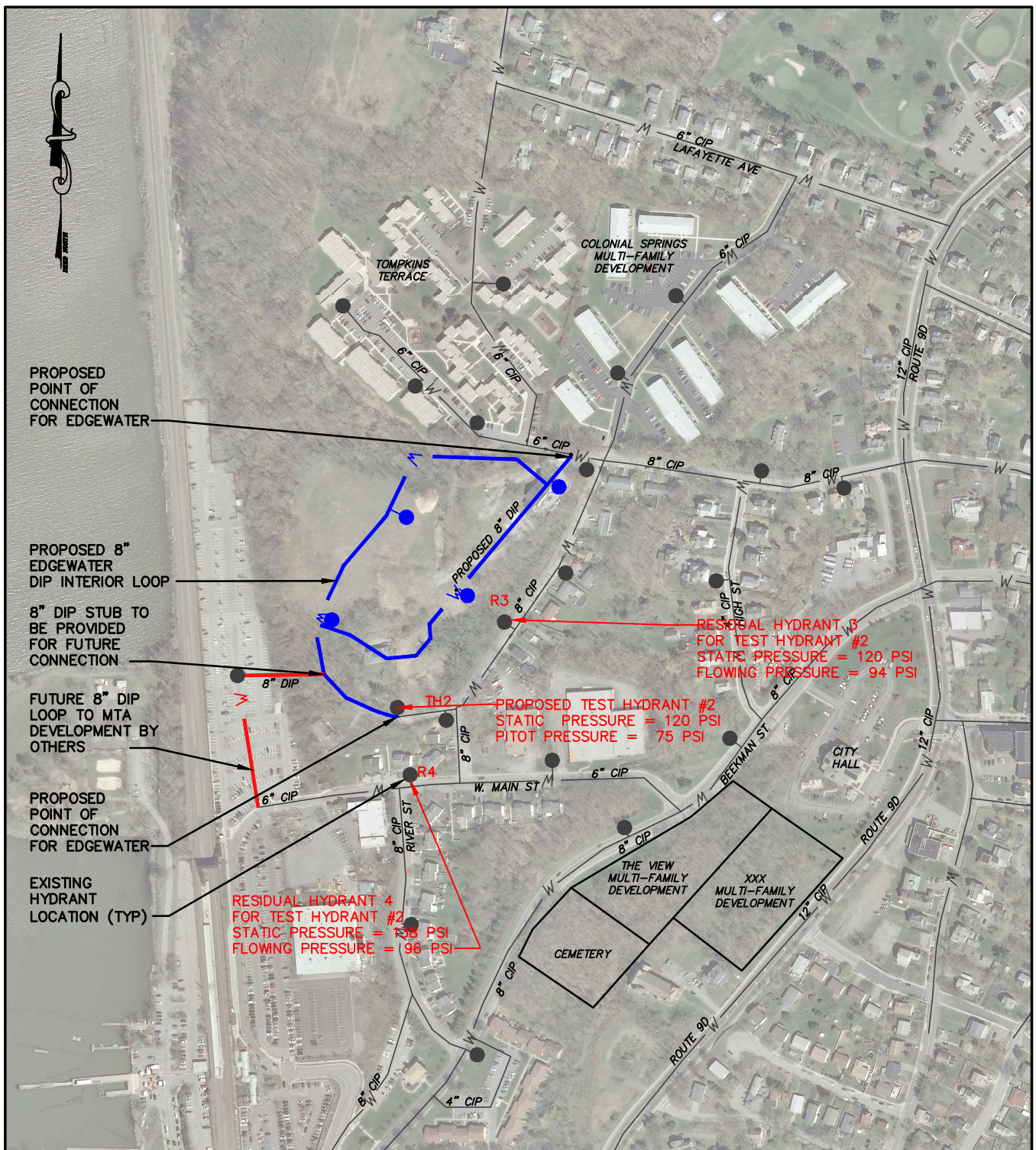




WATER MAIN TEST MAP 2

SCALE: 1" = 400'
DATE: MAY 2, 2017

PREPARED FOR:
SCENIC BEACON DEVELOPMENTS, LLC
9-11 CREEK DRIVE
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX PARCEL 5954-25-566983, 574979, 582985, & 5955-19-590022



PREPARED BY:
HUDSON LAND DESIGN
PROFESSIONAL ENGINEERING
174 MAIN STREET
BEACON, NY 12508
PH: 845-440-6926

Job: Edgewater
 Job No.: 2016-015
 Description: Hydrant Flow Test #2
 Prep. By: AG Date: 5/25/2017
 Check By: MAB Date:

Hydrant Flow Test #1

Location: Edgewater Plan
 Personnel: M. Bodendorf, B. Butler, A. Gasparre
 Test date: 5/16/2017
 Test time: 11:30 p.m.

Tested (Observed) Flow:

Hydrant ID: Static Pressure: 120 psi
 Location: Branch Street
 Calculated Discharge (Q_t): $Q_t = 29.83(c_d)(D^2)(P_p^{0.5})$
 Where: 2.5 inches
 Pitot Reading (P_p): 75 psi
 Friction Loss Coefficient (c_d): 0.9 (0.9 typical for smooth 2.5" opening)
 Calculated Q_t : 1453 gpm

Calculated Available Flow:

Residual Hydrant ID: 3
 Location: West Side of Bank Street
 Calculated Fire Flow (Q_f): $Q_f = Q_t((P_s P_f)/(P_s P_t))^{0.54}$
 Where: 120 psi
 Static pressure (P_s): 94 psi
 Residual pressure (P_r): 20 psi
 Desired pressure at fire flow (P_f) 20 psi
 Calculated Q_f : 3008 gpm
 Hydrant Classification/Color⁽¹⁾: Class AA - Light Blue

Calculated Available Flow:

Residual Hydrant ID: 4
 Location: Corner of Bank Street and W. Main Street
 Calculated Fire Flow (Q_f): $Q_f = Q_t((P_s P_f)/(P_s P_t))^{0.54}$
 Where: 138 psi
 Static pressure (P_s): 96 psi
 Residual pressure (P_r): 20 psi
 Desired pressure at fire flow (P_f): 20 psi
 Calculated Q_f : 2538 gpm
 Hydrant Classification/Color⁽¹⁾: Class AA - Light Blue

Notes:

- 1) Per AWWA C502. Color shall be as designated in Federal Standard 595B, top and nozzle caps to be painted.
- 2) Consult with local water operator to verify color schemes and parts to be painted.
- 3) Hydrant colors shall signify only the approximate capacity of the individual hydrant as tested alone, and not its capacity when more than one hydrant in the vicinity is in use. The marking of the hydrant is not to be considered as in any way guaranteeing the capacity indicated by the color.