

CURB —

CONCRETE THRUST

2. 1/2" STEEL TIE RODS TO BE PROVIDED BETWEEN THE GATE VALVE AND THE HYDRANT.

1. THE GATE VALVE SHALL BE LOCATED THIRTY SIX (36) INCHES FROM THE HYDRANT CENTER LINE.

HYDRANT DETAIL

NOT TO SCALE

BLOCK (TYP.)

5' MINIMUM COVER

FILL TO 6" ABOVE

DRAIN PORT —

WEEP HOLE -

WEEP HOLE SHALL BE

SURROUNDED BY ½ CUBIC

OR BROKEN STONE

ARD OF COARSE GRAVEL

UNOBSTRUCTED AND

ITEM 304.14.

CONCRETE THRUST BLOCK

COMPACTED SUBGRADE

1. WHEN THE ELEVATION OF THE SANITARY OR STORM SEWER CAN NOT

REQUIRED SEPARATION OR RECONSTRUCTED WITH MECHANICAL JOINT

SEWER. ONE FULL LENGTH OF WATERMAIN SHALL BE CENTERED OVER

DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES

HE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AWAY FROM

2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS,

OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH

ACCORDANCE WITH AWWA, NYSDOH AND DCDOH STANDARDS

4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE

MATERIAL SHALL BE IMPORTED AND USED.

MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL

3. THE RELOCATED WATER MAIN/SERVICE LINE SHALL BE DISINFECTED IN

5. ALL REPLACED WATERMAIN SHALL BE 12" CLASS 52 DUCTILE IRON.

WATER LINE OFFSET DETAIL

NOT TO SCALE

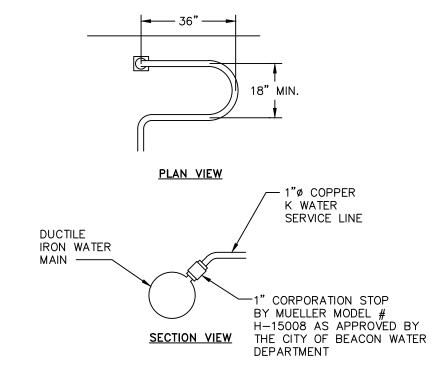
PIPE FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE

BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER SERVICE LINE OR MAIN SHALL BE RELOCATED TO PROVIDE THIS

THE SEWER AS POSSIBLE.

PAVEMENT RESTORATION DETAIL.

BENEATH ELBOW WITH RODDING



1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL WATER MAIN DEPTH). 2. CORPORATION STOP TO BE COMPRESSION TYPE BY MUELLER. 3. WATER SERVICE LINE TO HAVE A 'GOOSENECK' NEAR CORPORATION 4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF OF THE WATER MAIN AT AN ANGLE OF APPROXIMATELY 45° FROM WATER SERVICE CONNECTION DETAIL

NOT TO SCALE

1. THE PROPOSED BUILDING IS TO BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER SYSTEM. INSTALLATION OF ALL COMPONENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY CODE, 2. REFER TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH STANDARD NOTES FOR ADDITIONAL PERTINENT 3. THE WATER MAIN SHALL BE INSTALLED, PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C600 (SEE NOTES BELOW). 4. THE DUTCHESS COUNTY DEPARTMENT OF HEALTH, CITY OF BEACON WATER OPERATOR, AND THE CERTIFYING PROFESSIONAL ENGINEER SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF THE WATER MAIN INSTALLATION. 5. THE WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C651 (SEE

SANITARY SEWER NOTES:

SHALL BE VERIFIED BY DEFLECTION TESTING.

MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

THE CITY CODE, CHAPTER 179.

AND WATERTIGHT JOINTS.

1. THE PROPOSED APARTMENTS ARE TO BE SERVED BY THE CITY OF

SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF

2. REFER TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH

4. SEWER MAIN MATERIAL SHALL BE 8" DIAMETER SDR-35 OR

6. THE SEWER MAIN SHALL BE INSTALLED AND TESTED FOR

STANDARD NOTES FOR ADDITIONAL PERTINENT INFORMATION.

BEACON MUNICIPAL SEWER SYSTEM. INSTALLATION OF ALL COMPONENTS

3. THE DUTCHESS COUNTY DEPARTMENT OF HEALTH, CITY OF BEACON

SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF THE SEWER MAIN

SDR-26 PVC BELL AND SPIGOT GRAVITY SEWER PIPE, WITH GASTIGHT

5. SEWER MAIN SHALL BE LAID IN STRAIGHT ALIGNMENT. MANHOLES

SHALL BE CONSTRUCTED AT ALL CHANGES IN SLOPE, ALIGNMENT OR

EXFILTRATION PRIOR TO BEING PERMITTED TO OPERATE. ALL NEW

SANITARY SEWER GRAVITY LINES SHALL PASS A LOW PRESSURE AIR

TEST IN ACCORDANCE WITH ASTM C-828 AT A PRESSURE OF 3.5 PSI.

7. MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ASTM

C-1244. IF PRESSURE DROP EXCEEDS THE SPECIFIED AMOUNT, THE

NECESSARY REPAIRS OR REPLACEMENTS REQUIRED SHALL BE MADE TO

REDUCE THE PRESSURE DROP TO WITHIN THE SPECIFIED LIMIT, AND

THE TESTS SHALL BE REPEATED UNTIL THE REQUIREMENT IS MET.

8. SERVICE LATERALS SHALL BE 4" DIAMETER SDR-35 PVC WITH A

MINIMUM SLOPE OF 2%, UNLESS OTHERWISE NOTED ON THE PLAN.

9. ALL SANITARY SEWER MAINS AND MANHOLES UP TO, BUT NOT

INCLUDING, THE EXISTING MANHOLE SHALL BE OWNED, OPERATED AND

AT INTERVALS NOT EXCEEDING 400 LINEAR FEET. STRAIGHT ALIGNMENT

CHIEF SEWER OPERATOR, AND THE CERTIFYING PROFESSIONAL ENGINEER

6. WATER MAIN MATERIAL SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON PIPE WITH MECHANICAL JOINTS AND SHALL MEET THE REQUIREMENTS OF AWWA C150 AND ANSI A21.51. 7. MEGALUG RESTRAINING SYSTEMS SHALL BE USED AT ALL FITTINGS, VALVES AND HYDRANTS (SEE SCHEDULE 8. GATE VALVES SHALL BE MUELLER RESILIENT WEDGE, NON-RISING STEM, MECHANICAL JOINT. 9. HYDRANTS SHALL BE A-423 MUELLER CENTURION, WITH A MUELLER GATE VALVE BEFORE THE HYDRANT. 10. SERVICE LINES SHALL BE 3/4" COPPER K, UNLESS OTHERWISE NOTED ON THE PLAN. 11. THE CONTRACTOR SHALL VERIFY THE EXISTING WATER MAIN MATERIAL AND BE PREPARED TO PROVIDE A SPECIAL COUPLING FOR CONNECTION OF THE PROPOSED DUCTILE IRON WATER MAIN. 12. A PRESSURE REDUCING VALVE SHALL BE INSTALLED FOR EACH NEW TOWNHOME, WATTS MODEL 25AUB—Z3 OR EQUAL AS APPROVED BY THE CITY OF BEACON WATER DEPARTMENT. 13. THE CITY OF BEACON SHALL OWN, OPERATE AND MAINTAIN THE WATER MAIN THROUGHOUT THE SITE,

WATER MAIN PRESSURE & LEAKAGE TESTING

GENERAL: ALL PIPING SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF AWWA C600, EXCEPT AS ADDED OR AMENDED BELOW: 1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR ANY AND ALL REQUIRED PIPE TAPS FOR TESTING, AND AS NECESSARY FOR TESTING AS SPECIFIED. EQUIPMENT WILL BE SUCH THAT THE ENGINEER MAY INSTALL HIS OWN PRESSURE GAUGE. 2. A PRESSURE TEST AND LEAKAGE TEST ARE REQUIRED FOR ALL PIPE. 3. TESTING TO BE PERFORMED ONLY AFTER PARTIAL OR COMPLETE BACKFILL AND RESTRAINT BLOCKING (USING

4. THE MAIN SHALL BE PARTIALLY BACKFILLED OR BRACED AGAINST MOVEMENT DURING THE TEST. ALL AIR MUST BE BLED OUT OF THE SECTION TO BE TESTED. IF NECESSARY, CONTRACTOR SHALL INSTALL CORPORATION STOPS AT THE HIGH POINTS, FOR BLOW-OFFS. AFTER ALL AIR HAS BEEN EXPELLED, THE CORPORATION COCKS SHALL BE CLOSED AND THE PRESSURE TEST APPLIED. AFTER EXAMINATION OF EXPOSED PARTS OF THE SYSTEM, THE TEST PRESSURE SHALL BE INCREASED TO 1 1/2 TIMES THE NORMAL PRESSURE. BASED UPON THE ELEVATION OF THE LOWEST POINT IN THE LINE OR SECTION UNDER THE TEST, BUT SUCH PRESSURE SHALL NOT BE LESS THAN 150 PSI NOR MORE THAN 200 PSI, AND EXPOSED PARTS AGAIN EXAMINED. THE MINIMUM DURATION OF THE LEAKAGE TEST SHALL BE TWO (2) HOURS.

5. ALLOWABLE SYSTEM LEAKAGE AS SPECIFIED IN THE REFERENCED STANDARDS. IF LEAKAGE IN SYSTEM IS GREATER THAN ALLOWABLE, CONTRACTOR WILL LOCATE AND REPAIR SYSTEM AT HIS EXPENSE AND RETEST, CONTINUE TO TEST AND REPAIR THE SYSTEM UNTIL LEAKAGE IS WITHIN ACCEPTABLE LIMITS. 6. NO DUCTILE IRON PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:

L = LEAKAGE IN GALLONS PER HOUR S = LENGTH OF PIPE TESTED, IN FEET

D = NOMINAL DIAMETER OF PIPE IN INCHES P = AVERAGE TEST PRESSURE DURING LEAKAGE TEST, IN PSI (GAUGE)

DRAWN BY: MAB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	J
1	12/25/18	REVISED FOR PLANNING BOARD SUBMISSION	MAB				

OR LATERAL-

MAIN/LATERAL/FORCEMAIN.

STORM LINE &

MANHOLES

EQUAL -----EQUAL -----

-----FULL UNCUT LENGTH OF PIPE

VERTICAL SEPARATION

HORIZONTAL SEPARATION

1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE

OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE

WATER LINE SEPARATION DETAIL

NOT TO SCALE

DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF

PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE

BEACON. CONCRETE ENCASEMENT OF WATERLINE OR

SEPARATION DISTANCES CANNOT BE MAINTAINED.

OR SERVICE

BEDDING -

(TYP.) NOTES:

ELBOW



__6"ø CLASS 52

CEMENT LINED

- MUELLER RESILIENT WEDGE NON-RISING

OF BEACON WATER DEPARTMENT

VALVE WITH RODDING

- CONCRETE THRUST BLOCK BENEATH

STEM MODEL # A-2360, MECHANICAL JOINT

GATE VALVE AS APPROVED BY THE CITY

__ WATER MAIN

- CONCRETE THRUST

— UNDISTURBED EARTH

BLOCK (TYP.)





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WATER AND SEWER DETAILS

23-28 CREEK ROAD CITY OF BEACON DUTCHESS COUNTY, NEW YORK JOB #: 2018:029 DATE: 10/23/2018 SCALE: AS SHOWN TITLE: D-3

SHEET: 12 OF 12

TAX ID: 6054-37-037625