Drawing No.	CAD No.	Description
WS 1	2010069.002	General construction notes
WS 2	2010069.001	Typical trench reinstatement and bedding details for water supply
WS 3	2010069.003	Typical watermain intersection layout
WS 4	2010069.004	Road crossing details and principal main to rider main connections
WS 5	2010069.036	Rider main alternative connection
WS 6	2010069.005	Boundary zone detail
WS 7	2010069.006	Valve and hydrant markings
WS 8	2010069.013	Anchor block details for 90° and 45° bends
WS 9	2010069.014	Anchor block details for 22½° and 11¼° bends and tee junction
WS 10	2010069.015	Anchor block details. Reducers and vertical bends
WS 11	2010069.034	Flange connection detail. PE main to other
WS 12	2010069.027	Hydrant detail
WS 13	2010069.029	Flanged sluice valve detail
WS 14	2010069.031	Air release valve and chamber detail
WS 15	2010069.043	Air vent cowling, vertical steel pipe fabrication detail and concrete footing
WS 18	2010069.012	Domestic water meter connection. 15mm, 20mm and 25mm diameter
WS 19	2010069.017	Water meter and backflow prevention device for high hazard less than 50mm
WS 20	2010069.018	Water meter and backflow for low to medium hazard less than 50mm
WS 21	2010069.019	Fire suppression supply and separate water supply less than 50mm
WS 22	2010069.021	Manifold meter bank. Less than 50mm
WS 23	2010069.044	Fire suppression supply and separate domestic meter bank
WS 24	2010069.022	Fire suppression supply and separate water meter 50mm and above
WS 25	2010069.023	Combined fire suppression supply and water meter 50mm and above
WS 26	2010069.045	Combined fire suppression supply and commercial with separate domestic supply

GENERAL CONSTRUCTION NOTES

STANDARDS RELATING TO WORKS

Works shall to be carried out to the requirements of the Health & Safety at work in Employment Act 2015

Works shall be completed to Watercare Construction Standards.

MANUFACTURERS SPECIFICATIONS

Materials shall be installed to the Manufacturers requirements unless otherwise specified.

WELDING & FIXINGS

All steelwork shall be be workshop fabricated.

Steelwork and fixings shall be hot-dip galvanised to AS/NZS 4680 unless otherwise stated.

A Nickel anti-seize free of copper , lead , sulphides , chlorides & carbons (graphite) shall be used on bolts.

REINFORCING STEEL

Reinforcing shall be centrally placed with the specified minimum cover.

Bends shall be cold formed.

JOINT SEALS

Couplings & Flanges : Per WSL Material Standard.

Concrete joints around pipe penetrations through chambers shall be made with a suitable hydrophilic sealant to the manufacturer's requirements. Concrete repair shall be reinforced and box-cast to prevent cracking from sealant forces.

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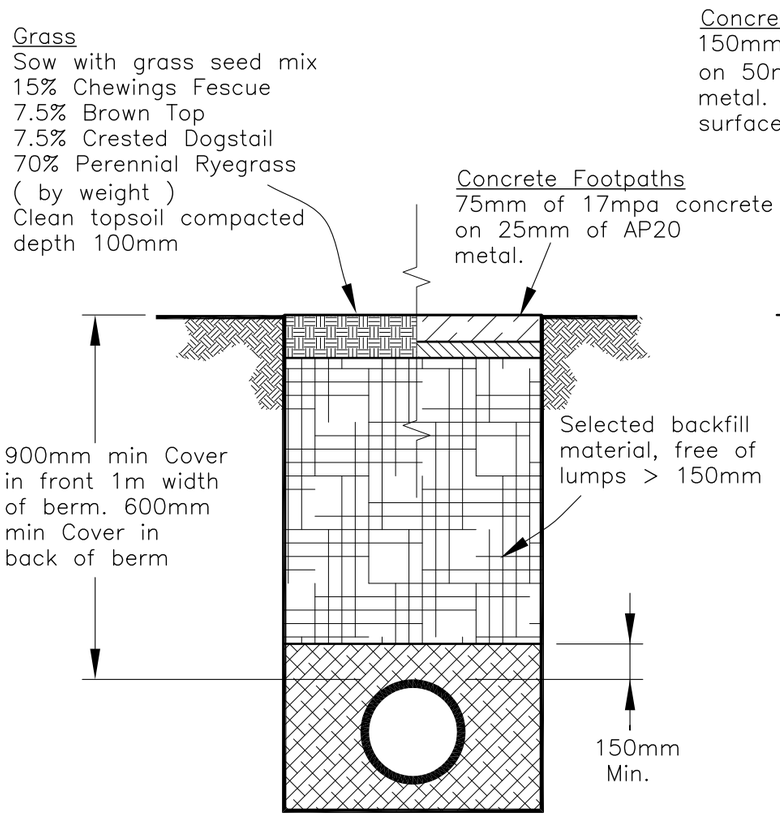
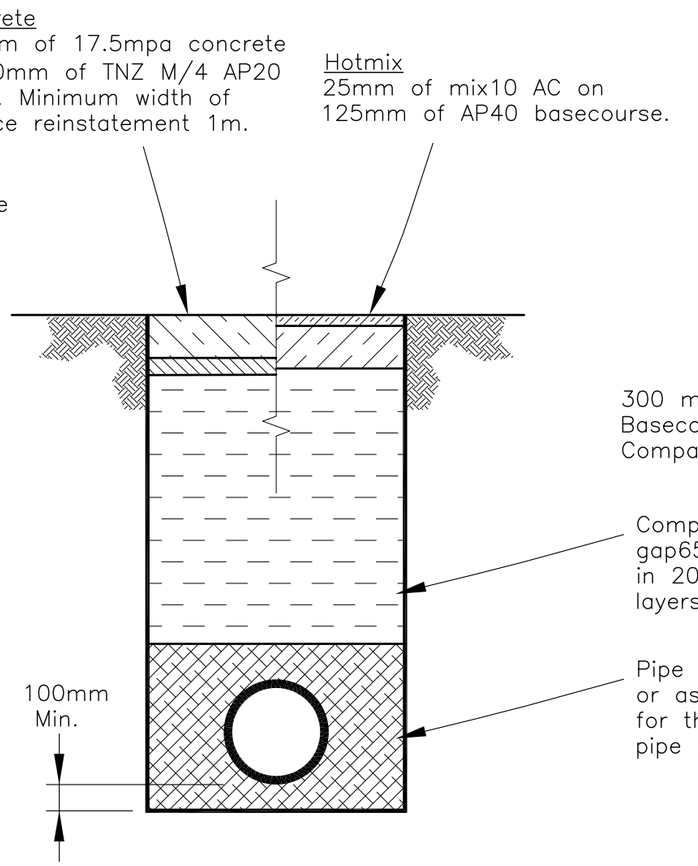
Watercare

GENERAL CONSTRUCTION NOTES

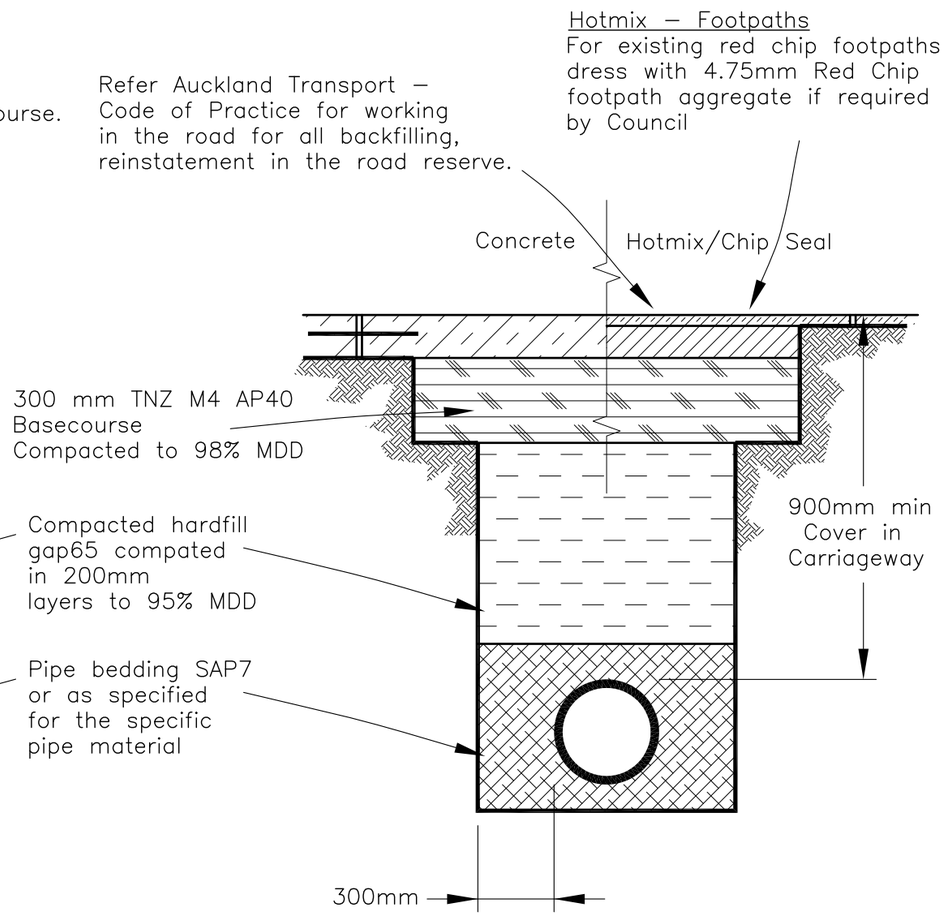
SCALE:	N.T.S.
ISSUE DATE:	13-07-2018
DWG No.	2010069.002D
REFERENCE No.	WS 1



GRASS AREA & FOOTPATH
REINSTATEMENT



DRIVEWAY
REINSTATEMENT



FOOTPATH/VEHICLE CROSSING,
CARRIAGEWAY REINSTATEMENT

NOTES

1. Trench reinstatement within the road reserve shall comply with the Auckland Transport requirements.
2. Backfill is to be compacted in 200mm, layers to obtain maximum density, as per standard specifications.
3. Where concrete or other stabilized layers exist in the roadway, the trench shall be reinstated with similar material or as directed by the roading engineer.
4. Minimum cover in carriageway for watermains 900mm. 900mm cover in front 1m of berm and Minimum 600mm in the back of berm.
5. Fill shall be clean, Non–contaminated material. Recycled material is not acceptable.
6. Pipe bedding shall be compacted to AS/NZS 2566.2 clause 5.6.3 for compaction control.
7. Alternative embedment details by specific design for pipe at steep grades, inadequate trench foundation and erosion is not covered by this drawing.

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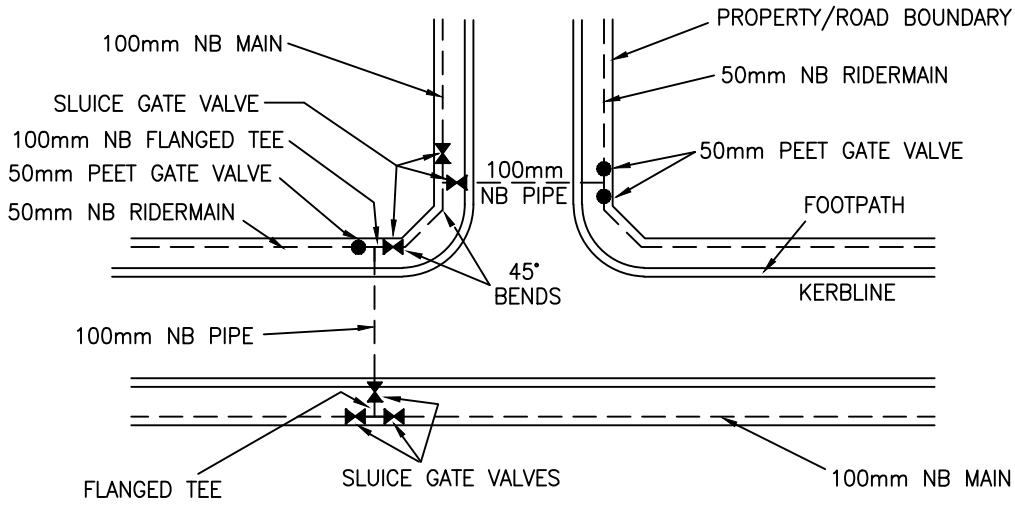
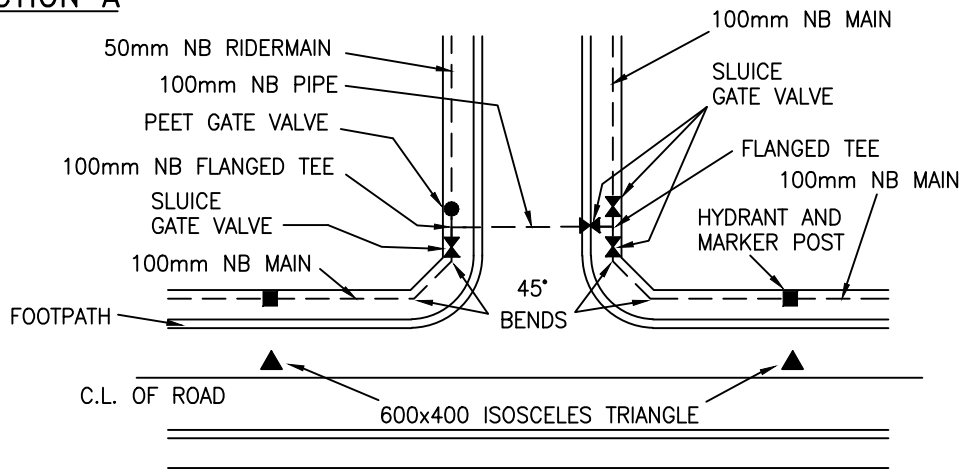
Watercare

TYPICAL TRENCH REINSTATEMENT AND BEDDING DETAILS FOR WATER SUPPLY

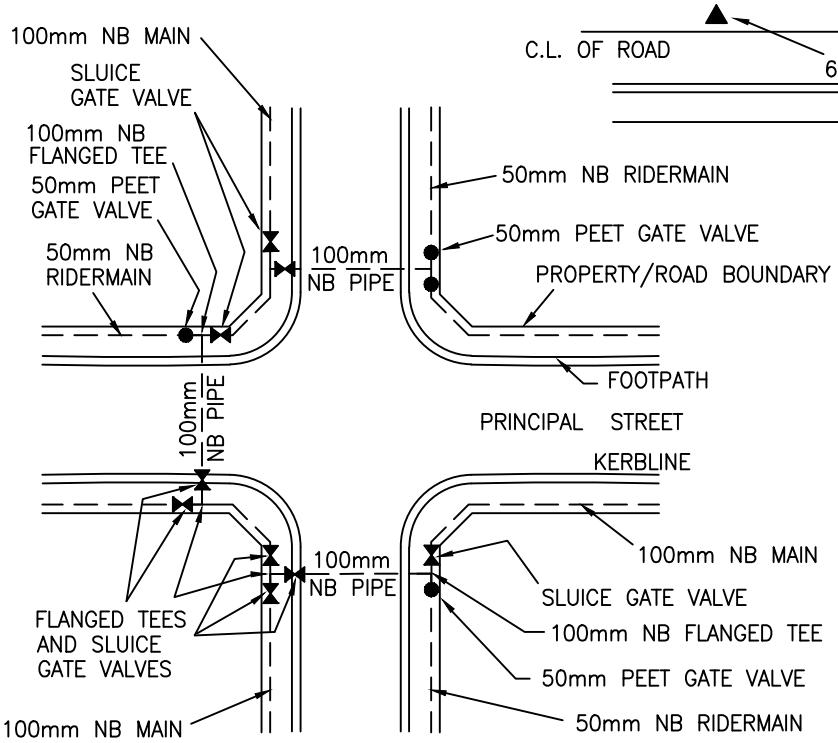
SCALE:	N.T.S.
ISSUE DATE:	28–09–2017
DWG No.	2010069.001D
REFERENCE No.	WS 2



TEE INTERSECTION A



TEE INTERSECTION B



CROSS INTERSECTION

NOTES

1. PIPES SHALL BE LAID PARALLEL WITH THE BOUNDARY.
2. ALL PRINCIPAL MAIN ROAD CROSSINGS SHALL BE 100mm DIA. (OR LARGER) DI, STEEL OR PE100, PIPES EXTENDING FROM MAIN TO MAIN.
3. BENDS SHALL BE LONG RADIUS BENDS.
4. ALL JOINTS UNDER ROADS SHALL BE FIELD WELDED OR FLANGED JOINTS (WRAPPED IN APPROVED WRAPPING SYSTEM
5. THESE DETAILS APPLY TO 100mm NB AND 150mm NB PRINCIPAL MAINS. LARGER DIAMETER MAINS SHALL GENERALLY PASS STRAIGHT THROUGH INTERSECTIONS.
6. REFER TO WS4 FOR CROSSING DETAILS.

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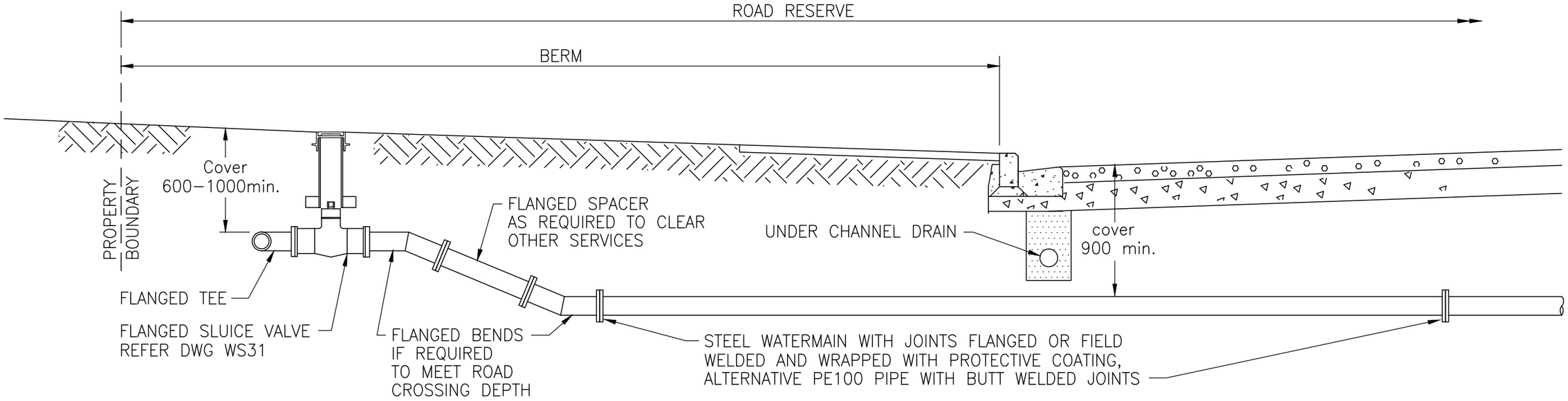
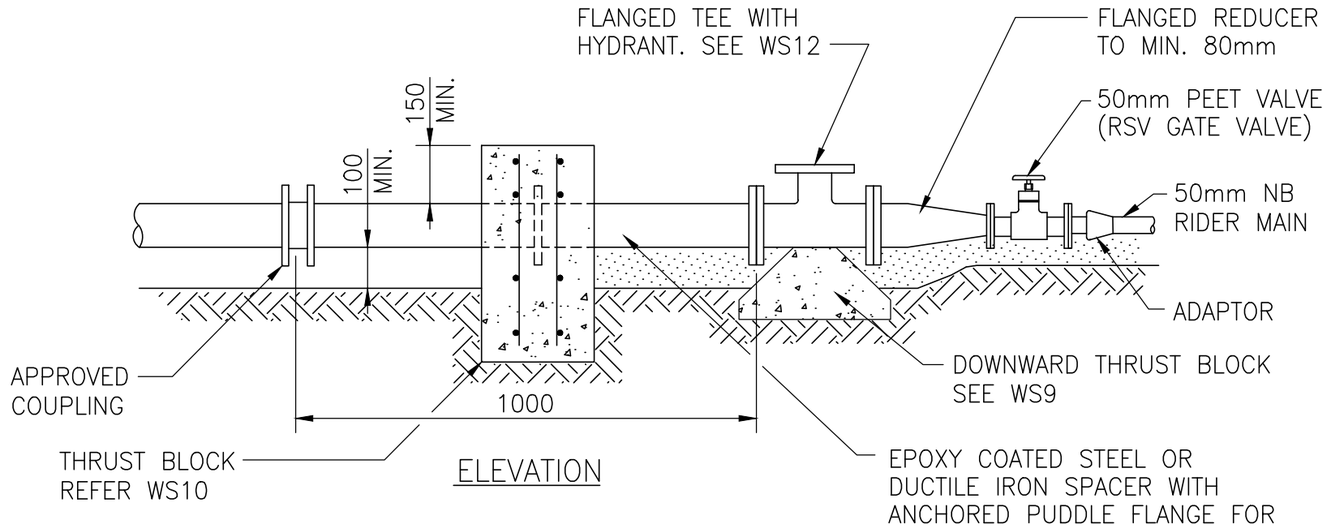
TYPICAL WATERMAIN INTERSECTION LAYOUT

SCALE:	N.T.S.
ISSUE DATE:	13-03-2017
DWG No.	2010069.003B
REFERENCE No.	WS 3



TYPICAL PRINCIPAL MAIN CROSSING UNDER ROAD
N.T.S.



TYPICAL REDUCTION TO 50mm NB RIDERMAIN
SEE NOTE 1 N.T.S.

NOTES

1. FOR AN ALTERNATIVE RIDERMAIN CONNECTION SEE WS5.
2. PIPE AND BENDS TO BE SUPPORTED AN CORROSION PROTECTED.
3. ALL SPECIAL FITTINGS INCLUDING TEES AND BENDS TO BE FLANGED DUCTILE IRON OR AN ACCEPTED PROPRIETARY ALTERNATIVE.

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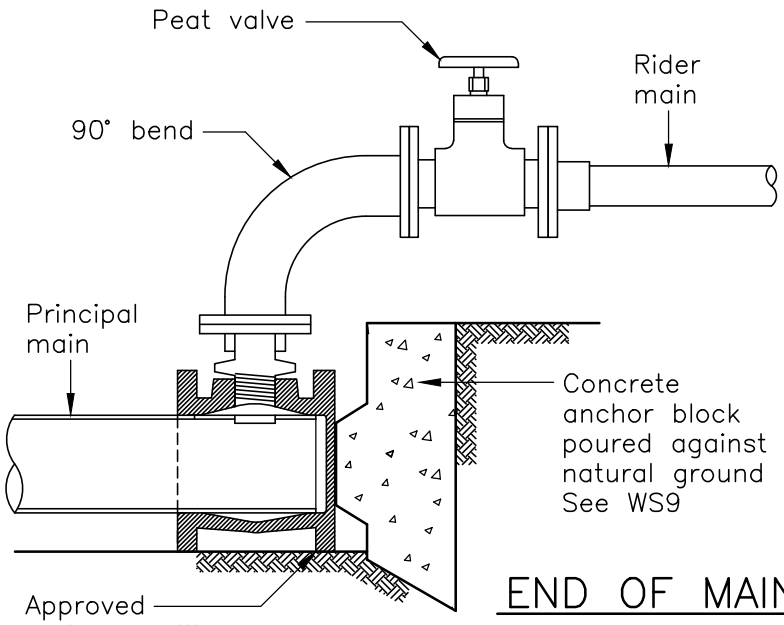
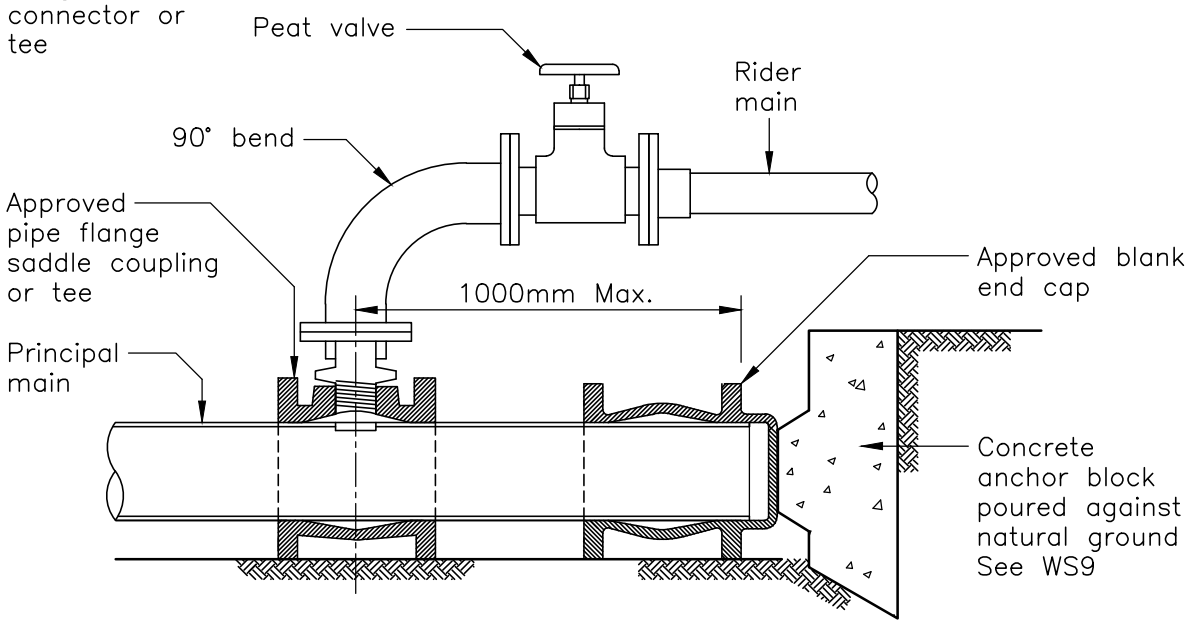
ROAD CROSSING DETAILS AND PRINCIPAL MAIN TO RIDER MAIN CONNECTIONS

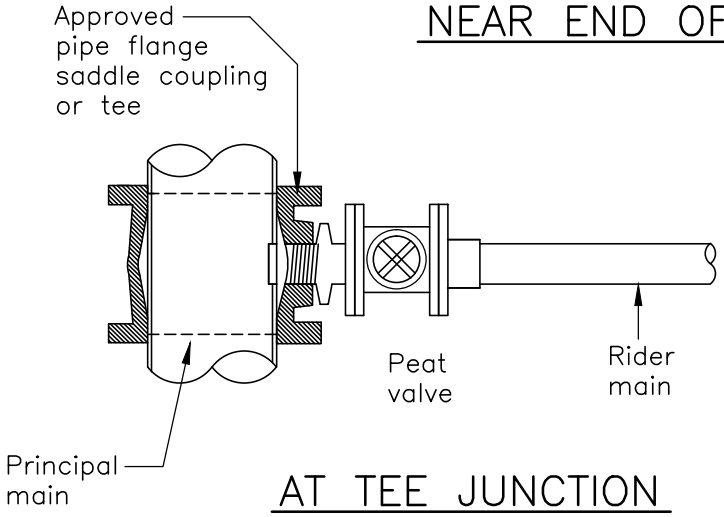
SCALE:	N.T.S.
ISSUE DATE:	13–07–2018
DWG No.	2010069.004C
REFERENCE No.	WS 4



END OF MAIN



NEAR END OF MAIN



AT TEE JUNCTION

Notes

1. Tapping saddles are only allowed on principal mains up to DN300mm. A reducing Tee shall be used for 300mm and over.

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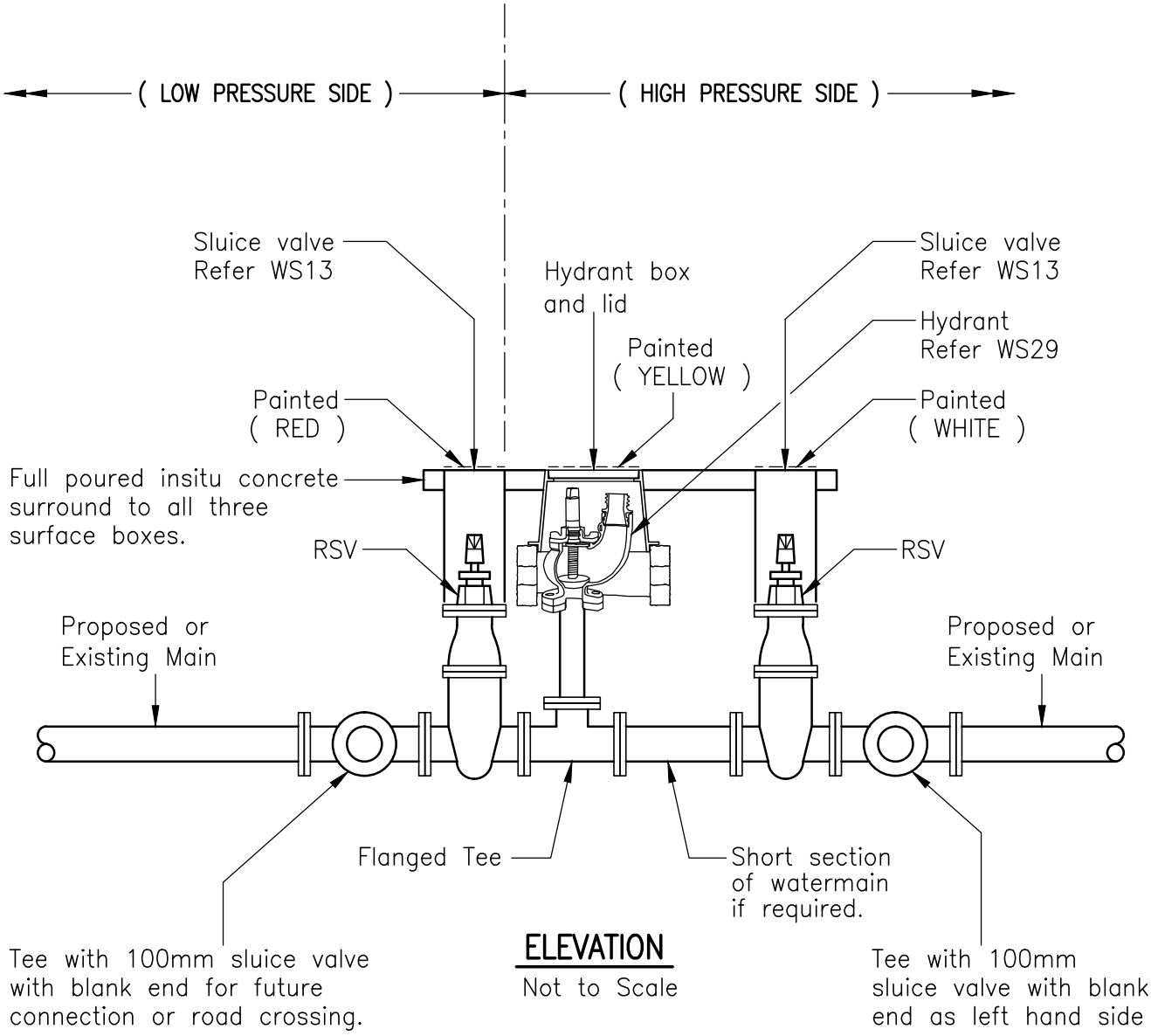
RIDER MAIN ALTERNATIVE CONNECTION

SCALE:	N.T.S.
ISSUE DATE:	13–07–2018
DWG No.	2010069.036C
REFERENCE No.	WS 5



ELEVATION

Not to Scale

NOTES :

1. All surface boxes and marker posts to be painted in accordance with the color code specified on drawing number WS7.
2. The RSV gate valve on the high pressure side is to remain in the open position and the valve box lid to be painted (WHITE).
3. The RSV gate valve on the low pressure side is to remain in the closed position and the valve box lids to be painted (RED). The valve access sleeve shall be filled with an expansion foam after acceptance testing.
4. The Hydrant box lid to be painted (YELLOW).
5. Valves and hydrants shall be supported on a concrete base and not pass any loading onto the connecting pipe. For hydrant support see WS9.

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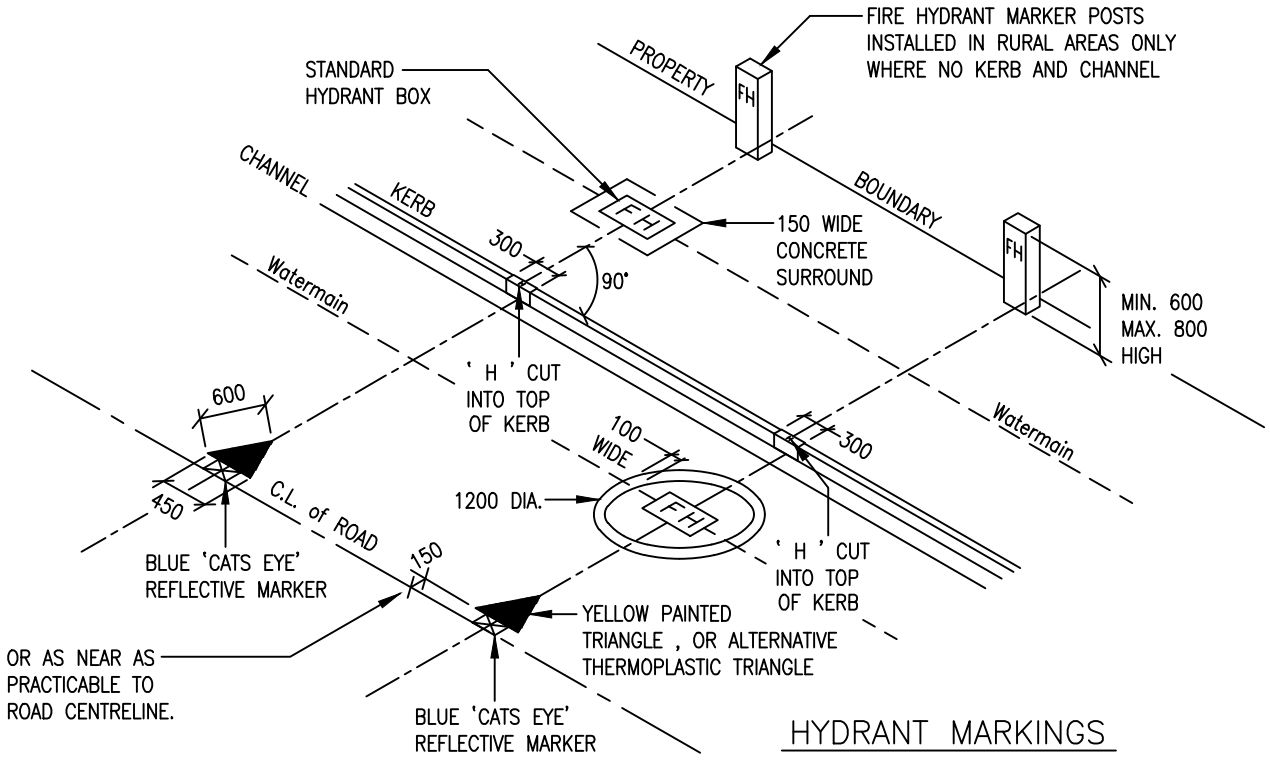
Watercare

BOUNDARY ZONE DETAIL

SCALE:	N.T.S.
ISSUE DATE:	13–07–2018
DWG No.	2010069.005C
REFERENCE No.	WS 6



HYDRANT MARKINGS

N.T.S.

NOTE: ALIGN LONGITUDINAL AXIS OF HYDRANT BOX WITH WATERMAIN

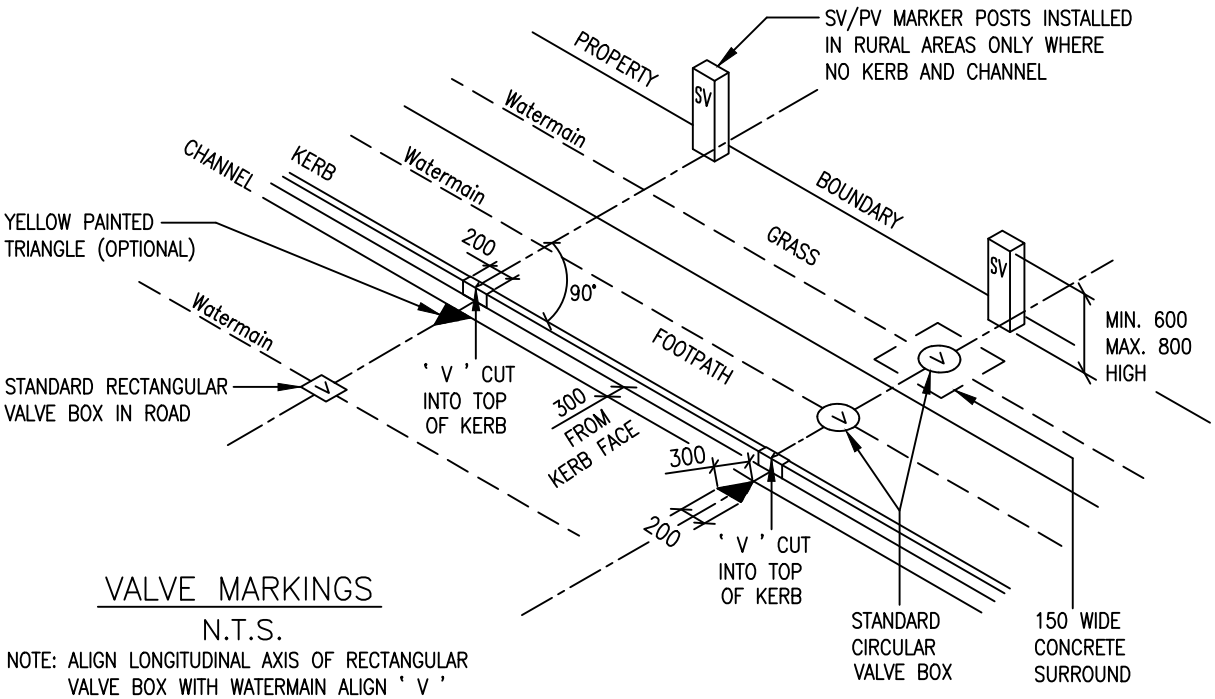
NOTES

PAINT USED FOR ALL MARKINGS AND CI/DI LIDS SHALL BE TRANSIT "ROAD MARKING PAINT" AS FOLLOWS:–

HYDRANTS – YELLOW
PROTECTIVE PAINTS LTD.– IJAY CODE: 880–403
OR – RESENE M7–W ;
(ALTERNATIVE OPTION THERMOPLASTIC TRIANGLE)

VALVES (PV, SV, AV"s) – WHITE

SPECIAL CONTROL VALVES (SHUT) – RED
RESENE RED OXIDE – VINYL ETCH
ADHESION PRIMER



VALVE MARKINGS

N.T.S.

NOTE: ALIGN LONGITUDINAL AXIS OF RECTANGULAR VALVE BOX WITH WATERMAIN ALIGN ' V ' WITH WATERMAIN AS SHOWN

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Watercare

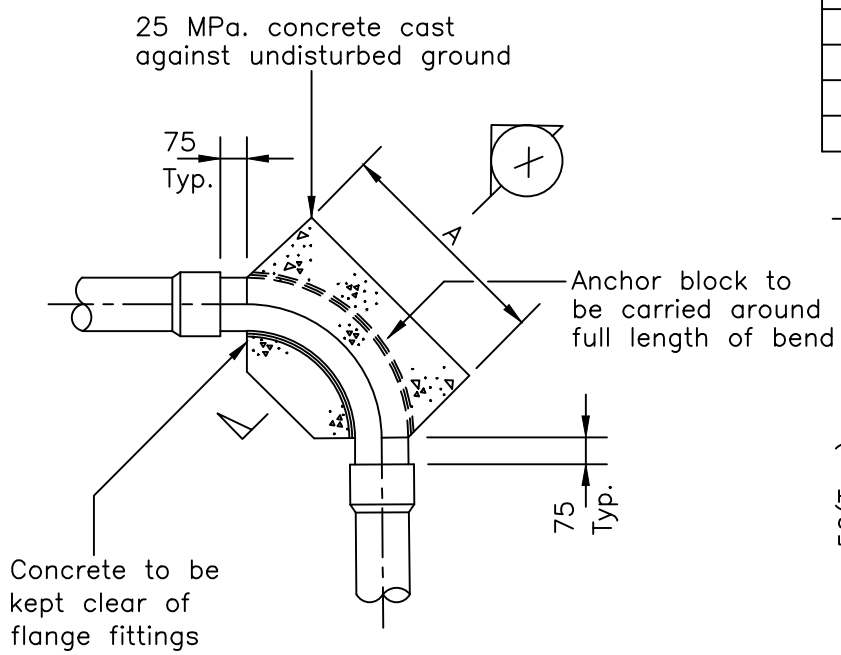
VALVE AND HYDRANT MARKINGS

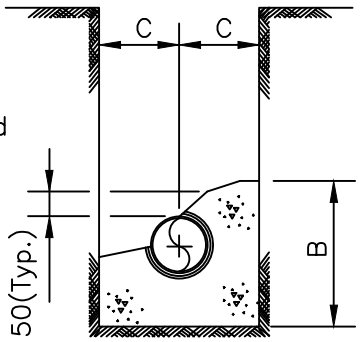
SCALE:	N.T.S.
ISSUE DATE:	10–02–2017
DWG No.	2010069.006B
REFERENCE No.	WS 7

Notes :

1. Thrust block dimensions are based on firm soil conditions.
2. The dimensions to be increased or decreased for variation in soil conditions.
3. Allowable bearing stress used – 100KPa.
4. As built locations to be obtained prior to backfill.
5. Protective membrane (Polythene) between concrete & pipe.
6. 75mm clearance between fittings/flanges and concrete casting.
7. All fittings to be wrapped with a suitable wrapping system.

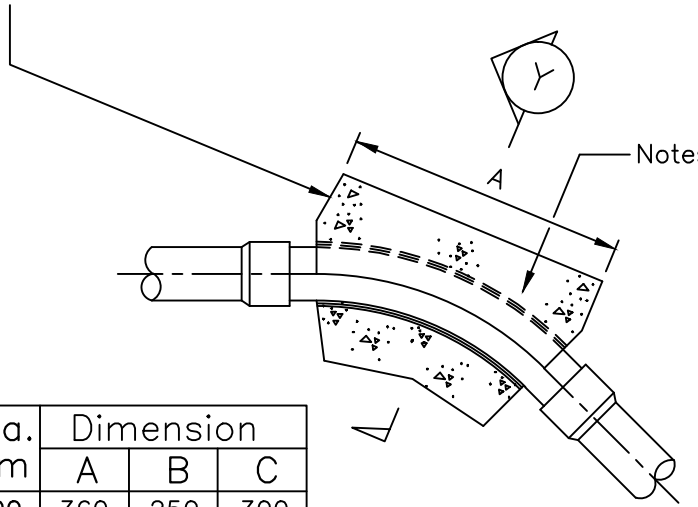
Dia. mm	Dimension		
	A	B	C
100	670	250	450
150	1250	300	450
200	1500	450	550
250	1750	600	600

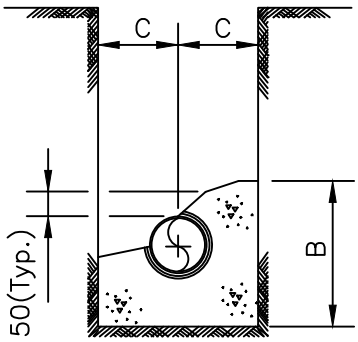




SECTION X

ANCHOR BLOCKS FOR 90° BENDS





SECTION Y

Dia. mm	Dimension		
	A	B	C
100	360	250	300
150	680	300	400
200	800	450	500
250	1000	600	600

ANCHOR BLOCKS FOR 45° BENDS

O:\---\ EGCADFI \ 2017 \ WATER & WASTEWATER NETWORK STD DWGS \ 2010069.013B .DWG

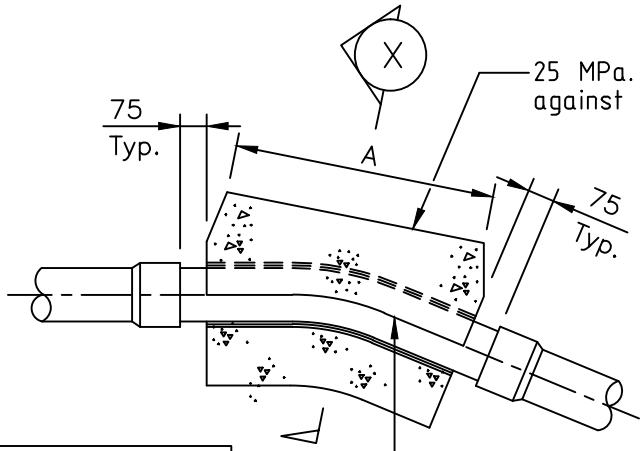
Watercare

ANCHOR BLOCK DETAILS FOR 90° & 45° BENDS

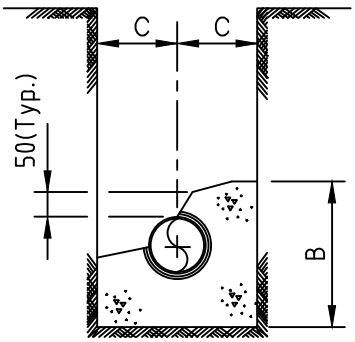
SCALE:	N.T.S.
ISSUE DATE:	10–02–2017
DWG No.	2010069.013B
REFERENCE No.	WS 8

Notes :

1. Thrust block dimensions are based on firm soil conditions.
2. The dimensions to be increased or decreased for variation in soil conditions.
3. Allowable bearing stress used - 100KPa.
4. As built locations to be obtained prior to backfill.
5. Protective membrane (Polythene) between concrete & pipe.
6. 75mm clearance between fittings/flanges and concrete casting.
7. All fittings to be wrapped with a suitable wrapping system.

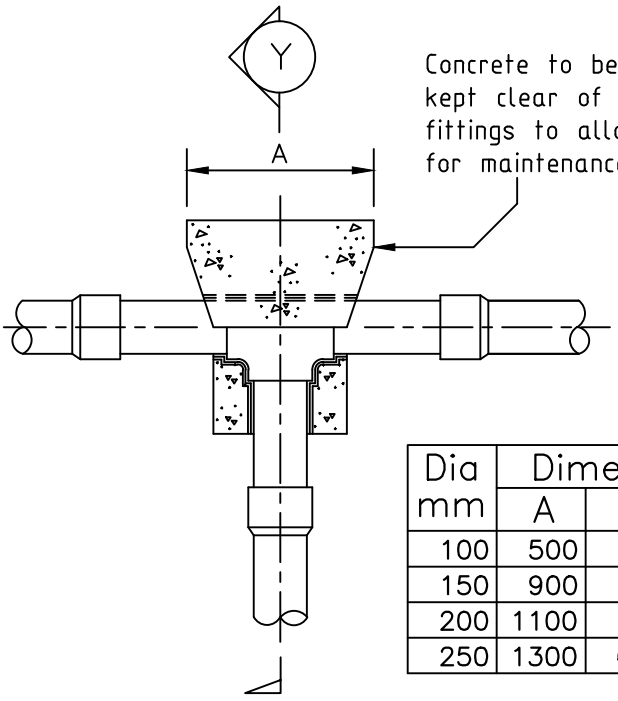


Dia mm	Dimension		
	A	B	C
100	300	250	300
150	400	300	400
200	500	450	500
250	600	600	600

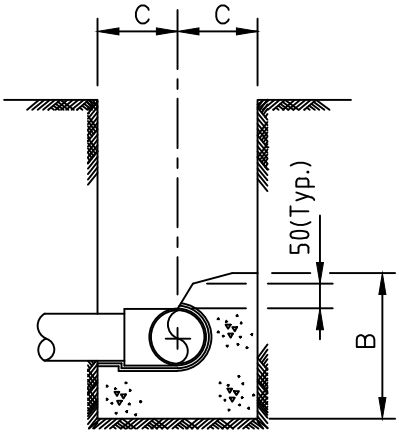


SECTION X

ANCHOR BLOCKS FOR 22½° & 11¼° BENDS



Dia mm	Dimension		
	A	B	C
100	500	250	450
150	900	300	450
200	1100	450	550
250	1300	600	600



SECTION Y

ANCHOR BLOCKS TEE JUNCTION & END CAPS

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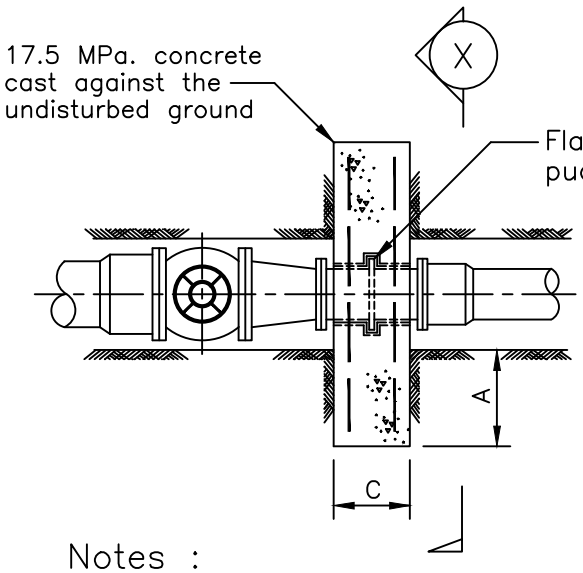
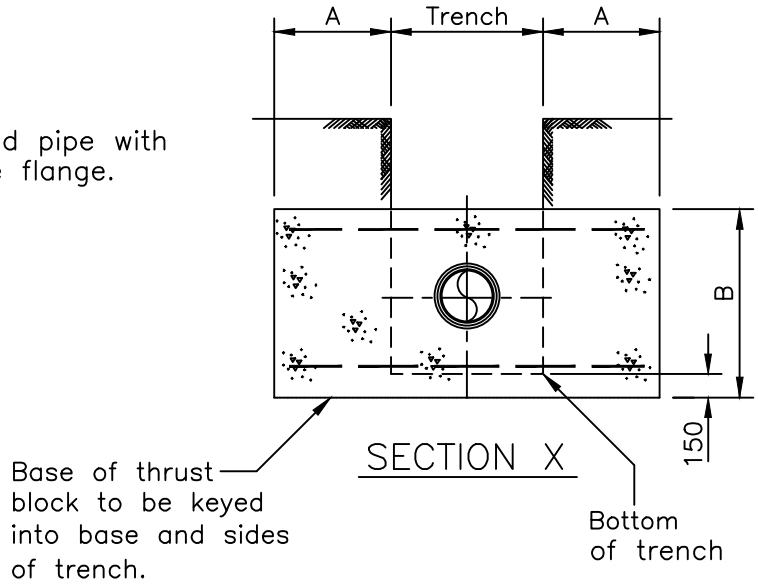
Watercare

ANCHOR BLOCK DETAILS FOR 22½° & 11¼° BENDS AND TEE JUNCTION

SCALE:	N.T.S.
ISSUE DATE:	10–02–2017
DWG No.	2010069.014B
REFERENCE No.	WS 9





Notes :

1. Concrete thrust block dimensions are based on firm soil conditions.
2. The dimensions to be increased or decreased for variation in soil conditions.
3. Allowable bearing stress used - 100KPa.
4. As built locations to be obtained prior to backfill.
5. Protective membrane (Polythene) between concrete and pipe.
6. 75mm clearance between fittings/flanges and concrete casting.
7. All fittings to be wrapped with a suitable wrapping system.

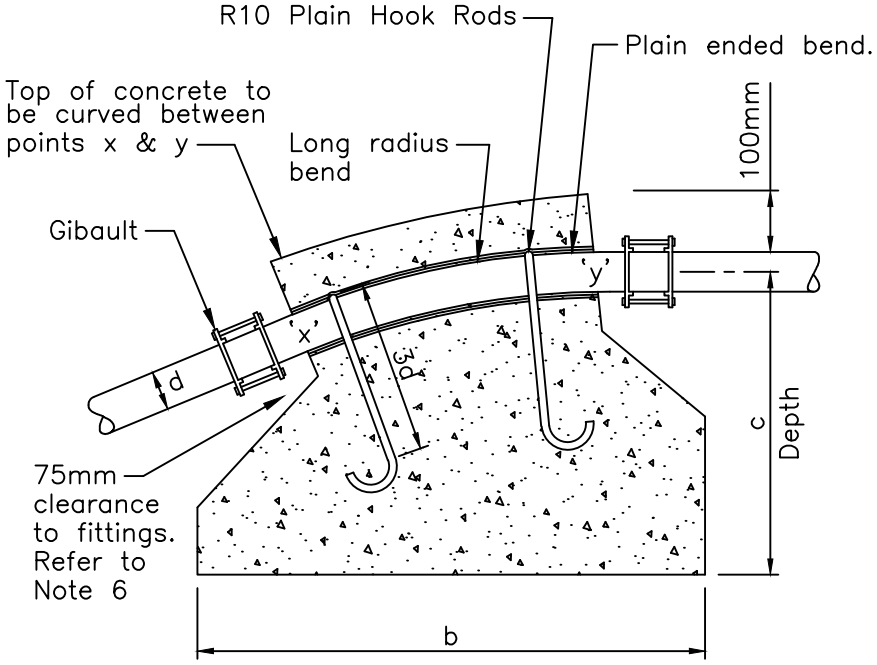
Reducer mm	Reducers		
	A	B	C
100–150	250	350	300
100–200	500	350	300
150–200	250	500	300
150–250	500	500	300
200–250	250	600	300
200–300	400	700	300

ANCHOR BLOCKS AT REDUCERS

Pipe Dia	Vertical Bends–45°		
	a	b	c
100mm	600	800	700
150mm	800	1000	800
200mm	1000	1200	800
250mm	1000	1600	1000

Pipe Dia	Vertical Bends–22.5°		
	a	b	c
100mm	500	500	500
150mm	500	800	800
200mm	700	1000	800
250mm	800	1200	900

Pipe Dia	Vertical Bends–11.25°		
	a	b	c
100mm	400	500	500
150mm	500	600	600
200mm	500	800	800
250mm	700	1000	800



a = Width of Anchor Block

VERTICAL SECTION

ANCHOR BLOCKS AT BENDS IN VERTICAL PLANE

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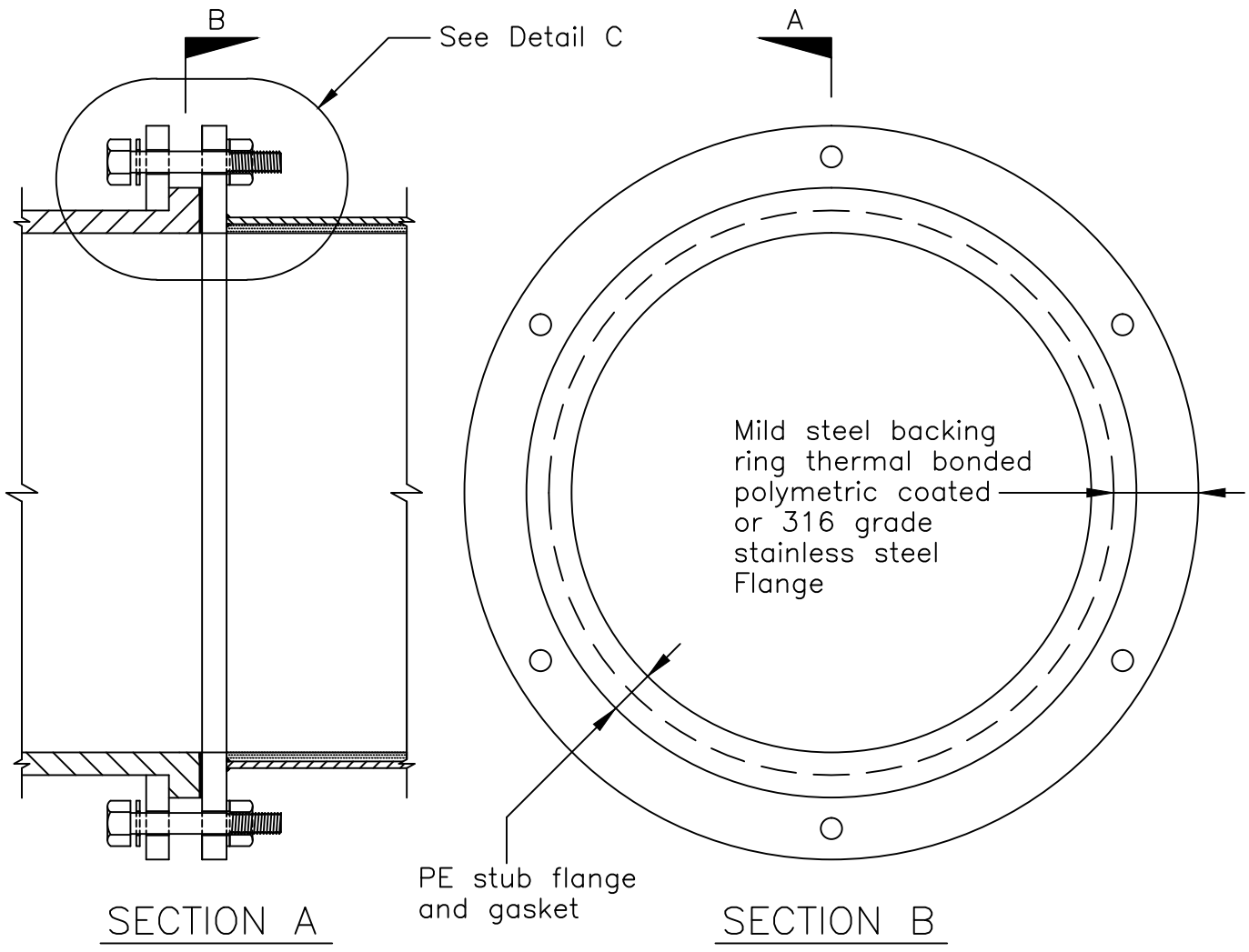
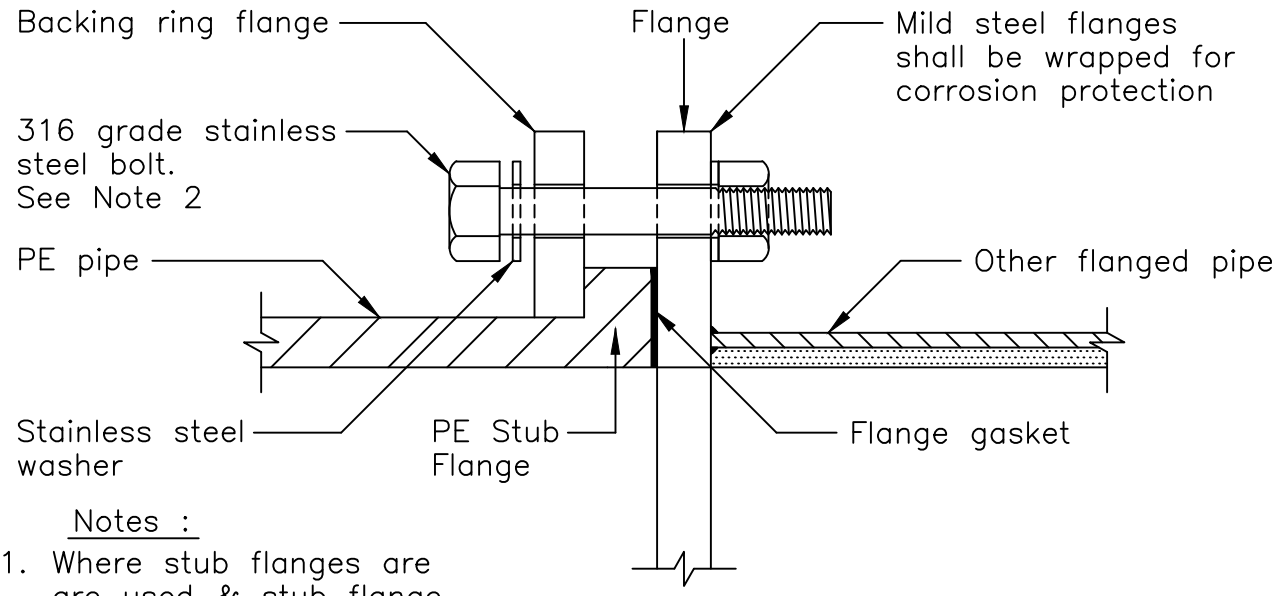
ANCHOR BLOCK DETAILS
REDUCERS AND VERTICAL BENDS

SCALE:	N.T.S.
ISSUE DATE:	10–02–2017
DWG No.	2010069.015B
REFERENCE No.	WS 10



SECTION A

SECTION B



DETAIL C

Notes :

1. Where stub flanges are are used & stub flange machined to fit, calculations must show Max. allowable operating pressure is met.
2. When using mild steel flanges the stainless steel bolts must be isolated with an appropriate sleeve to prevent galvanic corrosion.

Notes continued :

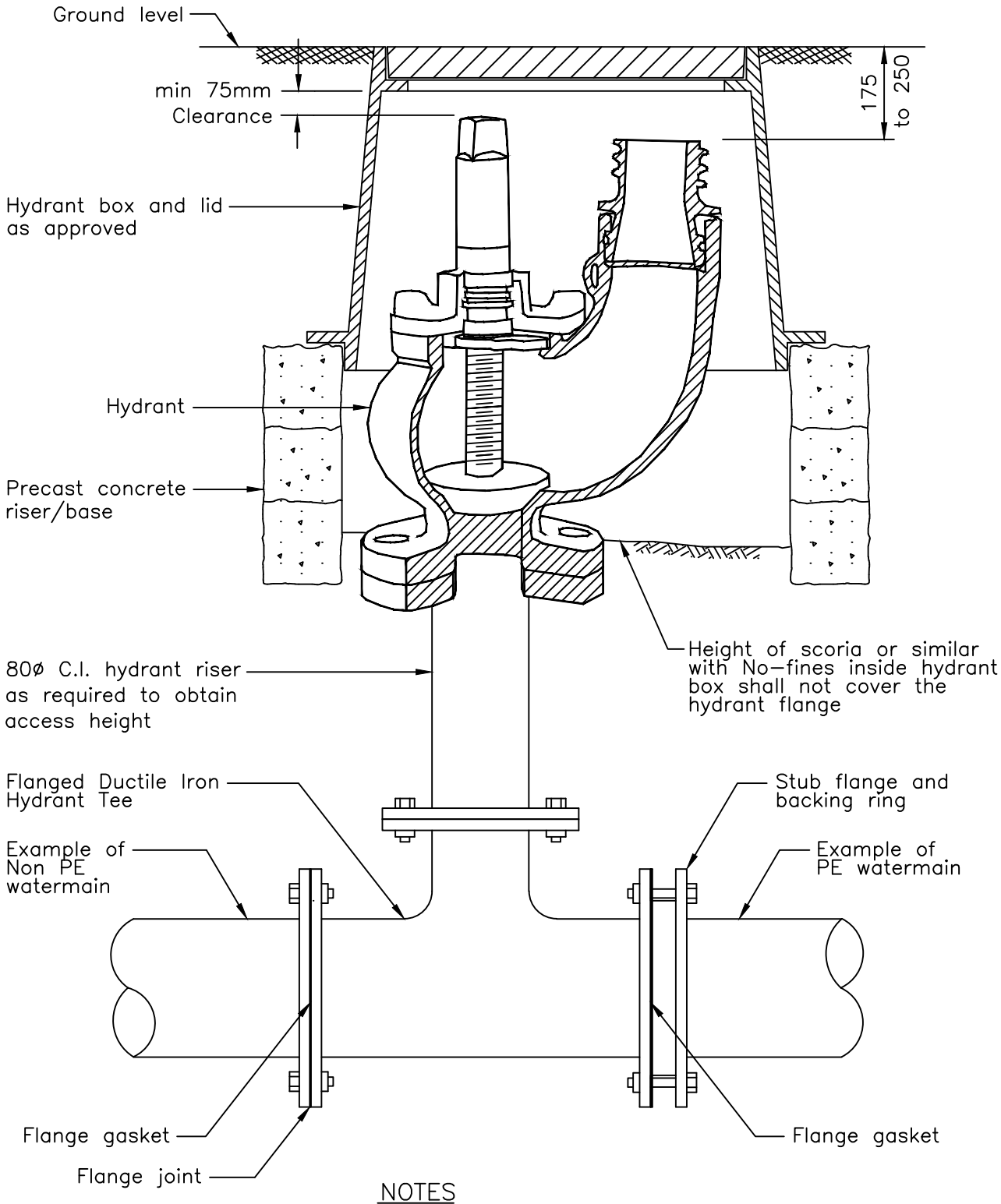
3. Bolt assemblies must be to Watercare's mechanical construction standard.

0:\---\ EGCADFI \ 2017 \ WATER & WASTEWATER NETWORK STD DWGS \ 2010069.034B .DWG

Watercare

FLANGE CONNECTION DETAIL PE MAIN TO OTHER

SCALE:	N.T.S.
ISSUE DATE:	10–02–2017
DWG No.	2010069.034B
REFERENCE No.	WS 11



NOTES

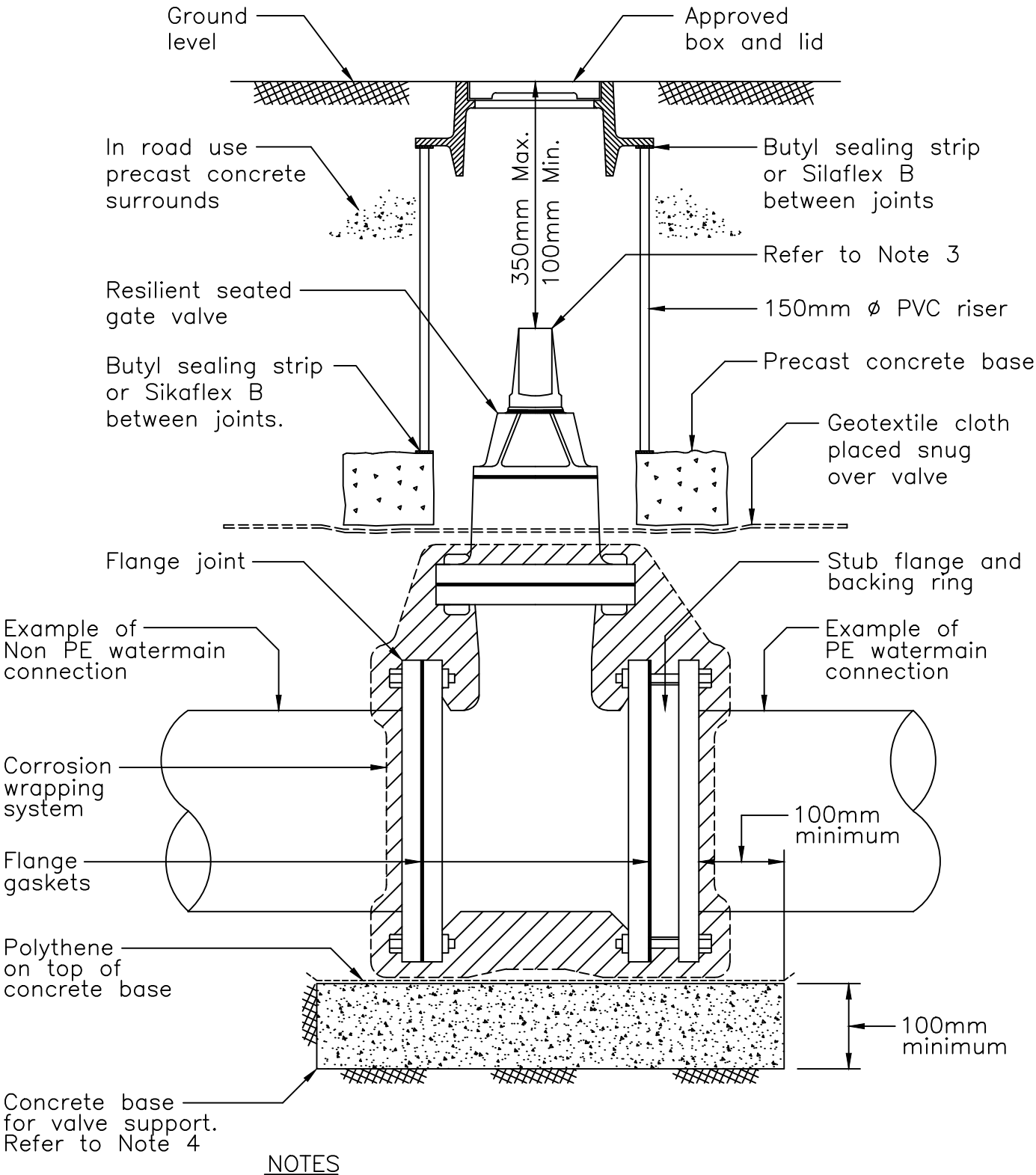
1. The hydrant box shall be spaced to provide clear access to the valve spindle and outlet.
2. All flanges and fittings shall be wrapped with suitable corrosion protection wrapping to the manufacturers requirements. Refer WS11
3. Concrete support to be provided under hydrant Tee. Refer WS9. (The concrete overbear can be ignored)

O:\---\ EGCADFI \ 2017 \ WATER & WASTEWATER NETWORK STD DWGS \ 2010069.027A .DWG

Watercare

HYDRANT DETAIL

SCALE:	N.T.S.
ISSUE DATE:	06-03-2017
DWG No.	2010069.027A
REFERENCE No.	WS 12



NOTES

1. The valve, including flanges shall be completely wrapped in approved corrosion protected wrapping system to the wrapping manufacturers requirements.
2. Refer WS11 for typical notes on flange bolting .
3. An extension spindle shall be incorperated as required to ensure the top of the spindle is no more than 350mm below the finished surface level.
4. For valves 150mm and greater the valve shall be supported on a in-situ cast concrete base of suitable dimension to prevent any loads transfered to the pipe.

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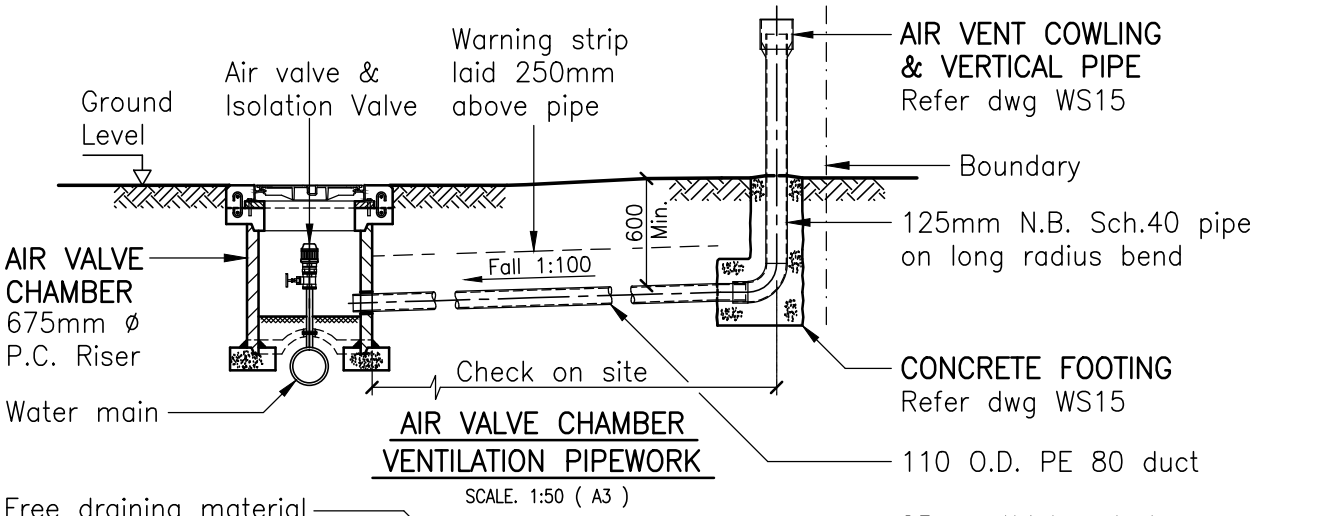
Watercare

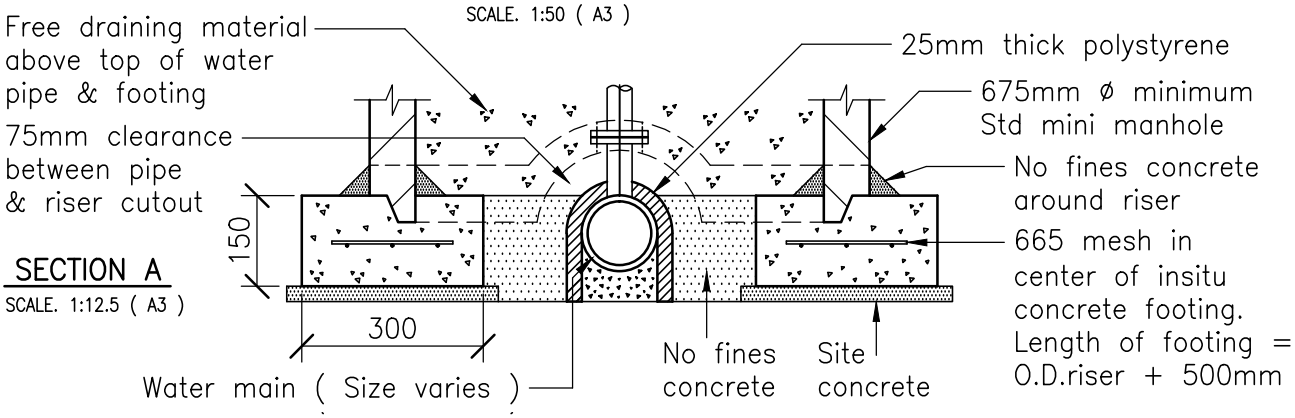
FLANGED SLUICE VALVE DETAIL

SCALE:	N.T.S.
ISSUE DATE:	26-05-2017
DWG No.	2010069.029B
REFERENCE No.	WS 13



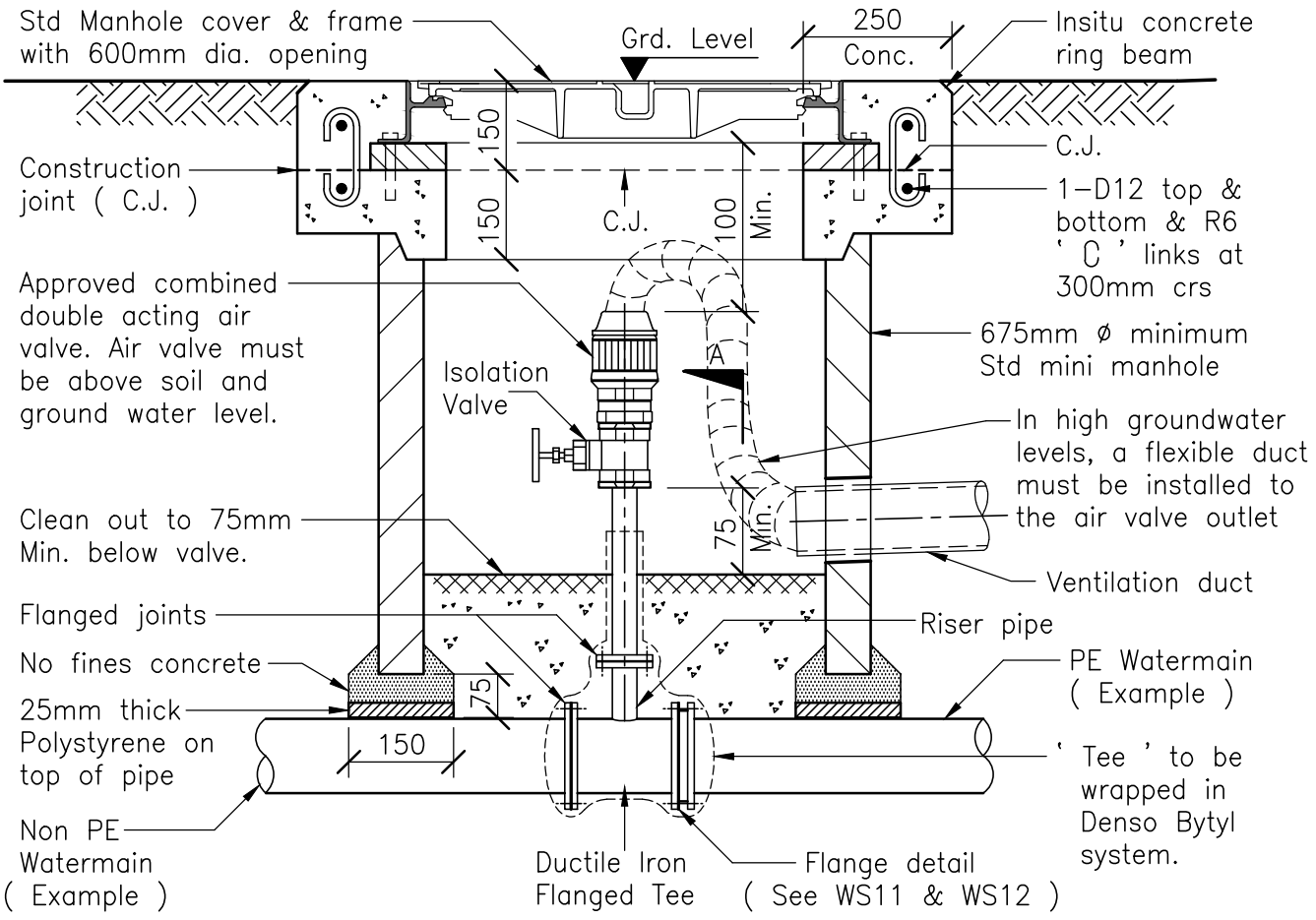
AIR VALVE CHAMBER VENTILATION PIPEWORK

SCALE. 1:50 (A3)



SECTION A

SCALE. 1:12.5 (A3)



STANDARD AIR RELEASE VALVE & VALVE CHAMBER DETAIL

SCALE. 1:12.5 (A3)

O:\---\ EGCADFI \ 2017 \ WATER & WASTEWATER NETWORK STD DWGS \ 2010069.031C .DWG

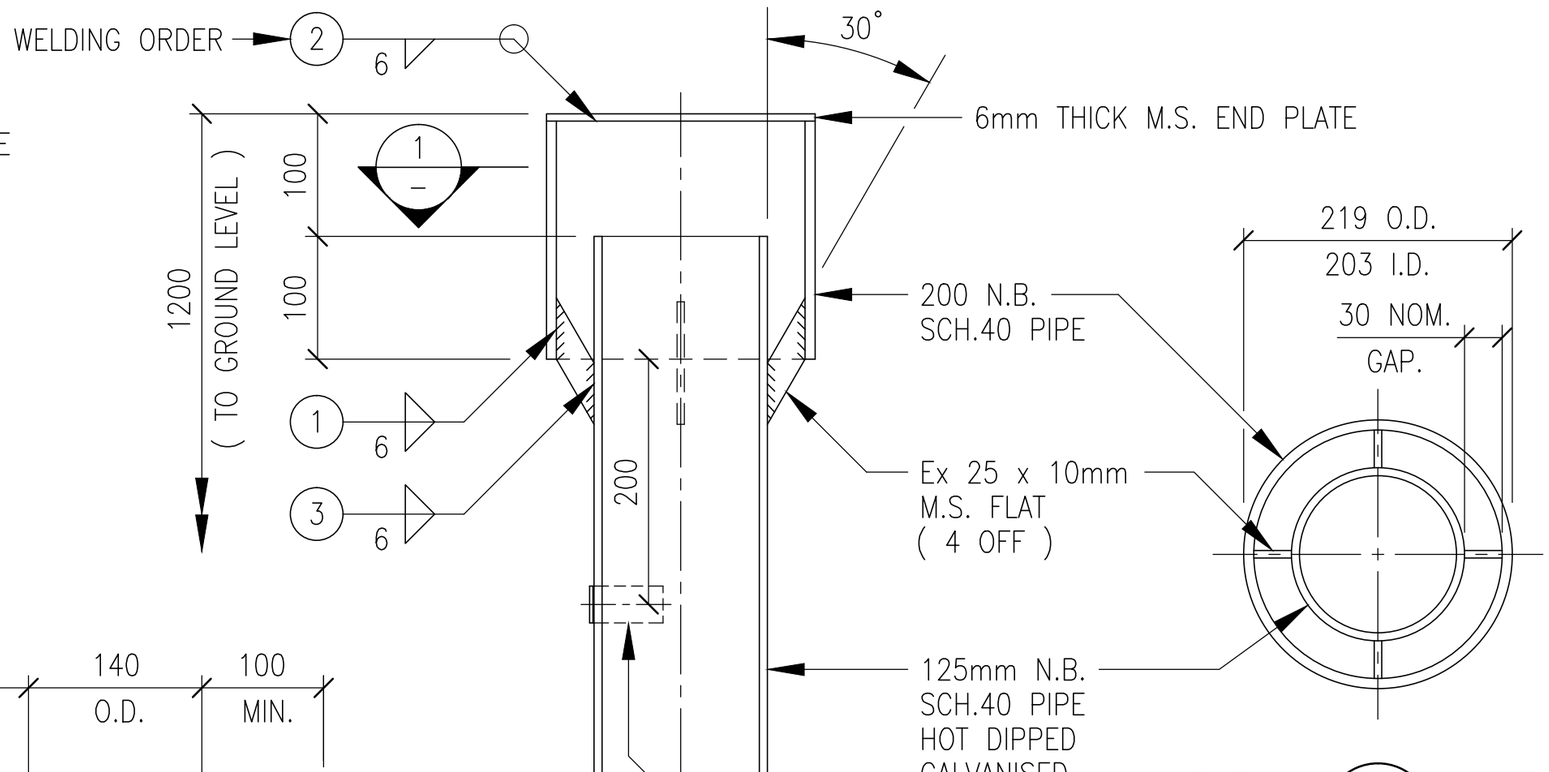
Watercare

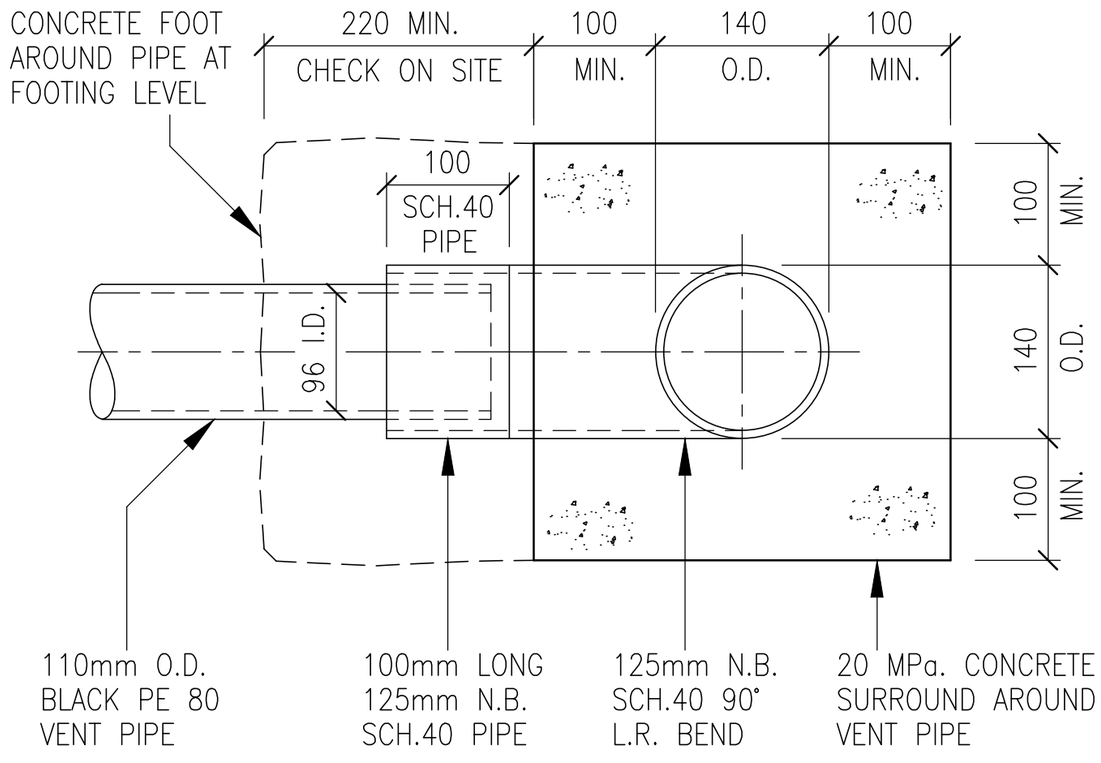
AIR RELEASE VALVE AND CHAMBER DETAIL

SCALE:	N.T.S.
ISSUE DATE:	13–07–2018
DWG No.	2010069.031C
REFERENCE No.	WS 14

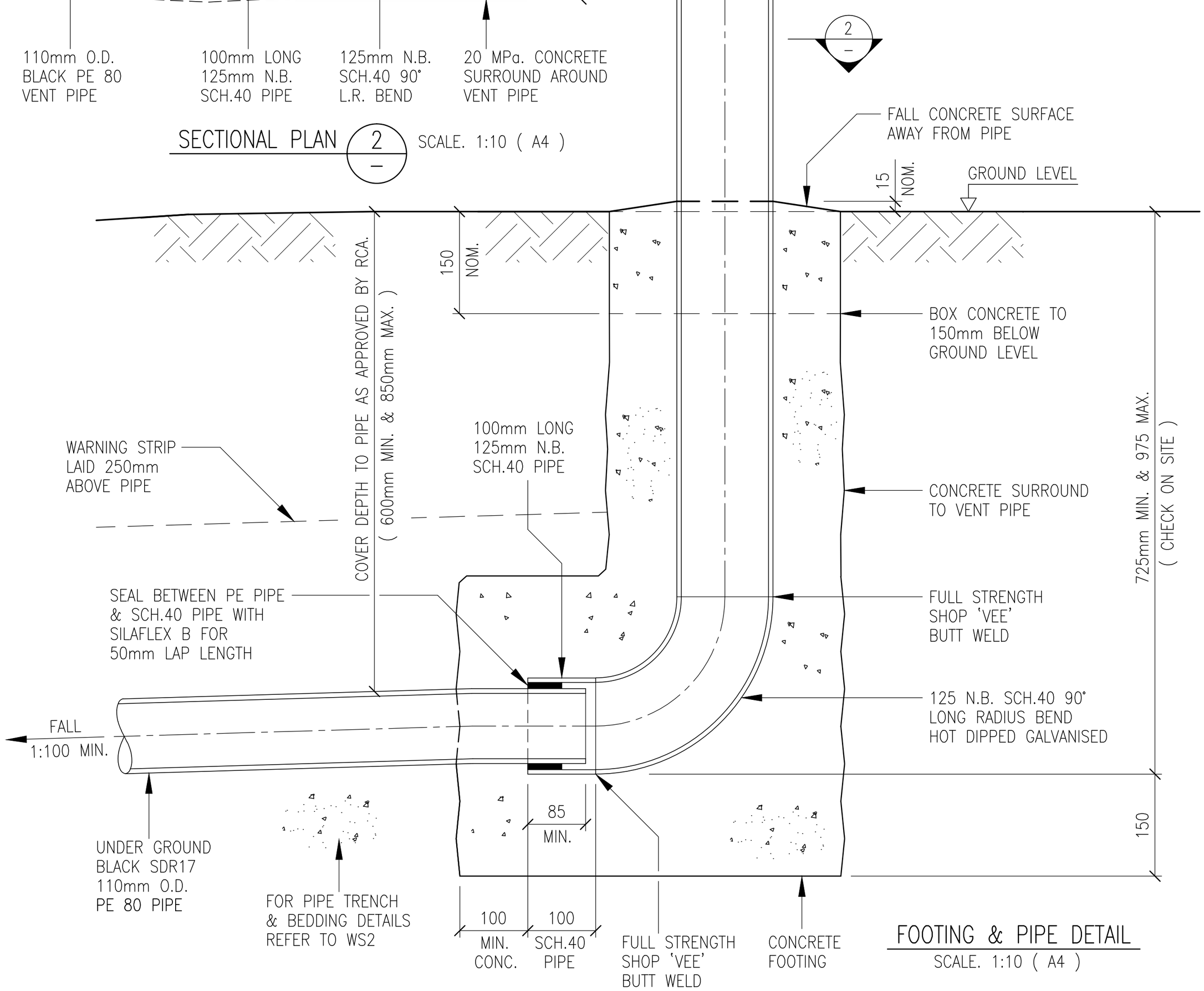
NOTES

1. FOR AIR RELEASE VALVE CHAMBER REFER DWG WS 14
2. PLACE EPOXY MORTAR AROUND VENT PIPE AT AIR VALVE CHAMBER CONCRETE WALL
3. NOTATION:
   C.O.S. = CHECK ON SITE
   N.T.S. = NOT TO SCALE
   O.D. = OVERALL DIAMETER
4. ALL STEEL PIPEWORK & VENT COWLING TO BE HOT DIP GALVANISED AFTER FABRICATION IS COMPLETE
5. THE AIR VENT MUST BE PLACED INSIDE 500mm FROM THE BOUNDARY





SECTIONAL PLAN 2 — SCALE. 1:10 (A4)



FOOTING & PIPE DETAIL
SCALE. 1:10 (A4)

O:\---\ EGCADFI \ 2017 \ WATER & WASTEWATER NETWORK STD DWGS \ 2010069.043B .DWG

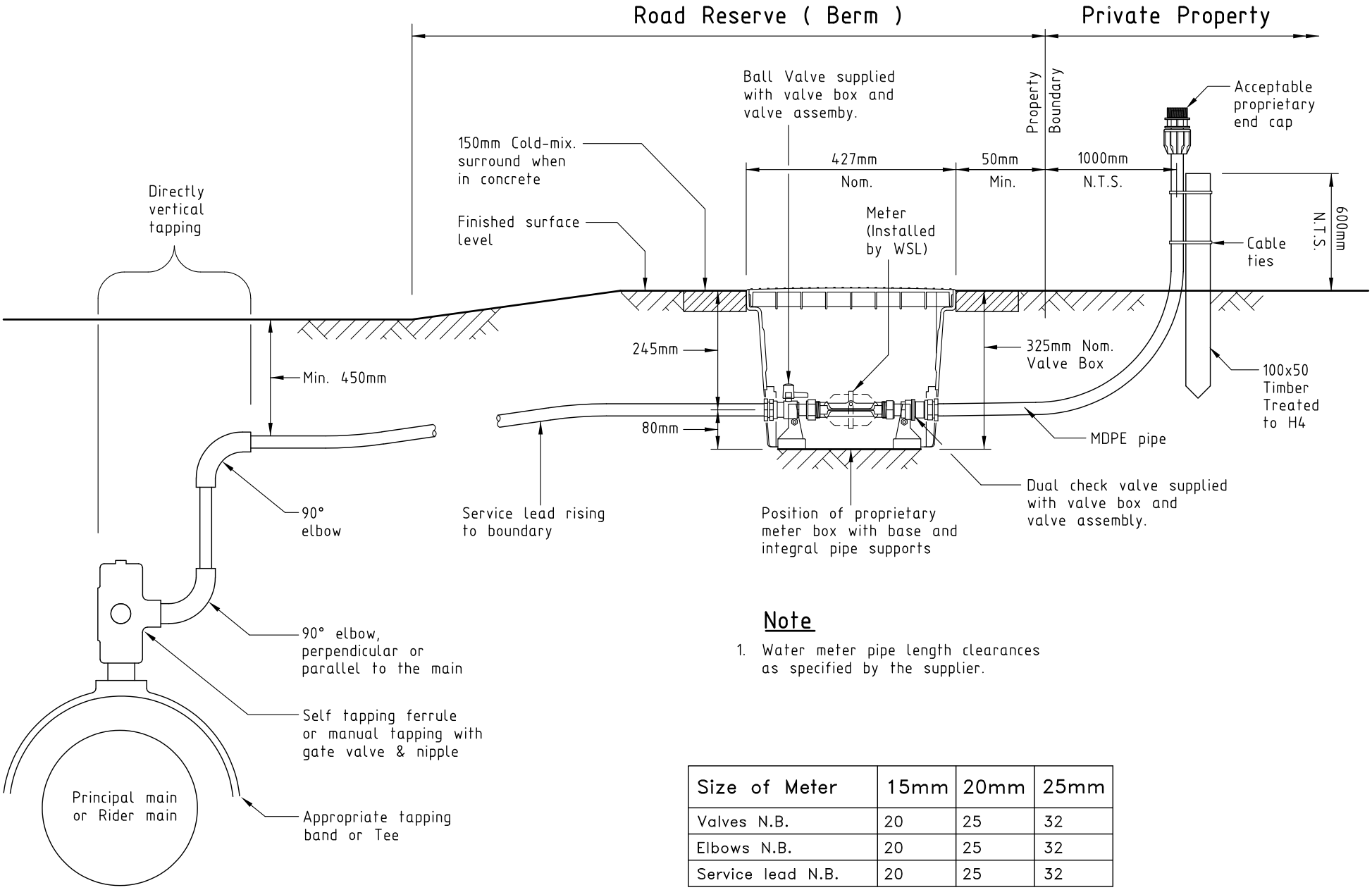
Watercare

AIR VENT COWLING, VERTICAL STEEL PIPE FABRICATION DETAIL & CONCRETE FOOTING

SCALE:	1:10 (A4)
ISSUE DATE:	13-07-2018
DWG No.	2010069.043B
REFERENCE No.	WS 15

Watercare

DOMESTIC WATER METER CONNECTION
15mm, 20mm & 25mm DIAMETER



Note

1. Water meter pipe length clearances as specified by the supplier.

Size of Meter	15mm	20mm	25mm
Valves N.B.	20	25	32
Elbows N.B.	20	25	32
Service lead N.B.	20	25	32

SCALE: N.T.S.
ISSUE DATE: 10-08-2020
DWG No. 2010069.012F
REFERENCE No. WS 18

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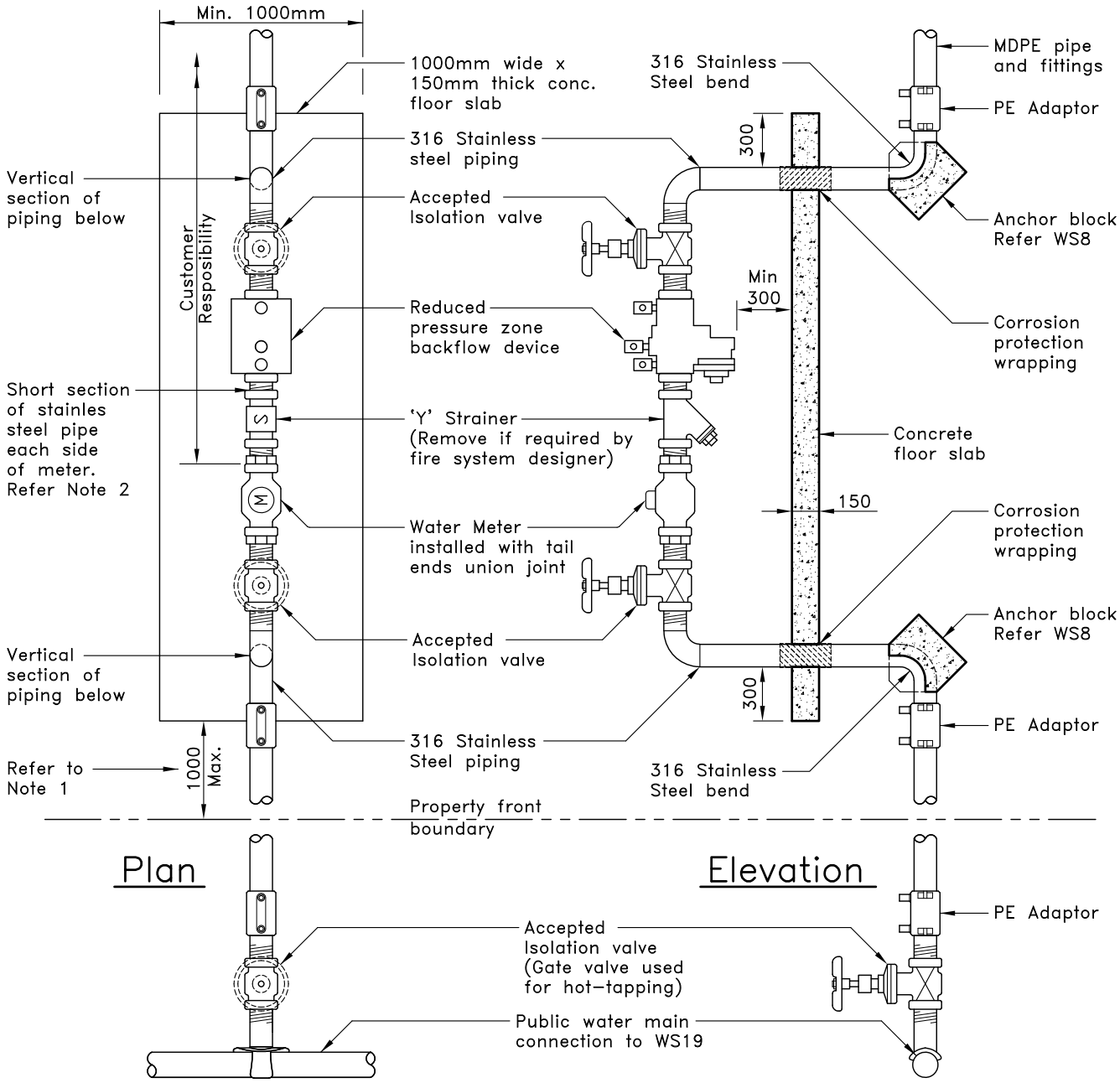

Notes:

1. Drawing indicates connection within a private property and above ground on special arrangement with Watercare. A typical installation shall be below ground within the road corridor as shown on WS20.
2. Water meter to be supplied and installed by Watercare meter installation contractor only. Water meter pipe length clearance as specified by supplier.
3. Backflow prevention device shall be installed by Watercare meter installation contractor or an Industry Qualified Plumber.
4. All components to be flanged connections.
5. Valves to be chained with a padlock or assembly to be housed in a lockable protective cage.
6. Water meter pipe length clearances as specified by supplier.
7. For low or medium risk refer WS20.
8. For 50mm and larger supply refer to WS24 and WS25.

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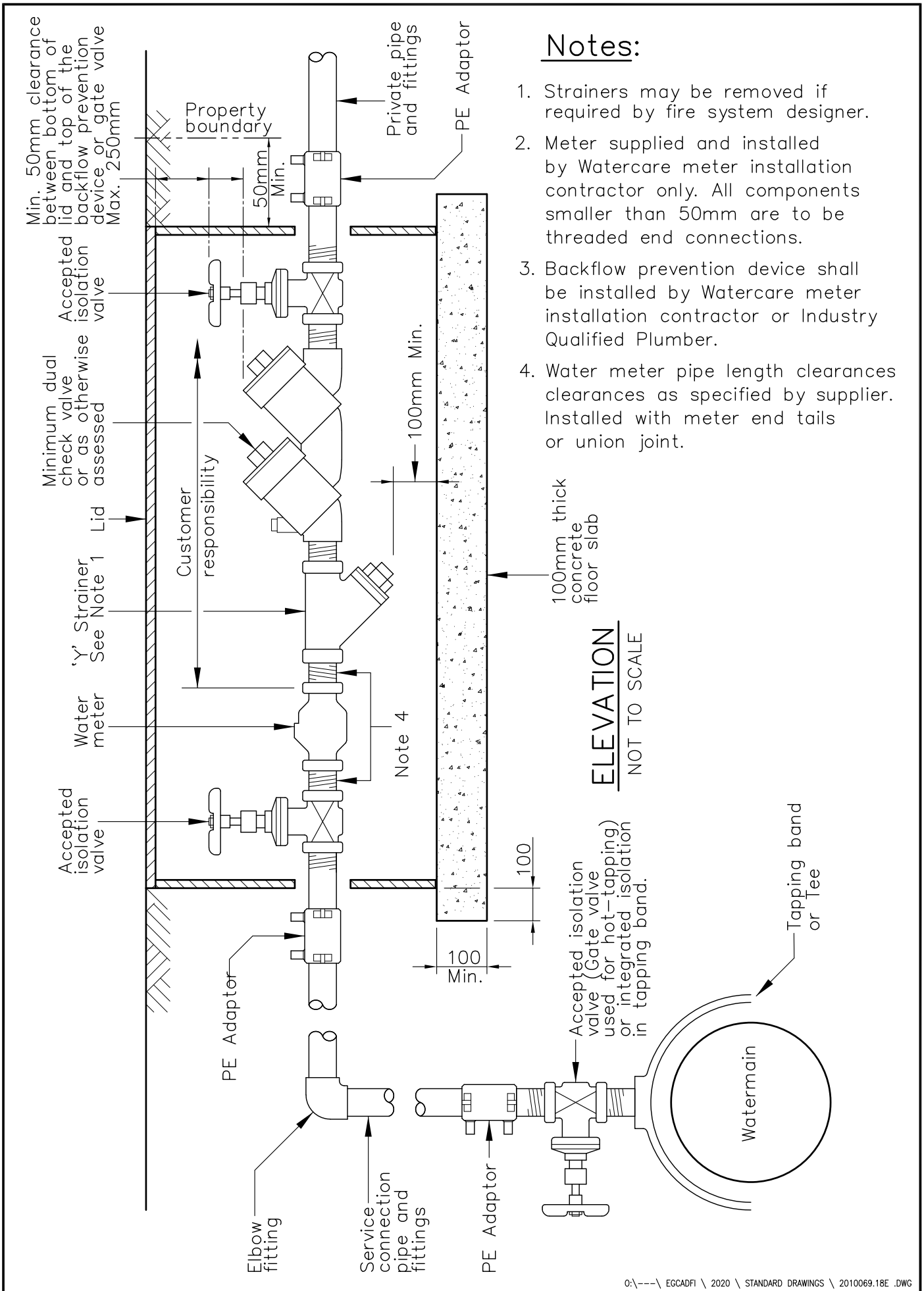
Watercare

WATER METER AND BACKFLOW PREVENTION DEVICE FOR HIGH HAZARD LESS THAN 50mm

SCALE:	N.T.S.
ISSUE DATE:	10-08-2020
DWG No.	2010069.017E
REFERENCE No.	WS 19



Notes:

1. Strainers may be removed if required by fire system designer.
2. Meter supplied and installed by Watercare meter installation contractor only. All components smaller than 50mm are to be threaded end connections.
3. Backflow prevention device shall be installed by Watercare meter installation contractor or Industry Qualified Plumber.
4. Water meter pipe length clearances clearances as specified by supplier. Installed with meter end tails or union joint.

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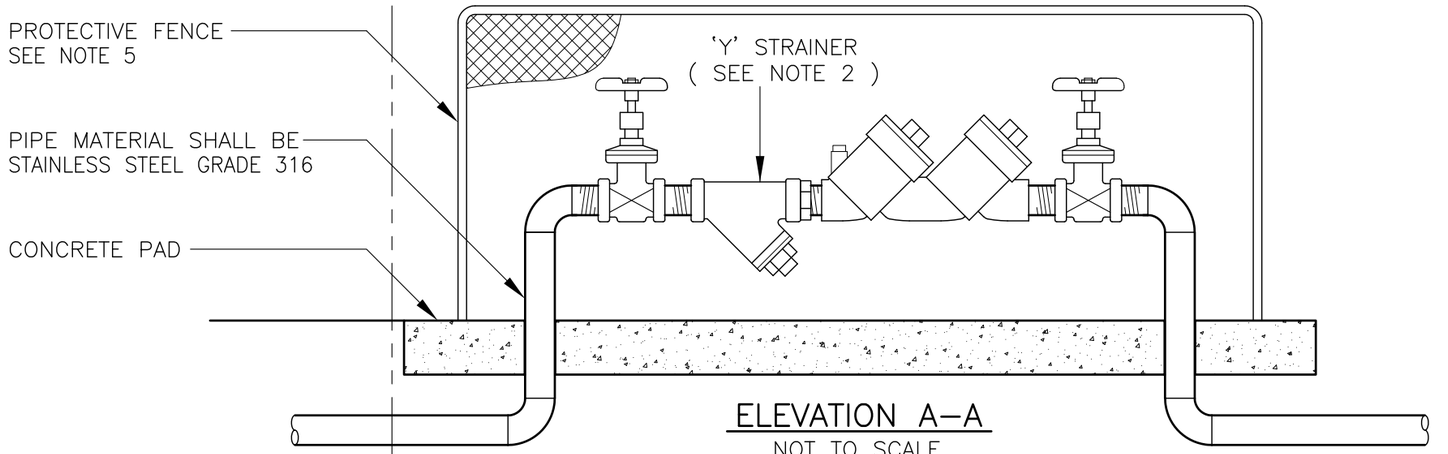
Watercare

WATER METER AND BACKFLOW FOR LOW TO MEDIUM HAZARD LESS THAN 50mmø

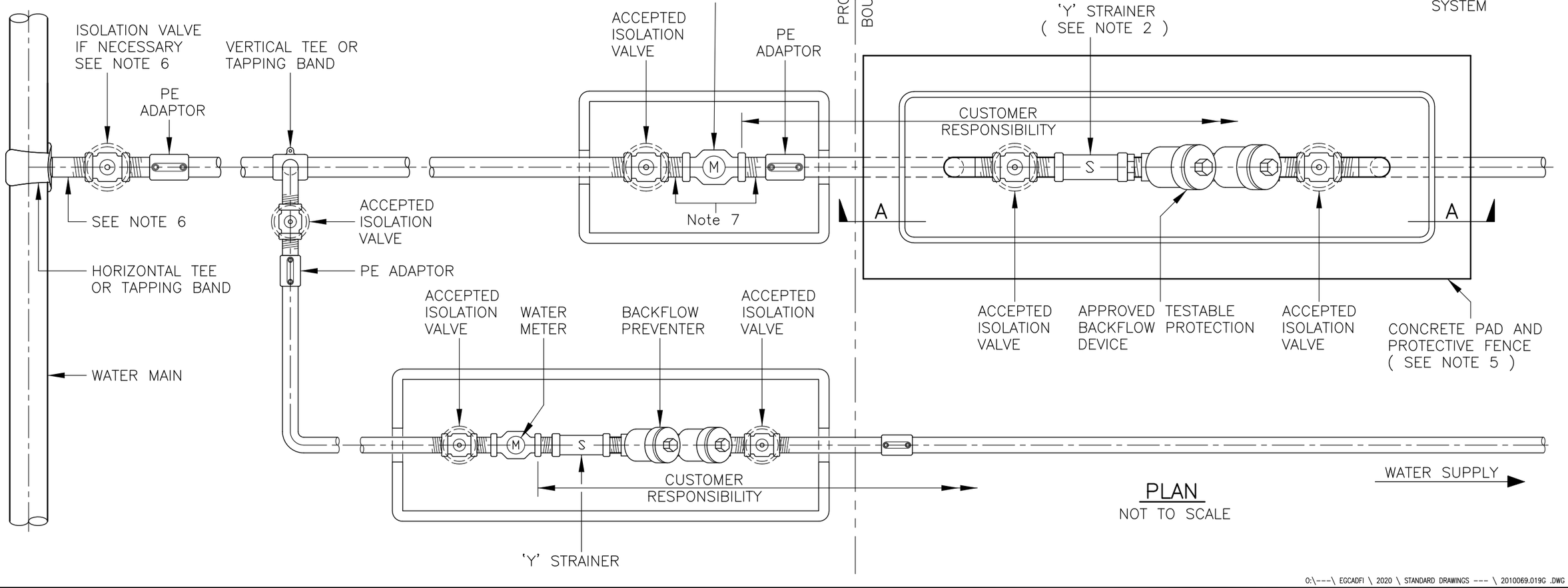
SCALE:	N.T.S.
ISSUE DATE:	10-08-2020
DWG No.	2010069.018E
REFERENCE No.	WS 20

NOTES:

1. PRIVATE FIRE SUPPLIES SHALL BE METERED. THE METER MUST BE SIZED BY A FIRE ENGINEER.
2. STRAINER MAY BE REMOVED IF REQUIRED BY FIRE SYSTEM DESIGNER.
3. FIRE CONNECTION PIPE MATERIAL SHALL BE STAINLESS STEEL GRADE 316 FOR ABOVE GROUND. 50mm AND OVER TO BE FLANGED.
4. >50mm LINE REFER TO WS24 AND WS25.
5. THE BACKFLOW PREVENSION ASSEMBLY IS PREFERRED IN PUBLIC LOCATION. SPECIAL AGREEMENT WITH WATERCARE IS REQUIRED TO INSTALL ON PRIVATE PROPERTY. THE ASSEMBLY MAY BE INSTALLED BELOW GROUND.
6. WHERE THE MAIN IS > 5m TO THE BOUNDARY AN ADDITIONAL ISOLATION VALVE ON THE CONNECTION TEE IS REQUIRED.
7. WATER METER PIPE LENGTH CLEARANCES AS SPECIFIED BY SUPPLIER. INSTALLED WITH METER TAILS OR UNION JOINT.
8. BACKFLOW PREVENTION SHOWN INSIDE PRIVATE PROPERTY WHEN INSUFFICIENT BERM SPACE.



ELEVATION A–A
NOT TO SCALE



PLAN
NOT TO SCALE

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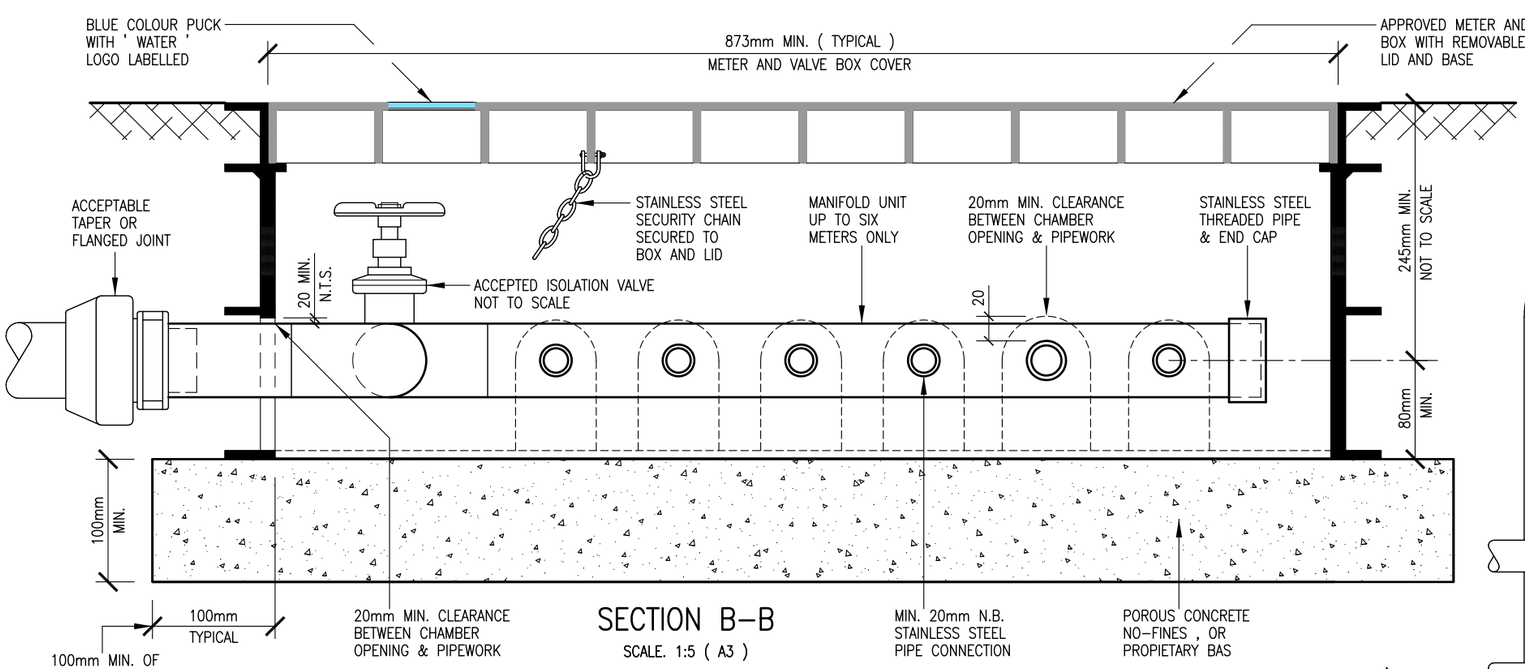
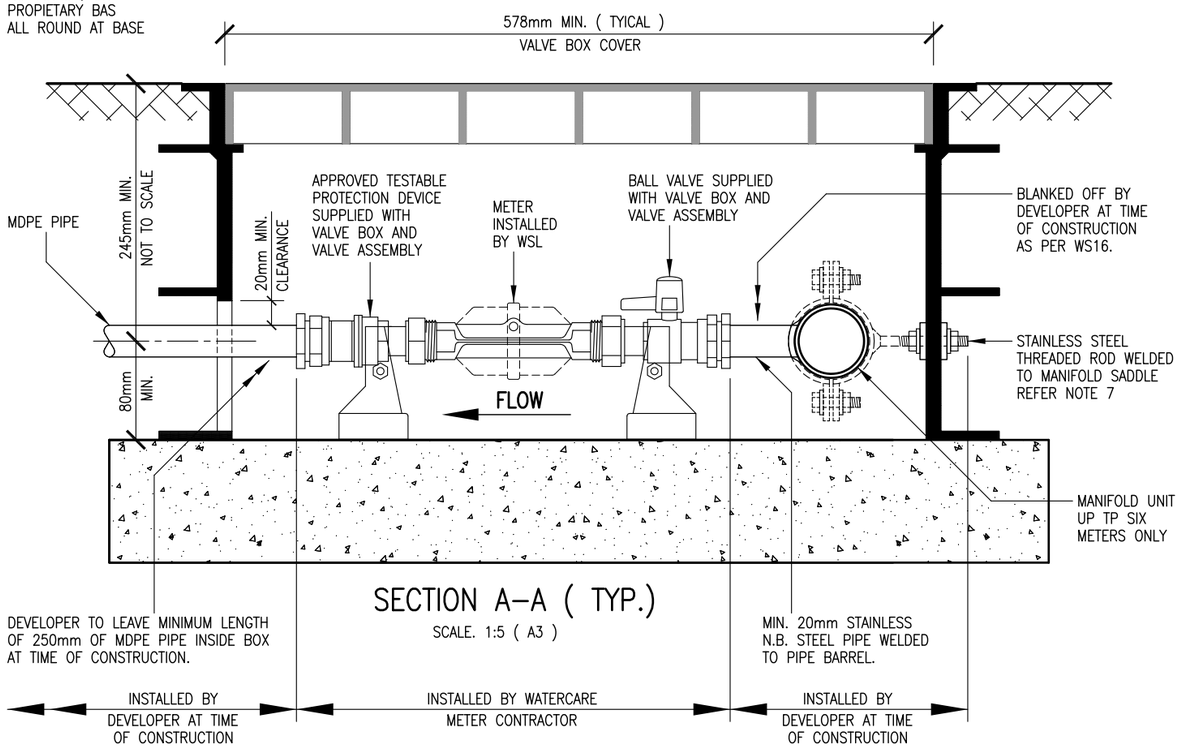
FIRE SUPPRESSION SUPPLY AND SEPARATE WATER SUPPLY LESS THAN 50mmø

SCALE:	N.T.S.
ISSUE DATE:	240–08–2020
DWG No.	2010069.019G
REFERENCE No.	WS 21



SECTION B–B

SCALE. 1:5 (A3)

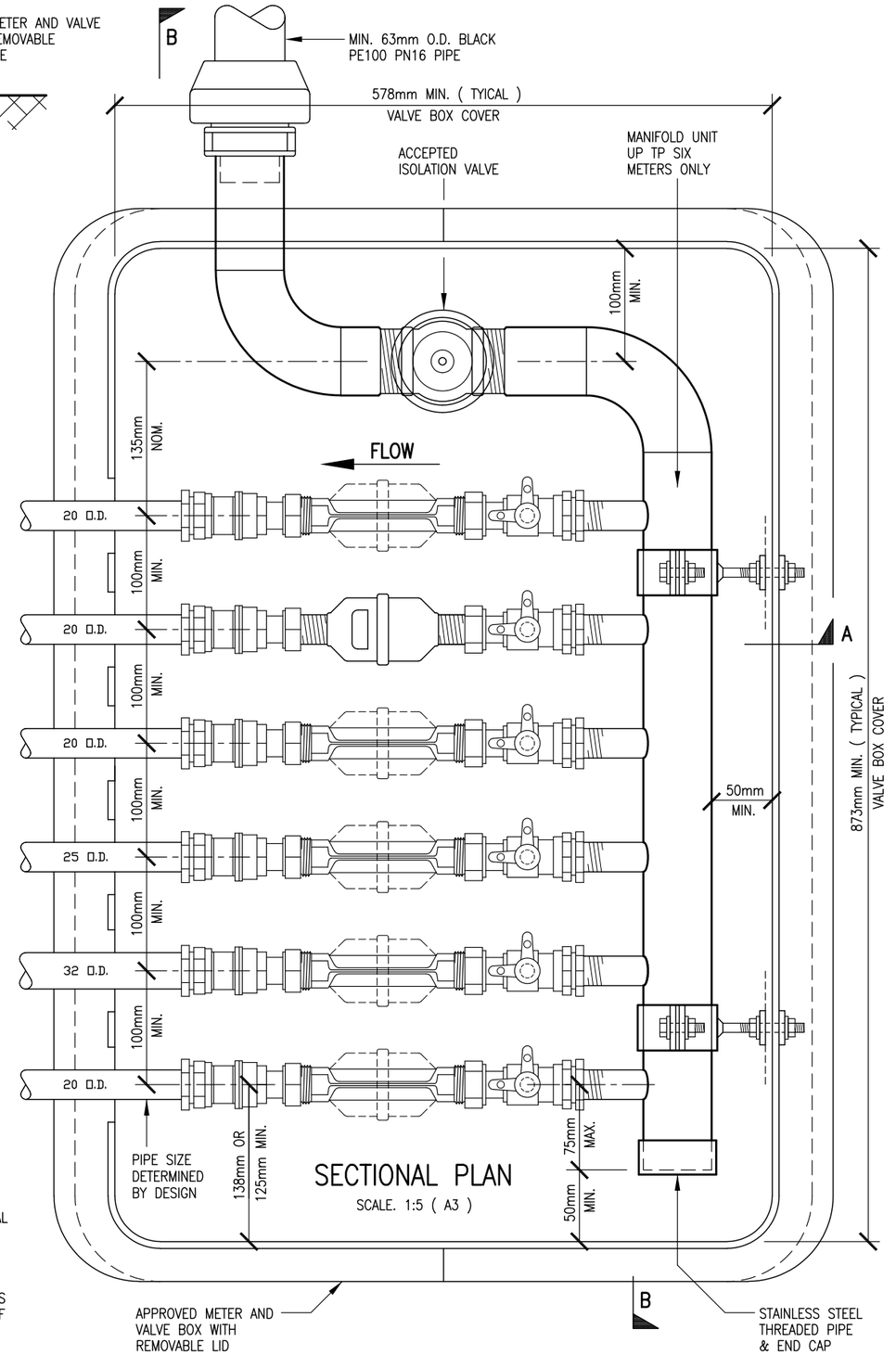


SECTION A–A (TYP.)

SCALE. 1:5 (A3)

NOTES

1. IN SOFT SOILS THE BASE MUST BE STABALISED WITH SITE CONCRETE OR CONCRETE BLOCKS TO PREVENT SUBSIDENCE.
2. ALL FITTINGS TO BE TO WATERCARE ENGINEERING STANDARDS.
3. BANK TO HAVE A MAXIMUM OF 6 METERS.
4. ABBREVIATIONS :
   O.D. = OVERALL DIAMETER
   MIN. = MINIMUM
   TYP. = TYPICAL
5. NUMBERED TAGS TO BE PROVIDED ON EACH CONNECTION STARTING WITH UNIT 1 OR THE (LOWEST UNIT NUMBER) FROM ONE SIDE. THE TAGS SHALL BE CLEARLY MARKED AND FIRMLY ATTACHED.
6. REFER TO WS18 FOR TYPICAL DOMESTIC METER TRAIN.
7. 8mm DIA. STAINLESS STEEL THREADED ROD WELDED TO MANIFOLD SADDLE WITH NUTS AND WASHERS EACH SIDE OF VALVE BOX WALL.



SECTIONAL PLAN

SCALE. 1:5 (A3)

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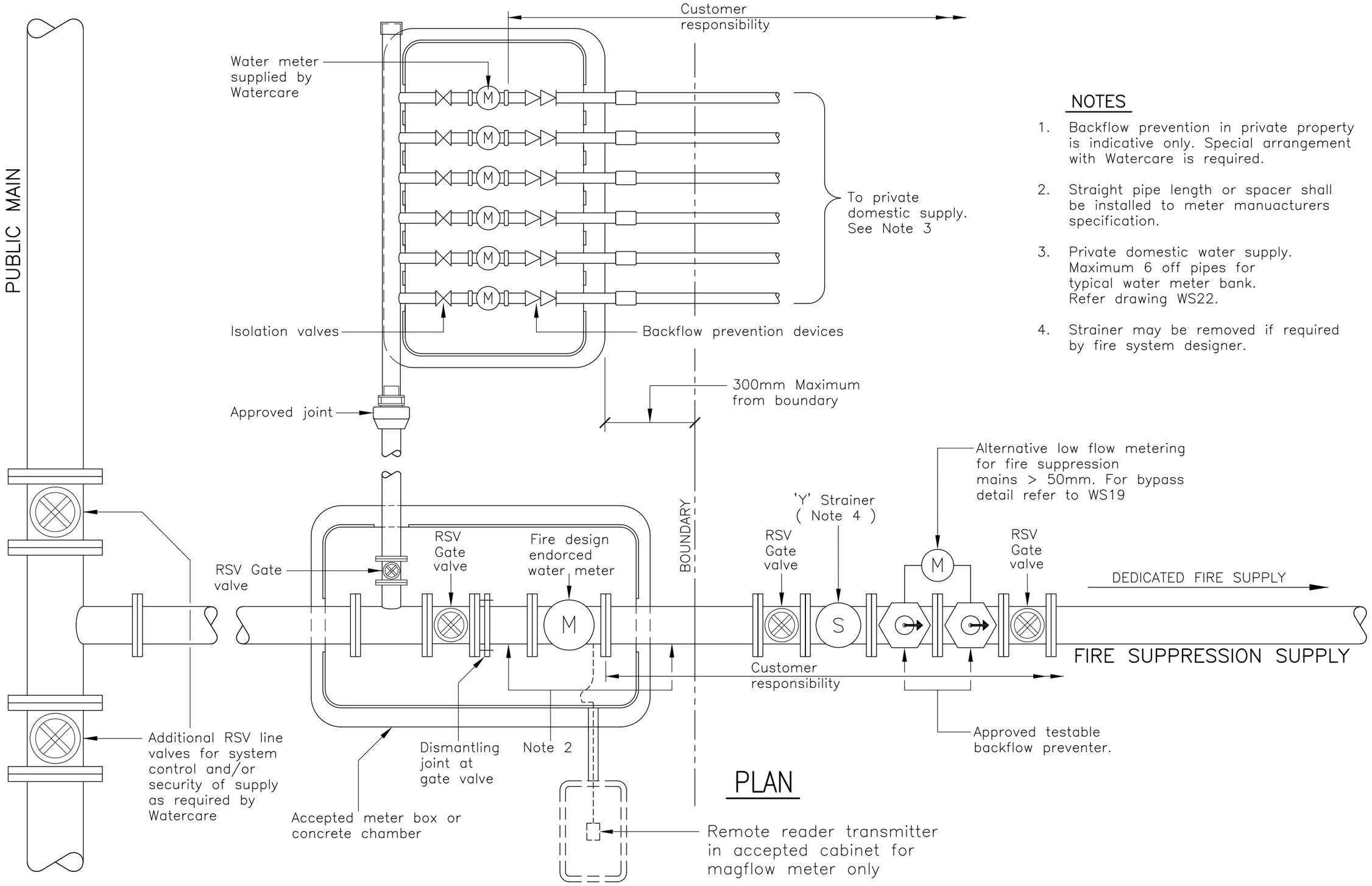
Watercare

DOMESTIC MANIFOLD METER BANK LESS THAN 50mmø

DRAFT

SCALE:	1:5 & N.T.S. (A3)
ISSUE DATE:	10–08–2020
DWG No.	2010069.021D
REFERENCE No.	WS 22



PLAN

NOTES

1. Backflow prevention in private property is indicative only. Special arrangement with Watercare is required.
2. Straight pipe length or spacer shall be installed to meter manuacturers specification.
3. Private domestic water supply. Maximum 6 off pipes for typical water meter bank. Refer drawing WS22.
4. Strainer may be removed if required by fire system designer.

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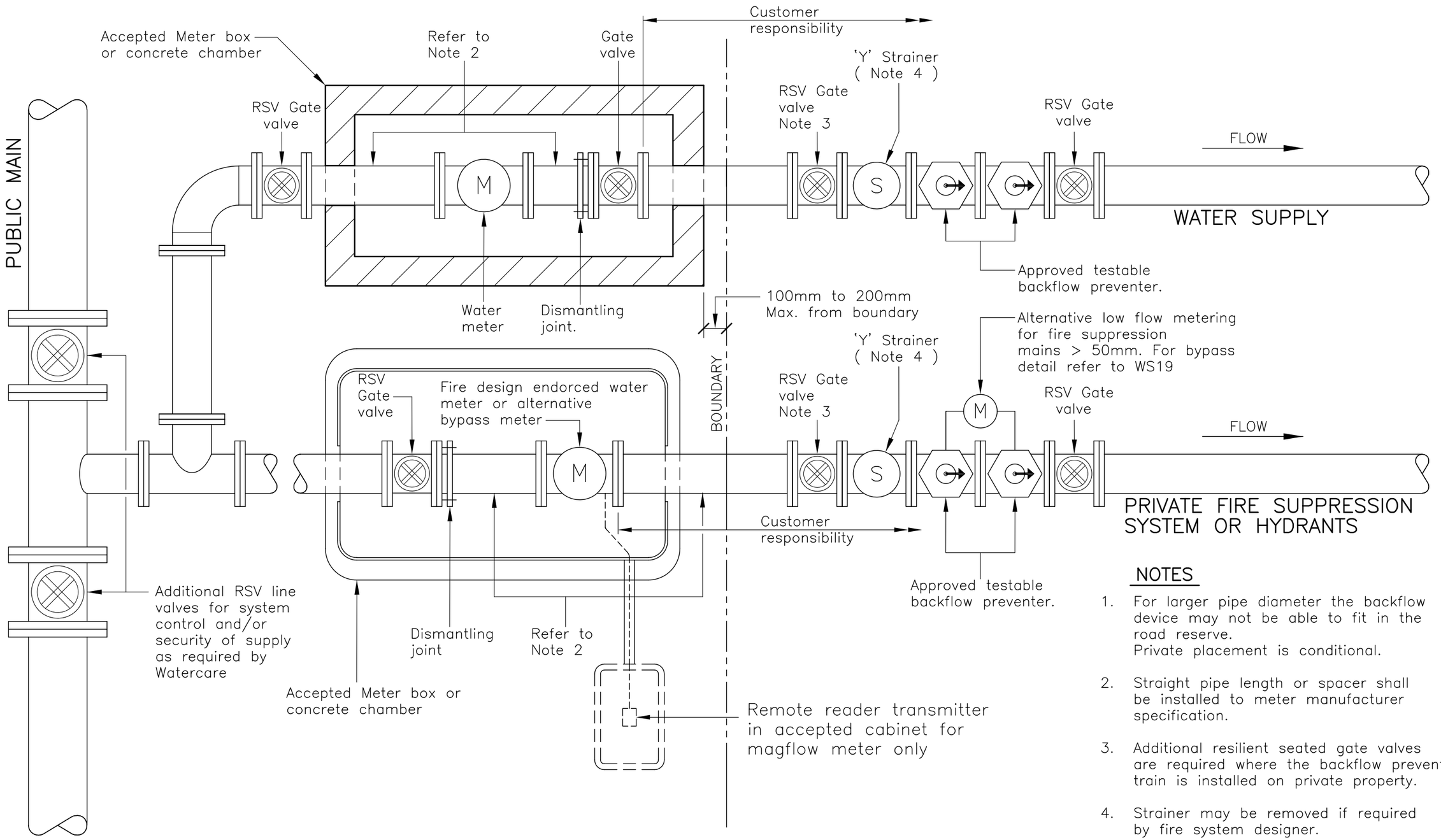
Watercare

FIRE SUPPRESSION SUPPLY AND SEPARATE DOMESTIC METER BANK

SCALE:	N.T.S.
ISSUE DATE:	24–09–2020
DWG No.	2010069.044D
REFERENCE No.	WS 23



PLAN

NOTES

1. For larger pipe diameter the backflow device may not be able to fit in the road reserve.
   Private placement is conditional.
2. Straight pipe length or spacer shall be installed to meter manufacturer specification.
3. Additional resilient seated gate valves are required where the backflow preventer train is installed on private property.
4. Strainer may be removed if required by fire system designer.
5. Additional RSV Line valves for system control and/or security of supply as required by Watercare.

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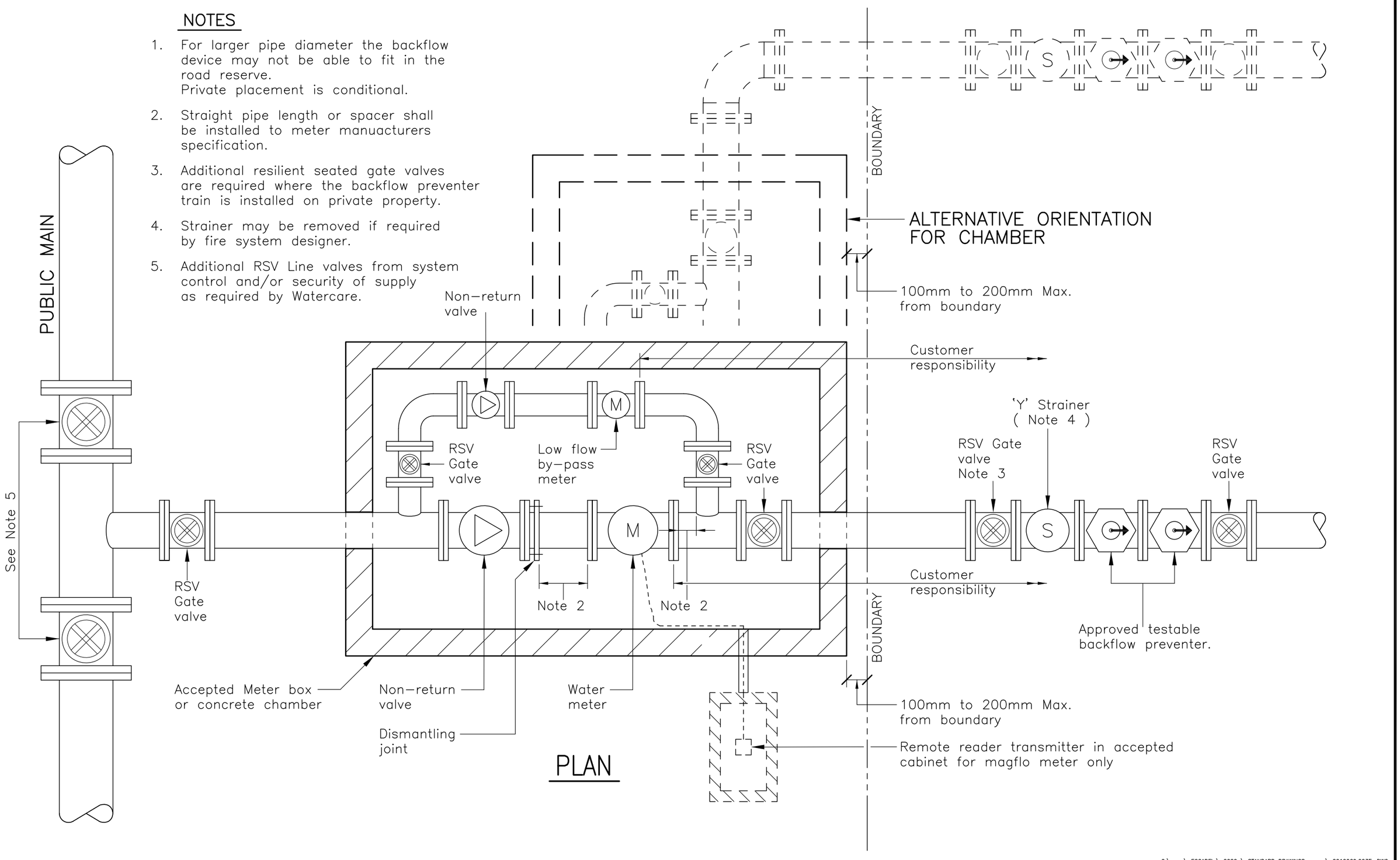
Watercare

FIRE SUPPRESSION SUPPY AND SEPARATE WATER METER 50mmø AND ABOVE

SCALE:	N.T.S.
ISSUE DATE:	24–09–2020
DWG No.	2010069.022F
REFERENCE No.	WS 24

NOTES

1. For larger pipe diameter the backflow device may not be able to fit in the road reserve.
   Private placement is conditional.
2. Straight pipe length or spacer shall be installed to meter manuacturers specification.
3. Additional resilient seated gate valves are required where the backflow preventer train is installed on private property.
4. Strainer may be removed if required by fire system designer.
5. Additional RSV Line valves from system control and/or security of supply as required by Watercare.



PLAN

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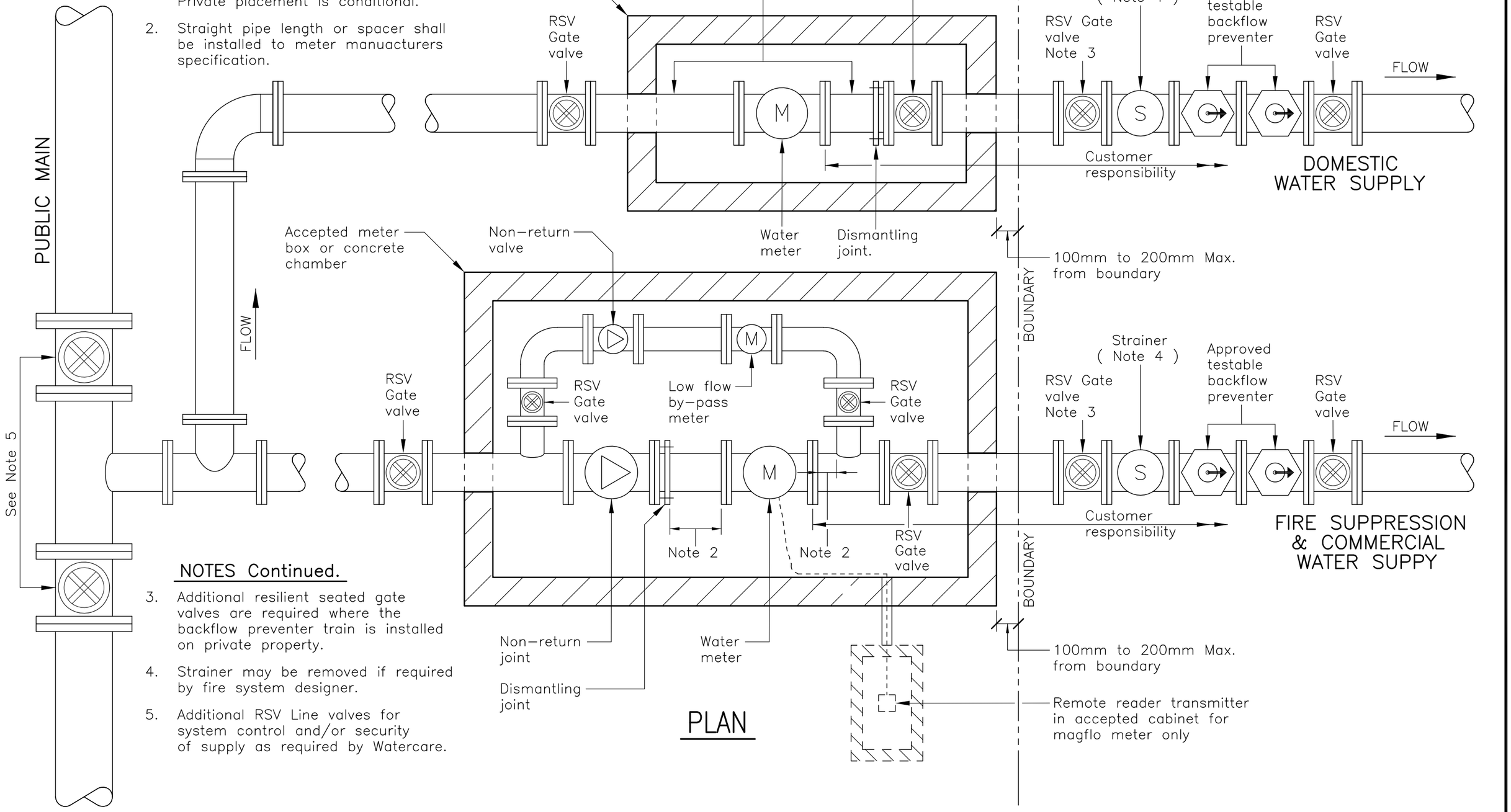
COMBINED FIRE SUPPRESSION SUPPLY AND WATER METER 50mmø AND ABOVE

SCALE:	N.T.S.
ISSUE DATE:	24–09–2020
DWG No.	2010069.023F
REFERENCE No.	WS 25

NOTES

1. For larger pipe diameter the backflow device may not be able to fit in the road reserve.
   Private placement is conditional.
2. Straight pipe length or spacer shall be installed to meter manuacturers specification.



PLAN

NOTES Continued.

3. Additional resilient seated gate valves are required where the backflow preventer train is installed on private property.
4. Strainer may be removed if required by fire system designer.
5. Additional RSV Line valves for system control and/or security of supply as required by Watercare.

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Watercare

COMBINED FIRE SUPPRESSION SUPPLY AND COMMERCIAL WITH SEPARATE DOMESTIC SUPPLY

SCALE:	N.T.S.
ISSUE DATE:	24–09–2020
DWG No.	2010069.045D
REFERENCE No.	WS 26