

CITY OF ROCHESTER HILLS
HYDRANT FLOW TEST

Date: 07 4 2021 Time: 1:35 PM

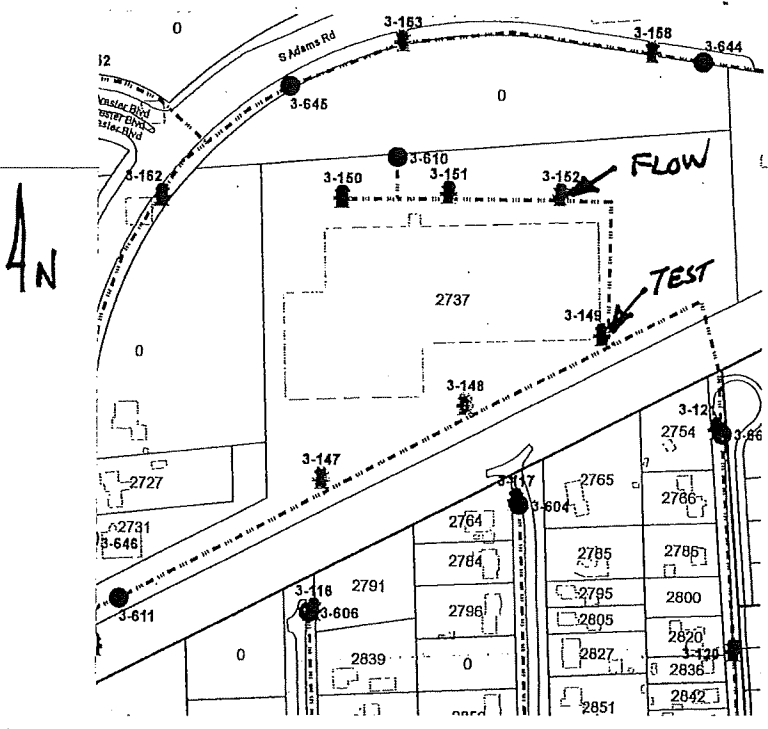
Test Performed By: W. Rybak M. Greenwood

Location: 2737 Adams

Calculations Performed By: Wayne Rybak

- Number of Hydrants Flowing: 1
- Number of Outlets Open: 1
- Size of Outlet, D (inches): 3 3/4
- Friction Loss Coefficient, c_d : .9
- Static Pressure, P_s (psi): 80
- Residual Pressure, P_r (psi): 70
- Pitg Pressure, P_p (psi): 35
- Residual Flow, Q_r (GPM): 2234 / 1854* $Q_r = 29.83 c_d D^2 (P_s - P_r)^{0.54} \# \text{Outlets}$
- Fire Flow at 20 psi, Q_f (GPM): 5879 / 4264* $Q_f = Q_r [(P_s - 20) / (P_s - P_r)]^{0.54}$
- Supply Main Size (p/fo hydrant): 8"
- Supply Main Size (static hydrant): 8"

Drawing of Flow Test Site (include location of flow & test hydrant):



Post-it® Fax Note	7671	Date	10/6/21	# of pages	1
To	Tracey Balint	From	Wayne Rybak		
Co./Dept.	Engineering	Co.	C. O. R. H.		
Phone #		Phone #	248-978-8582		
Fax #		Fax #			

**CITY OF ROCHESTER HILLS
HYDRANT FLOW TEST**

Date: 6/30/2022 Time: 2:30 PM
 Location: 2700 S. Adams

Test Performed By: W. Rybak M. Greenwood
 Calculations Performed By: Wayne Rybak

Number of Hydrants Flowing: 1
 Number of Outlets Open: 1
 Size of Outlet, D (Inches): 3 3/4
 Friction Loss Coefficient, C_d : 9
 Static Pressure, P_s (psi): 82
 Residual Pressure, P_r (psi): 72
 Pico Pressure, P_p (psi): 42
 Residual Flow, Q_r (GPM): 2448/2032 * $Q_r = 29.88 C_d D^2 (P_p)^{0.54} \# \text{Outlets}$
 Fire Flow at 20 psi, Q_f (GPM): 557/5443 * $Q_f = Q_r [(P_s - 20) / (P_r - P_p)]^{0.84}$
 Supply Main Size (pico hydrant): 8"
 Supply Main Size (static hydrant): 8"

* Multiplied by .83 per NFPA 291
 Drawing of Flow Test Site (include location of flow & test hydrant):

4N

