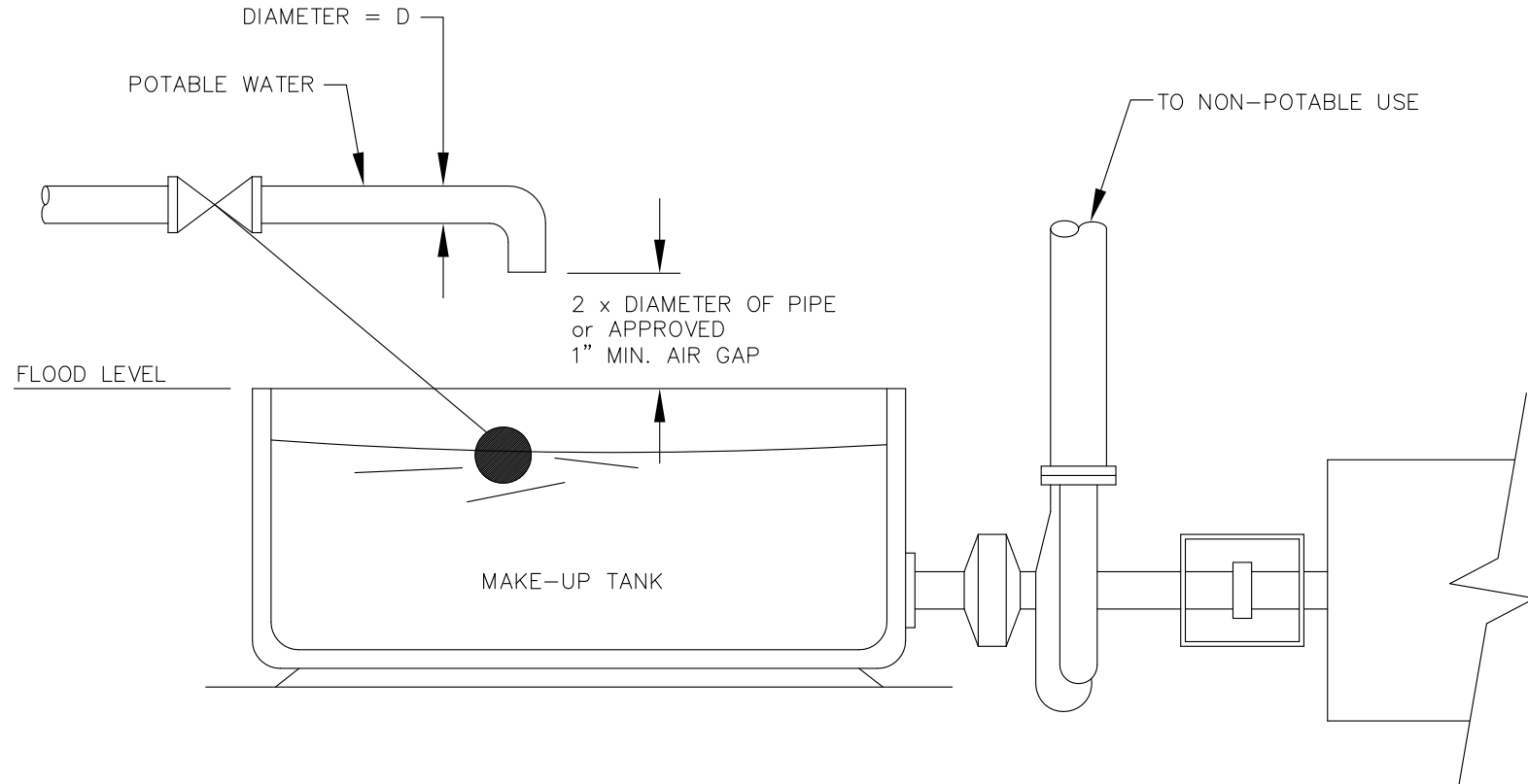


AIR GAP (AG): THE PHYSICAL SEPERATION BY AN AIR SPACE OF THE POTABLE WATER SUPPLY AND AN OPEN VESSEL THAT CONTAINS NONPOTABLE FLUIDS. THE VERTICAL DISTANCE BETWEEN THE SUPPLY PIPE AND THE FLOOD LEVEL RIM SHOULD BE TWO TIMES THE DIAMETER OF THE SUPPLY PIPE, BUT NEVER LESS THAN 1 INCH.



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AIR GAP DETAIL

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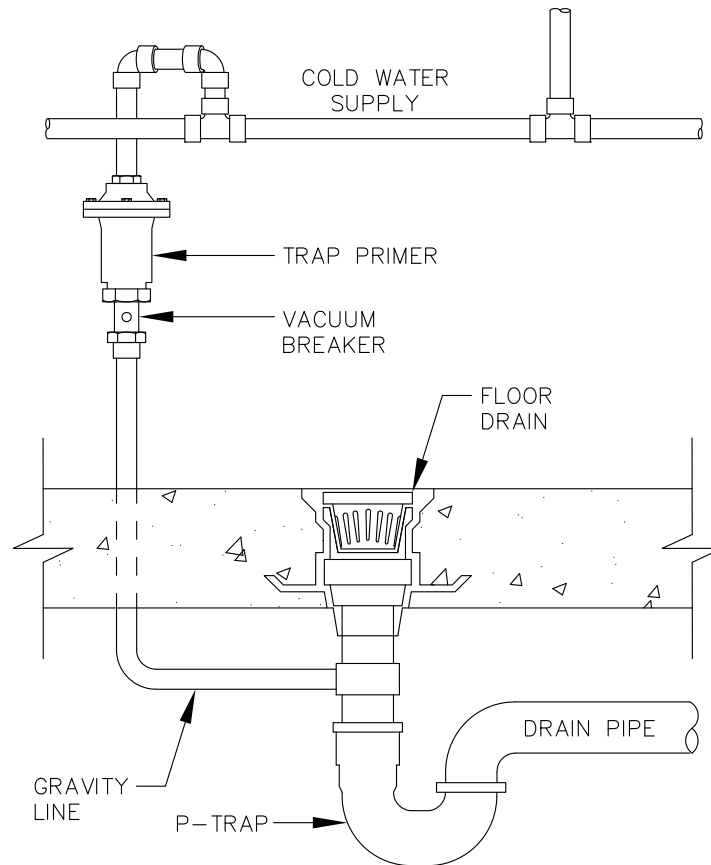
DRAWN: JKP

DATE: 07/04

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12

VACUUM BREAKERS (VB): MAY BE USED ONLY ON NON-PRESSURE CONNECTIONS TO A NON-POTABLE SYSTEM WHERE THE VACUUM BREAKER IS NEVER SUBJECTED TO BACK PRESSURE AND IS INSTALLED ON THE DISCHARGE SIDE OF THE LAST CONTROL VALVE. IT MUST BE INSTALLED ABOVE THE USAGE POINT. IT CAN NOT BE USED UNDER CONTINUOUS PRESSURE. HOSE VACUUM BREAKERS MAY BE USED ON SILL COCKS AND SIMILAR VALVES WITH THREADED OUTLETS.



VACUUM BREAKER INSTALLATION

N.T.S.



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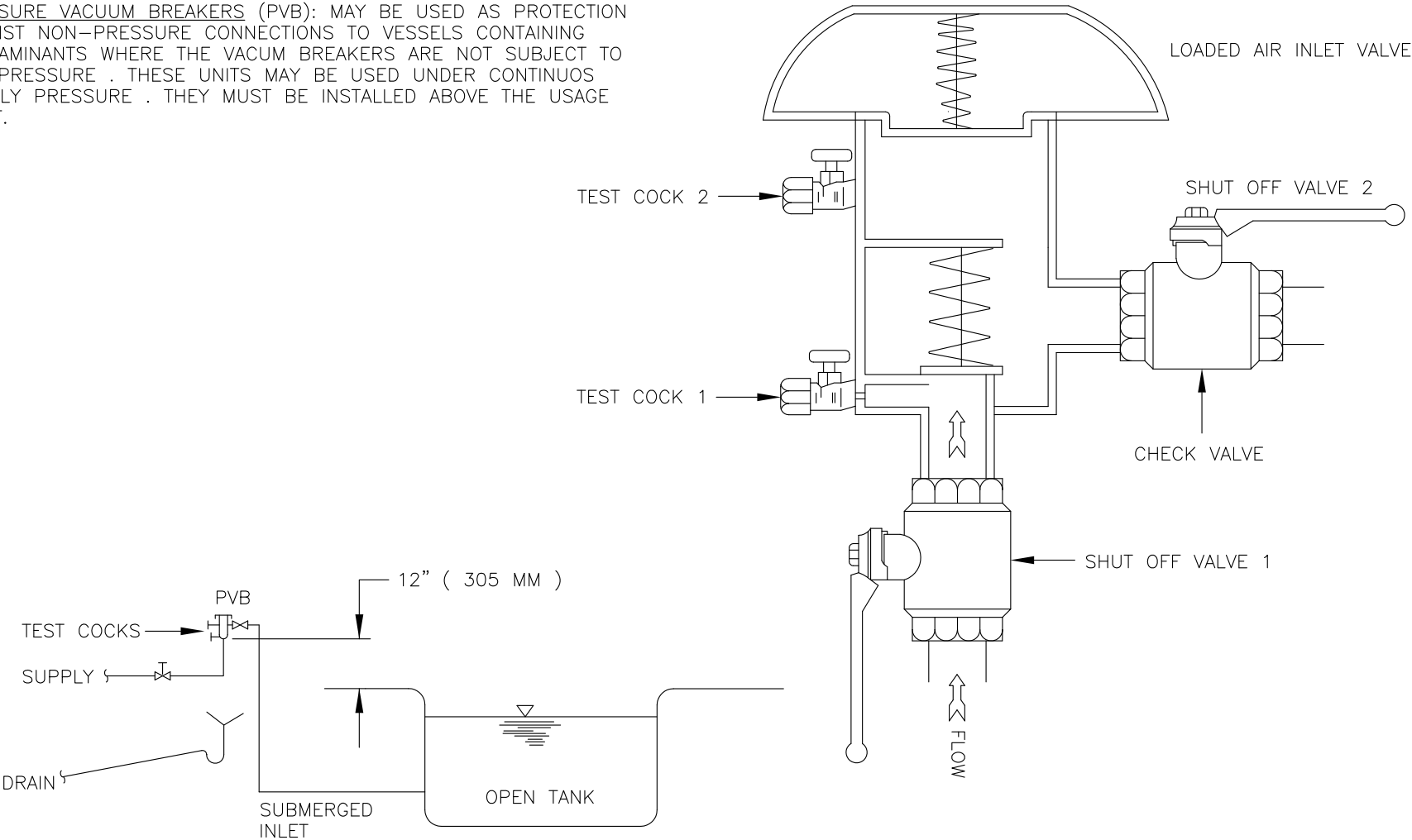
BFP-0002

DESIGNED: CCWSA

DATE: 07/04

BY	REVISIONS	DATE
CHC	ADDED DET.	07/09
CHC	ADDED NOTES	03/12

PRESSURE VACUUM BREAKERS (PVB): MAY BE USED AS PROTECTION AGAINST NON-PRESSURE CONNECTIONS TO VESSELS CONTAINING CONTAMINANTS WHERE THE VACUM BREAKERS ARE NOT SUBJECT TO BACKPRESSURE . THESE UNITS MAY BE USED UNDER CONTINUOUS SUPPLY PRESSURE . THEY MUST BE INSTALLED ABOVE THE USAGE POINT.



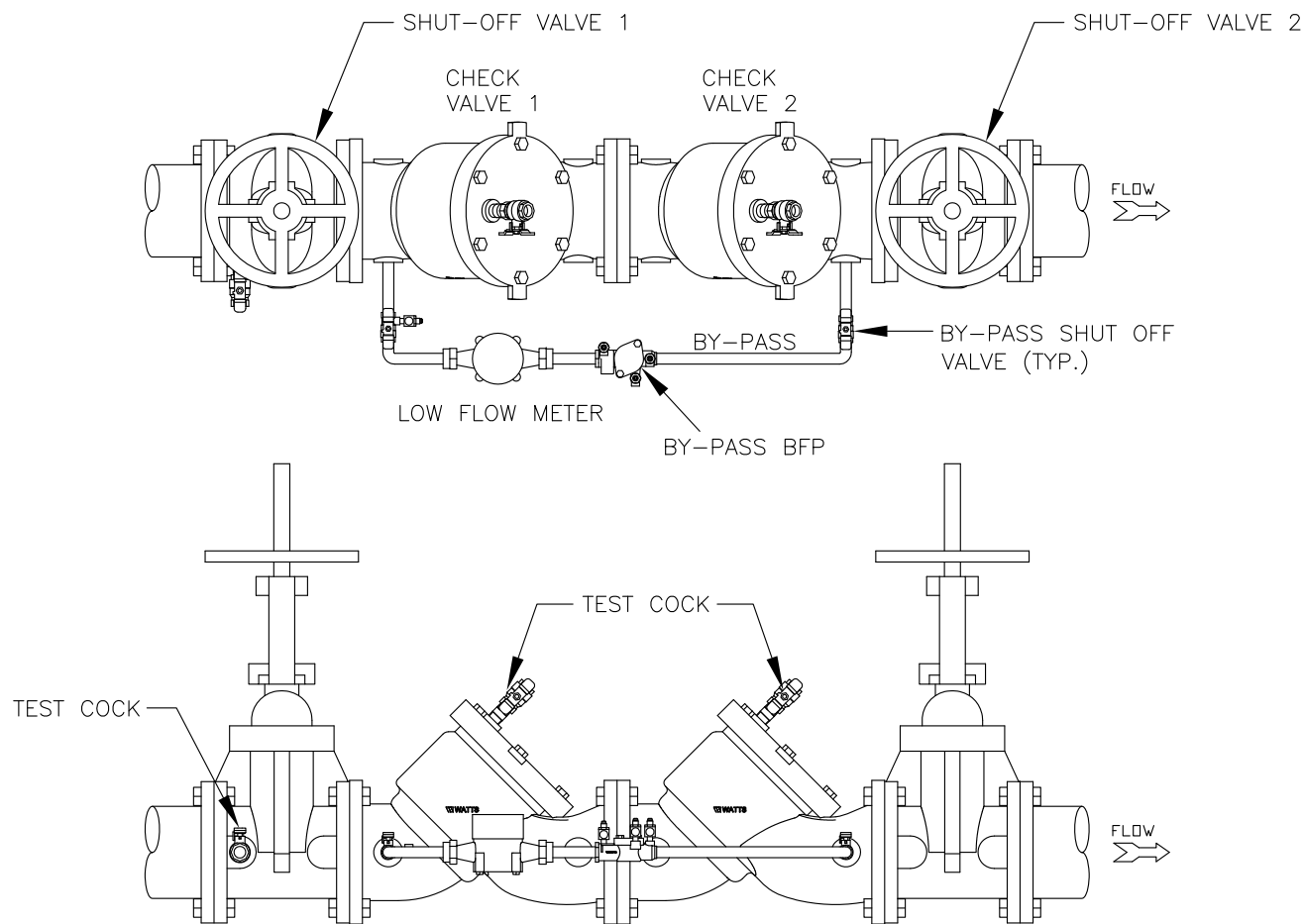
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PRESSURE VACUUM BREAKER ASSEMBLY INSTALLATION

BFP-0003

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DOUBLE CHECK VALVE BACKFLOW PREVENTERS (DCV):
 DOUBLE CHECK VALVES AND DUAL CHECK BACKFLOW PREVENTERS MAY BE USED AS PROTECTION FOR ALL PRESSURE CONNECTIONS THROUGH WHICH POLLUTANTS MIGHT ENTER THE POTABLE WATER SYSTEM IN CONCENTRATION THAT COULD CONSTITUTE A NUISANCE OR BE AESTHETICALLY OBJECTIONABLE, SUCH AS AIR, STEAM, OR OTHER MATERIALS THAT DO NOT CONSTITUTE A HEALTH HAZARD.



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DOUBLE CHECK VALVE BACKFLOW PREVENTERS

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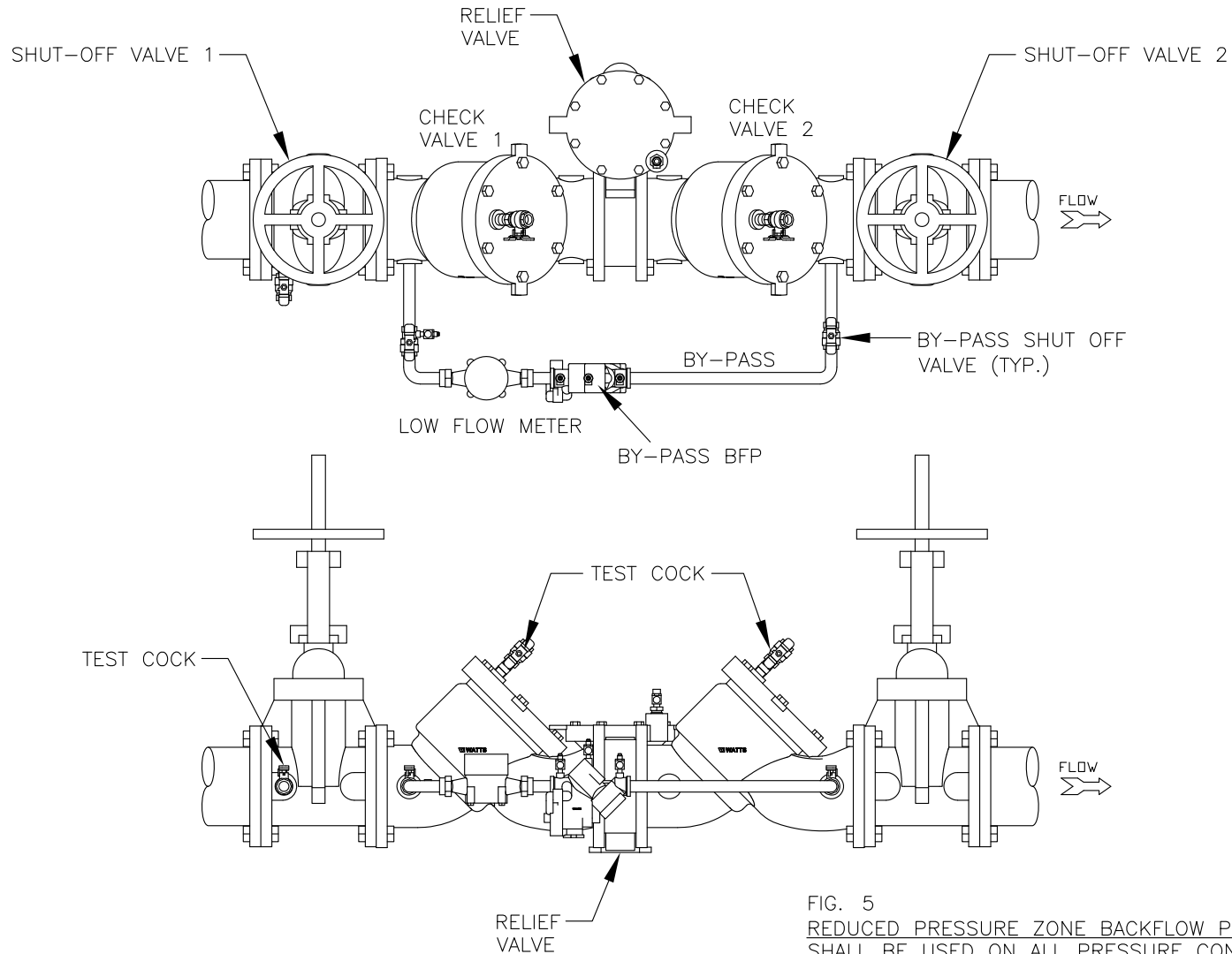


FIG. 5
REDUCED PRESSURE ZONE BACKFLOW PREVENTERS (RPZ):
 SHALL BE USED ON ALL PRESSURE CONNECTIONS THAT
 SHALL BE SUBJECT TO BACKPRESSURE, AND WHERE THERE IS
 THE POTENTIAL FOR CONTAMINATION AND HEALTH HAZARD.



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REDUCED PRESSURE BACKFLOW PREVENTER

BFP-0005

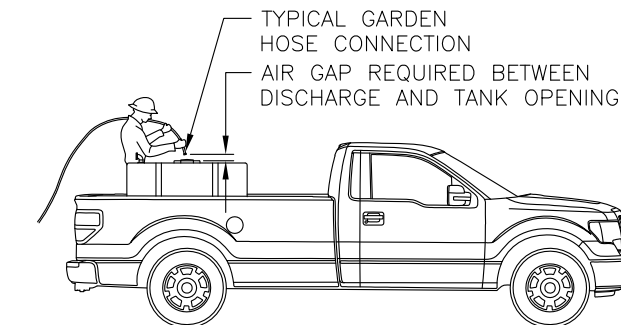
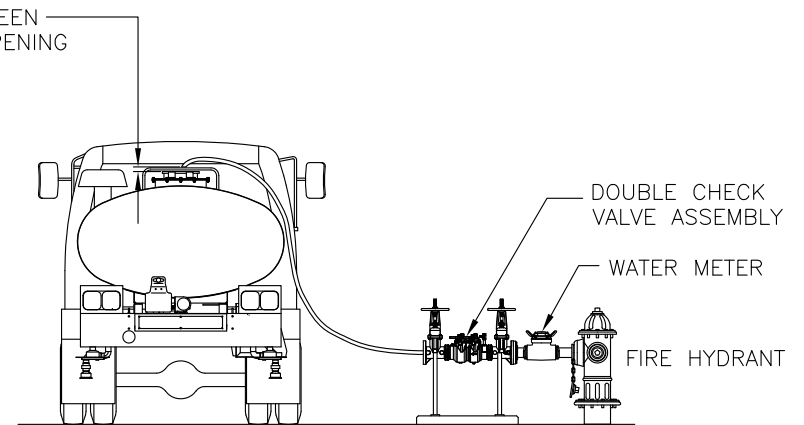
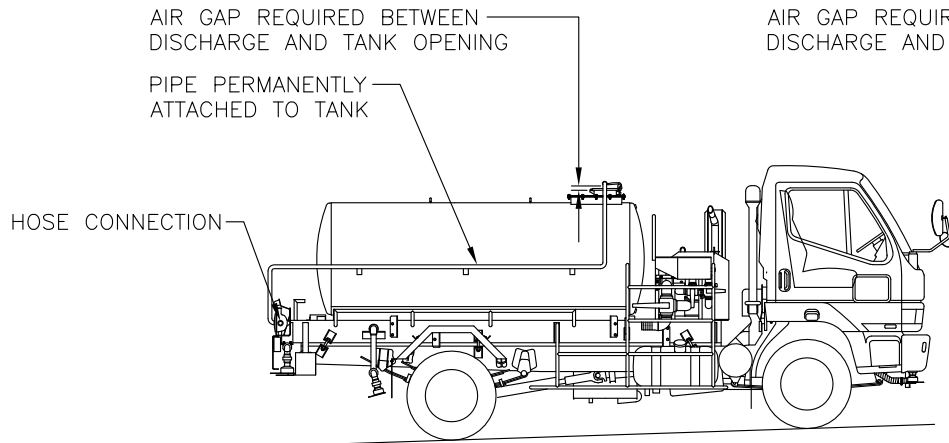
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SCALE: NTS

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NOTE:

ANYONE FOUND IN VIOLATION WILL BE PROHIBITED FROM FURTHER USE OF THE CONNECTION AND WILL BE SUBJECT TO FINE.

APPROVED METHODS OF FILLING TANKS, TANKER TRUCKS :

ANY WATER BEING INTRODUCED INTO A VESSEL, TANK ,TANKER TRUCK ETC.; FROM ANY CONNECTION TO THE COWETA COUNTY WATER DISTRIBUTION MUST BE THROUGH AN APPROVED BACKFLOW PREVENTION DEVICE. THE MOST EFFECTIVE AND ECONOMICAL METHOD IS BY AN APPROVED AIR-GAP SEPERATION BETWEEN THE WATER INLET AND OVERFLOW LEVEL OF THE VESSEL OR TANK. AT NO TIME SHALL A HOSE, EITHER HAND HELD OR OTHERWISE IMMERSED IN A VESSEL OR TANK BE AN ACCEPTABLE METHOD FOR THIS TYPE APPLICATION.



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TANK/TRUCK FILLING METHODS

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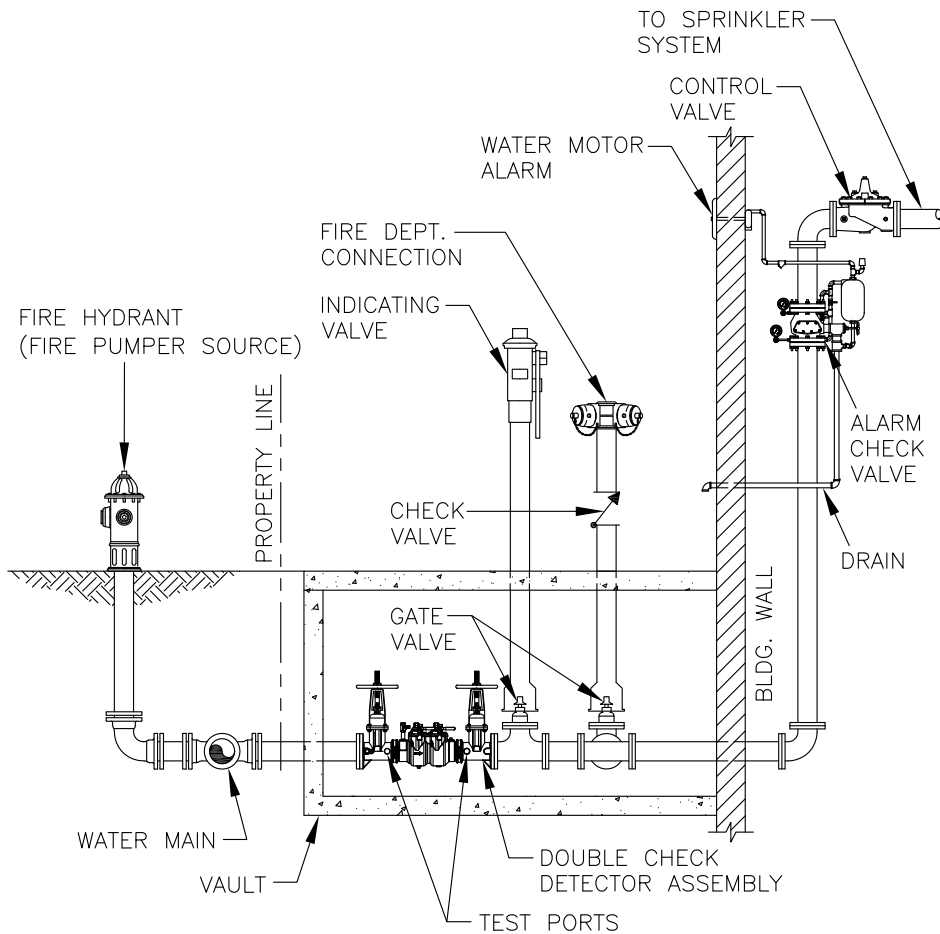
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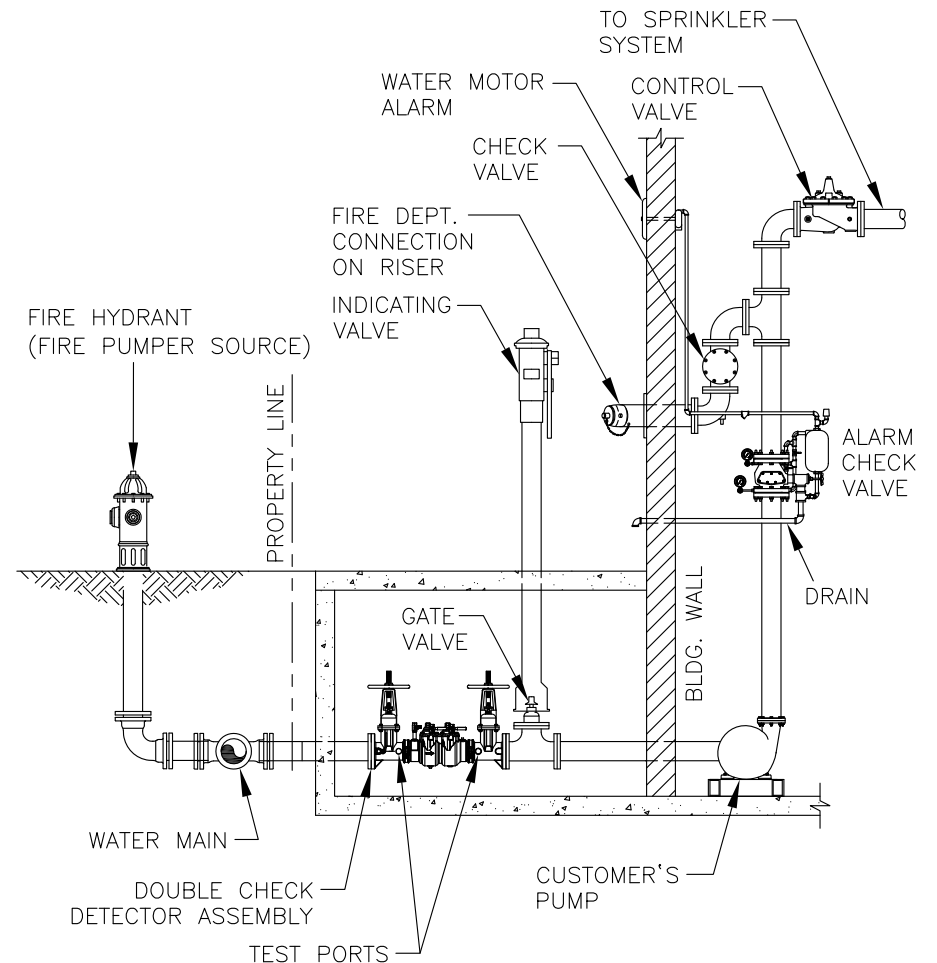
BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12

CLASS 1 FIRE SPRINKLER – SYSTEM



CLASS 1 DIRECT CONNECTIONS FROM PUBLIC WATER MAINS ONLY; NO PUMPS, TANKS, OR RESEVOIRS; NO PHYSICAL CONNECTION FROM OTHER WATER SUPPLIES; NO ANTIFREEZE OR OTHER ADDITIVES OF ANY KIND; ALL SPRINKLER DRAINS DISCHARGING TO ATMOSPHERE, DRY WELLS OR OTHER SAFE OUTLETS.

CLASS 2 FIRE SPRINKLER SYSTEM



CLASS 2 SAME AS CLASS 1, EXCEPT BOOSTER PUMPS MAY BE INSTALLED IN THE CONNECTIONS FROM THE STREET MAINS, (BOOSTER PUMPS DO NOT AFFECT THE POTABILITY OF THE SYSTEM: IT IS NECESSARY, HOWEVER, TO AVOID DRAFTING SO MUCH WATER THAT PRESSURE IN THE WATER MAIN IS REDUCED BELOW 20 P.S.I.)



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CLASS 1 AND 2 FIRE SPRINKLER

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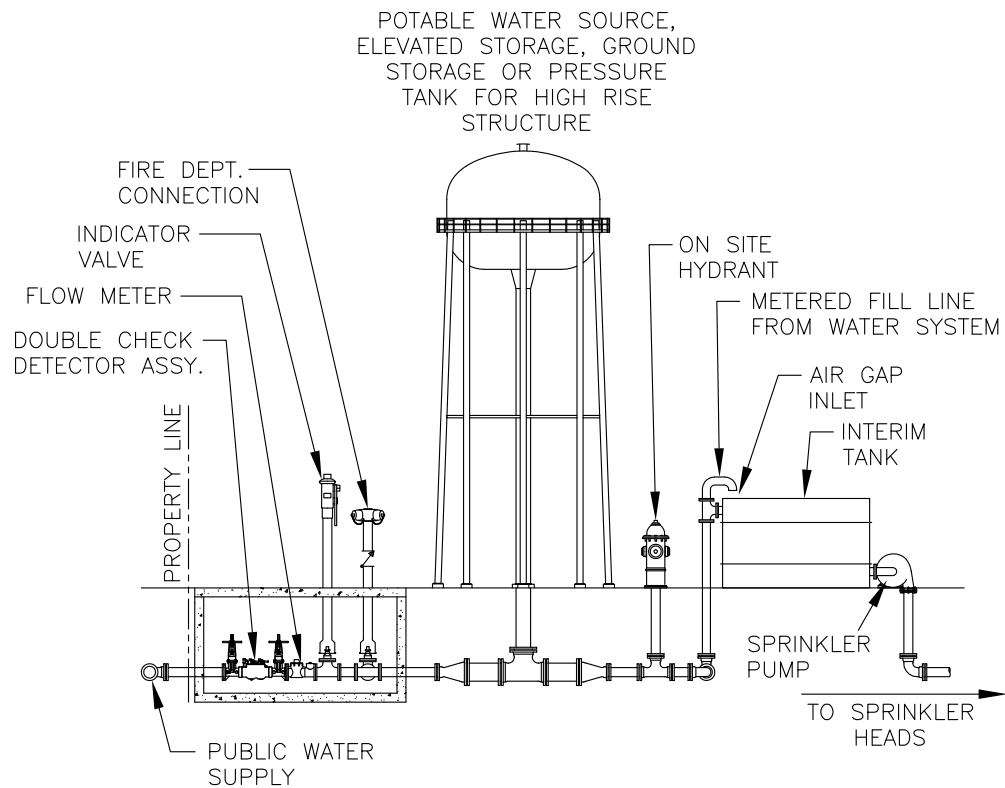
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DATE: 07/04

SCALE: NTS

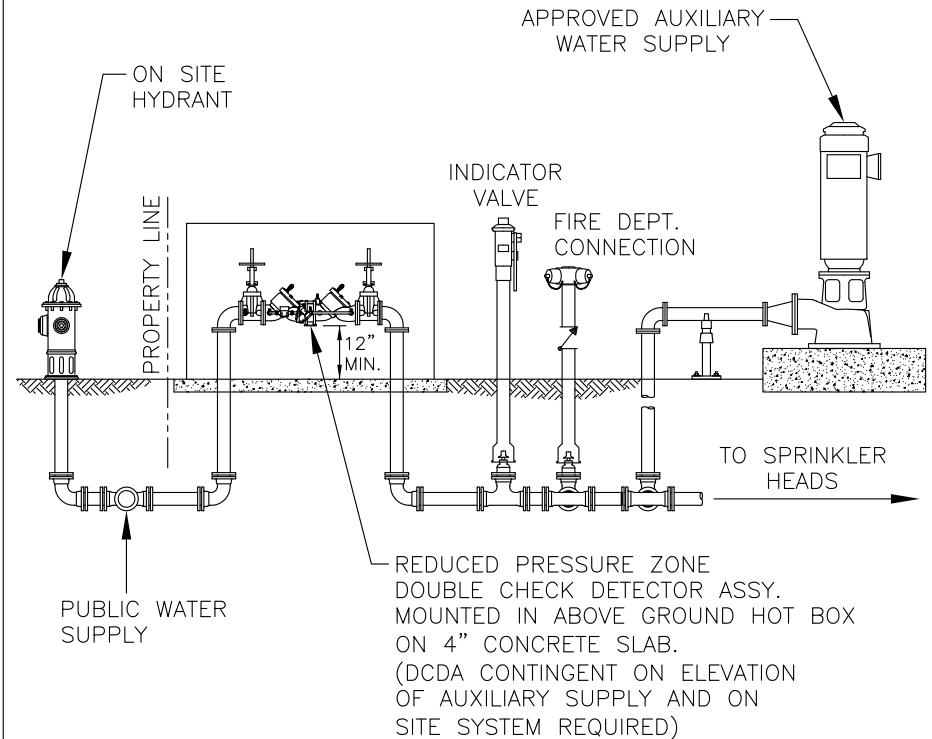
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CLASS 3 FIRE SPRINKLER SYSTEM



CLASS 3 DIRECT CONNECTION FROM PUBLIC WATER SUPPLY MAIN PLUS ONE OR MORE OF THE FOLLOWING: ELEVATED STORAGE TANKS; FIRE PUMPS TAKING SUCTION FROM ABOVE – GROUND COVERED RESERVOIRS OR TANKS; AND PRESSURE TANKS. (ALL STORAGE FACILITIES ARE FILLED BY OR CONNECT TO PUBLIC WATER ONLY, THE WATER IN THE TANKS TO BE MAINTAINED IN A POTABLE CONDITION. OTHERWISE, CLASS 3 SYSTEMS ARE THE SAME AS CLASS 1.)

CLASS 4 FIRE SPRINKLER SYSTEM



CLASS 4 DIRECTLY SUPPLIED FROM PUBLIC MAINS SIMILAR TO CLASSES 1 AND 2 WITH AN AUXILIARY WATER SUPPLY ON OR AVAILABLE TO THE PREMISES; OR AN AUXILIARY SUPPLY LOCATED WITHIN 1,700 FEET OF THE PUMPER CONNECTION.



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CLASS 3 AND 4 FIRE SPRINKLER

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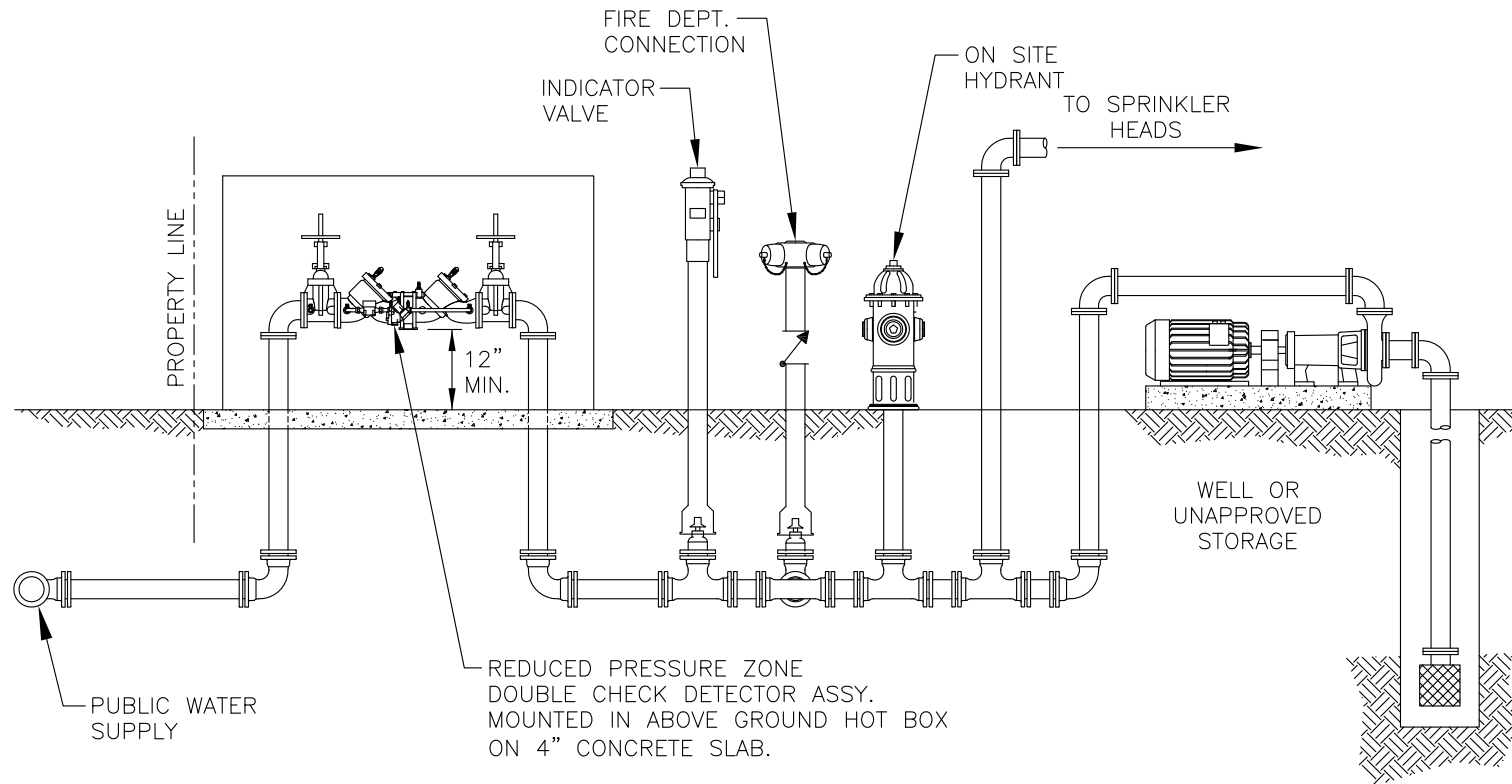
DRAWN: JKP

DATE: 07/04

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12

CLASS 5 FIRE SPRINKLER SYSTEM



CLASS 5 ~ DIRECTLY SUPPLIED FROM PUBLIC MAINS, AND INTERCONNECTED WITH AUXILLARY SUPPLIES, SUCH AS: PUMPS TAKING SUCTION FROM RESERVOIRS EXPOSED TO CONTAMINATION, OR RIVERS AND PONDS: DRIVEN WELLS: MILLS OR OTHER INDUSTRIAL WATER SYSTEMS: OR WHERE ANTIFREEZE OR OTHER ADDITIVES ARE USED.



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CLASS 5 FIRE SPRINKLER

BFP-0009

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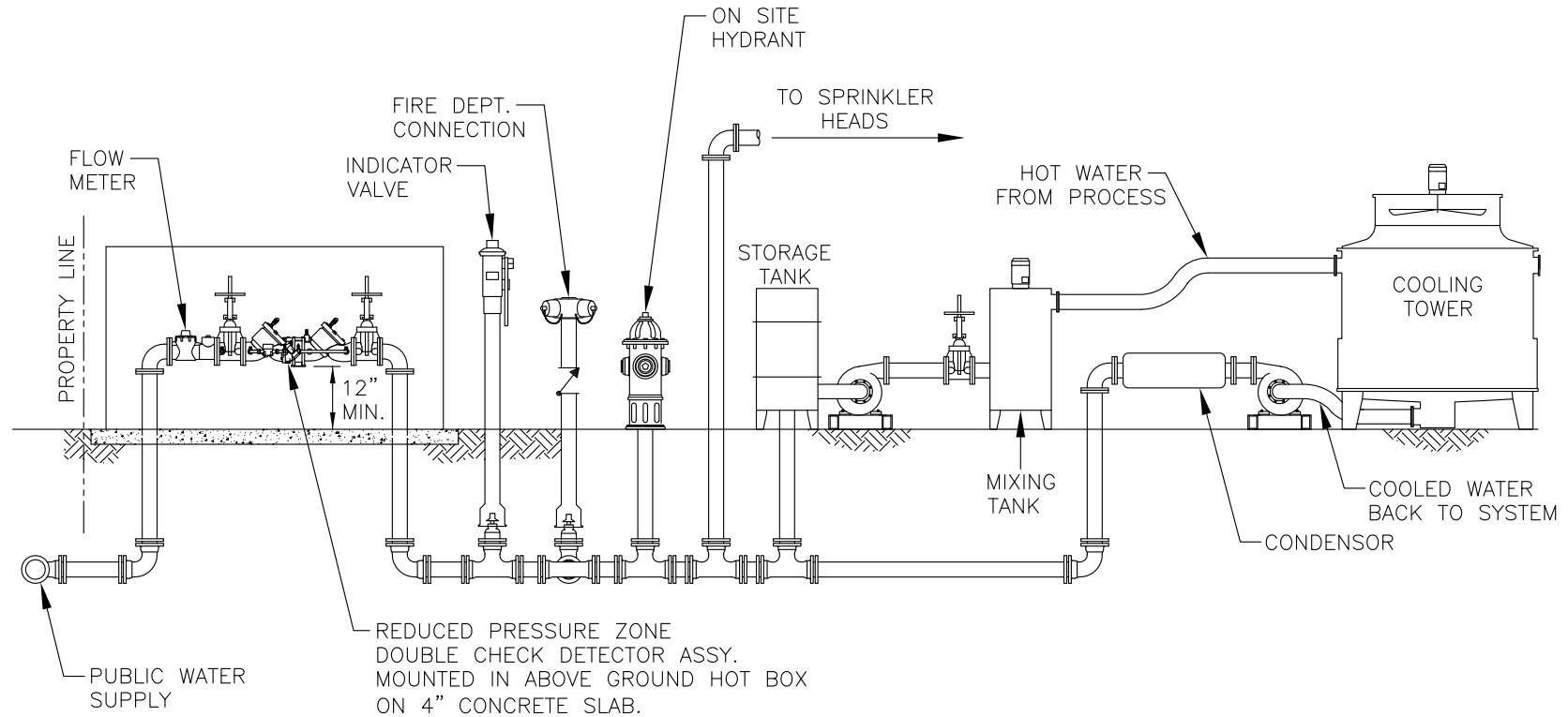
DRAWN: JKP

DATE: 07/04

SCALE: NTS

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CHC	ADDED NOTES	03/12
GMC	REV. DTL	04/18

CLASS 6 FIRE SPRINKLER SYSTEM



CLASS 6 ~ COMBINED INDUSTRIAL AND FIRE PROTECTION SYSTEMS
SUPPLIED FROM THE PUBLIC WATER MAINS ONLY, WITH OR
WITHOUT GRAVITY STORAGE OF PUMP SUCTION TANKS.



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CLASS 6 FIRE SPRINKLER

BFP-0010

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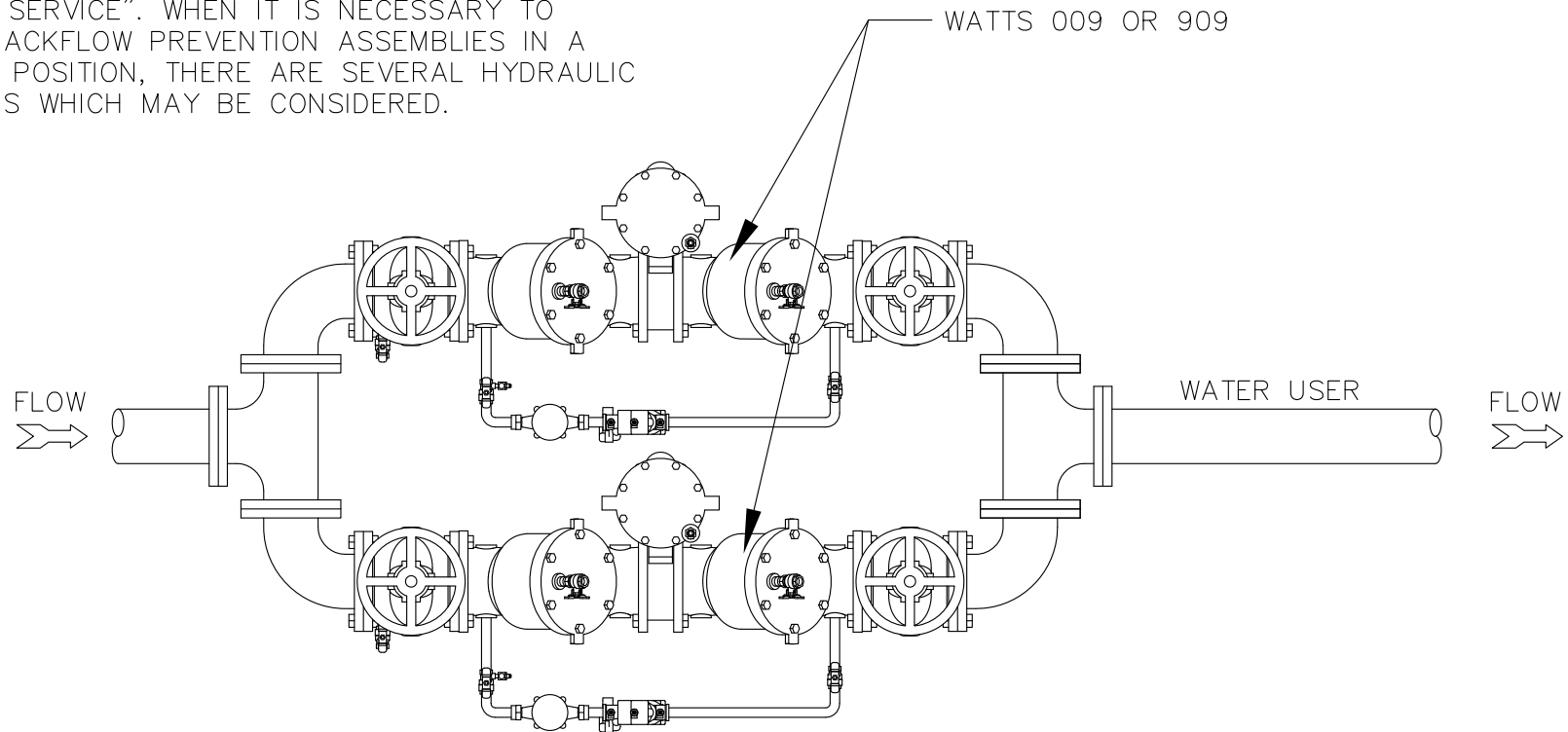
DATE: 07/04

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12
GMC	REV. DTL	04/18

NOTE:

TWO OR MORE BACKFLOW PREVENTION ASSEMBLIES OF THE SAME TYPE MAY BE INSTALLED IN PARALLEL POSITION TO PROVIDE UNINTERRUPTED WATER SERVICE TO THE WATER USER, TYPICALLY KNOWN AS A "CRITICAL SERVICE". WHEN IT IS NECESSARY TO INSTALL BACKFLOW PREVENTION ASSEMBLIES IN A PARALLEL POSITION, THERE ARE SEVERAL HYDRAULIC CONDITIONS WHICH MAY BE CONSIDERED.



EXAMPLE OF R.P.'S INSTALLED IN PARALLEL POSITION



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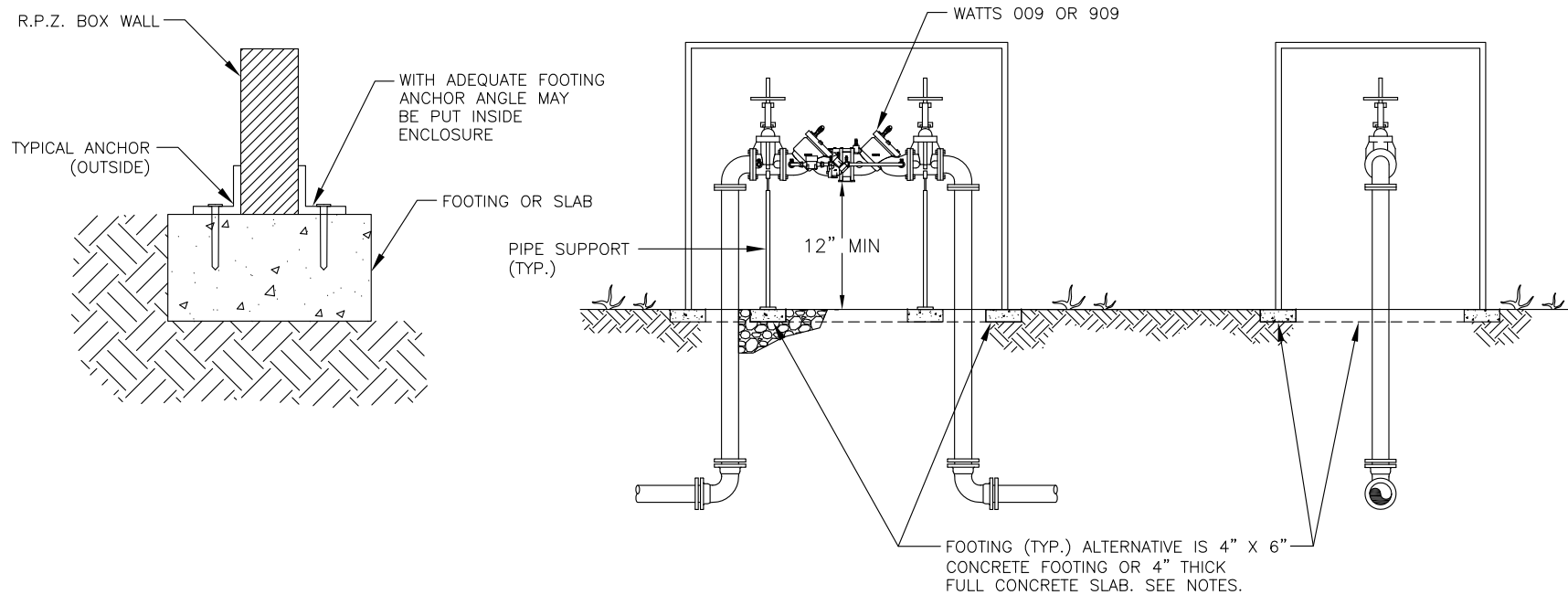
PARALLEL R.P.Z. (MANIFOLD) ASSEMBLY INSTALLATION

BFP-0011

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DATE: 07/04
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SCALE: NTS

BY	REVISIONS	DATE
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GMC	REV. DTL	04/18

R.P.Z. INSTALLATION DETAIL



*NOTES:

1. BOX SHOULD BE HEATED OR INSULATED TO PROTECT FROM FREEZING.
2. SHOULD NEVER BE INSTALLED IN CEILINGS.
3. IF A PERIMETER FOOTING IS USED THEN THERE MUST BE GRAVEL COVERING THE ENTIRE BOTTOM OF THE ENCLOSURE A FULL (12") TWELVE INCHES DEEP.



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REDUCED PRESSURE ZONE ASSEMBLY INSTALLATION

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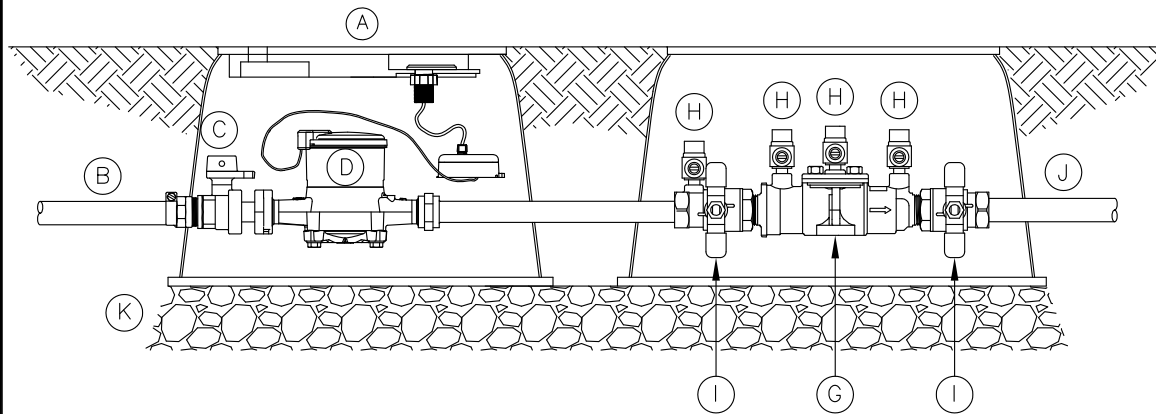
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DATE: 07/04

SCALE: NTS

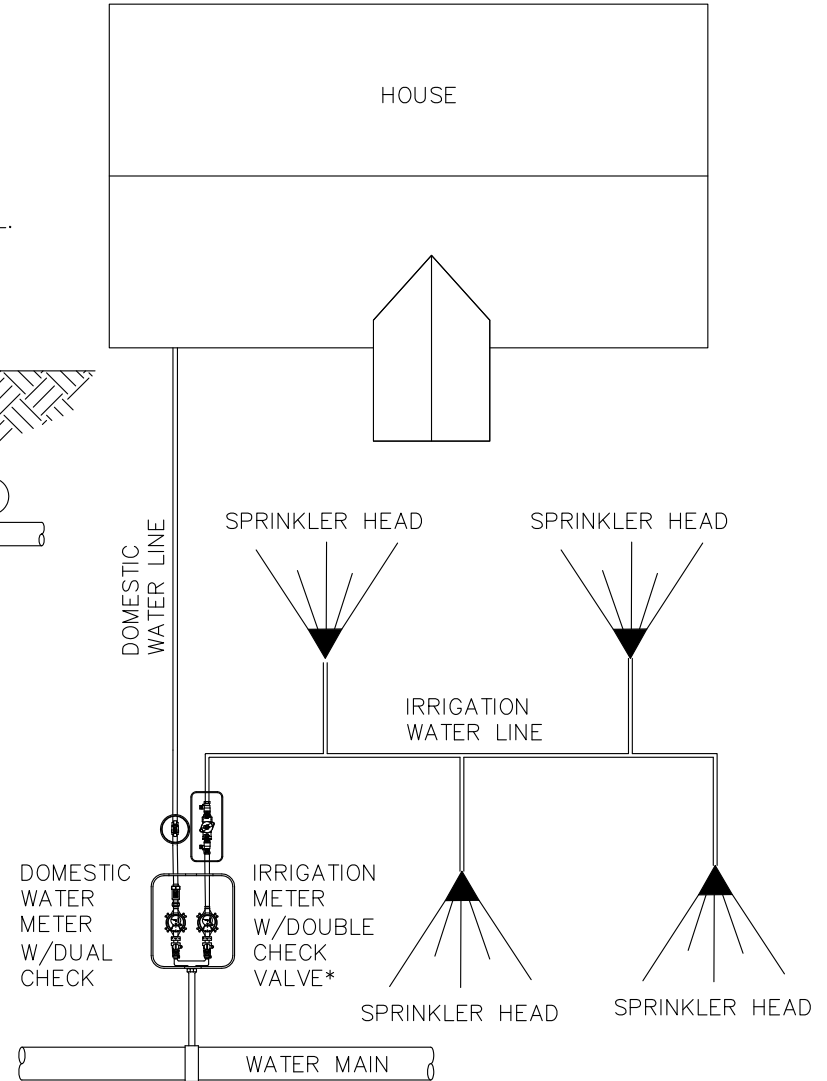
BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12
GMC	REV. DTL	04/18

- A.) MB-18 METER BOX WITH AMR LID (DEVELOPER INSTALLED)
- B.) TYPE K COPPER SERVICE LINE CONNECTION (DEVELOPER INSTALLED)
- C.) CURB STOP-FORD B43-332W OR APPROVED EQUAL (DEVELOPER INSTALLED)
- D.) WATER METER PROVIDED BY CCW&SA. (DEVELOPER INSTALLED)
- G.) DOUBLE CHECK VALVE ASSEMBLY
- H.) TEST COCKS
- I.) 3/4" BRASS BALL VALVE W/STAINLESS STEEL "T" HANDLE OR APPROVED EQUAL.
- J.) IRRIGATION LINE
- K.) #57 STONE 6" MIN. DEPTH



IRRIGATION METER
SECTION

*NOTE: ALL BACKFLOW PREVENTERS SHALL BE TESTED BY A CERTIFIED TESTER AND PAPERWORK TURNED IN TO THE CCW&SA BACKFLOW PREVENTION UNIT NO LATER THAT 15 DAYS AFTER INSTALLATION. REFERENCED LIST OF CERTIFIED TESTERS AVAILABLE AT www.cowetawater.com



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RESIDENTIAL IRRIGATION WITH BACKFLOW PREVENTER INSTALLATION

BFP-0014

DESIGNED: TAT

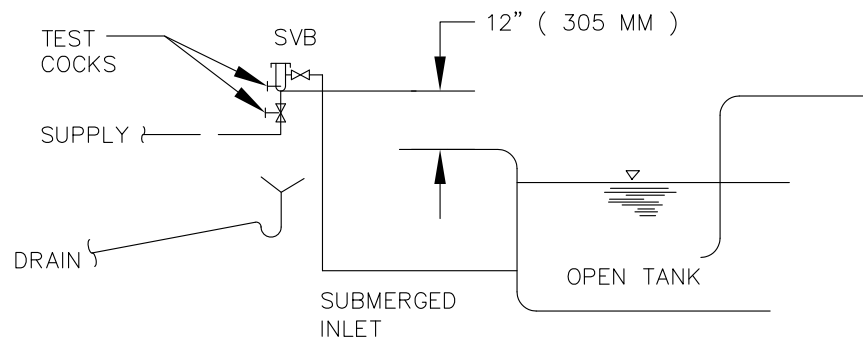
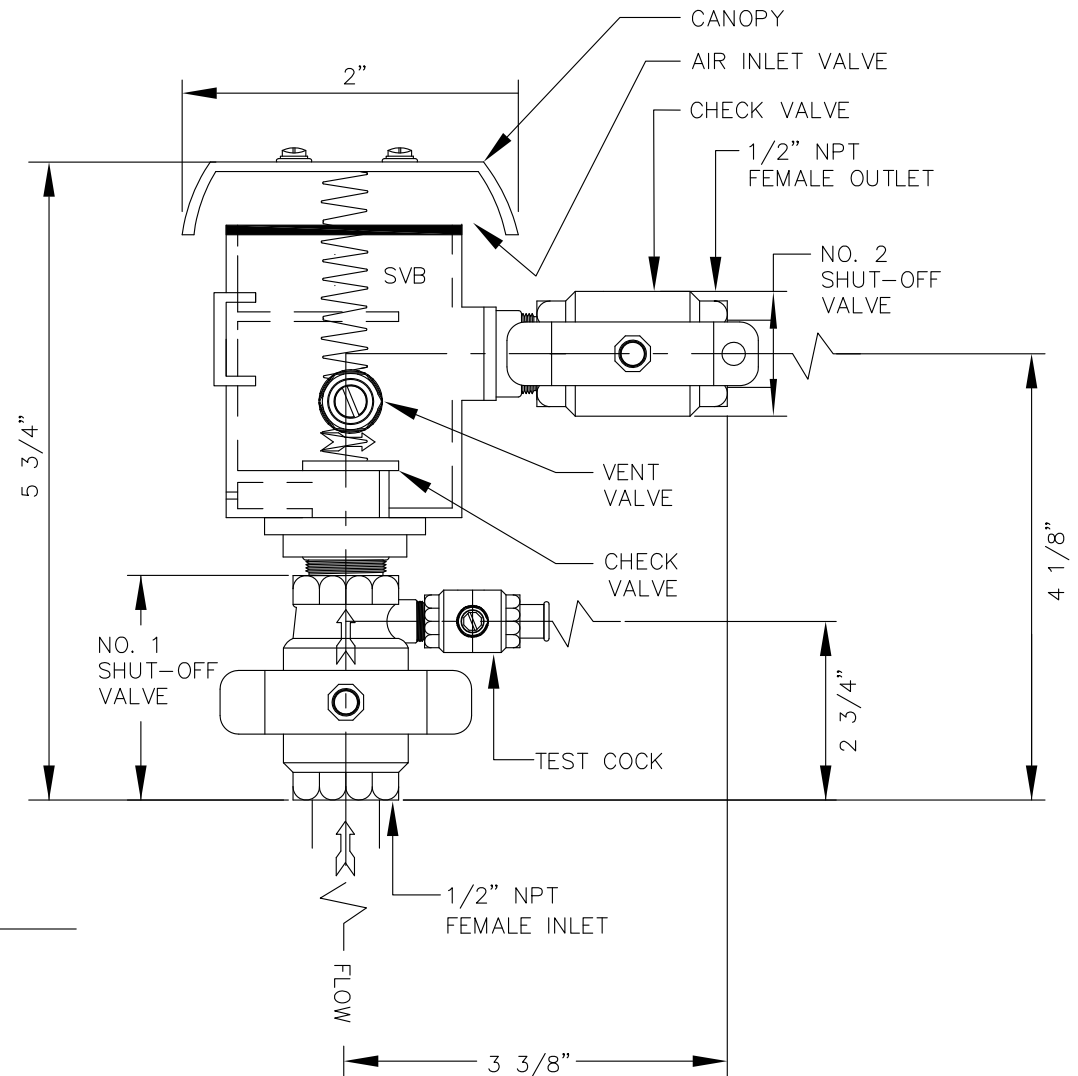
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DATE: 05/07

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED DET.	07/09
CHC	ADDED NOTES	03/12
GMC	REV. DTL	04/18

SPILL-RESISTANT PRESSURE VACUUM BREAKER
 BACK-SIPHONAGE PREVENTION ASSEMBLY (SVB):
 MAY BE USED AS PROTECTION AGAINST
 NON-PRESSURE CONNECTIONS TO VESSELS CONTAINING
 CONTAMINANTS WHERE THE VACUUM BREAKERS ARE NOT
 SUBJECT TO BACK SIPHON PRESSURE. THESE UNITS
 MAY BE USED UNDER CONTINUOUS SUPPLY PRESSURE.
 THEY MUST BE INSTALLED ABOVE THE USAGE POINT.



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SPILL VACUUM BREAKER DETAIL

BFP-0015

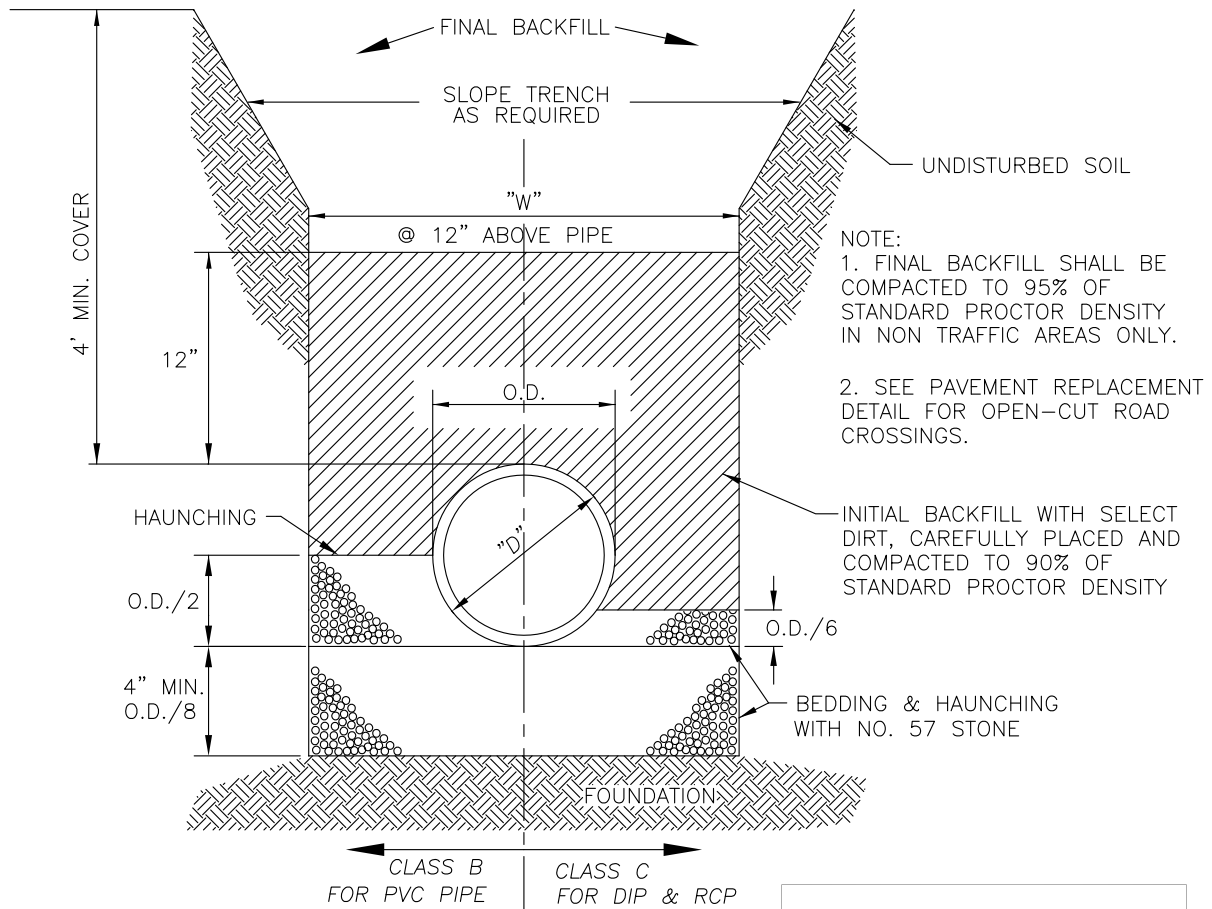
DESIGNED: CCWSA

DRAWN: CHC

DATE: 03/12

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12



CLASS B AND C

"D" = NOMINAL PIPE DIAMETER
 O.D. = OUTSIDE PIPE DIAMETER
 "W" = O.D. PLUS TWO FEET MIN.
 O.D. PLUS FOUR FEET MAX.

GRAVITY PIPE BEDDING

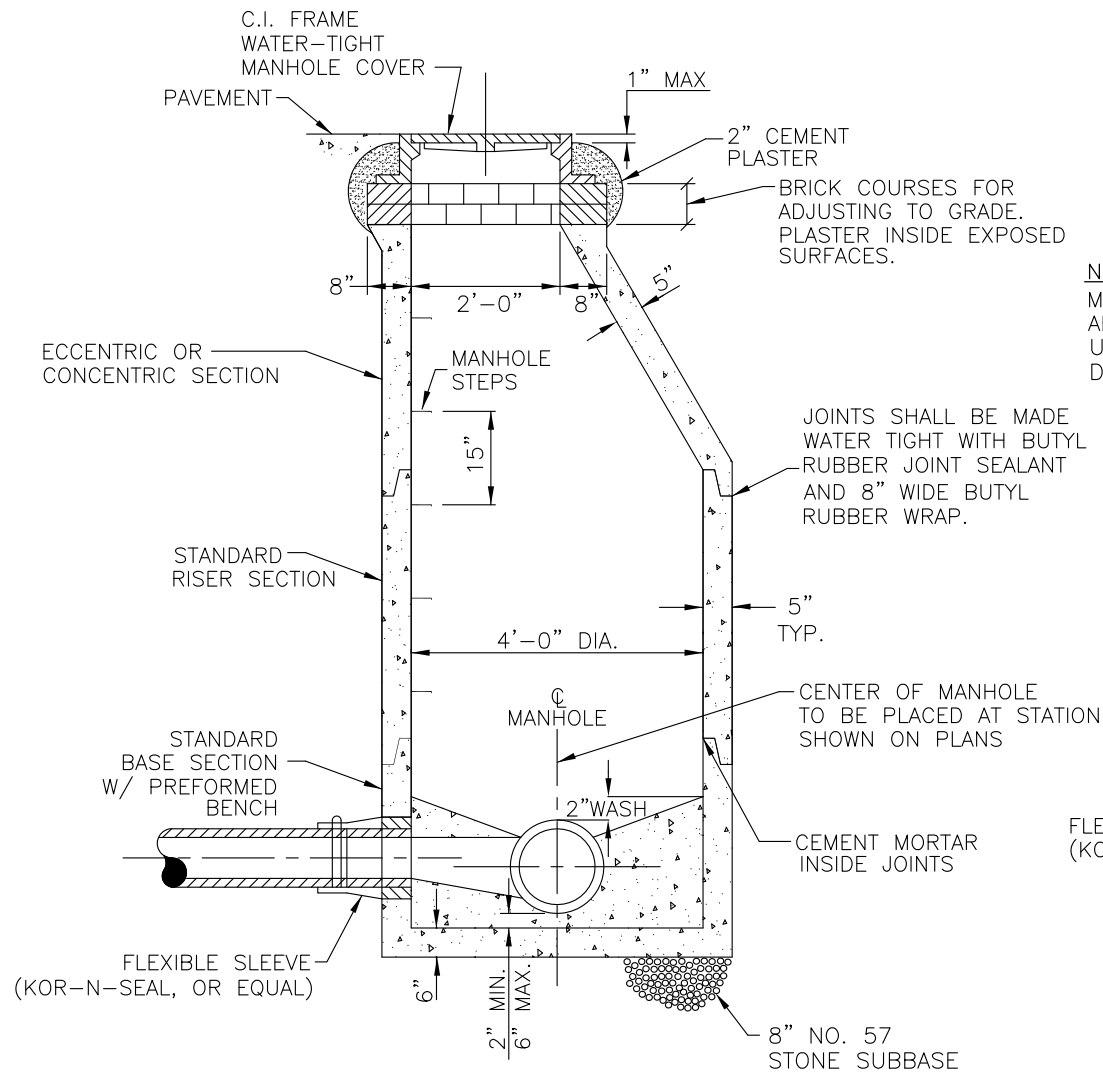


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S-0001

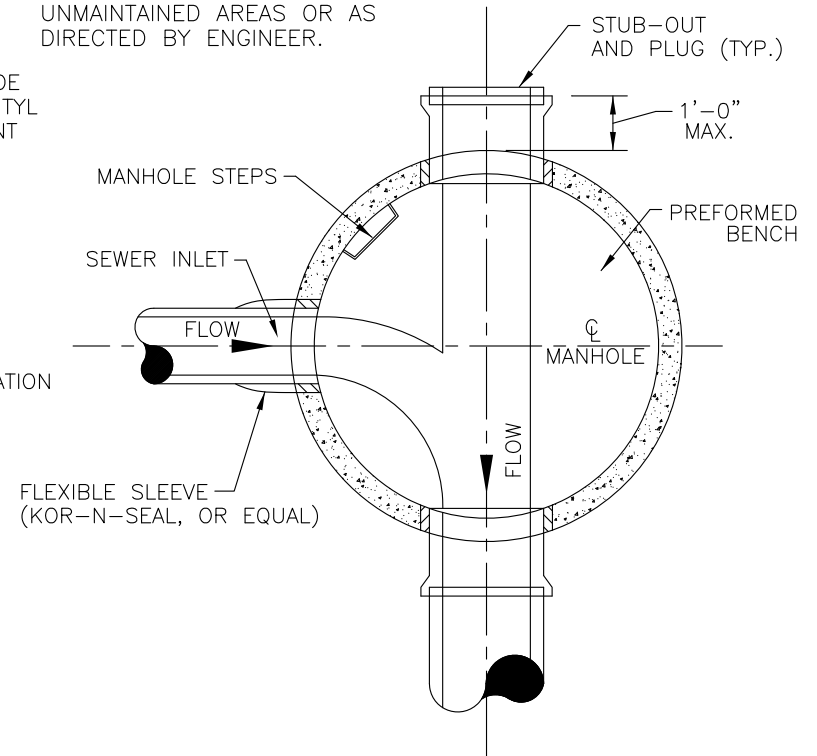
DESIGNED: CCWSA
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 SCALE: NTS

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SECTION

NOTE:
MANHOLES TO BE 24"-30" ABOVE GRADE IN OPEN, UNMAINTAINED AREAS OR AS DIRECTED BY ENGINEER.



PLAN



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STANDARD PRECAST 4'-0" MANHOLE

S-0002

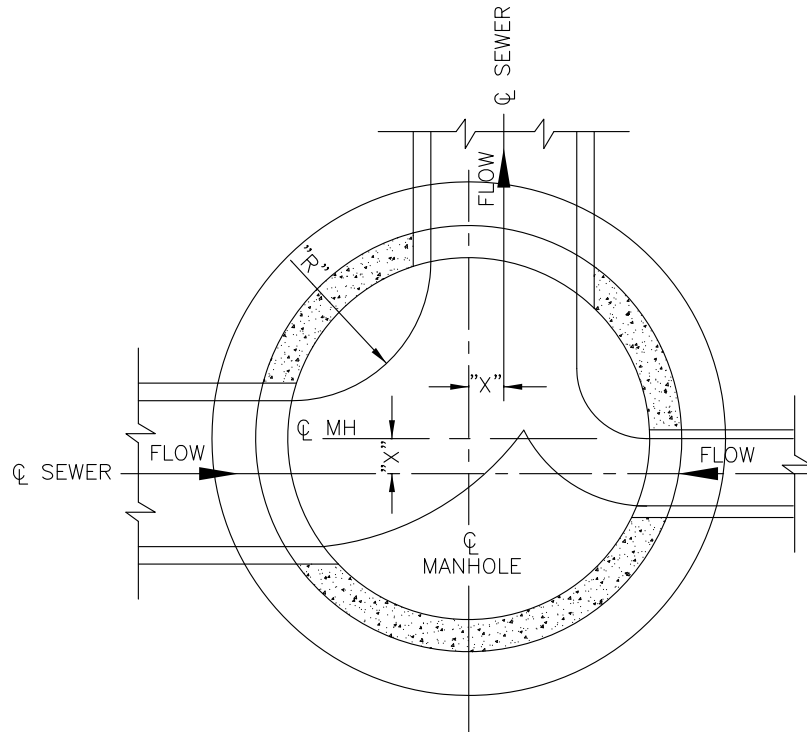
DESIGNED: CCWSA

DRAWN: GMC

DATE: 12/16

SCALE: NTS

BY
REVISIONS
DATE



SECTIONAL PLAN

STANDARD PRECAST MANHOLES GOVERNING DIMENSIONS			
PIPE SIZE	M.H. DIA.	"R"	"X"
8"THRU12"	4'	1'-0"	0"
15"	4'	1'-3"	6"
18"	4'	1'-4"	8"
21"	5'	1'-9"	9"
24"	5'	1'-6"	9"
27"	6'	2'-0"	1'-0"
30"	6'	1'-9"	8"
36"	PIPE-BED PIPE M.H. BASE AND ELBOW UNIT		



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GOVERNING DIMENSIONS FOR PRECAST MANHOLES

S-0003

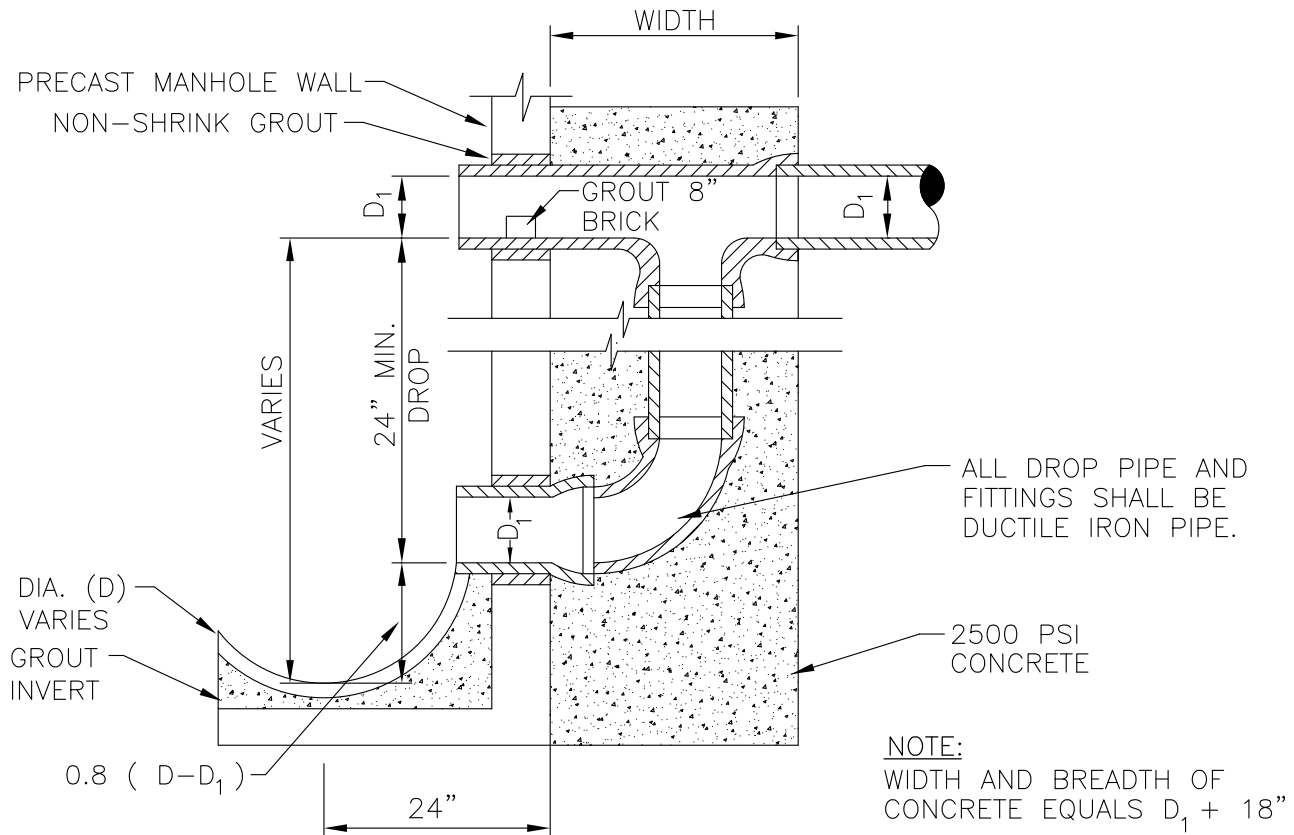
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OUTSIDE DROP MANHOLE



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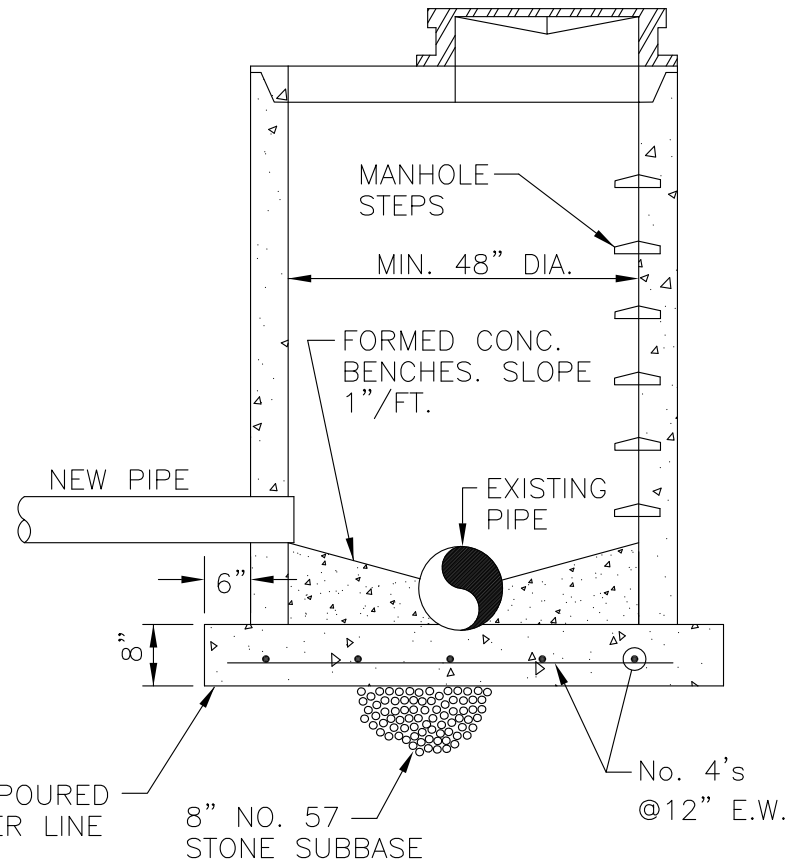
NOTES

- 1) NEW PIPE SHALL HAVE A MINIMUM 8" DROP INTO MANHOLE WHENEVER POSSIBLE.
- 2) PROVIDE PRECAST MANHOLE RISER COMPLETE WITH UPSIDE DOWN U-SHAPED OPENINGS TO SUIT EXISTING LINES AND NEW OPENING TO SUIT PROPOSED PIPELINES.
- 3) BENCHES TO BE GENTLY SLOPED AND TROWELED SMOOTH FROM MANHOLE WALL TO SPRING LINE OF EXISTING PIPE.
- 4) AFTER APPROVED INSPECTION, TOP HALF OF EXISTING PIPE SHALL BE CAREFULLY REMOVED BY SAWING OR OTHER APPROVED METHOD.

4000 PSI CONCRETE POURED UNDER EXISTING SEWER LINE

8" NO. 57 STONE SUBBASE

No. 4's @12" E.W.



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NEW MANHOLE OVER EXISTING PIPE

S-0005

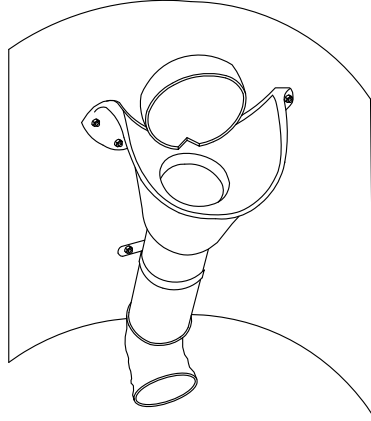
DESIGNED: CCWSA

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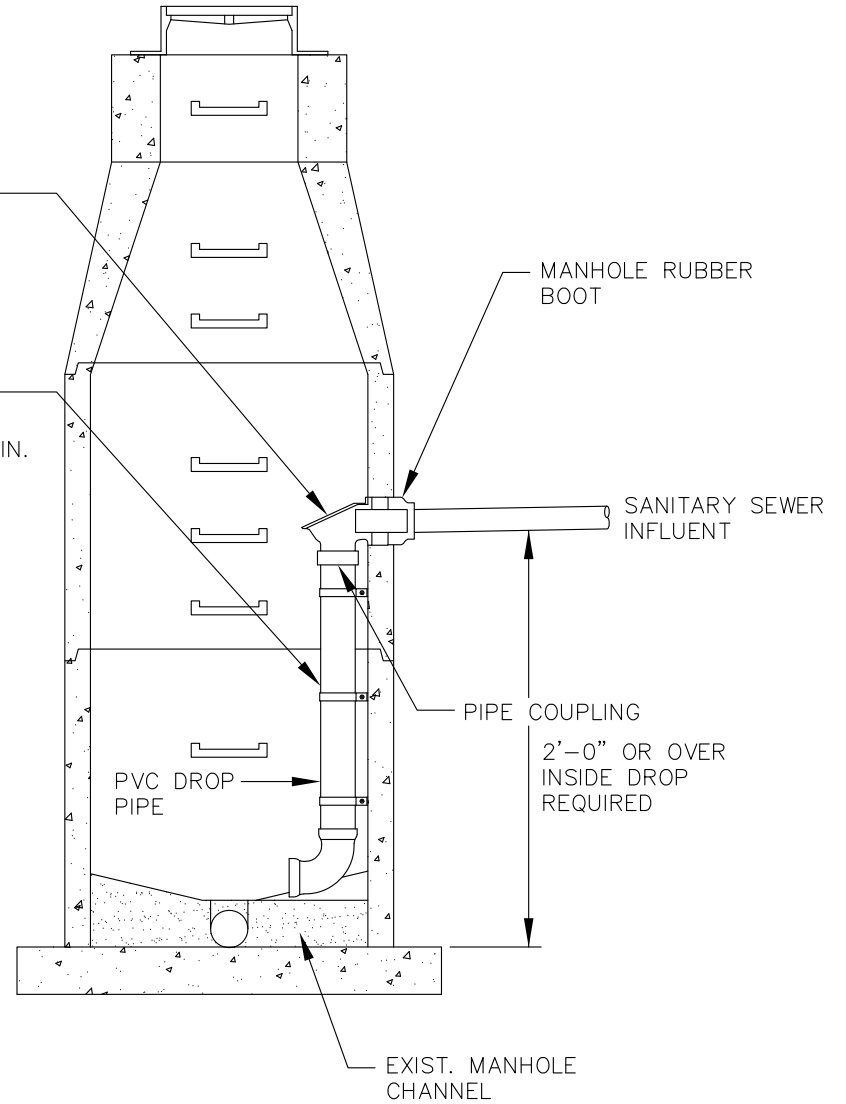
RELINER INSIDE DROP BOWL
SECURED WITH SSTL FASTENERS

RELINER SSTL PIPE BRACKET
SECURED TO STRUCTURE WIT (2)
SSTL BOLTS. (4' INTERVALS, 2 MIN.
BRACKETS REQ'D.)

NON-CORROSIVE 11 GAUGE 304
SSTL STRAP 1 1/2" MIN. WIDTH

PVC DROP
PIPE

USE 3/8" RED HEAD ANCHOR TO
ATTACH TO MANHOLE WALL



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INSIDE DROP MANHOLE

S-0006

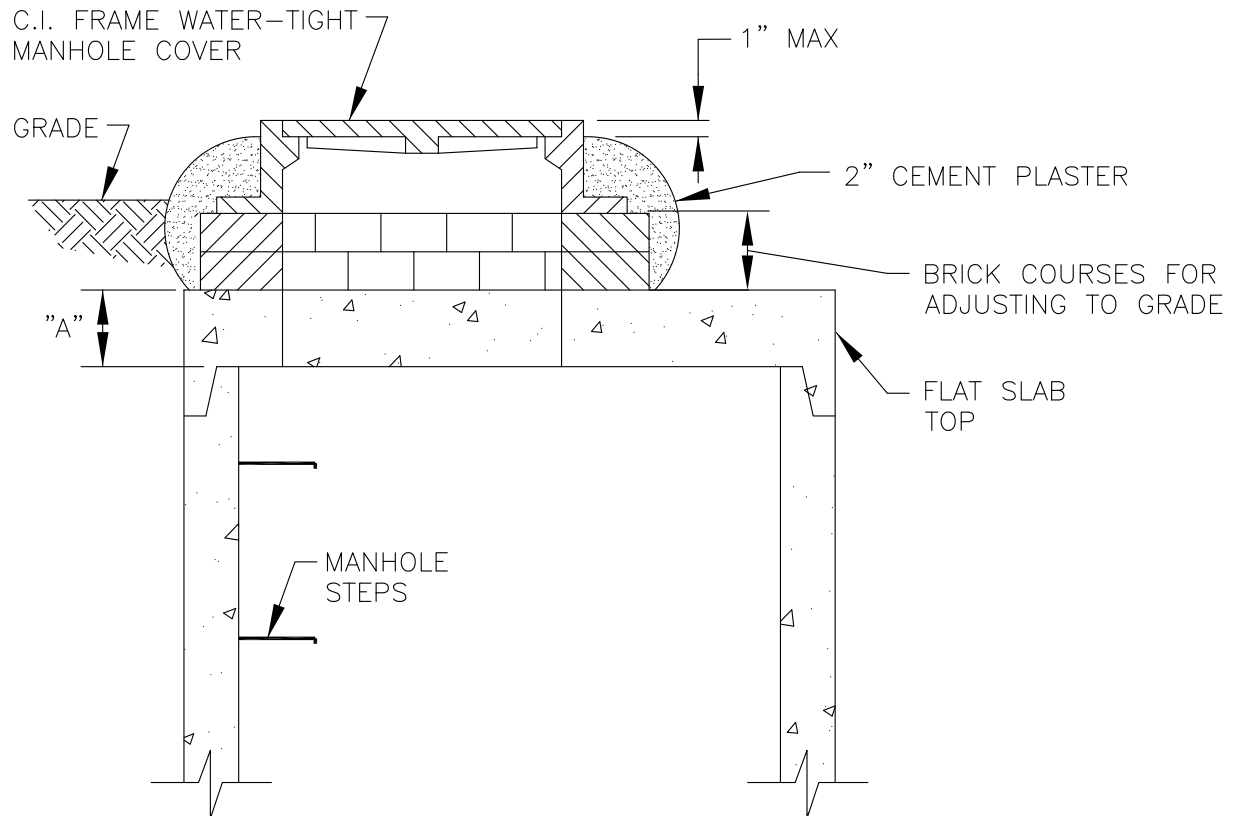
DESIGNED: CCWSA

DRAWN: GMC

DATE: 12/16

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NOTE: "A" = 10" FOR 4'-0" I.D. MANHOLE
12" FOR 5'-0" AND 6'-0" MANHOLES

SHALLOW MANHOLE



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S-0007

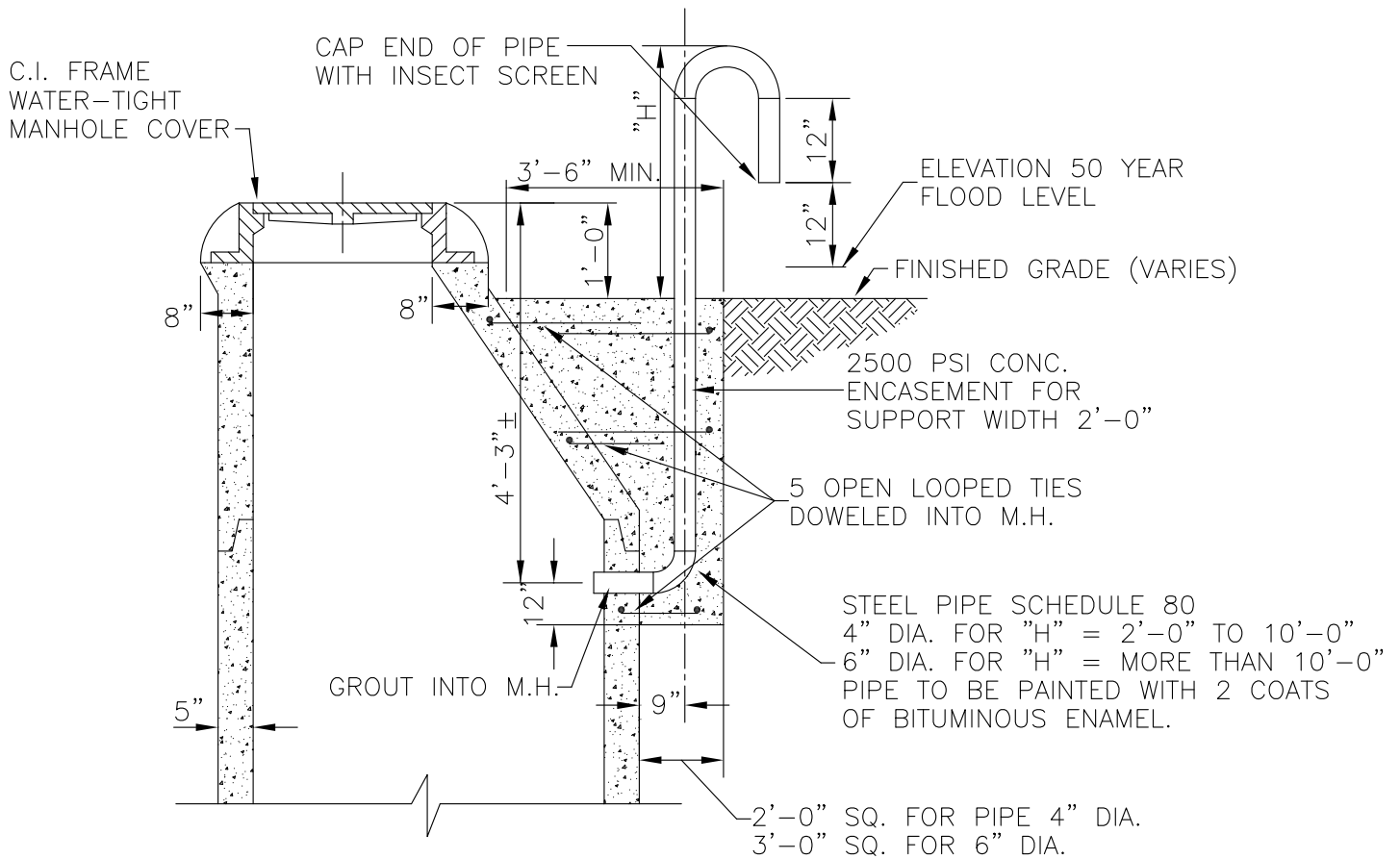
DESIGNED: CCWSA

DRAWN: JKP

DATE: 07/04

SCALE: NTS

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VENTED MANHOLE DETAIL

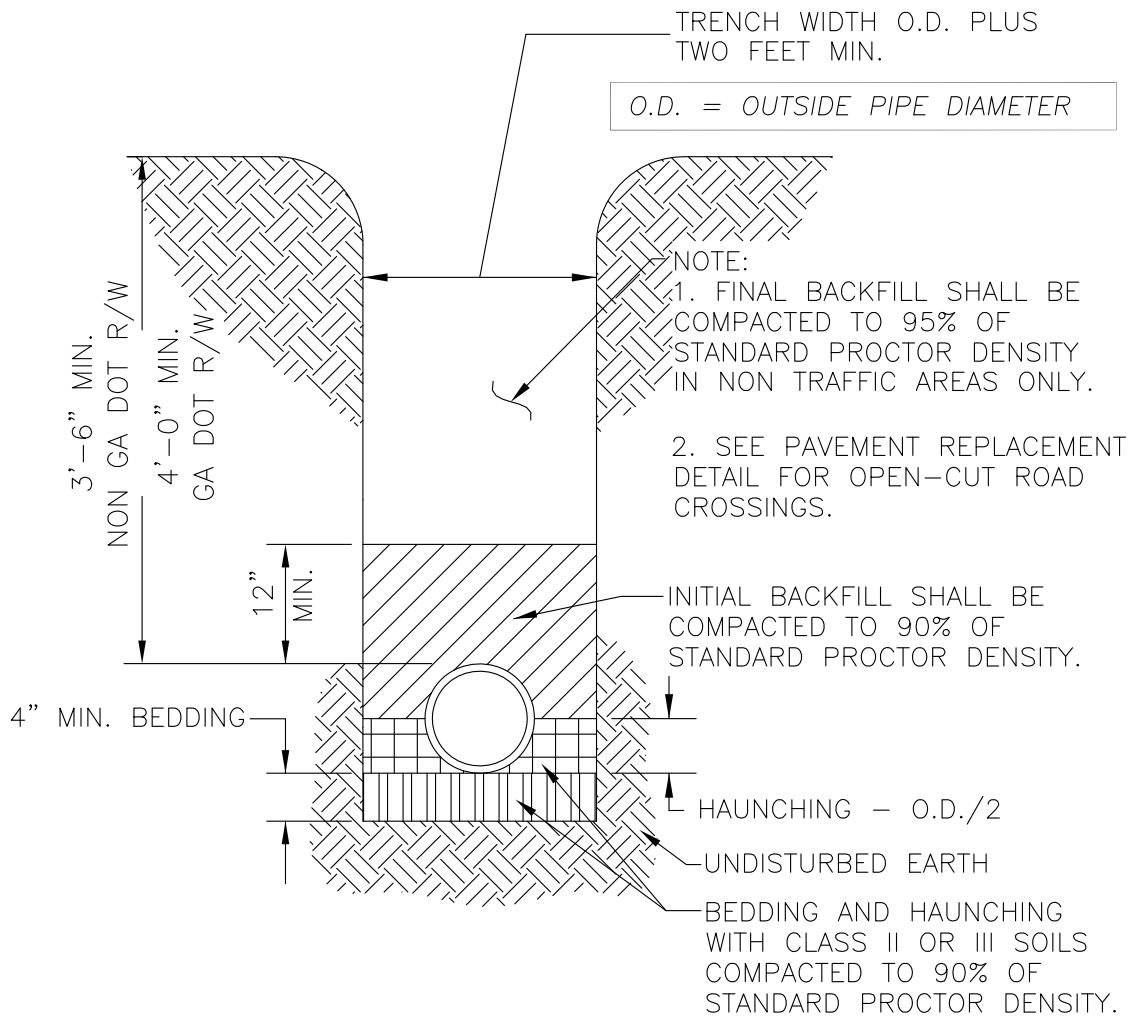


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PRESSURE PIPE BEDDING



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S-0009

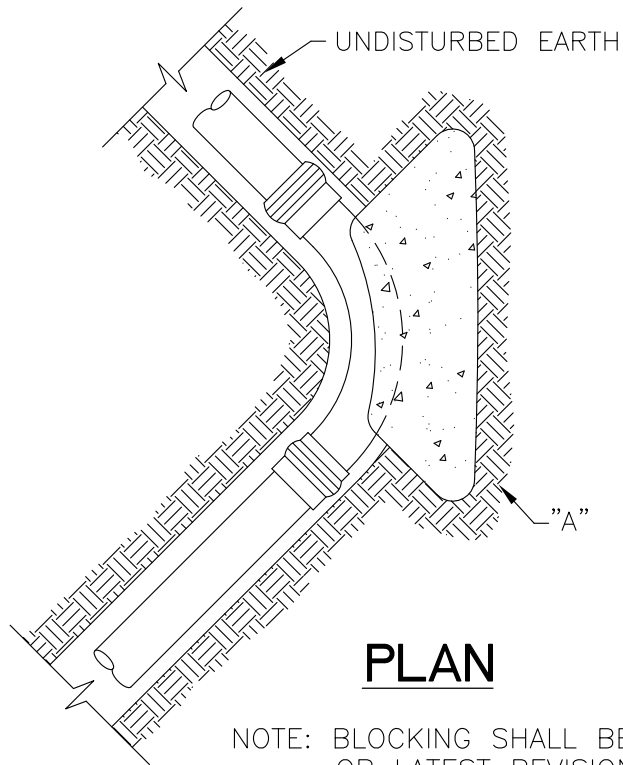
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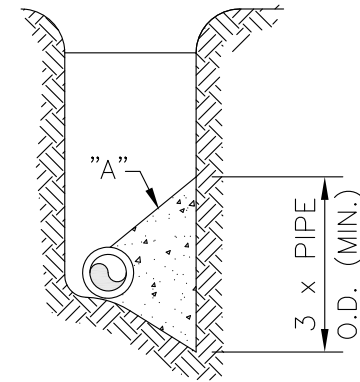
DATE: 07/04

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BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12



PIPE DIA. (IN)	"A"—SURFACE BEARING AREA (SQ. FEET)
4	1.5
6	3
8	6
10	9
12	12
14	16
16	20
18	26
20	32
24	45



TYP. SECTION

NOTE: BLOCKING SHALL BE CONSTRUCTED AS PER AWWA STANDARD C600—SECTION 12.3 OR LATEST REVISION. CONCRETE SHALL BE 3000 P.S.I.



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AUTHORITY**
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NEWNAN, GA 30263
(770) 254-3710

FORCE MAIN THRUST BLOCKS

S-0010

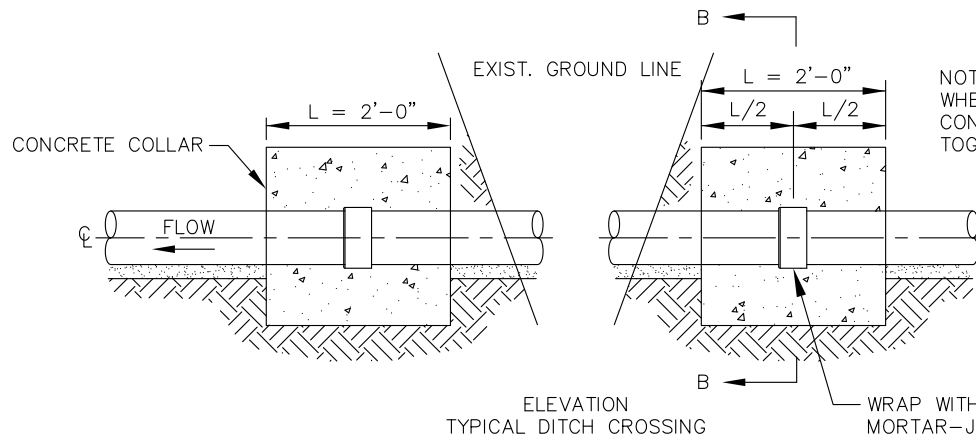
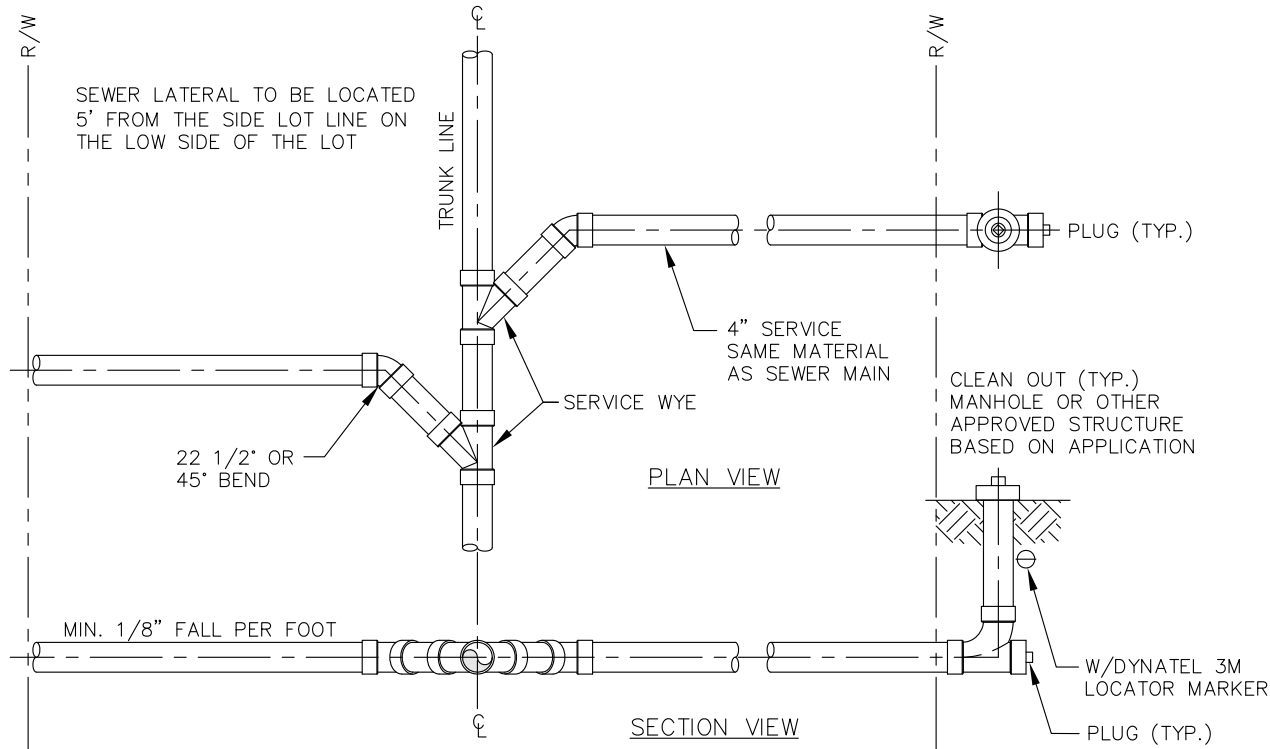
DESIGNED: CCWSA

DRAWN: GMC

DATE: 12/16

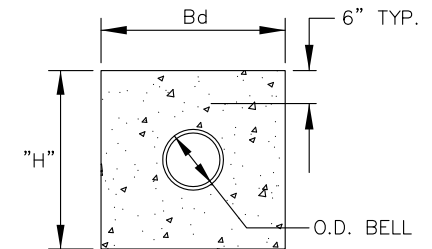
SCALE: NTS

BY
REVISIONS
DATE



NOTE: DITCH SHALL ALSO APPLY WHEN CAST IRON, CLAY, OR CONCRETE PIPE ARE JOINED TOGETHER

WRAP WITH TAR PAPER & MAKE MORTAR-JOINT TIGHT BEFORE POURING CONCRETE



CLASS "B" CONC. SECTION B - B



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SEWER LATERAL INSTALLATION

S-0011

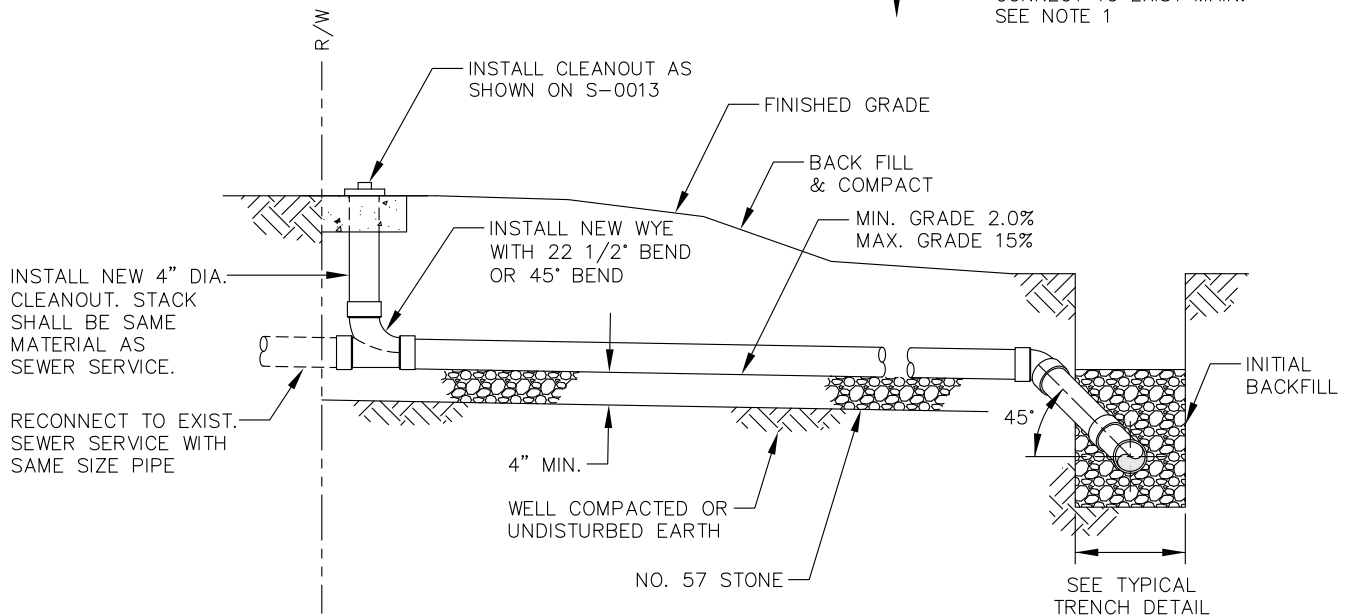
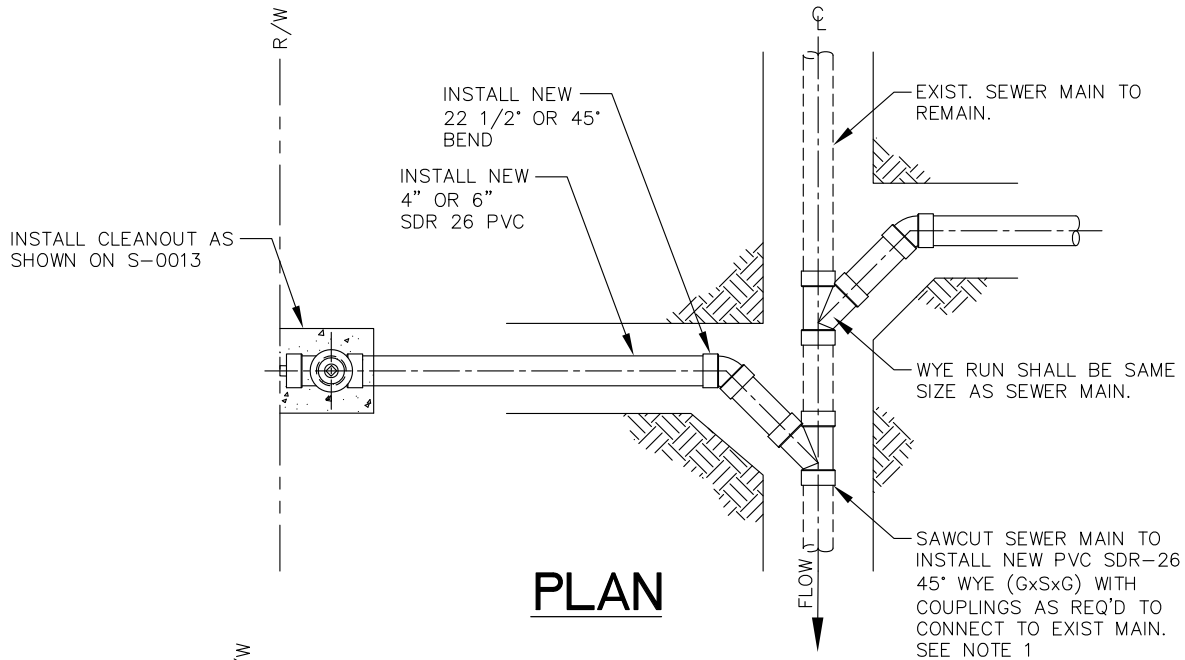
DESIGNED: CCWSA

DRAWN: JKP

DATE: 07/04

SCALE: NTS

BY	REVISIONS	DATE
GMC	REV. DTL	04/18



NOTES:

1. ALL NEW SEWER MAIN, LATERAL WYE's AND SERVICE PIPE SHALL BE SDR 26 PVC UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. CONSTRUCTION/REPAIR OF THE SEWER MAIN, LATERAL & CLEANOUT SHALL BE INSTALLED APPROXIMATELY JUST INSIDE R/W LINE.

TYPICAL SEWER SERVICE POINT REPAIR W/NEW MAIN WYE AND CLEANOUT



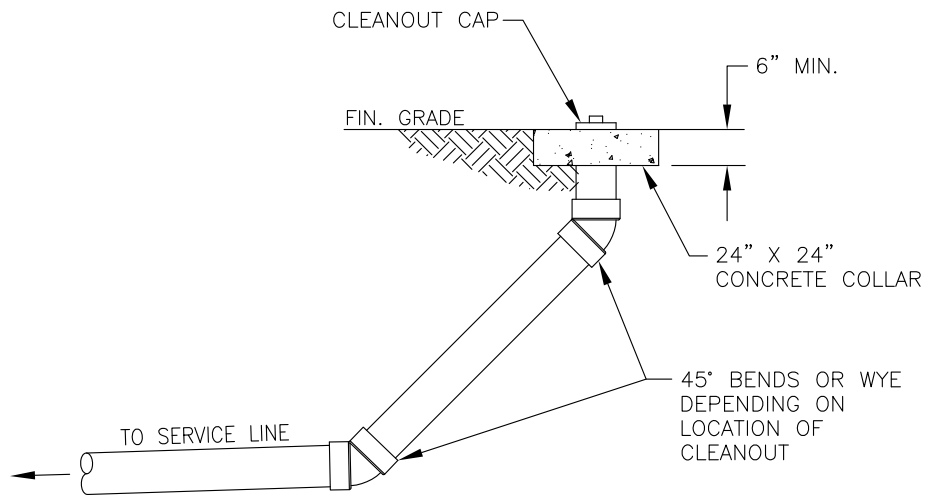
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(770) 254-3710

S-0012

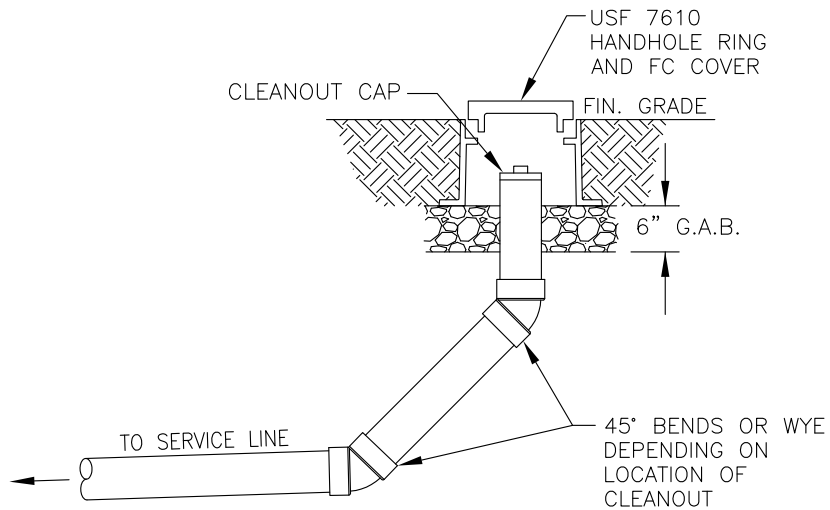
DESIGNED: CCWSA
DATE: 07/04

DRAWN: JKP
SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES 03/12	



CLEANOUT DETAIL



CLEANOUT DETAIL



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545 CORINTH ROAD
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(770) 254-3710

S-0013

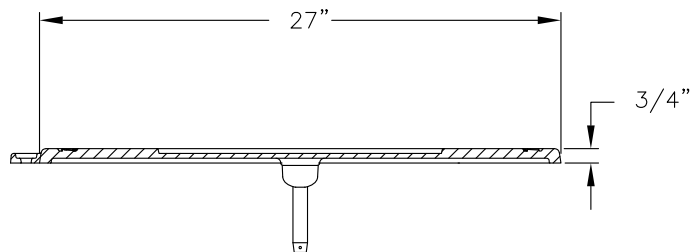
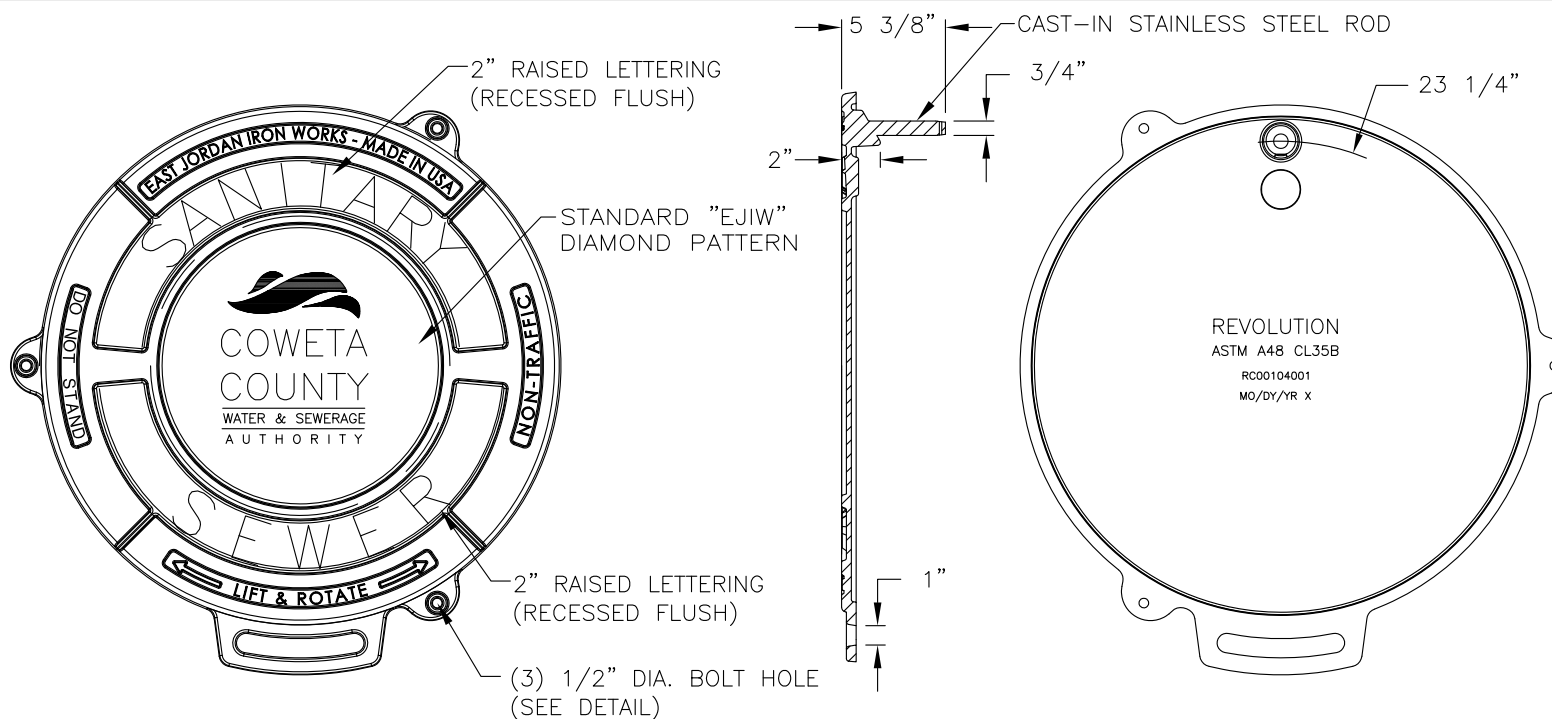
DESIGNED: CCWSA

DRAWN: GMC

DATE: 01/17

SCALE: NTS

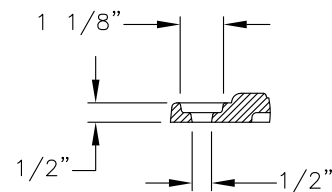
BY
REVISIONS
DATE



SECTION

SECTION

BOTTOM VIEW



BOLTHOLE DETAIL

EJIW EAST JORDAN
IRON WORKS EST. 1883
800-626-4653
www.ejiw.com
MADE IN USA

PRODUCT NUMBER
NCR08-667D

CATALOG NUMBER
24" REVOLUTION

OUTFALL COVER

LOAD RATING
NON-TRAFFIC

COATING
UNDIPPED

MATERIAL SPECIFICATION
COVER - GRAY IRON
ASTM A48 CL35B

OPEN AREA
N/A

✓ DESIGNATES
MACHINED SURFACE

DRAWN GAD	DATE 08/25/08
--------------	------------------

LAST REVISED	DATE
--------------	------

REFERENCE INFORMATION
RC41384037.1C
RC41384037.1D
RC001041XX.LO

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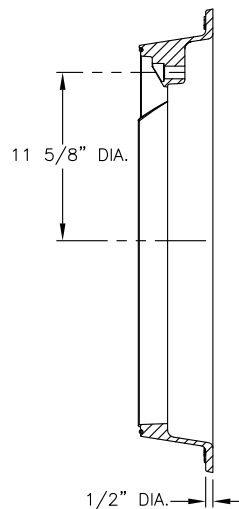
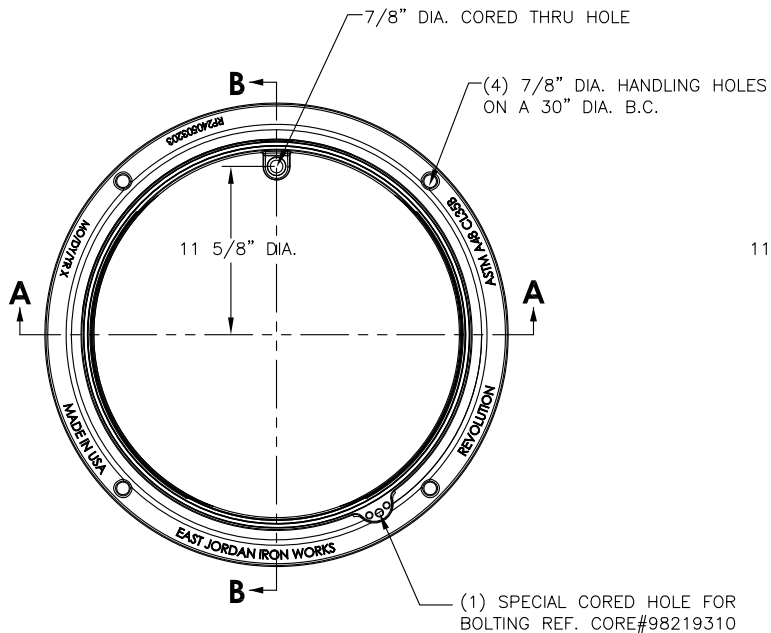
**COWETA COUNTY
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AUTHORITY**
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NEWNAN, GA 30263
(770) 254-3710

OUTFALL MANHOLE COVER

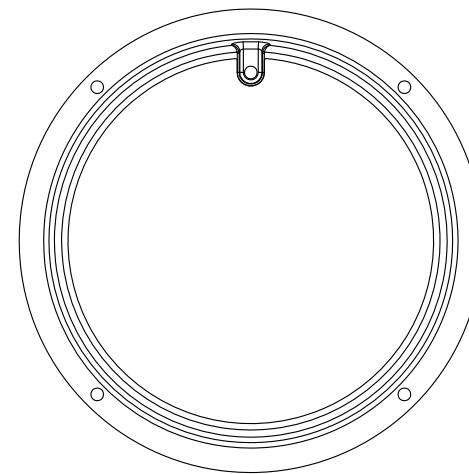
S-0014

DESIGNED: CCWSA	DRAWN: CHC
DATE: 08/08	SCALE: NTS

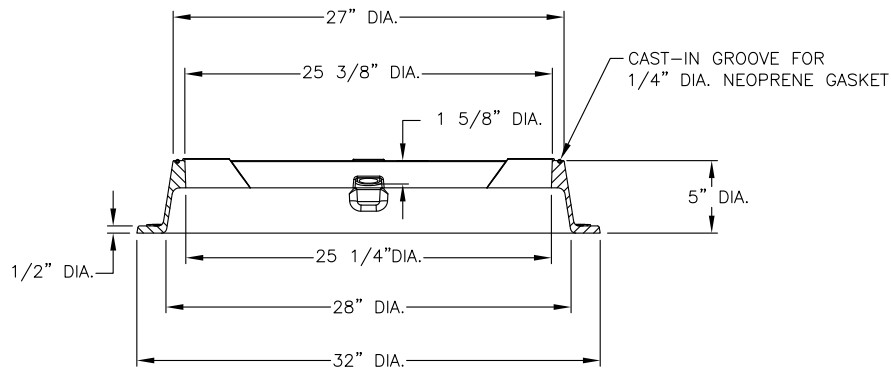
BY	REVISIONS	DATE
CHC	ADDED DET.	08/08
CHC	NOTES	02/12



SECTION B-B



BOTTOM VIEW



SECTION A-A

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EJIW EAST JORDAN
IRON WORKS EST. 1883
800-626-4653
www.ejiw.com
MADE IN USA

PRODUCT NUMBER
RF240503203

CATALOG NUMBER
REVOLUTION

OUTFALL FRAME

LOAD RATING
NON-TRAFFIC

COATING
UNDIPPED

ESTIMATED WEIGHT
FRAME: 85 LBS 39kg

MATERIAL SPECIFICATION
FRAME - GRAY IRON
ASTM A48 CL35B

OPEN AREA
N/A

✓ DESIGNATES
MACHINED SURFACE

DRAWN
JIJ

DATE
04/16/07

LAST REVISED

DATE

REFERENCE INFORMATION

RF240503201



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AUTHORITY**
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OUTFALL MANHOLE FRAME

S-0015

DESIGNED: CCWSA

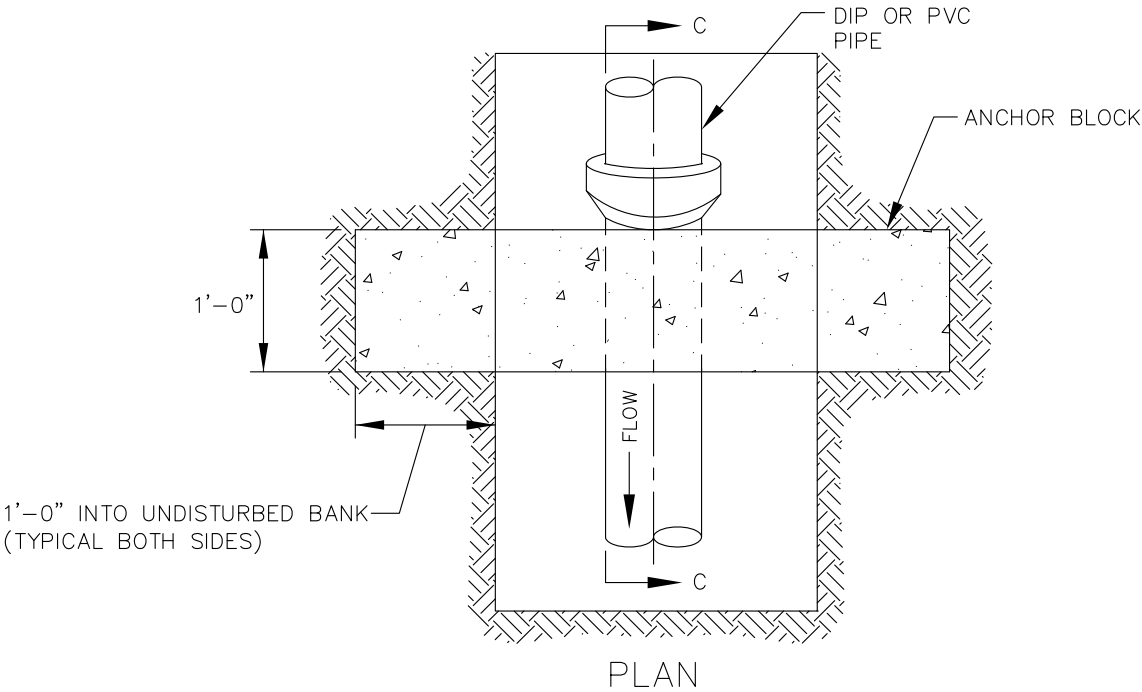
DRAWN: CHC

DATE: 08/08

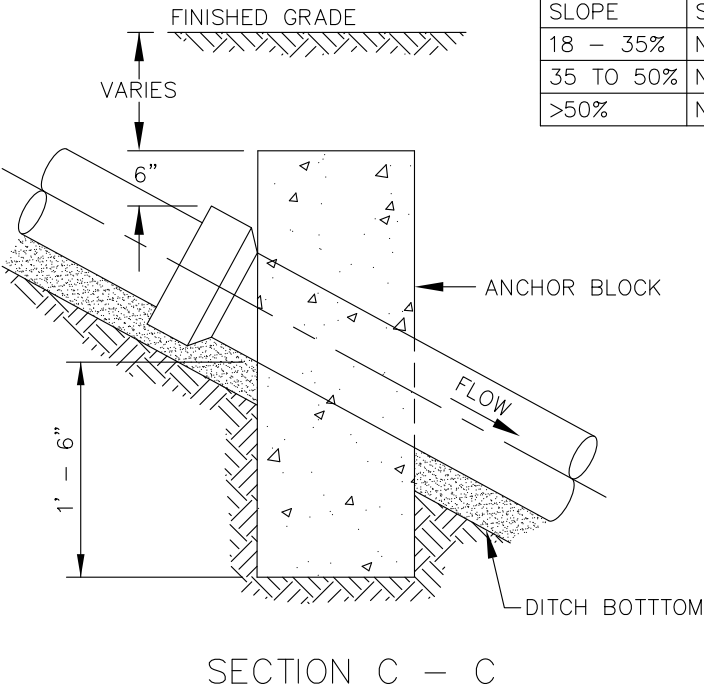
SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED DET.	08/08
CHC	NOTES	02/12

NOTE: CONCRETE ANCHOR BLOCK
 DETAIL TO BE USED ON PIPES UP TO
 36" OR LESS ON STEEP SLOPES



CONCRETE ANCHOR SPACING	
SLOPE	SPACING
18 - 35%	NO MORE THAN 36 L.F.
35 TO 50%	NO MORE THAN 24 L.F.
>50%	NO MORE THAN 16 L.F.



CONCRETE ANCHOR BLOCK DETAIL



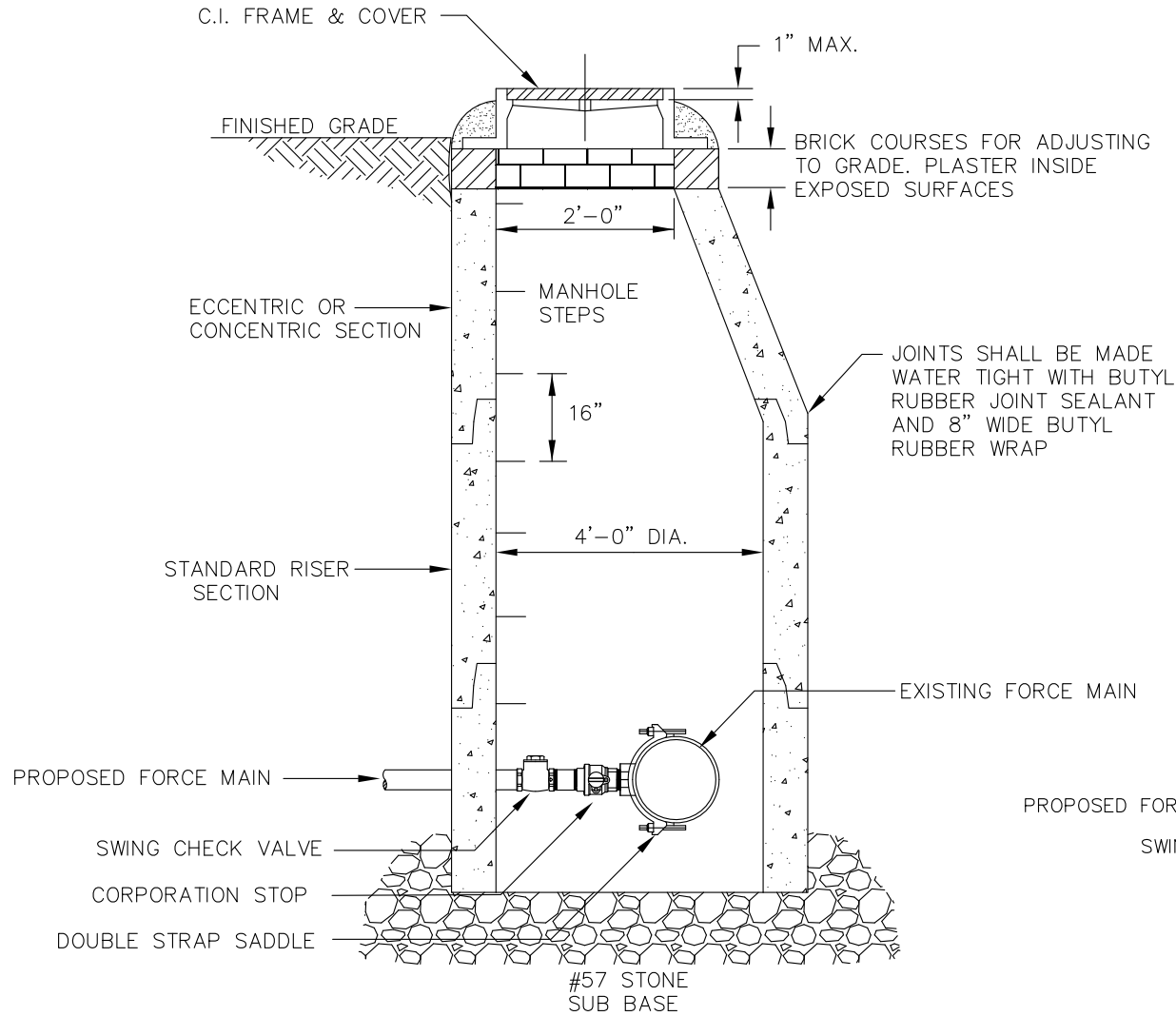
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S-0016

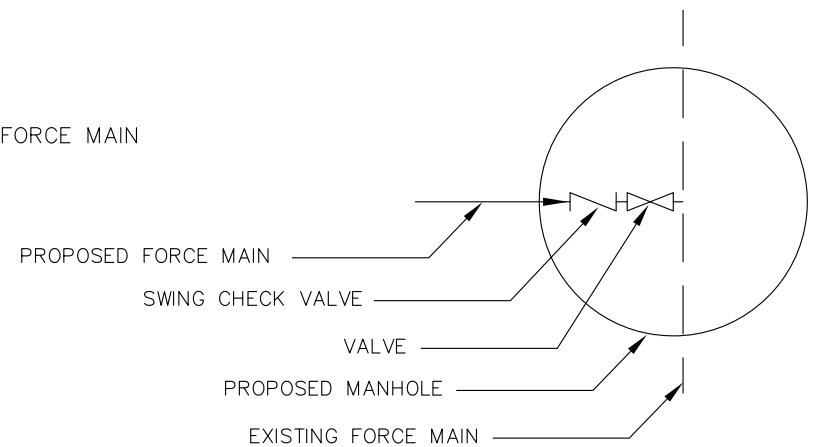
DESIGNED: CCWSA
 DRAWN: GMC
 DATE: 01/17
 SCALE: NTS

BY
 REVISIONS
 DATE

DETAIL VIEW



SCHEMATIC VIEW



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EXISTING FORCE MAIN TIE-IN DETAIL

S-0017

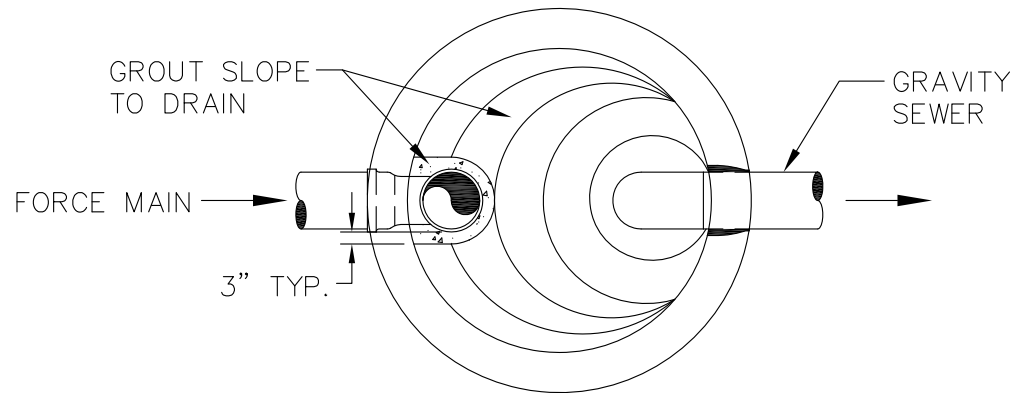
DESIGNED: CCWSA

DRAWN: JKP

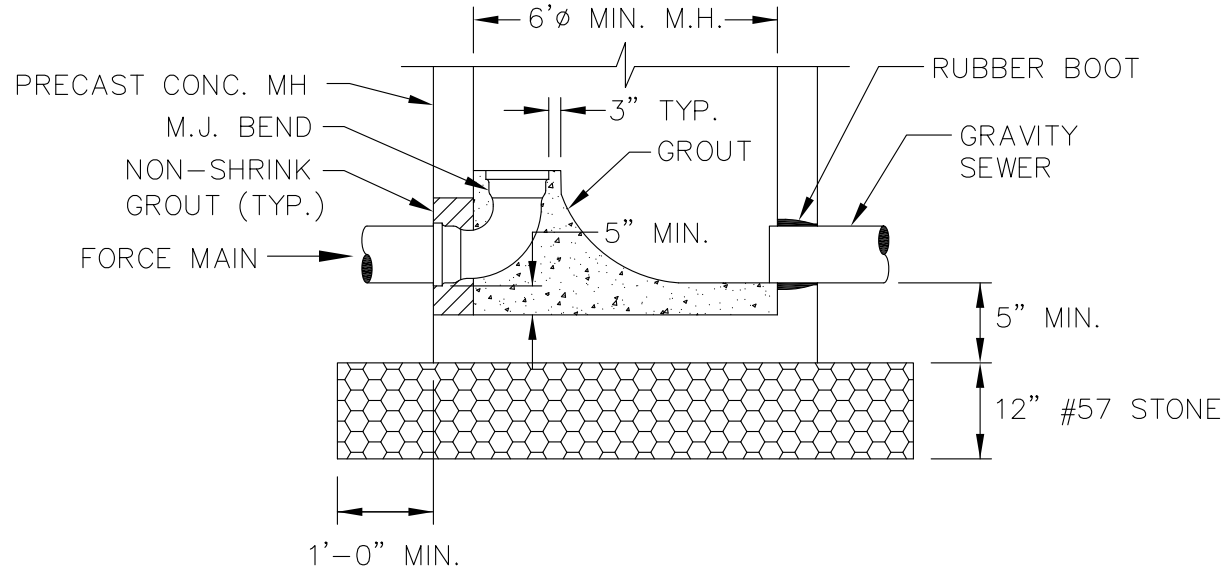
DATE: 01/13

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12



PLAN



SECTION

NOTE: USE VENTED COVER AND BOLT TO FRAME.

NOTES:

1. THIS DETAIL TO BE USED ONLY IN SHALLOW MANHOLE APPLICATIONS 3'-0" TO 8'-0" DEPTH AND BELOW.

2. BOLT DOWN COVER REQUIRED FOR MANHOLES 4'-0" AND UNDER.



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FORCE MAIN TERMINATION DETAIL

S-0018

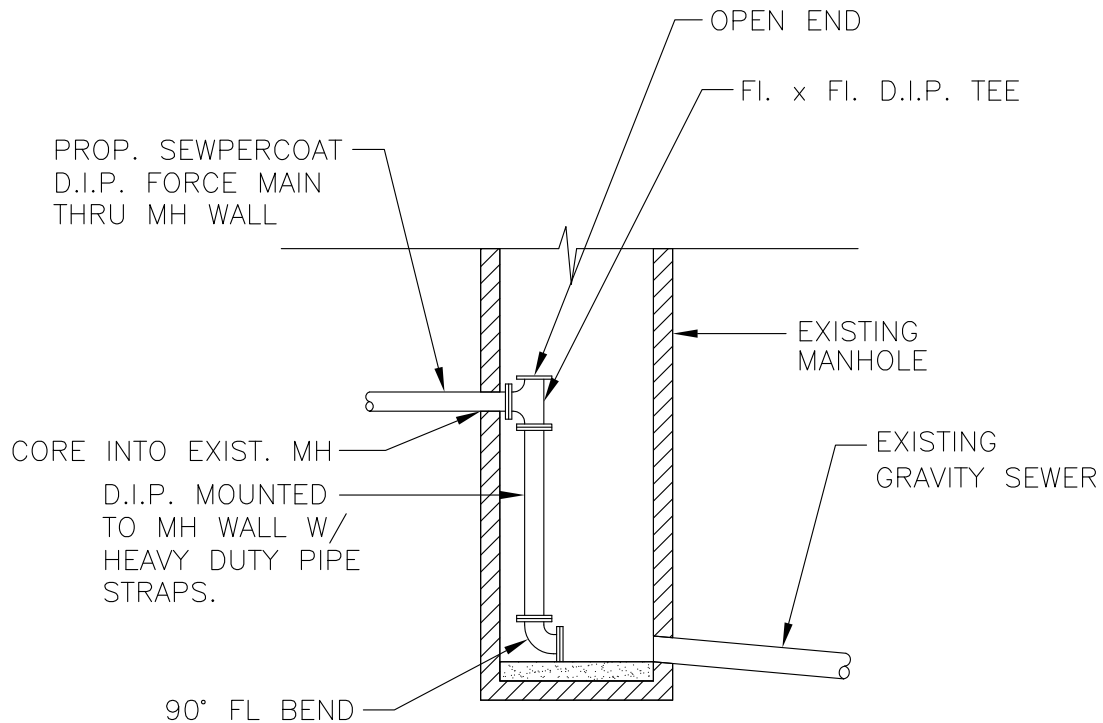
DESIGNED: CCWSA

DRAWN: GMC

DATE: 01/17

SCALE: NTS

BY
REVISIONS
DATE



NOTE:
ALL PIPE & FITTINGS SHALL BE
SEWPERCOAT (CALCIUM ALUMINATE)
LINED OR APPROVED EQUAL.
PIPE SIZE AS REQUIRED

RECEIVING MANHOLE DETAIL FOR DEEP MANHOLES



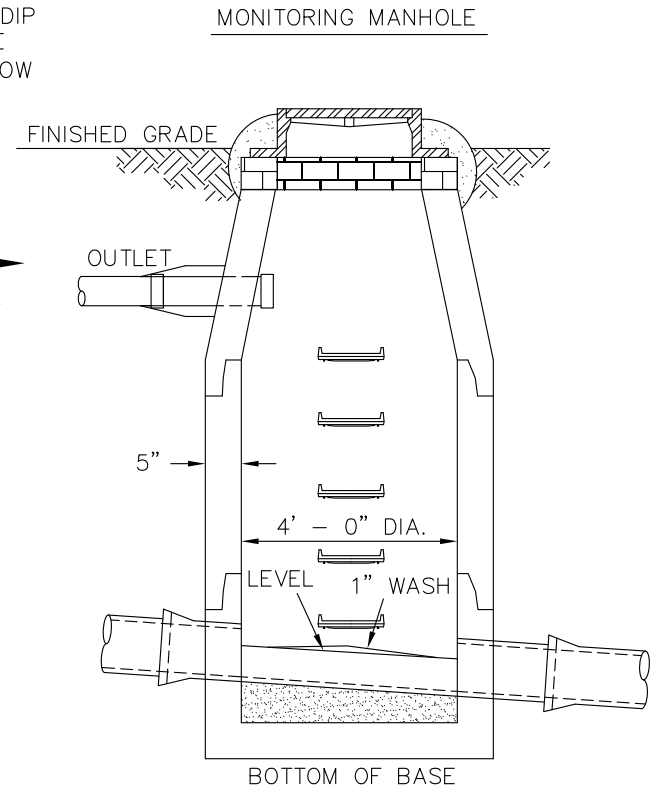
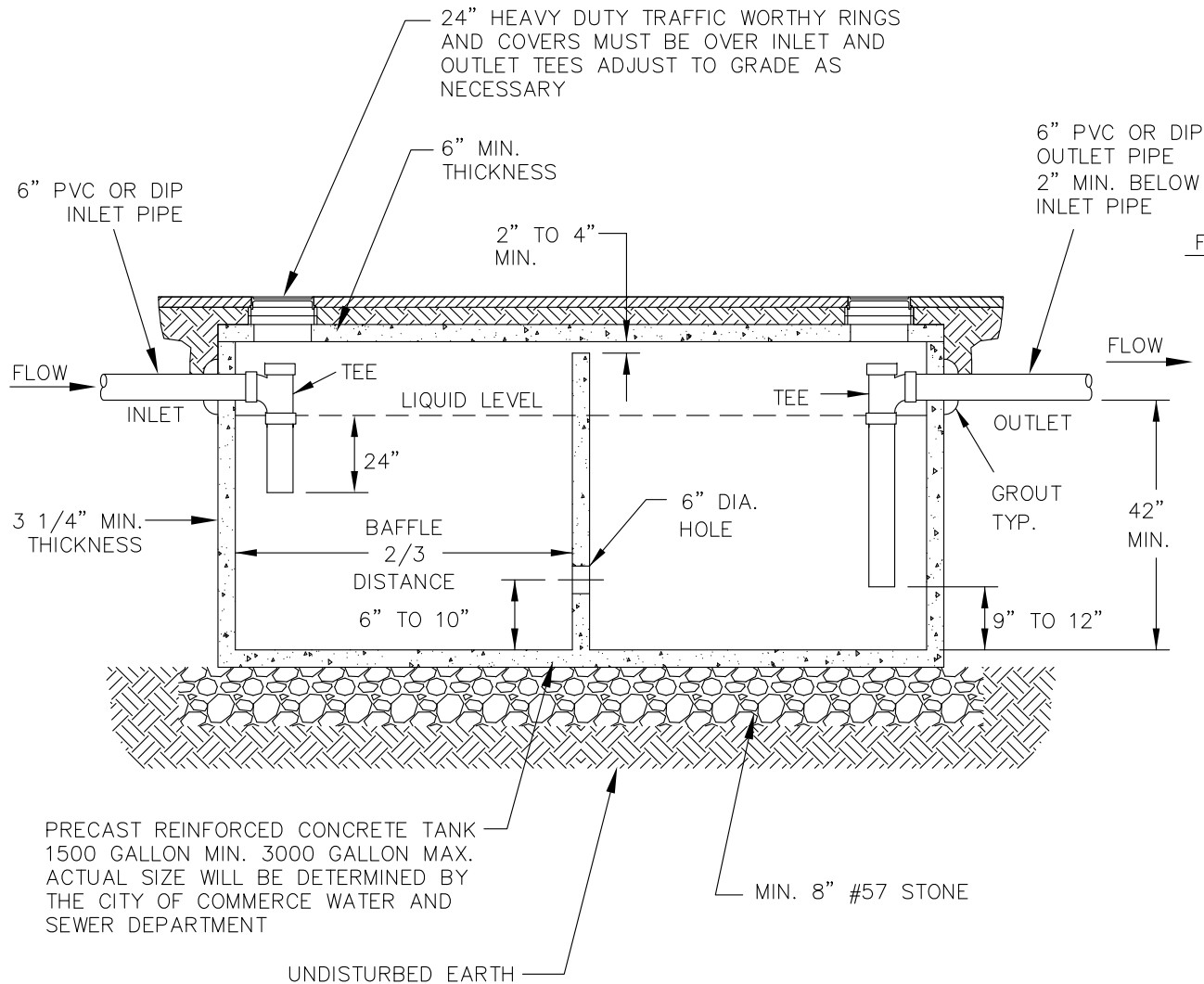
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S-0019

DESIGNED: CCWSA
DATE: 01/17

DRAWN: GMC
SCALE: NTS

BY	
REVISIONS	
DATE	



NOTE:
 1. ALSO SEE STANDARD GREASE TRAP ARRANGEMENT DETAIL
 2. TO BE SIZED BY CCWSA.



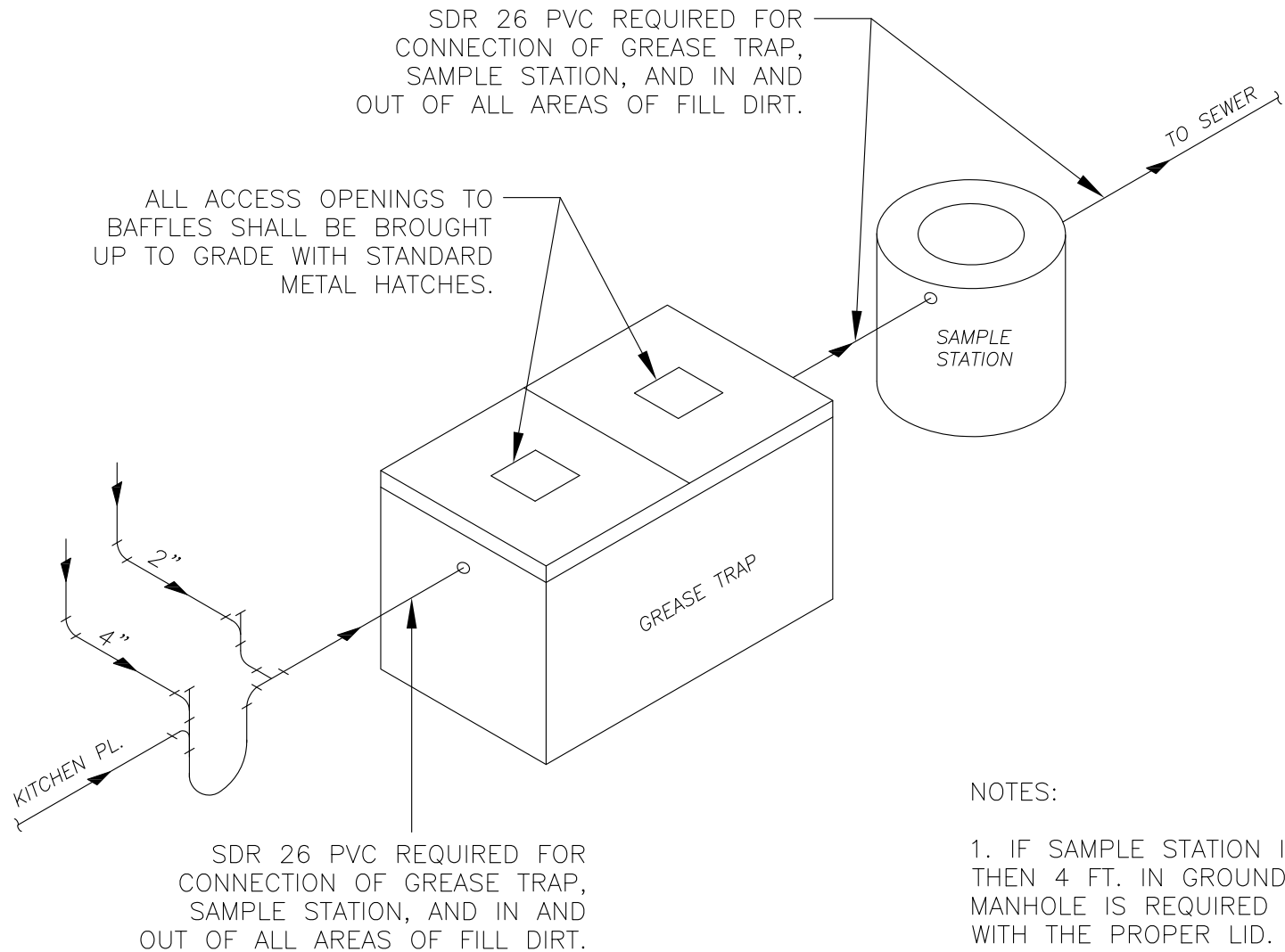
**COWETA COUNTY
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 AUTHORITY**
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 (770) 254-3710

GREASE TRAP INSTALLATION

S-0020

DESIGNED: CCWSA
 DATE: 01/17
 DRAWN: GMC
 SCALE: NTS

BY	REVISIONS	DATE
CHC	MONT. MH	03/08
CHC	ADDED NOTES	02/12



NOTES:

1. IF SAMPLE STATION IS DEEPER THEN 4 FT. IN GROUND A REGULAR MANHOLE IS REQUIRED INSTALLED WITH THE PROPER LID.
2. H2O LOADING REQUIRED FOR TRAFFIC BEARING HATCHES.



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STANDARD GREASE TRAP ARRANGEMENT

S-0021

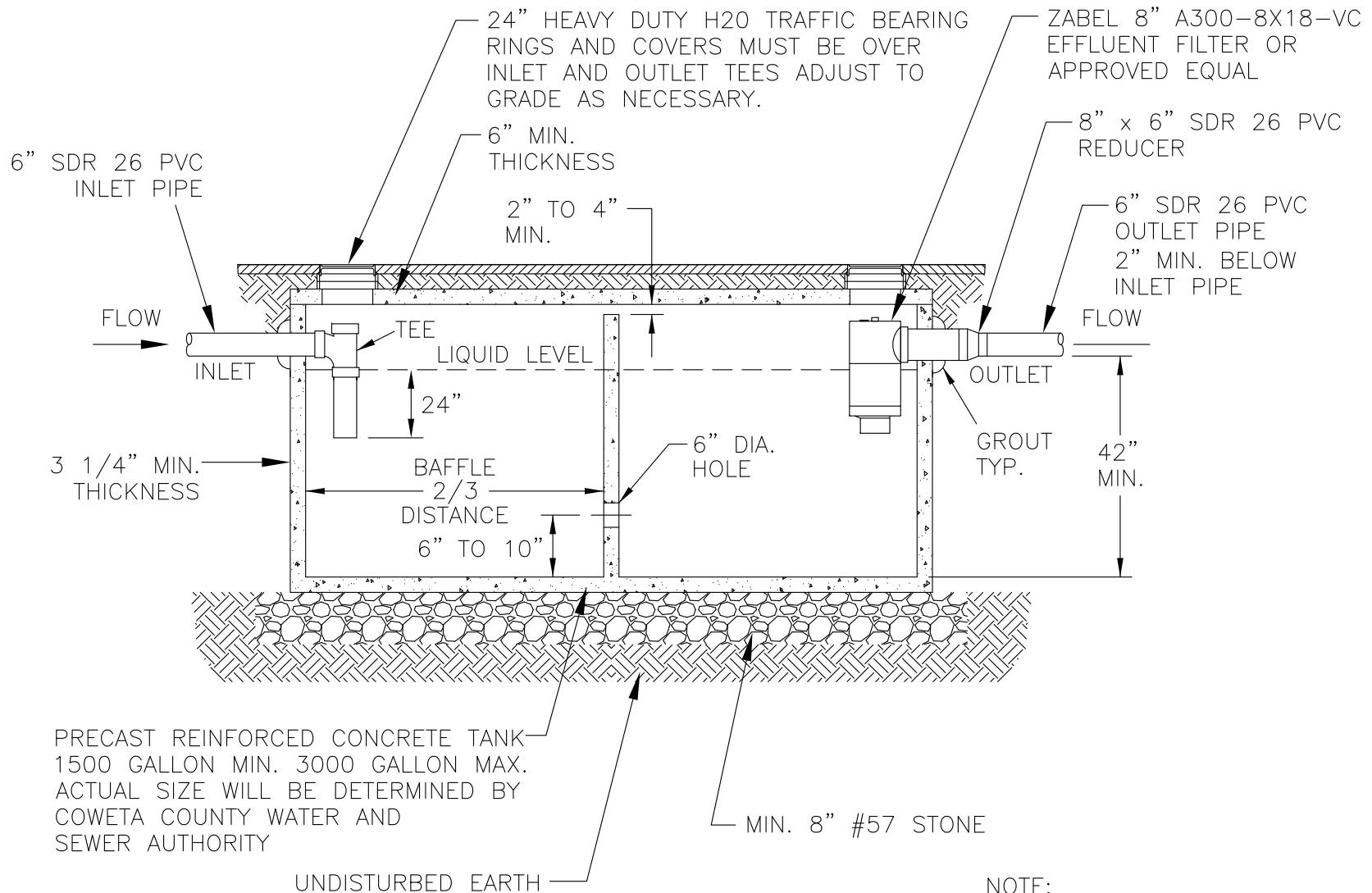
DESIGNED: CCWSA

DRAWN: GMC

DATE: 01/17

SCALE: NTS

BY
REVISIONS
DATE



NOTE:
 1. ALSO SEE STANDARD GREASE TRAP ARRANGEMENT DETAIL SS-0021.
 2. TO BE SIZED BY CCWSA.



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GREASE TRAP INSTALLATION

S-0022

DESIGNED: CCWSA

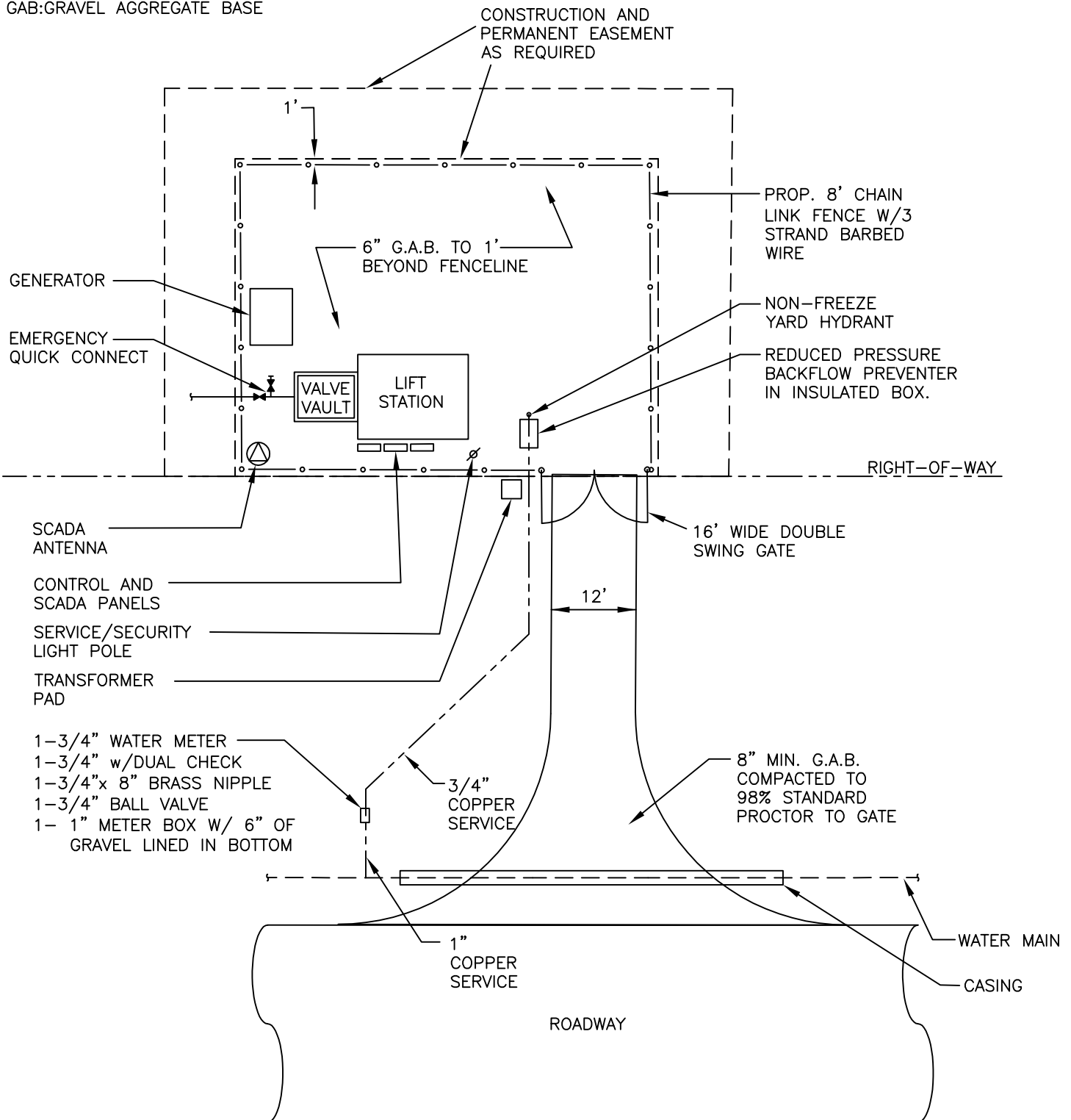
DRAWN: GMC

DATE: 01/17

SCALE: NTS

BY
 REVISIONS
 DATE

LEGEND
TCE:TEMPORARY CONSTRUCTION EASEMENT
PE:PERMANENT EASEMENT
GAB:GRAVEL AGGREGATE BASE



STANDARD LIFT STATION ARRANGEMENT



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S-0023

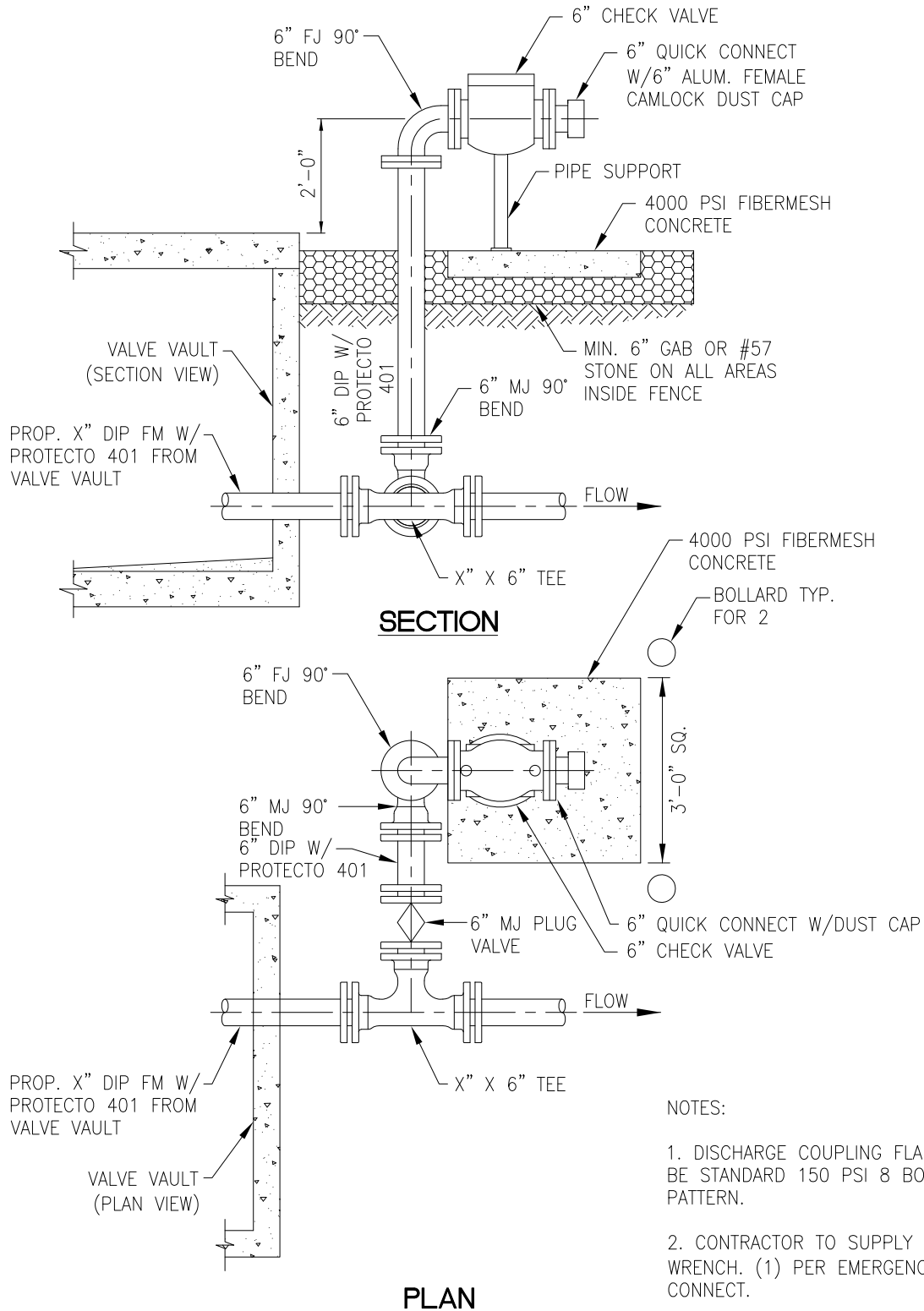
DESIGNED: CCWSA

DRAWN: GMC

DATE: 01/2017

SCALE: NTS

BY	REVISIONS	DATE
CHC	REV. DET.	10/20



EMERGENCY QUICK CONNECT DETAIL

N.T.S.



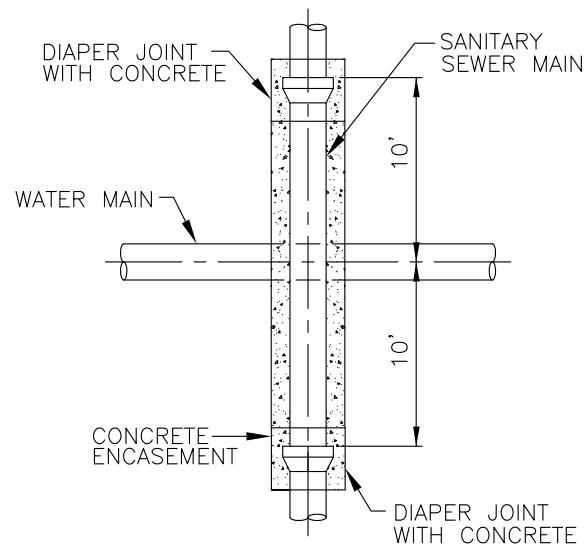
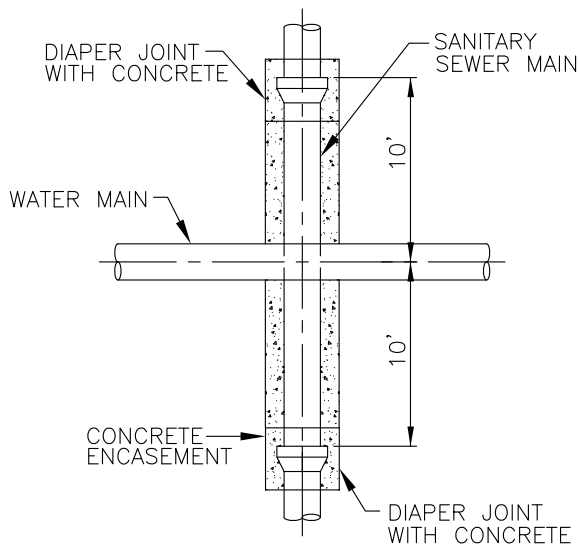
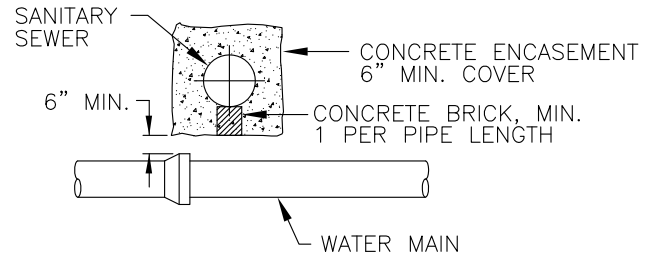
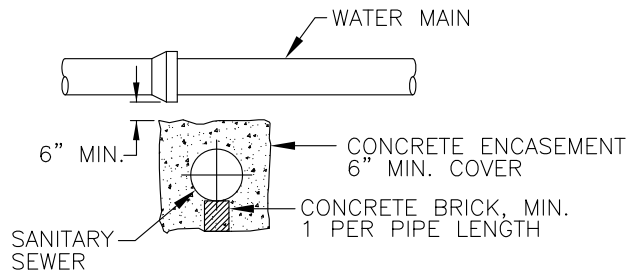
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S-0024

DESIGNED: CCWSA
DATE: 01/17

DRAWN: GMC
SCALE: NTS

BY	REVISIONS	DATE
GMC	DUST CAP	11/20



**WATER MAIN
OVER SEWER**

**WATER MAIN
UNDER SEWER**

TYPICAL SEWER MAIN ENCASEMENT



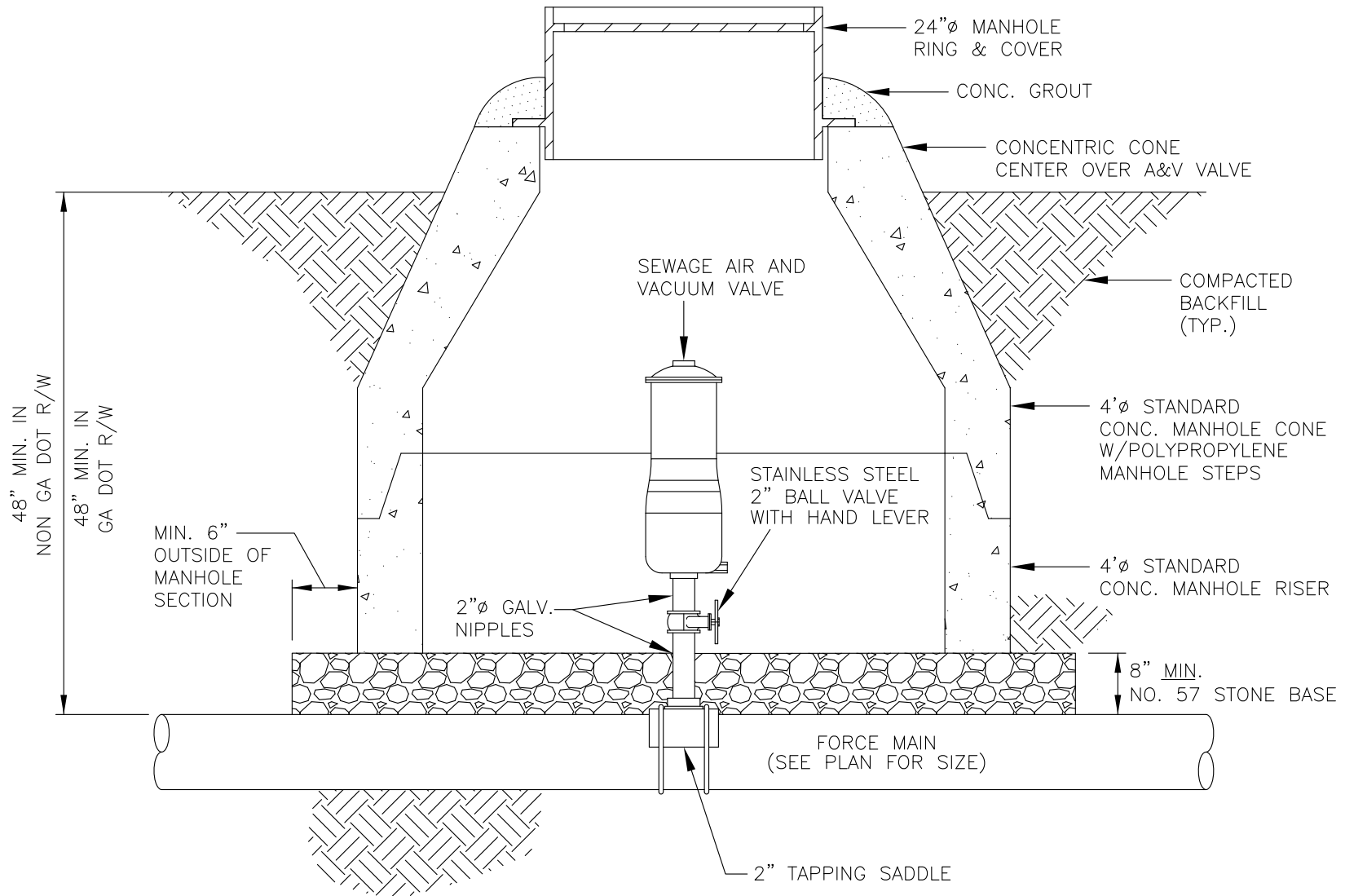
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(770) 254-3710

S-0025

DESIGNED: CCWSA
DATE: 01/17

DRAWN: GMC
SCALE: NTS

BY
REVISIONS
DATE



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AIR AND VACUUM VALVE ASSEMBLY TYPICAL INSTALLATION

S-0026

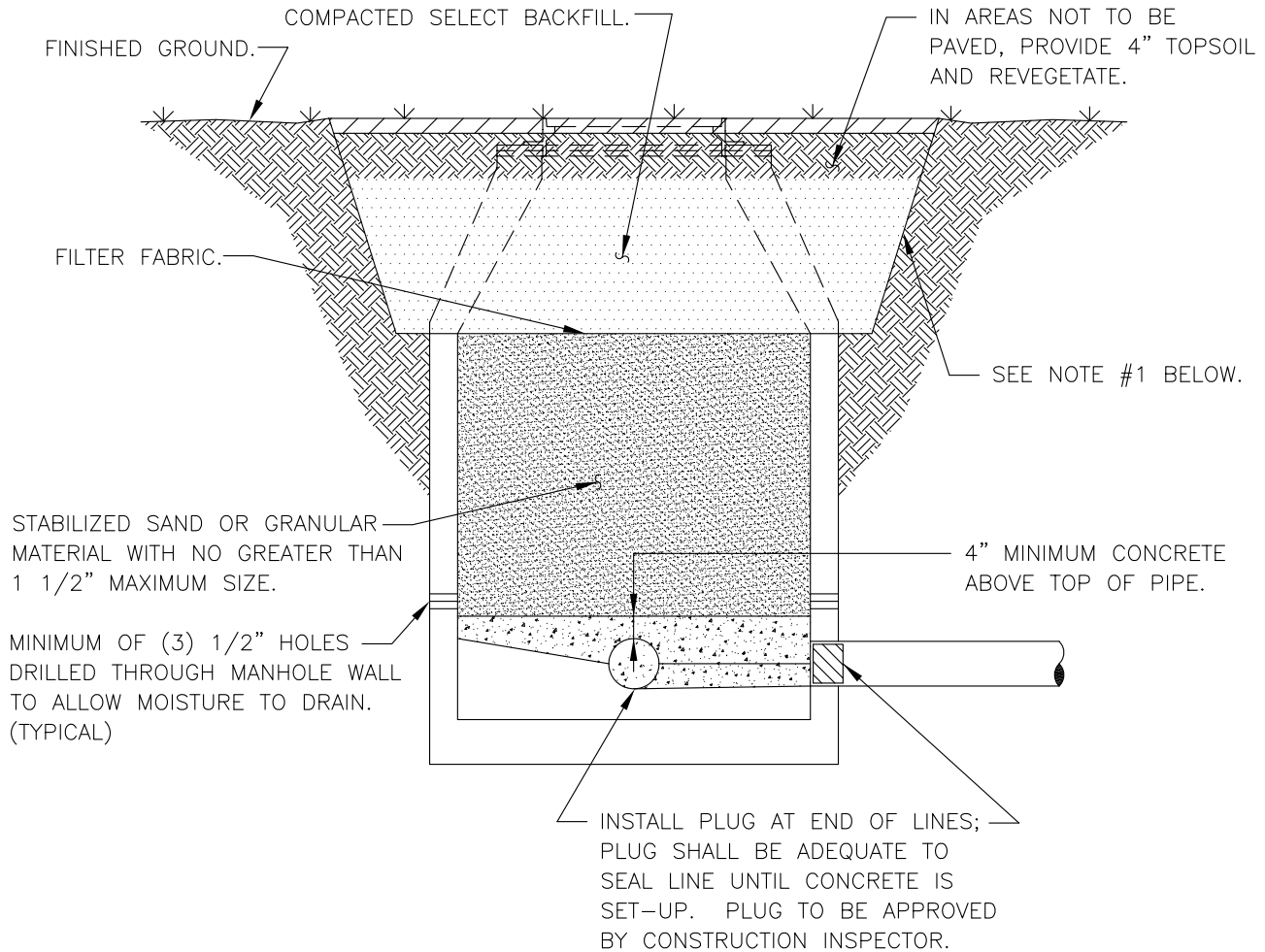
DESIGNED: CCWSA

DRAWN: GMC

DATE: 01/17

SCALE: NTS

BY	
REVISIONS	
DATE	



NOTES:

1. REMOVE ENTIRE CONE SECTION AND DEMOLISH STRUCTURE TWO FEET (2'-0") MINIMUM BELOW GROUND LEVEL.
2. IF LINE WHICH IS TO ABANDONED IN PLACE, EXTENDS UNDER EXISTING OR PROPOSED STRUCTURE, THEN THE ENTIRE LINE TO THE NEXT MANHOLE SHALL BE GROUTED OR SLURRY FILLED.
3. IF LINE IS NOT LOCATED UNDER A STRUCTURE, ABANDON EXISTING LINE IN PLACE BY PLUGGING BOTH ENDS OF LINE AND GROUTING AROUND PLUGS.
4. THE CONTRACTOR IS TO RECORD AND CERTIFY QUANTITIES OF GROUT OR SLURRY PUMPED. QUANTITIES MUST BE A MINIMUM OF 90% OF CALCULATED EXISTING VOID CAPACITY.

TYPICAL MANHOLE ABANDONMENT



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(770) 254-3710

S-0027

DESIGNED: CCWSA

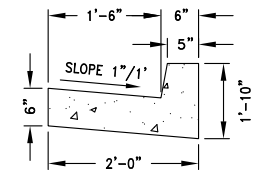
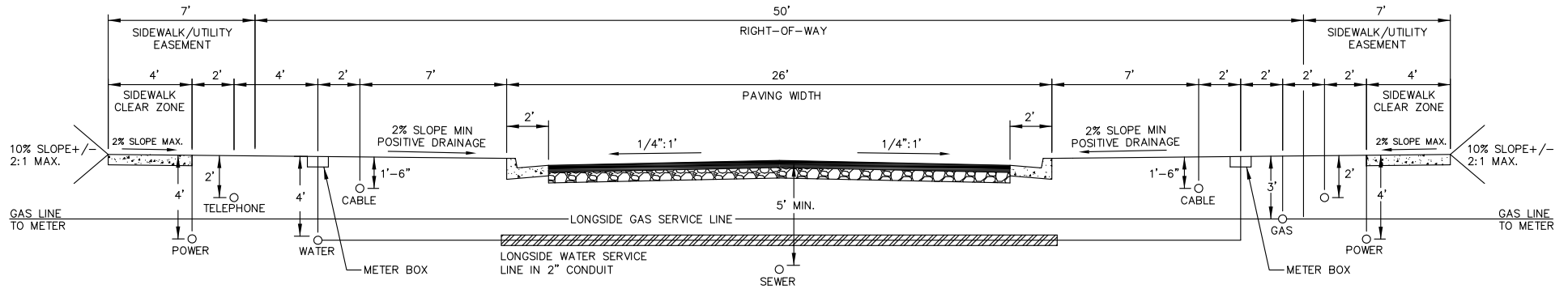
DRAWN: GMC

DATE: 01/17

SCALE: NTS

BY
REVISIONS
DATE

PAVEMENT DESIGN
 2" ASPHALTIC CONCRETE "E" OR "F"
 2" ASPHALTIC CONCRETE "B" BINDER
 6" GRADED AGGREGATE BASE
 SUBGRADE STABILIZED AS REQUIRED
 TO 98% STANDARD PROCTOR



HIGH BACK CURB DETAIL

NOTE:
 1. A BITUMINOUS TACK COAT MEETING THE CURRENT GA D.O.T. SPECIFICATIONS SHALL BE APPLIED BETWEEN LIFTS OF ASPHALT.
 2. ALL CONCRETE CURB AND GUTTER TO BE CLASS "A" CONCRETE.
 3. SEE TABLE 5 STREET REGULATIONS IN THE DEVELOPMENT REGULATIONS FOR ADDITIONAL REQUIREMENTS REGARDING R.O.W., PAVING WIDTH, LANDSCAPE ZONE, AND SIDEWALK CLEAR ZONE.



COWETA COUNTY
 WATER AND SEWERAGE
 AUTHORITY
 545 CORINTH ROAD
 NEWNAN, GA 30263
 (770) 254-3710

STANDARD DETAILS FOR SUBDIVISION STREETS WITH CURB AND GUTTER

U-0001

DESIGNED: CCWSA
 DATE: 07/04
 DRAWN: JKP
 SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12

GENERAL UTILITY NOTES:

1. ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH COWETA COUNTY WATER AND SEWERAGE AUTHORITY (CCW&SA) SPECIFICATIONS.
2. ALL MATERIALS TO CONFORM TO COWETA COUNTY DEVELOPMENT SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE CCW&SA SUBMITTALS ON ALL PIPE AND MATERIALS USED FOR APPROVAL. ANY WORK DONE BY THE CONTRACTOR SHALL BE AT HIS OWN RISK UNTIL REVIEW AND APPROVAL OF THESE SUBMITTALS ARE COMPLETE.
3. THE CONTRACTOR SHALL NOTIFY CCW&SA 48 HOURS PRIOR TO CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE.
4. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY CCW&SA BEFORE ANY WORK IS HIDDEN FROM VIEW.
5. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL UTILITIES BEFORE CONSTRUCTION AND VERIFYING THE LOCATIONS OF ALL UTILITIES SHOWN OR NOT SHOWN.
6. ALL UTILITIES WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRING RELOCATION OR ADJUSTMENT IN ORDER TO ACCOMMODATE PROPOSED IMPROVEMENT SHALL BE RELOCATED OR ADJUSTED AT THE EXPENSE OF THE CONTRACTOR.
7. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY AND COORDINATE HIS WORK WITH EXISTING UTILITIES WHICH MAY CONFLICT WITH HIS WORK. CONTRACTOR SHALL PROTECT AND MAINTAIN SUCH UTILITIES SHOWN OR NOT SHOWN ON THE PLANS.
8. ALL VALVE BOXES ARE TO HAVE COLLARS AND VALVE MARKERS AS REQUIRED BY CCW&SA. ALL CONCRETE COLLARS SHALL BE A MINIMUM 24" DIAMETER AND 6" THICK.
9. MINIMUM HORIZONTAL AND VERTICAL DISTANCES BETWEEN WATER LINES AND OTHER UNDERGROUND UTILITIES OR STRUCTURES SHALL BE 2 FEET.
10. WATER LINES SHALL HAVE A MINIMUM COVER OF 4' (FEET) FROM FINISHED GRADE.
11. ALL WATER SERVICE CONNECTIONS SHALL BE MARKED WITH A 2"x4" "W" SAW NOTCH AT SERVICE LOCATIONS ON THE CURB AND PAINTED BLUE. THE LOCATION OF FUTURE WATER METERS SHALL BE TEMPORARILY MARKED WITH A 2" PVC PIPE PAINTED BLUE. THIS LOCATION INDICATOR SHALL EXTEND A MINIMUM OF 24" ABOVE EXISTING GRADE.
12. WHERE VALVE MARKERS ARE NOT USED ALL VALVES SHALL BE MARKED WITH A 2"x4" "V" ON THE CURB AND PAINTED BLUE.
13. ALL BLOCKING BEHIND FITTINGS TO BE AGAINST UNDISTURBED SOIL.
14. ALL WATER MAIN CROSSING UNDER PAVEMENT SHALL BE DUCTILE IRON PIPE ENCASED IN STEEL CASING WITH CASING SPACERS AND FIELD LOCK GASKETS PER CCW&SA SPECIFICATIONS.
15. CONTRACTORS ARE REQUIRED TO CONTACT CCW&SA FOR A PRE-CONSTRUCTION CONFERENCE.
16. ALL WATER LINES CROSSING STORM DRAINS SHALL BE DUCTILE IRON PIPE(DIP). (36 L.F. MIN.). DIP SHALL ALSO BE REQUIRED IN ANY AREAS IN WHICH THE WATER MAIN PARALLELS A STORM DRAIN.
17. ALL SERVICE LINES CROSSING UNDER PAVEMENT SHALL BE ENCASED IN 2" SCH 80 PVC OR OTHER CONDUIT MATERIAL AS APPROVED BY CCW&SA.
18. ALL VALVES AND FITTINGS ARE TO BE RESTRAINED WITH APPROPRIATE TYPE AND NUMBER OF "EBAA IRON" OR "UNI-FLANGE" PIPE RESTRAINT SYSTEM ACCESSORIES IN A MANNER APPROVED BY CCW&SA PRIOR TO CONSTRUCTION. ANY CONCRETE BLOCKING THAT IS ALLOWED SHALL BE POURED AGAINST UNDISTURBED EARTH.
19. EACH LOT IN A SUBDIVISION SHALL BE SERVED BY A 1" TAP. A DOUBLE METER BOX AND FITTINGS SHALL BE SET PER THE CONSTRUCTION DOCUMENTS AS APPROVED BY CCW&SA.
20. DUCTILE IRON PIPE IS REQUIRED GOING "IN TO" AND "OUT OF" ALL FITTINGS.
21. BOTH TRACER WIRE AND METALLIC UNDERGROUND MARKING TAPE WILL BE REQUIRED FOR ALL AREAS. A TRACER WIRE TERMINAL POST SHALL BE REQUIRED ON ANY WATER OR SEWER THAT DOES NOT HAVE A PERMANENT STRUCTURE THAT CLEARLY INDICATES THE PRESENCE OF AN ASSET. CCW&SA WILL REVIEW THESE LOCATIONS ON A CASE BY CASE BASIS AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE POST LOCATIONS WITH CCW&SA.
22. THE FIRE DEPARTMENT CONNECTION (FDC) SHOULD BE LOCATED NOT LESS THAN 18" AND NOT MORE THAN 4' ABOVE THE LEVEL OF THE ADJACENT GRADE OR ACCESS LEVEL. POST INDICATOR VALVE OR FIRE HYDRANT SHALL BE NO LESS THAN 40' FROM A BUILDING. NO OBSTRUCTIONS WITHIN 36" OF FIRE HYDRANTS, CONTROL VALVES OR FDC SHALL BE ALLOWED. IMPACT PROTECTION SHALL BE PROVIDED FOR FIRE HYDRANTS SUBJECT TO MOTOR VEHICLE IMPACT. REF. NO. NFPA-24-7.3.3.



**Know what's below.
Call before you dig.**

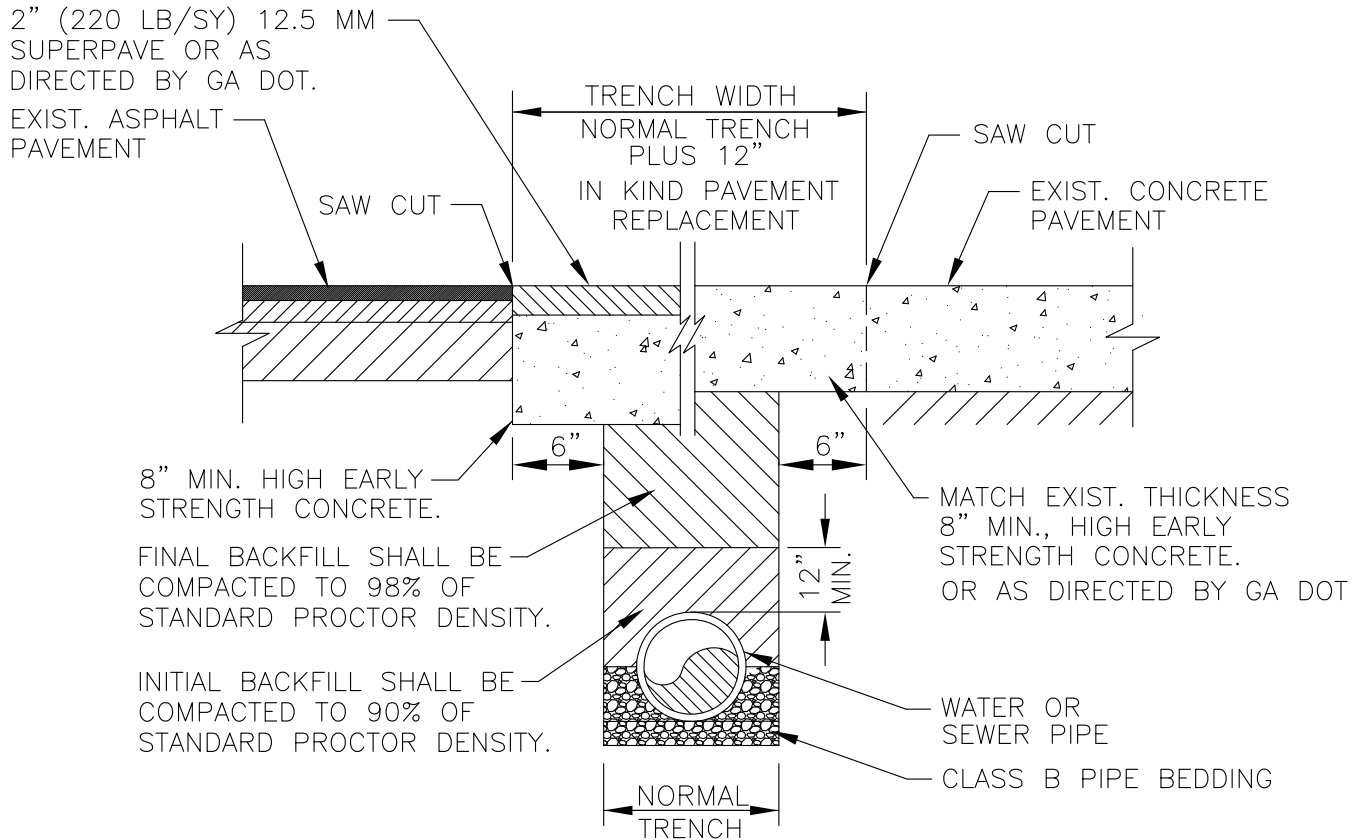


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AUTHORITY**
545 CORINTH ROAD
NEWNAN, GA 30263
(770) 254-3710

U-0002

DESIGNED: CCWSA	DRAWN: JKP
DATE: 07/04	SCALE: NTS

BY	
REVISIONS	
DATE	



NOTE: FINAL BACKFILL TO BE PLACED IN MAXIMUM 8" (LOOSE) LIFTS AND COMPACTED TO NOT LESS THAN 98% STANDARD PROCTOR DENSITY AS DETERMINED BY (ASTM D698.) ONLY CLASS B TRENCH WILL BE ALLOWED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

PAVEMENT REPLACEMENT CLASS B TRENCH FOR ALL PIPING



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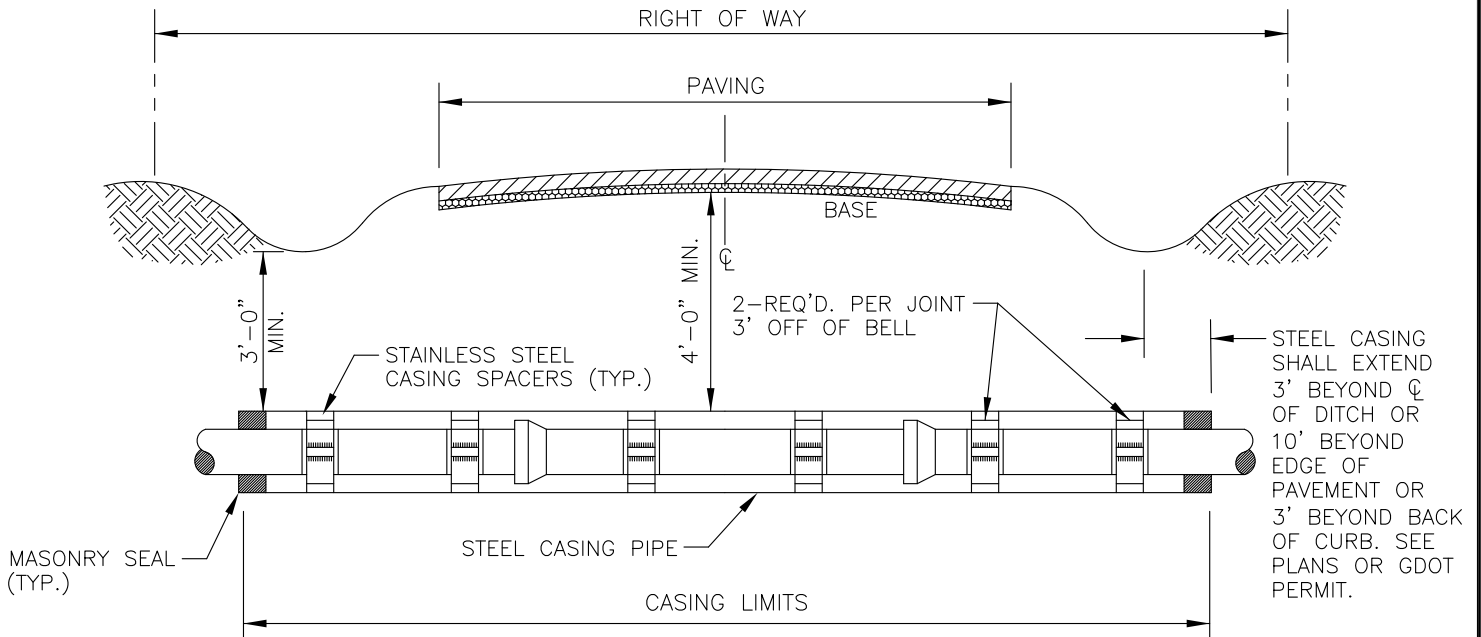
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CHC	ADDED NOTES	03/12



TYPICAL HIGHWAY CROSSING

N.T.S.

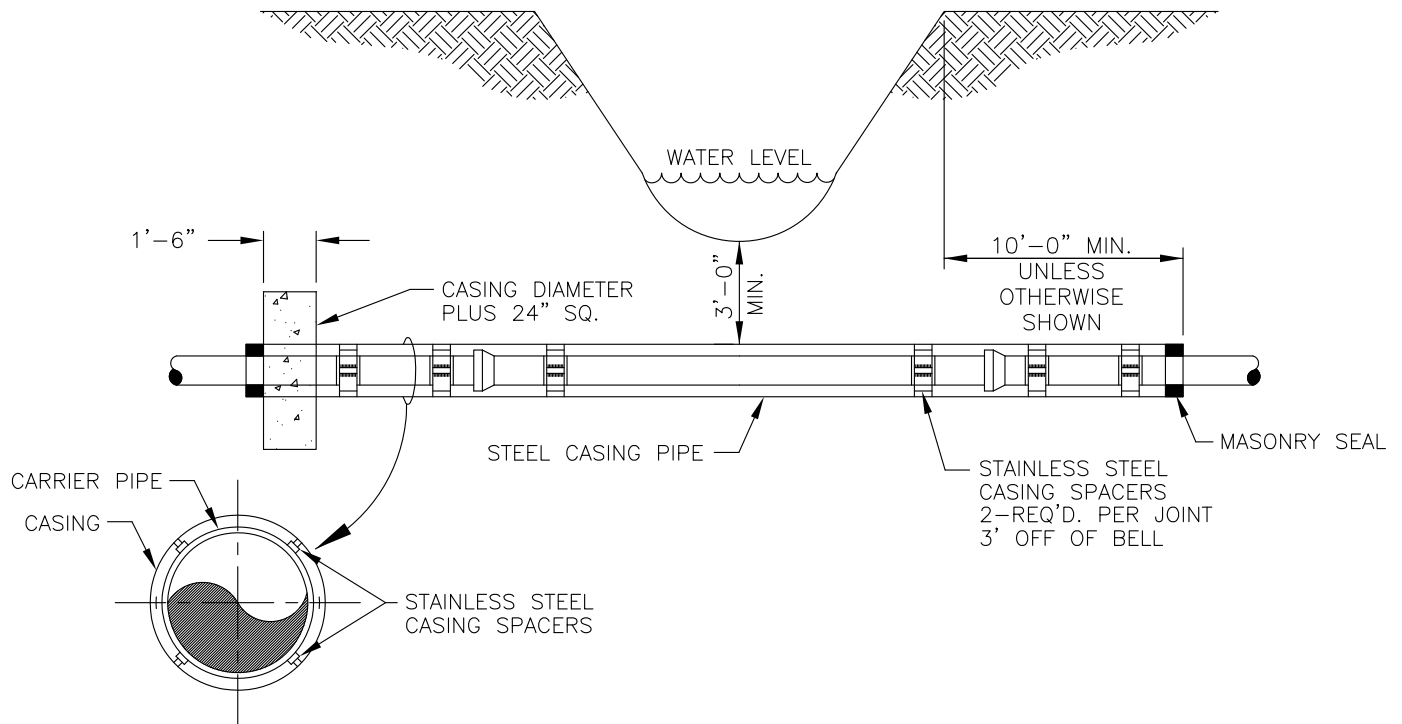


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U-0004

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TYPICAL CREEK CROSSING

N.T.S.



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U-0005

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SCENARIO "A"
BEGIN DEFLECTION OF PROP.
WATER MAIN 100' BEFORE
EXIST. STORM DRAIN

PROP. WATER
MAIN TYP.

SCENARIO "B"
DEFLECT PROPOSED WATER MAIN
BENEATH EXIST. STORM DRAIN WITH
(4) 22 1/2° BENDS OR (4) 45° BENDS
MAINTAIN 18" MIN. VERTICAL SEPARATION
BELOW CROSS DRAIN

SCENARIO "C"
DEFLECT PROPOSED WATER MAIN
ABOVE EXIST. STORM DRAIN WITH
(4) 22 1/2° BENDS OR (4) 45° BENDS
ENCASE WATER MAIN IN CONC. WITH 12"
MINIMUM GROUND COVER.
(NOT TYP. IN GDOT R/W)

MAINTAIN 24" HORIZONTAL
SEPARATION AWAY FROM
END OF EXIST. CROSS
DRAIN

END DEFLECTION OF
PROPOSED WATER MAIN
100' BEYOND EXIST.
STORM DRAIN

RIGHT-OF-WAY

EXISTING ROAD

EX. STORM DRAIN
TYPICAL

CREEK OR DITCH
TYPICAL

SCENARIO "C"
CONCRETE ENCASED
MIN. 5' EACH SIDE
OF STORM DRAIN

12" MIN.

STORM DRAIN

SCENARIO "A"
3.5' MIN. COVER
(4' MIN. WITHIN GDOT
R/W)

SCENARIO "B"
18" MIN.

CROSS SECTION

ISOLATION VALES
IF REQUIRED

(4) 22 1/2° OR
(4) 45° VERTICAL
BENDS

SCENARIO "B"
18" MIN.

(1) JOINT OF PIPE
CENTERED UNDER
STORM DRAIN



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TYPICAL WATER MAIN INSTALLATION AT CROSS DRAIN

U-0006

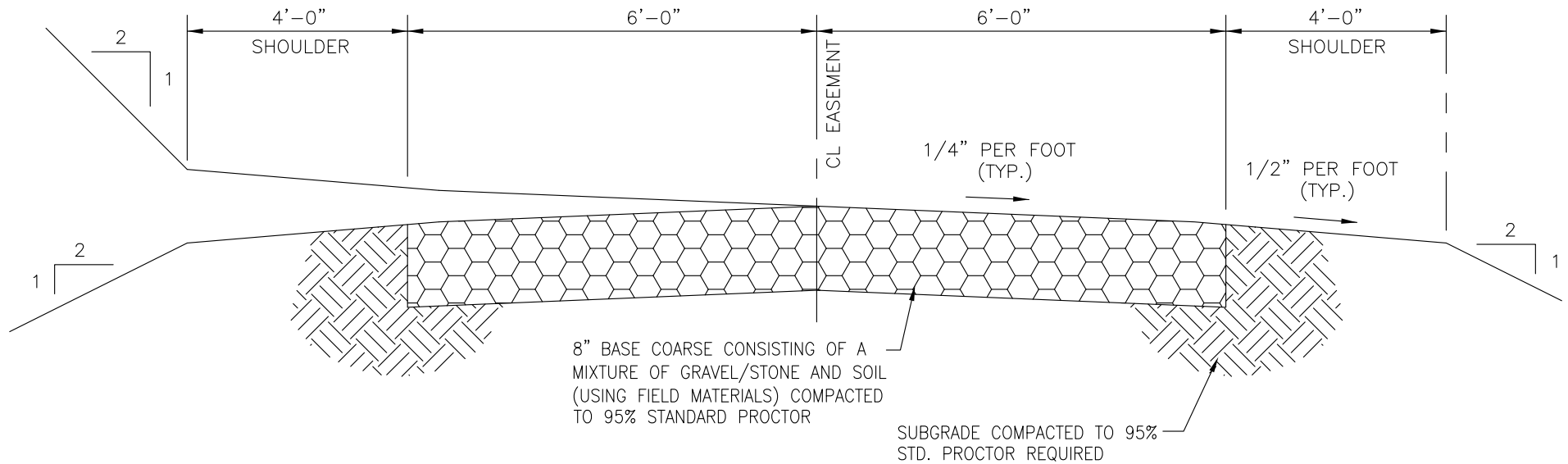
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DRAWN: GMC

DATE: 02/17

SCALE: NTS

BY
REVISIONS
DATE



NOTE:
THE TERRAIN ALONG SOME SECTIONS OF THE ALIGNMENT MAY NOT ALLOW ROOM FOR CONSTRUCTION OF SHOULDERS. CUT AND FILL ADJACENT TO EDGE OF ROAD/SHOULDER MAY BE INCREASED TO 1:1 AS NECESSARY TO STAY IN A 30 FT. PERMANENT EASEMENT.



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TYPICAL ACCESS ROAD

U-0007

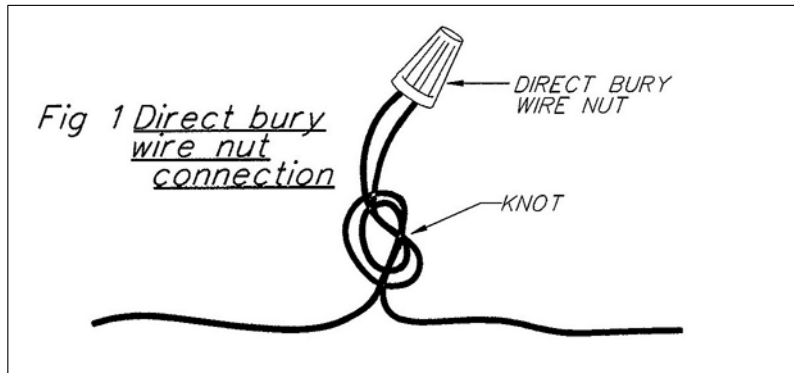
DESIGNED: CCWSA

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DATE: 02/17

SCALE: NTS

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DATE

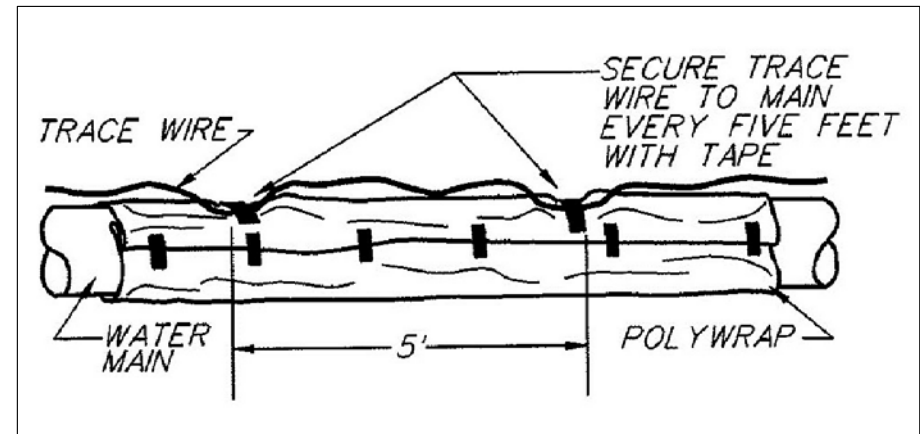
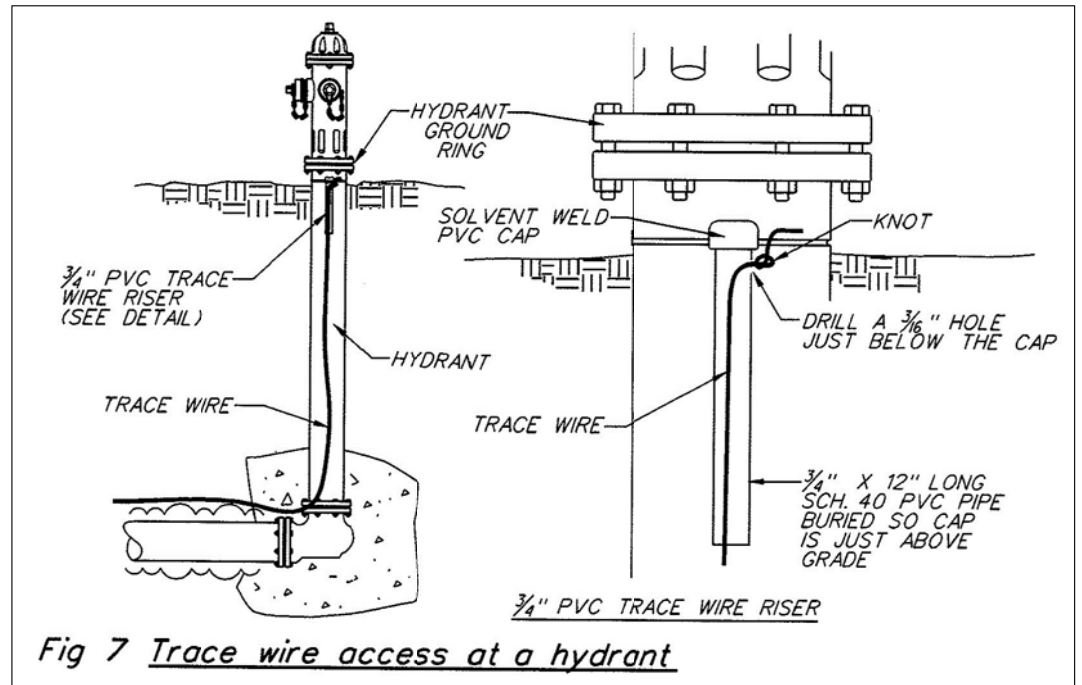


INSTALLATION:
TRACE WIRE SHALL BE INSTALLED IN A CONTINUOUS FASHION. INSTALL TRACE WIRE ALONG THE TOP OF THE WATER MAIN AND SECURE WITH TAPE EVERY (5) FIVE FEET. A NON-DETECT TAPE WILL ALSO BE INSTALLED APPROX. 24" ABOVE WATER MAIN.

BRING TRACE WIRE TO SURFACE AT EACH FIRE HYDRANT AND VALVE ASSEMBLIES AT INTERSECTIONS. TAKE CARE NOT TO DAMAGE THE WIRE COATING. REPAIR DAMAGED COATING WITH ELECTRICAL TAPE.

WIRE GAUGE SHALL BE 12 GAUGE OR LARGER ON ALL WATER MAINS. WIRE SHALL BE DURAtace OR APPROVED EQUAL. ALWAYS ATTACH THE WIRE TO THE LEAD END OF THE PIPE WHEN BORING AND AVOID KINKING OR TANGLING THE WIRE DURING INSTALLATION. WHEN DIRECTIONAL BORING EQUIPMENT IS UTILIZED, (3) THREE 10 OR 12 GAUGE WIRES SHOULD BE PULLED WITH THE MAIN IN CASE ONE OR TWO WIRES SHOULD BREAK.

INSTALL A SNAKEPIT TRACING WIRE ACCESS BOX 331075 AT THE TIE-IN POINT TO THE EXISTING WATER MAIN.



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TRACER WIRE INSTALLATION

U-0008

DESIGNED: CCWSA

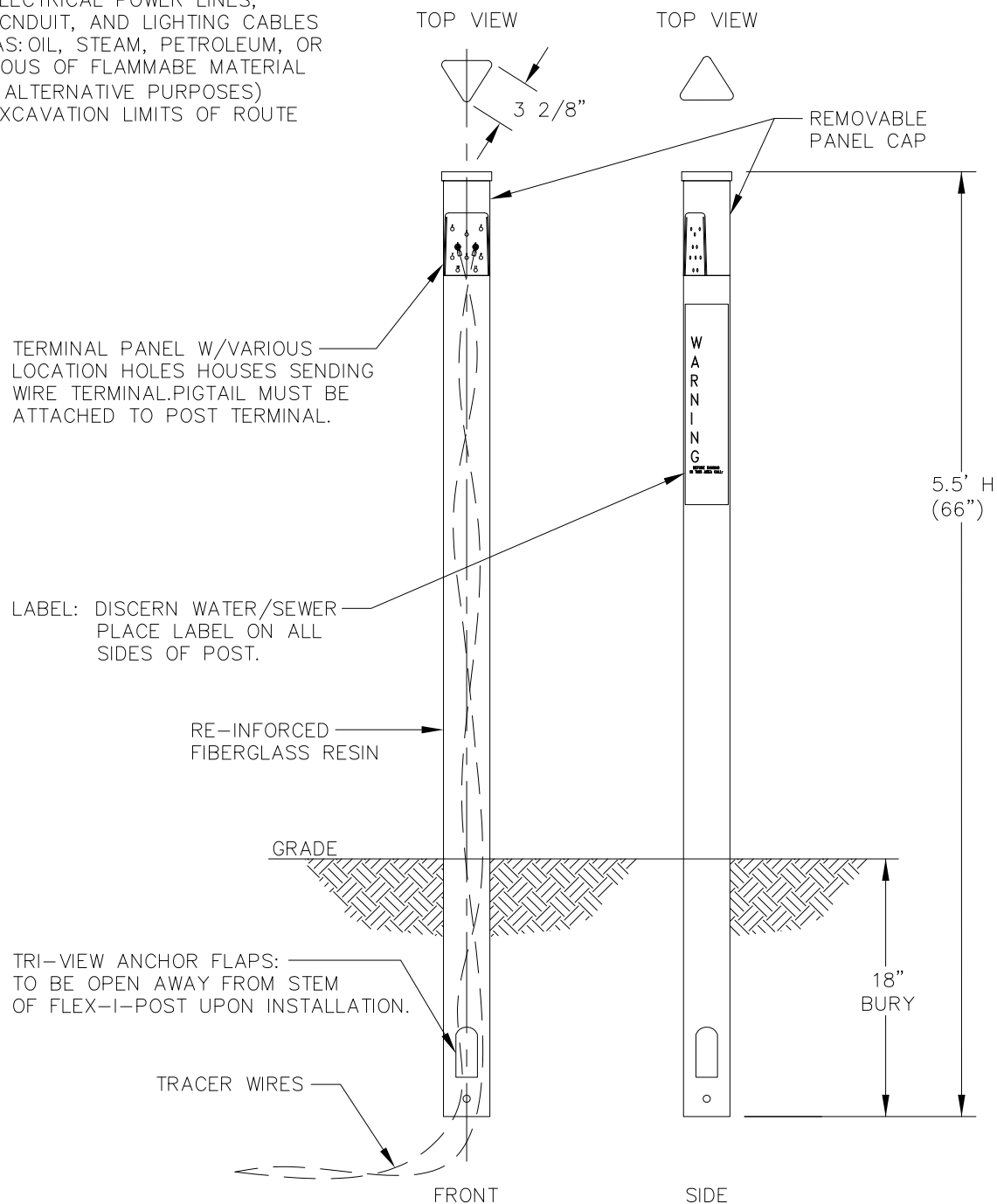
DRAWN: JKP

DATE: 06/15

SCALE: NTS

BY
REVISIONS
DATE

COLOR	UTILITY COLOR CODE
BLUE	WATER
GREEN	SEWER: SEWAGE AND DRAIN LINES
ORANGE	TELECOMMUNICATION: ALARM OR SIGNAL LINES, FIBER OPTIC CABLE, OR CONDUIT.
RED	ELECTRIC: ELECTRICAL POWER LINES, CABLES OR CONDUIT, AND LIGHTING CABLES
YELLOW	NATURAL GAS: OIL, STEAM, PETROLEUM, OR OTHER GASEOUS OR FLAMMABLE MATERIAL
BLACK	(SPECIAL / ALTERNATIVE PURPOSES)
WHITE	PROPOSED EXCAVATION LIMITS OF ROUTE



TRACER WIRE UTILITY MARKERS



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U-0009

DESIGNED: CCWSA

DRAWN: CHC

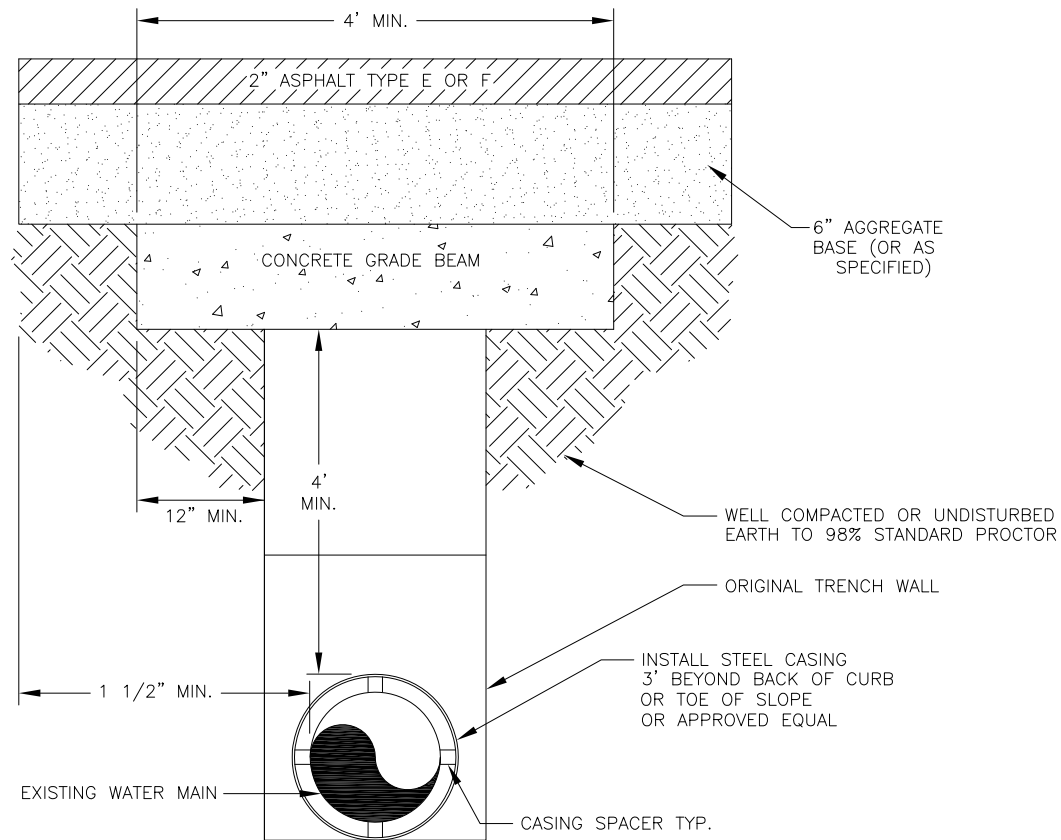
DATE: 03/27/18

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SECTION

NOTE:
THIS DETAILS APPLICATION USED
FOR WATER MAIN PROTECTION
FOR ROADS CONSTRUCTED OVER
EXISTING WATER MAINS



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CONCRETE GRADE BEAM DETAIL

U-0010

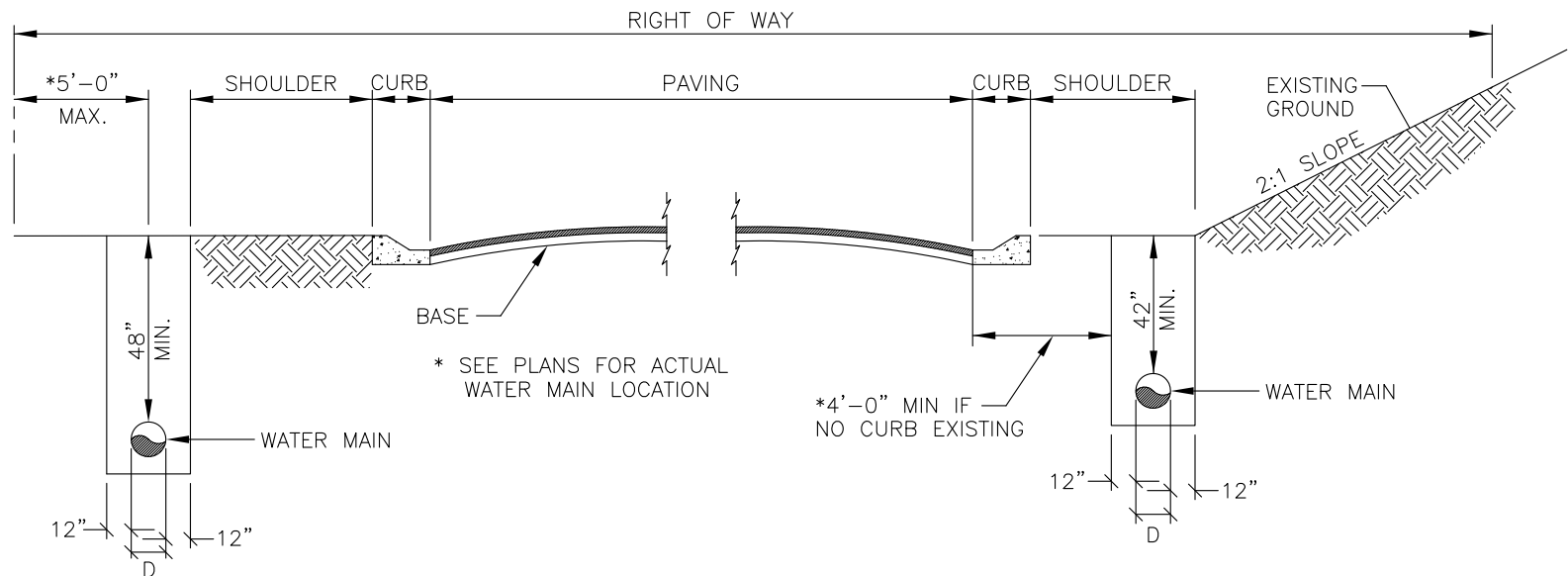
DESIGNED: CCWSA

DRAWN: CHC

DATE: 08/09

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED DTL.	03/12



TYP. GA DOT RIGHT-OF-WAY INSTALLATION

N.T.S.

TYP. NON GA DOT SHOULDER INSTALLATION

N.T.S.



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TYPICAL WATER MAIN PLACEMENT

W-0001

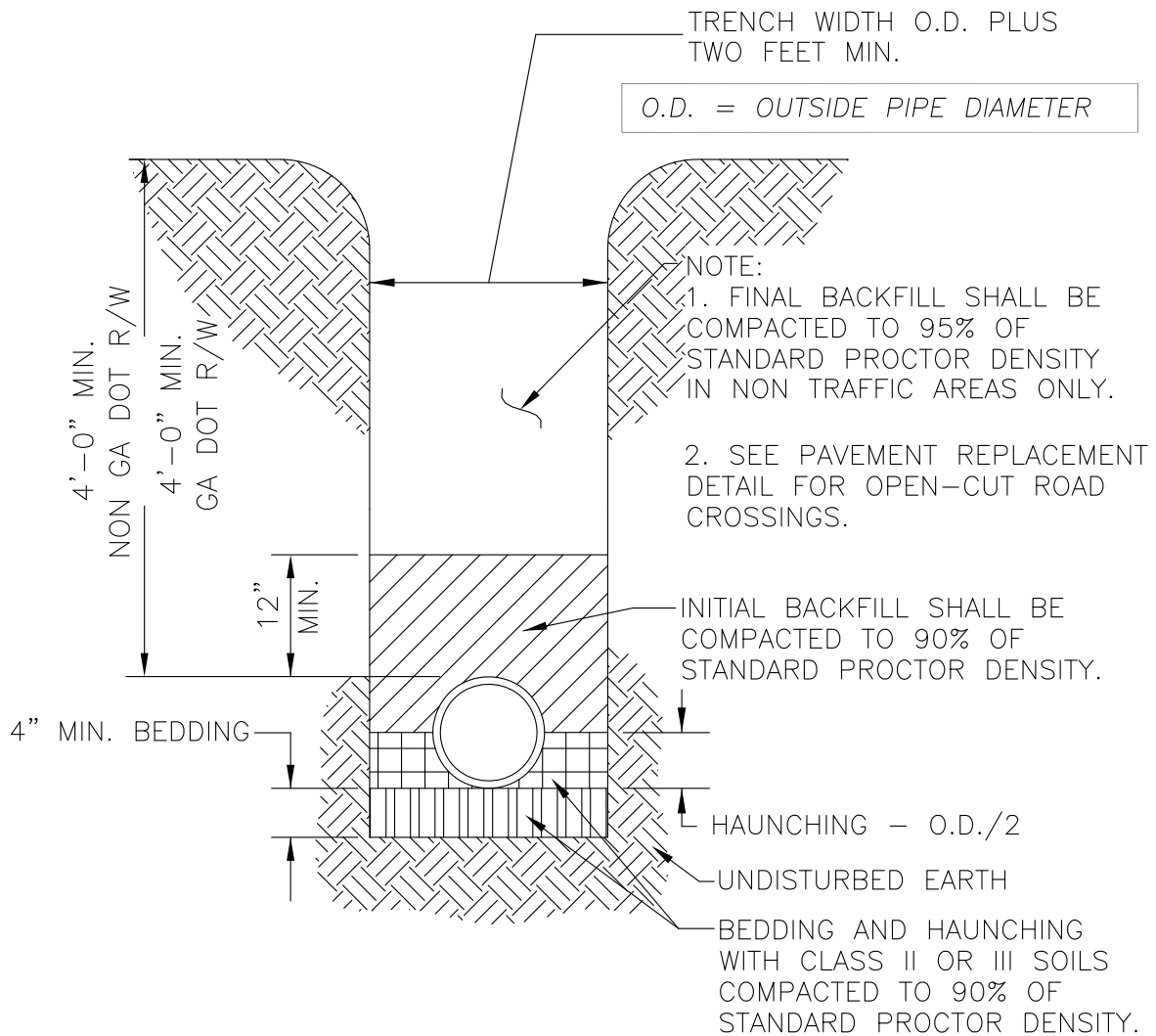
DESIGNED: CCWSA

DRAWN: JKP

DATE: 07/04

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12



PRESSURE PIPE BEDDING

N.T.S.

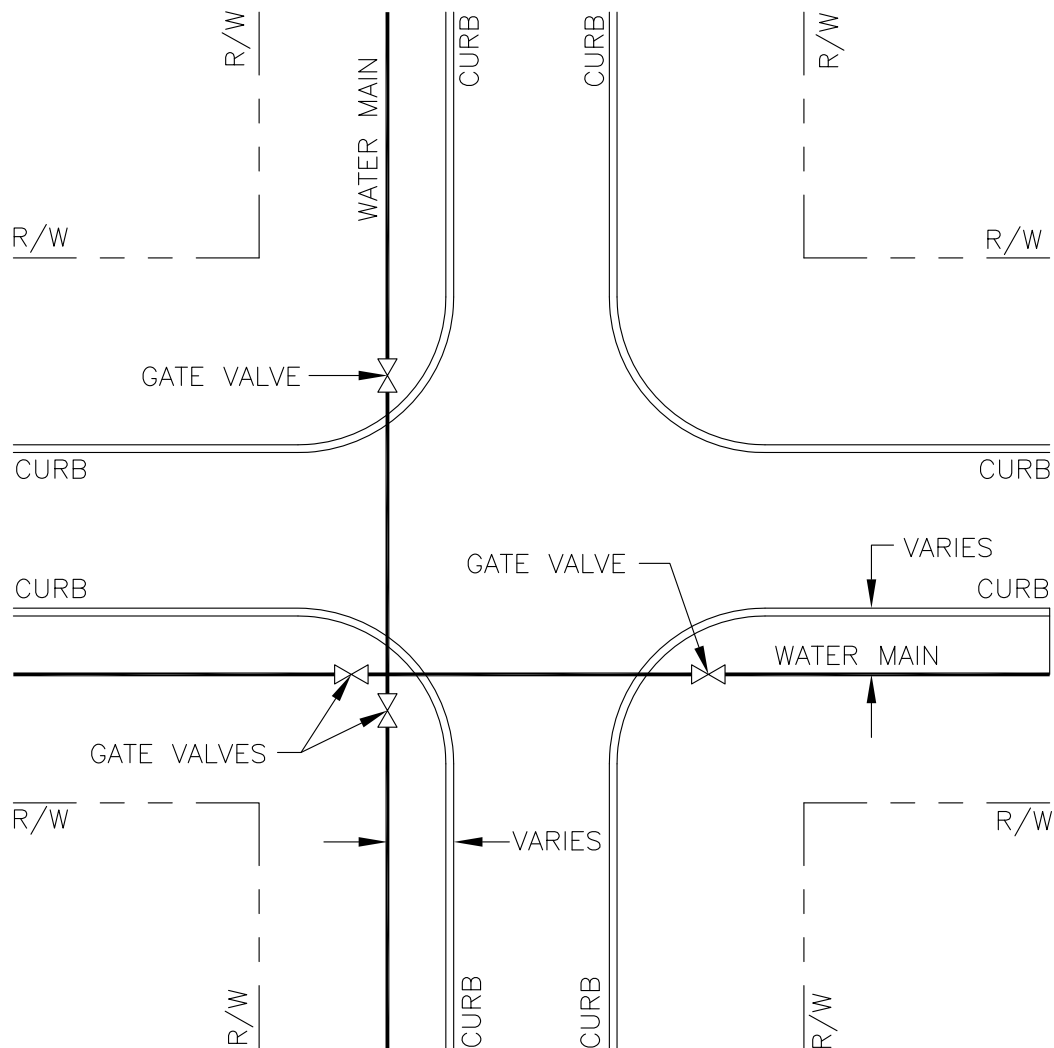


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W-0002

DESIGNED: CCWSA
 DATE: 07/04
 DRAWN: JKP
 SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12



NOTES:

1. VALVES ARE TO BE LOCATED WITHIN RIGHT-OF-WAY OF ROADWAY.
2. GATE VALVES ARE NOT REQUIRED ON DEADEND LEGS LESS THAN 1,000 LINEAR FEET IN LENGTH UNLESS OTHERWISE SHOWN ON THE PLANS.
3. VALVES SHALL NOT BE LOCATED IN DITCH LINE.

WATER MAIN VALVING AT INTERSECTION

N.T.S.



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W-0003

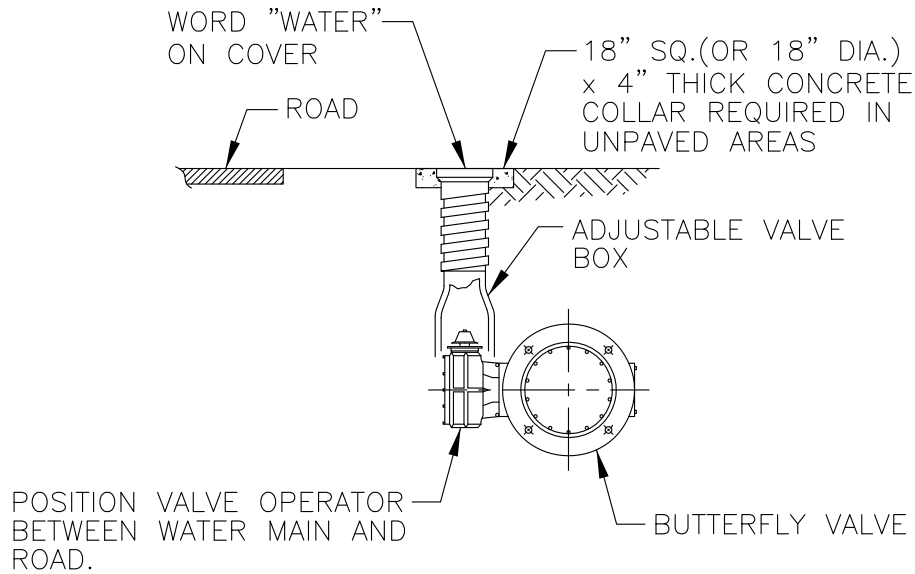
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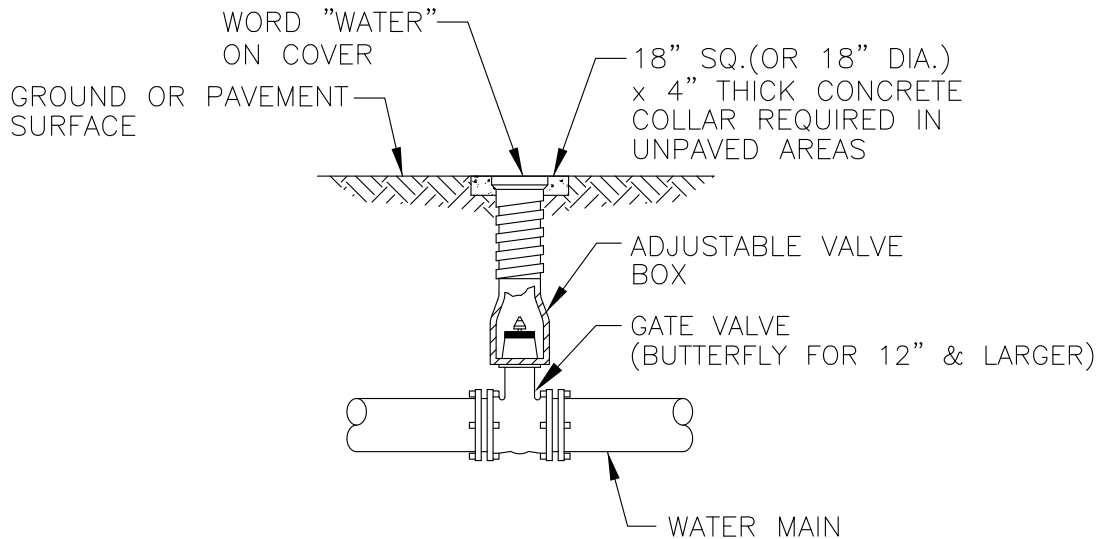
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CHC	ADDED NOTES	03/12



BUTTERFLY VALVE DETAIL



GATE VALVE DETAIL

VALVE INSTALLATION

N.T.S.



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W-0005

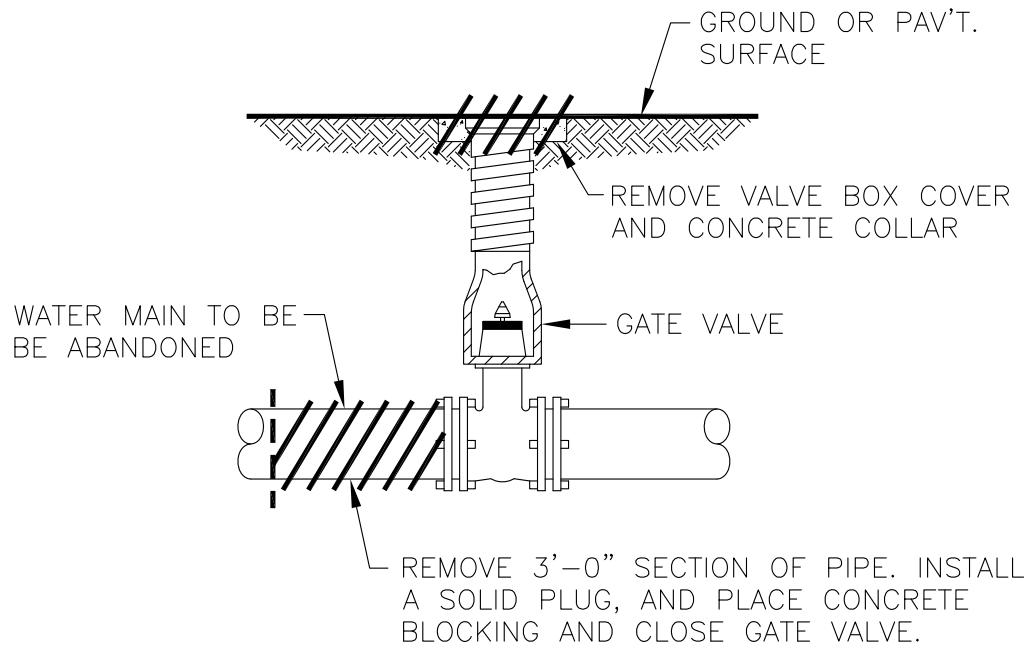
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DATE: 07/04

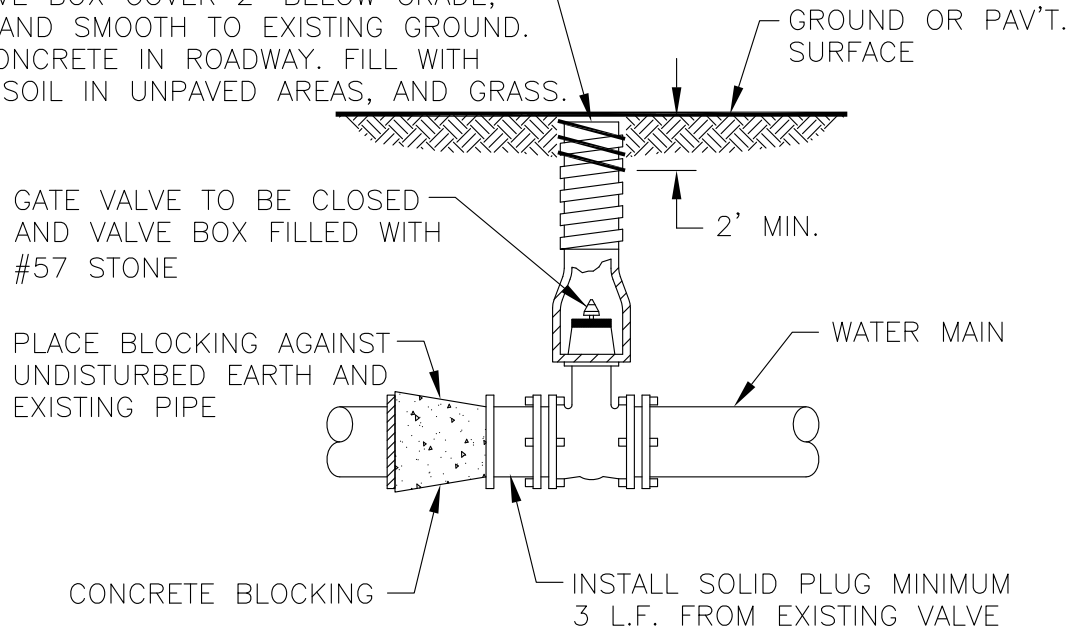
SCALE: NTS

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CHC	ADDED NOTES	03/12



EXISTING SECTION

REMOVE VALVE BOX COVER 2' BELOW GRADE, FILL FLUSH AND SMOOTH TO EXISTING GROUND. FILL WITH CONCRETE IN ROADWAY. FILL WITH COMPACTED SOIL IN UNPAVED AREAS, AND GRASS.



REVISED SECTION

LINE ABANDONMENT AT VALVE



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W-0006

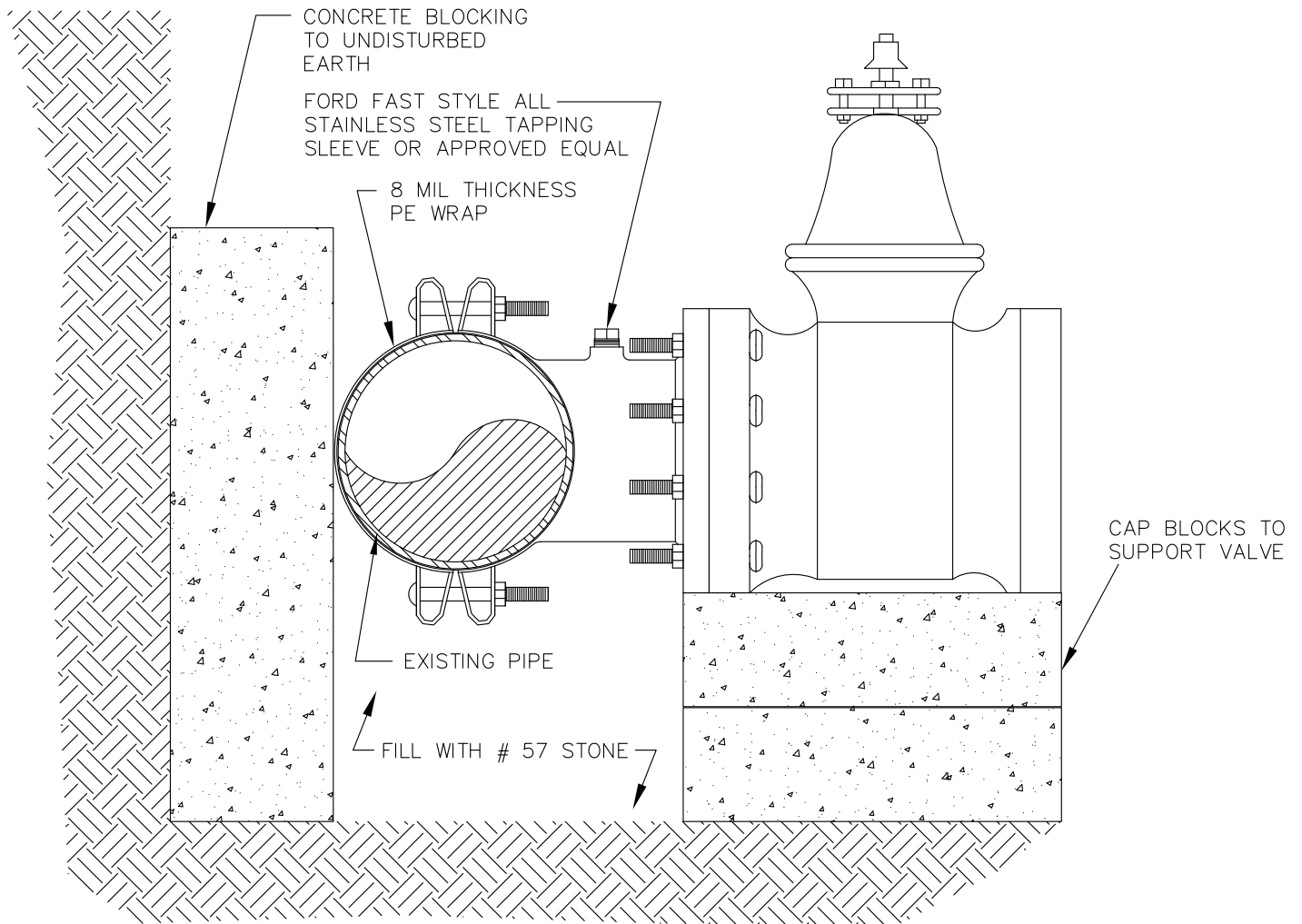
DESIGNED: CCWSA

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WATER MAIN VALVE TAPPING SLEEVE

N.T.S.



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W-0007

DESIGNED: CCWSA
DATE: 02/17

DRAWN: GMC
SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12



TOP VIEW

4 - #4 BARS

"V" OR "WATER" CAST IN
MARKER POST ON TWO SIDES

CHAMFER ALL EDGES

ALUMINUM PLATE CAST IN MARKER,
DISTANCE TO VALVES (RELATIVE TO
MARKER) SHALL BE CLEARLY
STAMPED ON PLATE WITH STEEL
DIE AFTER MARKER IS SET

GRADE

2500 PSI CONC



FRONT



SIDE

2'-0" BURY

4'-0"

CONCRETE VALVE MARKER

N.T.S.



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DATE: 07/04

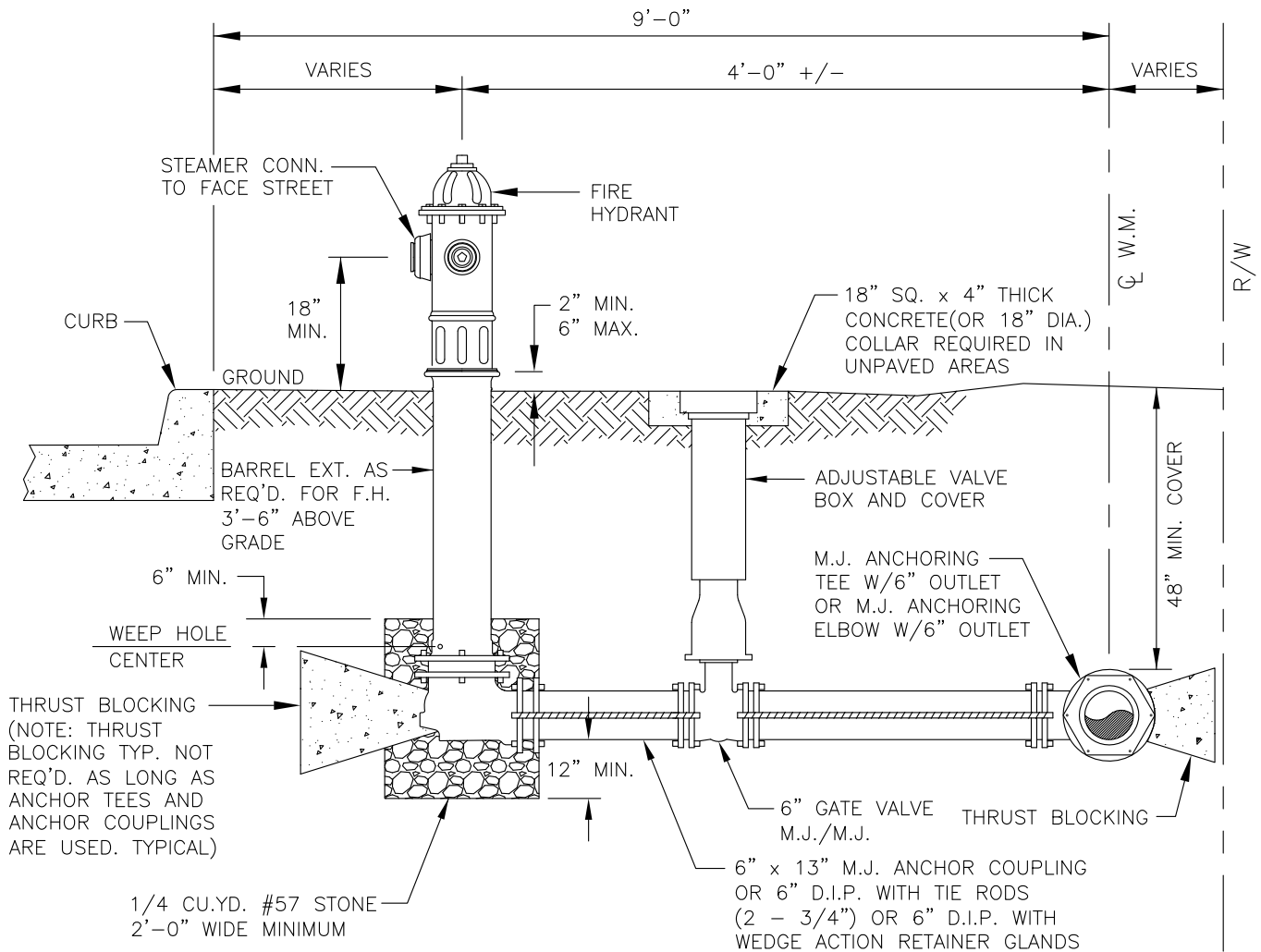
SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12

SUBDIVISION STANDARD

NOTES:

1. PROVIDE ONE 10 FT. LENGTH OF D.I.P. IN EACH DIRECTION FROM ALL FITTINGS AND VALVES UNLESS OTHERWISE NOTED ON THE PLANS. ALL FITTINGS SHALL BE RESTRAINED WITH MEGA-LUGS.
2. TIE RODS SHALL BE ALLOY STEEL W/MIN. TENSILE STRENGTH OF 125,000 PSI. RODS TO BE COATED WITH BITUMINOUS PAINT AFTER INSTALLATION.



PROFILE - RODDED LEADER

FIRE HYDRANT INSTALLATION



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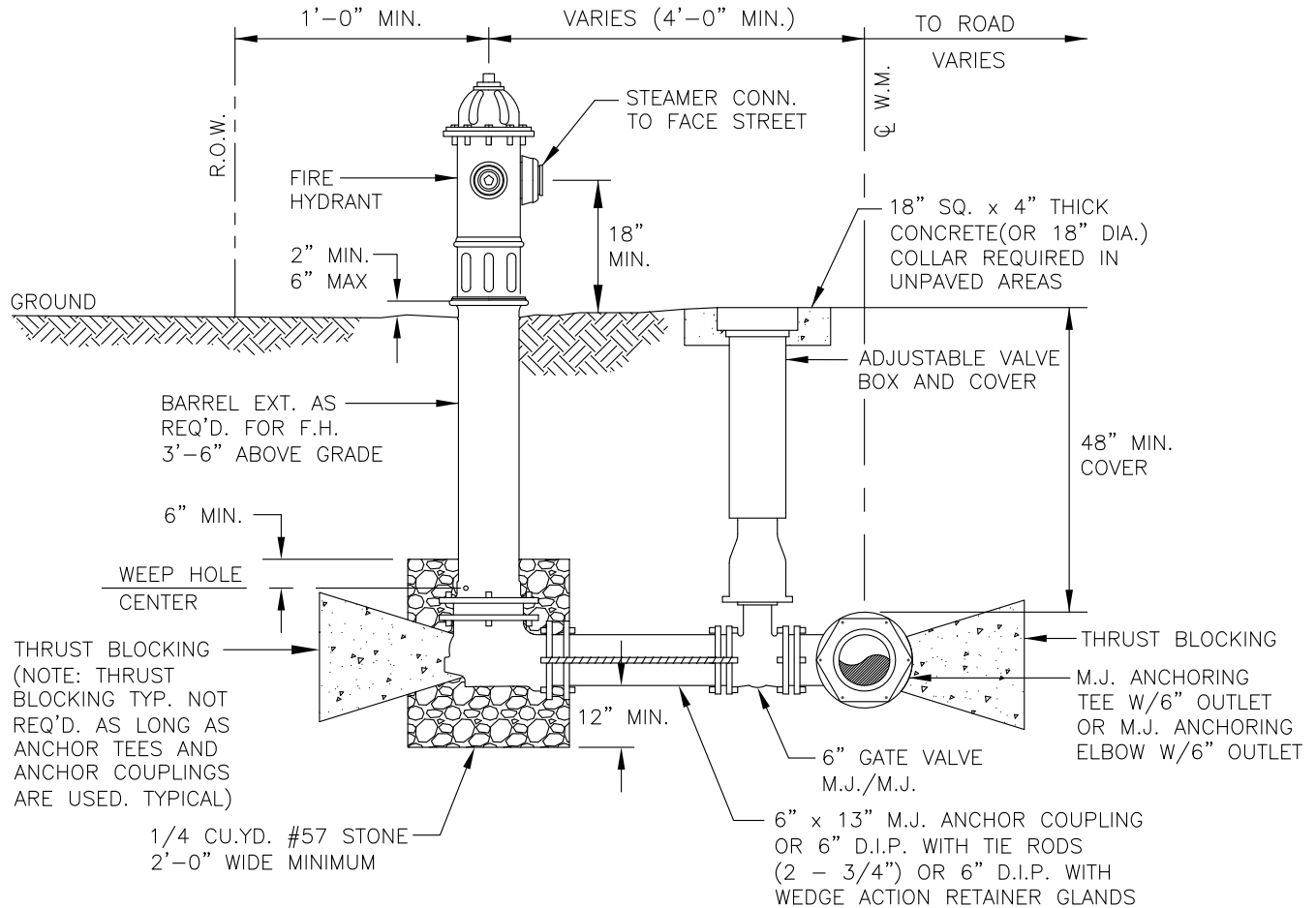
W-0009

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CHC	ADDED NOTES	03/12
GMC	REV. DTL	04/18

NOTES:

1. PROVIDE ONE 10 FT. LENGTH OF D.I.P. IN EACH DIRECTION FROM ALL FITTINGS AND VALVES UNLESS OTHERWISE NOTED ON THE PLANS. ALL FITTINGS SHALL BE RESTRAINED WITH MEGA-LUGS.
2. TIE RODS SHALL BE ALLOY STEEL W/MIN. TENSILE STRENGTH OF 125,000 PSI. RODS TO BE COATED WITH BITUMINOUS PAINT AFTER INSTALLATION.



FIRE HYDRANT INSTALLATION

N.T.S.

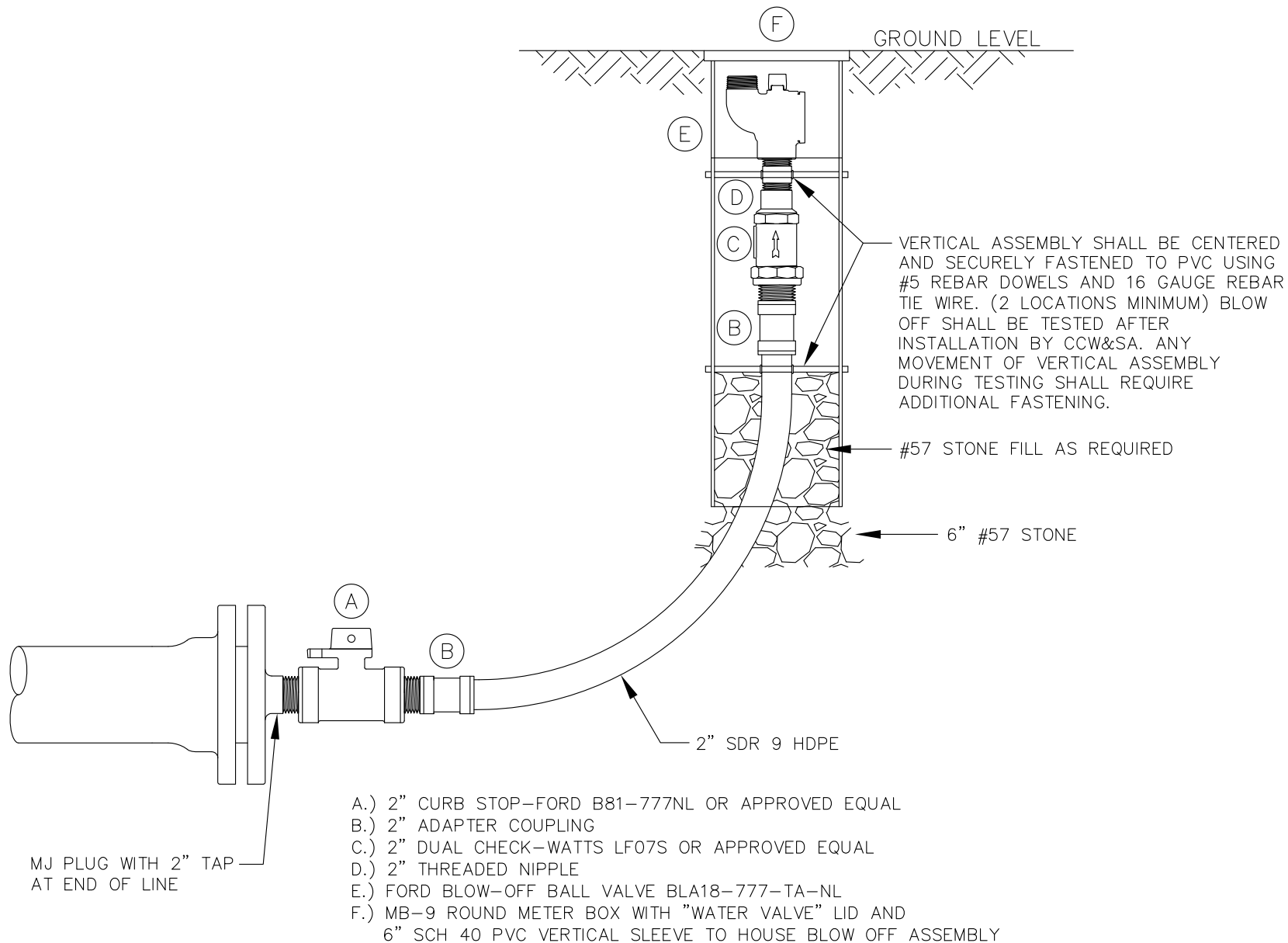


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W-0010

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BLOW-OFF VALVE FOR CUL-DE-SAC INSTALLATION

W-0011

DESIGNED: CCWSA

DRAWN: GMC

DATE: 04/18

SCALE: NTS

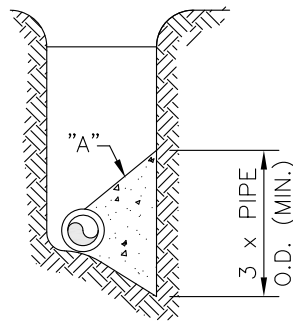
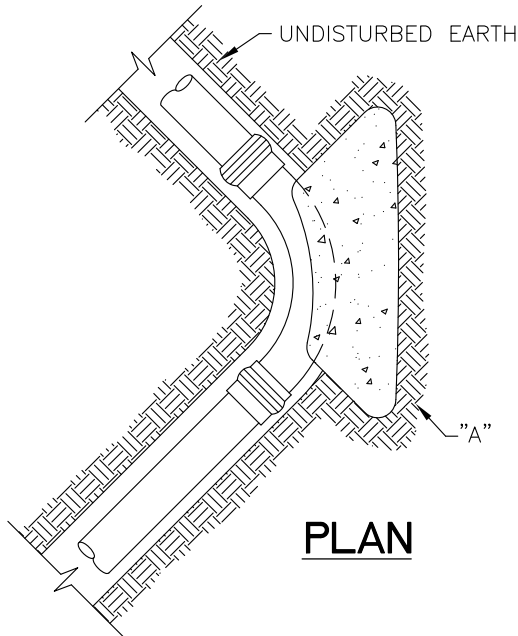
BY
REVISIONS
DATE

NOTES:

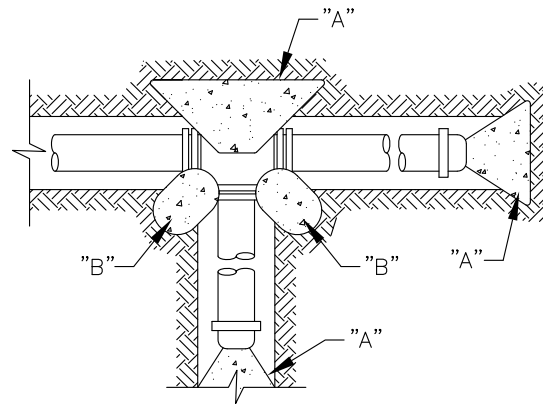
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL & EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL.
2. ON BENDS & TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCK.
4. CONCRETE SHALL BE 3000 P.S.I.
5. BLOCKING SHALL BE CONSTRUCTED AS PER AWWA STANDARD C600-SECTION 12.3 OR LATEST REVISION.

PIPE SIZE	2"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"
A*	1	1.5	3	6	9	12	16	20	26	32	45	71	102
B*	1	1	2	4	5	8	10	15	20	24	35	54	78

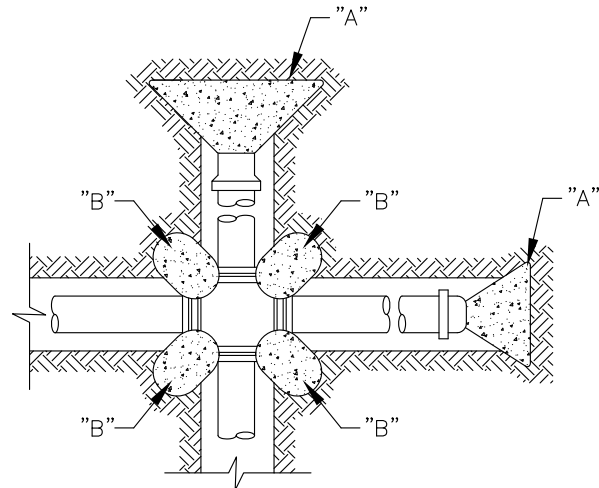
* CHART NO.'S ARE SQ. FT. BEARING ON UNDISTURBED MATL.



TYP. SECTION



TEE W/ 1 OR 2 PLUGS



CROSS TEE OR CROSS TEE
W/ 1 OR 2 PLUGS

THRUST BLOCK DETAIL

N.T.S.



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W-0012

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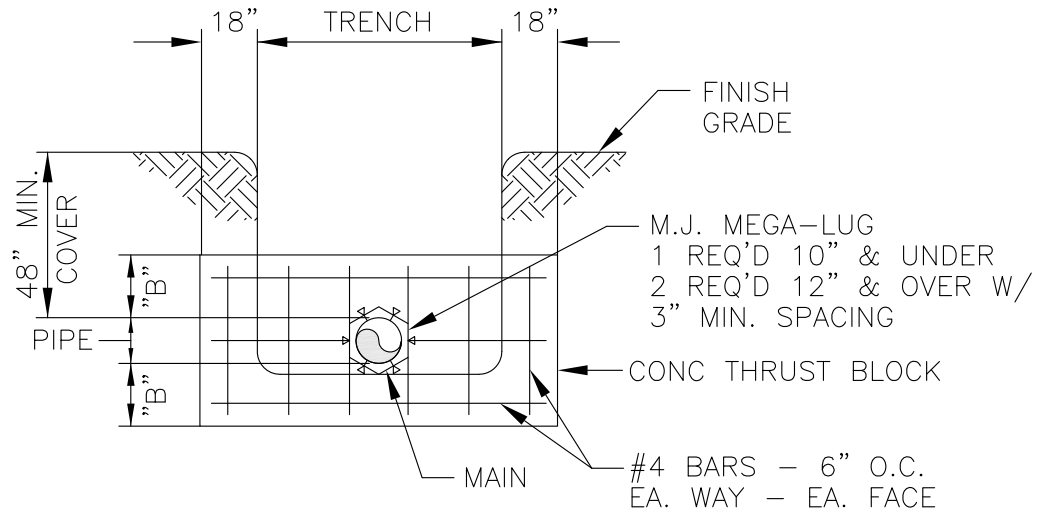
DATE: 07/04

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES 03/12	

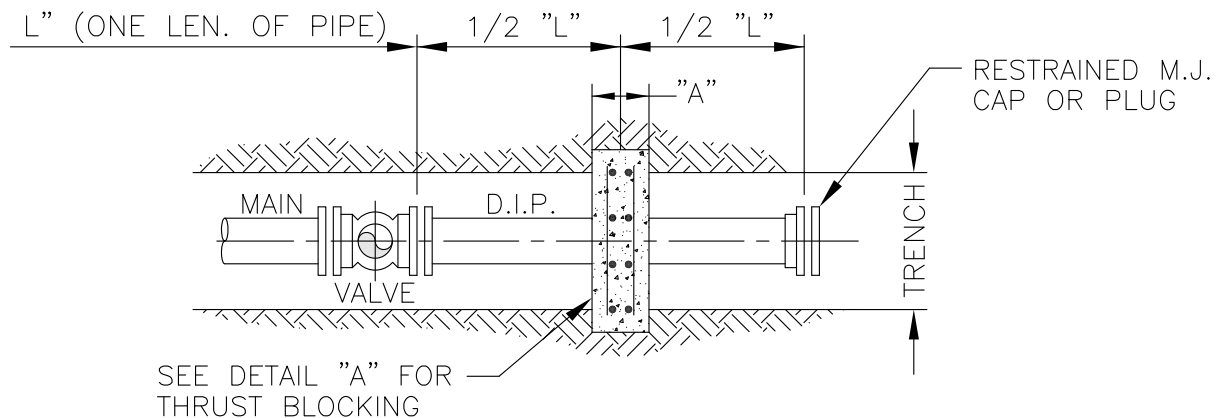
PIPE DIA.	"A"	"B"
20"	2'-0"	2'-0"
16"	1'-6"	1'-6"
14"	1'-6"	1'-6"
12"	1'-6"	1'-6"
10"	1'-0"	1'-0"
8"	1'-0"	1'-0"
6"	1'-0"	1'-0"
4"	1'-0"	1'-0"

NOTE: THE ABOVE FIGURES ARE
BASED ON SOIL BEARING CAPACITY
OF 2000 P.S.F.



DETAIL "A"

N.T.S.



TERMINAL END DETAIL

N.T.S.



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W-0013

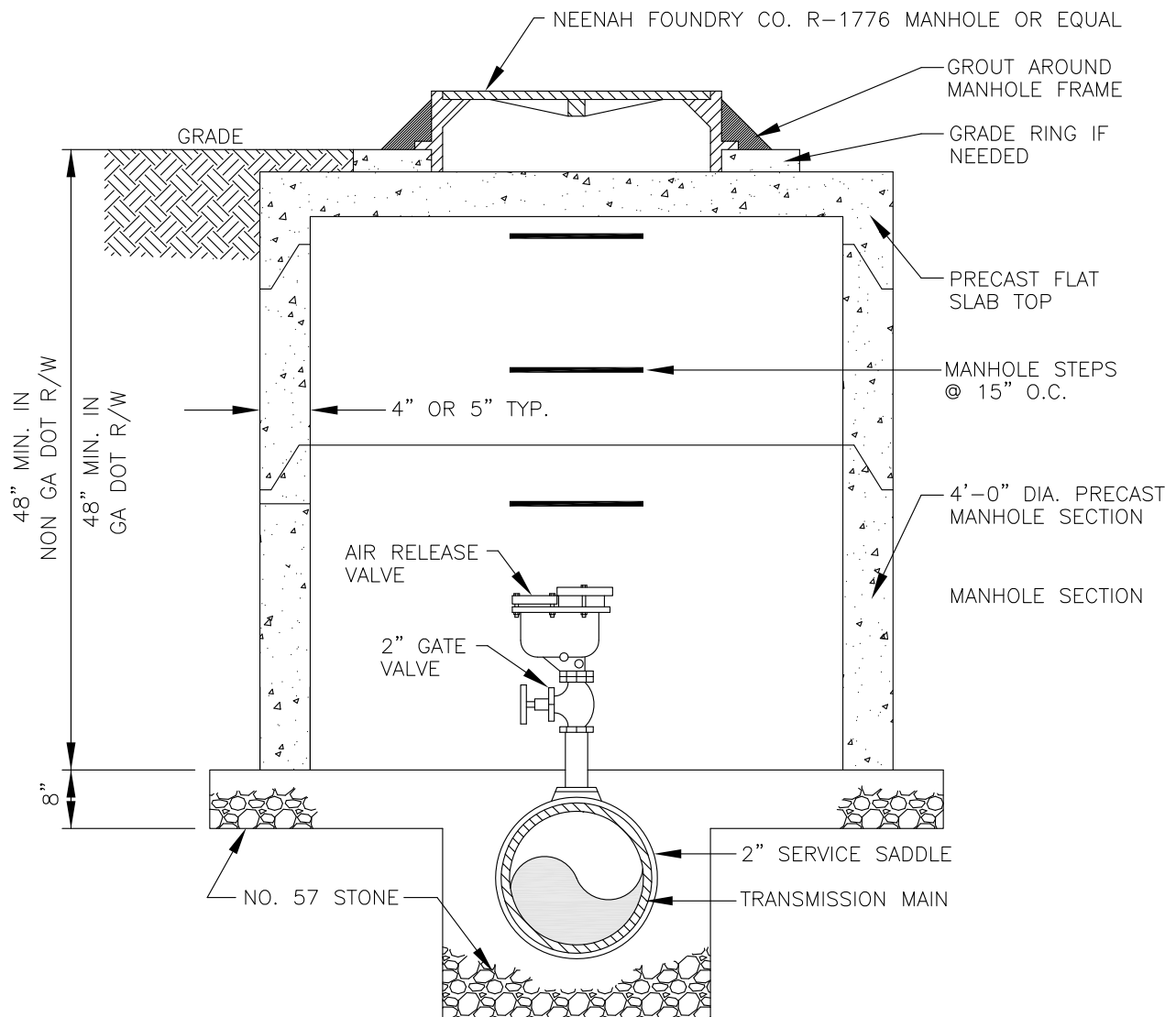
DESIGNED: CCWSA

DRAWN: JKP

DATE: 07/04

SCALE: NTS

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CHC	ADDED NOTES	03/12



AIR RELEASE VALVE DETAIL

N.T.S.

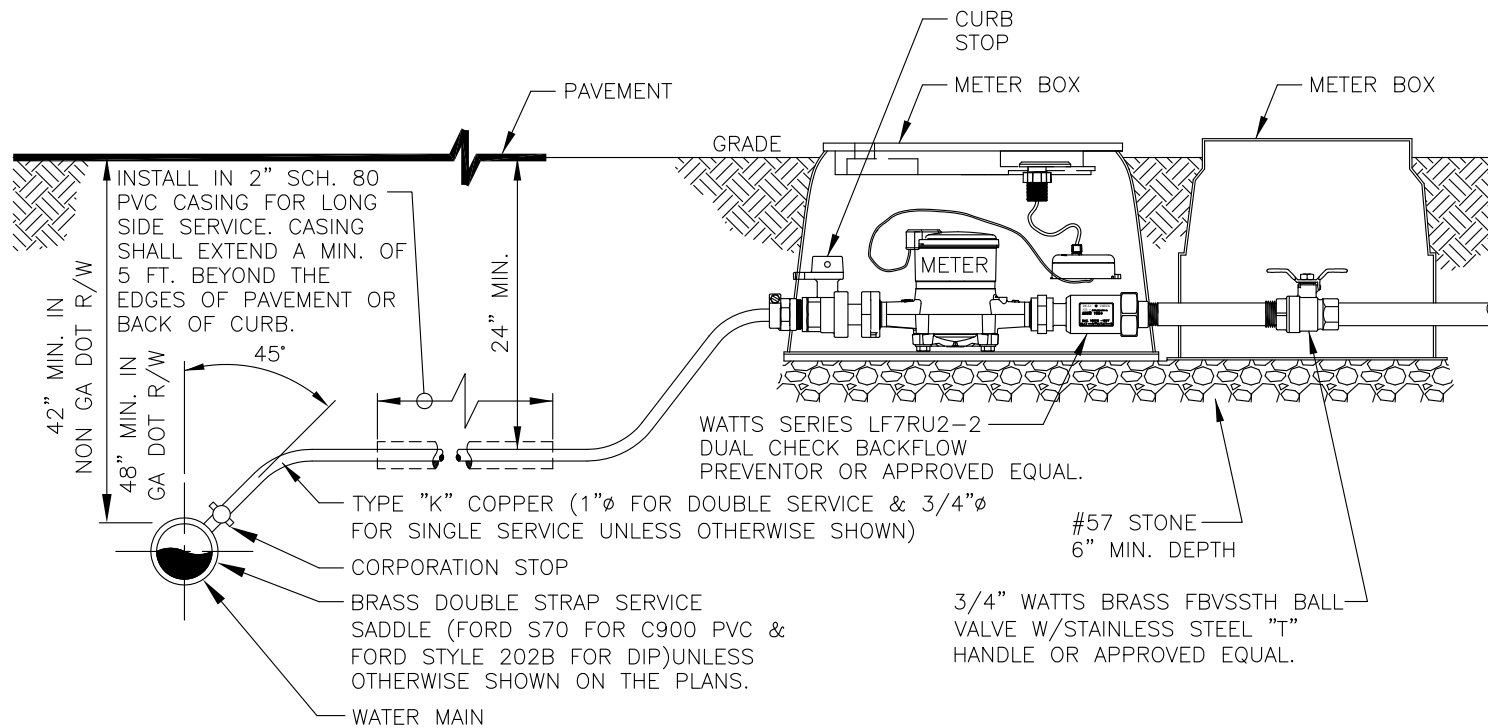


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RESIDENTIAL SERVICE CONNECTION

W-0015

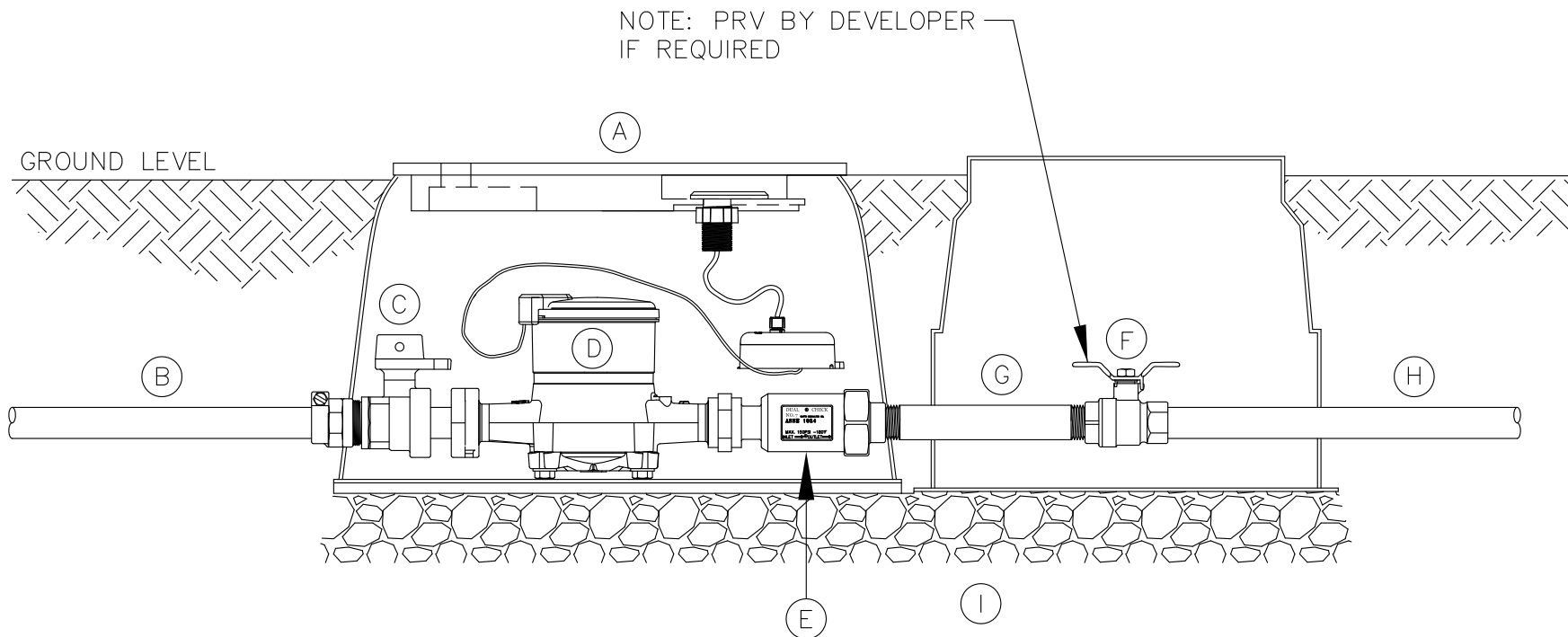
DESIGNED: CCWSA

DRAWN: GMC

DATE: 01/17

SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12



RESIDENTIAL PRIVATE DEV. METERS

SIZE	ACCURACY RANGE +/- 1.5%
5/8"	1/2 - 20 gpm
3/4"	3/4 - 30 gpm
1"	1 - 50 gpm



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TYPICAL INSTALLATION RESIDENTIAL SERVICE APPLICATION

W-0015A

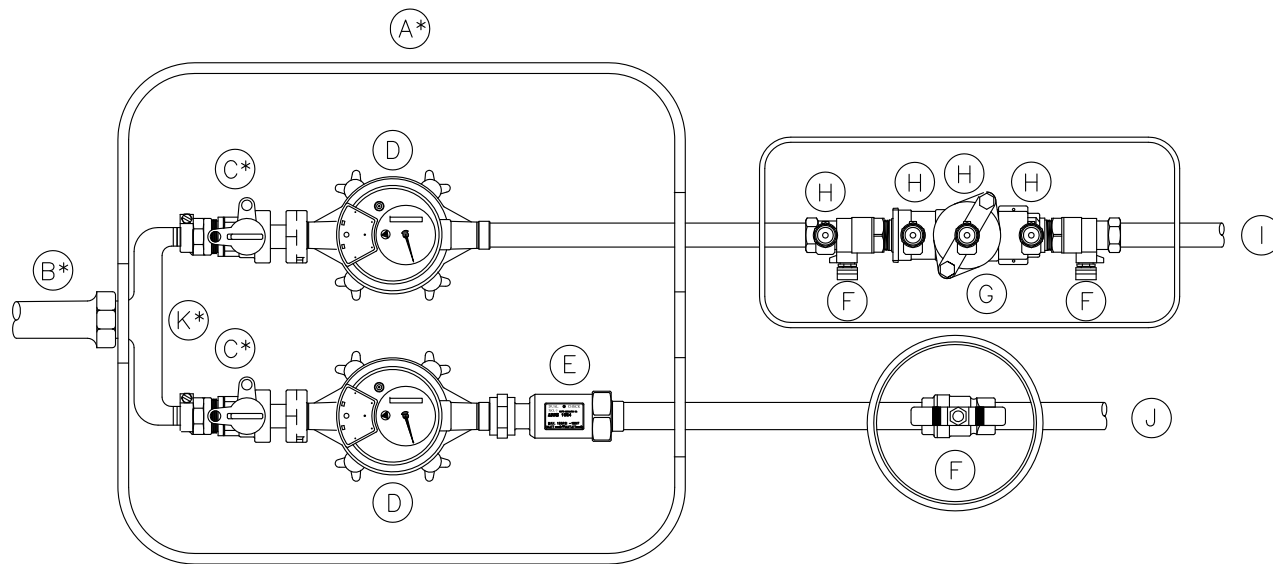
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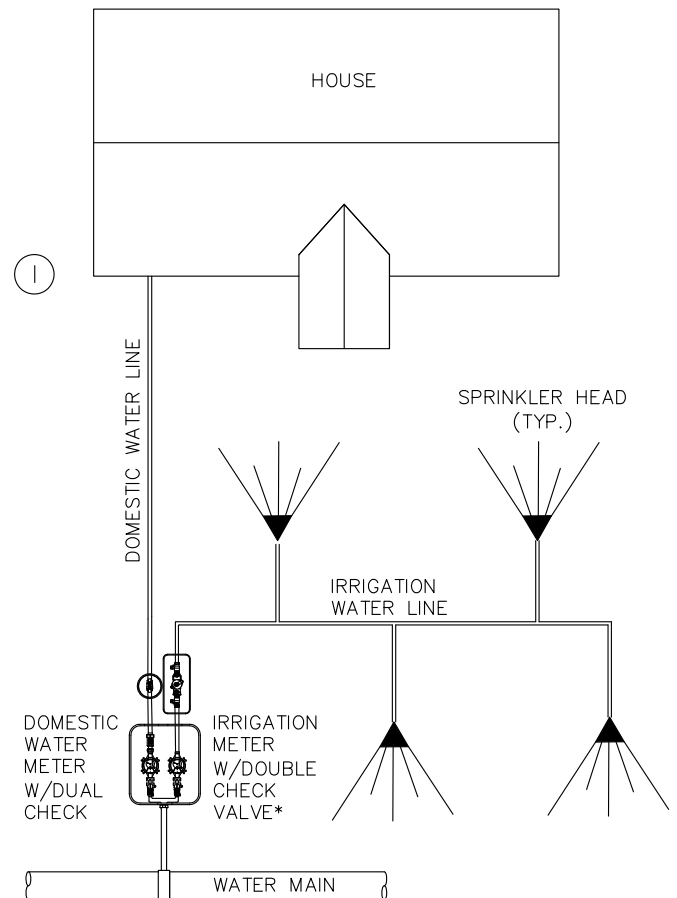
DATE: 07/04

SCALE: NTS

BY	REVISIONS	DATE
CHC	REVISED DET.	07/08
CHC	REVISED DET.	03/12



- A.) MB-18 METER BOX WITH AMR LID (DEVELOPER INSTALLED)*
- B.) TYPE K COPPER SERVICE LINE CONNECTION (DEVELOPER INSTALLED)*
- C.) CURB STOP-FORD B43-332W OR APPROVED EQUAL (DEVELOPER INSTALLED)*
- D.) 3/4" NEPTUNE T-10 WATER METER OR APPROVED EQUAL
- E.) DUAL CHECK-WATTS SERIES LF7RU2-2 OR APPROVED EQUAL
- F.) 3/4" WATTS BRASS FBVSSTH BALL VALVE W/STAINLESS STEEL "T" HANDLE OR APPROVED EQUAL
- G.) DOUBLE CHECK VALVE ASSEMBLY
- H.) TEST COCKS
- I.) IRRIGATION LINE
- J.) DOMESTIC LINE
- K.) 1" x 3/4" x 7.5" BRANCH PIECE (DEVELOPER INSTALLED)*



RESIDENTIAL PRIVATE DEV. METERS

SIZE	ACCURACY RANGE +/- 1.5%
5/8"	1/2-20 GPM
3/4"	3/4-30 GPM
1"	1-50 GPM



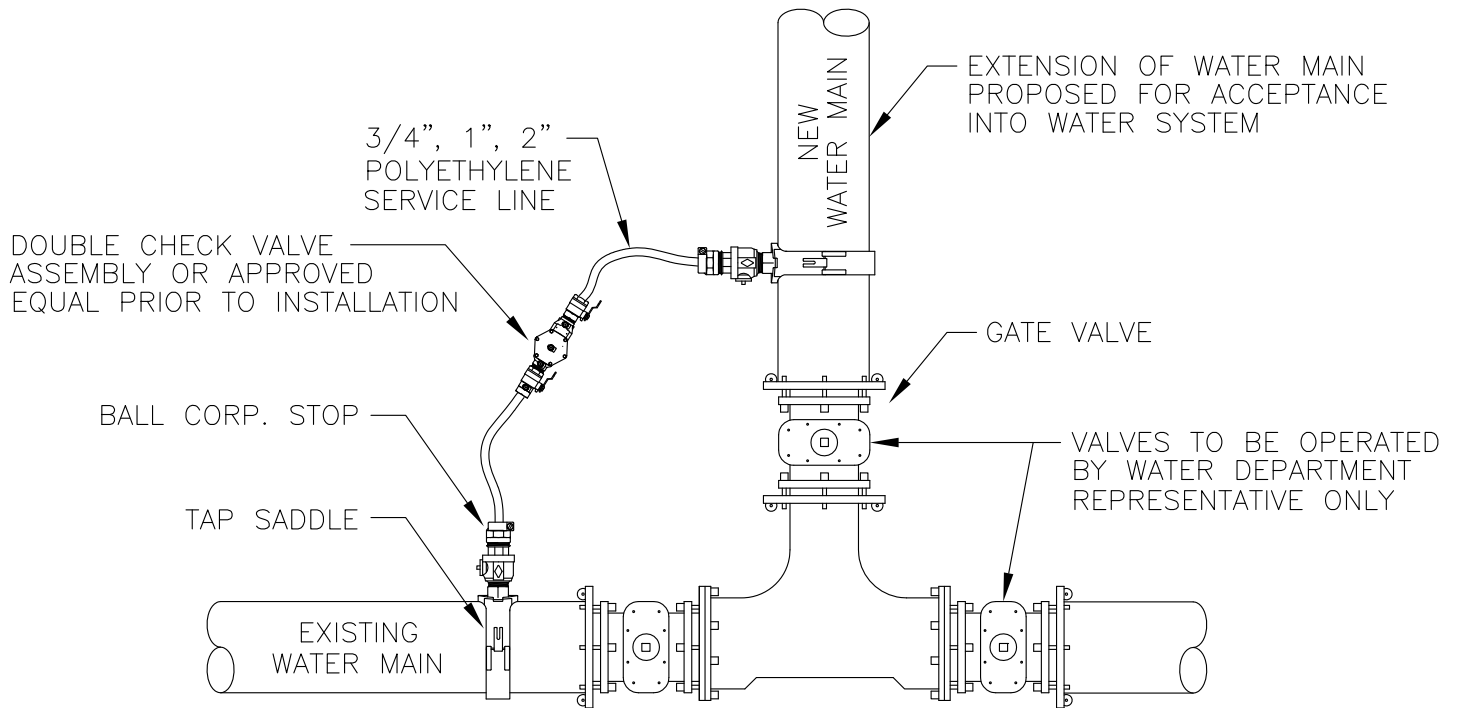
**COWETA COUNTY
WATER AND SEWERAGE
AUTHORITY**
545 CORINTH ROAD
NEWNAN, GA 30263
(770) 254-3710

DUAL RESIDENTIAL AND IRRIGATION METER INSTALLATION

W-0016

DESIGNED: CCWSA
DATE: 07/04
DRAWN: JKP
SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED DET.	07/09
CHC	TEXT	03/12



APPROVED METHOD FOR FILLING NEW WATER MAINS

N.T.S.



**COWETA COUNTY
WATER AND SEWERAGE
AUTHORITY**
545 CORINTH ROAD
NEWMAN, GA 30263
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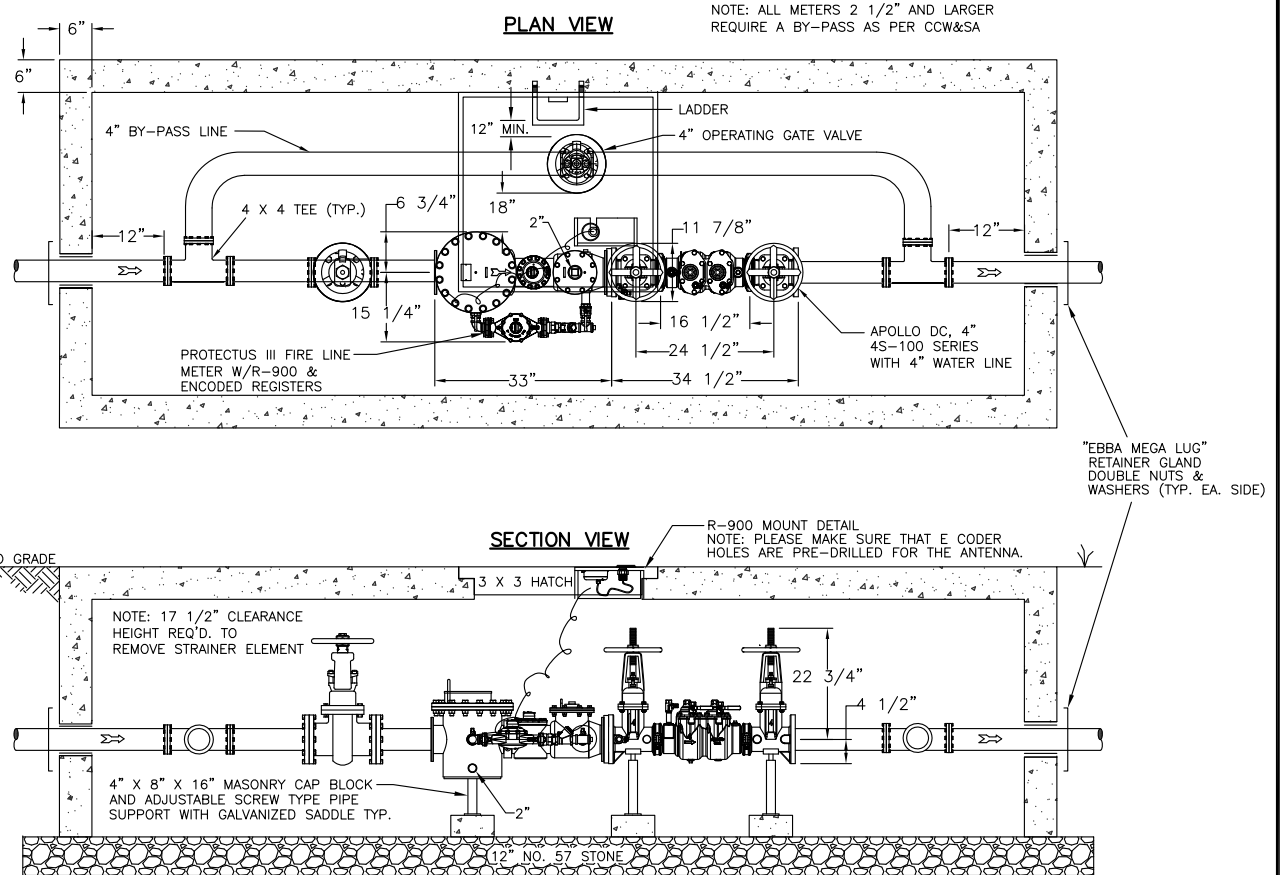
W-0017

DESIGNED: CCWSA
DATE: 07/04

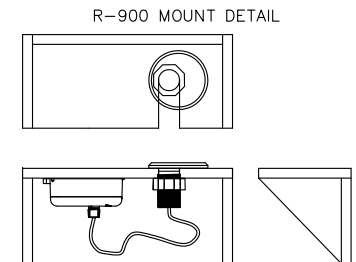
DRAWN: JKP
SCALE: NTS

BY	REVISIONS	DATE
CHC	ADDED NOTES	03/12

1. ALL MATERIALS SHALL BE FURNISHED BY CCW&SA.
2. FITTINGS INSIDE OF VAULT SHALL BE FLANGED.
3. VAULT SHALL BE PRECAST REINFORCED CONCRETE WITH MINIMUM 6" THICKNESS TOP AND SIDES. INSIDE HEIGHT SHALL BE A MINIMUM OF 6'.
4. VAULT TOP SHALL BE REINFORCED CONCRETE WITH A MINIMUM 36" x 36" ACCESS OPENING OFFSET TO ONE SIDE.
5. VAULT SHALL BE PRECAST FOR NON-LOAD BEARING APPLICATIONS. WHEN VAULT IS EXPECTED TO CARRY A LIVE LOAD, CUSTOMERS ENGINEER SHALL SUBMIT A DETAILED VAULT DESIGN TO CCW&SA FOR APPROVAL PRIOR TO CONSTRUCTION.
6. BOTTOM OF VAULT SHALL BE FILLED AND REST ON A MINIMUM OF 12" OF #57 STONE.
7. VAULT INLET/OUTLET PIPE OPENINGS SHALL BE SEALED WITH NON-SHRINK GROUT OR MORTAR. PIPE MUST NOT SUPPORT VAULT. BACK FLOW PREVENTION ASSEMBLY MUST BE SUPPORTED IN AT LEAST (3) LOCATIONS.
8. MINIMUM CLEARANCES SHOWN MUST BE MAINTAINED. A MIN. OF 12" BETWEEN VAULT WALLS AND FLANGES AND OR FITTINGS IS TYPICAL.
9. DUCTILE IRON PIPE REQUIRED FOR PIPE ABOVE 3 INCHES IN DIAMETER.
10. 36" X 36" HATCH TO BE APPROVED BY CCW&SA PRIOR TO CONSTRUCTION.
11. MANHOLE STEPS AT 15" O.C. ARE TO BE PLACED IN CENTER OF ACCESS HATCH. STEPS SHALL BE OF POLYPROPYLENE CONSTRUCTION WITH A NO. 3 DEFORMED STEEL ROD CENTER.
12. VAULT SHALL BE LOCATED ON PRIVATE PROPERTY. RIGHT OF ENTRY SHALL GIVEN TO CCW&SA FOR MAINTENANCE OF VAULT.
13. BALL VALVES SHALL BE QUARTER TURN AND BE EQUIPPED WITH STAINLESS STEEL HANDLES AND NUTS.



OPERATING CHARACTERISTICS		HIGH PERFORMANCE PROTECTUS III FIRE SERVICE METER		
SIZE	Normal Operating Range* @100% Accuracy (±1.5%)	AWWA Standard	Low Flow @95% Accuracy	Maximum Intermittent Flow Rate
4"	3/4 to 1200 US gpm 0.171 to 272.55 m ³ /h	2 to 700 US gpm 0.45 to 159 m ³ /h	3/8 US gpm 0.09 m ³ /h	150 US gpm 340.7 m ³ /h
6"	1 1/2 to 2500 US gpm 0.34 to 567.81 m ³ /h	4 to 1600 US gpm 0.91 to 363 m ³ /h	3/8 US gpm 0.17 m ³ /h	150 US gpm 704.1 m ³ /h
8"	2 to 4000 US gpm 0.45 to 908.5 m ³ /h	7 to 2800 US gpm 1.6 to 636 m ³ /h	1 US gpm 0.23 m ³ /h	5000 US gpm 1135.6 m ³ /h
10"	2 to 6500 US gpm 0.45 to 1476.31 m ³ /h	12 to 4400 US gpm 2.7 to 999 m ³ /h	1 US gpm 0.23 m ³ /h	8000 US gpm 1817 m ³ /h



**COWETA COUNTY
WATER AND SEWERAGE
AUTHORITY**

545 CORINTH ROAD
NEWNAN, GA 30263
(770) 254-3710

4" PROTECTUS III FIRE SERVICE METER WITH BY PASS LINE AND DBL CHECK VALVE ASSY. (LEAD-FREE)

W-0018A

DESIGNED: CCWSA

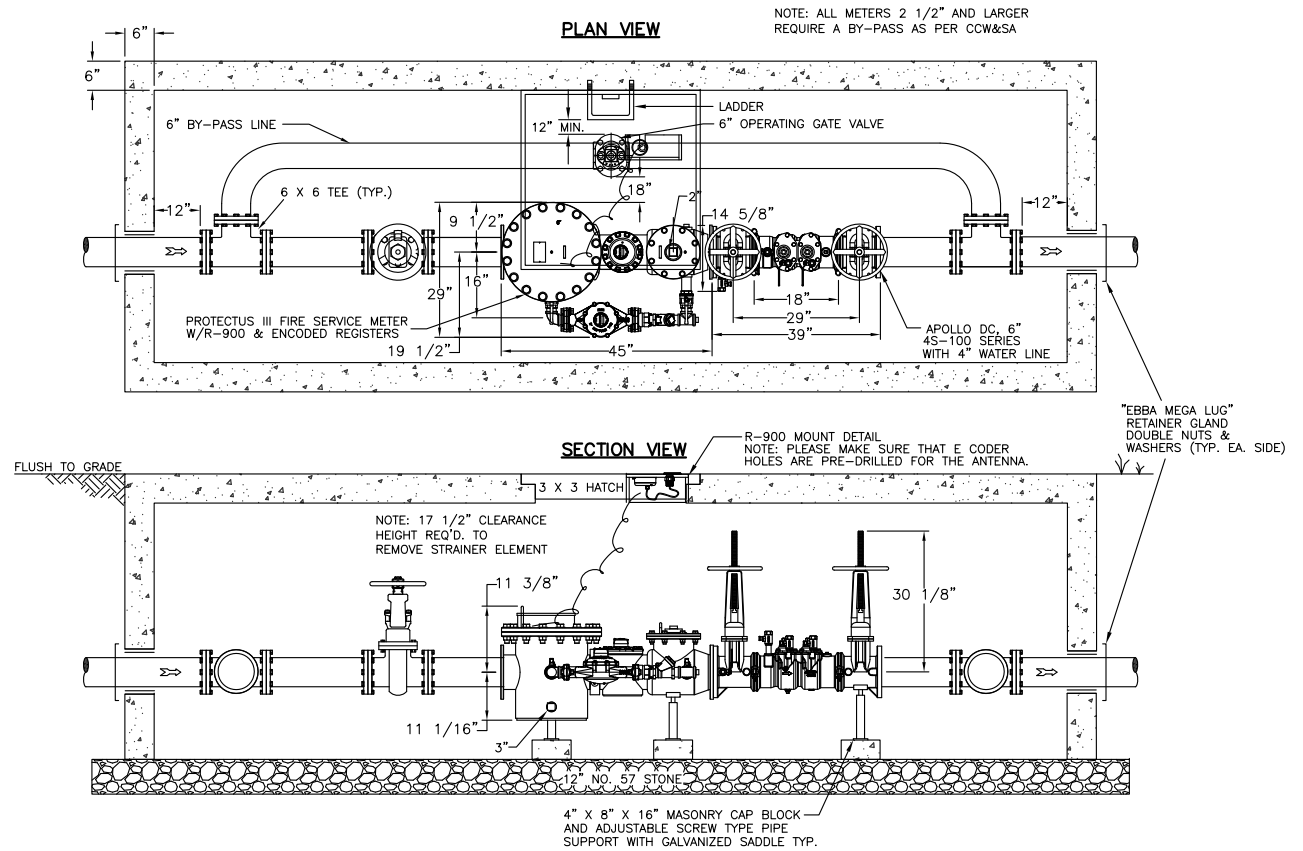
DRAWN: JKP

DATE: 07/04

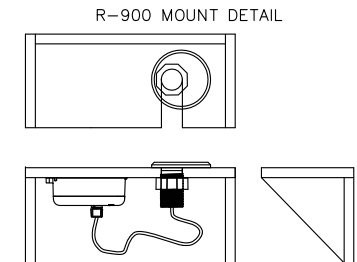
SCALE: NTS

BY	REVISIONS	DATE

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10"	2 to 6500 US gpm 0.45 to 1476.31 m ³ /h	12 to 4400 US gpm 2.7 to 999 m ³ /h	1 US gpm 0.23 m ³ /h	8000 US gpm 1817 m ³ /h



**COWETA COUNTY
WATER AND SEWERAGE
AUTHORITY**

545 CORINTH ROAD
NEWNAN, GA 30263
(770) 254-3710

6" PROTECTUS III FIRE SERVICE METER WITH BY PASS LINE AND DBL CHECK VALVE ASSY. (LEAD-FREE)

W-0018B

DESIGNED: CCWSA

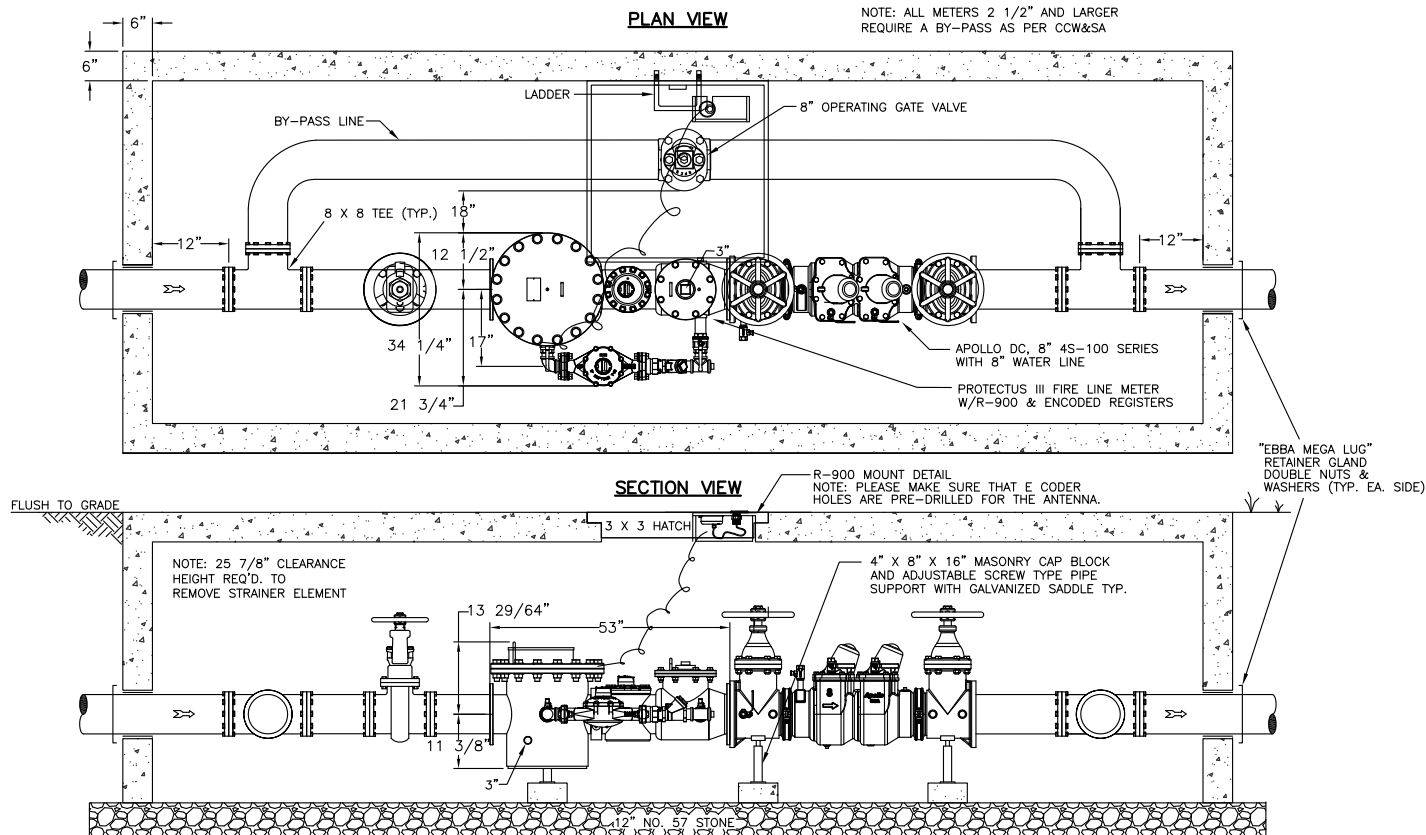
DRAWN: JKP

DATE: 07/04

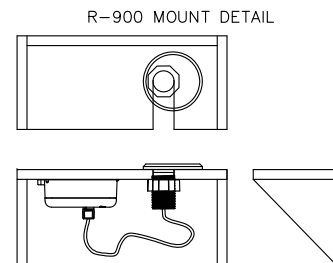
SCALE: NTS

BY	REVISIONS	DATE
CHC	REVISIONS	07/09

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**COWETA COUNTY
WATER AND SEWERAGE
AUTHORITY**
545 CORINTH ROAD
NEWNAN, GA 30263
(770) 254-3710

**8" PROTECTUS III FIRE SERVICE
METER WITH BY PASS LINE AND
DBL CHECK VALVE ASSY.
(LEAD-FREE)**

W-0018C

DESIGNED: CCWSA

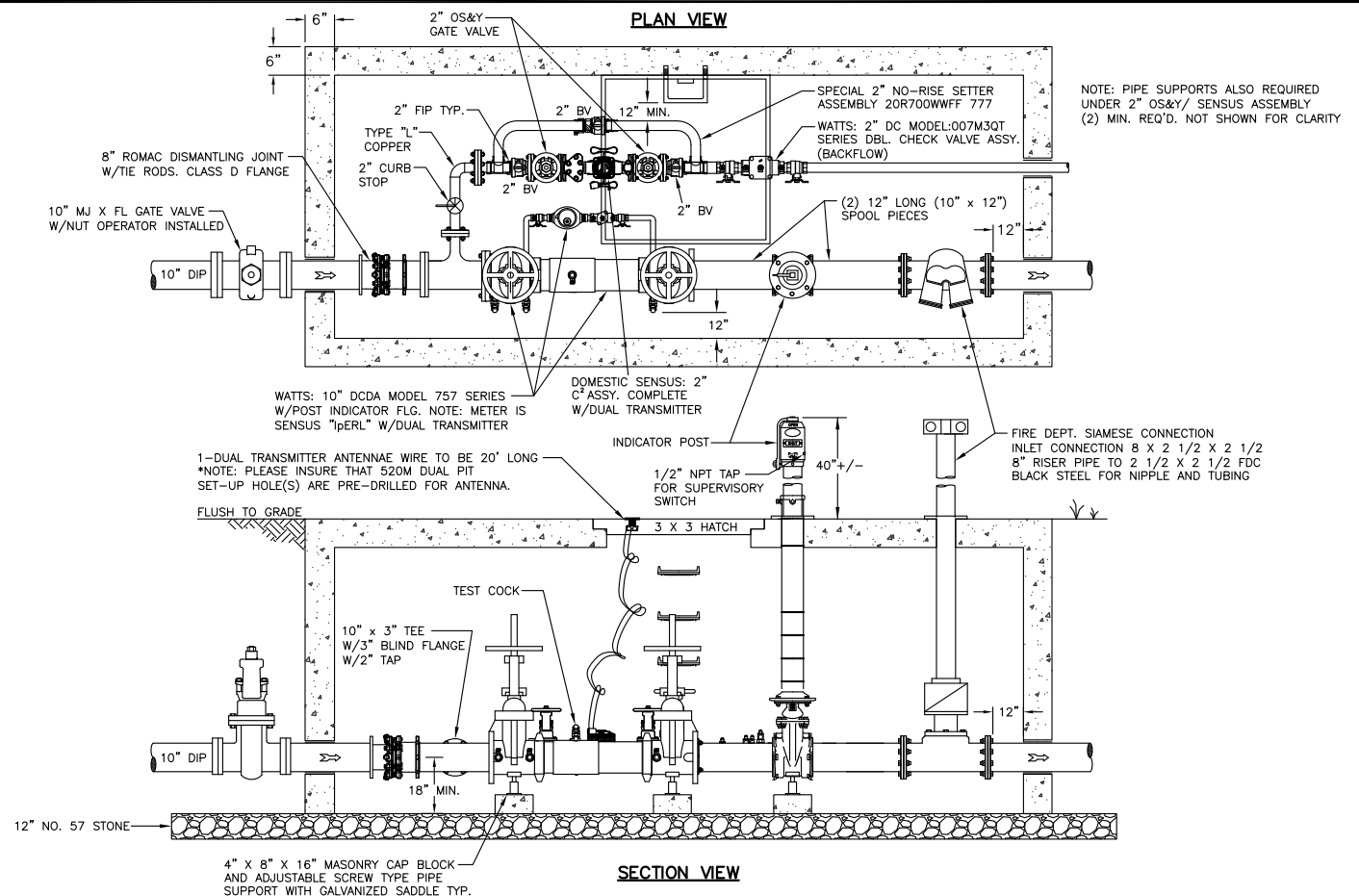
DRAWN: JKP

DATE: 07/04

SCALE: NTS

BY	REVISIONS	DATE
CHC	REVISIONS	07/09

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**10" FIRE LINE: WATTS DCDA MODEL 757
SERIES WITH 3/4" IPERL
2" DOMESTIC: SENSUS C WITH WATTS DC
BACKFLOW ASSY.
(LEAD-FREE)**

W-0018D

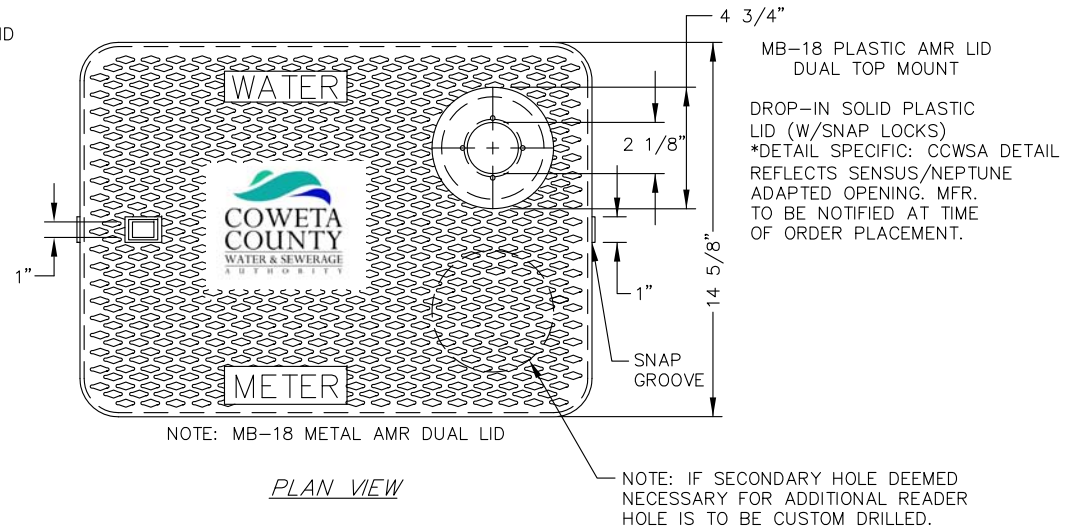
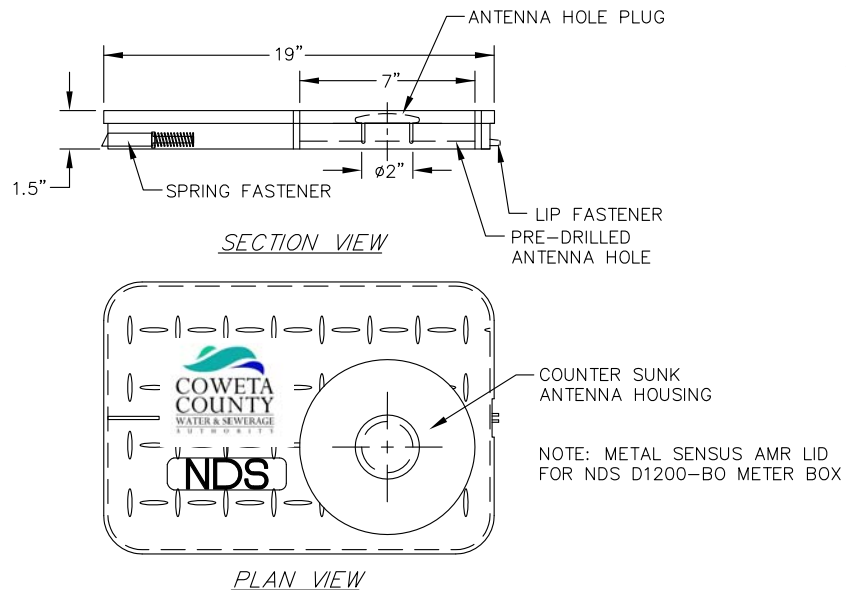
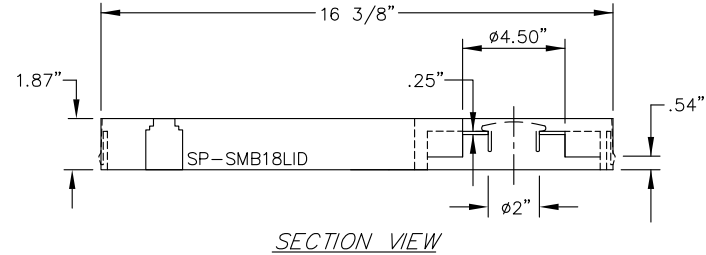
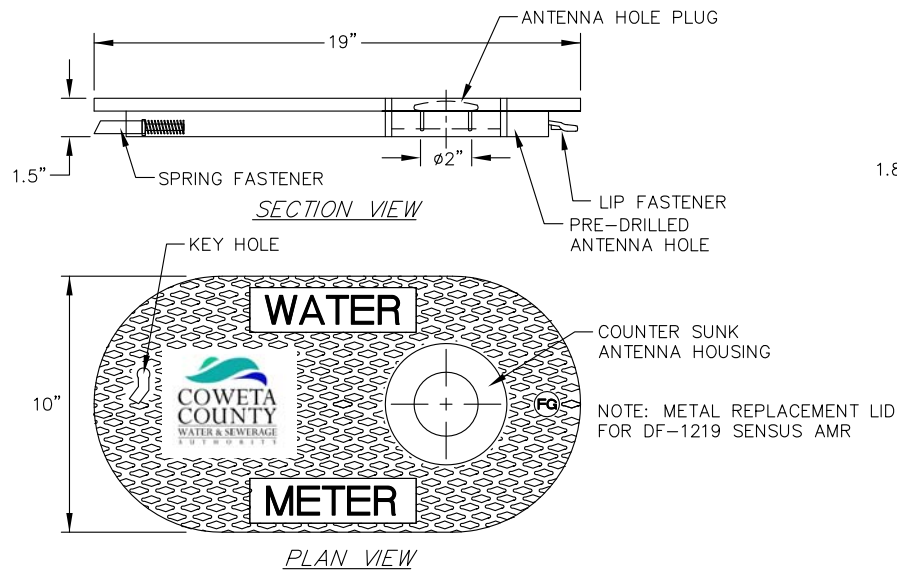
DESIGNED: CCWSA

DRAWN: CHC

DATE: 06/19/15

SCALE: NTS

BY	REVISIONS	DATE
CHC	UPDATE	08/17



TOP MOUNTS:
 RECESS REDUCES THE PROBABILITY OF DAMAGE CAUSED BY LANDSCAPE EQUIPMENT & VANDALS. OFFSET RECESSES ELIMINATE THE PHYSICAL INTERFERENCE BETWEEN ANTENNAE AND METER.
 RECESS AND HOLES ACCOMMODATE MOST INDUSTRY ANTENNAE.
 COMPATIBLE WITH MANY INDUSTRY TOUCH READ ANTENNAE.



**COWETA COUNTY
 WATER AND SEWERAGE
 AUTHORITY**
 545 CORINTH ROAD
 NEWNAN, GA 30263
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METAL METER BOX LIDS SINGLE RESIDENTIAL METER AND DUAL RESIDENTIAL WITH CCWSA LOGO

W-0019

DESIGNED: CCWSA

DRAWN: CHC

DATE: 03/08/18

SCALE: NTS

BY
 REVISIONS
 DATE