

JOHN B. SMITH ENGINEERS, INC.

1457 N.E. 4TH AVENUE
FORT LAUDERDALE, FL 33304
E-Mail JOHNBSMITH@ATT.NET

July 2, 2021

POMPANO TOWNHOMES NEEDED FIRE FLOW REQUIREMENTS (NFFi)

$$NFFi = (Ci)(Oi)\{1.0+(X+P)i\}$$

- Ci = 18 (F) (A)^{0.5}
= Required Fire Flow in GPM (Rounded up to next 250 GPM)
- F = Coefficient Related to Class of Construction
1.0 – Joisted Masonry (Class 2 Construction)
- A = Square Footage of Building
= 6795 S.F. Largest Building
- Ci = 18 (1.0) (6,795)^{0.5}
= 1484 GPM (Rounded up to next 250 GPM)
= 1,500 GPM
- Oi = 0.85 (Limited Combustible)
- Xi = 0.21 (Unprotected Opening)
- Pi = 0
- NFFi = (1500)(0.85){1.0+(0.21+0)}
= 1542 (Rounded up to the next 250 GPM)
= 1750 GPM

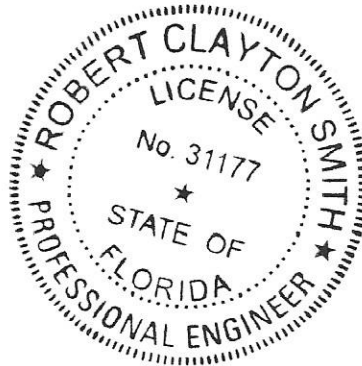
AVAILABLE FIRE FLOW = 3335 GPM @ 20 PSI (XTREME FIRE PROTECTION TEST 4/13/21 (ATTACHED))

Prepared by:

JOHN B. SMITH ENGINEERS, INC.



Robert C. Smith, P.E.
Professional Engineer No. 31177
State of Florida



IRE.PC\MPANOTH.doc

DRC

PZ21-12000003

8/18/2021

WATER FLOW TEST REPORT



XTREME Fire Protection, Inc.
5081 S State Rd 7 - Suite 807
Davie, FL 33314
PH: 786-437-7939 FAX: 786-319-9965

HYDRANT # & LOCATION 700 Cypress Grove Blvd DATE: 4/13/2021

TEST BY: Xtreme Fire Pro Day or Week: Tuesday TIME OF DAY: 8:15am MIN. OF FLOW: 20

WATER SUPPLIED BY: Municipal

PURPOSE OF TEST: Fire Shop Drawings

DATA

FLOW HYDRANT(S)	A1	A2	A3
SIZE OPENING:	<u>2.5</u>	<u> </u>	<u> </u>
COEFFICIENT:	<u>0.9</u>	<u> </u>	<u> </u>
PITOT READING:	<u>40</u>	<u> </u>	<u> </u>
GPM:	<u>1061</u>	<u> </u>	<u>0</u>

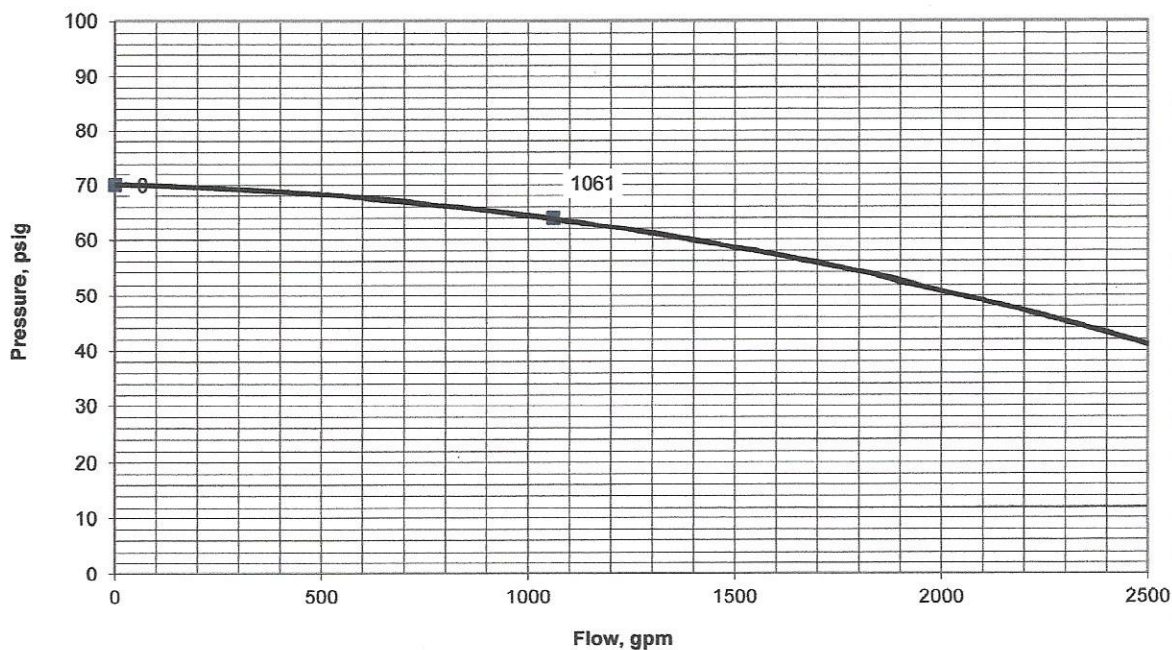
TOTAL FLOW DURING TEST: 1061 GPM

STATIC READING: 70 PSI RESIDUAL: 64 PSI

RESULTS: AT 20 PSI RESIDUAL 3335 GPM AT 0 PSI 3999 GPM

ESTIMATED CONSUMPTION: 21224 GAL.

REMARKS:



DRC

PZ21-12000003

8/18/2021