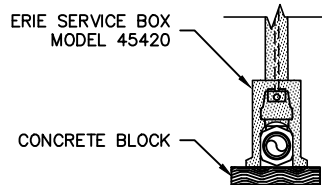
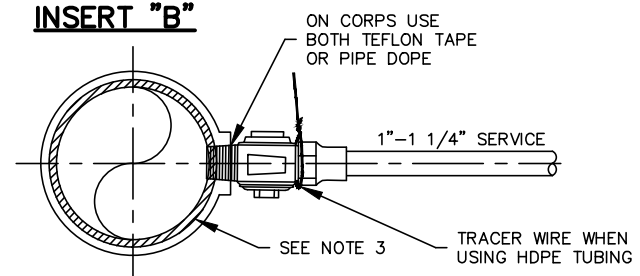


INSERT "A"



INSERT "B"



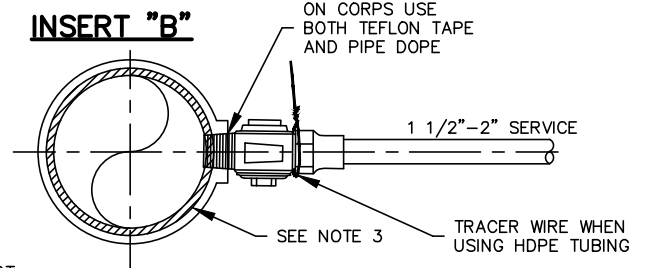
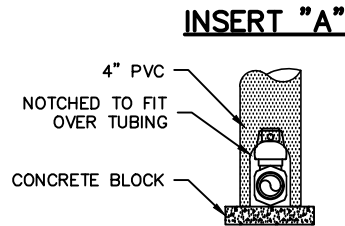
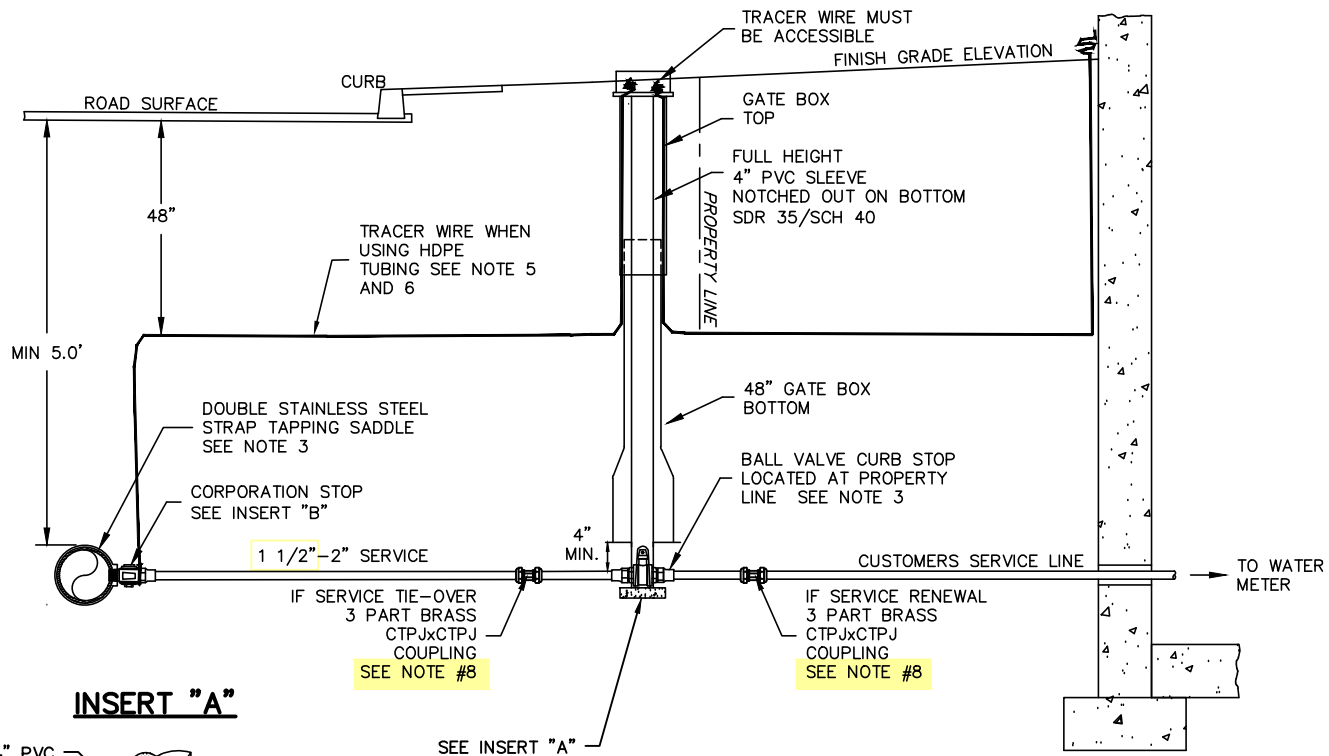
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. IF WATER MAIN IS PVC OR TRANSITE, A DOUBLE STAINLESS STEEL STRAP TAPPING SADDLE MUST BE USED TO CONNECT THE CORPORATION TO THE WATER MAIN. CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
4. IF TAPPING A FIRE SERVICE, THEN SEE DETAIL D15 AND D16.
5. USE 10-GAUGE SOLID-CORE COATED BLUE TRACER WIRE PER P.W.W. TECHNICAL SPECIFICATIONS. SPLICES REQUIRE SNAKEBITE LSC1030C LOCKING CONNECTORS OR EQUAL.
6. INSTALL 3" WIDE BLUE UNDERGROUND WARNING TAPE.
7. SERVICE TO BE PLACED ON 1' COMPACTED SAND BED AND COVERED IN 1' COMPACTED SAND BED.
8. ANY SECTION OF NEW SERVICE LINE THAT IS 60' OR LESS IN LENGTH, SHALL CONTAIN NO COUPLINGS, UNIONS OR FITTINGS.
9. A NEW SERVICE LINE SHALL BE INSTALLED NO CLOSER THAN 10' TO A SEPTIC TANK, LEACH BED OR SEWER LINE. THIS DISTANCE CAN BE REDUCED TO 5' IF THE SERVICE LINE IS SLEEVED INSIDE A GASKETED PIPE.
10. WHEN A NEW SERVICE LINE CROSSES BENEATH A DRIVEWAY, THE SERVICE LINE SHALL BE SLEEVED WITHIN A PIPE EQUIVALENT TO SDR 35 AND MINIMUM DIAMETER OF 3".

ITEM REVISED IN 2026

 **PENNICHUCK**
WATER

DETAIL D01
TYPICAL 1"-1 1/4" SERVICE &
VALVE BOX INSTALLATION DETAIL
PENNICHUCK WATER WORKS, INC.
REV: 02-20-2026 SCALE: NTS



NOTES:

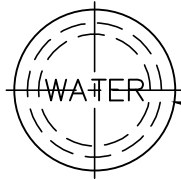
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. IF WATER MAIN IS PVC OR TRANSITE, A DOUBLE STAINLESS STEEL STRAP TAPPING SADDLE MUST BE USED TO CONNECT THE CORPORATION TO THE WATER MAIN. CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
4. IF TAPPING A FIRE SERVICE, THEN SEE DETAIL D15 AND D16.
5. USE 10-GAUGE SOLID-CORE COATED BLUE TRACER WIRE PER P.W.W. TECHNICAL SPECIFICATIONS. SPLICES REQUIRE SNAKEBITE LSC1030C LOCKING CONNECTORS OR EQUAL.
6. INSTALL 3" WIDE BLUE UNDERGROUND WARNING TAPE.
7. SERVICE TO BE PLACED ON 1' COMPACTED SAND BED AND COVERED IN 1' COMPACTED SAND BED.
8. ANY SECTION OF NEW SERVICE LINE THAT IS 60' OR LESS IN LENGTH, SHALL CONTAIN NO COUPLINGS, UNIONS OR FITTINGS.
9. A NEW SERVICE LINE SHALL BE INSTALLED NO CLOSER THAN 10' TO A SEPTIC TANK, LEACH BED OR SEWER LINE. THIS DISTANCE CAN BE REDUCED TO 5' IF THE SERVICE LINE IS SLEEVED INSIDE A GASKETED PIPE.
10. WHEN A NEW SERVICE LINE CROSSES BENEATH A DRIVEWAY, THE SERVICE LINE SHALL BE SLEEVED WITHIN A PIPE EQUIVALENT TO SDR 35 AND MINIMUM DIAMETER OF 3".

ITEM REVISED IN 2026

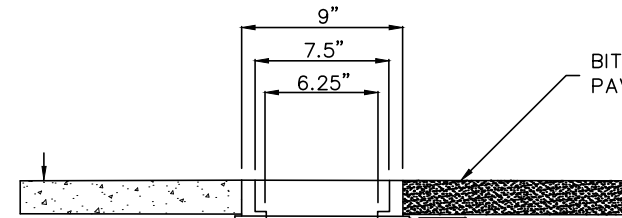


DETAIL D02
 TYPICAL 1 1/2"-2" SERVICE &
 VALVE BOX INSTALLATION DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS

ITEM REVISED IN 2023



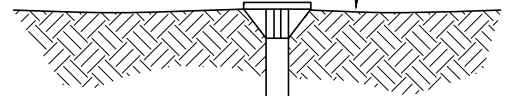
GATE BOX COVER
SEE DROP STYLE
COVER IN DETAIL M14



BITUMINOUS OR CONCRETE
PAVEMENT SURFACE (TYP)



EXISTING
GROUND



STANDARD GATE BOX
TOP WITH COVER
SEE TOP DETAIL IN
DETAIL M14

STANDARD SERVICE BOX
SEE P.W.W. TECHNICAL
SPECIFICATIONS

STANDARD SERVICE BOX
SEE P.W.W. TECHNICAL
SPECIFICATIONS

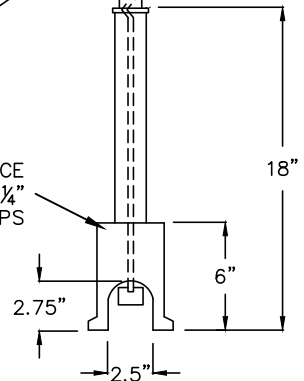
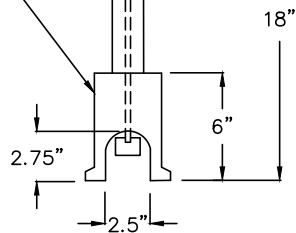
FOR 1½"–2" CURB STOPS: ELIMINATE
SERVICE BOX AND SPLIT IRON; ADD
48" GATE BOX BOTTOM AND FULL
HEIGHT 4" PVC SLEEVE
NOTCHED ON BOTTOM

SPLIT IRON IS 30" HIGH

½" STAINLESS STEEL
SPLIT IRON
FOR 1" TO 1¼"
CURB STOP

STANDARD FOOT PIECE
FOR 1" TO 1¼"
CURB STOPS

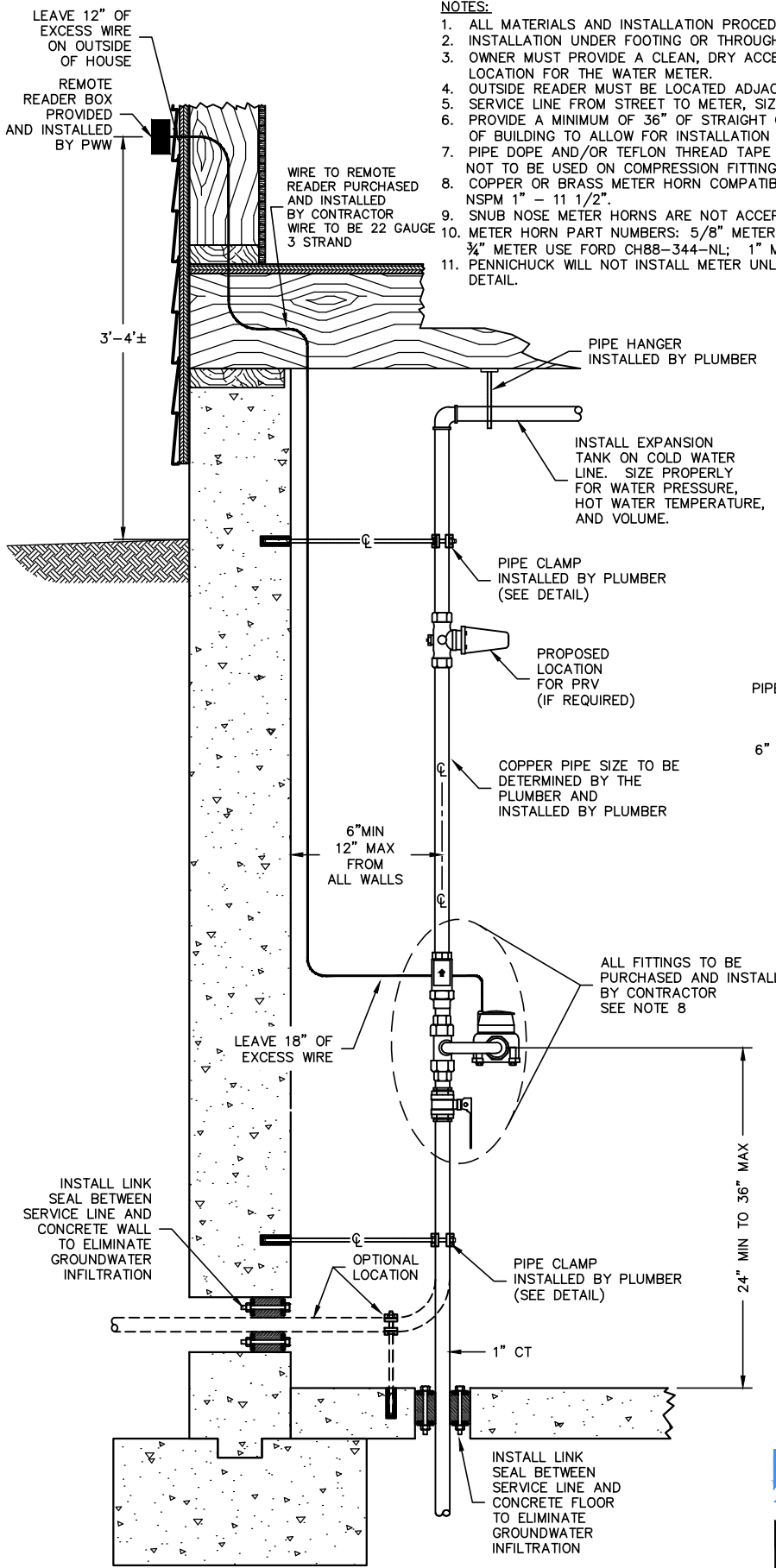
STANDARD FOOT PIECE
FOR 1" TO 1¼"
CURB STOPS



NOTE:
ALL MATERIALS AND INSTALLATION
PROCEDURES WILL CONFORM TO
P.W.W. TECHNICAL SPECIFICATIONS.

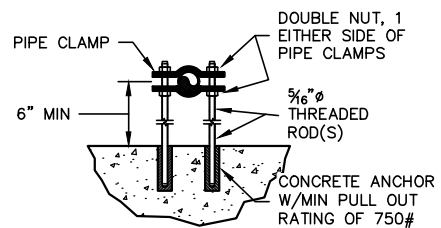


DETAIL D03
TYPICAL SERVICE BOX DETAIL
IN PAVED AREAS
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS

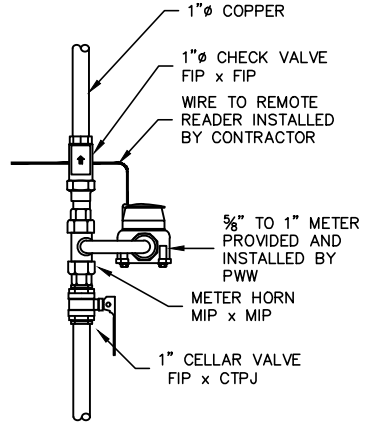


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



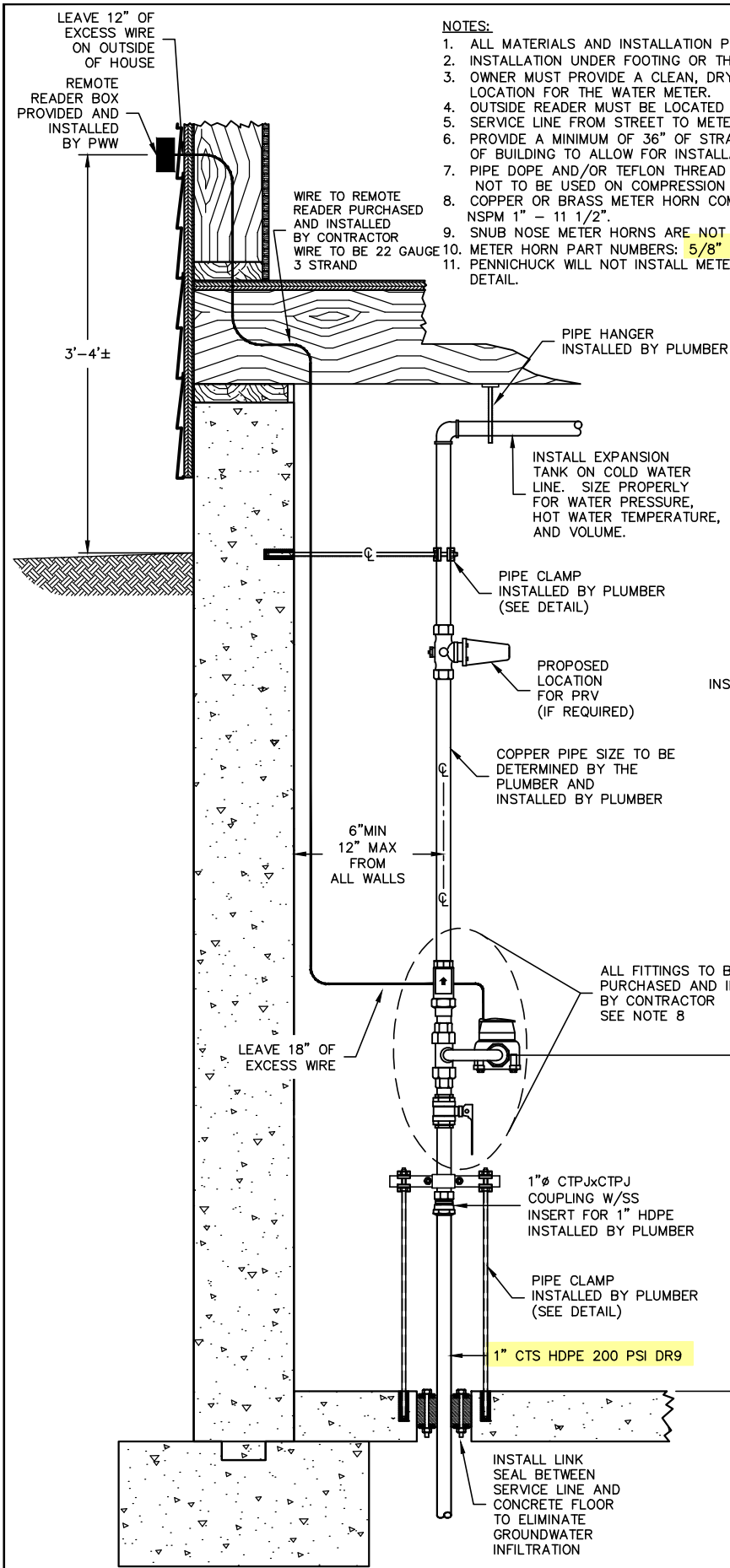
PIPE CLAMP (WALL)
NTS



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

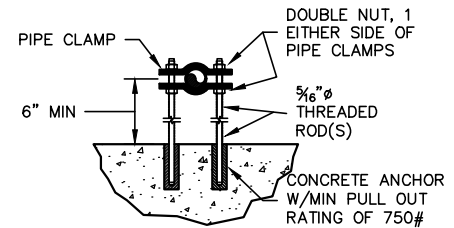


DETAIL D04
TYPICAL 1" CT SERVICE WITH 5/8", 3/4", 1" METER SERVICE INSTALLATION
PENNICHUCK WATER WORKS, INC.
REV: 03-15-2023 SCALE: NTS



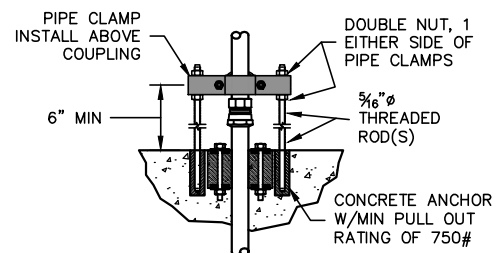
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8").
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



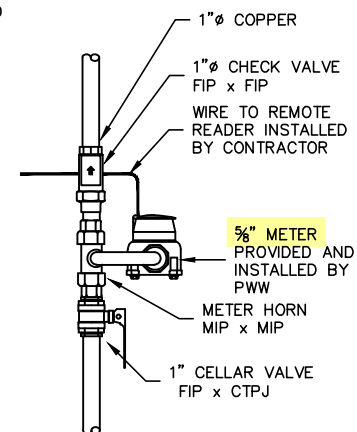
PIPE CLAMP (WALL)

NTS



PIPE CLAMP (FLOOR)

NTS



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

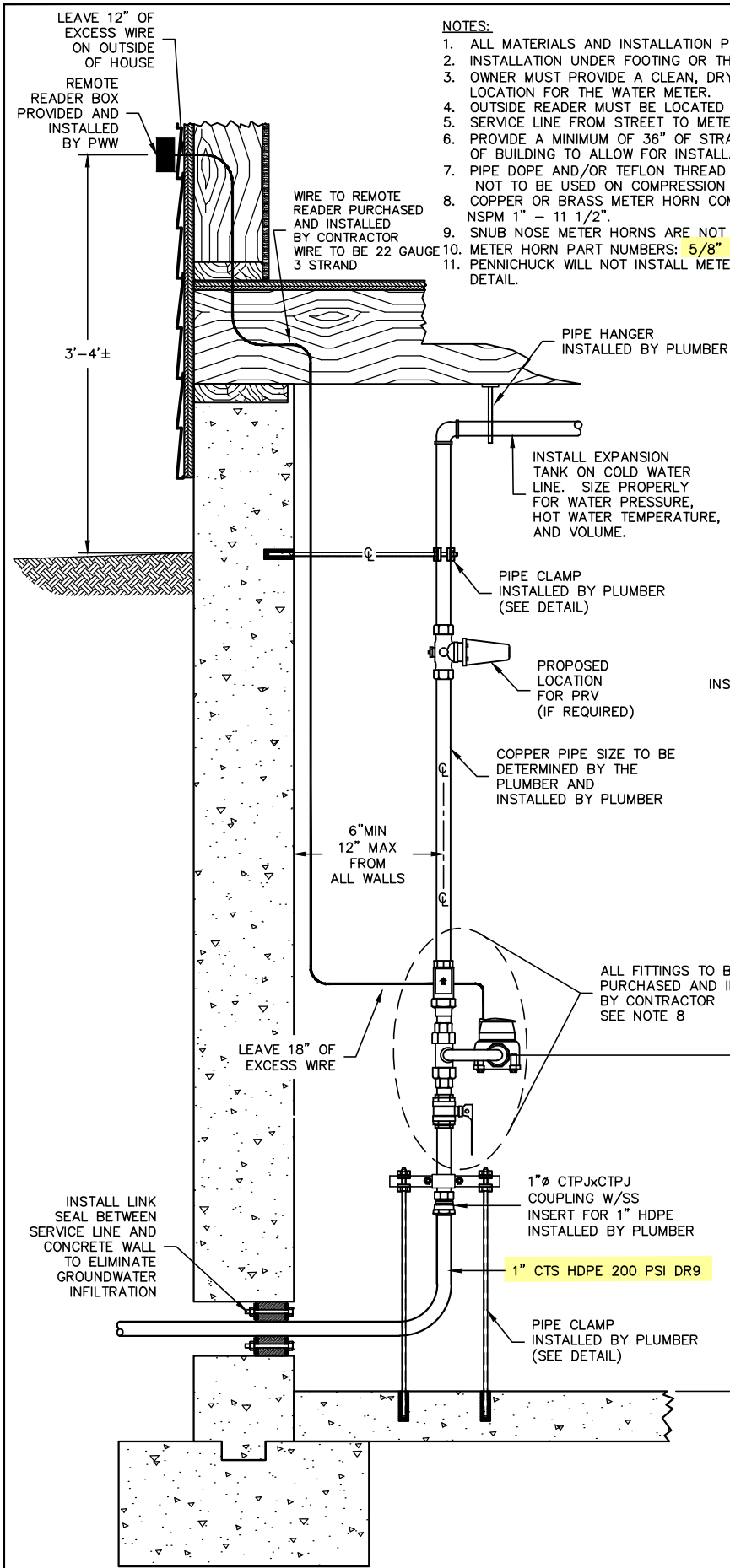
ITEM REVISED IN 2026



DETAIL D05.1

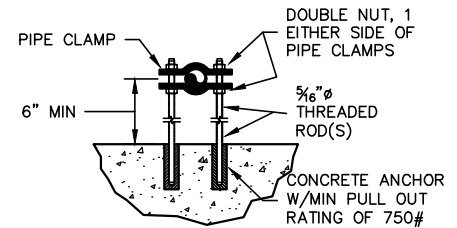
1" HDPE SERVICE WITH 5/8" METER SERVICE INSTALLATION THROUGH FLOOR
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS

1" DIAMETER POLYETHYLENE TUBING CAN ONLY BE USED WITH PRIOR WRITTEN APPROVAL FROM THE PENNICHUCK ENGINEERING DEPARTMENT



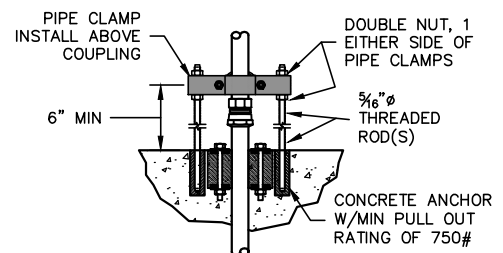
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 11 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8").
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



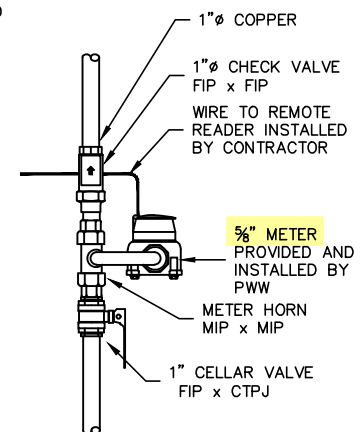
PIPE CLAMP (WALL)

NTS



PIPE CLAMP (FLOOR)

NTS



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

ITEM REVISED IN 2026



DETAIL **D05.2**

1" HDPE SERVICE WITH 5/8" METER SERVICE INSTALLATION THROUGH WALL

PENNICHUCK WATER WORKS, INC.

REV: 02-20-2026 SCALE: NTS

1" DIAMETER POLYETHYLENE TUBING CAN ONLY BE USED WITH PRIOR WRITTEN APPROVAL FROM THE PENNICHUCK ENGINEERING DEPARTMENT

LEAVE 12" OF EXCESS WIRE ON OUTSIDE OF HOUSE

REMOTE READER BOX PROVIDED AND INSTALLED BY PWW

WIRE TO REMOTE READER PURCHASED AND INSTALLED BY CONTRACTOR WIRE TO BE 22 GAUGE 3 STRAND

3'-4"±

PIPE HANGER INSTALLED BY PLUMBER

INSTALL EXPANSION TANK ON COLD WATER LINE. SIZE PROPERLY FOR WATER PRESSURE, HOT WATER TEMPERATURE, AND VOLUME.

PIPE CLAMP INSTALLED BY PLUMBER (SEE DETAIL)

PROPOSED LOCATION FOR PRV (IF REQUIRED)

1"Ø COPPER PIPE TYPE K INSTALLED BY PLUMBER

6" MIN 12" MAX FROM ALL WALLS

ALL FITTINGS TO BE PURCHASED AND INSTALLED BY CONTRACTOR SEE NOTE 8

LEAVE 18" OF EXCESS WIRE

1" MIP x CTPJ INSTALLED BY PLUMBER

1½" CTPJ x 1½" FIP W/ 1½" x 1" BRASS BUSHING INSTALLED BY PLUMBER

1 1/4" HDPE PJ x FIP W/SS INSERT INSTALLED BY PLUMBER

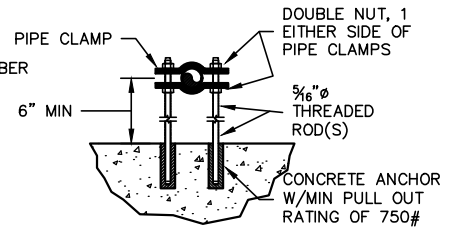
1 1/4" CTS HDPE 200 PSI DR9

PIPE CLAMP INSTALLED BY PLUMBER (SEE DETAIL)

INSTALL LINK SEAL BETWEEN SERVICE LINE AND CONCRETE FLOOR TO ELIMINATE GROUNDWATER INFILTRATION

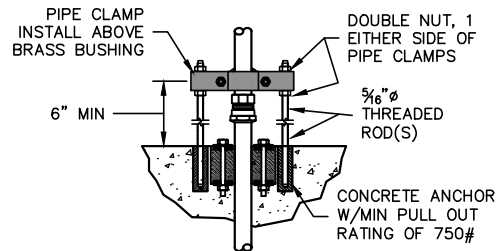
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 11 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (¾" x 5/8"); ¾" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



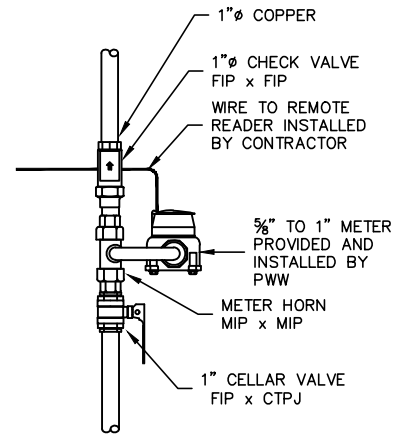
PIPE CLAMP (WALL)

NTS



PIPE CLAMP (FLOOR)

NTS



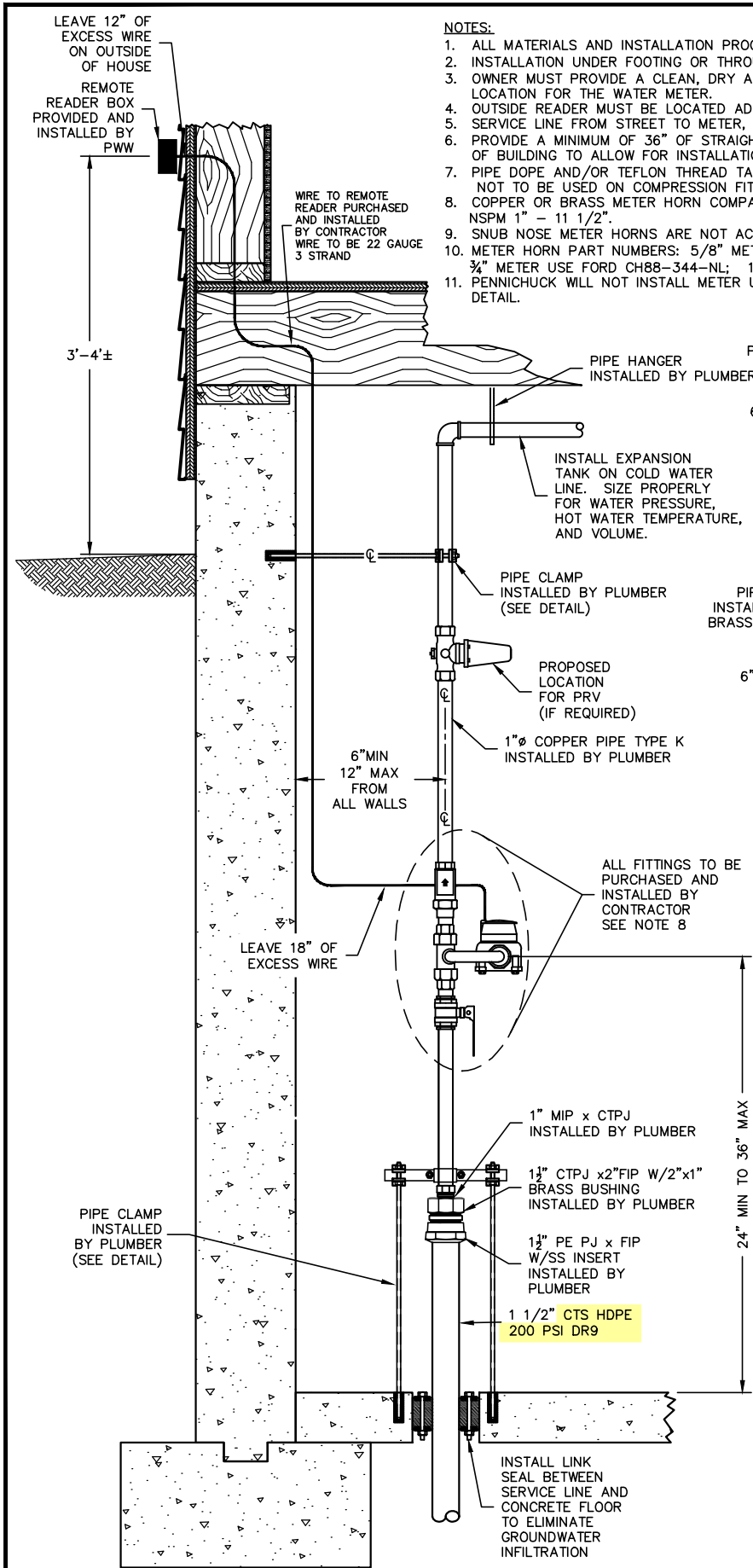
MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

ITEM REVISED IN 2026



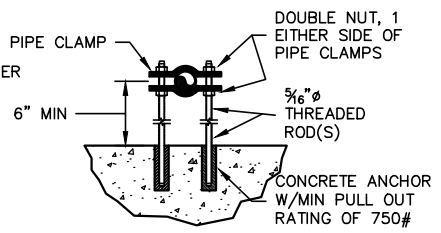
DETAIL D06

TYPICAL 1½" SERVICE WITH 5/8", ¾" & 1" METER SERVICE THROUGH FLOOR INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS

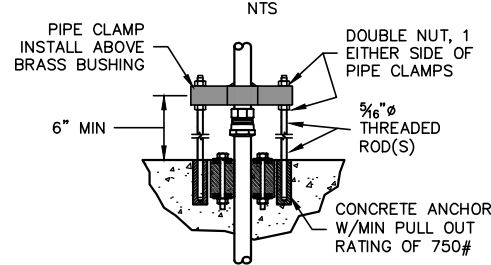


NOTES:

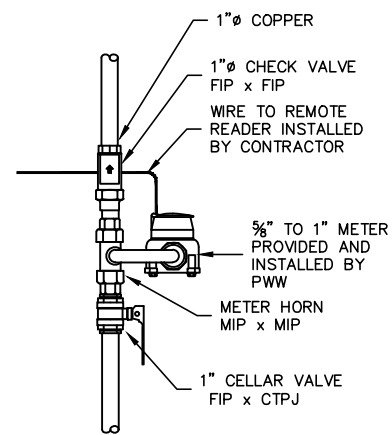
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 11 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



PIPE CLAMP (WALL)



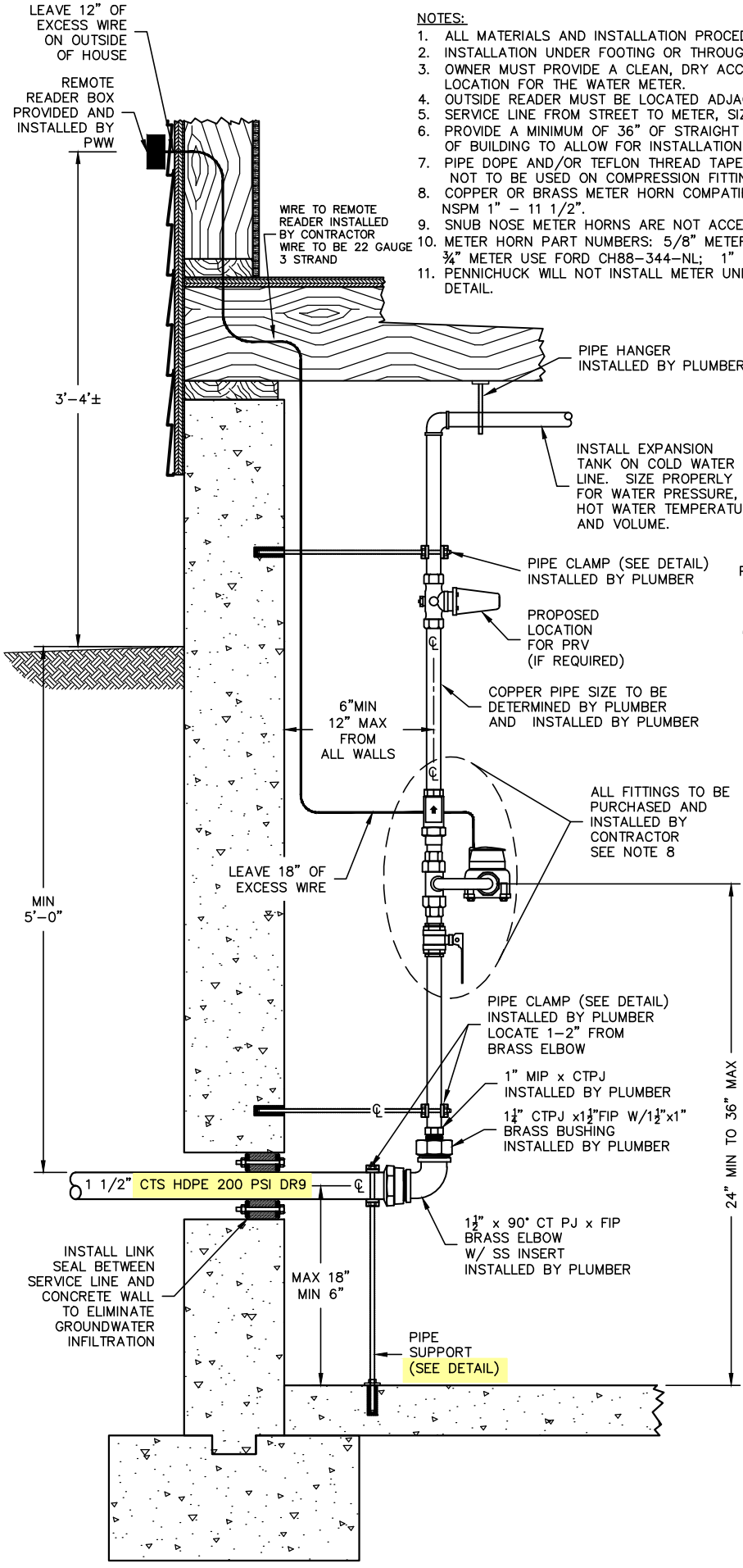
PIPE CLAMP (FLOOR)



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

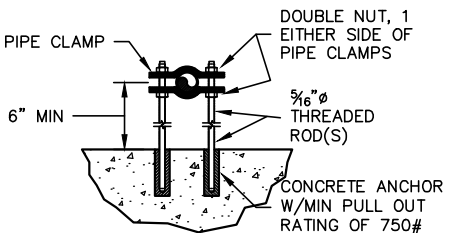
ITEM REVISED IN 2026

DETAIL D08
 TYPICAL 1 1/2" SERVICE WITH 5/8", 3/4" & 1" METER SERVICE THROUGH FLOOR INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS

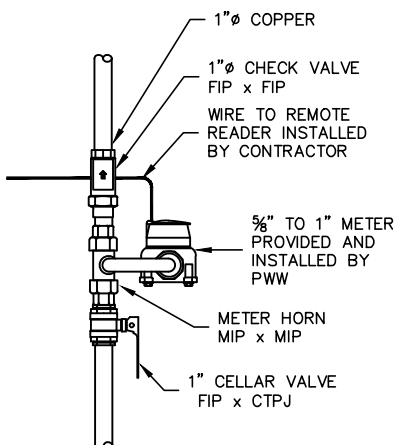


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



PIPE CLAMP
NTS

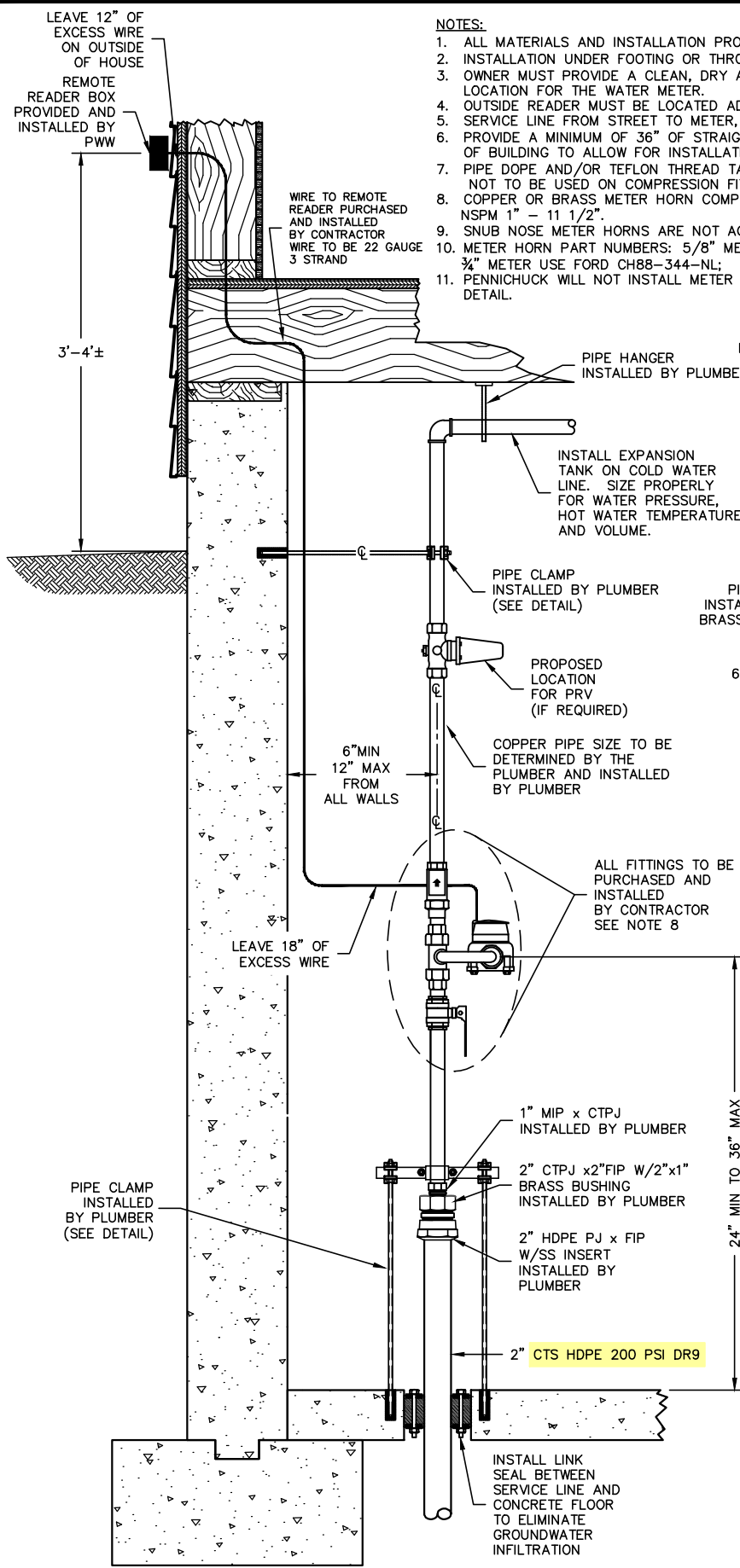


MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

ITEM REVISED IN 2026

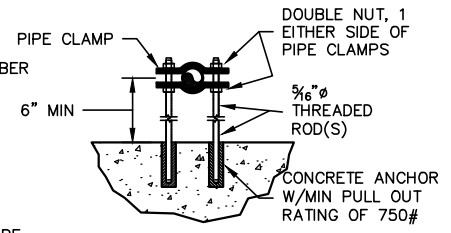


DETAIL D09
TYPICAL 1 1/2" SERVICE WITH 5/8", 3/4" & 1" METER THROUGH WALL INSTALLATION
PENNICHUCK WATER WORKS, INC.
REV: 02-20-2026 SCALE: NTS

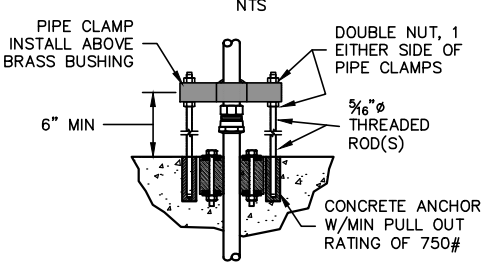


NOTES:

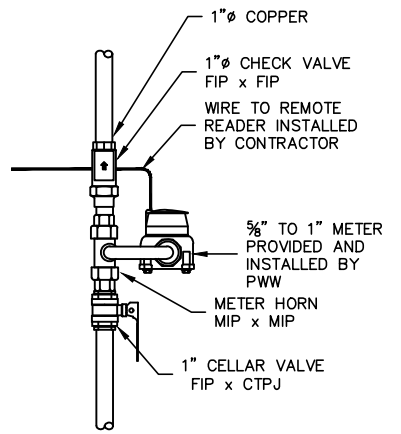
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



PIPE CLAMP (WALL)



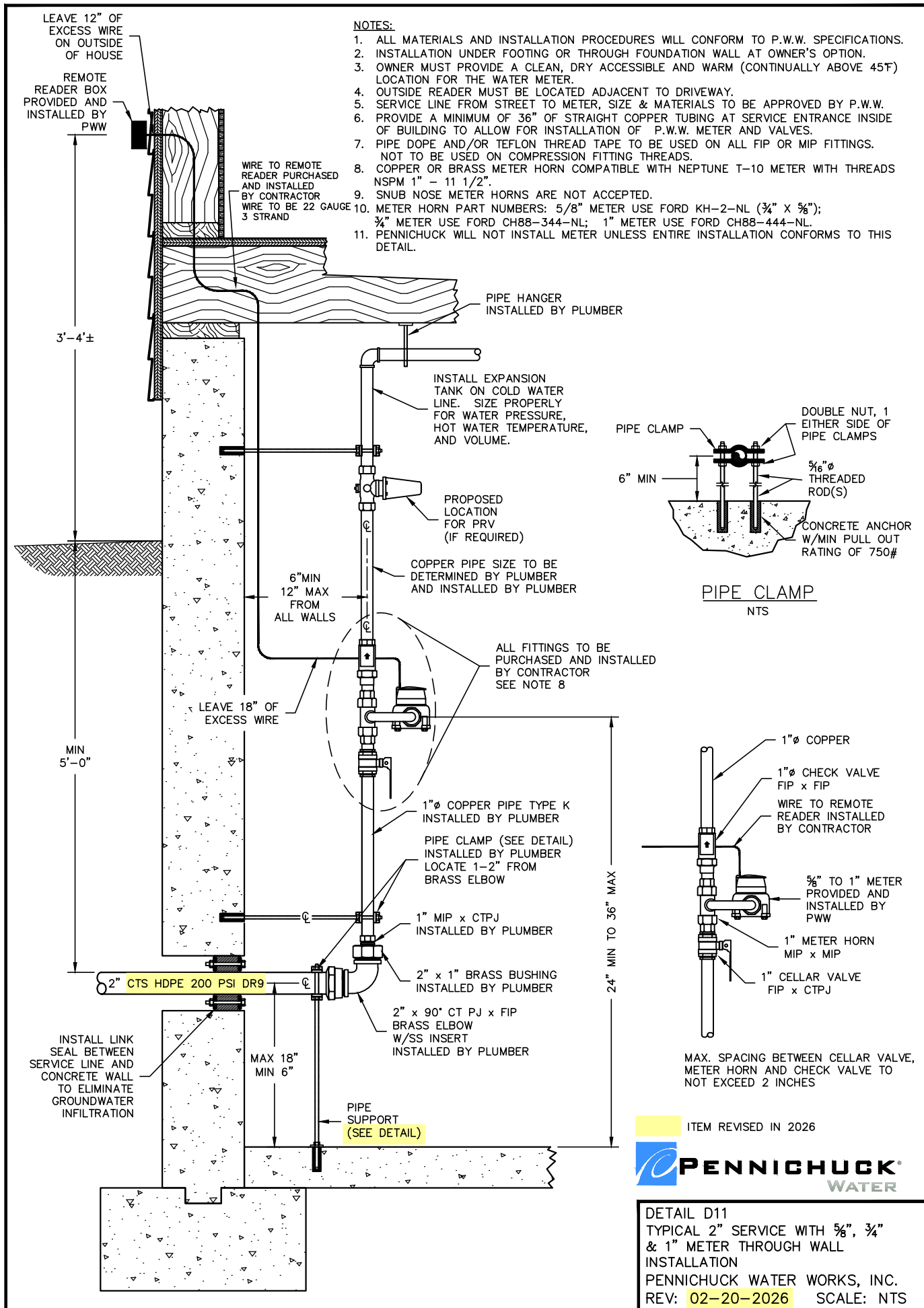
PIPE CLAMP (FLOOR)



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

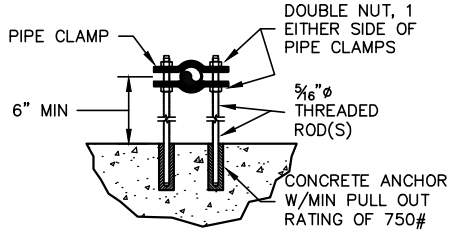
ITEM REVISED IN 2026

DETAIL D10
 TYPICAL 2" SERVICE WITH 5/8", 3/4" & 1" METER SERVICE THROUGH FLOOR INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS

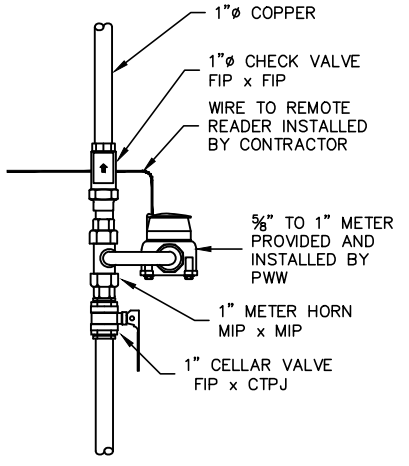


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 11 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" X 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



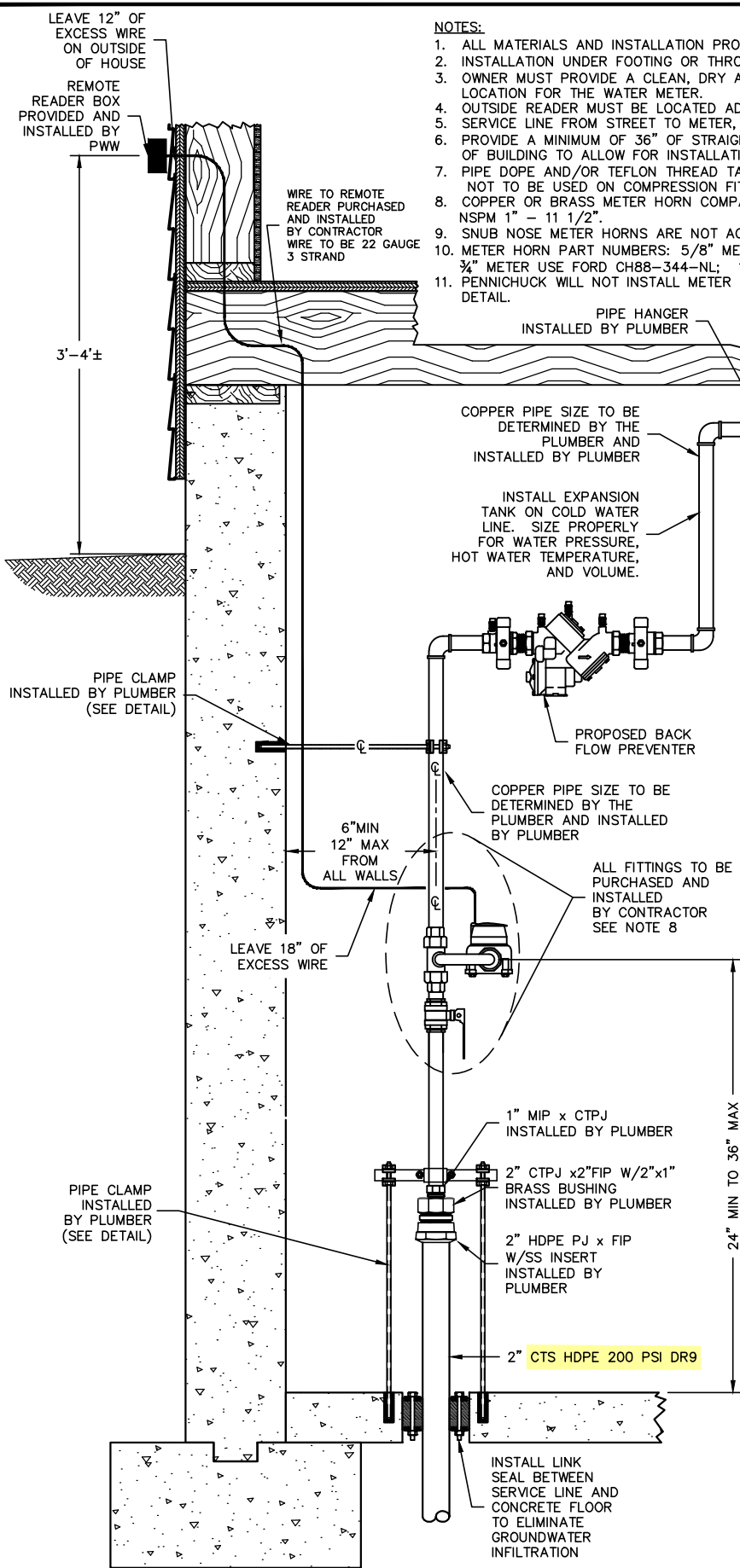
PIPE CLAMP
NTS



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

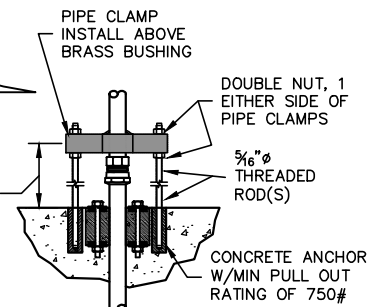
ITEM REVISED IN 2026

DETAIL D11
TYPICAL 2" SERVICE WITH 5/8", 3/4" & 1" METER THROUGH WALL INSTALLATION
PENNICHUCK WATER WORKS, INC.
REV: 02-20-2026 SCALE: NTS

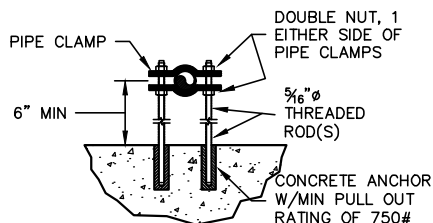


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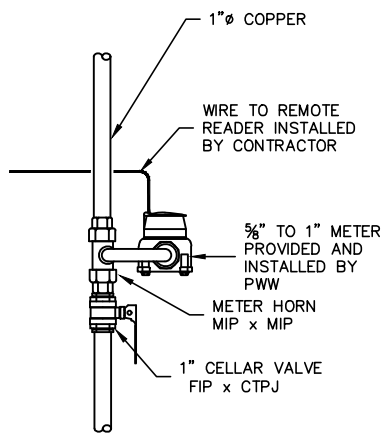
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 1 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" x 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.



PIPE CLAMP (FLOOR)
NTS



PIPE CLAMP (WALL)
NTS

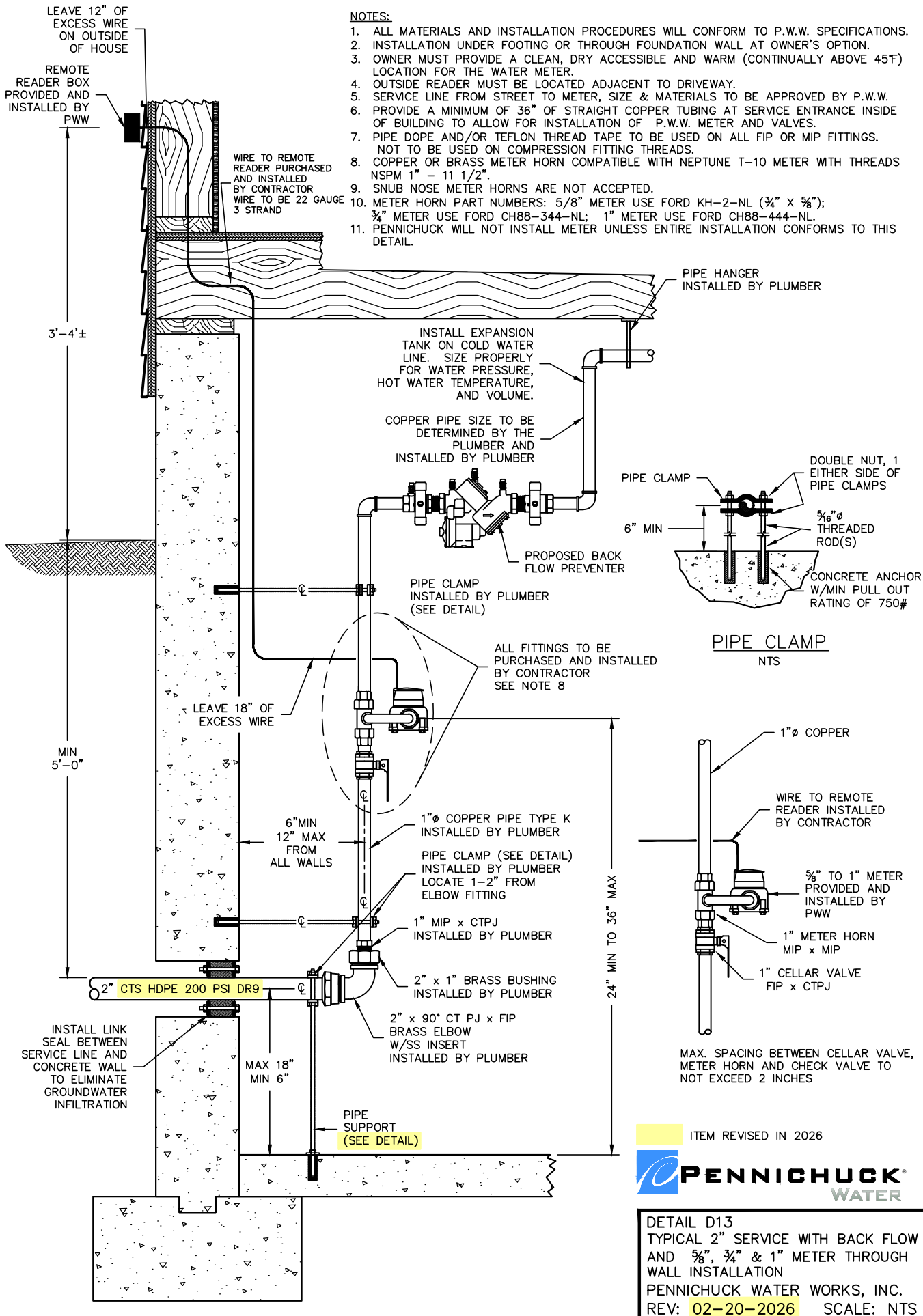


MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

ITEM REVISED IN 2026



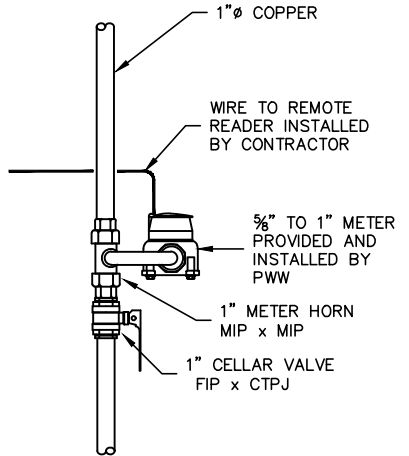
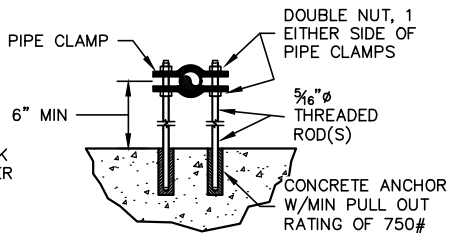
DETAIL D12
TYPICAL 2" SERVICE WITH BACK FLOW AND 5/8", 3/4" & 1" METER SERVICE THROUGH FLOOR INSTALLATION
PENNICHUCK WATER WORKS, INC.
REV: 02-20-2026 SCALE: NTS



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE WATER METER.
4. OUTSIDE READER MUST BE LOCATED ADJACENT TO DRIVEWAY.
5. SERVICE LINE FROM STREET TO METER, SIZE & MATERIALS TO BE APPROVED BY P.W.W.
6. PROVIDE A MINIMUM OF 36" OF STRAIGHT COPPER TUBING AT SERVICE ENTRANCE INSIDE OF BUILDING TO ALLOW FOR INSTALLATION OF P.W.W. METER AND VALVES.
7. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.
8. COPPER OR BRASS METER HORN COMPATIBLE WITH NEPTUNE T-10 METER WITH THREADS NSPM 1" - 11 1/2".
9. SNUB NOSE METER HORNS ARE NOT ACCEPTED.
10. METER HORN PART NUMBERS: 5/8" METER USE FORD KH-2-NL (3/4" x 5/8"); 3/4" METER USE FORD CH88-344-NL; 1" METER USE FORD CH88-444-NL.
11. PENNICHUCK WILL NOT INSTALL METER UNLESS ENTIRE INSTALLATION CONFORMS TO THIS DETAIL.

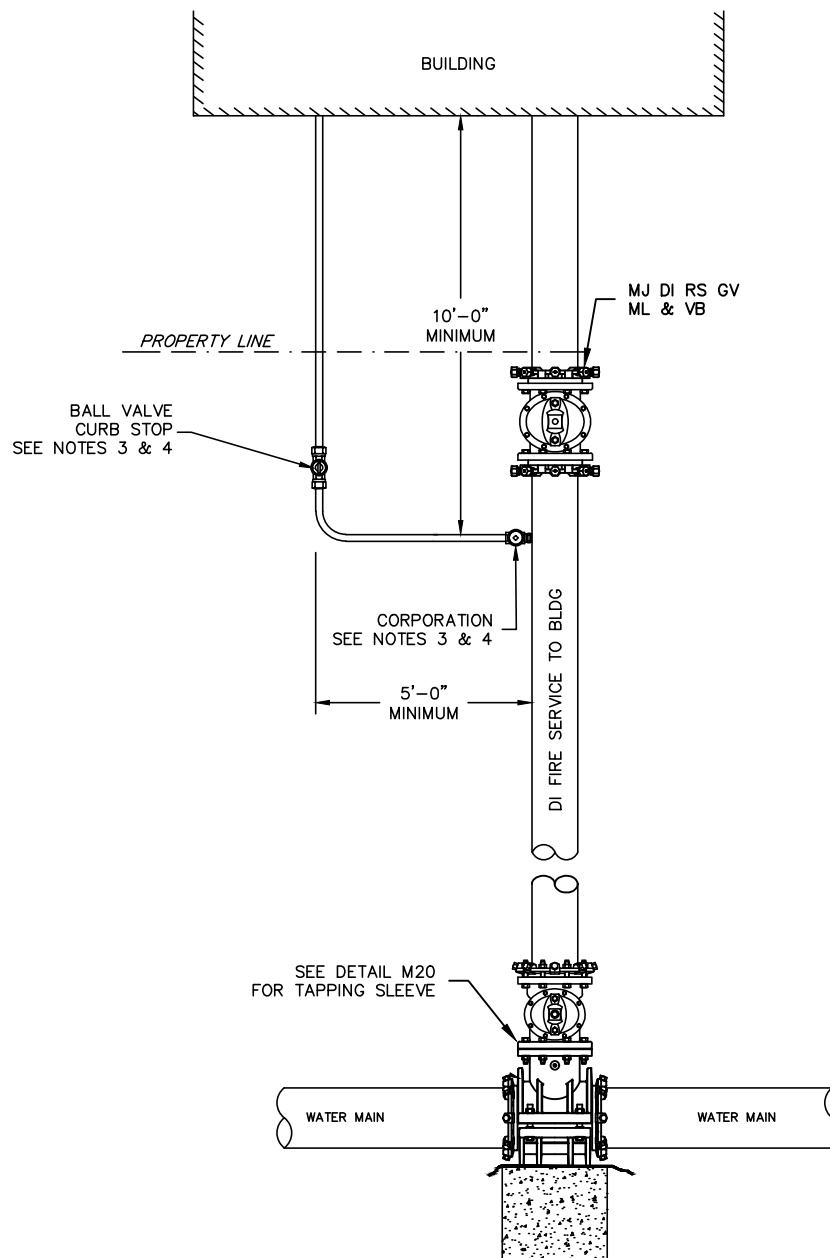
PIPE CLAMP
NTS



MAX. SPACING BETWEEN CELLAR VALVE, METER HORN AND CHECK VALVE TO NOT EXCEED 2 INCHES

ITEM REVISED IN 2026
PENNICHUCK
 WATER

DETAIL D13
 TYPICAL 2" SERVICE WITH BACK FLOW AND 5/8", 3/4" & 1" METER THROUGH WALL INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS



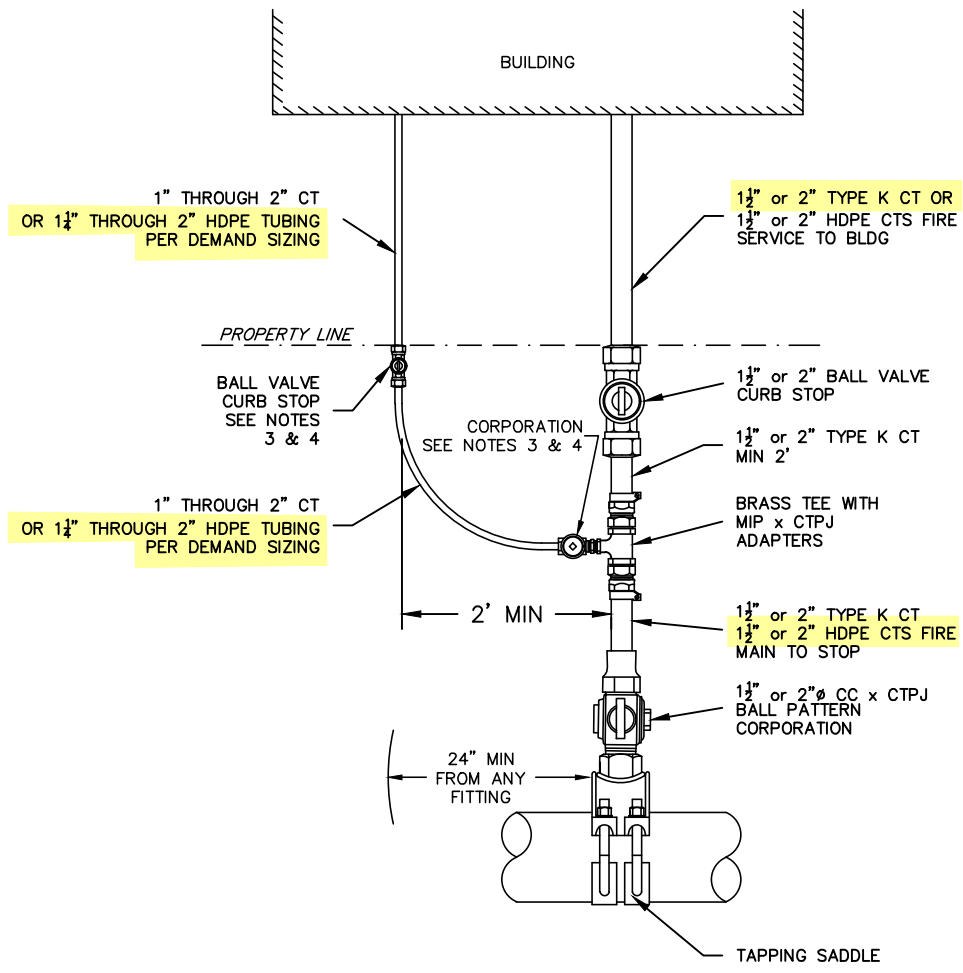
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. SEE DETAIL D01 AND D03 FOR 1" THROUGH 2" SERVICE AND VALVE BOX INSTALLATION DETAIL.
4. SEE DETAIL M01 FOR TYPICAL SERVICE UTILITY SEPARATION ENTRANCE.

ITEM REVISED IN 2026



DETAIL D15
 COMMERCIAL SERVICE TAPPED OFF
 FIRE SERVICE (2" OR SMALLER)
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS



NOTES:

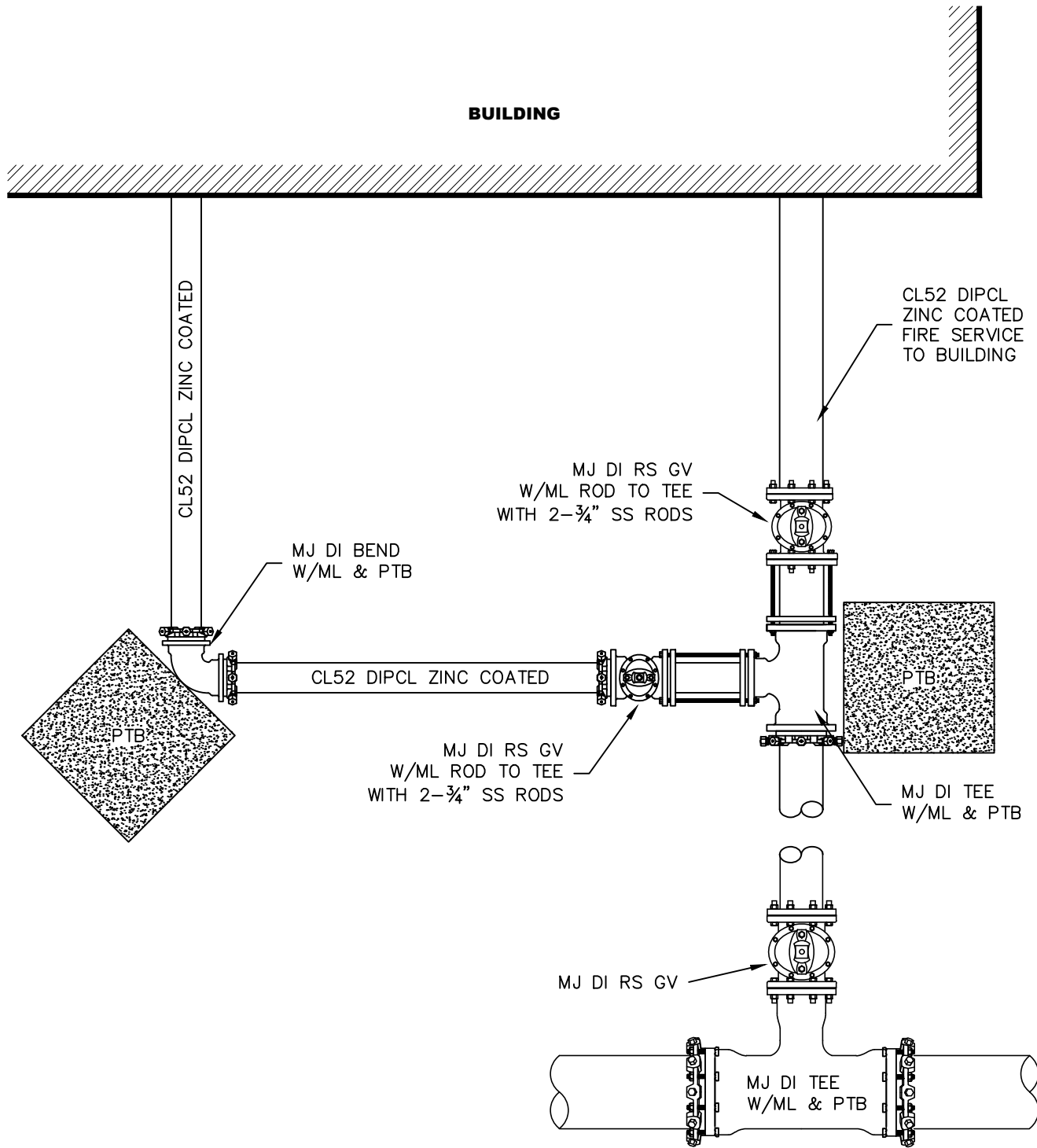
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. INSTALLATION DETAIL. SEE DETAIL D01 FOR 1" THROUGH 2" SIZED SERVICES.
4. SEE DETAIL M01 FOR TYPICAL SERVICE UTILITY SEPARATION ENTRANCE.

ITEM REVISED IN 2026



DETAIL D16
 RESIDENTIAL SERVICE TAPPED OFF
 FIRE SERVICE; 1" TO 2"
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS

BUILDING



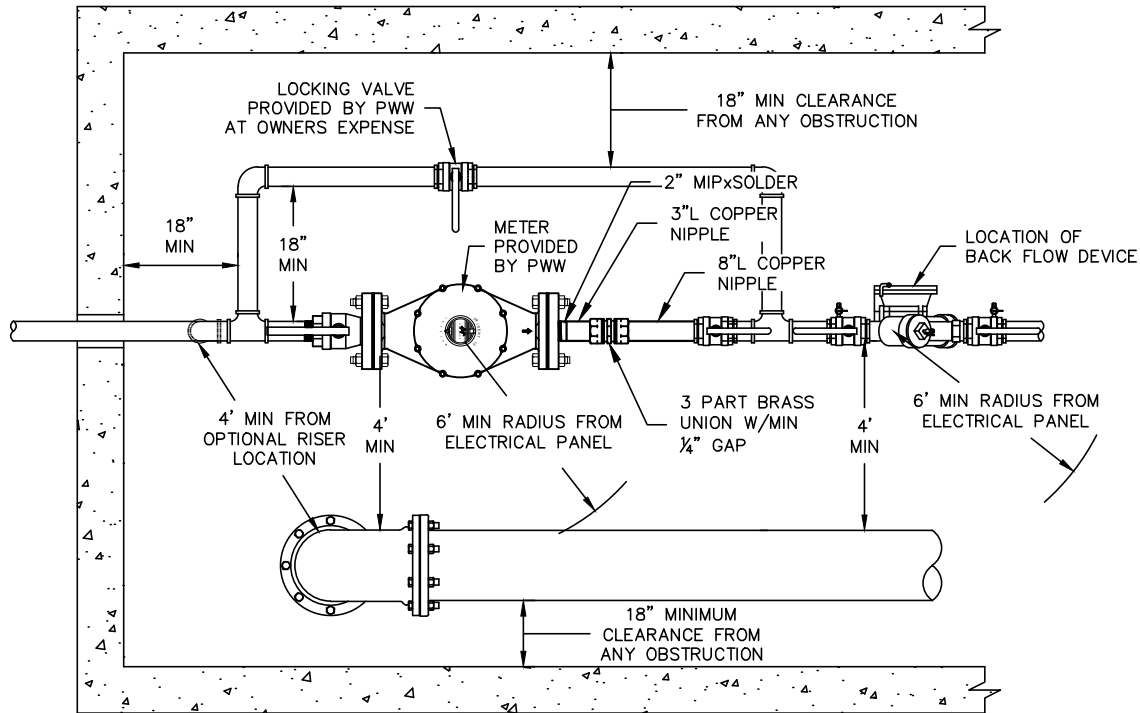
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

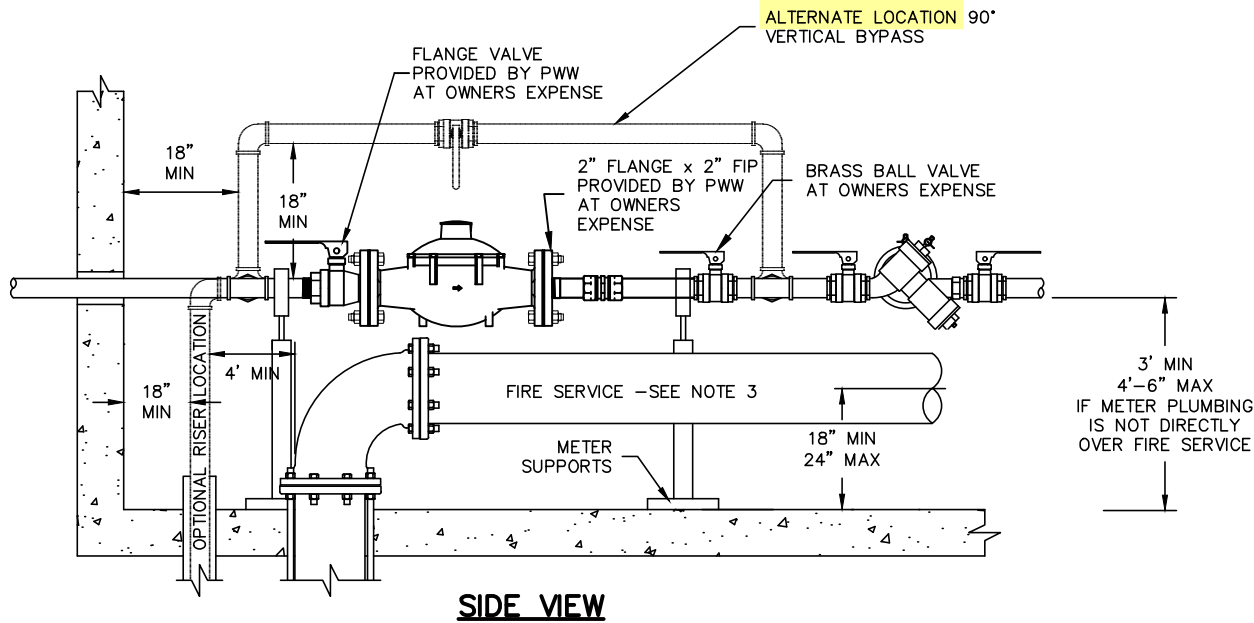
ITEM REVISED IN 2026



DETAIL D17
COMMERCIAL SERVICE OFF FIRE SERVICE 4" OR LARGER
PENNICHUCK WATER WORKS, INC.
REV: 02-22-2026 SCALE: NTS



TOP VIEW



SIDE VIEW

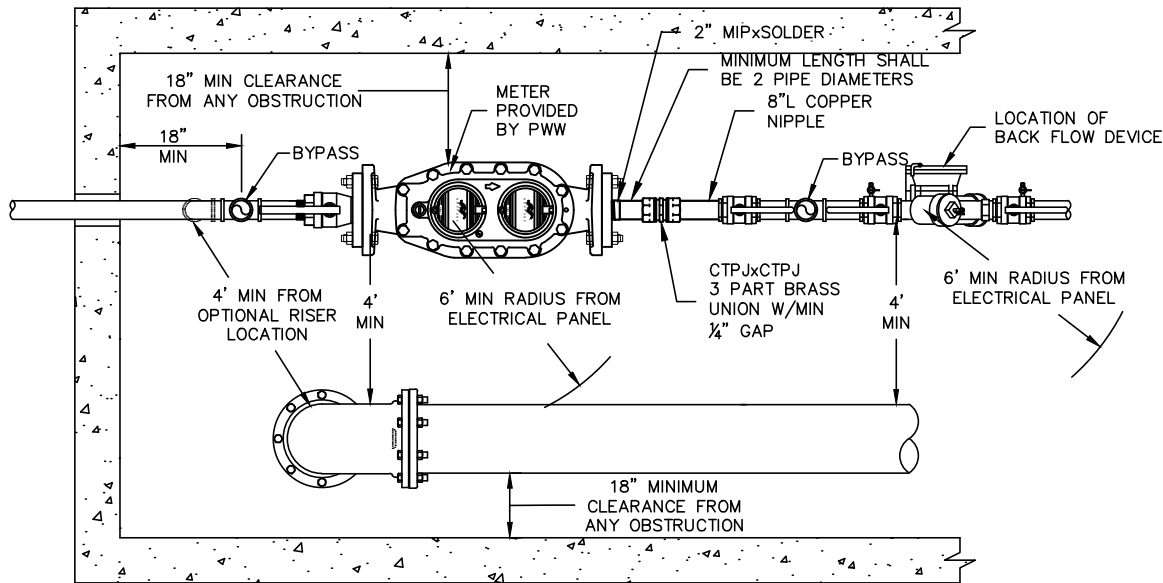
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. BACK FLOW PREVENTOR REQUIRED ON ALL FIRE SERVICES. TYPE AND LOCATION SUBJECT TO P.W.W. APPROVAL.
4. ANY ELECTRICAL PANEL MUST MAINTAIN A 6' MINIMUM RADIUS FROM METER AND BACK FLOW.
5. 1 1/2" METER = 13" LAYING LENGTH.
6. 2" METER = 17" LAYING LENGTH.
7. MINIMUM OF 10 PIPE DIAMETERS OF STRAIGHT RUN PIPE IS REQUIRED UPSTREAM OF THE METER.

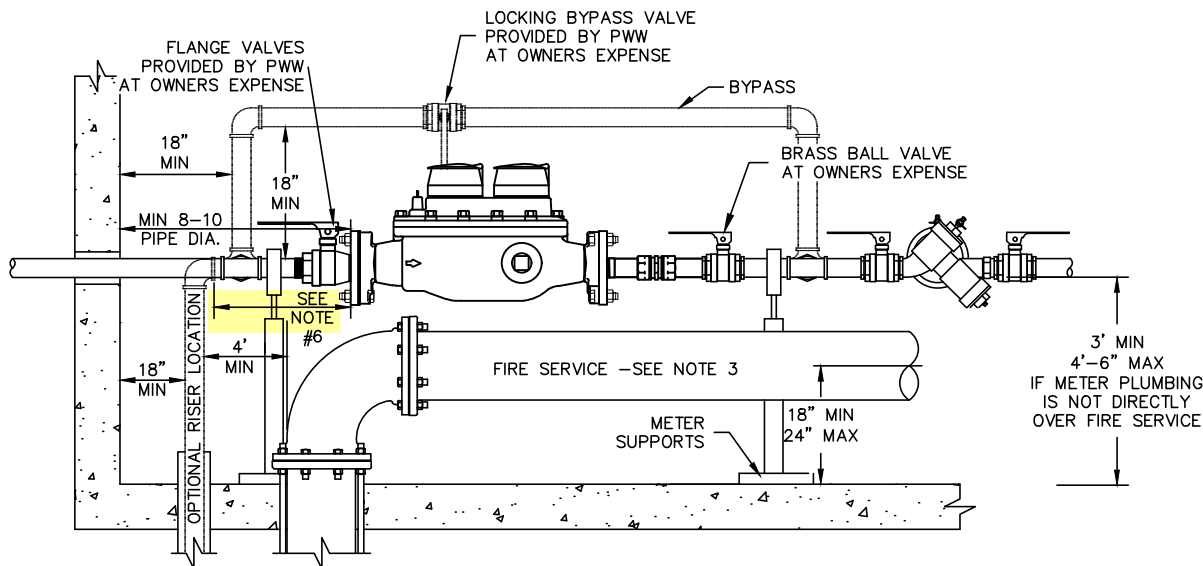
ITEM REVISED IN 2026



DETAIL D18
 1 1/2" & 2" POSITIVE
 DISPLACEMENT METER
 COMBINED FIRE AND DOMESTIC
 SERVICE ENTRANCE DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS



TOP VIEW



SIDE VIEW

NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. BACK FLOW PREVENTOR REQUIRED ON ALL FIRE SERVICES. TYPE AND LOCATION SUBJECT TO P.W.W. APPROVAL.
4. ANY ELECTRICAL PANEL MUST MAINTAIN A 6' MINIMUM RADIUS FROM METER AND BACK FLOW.
5. 2" COMPOUND METER = 15 1/4" LAYING LENGTH OF METER.
6. MINIMUM OF 8 PIPE DIAMETERS OF STRAIGHT RUN PIPE IS REQUIRED UPSTREAM OF THE METER IF NO STRAINER IS INSTALLED. IF A STRAINER IS INSTALLED, THIS LENGTH CAN BE REDUCED TO 4 PIPE DIAMETERS. A MINIMUM OF 2 PIPE DIAMETERS OF STRAIGHT RUN PIPE IS REQUIRED DOWNSTREAM OF THE METER AND STRAINER ASSEMBLY.

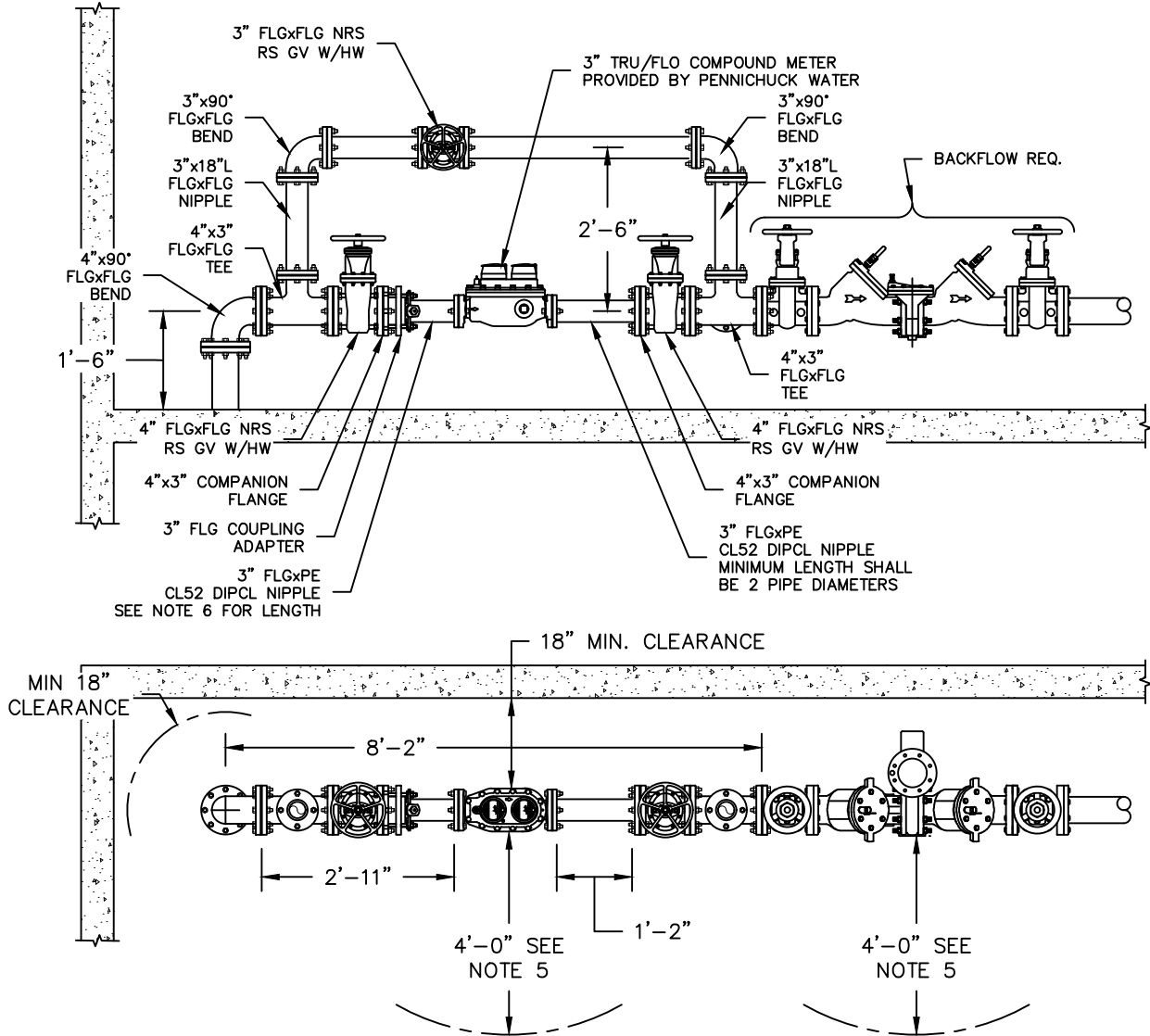
ITEM REVISED IN 2026



DETAIL D19
2" TRU/FLO COMPOUND METER
COMBINED FIRE AND DOMESTIC
SERVICE ENTRANCE DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-15-2026 SCALE: NTS

NOTES:

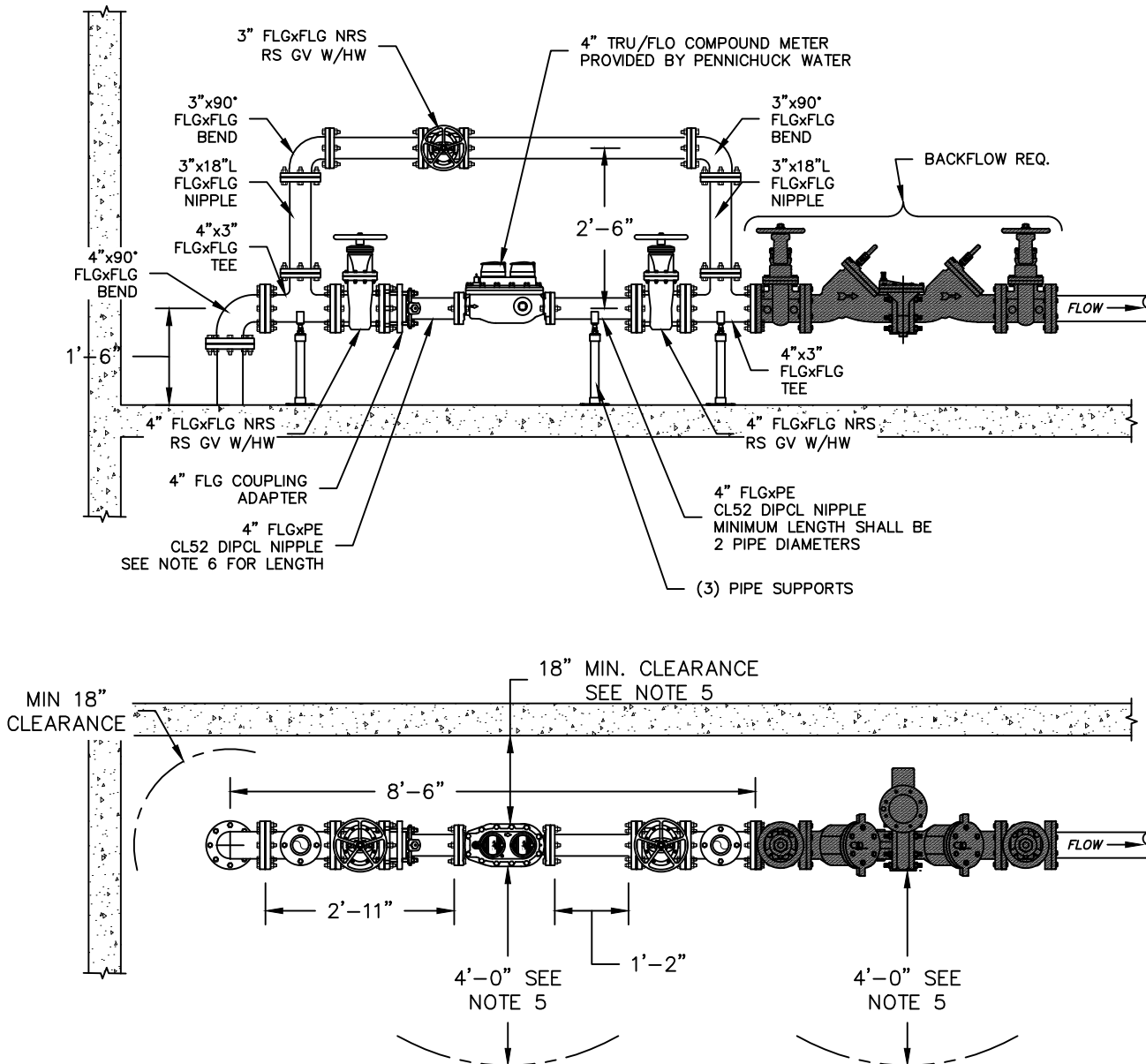
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. BACK FLOW PREVENTOR REQUIRED ON ALL FIRE SERVICES. TYPE AND LOCATION SUBJECT TO P.W.W. APPROVAL.
4. ANY ELECTRICAL PANEL MUST MAINTAIN A 6' MINIMUM RADIUS FROM METER AND BACK FLOW.
5. METER PLUMBING MAY BE INSTALLED DIRECTLY OVER THE FIRE SERVICE PROVIDED THAT 2' CLEARANCE IS MAINTAINED AND 4' MINIMUM CLEARANCE FROM ANY OBSTRUCTION IS ALSO MAINTAINED.
6. MINIMUM OF 8 PIPE DIAMETERS OF STRAIGHT RUN PIPE IS REQUIRED UPSTREAM OF THE METER IF NO STRAINER IS INSTALLED. IF A STRAINER IS INSTALLED, THIS LENGTH CAN BE REDUCED TO 4 PIPE DIAMETERS. A MINIMUM OF 2 PIPE DIAMETERS OF STRAIGHT RUN PIPE IS REQUIRED DOWNSTREAM OF THE METER AND STRAINER ASSEMBLY.



ITEM REVISED IN 2026



DETAIL D20
3" METER DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-15-2026 SCALE: NTS



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. BACK FLOW PREVENTOR REQUIRED ON ALL FIRE SERVICES. TYPE AND LOCATION SUBJECT TO P.W.W. APPROVAL.
4. ANY ELECTRICAL PANEL MUST MAINTAIN A 6' MINIMUM RADIUS FROM METER AND BACK FLOW.
5. METER PLUMBING MAY BE INSTALLED DIRECTLY OVER THE FIRE SERVICE PROVIDED THAT 2' CLEARANCE IS MAINTAINED AND 4' MINIMUM CLEARANCE FROM ANY OBSTRUCTION IS ALSO MAINTAINED.
6. MINIMUM OF 8 PIPE DIAMETERS OF STRAIGHT RUN PIPE IS REQUIRED UPSTREAM OF THE METER IF NO STRAINER IS INSTALLED. IF A STRAINER IS INSTALLED, THIS LENGTH CAN BE REDUCED TO 4 PIPE DIAMETERS. A MINIMUM OF 2 PIPE DIAMETERS OF STRAIGHT RUN PIPE IS REQUIRED DOWNSTREAM OF THE METER AND STRAINER ASSEMBLY.

ITEM REVISED IN 2026

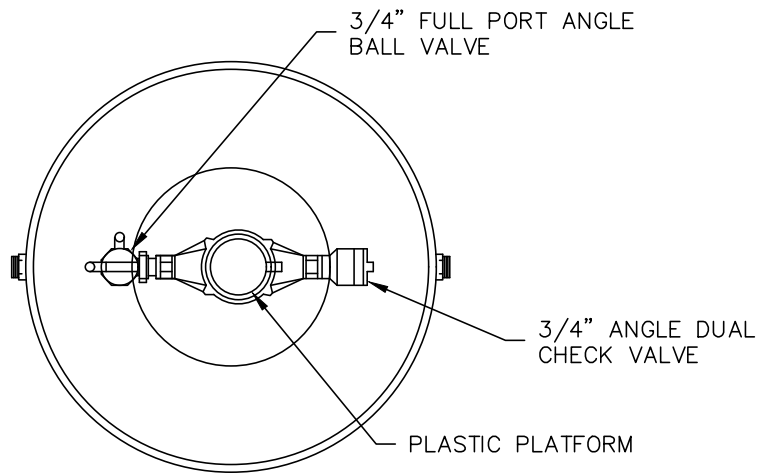


DETAIL D21

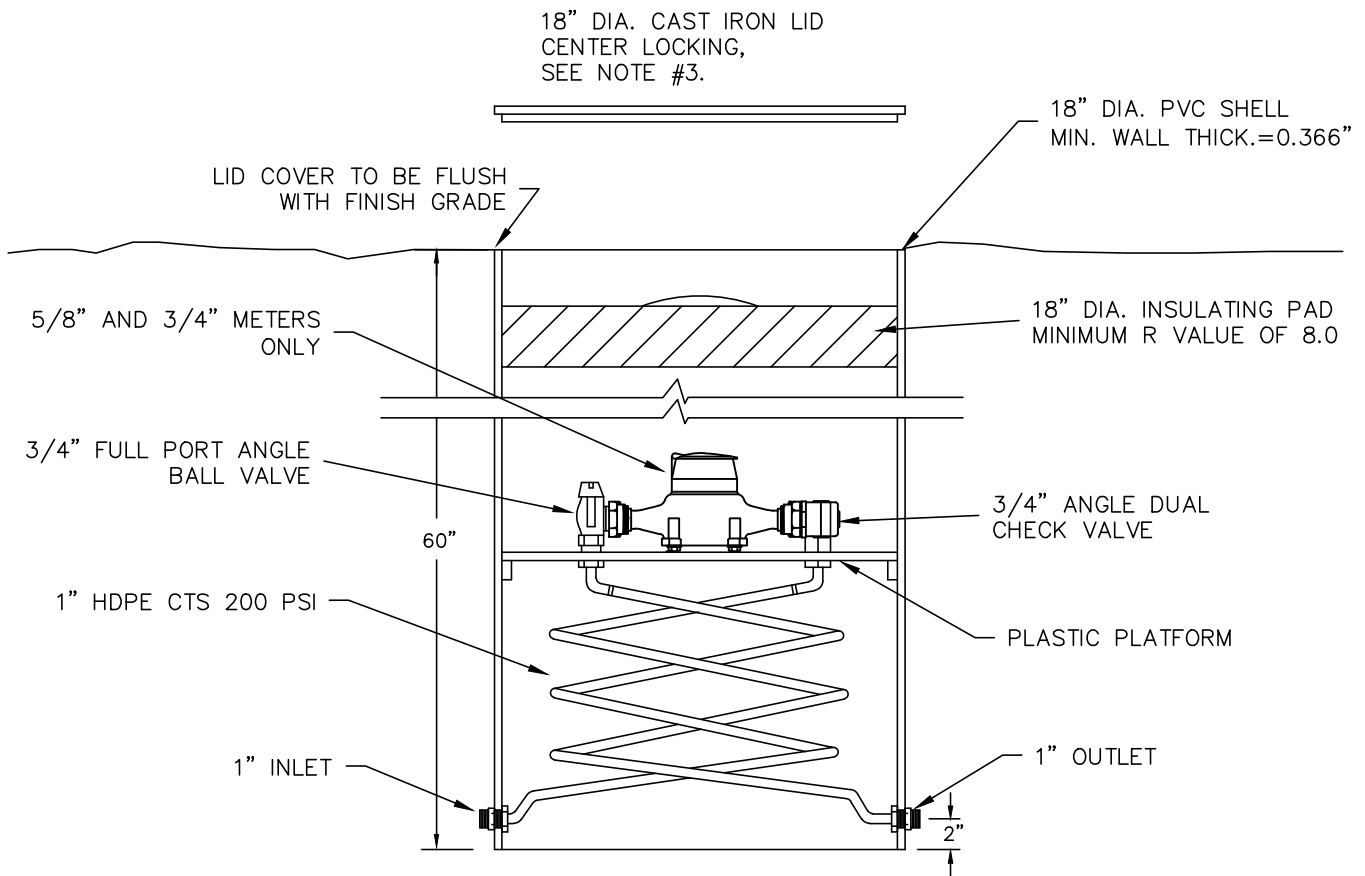
4" METER DETAIL

PENNICHUCK WATER WORKS, INC.

REV: 03-15-2026 SCALE: NTS



PLAN VIEW



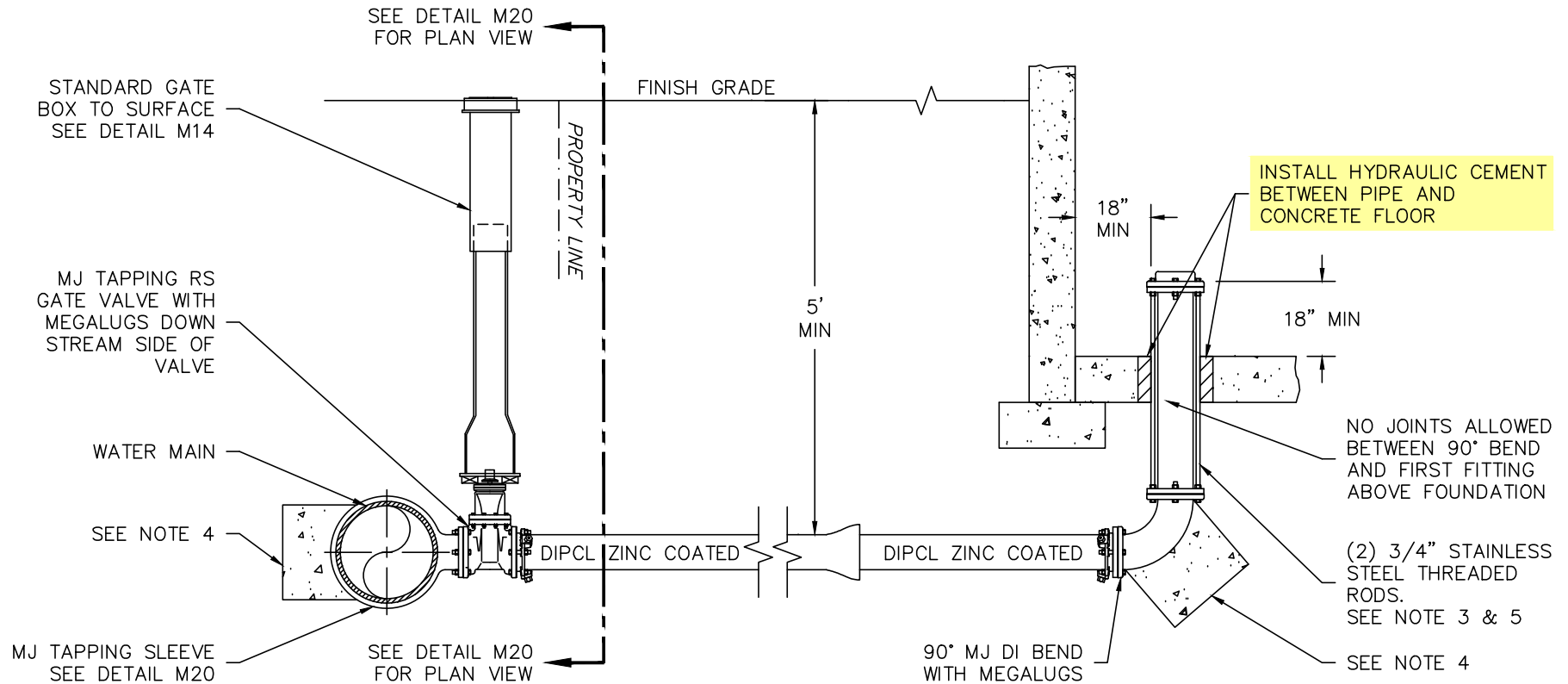
ELEVATION VIEW

NOTES:

1. PENNICHUCK WILL PROVIDE AND INSTALL METER IF INSTALLATION CONFORMS TO THIS DETAIL..
2. METER PIT SHALL BE MUELLER HUNT MODEL 203CS1860, FORD 18360-NL, AY McDONALD 790 OR APPROVED EQUAL.
3. PITS INSTALLED IN OR NEAR DRIVEWAYS MUST HAVE AN APPROVED FRAME AND COVER WITH A MINIMUM 20,000 POUND LOAD RATING.
4. ALL COVERS MUST HAVE LOCKING LIDS WITH ELECTRONIC READ CAPABILITIES.



DETAIL D22
 18" DIAMETER COIL SINGLE
 METER PIT
 PENNICHUCK WATER WORKS, INC.
 DATE: 02-20-2026 SCALE: NTS



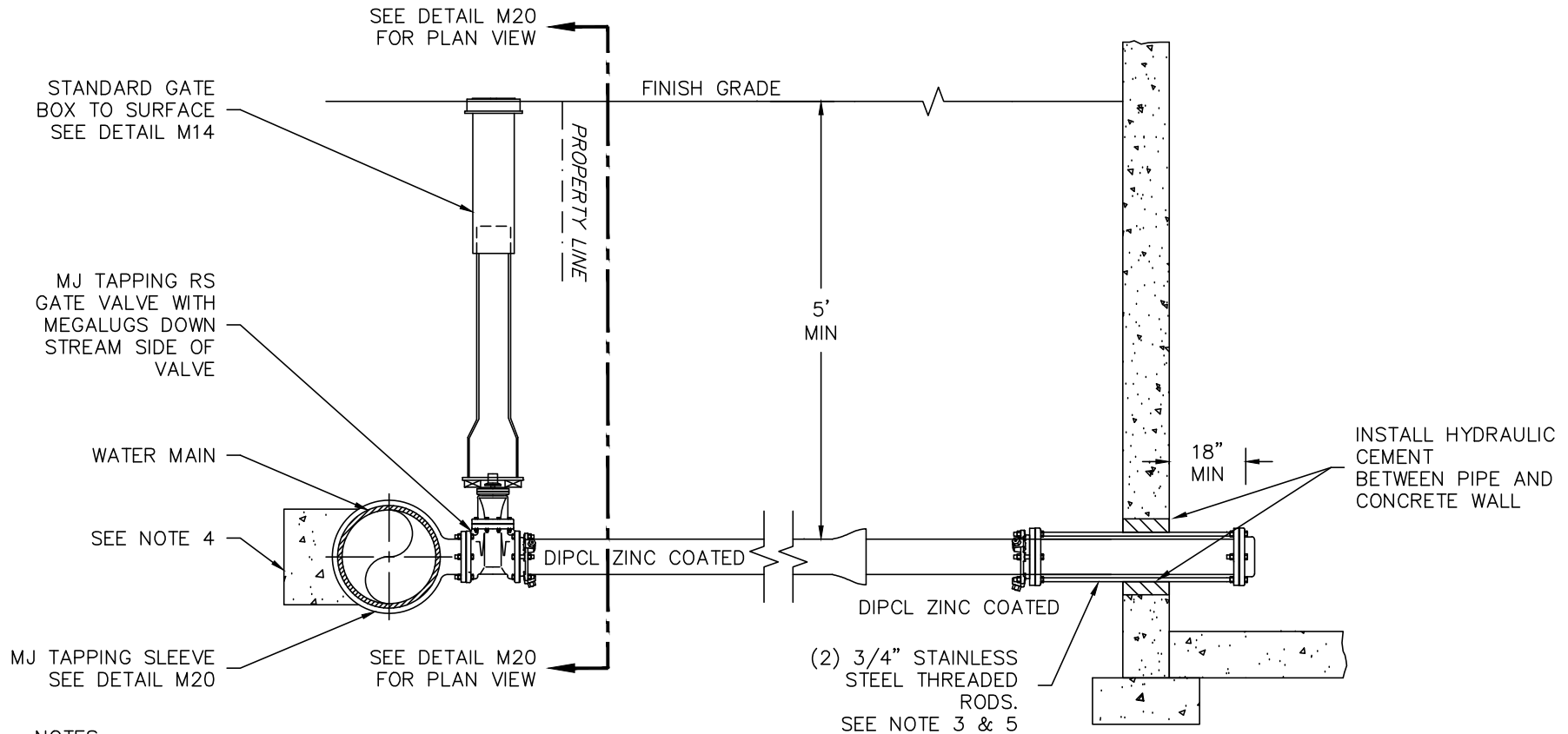
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4" ϕ S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. PER SPECIFICATION SECTION 01600.C.16.F
 10" FITTING OR SMALLER = (2) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
 12" FITTING OR LARGER = (4) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH – SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL M10.
5. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PWW TECHNICAL SPECIFICATION SECTION 01600E.2.F

ITEM REVISED IN 2026



DETAIL F01
FIRE SERVICE 4" OR LARGER
THRU FLOOR INSTALLATION DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS



NOTES:

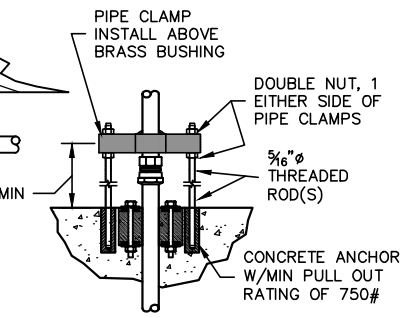
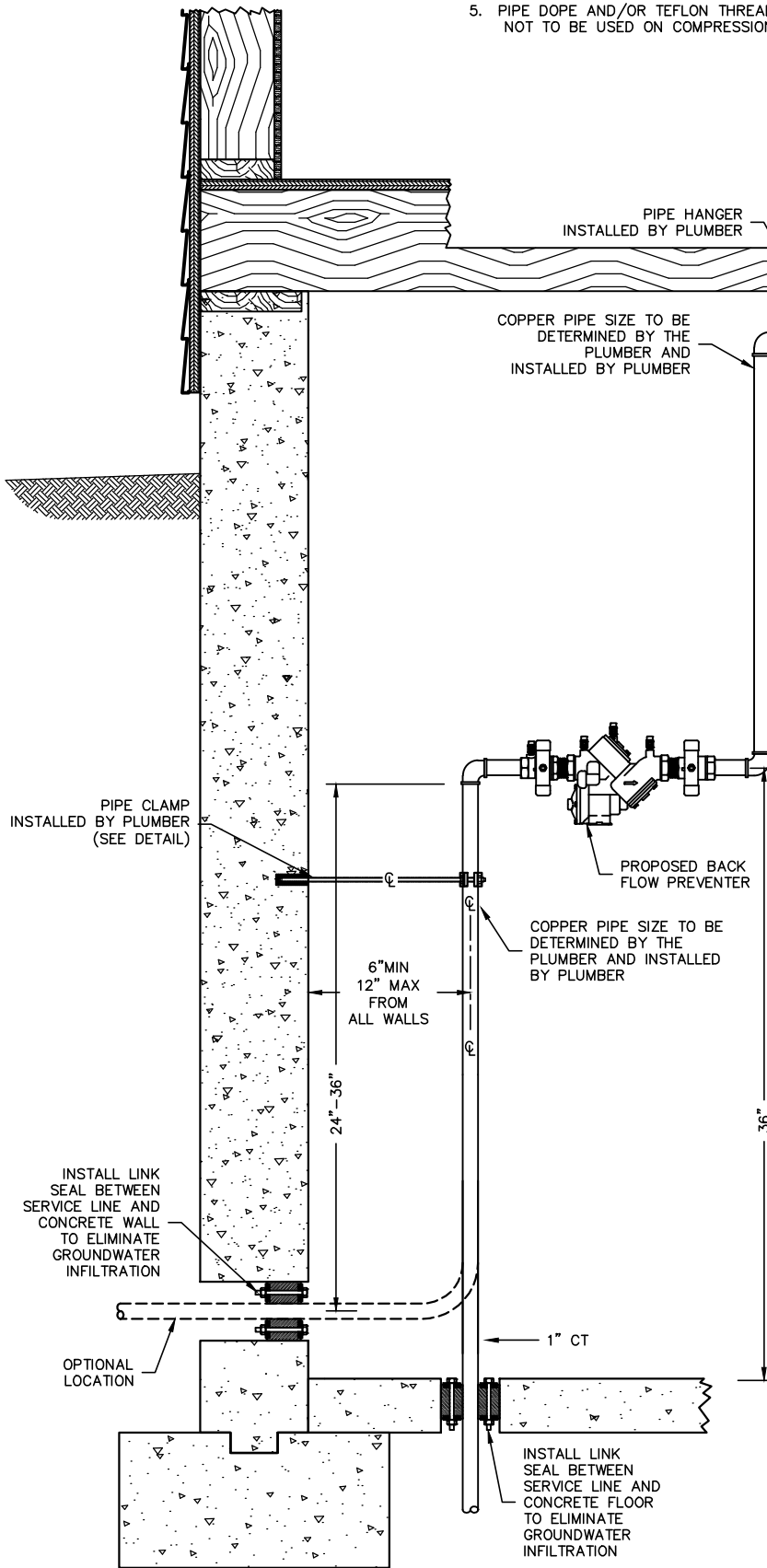
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4" ϕ S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. PER SPECIFICATION SECTION 01600.C.16.F
 10" FITTING OR SMALLER = (2) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
 12" FITTING OR LARGER = (4) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL M10.
5. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PWW TECHNICAL SPECIFICATION SECTION 01600E.2.F



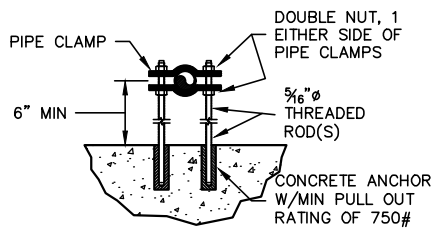
DETAIL F02
 FIRE SERVICE 4" OR LARGER
 THRU WALL INSTALLATION DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS

NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE BACKFLOW PREVENTER.
4. SERVICE LINE FROM STREET SIZE & MATERIALS TO BE APPROVED BY P.W.W.
5. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.



PIPE CLAMP (FLOOR)
NTS



PIPE CLAMP (WALL)
NTS

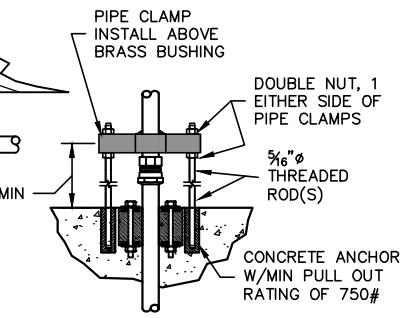
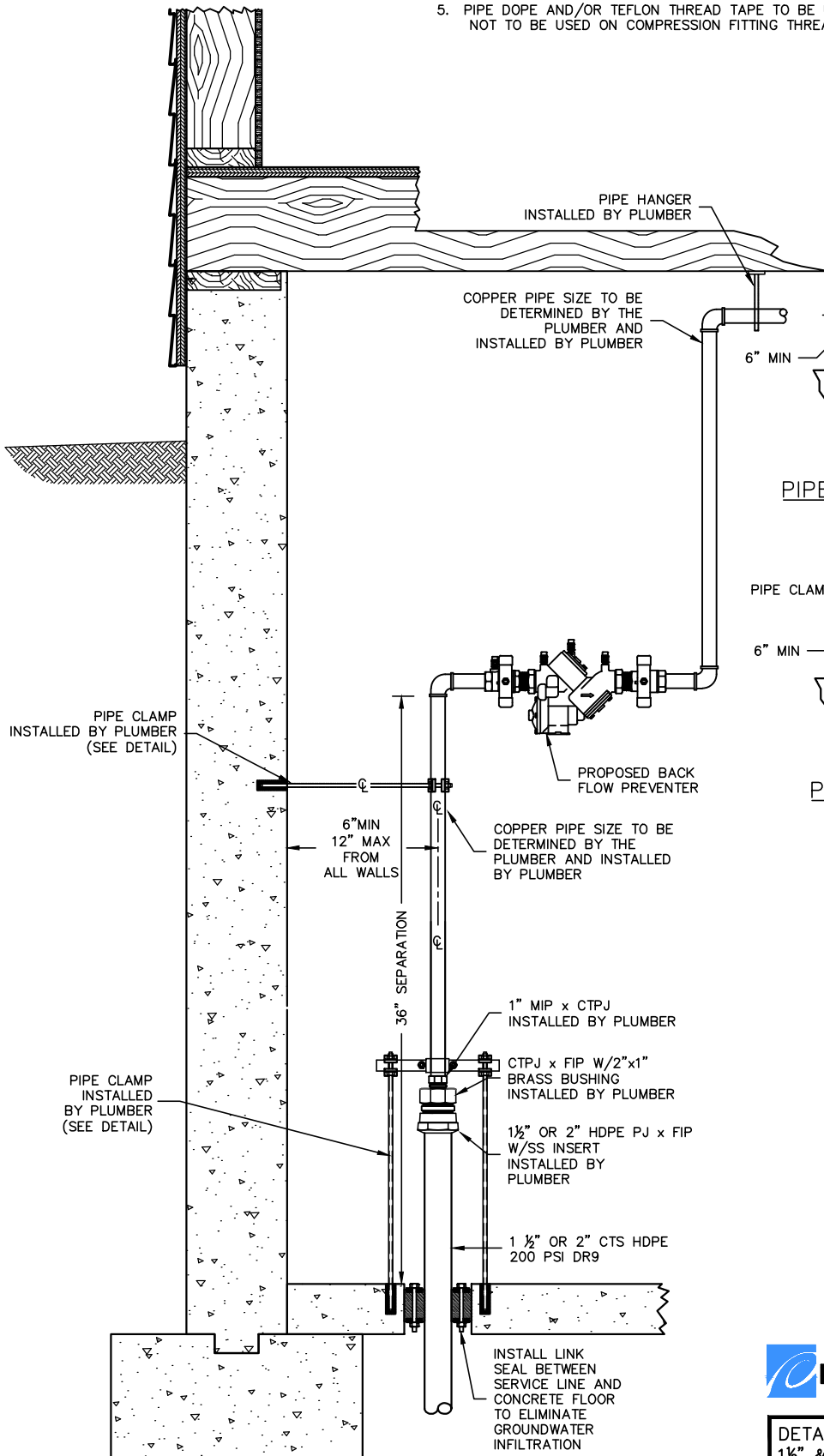


DETAIL F03
1" CT FIRE SERVICE CONNECTION

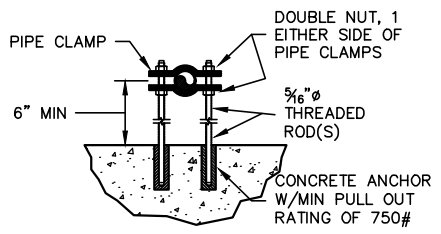
PENNICHUCK WATER WORKS, INC.
DATE: 02-20-2026 SCALE: NTS

NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE BACKFLOW PREVENTER.
4. SERVICE LINE FROM STREET SIZE & MATERIALS TO BE APPROVED BY P.W.W.
5. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.



PIPE CLAMP (FLOOR)
NTS



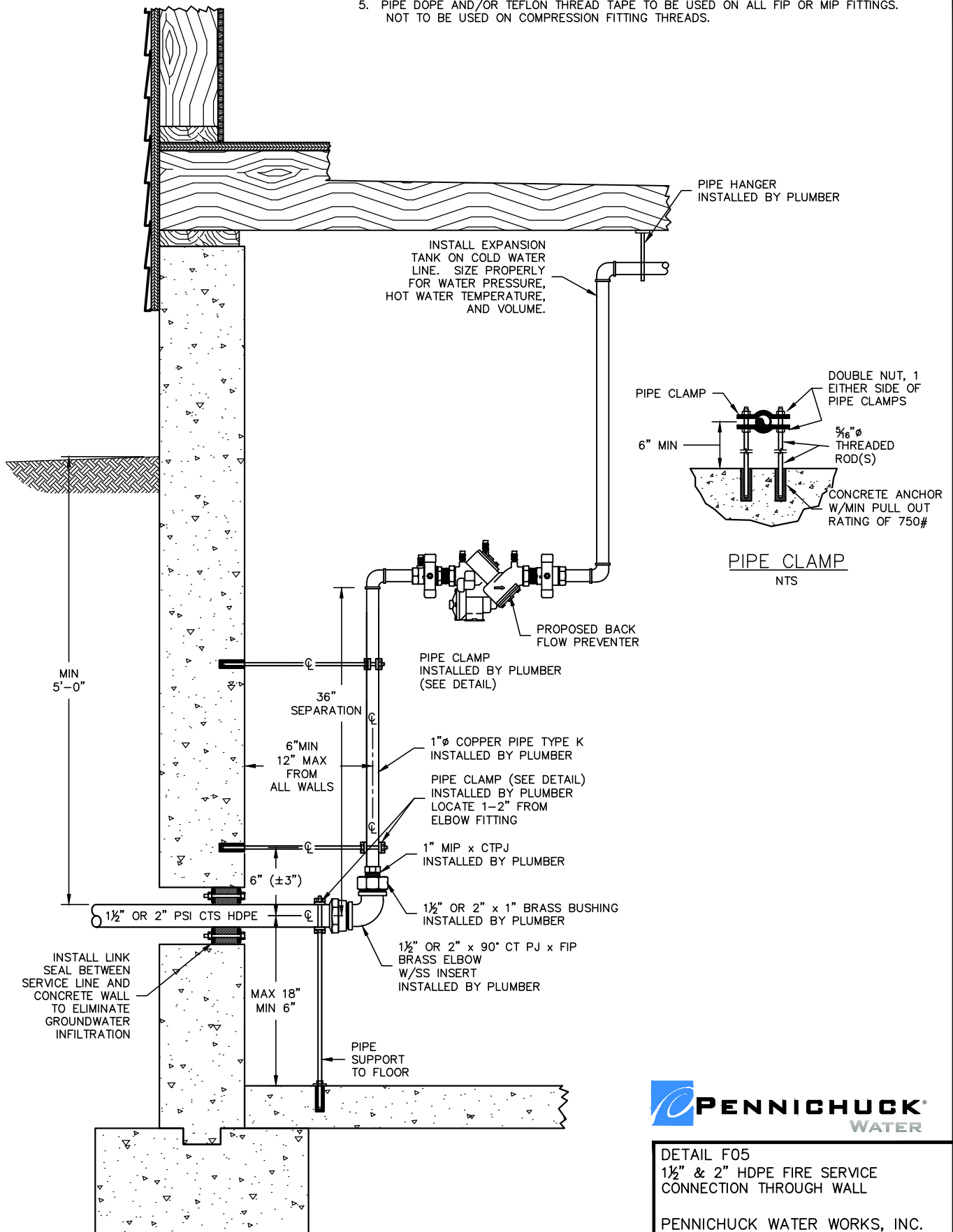
PIPE CLAMP (WALL)
NTS

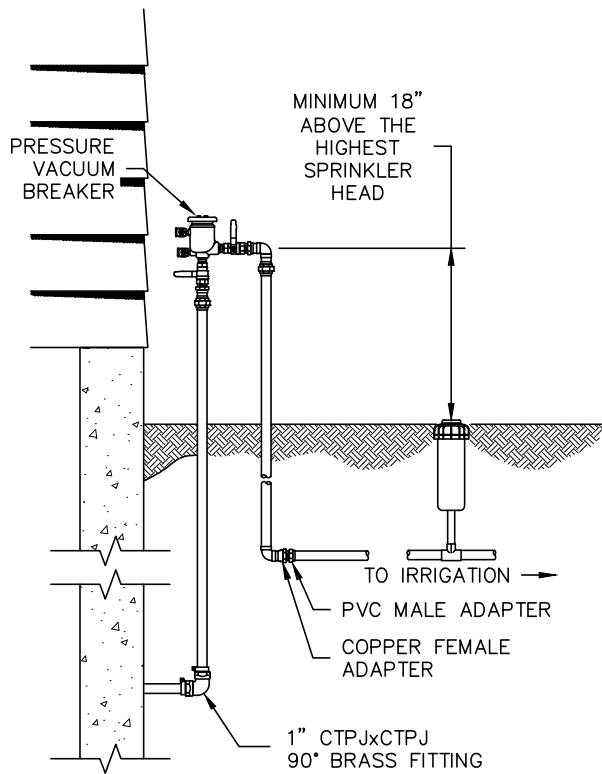


DETAIL F04
 1½" & 2" HDPE FIRE SERVICE
 CONNECTION THROUGH FLOOR
 INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS

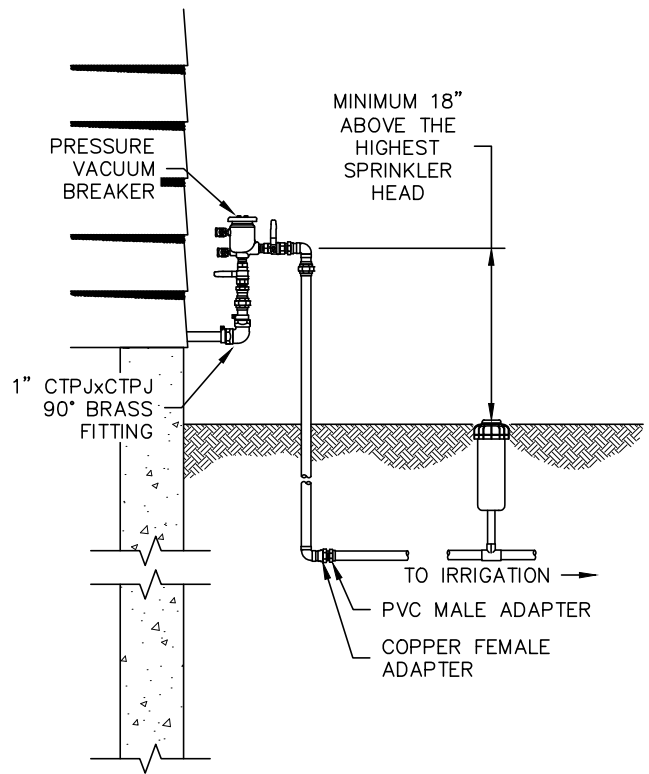
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. SPECIFICATIONS.
2. INSTALLATION UNDER FOOTING OR THROUGH FOUNDATION WALL AT OWNER'S OPTION.
3. OWNER MUST PROVIDE A CLEAN, DRY ACCESSIBLE AND WARM (CONTINUALLY ABOVE 45°F) LOCATION FOR THE BSCK FLOW PREVENTER.
4. SERVICE LINE FROM STREET SIZE & MATERIALS TO BE APPROVED BY P.W.W.
5. PIPE DOPE AND/OR TEFLON THREAD TAPE TO BE USED ON ALL FIP OR MIP FITTINGS. NOT TO BE USED ON COMPRESSION FITTING THREADS.





OPTION "A"
THROUGH FOUNDATION WALL

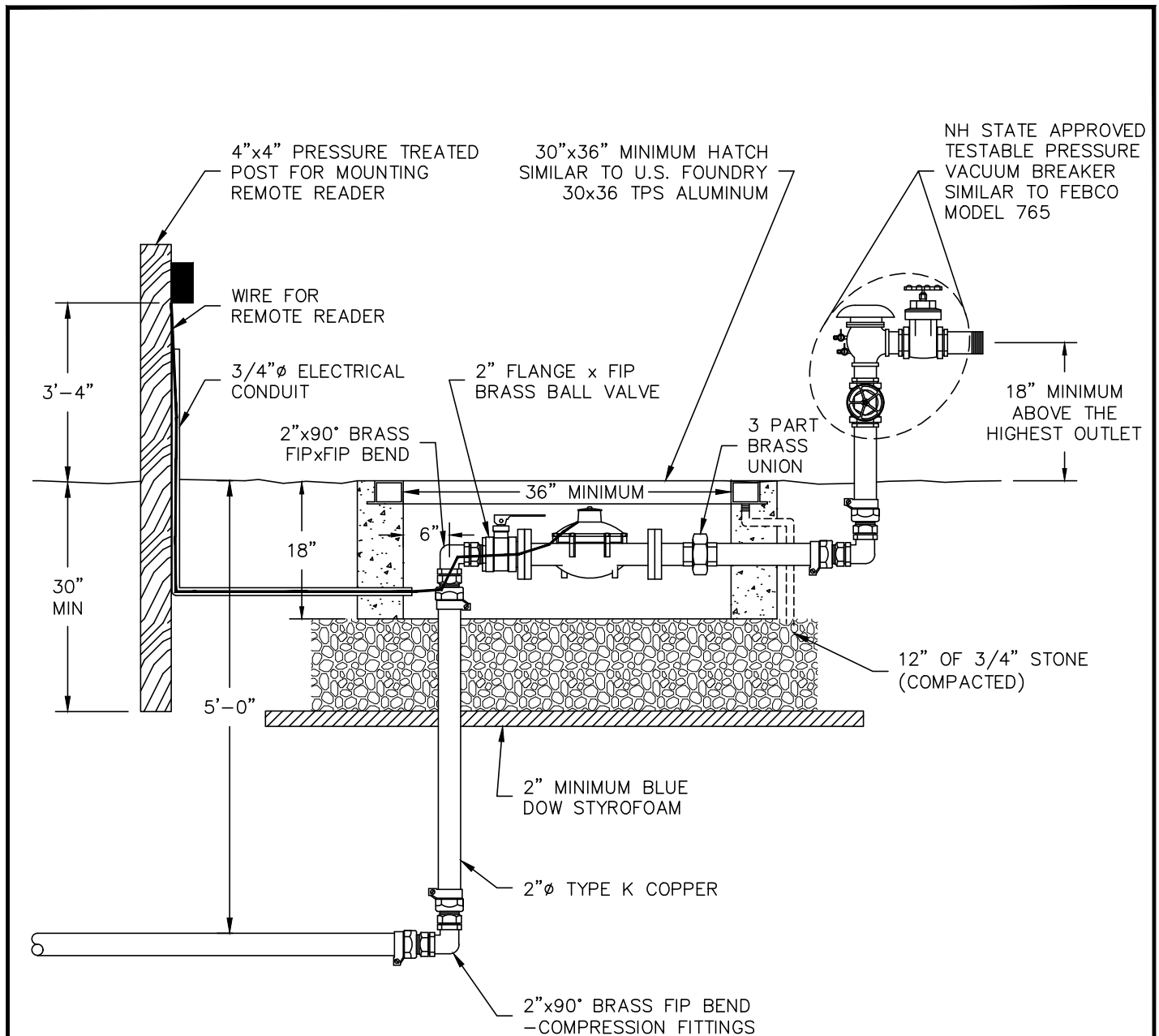


OPTION "B"
THROUGH HOUSE WALL



DETAIL L01
1" IRRIGATION SETUP OPTIONS

PENNICHUCK WATER WORKS, INC.
REV: 03-18 SCALE: NTS

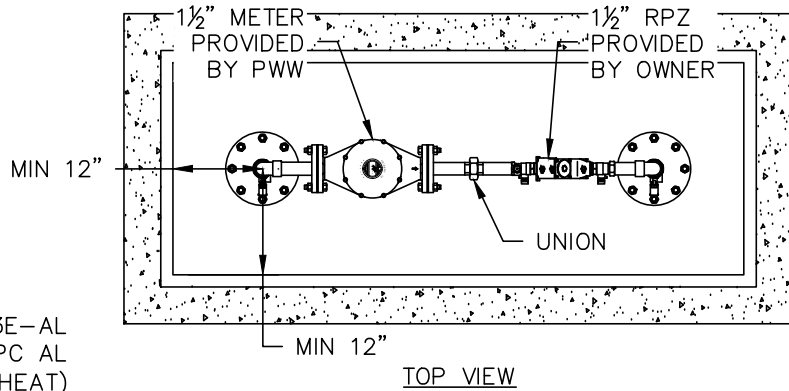


NOTES:

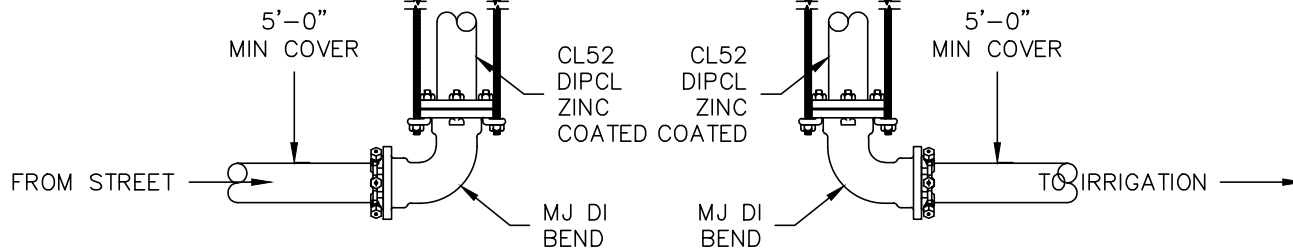
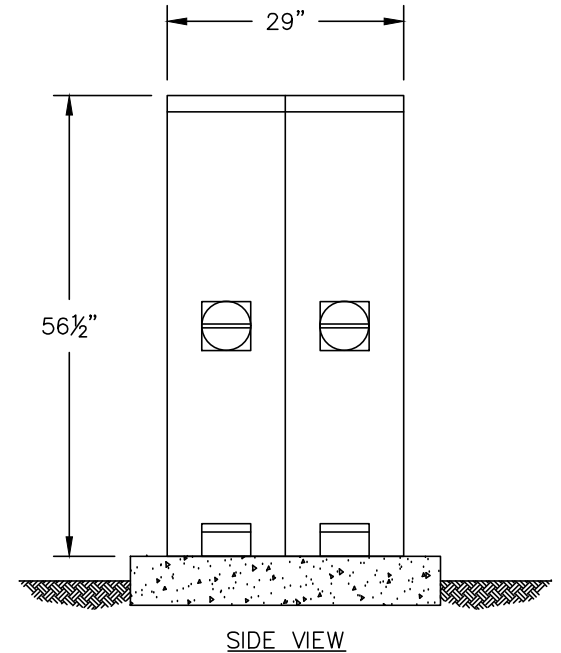
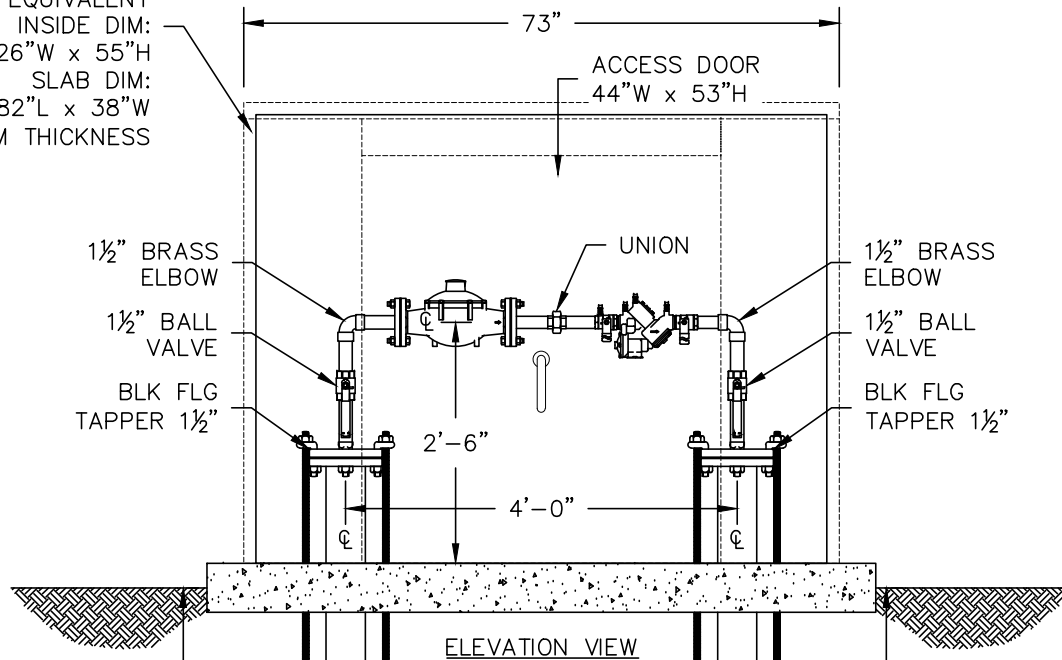
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
4. METER WIRE TO BE 22 AWG 3-STRAND (BLACK/RED/GREEN COLOR CODE) SOLID CORE CABLE AVAILABLE FROM:
ACT SERVICES, INC.
916 PLEASANT STREET
SUITE 3A
NORWOOD, MA 02062
TEL. (781) 255-0978



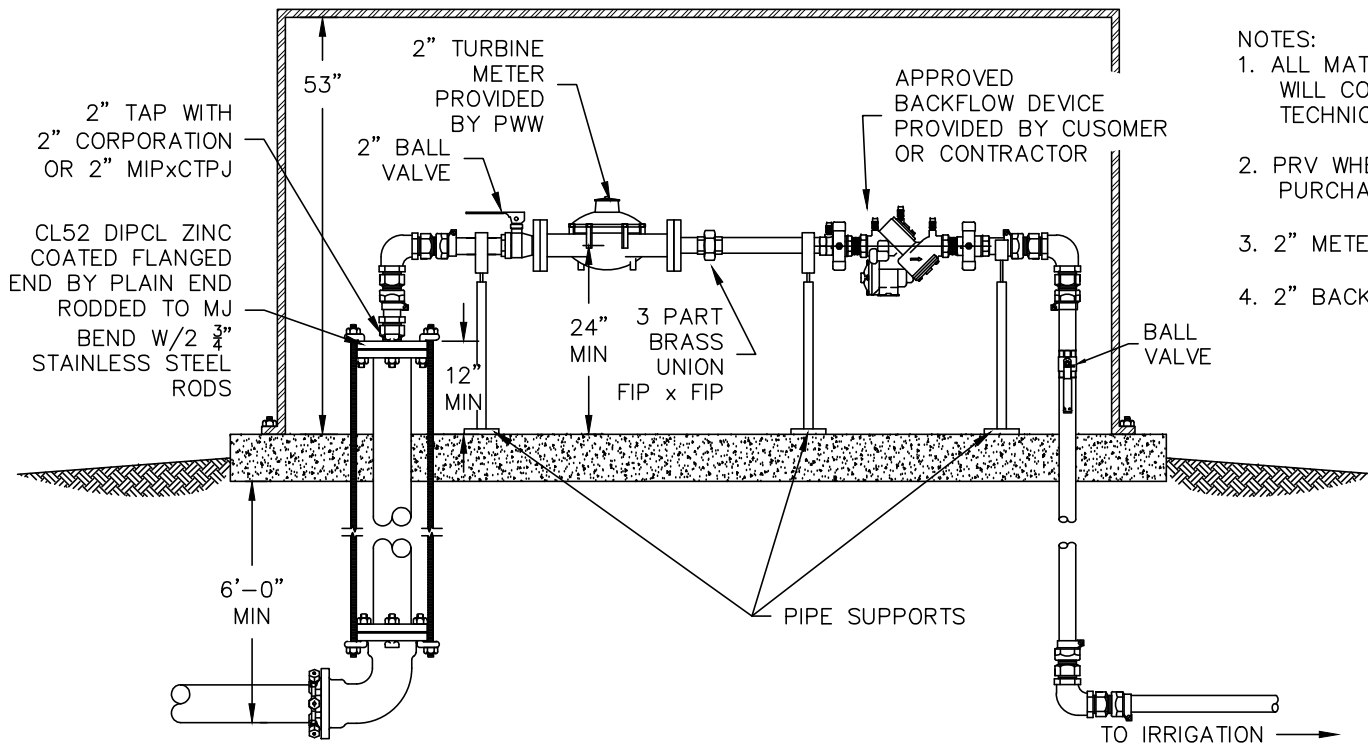
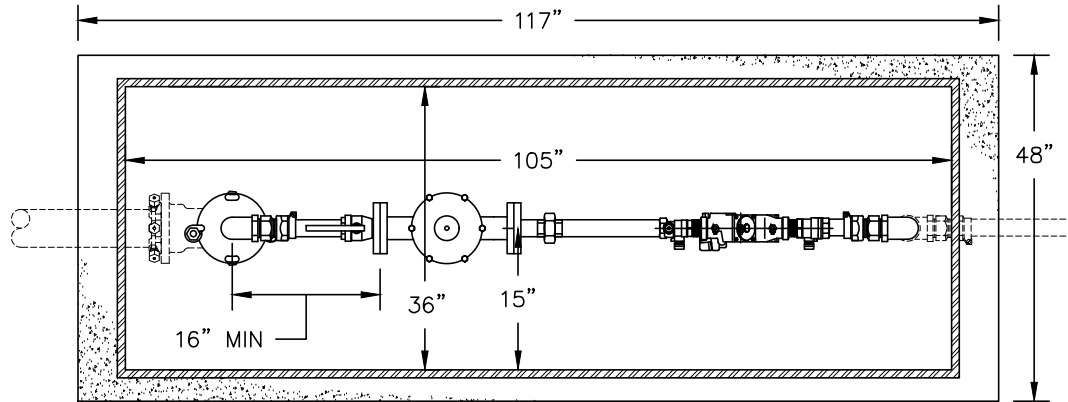
DETAIL L02
 TYPICAL SHALLOW 2" IRRIGATION
 METER PIT DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



HOT BOX® MODEL LB3E-AL
 (STANDARD 2-PC AL
 ENCLOSURE NO HEAT)
 or EQUIVALENT
 INSIDE DIM:
 70"L x 26"W x 55"H
 SLAB DIM:
 82"L x 38"W
 4" MINIMUM THICKNESS



DETAIL L03
 TYPICAL 1 1/2" ABOVE GROUND
 IRRIGATION METER VAULT
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

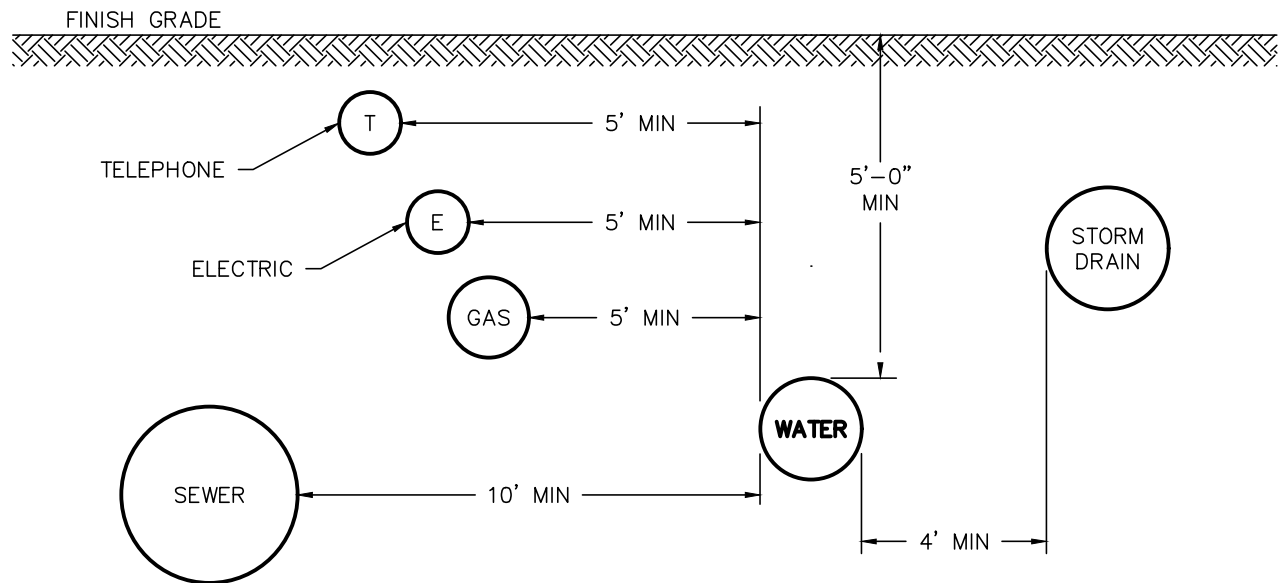


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. PRV WHEN NECESSARY WILL BE INSTALLED AND PURCHASED BY OWNER OR CONTRACTOR.
3. 2" METER = 17" LAYING LENGTH.
4. 2" BACKFLOW = 20" LAYING LENGTH. (APPROX)



DETAIL L04
2" ABOVE GROUND IRRIGATION
TYPICAL DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

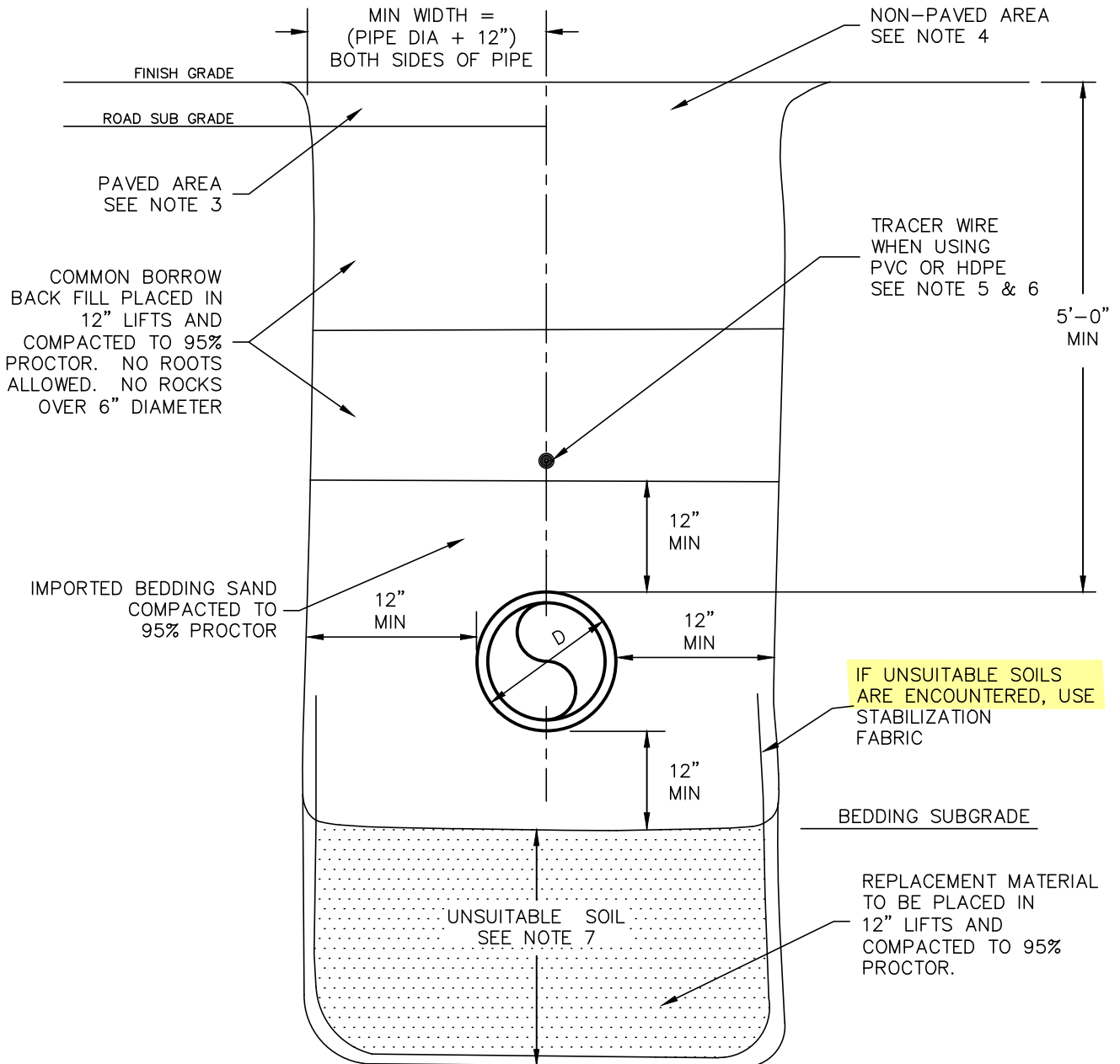


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL WATER MAIN SHOULD HAVE A MINIMUM DEPTH OF 5'-0" OF COVER TO FINISH GRADE.
3. SEE DETAIL M02 FOR TRENCH DETAIL.



DETAIL M01
TYPICAL UTILITY SEPARATION
(MAIN) DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



NOTES:

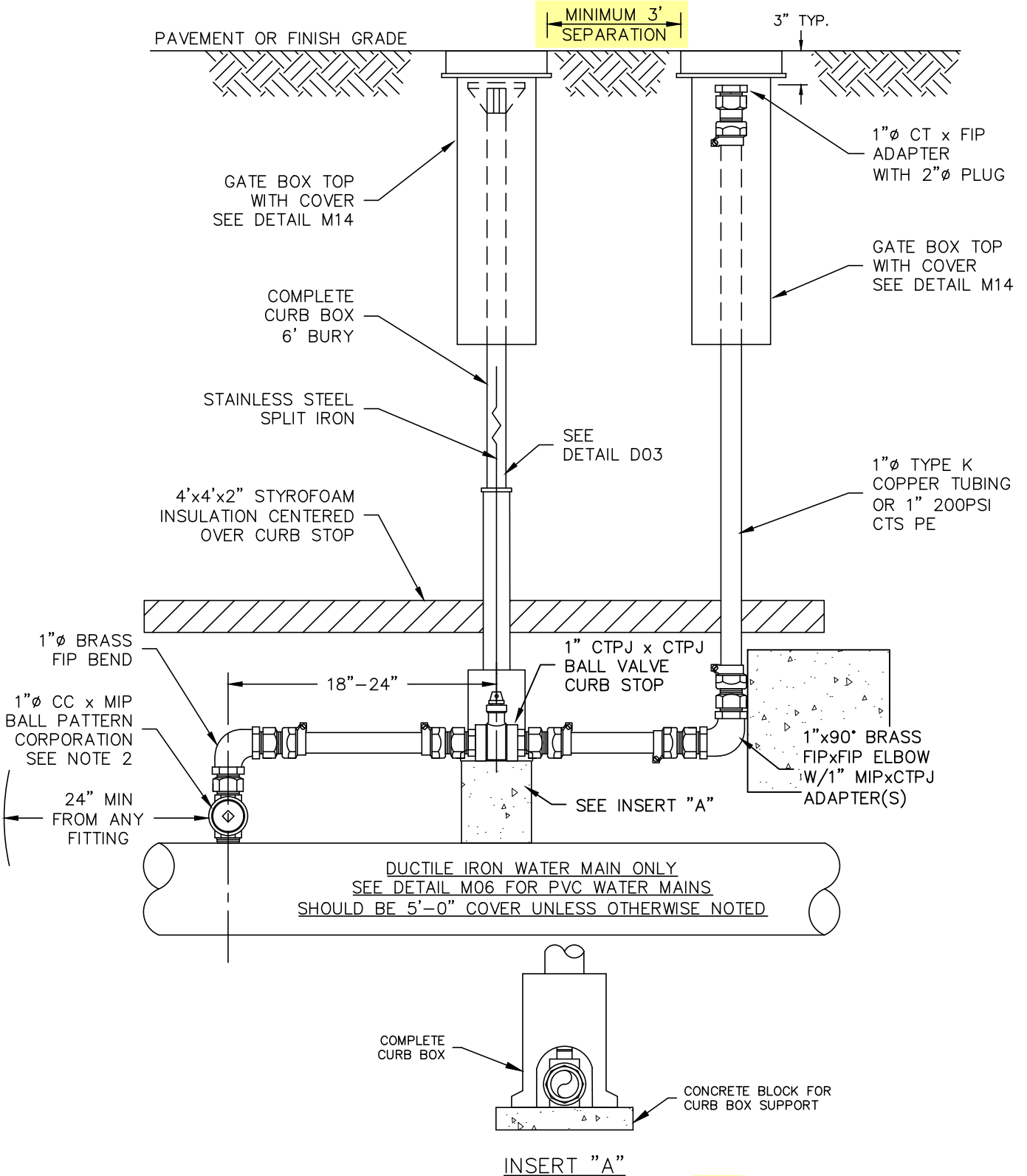
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS. PENNICHUCK FIELD REPRESENTATIVE SHALL DETERMINE LIMITS OF UNSUITABLE SOILS AND MATERIAL TYPE FOR REPLACEMENT.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN PAVED AREAS.
4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
5. USE 10-GAUGE SOLID-CORE COATED TRACER WIRE PER P.W.W. TECHNICAL SPECIFICATIONS.
6. INSTALL 3" WIDE BLUE UNDERGROUND WARNING TAPE.
7. REPLACEMENT MATERIALS FOR UNSUITABLE SOILS ABOVE BEDDING SUBGRADE AND BELOW THE ROAD GRAVELS, SHALL BE EITHER THE BEDDING SAND OR CLEAN COMMON BORROW AS DETAILED.
8. REPLACEMENT MATERIALS FOR UNSUITABLE SOILS BELOW BEDDING SUBGRADE SHALL BE EITHER 1 1/2" CRUSHED STONE OR NHDOT 304.2 GRAVEL, AS DETERMINED BY PWW.

ITEM REVISED IN 2026



DETAIL M02
TYPICAL TRENCH DETAIL

PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS



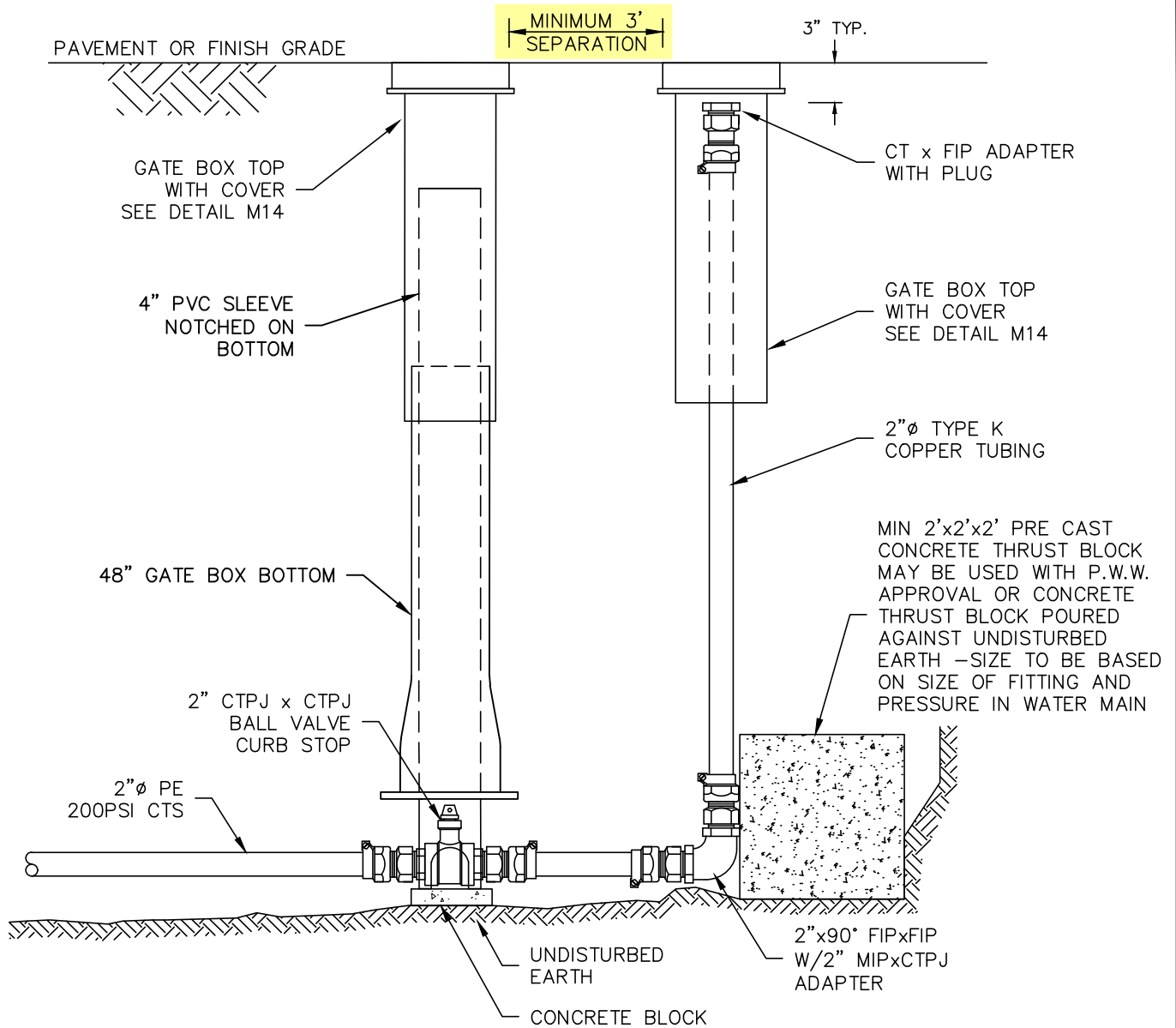
ITEM REVISED IN 2026



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. WATER MAIN MAY BE DIRECT TAPPED WHEN IT IS 6" OR LARGER DUCTILE IRON.
3. SEE DETAIL M06 FOR INSTALLATION ON PVC WATER MAINS.

DETAIL M03
 TYPICAL 1" RELEASE VALVE
 INSTALLATION ON DUCTILE IRON
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS



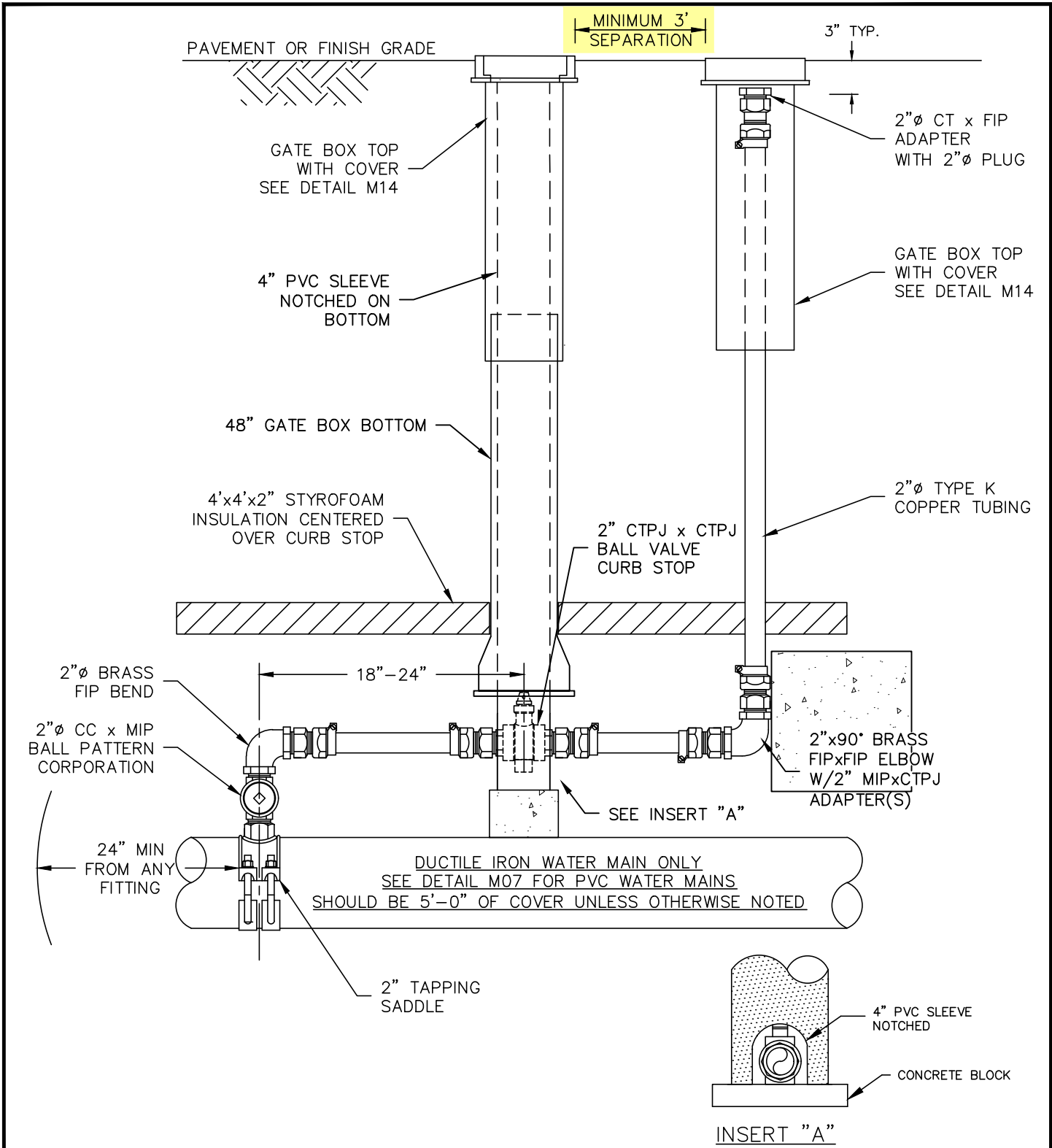
ITEM REVISED IN 2026

NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.



DETAIL M04
 TYPICAL 2" RELEASE VALVE
 INSTALLATION ON END OF 2" MAIN
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS



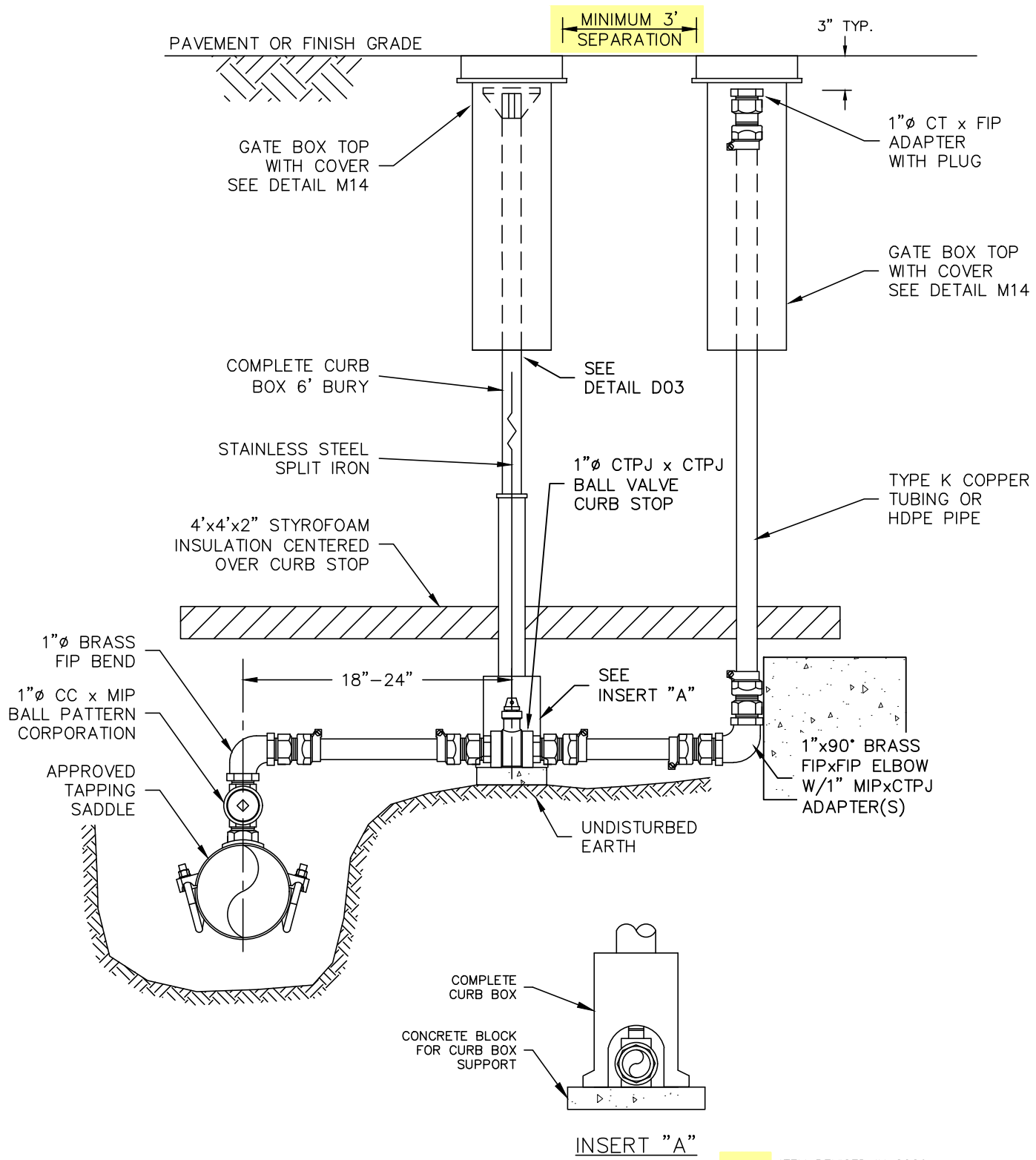
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. WATER MAIN MAY BE DIRECT TAPPED WHEN IT IS 16" OR LARGER DUCTILE IRON.
3. SEE DETAIL M07 FOR INSTALLATION ON PVC WATER MAINS.

ITEM REVISED IN 2026



DETAIL M05
TYPICAL 2" RELEASE VALVE
INSTALLATION ON DUCTILE IRON
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS



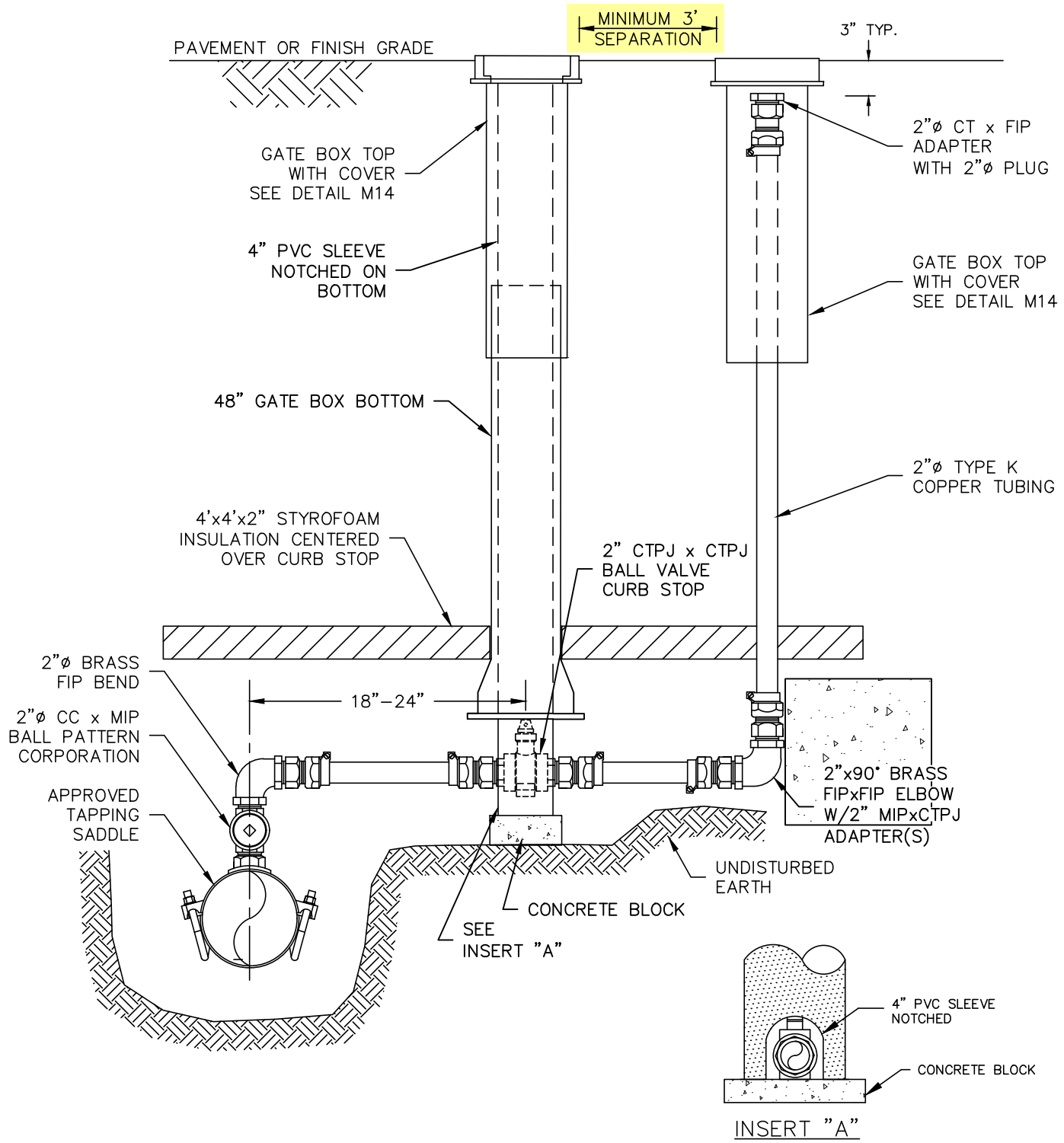
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.

ITEM REVISED IN 2026



DETAIL M06
 TYPICAL 1" RELEASE VALVE
 INSTALLATION ON PVC
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS



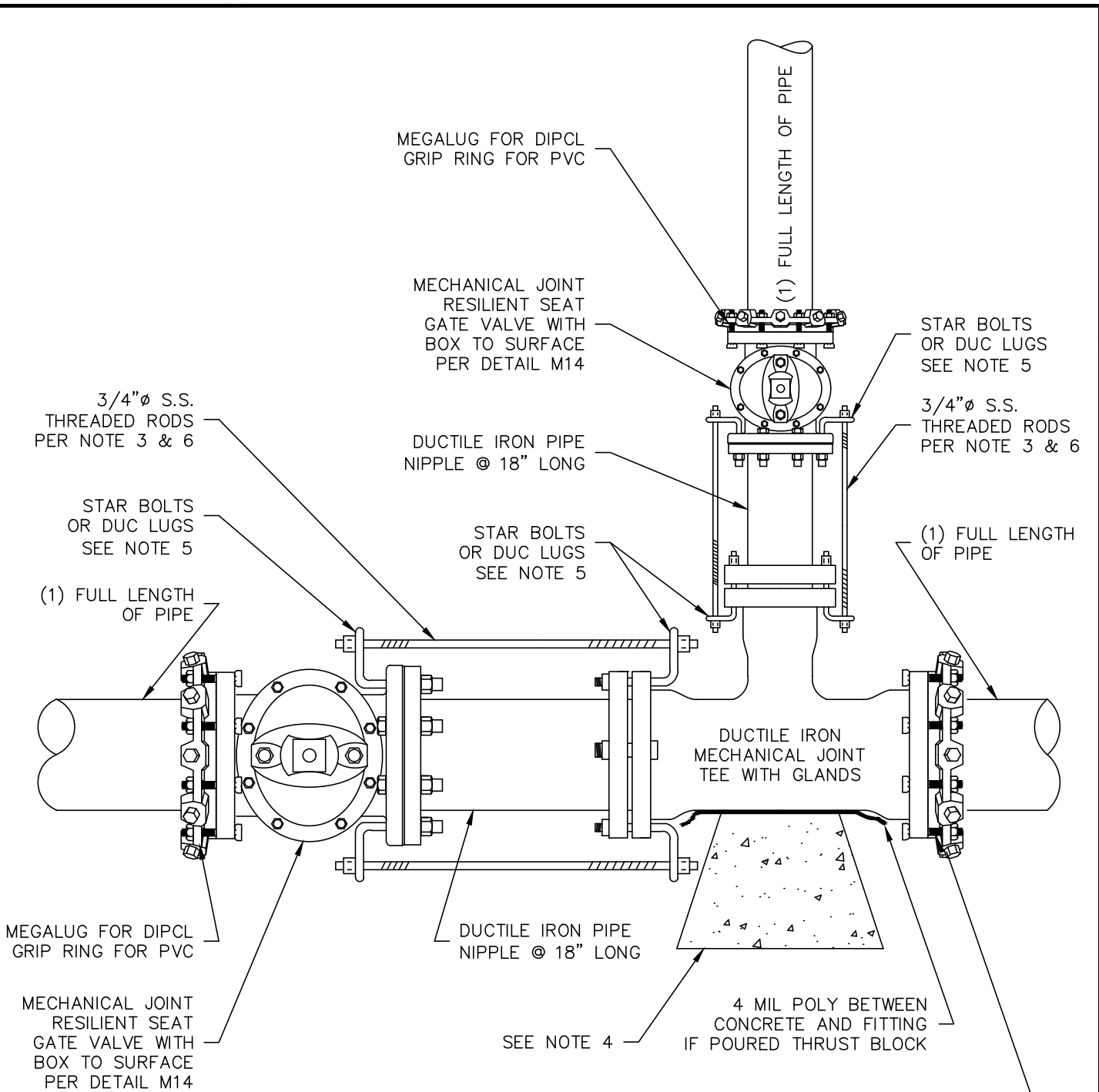
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.

ITEM REVISED IN 2026



DETAIL M07
 TYPICAL 2" RELEASE VALVE
 INSTALLATION ON PVC
 PENNICHUCK WATER WORKS, INC.
 REV: 02-20-2026 SCALE: NTS

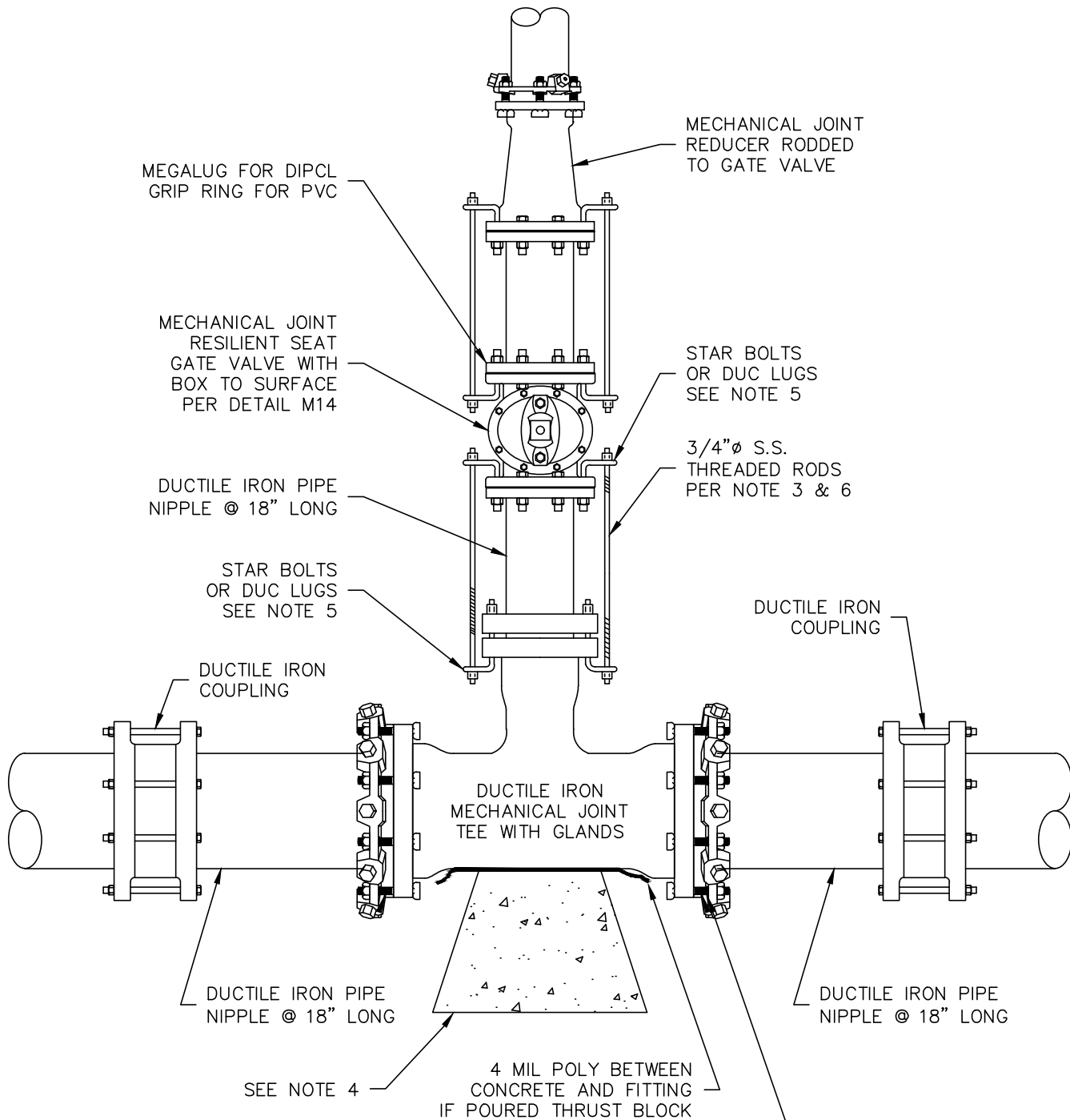


NOTES:

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS.
 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE.
 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL M10.
5. SEE PWW TECHNICAL SPECIFICATION SECTION 01600.C.16.F
6. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PWW TECHNICAL SPECIFICATION SECTION 01600E.2.F IF SEPARATION IS MORE THAN 10 FEET SUBSTITUTE MEGALUGS (OR GRIP RINGS) IN LIEU OF THREADED RODS.



DETAIL M08
 TYPICAL TEE INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS

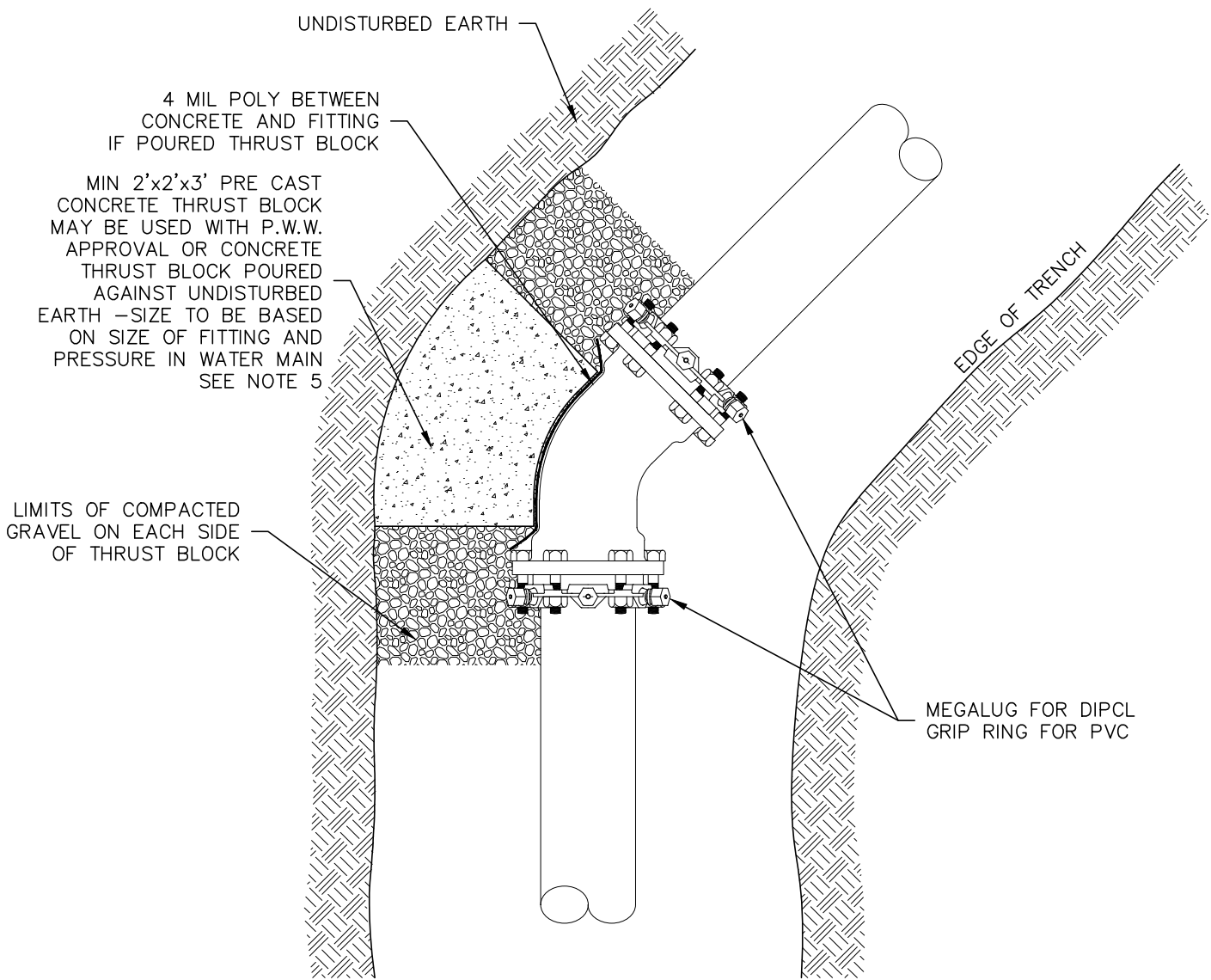


NOTES:

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4" ϕ S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS.
10" FITTING OR SMALLER = (2) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
12" FITTING OR LARGER = (4) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL M10.
5. SEE PWW TECHNICAL SPECIFICATION SECTION 01600.C.16.F
6. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PWW TECHNICAL SPECIFICATION SECTION 01600E.2.F IF SEPARATION IS MORE THAN 10 FEET SUBSTITUTE MEGALUGS (OR GRIP RINGS) IN LIEU OF THREADED RODS.



DETAIL M09
TYPICAL TEE INSTALLATION
ON EXISTING MAIN
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS

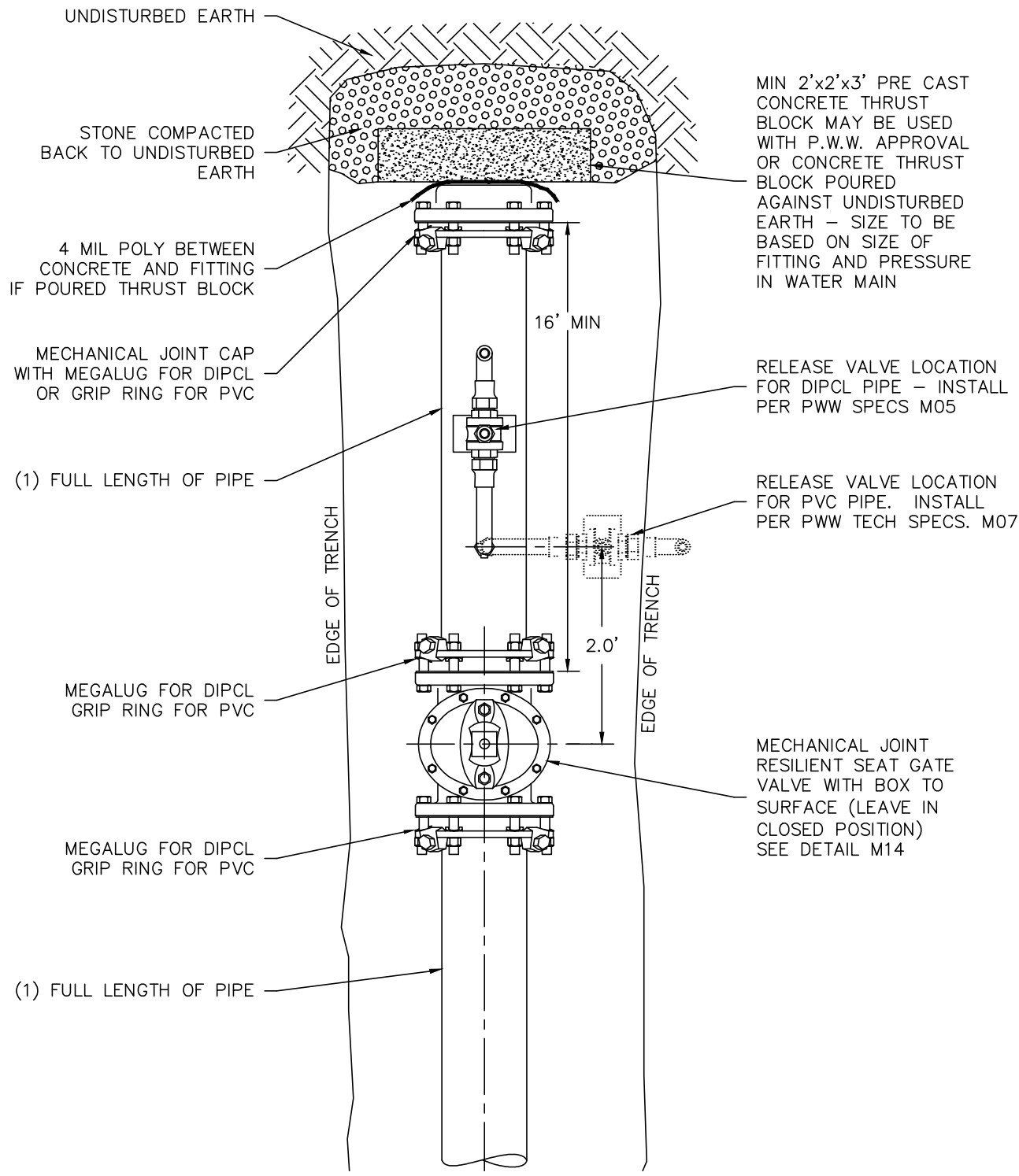


NOTES:

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4" ϕ S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS PER SPECIFICATION SECTION 01600C.16.F 10" FITTING OR SMALLER = (2) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" ϕ S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK Poured AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN.
5. VOID BETWEEN PRECAST THRUST BLOCK AND VIRGIN SOIL TO BE FILLED AND CHINKED WITH STONE
6. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PWW TECHNICAL SPECIFICATION SECTION 01600E.2.F IF SEPARATION IS MORE THAN 10 FEET SUBSTITUTE MEGALUGS (OR GRIP RINGS) IN LIEU OF THREADED RODS.



DETAIL M10
TYPICAL THRUST BLOCK BEHIND
FITTINGS INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS

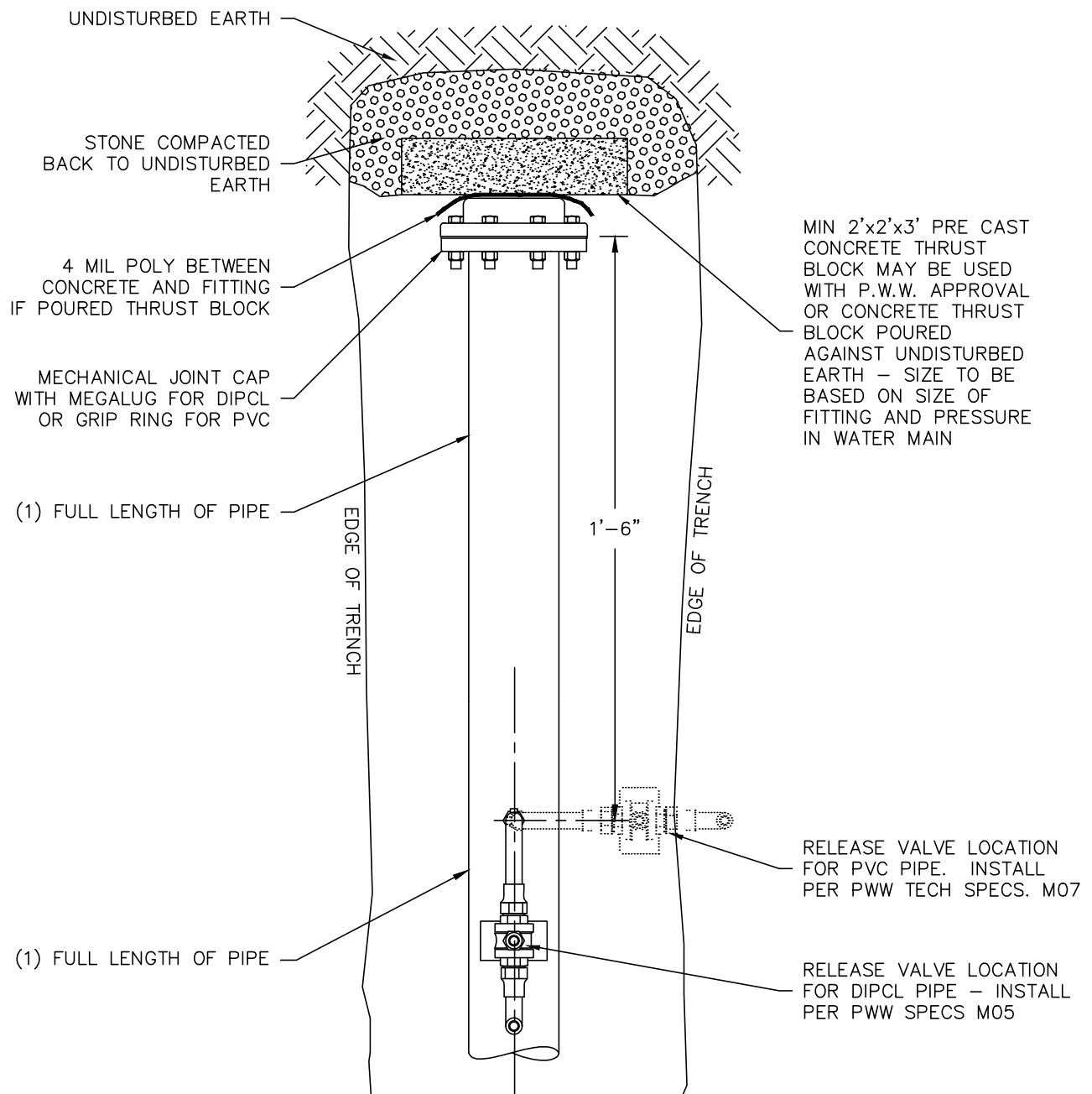


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.



DETAIL M11
 TYPICAL END OF MAIN W/GATE
 VALVE INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

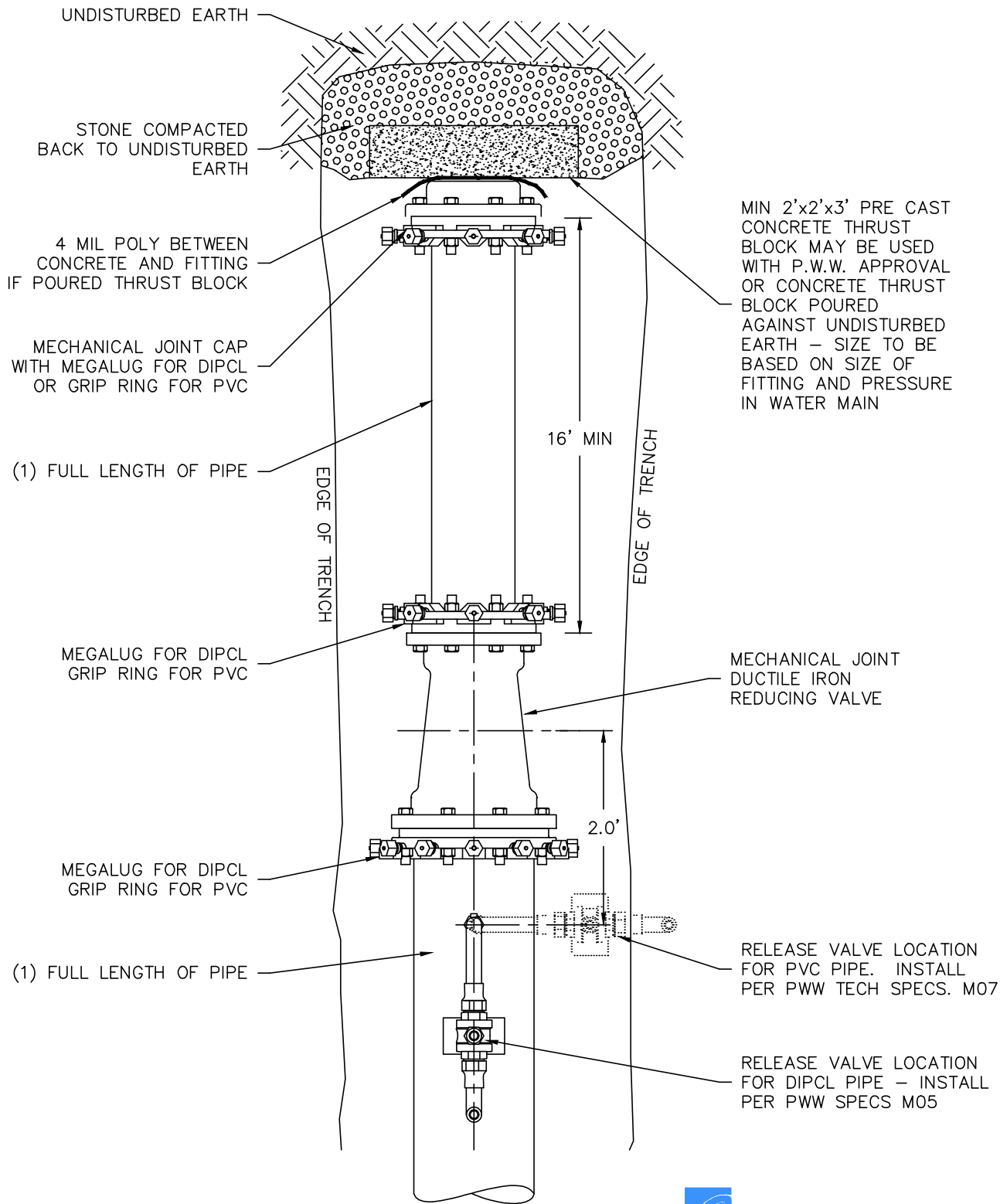


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.



DETAIL M12
 TYPICAL END OF MAIN W/O
 GATE VALVE INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

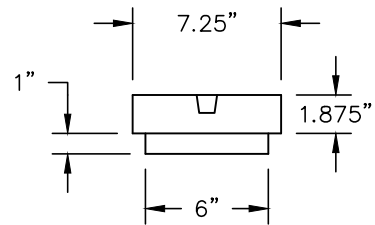
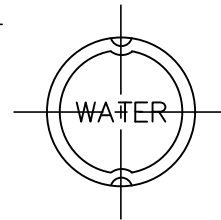
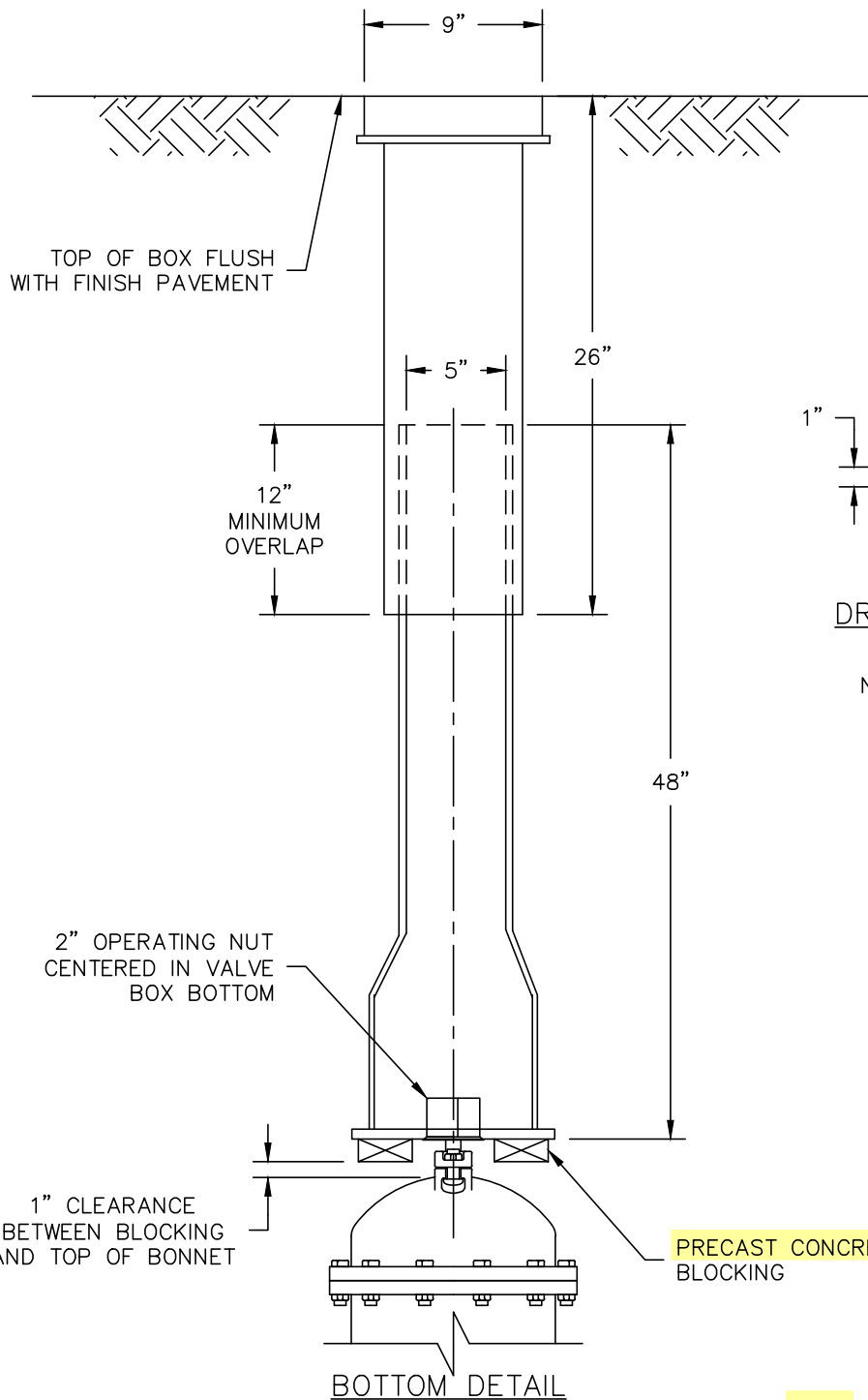


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.



DETAIL M13
 TYPICAL END OF MAIN W/REDUCER
 INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



DROP STYLE COVER

NOTE: COVER MUST BE MARKED "WATER"

NOTES:

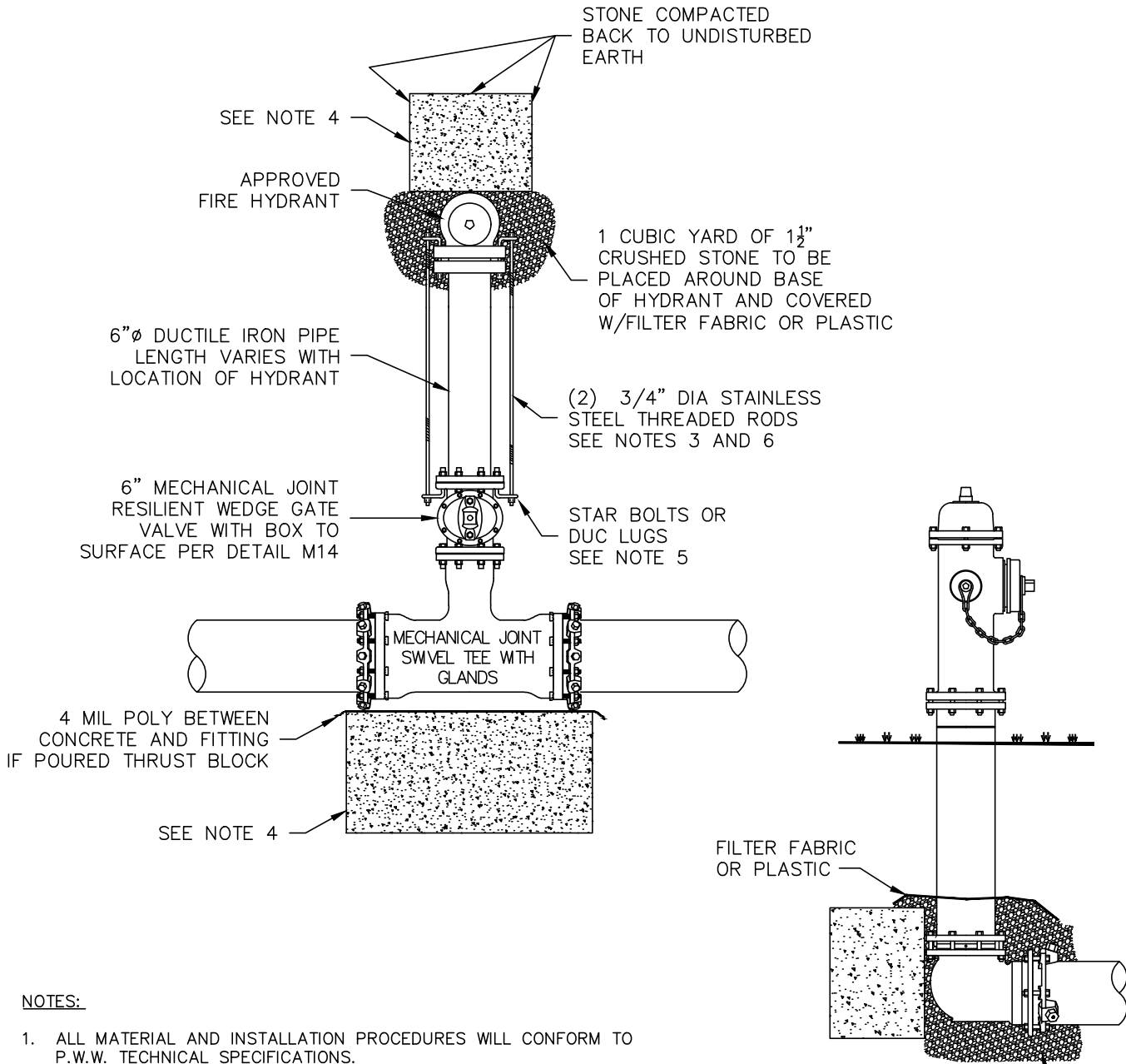
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.

ITEM REVISED IN 2023



DETAIL M14
TYPICAL VALVE BOX DETAIL
 PENNICHUCK WATER WORKS, INC.

REV: 03-15-2023 SCALE: NTS

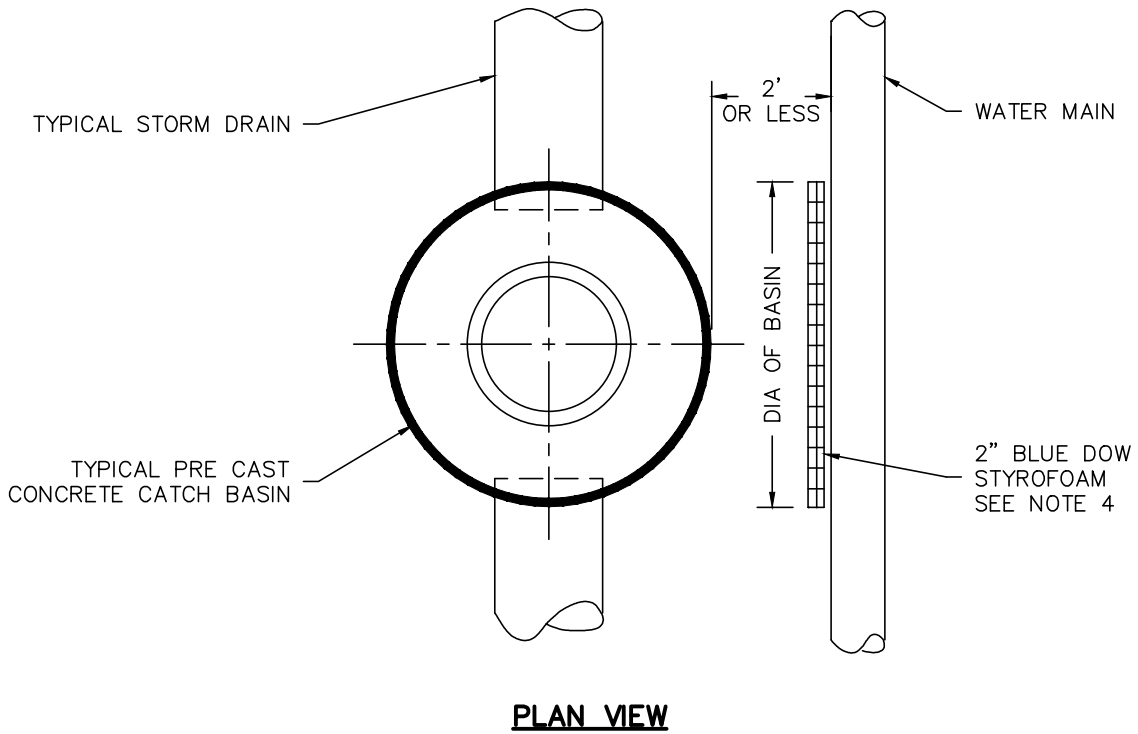


NOTES:

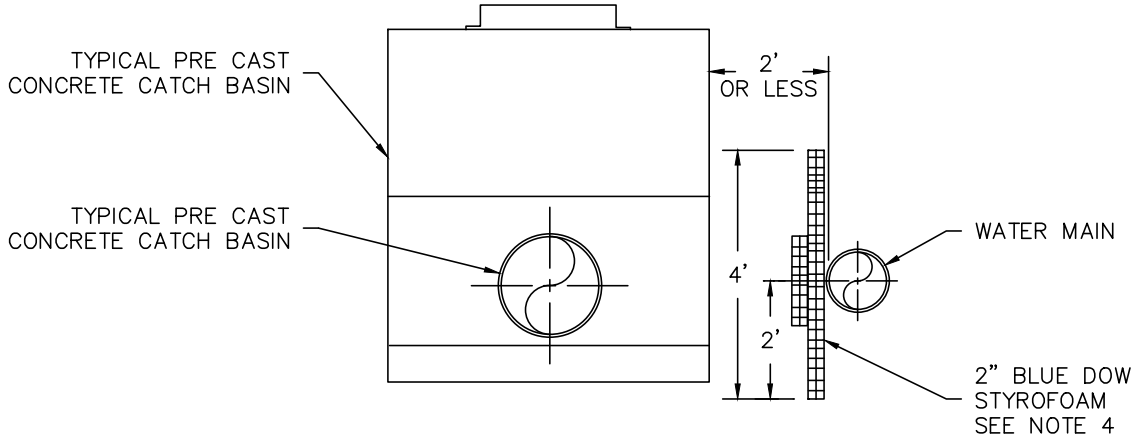
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4"ø S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4"ø S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4"ø S.S. RODS & ASSOC. HARDWARE.
4. MIN 2'x2'x3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL M10.
5. SEE PWW TECHNICAL SPECIFICATION SECTION 01600.C.16.F
6. ALL MECHANICAL JOINT FITTINGS SEPARATED BY PIPE LENGTH OF 10 FEET OR LESS MUST BE RODDED PER PWW TECHNICAL SPECIFICATION SECTION 01600E.2.F IF SEPARATION IS MORE THAN 10 FEET SUBSTITUTE MEGALUGS (OR GRIP RINGS) IN LIEU OF THREADED RODS.



DETAIL M15
 TYPICAL HYDRANT INSTALLATION
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS



PLAN VIEW



ELEVATION VIEW

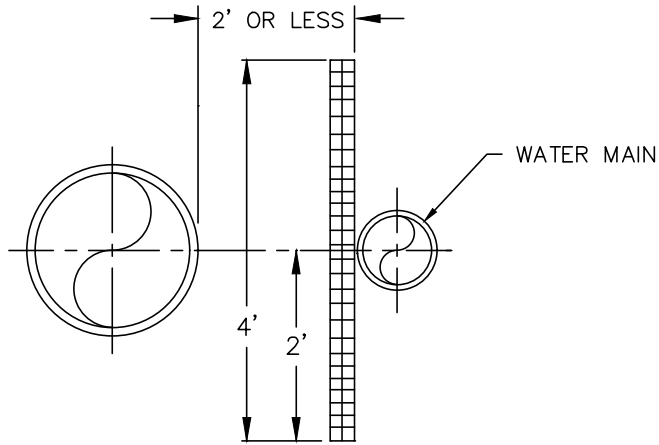
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. P.W.W., INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
4. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH 1' PIECE OF INSULATION CENTERED OVER SEAM.

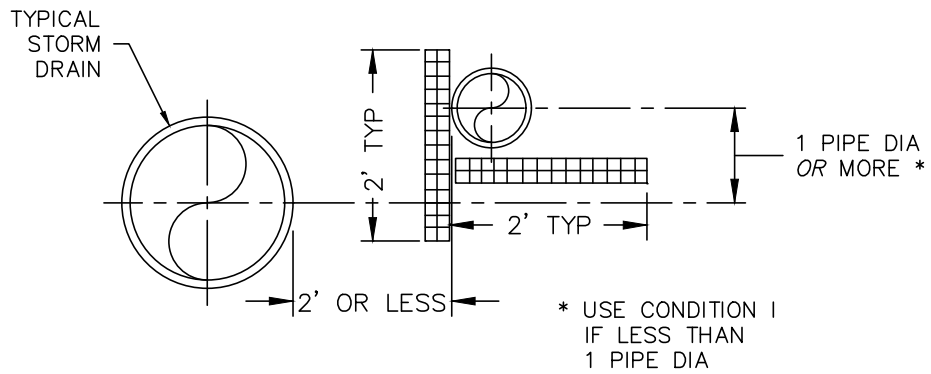


DETAIL M16
 TYPICAL CATCH BASIN
 INSULATION DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

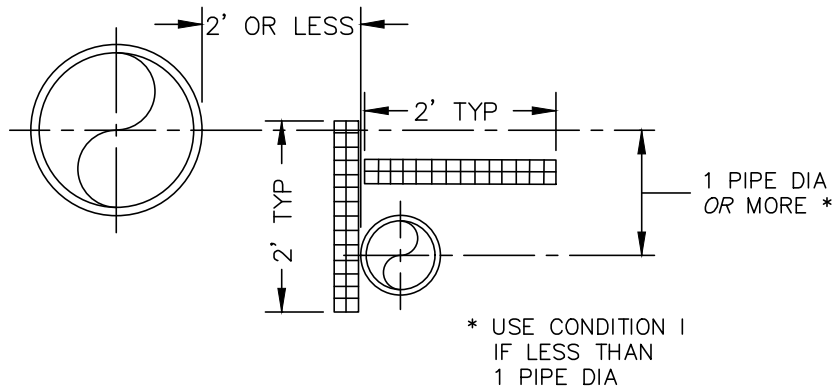
CONDITION I




CONDITION II



CONDITION III

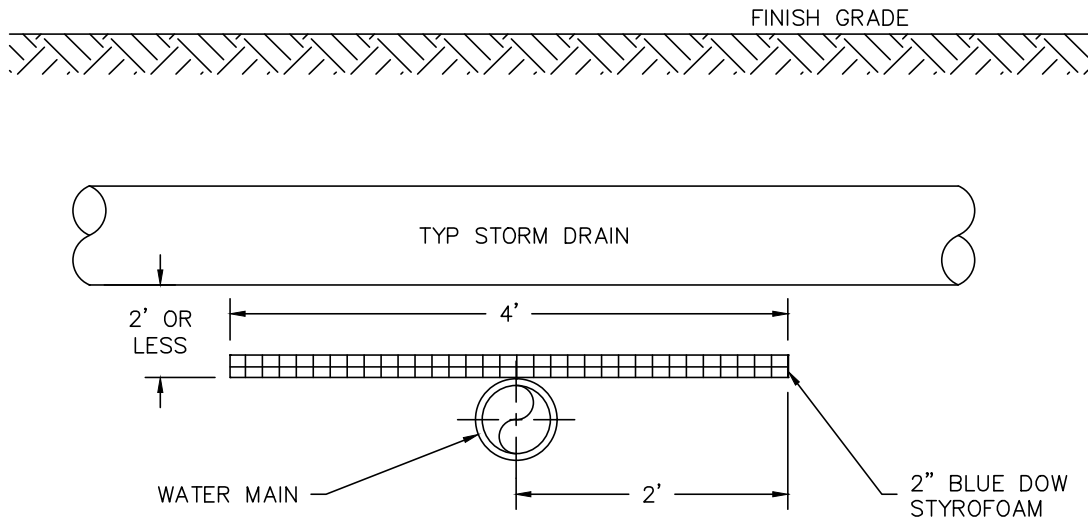


NOTES:

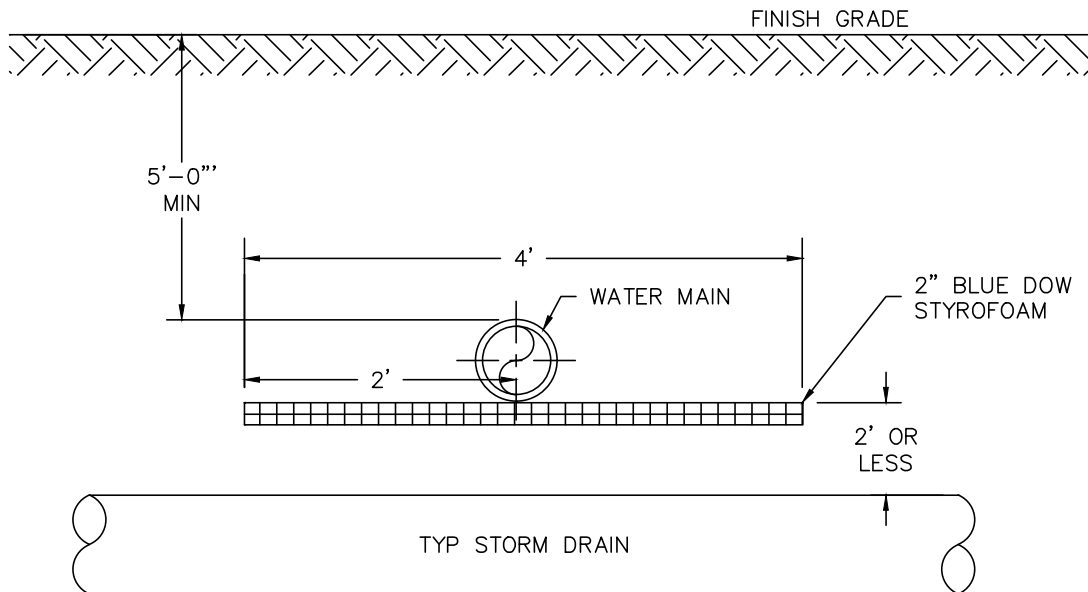
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. P.W.W., INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
3. INSULATION TO BE RUN HORIZONTALLY AS LONG AS CONDITIONS I, II, OR III ABOVE EXIST. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH 1' PIECE OF INSULATION CENTERED OVER SEAM.
4.  - 2" (MIN) BLUE DOW STYROFOAM



DETAIL M17
 STORM DRAIN / WATER MAIN
 PARALLEL RUNS - ELEVATION VIEW
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



CONDITION I



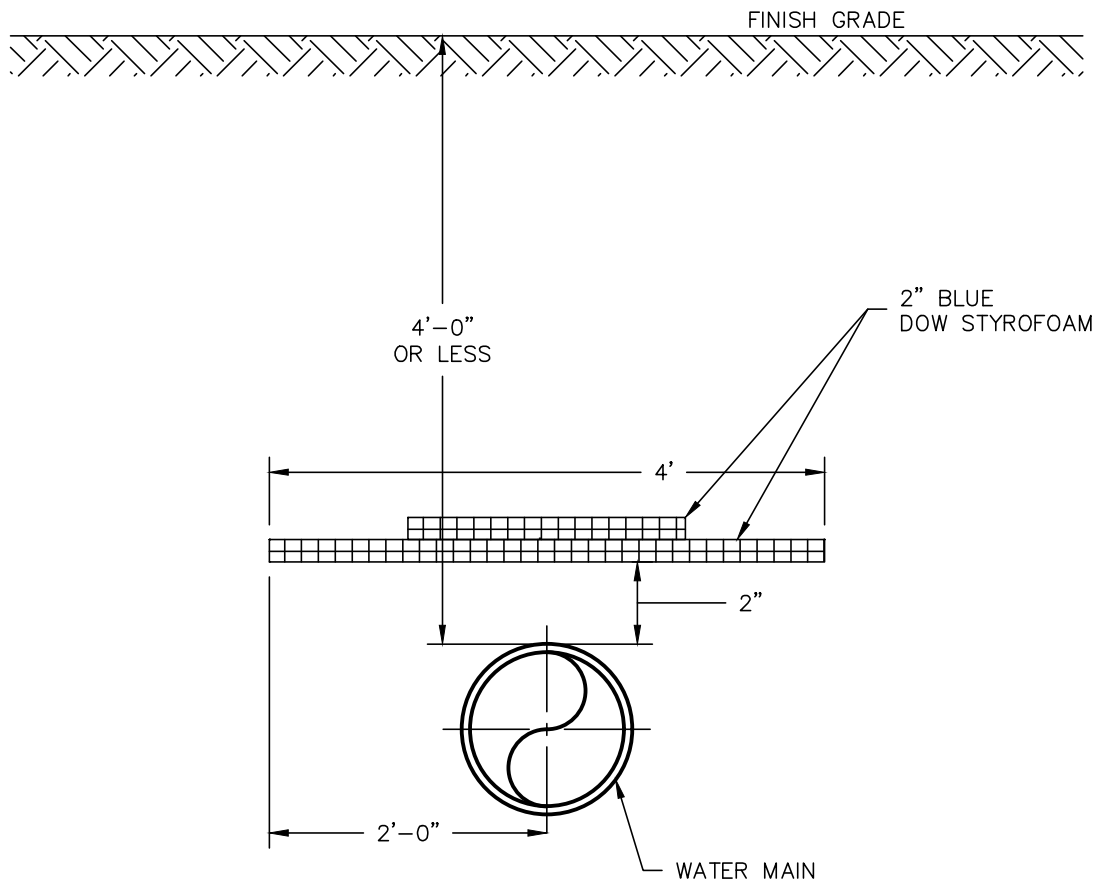
CONDITION II

NOTES:

1. PENNICHUCK WATER WORKS, INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
2. THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2' BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.
3. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH A 1'-0" PIECE OF INSULATION CENTERED OVER SEAM.



DETAIL M18
 STORM DRAIN / WATER MAIN
 INTERSECTING RUNS - ELEV. VIEW
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS

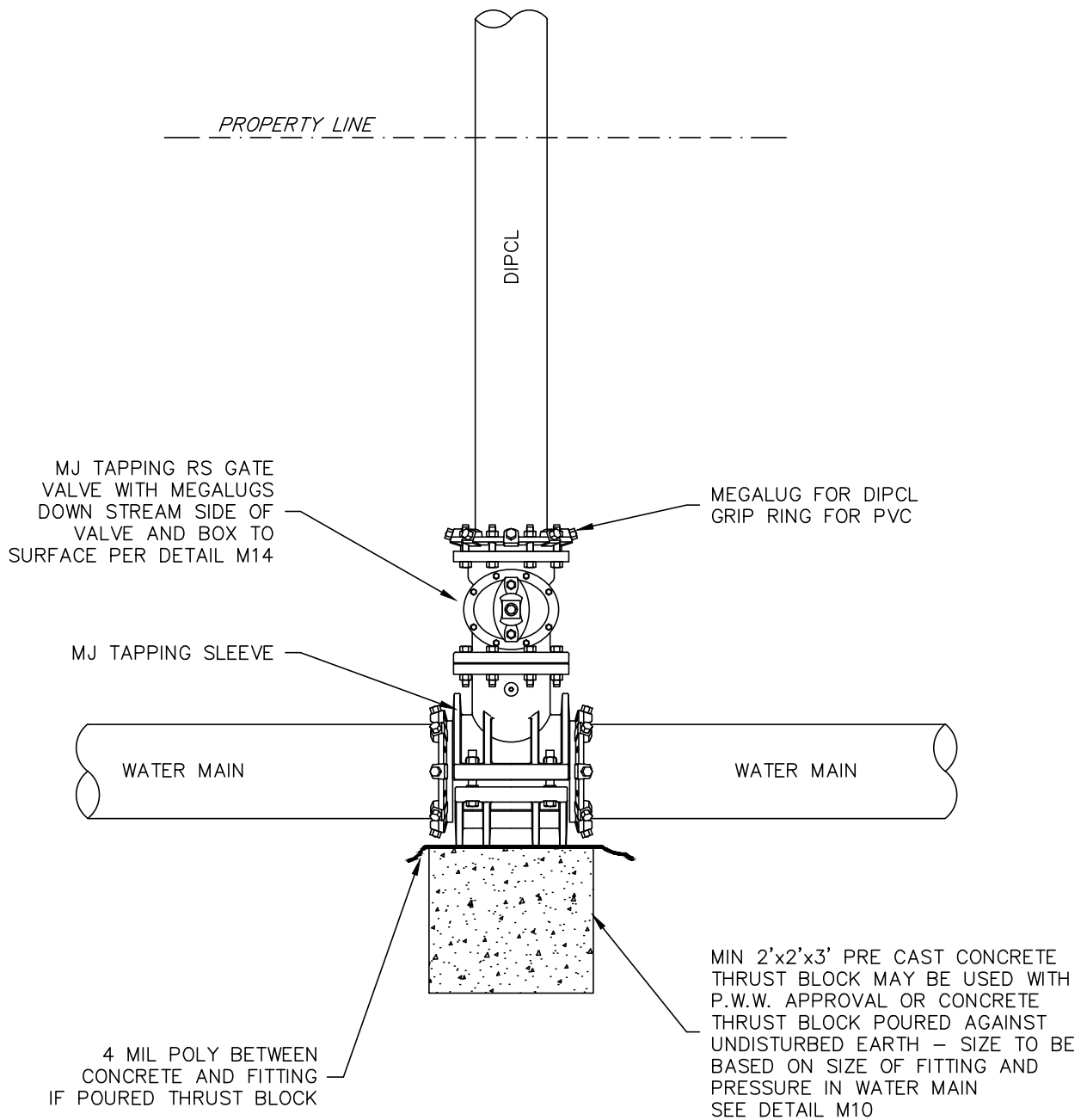


NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. P.W.W., INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
3. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH 2" PIECE OF INSULATION CENTERED OVER SEAM.



DETAIL M19
TYPICAL INSULATION DETAIL FOR
LESS THAN 4'-0" OF COVER
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



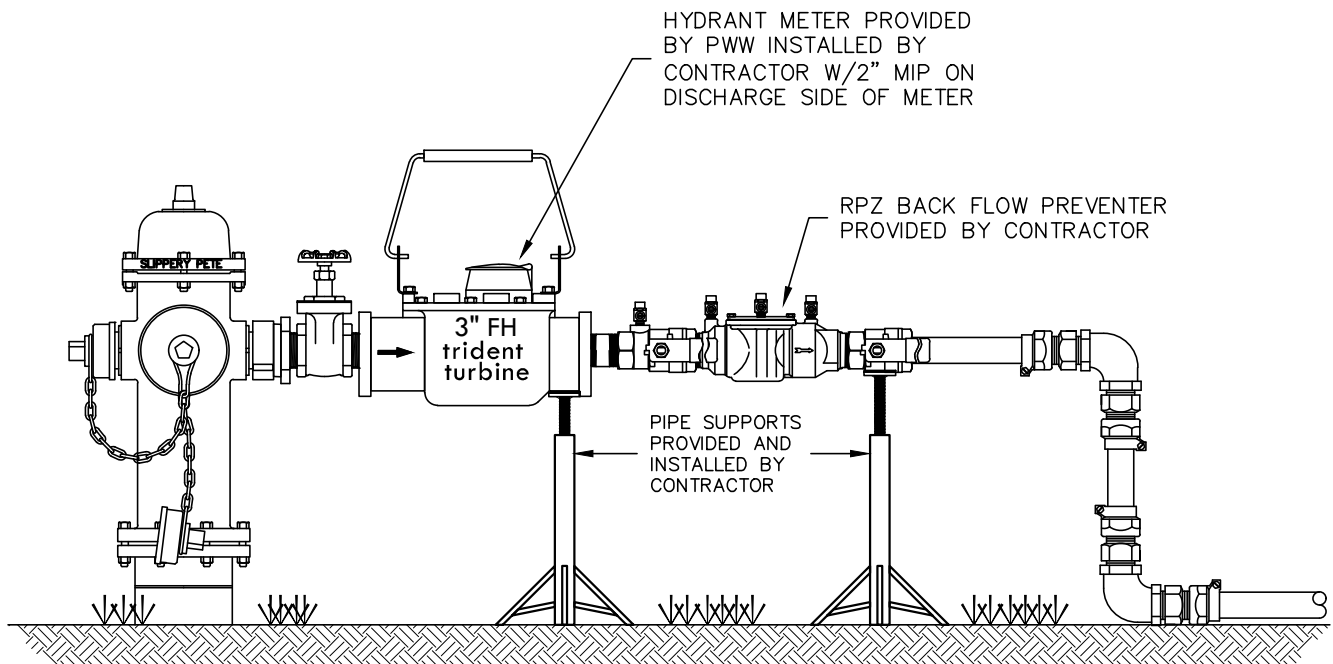
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
2. SEE DETAIL F01 FOR CROSS-SECTIONAL VIEW.



DETAIL M20
TYPICAL LARGE SERVICE AND/OR
TAPPING SLEEVE DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 11-1-2021 SCALE: NTS

NOTE:
INITIAL INSTALLATION OF
CONSTRUCTION METER BY
PWW METER DEPT.

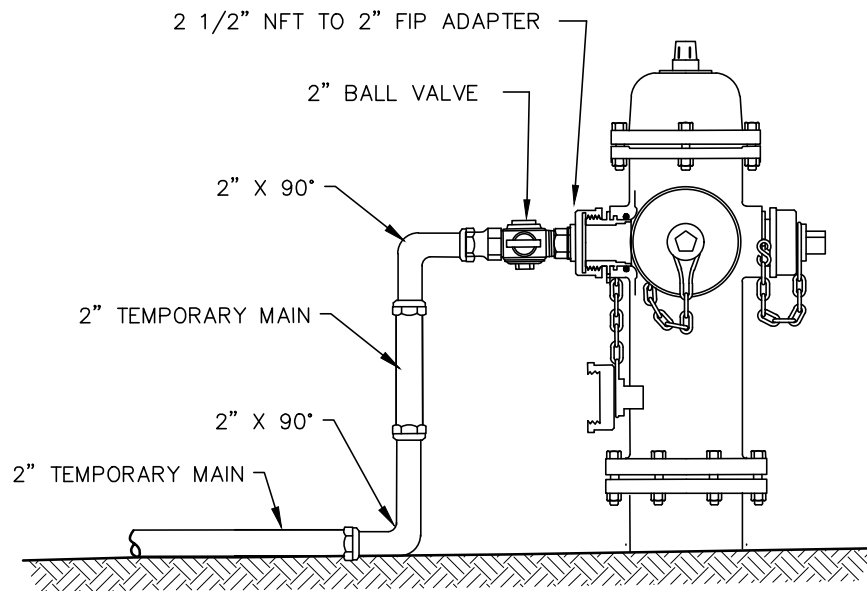


APPLICATION NOTES:

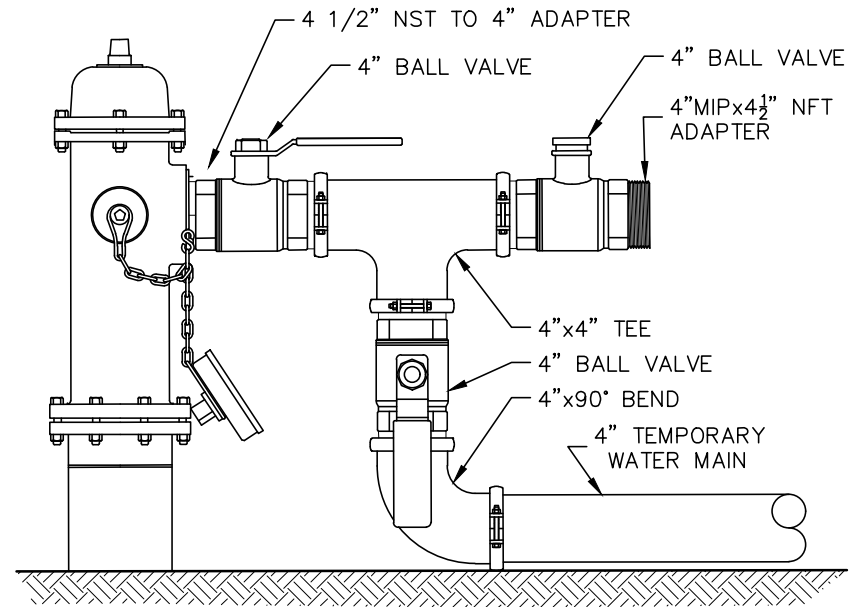
1. USE DESIGNATED HYDRANT ONLY
2. CONTRACTOR IS RESPONSIBLE TO PROTECT THE METER FROM THEFT, DAMAGE AND FREEZING
3. INITIATE AND TERMINATE WATER FLOW SLOWLY.
4. CONTACT PENNICHUCK WATER METER DEPARTMENT TO RELOCATE METER ASSEMBLY TO A DIFFERENT FIRE HYDRANT (603-913-2391)
5. HYDRANT METERS ARE AVAILABLE FROM APRIL 15TH TO NOVEMBER 15TH.



DETAIL T01
TYPICAL CONSTRUCTION METER
INSTALLATION DETAIL
PENNICHUCK WATER WORKS, INC.
REV: 03-18 SCALE: NTS



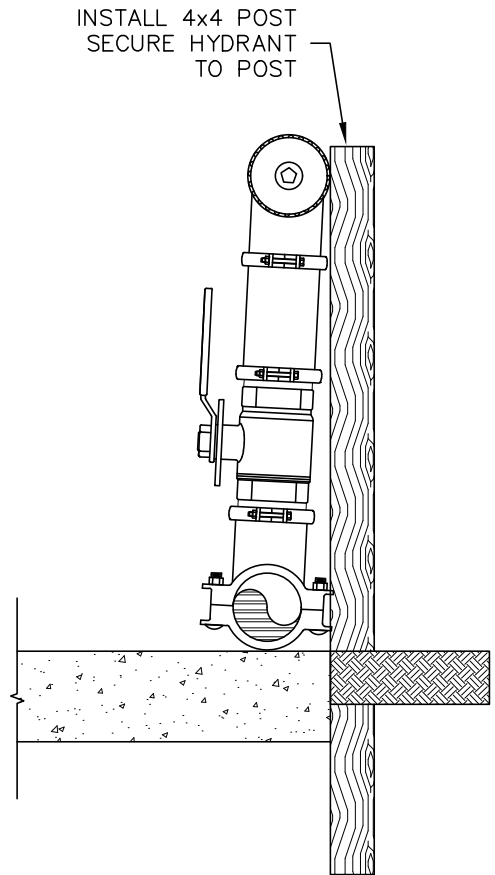
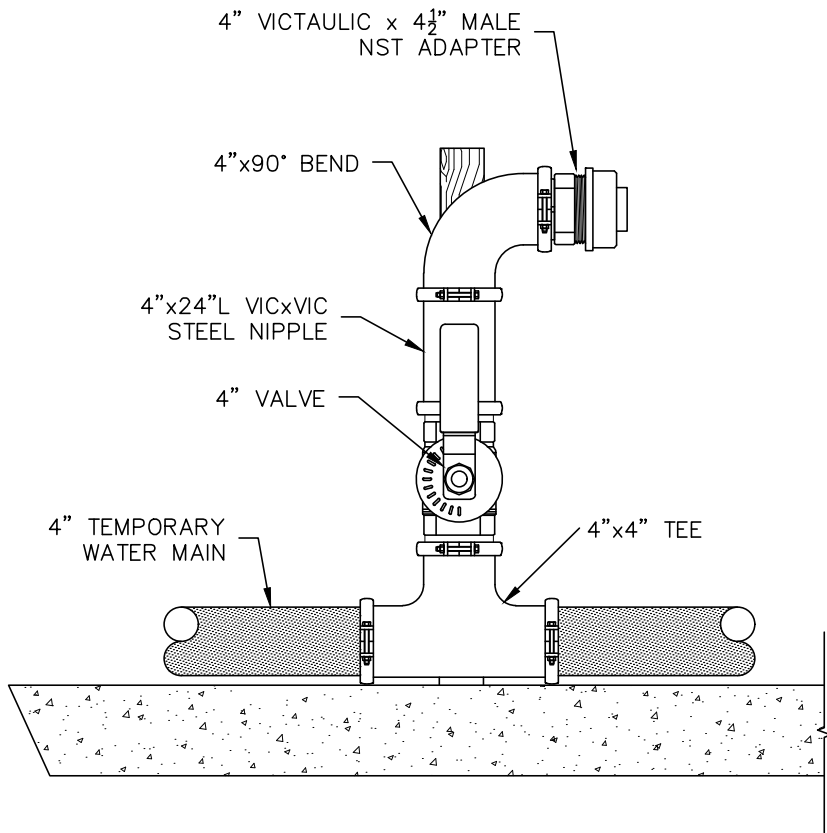
DETAIL "AA"



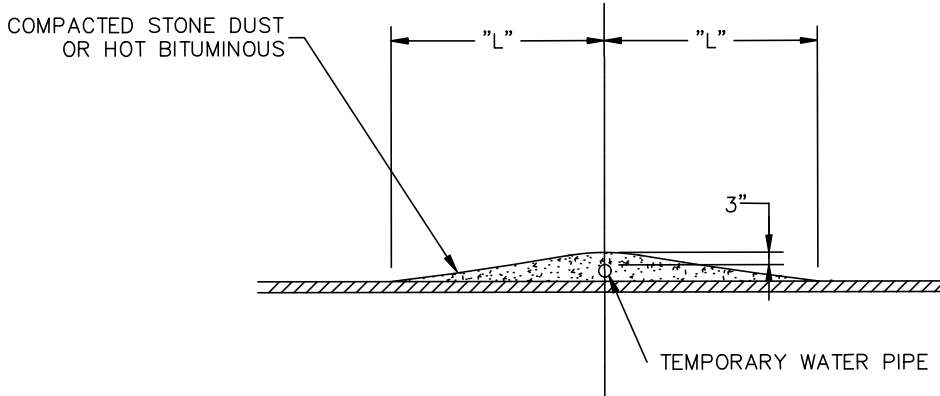
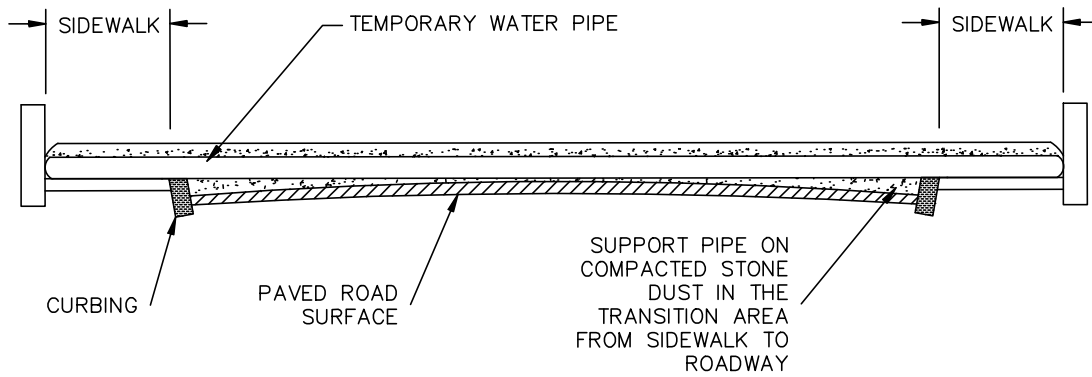
DETAIL "BB"



DETAIL T02
TEMPORARY MAIN FED
FROM A HYDRANT
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



DETAIL T03
 TYPICAL FIRE DEPARTMENT
 CONNECTION ON TEMP. MAIN
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS



TEMPORARY WATER PIPE SIZE	"L" DIMENSION
1"	3 FT
2"	4 FT
4"	6 FT

NOTE:
FOR LOW TRAFFIC ROADS ONLY



DETAIL T04
TEMPORARY PEDESTRIAN/ROADWAY
CROSSING DETAIL
 PENNICHUCK WATER WORKS, INC.
 REV: 03-18 SCALE: NTS