Water Servicing Guidelines

Sunshine Coast Regional District

Version: 01
Date: January 26, 2026

Approved by: Remko Rosenboom, General Manager, Infrastructure Services
Approval Date: January 26, 2026

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Part 1: Introduction

This document establishes the Sunshine Coast Regional District's (SCRD) requirements for water service applications, water meter installations, and waterworks design and construction. These Guidelines are intended to support Applicants and design professionals by clearly outlining applicable standards, processes, and approval requirements for connections to the Regional District's water systems.

Nothing in this document shall be interpreted as contradicting or superseding SCRD Bylaw 778 or SCRD Bylaw 320. In the event of a conflict, the applicable bylaw shall govern.

1.1 Content and Intent

The intent of this document is to provide clear, consistent, and transparent guidance for the application, design, installation, and approval of water services, water meters, and watermains within the Sunshine Coast Regional District. These Guidelines are intended to promote uniformity across all SCRD water service areas and to ensure that water infrastructure is designed and constructed in a manner that is safe, reliable, maintainable, and compatible with the Regional District's water systems.

This document is organized into the following five parts:

Part 1: Introduction – Establishes the purpose of the document, defines key terms, and outlines general responsibilities.

Part 2: Water Service Applications and Protection Requirements – Provides requirements and procedures for applying for water service connections.

Part 3: Water Meter Guidelines – Outlines standards and requirements related to water meter sizing, selection, location, and installation.

Part 4: Watermain and Water Service Design Guidelines – Provides design requirements for waterworks to be used by the Applicant and the Applicant's Engineer.

Part 5: Standard Detail Drawings – Provides standard drawings to support waterworks design and construction.

1.2 Definitions

For the purposes of these Guidelines, the following definitions apply. Where a term is not defined herein, the definition provided in SCRD Bylaw 778 shall apply.

"Applicant" refers to a property Owner, or their authorized agent, who makes an application for a Water Service Connection.

“Applicant’s Engineer” refers to a Professional Engineer registered with EGBC engaged by the Applicant and may act on the Applicant’s behalf for technical submissions.

“ASTM” stands for the American Society for Testing and Materials.

“AWWA” stands for the American Water Works Association.

“CSA” stands for the Canadian Standards Association.

“Curb Stop” means the shut off valve to the property that is typically located at or near the property line and is owned by the Regional District.

“FM” stands for Factory Mutual.

“General Manager” means the person holding the position of General Manager, Infrastructure Services for the Regional District, or their designate.

“MOTT” stands for BC Ministry of Transportation and Transit.

“MMCD” stands for Master Municipal Construction Documents.

“NFPA” stands for National Fire Protection Association.

“Non-Standard Water Service Connection” refers to a Water Service Connection greater than one inch in diameter and/or provides water for fire suppression or other high flow purposes.

“Owner” & **“Property Owner”** means the Property Owner as defined in the Sunshine Coast Regional District Bylaw No. 778, and includes the owner or Owner’s representative, or registered lessee, of any property as registered at the British Columbia Land Title Office.

“Premises” means any residence, building or structure connected to a community water system.

“**Regional District**” means the Sunshine Coast Regional District or persons duly authorized to represent the Sunshine Coast Regional District in respect to these guidelines.

“**Sprinkler**” means the application or distribution of water on gardens, lawns or grounds by sprinkling or spraying, including sprinkler irrigation systems, micro-spray systems, misting systems, weeper hoses, and soaker hoses, but excludes hand watering or drip irrigation.

“ULC” stands for Underwriters Laboratory of Canada.

“VCH” stands for Vancouver Coastal Health.

“Water Meter” means a device supplied and owned by the Regional District which measures the quantity of water delivered to a property and delivers information through radio frequency or cellular data.

“Water Service Area(s)” means the area or areas designated as a water service area established by *Sunshine Coast Regional District Water Supply and Distribution Local Service Bylaw No. 1002*.

“**Water Service Connection**” means the portion of the water supply system owned by the Regional District that extends from the main water line to the property line of the parcel being served. The service connection includes a shut-off valve and, where installed, a Water Meter.

“Water Service Suspension” means the temporary turn-off of a water service from the Curb Stop.

“Water System” means the community water system owned and operated by the Regional District that includes all pipes, valves, meters (not including the meter outlet coupling), transmission and distribution lines, pumping equipment, reservoirs and Water Service Connections.

1.3 Responsibilities

While the Regional District will generally adhere to the standards and requirements set out in these Guidelines, the Regional District reserves the right, through SCRD Bylaw 778, to approve variations, exceptions, or exemptions where circumstances warrant. Any such approval may be subject to conditions deemed appropriate by the Regional District. Unless otherwise stated, all designs, installations, and construction associated with water services and waterworks are subject to approval by the Regional District.

The Applicant is responsible for ensuring that all applications, fees, deposits, designs, and construction associated with a Water Service Connection comply with these Guidelines, Bylaw 778, Bylaw 320, and all other applicable regulations.

Where these guidelines refer to actions or submissions by the Applicant, such actions may be carried out by the Applicant’s Engineer on the Applicant’s behalf, unless otherwise stated.

The Applicant must receive approval from the Regional District and any other relevant authorities before commencing construction of any waterworks intended to be owned or operated by the Regional District.

Part 2: Water Service Applications and Protection Requirements

The application requirements and procedures for obtaining a Water Service Connection are outlined in this part.

2.1 Applications for Standard Water Service Connections to Properties Fronting a Regional District Watermain

An Applicant seeking a Water Service Connection for a Property which fronts a Regional District watermain must submit a water service request form and pay the applicable application fees. Upon receipt of the application fee, the Regional District will review the request and, if approved, issue either a deposit payment request letter or an invoice for the connection fee, as applicable. Water service connections will only be permitted once payment has been received. Refer to SCRD Bylaw 778 for information on application fees. The application process is summarized in Figure 1 below.

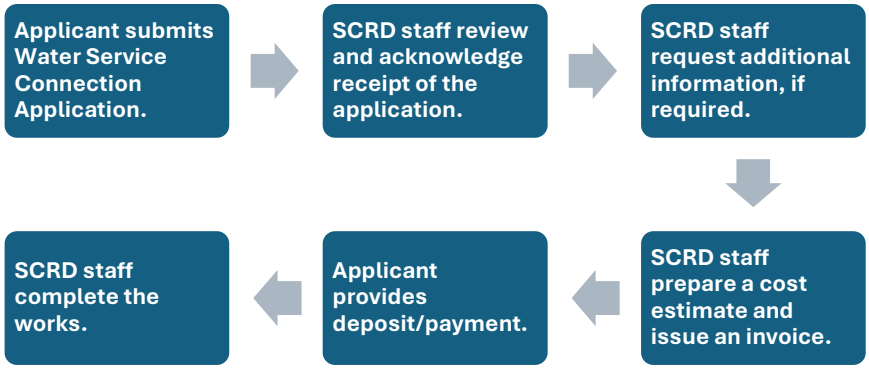


Figure 1: Water Application Process

2.2 Applications for Non-Standard Water Service Connections to Properties Fronting a Regional District Watermain

In addition to the requirements set out in section 2.1, applications concerning a Non-Standard Water Service Connection to a Property fronting a Regional District watermain shall also include sufficient detail to support the proposed Water Meter assembly and Water Service Connection size. At a minimum, the following information is required:

- Anticipated flow rate and water service size
- Meter size supported by water demand calculations
- Meter type, manufacturer, and model, accepted by the Regional District

- Meter location relevant to property line and building footprint indicated on a site plan (1:500 scale)
- Meter chamber or mechanical room layout indicated on a detail drawing (1:250 scale)
- Discharge location and details associated with chamber drain
- Land use and approved zoning
- Presence of on-site fire hydrants or fire sprinkler systems
- Presence of irrigation systems
- Future development phases for the property, with anticipated meter upgrades
- Any other relevant information regarding the proposed meter installation

Any submission that does not conform to Regional District standards and/or the BC Plumbing Code will be rejected by the Regional District. Installation shall not proceed without prior approval from the Regional District, and any works constructed without approval may be subject to suspension of water service.

Requirements specific to Water Meter sizing, selection, and installation are provided in Part 3 of this document.

2.3 Applications for Water Service Connections to Properties Not Fronting a Regional District Watermain

Where a Regional District watermain does not front the Property for which a Water Service Connection is requested, the Applicant is responsible for the design and construction of a watermain extension across the full frontage of the property. All costs associated with the design and construction of the watermain extension, including any associated appurtenances, shall be borne by the Applicant. The Applicant is responsible for ensuring the design and construction of all Regional District waterworks meets the standards set out in this document, SCRD Bylaw 320**,** as well as relevant engineering and MMCD Design Guidelines. Detailed design and construction requirements for watermain and water service works are provided in Part 4 of this document as well as SCRD Bylaw 320.

2.4 Applications for Temporary Water Services

An Applicant may apply for a separate temporary water service for use during construction. Construction services shall be equipped with an approved water meter and double check valve (backflow prevention) device, installed in accordance with Sunshine Coast Regional District Cross Connection Control Bylaw No. 425. Water for construction purposes shall not

be obtained from a Regional District fire hydrant unless the Applicant has prior approval from the Regional District in the form of a Temporary Hydrant Use Permit.

2.5 Applications for Water Services in Eastbourne Water System

Properties connected to the Eastbourne Water System that utilize water storage tanks connected to a Water Service Connection are required to install and maintain, at the Property Owner's expense, a shut off valve for this Water Service Connection on the water storage tank prior to the approval of a Water Service Connection.

2.6 Private Water Service Protection Requirements

Property Owners are responsible for installing private water service piping in accordance with the requirements outlined below. Failure to do so may result in damage to piping and/or Water Service Suspension in accordance with SCRD Bylaw 778.

i. Each service pipe must be provided with a stop and waste tap, or a pattern to be approved by the Regional District, which must be placed immediately inside the outer wall of the Premises in case of leaky or defective pipes or fixtures, or in cases where the Premises are vacated.

ii. All private water service installations and connections downstream of the Regional District meter shall conform to the BC Plumbing Code and applicable municipal or regional plumbing permit requirements.

iii. The Property Owner must install a sand strainer, pressure regulator, and relief valve on the water service of every building when the initial pressure of the street main in proximity to the building amounts to or exceeds 517.5 kPa [75 psi]. This clause does not apply to Premises where the total service does not exceed one cold supply tap.

iv. No pump, booster or other device may be utilized for the purpose of or having the effect of increasing water pressure for Private Waterworks to a pressure higher than the normal water pressure in said Private Waterworks without advance approval in writing from the Regional District. The Regional District may, without notice, disconnect the service to any Property Owner or Premises utilizing such pump, booster or other device.

v. An Authorized Backflow Prevention Device must be installed in accordance with the Regional District's Cross Connection Control Bylaw No. 425. The General Manager may require the Authorized Backflow Prevention Device to be inspected and registered with the Regional District.

vi. All service pipes in any property or Premises must be laid at a depth of not less than 600 mm, (or such other greater depth as may be determined by the Regional District)

below the surface of the ground; and where they cross under or near other excavations, they must be properly protected against settlement; and in all cases they must be laid in such a manner as to be protected from frost.

Part 3: Water Meter Guidelines

3.1 Meter Sizing

Meters for domestic water use shall be sized in accordance with AWWA standards.

The meter size selection should not compromise the operating range or the long-term life of the meter itself, nor adversely impact water pressures supplied to the property. In this same regard, the sizing analysis should be sufficiently thorough to avoid unnecessarily over-sizing the meter. In some instances, this may result in a smaller meter than the existing water service size. Note: newer meter technologies no longer derate maximum continuous flow to 50% but still incur a head loss.

For developments that are to be phased, the meter assembly shall be sized to accommodate the meter required for the ultimate build-out of the development. However, an initial meter installation may be sized to accurately capture the range of anticipated flows for the current phase of development.

Fire service meters shall be sized based on Fire Underwriters Survey requirements for on-site fire hydrants and NFPA standards for sprinkler systems.

3.2 Meter Selection

All Water Meters shall be compatible and installed with Neptune R900i registers.

3.2.1 Industrial / Commercial / Institutional Services

Unless otherwise approved by the **Regional District**, a single meter for water use shall be installed per property. No water can be sold or conveyed beyond the property served either below or above grade. Consideration to future subdivision or development may be considered during the approval process.

3.2.2 Dedicated Fire Services

All dedicated fire services must be equipped with an FM approved / ULC listed double check detector valve assembly to detect unauthorized water use. The remote receptacle for a “tattle tale” meter must be mounted such that it is always accessible to the meter reader and Regional District. All double check detector valve assemblies shall be factory supplied and installed as a complete unit.

3.2.3 Combined Fire & Domestic Services

Where the Applicant proposes a combined fire and domestic service, an FM approved / ULC listed Water Meter and backflow prevention device assembly shall be installed at the property line.

3.2.4 Private Fire Hydrants

A service to supply a fire hydrant located on private property must be equipped with an FM approved / ULC listed double check detector valve assembly in the case of a dedicated fire service, or an FM approved / ULC listed water meter and backflow prevention device assembly in the case of a combined fire and domestic service.

Where water usage other than firefighting through an onsite private hydrant is anticipated (i.e., flushing, bulk supply), a full-sized Water Meter must be used.

3.2.5 Mixed Use Developments

Comprehensive developments, including mixed use commercial and residential, shall have approved meter boxes, chambers, or onsite mechanical rooms sized to accommodate metering of both the proposed commercial consumption and domestic water usage within the property. The Applicant shall prepare and submit a documented "Metering Strategy" that outlines how all metering of the development shall be achieved.

3.3 Meter Locations

3.3.1 Preferred Locations

Meter locations are subject to Regional District approval. Ideally, all meter layouts shall be per SCRD-W2F. Larger meters shall be located inside the property line while smaller meters may be located in the MOTT Right of Way. For meter installations within the District of Sechelt (DoS), no meter of any size shall be installed in a DoS Right of Way.

With prior permission of the Regional District, meters may be located inside a building mechanical room, particularly where "zero lot line" development is anticipated. All inside installations shall be accessible by the Regional District. For example, the Applicant may provide contact information to the Regional District regarding ongoing access arrangements for purposes of conducting meter maintenance and service.

3.3.2 Inside Meters (Mechanical room)

The distance from the floor level to pipe center of the water meter setting shall not exceed 1 meter.

The meter shall be located close to the wall through which the water service enters the building, with no more than 2 meters of pipe between the entry point and the meter, unless otherwise approved by the Regional District. The complete meter assembly shall be restrained in accordance with good engineering practice.

A minimum working area of 1 meter by 1 meter horizontal immediately adjacent to the meter, as well as a 1 meter vertical clearance, shall always remain free of obstruction to allow for convenient servicing or testing of the meter by the Regional District.

The meter should be located within a reasonable distance of a floor drain. The floor drain should be adequately sized to accept the flows associated with meter testing and servicing.

The meter must not be installed within proximity to any sources of unreasonable heat, cold, and all types of corrosive materials. If such a location is unavoidable, it must have prior approval from the Regional District and be adequately protected from these elements.

No electronic, electrical, mechanical, or other water-sensitive equipment should be placed or installed under the meter assembly, or in an area where splash or flow from the meter assembly could occur during onsite servicing or testing of the meter.

3.3.3 Outside Meters (Chambers or box)

Outside meter boxes and chambers to be bedded on 100mm of compacted crush granular (or road base) material. Set top of meter box or chamber flush with final lot grade, with surface area surrounding the installation to promote surface drainage away from meter chamber or box, access point. Depth down to top of meter register to be 300 mm minimum, 400 mm maximum, or deeper where access into a chamber is provided.

An area of at least 1 meter horizontal surrounding the meter box or chamber should be free of major landscaping or obstructions to provide ongoing access for meter maintenance or testing. Meter boxes or chambers shall be installed in areas with little or no possibility of vehicular traffic, either moving or parked, at the time of installation or under future conditions. Where this is not possible, or unknown, meter chambers shall be designed to accommodate vehicle traffic (H-20) loading.

Where subject to freezing, equip the meter box or chamber with rigid insulation on the under-side of the lid or hatch.

3.4 Meter Configuration

Minimum depth from top of meter box to top of register to be 300mm; maximum 400mm. Meters shall be installed horizontally with register faces oriented vertically (upwards) for easy viewing.

Straight pipe lengths upstream and downstream of the meter (including the presence of bypass tees, isolation valves, reducers, and any other fittings) shall comply with manufacturer's recommendations for optimal meter accuracy. Valves and fittings shall be spaced at a minimum of three (3) pipe diameters up-stream of the meter.

Meters, strainers, valves, bypasses and associated piping or fittings shall be supported by appropriate pipe stands or anchors, to fully restrain against movement, or hydraulic thrust, even if the meter is removed for service. A restraint coupling must be provided on the downstream side of the meter to provide flexibility for meter removal or replacement.

3.4.1 Isolation Valves

Isolation valves must be provided upstream and downstream of the meter assembly to facilitate testing or removal of the water meter and strainer. Valves shall comply with the requirements stated in Section 3.7. The use of butterfly valves on positive displacement style meter installations is prohibited. If a butterfly valve is used, it must be a flanged non-wafer style.

Isolation valves are typically installed outside the meter box or chamber for 50mm or smaller. Larger installations may have both outside and inside isolations, to WorkSafe requirements (double-block-and-bleed).

3.4.2 Reducers

Where possible, all piping, valves, fittings, and meters shall remain full size. If a reduction in the size of the incoming or outgoing Water Service Connection must occur, then it shall be between the isolation valves and within the box, chamber or approved mechanical room installation. Reducers to be eccentric type, with deviation on the bottom. If a reduction in water service size is proposed, the isolation valve spacing must be sufficient to accommodate a meter that is the same size as the service connection.

3.4.3 Bypasses

Bypasses are required for all meters larger than 50mm.

For designated domestic services, the bypass shall be no less than half the size of the meter or service connection. For a combined fire and domestic service meter, a bypass equal to one size smaller than the service is required. For a designated fire service, a full-size bypass must be provided.

All bypass valves must be equipped with a lock wing on both the operating nut and case. After testing the installation, the bypass valve shall be closed and sealed by the installer.

Pressure reducing valves (PRVs) must be located downstream of the meter assembly.

For meters located inside building mechanical rooms, the bypass should be located above the meter, in clear view for inspection. Bypasses offset horizontally from the meter shall be avoided.

For meters located outside, the bypass piping and valve must be within the same box or chamber as the meter.

3.4.4 Setters

All 50 mm meters or smaller, located in exterior meter boxes, shall be installed on a setter. Re-setters shall only be installed when approved by the Regional District.

All setters, with meter installed, shall include a full port inlet ball valve and full port dual check valve outlet.

3.4.5 Strainers

Strainers are not typically required for full-port, ultrasonic meters. However, where required, strainers are to be installed immediately upstream of the meter using flanged connections. For meters not coupled with a strainer, the strainer shall be installed as per the manufacturer's specifications. Sufficient area must be provided to drain, inspect, and clean the strainer.

3.5 Remote Receptacles

The meter setup shall include conduit and wiring, installed and fully labelled. Wall mounted remote receptacles must be located 1.2 meters to 1.8 meters above floor level and easily accessible for reading and maintenance. The three wires from the meter to the receptacle must be installed in accordance with the manufacturer's instructions. The cable must run neatly in horizontal or vertical directions only, in an approved casing or duct. Any penetrations through the building wall to facilitate remote receptacle mounting shall be sealed with sealing compound. Where possible, remote receptacles should be located with an unobstructed view of the sky to facilitate radio communications. For outside meters installed at the property line, remote receptacles must be mounted to the meter box or chamber lid according to the manufacturer's instructions. Receptacles must be provided with at least 1.8 meters of 22 gauge, three-colour (red, green, black) wire connected and sealed at the receptacle without terminal exposure. Remote wiring connections must be either factory or field sealed to ensure that the connection is waterproof.

Compound meters with two registers must have a separate remote receptacle mounted to the box or chamber lid or wall for each register. Services with multiple meter installations shall have receptacles mounted in such a manner to be near each other and with sufficient room for associated radio units.

3.5.1 Chambers

The Applicant is responsible for selecting the appropriate meter box or chamber for a given application that satisfies the Regional District's requirements, including specifications noted in SCRD-W10.

Chamber lids / hatches shall be large enough to facilitate installation or replacement of the complete meter assembly including meter(s), strainer, and isolation valves. Manhole lids are not acceptable.

The minimum distance between the inside chamber walls and outside edges of pipe shall be 300 mm to provide sufficient space for maintenance. At least 340 mm separation shall be provided between the water service line and bypass. All internal piping shall be supported using appropriate and adjustable pipe supports.

All below-ground chambers for meters 50 mm and larger shall be made water-tight and include a sump drain. The Applicant is responsible for determining an adequate drainage location and method, subject to approval by the Regional District.

Part 4: Watermain and Water Service Design Guidelines

The detailed technical design and construction requirements applicable to watermain and water service works are outlined in the sections below. Refer to SCRD Bylaw 320 for additional information.

4.1 Watermain Pipe Sizing

Watermain diameter is to be a minimum of 200mm (8") diameter, except in cul-de-sacs less than 150 meters (500 feet) in length.

4.2 Watermain Pipe Material

Main extensions must be of Class 350 cement-mortar lined ductile iron pipe. Alternative pipe materials, such as high-density polyethylene (HDPE) or stainless steel, may be with Regional District approval.

4.3 Watermain Cover

Minimum pipe cover is to be 1.0 meter over all sections of watermain. Where this depth of cover cannot be obtained, adequate pipe protection measures must be implemented, subject to Regional District approval.

4.4 Minimum Separation Distances

Separation distances are to conform to the latest version of “Design Guidelines for Drinking Water Systems in British Columbia”, Ministry of Health.

4.5 Mainline Valves

Mainline isolation valves must be spaced a maximum of 150 meters from the nearest valve or intersection.

A minimum of two valves are to be present on a tee and a minimum of three valves are to be present on a cross.

4.6 Air-Release-Valves and Blow-offs

Air-Release-Valves are to be located at all high points in a watermain. Blow-offs are to be located at all dead ends.

4.7 Fire Hydrants

Fire Hydrants must be Terminal City model 20P, spaced a maximum of 150 meters (500 feet) apart.

Refer to SCRD-W4 for more details.

4.8 Water Service Connections

Service connection pipe up to 25 mm in diameter shall be type K copper pipe.

Refer to SCRD-W1, SCRD-W2E, and SCRD-W2F for more details.

4.9 Approvals and Testing

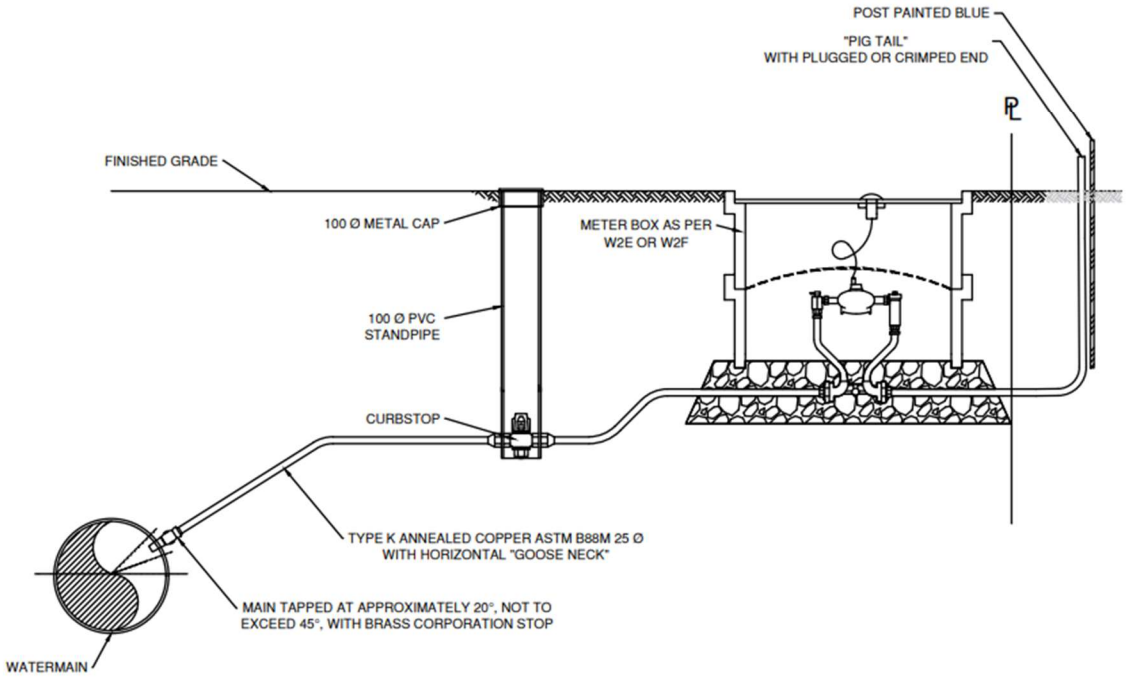
Approval must be given by the Regional District and VCH, as well as MOTT and DoS (when applicable), prior to the construction of any watermain extension.

Prior to tie-in to the Regional District water system, pressure testing, flushing, chlorination, and bacteria sampling is required under Regional District supervision.

Tie-in to the Regional District water system shall be performed by the Regional District.

Part 5: Standard Detail Drawings

SCRD STANDARD DETAIL DRAWINGS



25mm Ø TO 50mm Ø CONNECTION

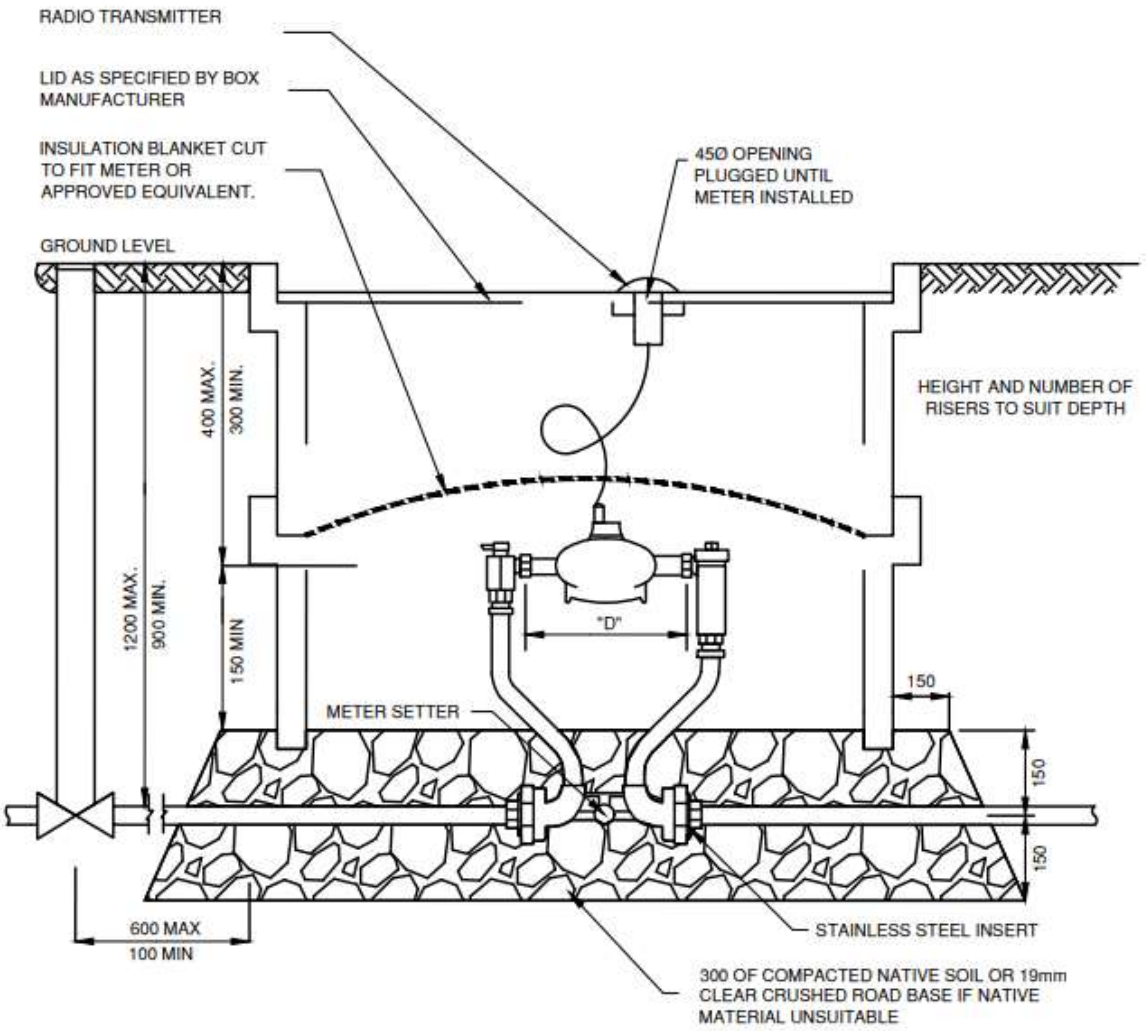
1) WATER SERVICE CONNECTIONS SHALL BE AT LEAST 3.0m AWAY FROM PARALLEL SEWER SERVICE CONNECTIONS.
2) ALL MEASUREMENTS IN MILLIMETERS UNLESS STATED OTHERWISE.

NOT TO SCALE

WATER SERVICE CONNECTION

DRAWING NUMBER: **W1**

SCRD STANDARD DETAIL DRAWINGS



SETTERS TO BE FORD VBHH, MANUFACTURED IN PLACE OR APPROVED EQUIVALENT

NOTES:

1. METER TO BE SUPPLIED AND INSTALLED BY SUNSHINE COAST REGIONAL DISTRICT.
2. METER SETTERS TO HAVE SADDLE NUTS AT METER INLET AND OUTLET, BE EQUIPPED WITH BYPASS LOCKABLE INLET VALVE, LOCKABLE BYPASS VALVE IF APPLICABLE, AND CHECK VALVE OUTLET.
3. METER BOX TO BE ARMTEC AE UTILITY BOX OR APPROVED EQUIVALENT.
4. REFER TO DRAWING NUMBER W2B FOR DETAIL OF SERVICE CONNECTION.
5. ALL MEASUREMENTS IN MILLIMETERS UNLESS STATED OTHERWISE.

METER SETTER SPACING AND TYPE

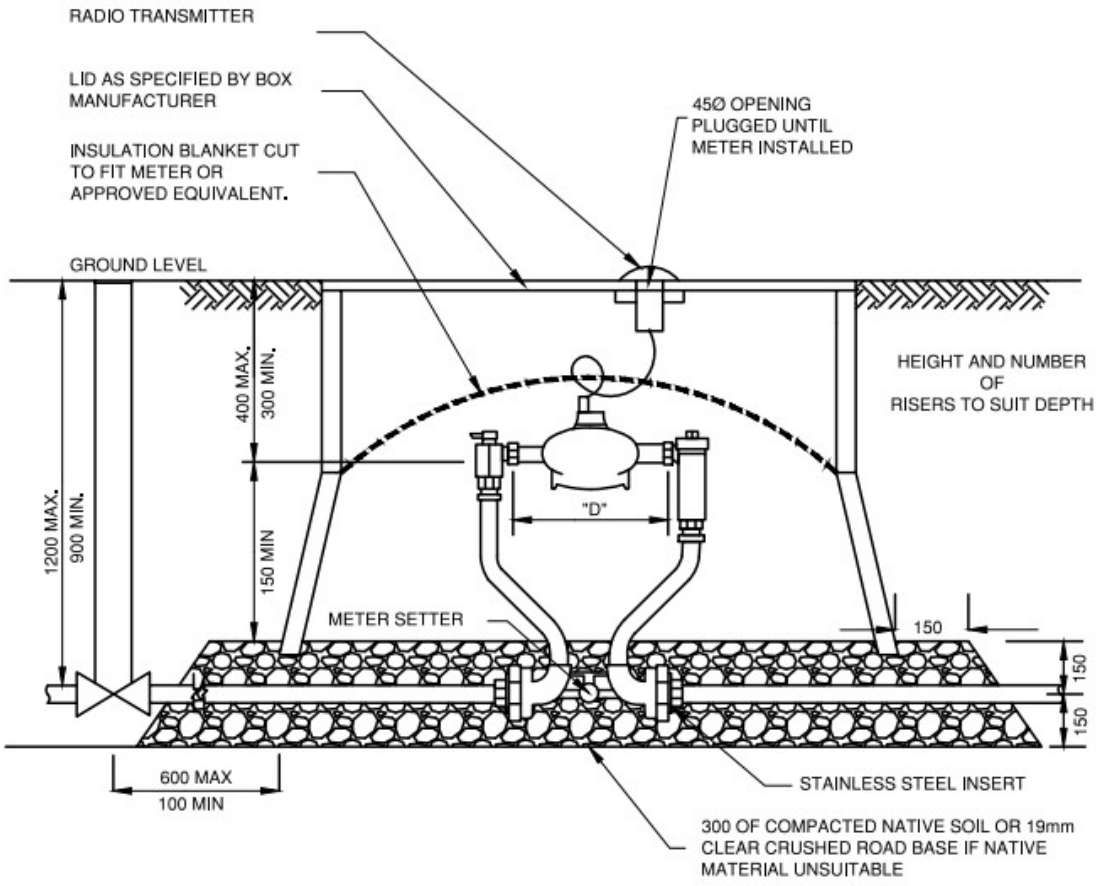
METER SIZE	"D"	METER BOX
16mm	191mm	ARMTEC AE B937
19mm	229mm	
25mm	273mm	ARMTEC AE T266
38mm	330mm	ARMTEC AE 5696
50mm	430mm	

METER INSTALLATION
IN VEHICULAR TRAFFIC AREAS

NOT TO SCALE

DRAWING NUMBER:
W2E

SCRD STANDARD DETAIL DRAWINGS



SETTERS TO BE FORD VBHH, MANUFACTURED IN PLACE OR APPROVED EQUIVALENT

NOTES:

1. METER TO BE SUPPLIED AND INSTALLED BY SUNSHINE COAST REGIONAL DISTRICT.
2. METER SETTERS TO HAVE SADDLE NUTS AT METER INLET AND OUTLET, BE EQUIPPED WITH BYPASS LOCKABLE INLET VALVE, LOCKABLE BYPASS VALVE IF APPLICABLE, AND CHECK VALVE OUTLET.
3. METER BOX TO BE ARMOR UTILITY BOX OR APPROVED EQUIVALENT.
4. REFER TO DRAWING NUMBER W2B FOR DETAIL OF SERVICE CONNECTION.
5. ALL MEASUREMENTS IN MILLIMETERS UNLESS STATED OTHERWISE.

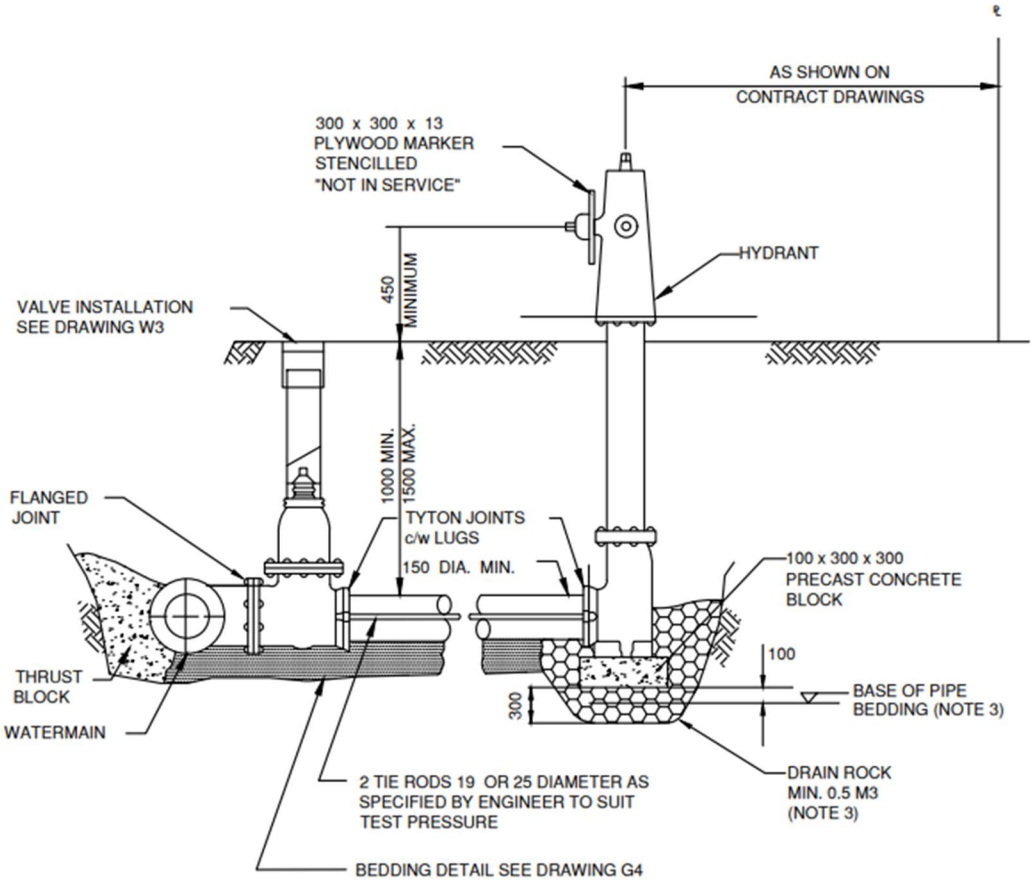
METER SETTER SPACING AND TYPE		
METER SIZE	"D"	METER BOX
16mm	191mm	ARMOR STANDARD
19mm	229mm	
25mm	273mm	ARMOR JUMBO
38mm	330mm	ARMOR XL
50mm	430mm	

METER INSTALLATION
IN NON-VEHICULAR TRAFFIC AREAS

NOT TO SCALE

DRAWING NUMBER:
W2F

SCRD STANDARD DETAIL DRAWINGS

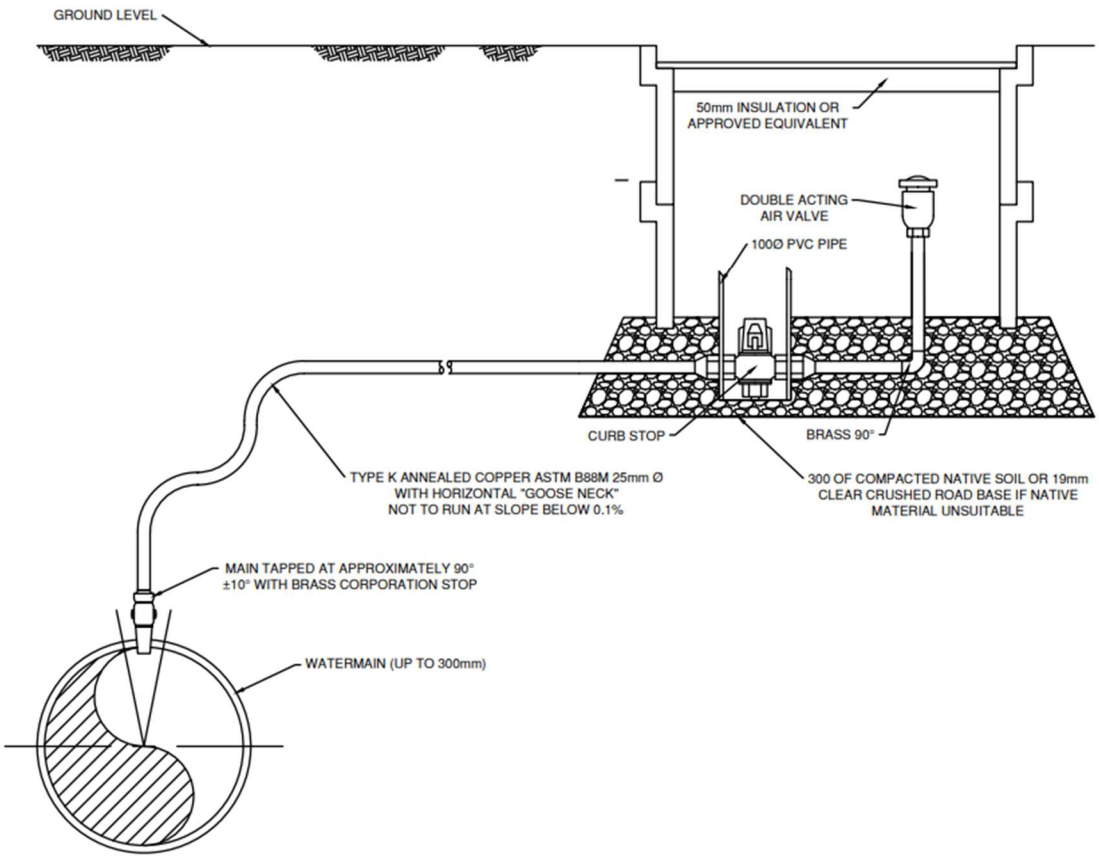


NOTE:
1. FIRE HYDRANTS TO BE TERMINAL CITY 20P.
2. THREADED PORTS TO BE USED IN DISTRICT OF SECHELT, PENDER HARBOUR, AND EGMONT FIRE PROTECTION AREAS. STORZ CONNECTIONS TO BE USED ELSEWHERE.
3. REFER TO SUPPLEMENTAL SPECIFICATIONS FOR HYDRANT PAINTING REQUIREMENTS.
4. FOR INSTALLATIONS SHOWN ON CONTRACT DRAWINGS WHERE WATER (AT SEASONAL HIGH) IS ABOVE BASE OF DRAIN ROCK, INSERT THREADED PLUGS IN DRAIN HOLES AND SUBSTITUTE GRANULAR PIPE BEDDING FOR DRAIN ROCK (COMPACT PIPE BEDDING TO 95% MODIFIED PROCTOR DENSITY).
5. IF REQUIRED BY MOTI, UPM STANDARDS, FLANGED STUB IS TO INCORPORATE BETWEEN THE TEE AT THE MAIN AND THE HYDRANT GATE VALVE TO LOCATE HYDRANT VALVES AWAY FROM THE PAVED SURFACE.

FIRE HYDRANT INSTALLATION

DRAWING NUMBER: **W4**

SCRD STANDARD DETAIL DRAWINGS



NOTES:

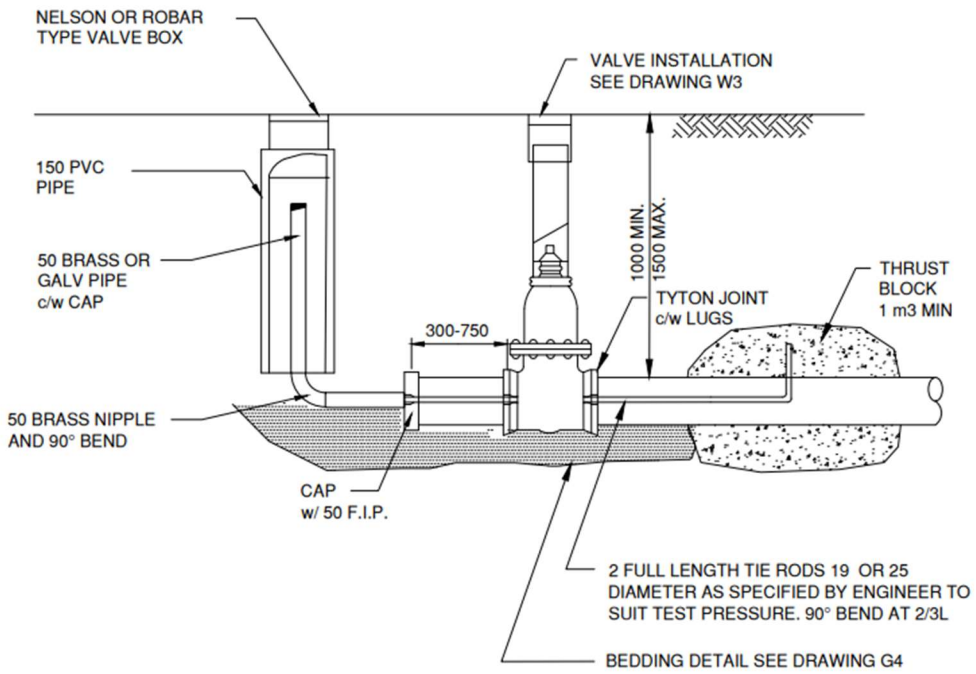
1. METER BOX TO BE ARMTEC AE UTILITY BOX OR APPROVED EQUIVALENT
2. ALL MEASUREMENTS IN MILLIMETERS UNLESS STATED OTHERWISE
3. ALL AIR VALVES TO BE OF THE DOUBLE ACTING TYPE. TERMINAL CITY IRON WORKS, A.V.24 OR EQUIVALENT

AIR VALVE ASSEMBLY

NOT TO SCALE

DRAWING NUMBER: W6

SCRD STANDARD DETAIL DRAWINGS



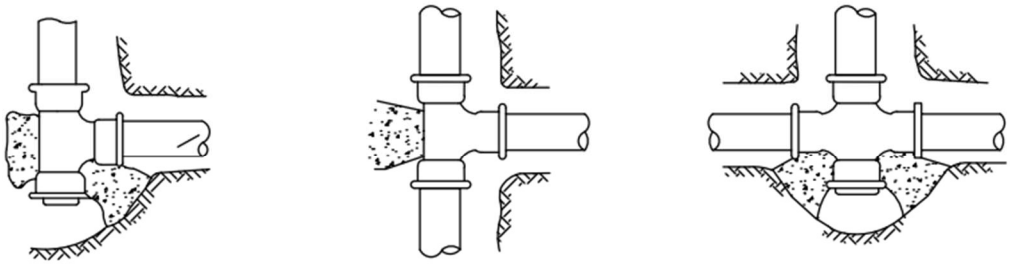
NOTE: 1. 20 Mpa CONCRETE.

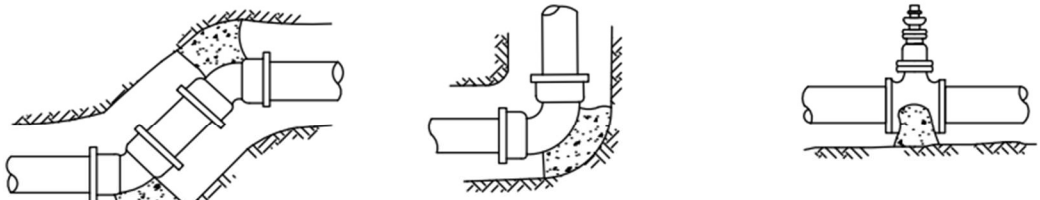
2. REFER TO CONTRACT DRAWINGS AND SECTION 02666 FOR DETAILED SPECIFICATIONS.

BLOW-OFF WITH GATE VALVE

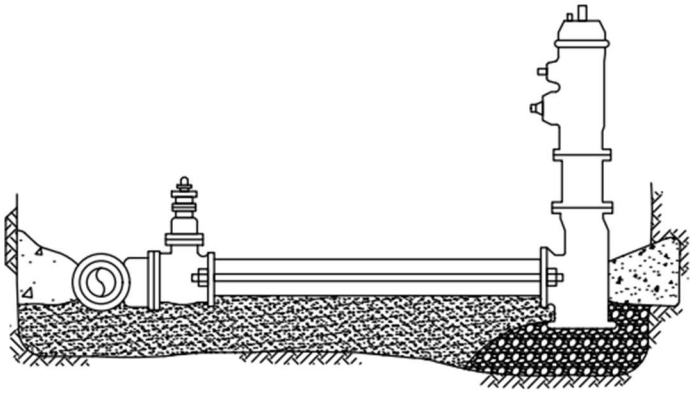
DRAWING NUMBER:
W8A

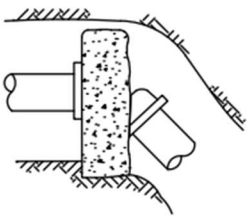
SCRD STANDARD DETAIL DRAWINGS



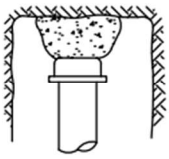


ALL BLOCKING TO EXTEND
INTO UNDISTURBED SOIL





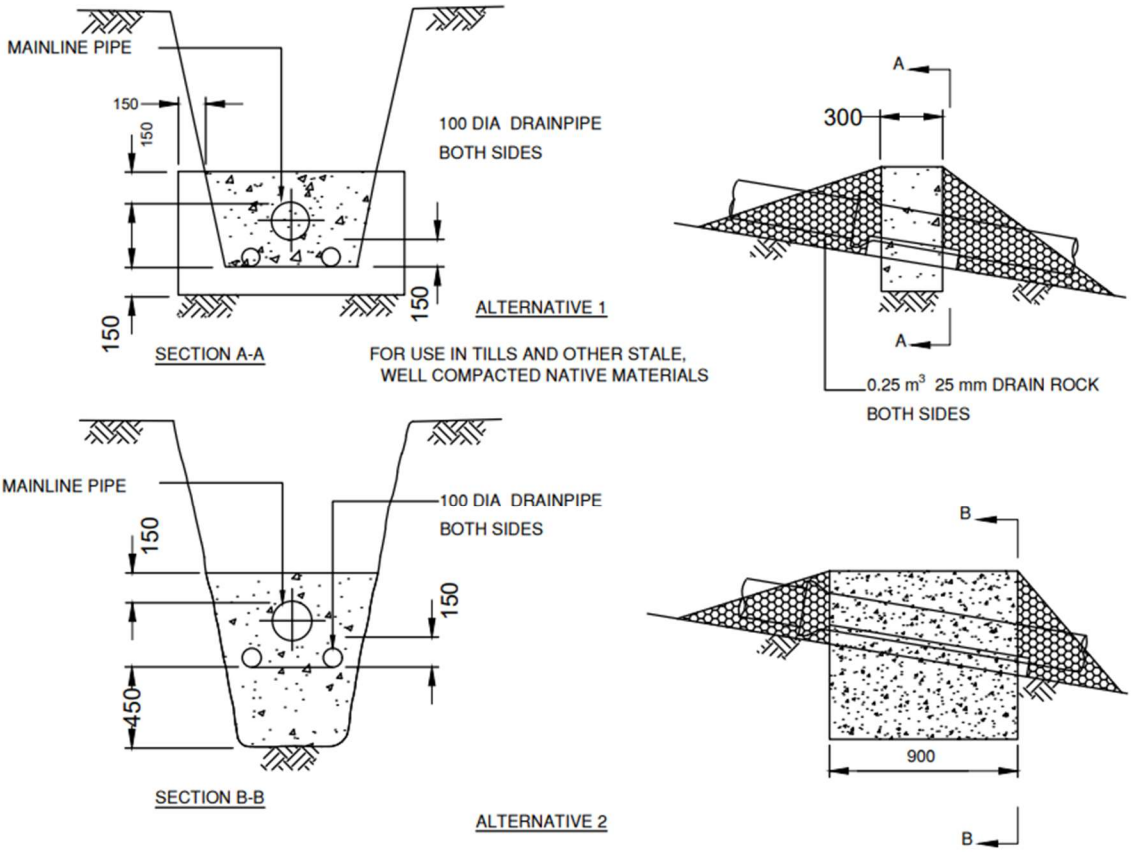
ELEVATION



THRUST BLOCK LOCATIONS

DRAWING NUMBER:
W9

SCRD STANDARD DETAIL DRAWINGS



MAXIMUM SPACING OF ANCHOR BLOCKS (SEE NOTE 4)			
SANITARY AND STORM GRAVITY SEWERS		WATERMAINS AND FORCEMAINS	
SLOPE	MAX. SPACING	SLOPE	MAX. SPACING
15% - 20%	25m	10% OR GREATER	10m
20% - 35%	20m		
35% - 50%	15m		
50% - OVER	10m		

NOTE: 1. APPLICABLE TO ALL PIPE MATERIALS.

2. USE ALTERNATIVES 1 OR 2 AS SPECIFIED ON CONTRACT DRAWINGS.

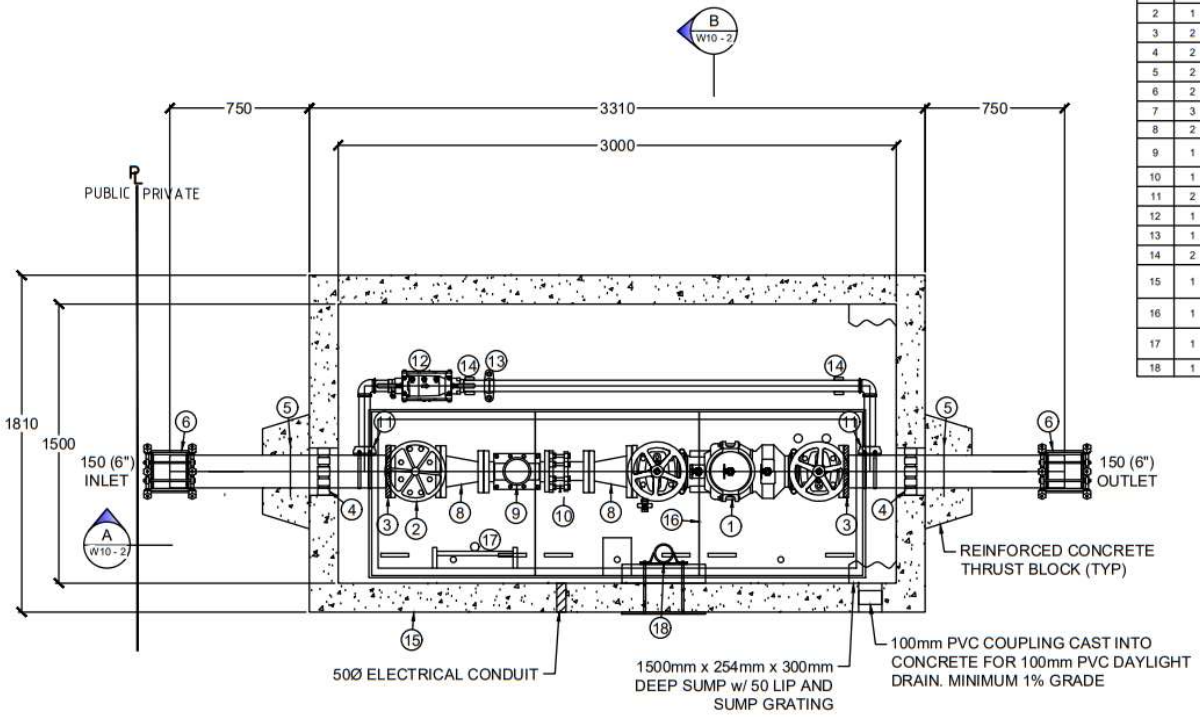
3. USE 20 MPa CONCRETE UNLESS SPECIFIED OTHERWISE ON CONTRACT DRAWINGS.

4. REFER TO CONTRACT DRAWINGS FOR SPECIFIED SPACING IF OTHER THAN MAXIMUM SHOWN IN TABLE.

PIPE ANCHOR BLOCKS

DRAWING NUMBER:
G8

SCRD STANDARD DETAIL DRAWINGS



MATERIALS LIST		
ITEM	QTY	DESCRIPTION
1	1	150 (6") WILKINS 350A DCVA w/ NRS Gate Valves
2	1	150 (6") MUELLER A-2362 NRS Gate Valves
3	2	150 (6") VICTAULIC 341 Flange Adapter
4	2	150 (6") LINK SEAL Assembly
5	2	150 (6") Pipe Grip Ring
6	2	150 (6") AWWA M11 External Transition Coupling
7	3	150 (6") CWS Adj. Stainless Steel Pipe Support
8	2	150 (6") x 100 (4") Concentric SS Reducer FxF
9	1	100 (4") NEPTUNE MACH 10 Ultrasonic Meter w/ NEPTUNE R900i 14" Meter Lay Length
10	1	100 (4") ROMAC DJ-400 Dismantling Joint
11	2	150 (6") x 50 (2") Reducing Saddle for Steel Pipe
12	1	50 (2") WILKINS 350 DCVA w/ Ball Valves
13	1	50 (2") VICTAULIC 89 Galv. Grooved Coupling
14	2	50 (2") CWS Adj. Stainless Steel Pipe Support
15	1	AE 3151 Precast Concrete Chamber c/w White Interior, Black Exterior, Cored Holes, and 298 (11¾") Aluminum Plank Grating
16	1	Galv. Steel Three Door Locking Hatch w/ Spring assist & RR Holes - Cast into AE 3151 Concrete Roof Slab
17	1	Aluminum Ladder c/w Safety Post
18	1	DBI SALA 8518348 Wall Mount Stainless Steel Davit Sleeve

1. ALL PIPE AND FITTINGS TO BE SCH. 40 304 STAINLESS STEEL
2. ALL FLANGES TO BE STAINLESS STEEL CLASS 150
3. NUTS AND BOLTS TO BE ASTM F393 STAINLESS STEEL w/ EPDM GASKETS
4. ALL MEASUREMENTS IN MILLIMETERS UNLESS STATED OTHERWISE

CHAMBER (AE CONCRETE 3151)

WEIGHT (APROX. UNTIL SHIPPING)
ROOF SLAB: 5,200 LBS / 2,363 KGS
BOTTOM: 12,470 LBS / 5,660 KGS
PIPE TRAIN: 2,000 LBS / 907 KGS

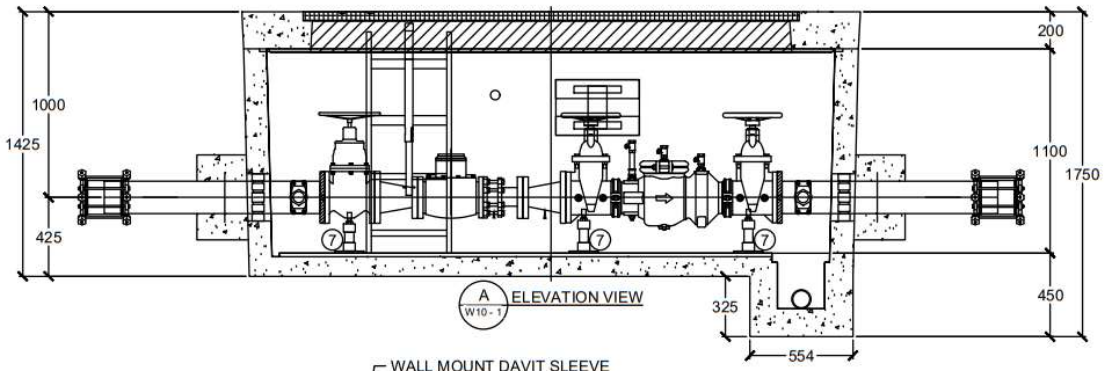
INSIDE DIMENSIONS:
3,000L X 1,500W X 1,100H

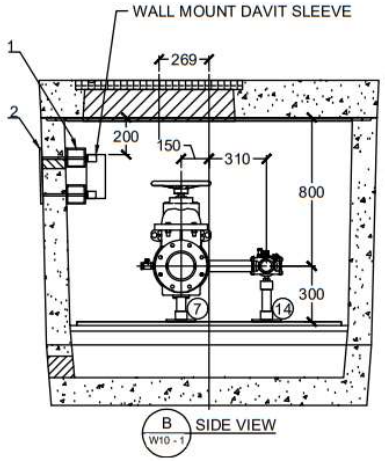
4-6" METER CHAMBER
PLAN

NOT TO SCALE

DRAWING NUMBER:
W10 - 1

SCRD STANDARD DETAIL DRAWINGS





1. 450mm L x 300mm W x 12mm Thick MOUNTING PLATE w/ 4-Ø12 THREADED ROD THROUGH CHAMBER WALL
2. 2-100 HSS x 450mm L INSIDE MOUNTING BRACKETS, SHIMMED AS REQUIRED TO ACCOMMODATE SLOPED WALL

1. ALL PIPE AND FITTINGS TO BE SCH. 40 304 STAINLESS STEEL
2. ALL FLANGES TO BE STAINLESS STEEL CLASS 150
3. NUTS AND BOLTS TO BE ASTM F393 STAINLESS STEEL w/ EPDM GASKETS
4. ALL MEASUREMENTS IN MILLIMETERS UNLESS STATED OTHERWISE

CHAMBER (AE CONCRETE 3151)

WEIGHT (APROX. UNTIL SHIPPING)
ROOF SLAB: 5,200 LBS / 2,363 KGS
BOTTOM: 12,470 LBS / 5,660 KGS
PIPE TRAIN: 2,000 LBS / 907 KGS

INSIDE DIMENSIONS:
3,000L X 1,500W X 1,100H

4-6" METER CHAMBER
PROFILE

NOT TO SCALE

DRAWING NUMBER:
W10 - 2