



G. Utilities Appendix



Computations

Project #: 29254
 Project: Normandy
 Location: Harrison, NY
 Calculated by: J.Cheong
 Title: Existing Sewer Pipe Capacity (Crossing Westchester Avenue)
 Date: 10/26/2015

Mannings Formula

$$Q = (1.486/n)AR_h^{2/3}S^{1/2}$$

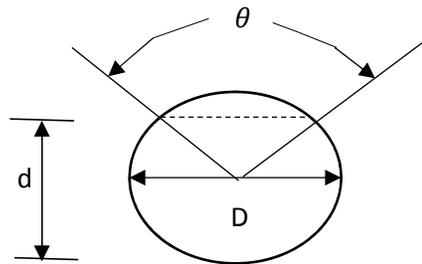
$$R = A/P$$

A = cross sectional area

P = wetted perimeter

S = slope of pipe

n = Manning's roughness coefficient



$$V = (1.49/n)R_h^{2/3}S^{1/2}$$

$$Q = V \times A$$

INPUT

D = 8 inches
 d = 8 inches
 n = 0.012 manning Coeff
 theta = 0 degree
 S = 0.006 slope ft/ft

Area, ft ²	Wetted Perimeter, ft	Hydraulic Radius, ft	Results from Manning Equation	
			Velocity (ft/s)	Flow, cfs
0.35	2.09	0.17	2.90	1.01

Pipe Capacity, Q		
Q =	1.01	cfs
=	655,303	gpd



HYATT
house®

White Plains

11:44am 56°F / 13°C

HOTEL PHOTOS

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You'll get more when you bring people together for group events or small meetings at Hyatt House White Plains. Our 1,288 sq. ft. event space can accommodate groups as small as 5 and as large as 70 with a variety of set up options. We offer facilities and services for training classes, business meetings or social events. Let our staff assist with audio/visual needs, catering and anything else – for events that connect and inspire.

Your guests will feel more than welcome in our residential-style suites featuring full kitchens, separate living and sleeping areas and free high-speed Internet access. A daily complimentary full breakfast buffet is offered, as well as an Evening Social every Monday through Thursday.

Please contact the sales office today at 914-251-9700 to book your meeting and/or block of rooms.

MAKE A RESERVATION

Arrive

Depart

MMM / DD / YYYY

MMM / DD / YYYY

CHECK AVAILABILITY

MEETINGS + EVENTS

Meetings

Weddings

Events

PLAN YOUR MEETING >>



Meeting Planning

Plan the perfect meeting that inspires and connects at Hyatt house White Plains.



Wedding Planning

Our hotel is the perfect place for accommodating guests and rehearsal dinners.

Share





HYATT HOUSE WHITE PLAINS NY

101 Corporate Park Dr., **White Plains**, NY **10604** United States (USA)

[View Map](#) Reservations: 1-800-230-4134 Group Sales: 1-800-906-2871

★★★ 3.0 Star Suburban All-Suite or Extended Stay Hotel in Westchester County



Hyatt House White Plains Ny 1 of 13



Check availability

Very Good

4

Based on 277 guest reviews

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- ✓ With an outdoor pool!
- ✓ Free breakfast
- ✓ Avg. Group Discount of **7.0%**!
- ✓ Fitness / Gym is on-site
- ✓ **159 rooms in hotel**
- ✓ Check-out time: 12:00pm
- ✓ Groups & Meetings rating of **10.0/10**
- ✓ 3 meeting rooms in hotel

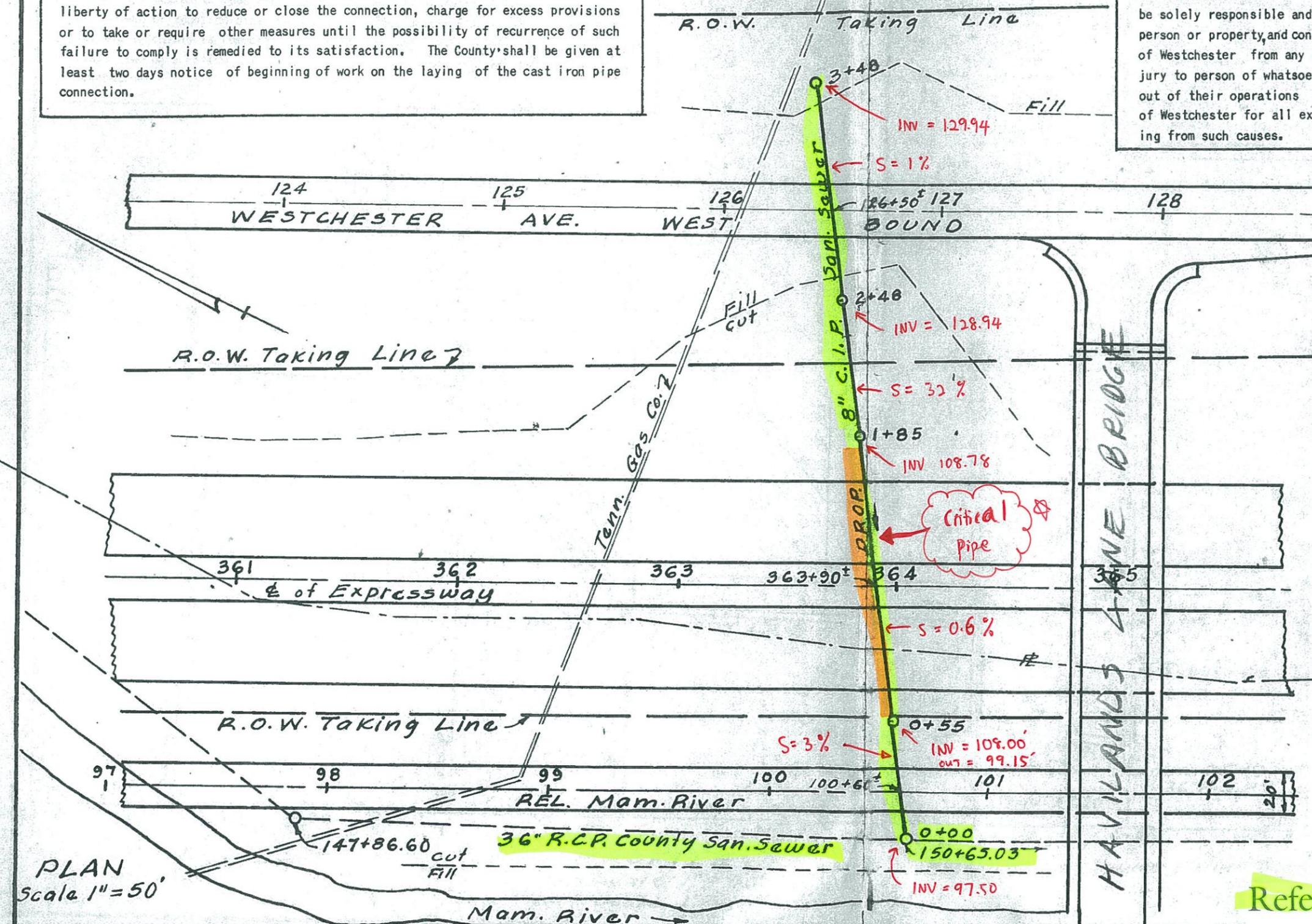
CONDITIONS

Discharge thru this sewer connection shall be subject to the conditions of the permit granted or to be granted to the County by the State and shall at no hour exceed a rate of 150 gallons per day per capita of connected tributary population. Only domestic sewage and non injurious waste liquid, and no snow, storm, cellar, surface or roof water or other drainage water shall be discharged. In case of failure to comply with these conditions; the County reserves to itself full liberty of action to reduce or close the connection, charge for excess provisions or to take or require other measures until the possibility of recurrence of such failure to comply is remedied to its satisfaction. The County shall be given at least two days notice of beginning of work on the laying of the cast iron pipe connection.

**WESTCHESTER COUNTY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF SEWERS
APPLICATION FOR CONNECTION
TO COUNTY TRUNK SEWER**

INSURANCE REQUIREMENTS

The Contractor at his own expense shall take out and maintain such insurance as will protect the Contractor for the term of the work under the Workmen's Compensation Acts; and shall also take out and maintain public liability and property damages insurance including contractual coverage as follows: Workmen's Compensation - Unlimited. Public Liability including Contractual Liability - for one person \$100,000.00 - for any one accident \$500,000.00. Property Damage Liability \$100,000.00. The Contractor assumes all risks in the operation covered by the permit and shall be solely responsible and answerable in damages for all accidents or injuries to person or property, and covenants and agrees to indemnify and hold harmless County of Westchester from any and all claims, suits, losses, damage to property or injury to person of whatsoever kind and nature, whether direct or indirect, arising out of their operations under the permit, and further agrees to reimburse County of Westchester for all expenses, costs or judgements to which it may be put arising from such causes.



LOCATION DATA	
COUNTY PROJECT	Mamaronock
SECTION	"B" STATION 150+65.03
MUNICIPALITY	Town of Harrison
AREA TRIBUTARY	36 Acres
POPULATION Present	0 Future 500

DESIGNER	Raymond W. Murphy
LICENSE NO.	9469
ADDRESS	510 Forest Ave. Rye, N.Y.
DATE	July 26 '57
SIGNED	Raymond W. Murphy Title P.E. & L.S.

APPLICANT	Harchester Realty Corp.
ADDRESS	27 South Broadway White Plains, N.Y.
DATE	July 31 1957
SIGNED	Edward H. David Title Pres.

MUNICIPALITY	Town of Harrison
ADDRESS	Town Hall Harrison, N.Y.
DATE	7/29/57
SIGNED	Barth E. Bradner Title Supt. Highways & Sewers

WESTCHESTER COUNTY DEPARTMENT OF PUBLIC WORKS DIVISION OF SEWERS	
CHECKED	A.S.P. DATE Aug. 8 1957
SIGNED	John J. Cady Superintendent of Sewers

CONN. COMPLETED	
CONTRACTOR	
FOREMAN	

Reference: WCDEF; 1957 Permit

PLAN
Scale 1" = 50'

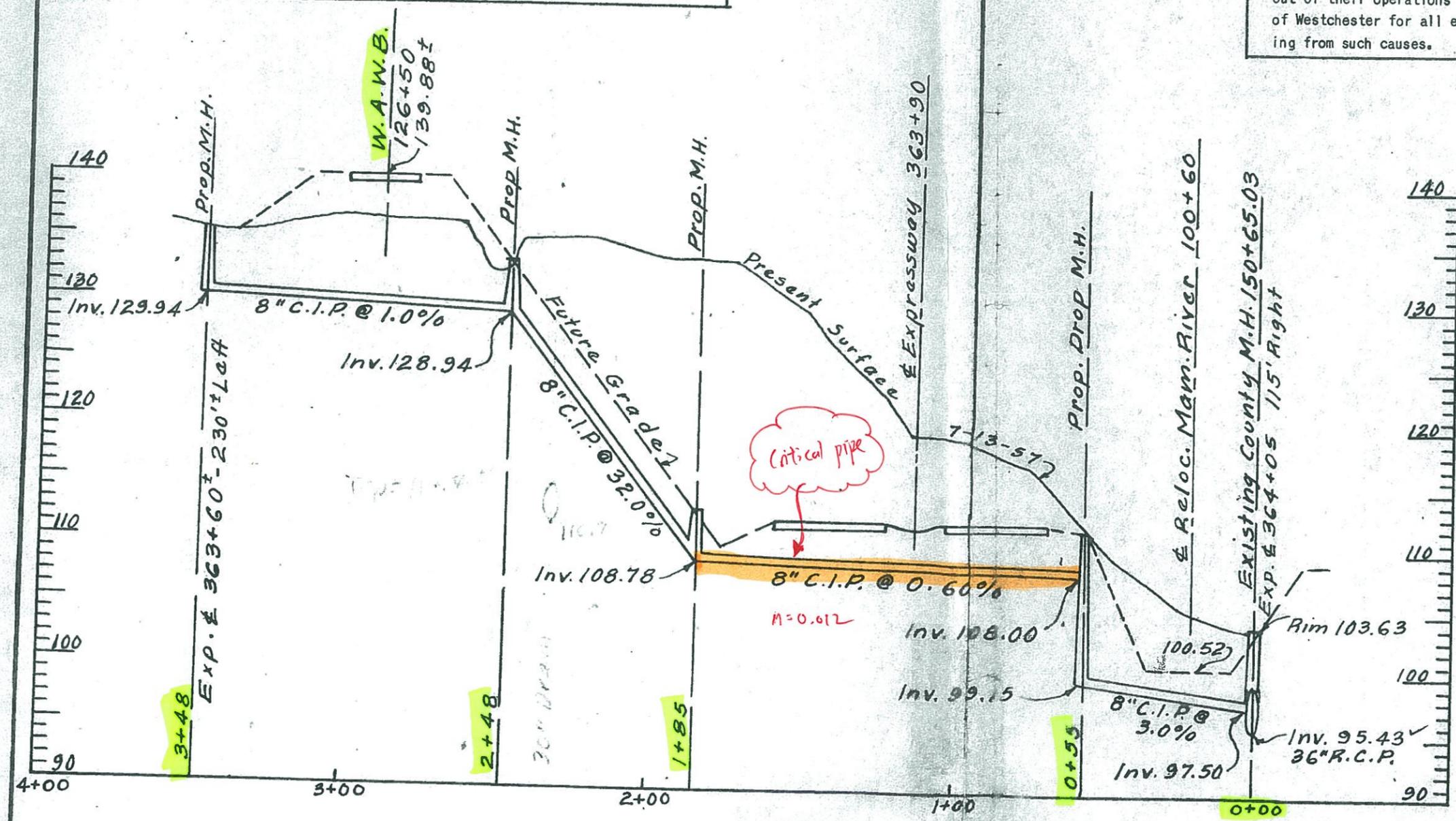
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SECTION	"B" STATION 150+65.03
MUNICIPALITY	Town of Harrison
AREA TRIBUTARY	36 Acres
POPULATION Present	0
POPULATION Future	500

DESIGNER Raymond W. Murphy
 LICENSE NO. 9469
 ADDRESS 510 Forest Ave. Bye, N.Y.
 DATE July 26, 57
 SIGNED Raymond W. Murphy
 Title P.E.-F.L.S.

APPLICANT Harchester Realty Corp.
 ADDRESS 27 South Broadway White Plains, N.Y.
 DATE July 31, 1957
 SIGNED Leonard H. Davidson
 Title Pres.

MUNICIPALITY Town of Harrison
 ADDRESS Town Hall Harrison, N.Y.
 DATE 7/29/57
 SIGNED Basil E. Bradner
 Title Supt Highways & Sewers

**WESTCHESTER COUNTY
DEPARTMENT OF PUBLIC WORKS
DIVISION OF SEWERS**

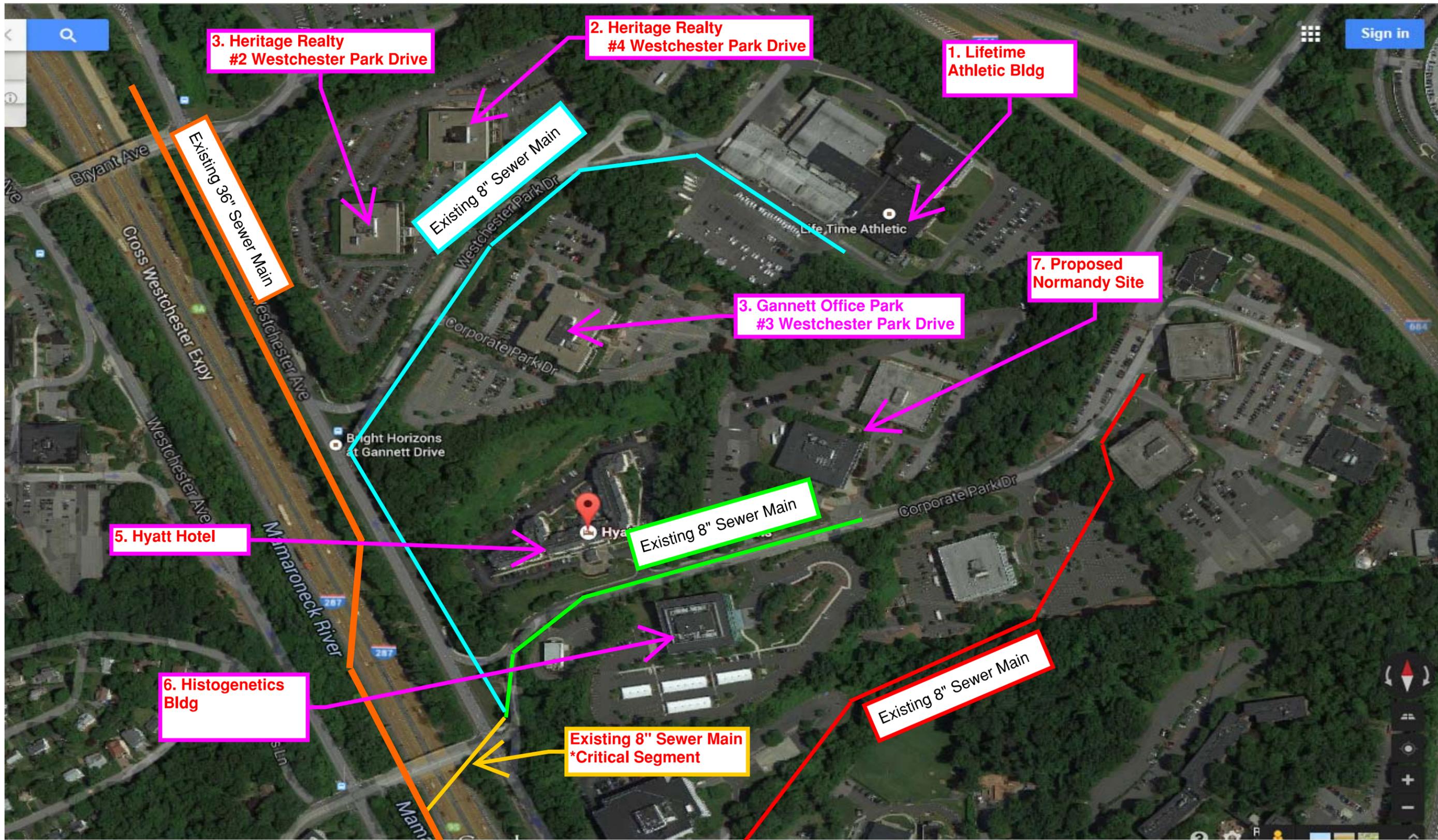
CHECKED A.F.P. DATE Aug. 8, 1957
 SIGNED [Signature] Superintendent of Sewers

CONN. COMPLETED _____
 CONTRACTOR _____

PROFILE
 Hor. Scale 1" = 40'
 Vert. Scale 1" = 10'

Note: County sewer Datum used.

Reference: WCDEF; 1957 Permit



NOTES:

1. THE BUILDINGS IDENTIFIED ON THIS MAP ARE KNOWN TO CONTRIBUTE TO THE CRITICAL SEGMENT OF THE EXISTING 8" SEWER MAIN WHICH CROSSES I-287 AND DISCHARGES TO THE EXISTING 36" SEWER MAIN.





Project #: 29254
 Project: Normandy
 Location: Harrison, NY
 Calculated by: J.Cheong
 Title: Sewer Demand Flow Calculations

Date: 10/26/2015

Sewer Demand Flow Calculation

Building	Building Type	Building Footprint (sf)		Number Story	Total Floor Area (sf)	Total gpd
1 Lifetime Athletic Building	Health Club	630 x 260	163800	2	327600	43780
2 #4 Westchester Park Dr.	office	150 x 150	22500	4	90000	6750
3 #2 Westchester Park Dr.	office	150 x 150	22500	4	90000	6750
4 #3 Westchester Park Dr.	office	175 x 210	36750	4	147000	11025
5 Hyatt Hotel	Hotel	600 x 50	30000	4	120000	20640
6 Histogenetics	Biotech R&D/office	170 x 160	27200	4	108800	8160
7 Proposed Normandy Site	Residential					67530
Total Flow Demand =						164,635

1 Lifetime Athletic Building (Health Club)

Unit	Structure Use	Hydraulic Load (gpd/unit)	Design flow rate (gpd)	Total Floor Area
2184 Patron	Health Club	20	43680	327600
20 shower room	Shower	5	100	
Total			43780	

(*assume 1 patron per 150 sf of floor area)

2 #4 Westchester Park Dr.

Unit	Structure Use	Hydraulic Load (gpd/unit)	Design flow rate (gpd)	Total Floor Area
450 employee	Office	15	6750	90000
Total			6750	

(*assume 1 employee per 200 sf of floor area)

3 #2 Westchester Park Dr. (Office)

Unit	Structure Use	Hydraulic Load (gpd/unit)	Design flow rate (gpd)	Total Floor Area
450 employee	Office	15	6750	90000
Total			6750	

(*assume 1 employee per 200 sf of floor area)

4 #3 Westchester Park Dr (Office)

Unit	Structure Use	Hydraulic Load (gpd/unit)	Design flow rate (gpd)
735 employee	Office	15	11025
		Total	11025

Total Floor Area
147000

(*assume 1 employee per 200 sf of floor area)

5 Hyatt Hotel

Unit	Structure Use	Hydraulic Load (gpd/unit)	Design flow rate (gpd)
159 hotel room	Hotel	110	17490
70 seat	Banquet Hall	10	700
70 seat	Restaurant	35	2450
		Total	20640

6 Histogenetics (Office)

Unit	Structure Use	Hydraulic Load (gpd/unit)	Design flow rate (gpd)
544 employee	Office	15	8160
		Total	8160

Total Floor Area
108800

(*assume 1 employee per 200 sf of floor area)

7 Proposed Normandy Site

Unit	Bedrooms/ unit	Structure Use	Hydraulic Load (gpd/bedroom)	Design flow rate (gpd)
22	Studio	Single Family	110	2420
212	1	Single Family	110	23320
187	2	Single Family	110	41140
421			Total	66880

Restaurant		
Area (sq ft)	gpd/sq ft	Design flow rate (gpd)
6500	0.1	650

Total flow rate for Normandy site = **67530** gpd