

DRAINAGE	PIPE SCHEDULE			
LABEL	LENGTH	SLOPE	DIAMETER	MATERIAL
P1	20'	2.0%	12"	HDPE
P2	128.7 '	9.75%	15"	HDPE
P3	20'	2.0%	12"	HDPE
P4	131.1'	9.35%	15 "	HDPE
P5	20'	2.0%	12"	HDPE
P6	168.9'	8.23%	15"	HDPE
P7	20'	2.0%	15 "	HDPE
P8	128.2	2.96%	15 "	HDPE
P9	20'	2.0%	15"	HDPE
P10	20'	1.0%	12 "	HDPE
P11	172'	4.6%	18 "	HDPE
P12	58'	1.1%	15"	HDPE
P13	36'	2.77%	18 "	HDPE
P14	100'	0.50%	15 "	HDPE

295

285

280

270

265

250

0+00

Ø+5Ø

SANITARY STRUCTURE SCHEDULE				
LABEL S4 S6 S8 S10	T.F 296.50 289.20 277.50 267.80	273.50		
SANITARY PIPE SCHEDULE				
LABEL S4P S6P S8P S10P	LENGTH 137' 190' 154' 148'	5.68%		
FLARED END SECTIONS				
FES-1 FES-2		44.00 42.00		HDPE HDPE
OUTLET STRUCTURE (OS-1)				

320

310 _

305 _

300

290 _

285

5 4+62.29 = 279.30 IN = 271.7 OUT = 271.7

S-5 STA T.F. INV

4+50

5+00

5+5Ø

6+00

PVI STA = 06+07.81PVI ELEV + 290.00

K = 126.2

88#88

CB-6 STA 6+1 T.F. = 2 INV IN = 1 SUMP = -

3 1 5+95.37 23.5 = 290.30 |N = 283.69 |OUT = 283.51

STA STA NN NN

294.21' VC

SEE DETAIL SHEET

3+34.87 2 = 269.23 IN = 261.5 OUT = 261.

S74 S74 N N

CB-9 STA 3+15.18 12.0 T.F. = 267.30 INV IN = 263.70 INV OUT = 263.60 SUMP = 261.60

CB-11 STA 2+14.61 12.001 I.F. = 259.58 INV IN = 253.10 SUMP = 253.00 SUMP = 251.00 STA 2 T.F. | STA 2 T.F. | STA 2

2+00

2+50

3+00

3+**5**Ø

4+00

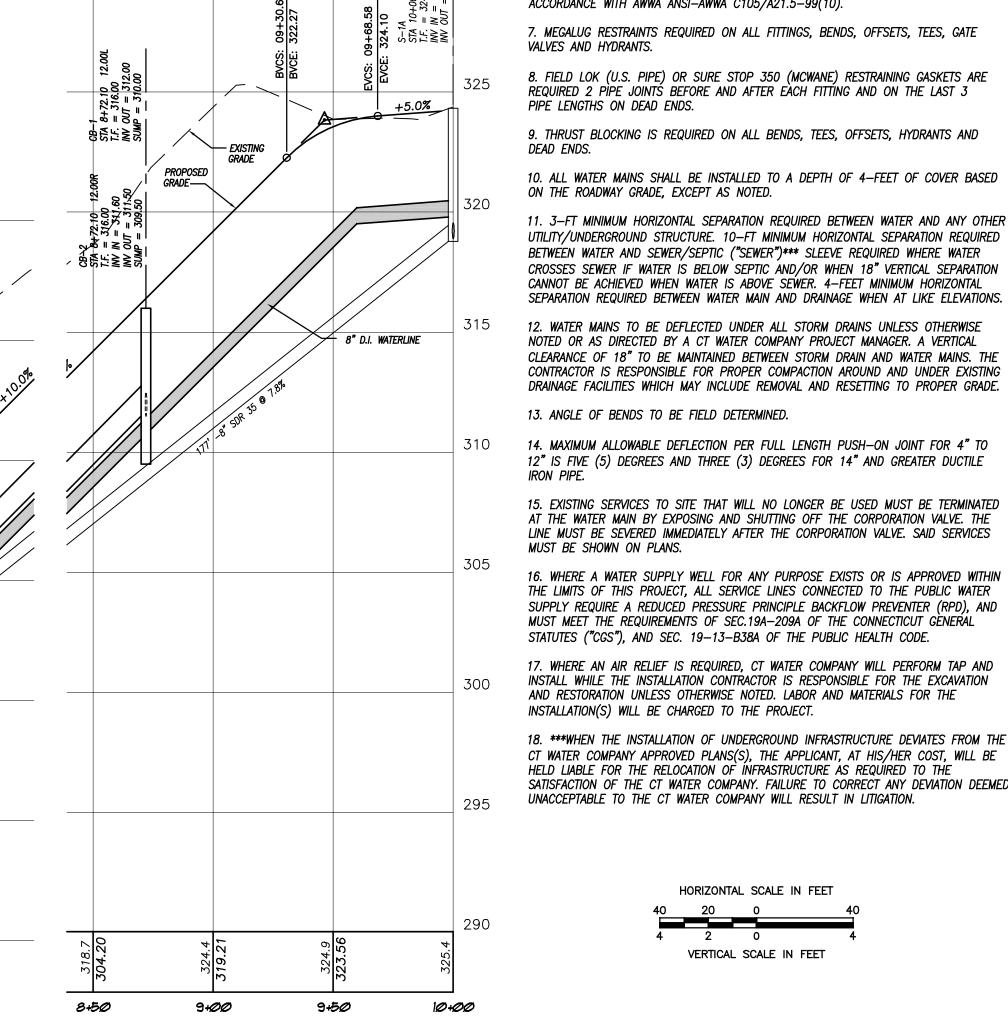
PVI STA = 01+12.67

PVI ELEV = 252.00K = 68.4

36 L.F. — 18" HDPE TO BASIN **©** 2.77%

1+00

STA STA N N N



8+22.87 = 311.33 IN = 305.0 OUT = 304

7+35. = 30; IN = 00T =

S-2 STF STF STF

— 8" D.I. WATERLINE

6+50

7+00

7+50

8+00

PVI STA = 9+46.39

PVI ELEV = 323.84

K = 7.637.92' VC **WATER MAIN INSTALLATION NOTES:**

1. PROJECT MUST BE BUILT TO CONNECTICUT WATER COMPANY SPECIFICATIONS.

2. CLASS 52 DUCTILE IRON PIPE REQUIRED.

3. COPPER AND/OR DUCTILE IRON SERVICE LATERAL MATERIAL REQUIRED.

4. GATE VALVES OPEN LEFT.

5. FIRE HYDRANTS OPEN LEFT. HYDRANTS ARE 5.5' BURY DEPTH. CT WATER COMPANY WILL FURNISH MATERIALS INCLUDING TEE, VALVE, PIPE, HYDRANT AND ACCESSORIES. FIRE HYDRANTS TO BE INSTALLED WITH FACE OF HYDRANT 3-FEET OFF FACE OF CURB. HYDRANTS ARE NOT TO BE INSTALLED IN SIDEWALKS. WHERE 3-FEET CANNOT BE OBTAINED, INSTALL HYDRANT BEHIND SIDEWALK UNLESS OTHERWISE NOTED OR AS DIRECTED BY A CT WATER COMPANY PROJECT MANAGER. 10-FEET HORIZONTAL SEPARATION REQUIRED BETWEEN HYDRANTS, SEWER MANHOLES AND STORM DRAINS. ***FIRE HYDRANTS TO BE INSTALLED WITH FINISH GRADE AT THE BURY LINE CAST INTO THE LOWER BARREL. CONTRACTOR IS RESPONSIBLE FOR ADJUSTMENTS OF WATER MAIN AND LATERAL ELEVATION TO ACHIEVE PROPER BURY DEPTH. ANY COSTS RELATED TO ADJUSTMENTS REQUIRED BY CT WATER COMPANY WILL BE THE RESPONSIBILITY OF THE INSTALLATION CONTRACTOR AND/OR APPLICANT OF RECORD.

6. ALL WATER MAIN PIPING AND APPURTENANCES MUST BE POLYETHYLENE ENCASED IN ACCORDANCE WITH AWWA ANSI-AWWA C105/A21.5-99(10).

7. MEGALUG RESTRAINTS REQUIRED ON ALL FITTINGS, BENDS, OFFSETS, TEES, GATE VALVES AND HYDRANTS.

8. FIELD LOK (U.S. PIPE) OR SURE STOP 350 (MCWANE) RESTRAINING GASKETS ARE REQUIRED 2 PIPE JOINTS BEFORE AND AFTER EACH FITTING AND ON THE LAST 3 PIPE LENGTHS ON DEAD ENDS.

9. THRUST BLOCKING IS REQUIRED ON ALL BENDS, TEES, OFFSETS, HYDRANTS AND

10. ALL WATER MAINS SHALL BE INSTALLED TO A DEPTH OF 4-FEET OF COVER BASED ON THE ROADWAY GRADE, EXCEPT AS NOTED.

11. 3-FT MINIMUM HORIZONTAL SEPARATION REQUIRED BETWEEN WATER AND ANY OTHER UTILITY/UNDERGROUND STRUCTURE. 10-FT MINIMUM HORIZONTAL SEPARATION REQUIRED BETWEEN WATER AND SEWER/SEPTIC ("SEWER")*** SLEEVE REQUIRED WHERE WATER CROSSES SEWER IF WATER IS BELOW SEPTIC AND/OR WHEN 18" VERTICAL SEPARATION CANNOT BE ACHIEVED WHEN WATER IS ABOVE SEWER. 4-FEET MINIMUM HORIZONTAL SEPARATION REQUIRED BETWEEN WATER MAIN AND DRAINAGE WHEN AT LIKE ELEVATIONS.

12. WATER MAINS TO BE DEFLECTED UNDER ALL STORM DRAINS UNLESS OTHERWISE NOTED OR AS DIRECTED BY A CT WATER COMPANY PROJECT MANAGER. A VERTICAL CLEARANCE OF 18" TO BE MAINTAINED BETWEEN STORM DRAIN AND WATER MAINS. THE CONTRACTOR IS RESPONSIBLE FOR PROPER COMPACTION AROUND AND UNDER EXISTING DRAINAGE FACILITIES WHICH MAY INCLUDE REMOVAL AND RESETTING TO PROPER GRADE.

13. ANGLE OF BENDS TO BE FIELD DETERMINED.

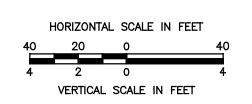
14. MAXIMUM ALLOWABLE DEFLECTION PER FULL LENGTH PUSH—ON JOINT FOR 4" TO 12" IS FIVE (5) DEGREES AND THREE (3) DEGREES FOR 14" AND GREATER DUCTILE

15. EXISTING SERVICES TO SITE THAT WILL NO LONGER BE USED MUST BE TERMINATED AT THE WATER MAIN BY EXPOSING AND SHUTTING OFF THE CORPORATION VALVE. THE LINE MUST BE SEVERED IMMEDIATELY AFTER THE CORPORATION VALVE. SAID SERVICES MUST BE SHOWN ON PLANS.

THE LIMITS OF THIS PROJECT, ALL SERVICE LINES CONNECTED TO THE PUBLIC WATER SUPPLY REQUIRE A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER (RPD), AND MUST MEET THE REQUIREMENTS OF SEC.19A-209A OF THE CONNECTICUT GENERAL STATUTES ("CGS"), AND SEC. 19-13-B38A OF THE PUBLIC HEALTH CODE.

17. WHERE AN AIR RELIEF IS REQUIRED, CT WATER COMPANY WILL PERFORM TAP AND INSTALL WHILE THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR THE EXCAVATION AND RESTORATION UNLESS OTHERWISE NOTED. LABOR AND MATERIALS FOR THE INSTALLATION(S) WILL BE CHARGED TO THE PROJECT.

18. ***WHEN THE INSTALLATION OF UNDERGROUND INFRASTRUCTURE DEVIATES FROM THE CT WATER COMPANY APPROVED PLANS(S), THE APPLICANT, AT HIS/HER COST, WILL BE HELD LIABLE FOR THE RELOCATION OF INFRASTRUCTURE AS REQUIRED TO THE SATISFACTION OF THE CT WATER COMPANY. FAILURE TO CORRECT ANY DEVIATION DEEMED UNACCEPTABLE TO THE CT WATER COMPANY WILL RESULT IN LITIGATION.



REVISIONS

DRAINAGE AND UTILITIES PLAN

PREPARED FOR

SHANE POLLOCK

LOUISE BERRY DRIVE

BROOKLYN, CONNECTICUT

Killingly Engineering Associates

PER TOWN & ENGINEERING REVIEW

PER TOWN REVIEW DESCRIPTION

•	IRON PIN TO BE SET
0	IRON PIN FOUND
⊙ DH	DRILL HOLE FOUND
Ø	UTILITY POLE
□ ^{CB}	CATCH BASIN
959 795 SMH	SANITARY MANHOLE
	EXISTING CONTOURS
#\	INLAND WETLANDS FLA
∞	STONE WALL
~~~~	STONE WALL DEMAINS

Civil Engineering & Surveying 114 Westcott Road P.O. Box 421 Killingly, Connecticut 06241

11/13/2020

DATE

08/24/2020

www.killinglyengineering.com DATE: 4/23/2020 DRAWN: DNE SCALE: 1" = 40'DESIGN: NET CHK BY: ---SHEET: 6 OF 9 DWG. No: CLIENT FILE JOB No: 20014

NORMAND E. THIBEAULT, JR., P.E. DATE LIC #PEN 0022834

<u>LEGEND</u>

	INON I IN I OUND
O DH	DRILL HOLE FOUND
Ø	UTILITY POLE
□ ^{CB}	CATCH BASIN
959 795	SANITARY MANHOLE
260	EXISTING CONTOURS
——# [*] ——	INLAND WETLANDS FLAG
$\infty$	STONE WALL
$\infty$ 0 $\infty$	STONE WALL REMAINS

Email from KEA received after 1/4/2021 deadline as per IWWC Policy Statement. Received 1/7/2021.

Please find comments from Alan Carpenter, Engineering consultant for the Brooklyn WPCA. We will add these notes to the cover sheet of the plans

From: Carpenter, Alan (P.E.) <a href="mailto:acarpenter@cphcorp.com">acarpenter@cphcorp.com</a>>

Sent: Thursday, January 7, 2021 9:51 AM

To: Bob Kiley <bobk4723@icloud.com>; Norm Thibeault <nthibeault@killinglyea.com>

**Cc:** Joseph Couture < <u>joseph.couture@suez-na.com</u>>; Craig Dunlop < <u>cedunlop@email.com</u>>; Derek Lindia

< lindias 777@gmail.com >; Robert Kelleher < bobcar 64@charter.net >; Robert Ross

<<u>robross634@gmail.com</u>>; Carpenter, Alan (P.E.) <<u>acarpenter@cphcorp.com</u>>; Sherri A Soucy <<u>brooklynwpca019@gmail.com</u>>

**Subject:** RE: Pollock / Louise Berry Drive 51-Unit Condominium Project - Brooklyn Water Pollution Control Authority (BWPCA) -Commitment to Serve - Sanitary Sewer.

Mr. Thibeault,

On Behalf of the Brooklyn Water Pollution Control Authority and with authorization of the BWPCA Chairman Mr. Bob Kiley, please let this email represent our 'Commitment to Serve' the proposed 51-Unit Condominium Development on Louise Berry Drive. (See attached preliminary plan, your plan)

Currently, our system has available capacity to serve the project. We will want the full Authority to render their approval of the plans, specifications and construction measures and have the following requests for you and the Developer to meet our needs.

- We will require that the main trunk line through the site be dedicated to the Town of Brooklyn Water Pollution Control Authority under a 30-foot wide easement (15-feet each side of the line) for ownership, control, and maintenance responsibility. The permanent easement over the main trunk line will need to be created, approved by BWPCA and recorded in the Town of Brooklyn land records prior to any connections to the system.
- 2. The eastern terminus manhole in Louise Berry Drive be a minimum of 8-feet deep from top of frame to invert and an 8-inch SDR 35 stub be installed a minimum of 1 pipe length (20-feet) at 0.4 ft/ft slope and capped in the east facing invert.
- 3. We require that the entire system be constructed/installed in accordance with the Town of Brooklyn WPCA construction standards by the Developer. We will require the system be inspected by our representatives during construction, tested by the Developer and certified by his engineer and 'cleared for use' by our representatives before the system can be used.
- 4. Unless you provide us with documented proof of anticipated usage, we are calculating your anticipated usage at 22,950 Gallons per day. (51 units X 450 GPD/per unit).
- 5. Prior to the commencement of construction of the sewer system, we require a pre-construction meeting be scheduled by the Developer, to include at a minimum, an invite to the BWPCA 72-hours minimum in advance of the meeting and attendance by The Developer, his engineer, the general contractor and utility contractor (if different entities).
- 6. It is understood that ALL costs relating to the creation of this utility extension, and the legal control and documentation of it shall be borne entirely by the developer.

7. It is expected that connection fees per unit, be paid prior to the issuance of a building permit and the only guarantee of system capacity availability is receipt of the connection fees by the BWPCA.

We will provide a mark-up of the drawings you provided to us on 1-4-21 in the near future containing our expectations and once the plans are complete, and approved by the BWPCA, they will become an exhibit to our permit approval.

We are not currently aware of any other development proposed along this section of the BWPCA system but if anything new comes to our attention that might affect the system capacity to the potential detriment of your client we will let you know.

Sherri Soucy will be responsible for establishing the connection fees for the proposed connections to the system and invoicing for them.

Thank you and we look forward to working with you and Mr. Pollock (or his assigns) on this project. Please let us know if you have any questions or if you need any additional information.

Alan R. Carpenter, PE Vice President / Associate o 508.659.7020 (Ext. 6401) c 860.208.3394 ACarpenter@cphcorp.com



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Syl Pauley email 1-11-2021 re: Brooklyn WPCA review of the condos project

Margaret,

Plan Sheet 5 of 9 sent to Brooklyn WPCA for review of the proposed sanitary sewer system for this project is the same plan included in the most recent Version 5 plan set. This plan was sent to the WPCA for comment on the proposed sewer system layout and nothing more. However, Norm should have also sent all detail sheets for WPCA review of what is pertinent to them. Al Carpenter in his email stated that he attached the plan sent to him by Norm but Norm did not include that in the copy of the email he sent to us. Bottom line is, the WPCA review may be incomplete and they may have more to comment on after reviewing the detail sheets.

Syl