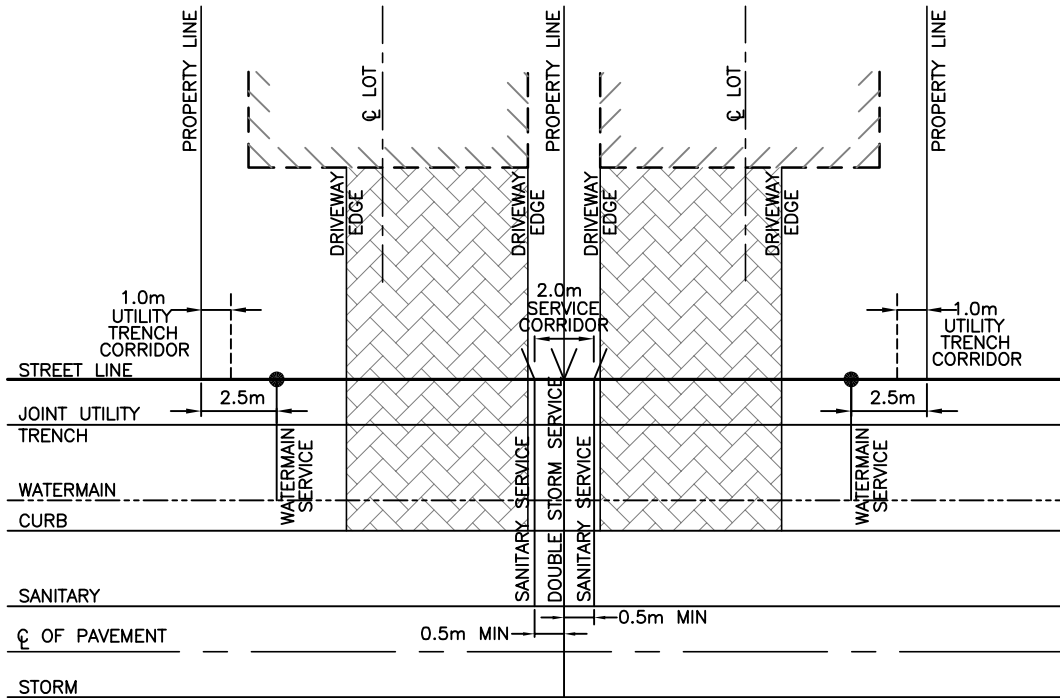


SINGLE CONNECTION



DOUBLE CONNECTION

NOTES:

- CLEAN OUT REQUIRED IF SEWER CONNECTION LENGTH IS GREATER THAN 30.0m.



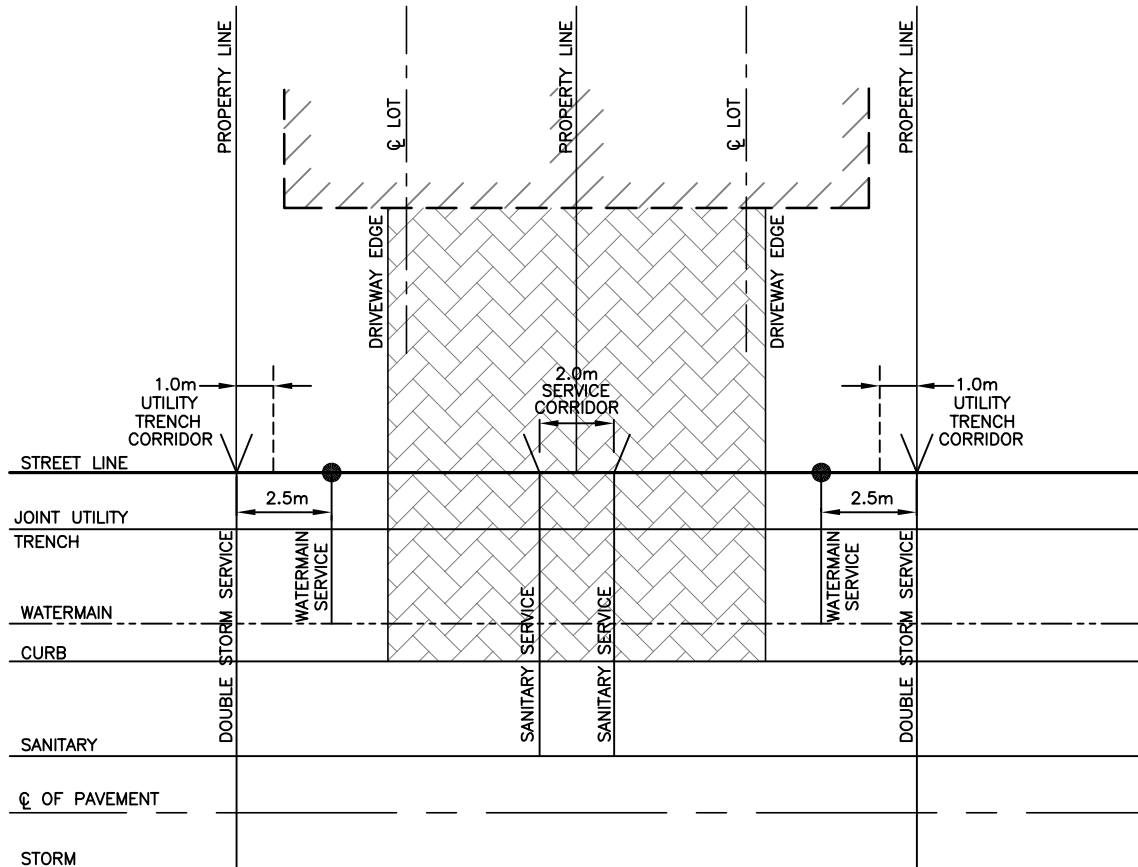
TOWN OF NEW TECUMSETH

TYPICAL DETACHED UNIT SERVICE ARRANGEMENT

METRIC
ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN

NO.	REVISIONS	DATE	APR'D

SCALE: N.T.S.
DATE: OCT. 2004
TNT.SD.
401



NOTES:

1. CLEAN OUT REQUIRED IF SEWER CONNECTION LENGTH IS GREATER THAN 30.0m.



TOWN OF NEW TECUMSETH

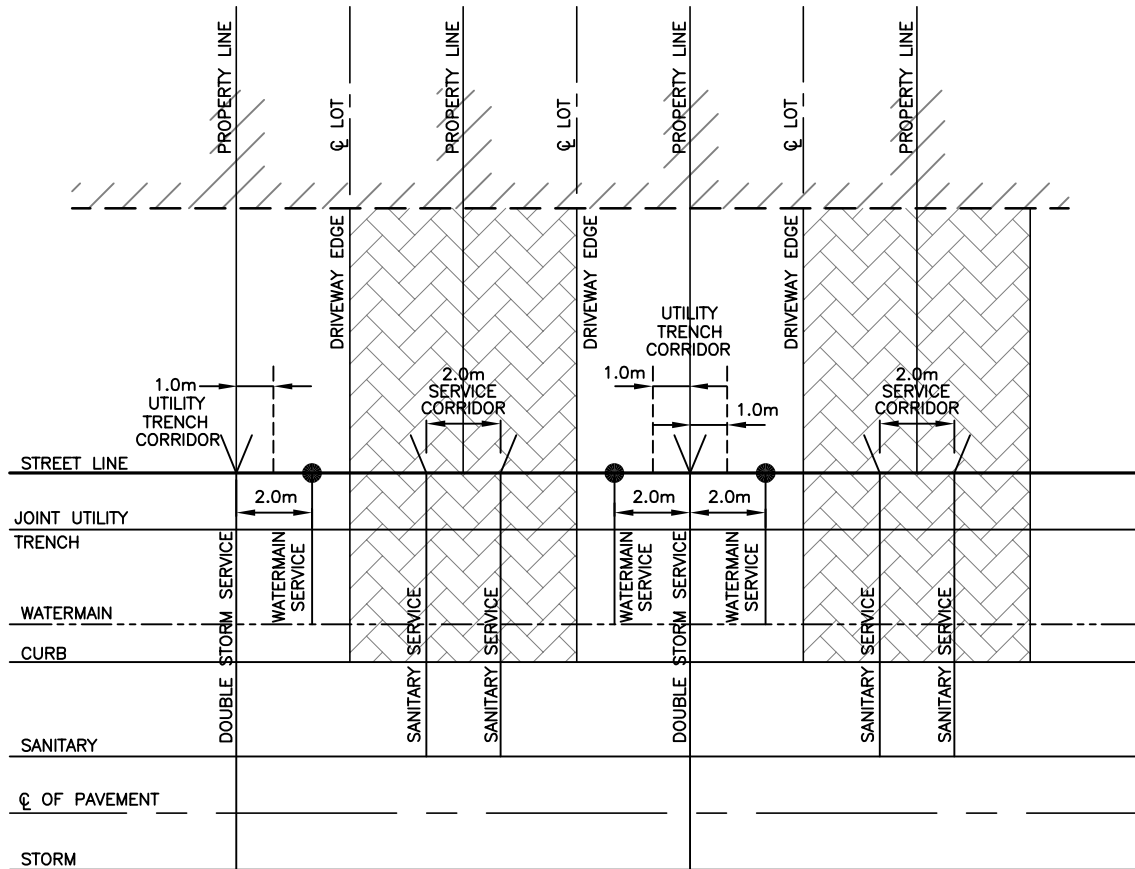
**TYPICAL SEMI-DETACHED UNIT
SERVICE ARRANGEMENT**



METRIC
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IN METRES UNLESS
OTHERWISE SHOWN

NO.	REVISIONS	DATE	APR'D

SCALE: N.T.S.
DATE: FEB. 2011
TNT.SD.
402



NOTES:

- CLEAN OUT REQUIRED IF SEWER CONNECTION LENGTH IS GREATER THAN 30.0m.



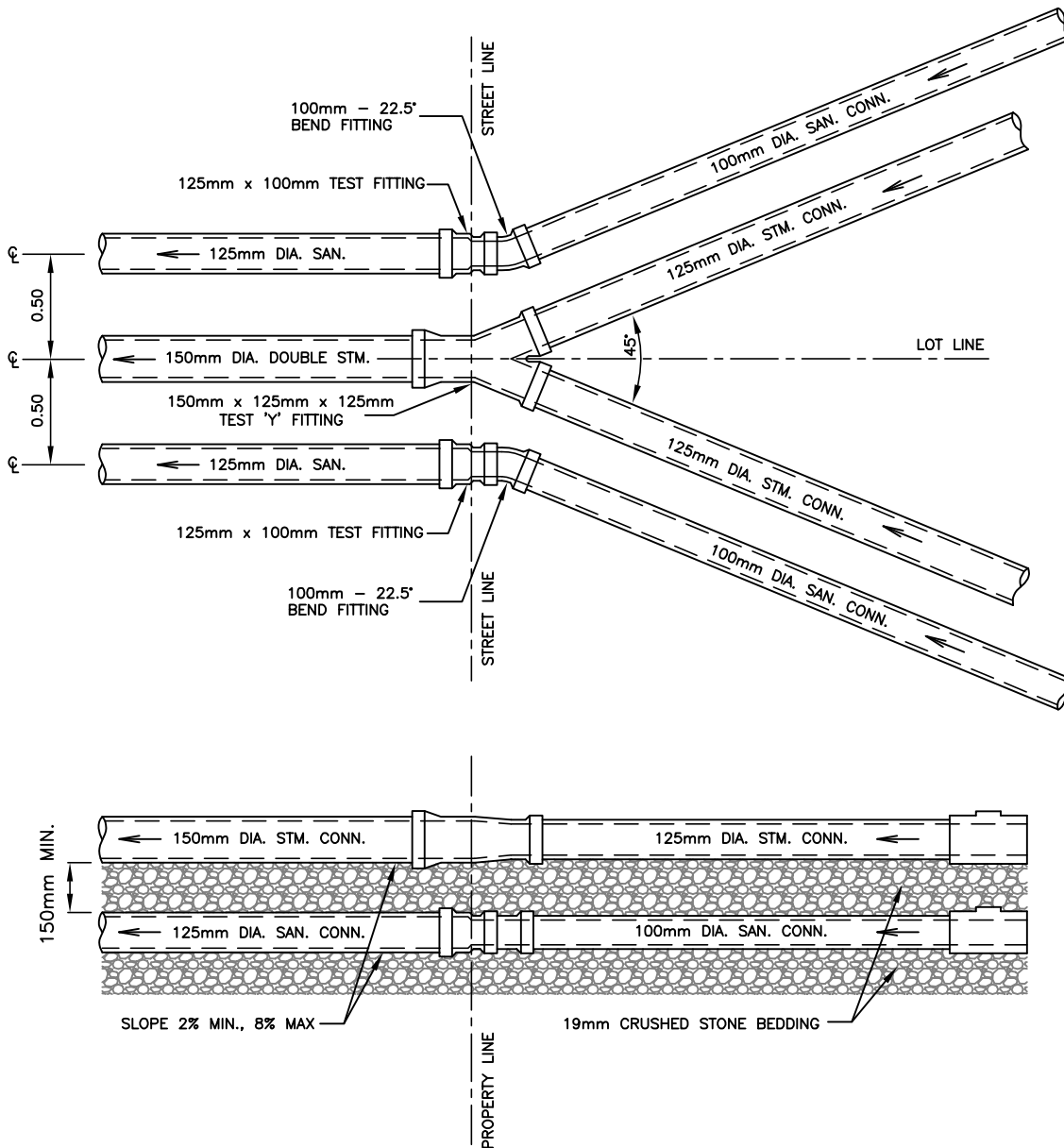
TOWN OF NEW TECUMSETH

TYPICAL TOWNHOUSE UNIT SERVICE ARRANGEMENT

METRIC
ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN

NO.	REVISIONS	DATE	APR'D

SCALE: N.T.S.
DATE: FEB. 2011
TNT.SD.
403



NOTE:

1. SERVICE CORRIDOR TRENCH WIDTH TO BE 2.0m.
2. MIN. COVER TO STM. SERVICE TO BE 2.5m, MIN. COVER TO SAN. SERVICE TO BE 2.7m.
3. GRANULAR 'A' BEDDING TO BE USED.
4. 100mm DIA. TEST FITTING TO BE MARKED "SAN."; 125mm DIA. TEST FITTING TO BE MARKED "STM".
5. SANITARY CONNECTION PIPE TO BE GREEN IN COLOUR; STORM CONNECTION PIPE TO BE WHITE IN COLOUR.
6. SANITARY AND STORM CONNECTIONS MUST BE SECURELY PLUGGED AT PROPERTY LINE WITH AN APPROVED PLUG.



TOWN OF NEW TECUMSETH

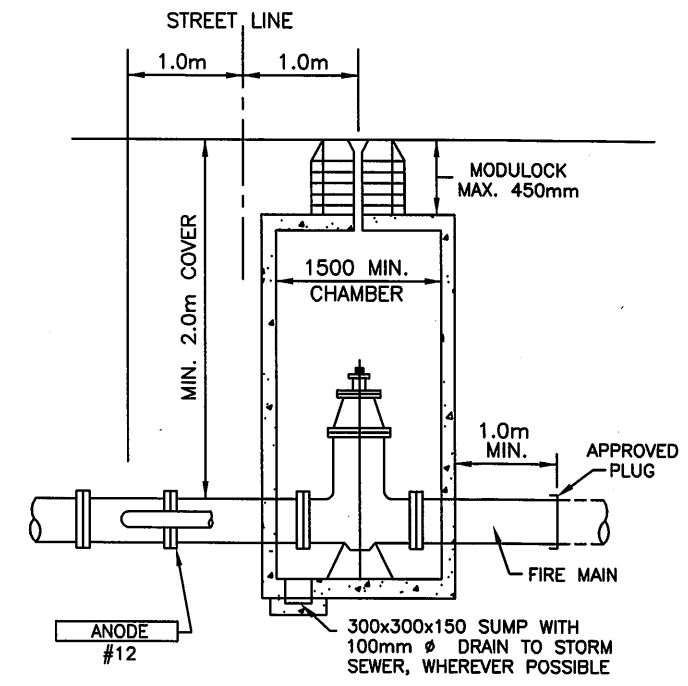
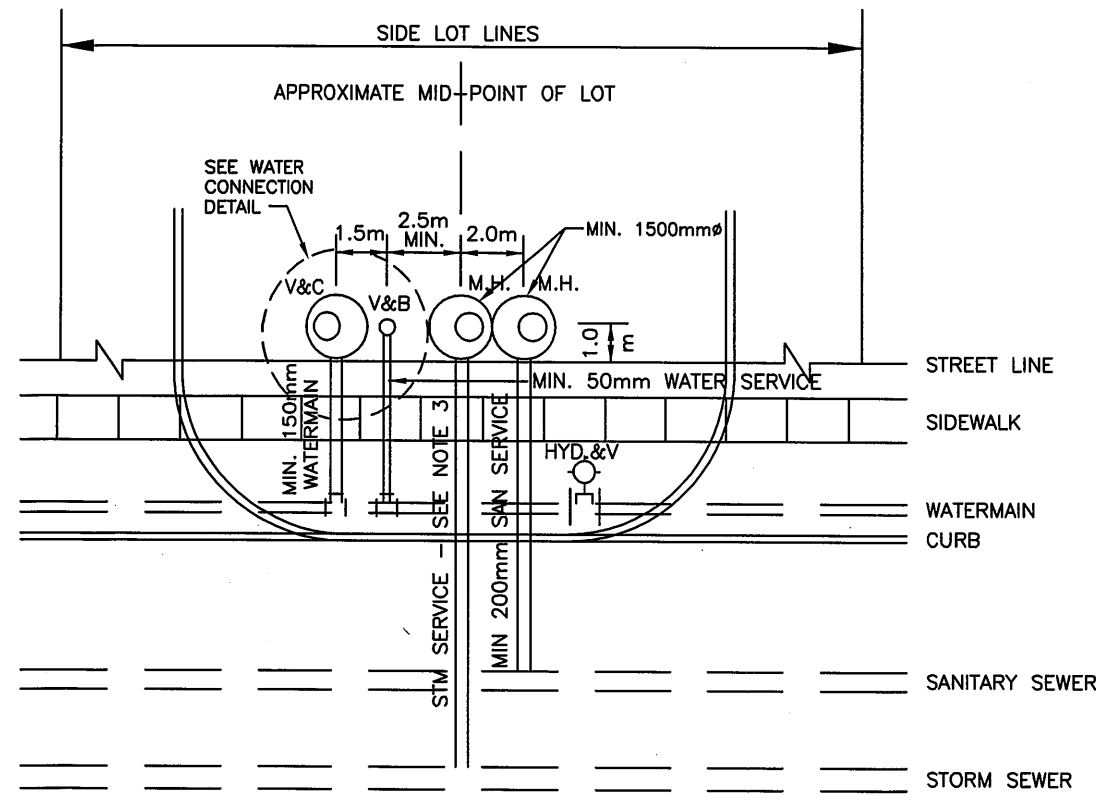
**DOUBLE SERVICE CONNECTIONS
IN COMMON TRENCH**



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404



WATER CONNECTION DETAIL
N.T.S.

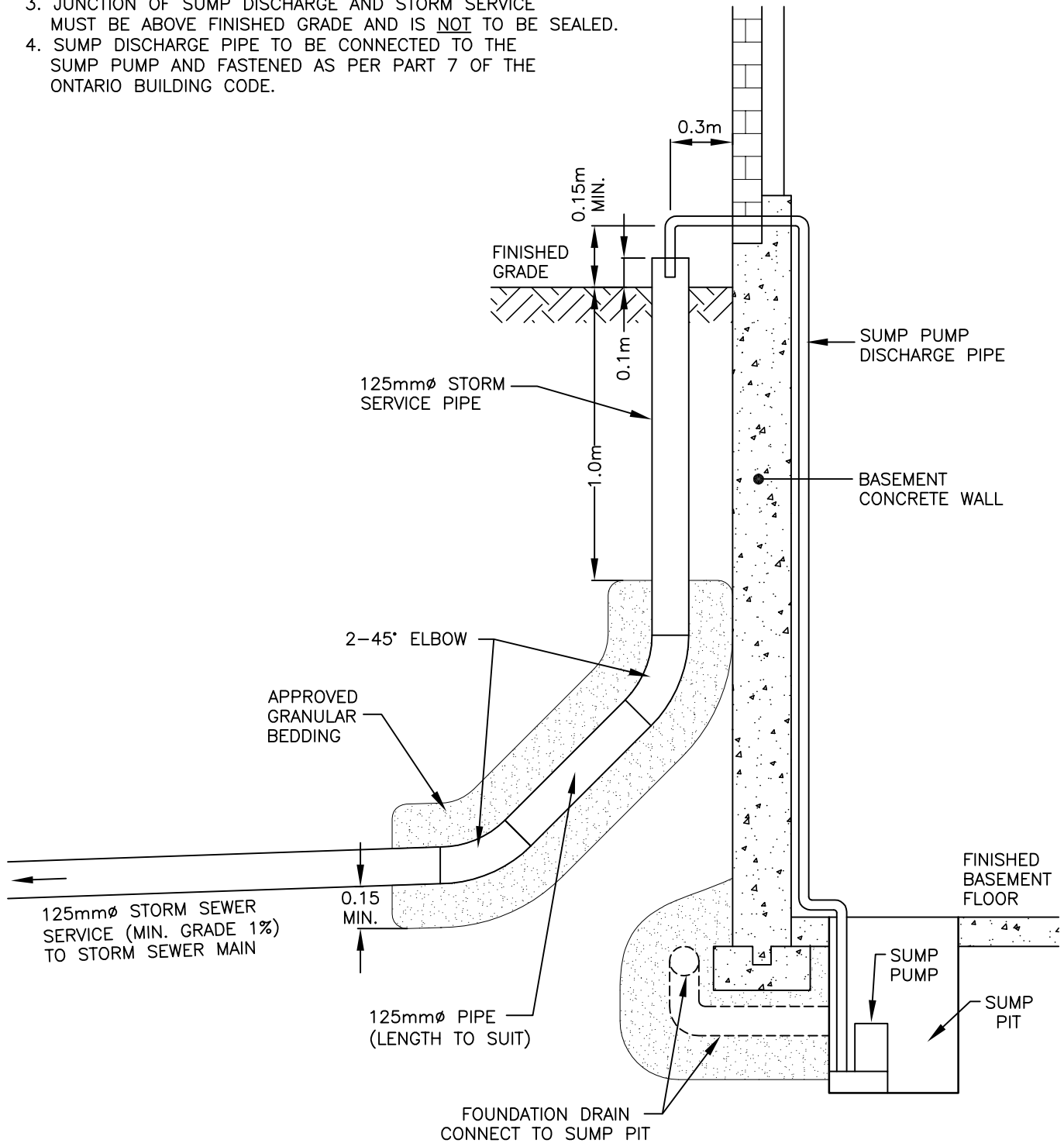
NOTES:

1. ABOVEGROUND UTILITIES TO BE LOCATED MINIMUM 1.0m FROM CURBS, SIDEWALK AND DRIVEWAYS.
2. MAINTENANCE HOLES AND VALVE CHAMBERS FOR SERVICE CONNECTIONS TO BE LOCATED AT 1.0m OFF STREET LINE ON PRIVATE PROPERTY.
3. STORM SEWER CONNECTIONS SHALL BE SIZED BASED UPON STORM WATER MANAGEMENT REQUIREMENTS.
4. BOND BREAKER TO BE USED BETWEEN ALL WATERMAIN FITTINGS AND CONCRETE.
5. THRUST BLOCKS SHALL NOT BE USED WITHIN VALVE CHAMBER.
6. PROVIDE RESTRAINED MECHANICAL JOINTS OR SLIP-ON JOINTS WITH TIE RODS & CLAMPS FOR WATERMAIN, AS REQUIRED.

 TOWN OF NEW TECUMSETH				SCALE: N.T.S.
				DATE: FEB. 2011
INDUSTRIAL/COMMERCIAL/INSTITUTIONAL SERVICE CONNECTIONS	1.		FEB. 2016	TNT.SD. 405
	NO.	REVISIONS	DATE	

NOTES:

1. PIPE SHALL BE 125mm DIA. PVC.
MEETING CSA-B182.4-M90, RUBBER GASKET TYPE JOINTS.
2. MIN. SLOPE OF PIPE TO BE 1%.
3. JUNCTION OF SUMP DISCHARGE AND STORM SERVICE MUST BE ABOVE FINISHED GRADE AND IS NOT TO BE SEALED.
4. SUMP DISCHARGE PIPE TO BE CONNECTED TO THE SUMP PUMP AND FASTENED AS PER PART 7 OF THE ONTARIO BUILDING CODE.



TOWN OF NEW TECUMSETH

TYPICAL RESIDENTIAL STORM SEWER CONNECTION (125mm)

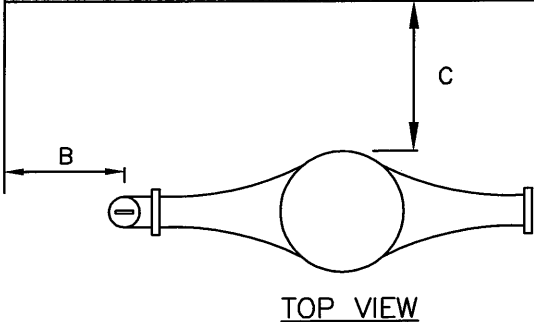
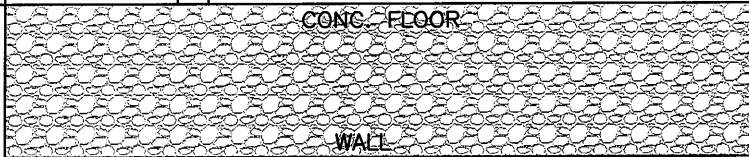
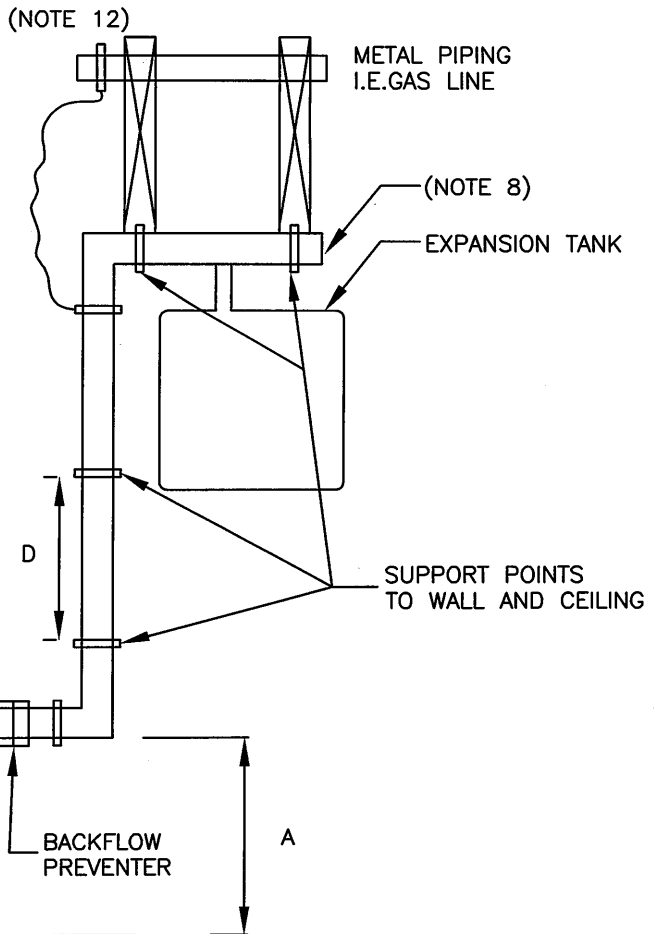
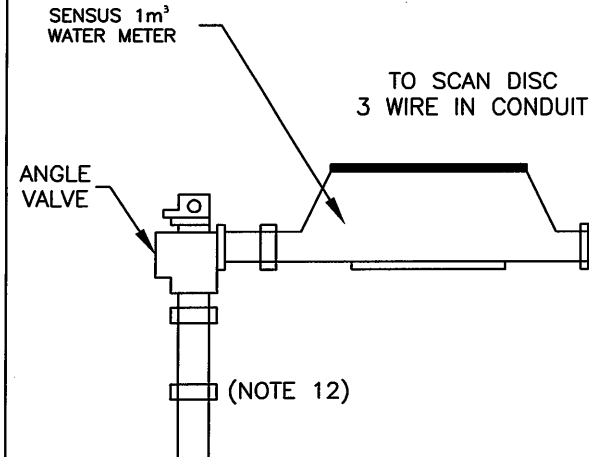
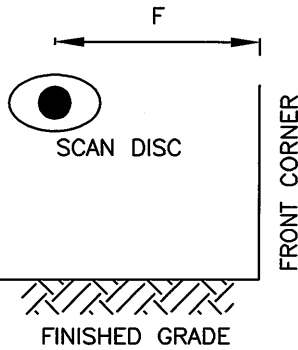


METRIC
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OTHERWISE SHOWN

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SCALE: N.T.S.
DATE: FEB. 2011
TNT.SD.
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RADIO BOX
TO BE
INSTALLED
OVER SCAN
DISC (510R2)



TOP VIEW

PIPE IN	METER	PIPE OUT	CODE
19mm	19mm	19mm	R
25mm	19mm	19mm	R/O
25mm	25mm	25mm	L/C

INSTALLATION NOTES – RESIDENTIAL

- SUPPLY LINE TO BE "K" TYPE COPPER, 25mm FOR NEW CONSTRUCTION OPTIONAL 19mm FOR EXISTING DEVELOPMENT.
- SUPPLY LINE MUST BE INSTALLED AS PER BUILDING CODE AND BUILDING DEPARTMENTS REQUIREMENTS PROTECTED FROM FROST AND BE FLUSHED, PRESSURE TESTED AND INSPECTED PRIOR TO BACKFILLING.
- LINE TO BE SET INTO BUILDING AT CLOSET FRONT PORTION IN A HEATED AREA THAT IS ACCESSIBLE FOR READING, SERVICE WORK AND THAT IT ADHERES TO TOWN STANDARDS DRAWINGS.
- THE METER INLET VALVE SHALL BE A FULL PORT BALL TYPE WITH DIRECT SEAL CONNECTION TO THE METER INLET ONLY. THIS IS A MUNICIPAL TYPE VALVE, THE VALVE IS TO HAVE ONLY A GASKET CONNECTION TO THE METER. NO TREAD OR SEALANT COMPOUND.
- A BACKFLOW IS REQUIRED ON THE OUTLET SIDE OF THE METER USING ONLY A GASKET.
- AN ISOLATION VALVE IS ALSO DOWNSTREAM OF THE BACKFLOW PREVENTER FOR SERVICE WORK.
- A PRESSURE EXPANSION TANK AND/OR PRESSURE RELIEF VALVE IS REQUIRED TO PROTECT THE BUILDING FROM OVERPRESSURE DUE TO THERMAL EXPANSION. SHOULD AN EXPANSION TANK BE INSTALLED, THIS DEVICE MUST NOT BE INSTALLED ON THE METER RISER LINE TO THE CEILING, BUT BETWEEN CEILING AND COLD INLET LINE TO HOT WATER TANK. IT MUST BE WELL SUPPORTED TO CARRY THE WEIGHT AND LINE SHOCK OF THE WATER. THE INSTALLING PLUMBER WILL BE RESPONSIBLE TO DETERMINE THE SIZE & LOCATION OF THE EXPANSION TANK.
- SEE METER SERVICE DIAGRAM AND USE ONLY COPPER "U" TYPE DRIVE CLIPS AS OUTLINED. THE METER RISER MUST RUN FROM THE METER TO THE CEILING IN COPPER ONLY AS PER DRAWING. THE TYPE OF MATERIAL BEYOND THE CEILING SUPPORT IS TO BE APPROVED BY THE BUILDING DEPARTMENT.
- REMOTE READING SCAN DISK AND RADIO READ BOX ARE TO BE LOCATED ON THE FRONT WALL OR SIDEWALL NO FURTHER THAN 1 TO 1.5 METRES FROM FINISHED GRADE AND A MAXIMUM OF 1 METRE BACK FROM THE FRONT WALL. USING ONLY #8 RED ROBERTSON MACHINE SCREWS AND EXTERIOR GRADE WALL PLUGS.
- ALL WIRING TO BE RUN IN A CONDUIT FROM THE REMOTE READER TO THE METRE AREA USING PROPER CLIPS AND CONDUIT TO BE INSTALLED IN SUCH A WAY NOT TO BE DAMAGED FROM FINISHING IN THE AREA. ANY EXPOSED WIRE FROM THE CONDUIT TO THE METRE REGISTER ONLY CABLE TIES AND/OR "U" TYPE STAPLES TO BE USED.
- 3 CONDUCTOR 22 GAUGE WIRE ONLY WILL BE ACCEPTED.
- WHERE THE WATER SUPPLY LINE IS USED FOR ELECTRICAL SYSTEM GROUND, THE APPROPRIATE GROUND CLAMP AND CABLE IS TO BE LOCATED AS CLOSE AS POSSIBLE TO THE ENTRY POINT OF THE WATER SUPPLY LINE INTO THE HOUSE AND BEFORE OR UPSTREAM OF THE WATER METER. WHERE GROUND RODS OR PLATES ARE USED FOR ELECTRICAL SYSTEM GROUND THE COPPER WATER SUPPLY LINE MUST BE BONDED TO INTERNAL METAL PIPING WITH APPROPRIATE SIZED COPPER WIRING AND CLAMP.
- ADHERE TO TOWNS STANDARDS DRAWING AND ANY QUESTIONS CALL PUBLIC WORKS PRIOR TO COMMENCING OR INTERPRETING ANY INFORMATION NOT UNDERSTOOD.
- CALL FOR INSPECTION AFTER WORK IS COMPLETED TO OBC REQUIREMENTS.

MINIMUM CLEARANCE TABLE

A	BOTTOM PLATE TO FLOOR	300mm–500mm MAX
B	INLET TO OBSTRUCTION	200mm
C	REAR BODY TO WALL	150mm
D	REGISTER TO OVER OBSTRUCTION (MIN. ONLY)	1m
E	SCAN DISC FINISH GRADE	1.0–1.5m
F	FRONT CORNER ON SIDE OR FRONT	0–1.0m MAX.



TOWN OF NEW TECUMSETH

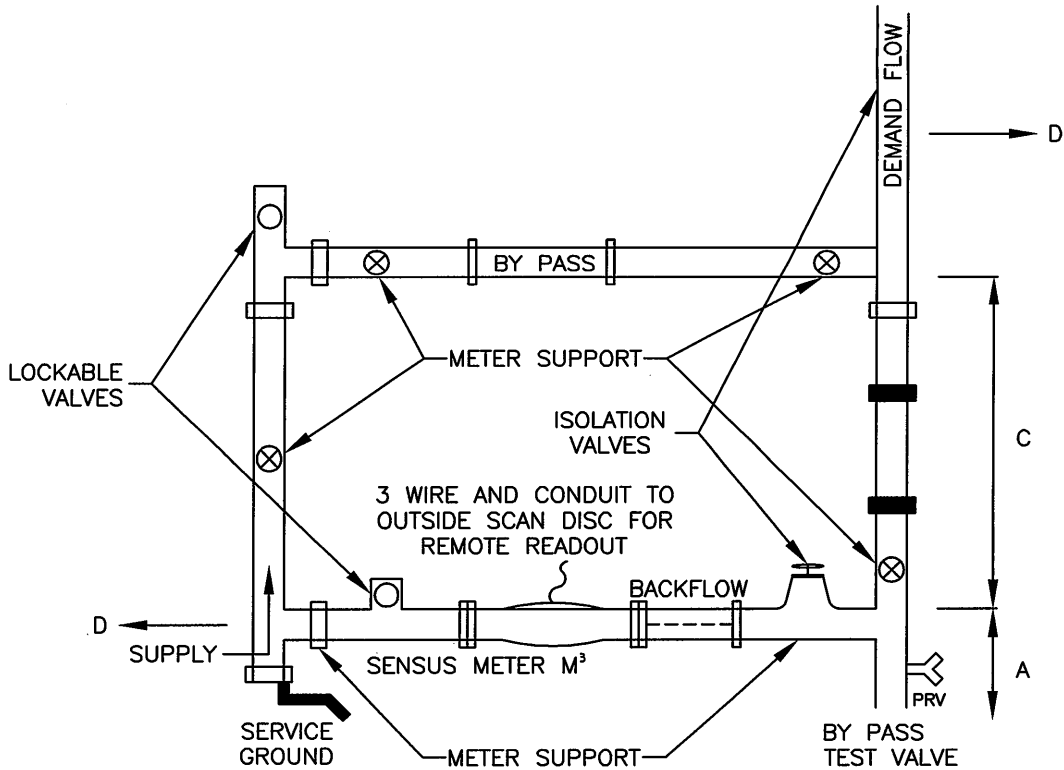
TYPICAL RESIDENTIAL METER
INSTALLATION (25mm SUPPLY LINE)



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OTHERWISE SHOWN

NO.	REVISIONS	DATE	APR'D

SCALE: N.T.S.
DATE: MARCH 2015
TNT.SD.
407



MINIMUM CLEARANCE TABLE	
A	BOTTOM OF SERVICE TO FLOOR 300mm-500mm MAX
B	TO OF REGISTER TO 1m MIN.
	BY PASS OF OBSTRUCTION
C	REAR SERVICE TO WALL 150mm MIN
D	PIPING TO ANY OBSTRUCTION 200mm MIN
E	SCAN DISC FROM FINISH GRADE 1.0-1.5m
F	FRONT CORNER OR 0-1.0m MAX.
	SIDE OF FRONT


INSTALLATION NOTES – COMMERCIAL

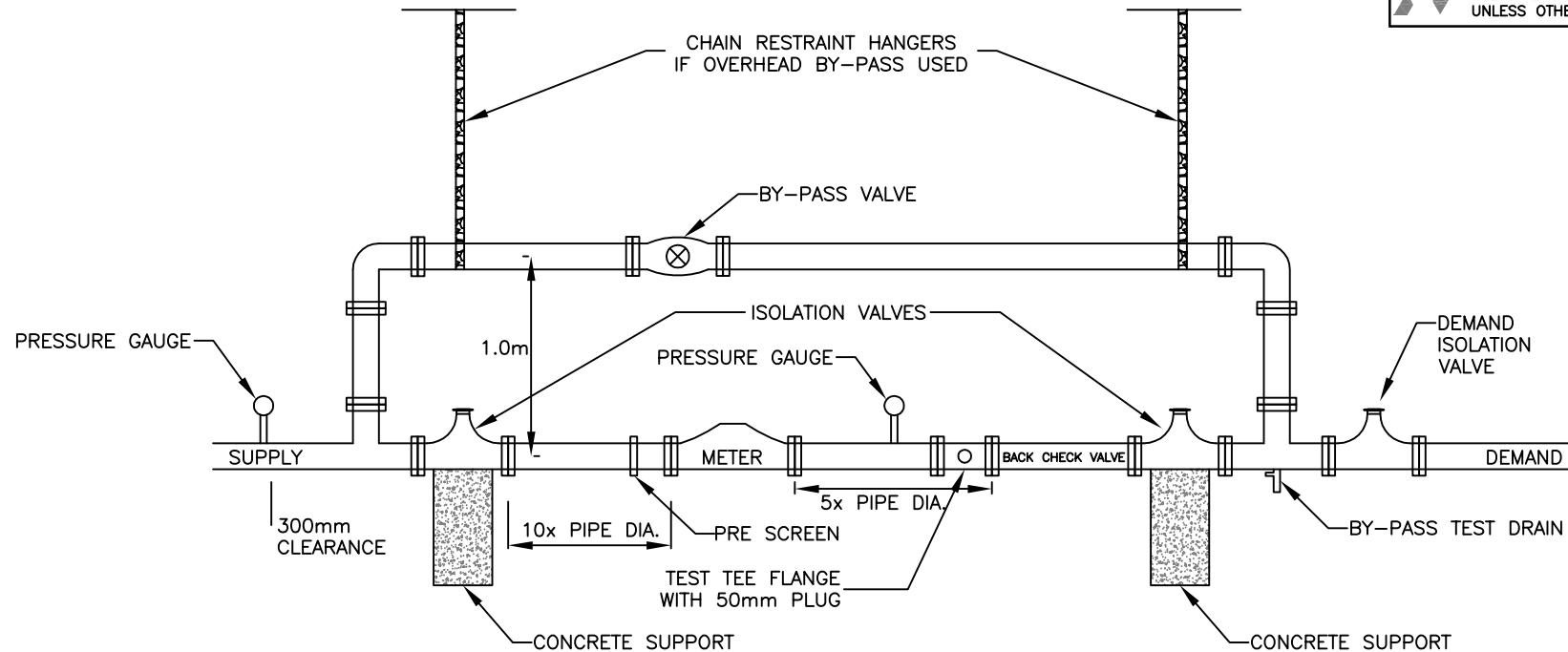
1. PRE INSPECTION REQUIRED BY TOWN PRIOR TO COMMENCEMENT OF WORK.
2. BY PASS LINE MUST EQUAL SERVICE LINE IN SIZE.
3. FLOOR DRAIN MUST BE WITHIN 2m OF SERVICE.
4. WORKING AREA MUST BE 2m MINIMUM AT SERVICE FLOOR TO ANY OVERHEAD OBSTRUCTION.
5. TEST DRAIN AND PRV MUST BE LOCATED IN OUTGOING SUPPLY BETWEEN SERVICE VALVES AS PER DRAWING.
6. A PRESSURE EXPANSION TANK AND/OR PRESSURE RELIEF VALVE IS REQUIRED TO PROTECT THE BUILDING FROM OVERPRESSURE DUE TO THERMAL EXPANSION. SHOULD AN EXPANSION TANK BE INSTALLED, THIS DEVICE MUST NOT BE INSTALLED ON THE METER RISER LINE TO THE CEILING, BUT BETWEEN CEILING AND COLD INLET LINE TO HOT WATER TANK. IT MUST BE WELL SUPPORTED TO CARRY THE WEIGHT AND LINE SHOCK OF THE WATER. THE INSTALLING PLUMBER WILL BE RESPONSIBLE TO DETERMINE THE SIZE & LOCATION OF THE EXPANSION TANK.
7. SUPPLY VALVES FOR SERVICE AND BY PASS MUST BE LOCKABLE TYPE.
8. METER AND PIPING SUPPORT MUST BE PROVIDED.
9. METER TYPE SENSUS FOR 1m³ REGISTER WITH RADIO READ BOX 510 MODEL USING CONDUIT AND 3 CONDUCTOR 22 GAUGE WIRE FROM METER TO REMOTE READER.
10. METER GROUND TO BE ON INLET SUPPLY USING MINIMUM #8 STANDARD COPPER AND GROUND CLAMPS AS PER PIPE SIZE.
11. CLEAR ACCESS REQUIRED AT ALL TIMES FOR READING, SERVICE, AND INSPECTION.
12. MUST BE HEATED ENVIRONMENT WITH ADEQUATE LIGHTING.
13. UPON COMPLETION, CALL TOWN PUBLIC WORKS FOR FINAL INSPECTION.



TOWN OF NEW TECUMSETH

TYPICAL COMMERCIAL METER INSTALLATION (38mm TO 50mm)

 METRIC ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN					SCALE: N.T.S.
					DATE: MARCH 2015
					TNT.SD.
NO.	REVISIONS	DATE	APR'D		408



INSTALLATION NOTES – INDUSTRIAL, COMMERCIAL, INSTITUTIONAL

1. PRE-INSPECTION REQUIRED BY TOWN PRIOR TO COMMENCEMENT OF WORK (WATER SERVICE AND PIPING).
2. ALL EQUIPMENT IS TO BE HOUSED ABOVE GROUND, IN A HEATED AND ADEQUATELY LIT ROOM OR BUILDING WITH ACCESS AVAILABLE AT ALL TIMES FOR SERVICING EQUIPMENT.
3. WORKING AREA MUST BE 2 METRES MINIMUM FROM FLOOR TO ANY OVERHEAD OBSTRUCTION AND CLEAR OF ANY OBSTRUCTIONS.
4. METER TYPE TO BE APPROVED BY TOWN, USING INVENSYS ECR REGISTER TO 1cu.m WITH RADIO READ BOX MODEL 510.
5. REMOTE READER WIRING MUST BE 22 GAUGE, 3 CONDUCTOR WIRE, USING CONDUIT FROM METER TO REMOTE READ LOCATION.
6. STAINLESS STEEL PIPING IS RECOMMENDED.
7. BY-PASS LINE MUST EQUAL SERVICE LINE SIZE.
8. FLOOR DRAIN MUST BE WITHIN 2 METRES OF SERVICE.
9. TEST TEE MUST BE FLANGED WITH THREADED 50mm PLUG.
10. BY-PASS TEST DRAIN MUST BE LOCATED BETWEEN BY-PASS VALVE, SERVICE ISOLATION VALVE AND DEMAND ISOLATION VALVE.
11. PRESSURE GAUGES ARE TO BE INSTALLED PRIOR TO BY-PASS LINE AND AFTER METER.
12. ALL VALVES MUST BE WHEEL TYPE AND LOCKABLE EXCEPT SMALL SERVICE VALVES.
13. METER AND PIPING MUST BE SUPPORTED AS PER DRAWING OR EQUIVALENT.
14. METER EQUIPMENT MUST BE EARTH GROUNDED.
15. CALIBRATION AND BACKFLOW TESTING RESULTS TO BE PROVIDED TO TOWN.
16. UPON COMPLETION OF THE COMPLETE METER INSTALLATION AND TESTING, CONTACT THE PUBLIC WORKS DEPARTMENT FOR FINAL INSPECTION.



TOWN OF NEW TECUMSETH

**ICI WATER METER INSTALLATION
75mm AND LARGER**

NO.	REVISIONS	DATE	APR'D

SCALE: N.T.S.

DATE: FEB. 2011

**TNT.SD.
409**