

September 14, 2023

Re: Indigo Pompano Beach

To whom it may concern:

The submitted project herein is composed of 9 residential buildings, some 3 stories and others are 2 stories. There are also (2) two story townhouse buildings, a clubhouse, and (8) garage structures ranging from 1674SF to 10,000SF

As per 18.4.5.4 the fire flow demand and the fire sprinkler system demand shall not be required to be added together. The Fire Flow Demand for this project development for each building type is as indicated below.

**BLDG TYPE I** (3 bldgs): #3, 4 7 -  5 stories, 49 units – 55,850SF each  - 2A Construction Type

Per Table 18.4.5.2.1 Bldgs other than 1 and 2 family dwellings per 18.4.5.3.1

Required flow: 3500 GPM for 3 hrs. @ 25% = **875 GPM**

**BLDG TYPE II** (2 bldgs): #1 & #6 - 5 stories, 59 units – 71,681 SF each – 2A Construction Type

Per Table 18.4.5.2.1 Bldgs other than 1 and 2 family dwellings per 18.4.5.3.1

Required flow: 3750 GPM for 3 hrs. @ 25% = **938 GPM**

**BLDG TYPE III** (2 bldgs): #2 & #5 - 4 stories, 71 units – 72,860SF each– 1A Construction Type

Per Table 18.4.5.2.1 Bldgs other than 1 and 2 family dwellings per 18.4.5.3.1

Required flow: 3000 GPM for 3 hrs. @ 25% = **750 GPM**

**TOWNHOUSES** (2 bldgs): 2 stories, 5 dwelling units – 8400 SF each building– 5B Construction Type

Per Table 18.4.5.2.1 Bldgs other than 1 and 2 family dwellings per 18.4.5.3.1

Required flow: 2500 GPM for 2 hrs. @ 25% = **625 GPM**

**CLUBHOUSE** – 1 story -   9,090SF -5B Construction Type

Per Table 18.4.5.2.1 Bldgs other than 1 and 2 family dwellings per 18.4.5.3.1

Required flow: 2500 GPM for 2 hrs. @ 25% = **625 GPM**

**GARAGE BLDG #1#2/STORAGE/MAINTENANCE** 10000 SF each - 5B Construction Type

Per Table 18.4.5.2.1 Bldgs other than 1 and 2 family dwellings per 18.4.5.3.1

Required flow: 2750 GPM for 2 hrs. @25% = **688 GPM**

**GARAGE BLDGS - #4,5,6,7 (7STALL)** ---1674  SF each - 5B  Construction Type

Per Table 18.4.5.2.1 Bldgs other than 1 and 2 family dwellings per 18.4.5.3.1

Required flow: 1500 GPM for 2 hrs. @25% = **375 GPM**

**GARAGE BLDGS - #3 & 8 (9STALL)** ---2209  SF each - 5B Construction

Per Table 18.4.5.2.1 Bldgs other than 1 and 2 family dwellings per 18.4.5.3.1

Required flow: 1500 GPM for 2 hrs. @25% = **375 GPM**

Respectfully,

Viviana Franyie, PE

Reference Standard Code references:

*18.4.5..3.1 Buildings Other Than One- and Two-Family Dwellings. The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table 18.4.5.1.2.*

*18.4.5.3.3 Required fire flow shall be reduced by 75 percent when the building is protected throughout by an approved automatic sprinkler system, which utilizes quick response sprinklers throughout. The resulting fire flow shall not be less than 600 gpm (2270 L/min).*

*18.4.5.4\* For a building with an approved fire sprinkler system, the fire flow demand and the fire sprinkler system demand shall not be required to be added together. The water supply shall be capable of delivering the larger of the individual demands*