



DESIGN SPECIFICATIONS

SECTION 7 - DRAWING REQUIREMENTS (GIS SYMBOLOGY)

SECTION 7.5.2
JULY 2025

WATER SYSTEM

	GIS Revision Tracking Point
	Pressure Tank
	Air and Vacuum Valve
	Air Release Valve
	Altitude Valve
	Ball Valve
	Butterfly Valve
	Butterfly Valve Operator Side
	Check Valve
	Corporation Stop
	Curb Stop
	Drain Valve
	Gate Valve
	Globe Valve
	Hydrant Valve
	Pressure Reducing Valve
	Service Valve
	Surge Relief Valve
	Private Air Release Valve
	Private Air and Vacuum Valve
	Private Altitude Valve
	Private Ball Valve
	Private Butterfly Valve
	Private Butterfly Valve Operator Side
	Private Check Valve
	Private Corporation Stop
	Private Curb Stop
	Private Drain Valve
	Private Gate Valve
	Private Globe Valve
	Private Hydrant Valve
	Private Pressure Reducing Valve
	Private Service Valve
	Private Surge Relief Valve
	Unknown FCODE

Closed Water Valves

	Closed
	Temporarily Closed
	Isolation Valve
	Private Isolation Valve
	Backflow Preventer
	Flowmeter
	Water Quality Station
	Water Quality Instrument
	Water Rechlorination Station

Water Fittings

	Adaptor
	Bend
	Blind Flange
	Cap
	Chamber Flow Arrow
	Chamber Vent
	Coupling
	Cross
	Denso Tape
	Link Seal on a Pipe Sleeve
	M.J. Restraint Device
	Non-shrink Fill on a Pipe Sleeve
	Plug
	Reducer
	Sleeve
	Strainer
	Tapping Sleeve
	Tee
	Test Meter Pit
	Victaulic Coupling
	Wye
	Wye Left
	Wye Right

Water Structure Points

	Unknown Water Structure Point
	Booster Station
	Water Supply Plant
	ARV Chamber
	Control Chamber
	Drain Chamber
	General Chamber
	Meter Chamber
	PRV Chamber
	Reservoir Chamber
	Surge Relief Chamber
	Water Intake Structure - In Bank Filtration
	Water Intake Structure - Intake Structure
	Water Intake Structure - Low Lift
	Water Intake Structure - Travelling Screen
	Water Intake Structure - Well
	Water Bulk Fill Station Points
	Water Reservoir

Water Hydrants

	Hydrant
--	---------

	Hydrant, Out of Service
	Private Hydrant

Other Water Service Features

	Water Service Point
	Leaks and Breaks

Water Pumps

	Domestic Pump
	Fire Pump

Water Pipes

	Drain
	Distribution Main
	Transmission Main
	Private Drain
	Private Distribution Main
	Private Transmission Main
	Unknown Pipe
	Service Lateral
	Hydrant Lead
	Private Service Lateral
	Private Hydrant Lead
	Unknown Lateral
	Pipe Mask

Water Pipe Protection

	Concrete Slab
	Styrofoam Insulation
	Pre-Insulated External Wrap - Buried
	Pre-Insulated External Wrap - Above Ground
	Casing Pipe - Buried
	Casing Pipe - Above Ground
	Pipe Protection Unknown
	Pipe Protection Other
	Pipe Protection - Temp

Water Pipe Cleaning and Lining

	Cleaning and Lining
	Cleaned Pipe
	IFC Update (Under Review)

Water System Structure Polygons

	Booster Station
	Reservoir
	Water Intake Structure
	Chamber
	Water Supply Plant
	Unknown Water Structure
	Water Bulk Fill Station Polygons



DESIGN SPECIFICATIONS

SECTION 7 - DRAWING REQUIREMENTS (GIS SYMBOLOGY)

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WASTEWATER COLLECTION SYSTEM

	GIS Revision Tracking Point		Wye		Pressure Release Valve
Wastewater Manholes and Outfalls					
	Public Manhole		Vent		Surge Relief Valve
	Private Manhole		Service Point		Valve
Wastewater Chambers					
	Wastewater Diversion Chamber		Legacy Service Point		Collection System Spot Repair
	Wastewater Diversion Point		Cathodic Protection Test Station		Sewer Pump
	Wastewater Force Main Valve Chamber		Control Structure		Treatment Facility
	Wastewater Junction Chamber		Identified Deficiency (Pipes/Laterals)		Casing
	Wastewater Pre-Treatment Unit		Tracewire Access Point		Lining
	Wastewater Pump Chamber		Force Main Flow Meter		Tracewire
	Wastewater Regulating Chamber		Gravity Flow Meter		Vent Line
	Wastewater Storage Basin		Gravity Flow Meter - Removed		CCTV Televised Main
	Wastewater Tide Chamber		Wastewater Corp Stop		CCTV Televised Lateral
	Wastewater Vortex Chamber		Wastewater Curb Stop	Wastewater Insulation	
	Outfall	Wastewater Pumping Stations			Concrete Slab
Wastewater Fittings					
	Bend		Public Pumping Station		Pre-Insulated Pipe
	Cap		Private Pumping Station		Styrofoam Sheet
	Cleanout	Wastewater Holding Tanks		Wastewater Pipes	
	Coupling		Heat Recovery Tank		Public Force Main
	Eccentric Reducer		Holding Tank		Public Gravity Pressure Pipe
	Flexible Coupling		Overflow Tank		Public Pressure Pipe
	Flex Joint	Wastewater Valves			Public Inverted Siphon
	Grouted Connection		Air Release Valve		Public Pipe
	Long Radius Bend		Altitude Valve		Private Force Main
	Mechanical Joint Restraint		Butterfly Valve		Private Gravity Pressure Pipe
	Reducer		Ball Valve		Private Pressure Pipe
	Saddle		Cone Valve		Private Inverted Siphon
	Tap		Check Valve		Private Pipe
	Tee		Drain Valve		Public Lateral
			Gate Valve		Private Lateral
			Plug Valve		Wastewater Structure Polygon



DESIGN SPECIFICATIONS

SECTION 7 - DRAWING REQUIREMENTS (GIS SYMBOLOGY)

SECTION 7.5.2
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STORMWATER COLLECTION SYSTEM

Stormwater Manholes

- Public Manhole
- Private Manhole

Stormwater Inlets

- Public Catchbasin
- Public Double Catchbasin
- Public Triple Catchbasin
- Private Catchbasin
- Private Double Catchbasin
- Private Triple Catchbasin

Stormwater Headwalls and Outfalls

- Headwall
- Outfall

Stormwater Fittings

- Bend
- Cap
- Cleanout
- Coupling
- Eccentric Reducer
- Flexible Coupling
- Flex Joint
- Grouted Connection
- Long Radius Bend
- Mechanical Joint Restraint
- Reducer
- Saddle
- Tap
- Tee
- Wye

Stormwater Chambers

- Stormwater Diversion Chamber
- Stormwater Diversion Point
- Stormwater Force Main Valve Chamber
- Stormwater Junction Chamber
- Stormwater Pump Chamber
- Stormwater Regulating Chamber
- Stormwater Storage Basin
- Stormwater Tide Chamber
- Stormwater Treatment Unit
- Private Stormwater Treatment Unit
- Stormwater Vortex Chamber

- Other Chamber
- Service Point
- Control Structure

Stormwater Valves

- Air Release Valve
- Altitude Valve
- Butterfly Valve
- Ball Valve
- Cone Valve
- Check Valve
- Drain Valve
- Gate Valve
- Plug Valve
- Pressure Release Valve
- Surge Relief Valve
- Valve

Stormwater Management Structures

- Berm
- Private Berm
- Constructed Wetland
- Private Constructed Wetland
- Lake
- Private Lake
- Oversize Pipe
- Private Oversize Pipe
- Underground Storage
- Private Underground Storage
- Wet Pond
- Private Wet Pond
- Dry Pond
- Private Dry Pond
- Unknown
- Private Unknown
- Other (See Remarks)
- Private Other (See Remarks)
- Other (No Remarks)

- Identified Deficiency (Pipes/Laterals)
- Force Main Flow Meter
- Gravity Flow Meter
- Gravity Flow Meter - Removed
- Stormwater Corp Stop
- Stormwater Curb Stop

Stormwater Pumping Stations

- Public Pumping Station
- Private Pumping Station
- Casing
- Lining
- Ditch
- CCTV Televised Main
- CCTV Televised Lateral

Stormwater Insulation

- Concrete Slab
- Pre-Insulated Pipe
- Styrofoam Sheet

Stormwater Pipes

- Public Catchbasin Lead
- Public Culvert
- Public Drain
- Public Force Main
- Public Gravity Pressure Pipe
- Public Pressure Pipe
- Public Inverted Siphon
- Public Pipe
- Private Catchbasin Lead
- Private Culvert
- Private Drain
- Private Force Main
- Private Gravity Pressure Pipe
- Private Pressure Pipe
- Private Inverted Siphon
- Private Pipe
- Public Lateral
- Private Lateral
- Stormwater Structure Polygon







DESIGN SPECIFICATIONS

SECTION 7 - DRAWING REQUIREMENTS (GIS SYMBOLOGY)
















SECTION 7.5.2
JULY 2025

COMBINED COLLECTION SYSTEM




Combined Manholes and Outfalls

-  Public Manhole
-  Private Manhole
-  Outfall
-  Combined Sewer Overflow (CSO) Structure

Combined Fitting

-  Bend
-  Cap
-  Cleanout
-  Coupling
-  Eccentric Reducer
-  Flexible Coupling
-  Flex Joint
-  Grouted Connection
-  Long Radius Bend
-  Mechanical Joint Restraint
-  Reducer
-  Saddle
-  Tap
-  Tee
-  Wye

Combined Holding Tanks

-  Heat Recovery Tank
-  Holding Tank
-  Overflow Tank

Combined Pumping Stations

-  Public Pumping Station



Private Pumping Station



Control Structure



Identified Deficiency (Pipes/
Laterals)



Force Main Flow Meter



Gravity Flow Meter



Gravity Flow Meter - Removed



Combined Corp Stop



Combined Curb Stop

Combined Chambers



Combined Diversion Chamber



Combined Diversion Point



Combined Force Main Valve
Chamber



Combined Junction Chamber



Combined Pump Chamber



Combined Regulating Chamber



Combined Storage Basin



Combined Tide Chamber



Combined Vortex Chamber

Combined Valves



Air Release Valve



Altitude Valve



Butterfly Valve



Ball Valve



Cone Valve



Check Valve



Drain Valve



Gate Valve



Plug Valve



Pressure Release Valve



Surge Relief Valve



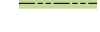
Valve



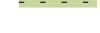
Casing



Lining



CCTV Televised Main



CCTV Televised Laterals

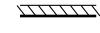
Insulation



Concrete Slab



Pre-Insulated Pipe



Styrofoam Sheet

Combined Pipes



Public Force Main



Public Gravity Pressure Pipe



Public Pressure Pipe



Public Inverted Siphon



Public Pipe



Private Force Main



Private Gravity Pressure Pipe



Private Pressure Pipe



Private Inverted Siphon



Private Pipe



Public Lateral



Private Lateral



Combined Structure Polygon





DESIGN SPECIFICATIONS

SECTION 7 - DRAWING REQUIREMENTS (GIS SYMBOLOGY)



SECTION 7.5.2
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UNKNOWN COLLECTION SYSTEM


Unknown Manholes

-  Public Manhole
-  Private Manhole




Unknown Headwalls and Outfalls

-  Headwall
-  Outfall



Unknown Fittings










-  Bend
-  Cap
-  Cleanout
-  Coupling
-  Eccentric Reducer
-  Flexible Coupling
-  Flex Joint
-  Grouted Connection
-  Long Radius Bend
-  Mechanical Joint Restraint
-  Reducer
-  Saddle
-  Tap
-  Tee
-  Wye

Unknown Holding Tanks










-  Heat Recovery Tank
-  Holding Tank
-  Overflow Tank

Unknown Pumping Stations









-  Public Pumping Station
-  Private Pumping Station









-  Service Point
-  Cathodic Protection Test Station
-  Control Structure
-  Identified Deficiency (Pipes/Laterals)
-  Force Main Flow Meter
-  Gravity Flow Meter
-  Gravity Flow Meter - Removed
-  Unknown Corp Stop
-  Unknown Curb Stop

Unknown Chambers



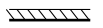
-  Unknown Diversion Chamber
-  Unknown Diversion Point
-  Unknown Force Main Valve Chamber
-  Unknown Junction Chamber
-  Unknown Pump Chamber
-  Unknown Regulating Chamber
-  Unknown Storage Basin
-  Unknown Tide Chamber
-  Unknown Vortex Chamber

Unknown Valves














-  Air Release Valve
-  Altitude Valve
-  Butterfly Valve
-  Ball Valve
-  Cone Valve
-  Check Valve
-  Drain Valve
-  Gate Valve

-  Plug Valve
-  Pressure Release Valve
-  Surge Relief Valve
-  Valve
-  Casing
-  Lining
-  CCTV Televised Main
-  CCTV Televised Lateral

Unknown Insulation

-  Concrete Slab
-  Pre-Insulated Pipe
-  Styrofoam Sheet

Unknown Pipes

-  Public Force Main
-  Public Gravity Pressure Pipe
-  Public Pressure Pipe
-  Public Inverted Siphon
-  Public Pipe
-  Private Force Main
-  Private Gravity Pressure Pipe
-  Private Pressure Pipe
-  Private Inverted Siphon
-  Private Pipe
-  Public Lateral
-  Private Lateral
-  Unknown Structure Polygon



DESIGN SPECIFICATIONS

SECTION 7 - DRAWING REQUIREMENTS (GIS SYMBOLOGY)

SECTION 7.5.2
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ABANDONED WATER SYSTEM

- Abandoned Valves
- Abandoned Hydrants
- Abandoned Water Rechlorination Station
- Abandoned Water Reservoir
- Abandoned Flowmeter
- Abandoned Water Pipe
- Abandoned Water Drain
- Abandoned Water Structure Polygons**
 - Abandoned Water Structure
 - Unknown Structure Subtype
 - Abandoned Water Bulk Fill Station Polygons
- Abandoned Water Structure Points**
 - Unknown
 - Booster Station
 - Water Supply Plant
 - ARV Chamber
 - Control Chamber
 - Drain Chamber

- General Chamber
- Meter Chamber
- PRV Chamber
- Reservoir Chamber
- Surge Relief Chamber
- Water Intake Structure - In Bank Filtration
- Water Intake Structure - Intake Structure
- Water Intake Structure - Low Lift
- Water Intake Structure - Travelling Screen
- Water Intake Structure - Well
- Abandoned Water Bulk Fill Station Points
 - Abandoned Service Point
 - Abandoned Service Lateral
- Abandoned Fittings**
 - Adaptor
 - Bend
 - Blind Flange
 - Cap
 - Chamber Flow Arrow

- Chamber Vent
- Coupling
- Cross
- Denso Tape
- Link Seal on a Pipe Sleeve
- M.J. Restraint Device
- Non-shrink Fill on a Pipe Sleeve
- Plug
- Reducer
- Sleeve
- Strainer
- Tapping Sleeve
- Tee
- Test Meter Pit
- Victaulic Coupling
- Wye
- Wye Left
- Wye Right
- Unknown FCODE

ABANDONED COLLECTION SYSTEM

- Abandoned Manholes**
 - Combined Manhole
 - Wastewater Manhole
 - Stormwater Manhole
 - Unknown Manhole
 - Abandoned CSO Structure
- Abandoned Inlets and Outfalls**
 - Catchbasin
 - Double Catchbasin
 - Triple Catchbasin
 - Abandoned Headwall
 - Abandoned Outfall

- Abandoned Fittings**
 - Bend
 - Cap
 - Cleanout
 - Coupling
 - Eccentric Reducer
 - Flex Joint
 - Flexible Coupling
 - Grouted Connection
 - Long Radius Bend
 - Mechanical Joint Restraint
 - Reducer
 - Saddle
 - Tap
 - Tee
 - Wye
 - Vent

- Abandoned Holding Tanks**
 - Heat Recovery Tank
 - Holding Tank
 - Overflow Tank

- Abandoned Service Points**
 - Unknown
 - Stormwater
 - Wastewater
 - Abandoned Cathodic Protection Test Station
 - Abandoned Control Structure
 - Abandoned Stormwater Management Structure
 - Abandoned Tracewire Access Point
 - Abandoned Sewer Pump
 - Abandoned Corp Stop
 - Abandoned Curb Stop
- Abandoned Chambers**
 - Diversion Chamber
 - Diversion Point
 - Force Main Valve Chamber
 - Junction Chamber
 - Pump Chamber
 - Regulating Chamber
 - Storage Basin
 - Tide Chamber
 - Stormwater Treatment Unit
 - Vortex Chamber
 - Wastewater Pre-Treatment Unit

- Abandoned Valves**
 - Air Release Valve
 - Altitude Valve
 - Butterfly Valve
 - Ball Valve
 - Cone Valve
 - Check Valve
 - Drain Valve
 - Gate Valve
 - Plug Valve
 - Pressure Relief Valve

- Surge Relief Valve
- Valve
- Abandoned Treatment Facility
- Abandoned Pumping Station
- Abandoned Casing
- Abandoned Lining
- Abandoned Ditch
- Abandoned Insulation
- Abandoned Tracewire
- Abandoned Vent Line
- Abandoned Pipes**
 - Combined Force Main
 - Combined Gravity Pressure Pipe
 - Combined Pressure Pipe
 - Combined Inverted Siphon
 - Combined Pipe
 - Catchbasin Lead
 - Culvert
 - Drain
 - Stormwater Force Main
 - Stormwater Gravity Pressure Pipe
 - Stormwater Pressure Pipe
 - Stormwater Inverted Siphon
 - Stormwater Pipe
 - Unknown Force Main
 - Unknown Gravity Pressure Pipe
 - Unknown Pressure Pipe
 - Unknown Inverted Siphon
 - Unknown Pipe
 - Wastewater Force Main
 - Wastewater Gravity Pressure Pipe
 - Wastewater Pressure Pipe
 - Wastewater Inverted Siphon
 - Wastewater Pipe
 - Lateral
 - Abandoned Collection System Structure

LAND FEATURES

Traffic Pole

 Traffic Pole

Utility Pole

 Utility Pole


Survey Monument

 Survey Monument

Natural Gas Lateral

 Natural Gas Lateral

Natural Gas Pipeline

 Natural Gas Pipeline


Property Boundary


 Property Boundary

Land Owned by Halifax Water


 Land Owned by Halifax Water

Community Boundary


 Community Boundary


 District Energy System Service Boundary

Halifax Water Stormwater Service Boundary

 Halifax Water Stormwater Service Boundary

HRM Service Requirements

 Water Service Only

 Wastewater Service Only

 Water and Wastewater Service


Protected Water Areas





Provincial Tertiary Watersheds




HW Water Supply Sheds


 Bennery Lake

 Bomont

 Chain Lakes

 Collin's Park

 Five Islands

 Lemont Lake

 Lake Major


 Middle Musquodoboit

 Pockwock Lake

 Siversands

 Tomahawk Lake

BASEMAP


 Power Pole / Transmission Tower

 Municipal Boundary

 Railroad

 Rivers / Stream

 Streets and Highways (1:100 - 1:8,000)


 Streets and Highways (1:16,000: - 1:64,000)

Streets and Highways (1:128,000 - 1:256,000)

 Major Highway


 Minor Highway


 Primary Street

 Street

 Building


 Coastline


 Community Boundary

 Lake

 Land Owned by University

 Parks / Recreational Areas

 Property Boundary

 District Energy System Service Boundary