

W-01	Valve Box Installation	Jan/18
W-01A	Valve Box Installation Horizontal Direct Bury	Jan/18
W-02	Hydrant Installation	Aug/10
W-02A	Hydrant Installation in Narrow Streets	Aug/10
W-03	Support of Mains over Uncompacted Areas	Aug/10
W-04	Watermain Trench Excavation and Backfill Details	Aug/10
W-05	Gate Valve Manhole	Aug/10
W-06	Detail for Watermain Crossing Beneath Sewer Main	Aug/10
W-08	Winter Service Hydrant Type Irrigation Outlet	Aug/10
W-09	50 mm Above Grade Irrigation Kiosks Site Plan and Concrete Base Details	Jun/26
W-09A	75mm and 100 mm Above Grade Irrigation Kiosks Site Plan and Base Details	Jun/26
W-10.CAB	50 mm Irrigation Service Kiosk CABINET	Nov/25
W-10.INT1	50 mm Irrigation Service Kiosk Interior Equipment Layout (No Booster Pump)	Nov/25
W-10.INT2	50 mm Irrigation Service Kiosk Interior Equipment Layout (With Booster Pump)	Nov/25
W-11.CAB1	75mm + 100mm Irrigation Service Kiosk CABINET (No Booster Pump)	Jan/26
W-11.CAB2	75mm + 100mm Irrigation Service Kiosk CABINET (With Booster Pump)	Jan/26
W-11.INT1	75mm + 100mm Irrigation Service Kiosk Interior Equipment Layout (No Booster Pump)	Jan/26
W-11.INT2	75mm + 100mm Irrigation Service Kiosk Interior Equipment Layout (With Booster Pump)	Jan/26
W-12	Detail for Dead-end Watermain Flushout	Aug/10
W-13	Thrust Blocks	Aug/10
W-14	Mechanical Thrust Restraints	Aug/10
W-15	Valve Anchoring	Aug/10
W-16A(100)	Details of 100mm Water Service Extensions to Irrigation Kiosks	Sep/15
W-16B (50)	Details of 50mm Water Service Extensions to Irrigation Kiosks	Sep/15
W-17	Water Service Connection – 50mm and Smaller Services	Aug/10
W-18	Water Service Curb Box – 50mm and Smaller Services	Jan/18
W-19	Multiple Service and Deadend Watermain Connections	Aug/10
W-23	Blowoff from Steel Pipeline	Aug/10

W-24	Drain/Blowoff Connection from Non-Steel Pipelines	Aug/10
W-25	Cathodic Protection of Cast Iron Fittings	Aug/10
W-26	Cathodic Protection of Gate Valves	Aug/10
W-27	Cathodic Protection of Hydrant Using Eyelet Connection	Aug/10
W-28	Cathodic Protection of Hydrant Using Cadweld Connection	Aug/10
W-29	Typical Cadweld Description and Details	Aug/10
W-30	Water Meter/Backflow Preventer Installation Requirements for Multi Metered Locations – Alt-1	Oct/23
W-31	Water Meter/Backflow Preventer Installation Requirements for Multi Metered Locations – Alt-2	Oct/23
W-32	Water Meter Installation for 40mm or 50mm Domestic Supply Pipe Sizes	Oct/23
W-33	Water Meter Installation for 75mm or 100mm Domestic Supply Pipe Sizes	Oct/23
W-34	Water Meter Installation for Summer Service Irrigation Meters	Feb/24
W-36	Steel Watermain Hot Tap Connections	Aug/10
W-37	Residential Water Meter Installation	Mar/24
W-38	Temporary Crossing over Critical Infrastructure	Jan/18

INSTALL 42x89x1000 LONG WOODEN MARKER POST AT 150 FROM VALVE BOX. EMBED HALF IN GROUND. EXPOSED HALF TO BE PAINTED BRIGHT RED.

SET UPPER VALVE BOX SECTION AT FINISHED GRADE AND SUPPORT SECURELY

C.I. COVER

CAST IRON UPPER BOX SECTION c/w FLANGE. SEE NOTE 1.

MIN. 150 INSERTION

11mm W.T. MIN.

150 ID MIN.

1200mm UNDER ROADWAY
760mm OTHERWISE

NOTE 2.

2400

6mm W.T. MIN.

127 ID MIN.

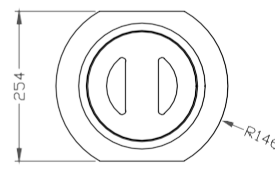
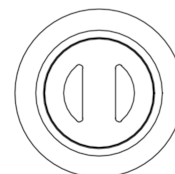
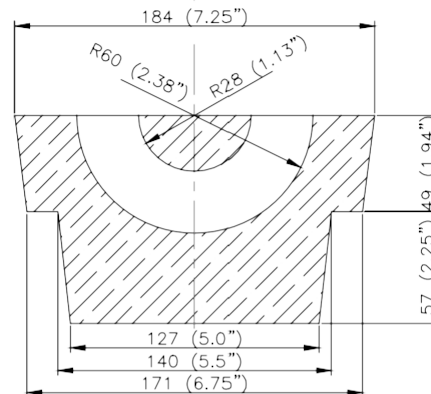
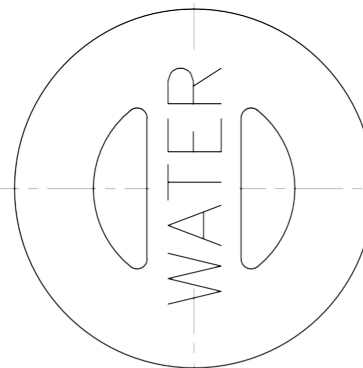
PVC LOWER VALVE BOX SECTION. INSTALL STRAIGHT AND PLUMB AND CENTERED OVER VALVE NUT.

50 SQUARE VALVE OPERATING NUT

FLARED SECTION 194 I.D. x MINIMUM 6 WALL THICKNESS

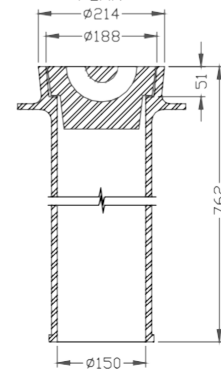
GATE VALVE

VALVE ANCHOR BLOCK. SEE DRAWING W-15

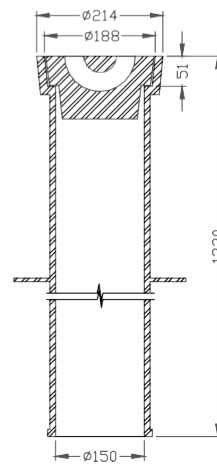


PLAN

PLAN



760mm UPPER VALVE BOX



1200mm UPPER VALVE BOX

NOTES:

1. WHERE THE LOCATION OF THE VALVE IS UNDER A ROADWAY USE A 1200 LONG UPPER VALVE BOX SECTION. WHERE THE VALVE LOCATION IS NOT UNDER A ROADWAY USE A 760 LONG UPPER VALVE BOX SECTION.

2. LOCKING RING (OPTIONAL)

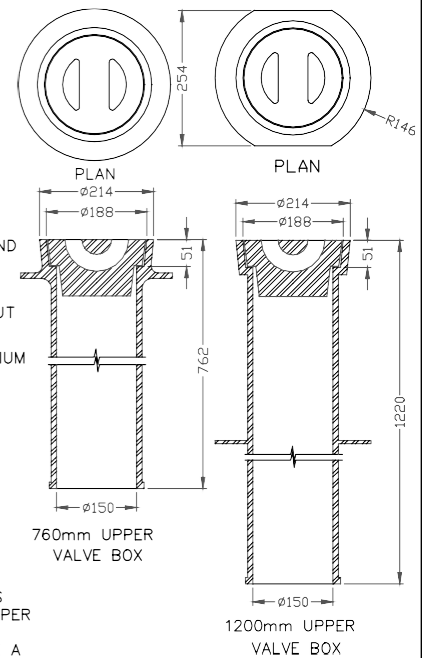
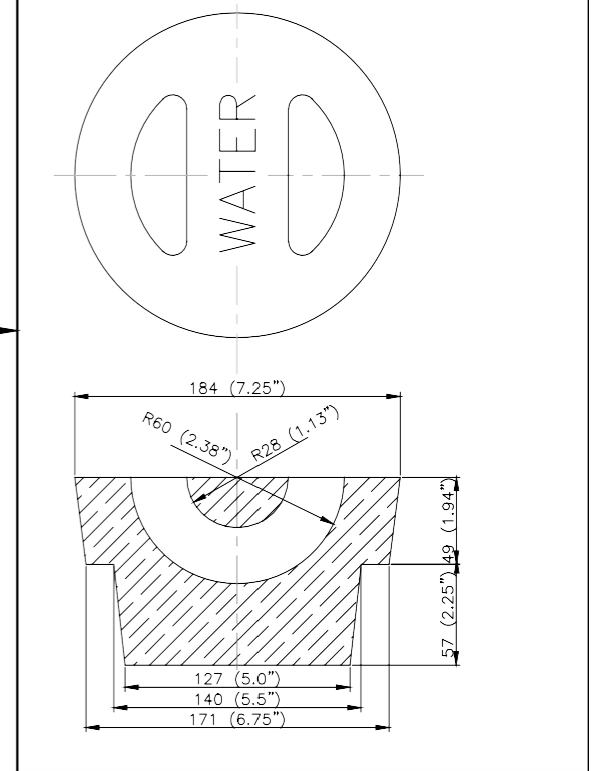
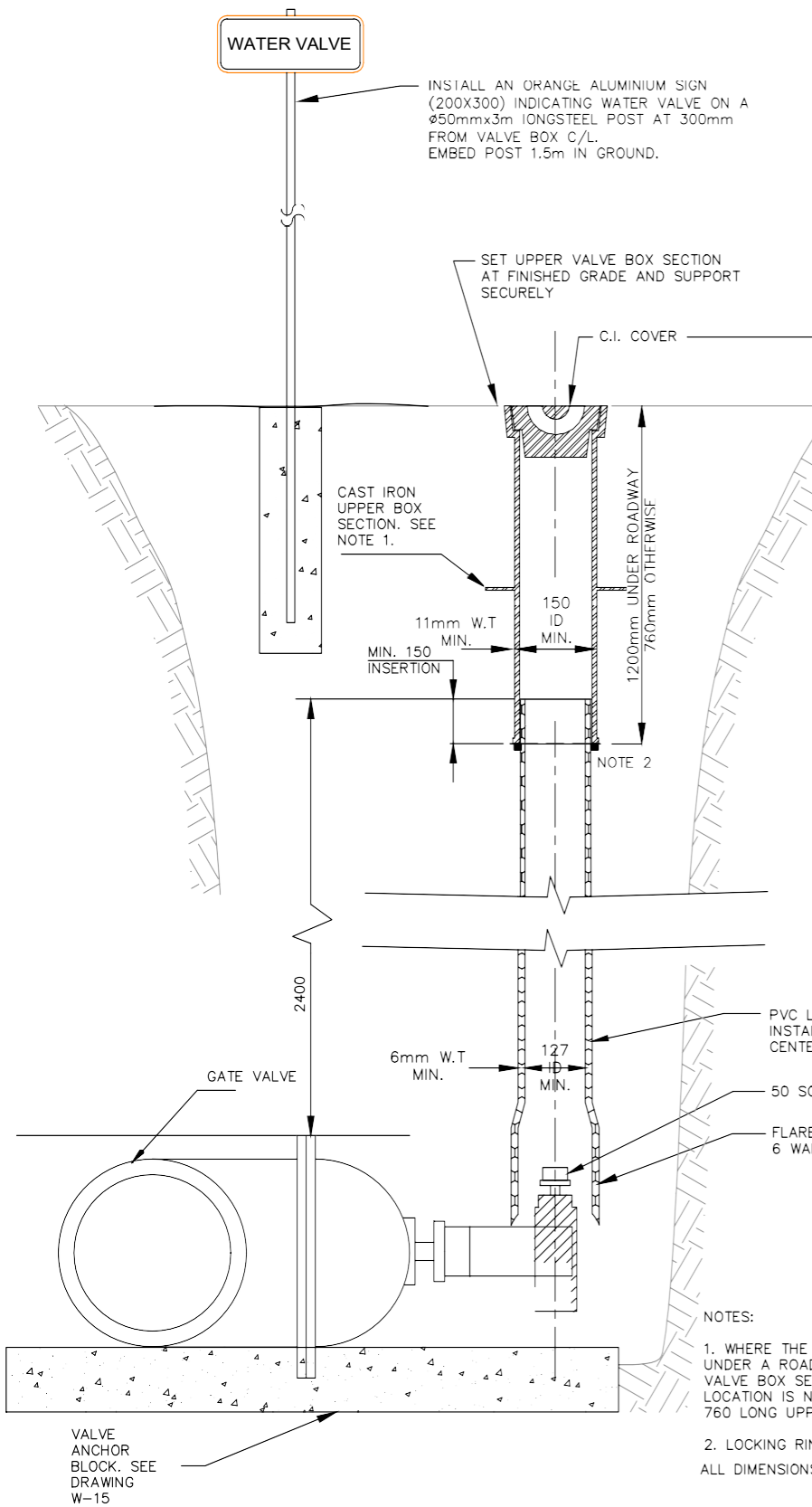
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By
NOV/98	REVISED/RENUMBERED	SB
SEP/97	GENERAL REVISIONS	SB
JAN/97	GENERAL REVISIONS	SB
AUG/10	TITLE BLOCK	JJA
AUG/15	DIMENSIONS ADDED	PI
SEP/15	REVISED DIMENSION AND NOTES	PI
JAN/18	REVISED UPPER BOX DETAILS	BW



CONSTRUCTION STANDARDS Valve Box Installation

Designed By:		Approved: Dustin McCall	
Date	JAN/18	Scale	NTS
Digital File: Stdw-01.dwg		W-01	



NOTES:

1. WHERE THE LOCATION OF THE VALVE IS UNDER A ROADWAY USE A 1200 LONG UPPER VALVE BOX SECTION. WHERE THE VALVE LOCATION IS NOT UNDER A ROADWAY USE A 760 LONG UPPER VALVE BOX SECTION.

2. LOCKING RING OPTIONAL.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By
AUG/10	TITLE BLOCK	JJA
AUG/15	DIMENSIONS ADDED	PI
SEPT/15	REVISED DIMENSION AND NOTES	PI
JAN/18	REVISED UPPER VALVE BOX DETAIL	BW



CONSTRUCTION STANDARDS

Valve Box Installation

Horizontal Direct Bury

Designed By:

Approved:

Dustin McCall

Date

JAN/18

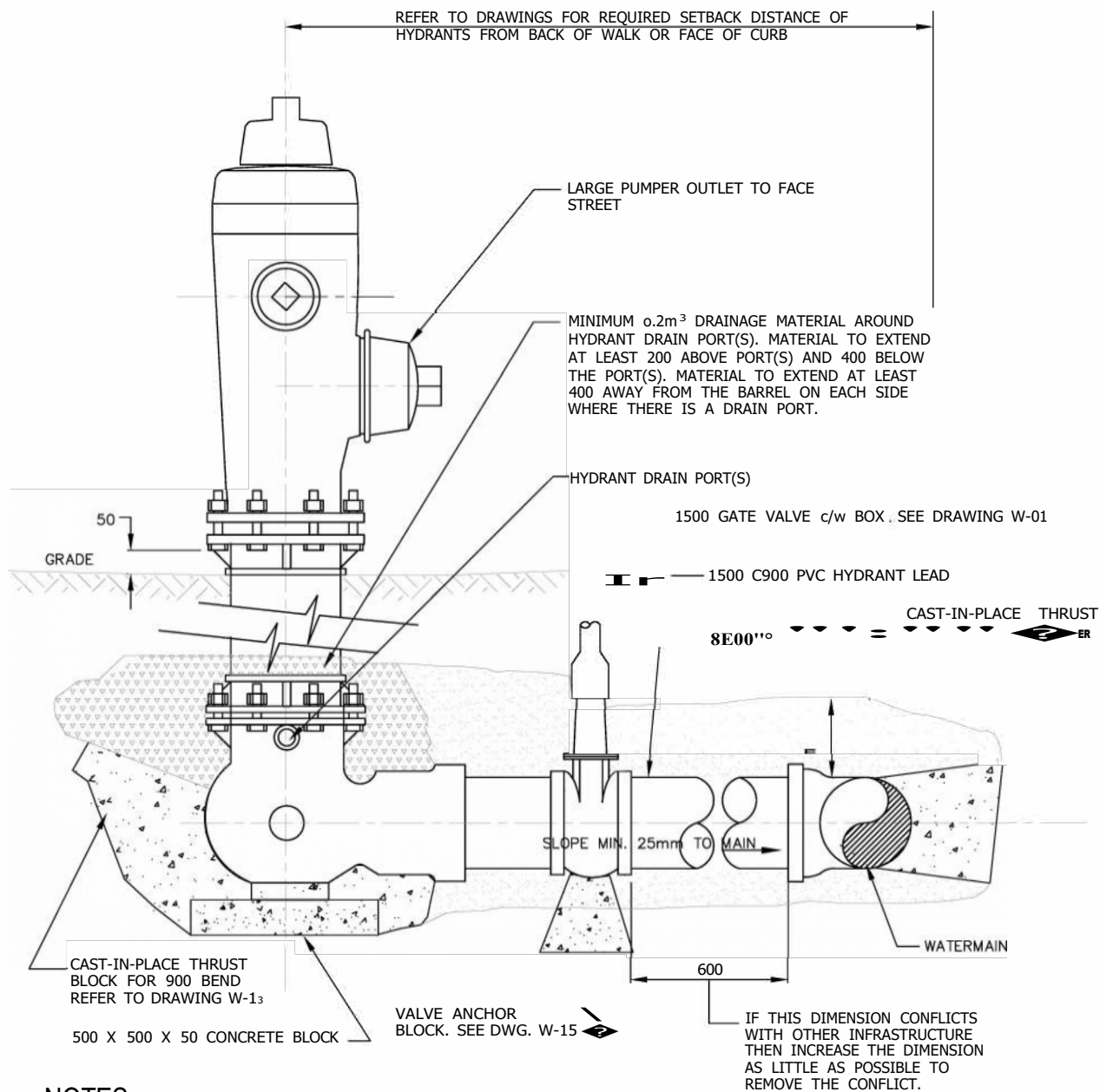
Scale

NTS

W-01A

Digital File:

Stdw-01A.dwg



NOTES:

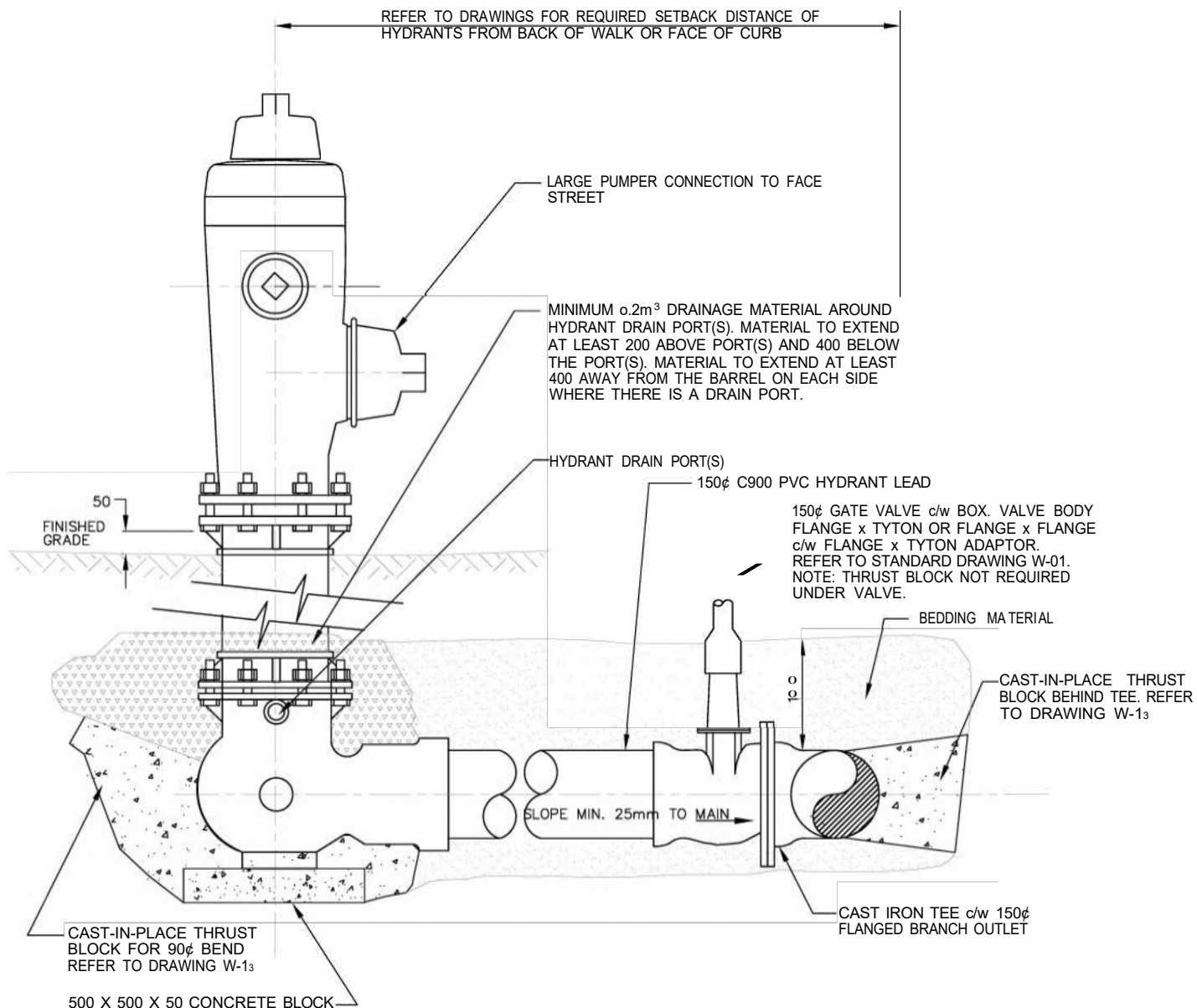
- 1) WHERE USE OF THIS DETAIL WOULD RESULT IN THE HYDRANT ISOLATING VALVE BOX BEING LOCATED UNDER EITHER GUTTER OR SIDEWALK - REFER TO AND USE THE DETAIL PRESENTED ON STANDARD DRAWING W-02A.
- 2) FOR THRUST BLOCK CONCRETE REQUIREMENTS REFER TO SPECIFICATIONS SECTION 02511-WATERMAINS

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By
MAR/05	NOTES REVISED	SB
APR/01	GATE VALVE REQUIREMENT	SB
SEP/99	MINOR REVISIONS	SB
NOV/98	RENUMBERED FROM W-7	SB
AUG/10	TITLE BLOCK	JJA



CONSTRUCTION STANDARDS			
Hydrant Installation			
Designed By:		Approved:	
Date	JUN/83	Scale	NTS
Digital File:		W-02	
Stdw-02.dwg			



NOTES:

USE THIS DETAIL IN THOSE LOCATIONS WHERE USE OF THE DETAIL ON STANDARD DRAWING W-02 WOULD RESULT IN THE VALVE BOX BEING INSTALLED UNDER EITHER GUTTER OR SIDEWALK.

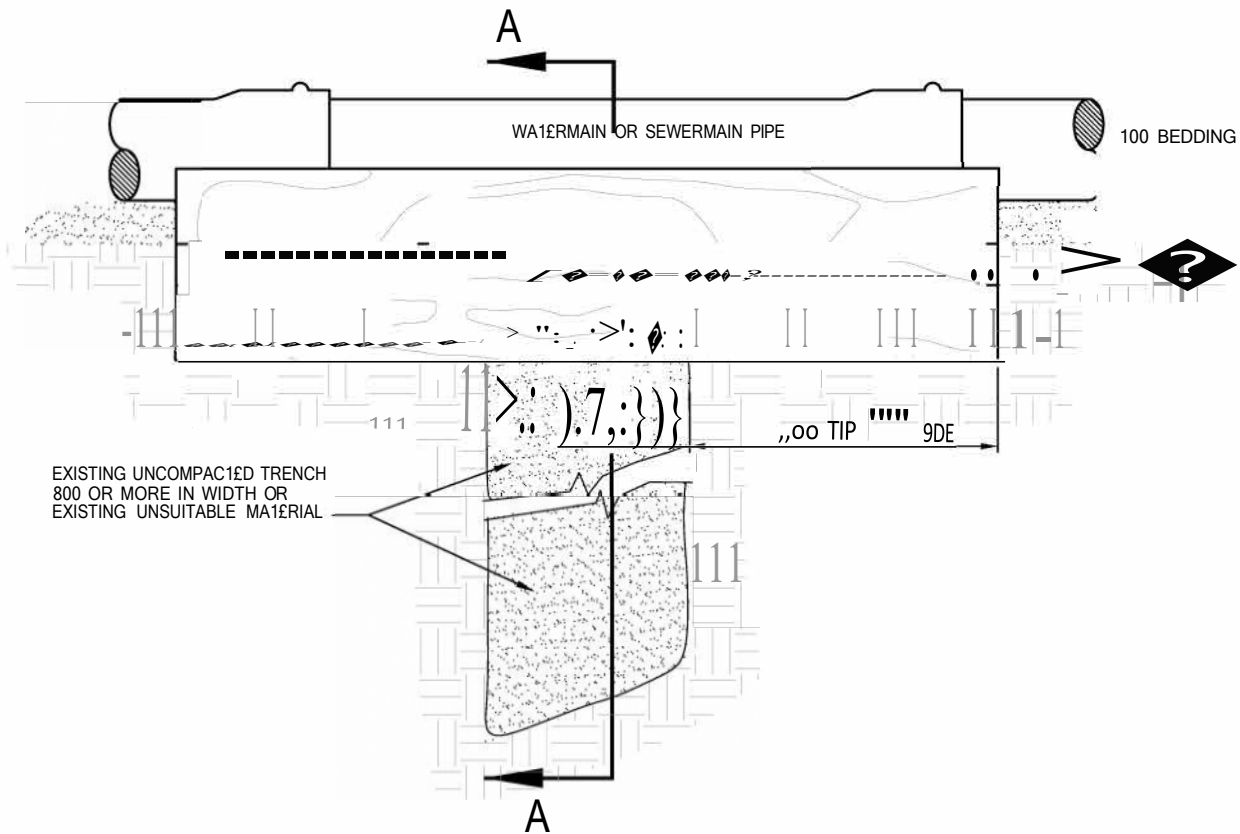
FOR MATERIALS AND INSTALLATION REQUIREMENTS REFER TO STANDARD CONSTRUCTION SPECIFICATIONS SECTIONS 02315 AND 02511.

IN LOCATIONS WHERE THE EXISTING WATERMAIN IS UNDER THE SIDEWALK OR GUTTER CONSULT ENGINEERING AND WORKS PRIOR TO PROCEEDING.

CORROSION PROTECTION FOR HYDRANT BODY TO BE SACRIFICIAL ANODE NOT PETROLATUM ENCAPSULATION.

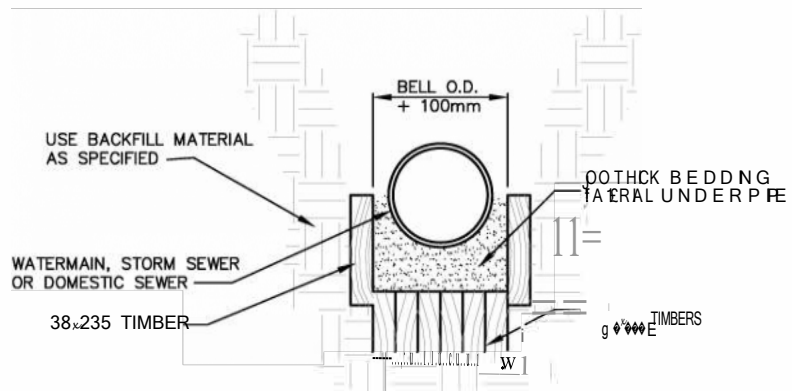
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By	 REGINA	CONSTRUCTION STANDARDS		
FEB/05	NEW NARROW STREET OPTION	SB		Hydrant Installation in Narrow Streets		
JUU04	GATE VALVE MOVED TO TEE	SB				
APR/01	GATE VALVE REQUIREMENT	SB				
SEP/99	MINOR REVISIONS	SB				
NOV/98	RENUMBERED FROM W-7	SB		DesignedBy:		
AUG/10	TITLE BLOCK	JJA		Approved:		
				Date	Scale	W-02A
			FEB/05	NTS		
			Digital File: Stdw-02A.dwg			



NOTES

- 1) NUMBER OF 38x235 TIMBERS USED DEPENDS ON SIZE OF PIPE AND SPAN OF TRENCH.
- 2) SUPPORT OVER TRENCH WIDTHS GREATER THAN 1500 MUST BE APPROVED BY THE ENGINEER.
- 3) USE PRESSURE TREATED TIMBER FOR SUPPORTS
- 4) REINFORCED CONCRETE BRIDGING MAY BE USED IN LIEU OF TIMBER. DETAILS MUST BE PRE-APPROVED BY THE ENGINEER.



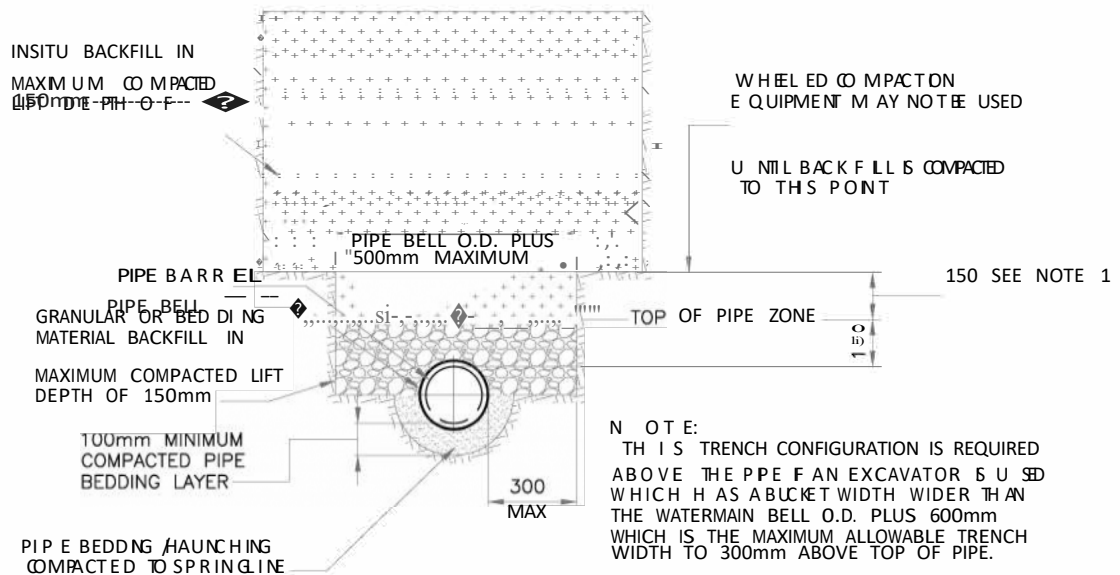
SECTION A-A

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By
SEP/97	GENERAL REVISIONS	SB
MAR/98	MINOR REVISIONS/ TITLE CHANGE	SB
NOV/98	RENUMBERED FROM W-4	SB
AUG/10	TITLE BLOCK	JJA



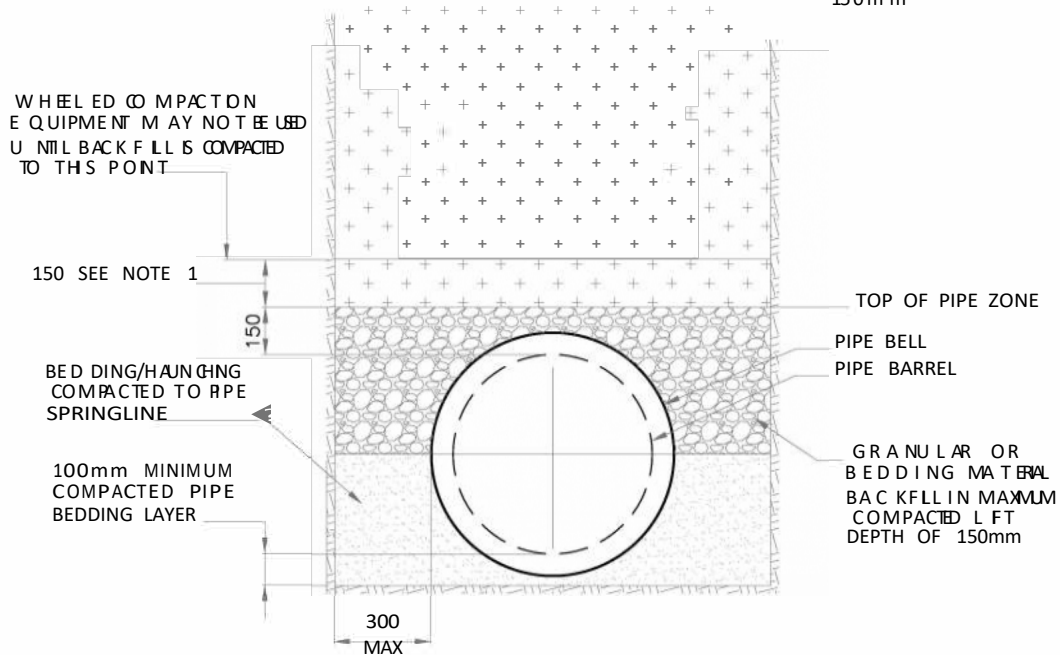
CONSTRUCTION STANDARDS			
Support of Mains Over Uncompacted Areas			
Designed By:		Approved:	
Date	MAR/77	Scale	NTS
Digital File:	Stdw-03.dwg		W-03



BUCKET/SPOON METHOD

NOTE 1: THE USE OF GRANULAR MATERIAL IS RECOMMENDED FOR THE LIFT INDICATED. INSITU MATERIAL MAY BE USED PROVIDED THAT IT CONFORMS TO THE SPECIFICATIONS AND THAT IT CAN BE COMPACTED TO THE SPECIFIED DENSITY WITHOUT THE USE OF WHEELED COMPACTION EQUIPMENT.

£ INSITU BACKFILL IN
MAXIMUM COMPACTED
LIFT DEPTH OF
150mm



BUCKET METHOD

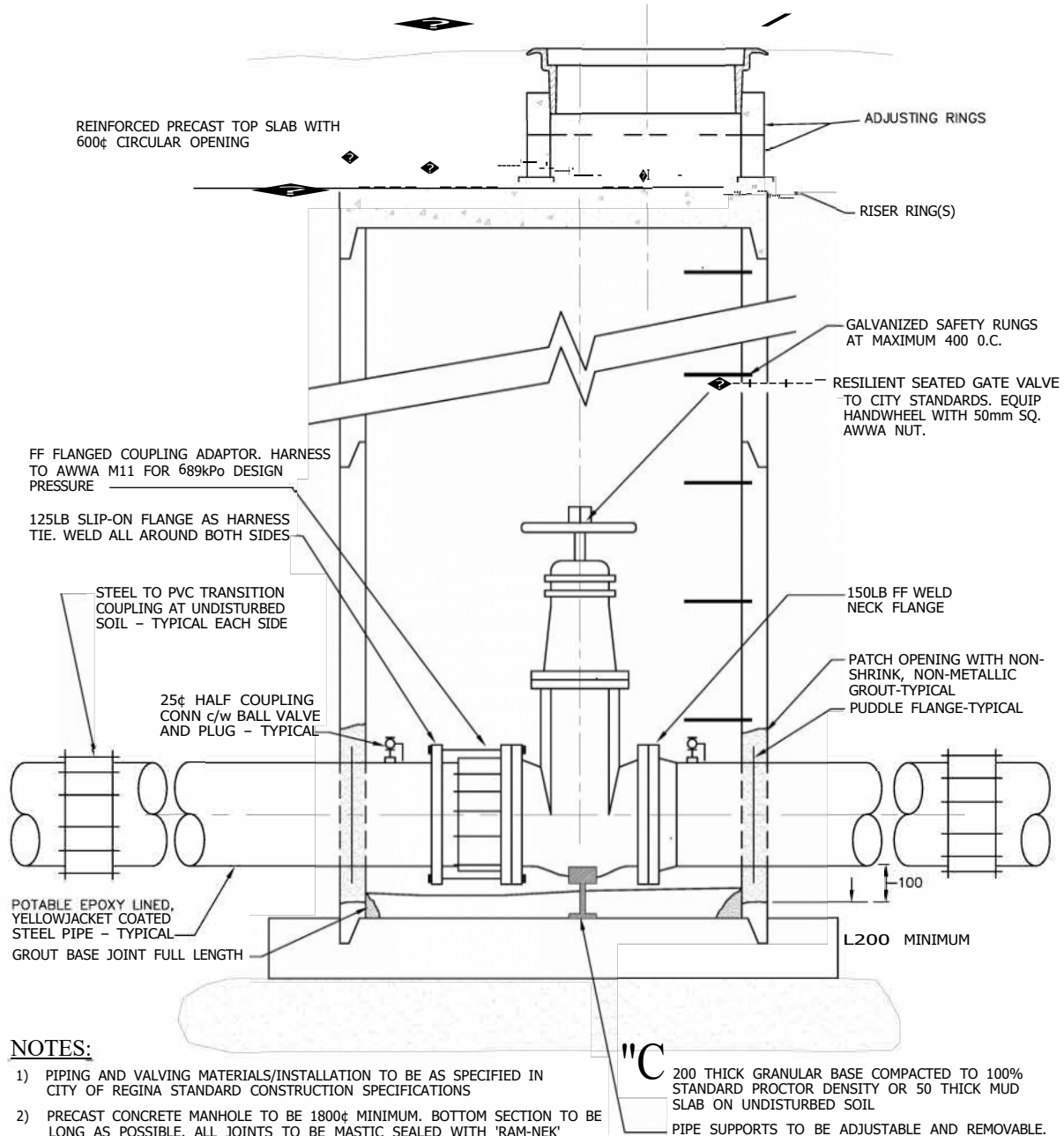
Date	Revisions	By
NOV/01	ISSUED AS STANDARD	SB
DEC/05	COMPACTION NOTES CLARIFIED	SB
AUG/10	TITLE BLOCK	JJA



CONSTRUCTION STANDARDS			
Watermain Trench Excavation and Backfill Details			
Designed By:		Approved:	
Date	NOV/00	Scale	NTS
Digital File:		W-04	
Stdw-04.dwg			

LOCATE VALVE IN MANHOLE SUCH THAT THE CENTER OF ITS HANDWHEEL IS WITHIN THE PERIMETER OF THE TOP OPENING IN THE MANHOLE

STANDARD FRAME & COVER

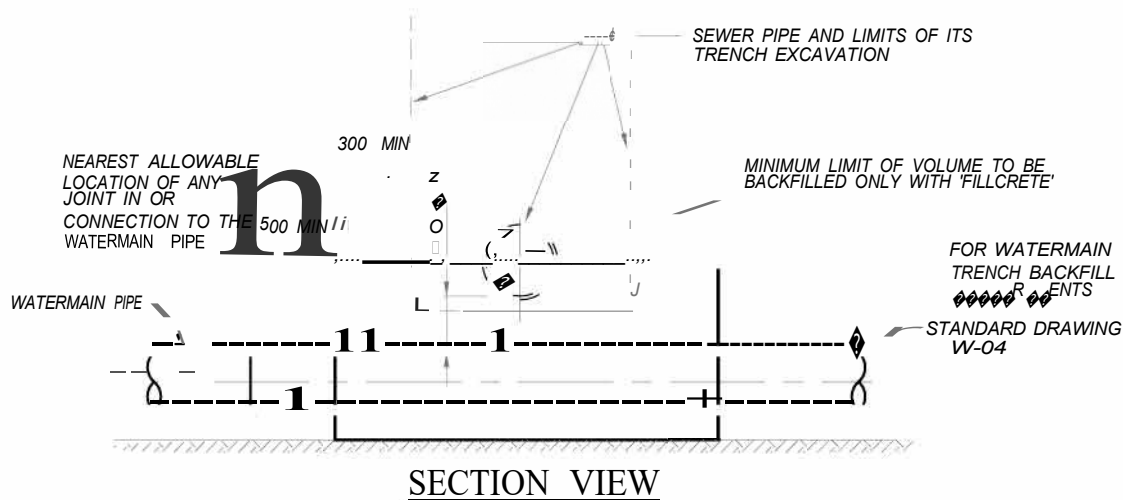
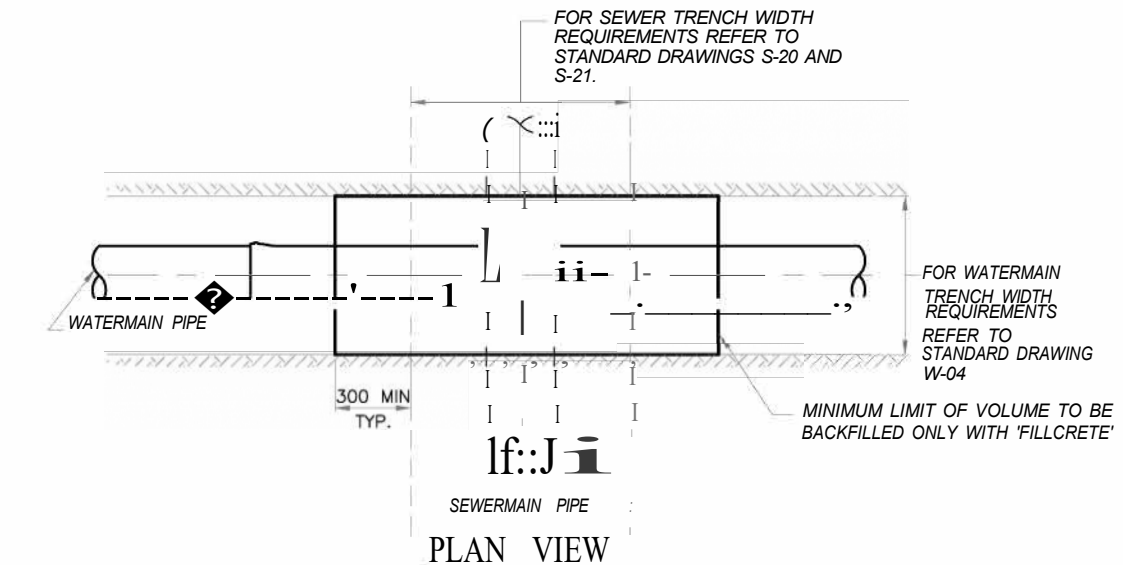


NOTES:

- 1) PIPING AND VALVING MATERIALS/INSTALLATION TO BE AS SPECIFIED IN CITY OF REGINA STANDARD CONSTRUCTION SPECIFICATIONS
- 2) PRECAST CONCRETE MANHOLE TO BE 1800mm MINIMUM. BOTTOM SECTION TO BE LONG AS POSSIBLE. ALL JOINTS TO BE MASTIC SEALED WITH 'RAM-NEK' OR EQUAL. GROUT ALL JOINTS OUTSIDE.
- 3) MANHOLE BASE TO BE REINFORCED, PRECAST OR CAST-IN-PLACE. AND TO BE DESIGNED BY A PROFESSIONAL ENGINEER.
- 4) PREPARE AND COAT EXPOSED METAL SURFACES PER SPECIFICATIONS SECTION 09910.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By	 REGINA	CONSTRUCTION STANDARDS		
JAN/97	REISSUED	SB		Gate Valve Manhole		
SEP/98	REVISED	SB				
NOV/98	RENUMBERED FROM W-13	SB				
MAR/10	REVISED	DM		Designed By:		
AUG/10	TITLE BLOCK	JJA		Approved:		
</						



NOTE 1:

THIS DETAIL IS TO BE APPLIED IN THE FOLLOWING INSTANCES WHERE THE OPEN CUT TRENCH METHOD IS USED:
 -ALL LOCATIONS WHERE NEW SANITARY SEWERMAIN IS INSTALLED OVER EITHER NEW OR EXISTING WATERMAIN.
 -ALL LOCATIONS WHERE NEW WATERMAIN IS INSTALLED UNDER EITHER EXISTING SANITARY SEWERMAIN OR EXISTING STORM SEWERMAIN.

NOTE 2:

WHERE, IN THE OPINION OF THE ENGINEER, SOIL CONDITIONS DICTATE THAT THE AREA FILLED WITH 'FILLCRETE' SHOULD BE EXPANDED FROM THAT SHOWN ON THIS DRAWING THEN THE FIELD DIRECTED EXTENT OF FILL WILL BE REQUIRED.

NOTE 3:

ENSURE MAINS ARE NOT DISPLACED DURING EITHER EXCAVATION OR 'FILLCRETE' INSTALLATION.

NOTE 4:

MAXIMUM DEPTH OF 'FILLCRETE' THAT MAY BE INSTALLED IN ANY SINGLE POUR IS 1.0 METRE. IF MORE THAN 1.0 METRE TOTAL DEPTH IS REQUIRED THEN THE INITIAL DEPTH MUST BE CURED TO THE SATISFACTION OF THE ENGINEER BEFORE FURTHER DEPTH IS ADDED ON TOP OF IT.

NOTE 5:

WHEREVER POSSIBLE, DESIGN WATER AND SEWER SERVICES SUCH THAT THE WATERMAIN CROSSES ABOVE SEWERMAIN(S).

NOTE 6:

AS MUCH AS POSSIBLE CENTRE THE LENGTH OF WATERMAIN PIPE AT THE POINT OF CROSSING THE SEWER(S).

Date	Revisions	By
SEP/04	DRAFT NEW STANDARD FOR REVIEW	SB
FEB/05	REVISED, NEW STANDARD ADOPTED	SB
AUG/10	TITLE BLOCK	JJA

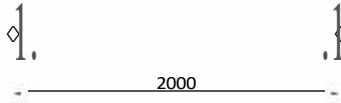


CONSTRUCTION STANDARDS			
Detail for Watermain Crossing Beneath Sewer Main			
Designed By:		Approved:	
Date	02/05	Scale	NTS
Digital File:		W-06	
Stdw-06.dwg			

GUARD POST-4 REQUIRED/ SEE
VIEW BELOW FOR DETAIL

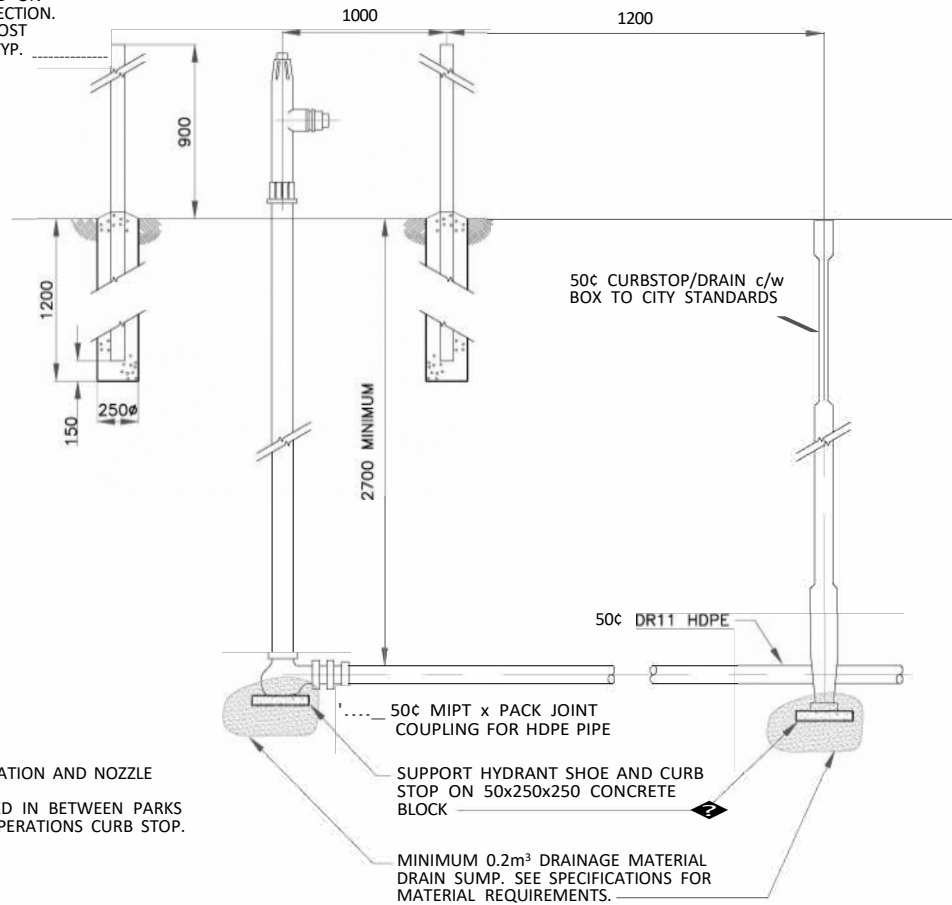
MUELLER A-411 POST HYDRANT c/w 1x65c
NOZZLE. THREADS TO MATCH CITY OF
REGINA STANDARD-SEE SPECIFICATIONS.
LOWER HYDRANT CONNECTION TO BE FIPT.
HYDRANT BURY TO BE MINIMUM 2.7m.

\$=u



PLAN

100x100 WOODEN POST.
PRESSURE TREATED ON
BELOW GROUND SECTION.
PAINT EXPOSED POST
BRIGHT ORANGE-TYP.

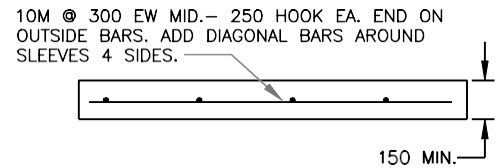
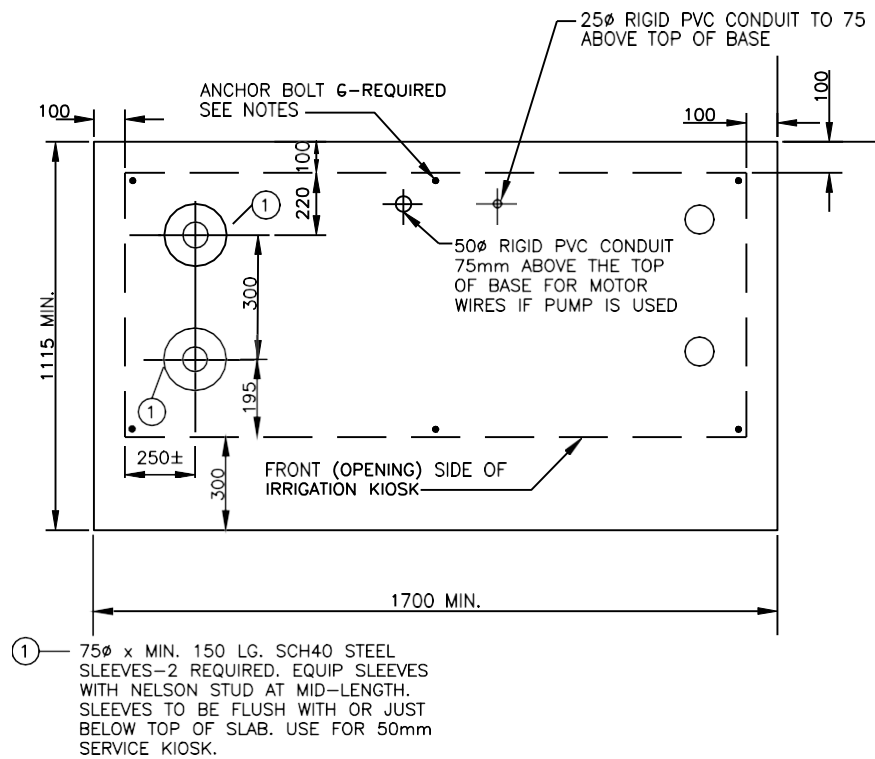


NOTES:
-DETERMINE HYDRANT LOCATION AND NOZZLE
ORIENTATION IN FIELD.
-HYDRANT TO BE INSTALLED IN BETWEEN PARKS
CURB STOP AND WATER OPERATIONS CURB STOP.

SECTION

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY NOTED OTHERWISE

Date	Revisions	By		CONSTRUCTION STANDARDS		
DEC/01	NEW POST HYDRANT TYPE	SB		Winter Service Hydrant Type Irrigation Outlet		
AUG/10	TITLE BLOCK	JJA				
MAR/16	NOTE ADDED ABOUT INSTALL	BL				
				Designed By :		Approved:
						Bruce Liski
				Date	Scale	W-08
				MAR/16	NTS	
				Digital File: Stdw-08.dwg		



NOTES:

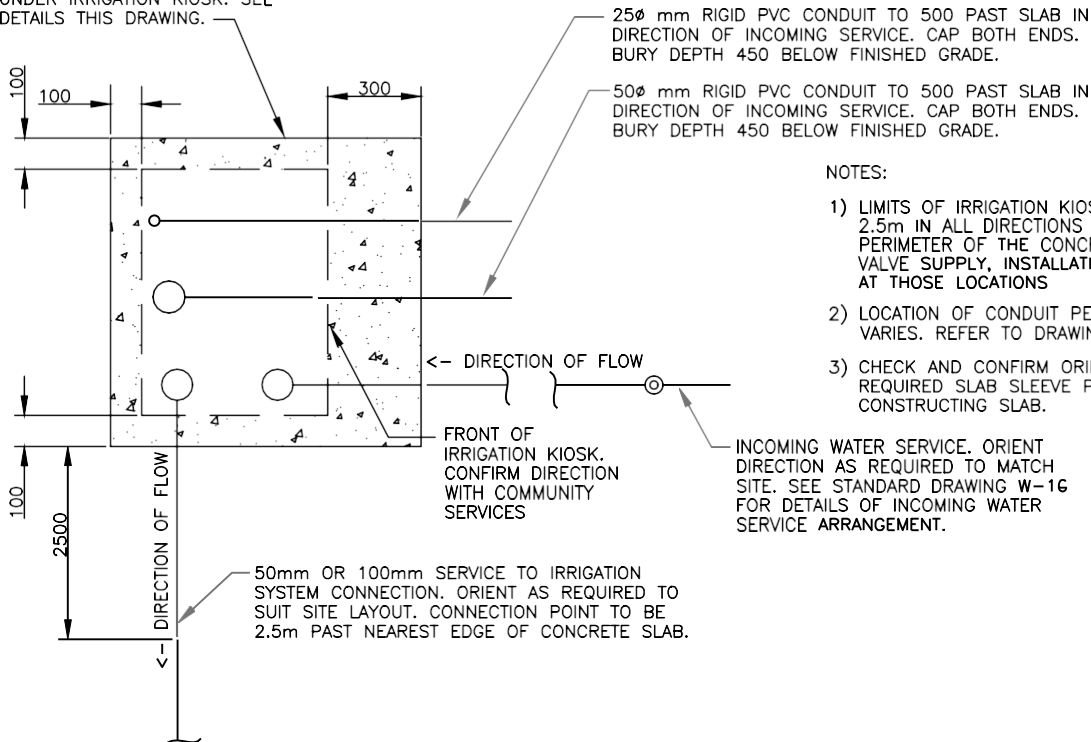
- 1) COMPACT PIPE TRENCH BACKFILL TO MINIMUM 95% STANDARD PROCTOR DENSITY TO A MINIMUM DISTANCE OF 2.5m IN ALL DIRECTIONS FROM THE EDGE OF SLAB. MAXIMUM DEPTH OF UNCOMPACTED LIFT TO BE 300mm.
- 2) PROVIDE MINIMUM 150 THICK COMPACTED GRANULAR BASE UNDER SLAB.
- 3) TOP OF SLAB TO BE SLIGHTLY ABOVE FINISHED GRADE.
- 4) PROVIDE LAYER OF "RAMNEK" OR EQUIV. SEAL BETWEEN KIOSK AND SLAB. ALL ROUND.

FOR CAST-IN-PLACE BASE SLAB

- 4) CONCRETE TO BE 25MPa, TYPE 50, 5% ±1 AIR CONTENT. 80mm MAX SLUMP. MOIST CURE FOR 7 DAYS.
- 5) INSTALL 6x15Ø SS ANCHOR BOLTS LOCATED AT CORNERS AND MID-PT. OF LONG SIDES. BOLTS TO PROTRUDE 25 MIN. BOLTS TO HAVE MIN. 50 HOOK EMBEDDED 75 IN SLAB.
- 6) INSTALL 15Ø SELF-DRILLING SS ANCHOR BOLTS AS ABOVE. SLAB PENETRATIONS TO BE CORED. SIZES TO MATCH SLEEVE SIZES SHOWN.

1 50mm IRRIGATION KIOSK BASE SLAB - PLAN/END VIEWS

REINFORCED CONCRETE SLAB
UNDER IRRIGATION KIOSK. SEE
DETAILS THIS DRAWING.



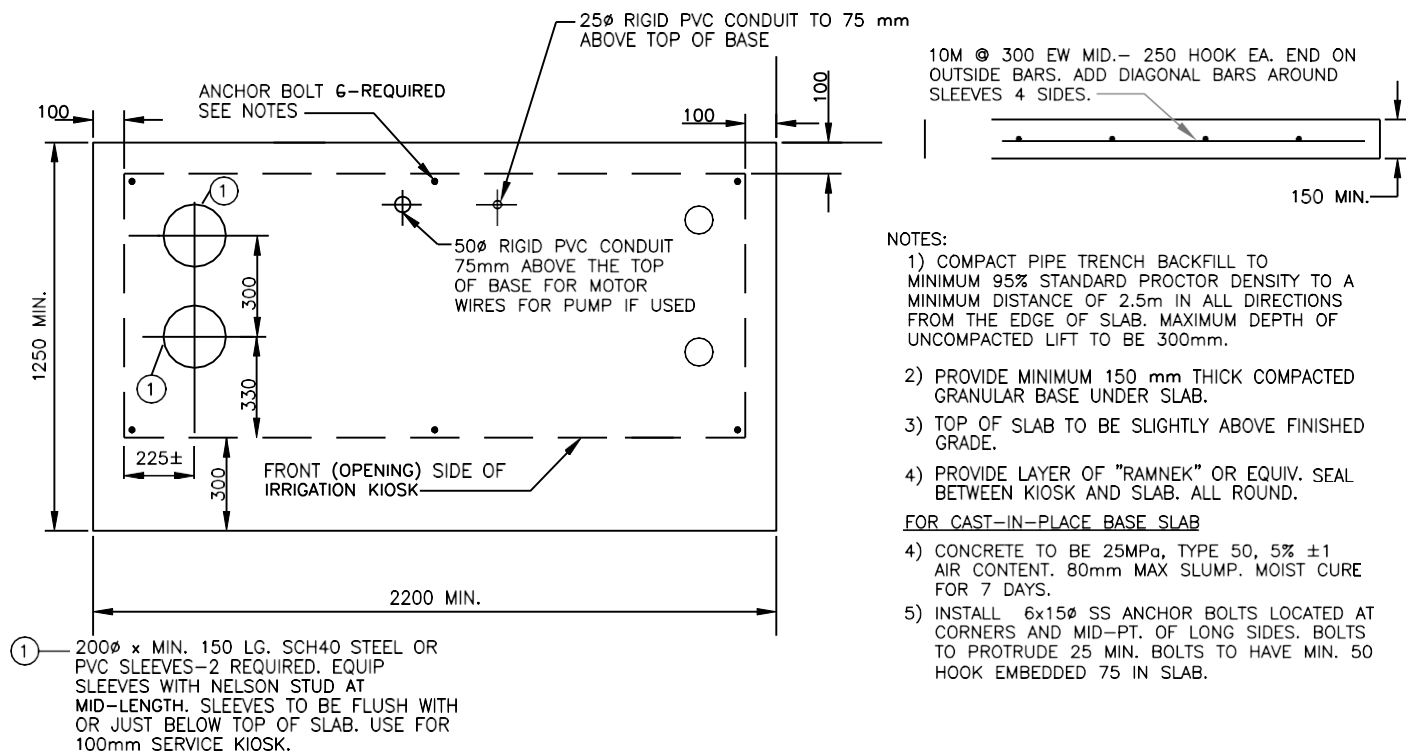
NOTES:

- 1) LIMITS OF IRRIGATION KIOSK PAY ITEM EXTEND 2.5m IN ALL DIRECTIONS FROM THE OUTSIDE PERIMETER OF THE CONCRETE SLAB AND INCLUDE VALVE SUPPLY, INSTALLATION AND CONNECTION AT THOSE LOCATIONS
- 2) LOCATION OF CONDUIT PENETRATION IN BASE SLAB VARIES. REFER TO DRAWING W-07 OR W-10.
- 3) CHECK AND CONFIRM ORIENTATION OF KIOSK SLAB AND REQUIRED SLAB SLEEVE PENETRATIONS PRIOR TO CONSTRUCTING SLAB.

2 50mm IRRIGATION KIOSK SITE PLAN (WITH OR WITHOUT PUMP)

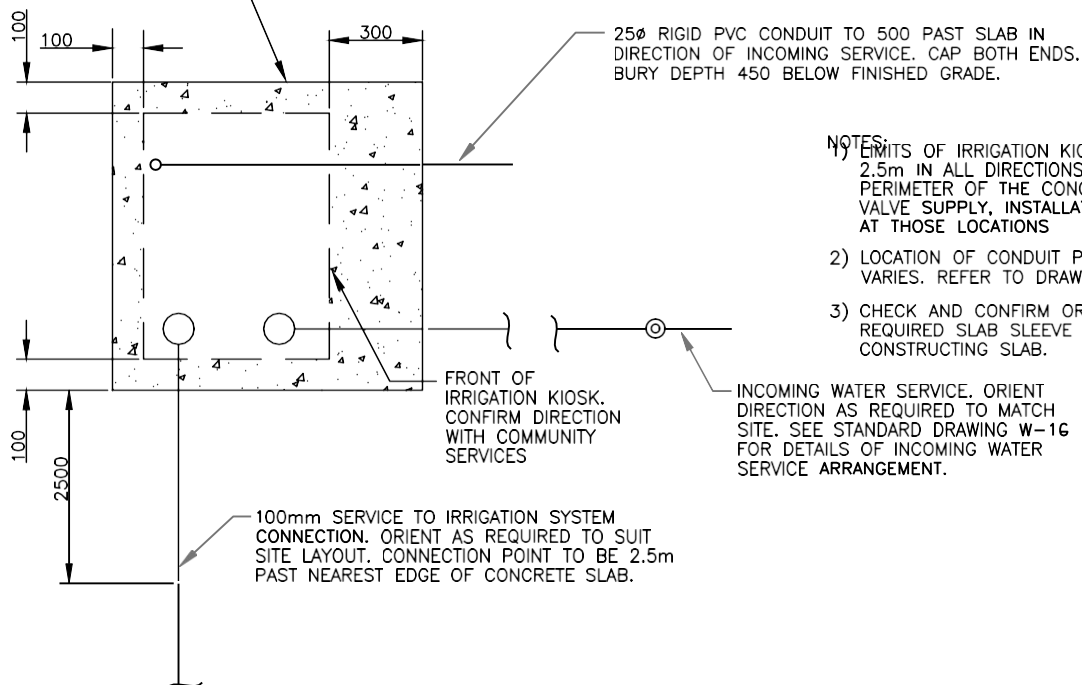
Date	Revisions	By	CONSTRUCTION STANDARDS		
JAN/00	STANDARD DRAWING ISSUED	SB	50mm Above Grade Irrigation Kiosks		
NOV/01	REVISIONS - SEE ALSO W-16	SB	Site Plan, Concrete Base Details		
AUG/04	W-09 REVISED FOR 75mm KIOSK	SB	Designed By:	Approved:	
AUG/10	TITLE BLOCK	JJA	Bruce Liski	Darren Harris	
FEB/16	CHANGE 75mm TO 100mm KIOSK	BL	Date	Scale	W-09
AUG/16	REV OF NOTES / DIMENSIONS-50mm CURRENT	BL	22-JUN-2026	NTS	
JUN/26	DIMS revised	CB	Digital File:	2025-02-10 Stdw-09.dwg	





1 75mm + 100mm IRRIGATION KIOSK BASE SLAB - PLAN/END VIEWS

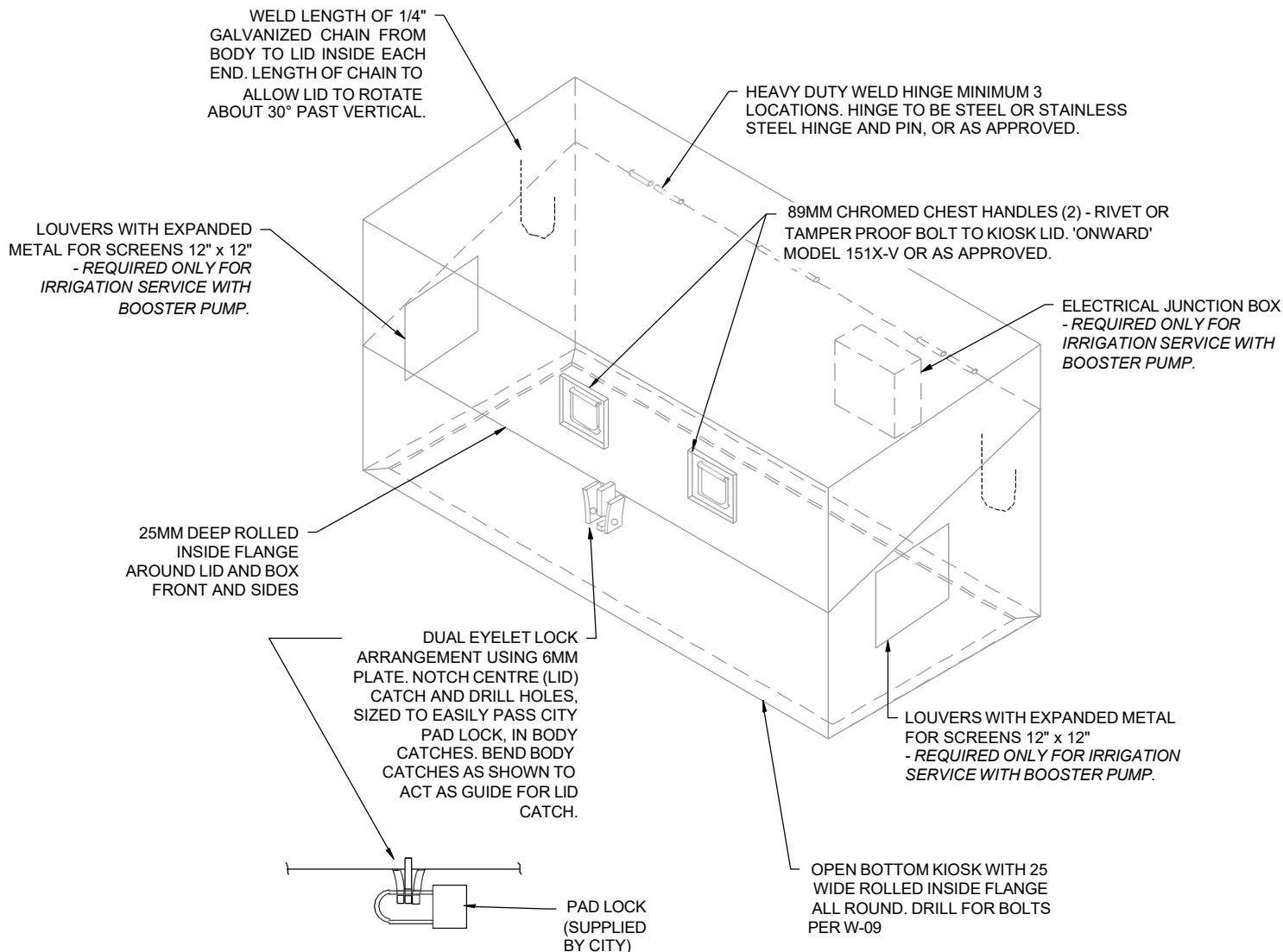
REINFORCED CONCRETE SLAB UNDER IRRIGATION KIOSK. SEE DETAILS THIS DRAWING.



2 75mm + 100mm IRRIGATION KIOSK SITE PLAN (WITH OR WITHOUT PUMP)

Date	Revisions	By	CONSTRUCTION STANDARDS		
JAN/00	STANDARD DRAWING ISSUED	SB	75mm + 100mm Above Grade Irrig.		
NOV/01	REVISIONS - SEE ALSO W-16	SB	Kiosks Site Plan, Conc. Base Details		
AUG/04	W-09 REVISED FOR 75mm KIOSK	SB	Designed By:	Approved:	
AUG/10	TITLE BLOCK	JJA	Bruce Liski	Darren Harris	
FEB/16	CHANGE 75mm TO 100mm KIOSK	BL	Date	Scale	W-09A
AUG/16	REV OF NOTES / DIMENSIONS-100mm CURRENT	BL	22-JUN-2026	NTS	
JUN/26	DIMS revision	CB	Digital File:	2025-02-10 Stdw-09.dwg	

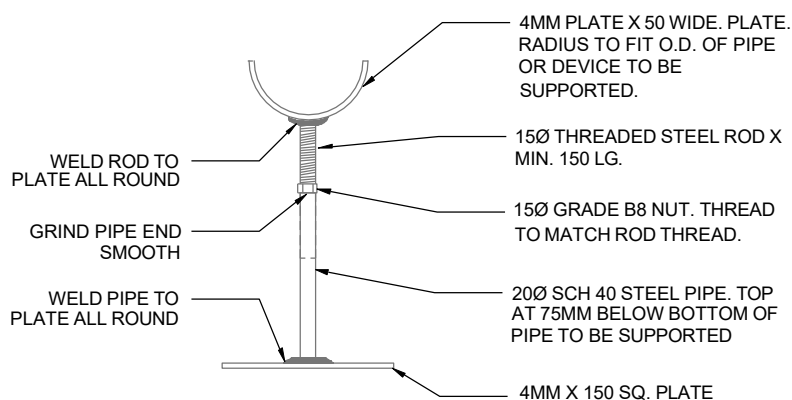




CABINET DETAIL

NOTES:

1. CONSTRUCT KIOSK WITH 12 GA. ALUMINIUM. GRIND WELDS SMOOTH. DEGREASE AND BLAST TO SSPC-SP6 INSIDE AND OUT.
2. MOUNT KIOSK ON CAST OR PRECAST SLAB. REFER TO STANDARD DRAWING W-09 FOR DETAILS.
3. PIPE ABOVE GRADE TO BE SCH40 STEEL WITH NPT OR GROOVED ENDS. FITTINGS TO BE 300 LB BANDED MALLEABLE IRON THREADED OR DUCTILE IRON GROOVED.



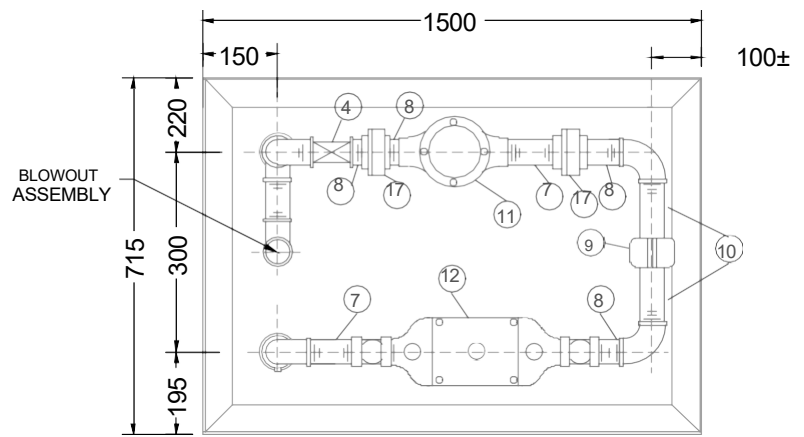
ADJUSTABLE SUPPORT DETAIL

Date	Revisions	By
DEC/00	ENCLOSURE AND MISC DETAILS REVISED	SB
NOV/01	ENCLOSURE AND PIPING DETAILS REVISED	SB
OCT/04	ENCLOSURE ARRANGEMENT, MATERIAL & LATCH	SB
AUG/10	TITLE BLOCK	JJA
FEB/16	REMOVE JUNC BOX & NOTE ADD LOUVERS	BL
AUG/16	EDIT LABELS	BL
NOV/25	UPDATE KIOSK MATERIAL, DETAIL NAME, #	CB

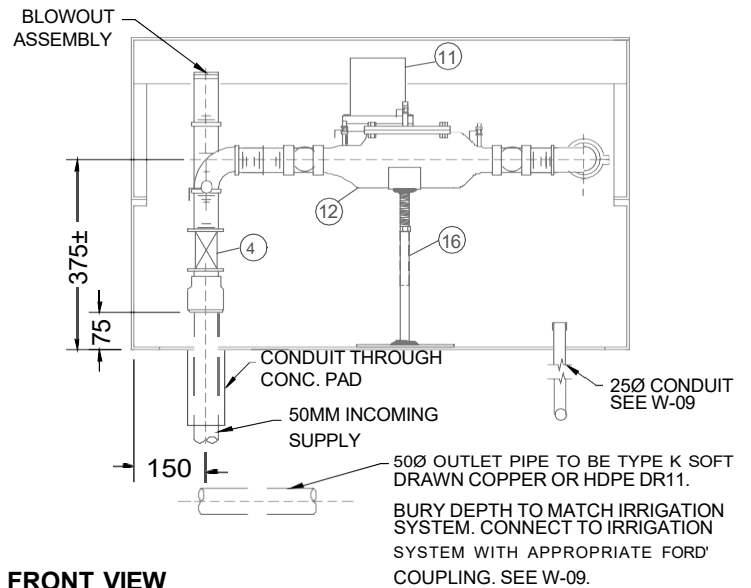


CONSTRUCTION STANDARDS			
50mm Irrigation Service Kiosk CABINET			
Designed By:		Approved: DARREN HARRIS	
Date NOV. 21, 2025	Scale NTS		W-10.CAB
Digital File: W-10 2025-11-21.dwg			

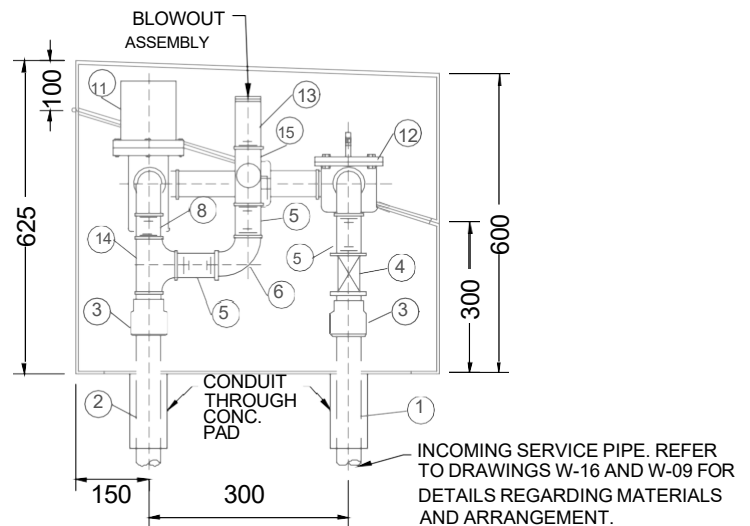
- ①. 50MM HDPE DR11 OR TYPE K SOFT DRAWN COPPER LEAD FROM INCOMING WATER SERVICE LINE.
- ②. 50MM HDPE DR11 TO CONNECTION TO HDPE IRRIGATION LINES
- ③. FORD ADAPTOR COUPLING TO SUIT PIPE MATERIAL USED - TWO (2) REQUIRED.
- ④. 50MM BRONZE BODY GATE VALVE WITH FIPT ENDS - TWO (2) REQUIRED. SEE SPECIFICATIONS.
- ⑤. 50MM X 75 LONG MIPT NIPPLE - THREE (3) REQUIRED
- ⑥. 50MM X 90° M.I. ELLS - FIVE (5) REQUIRED
- ⑦. 50MM X (LENGTHS VARY) MIPT NIPPLE - TWO (2) REQUIRED.
- ⑧. 50MM X 50 LONG MIPT NIPPLE - 4 REQUIRED
- ⑨. 50MM GRUVLOK COUPLING
- ⑩. 50MM MIPT X PLAIN END SPOOL. LENGTHS AS REQUIRED.
- ⑪. 50MM FLOWMETER/MASTER VALVE ASSEMBLY, FIPT ENDS. SEE SPECIFICATIONS FOR DETAILS
- ⑫. 50MM APPROVED DOUBLE CHECK BACKFLOW PREVENTER C/W BALL TYPE ISOLATION VALVES. REFER TO SPECIFICATIONS.
- ⑬. 50MM X 100 LONG MIPT X GROOVE END NIPPLE
- ⑭. 50MM M.I. TEE.
- ⑮. 50MM X 400 LB BRONZE BALL VALVE.
- ⑯. ADJUSTABLE SUPPORTS SEE W-10.CAB. INSTALL TWO ASSEMBLIES AT LOCATIONS TO BE DIRECTED IN FIELD. PAINT SUPPORT ASSEMBLIES WITH MARINE ENAMEL.
- ⑰. 50MM FIPT M.I. UNION-GROUND JOINT BRONZE TO IRON



PLAN VIEW



FRONT VIEW



LEFT END VIEW

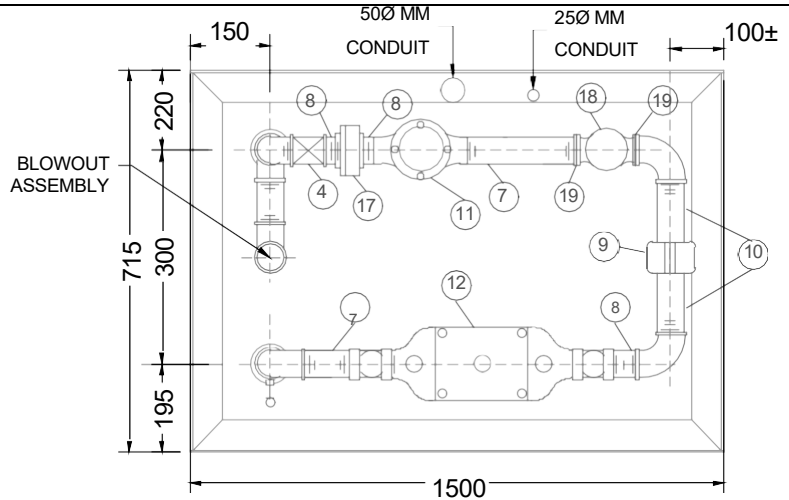
Date	Revisions	By
AUG/10	TITLE BLOCK	JJA
FEB/16	CHANGE DETAIL ORIENTATION	BL
AUG/16	CHANGE DIMENSIONS / LABELS	BL
NOV/25	DWG LAYOUT, DETAIL NAME, #	CB



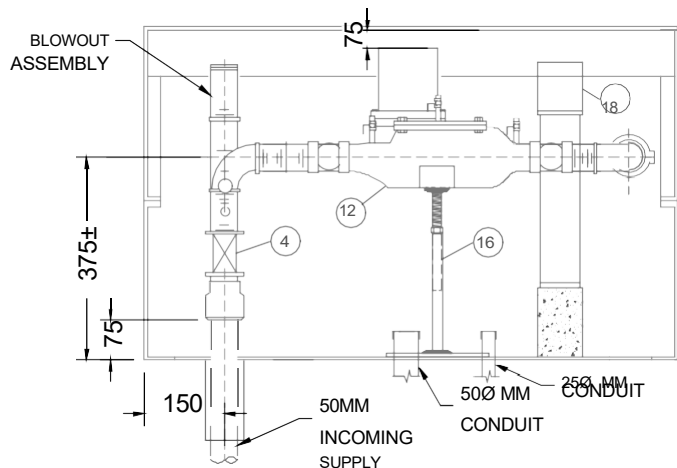
CONSTRUCTION STANDARDS
50mm Irrigation Service Kiosk
INTERIOR EQUIP. LAYOUT
(NO Booster Pump)

Designed By:	Approved: JEFF STORRY		
Date	NOV. 21, 2025	Scale	NTS
Digital File:	W-10 2025-11-21.dwg	W-10.INT1	

1. 50MM HDPE DR11 OR TYPE K SOFT DRAWN COPPER LEAD FROM INCOMING WATER SERVICE LINE.
2. 50MM HDPE DR11 TO CONNECTION TO HDPE IRRIGATION LINES
3. FORD ADAPTOR COUPLING TO SUIT PIPE MATERIAL USED - TWO (2) REQUIRED.
4. 50MM BRONZE BODY GATE VALVE WITH FIPT ENDS - TWO (2) REQUIRED. SEE SPECIFICATIONS.
5. 50MM X 75 LONG MIPT NIPPLE - THREE (3) REQUIRED
6. 50MM X 90° M.I. ELLS - FIVE (5) REQUIRED
7. 50MM X (LENGTHS VARY) MIPT NIPPLE - TWO (2) REQUIRED.
8. 50MM X 50 LONG MIPT NIPPLE - 4 REQUIRED
9. 50MM GRUVLOK COUPLING
10. 50MM MIPT X PLAIN END SPOOL. LENGTHS AS REQUIRED.
11. 50MM FLOWMETER/MASTER VALVE ASSEMBLY, FIPT ENDS. SEE SPECIFICATIONS FOR DETAILS
12. 50MM APPROVED DOUBLE CHECK BACKFLOW PREVENTER C/W BALL TYPE ISOLATION VALVES. REFER TO SPECIFICATIONS.
13. 50MM X 100 LONG MIPT X GROOVE END NIPPLE
14. 50MM M.I. TEE.
15. 50MM X 400 LB BRONZE BALL VALVE.
16. ADJUSTABLE SUPPORTS SEE W-10.CAB. INSTALL TWO ASSEMBLIES AT LOCATIONS TO BE DIRECTED IN FIELD. PAINT SUPPORT ASSEMBLIES WITH MARINE ENAMEL.
17. 50MM FIPT M.I. UNION-GROUND JOINT BRONZE TO IRON
18. PUMP - SIZE, LENGTH, AND HP TO BE DETERMINED BY FIELD AREA.
19. 63.5MM X 150 LB FF WN FLANGE - TWO (2) REQUIRED
20. 150MM X 150 X 100 EEMAC 1 ELECTRICAL JUNCTION BOX C/W HINGED FRONT AND MIN. 2 X 25Ø CONDUIT KNOCKOUTS. BEL EUK0664 OR EQUAL. SPOT WELD TO BODY AND FINISH SAME AS KIOSK.



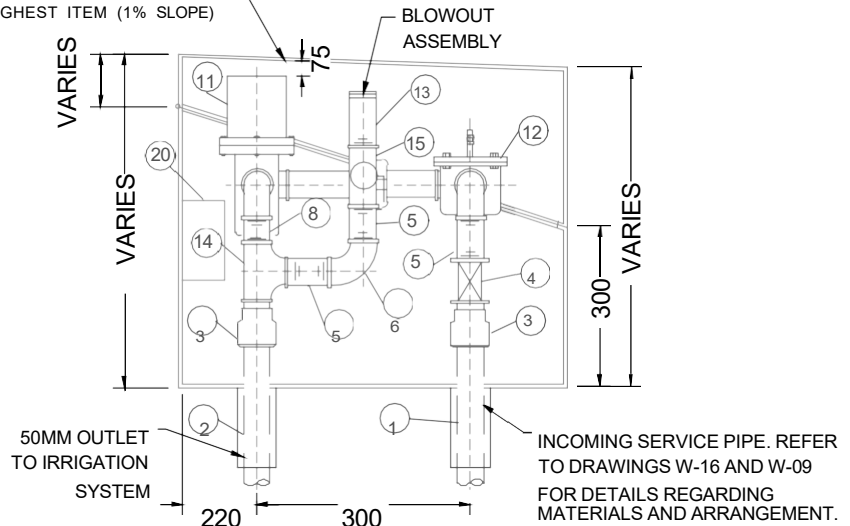
PLAN VIEW



50Ø OUTLET PIPE TO BE TYPE K SOFT DRAWN COPPER OR HDPE DR11. BURY DEPTH TO MATCH IRRIGATION SYSTEM. CONNECT TO IRRIGATION SYSTEM WITH APPROPRIATE FORD' COUPLING. SEE W-09.

FRONT VIEW

ADD 75 MM CLEARANCE FROM HIGHEST ITEM (1% SLOPE)



LEFT END VIEW

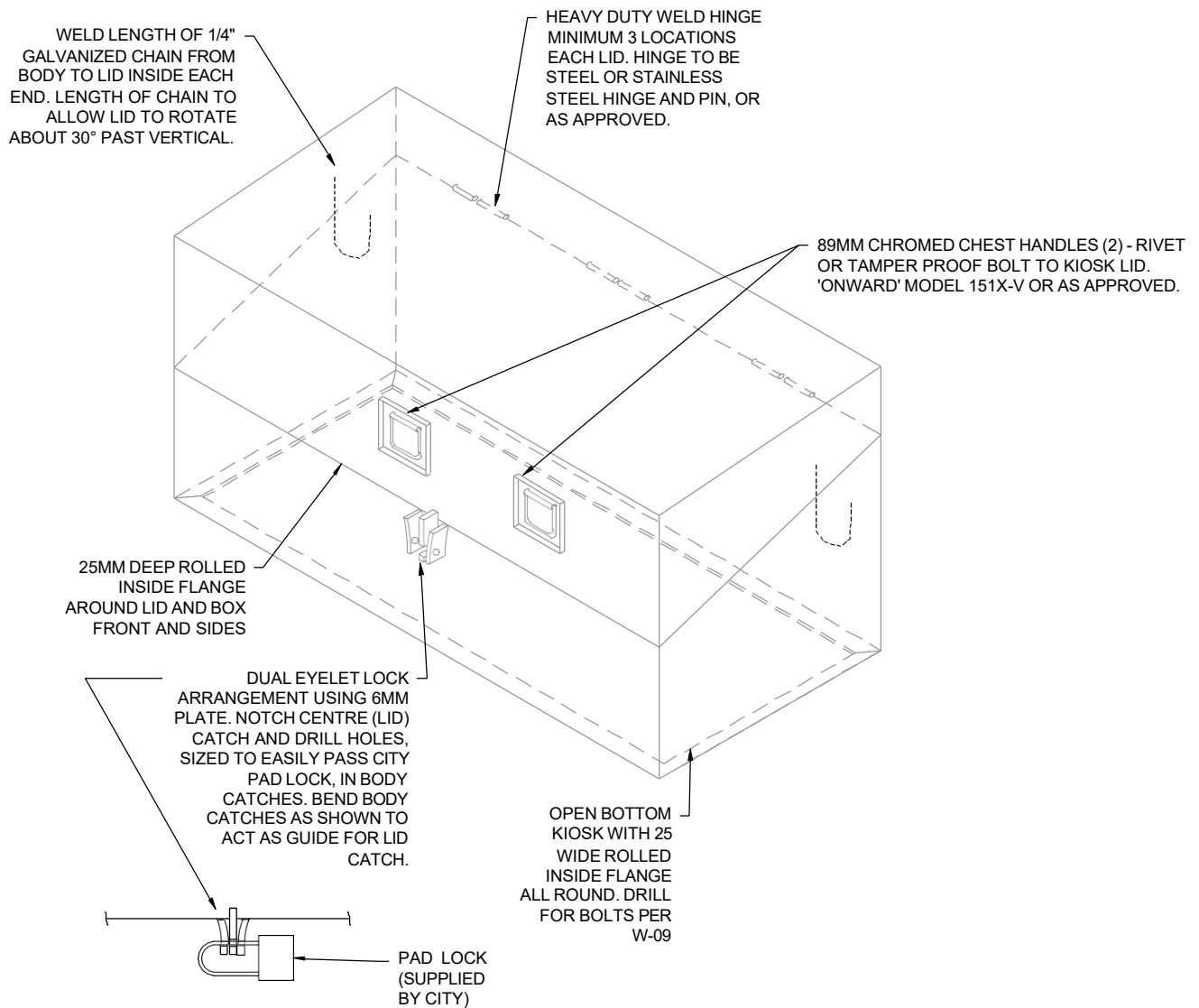
Date	Revisions	By
AUG/10	TITLE BLOCK	JJA
FEB/16	CHANGE DETAIL ORIENTATION / SPEC	BL
AUG/16	CHANGE LABELS	BL
NOV/25	DWG LAYOUT, DETAIL NAME, #	CB



REGINA

CONSTRUCTION STANDARDS
**50mm Irrigation Service Kiosk
 INTERIOR EQUIP. LAYOUT
 (WITH Booster Pump)**

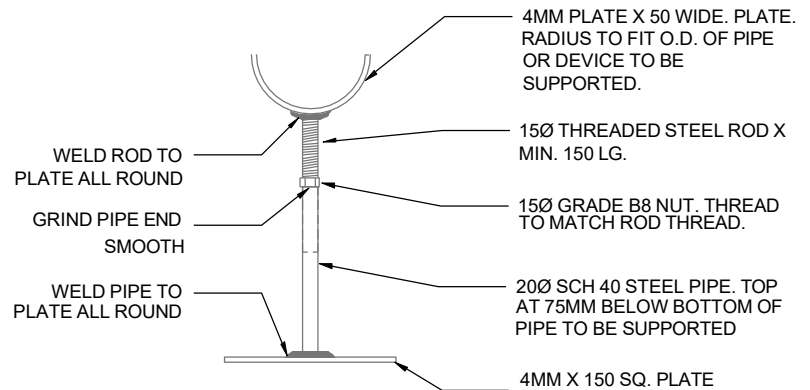
Designed By:		Approved: JEFF STORRY	
Date NOV. 21, 2025	Scale NTS	W-10.INT2	
Digital File: W-10 2025-11-21.dwg			



CABINET DETAIL

NOTES:

1. CONSTRUCT KIOSK WITH 12 GA. ALUMINIUM PLATE. ALL WELDS TO BE FULL LENGTH AND GROUND SMOOTH.
2. MOUNT KIOSK ON PRECAST OR CAST-IN-PLACE SLAB. REFER TO STANDARD DRAWING W-09 FOR SLAB DETAILS.
3. PIPE AND FITTINGS 75MM AND LARGER TO BE STANDARD WT. STEEL PIPING 50MM AND SMALLER TO BE SCH80. STEEL.
4. PROVIDE A MINIMUM OF 1 ADJUSTABLE SUPPORT. LOCATE SUPPORT WHERE INDICATED. CLEAN, PRIME AND PAINT SUPPORT WITH TWO COATS OF MARINE ENAMEL.
5. DIMENSIONS OF KIOSK ARE BASED ON USE OF NON-RISING STEM GATE VALVES AND BACKFLOW PREVENTER INDICATED IN NOTES.



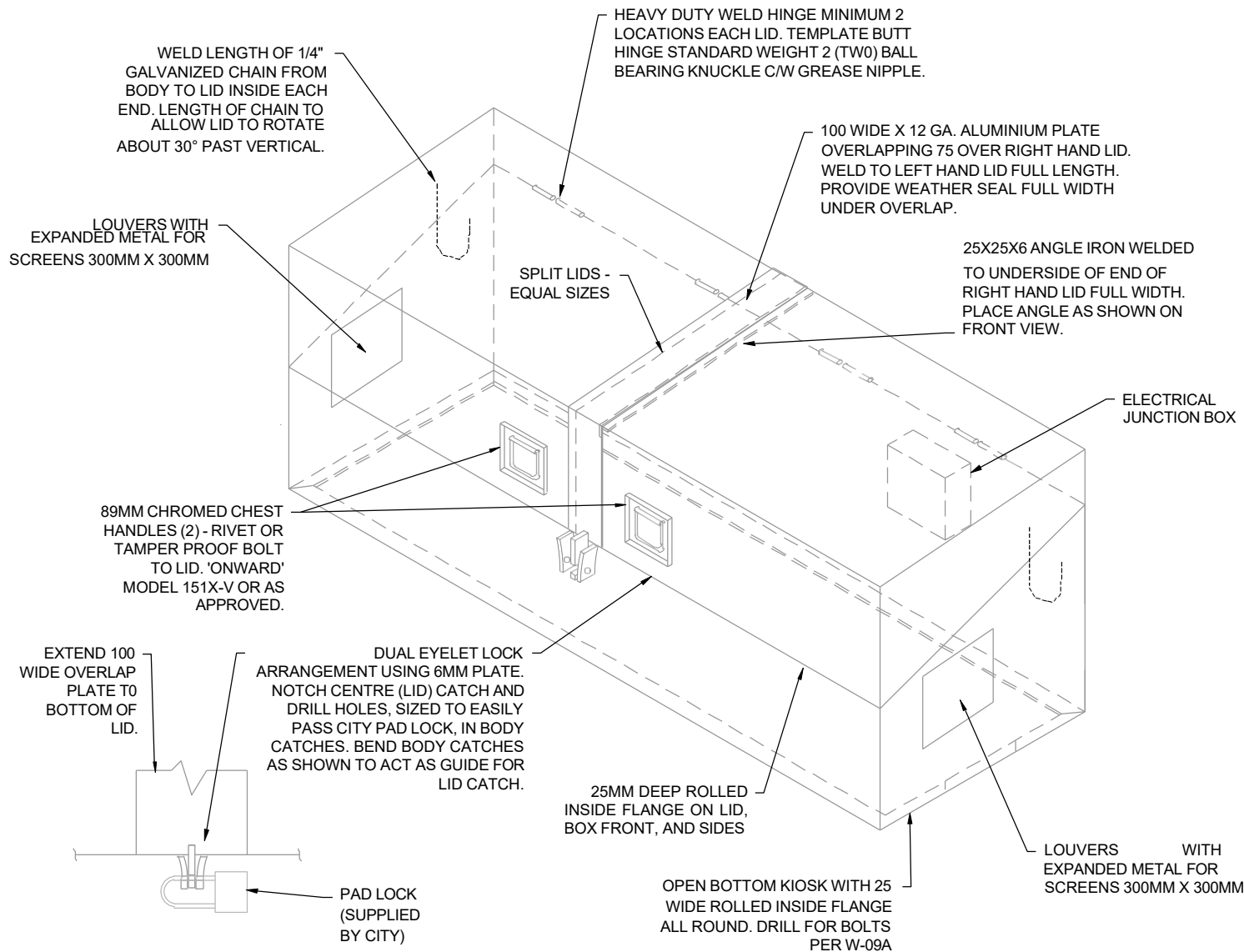
ADJUSTABLE SUPPORT DETAIL

Date	Revisions	By
DEC/00	ENCLOSURE AND MISC DETAILS REVISED	SB
NOV/01	ENCLOSURE AND PIPING DETAILS REVISED	SB
OCT/04	ENCLOSURE ARRANGEMENT, MATERIAL & LATCH	SB
AUG/10	TITLE BLOCK	JJA
FEB/16	REMOVE JUNC BOX & NOTE ADD LOUVERS	BL
AUG/16	EDIT LABELS	BL
JAN/26	COMBINE 75mm and 100mm, Revise detail name, #	CB



CONSTRUCTION STANDARDS
75mm + 100mm Irrigation Service
Kiosk - CABINET
(NO Booster Pump)

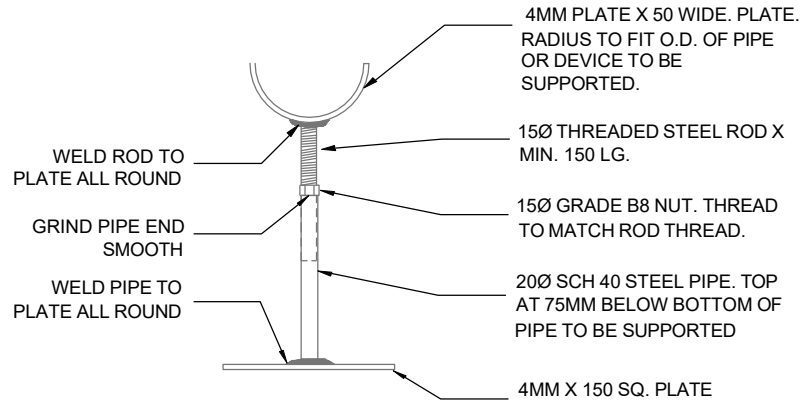
Designed By:		Approved:	
		JEFF STORRY	
Date	Scale	W-11.CAB1	
JAN. 26, 2026	NTS		
Digital File: W-11 2026-01-26.dwg			



CABINET DETAIL

NOTES:

1. CONSTRUCT KIOSK WITH 12 GA. ALUMINIUM PLATE. ALL WELDS TO BE FULL LENGTH AND GROUND SMOOTH.
2. MOUNT KIOSK ON PRECAST OR CAST-IN-PLACE SLAB. REFER TO STANDARD DRAWING W-09A FOR SLAB DETAILS AND SUPPLY/DISCHARGE PIPING ARRANGEMENTS.
3. PIPE AND FITTINGS 75MM AND LARGER TO BE STANDARD WT. STEEL. PIPING 50MM AND SMALLER TO BE SCH40. STEEL.
4. PROVIDE A MINIMUM OF 2 ADJUSTABLE SUPPORTS. ONE UNDER #14 SPOOL PIECE AND ONE UNDER #10 SPOOL PIECE. CLEAN, PRIME AND PAINT SUPPORTS WITH TWO COATS OF MARINE ENAMEL. SEE DETAIL THIS DRAWING.
5. HEIGHT OF KIOSK SHOWN IS BASED UPON HEIGHT REQUIREMENTS OF PUMP.



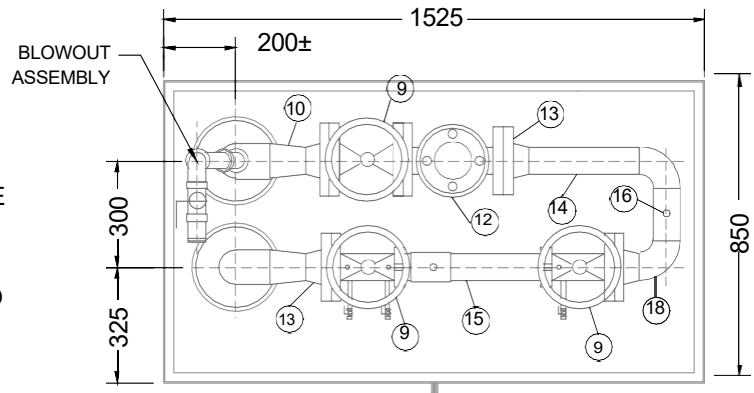
ADJUSTABLE SUPPORT DETAIL

Date	Revisions	By
DEC/00	ENCLOSURE AND MISC DETAILS REVISED	SB
NOV/01	ENCLOSURE AND PIPING DETAILS REVISED	SB
OCT/04	ENCLOSURE ARRANGEMENT, MATERIAL & LATCH	SB
AUG/10	TITLE BLOCK	JJA
FEB/16	REMOVE JUNC BOX & NOTE ADD LOUVERS	BL
AUG/16	EDIT LABELS	BL
JAN/26	COMBINE 75mm and 100mm, Revise detail name, #	CB

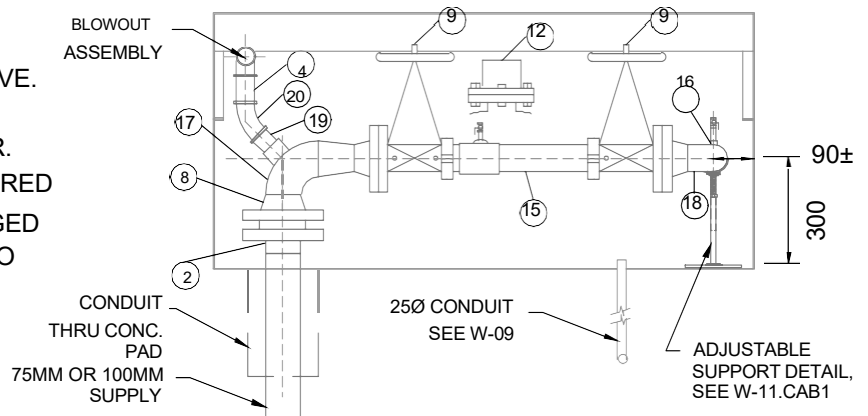


CONSTRUCTION STANDARDS 75mm + 100mm Irrigation Service Kiosk - CABINET (WITH Booster Pump)		
Designed By:		Approved: DARREN HARRIS
Date JAN 26, 2026	Scale NTS	W-11.CAB2
Digital File: W-11 2026-01-26.dwg		

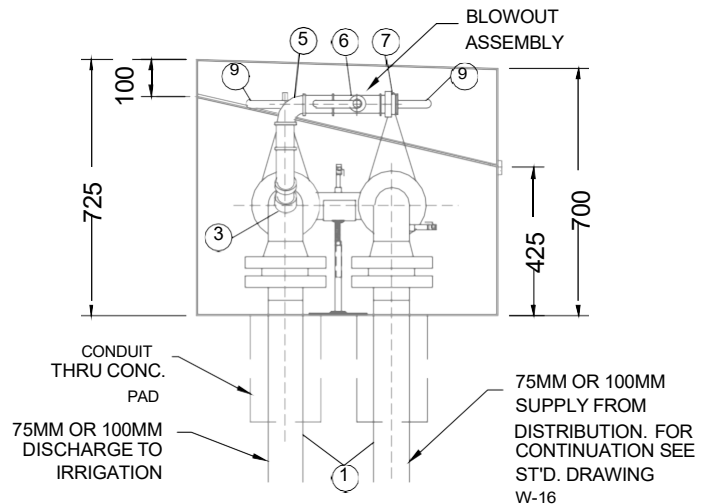
- ①. 100MM HDPE DR11 RISER FOR SUPPLY AND DISCHARGE FOR CONTINUATION REFER TO STANDARD DRAWINGS W-09/W-16 AND SITE PLAN.
- ②. 100MM HDPE STUB END AND BACKING FLANGE ASSEMBLY. BACKING FLANGES TO BE EPOXY COATED DUCTILE IRON - 2 REQUIRED.
- ③. 50MM X 2000LB HALF COUPLING
- ④. 50MM X 75 LONG SHORT NIPPLE NPT BOTH ENDS
- ⑤. 50MM X 300LB 90° M.I. THREAD ELL.
- ⑥. 50MM X 400 LB WOG BRONZE BALL VALVE. NPT ENDS.
- ⑦. 50MM MALE NPT X 'GRUVLOK' ADAPTOR.
- ⑧. 100MM X 150LB FF WN FLANGE-2 REQUIRED
- ⑨. 75MM X 125LB CAST IRON BODY, FLANGED END RESILIENT SEATED GATE VALVE TO AWWA C509 - ONE REQUIRED.
- ⑩. 100MM X 75 WELD REDUCER - TWO REQUIRED.
- ⑪. NOT USED
- ⑫. 75MM FLOWMETER/MASTER VALVE ASSEMBLY AS SPECIFIED.
- ⑬. 75MM X 150LB FF WN FLANGE - THREE REQUIRED
- ⑭. 75MM PIPE SPOOL PIECE. OVERALL LENGTH APPROX. 315MM. FIELD CONFIRM.
- ⑮. 75MM WATTS MODEL 757 DOUBLE CHECK STYLE BACKFLOW PREVENTOR ASSEMBLY C/W NON-RISING STEM GATE STYLE ISOLATING VALVES.
- ⑯. 15MM X 2000LB HALF COUPLING CONNECTION C/W 15MM X 400 LB WOG BRONZE BALL VALVE.
- ⑰. 100MM SHORT RADIUS 90° WELD ELLS - 2 REQUIRED
- ⑱. 75MM SHORT RADIUS 90° WELD ELLS - 2 REQUIRED
- ⑲. 50MM X 65 LONG SHORT NIPPLE
- ⑳. 50MM X 45° THREAD ELL



PLAN VIEW



FRONT VIEW



LEFT END VIEW

Date	Revisions	By
AUG/10	TITLE BLOCK	JJA
FEB/16	CHANGE DETAIL ORIENTATION / SPEC	BL
AUG/16	CHANGE LABELS	BL
JAN/26	COMBINE 75mm and 100mm, Revise detail name, #	CB



CONSTRUCTION STANDARDS
**75mm + 100mm Irrigation Service
 Kiosk - INTERIOR EQUIP. LAYOUT
 (NO Booster Pump)**

Designed By:		Approved: DARREN HARRIS	
Date JAN 26, 2026	Scale NTS	W-11.INT1	
Digital File: W-11 2026-01-26.dwg			

- [illegible]

Date	Revisions	By
AUG/10	TITLE BLOCK	JJA
FEB/16	CHANGE DETAIL ORIENTATION / SPEC	BL
AUG/16	CHANGE LABELS	BL
JAN/26	COMBINE 75mm and 100mm, Revise detail name, #	CB



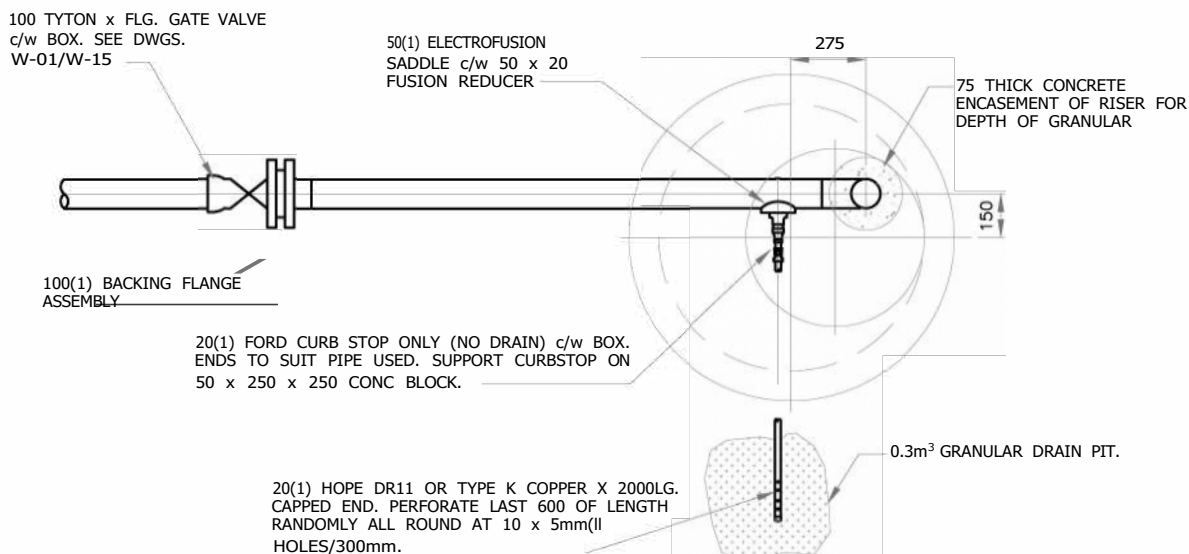
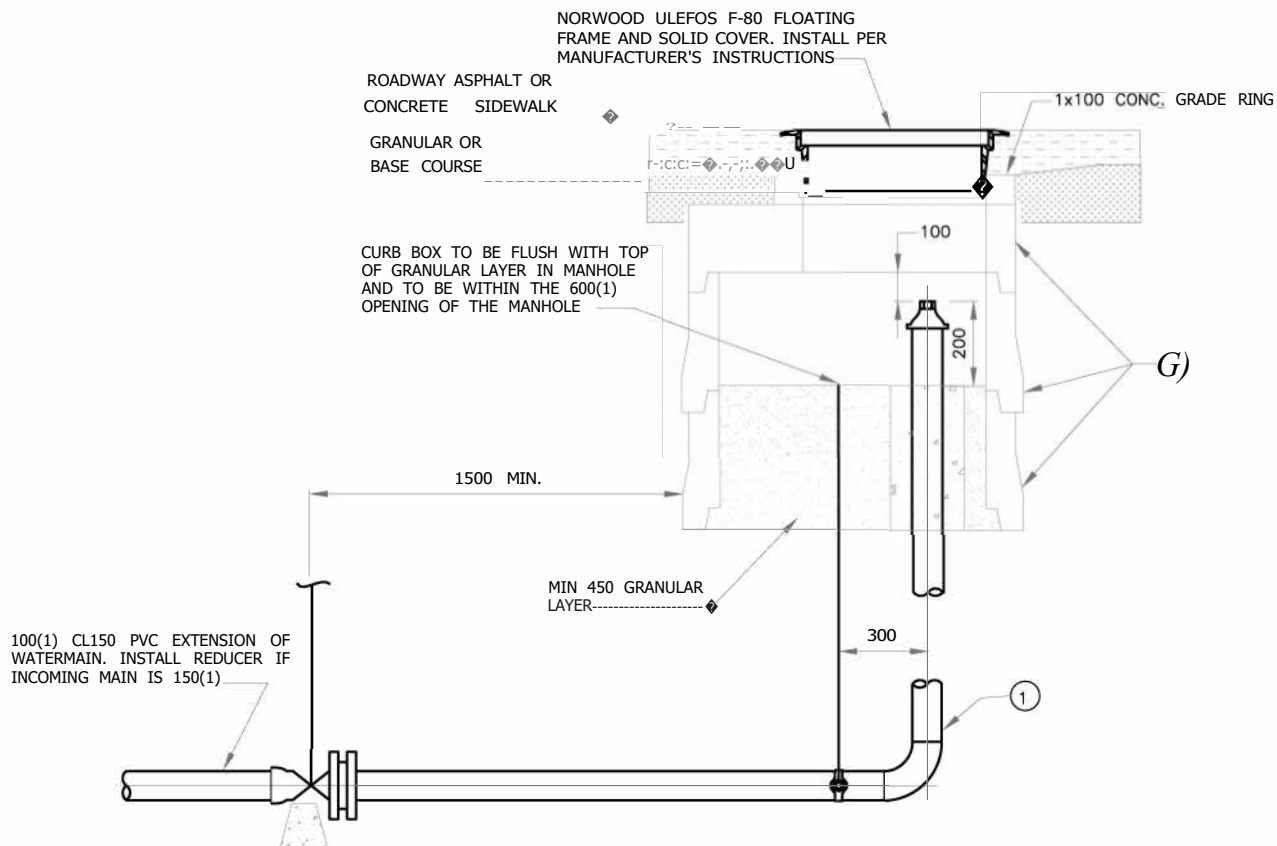
CONSTRUCTION STANDARDS
75mm + 100mm Irrigation Service
Kiosk - INTERIOR EQUIP. LAYOUT
(WITH Booster Pump)

DARREN HARRIS

W-11.INT2

W-11 2026-01-26.dwg

- ① 100(1) DR11 HOPE RISER ASSEMBLY c/w 100(1) 'CENTRAL' TRANSITION FITTING WITH REGINA FIRE DEPT PUMPER THREAD. CAP WITH STANDARD HYDRANT CAP AS SHOWN. LENGTH OF RISER AS REQ'D.
- ② TWO SECTIONS OF 900(1) CATCHBASIN MANHOLE X 0.41m LONG AND ONE 900X600X300 CATCHBASIN FLAT TOP. CUT OFF ANY RUNGS IN MANHOLE SECTIONS. MORTAR ALL JOINTS.



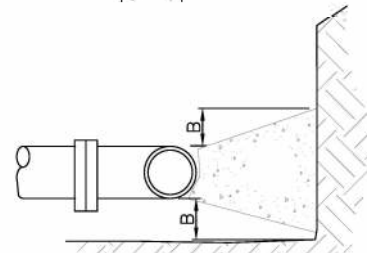
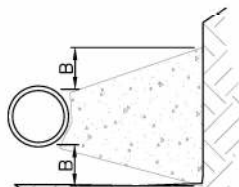
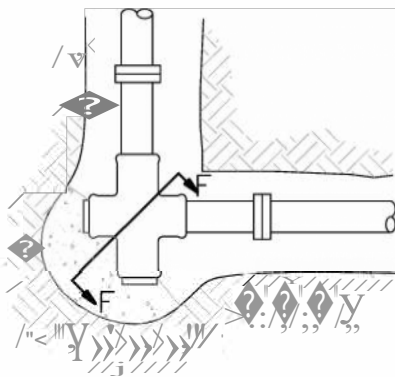
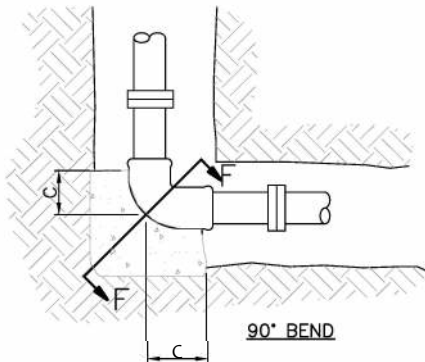
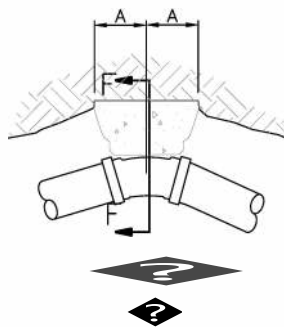
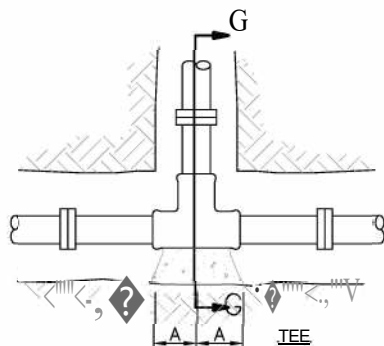
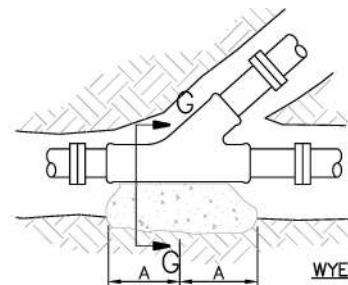
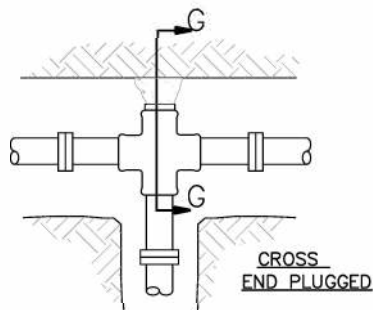
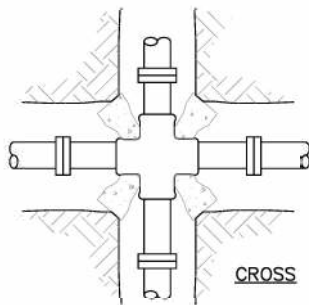
Date	Revisions	By
11/00	PROPOSED DETAIL - FOR REVIEW	SB
09102	REVISED PER TRIAL INSTALLATION	SB
AUG/10	TITLE BLOCK	JJA



CONSTRUCTION STANDARDS

**Detail for Deadend Watermain
Flushout**

Designed By :		Approved:	
Date	JUU00	Scale	NTS
Digital File:		Stdw-12.dwg	
		W-12	



NOTES:

-DIMENSIONS OF THRUST BLOCKS AND REQUIRED BEARING AREAS SHOWN ARE BASED ON A MAXIMUM TEST/OPERATING PRESSURE OF 689 kPa (100 psi) AGAINST SOIL WHICH HAS A SAFE LOAD BEARING CAPACITY OF 70 kPa (10 psi) MINIMUM. FOR ANY CONDITIONS WHICH VARY FROM THESE, THE DIMENSIONS/AREAS MUST BE ADJUSTED ACCORDINGLY

-REFER TO SPECIFICATIONS SECTION 02511 - WATERMAINS FOR CONCRETE REQUIREMENTS

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

PIPE DIAMETER (mm)	90°BEND				45°BEND				TEE, PLUGS, WYES				22.5 & 11.25 BENDS			
	A (mm)	B (mm)	C (mm)	AREA (sq.m)	A (mm)	B (mm)	C (mm)	AREA (sq.m)	A (mm)	B (mm)	C (mm)	AREA (sq.m)	A (mm)	B (mm)	C (mm)	AREA (sq.m)
100		170	200	0.16	160	110		0.09	190	140		0.11	110	60		0.04
150		250	300	0.33	240	160		0.18	270	190		0.23	160	90		0.08
200		320	350	0.56	310	210		0.30	350	250		0.40	210	110		0.14
250		390	400	0.85	380	250		0.46	430	310		0.60	260	140		0.22
300		460	450	1.20	450	300		0.65	520	370		0.85	310	160		0.31
350		530	500	1.61	520	350		0.87	600	420		1.14	340	170		0.38
400		610	550	2.08	600	400		1.13	680	480		1.47	390	190		0.49
450		680	600	2.62	670	440		1.42	760	540		1.85	440	220		0.62
500		750	650	3.21	740	490		1.75	840	590		2.27	490	240		0.77
600		900	750	4.95	880	580		2.49	1010	710		3.24	590	290		1.22
750		1110	900	7.04	1090	720		3.81	1250	870		4.98	780	410		1.95
900		1330	1050	10.09	1310	860		5.46	1490	1040		7.14	930	480		2.79

Date	Revisions	By
SEP/97	REVISED NOTES/TITLE BLOCK	SB
MAY/98	BLOCK AREAS REVISED	SB
NOV/98	RENUMBERED FROM W-5	SB
DEC/02	SPEC. No. REF. CORRECTED	SB
AUG/10	TITLE BLOCK	JJA



CONSTRUCTION STANDARDS

Thrust Blocks

Designed By:

Approved:

Date

MAR/77

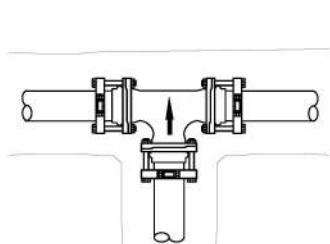
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NTS

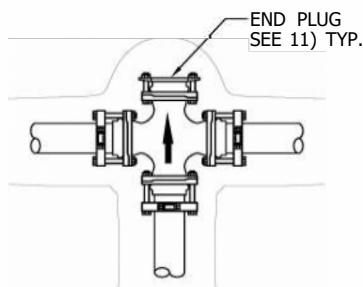
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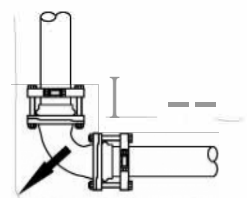
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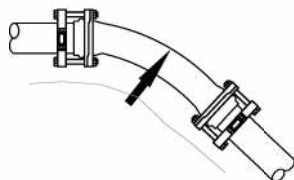
1) THRU LINE CONNECTION - TEE



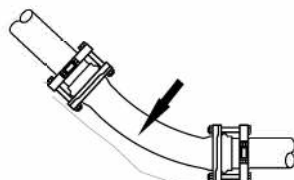
2) THRU LINE CONNECTION - CROSS



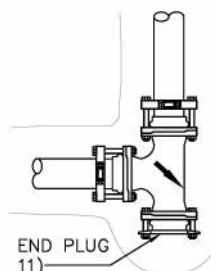
3) CHANGE OF DIRECTION - ELBOW



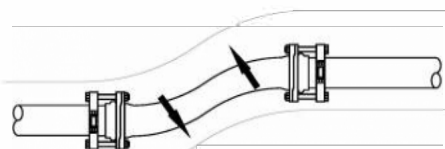
4A) CHANGE OF DIRECTION
VERTICAL BEND - DOWN



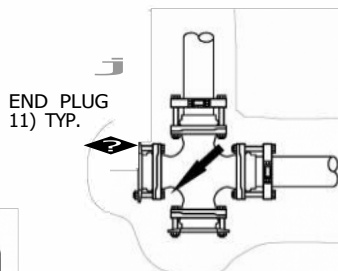
4B) CHANGE OF DIRECTION
VERTICAL BEND - UP



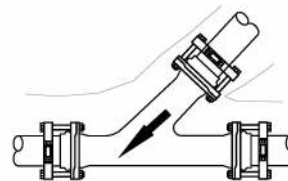
5) CHANGE OF DIRECTION -
TEE USED AS ELBOW



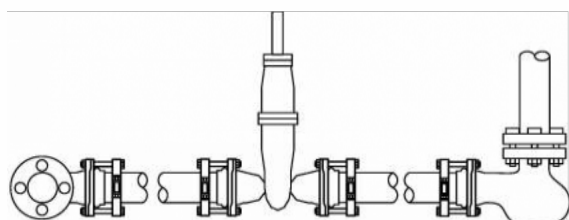
6) CHANGE OF DIRECTION



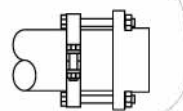
7) CHANGE OF DIRECTION - CROSS USED AS ELBOW



8) THRU LINE CONNECTION - WYE



9) HYDRANT LEAD/VALVE



10) END CAP



11) END PLUG

HORIZONTAL RESTRAINTS

NOMINAL PIPE SIZE					
TYPE	100	150	200	250	300
90° BEND	1.5m	2.1m	2.7m	3.4m	4.0m
45° BEND	0.6m	0.9m	1.2m	1.5m	1.8m
22.5° BEND	0.3m	0.6m	0.6m	0.6m	0.9m
11.25° BEND	0.3m	0.3m	0.3m	0.3m	0.6m
SIZE ON SIZE TEE	Br. only	Br. only	Br. only	Br. only	Br. only
PLUGS & VALVES	3.0m	4.3m	5.5m	6.7m	7.9m

NOTES

1) RESTRAINED LENGTHS IN TABLE ARE FOR MAXIMUM TEST PRESSURE OF 690kPa WITH PIPE FULLY BEDDED IN GRANULAR MATERIAL. IF SITE CONDITIONS VARY FROM THESE - CONTACT THE ENGINEER.

VERTICAL RESTRAINTS

- 1) THE FIRST NUMBER IN THIS TABLE IS THE RECOMMENDED RESTRAINED LENGTH OF PIPE ON EACH SIDE OF A **VERTICAL** BEND WHERE THE THRUST IS ACTING GENERALLY UPWARDS TOWARDS THE GROUND SURFACE. SEE FIGURE 4A.
- 2) THE SECOND NUMBER IN THIS TABLE IS THE RECOMMENDED RESTRAINED LENGTH OF PIPE ON EACH SIDE OF A **DOWNWARD** BEND WHERE THE THRUST IS ACTING GENERALLY DOWNWARDS AWAY FROM THE GROUND SURFACE. SEE FIGURE 4B.
- 3) WHERE RECOMMENDED RESTRAINTS LENGTHS OVERLAP BETWEEN FITTINGS RESTRAIN ALL JOINTS BETWEEN THEM.

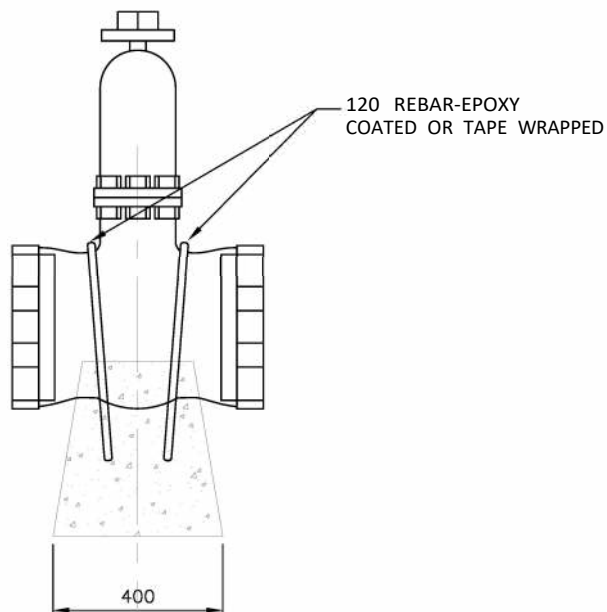
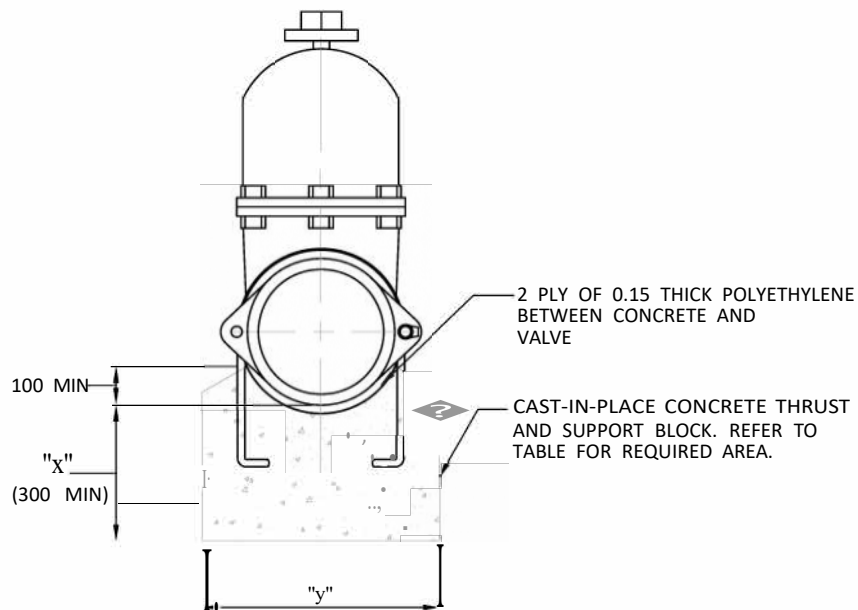
NOMINAL PIPE SIZE					
TYPE	100	150	200	250	300
45° VERTICAL OFFSET	1.2m/0.6m	1.8m/0.9m	2.4m/1.2m	2.7m/1.5m	3.4m/1.8m
22.5° VERTICAL OFFSET	0.6m/0.3m	0.9m/0.6m	1.2m/0.6m	1.5m/0.9m	1.5m/0.9m

Date	Revisions	By
SEP/97	NOTES/TITLE BLOCK REVISED	SB
SEP/98	END PLUGS ADDED/MINOR MODIFICATIONS	SB
NOV/98	RENUMBERED FROM W-5A	SB
AUG/10	TITLE BLOCK	JJA



CONSTRUCTION STANDARDS Mechanical Thrust Restraints

Designed By:		Approved:	
Date	Scale	W-14	
SEP/97	NTS		
Digital File: Stdw-14.dwg			



VALVE SIZE (mm)	REQUIRED AREA - SQ. M "X" X "y" -AREA
100	0.09
150	0.18
200	0.31
250	0.47
300	0.67
350	0.97
400	1.25
450	1.56
500	1.93
600	2.73
750	4.20
onn	6.03

NOTES:

1) DIMENSIONS OF BLOCK AND REQUIRED BEARING AREA ARE BASED UPON A MAXIMUM TEST/OPERATING PRESSURE OF 689 kPa (100 psi) AGAINST SOIL WHICH HAS A SAFE LOAD BEARING CAPACITY OF 70 kPa (10 psi) MINIMUM. FOR ANY CONDITION WHICH VARIES FROM THESE CONFIRM REQUIRED AREA WITH THE ENGINEER.

2) FOR CONCRETE REQUIREMENTS REFER TO SPECIFICATIONS SECTION 02511-WATERMAINS

3) ANY VALVE WHICH HAS EITHER 'TYTON' OR MJ STYLE END CONNECTIONS MUST BE ANCHORED AS SHOWN. THIS INCLUDES GATE VALVES AND BUTTERFLY VALVES.

ALL DIMENSIONS ARE IN MILLMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By
SEP/97	REVISED TITLE BLOCK	SB
MAY/98	REVISED AND TABLE ADDED	SB
NOV/98	RENUMBERED FROM W-5B	SB
NOV/01	NOTE 3 ADDED TO CLARIFY	SB
AUG/10	TITLE BLOCK	JJA



CONSTRUCTION STANDARDS

Valve Anchoring

Designed By:

Approved:

Date

NOV/96

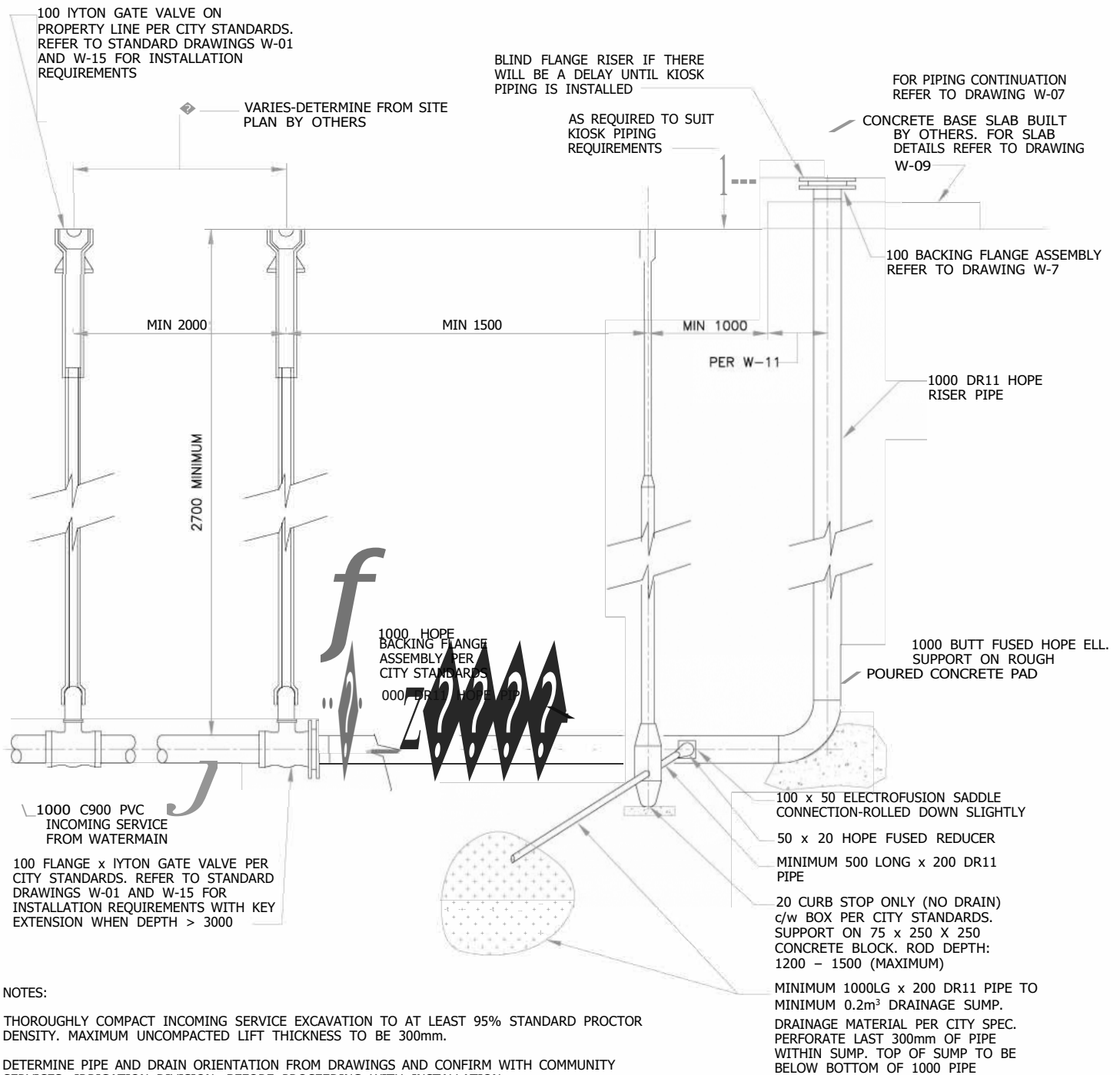
Scale

NTS

W-15

Digital File:

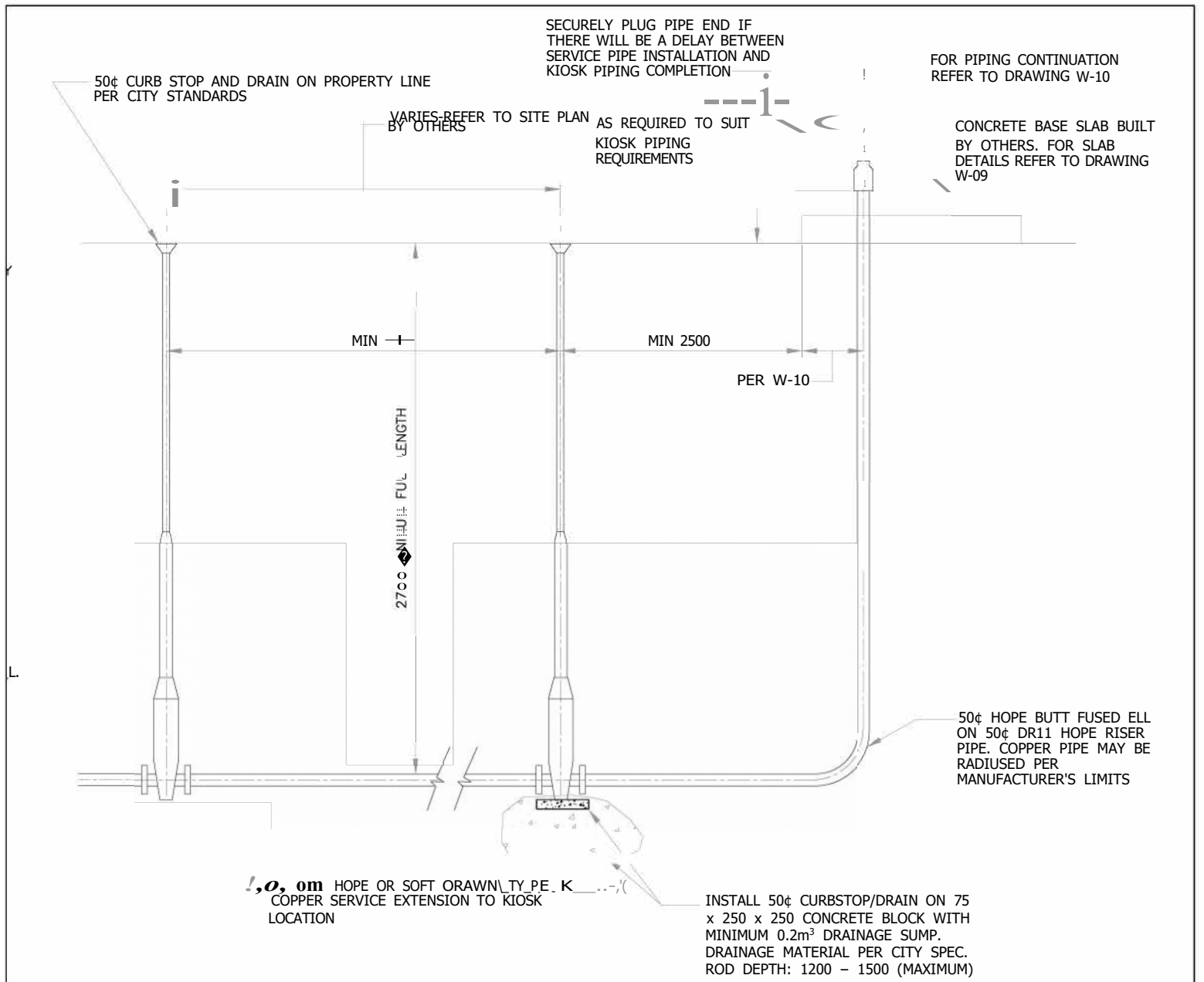
Stdw-15.dwg



OETAIL-1 00mm SERVICE TO IRRIGATION KIOSK

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By	CONSTRUCTION STANDARDS		
NOV/01	ISSUED FOR REVIEW AND APPROVAL	SB	 Details of 100mm Water Service Extension to Irrigation Kiosks		
MAR/10	REVISED NOTES	DM			
AUG/10	TITLE BLOCK	JJA			
JUN/14	REVISED DIMENSION AND NOTES	MF			
AUG/15	REVISED DIMENSION AND NOTES	MF			
SEP/15	REVISED DIMENSION AND NOTES	BL			
			Designed By:	Approved:	Stella Madsen
			Date: SepV15	Scale: NTS	W-16A (100)
			Digital File: Stdw-16.dwg		



NOTES:

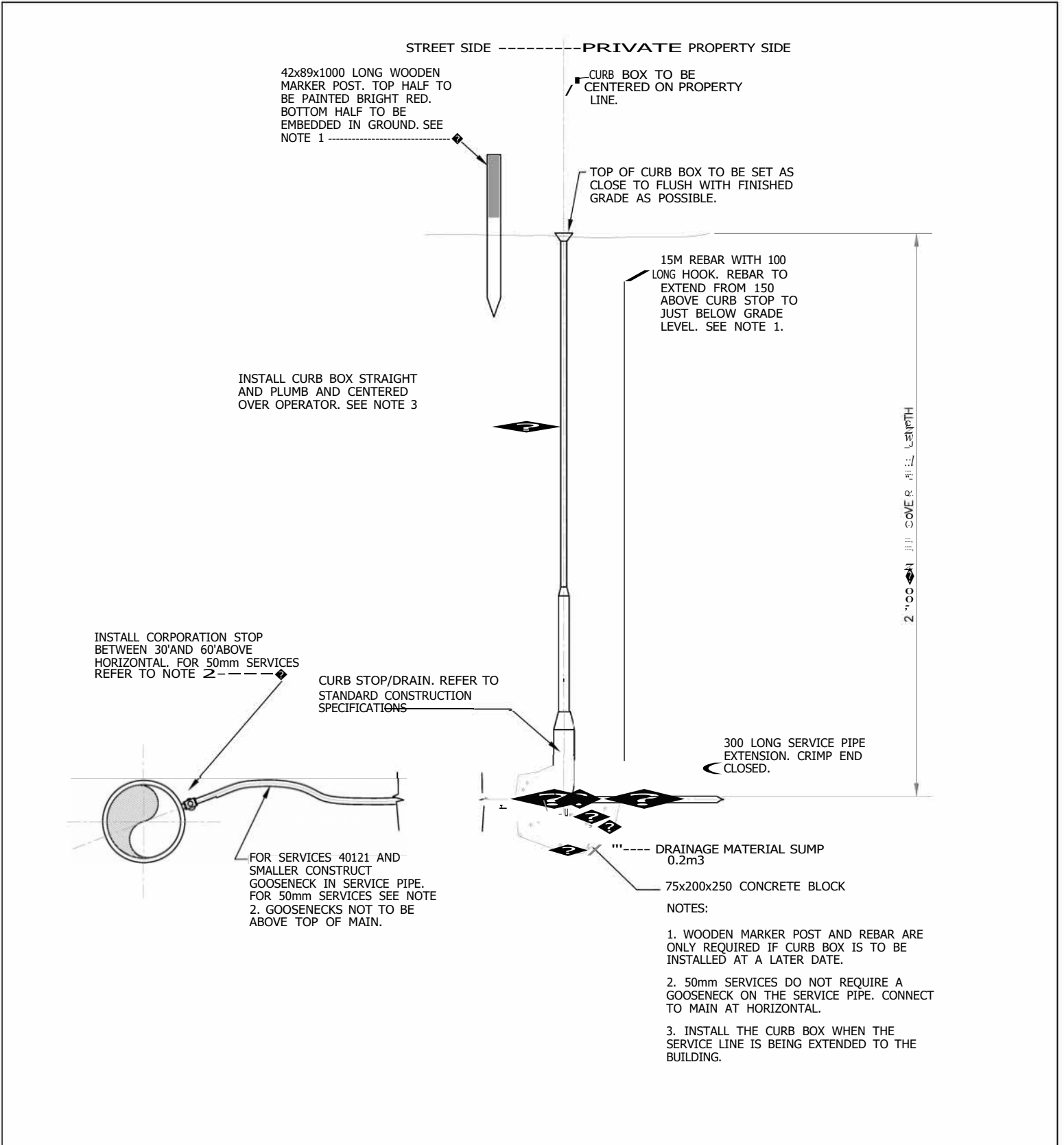
THOROUGHLY COMPACT INCOMING SERVICE EXCAVATION TO AT LEAST 95% STANDARD PROCTOR DENSITY. MAXIMUM UNCOMPACTED LIFT THICKNESS TO BE 300mm.

DETERMINE PIPE AND DRAIN ORIENTATION FROM DRAWINGS AND CONFIRM WITH COMMUNITY SERVICES, IRRIGATION DIVISION, BEFORE PROCEEDING WITH INSTALLATION.

DETAIL-50mm SERVICE TO IRRIGATION KIOSK

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By		CONSTRUCTION STANDARDS		
NOV/01	ISSUED FOR REVIEW AND APPROVAL	SB		Details of 50mm Water Service Extension to Irrigation Kiosks		
MAR/10	REVISED NOTES	DM				
AUG/10	TITLE BLOCK	JJA				
AUG/15	DIMENSIONS ADDED / REVISED NOTES	MF				
SEP/15	REVISED DIMENSION AND NOTES	BL				
				Designed By:		Approved: Stella Madsen
			Date	Scale	W-16B (50)	
			SepV15	NTS		
			Digital File: Stdw-16.dwg			

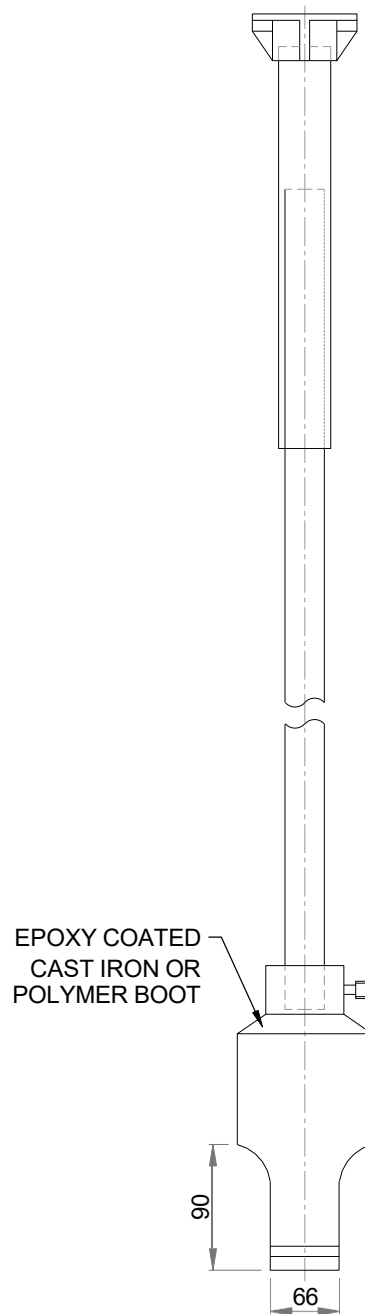
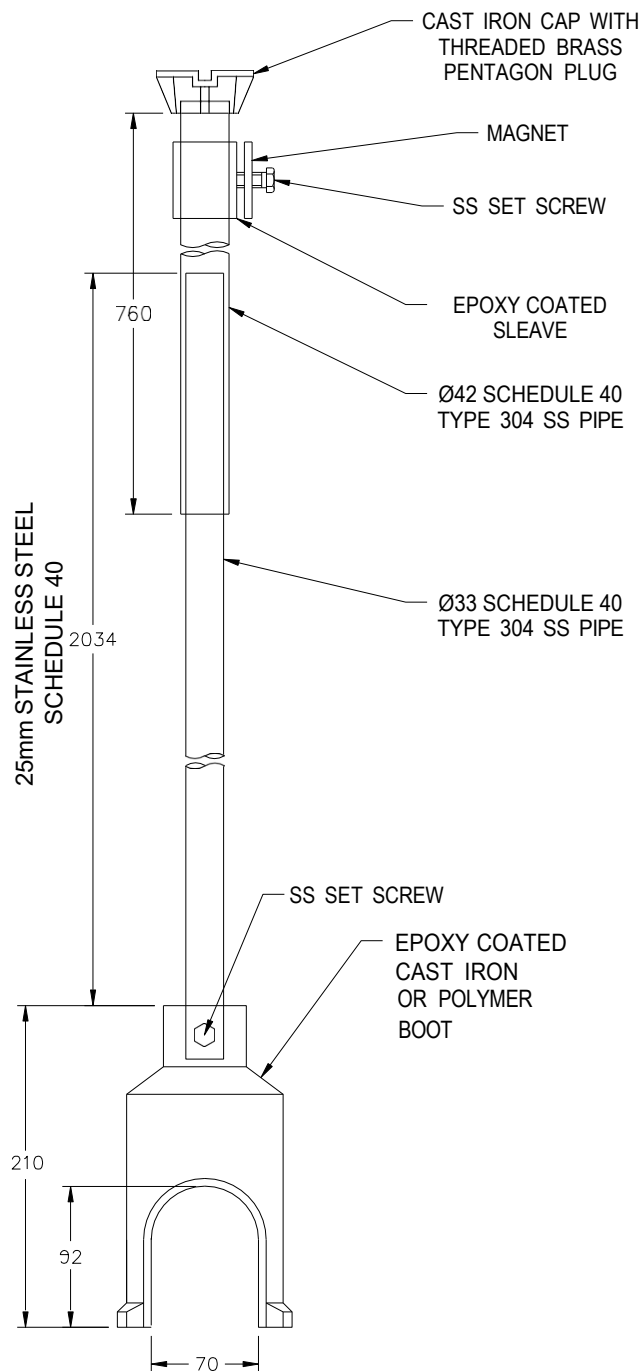


ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By
SEP/98	FIRST ISSUE	SB
NOV/98	RENUMBERED FROM W-20	SB
SEP/99	W-17 AND W-18 COMBINED	SB
NOV/00	NOTE 2 ADDED/ NOTES MODIFIED	SB
OCT/03	NOTE 3 ADDED / MOINOR MODIFICATIONS	SB
AUG/10	TITLE BLOCK	JJA



CONSTRUCTION STANDARDS			
Water Service Connection 50mm and Smaller Services			
Designed By:		Approved:	
Date	SEP/98	Scale	NTS
Digital File:		W-17	
Stdw-17.dwg			



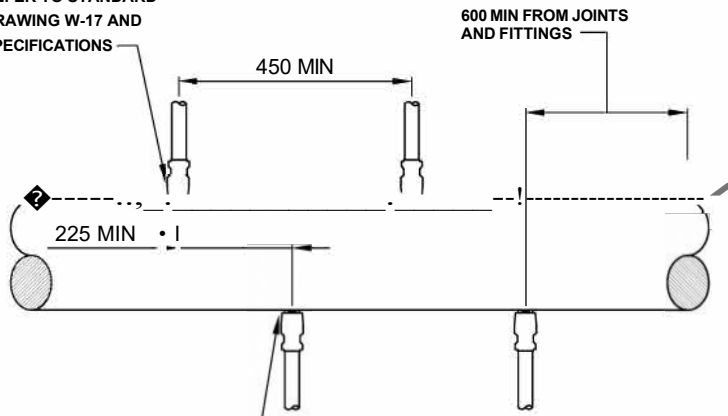
MINIMUM SIZE ALLOWED FOR SERVICES CONNECTIONS IS 25mm

Date	Revisions	By
JAN/18	FIRST ISSUE	TY



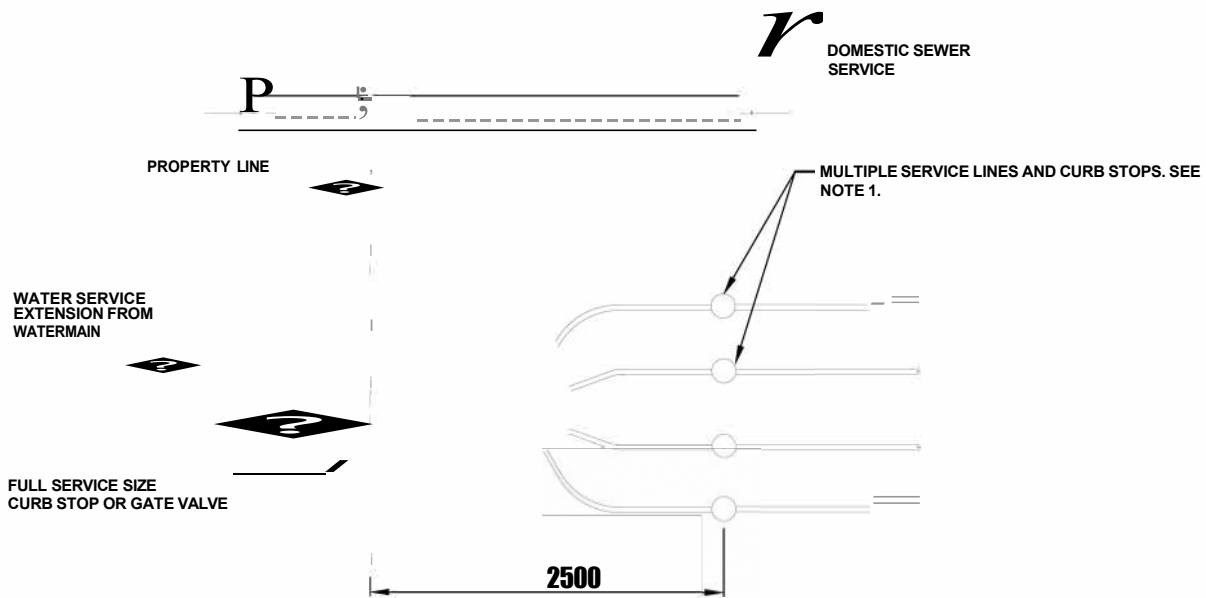
CONSTRUCTION STANDARDS		
Water Service Curb Box		
50mm and Smaller Services		
Designed By:		Approved: Dustin McCall
Date	Scale	W-18
JAN/18	NTS	
Digital File: Stdw-18.dwg		

SERVICE CONNECTION-
REFER TO STANDARD
DRAWING W-17 AND
SPECIFICATIONS



DIRECT TAP AS SHOWN MAY ONLY BE
USED ON MAINS WHICH ARE 1500 OR
LARGER CL150 PVC

SERVICE CONNECTIONS FROM DEADEND WATERMAINS



ARRANGEMENT OF SERVICE CONNECTIONS TO MULTIPLE METERED BUILDINGS

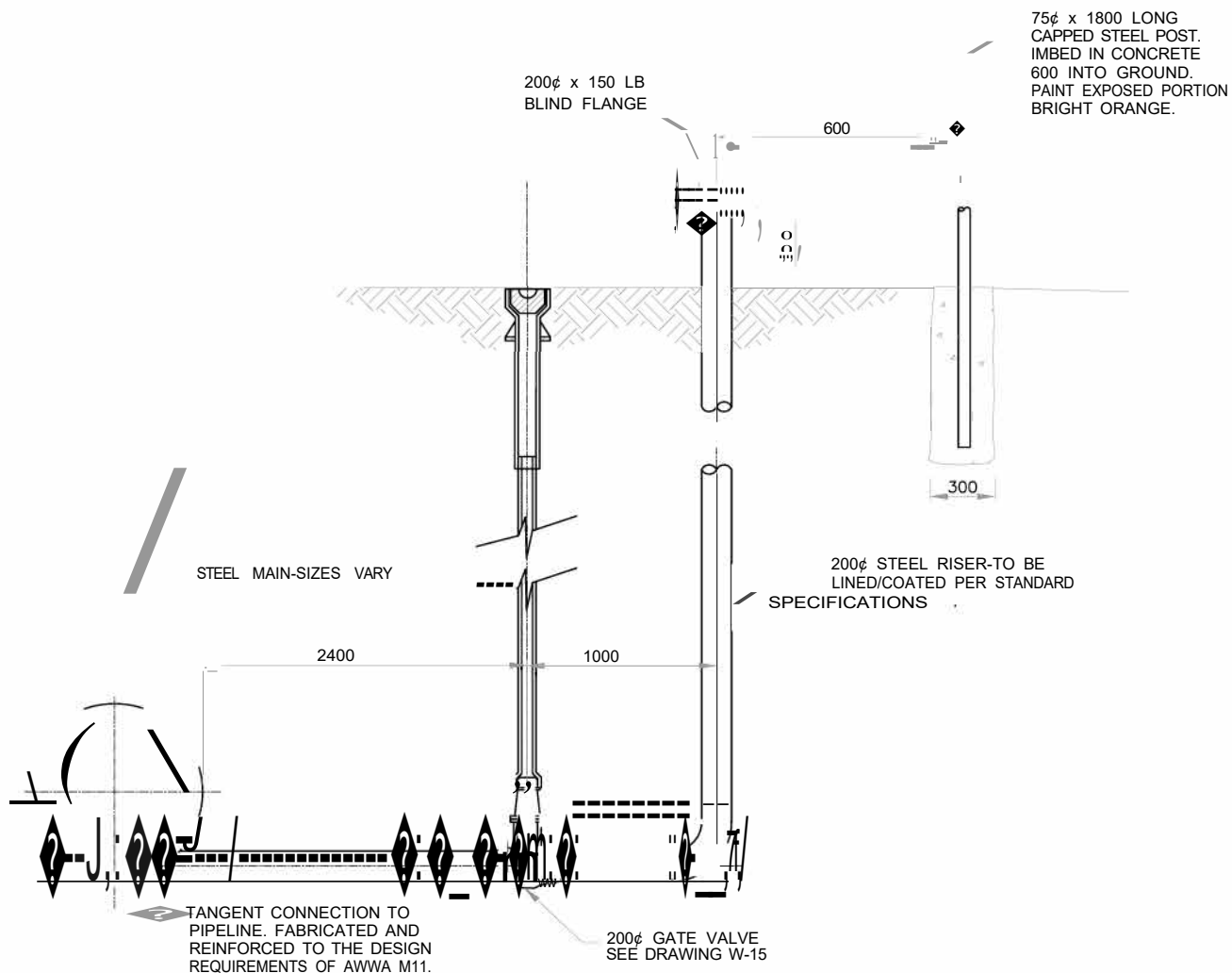
NOTES:

1) MULTIPLE SERVICE LINES AND CURB STOPS AS SHOWN MAY BE DELETED IF WATER METERS AND SHUTOFF VALVES ARE LOCATED IN A COMMON ROOM WHICH IS INACCESSIBLE TO THE PUBLIC IN ACCORDANCE WITH THE WATER BYLAW.

2) REFER TO SPECIFICATIONS SECTION 02516 FOR PIPING, VALVING AND INSTALLATION REQUIREMENTS

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By	 REGINA	CONSTRUCTION STANDARDS			
MAR/98	COMBINED W-15 AND W-17	SB		Multiple Service and Deadend Watermain Connections			
NOV/98	REVISED AND RENUMBERED	SB					
SEP/99	GENERAL REVISION	SB					
OCT/02	DEADEND REV. TO NEW FLUSHOUT	SB					
AUG/10	TITLE BLOCK	JJA					
				Designed By:		Approved:	
			Date	JUU02	Scale	NTS	W-19
			Digital File: Stdw-19.dwg				

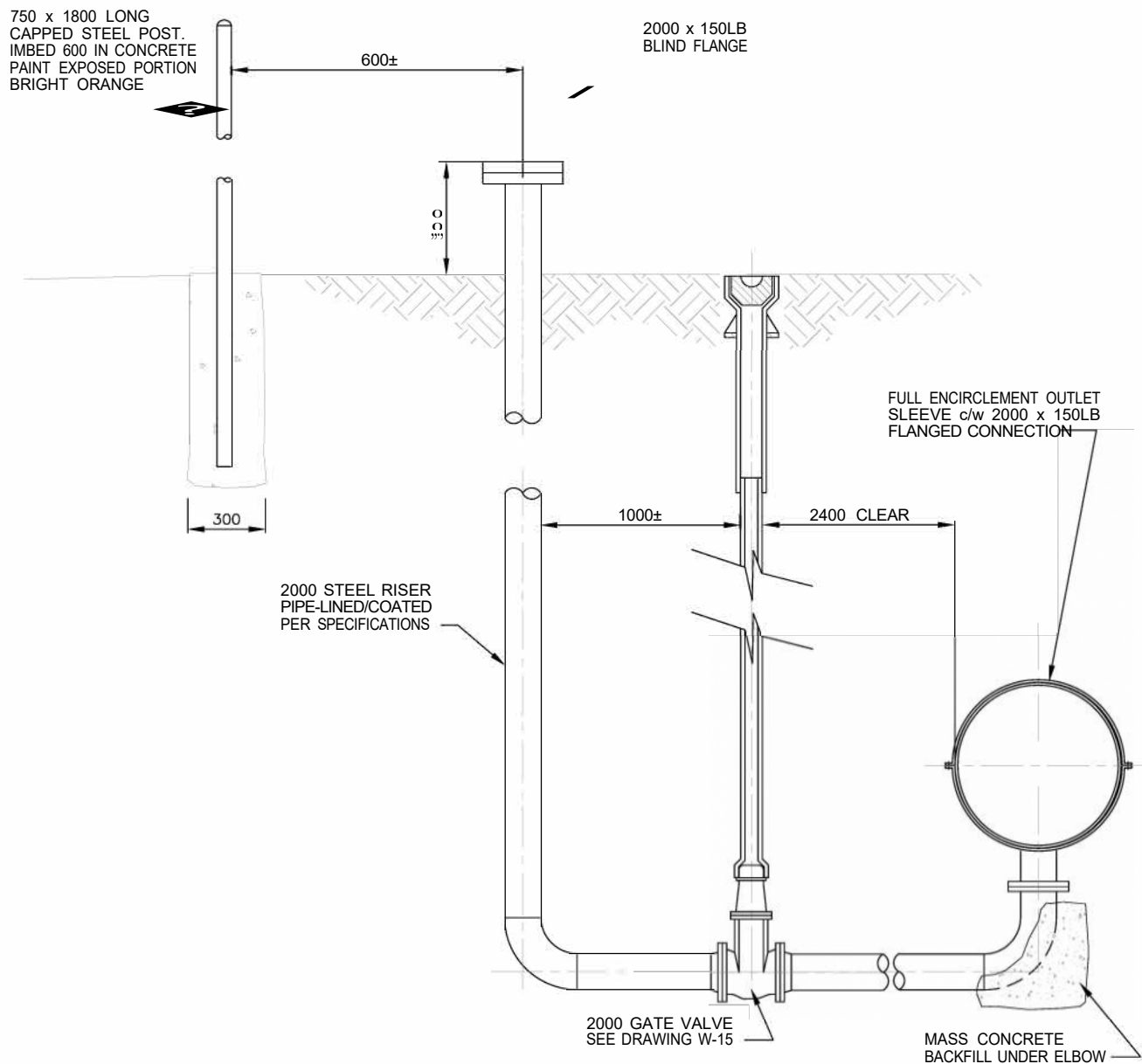


NOTES:

- 1) ALL MATERIALS/INSTALLATION TO BE IN ACCORDANCE WITH CITY OF REGINA STANDARD CONSTRUCTION SPECIFICATIONS FOR WATERMAIN.
- 2) REPAIR ALL LININGS/COATINGS DAMAGED BY CUTTING/WELDING OPERATIONS

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By	 REGINA	CONSTRUCTION STANDARDS	
JAN/97	REISSUED	SB		Blowoff from Steel Pipeline	
SEP/97	MINOR REVISIONS	SB			
NOV/98	RENUMBERED FROM W-19	SB			
AUG/10	TITLE BLOCK	JJA			
				Designed By: _____ Approved: _____	
				Date MAY/94	So. ϕ NTS
			Digital File: Stdw-23.dwa		

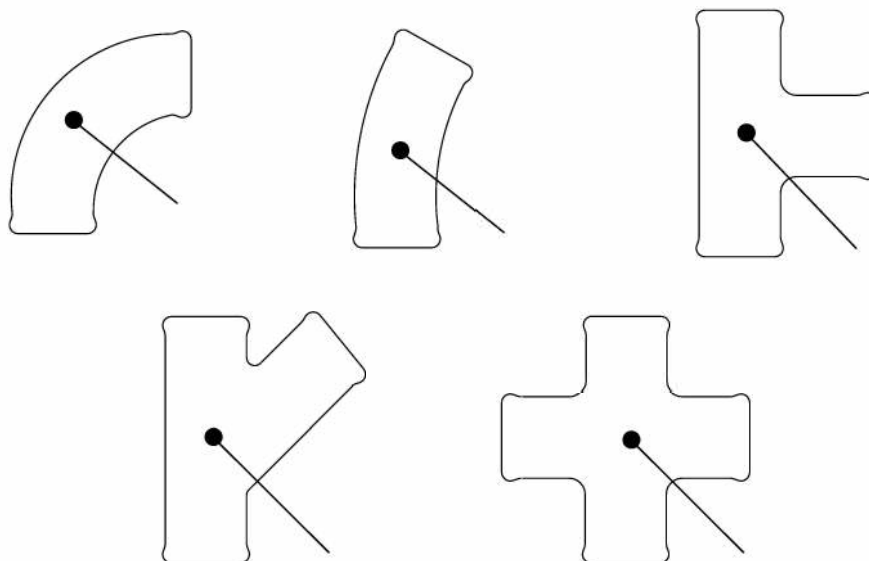


NOTE

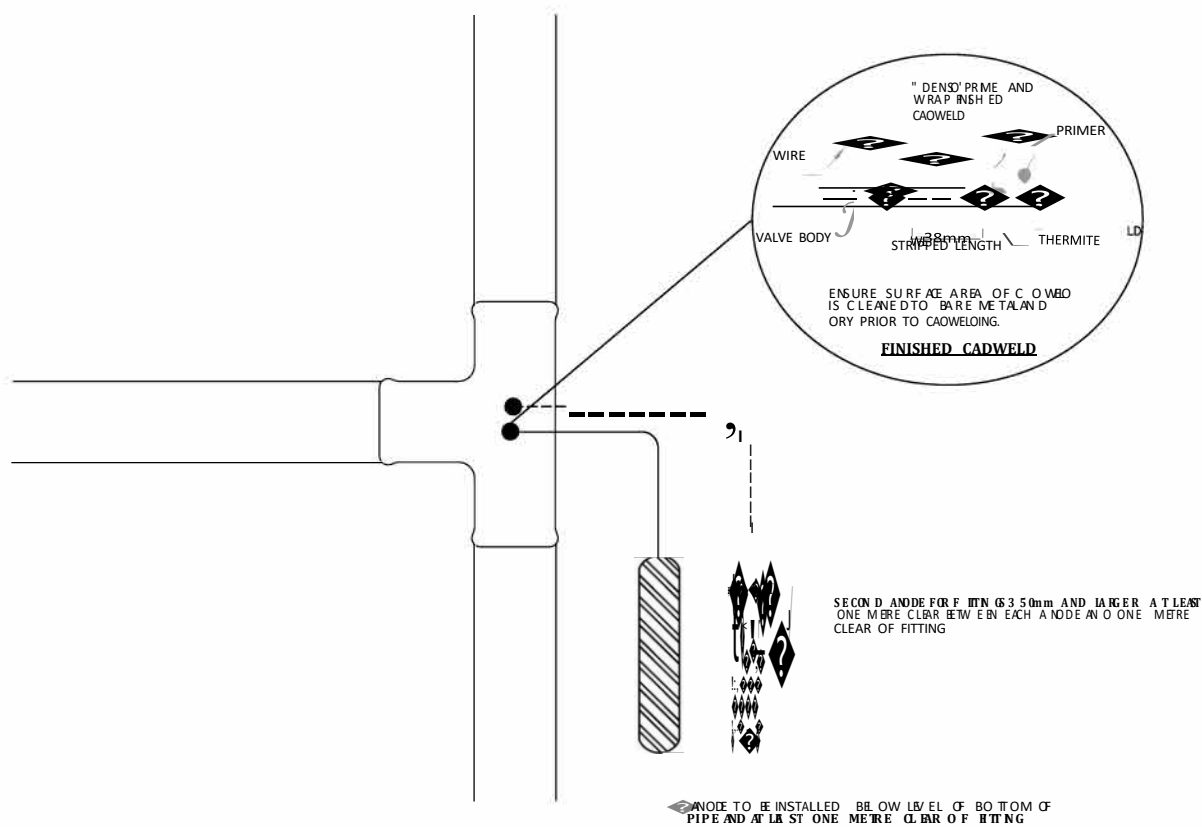
- 1) ALL MATERIALS AND INSTALLATION TO BE IN ACCORDANCE WITH CITY OF REGINA STANDARD CONSTRUCTION SPECIFICATIONS.
- 2) REPAIR ALL LININGS/COATINGS DAMAGED AS A RESULT OF CUTTING/WELDING OPERATIONS.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By		CONSTRUCTION STANDARDS			
JAN/97	REISSUED	SB		Drain/Blowoff Connection from Non-Steel Pipelines			
SEP/97	MINOR REVISIONS	SB					
NOV/98	RENUMBERED FROM W-19A	SB					
AUG/10	TITLE BLOCK	JJA					
				Designed By:		Approved:	
				Date	Scale	W-24	
			MAY/94	NTS			
			Digital File: Stdw-24.dwg				



CAST IRON FITTING-CADWELD LOCATION



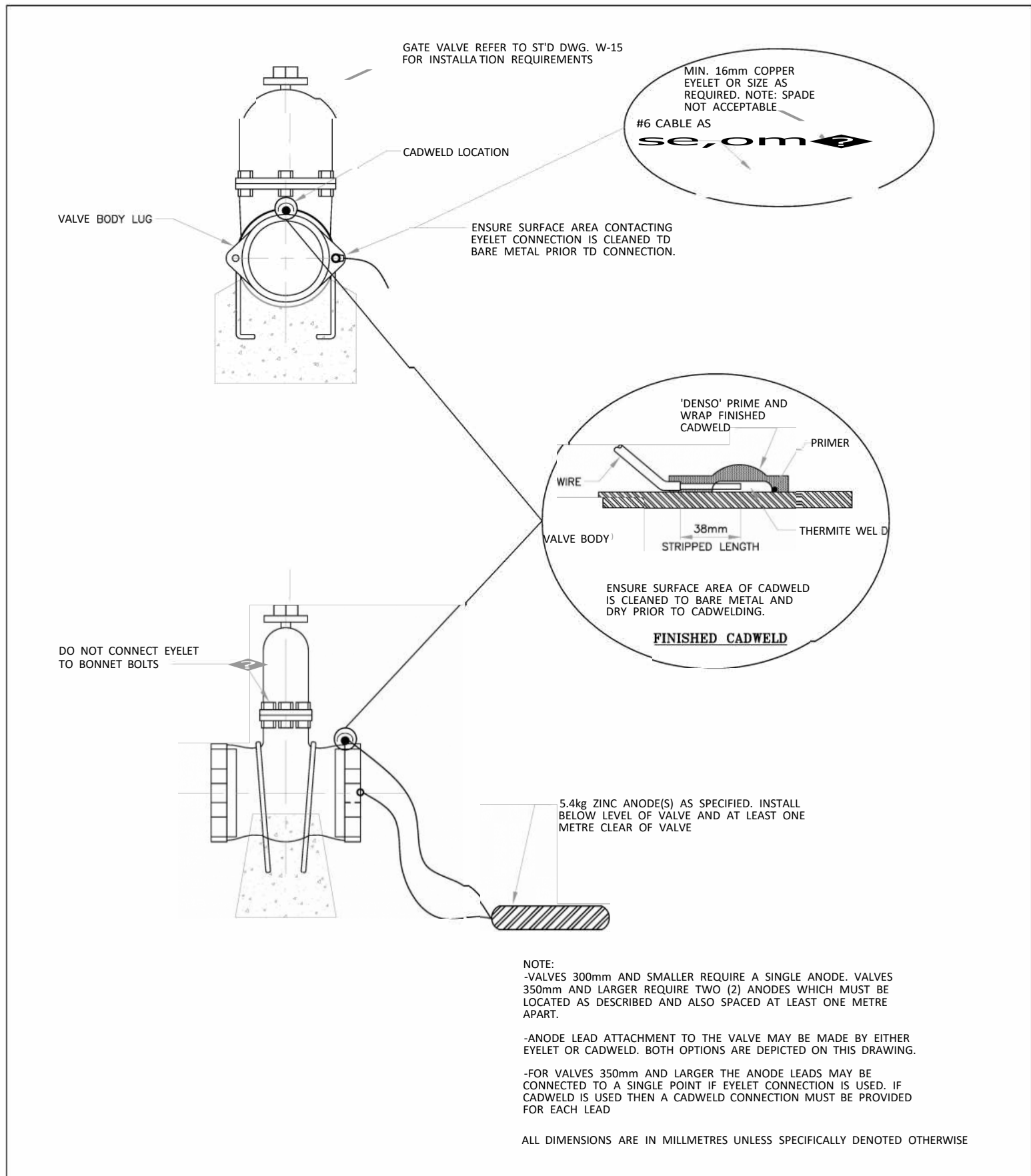
NOTE:

-FITTINGS 300mm AND SMALLER REQUIRE A SINGLE ANODE. FITTINGS 350mm AND LARGER REQUIRE TWO (2) ANODES WHICH MUST BE LOCATED AS DESCRIBED AND ALSO SPACED AT ONE METRE APART.

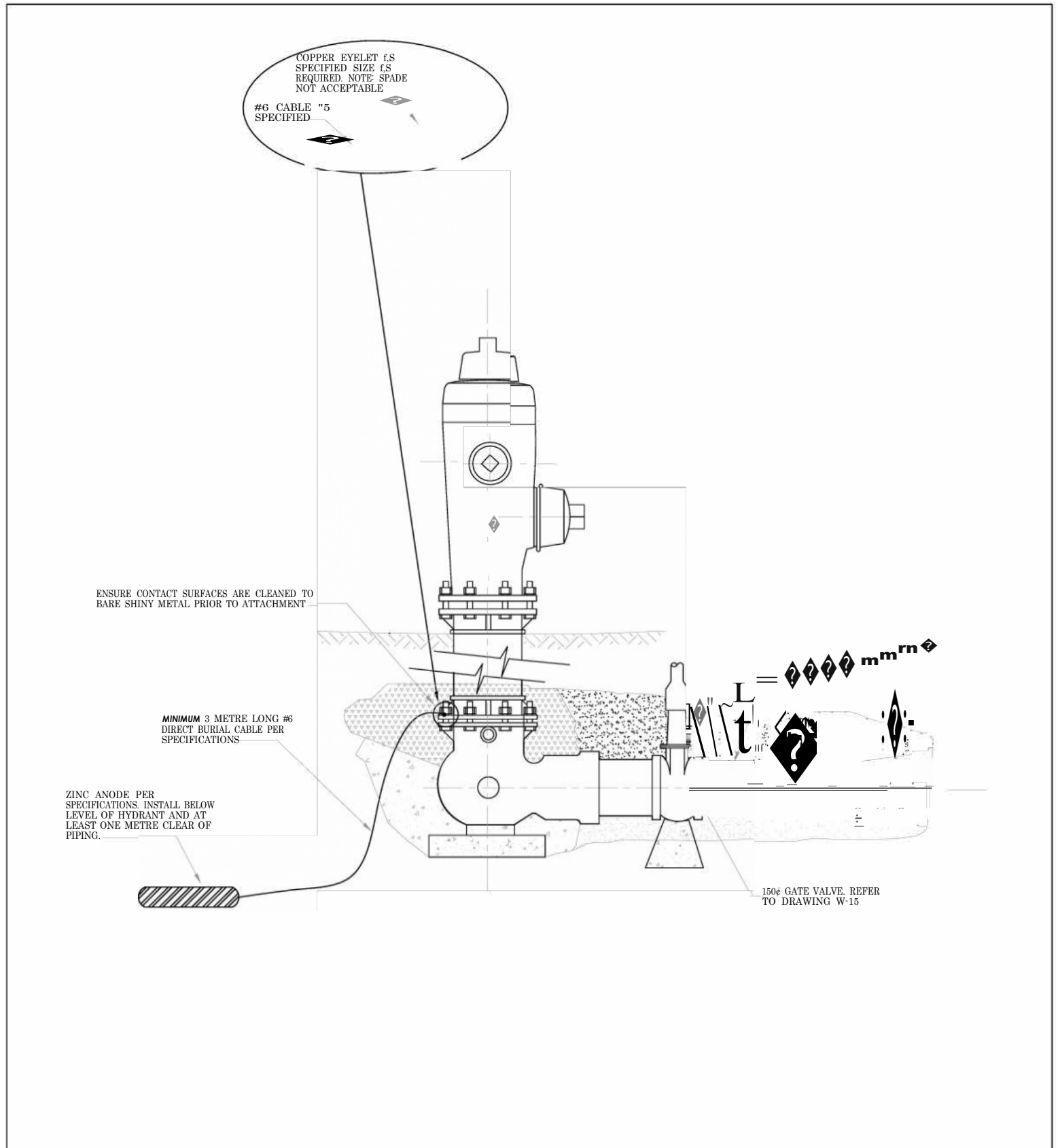
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By	CONSTRUCTION STANDARDS		
MAY/03	ISSUED AS STANDARD	SB	Cathodic Protection of Cast Iron Fittings		
AUG/10	TITLE BLOCK	JJA			
			Designed By:	Approved:	
			Date	Scale	W-25
			MAR/03	NTS	
			Digital File:	stdw-25.dwg	





Date	Revisions	By	CONSTRUCTION STANDARDS		
MAY/03	ISSUED AS STANDARD	SB			
AUG/10	TITLE BLOCK	JJA			
			Cathodic Protection of Gate Valves		
			Designed By :	Approved:	
			Date	Scale	W-26
			MAR/03	NTS	
			Digital File:	stdw-26.dw g	



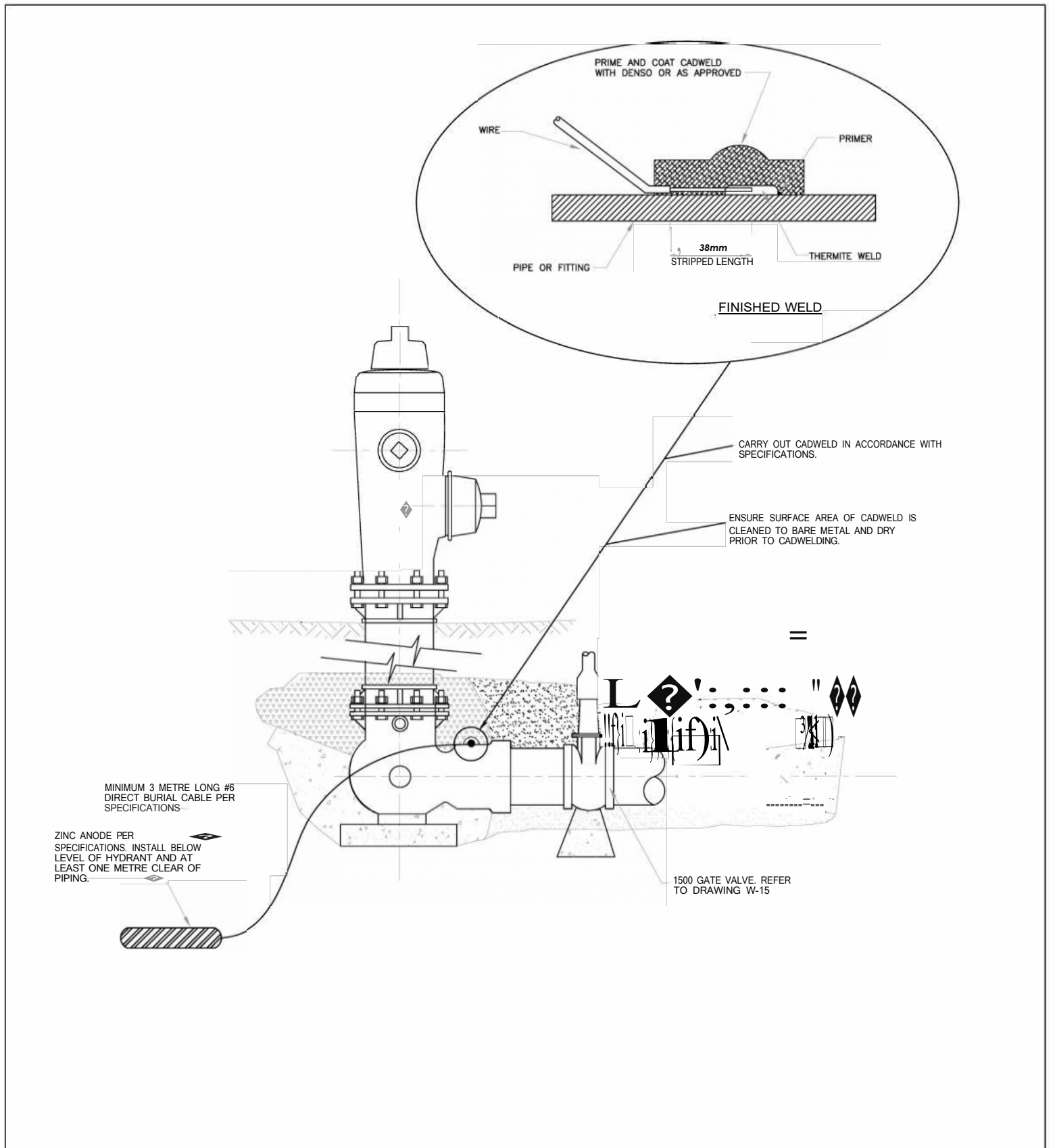
Date	Revisions	By
MAY/03	ISSUED AS STANDARD	SB
AUG/10	TITLE BLOCK	JJA



CONSTRUCTION STANDARDS

Cathodic Protection of Hydrant
Using Eyelet Connection

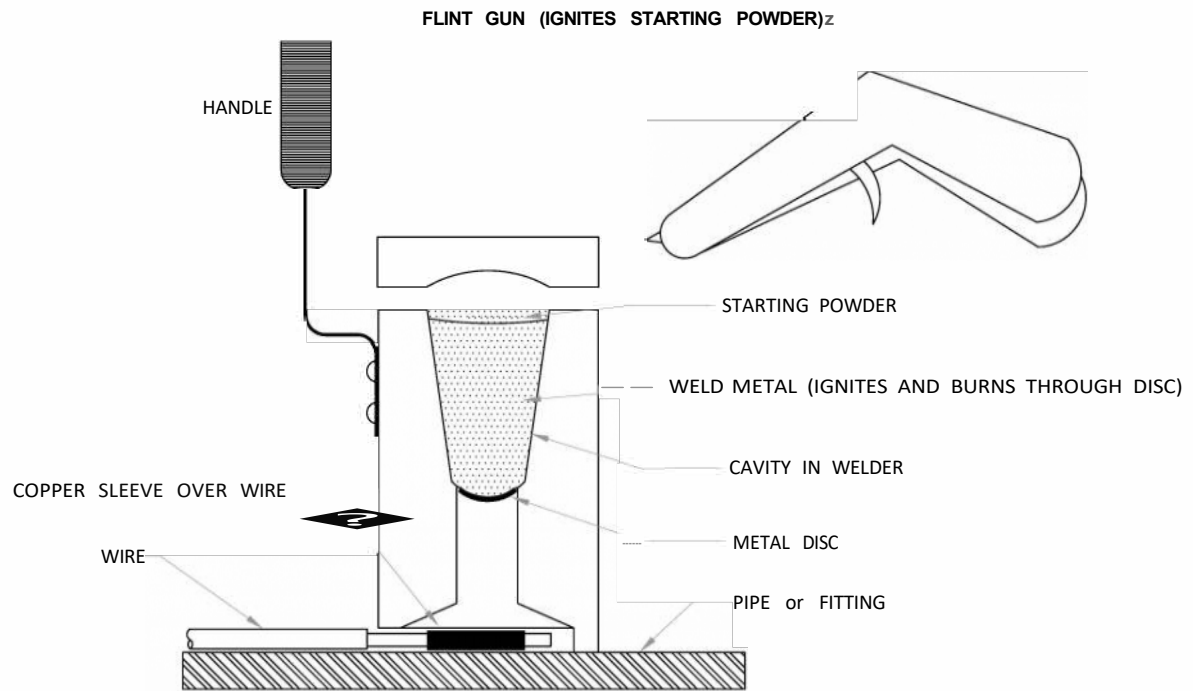
Designed By:		Approved:	
Date	MAR/03	Scale	NTS
Digital File:		stdw-27.dwg	
		W-27	



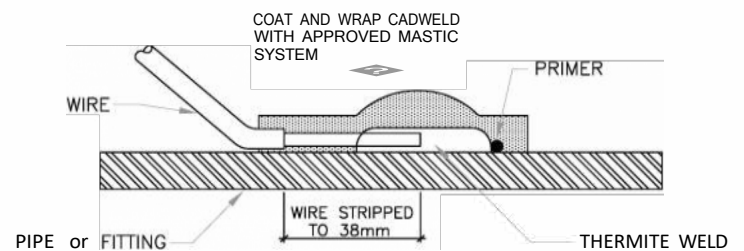
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFICALLY DENOTED OTHERWISE

Date	Revisions	By	CONSTRUCTION STANDARDS		
MAY/03	ISSUED AS STANDARD	SB	Cathodic Protection of Hydrant using Cadweld Connection		
AUG/10	TITLE BLOCK	JJA			
			Designed By:	Approved:	
			Date	Scale	
			MAR/03	NTS	W-28
			Digital File:	stdw-28.dwg	

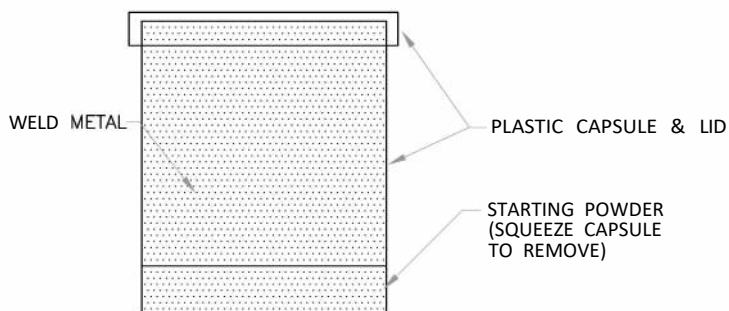




CADWELD

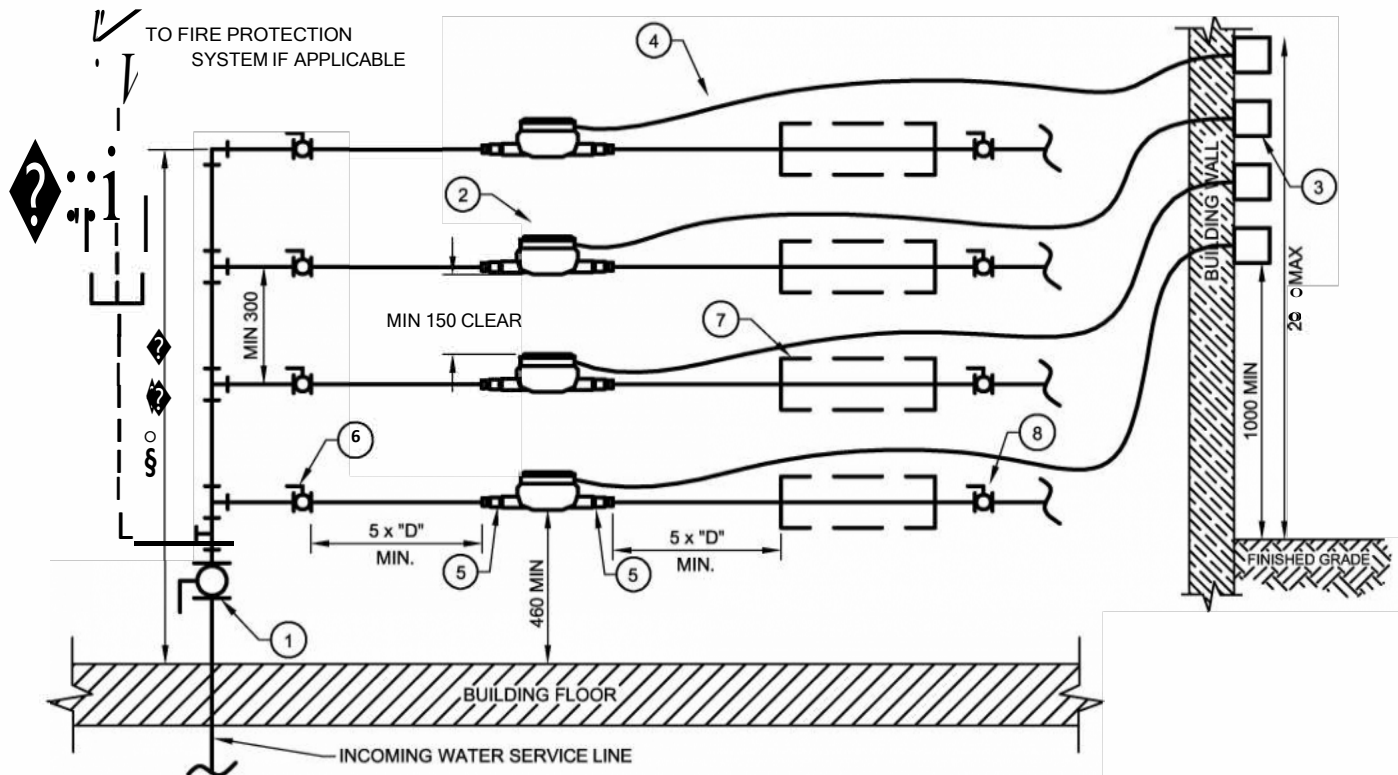


FINISHED WELD



WELD METAL CAPSULE

Date	Revisions	By	CONSTRUCTION STANDARDS			
MAY/03	ISSUED AS STANDARD	SB				
AUG/10	TITLE BLOCK	JJA				
			Typical Cadweld Description and Details Designed By: Date Scale Digital File: Approved: mar/03 NTS stdw-29.dwg W-29			



LEGEND:

- (G)** ISOLATION VALVE - REQUIRED IF SERVING A FIRE PROTECTION SYSTEM. MUST BE THE SAME SIZE AS INCOMING WATER SERVICE.
- (@)** WATER METER SUPPLIED AND INSTALLED BY THE CITY OF REGINA.
- (@)** MIU (TRANSMITTER) MODULE SUPPLIED AND INSTALLED BY THE CITY OF REGINA.
- (@)** WIRING OPTIONS
 OPTION 1: OWNER SUPPLIED AND INSTALLED MIU WIRING. LEAVE MINIMUM 0.6M (2FT) SLACK WIRE AT BOTH METER AND MIU MODULE LOCATIONS.
 OPTION 2: OWNER SUPPLIED AND INSTALLED CONDUIT FROM LOCATION OF METER(S) TO LOCATION OF MIU(S). CITY TO SUPPLY AND INSTALL MIU WIRING.
- (@)** WATER METER ADAPTERS INSTALLED BY OWNER.
- (@)** FACTORY LOCKABLE BALL VALVE. SAME SIZE AS INDIVIDUAL SERVICE LINE. LOCK WILL BE SUPPLIED AND INSTALLED BY THE CITY OF REGINA.
- (J)** BACKFLOW PREVENTION ASSEMBLY IF SO DIRECTED BY THE CITY OF REGINA CROSS CONNECTION CONTROL COORDINATOR.
- (@)** ISOLATING BALL VALVE TO BE THE SAME SIZE AS THE SERVICE LINE.

NOTES:

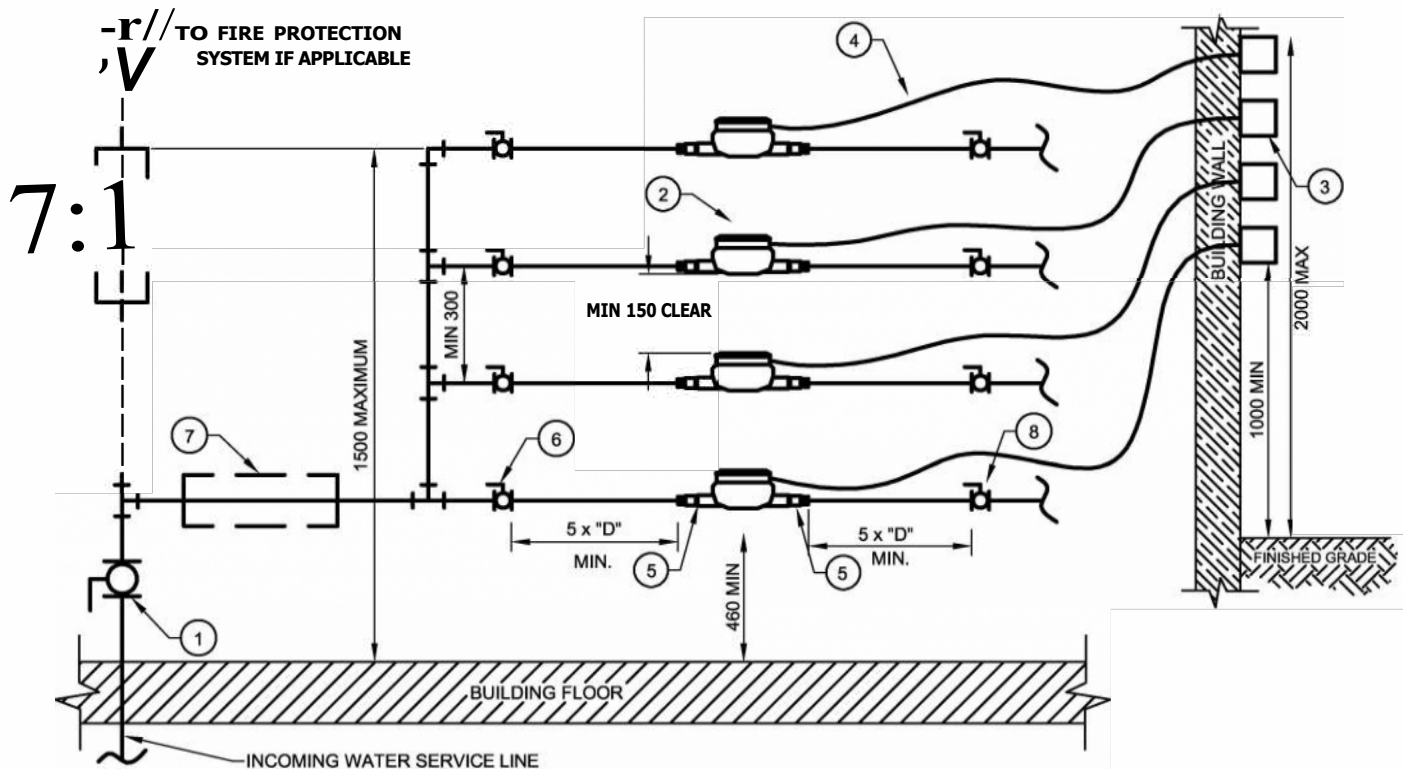
"P" SEE SPECIFICATION SECTION 15408 IN CONJUNCTION WITH THIS DRAWING.

2. FOR ADDITIONAL INFORMATION, CLARIFICATION, OR DEVIATION FROM THE REQUIREMENTS AS PER THESE STANDARDS, CONTACT THE WATER METER OR CROSS CONNECTION CONTROL PROGRAMS PRIOR TO INSTALLATION. TO CONTACT THESE PROGRAMS SUBMIT A SERVICE REQUEST TO (306) 777-7000.

Date	Revisions	By
FEB/24	MINOR REVISIONS	MG
MAR/24	NOTES/LEGEND REVISED	MG
AUG/10	TITLE BLOCK	JJA
FEB/16	NOTES / DIMENSIONS ADDED	BZ
FEB/17	DIMENSIONS ADDED	TY
OCT/22	REQUIREMENTS REVISION	MG
OCT/23	METER TYPE AND MINOR REVISIONS	MG



CONSTRUCTION STANDARDS			
Water Meter/Backflow Preventer Installation Requirements for Multi Metered Locations - Alt-1			
Designed By:		Approved:	
Kevin Lang		Brent Rostad	
Date	SEP/23	Scale	NTS
Digital File:		W-30	
Stdw-30.dwg			



LEGEND:

- G) ISOLATION VALVE - REQUIRED IF SERVING A FIRE PROTECTION SYSTEM. MUST BE THE SAME SIZE AS THE INCOMING WATER SERVICE.
- @ WATER METER SUPPLIED AND INSTALLED BY THE CITY OF REGINA
- @ MIU (TRANSMITTER) MODULE SUPPLIED AND INSTALLED BY THE CITY OF REGINA
- C WIRING OPTIONS
 - OPTION 1: OWNER SUPPLIED AND INSTALLED MIU WIRING. ONE WIRE REQUIRED FOR EACH METER. LEAVE MINIMUM 0.6M (2FT) SLACK WIRE AT BOTH METER AND MIU MODULE LOCATIONS.
 - OPTION 2: OWNER SUPPLIED AND INSTALLED CONDUIT FROM LOCATION OF METER(S) TO LOCATION OF MIU(S). CITY TO SUPPLY AND INSTALL MIU WIRING.
- @ WATER METER ADAPTERS INSTALLED BY OWNER.
- C FACTORY LOCKABLE BALL VALVE. SAME SIZE AS INDIVIDUAL SERVICE LINE. LOCK WILL BE SUPPLIED AND INSTALLED BY THE CITY OF REGINA
- (Z) BACKFLOW PREVENTION ASSEMBLY IF SO DIRECTED BY THE CITY OF REGINA CROSS CONNECTION CONTROL COORDINATOR.
- @ ISOLATING BALL VALVE TO BE THE SAME SIZE AS THE SERVICE LINE.

NOTES:

1. SEE SPECIFICATION SECTION 15408 IN CONJUNCTION WITH THIS DRAWING.
2. FOR ADDITIONAL INFORMATION, CLARIFICATION, OR DEVIATION FROM THE REQUIREMENTS AS PER THESE STANDARDS, CONTACT THE WATER METER OR CROSS CONNECTION CONTROL PROGRAMS PRIOR TO INSTALLATION. TO CONTACT THESE PROGRAMS SUBMIT A SERVICE REQUEST TO (306) 777-7000.

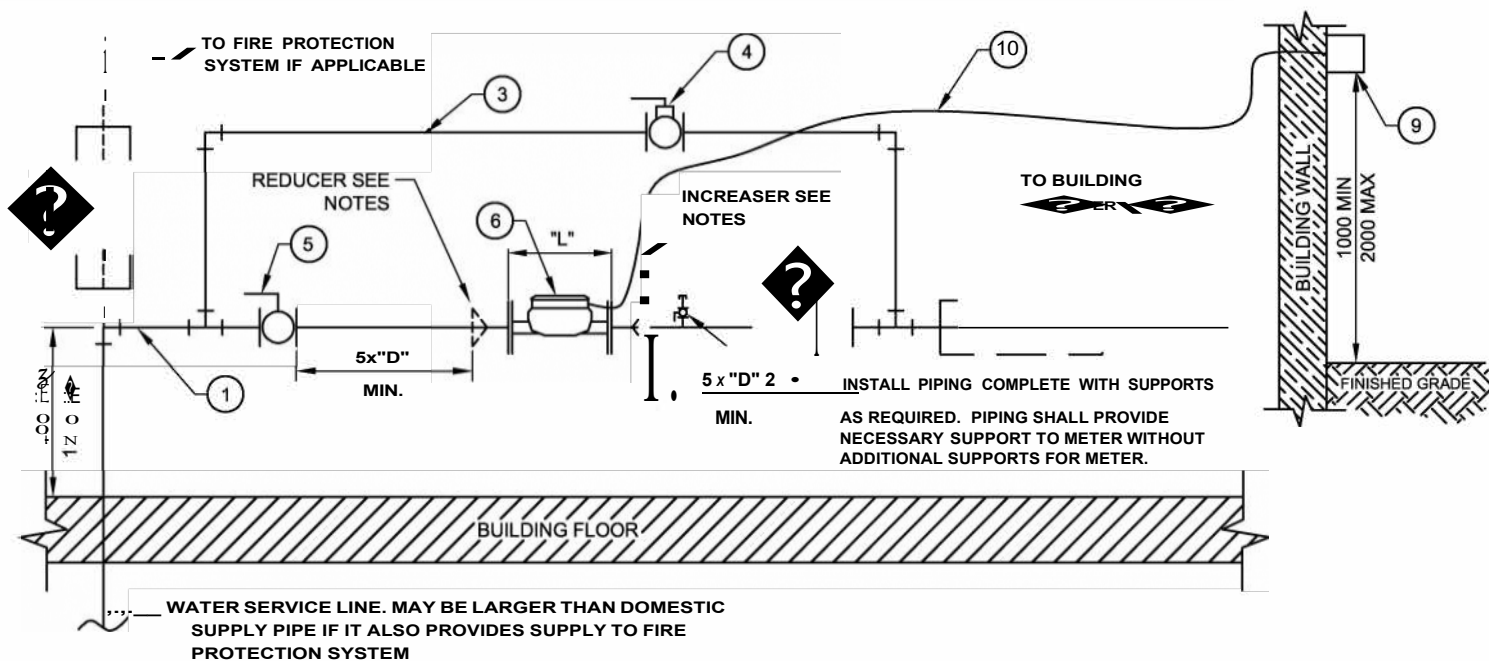
Date	Revisions	By
FEB/24	MINOR REVISIONS	MG
MAR/24	NOTES/LEGEND REVISED	MG
OCT/05	NOTES/LEGEND REVISED	SB
AUG/10	TITLE BLOCK	JJA
FEB/16	NOTE CHANGES, UPDATE DETAIL/LEGEND	BZ
OCT/22	REQUIREMENTS REVISION	MG
OCT/23	METER TYPE AND MINOR REVISIONS	MG



REGINA

CONSTRUCTION STANDARDS Water Meter/Backflow Preventer Installation Requirements for Multi Metered Locations - Alt-2

Designed By:	Kevin Lang	Approved:	Brent Rostad
Date	Feb. 24, 2016	Scale	NTS
Digital File:	Stdw-31.dwg		W-31



LEGEND:

- O** DOMESTIC WATER SUPPLY PIPE. ISOLATING AND BYPASS VALVING SHOWN MUST BE THE SAME SIZE AS THE INCOMING WATER SERVICE OR THE DOMESTIC WATER SUPPLY PIPE - WHICHEVER IS SMALLER.
- G** 12.5MM CONNECTION c/w BALL VALVE AND THREAD PLUG. ORIENT CONNECTIONS AS SHOWN.
- O** METER BYPASS LINE. THIS PIPING MAY BE ABOVE OR BELOW OR TO EITHER SIDE OF THE METER BUT WHEN ABOVE MUST BE SPACED A MINIMUM OF 500mm ABOVE THE METER REGISTER HEAD.
- O** METER BYPASS VALVE. THIS VALVE IS TO BE A BALL STYLE VALVE AND MUST BE EQUIPPED WITH A FACTORY SUPPLIED QUARTER TURN, LOCKABLE LEVER ACTUATOR.
- C** METER ISOLATING VALVES - 2 REQUIRED AT LOCATIONS SHOWN. VALVES TO BE BALL STYLE WITH QUARTER TURN LEVER ACTUATOR. IF A FIRE PROTECTION SYSTEM IS CONNECTED TO THE WATER SERVICE LINE THE ISOLATING VALVE UPSTREAM OF THE METER MUST BE A LOCKABLE TYPE.
- C** WATER METER SUPPLIED AND INSTALLED BY THE CITY OF REGINA. WATER METER ADAPTERS INSTALLED BY OWNER.
- O** BACKFLOW PREVENTION ASSEMBLY c/w ISOLATING VALVES AS DIRECTED BY THE CITY OF REGINA CROSS CONNECTION CONTROL COORDINATOR.
- C** OPTIONAL BALL TYPE ISOLATING VALVE FOR BACKFLOW PREVENTER.
- C** MIU (TRANSMITTER) MODULE SUPPLIED AND INSTALLED BY THE CITY OF REGINA.
- R** WIRING OPTIONS
 - OPTION 1: OWNER SUPPLIED AND INSTALLED MIU WIRING. ONE WIRE REQUIRED FOR EACH METER. WIRE TYPE SHALL BE 3 CONDUCTOR, SOLID #22 AWG WITH BLACK, RED, AND GREEN COLOUR CONDUCTORS. LEAVE MINIMUM 0.6M (2FT) SLACK WIRE AT BOTH METER AND MIU MODULE LOCATIONS.
 - OPTION 2: OWNER SUPPLIED AND INSTALLED 21MM (3/4") CONDUIT FROM LOCATION OF METER(S) TO LOCATION OF MIU(S) (ONE CONDUIT REQUIRED PER MAX 5 METERS). CITY TO SUPPLY AND INSTALL MIU WIRING.

NOTES:

1. SEE SECTION 15408 IN CONJUNCTION WITH THIS DRAWING.

- 2. IF METER SIZE DOES NOT MATCH DOMESTIC WATER SUPPLY PIPE SIZE, PROVIDE AND INSTALL ALL REQUIRED REDUCERS AND INCREASERS. NOTE THAT USE OF THREADED REDUCING BUSHINGS IS NOT ALLOWED. REDUCERS AND INCREASERS TO BE INSTALLED AS CLOSE AS POSSIBLE TO THE WATER METER.
- 3. "D" IS THE NOMINAL DIAMETER OF THE DOMESTIC WATER SUPPLY PIPE.
- 4. "L" IS THE LENGTH OF A FULL DOMESTIC PIPE SIZE WATER METER. OVERALL PIPE RUN PROVIDED MUST INCLUDE THIS LENGTH.
- 5. FOR ADDITIONAL INFORMATION, CLARIFICATION, OR DEVIATION FROM THE REQUIREMENTS AS PER THESE STANDARDS, CONTACT THE WATER METER OR CROSS CONNECTION CONTROL PROGRAMS PRIOR TO INSTALLATION. TO CONTACT THESE PROGRAMS SUBMIT A SERVICE REQUEST TO (306) 777-7000.

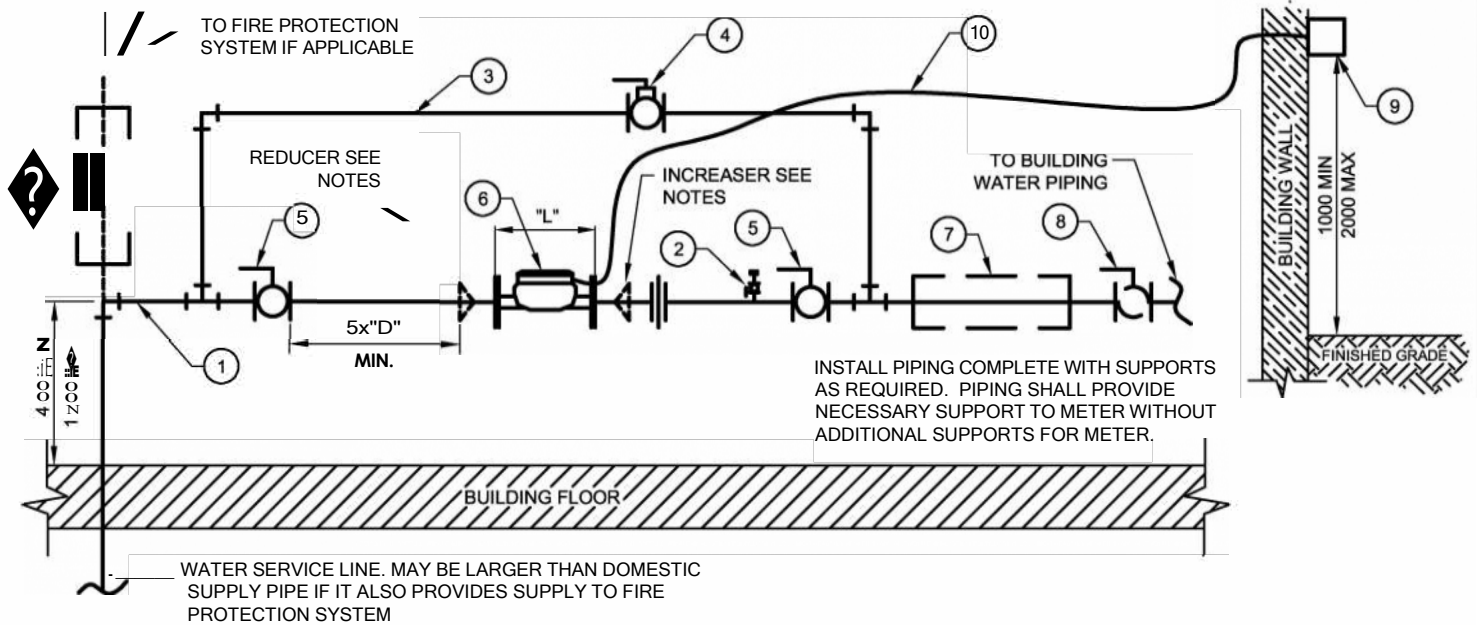
Date	Revisions	By
FEB/24	MINOR REVISIONS	MG
MAR/24	NOTES/LEGEND REVISED	MG
OCT/05	NOTES REVISED	SB
AUG/10	TITLE BLOCK	JJA
FEB/16	NOTE CHANGES, UPDATE DETAIL/LEGEND	BZ
OCT/22	REQUIREMENTS REVISION	MG
OCT/23	METER TYPE AND MINOR REVISIONS	MG



CONSTRUCTION STANDARDS

Water Meter Installation for 40mm or 50mm Domestic Supply Pipe Sizes

Designed By:	Kevin Lang	Approved:	Brent Rostad
Date	Apr. 05, 2017	Scale	NTS
Digital File:	Stdw-32.dwg		W-32



LEGEND:

- DOMESTIC WATER SUPPLY PIPE. ISOLATING AND BYPASS VALVING SHOWN MUST BE THE SAME SIZE AS THE INCOMING WATER SERVICE OR THE DOMESTIC WATER SUPPLY PIPE - WHICHEVER IS SMALLER.
- 12.5MM CONNECTION c/w BALL VALVE AND THREAD PLUG. ORIENT CONNECTIONS AS SHOWN.
- METER BYPASS LINE. THIS PIPING MAY BE ABOVE OR BELOW OR TO EITHER SIDE OF THE METER BUT WHEN ABOVE MUST BE SPACED A MINIMUM OF 500mm ABOVE THE METER REGISTER HEAD.
- METER BYPASS VALVE. THIS VALVE IS TO BE A BALL STYLE VALVE AND MUST BE EQUIPPED WITH A FACTORY SUPPLIED QUARTER TURN, LOCKABLE LEVER ACTUATOR.
- ⊙ METER ISOLATING VALVES - 2 REQUIRED AT LOCATIONS SHOWN. VALVES TO BE BALL STYLE WITH QUARTER TURN LEVER ACTUATOR. IF A FIRE PROTECTION SYSTEM IS CONNECTED TO THE WATER SERVICE LINE THE ISOLATING VALVE UPSTREAM OF THE METER MUST BE A LOCKABLE TYPE.
- ⊙ WATER METER SUPPLIED AND INSTALLED BY THE CITY OF REGINA WATER METER ADAPTERS INSTALLED BY OWNER.
- BACKFLOW PREVENTION ASSEMBLY c/w ISOLATING VALVES AS DIRECTED BY THE CITY OF REGINA CROSS CONNECTION CONTROL COORDINATOR.
- ⊙ OPTIONAL BALL TYPE ISOLATING VALVE FOR BACKFLOW PREVENTER.
- Ⓜ MIU (TRANSMITTER) MODULE SUPPLIED AND INSTALLED BY THE CITY OF REGINA
- Ⓢ WIRING OPTIONS
 - OPTION 1: OWNER SUPPLIED AND INSTALLED MIU WIRING. ONE WIRE REQUIRED FOR EACH METER. LEAVE MINIMUM 0.6M (2FT) SLACK WIRE AT BOTH METER AND MIU MODULE LOCATIONS.
 - OPTION 2: OWNER SUPPLIED AND INSTALLED CONDUIT FROM LOCATION OF METER(S) TO LOCATION OF MIU(S). CITY TO SUPPLY AND INSTALL MIU WIRING.

NOTES:

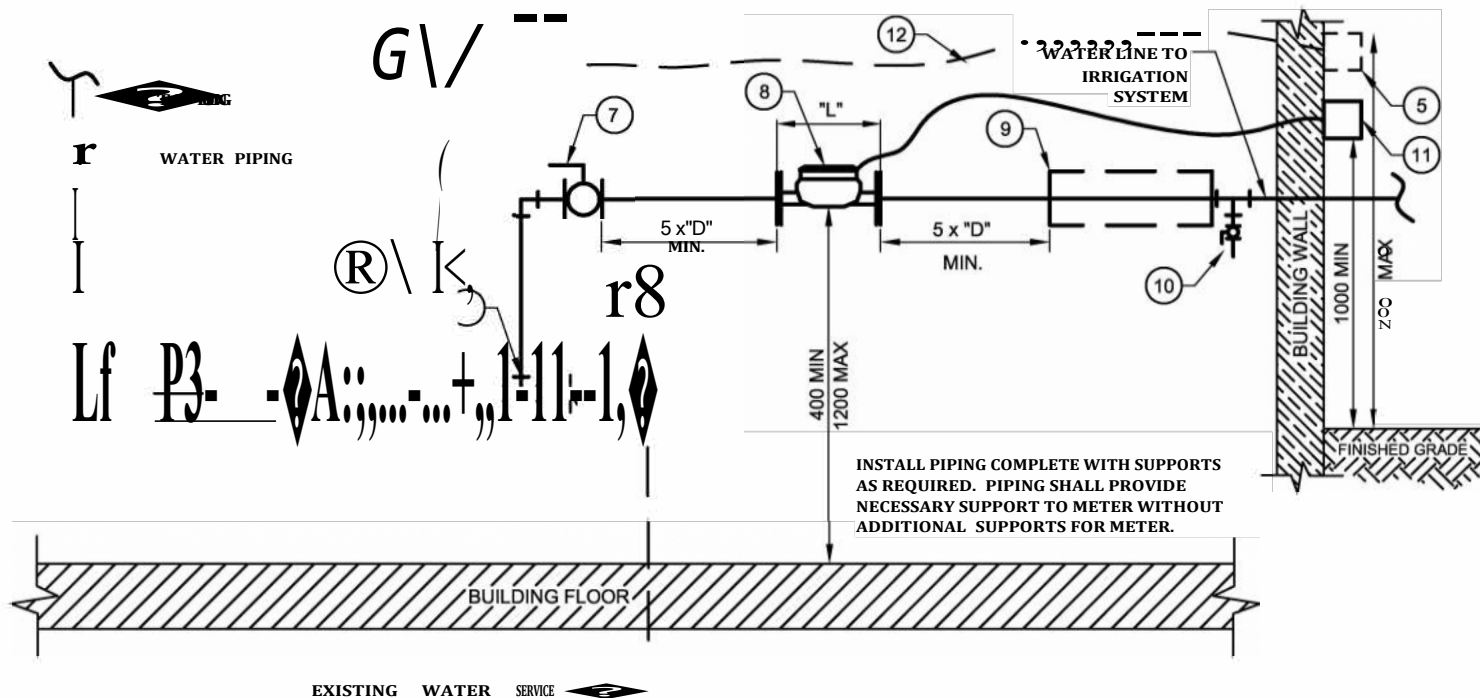
◆ SECTION 15408 IN CONJUNCTION WITH THIS DRAWING.

2. IF METER SIZE DOES NOT MATCH DOMESTIC WATER SUPPLY PIPE SIZE, PROVIDE AND INSTALL ALL REQUIRED REDUCERS AND INCREASERS. NOTE THAT USE OF THREADED REDUCING BUSHINGS IS NOT ALLOWED. REDUCERS AND INCREASERS TO BE INSTALLED AS CLOSE AS POSSIBLE TO THE WATER METER.
3. "D" IS THE NOMINAL DIAMETER OF THE DOMESTIC WATER SUPPLY PIPE.
4. "L" IS THE LENGTH OF A FULL DOMESTIC PIPE SIZE WATER METER. OVERALL PIPE RUN PROVIDED MUST INCLUDE THIS LENGTH.
5. FOR ADDITIONAL INFORMATION, CLARIFICATION, OR DEVIATION FROM THE REQUIREMENTS AS PER THESE STANDARDS, CONTACT THE WATER METER OR CROSS CONNECTION CONTROL PROGRAMS PRIOR TO INSTALLATION. TO CONTACT THESE PROGRAMS SUBMIT A SERVICE REQUEST TO (306) 777-7000.

Date	Revisions	By
FEB/24	MINOR REVISIONS	MG
MAR/24	NOTES/LEGEND REVISED	MG
OCT/05	NOTES REVISED	SB
AUG/10	TITLE BLOCK	JJA
FEB/16	NOTE CHANGES, UPDATE DETAIL/LEGEND	BZ
OCT/22	REQUIREMENTS REVISION	MG
OCT/23	METER TYPE AND MINOR REVISIONS	MG



CONSTRUCTION STANDARDS			
Water Meter Installation for 75mm or 100mm Domestic Supply Pipe Sizes			
Designed By: Kevin Lang		Approved: Brent Rostad	
Date Apr. 05, 2017	Seal NTS	W-33	
Digital File: Stdw-33.dwg			



LEGEND:

- EXISTING SHUTOFF VALVE.
- Ⓡ EXISTING WATER METER.
- EXISTING BACKFLOW PREVENTION ASSEMBLY.
- EXISTING MIU WIRING.
- EXISTING MIU (TRANSMITTER).
- Ⓢ NEW IRRIGATION SUPPLY CONNECTION. THIS CONNECTION MAY BE MADE ON THE UPSTREAM SIDE OF THE EXISTING SHUTOFF VALVE IF THERE IS NOT SUFFICIENT ROOM TO ALLOW THE PREFERRED CONNECTION SHOWN.
- NEW LOCKABLE SHUTOFF VALVE - MUST BE THE SAME SIZE AS THE WATER SERVICE LINE.
- Ⓢ WATER METER SUPPLIED AND INSTALLED BY THE CITY OF REGINA. WATER METER ADAPTERS INSTALLED BY OWNER.
- Ⓢ BACKFLOW PREVENTION ASSEMBLY c/w ISOLATING VALVES AS DIRECTED BY THE CITY OF REGINA CROSS CONNECTION CONTROL COORDINATOR.
- Ⓢ BLOWOFF VALVE MUST BE INSTALLED ON THE DOWNSTREAM (CUSTOMER SIDE) OF THE WATER METER.
- Ⓢ MIU (TRANSMITTER) MODULE SUPPLIED AND INSTALLED BY THE CITY OF REGINA.
- Ⓢ MIU WIRING SUPPLIED AND INSTALLED BY OWNER. ONE WIRE REQUIRED FOR EACH METER. LEAVE MINIMUM 0.6M (24") SLACK WIRE AT BOTH METER AND MIU MODULE LOCATIONS.

NOTES:

1. SEE SECTION 15408 IN CONJUNCTION WITH THIS DRAWING.

2. IF METER SIZE DOES NOT MATCH DOMESTIC WATER SUPPLY PIPE SIZE, PROVIDE AND INSTALL ALL REQUIRED REDUCERS AND INCREASERS. NOTE THAT USE OF THREADED REDUCING BUSHINGS IS NOT ALLOWED. REDUCERS AND INCREASERS TO BE INSTALLED AS CLOSE AS POSSIBLE TO THE WATER METER.
3. "D" IS THE NOMINAL DIAMETER OF THE DOMESTIC WATER SUPPLY PIPE.
4. "L" IS THE LENGTH OF A FULL DOMESTIC PIPE SIZE WATER METER. OVERALL PIPE RUN PROVIDED MUST INCLUDE THIS LENGTH.
5. APPLICATION FOR SUMMER WATER SERVICE MAY BE MADE IN PERSON ON THE MAIN FLOOR OF CITY HALL OR BY CALLING (306) 777-7000. THE WATER METER IS INSTALLED AFTER THE APPLICATION PROCESS.
6. FOR ADDITIONAL INFORMATION, CLARIFICATION, OR DEVIATION FROM THE REQUIREMENTS AS PER THESE STANDARDS, CONTACT THE WATER METER OR CROSS CONNECTION CONTROL PROGRAMS PRIOR TO INSTALLATION. TO CONTACT THESE PROGRAMS SUBMIT A SERVICE REQUEST TO (306) 777-7000.

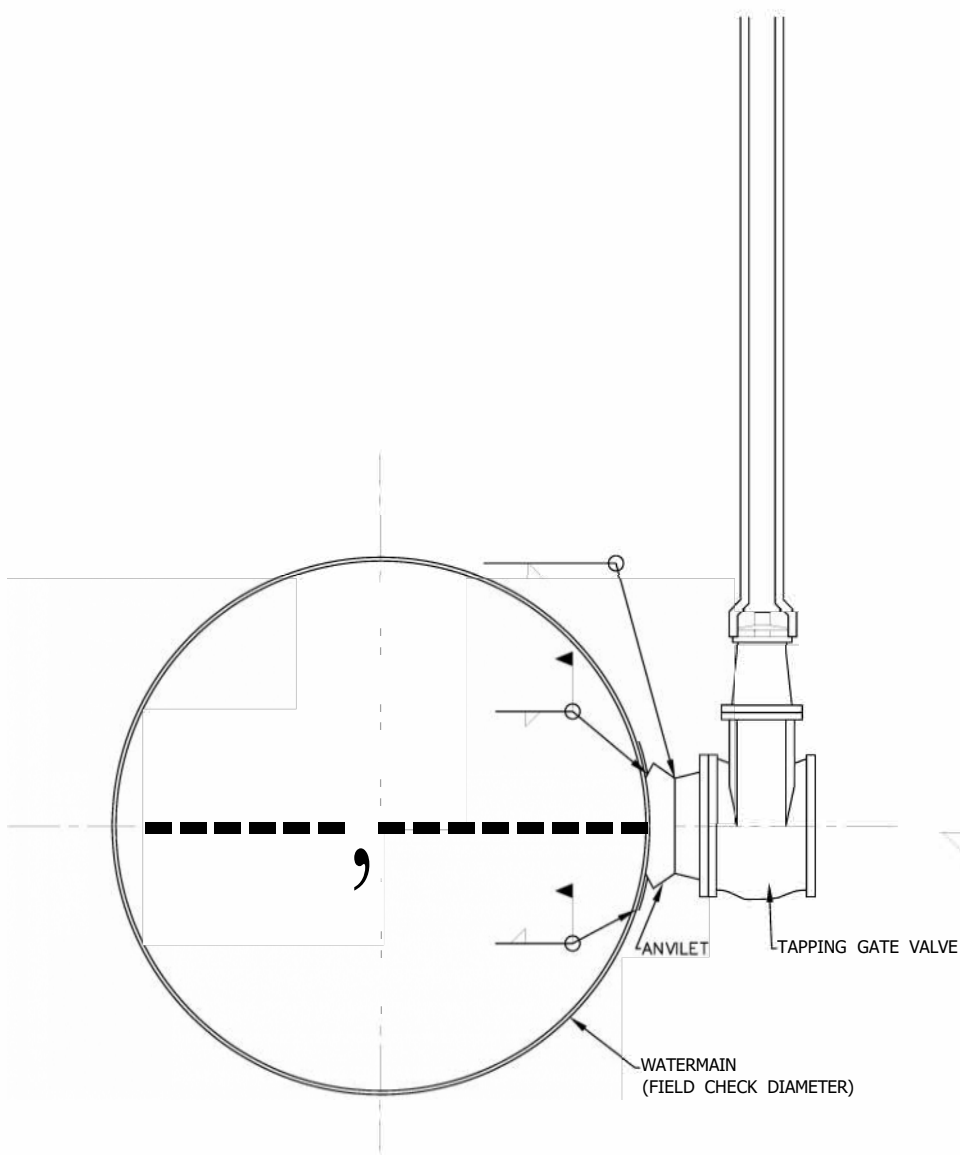
Date	Revisions	By
MAR/24	NOTES/LEGEND REVISED	MG
MAR/10	NOTES REVISED	DM
AUG/10	TITLE BLOCK	JJA
FEB/17	NOTE CHANGES, UPDATE DETAIL/LEGEND	TY
OCT/22	REQUIREMENTS REVISION	MG
OCT/23	METER TYPE AND MINOR REVISIONS	MG
FEB/24	DRAWING REVISED	MG



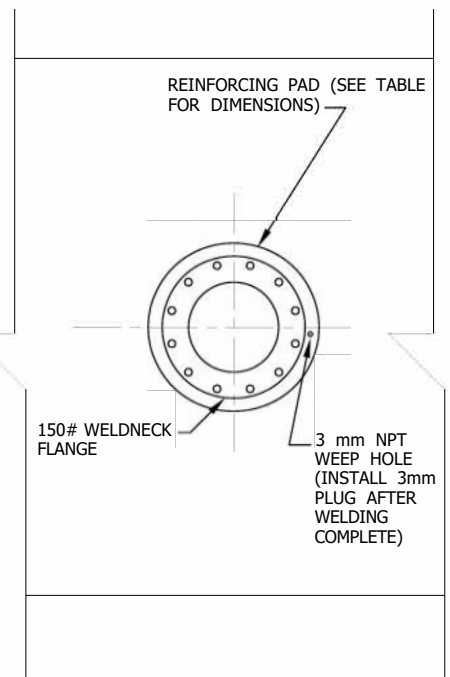
CONSTRUCTION STANDARDS			
<i>Water Meter Installation for Summer Service Irrigation Meters</i>			
Designed By:		Approved:	
Kevin Lang		Brent Rostad	
Date	Feb 24, 2017	Seal NTS	W-34
Digital File: Stdw-34.dwg			

CUT OFF AND CAP
VALVE BOX 600 mm
BELOW SURFACE

rrr==nl



SECTION VIEW



**FRONT VIEW
(VALVE NOT SHOWN)**

REINFORCING PADS

MATERIAL: MINIMUM 6.4 mm CSA G40.21/M GRADE 350W

PIPE SIZE	REINFORCING PAD		
	610mm MAIN	914mm MAIN	1067mm MAIN
300 mm	620 O.D.	650 O.D.	610 O.D.
350 mm	680 O.D.	710 O.D.	670 O.D.
400 mm	770 O.D.	810 O.D.	750 O.D.
450 mm	SEE NOTE 4	880 O.D.	840 O.D.
500 mm	SEE NOTE 4	970 O.D.	910 O.D.
610 mm	N/A	1150 O.D.	1090 O.D.

NOTES:

1. REMOVE EXISTING COATING ON MAIN PRIOR TO FITTING CONNECTION.
2. REPLACE COATING ON MAIN AND CONNECTION FITTING WITH SIMILAR TYPE AFTER WELDING COMPLETE.
3. ENCAPSULATE CONNECTION FITTING AND VALVE WITH PETROLATUM PRIMER AND TAPE PRIOR TO BACKFILLING.
4. FOR 450 mm AND 500 mm TAPS REINFORCING TO BE DESIGNED BY A PROFESSIONAL ENGINEER, AND APPROVED BY THE MANGER OF WATER, WASTEWATER AND DRAINAGE ENGINEERING PRIOR TO INSTALLATION

Date	Revisions	By
AUG/10	TITLE BLOCK	JJA

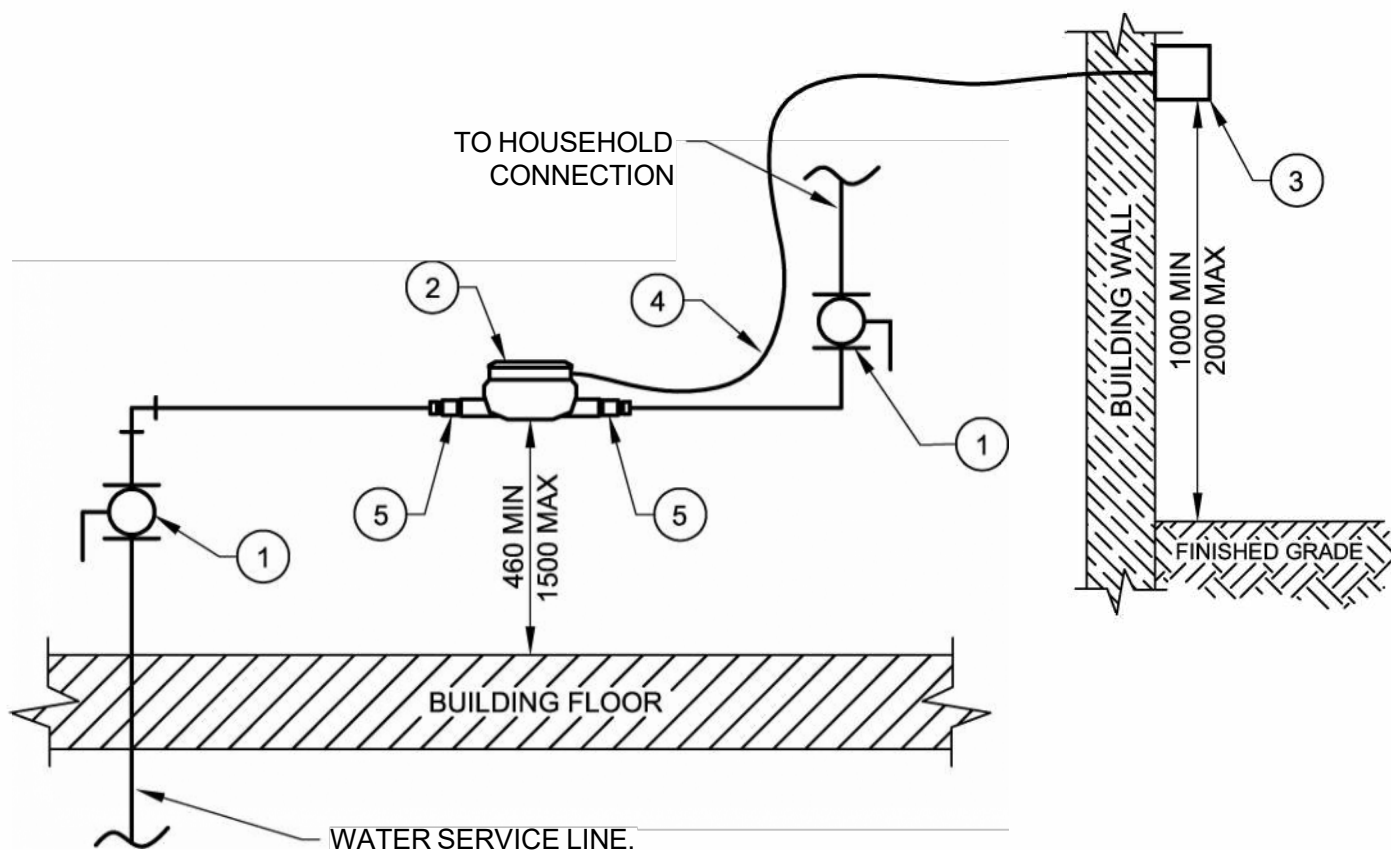


CONSTRUCTION STANDARDS

**Steel Watermain
Hot Tap Connection**

Approved:

Date	FEB/08	Scale	NTS	W-36
Digital File: Stdw-36.dwg				



LEGEND:

- 0 ISOLATION VALVE - MUST BE THE SAME SIZE AS THE INCOMING WATER SERVICE LINE.
- (R) WATER METER SUPPLIED AND INSTALLED BY THE CITY OF REGINA.
- G) MIU (TRANSMITTER) MODULE SUPPLIED AND INSTALLED BY THE CITY OF REGINA.
- O MIU WIRING SUPPLIED AND INSTALLED BY OWNER. ONE WIRE REQUIRED FOR EACH METER. LEAVE MINIMUM 0.6M (24") SLACK WIRE AT BOTH METER AND MIU MODULE LOCATIONS.
- 0 WATER METER ADAPTERS INSTALLED BY OWNER.

NOTES:

1. SEE SPECIFICATION SECTION 15408 IN CONJUNCTION WITH THIS DRAWING.
2. FOR ADDITIONAL INFORMATION, CLARIFICATION, OR DEVIATION FROM THE REQUIREMENTS AS PER THESE STANDARDS, CONTACT THE WATER METER OR CROSS CONNECTION CONTROL PROGRAMS PRIOR TO INSTALLATION. TO CONTACT THESE PROGRAMS SUBMIT A SERVICE REQUEST TO (306) 777-7000.

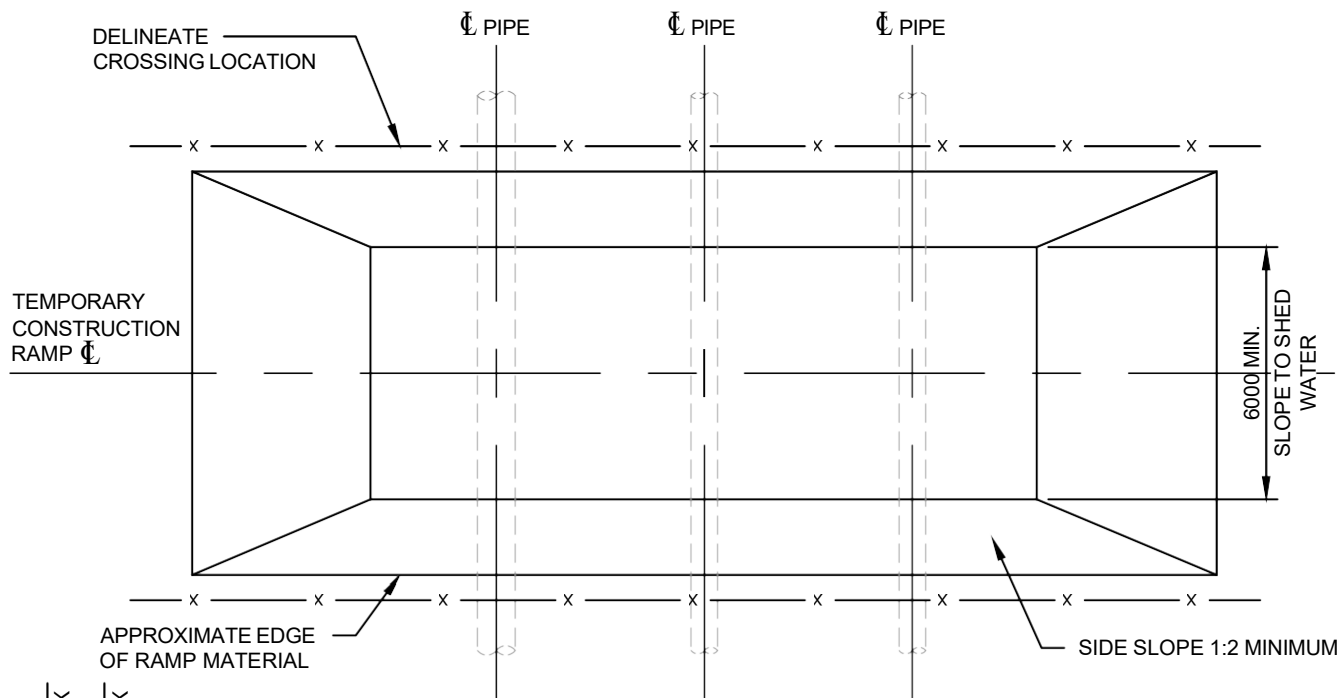
Date	Revisions	By
SEP/10	PROPOSED STANDARD FOR REVIEW	AH
APR/11	LEGEND NOTE #4 AND #5	AH
JAN/18	DIMENSIONS ADDED/REVISED TITLE	BW
OCT/22	REQUIREMENTS REVISION	MG
OCT/23	METER TYPE AND MINOR REVISIONS	MG
FEB/24	MINOR REVISIONS	MG
MAR/24	NOTES/LEGEND REVISION	MG



REGINA

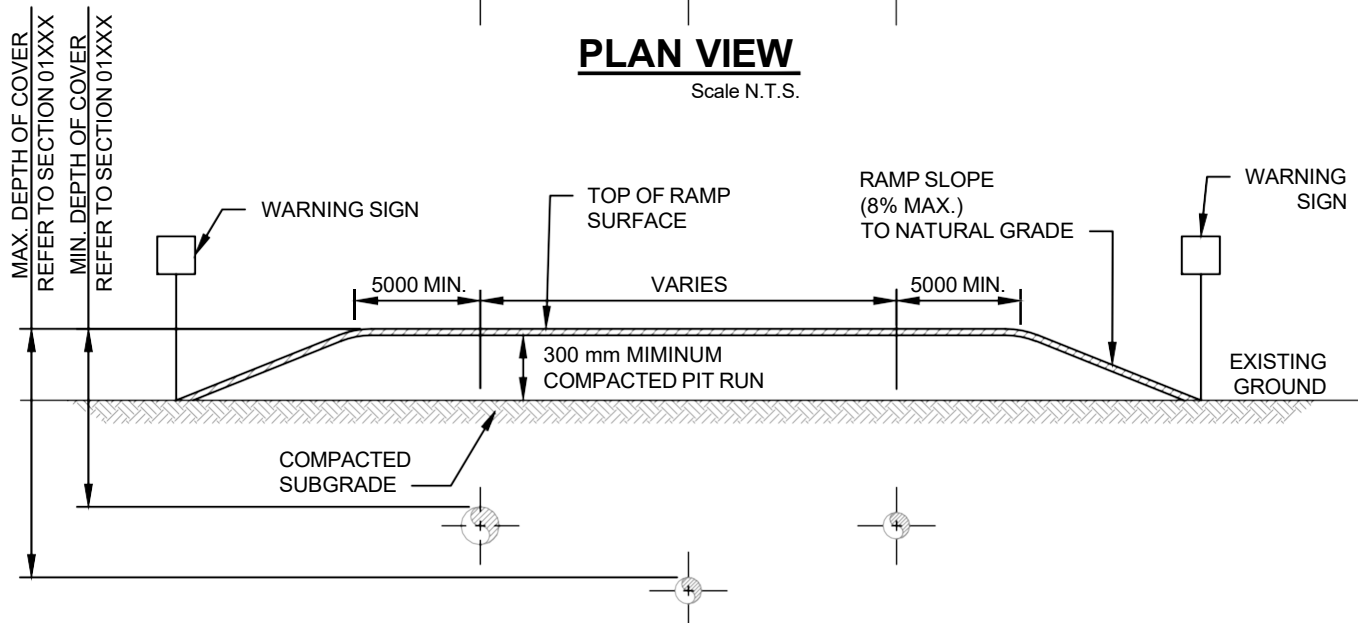
CONSTRUCTION STANDARDS RESIDENTIAL WATER METER INSTALLATION

Designed By: Kevin Lang		Approved: Brent Rostad	
Date SEP/23	Scale NTS	W-37	
Digital File: Stdw-37.dwg			



PLAN VIEW

Scale N.T.S.



PROFILE VIEW

Scale N.T.S.

NOTES:

1. REFER TO SECTION 01500 TEMPORARY CONSTRUCTION CROSSING OVER CRITICAL INFRASTRUCTURE.
2. NO WORK, INCLUDING HAND DIGGING OR TEMPORARY CROSSING CONSTRUCTION, IS PERMITTED ON CITY OF REGINA PIPELINE RIGHT-OF-WAY WITHOUT PRIOR APPROVAL FROM THE CITY OF REGINA.
3. TEMPORARY ROAD SHALL CROSS PIPE LINES AT OR NEAR 90 DEGREES AS PRACTICAL, BUT NOT LESS THAN 45 DEGREES.
4. LENGTH OF TEMPORARY ROAD SHALL VARY IN ACCORDANCE WITH PIPE CENTERLINE AND CROSSING ANGLE.
5. ANY OVERBURDEN OR MATERIALS INSTALLED FOR THE CROSSING MUST BE REMOVED AFTER CONSTRUCTION, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
7. RIG MATTING MAY BE USED IN LIEU OF GRANULAR COVER PROVIDED REQUIREMENTS OUTLINED IN SECTION XXXX ARE FOLLOWED.

CRITICAL INFRASTRUCTURE

BUFFALO POUND WATER MAINS	MCCARTHY WASTE WATER FORCE MAINS
900mm STEEL	1050mm PVC
1050mm STEEL	1050mm STEEL
	1500mm PVC

WARNING SIGN

UNAUTHORIZED CROSSING PROHIBITED
MAXIMUM SPEED 10 KM/HR
MAXIMUM PERMITTED AXLE WEIGHT 24,300 KG

Date	Revisions	By
Jan/18	Issued	B.W.



CONSTRUCTION STANDARDS TEMPORARY CROSSING OVER CRITICAL INFRASTRUCTURE

Designed By:		Approved: Dustin McCall	
Date	Scale	W-38	
JAN/18	NTS		
Digital File: Std W-38 Temp Crossing.dwg			