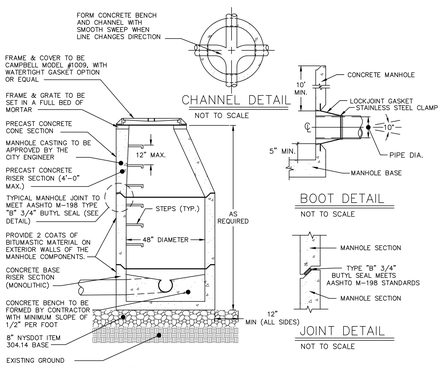
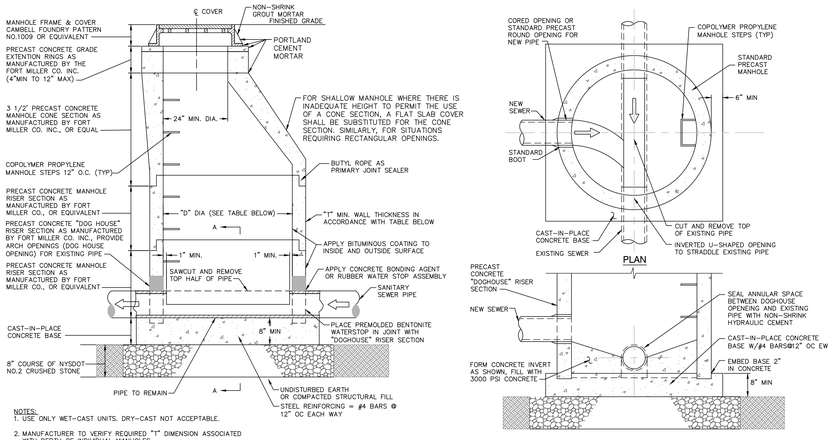
## SEWER DETAILS




NOTES:
1. PIPE CONNECTION TO BE STANDARD "LOCKJOINT" BOOT 5" OFF BASE OF MANHOLE (SEE DETAIL).
2. CONCRETE STRENGTH OF MANHOLE COMPONENTS TO BE 4000 PSI @ 28 DAYS IN ACCORDANCE WITH ASTM C-478-86.
3. STEEL REINFORMENT OF MANHOLE COMPONENTS TO MEET ASTM A615-A497 REQUIREMENTS.
4. LOADING OF MANHOLE COMPONENTS TO MEET H-20 REQUIREMENTS.
5. CONCRETE USED IN MANHOLE COMPONENTS TO CONTAIN 6% AIR ENTRAINMENT.
6. 4' MAXIMUM FROM MANHOLE TO PIPE JOINT.

### PRE-CAST CONCRETE SANITARY MANHOLE DETAIL
NOT TO SCALE

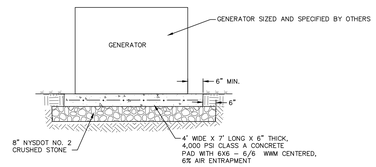



NOTES:
1. USE ONLY WET-CAST UNITS. DRY-CAST NOT ACCEPTABLE.
2. MANUFACTURER TO VERIFY REQUIRED "T" DIMENSION ASSOCIATED WITH DEPTH OF INDIVIDUAL MANHOLES.

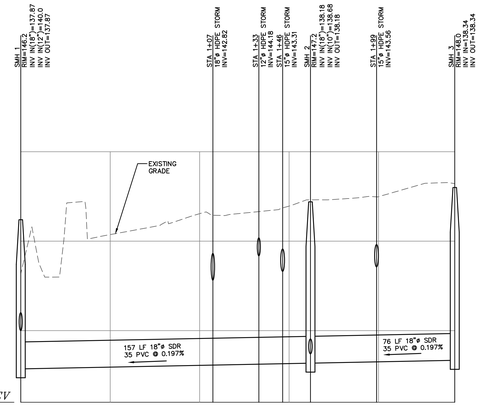
| OUTLET SEWER PIPE SIZE | "D" DIA MIN | "T" WALL THICKNESS MIN |
|---|---|---|
| 8" THRU 24" | 4'-0" | 5" |
| 30" | 5'-0" | 6" |

### PRECAST CONCRETE INSERTION "DOGHOUSE" MANHOLE DETAIL
NOT TO SCALE

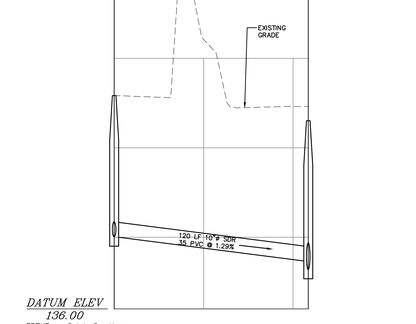


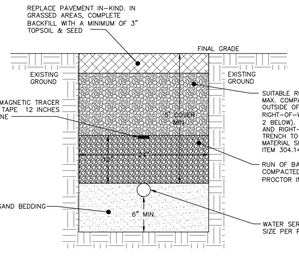




GENERATOR PAD




### PROPOSED SEWER LINE PROFILES
SCALE: 1" = 3' V
1" = 30' H



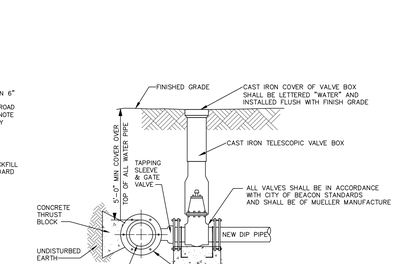




FLEXIBLE JOINT REQUIREMENTS

| SEWER PIPE TYPE | FLEXIBLE JOINT TYPE IN & OUT | "A"DISTANCE (FEET) |
|---|---|---|
| DUCTILE IRON | STD RUBBER GASKET PIPE JOINT ONLY | 10' MAX |
| PVC | STD RUBBER GASKET PIPE JOINT ONLY | 3' MAX |

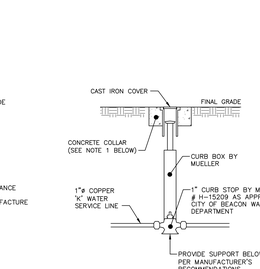
NOTE:
REFERENCE MANHOLE DETAIL(S) FOR REQUIRED INVERT CHANNEL CONFIGURATION.

### CORED HOLE AND INSERTED BOOT DETAIL
NOT TO SCALE



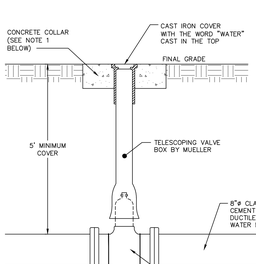

NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

### SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE




NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

### SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE




### CLEANOUT DETAIL
NOT TO SCALE

## WATER DETAILS




NOTES:
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.

### WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE




NOTES:
1. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2-INCH SQUARE-OPERATING NUT PAINTED RED.
2. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
3. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H-615, AND T-2630 RESPECTIVELY.

### TAPPING SLEEVE DETAIL
NOT TO SCALE



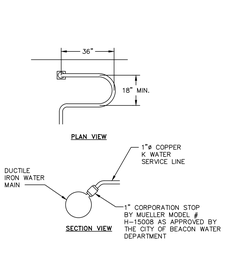

NOTES:
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.
2. CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

### WATER SHUT-OFF VALVE DETAIL
NOT TO SCALE



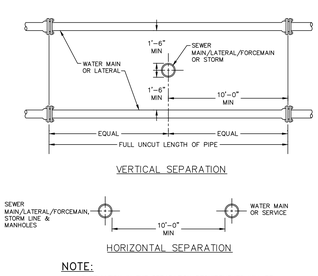

NOTES:
1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

### GATE VALVE DETAIL
NOT TO SCALE




NOTES:
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 STOP.
4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF OF THE WATER MAIN AT AN ANGLE OF APPROXIMATELY 45° FROM HORIZONTAL.

### WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



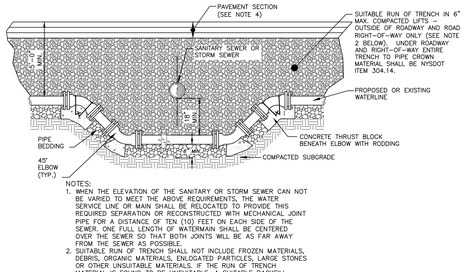

VERTICAL SEPARATION




HORIZONTAL SEPARATION

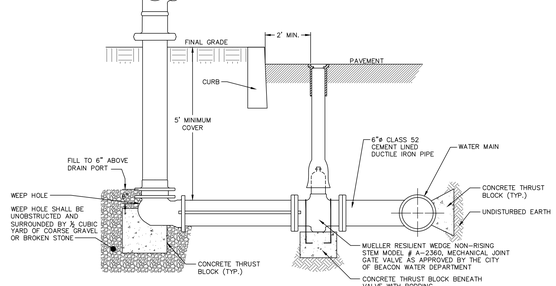
NOTE:
1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

### WATER LINE SEPARATION DETAIL
NOT TO SCALE




NOTES:
1. WHEN THE ELEVATION OF THE SANITARY OR STORM SEWER CAN NOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER SERVICE LINE OR MAIN SHALL BE RELOCATED TO PROVIDE THIS REQUIRED SEPARATION OR RECONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATERMAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AWAY FROM THE SEWER AS POSSIBLE.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. THE RELOCATED WATER MAIN/SERVICE LINE SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA, NYSDOH AND DCDOH STANDARDS.
4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE PAVEMENT RESTORATION DETAIL.
5. ALL REPLACED WATERMAIN SHALL BE 12"ø CLASS 52 DUCTILE IRON.

### WATER LINE OFFSET DETAIL
NOT TO SCALE




NOTES:
1. THE GATE VALVE SHALL BE LOCATED THIRTY SIX (36) INCHES FROM THE HYDRANT CENTER LINE.
2. ¾" STEEL TIE RODS TO BE PROVIDED BETWEEN THE GATE VALVE AND THE HYDRANT.

### HYDRANT DETAIL
NOT TO SCALE

RECOMMENDED FOR APPROVAL:

_____ _____
MAYOR OF THE CITY OF BEACON DATE

APPROVED BY RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BEACON

ON THE _____ DAY OF _____, 20_____

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE

_____ DAY OF _____, 20_____ SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____, 20_____, BY

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.

STATE OF NEW YORK — DANIEL G. KOEHLER — 082716 — PROFESSIONAL ENGINEER

SEAL

JON D. BODENDORF, P.E.
NYS LICENSE NO. 076245
DANIEL G. KOEHLER, P.E.
NYS LICENSE NO. 082716

| REVISIONS: | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| 1 | 8/29/17 | NO CHANGE THIS SHEET | CMB |
| 2 | 9/26/17 | NO CHANGE | CMB |
| | | | |
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| | | | |
| | | | |
| | | | |

# Amendment to Special Use Permit
# Water and Sewer Details

Sheet 10 of 10


*Owner:*
**Beacon HIP Lofts, LLC**
39 Front Street
Beacon, NY 12508

*Architect:*
**Aryeh Siegel, Architect**
514 Main Street
Beacon, New York 12508

*Site/Civil Engineer:*
**Hudson Land Design**
174 Main Street
Beacon, New York 12508

*Landscape Design:*
**LQ Design**
P.O. Box 244
Beacon, NY 12508

*Surveyor:*
**TEC Land Surveying**
Main Street
Beacon, New York 12508


**Beacon HIP Lofts**
Beacon, New York
Scale: As Noted
July 25, 2017