

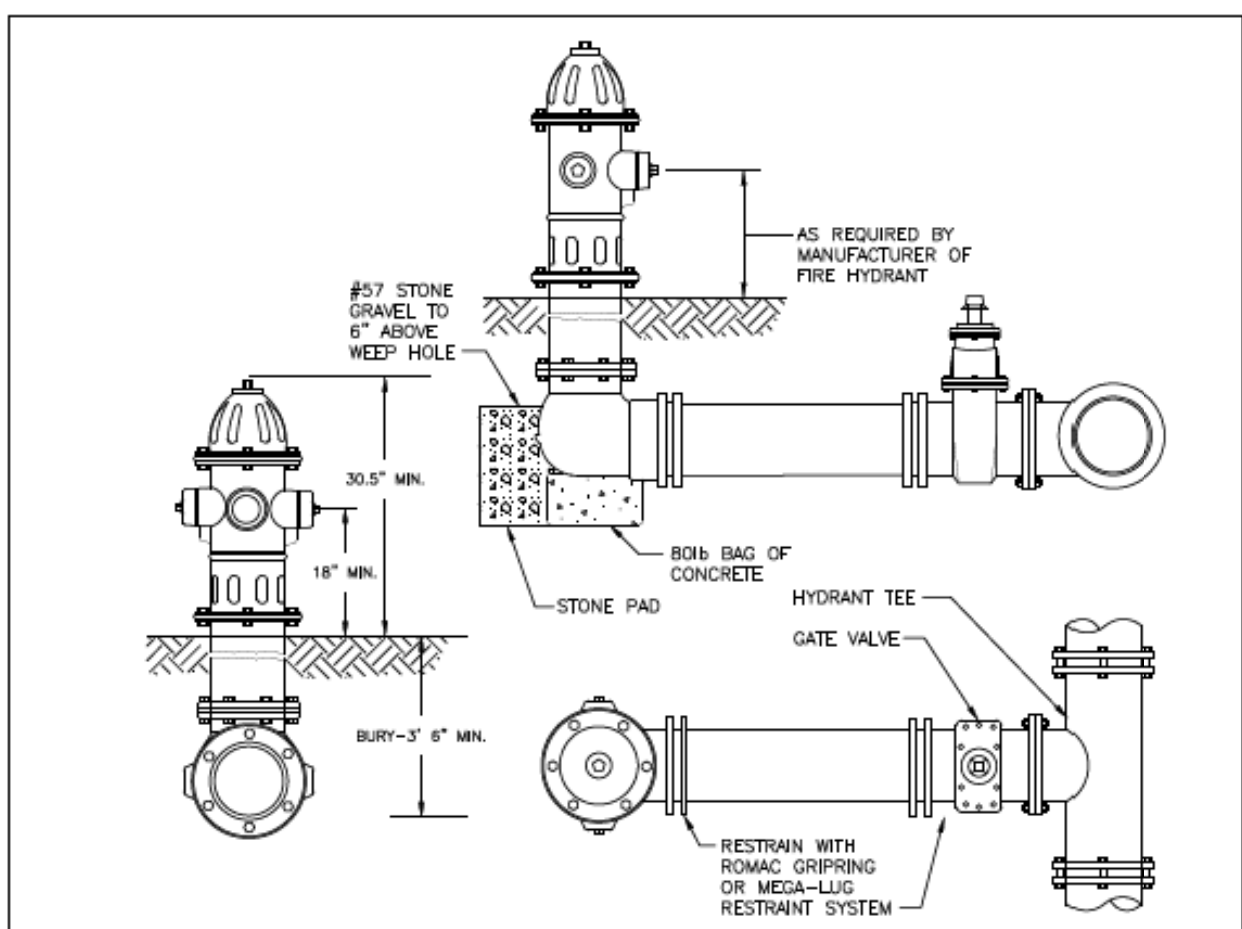
CITY OF CONCORD STANDARD DETAILS

PROJECT REFERENCE NO.	SHEET NO.
B-5808	UC-3C
DESIGNED BY: NKA	
DRAWN BY: NKA	
CHECKED BY: ASV	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	1/11/2023 UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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NC License Number F-0991



- GENERAL NOTES:**
- HYDRANTS SHALL BE MUELLER COMPANY - MODEL: SUPER CENTURION 250; AMERICAN FLOW CONTROL - MODEL 5K* 8-84-B; MEDALLION; OR EQUAL WITH BLACK PRIMER FINISH.
 - HYDRANT SHALL HAVE INTEGRAL SNAP-TIGHT STYLE STORZ CONNECTION WITH 5/8" VALVE OPENING, OPEN LEFT, 1/2" PENTAGON NUTS, TWO-2 3/8" NST CONNECTIONS, ONE-5" STORZ CONNECTION, DRAIN HOLES OPEN, AND 6" MJ SHOE.
 - MINIMUM BURY DEPTH OF 3'-6"
 - ALL HYDRANTS SHALL STAND PLUMB. HYDRANTS WITH PUMPER NOZZLES SHALL HAVE HOSE NOZZLES PARALLEL WITH AND THE PUMPER NOZZLE PERPENDICULAR TO THE CURB LINE. ALL HYDRANTS SHALL BE ORIENTED SO THAT THE PUMPER NOZZLE FACES THE CURB OR AS DIRECTED BY THE CITY.
 - HYDRANT SHALL BE LOCATED AT LEAST 3' BEHIND THE CURB AND LESS THAN 10' FROM THE EDGE OF THE ROAD PAVEMENT OR AS DIRECTED BY THE CITY.
 - ALL OTHER MATERIALS AND INSTALLATION MUST CONFORM WITH THE TECHNICAL STANDARDS OF WSACC AND CITY OF CONCORD.

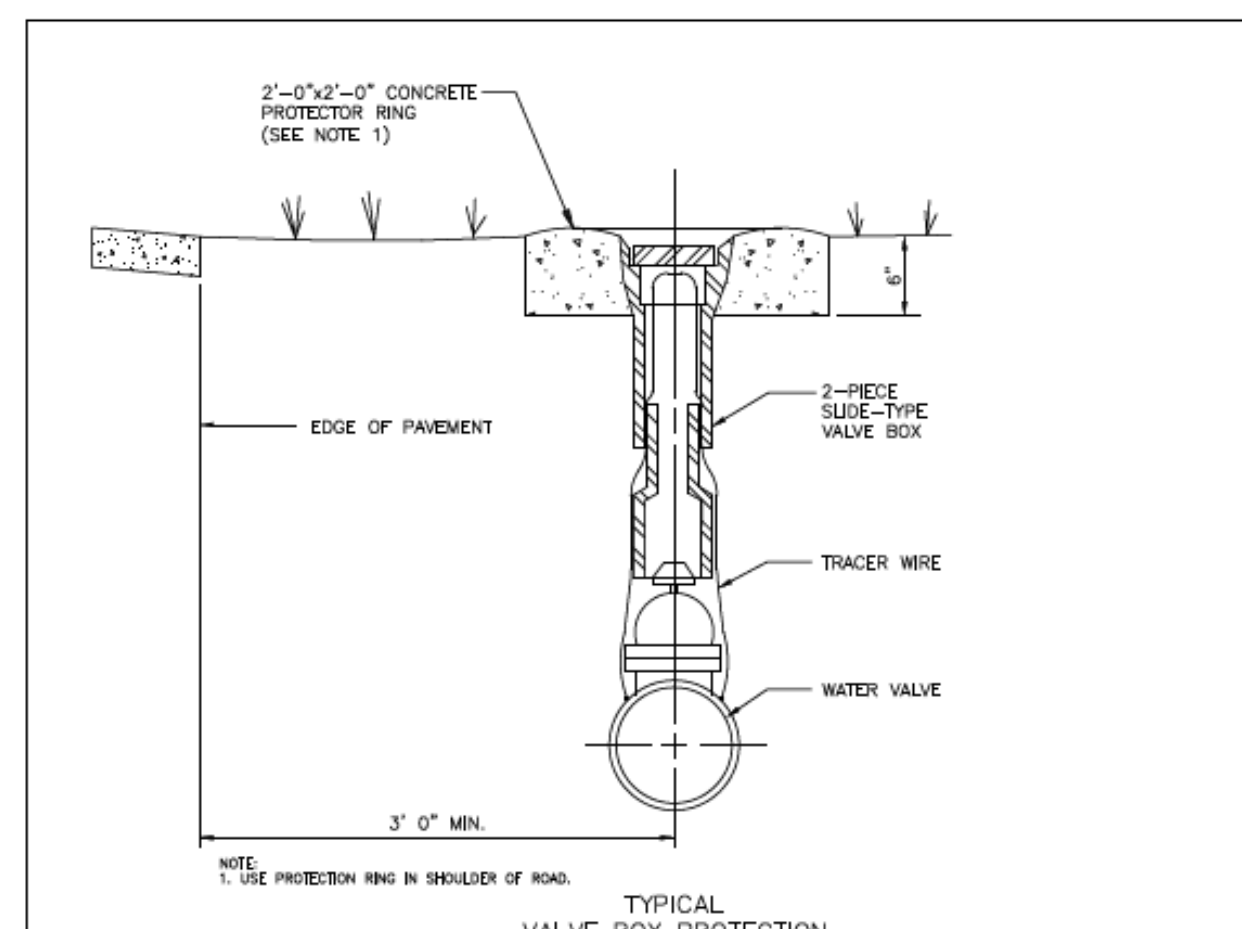
FIRE HYDRANT PAINT COLOR CODE REQUIREMENTS:
ALL NEW FIRE HYDRANTS INSTALLED IN THE CITY OF CONCORD SHALL BE PAINTED IN ACCORDANCE WITH THE FOLLOWING COLORS:

- HYDRANTS ON PUBLIC WATER MAINS SHALL BE PAINTED SAFETY YELLOW, SHERWIN WILLIAMS STEEL MASTER 9500 856-300 SERIES, LVS 30% OR EQUAL.
- PRIVATE HYDRANTS ON PRIVATE WATER MAINS SHALL BE PAINTED SAFETY RED, SHERWIN WILLIAMS SW408T LVR 11X OR EQUAL.

FOR ALL FIELD PAINTING, ALL SURFACES SHALL BE SANDBLASTED AND PROPERLY PREPARED ACCORDING TO THE PAINT MANUFACTURER'S RECOMMENDATION PRIOR TO PAINTING. ALL FIRE HYDRANTS AND ANY PORTIONS OF THE HYDRANT ASSEMBLY EXPOSED TO VIEW (ABOVE ADJACENT GROUND ELEVATION) SHALL BE PAINTED WITH TWO (2) OR MORE EVENLY APPLIED COATS OF HYDRANT ENAMEL PAINT. HYDRANTS WILL BE RETOUCHED / REPAINTED AS NECESSARY AFTER INSTALLATION AND PRIOR TO ACCEPTANCE.

CITY OF CONCORD STANDARD DETAIL
FIRE HYDRANT

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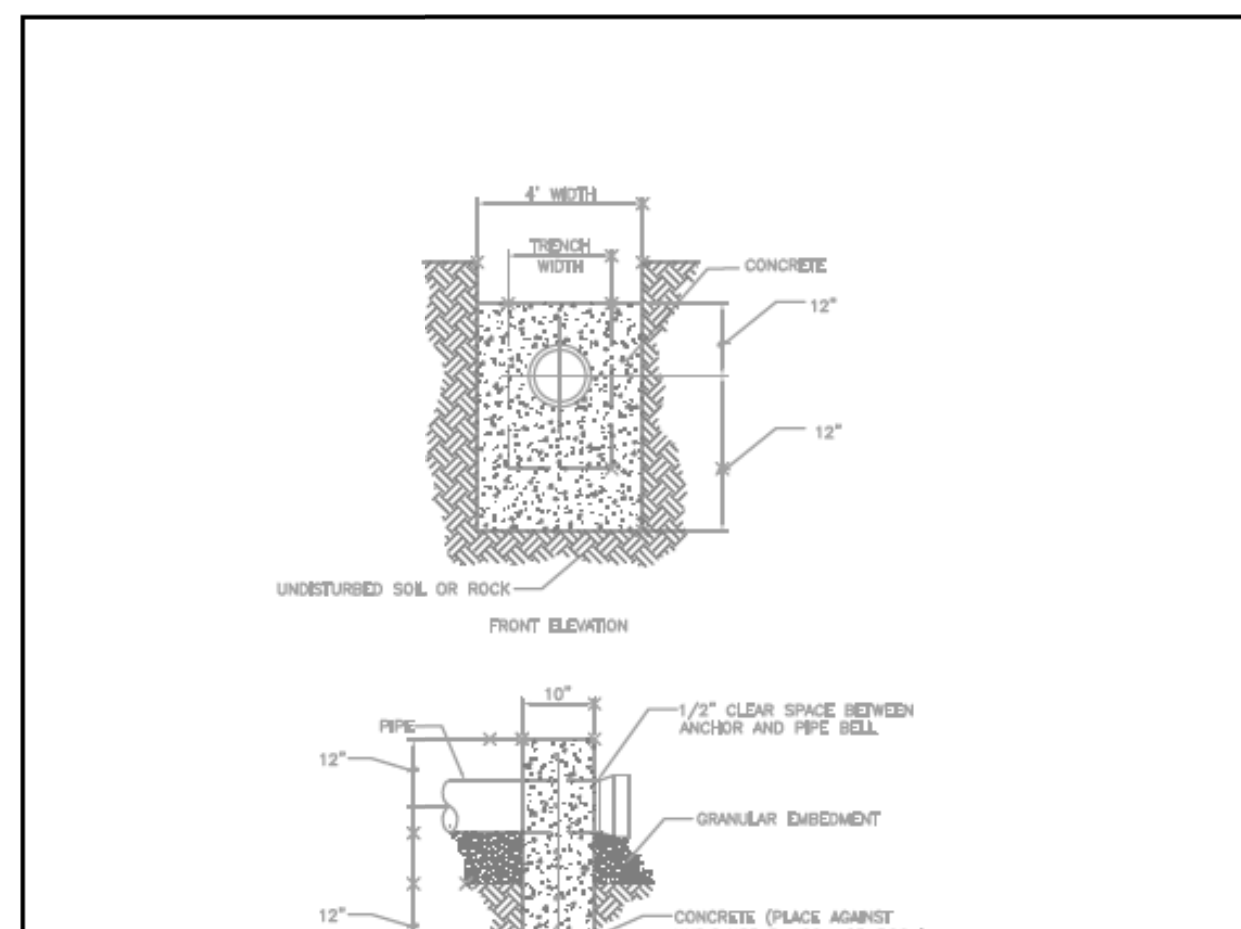


- NOTES:**
- EACH BURIED VALVE TO A DEPTH OF 4 FEET OR LESS SHALL BE PROVIDED WITH A CHARLOTTE FOUNDRY VALVE BOX OR EQUAL. VALVE BOXES SHALL BE CAST IRON, EXTENSION SLEEVE TYPE, FOR THE DEPTH OF COVER REQUIRED BY THE DRAWINGS. NOT MORE THAN ONE EXTENSION WILL BE ALLOWED WITH EACH SLIDE TYPE VALVE BOX. VALVE BOXES SHALL BE NOT LESS THAN 5 INCHES IN INSIDE DIAMETER, SHALL HAVE A MINIMUM THICKNESS AT ANY POINT OF 3/16 INCH, AND SHALL BE PROVIDED WITH SUITABLE CAST IRON BASES AND COVERS.
 - EACH VALVE BURIED TO A DEPTH GREATER THAN 4 FEET SHALL BE PROVIDED WITH A VALVE BOX CONSISTING OF A CAST IRON COVER AND A 6 INCH DUCTILE IRON PIPE SECTION. THE COVER SHALL BE CLAY & BAILEY "NO. 2193" OR TYLER "SERIES 6690-A". THE PIPE SHAFT SHALL BE SIZED TO EXTEND FROM THE VALVE TO 5 INCHES INSIDE THE VALVE BOX COVER.
 - ALL PARTS OF VALVE BOXES, BASES, AND COVERS SHALL BE SHOP COATED BY DIPPING IN ASPHALT VARNISH.
 - VALVES AND VALVE BOXES SHALL BE SET PLUMB. EACH VALVE BOX SHALL BE PLACED DIRECTLY OVER THE VALVE IT SERVES, WITH THE TOP OF THE BOX BROUGHT FLUSH WITH THE FINISHED GRADE. AFTER BEING PLACED IN PROPER POSITION, EARTH/FILL SHALL BE PLACED AROUND EACH VALVE BOX AND THOROUGHLY TAMPED ON EACH SIDE OF THE BOX. THE TOP OF THE BOX SHALL BE SET IN A CONCRETE PROTECTOR RING.
 - NO MORE THAN 6" OF GRADE RINGS SHALL BE USED FOR GRADE ADJUSTMENTS.

1. USE PROTECTOR RING IN SHOULDER OF ROAD.

CITY OF CONCORD STANDARD DETAIL
TYPICAL VALVE BOX

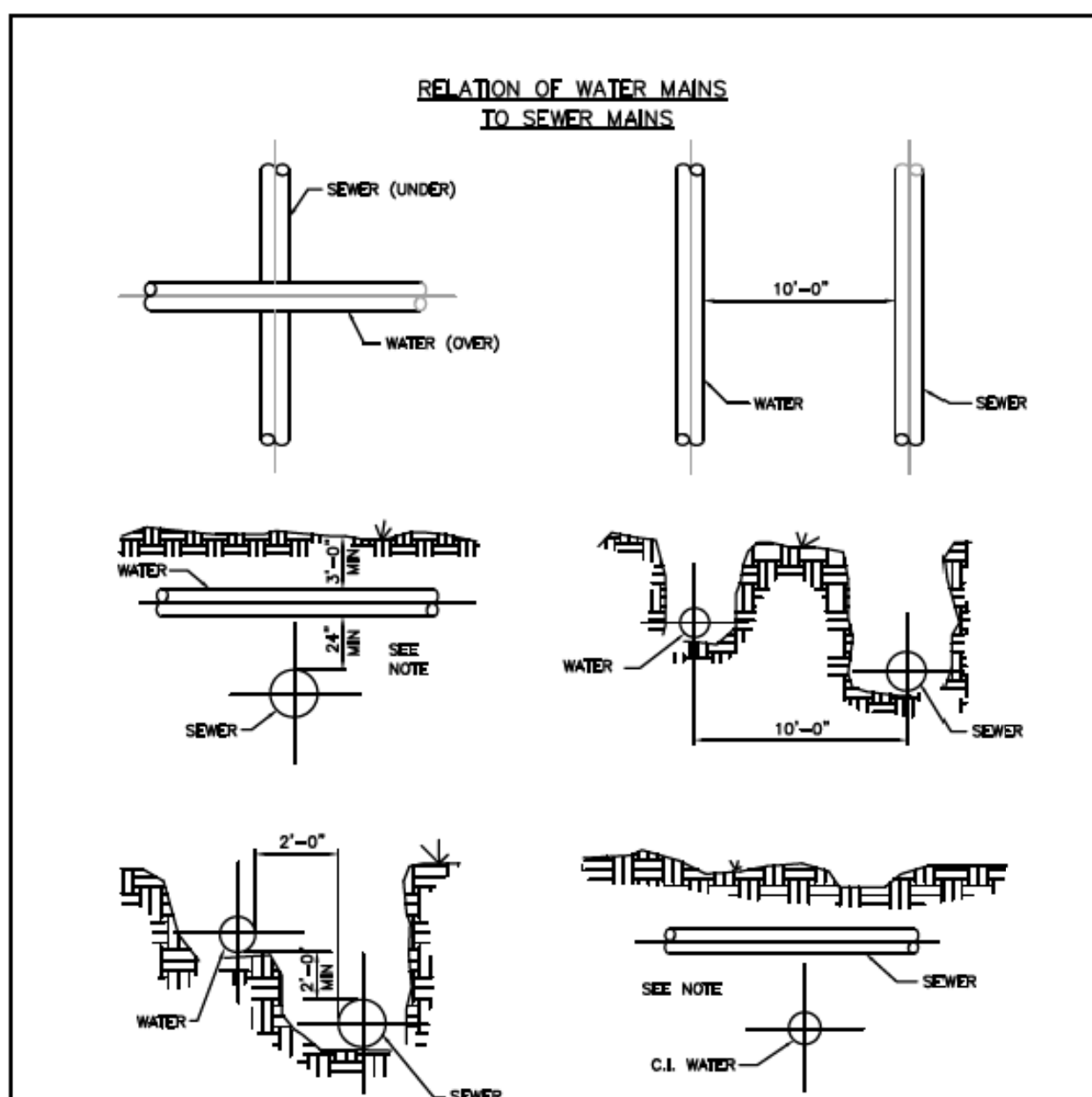
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- NOTES:**
- CONCRETE AND REINFORCING STEEL BARS FOR BURIED BLOCKING AND BRACING OF PIPE SHALL CONFORM TO THE LIMITING REQUIREMENTS SPECIFIED IN WSACC TECHNICAL SPECIFICATION SECTION 03301, EXCEPT THAT THE CEMENT FACTOR AND TOTAL WATER CONTENT MAY BE ADJUSTED TO PROVIDE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS. CONCRETE SHALL HAVE A SLUMP OF NOT LESS THAN 3 INCHES NOR MORE THAN 5 INCHES WHEN PLACED.
 - KEEP ALL PIPING JOINTS CLEAR OF CONCRETE ANCHOR BLOCKS.

CITY OF CONCORD STANDARD DETAIL
TYPICAL ANCHOR BLOCK

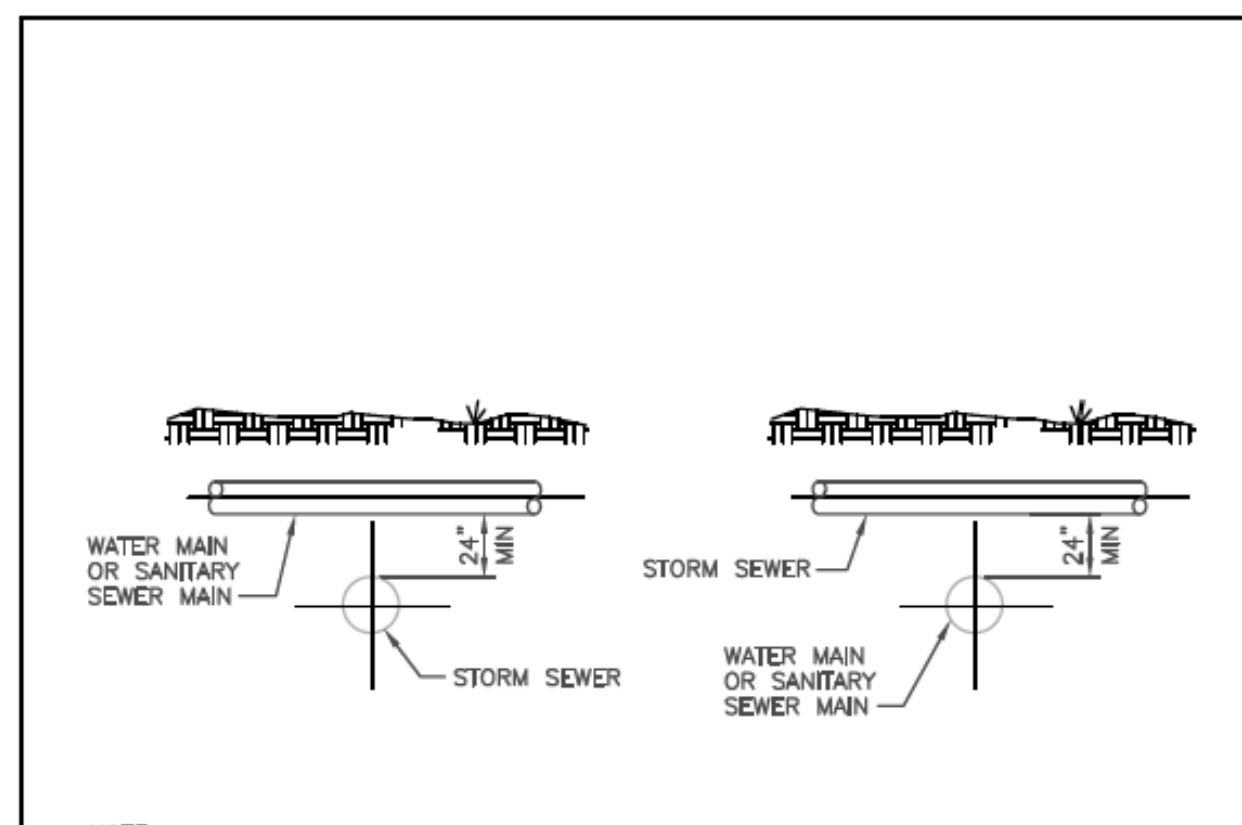
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NOTE:
WHEN THE WATER MAIN IS ABOVE THE SEWER, BUT WITH LESS THAN 24" OF VERTICAL CLEARANCE, OR WHEN THE SEWER IS ABOVE THE WATER MAIN, BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE CONSTRUCTED OF 20 LINEAR FEET OF PERVIOUS MATERIALS LOCATED ON CENTER TO THE CROSSING WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A MINIMUM LATERAL DISTANCE OF 10 FEET TO EACH SIDE OF THE CROSSING, AS MEASURED AT RIGHT ANGLES TO THE SEWER CROSSING.
FOR ALL WATER MAINS AT THE PIPE MATERIAL TRANSITIONS FROM C-900 PVC TO DUCTILE IRON (DI) PIPE, RESTRAINED MECHANICAL JOINT SLEEVES SHALL BE UTILIZED TO JOIN THE PIPES.

CITY OF CONCORD STANDARD DETAIL
RELATION OF WATER MAINS TO SEWER MAINS

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NOTE:
WHEN A WATER MAIN OR SANITARY SEWER MAIN CROSSES OVER OR UNDER A STORM SEWER AND CONDITIONS PREVENT THE REQUIRED 24" MIN VERTICAL SEPARATION, THE WATER MAIN OR SANITARY SEWER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.

FOR ALL WATER MAINS AT THE PIPE MATERIAL TRANSITIONS FROM C-900 PVC TO DUCTILE IRON (DI) PIPE, RESTRAINED MECHANICAL JOINT SLEEVES SHALL BE UTILIZED TO JOIN THE PIPES.

CITY OF CONCORD STANDARD DETAIL
RELATION OF WATER MAINS AND SEWER MAINS TO STORM SEWER

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