

LOCATION	Acres	i _s	Q _c cfs	L ft.	Conduit	S _o %	Vel. ft/sec	Time		Cap cfs	% ADE.		NOTE	
								Tot.	Incr.		Prop.	Exnt.		
10 th Ave. Exist. Sewer													23'S. of N. ROW. of E. 33 St. Constr. New M.H. over Exist. 12" - Remove remainder of 12" Line; Const. New M.H. 12' S/W & install new 12" line to 1 st exist. M.H. on W. 33 St.	
34 St - 33 St.	1.00	4.00	3.60	164	Exist. 12" ϕ	2.38	6.5	15.0		5.1		✓		
			3.60	12	New 12" ϕ	3.41	8.2		0.26	5.1	✓			
To Exist Sewer - 33 St.	-		3.60	114	New 12" ϕ	3.44	8.2		0.26	6.1	✓			
Exist. Sewer - 33 St. West of 10 th Ave. (from 1 st exist. M.H.)														
Exist. M.H - 106' W.	1.11	4.00	4.00	107	Exist. 12" ϕ	3.26	8.3	15.26	0.21	6.0	✓			
107' W - 208' W.	1.48	4.00	5.33	101	Exist. 12" ϕ	2.23	6.8	15.47	0.25	4.9	92			
208' W - 314' W	1.86	3.92	6.56	106	Exist. 12" ϕ	2.14	8.4	15.72	0.21	4.8	73	69		
314' W - Exd. Box	3.07	3.85	10.64	331	Exist. 15" ϕ	0.92	8.7	15.93	0.53	5.8	55	33		
Box - 11 th Ave	3.38	3.80	11.56	103	Exist. 3x4.75	0.14	4.35	16.56	0.39	50.0	✓	✓		
33 St E. of 10 th Ave to 55' E. of E. Row of 10 th Ave														
	3.6	4.00	12.96	540	Exist. 36" ϕ 2' 4"	3.30	13.5	15.0	0.67	25.0		✓	Construct New M.H. over Exist. Sewer 55' E. of E Row of 10 th Ave & Reconstruct Sewer to 10 th Ave and S. on 10 th Ave across prop. Bridge	
New M.H. 55' E. of E. Row of 10 th Ave. to 60' S. of S. Row of 33 St on 10 th Ave.														
- 10 Ave E. Row			12.96	55	New 30" RCP	0.30	10.4			20.0	✓			
- 10 th Ave - 33 St. S. Row				42										
- Prop. Bridge				101	New 30" RCP	0.30	10.4		0.48	20.0				
Bridge - New Drop M.H.			12.96	112	New 24" Steel	3.75	15.0		0.12	51.8	✓			

Storm frequency = 5 yrs

U.S. Dept. of Commerce T.P. # 25 - Rain Curves

Runoff factor C = 0.9 All tributaries

MTA West Side Storage Yard
Prop. Sewer Altd. (10' W)
NOTES BY M.S.
DATE 3/20/81
PAGE NO. 1

STV/SEELYE STEVENSON YELVE & KNECHT.

CONSULTING ENGINEERS

JOB AMTRAK NORTH ACCESS CONC. NOTES BY J.R. BRUSKO DATE 9-21-83 PAGE NO. 1-OF-1

TENTH AVENUE TUNNEL

CHECKED BY

DATE

CAPACITY OF PROPOSED 30" ϕ R.C.P. SEWER (REPLACES
EXISTING 4'-0" x 2'-8" EGG SHAPED BRICK SEWER):

30" ϕ R.C.P., CL. III

$$M = 0.015$$

$$S_o = 0.01067 \text{ FT./FT.}$$

$$R = \frac{D}{4} = 0.625$$

$$A = 4.9087 \phi$$

$$S^{1/2} = 0.1033$$

$$R^{2/3} = 0.7310$$

$$V = \frac{1.486}{M} \times R^{2/3} \times S^{1/2}$$

$$V = \frac{1.486}{0.015} \times 0.7310 \times 0.1033 = 7.48 \text{ FT./SEC.}$$

$$Q = AV = 4.9087 \phi \times 7.48 \text{ FT./SEC.} = 36.72 \text{ C.F.S.}$$

AS THE FLOW ENTERING THIS PIPE IS
12.96 C.F.S., IT IS MORE THAN
ADEQUATE