trunk
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SGM005395
MATERIAL	Pipe material type	Poly Vinyl Chloride
DIAMETER	Pipe diameter in millimetres	150
RELINED	Pipe has been relined	Yes or No
RELINEMETHOD	Construction method used for pipe relining	Pipe Bursting, Cured in Place
RELINESTRUCTURAL	Relined pipe has had significant reconstruction	Yes or No
HOSTMATERIAL	Material type for host pipe	Asbestos Cement
LINERTHICKNESS	Thickness of liner in millimetres	5
SHAPE	Feature geometry	Line
SHAPE.LEN	Length of pipe in metres	157

8. Sewer Lateral

Abstract: A sewer lateral is a small-diameter pipe that runs from the gravity main line to the customer premises. There is one type captured: Lateral Line. The pipe diameter is predominantly assumed to be 100 mm.

Geometry Type: Line

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SLL027310
MATERIAL	Pipe material type	Poly Vinyl Chloride
DIAMETER	Pipe diameter in millimetres	100
SHAPE	Feature geometry	Line
SHAPE.LEN	Length of pipe lateral in metres	7.1

9. Sewer Manhole

Abstract: A sewer manhole is an entry point that allows access for operators or equipment to enter a sewer collection system. It may also be called an access or maintenance hole.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
MANHOLETYPE	Type of manhole	Standard, Drop
CONSTRUCTIONTYPE	Construction type.	Concrete, Brick
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SMH000347
SHAPE	Feature geometry	Point

10. Sewer Network Structure

Abstract: A sewer network structure is used to convey water through the system in non-gravity scenarios and operating structures. There are nine types of sewer network structures captured: Pump Station, Storage Basin or Tank, Junction Chamber, Overflow Chamber, Pigging Chamber, Transition Chamber, Valve Chamber, Air Release Chamber, and Observation Chamber.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of network structure	Pump Station, Storage Basin or Tank, Junction Chamber, Overflow Chamber, Pigging Chamber, Transition Chamber, Valve Chamber, Air Release Chamber, Observation Chamber
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SNS000040
PUMPSTATIONNAME	Pump Station Name	Grange
SHAPE	Feature geometry	Point

11. Sewer Pressurized Main

Abstract: A pressurized main is a type of pipe that operates under pressure and is able to convey sewage where a gravity system would not function.

Geometry Type: Line

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SPM000108
MATERIAL	Pipe material type	Poly Vinyl Chloride
DIAMETER	Pipe diameter in millimetres	500
RELINED	Pipe has been relined	Yes or No
RELINEMETHOD	Construction method used for pipe relining	Pipe Bursting, Cured in Place
RELINESTRUCTURAL	Relined pipe has had significant reconstruction	Yes or No
HOSTMATERIAL	Material type for host pipe	Asbestos Cement
LINERTHICKNESS	Thickness of liner in millimetres	10
SHAPE	Feature geometry	Line
SHAPE.LEN	Length of pipe in metres	255

12. Sewer System Valve

Abstract: A sewer system valve is a device that is fitted to a pipeline or orifice in which the closure member is either rotated or moved transversely or longitudinally in the waterway so as to control or stop the flow. System valves are used to regulate pressure, isolate, throttle flow, prevent backflow, and relieve pressure. There is one type captured: Gate.

Geometry Type: Point

Attribution Information:

FIELD NAME	DESCRIPTION	EXAMPLES
OBJECTID/FID	Internal feature number	12
SUBTYPE	Type of system valve	Gate
ADMINISTRATIVEAREA	Organization or jurisdictional owner responsible for maintenance of feature	District of Saanich
FACILITYID	Unique Alphanumeric ID assigned by Saanich	SSV000019
SHAPE	Feature geometry	Point