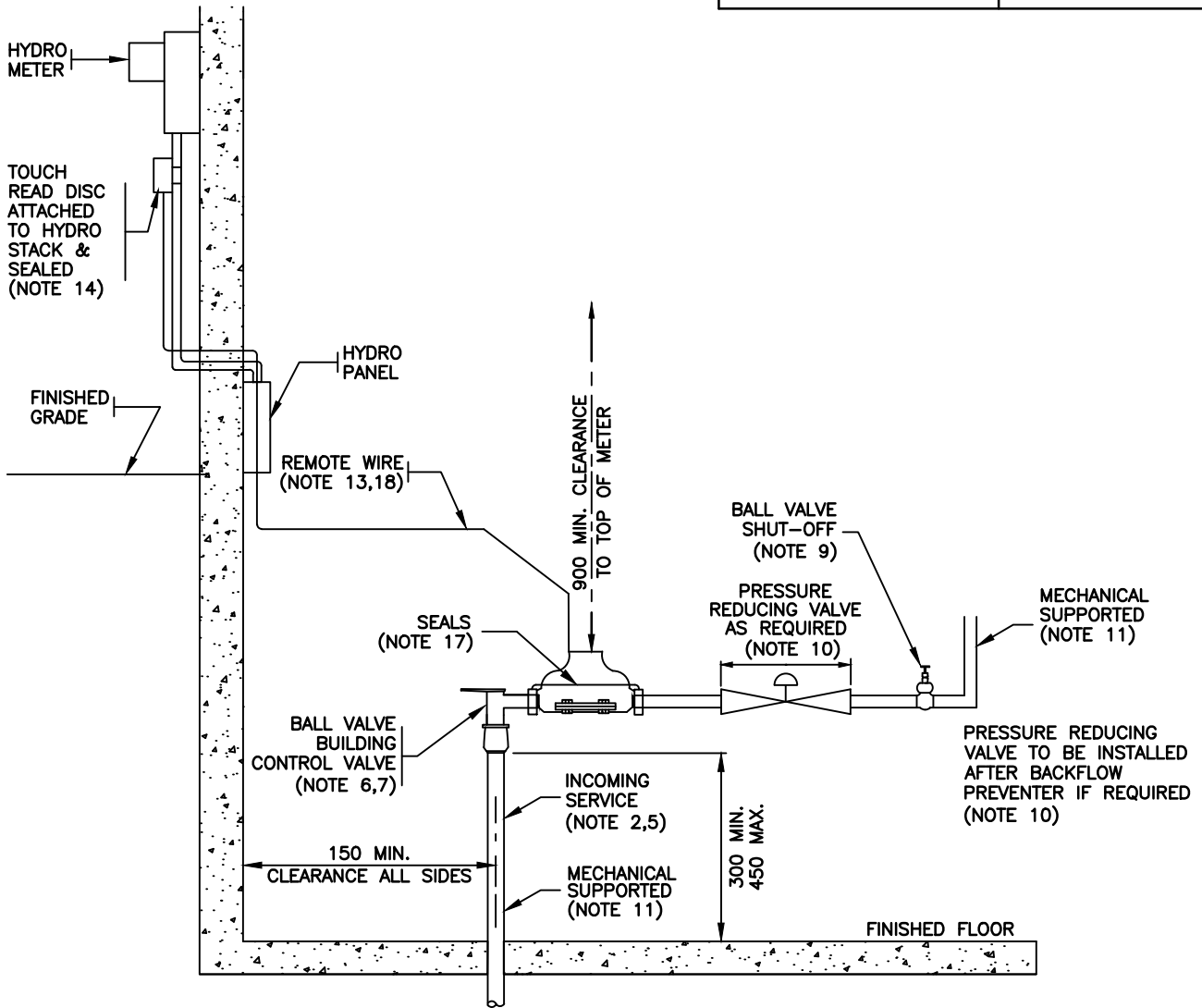


FOR 20-25 MM
SINGLE FAMILY RESIDENTIAL
WATER METER INSTALLATION ONLY

MATERIALS	
SUPPLIED BY REGION	SUPPLIED BY OTHERS
1- 20-25 mm WATER METER c/w TOUCH READ DISC AND BRACKET TAILPIECES REMOTE WIRE, SEALING WIRE AND SEAL	ALL PIPE FITTINGS REQUIRED FOR INSTALLATION INCLUDING VALVES



THIS DRAWING SHALL BE READ
IN CONJUNCTION WITH
RH 500.011

THE REGIONAL MUNICIPALITY OF HALTON
PUBLIC WORKS DEPARTMENT

**STANDARD 20-25 MM
WATER METER INSTALLATION
(NEW SINGLE FAMILY RESIDENTIAL)**

Date JULY 2017 Rev. 0 NTS

REGION STANDARD RH 500.010

STANDARD 20–25 MM
NEW SINGLE FAMILY RESIDENTIAL
METER INSTALLATION ONLY

ALL NOTES AND SPECIFICATIONS SHALL BE
READ IN CONJUNCTION WITH RH 500.010

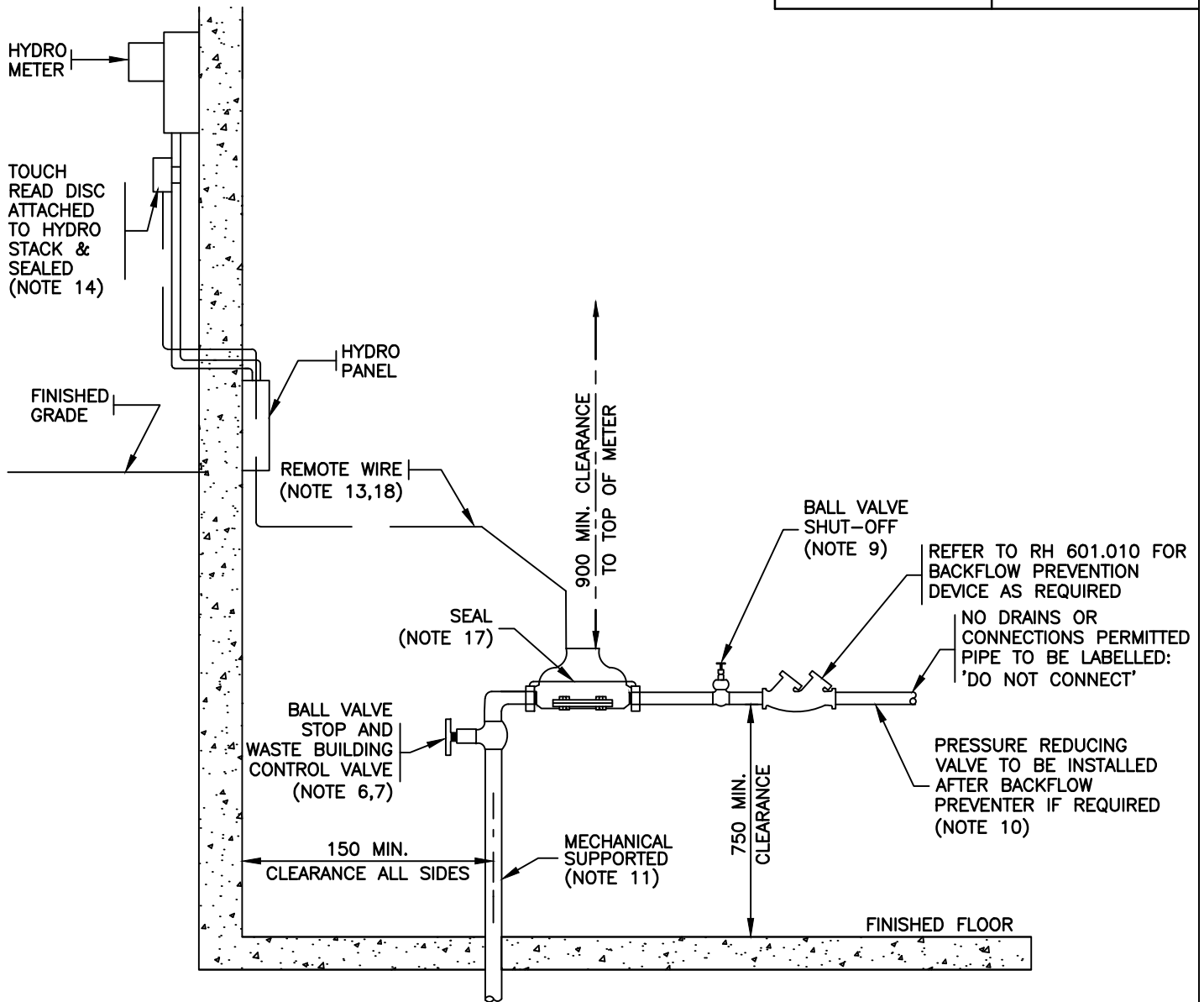
NOTES:

1. AS THE WATER PURVEYOR, HALTON REGION DOES NOT CONSENT TO ANY POTABLE WATER SYSTEM CONNECTING TO THE MUNICIPAL DRINKING WATER SYSTEM WITHOUT A WATER METER BEING INSTALLED, OR THE APPROVAL OF THE COMMISSIONER OF PUBLIC WORKS.
2. THE INSTALLATION OF THE METER, INCLUDING THE PIPING THAT IS PART OF THE METER INSTALLATION AND THE VALVING ARRANGEMENT FOR THE METER INSTALLATION, SHALL BE ACCORDING TO HALTON REGION'S REQUIREMENTS AND IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
3. THE METER INSTALLATION IS TO BE SCHEDULED THROUGH HALTON REGION AND IS AN INSPECTED REQUIREMENT FOR OCCUPANCY.
4. THE METER INSTALLATION IS TO REMAIN FULLY ACCESSIBLE AT ALL TIMES WITH NO OBSTRUCTIONS PERMITTED.
5. THE WATER SERVICE PIPE MINIMUM DIAMETER IS 25 MM UNLESS THE CONTRACTOR/DESIGNER PROVIDES ENGINEERING ANALYSIS SHOWING THIS MINIMUM SIZE OR LARGER IS NOT REQUIRED.
6. THE BUILDING CONTROL VALVE IS TO BE THE SAME SIZE AS THE INCOMING WATER SERVICE PIPE AND WHERE POSSIBLE SIZED FOR A DIRECT CONNECTION TO THE WATER METER.
7. THE BUILDING CONTROL VALVE IS REQUIRED TO BE AN APPROVED MANUFACTURER'S PRODUCT FOR WATER SYSTEMS BY HALTON REGION AND IS TO BE A RIGHT ANGLE BALL VALVE (FORD, CAMBRIDGE BRASS OR EQUIVALENT).
8. THE WATER SERVICE PIPE MATERIAL AND CONNECTIONS ARE REQUIRED TO ADHERE TO THE BUILDING CONTROL VALVE MANUFACTURER'S RECOMMENDATIONS.
9. A SHUT-OFF VALVE IS TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE METER TAILPIECE AND IS TO BE A BALL VALVE SIZED TO THE METER TAILPIECE AND DOWNSTREAM PIPING AND IS TO BE A FULL BORE STOP AND WASTE TYPE BALL VALVE.
10. THE CONTRACTOR/DESIGNER IS TO DETERMINE IF A PRESSURE REDUCING VALVE (PRV) TO LIMIT THE STATIC MAXIMUM STATIC PRESSURE TO 550 KPA (80 PSI) IS REQUIRED, AND IF NEEDED, IS TO ENSURE IT IS INSTALLED BEFORE THE SHUT OFF VALVE. IF A BACKFLOW PREVENTER IS INSTALLED, THE PRV SHALL BE INSTALLED AFTER THE BACKFLOW PREVENTER.
11. WHERE NON-METALLIC PIPE IS USED FOR THE PRIVATE WATER SERVICE PIPE AND/OR PRIVATE WATER SERVICE PIPE DOWNSTREAM OF THE METER, RIGID SUPPORTS ARE REQUIRED FOR THE WATER SERVICE PIPE AND WATER METER. IF REQUIRED, TYPE "L" COPPER (CERTIFIED TO ASTM B88) AND RATED TO A MINIMUM WORKING PRESSURE OF 1100 KPA SHALL BE USED BETWEEN THE BUILDING CONTROL VALVE AND SHUT OFF VALVE.
12. BUILDINGS WITH ZERO LOT LINE OFFSETS AT THE METER LOCATION REQUIRE 25 MM WATER SERVICE PIPE TO BE TYPE K SOFT COPPER TO COMPLY WITH PROVINCIAL AND REGIONAL REQUIREMENTS.
13. IF THE BASEMENT OR EXTERIOR WALL IS COMPLETED PRIOR TO OCCUPANCY, THE CONTRACTOR MUST ARRANGE THE INSTALLATION OF 3 CONDUCTOR 20 GAUGE (MINIMUM) WIRE PRIOR TO CEILING AND WALLS BEING INSTALLED, OR PROVIDE A 12 MM CONDUIT AND FISHING WIRE FROM THE METER TO OUTSIDE OF THE BUILDING.
14. THE TOUCH READING PAD AND 3 CONDUCTOR 20 GAUGE WIRE ARE TO BE SECURED TO THE HYDRO STACK WITH PLASTIC BRACKET (HYDRO ONE APPROVED) OR FLUSH MOUNTED TO THE WALL IN A FULLY ACCESSIBLE EXTERIOR AREA, AND SHALL BE INSTALLED A MINIMUM OF 1.2 M ABOVE FINISHED GRADE OR OTHER LOCATION AS APPROVED BY THE REGION OF HALTON.
15. THE CURB STOP/BOX MUST BE TO GRADE AND OPERATIONAL PRIOR TO INSTALLATION OF THE METER.
16. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
17. THE METER AND TAIL NUT SHALL BE SEALED TO PREVENT TAMPERING.
18. THE REMOTE TOUCHPAD WIRE SHALL BE CONNECTED TO THE WATER METER USING ALL 3 TERMINALS AND COLOUR MATCHED TO THE WATER METER TERMINAL I.E. RED – RED, GREEN – GREEN, BLACK – BLACK. THE WIRE SHALL BE RUN NEATLY AND FASTENED EVERY 600MM TO THE SURROUNDING PIPEWORK AND STRUCTURE USING APPROVED MATERIALS FOR WIRING SYSTEMS I.E. ZIP TIES, WIRING STAPLES.
19. ALL WATER METERS ARE TO BE INSTALLED IN A HORIZONTAL POSITION AND SHALL CONFORM TO THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
20. THE WATER SERVICE PIPE SHALL BE FLUSHED AFTER INSTALLATION OF BUILDING CONTROL VALVE AND PRIOR TO INSTALLATION OF METER IDLER (SPACER) OR WATER METER FOR A VOLUME OF AT LEAST 15 LITRES.

<p>THE REGIONAL MUNICIPALITY OF HALTON PUBLIC WORKS DEPARTMENT</p>	Date	JULY 2017	Rev.	0	NTS
<p>STANDARD 20–25 MM WATER METER INSTALLATION (NEW SINGLE FAMILY RESIDENTIAL)</p>					
	REGION STANDARD		RH 500.011		

FOR 20-25 MM
 NEW MULTI-RESIDENTIAL/COMMERCIAL/
 INDUSTRIAL WATER METER INSTALLATION ONLY

MATERIALS	
SUPPLIED BY REGION	SUPPLIED BY OTHERS
1-20-25 mm WATER METER C/W TOUCH READ DISC AND BRACKET TAILPIECES	ALL PIPE FITTINGS REQUIRED FOR INSTALLATION INCLUDING VALVES
REMOTE WIRE, SEALING WIRE AND SEAL	



THIS DRAWING SHALL BE
 READ IN CONJUNCTION WITH
 RH 501.011

THE REGIONAL MUNICIPALITY OF HALTON
 PUBLIC WORKS DEPARTMENT

**STANDARD 20-25 MM
 WATER METER INSTALLATION
 (NEW MULTI-RESIDENTIAL/
 COMMERCIAL/INDUSTRIAL)**

Date JULY 2017 Rev. 0 NTS

REGION STANDARD RH 501.010

STANDARD 20–25 MM
 NEW MULTI–RESIDENTIAL/COMMERCIAL/INDUSTRIAL
 METER INSTALLATION ONLY
 ALL NOTES AND SPECIFICATIONS SHALL BE
 READ IN CONJUNCTION WITH
 RH 501.010

NOTES:

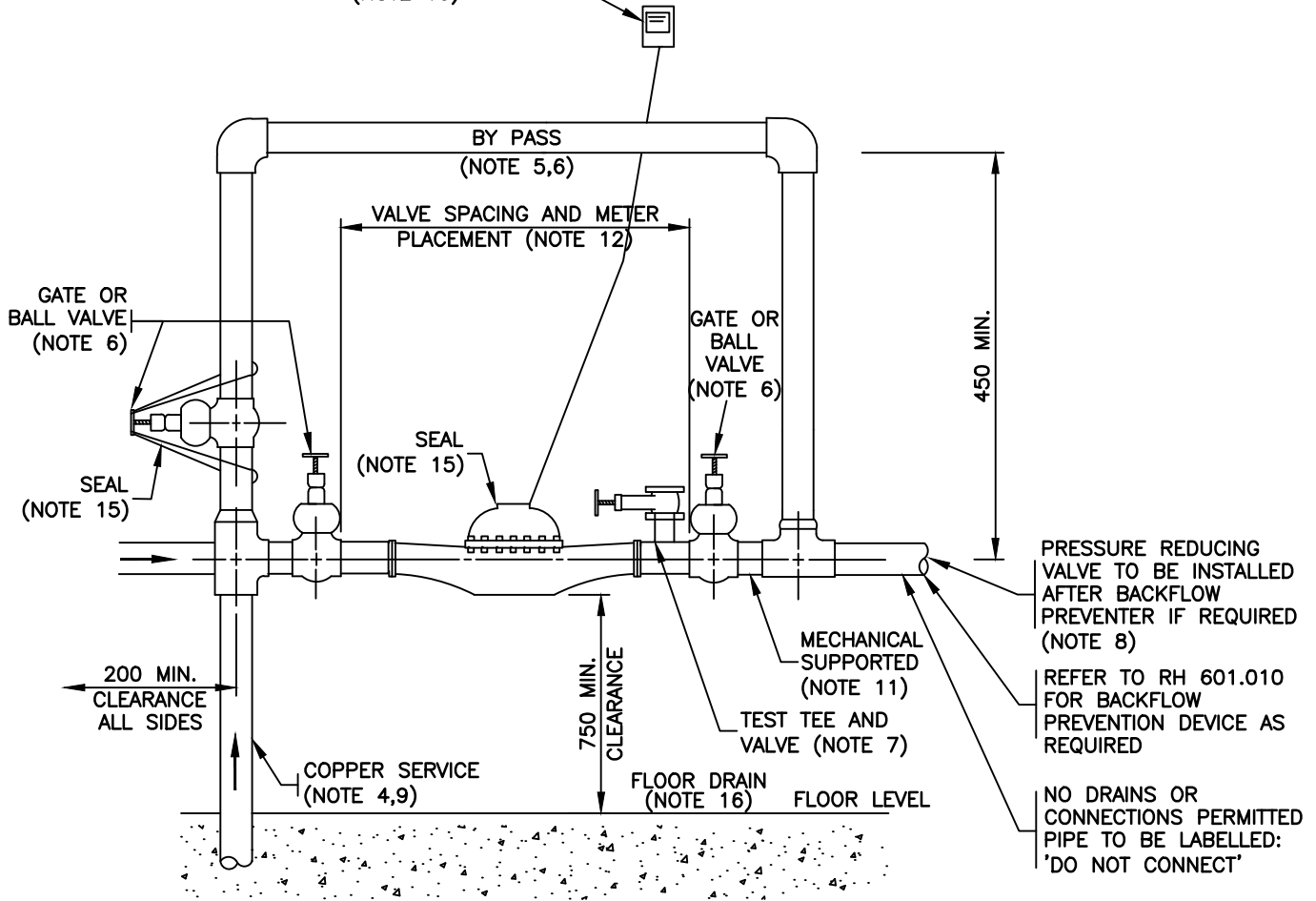
1. AS THE WATER PURVEYOR, HALTON REGION DOES NOT CONSENT TO ANY POTABLE WATER SYSTEM CONNECTING TO THE MUNICIPAL DRINKING WATER SYSTEM WITHOUT A WATER METER AND AN APPROPRIATE BACKFLOW PREVENTION DEVICE BEING INSTALLED, OR THE APPROVAL OF THE COMMISSIONER OF PUBLIC WORKS.
2. THE INSTALLATION OF THE METER, INCLUDING THE PIPING THAT IS PART OF THE METER INSTALLATION AND THE VALVING ARRANGEMENT FOR THE METER INSTALLATION, SHALL BE ACCORDING TO HALTON REGION'S REQUIREMENTS AND IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
3. THE METER INSTALLATION IS TO BE SCHEDULED THROUGH HALTON REGION AND IS AN INSPECTED REQUIREMENT FOR OCCUPANCY.
4. THE METER INSTALLATION IS TO REMAIN FULLY ACCESSIBLE AT ALL TIMES WITH NO OBSTRUCTIONS PERMITTED.
5. THE WATER SERVICE PIPE MINIMUM DIAMETER IS 25 MM UNLESS THE CONTRACTOR/DESIGNER PROVIDES ENGINEERING ANALYSIS SHOWING THIS MINIMUM SIZE OR LARGER IS NOT REQUIRED.
6. THE BUILDING CONTROL VALVE IS TO BE THE SAME SIZE AS THE INCOMING WATER SERVICE PIPE AND WHERE POSSIBLE SIZED FOR A DIRECT CONNECTION TO THE WATER METER.
7. THE BUILDING CONTROL VALVE IS REQUIRED TO BE AN APPROVED MANUFACTURER'S PRODUCT FOR WATER SYSTEMS BY HALTON REGION AND IS TO BE A STOP AND WASTE TYPE BALL VALVE.
8. THE WATER SERVICE PIPE MATERIAL AND CONNECTIONS ARE REQUIRED TO ADHERE TO THE BUILDING CONTROL VALVE MANUFACTURER'S RECOMMENDATIONS.
9. A SHUT–OFF VALVE IS TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE METER TAILPIECE AND IS TO BE A BALL VALVE SIZED TO THE METER TAILPIECE AND DOWNSTREAM PIPING.
10. THE CONTRACTOR/DESIGNER IS TO DETERMINE IF A PRESSURE REDUCING VALVE TO LIMIT THE STATIC MAXIMUM STATIC PRESSURE TO 550 KPA (80 PSI) IS REQUIRED, AND IF NEEDED, IS TO ENSURE IT IS INSTALLED AFTER THE BACKFLOW PREVENTER.
11. WHERE NON–METALLIC PIPE IS USED FOR THE PRIVATE WATER SERVICE PIPE AND/OR PRIVATE WATER SERVICE PIPE DOWNSTREAM OF THE METER, RIGID SUPPORTS ARE REQUIRED FOR THE WATER SERVICE PIPE AND WATER METER. IF REQUIRED, TYPE "L" COPPER (CERTIFIED TO ASTM B88) AND RATED TO A MINIMUM WORKING PRESSURE OF 1100 KPA SHALL BE USED BETWEEN THE BUILDING CONTROL VALVE AND SHUT OFF VALVE.
12. BUILDINGS WITH ZERO LOT LINE OFFSETS AT THE METER LOCATION REQUIRE 25 MM WATER SERVICE PIPE TO BE TYPE K SOFT COPPER TO COMPLY WITH PROVINCIAL AND REGIONAL REQUIREMENTS.
13. IF THE BASEMENT IS COMPLETED PRIOR TO OCCUPANCY, THE CONTRACTOR MUST ARRANGE THE INSTALLATION OF 3 CONDUCTOR 20 GAUGE (MINIMUM) WIRE PRIOR TO CEILING AND WALLS BEING INSTALLED, OR PROVIDE A 12 MM CONDUIT AND FISHING WIRE FROM THE METER TO OUTSIDE OF THE BUILDING.
14. THE TOUCH READING PAD AND 3 CONDUCTOR 20 GAUGE WIRE ARE TO BE SECURED TO THE HYDRO STACK WITH PLASTIC BRACKET (HYDRO ONE APPROVED) OR FLUSH MOUNTED TO THE WALL IN A FULLY ACCESSIBLE EXTERIOR AREA, AND SHALL BE INSTALLED A MINIMUM OF 1.2 M ABOVE FINISHED GRADE OR OTHER LOCATION AS APPROVED BY THE REGION OF HALTON.
15. THE CURB STOP/BOX MUST BE TO GRADE AND OPERATIONAL PRIOR TO INSTALLATION OF THE METER.
16. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
17. THE METER AND TAIL NUT SHALL BE SEALED TO PREVENT TAMPERING.
18. THE REMOTE TOUCHPAD WIRE SHALL BE CONNECTED TO THE WATER METER USING ALL 3 TERMINALS AND COLOUR MATCHED TO THE WATER METER TERMINAL I.E. RED – RED, GREEN – GREEN, BLACK – BLACK. THE WIRE SHALL BE RUN NEATLY AND FASTENED EVERY 600MM TO THE SURROUNDING PIPEWORK AND STRUCTURE USING APPROVED MATERIALS FOR WIRING SYSTEMS I.E. ZIP TIES, WIRING STAPLES.
19. ALL WATER METERS ARE TO BE INSTALLED IN A HORIZONTAL POSITION AND SHALL CONFORM TO THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
20. THE WATER SERVICE PIPE SHALL BE FLUSHED AFTER INSTALLATION OF BUILDING CONTROL VALVE AND PRIOR TO INSTALLATION OF METER IDLER (SPACER) OR WATER METER.

THE REGIONAL MUNICIPALITY OF HALTON PUBLIC WORKS DEPARTMENT	Date	JULY 2017	Rev. 0	NTS
STANDARD 20–25 MM WATER METER INSTALLATION (NEW MULTI–RESIDENTIAL/ COMMERCIAL/INDUSTRIAL)	REGION STANDARD RH 501.011			

FOR 38–50 MM
 NEW MULTI-RESIDENTIAL/COMMERCIAL/
 INDUSTRIAL WATER METER INSTALLATION ONLY

MATERIALS	
SUPPLIED BY REGION	SUPPLIED BY OTHERS
1-38-50 mm WATER METER C/W TOUCH READ DISC AND COMPANION FLANGES REMOTE WIRE 2-GASKETS, BOLTS AND NUTS	ALL PIPE FITTINGS REQUIRED FOR INSTALLATION INCLUDING VALVES

TOUCH READ DISC TO BE INSTALLED A MINIMUM OF 1.2M ABOVE FINISHED GRADE ON HYDRO STACK OR OTHER FULLY ACCESSIBLE EXTERIOR LOCATION APPROVED BY THE REGION OF HALTON (NOTE 10)



THIS DRAWING SHALL BE
 READ IN CONJUNCTION WITH
 RH 502.011

THE REGIONAL MUNICIPALITY OF HALTON
 PUBLIC WORKS DEPARTMENT

**STANDARD 38-50 MM
 WATER METER INSTALLATION
 (NEW MULTI-RESIDENTIAL/
 COMMERCIAL/INDUSTRIAL)**

Date JULY 2017 Rev. 0 NTS

REGION STANDARD RH 502.010

STANDARD 38–50 MM

MULTI–RESIDENTIAL/COMMERCIAL/INDUSTRIAL METER INSTALLATION ONLY

ALL NOTES AND SPECIFICATIONS SHALL BE READ
IN CONJUNCTION WITH RH 502.010

NOTES:

1. AS THE WATER PURVEYOR, HALTON REGION DOES NOT CONSENT TO ANY POTABLE WATER SYSTEM CONNECTING TO THE MUNICIPAL DRINKING WATER SYSTEM WITHOUT A WATER METER AND AN APPROPRIATE BACKFLOW PREVENTION DEVICE BEING INSTALLED, OR THE APPROVAL OF THE COMMISSIONER OF PUBLIC WORKS.
2. THE INSTALLATION OF THE METER, INCLUDING THE PIPING THAT IS PART OF THE METER INSTALLATION AND THE VALVING ARRANGEMENT FOR THE METER INSTALLATION, SHALL BE ACCORDING TO HALTON REGION'S REQUIREMENTS AND IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
3. THE METER INSTALLATION IS TO BE SCHEDULED THROUGH HALTON REGION AND IS AN INSPECTED REQUIREMENT FOR OCCUPANCY.
4. THE WATER METER INSTALLATION AND SURROUNDING PIPING IS TO REMAIN FULLY ACCESSIBLE AT ALL TIMES WITH NO OBSTRUCTIONS PERMITTED. THE WATER METER SHALL BE INSTALLED AT A MINIMUM DISTANCE OF 200MM FROM BEHIND THE METER MAIN CASE TO THE NEAREST WALL.
5. ALL WATER METERS ARE TO BE INSTALLED IN THE HORIZONTAL POSITION AND ACCORDING TO THE MANUFACTURERS INSTALLATION INSTRUCTIONS. BY–PASS PIPING MAY BE INSTALLED IN THE HORIZONTAL OR VERTICAL POSITION AROUND THE WATER METER. ALL BACKFLOW PREVENTION DEVICES ARE TO BE INSTALLED DOWNSTREAM OF THE WATER METER AND BY–PASS, WITH NO CONNECTIONS OR TEES AND SHALL BE INSTALLED AS PER CSA AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
6. ALL PIPING, INCLUDING BY–PASS PIPE, TEES, BENDS AND VALVES SHALL BE THE SAME DIAMETER AS THE INCOMING WATER SERVICE PIPE. PIPE REDUCERS REQUIRED TO ACCOMMODATE A SMALLER WATER METER THAN THE WATER SERVICE PIPE SHALL BE INSTALLED BETWEEN THE INLET AND OUTLET VALVES AND SHALL BE OF THE CONCENTRIC TYPE (NO THREADED REDUCING BUSHINGS). BUILDING CONTROL VALVES SHALL BE GATE VALVE OR FULL PORT BALL VALVE, TWO PIECE, FULL PORT, QUARTER TURN AND LEVER HANDLE.
7. THE TEST TEE AND VALVE SHALL BE LOCATED DOWNSTREAM OF THE WATER METER AT LEAST 3 X PIPE DIAMETERS AFTER THE OUTLET OF THE WATER METER AND 2 X PIPE DIAMETERS BEFORE THE INLET VALVE AND WILL BE OF THE SAME SIZE AS THE WATER SERVICE PIPING. THE VALVE MAY BE EITHER A THREADED BALL OR GATE VALVE AND A PLUG WILL BE INSTALLED IN THE OUTLET OF THE VALVE.
8. THE CONTRACTOR/DESIGNER IS TO DETERMINE IF A PRESSURE REDUCING VALVE TO LIMIT THE STATIC MAXIMUM STATIC PRESSURE TO 550 KPA (80 PSI) IS REQUIRED, AND IF NEEDED, IS TO ENSURE IT IS INSTALLED AFTER THE BACKFLOW PREVENTER.
9. WHERE NON–METALLIC PIPE IS USED FOR THE PRIVATE WATER SERVICE PIPE AND/OR PRIVATE WATER SERVICE PIPE DOWNSTREAM OF THE METER, RIGID SUPPORTS ARE REQUIRED FOR THE WATER SERVICE PIPE AND WATER METER. IF REQUIRED, TYPE "L" COPPER (CERTIFIED TO ASTM B88) AND RATED TO A MINIMUM WORKING PRESSURE OF 1100 KPA SHALL BE USED BETWEEN THE BUILDING CONTROL VALVE AND SHUT OFF VALVE. ALL VALVES AND FITTINGS SHALL BE BE RATING WITH A MINIMUM WORKING PRESSURE OF 1100 KPA.
10. THE TOUCH READING PAD AND 3 CONDUCTOR 20 GAUGE WIRE ARE TO BE SECURED TO THE HYDRO STACK WITH PLASTIC BRACKET (HYDRO ONE APPROVED) OR FLUSH MOUNTED TO THE WALL IN A FULLY ACCESSIBLE EXTERIOR AREA, AND SHALL BE INSTALLED A MINIMUM OF 1.2 M ABOVE FINISHED GRADE AS APPROVED BY THE REGION OF HALTON. THE REMOTE TOUCHPAD WIRE SHALL BE CONNECTED TO THE WATER METER USING ALL 3 TERMINALS AND COLOUR MATCHED TO THE WATER METER TERMINAL I.E. RED – RED, GREEN – GREEN, BLACK – BLACK. THE WIRE SHALL BE RUN NEATLY AND FASTENED EVERY 600MM TO THE SURROUNDING PIPEWORK AND STRUCTURE USING APPROVED MATERIALS FOR WIRING SYSTEMS I.E. ZIP TIES, WIRING STAPLES.
11. MECHANICAL SUPPORTS WILL BE INSTALLED AS NECESSARY TO THE WATER SERVICE PIPE AROUND THE WATER METER. THE WATER METER ITSELF IS NOT TO BE SUPPORTED TO PREVENT DAMAGE TO THE METER MAINCASE.
12. THE METER SHALL BE LOCATED 5 X PIPE DIAMETERS FROM THE INLET VALVE AND 3 X PIPE DIAMETERS FROM THE TEST TEE AND VALVE. THE OUTLET VALVE SHALL BE LOCATED AT LEAST 2 X PIPE DIAMETERS FROM THE TEST TEE AND VALVE.
13. THE CURB STOP/BOX MUST BE TO GRADE AND OPERATIONAL PRIOR TO INSTALLATION OF THE METER.
14. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
15. THE METER AND BYPASS VALVE SHALL BE SEALED BY THE REGION.
16. PROVISIONS ARE TO BE MADE FOR DISPOSAL OF WATER USED FOR IN–SITU TESTING EITHER THROUGH THE FLOOR DRAIN OR 125 MM FERRULE THROUGH THE WALL.
17. THE WATER SERVICE PIPE SHALL BE FLUSHED AFTER INSTALLATION OF BUILDING CONTROL VALVE AND PRIOR TO INSTALLATION OF METER IDLER (SPACER) OR WATER METER.

**THE REGIONAL MUNICIPALITY OF HALTON
PUBLIC WORKS DEPARTMENT**

**STANDARD 38–50 MM
WATER METER INSTALLATION
(NEW MULTI–RESIDENTIAL/
COMMERCIAL/INDUSTRIAL)**

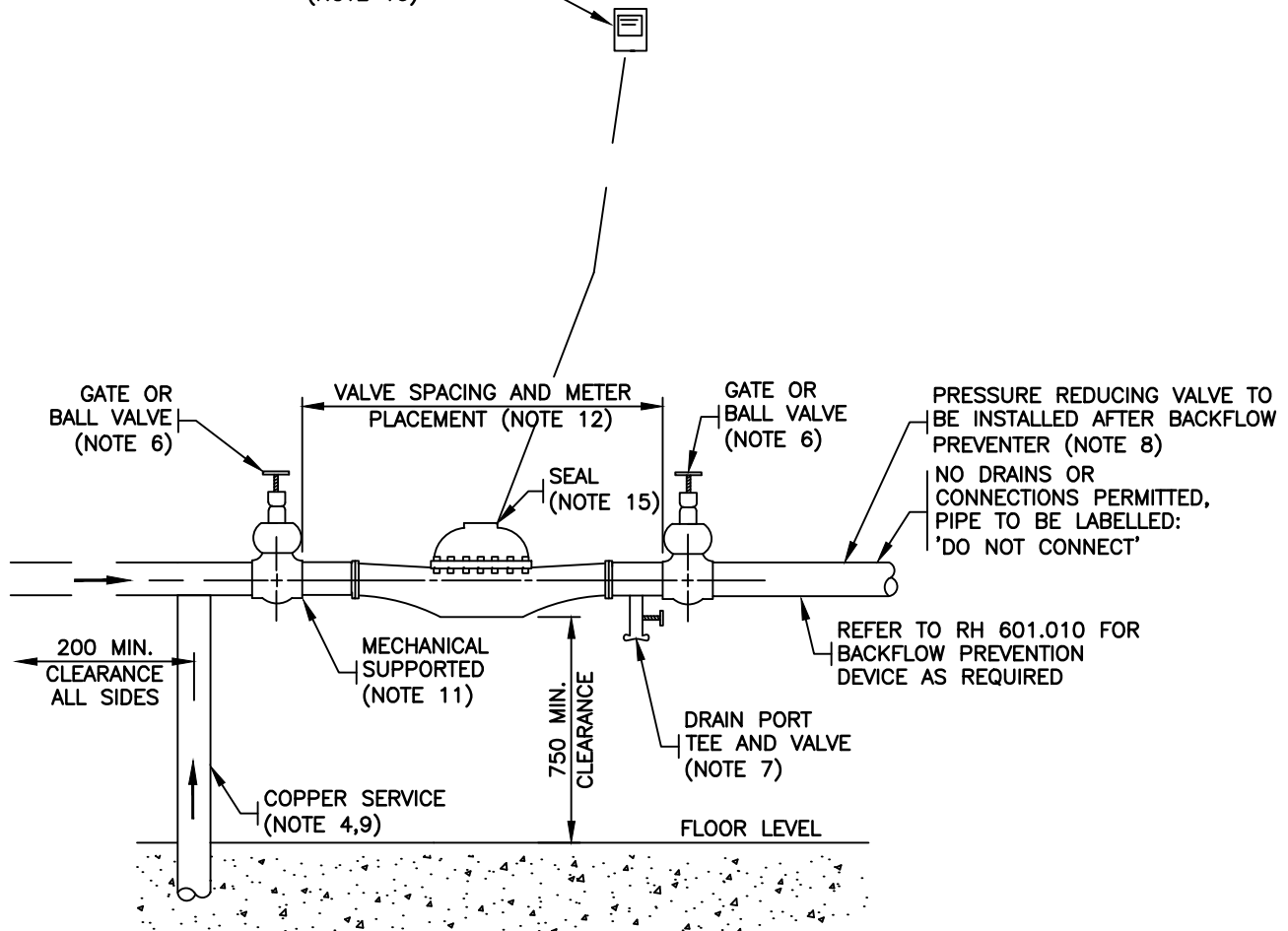
Date	JULY 2017	Rev. 0	NTS
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REGION STANDARD	RH 502.011
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FOR 38–50 MM
NEW SINGLE FAMILY RESIDENTIAL
WATER METER INSTALLATION ONLY

MATERIALS	
SUPPLIED BY REGION	SUPPLIED BY OTHERS
38–50 mm WATER METER C/W TOUCH READ DISC AND COMPANION FLANGES	ALL PIPE FITTINGS REQUIRED FOR INSTALLATION INCLUDING VALVES
REMOTE WIRE	
2–GASKETS, BOLTS AND NUTS	

TOUCH READ DISC TO BE INSTALLED A MINIMUM 1.2 m ABOVE FINISHED GRADE ON HYDRO STACK OR OTHER FULLY ACCESSIBLE EXTERIOR LOCATION APPROVED BY THE REGION OF HALTON (NOTE 10)



THIS DRAWING SHALL BE
READ IN CONJUNCTION WITH
RH 503.011

THE REGIONAL MUNICIPALITY OF HALTON
PUBLIC WORKS DEPARTMENT

**STANDARD 38–50 MM
WATER METER INSTALLATION
(NEW SINGLE FAMILY RESIDENTIAL)**

Date JULY 2017 Rev. 0 NTS

REGION STANDARD RH 503.010

**STANDARD 38–50 MM
NEW SINGLE FAMILY RESIDENTIAL METER INSTALLATION ONLY
ALL NOTES AND SPECIFICATIONS SHALL BE READ
IN CONJUNCTION WITH RH 503.010**

NOTES:

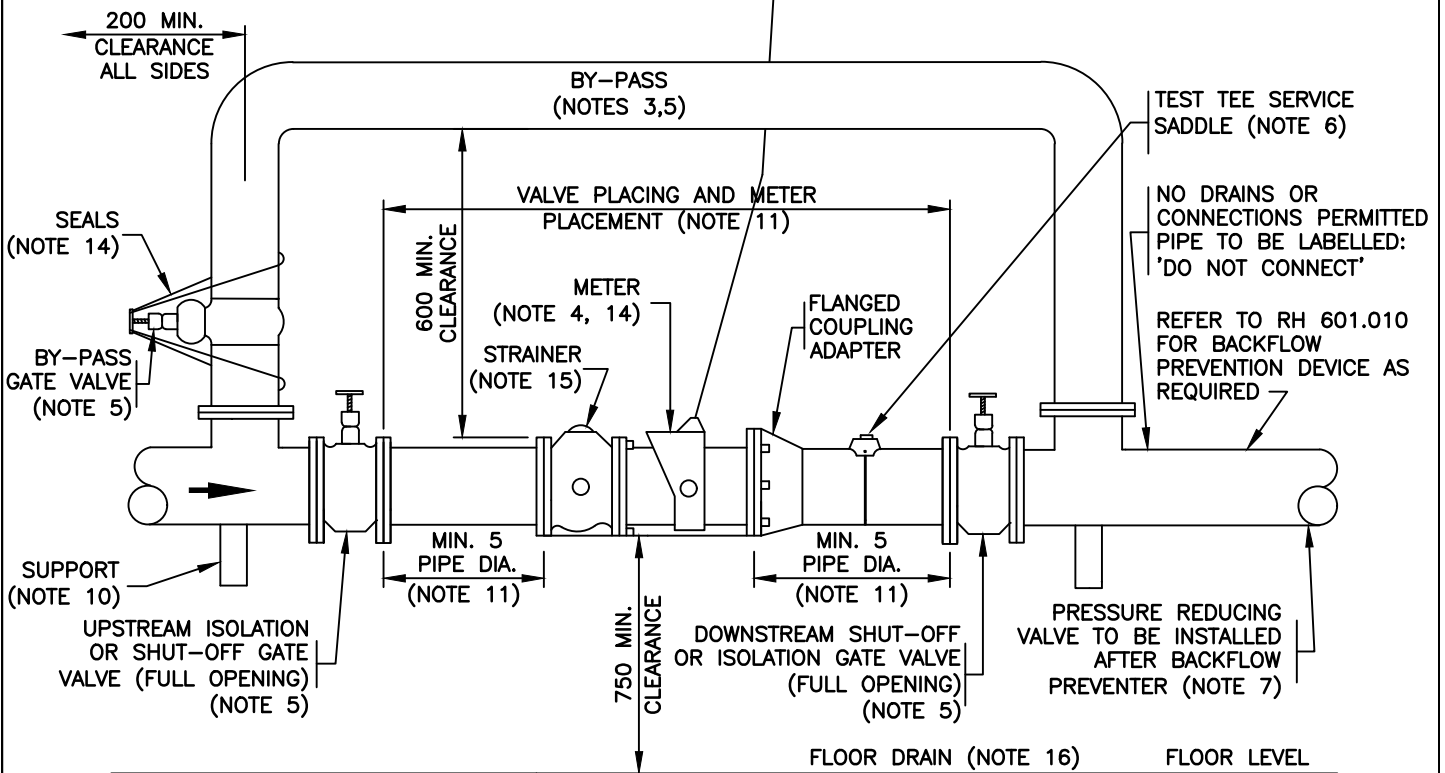
1. AS THE WATER PURVEYOR, HALTON REGION DOES NOT CONSENT TO ANY POTABLE WATER SYSTEM CONNECTING TO THE MUNICIPAL DRINKING WATER SYSTEM WITHOUT A WATER METER AND AN APPROPRIATE BACKFLOW PREVENTION DEVICE BEING INSTALLED, OR THE APPROVAL OF THE COMMISSIONER OF PUBLIC WORKS.
2. THE INSTALLATION OF THE METER, INCLUDING THE PIPING THAT IS PART OF THE METER INSTALLATION AND THE VALVING ARRANGEMENT FOR THE METER INSTALLATION, SHALL BE ACCORDING TO HALTON REGION'S REQUIREMENTS AND IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
3. THE METER INSTALLATION IS TO BE SCHEDULED THROUGH HALTON REGION AND IS AN INSPECTED REQUIREMENT FOR OCCUPANCY.
4. THE WATER METER INSTALLATION AND SURROUNDING PIPING IS TO REMAIN FULLY ACCESSIBLE AT ALL TIMES WITH NO OBSTRUCTIONS PERMITTED. THE WATER METER SHALL BE INSTALLED AT A MINIMUM DISTANCE OF 200MM FROM THE METER MAINCASE TO THE NEAREST WALL.
5. ALL WATER METERS ARE TO BE INSTALLED IN THE HORIZONTAL POSITION AND ACCORDING TO THE MANUFACTURERS INSTALLATION INSTRUCTIONS. ALL BACKFLOW PREVENTION DEVICES ARE TO BE INSTALLED DOWNSTREAM OF THE WATER METER AND BY-PASS, WITH NO CONNECTIONS OR TEES AND SHALL BE INSTALLED AS PER CSA AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
6. ALL PIPING INCLUDING ELBOWS AND VALVES EXCEPT FOR THE DRAINAGE TEE AND VALVE SHALL BE THE SAME DIAMETER AS THE INCOMING WATER SERVICE PIPE. PIPE REDUCERS REQUIRED TO ACCOMMODATE A SMALLER WATER METER THAN THE WATER SERVICE PIPE SHALL BE INSTALLED BETWEEN THE INLET AND OUTLET VALVES AND SHALL BE OF THE CONCENTRIC TYPE (NO THREADED REDUCING BUSHINGS). BUILDING CONTROL VALVES SHALL BE GATE VALVE OR FULL PORT BALL VALVE, TWO PIECE, FULL PORT, QUARTER TURN AND LEVER HANDLE.
7. THE DRAINAGE TEE AND BALL VALVE SHALL BE LOCATED DOWNSTREAM OF THE WATER METER. THE TEE OUTLET AND VALVE SHALL BE 19 MM AND A BRASS PLUG WILL BE INSTALLED IN THE OUTLET OF THE VALVE.
8. THE CONTRACTOR/DESIGNER IS TO DETERMINE IF A PRESSURE REDUCING VALVE TO LIMIT THE STATIC MAXIMUM STATIC PRESSURE TO 550 KPA (80 PSI) IS REQUIRED, AND IF NEEDED, IS TO ENSURE IT IS INSTALLED AFTER THE BACKFLOW PREVENTER.
9. WHERE NON-METALLIC PIPE IS USED FOR THE PRIVATE WATER SERVICE PIPE AND/OR PRIVATE WATER SERVICE PIPE DOWNSTREAM OF THE METER, RIGID SUPPORTS ARE REQUIRED FOR THE WATER SERVICE PIPE AND WATER METER. IF REQUIRED, TYPE "L" COPPER (CERTIFIED TO ASTM B88) AND RATED TO A MINIMUM WORKING PRESSURE OF 1100 KPA SHALL BE USED BETWEEN THE BUILDING CONTROL VALVE AND SHUT OFF VALVE. ALL VALVES AND FITTINGS SHALL BE RATED WITH A MINIMUM WORKING PRESSURE OF 1100 KPA.
10. THE TOUCH READING PAD AND 3 CONDUCTOR 20 GAUGE WIRE ARE TO BE SECURED TO THE HYDRO STACK WITH PLASTIC BRACKET (HYDRO ONE APPROVED) OR FLUSH MOUNTED TO THE WALL IN A FULLY ACCESSIBLE EXTERIOR AREA, AND SHALL BE INSTALLED A MINIMUM OF 1.2 M ABOVE FINISHED GRADE OR OTHER LOCATION AS APPROVED BY THE REGION OF HALTON. THE REMOTE TOUCHPAD WIRE SHALL BE CONNECTED TO THE WATER METER USING ALL 3 TERMINALS AND COLOUR MATCHED TO THE WATER METER TERMINAL I.E RED - RED, GREEN - GREEN, BLACK - BLACK. THE WIRE SHALL BE RUN NEATLY AND FASTENED EVERY 600MM TO THE SURROUNDING PIPEWORK AND STRUCTURE USING APPROVED MATERIALS FOR WIRING SYSTEMS I.E. ZIP TIES, WIRING STAPLES.
11. MECHANICAL SUPPORTS WILL BE INSTALLED AS NECESSARY TO THE WATER SERVICE PIPE AROUND THE WATER METER. THE WATER METER ITSELF IS NOT TO BE SUPPORTED TO PREVENT DAMAGE TO THE METER MAINCASE.
12. THE METER SHALL BE PLACED 5 X PIPE DIAMETER FROM THE INLET VALVE AND 3 X PIPE DIAMETER FROM THE OUTLET VALVE.
13. THE CURB STOP/BOX MUST BE TO GRADE AND OPERATIONAL PRIOR TO INSTALLATION OF THE METER.
14. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
15. THE METER SHALL BE SEALED BY THE REGION.
16. THE WATER SERVICE PIPE SHALL BE FLUSHED AFTER INSTALLATION OF BUILDING CONTROL VALVE AND PRIOR TO INSTALLATION OF METER IDLER (SPACER) OR WATER METER.

THE REGIONAL MUNICIPALITY OF HALTON PUBLIC WORKS DEPARTMENT	Date	JULY 2017	Rev. 0	NTS
STANDARD 38–50 MM WATER METER INSTALLATION (NEW SINGLE FAMILY RESIDENTIAL)				
	REGION STANDARD		RH 503.011	

FOR 75–200 MM
NEW MULTI–RESIDENTIAL/
COMMERCIAL/ INDUSTRIAL
WATER METER INSTALLATION ONLY

MATERIALS	
SUPPLIED BY REGION	SUPPLIED & INSTALLED BY OTHERS
75–200mm WATER METER C/W TOUCH READ DISC COMPANION FLANGES (AS REQUIRED FOR METER) GASKETS AND FASTENERS REMOTE WIRE 75–200MM STRAINER	ALL PIPE FITTINGS REQUIRED FOR INSTALLATION INCLUDING VALVES

TOUCH READ DISC TO BE INSTALLED A MINIMUM 1.2 m ABOVE FINISHED GRADE ON HYDRO STACK OR OTHER FULLY ACCESSIBLE EXTERIOR LOCATION APPROVED BY THE REGION OF HALTON (NOTE 9)



THIS DRAWING SHALL BE
READ IN CONJUNCTION WITH
RH 504.011

THE REGIONAL MUNICIPALITY OF HALTON
PUBLIC WORKS DEPARTMENT

**STANDARD 75–200 MM
WATER METER INSTALLATION
(NEW MULTI–RESIDENTIAL/
COMMERCIAL/INDUSTRIAL)**

Date	JULY 2017	Rev.	0	NTS
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REGION STANDARD	RH 504.010
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**STANDARD 75–200 MM NEW MULTI–RESIDENTIAL/
COMMERCIAL/INDUSTRIAL METER INSTALLATION ONLY**
ALL NOTES AND SPECIFICATIONS SHALL BE READ
IN CONJUNCTION WITH RH 504.010

NOTES:

1. AS THE WATER PURVEYOR, HALTON REGION DOES NOT CONSENT TO ANY POTABLE WATER SYSTEM CONNECTING TO THE MUNICIPAL DRINKING WATER SYSTEM WITHOUT A WATER METER AND AN APPROPRIATE BACKFLOW PREVENTION DEVICE BEING INSTALLED, OR THE APPROVAL OF THE COMMISSIONER OF PUBLIC WORKS.
2. THE INSTALLATION OF THE METER, INCLUDING THE PIPING THAT IS PART OF THE METER INSTALLATION AND THE VALVING ARRANGEMENT FOR THE METER INSTALLATION, SHALL BE ACCORDING TO HALTON REGION'S REQUIREMENTS AND IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.
3. THE WATER METER AND BACKFLOW PREVENTION DEVICE INSTALLATION AND SURROUNDING PIPING IS TO REMAIN FULLY ACCESSIBLE AT ALL TIMES WITH NO OBSTRUCTIONS PERMITTED. BYPASS PIPING MAY BE INSTALLED IN THE HORIZONTAL OR VERTICAL POSITION AND SHALL BE INSTALLED WITH A MINIMUM OF 600 MM CLEARANCE FROM THE OUTSIDE OF THE BYPASS PIPE TO THE NEAREST WALL OR CEILING. THE WATER METER SHALL BE INSTALLED AT A MINIMUM DISTANCE OF 600MM FROM BEHIND THE METER MAINCASE TO THE NEAREST WALL.
4. ALL WATER METERS ARE TO BE INSTALLED IN THE HORIZONTAL POSITION AND ACCORDING TO THE MANUFACTURERS INSTALLATION INSTRUCTIONS. THE TYPES OF METERS THAT WILL BE PROVIDED BY THE REGION CAN BE OF THE TURBINE, COMPOUND, ELECTROMAGNETIC OR ULTRASONIC TYPE. ALL BACKFLOW PREVENTION DEVICES ARE TO BE INSTALLED DOWNSTREAM OF THE WATER METER AND BY-PASS, WITH NO CONNECTIONS OR TEES AND SHALL BE INSTALLED AS PER CSA AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
5. ALL PIPING, INCLUDING BY-PASS PIPE, TEES, BENDS AND VALVES WITH THE EXCEPTION OF THE TEST TEE SHALL BE THE SAME DIAMETER AS THE INCOMING WATER SERVICE PIPE. PIPE REDUCERS REQUIRED TO ACCOMMODATE A SMALLER WATER METER THAN THE WATER SERVICE PIPE SHALL BE INSTALLED BETWEEN THE INLET AND OUTLET VALVES AND SHALL BE OF THE CONCENTRIC TYPE. ALL VALVES 75 MM AND GREATER SHALL BE OS&Y GATE VALVES CONFORMING TO AWWA C515–15.
6. THE TEST TEE/SERVICE SADDLE AND VALVE SHALL BE LOCATED DOWNSTREAM OF THE WATER METER AT LEAST 3 X PIPE DIAMETERS AFTER THE OUTLET OF THE WATER METER AND 2 X PIPE DIAMETER FROM THE OUTLET VALVE. THE VALVE MAY BE EITHER A THREADED BALL OR GATE VALVE AND A PLUG WILL BE INSTALLED IN THE OUTLET OF THE VALVE. A 50 MM (2") VALVE WILL BE INSTALLED FOR 75 AND 100 MM WATER METERS AND A 64MM (2 1/2") VALVE WILL BE INSTALLED FOR 150 MM AND 200 MM WATER METERS.
7. THE CONTRACTOR/DESIGNER IS TO DETERMINE IF A PRESSURE REDUCING VALVE TO LIMIT THE STATIC MAXIMUM STATIC PRESSURE TO 550 KPA (80 PSI) IS REQUIRED, AND IF NEEDED, IS TO ENSURE IT IS INSTALLED AFTER THE BACKFLOW PREVENTER.
8. ALL PIPING SHALL BE TYPE "L" COPPER (CERTIFIED TO ASTM B88), CEMENT LINED DUCTILE IRON PIPE (CERTIFIED TO ANSI/AWWA C115/A21.15 OR C51/A21.51; CEMENT LINING CERTIFIED TO ANSI/AWWA C104/A21.4; FITTINGS CERTIFIED TO ANSI/AWWA C110/A21.10) OR STAINLESS STEEL PIPE RATED TO A MINIMUM WORKING PRESSURE OF 1100 KPA. ALL VALVES AND FITTINGS SHALL BE RATING WITH A MINIMUM WORKING PRESSURE OF 1100 KPA.
9. THE TOUCH READING PAD AND 3 CONDUCTOR 20 GAUGE WIRE ARE TO BE SECURED TO THE HYDRO STACK WITH PLASTIC BRACKET (HYDRO ONE APPROVED) OR FLUSH MOUNTED TO THE WALL IN A FULLY ACCESSIBLE EXTERIOR AREA, AND SHALL BE INSTALLED A MINIMUM OF 1.2 M ABOVE FINISHED GRADE AS APPROVED BY THE REGION OF HALTON. THE REMOTE TOUCHPAD WIRE SHALL BE CONNECTED TO THE WATER METER USING ALL 3 TERMINALS AND COLOUR MATCHED TO THE WATER METER TERMINAL I.E. RED – RED, GREEN – GREEN, BLACK – BLACK. THE WIRE SHALL BE RUN NEATLY AND FASTENED EVERY 600MM TO THE SURROUNDING PIPEWORK AND STRUCTURE USING APPROVED MATERIALS FOR WIRING SYSTEMS I.E. ZIP TIES, WIRING STAPLES.
10. MECHANICAL SUPPORTS WILL BE INSTALLED AS NECESSARY TO THE WATER SERVICE PIPE AND FLANGES AROUND THE WATER METER. THE WATER METER ITSELF IS NOT TO BE SUPPORTED TO PREVENT DAMAGE TO THE METER MAINCASE.
11. THE METER SHALL BE LOCATED 5 X PIPE DIAMETERS FROM THE INLET VALVE AND 3 X PIPE DIAMETERS FROM THE TEST TEE AND VALVE. THE OUTLET VALVE SHALL BE LOCATED AT LEAST 2 X PIPE DIAMETERS FROM THE TEST TEE AND VALVE.
12. THE MAIN DISTRIBUTION SHUT OFF VALVE MUST BE INSTALLED AND OPERATIONAL PRIOR TO INSTALLATION OF THE METER.
13. ALL DIMENSIONS IN MM UNLESS OTHERWISE NOTED.
14. THE METER AND BYPASS VALVE SHALL BE SEALED BY THE REGION.
15. AN APPROVED STRAINER WILL BE PROVIDED BY THE REGION AND WILL BE BOLTED DIRECTLY TO THE INLET SIDE OF THE WATER METER.
16. PROVISIONS ARE TO BE MADE FOR DISPOSAL OF WATER USED FOR IN-SITU TESTING EITHER THROUGH THE FLOOR DRAIN OR 125 MM FERRULE THROUGH THE WALL.
17. THE WATER SERVICE PIPE SHALL BE FLUSHED AFTER INSTALLATION OF BUILDING CONTROL VALVE AND PRIOR TO INSTALLATION OF METER IDLER (SPACER) OR WATER METER.

<p>THE REGIONAL MUNICIPALITY OF HALTON PUBLIC WORKS DEPARTMENT</p>	Date	JULY 2017	Rev. 0	NTS
<p>STANDARD 75–200 MM WATER METER INSTALLATION (NEW MULTI–RESIDENTIAL/ COMMERCIAL/INDUSTRIAL)</p>	<p>REGION STANDARD RH 504.011</p>			