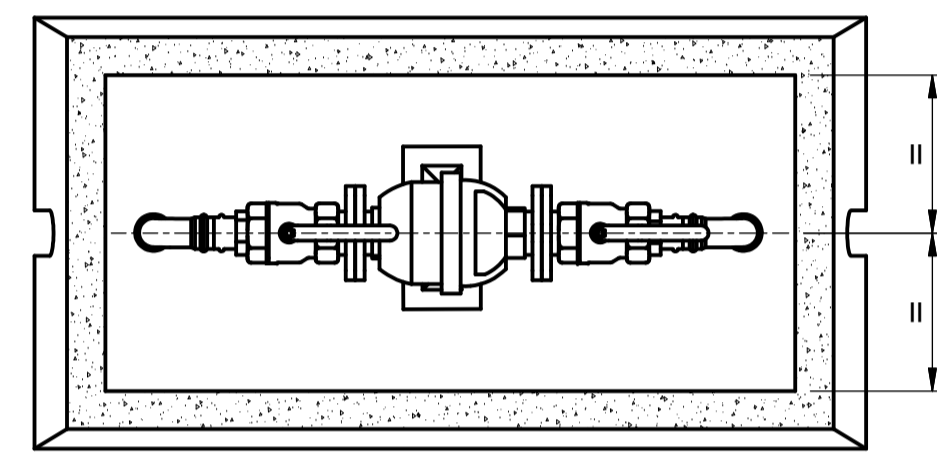
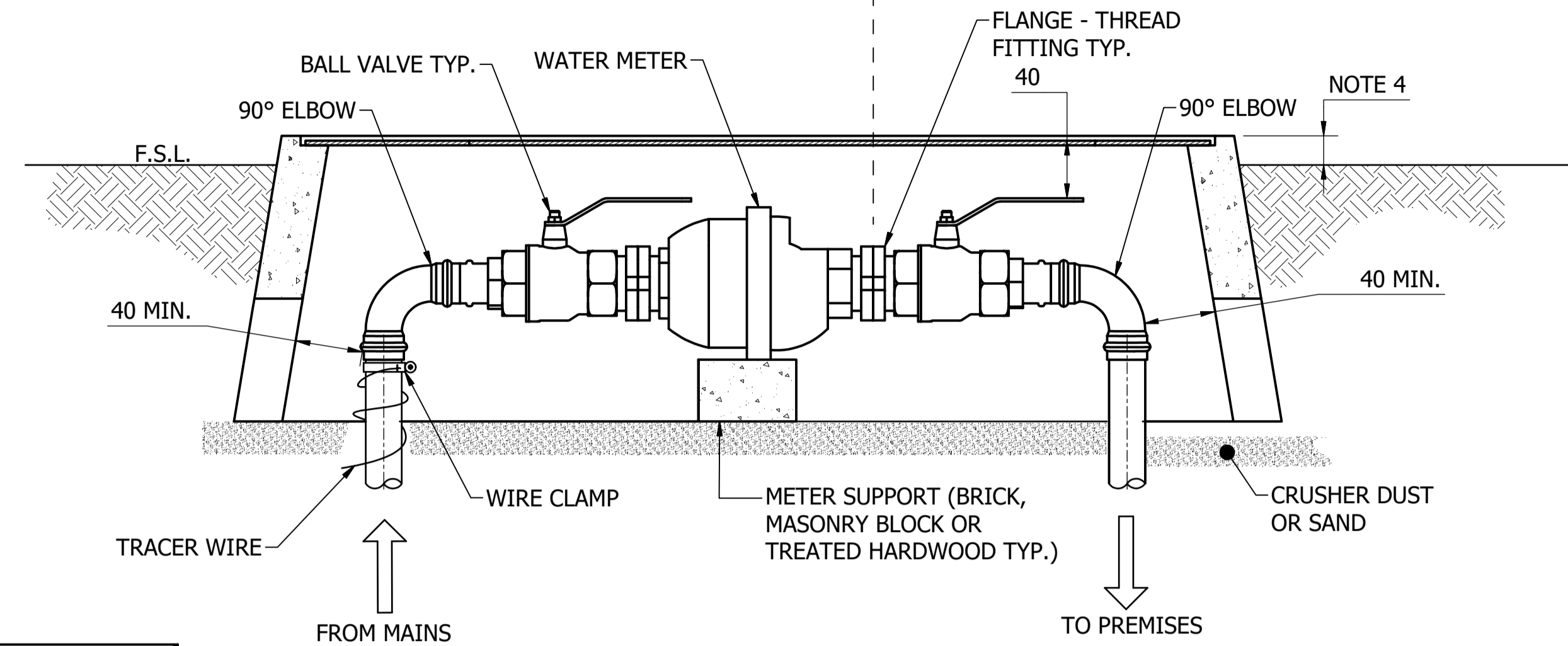


SECTIONAL ELEVATION

DN20 & DN25 METER INSTALLATION

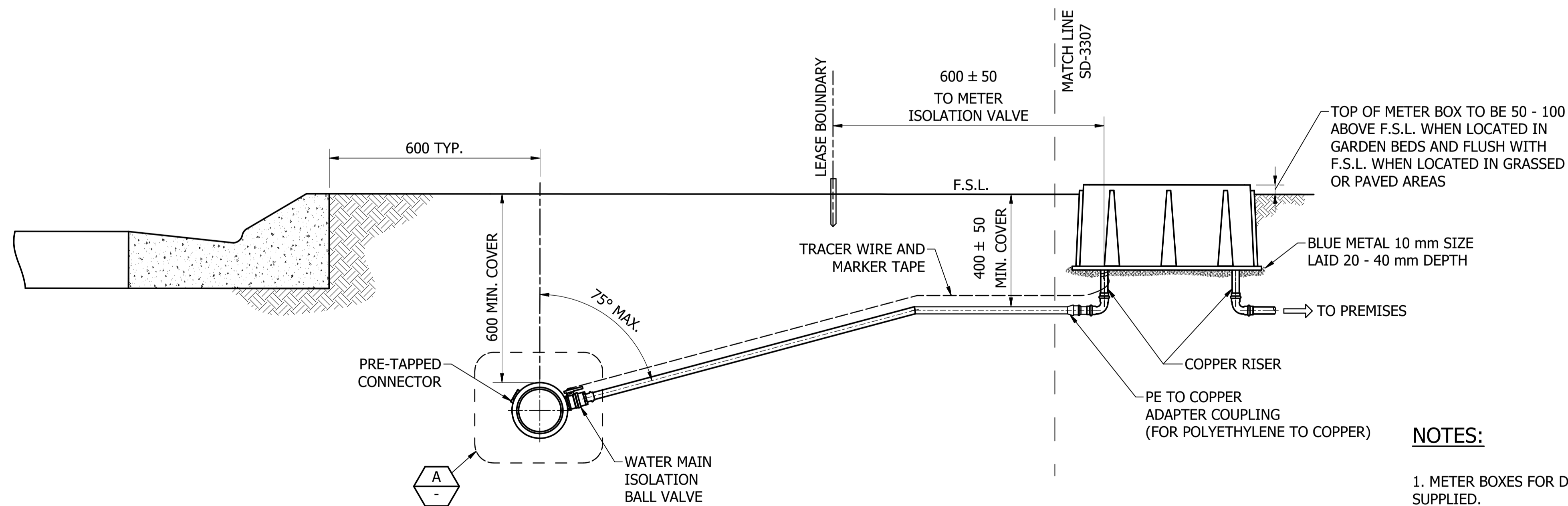


PLAN



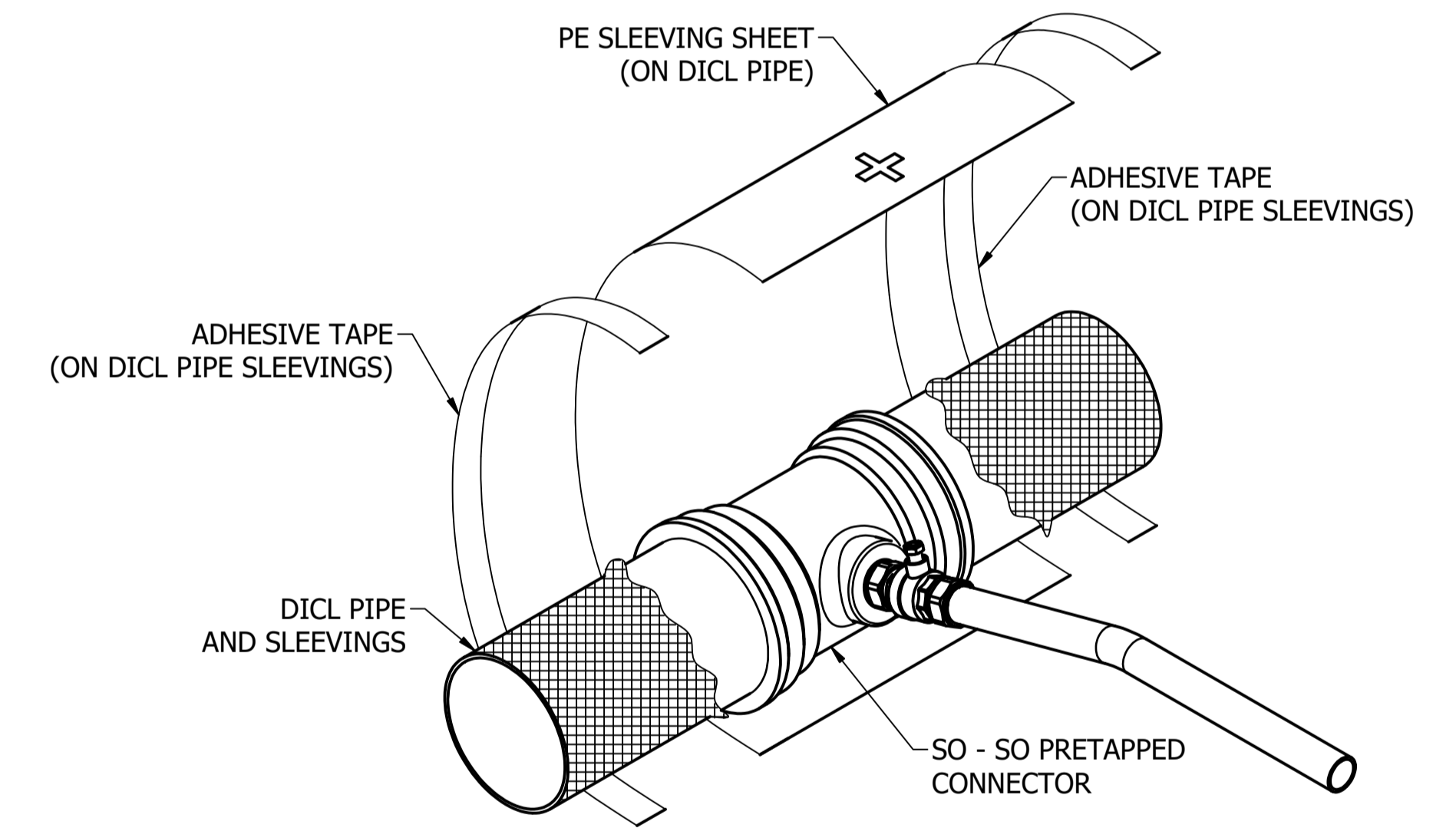
SECTIONAL ELEVATION

DN32 & DN40 METER INSTALLATION



ELEVATION

TYPICAL MAIN TO METER (SINGLE) PROPERTY SERVICE FOR METERS ≤ DN40



DETAIL A - PE SLEEVE FOR DI CL MAINS DN225 AND ABOVE (NOTE 3)

NOTES:

- METER BOXES FOR DN25 METERS AND LARGER ARE CUSTOMER SUPPLIED.
- REFER TO ICON WATER SPECIFICATION STD-SPE-M-006 FOR DETAILED PROPERTY SERVICE CONNECTION AND METERING REQUIREMENTS.
- REFER TO THE ICON WATER APPROVED PRODUCTS LIST FOR EXEMPTIONS TO PE SLEEVING REQUIREMENTS.
- TOP OF METER BOX LEVEL TO BE:
-PAVED AREAS OR GRASS: FLUSH WITH FINISHED SURFACE LEVEL.
-GARDEN BEDS: 50 - 100 ABOVE FINISHED SURFACE LEVEL.
- 25 mm CLEARANCE BETWEEN VALVE HANDLES AND THE METERING ENCLOSURE MUST BE MET WITH HANDLE IN BOTH THE FULLY OPEN AND CLOSED POSITION.

No.	ISSUE	DATE	DRAWN	CHECKED	AUTHORISED
A	INITIAL ISSUE	15/06/2018	S. Essery	K. Danenbergsons	D. Eager
B	CHANGE DRAWING CLASSIFICATION FROM -C TO -D	10/12/2018	S. Essery	K. Danenbergsons	C. Patrick

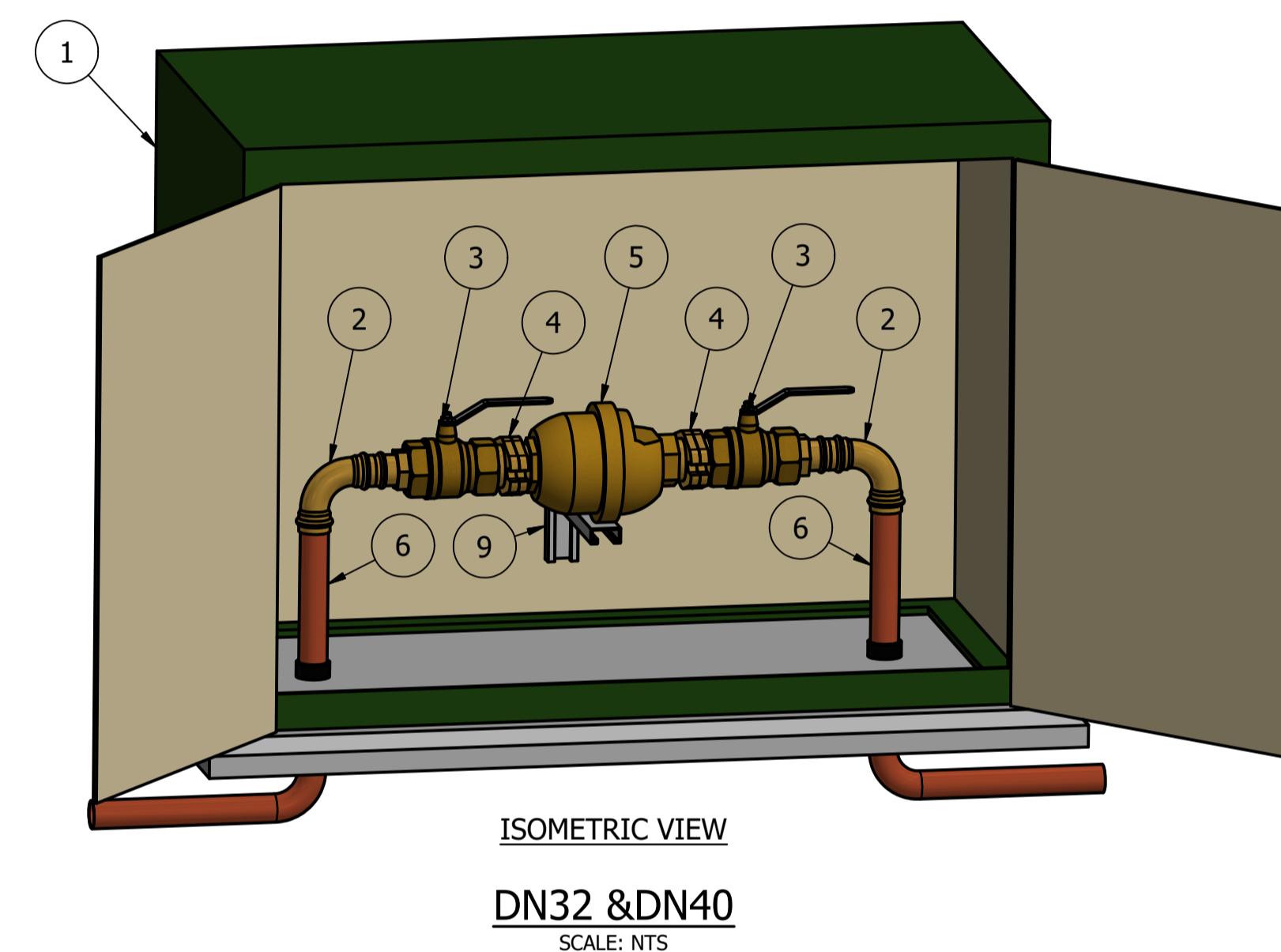
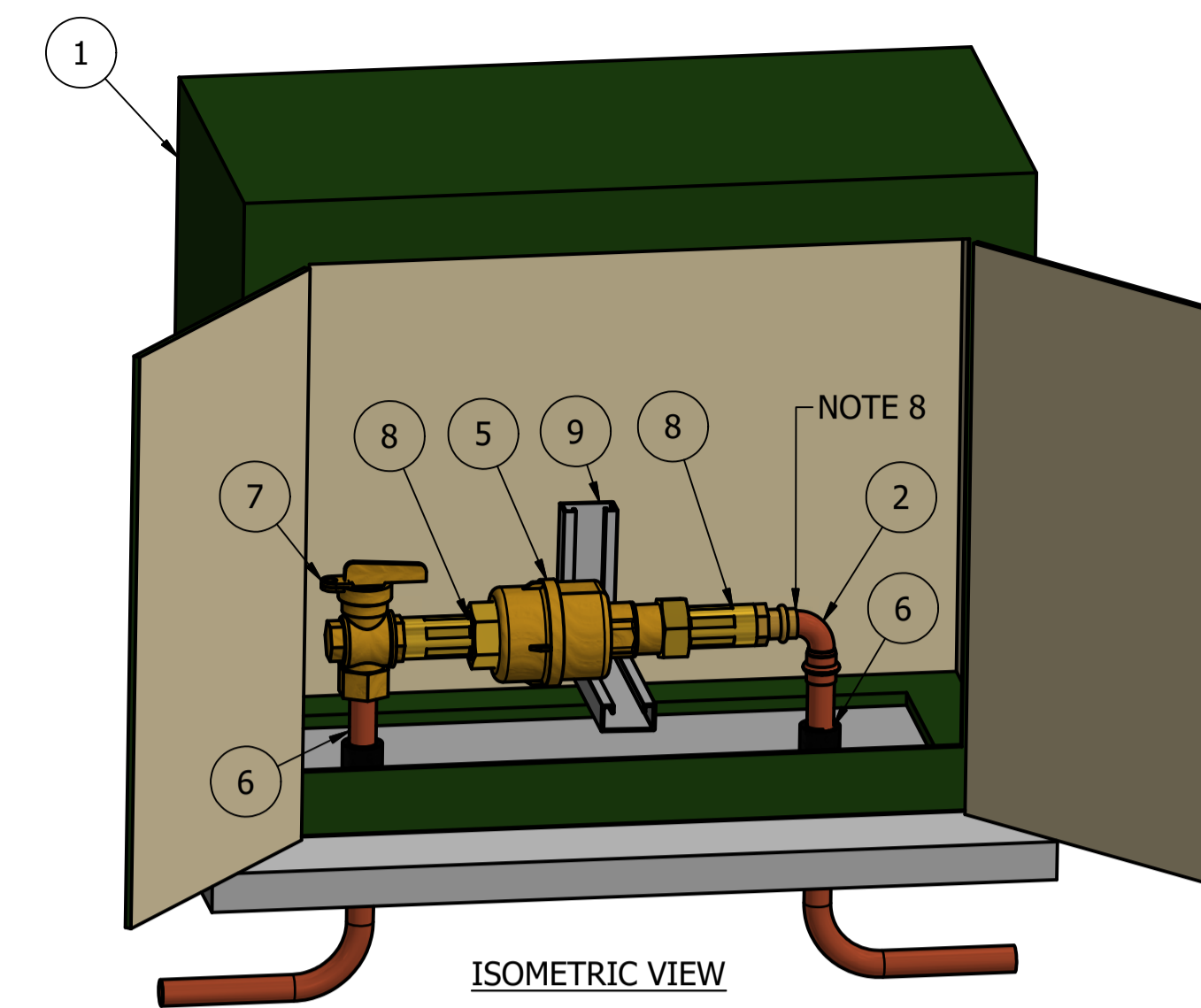
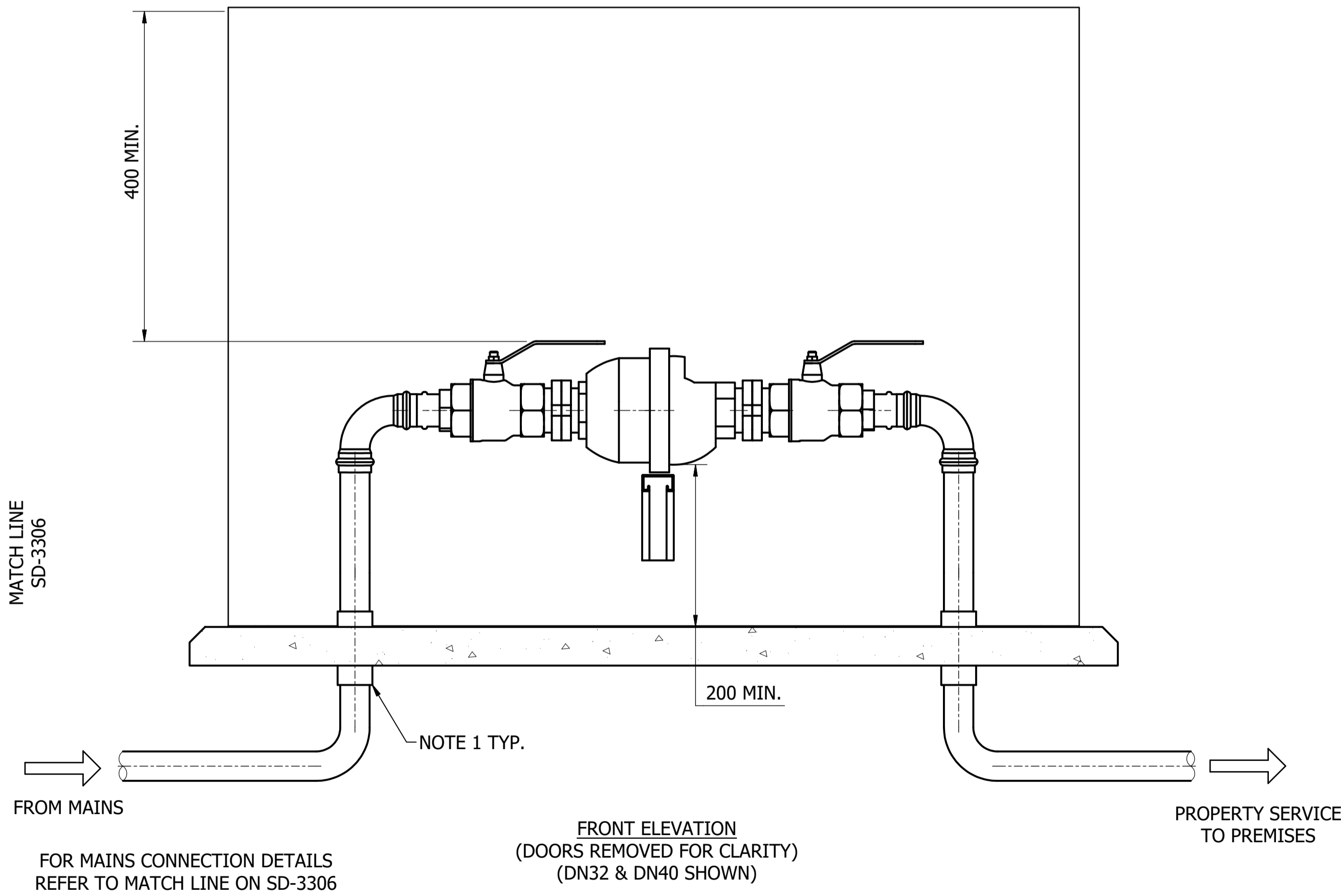
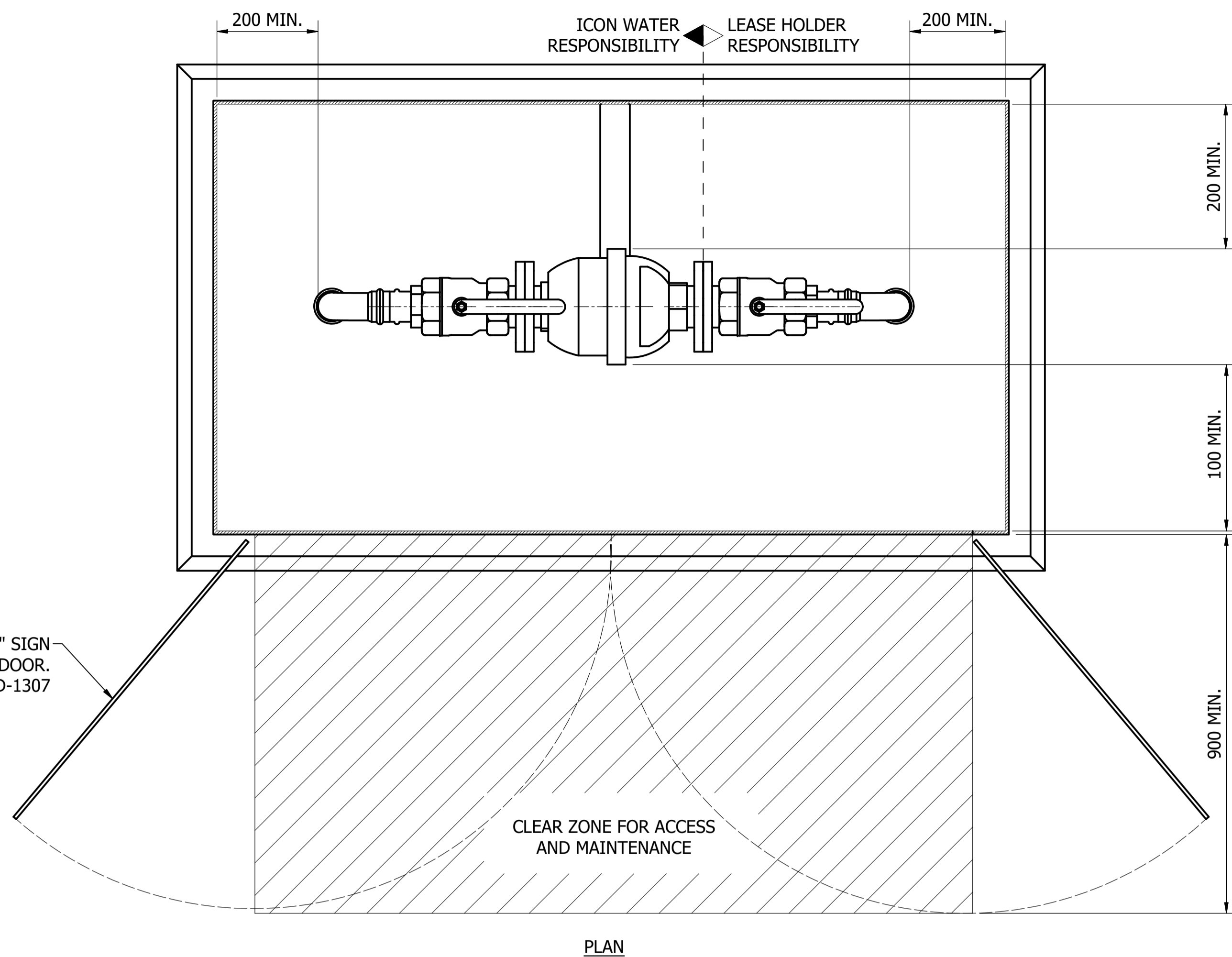
DAM	RES	SPS
BWS	WAT	STP
WTP	SEW	
WPS	REC	



STANDARD DRAWING
WATER SERVICE CONNECTIONS
DN20 TO DN40 METERS
BELOW GROUND INSTALLATIONS
ARRANGEMENT AND CONNECTION DETAILS

DRAWING STATUS	
Current	
SD-3306-D	
A1	ISSUE B
© Icon Water 2017	

AFFIX "WATER METER" SIGN TO EXTERNAL SIDE OF DOOR. REFER SD-1307



PARTS LIST	
ITEM	DESCRIPTION
1	ENCLOSURE (POWDER COATED GALVANISED STEEL ENCLOSURE SHOWN) (NOTE 2 & 3)
2	90° ELBOW
3	BALL VALVE
4	FLANGE - THREAD FITTING
5	WATER METER
6	COPPER RISER
7	90° / STRAIGHT THROUGH BALL VALVE
8	UNION COUPLING
9	PIPE SUPPORT (UNISTRUT OR EQUIVALENT)

NOTES:

- RISER PIPES SHALL BE INSULATED AND NOT IN DIRECT CONTACT WITH STEEL OR CONCRETE SURFACES.
- METERING ENCLOSURES SHALL HAVE KNAUF "CLIMAFOAM XPS" INSULATION BOARDS INSTALLED TO ALL INTERNAL SURFACES (INCLUDING DOORS) OF 30 mm MIN. THICKNESS. ALTERNATIVES SUCH AS BLOCK OR BRICK CONSTRUCTION ARE ACCEPTABLE IN LIEU OF GALVANISED STEEL.
- THE ENCLOSURE FINISH COLOUR SHALL BE NOMINATED BY THE DESIGNER TO SUIT THE PREVAILING ARCHITECTURE / STREETSCAPE. THE FINISH COLOUR MUST BE SHOWN ON THE DESIGN DRAWINGS FOR ACCEPTANCE BY ICON WATER. OTHERWISE, THE DEFAULT FINISH COLOUR SHALL BE G66 ENVIRONMENT GREEN TO AS 2700.
- MINIMUM CLEARANCES SHOWN APPLY FOR ALL METERS SIZED \leq DN40.
- FOR DN20 & DN25 METERING ARRANGEMENTS, THE LEASE HOLDER'S RESPONSIBILITY BEGINS IMMEDIATELY AFTER THE DOWNSTREAM UNION COUPLING.
- ALL PIPEWORK AND TUBING OF SIZES DN50 AND SMALLER SHALL BE INSULATED TO PREVENT FREEZING. REFER TO THE ICON WATER APPROVED PRODUCTS LIST FOR ACCEPTABLE INSULATION.
- REFER TO ICON WATER SPECIFICATION STD-SPE-M-006 FOR DETAILED PROPERTY SERVICE CONNECTION AND METERING REQUIREMENTS.
- INSTALL DOWNSTREAM ISOLATION VALVE IF REQUIRED e.g. MULTI STOREY INSTALLATION ON DN20 & DN25 METERING ARRANGEMENT.

No.	ISSUE	DATE	DRAWN	CHECKED	AUTHORISED
A	INITIAL ISSUE	15/06/2018	S. Essery	K. Danenbergsons	D. Eager
B	NOTE 3 AND METER SIGN ADDED	10/09/2018	S. Essery	K. Danenbergsons	C. Patrick

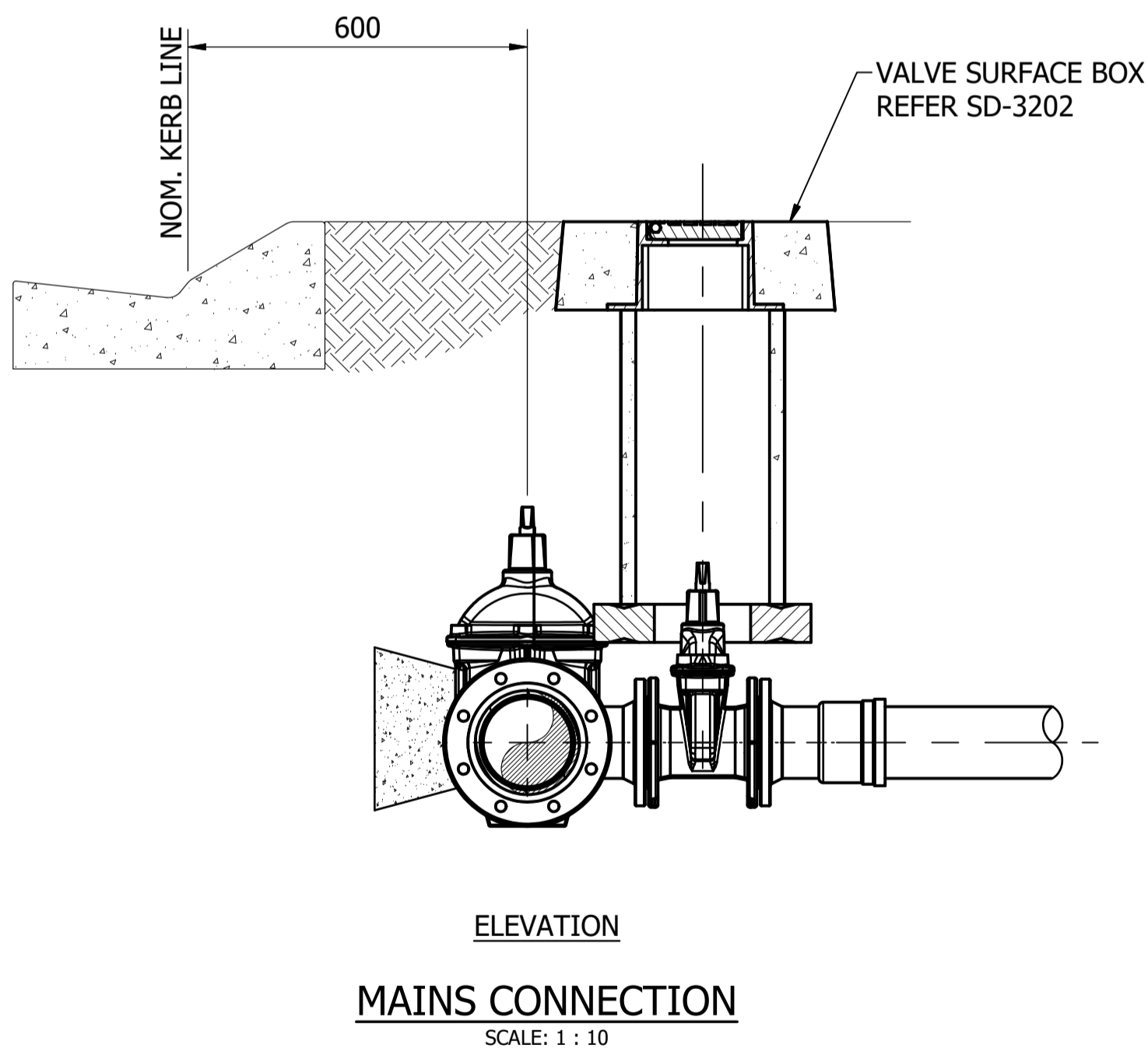
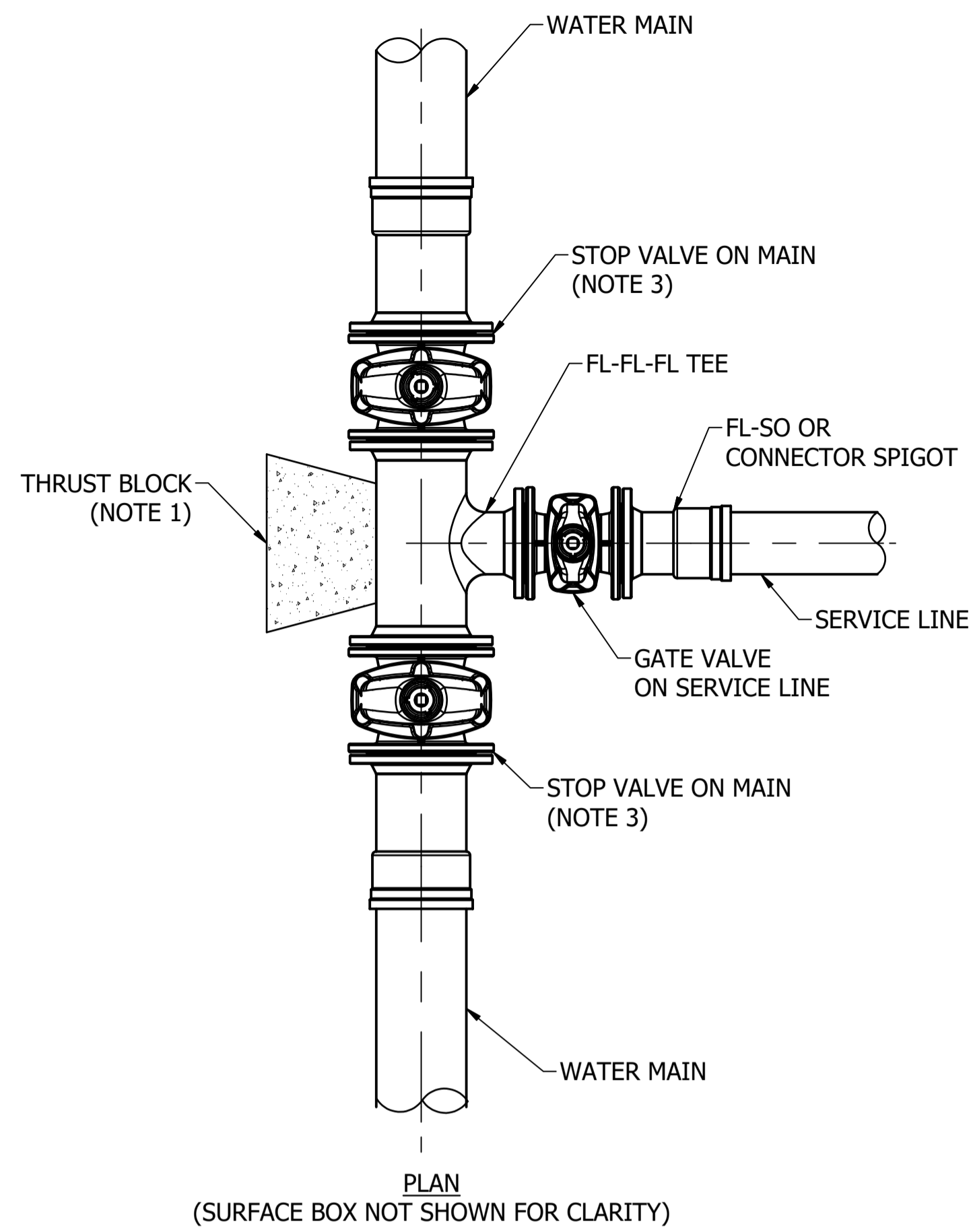
DAM	RES	SPS
BWS	WAT	X STP
WTP	SEW	
WPS	REC	

ASSET AREA APPLICABILITY

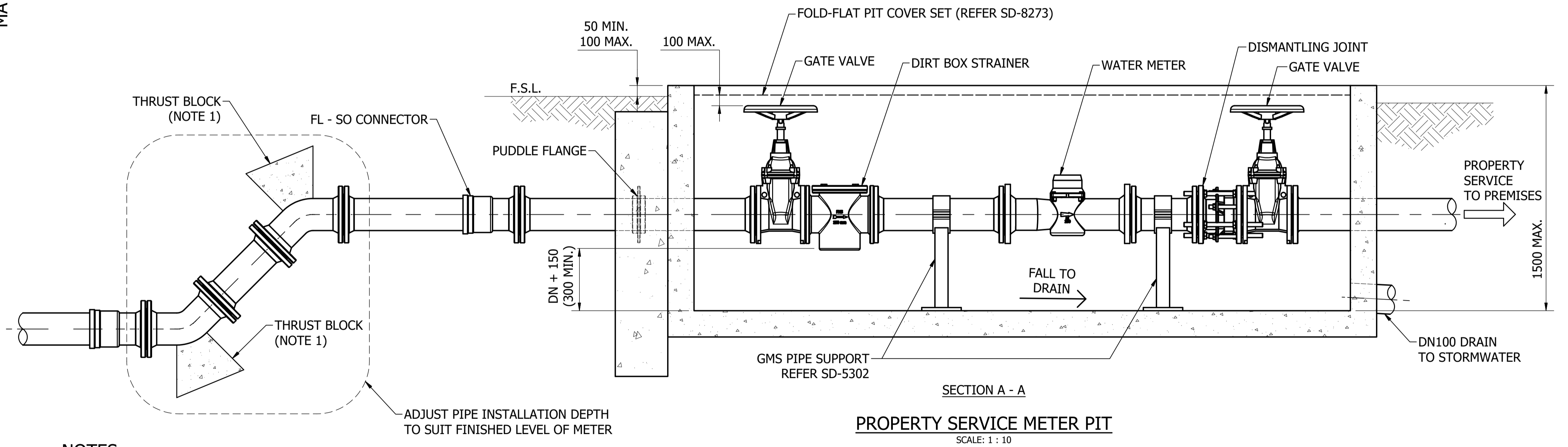
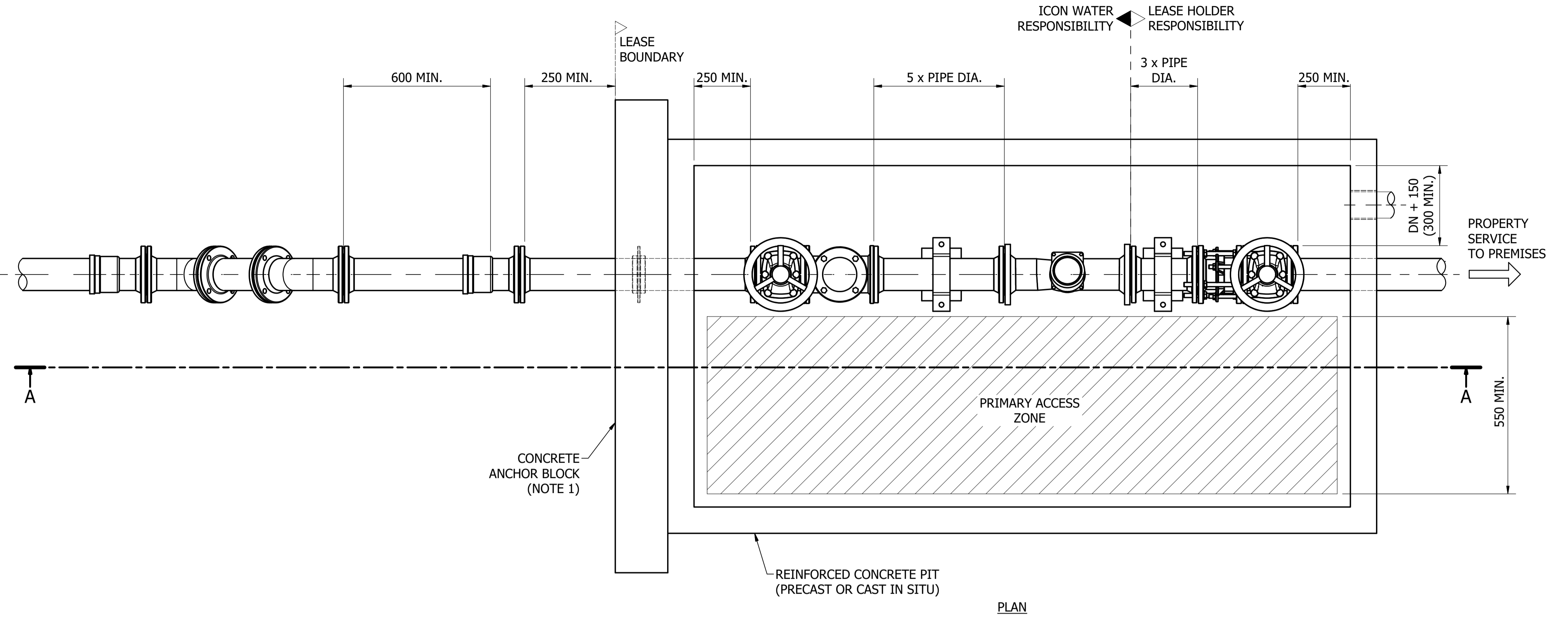


STANDARD DRAWING
WATER SERVICE CONNECTIONS
DN20 TO DN40 METERS
ABOVE GROUND INSTALLATIONS
ARRANGEMENT AND DETAILS

DRAWING STATUS	
Current	
SD-3307-C	
A1	ISSUE B
© Icon Water 2017	



MATCH LINE



NOTES:

1. CONCRETE THRUST BLOCK, ANCHORS AND THRUST WALLS TO BE EITHER ENGINEERED FOR THE SPECIFIC PROJECT OR IN ACCORDANCE WITH SD-5002 AND SD-5003 AS APPROPRIATE
2. REFER TO ICON WATER SPECIFICATION STD-SPE-M-006 FOR DETAILED PROPERTY SERVICE CONNECTION AND METERING REQUIREMENTS.
3. STOP VALVES (ON MAIN) ARE REQUIRED FOR PROPERTY SERVICE CONNECTIONS SIZED DN100 AND LARGER BY DEFAULT. ICON WATER WILL ADVISE (ON A PROJECT-BY-PROJECT BASIS) IF STOP VALVES ARE REQUIRED FOR SMALLER PROPERTY SERVICE CONNECTIONS.

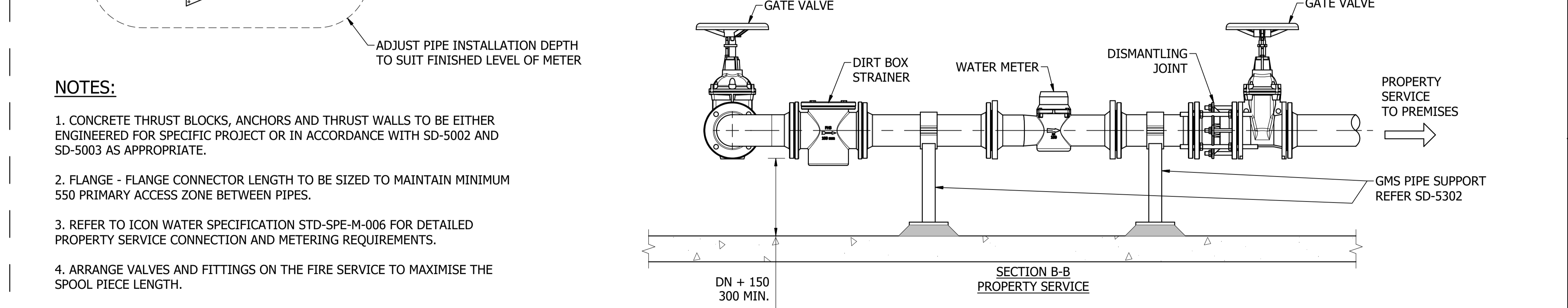
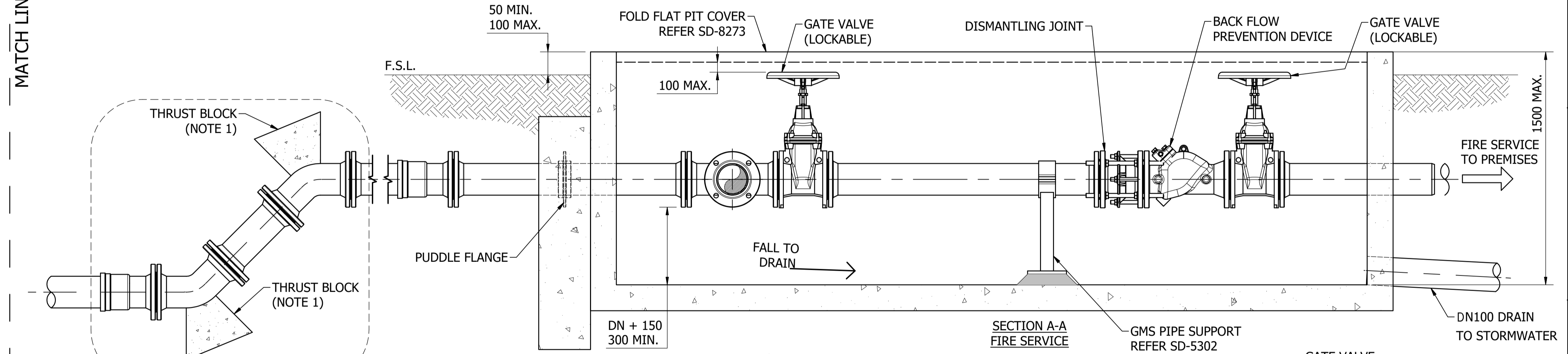
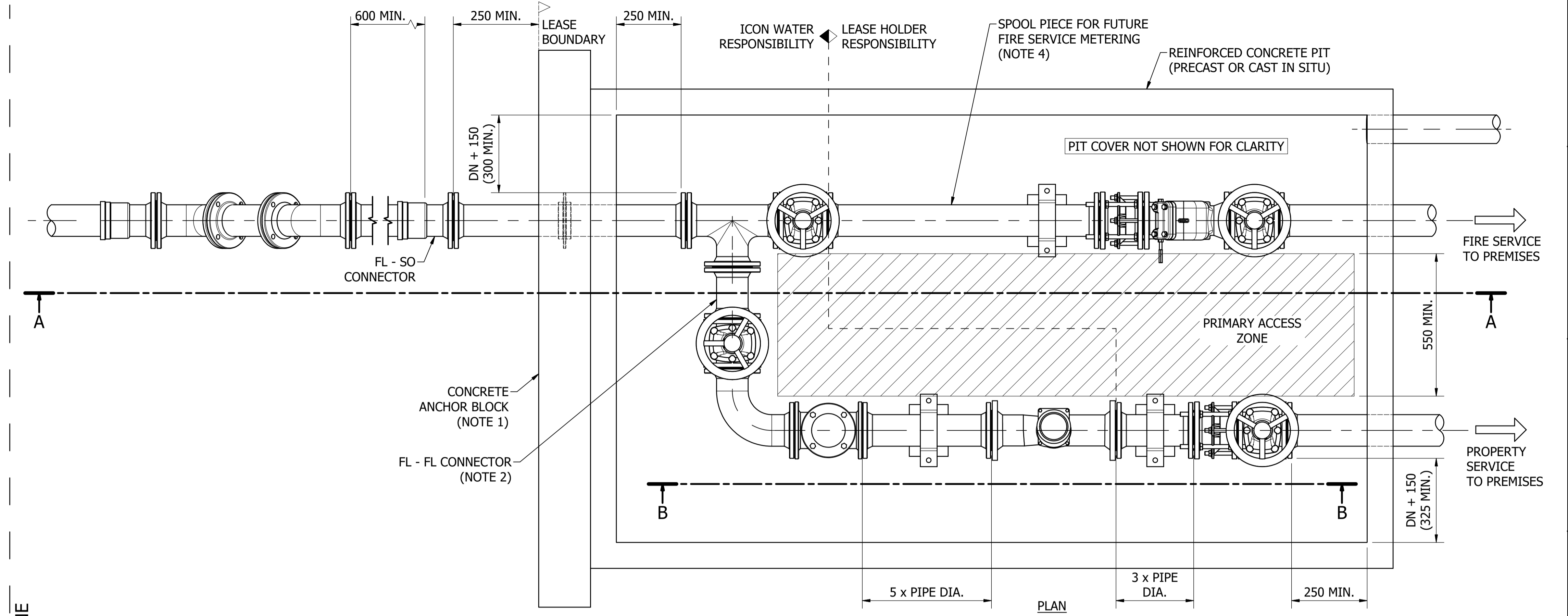
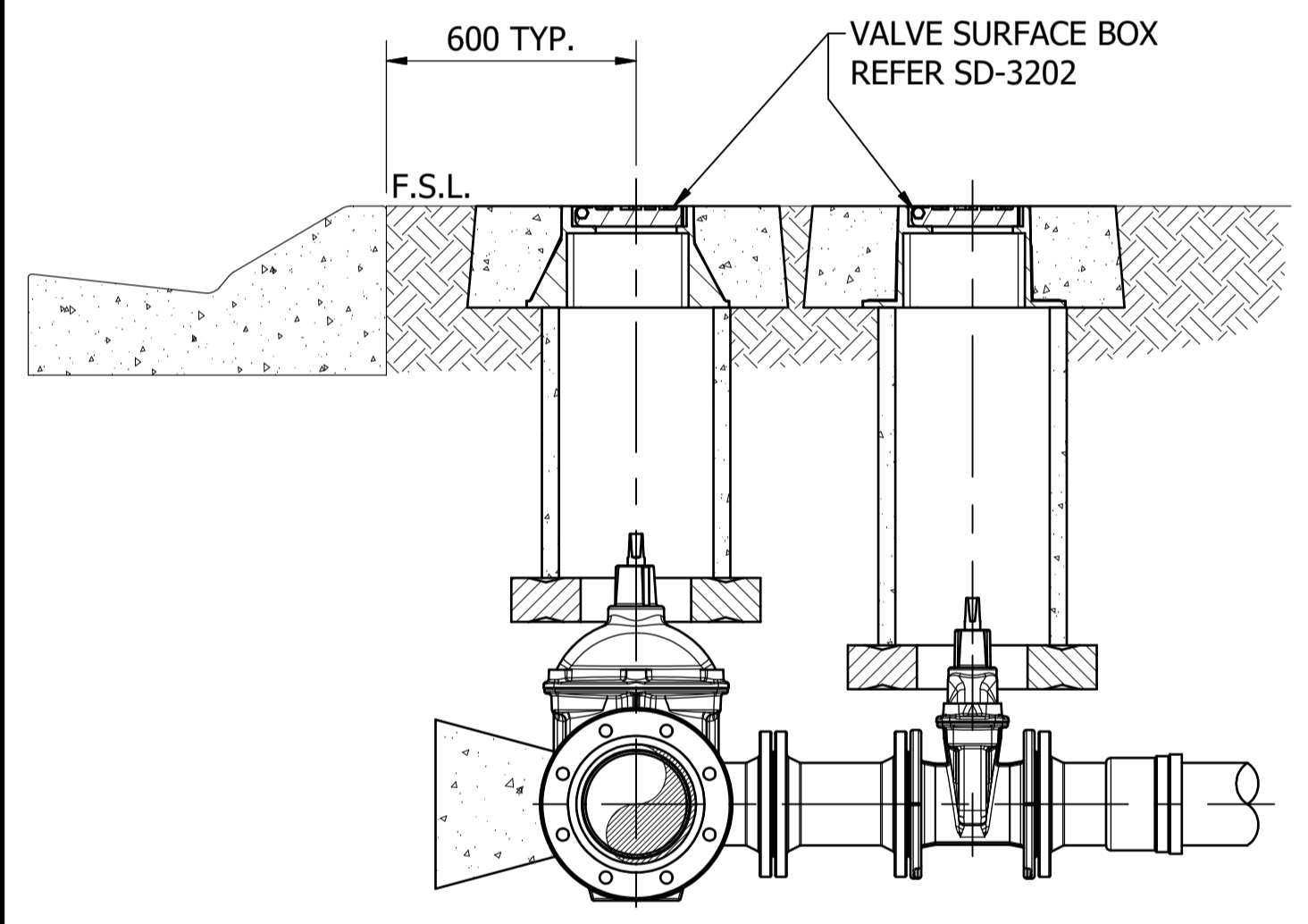
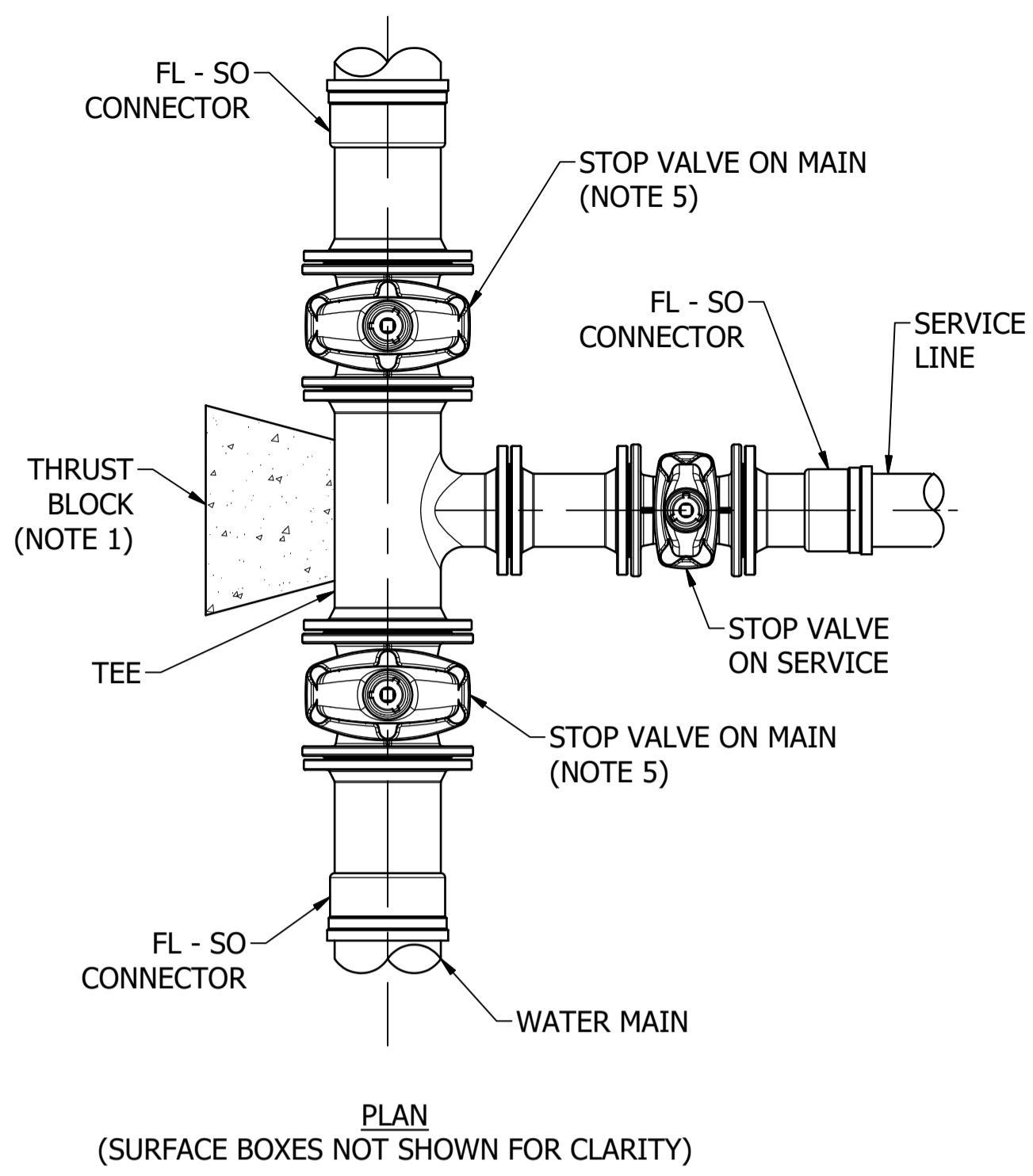
No.	ISSUE	DATE	DRAWN	CHECKED	AUTHORISED
A	INITIAL ISSUE	15/06/2018	S. Essery	K. Danenbergsons	D. Eager
B	VALVES ON MAIN ADDED	19/06/2019	S. Essery	K. Danenbergsons	C. Patrick

ASSET AREA APPLICABILITY	DAM	RES	WAT	SEW	REC	SPS	STP



STANDARD DRAWING
WATER SERVICE CONNECTIONS
WATER METERS DN50 AND LARGER
BELOW GROUND INSTALLATIONS
ARRANGEMENT AND CONNECTION DETAILS

DRAWING STATUS	
Current	
SD-3308-C	
A1	ISSUE B
© Icon Water 2017	



- NOTES:**
1. CONCRETE THRUST BLOCKS, ANCHORS AND THRUST WALLS TO BE EITHER ENGINEERED FOR SPECIFIC PROJECT OR IN ACCORDANCE WITH SD-5002 AND SD-5003 AS APPROPRIATE.
 2. FLANGE - FLANGE CONNECTOR LENGTH TO BE SIZED TO MAINTAIN MINIMUM 550 PRIMARY ACCESS ZONE BETWEEN PIPES.
 3. REFER TO ICON WATER SPECIFICATION STD-SPE-M-006 FOR DETAILED PROPERTY SERVICE CONNECTION AND METERING REQUIREMENTS.
 4. ARRANGE VALVES AND FITTINGS ON THE FIRE SERVICE TO MAXIMISE THE SPOOL PIECE LENGTH.
 5. STOP VALVES (ON MAIN) ARE REQUIRED FOR PROPERTY SERVICE CONNECTIONS SIZED DN100 AND LARGER BY DEFAULT. ICON WATER WILL ADVISE (ON A PROJECT-BY-PROJECT BASIS) IF STOP VALVES ARE REQUIRED FOR SMALLER PROPERTY SERVICE CONNECTIONS.

PROPERTY SERVICE WITH SINGLE FIRE SERVICE METER PIT
SCALE: 1 : 10

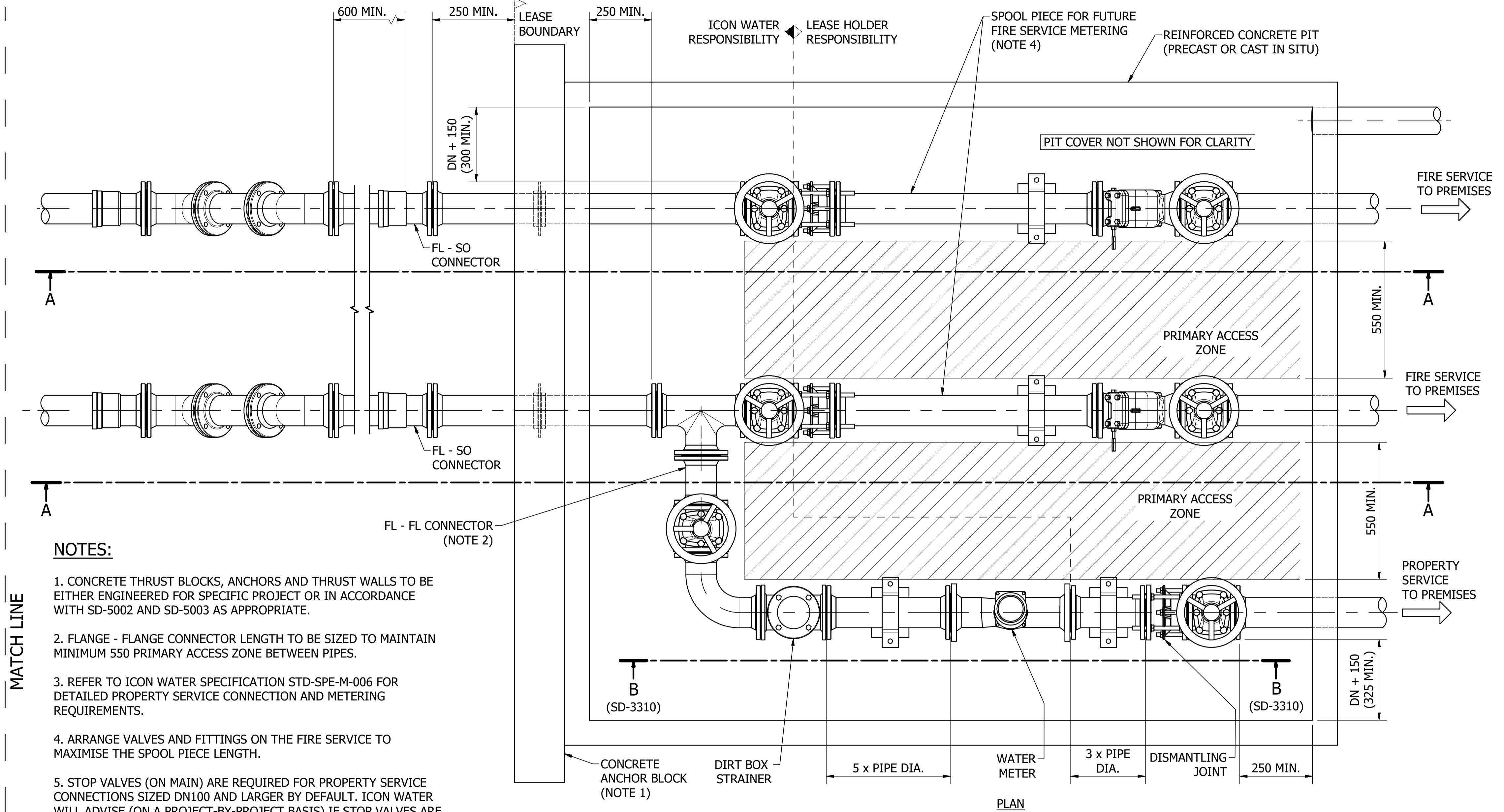
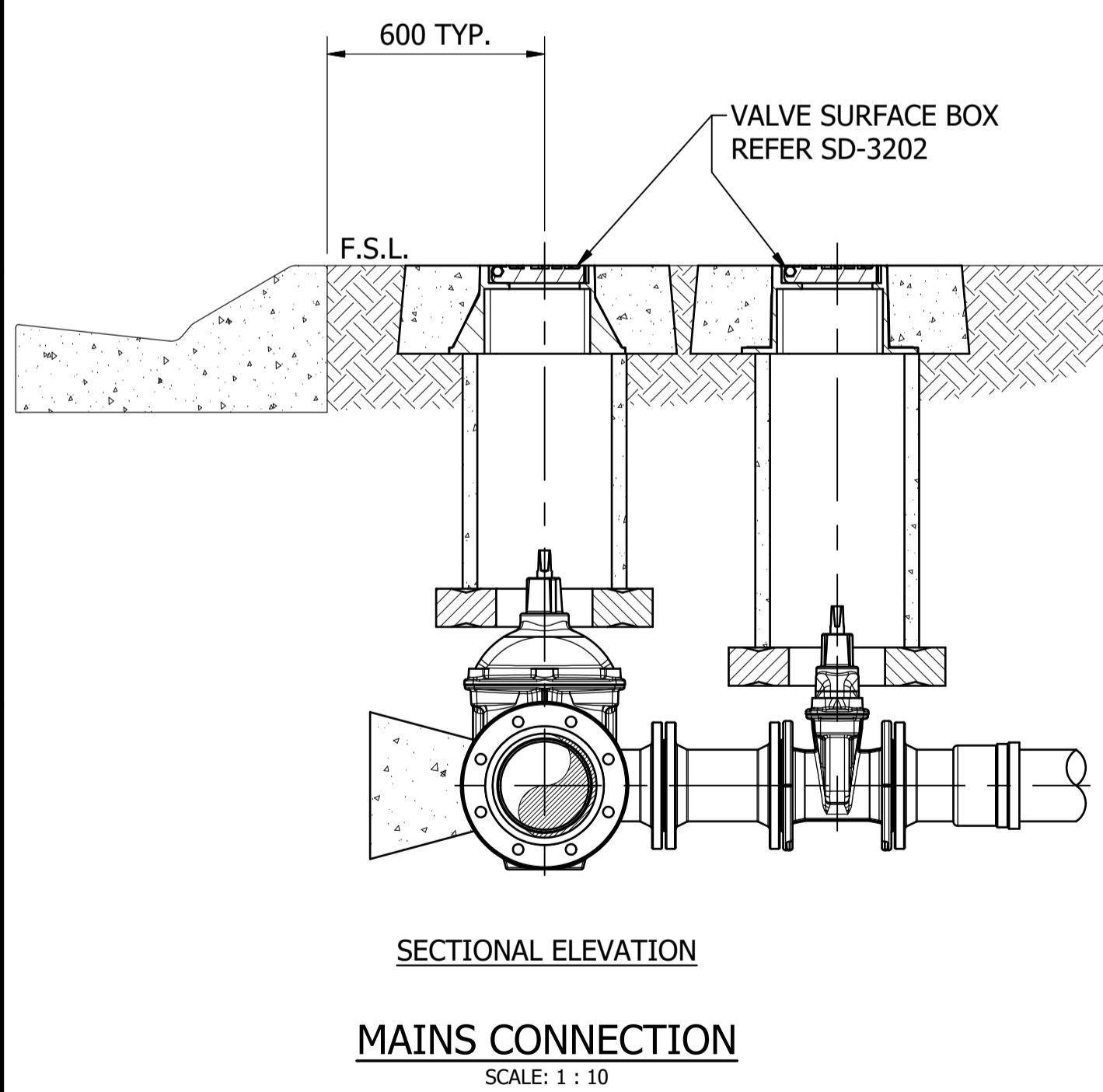
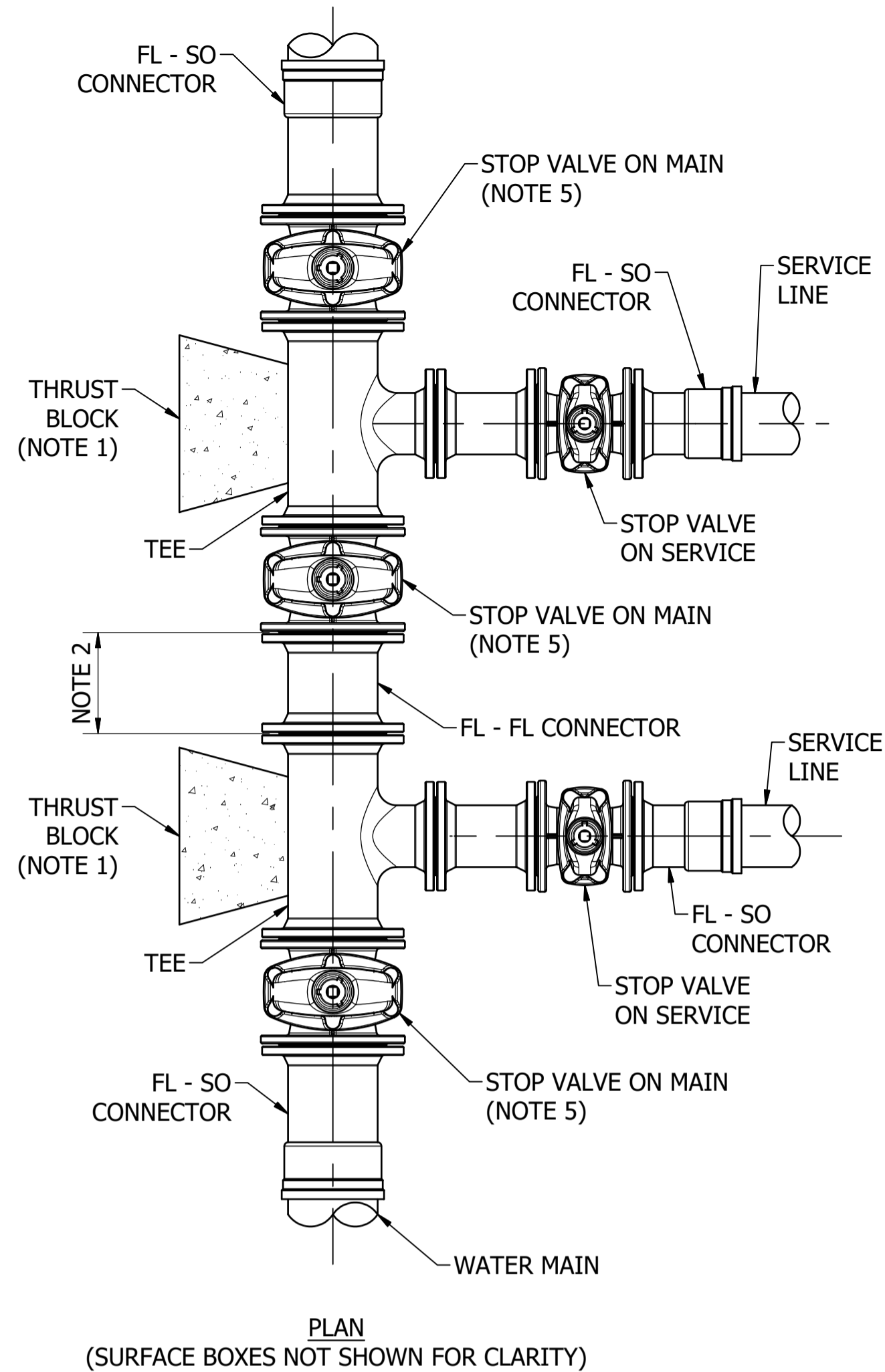
STANDARD DRAWING
WATER SERVICE CONNECTIONS
SINGLE FIRE SERVICE WITH METERED SERVICE
BELOW GROUND INSTALLATION
ARRANGEMENT AND CONNECTION DETAILS

DRAWING STATUS		Current
ISSUE		B
No.		A1
DATE		19/06/2019
DRAWN		S. Essery
CHECKED		K. Danenbergson
AUTHORISED		C. Patrick

INITIAL ISSUE		15/06/2018	M. Matusiak	K. Danenbergson	D. Eager
STOP VALVE NOTE ADDED		19/06/2019	S. Essery	K. Danenbergson	C. Patrick

DAM	RES	SPS
BWS	WAT	STP
WTP	SEW	
WPS	REC	
ASSET AREA APPLICABILITY		

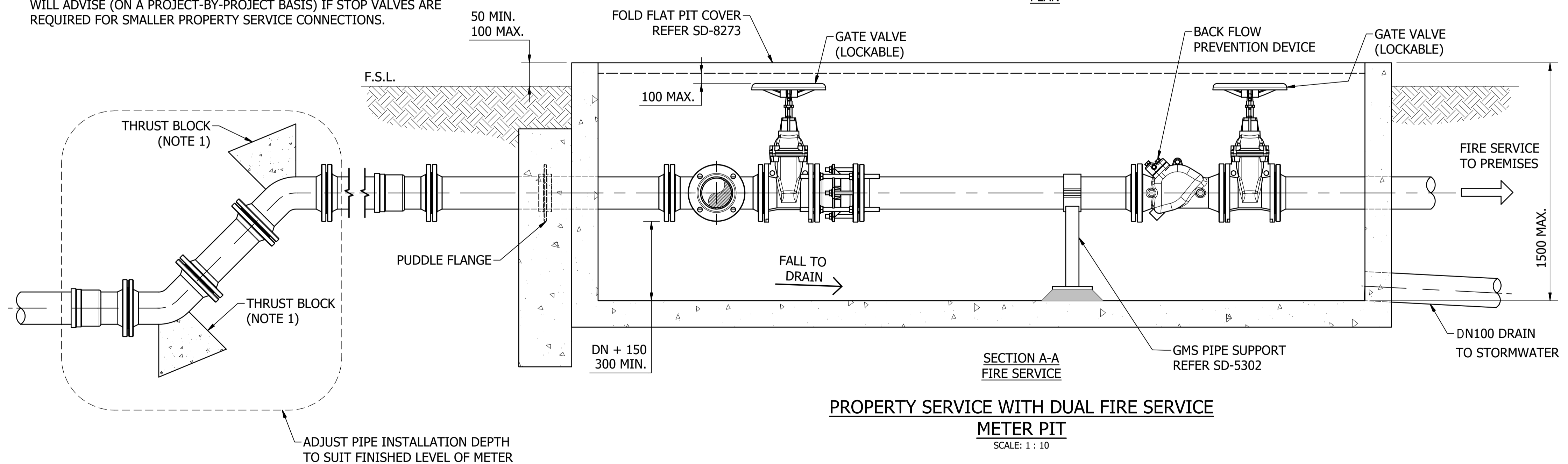




NOTES:

1. CONCRETE THRUST BLOCKS, ANCHORS AND THRUST WALLS TO BE EITHER ENGINEERED FOR SPECIFIC PROJECT OR IN ACCORDANCE WITH SD-5002 AND SD-5003 AS APPROPRIATE.
2. FLANGE - FLANGE CONNECTOR LENGTH TO BE SIZED TO MAINTAIN MINIMUM 550 PRIMARY ACCESS ZONE BETWEEN PIPES.
3. REFER TO ICON WATER SPECIFICATION STD-SPE-M-006 FOR DETAILED PROPERTY SERVICE CONNECTION AND METERING REQUIREMENTS.
4. ARRANGE VALVES AND FITTINGS ON THE FIRE SERVICE TO MAXIMISE THE SPOOL PIECE LENGTH.
5. STOP VALVES (ON MAIN) ARE REQUIRED FOR PROPERTY SERVICE CONNECTIONS SIZED DN100 AND LARGER BY DEFAULT. ICON WATER WILL ADVISE (ON A PROJECT-BY-PROJECT BASIS) IF STOP VALVES ARE REQUIRED FOR SMALLER PROPERTY SERVICE CONNECTIONS.

MATCH LINE



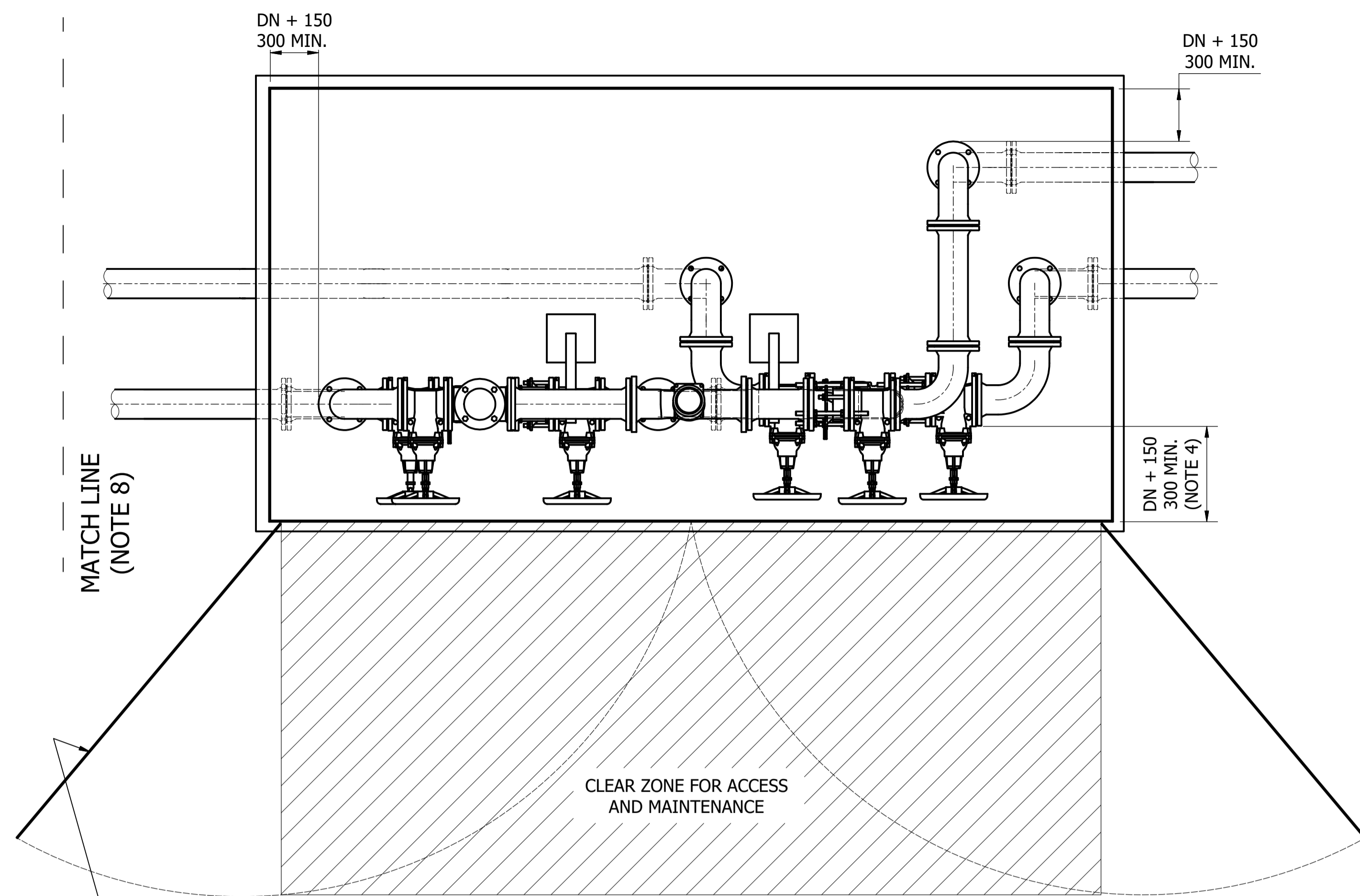
No.	ISSUE	DATE	DRAWN	CHECKED	AUTHORISED
A	INITIAL ISSUE	15/06/2018	M. Matusiak	K. Danenbergsons	D. Eager
B	MAIN VALVE NOTE ADDED	19/06/2019	S. Essery	K. Danenbergsons	C. Patrick

ASSET AREA APPLICABILITY		
DAM	RES	SPS
BWS	WAT	STP
WTP	SEW	
WPS	REC	



STANDARD DRAWING
WATER SERVICE CONNECTIONS
DUAL FIRE SERVICE WITH METERED SERVICE
BELOW GROUND INSTALLATION
ARRANGEMENT AND CONNECTION DETAILS

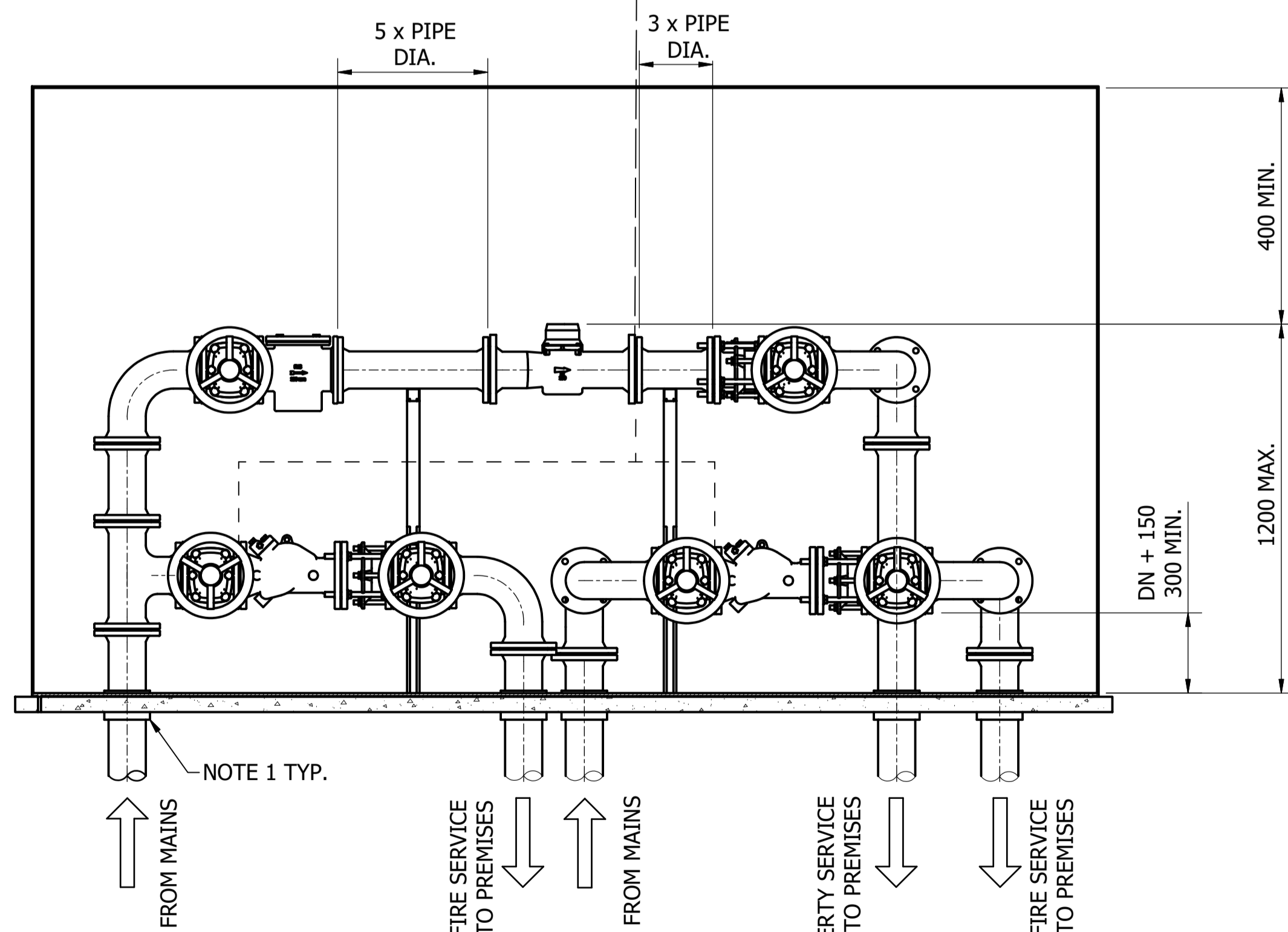
DRAWING STATUS	
Current	
SD-3312-C	
A1	ISSUE B
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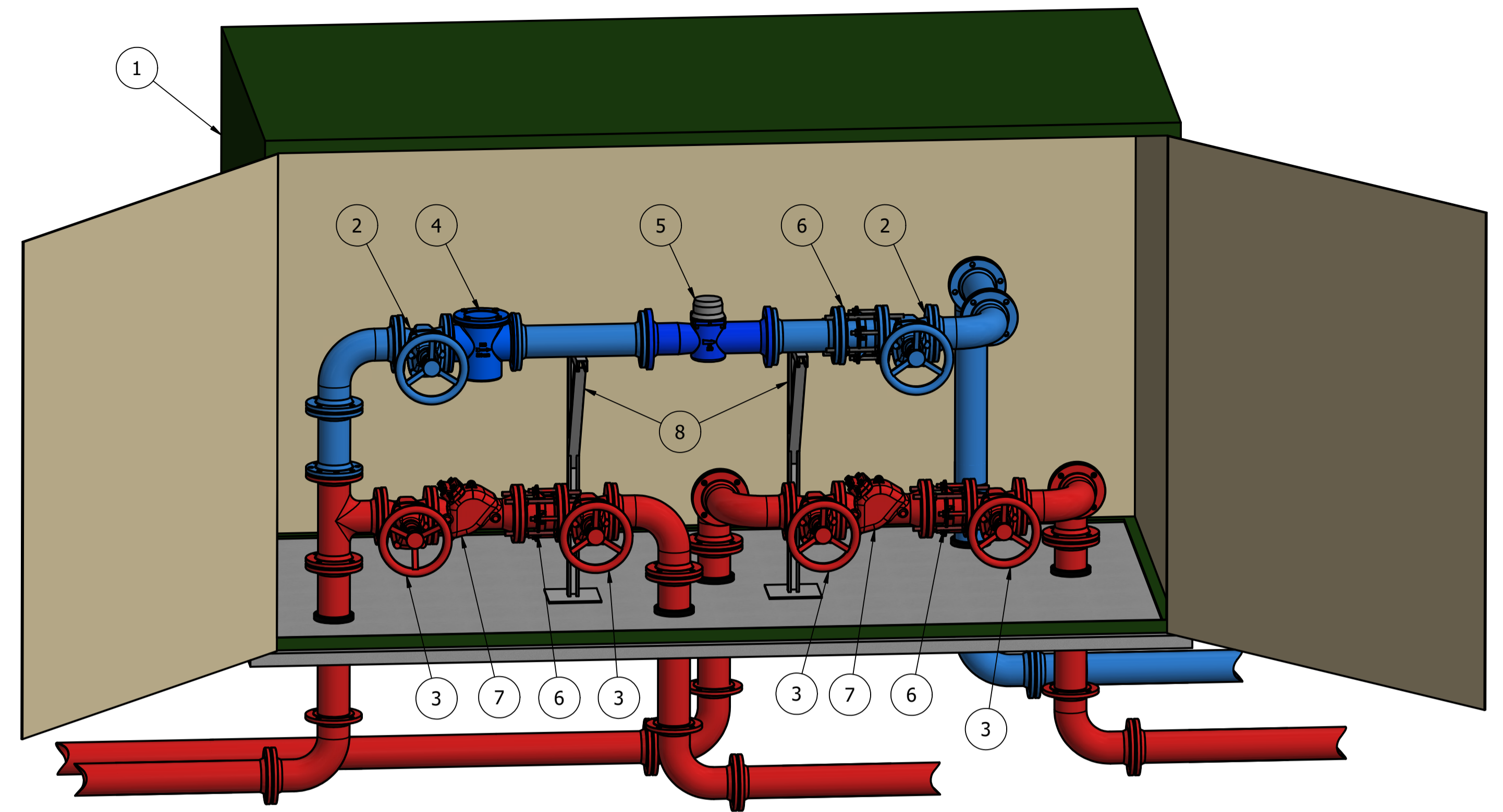
PLAN

AFFIX "WATER METER" SIGN TO EXTERNAL SIDE OF DOOR. REFER SD-1307

ICON WATER RESPONSIBILITY LEASE HOLDER RESPONSIBILITY



FRONT ELEVATION (DOORS REMOVED FOR CLARITY)



ISOMETRIC VIEW

SCALE: NTS

PARTS LIST

ITEM	DESCRIPTION
1	METERING ENCLOSURE - POWDER COATED GALVANISED STEEL (NOTE 2 & 3)
2	GATE VALVE
3	GATE VALVE (LOCKABLE)
4	DIRT BOX STRAINER
5	WATER METER
6	DISMANTLING JOINT (NOTE 7)
7	BACKFLOW PREVENTION DEVICE
8	PIPE SUPPORTS (UNISTRUT OR EQUIVALENT)

NOTES:

- RISER PIPEWORK SHALL BE INSULATED AND NOT IN DIRECT CONTACT WITH STEEL OR CONCRETE SURFACES.
- METERING ENCLOSURES SHALL HAVE KNAUF "CLIMAFOAM XPS" INSULATION BOARDS INSTALLED TO ALL INTERNAL SURFACES (INCLUDING DOORS) OF 30 mm MIN. THICKNESS. ALTERNATIVES SUCH AS BLOCK OR BRICK CONSTRUCTIONS ARE ACCEPTABLE IN LIEU OF GALVANISED STEEL.
- THE ENCLOSURE FINISH COLOUR SHALL BE NOMINATED BY THE DESIGNER TO SUIT THE PREVAILING ARCHITECTURE / STREETScape. THE FINISH COLOUR MUST BE SHOWN ON THE DESIGN DRAWINGS FOR ACCEPTANCE BY ICON WATER. OTHERWISE, THE DEFAULT FINISH COLOUR SHALL BE G66 ENVIRONMENT GREEN TO AS 2700.
- WORKING CLEARANCES TO THE FRONT OF THE CABINET CAN BE MINIMISED IF ADEQUATE ACCESS CAN BE ACHIEVED WHILST THE DOORS OF THE STRUCTURE ARE OPEN.
- ALL PIPEWORK AND TUBING OF SIZES DN50 AND SMALLER SHALL BE INSULATED TO PREVENT FREEZING. REFER TO ICON WATER'S APPROVED PRODUCTS LIST FOR ACCEPTABLE INSULATION.
- CLEARANCE BETWEEN FLANGES AND PIPEWORK OR FIXED STRUCTURES TO BE DN + 150 (MIN. 300) TO ALLOW FOR MAINTENANCE ACCESS.
- DISMANTLING JOINTS ARE NOT REQUIRED IF MAINTENANCE CAN BE CARRIED OUT WITHOUT UNDUE FORCE BEING APPLIED TO ANY PIPEWORK OR FITTING.
- FOR MAINS CONNECTION DETAILS REFER TO THE MATCH LINE ON THE FOLLOWING DRAWINGS:
METER ≥ DN50 REFER SD-3308
METER WITH SINGLE FIRE SERVICE REFER SD-3310
METER WITH DUAL FIRE SERVICE REFER SD-3312
- THE PIPE AND FITTINGS LAYOUT SHOWN IS AN EXAMPLE ONLY. OTHER LAYOUTS ARE ACCEPTABLE, PROVIDED THAT THE CLEARANCES AND ARRANGEMENTS SHOWN IN THIS DRAWING ARE ADHERED TO AND ACT FIRE & RESCUE HAVE APPROVED THE ARRANGEMENT IN WRITING.
- REFER TO ICON WATER SPECIFICATION STD-SPE-M-006 FOR DETAILED PROPERTY SERVICE CONNECTION AND METERING REQUIREMENTS.

No.	ISSUE	DATE	DRAWN	CHECKED	AUTHORISED
A	INITIAL ISSUE	15/06/2018	S. Essery	K. Danenbergsons	D. Eager
B	ENCLOSURE COLOUR NOTE AND METER SIGN ADDED	10/09/2018	S. Essery	K. Danenbergsons	C. Patrick

DAM	RES	SPS
BWS	WAT	STP
WTP	SEW	
WPS	REC	

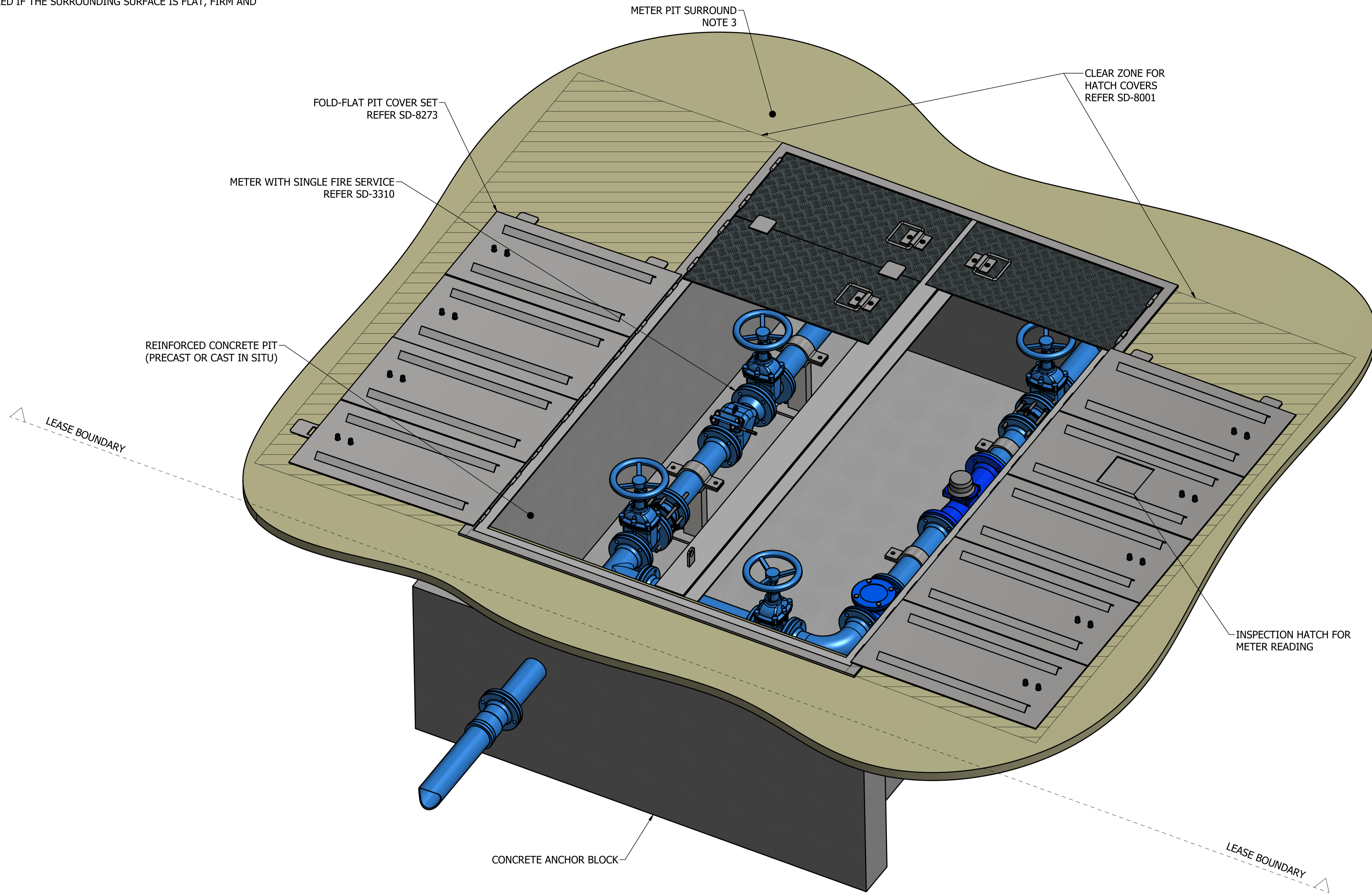


STANDARD DRAWING
WATER SERVICE CONNECTIONS
DUAL FIRE SERVICE WITH METERED SERVICE
ABOVE GROUND INSTALLATION
ARRANGEMENT AND DETAILS

DRAWING STATUS	
Current	
SD-3313-C	
A1	ISSUE B

NOTES:

1. REFER TO ICON WATER SPECIFICATION STD-SPE-M-006 FOR DETAILED PROPERTY SERVICE CONNECTION AND METERING REQUIREMENTS.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH SD-3310.
3. CONCRETE APRON IS NOT REQUIRED IF THE SURROUNDING SURFACE IS FLAT, FIRM AND LEVEL (e.g. LAWN OR ROAD BASE)



A	INITIAL ISSUE	15/06/2018	S. Essery	K. Danenbergsons D. Eager
No.	ISSUE	DATE	DRAWN	CHECKED AUTHORISED

DAM	RES	SPS
BWS	WAT	X STP
WTP	SEW	
WPS	REC	
ASSET AREA APPLICABILITY		



STANDARD DRAWING
 WATER SERVICE CONNECTIONS
 EXAMPLE BELOW GROUND INSTALLATION
 SINGLE FIRE SERVICE WITH METERED SERVICE

DRAWING STATUS	
Current	
SD-3314-C	
A1	ISSUE A
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