Tequesta Fire Rescue
Fire Hydrant Inspection Report

Hydrant #: 2-160 **Date:** 9/22/18 **Inspector:** NEWBERN

Location: US HWY 1 N. @ CANAL CT.

Static Pressure: 64
Pitot (Flow) Reading: 41
Residual Pressure: 54

Discharge Used (circle one): (2½") 4"

GPM: 1,069

ITEM	PASS/FAIL	REPAIRS NEEDED
A) Height *The center of a hose outlet must be at least 18" above final grade.*		
B) Paint		
C) Caps		
D) Chains		
E) Clearance *All vegetation, and other obstructions are at least 3' away from hydrant.*		
F) Operation Nut		
G) Reflector		

Comments:
STATIC HYDRANT – US HWY 1 N @ PALM CT.

General guidelines:

- Prior to conducting hydrant flow test; notify the Water Dept. (575-6234).
- The test hydrant is the hydrant that the static and residual are taken at. There must be at least a 10% drop in the static pressure after opening the flow hydrant.
- From an accuracy standpoint it is preferable to use the 2½" outlet rather than the steamer outlet.
- To determine gpm discharge from a hydrant use the formula:

$$29.7 \times D^2 \times \sqrt{P} \times .9$$

FIRE HYDRANT FLOW TEST

APPLICATION

REQUESTED BY: Amy Galvez c/o Simmons and White

ADDRESS: 2581 Metrocentre Blvd. West, Ste. 3 West Palm Bach FL 33407

PHONE NUMBER: 561-478-7848

FAX NUMBER: 561-478-3738

EMAIL: amy@simmonsandwhite.com

PROJECT ADDRESS: 691 and 19626 N. US. Highway 1 & 3471 Inlet Court and 3486 Canal Ct.

FIRE FLOW AREA, if applicable 15,198 SF (for Bldg A) sq ft. (See attache
(Per definition on Fire Flow Information Sheet)

CONSTRUCTION TYPE: (use Florida Building Code type) V B unprot. & sprinkled for Bldg. A

V B unprot. + unsprink for Bldg. B

TYPE OF PROJECT

- [x] Residential Building
- [ ] Commercial Building
- [x] Fire Protection System

64
54
41

IS THIS PROPOSED CONSTRUCTION PROJECT EQUIPPED WITH A FIRE SUPPRESSION SPRINKER SYSTEM?

- [x] YES for Bldg. A.
- [x] NO for Bldg B

YOUR RESULTS WILL BE FAXED OR EMAILED TO YOU IF REQUESTED

Submitted by:
Name: (print) Amy Galvez Signature: Amy N Galvez

Company Simmons and White Cell #

Attach the Fire-Rescue Department approval letter and a copy of this worksheet with the building's permit application. -not yet submitted; being requested now per VDT Site Plan comments

FIRE FLOWS

The effective date for this requirement was January 1, 2013.

The Florida Fire Prevention Code (FFPC) now requires that a newly constructed or substantially improved buildings, including one and two-family homes, must be built within the parameters of the fire flow capability provided to that property. These flows and durations are important to ensure that there is a sufficient water supply to extinguish a fire in the building and to keep it from spreading to nearby buildings.

The Code requires a minimum of 1,000 gallons per minute (GPM) fire flow for duration of two hours for homes having a fire flow area of 5,000 square feet or less. Fire flows commercial construction and homes with a fire flow area exceeding 5,000 square feet shall not be less than that specified in the Florida Fire Prevention Code, NFPA 1, Chapter 18, Table 18.4.5.1.2. This table calculates the needed fire flow (GPM) based on the fire flow area and construction type of the building.

If the size of the proposed building or home design exceeds the water system capabilities, the Florida Fire Prevention Code provides the owner with a the means for meeting and/or reducing the fire flow requirements. These options are listed below and may be incorporated in the building design either individually, or in combination with others.

DESIGN OPTIONS

- A 50% reduction in the required fire flow can be attained with the installation of a fire sprinkler system. Installation requirements can be found in the Florida Fire Prevention Code 2010, NFPA 13D or the Florida Building Code 2010 Residential Chapter 29, Section P2904. The reduction shall not reduce the required fire flow to less than 500 gallons per minute (GPM).

- A 25% reduction in the required fire flow can be attained for homes with a fire area of 5,000 square feet or less when separated from other buildings by a minimum of 30-feet.

- Based on Table 18.4.5.1.2 in NFPA 1, reductions in the required fire flow can be attained using different construction types and/or fire resistive materials.

- Adding a fire hydrant and/or increasing the size of the water main distribution system to provide for a greater gallon per minute (GPM) flow.

- The Fire-Rescue Department will accept any other recognized fire flow calculation method as an equivalency to the FFPC, i.e. Insurance Services Office (ISO) Method, Iowa State University (ISU) Method, Illinois Institute of Technology Research Institute Method.

COMMONLY ASKED QUESTIONS REGARDING FIRE FLOW REQUIREMENTS

What is fire flow?
It's the amount of water available from a fire hydrant available for fire fighting. The fire hydrant must be within 1000' of the building being constructed,

What is fire flow area?
The fire area includes the total of all floor areas within the building, in square feet, is used to determine the required fire flow. This generally means the area within the surrounding exterior walls. Areas of the building without surrounding exterior walls should be included in the fire area if such areas are within horizontal projection of the roof or floor above.

How do I determine the available fire flow for construction site?
Complete the attached "Fire Hydrant Flow Test Application Form" and submit it to Tequesta Fire Rescue Administrative Office. Fire Rescue personnel will be scheduled to conduct the fire flow test of the water system nearest your proposed construction site. When the test is completed you will be provided with documentation of the test and an approval letter for Building Permit Application, if the water is available for your project.

Is there a fee charged for a fire flow test?
Yes, Fire Rescue administration will provide you the current rate for this test. Fee's need to be collected prior to the test being performed; you can call 561-768-0550 to check on the cost of this test.

LETTER OF TRANSMITTAL

SIMMONS & WHITE
ENGINEERING | PLANNING | CONSULTING | SINCE 1982

2581 Metrocentre Blvd. West, Suite 3
West Palm Beach, FL 33407
561.478.7848 | 561.478.3738
www.simmonsandwhite.com

DATE	9-20-18	JOB NO.	17-137
ATTENTION			
RE:	Pelican Square		

TO Tequesta Fire Rescue
357 Tequesta Dr.
Tequesta, FL 33469
VIA: courier

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change Order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
1			Fire Hydrant Flow Test Application + Site Plan
1			$131.61 fee

THESE ARE TRANSMITTED as checked below:

☐ For Approval ☐ Approved as Submitted ☐ Resubmit _____ copies for approval
☒ For your Use ☐ Approved as Noted ☐ Submit _____ copies for distribution
☐ As Requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For Review & Comment ☐ _____
☐ FOR BIDS DUE _____ ☐ PRINTS RETURNED AFTER LOAN TO US

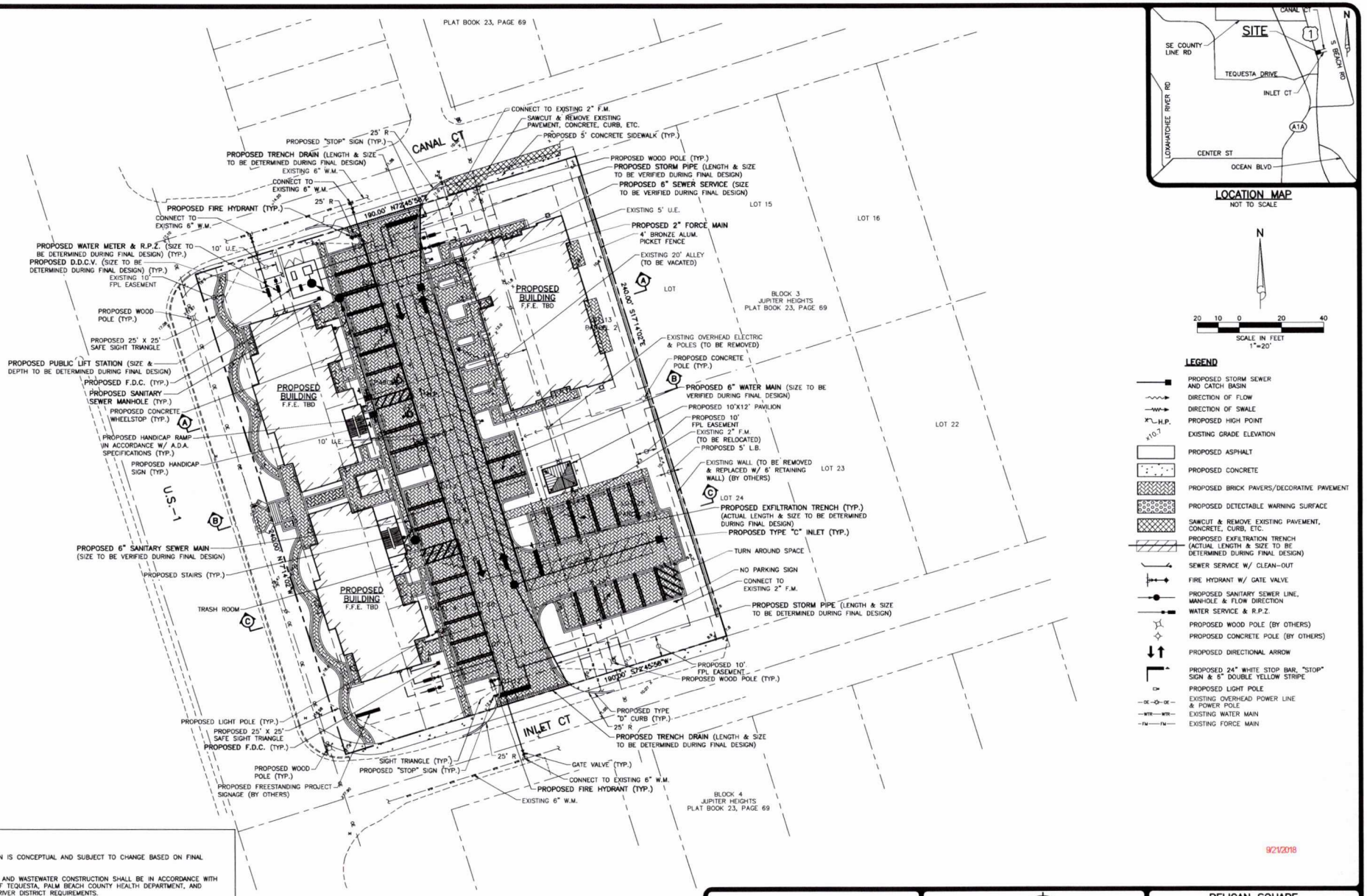
REMARKS

Please let me know if you need any additional information. Thank you!

COPY TO

SIGNED

NAME Amy N. Galvez, P.E.



LOCATION MAP
NOT TO SCALE

N

20 10 0 20 40
SCALE IN FEET
1"=20'

LEGEND

- PROPOSED STORM SEWER AND CATCH BASIN
- DIRECTION OF FLOW
- DIRECTION OF SWALE
- H.P. PROPOSED HIGH POINT
- EXISTING GRADE ELEVATION
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- PROPOSED BRICK PAVERS/DECORATIVE PAVEMENT
- PROPOSED DETECTABLE WARNING SURFACE
- SAWCUT & REMOVE EXISTING PAVEMENT, CONCRETE, CURB, ETC.
- PROPOSED EXFILTRATION TRENCH (ACTUAL LENGTH & SIZE TO BE DETERMINED DURING FINAL DESIGN)
- SEWER SERVICE W/ CLEAN-OUT
- FIRE HYDRANT W/ GATE VALVE
- PROPOSED SANITARY SEWER LINE, MANHOLE & FLOW DIRECTION
- WATER SERVICE & R.P.Z.
- PROPOSED WOOD POLE (BY OTHERS)
- PROPOSED CONCRETE POLE (BY OTHERS)
- PROPOSED DIRECTIONAL ARROW
- PROPOSED 24" WHITE STOP BAR, "STOP" SIGN & 6" DOUBLE YELLOW STRIPE
- PROPOSED LIGHT POLE
- OE — EXISTING OVERHEAD POWER LINE & POWER POLE
- WTR — EXISTING WATER MAIN
- FM — EXISTING FORCE MAIN

NOTES:

1.) THIS DESIGN IS CONCEPTUAL AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.

2.) ALL WATER AND WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE VILLAGE OF TEQUESTA, PALM BEACH COUNTY HEALTH DEPARTMENT, AND LOXAHATCHEE RIVER DISTRICT REQUIREMENTS.

3.) CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEMOLITION MATERIAL IN ACCORDANCE WITH ALL APPLICABLE GOVERNING AGENCY STANDARDS.

4.) LOCATIONS OF WATER AND SANITARY SEWER SERVICES, DRAINAGE STRUCTURES AND PIPES AND OTHER STRUCTURES TO BE COORDINATED WITH LANDSCAPE DESIGN DURING PREPARATION OF FINAL CIVIL ENGINEERING PLANS.

9/21/2018

5.) REVISED PER OWNER & SITE PLAN COMMENTS., 9/18/18 C.O.
4.) REVISED PER V.D.T., 8/9/18 C.O.
3.) REVISED PER SITE PLAN., 5/29/18 C.O.
2.) REVISED PER FPL., 4/30/18 C.O.
1.) REVISED PER SITE PLAN., 4/26/18 C.O.

REVISIONS

SIMMONS & WHITE
ENGINEERING | PLANNING | CONSULTING | SINCE 1982
Authorization No. 3452
2581 Metrocentre Blvd West • Suite 3 • West Palm Beach, Florida 33407 • (561) 478-7848

DESIGN	DRAWN	CHECKED	APPROVED	DATE
A.C.	C.O.			

PELICAN SQUARE
SECTION 30, TOWNSHIP 40S., RANGE 43E.
VILLAGE OF TEQUESTA, FLORIDA
CONCEPTUAL PAVING, DRAINAGE, WATER AND WASTEWATER PLAN

JOB NO.	DRAWING NO.	SHEET	OF
17-137	17137C01	1	1

Y:\AUTOCAD_FILES\2017\17-137\CONCEPTUAL\17137C01.dwg 9/21/2018 10:55 A.M Connor O'Rourke