

# FACILITY ANALYSIS DUE DILIGENCE STUDY

VENICE FIRE STATION 1
REPLACEMENT

July 10, 2018



**CLIENT:** City of Venice

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#### **CONSULTANT TEAM:**

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The City of Venice has requested that Sweet Sparkman Architects and its consultants provide a master concept plan with associated budget pricing for the replacement of Fire Station 1. The existing Fire Station is located at 112 Harbor Drive South in Venice, Florida. The proposed Fire Station will also be at this location.

The project scope of work includes the following:

- Analyze the current organizational configuration of the Venice Fire Department. Review the rank structure, specialization and respective facility space demands for each function
- Review anticipated growth projections within the Fire Station's service area. Based on this, determine the need for additional physical space, services, facility layout, and related operational changes.
- Consider the incorporation of the City Hall Parking, City Hall HVAC system relocations and combination back up power generator for Fire Station and City Hall.
- Consider the incorporation of a public/citizen/training meeting space for uses that include public non-firerelated activities
- Determine the necessary site amenities (stormwater detention, etc.) for site and development approval.
- Analyze site needs and dimensions for an improved/expanded Fire Station complex.
- Cost estimating for the Fire Station, updated parking layout and HVAC relocation/replacement.

# Site Planning:

Sweet Sparkman Architects and its consultants have held preliminary meetings with appropriate Fire Department and city staff as well as code officials to review the needs of the proposed development. As a result of these meetings, three site plan options have been developed for consideration. A list of objectives for the site evaluation is as follows:

- Improve access to on-site parking
- Improve on-site vehicular and pedestrian circulation
- Increase quantity of on-site and off-site parking
- Create separation (stand-off) from public parking and building perimeter for safety reasons
- Review stormwater attenuation requirements (above ground and subsurface)
- Create fenced in secure parking for Fire Department and City Hall staff
- Relocate existing chiller yard if required to facilitate more efficient site circulation/parking
- Locate generator and fuel storage appropriately to serve both the proposed Fire Station and the existing City Hall building.
- Create a plan that unifies the existing City Hall and the proposed Fire Station so as to achieve a 'campus' feel

#### Floor Plan/Space Planning:

Sweet Sparkman Architects met and corresponded with the City of Venice Fire Department to review the proposed Station's space needs. As a result of these communications, a space utilization program has been created as well as associated preliminary floor plans. The space program includes proposed functions and their appropriate square footages.

#### Cost Estimating:

Cost estimates for the three site options have been composed and are included in this report. The estimates include cost contingencies, anticipated escalation, design and permit fees.

The existing Fire Station is located at 112 Harbor Drive South in Venice, Florida. The Fire Station shares parcel #0176080001 with Venice City Hall. Records indicate that the existing Fire Station was built in 1958.

#### **Site Statistics:**

- Parcel Land Area: 133,185 square feet (includes City Hall area)
- Zoning: GU-Government Use District
- Stormwater attenuation: Dry detention ponds-See civil report
- Potable Water provider: City of Venice Utility Department
- Sanitary Sewer provider: City of Venice Utility Department
- Electrical Service provider: Florida Power and Light
- Telecommunications provider: My Florida Network and ATT
- Parking: On-site and street parking is provided

For a more thorough description of the existing site conditions refer to the civil report included with this document.

# **Existing Fire Station Statistics:**

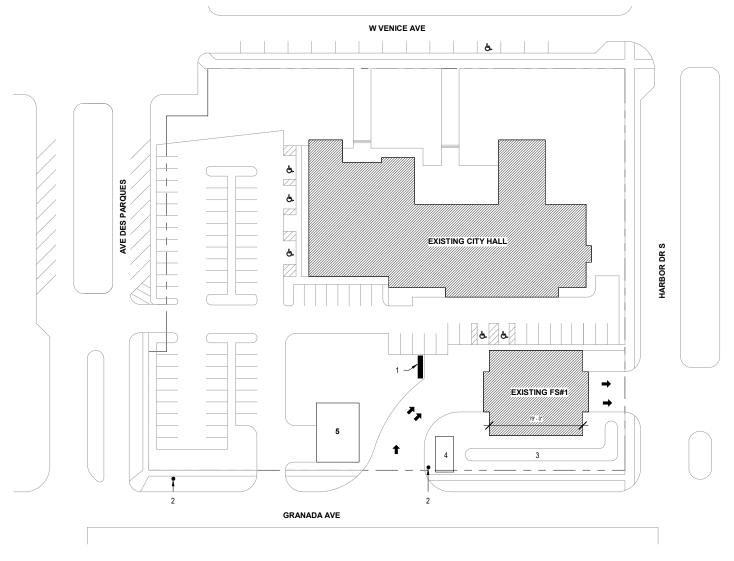
- Approximate age: 60 years
- Existing Fire Station area: 6100 SF +/-
- Dimension: 72' x 80' +/-
- 2 apparatus bays: 17' x 80' +/- each bay
- Construction: Concrete block walls with steel columns and bar joist roof structure.
- Roof: Low slope built-up system
- Fire Protection: Non-sprinklered



Aerial map provided by Sarasota County Property Appraiser



# **EXISTING CONDITIONS: SITE PLAN**



1" = 50'-0"

EXISTING SITE PLAN

PARKING ON SITE: 87 PARKING ON STREET: 32

#### SITE KEY

- 3.
- EXISTING BFP
  EXISTING FIRE
  HYDRANT
  EXISTING
  DETENTION POND #4
  EXISTING STORAGE
  EXISTING CHILLER
  YARD



7

SITE OPTIONS SUM	MADV/ANAIVSIS	
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Site Option 1 places the new Fire Station at a similar location as that of the existing Fire Station. The foot print of the building is larger as a result of the projected growth of the Fire Station's needs. Vehicular entry access for the Fire Station will occur off of Granada Avenue. Emergency dispatch will occur onto Harbor Drive South. A list summary of Site Option 1 is as follows:

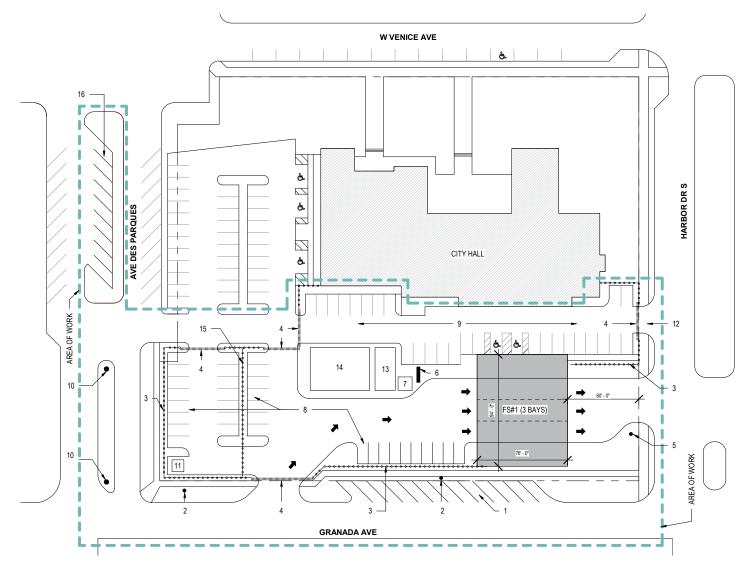
- New Station is set back 60' from property line to accommodate aerial trucks on exit drive.
- Fenced in secure Fire Department parking along southwest corner of site
- Alternative fenced in perimeter line for Fire Department parking
- Fenced in secure City Hall staff parking between new Station and existing City Hall Bldg.
- Proposed curb cut at Harbor Drive South to provide alternative ingress and egress at secure City Hall staff parking
- Chiller Yard is relocated and more central to the site. New equipment will serve both the City Hall and Fire Station.
- New Generator Enclosure adjacent to relocated Chiller Yard. New Generator to serve both City Hall and Station 1.
- New on-street parking along Granada Avenue.
- New on-street parking at existing north median of Avenue Des Parques
- The existing Fire water back flow preventer is to remain.
- A new fire hydrant is added at the southeast corner of the site.

#### Pros:

- Easily accessible by vehicles
- Dispatch route remains unchanged
- Fire Department secure parking is separate from City Hall staff parking
- Majority of parking adjacent to City Hall is secure and inaccessible to the public
- Parking count increases on and off site

#### Cons:

- Existing chiller yard requires relocation which will increase costs.
- Existing Fire Station will require demolition prior to the construction of the new building. This will require the fire department to acquire a temporary Fire Station while the new Fire Station is being built.
- Stormwater attenuation will need to occur by means of underground detention (Note that this will most likely need to occur with all proposed options)



OPTION 1 - PROPOSED SITE PLAN

1" = 50'-0"

PROPOSED SITE PLAN

EXISTING PARKING ON SITE: 84 PROPOSED PARKING ON SITE:96

EXISTING PARKING ON STREET:31 PROPOSED PARKING ON STREET:53

TOTAL OVERALL: 149

# SITE KEY

- NEW ON STREET
  PARKING (13 SPACES)
  EXISTING FIRE HYDRANT
  FENCE
  GATE
  NEW FIRE HYDRANT
  EXISTING BFP TO REMAIN
  FUEL TANK
  SECURE PARKING
  SECURE CITY HALL
  PARKING (35 SPACES)
  EXISTING POWER POLES
  TRASH ENCLOSURE
  PROPOSED CURB CUT
  GENERATOR
  YARD
  ALTERNATE FENCE LINE

- 2. 3. 4. 5. 6. 7. 8. 9.

- 10. 11. 12. 13. 14.
- YARD ALTERNATE FENCE LINE NEW PARKING (9 SPACES) 15. 16.



Site Option 2 places the new Fire Station at the southwest corner of the site. The foot print of the building is larger as a result of the projected growth of the Fire Station's needs. Fire Department vehicular entry access for the Fire Station will occur off of Granada Avenue. Emergency dispatch will occur onto Avenue Des Parques. A list summary of Site Option 2 is as follows:

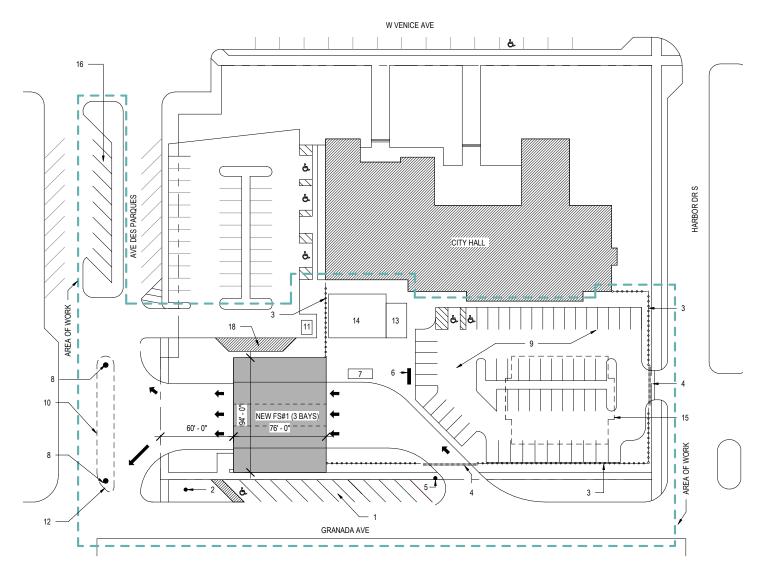
- New Station is set back 60' from property line to accommodate aerial trucks on exit drive.
- Fenced in secure Fire Department parking and City Hall Staff parking will occur on the southeast corner of the site
- Proposed curb cut at Harbor Drive South to provide ingress and egress at secure parking
- Chiller Yard is relocated and more central to the site. New equipment will serve both the City Hall and Fire Station.
- New Generator Enclosure adjacent to relocated Chiller Yard. New Generator to serve both City Hall and Station 1.
- New on-street parking along Granada Avenue.
- New on-street parking at existing north median of Avenue Des Parques
- The existing Fire water back flow preventer to be relocated
- South median at Avenue Des Parques will require removal in order to accommodate apparatus turning requirements.
- Overhead lines at Avenue Des Parques to be routed underground in order to address apparatus head clearance requirements
- Loading/Unloading delivery zone is included. Zone to serve both Fire Station 1 and City Hall.

#### Pros:

- With this configuration there is a potential for the existing Station 1 to remain operational for much of the construction duration of the new Fire Station. The feasibility of this will need to be reviewed in greater detail
- Majority of parking adjacent to City Hall is secure and inaccessible to the public (creating stand-off distance)
- Parking count increases on-site and off-site

#### Cons:

- Existing chiller yard requires relocation which will increase costs.
- Dispatch will occur along Avenue Des Parques which may have challenges with traffic at the street parking at the north route
- Stormwater attenuation will need to occur by means of underground detention (Note that this will most likely need to occur with all proposed options)
- City Hall Staff and Fire Department will share secure parking lot (Potential advantage as well)



OPTION 2 - PROPOSED SITE PLAN

1" = 50'-0"

PROPOSED SITE PLAN

EXISTING PARKING ON SITE: 84 PROPOSED PARKING ON SITE: 95

EXISTING PARKING ON STREET:31 PROPOSED PARKING ON STREET:52

TOTAL OVERALL: 147

#### SITE KEY

- 1.
- 2. 3. 4. 5. 6. 7. 8.

- 9.
- 10. 11. 12.
- 13. 14. 15.
- NEW ON STREET PARKING
  (12 SPACES)
  EXISTING FIRE HYDRANT
  FENCE
  GATE
  RELOCATED FIRE HYDRANT
  RELOCATED BFP
  FUEL TANK
  EXISTING POWER POLE TO
  BE REMOVED
  SECURE STAFF PARKING (58
  SPACES)
  MEDIAN TO BE REMOVED
  TRASH ENCLOSURE
  EXISTING POWER LINES TO
  BE ROUTED UNDERGROUND
  GENERATOR
  RELOCATED CHILLER YARD
  EXISTING FIRE STATION
  FOOT PFINIT
  NEW PARKING (9 SPACES)
  EXISTING FOWER LINES TO
  BE ROUTED UNDERGROUND
  CONTROL STATION
  FOOT PFINIT
  NEW PARKING (9 SPACES)
  EXISTING FOWER LINES TO
  BE ROUTED UNDERGROUND
  LOADING/ UNLOADING
  DELIVERY AREA 16. 17.
- 18.



Site Option 3 is similar to Option 1 in that it places the new Fire Station at a similar location as that of the existing Fire Station. The Fire Department vehicular entry access for the Fire Station will occur off of Avenue Des Parques. Emergency dispatch will occur onto Harbor Drive South. The primary intention of this option is to keep the Chiller Yard at its current location to avoid the added expense of its relocation. A list summary of Site Option 3 is as follows:

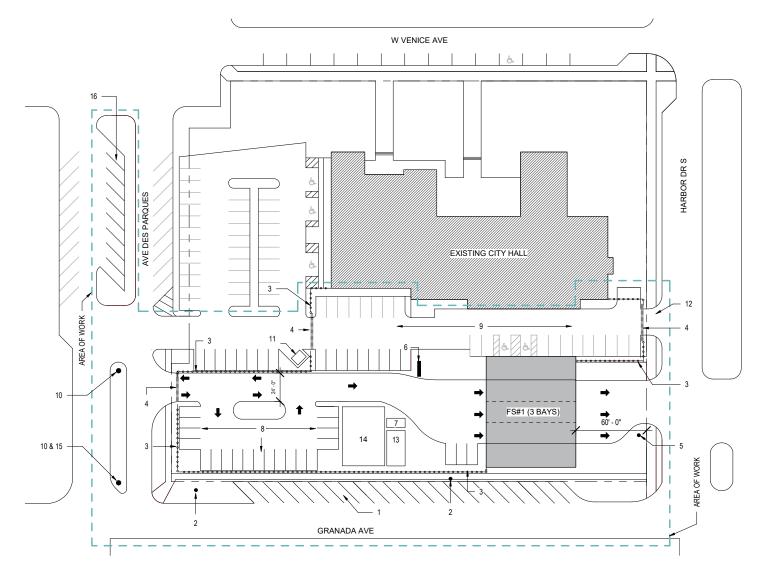
- New Station is set back 60' from property line to accommodate aerial trucks on exit drive.
- Fenced in secure Fire Department parking along southwest corner of site
- Fenced in secure City Hall staff parking between new Station and existing City Hall Bldg.
- Proposed curb cut at Harbor Drive South to provide alternative ingress and egress at secure City Hall staff parking
- Existing Chiller Yard to remain. Provide new equipment to serve both City Hall and Fire Station.
- New Generator Enclosure adjacent to relocated Chiller Yard. New Generator to serve both City Hall and Station 1
- New on-street parking along Granada Avenue
- New on-street parking at existing north median of Avenue Des Parques
- The existing Fire water back flow preventer is to remain.
- A new fire hydrant is added at the southeast corner of the site.

#### Pros:

- Easily accessible by vehicles
- Dispatch route remains unchanged
- Fire Department secure parking is separate from City Hall staff parking
- Majority of parking adjacent to City Hall is secure and inaccessible to the public
- Chiller Yard to remain
- Fire Water back-flow preventer to remain

#### Cons:

- Existing Fire Station will require demolition prior to the construction of the new building. This will required the fire department to acquire a temporary Fire Station while the new Fire Station is being built
- Generator is not centrally located on site.
- On-site parking count is slightly reduced
- Stormwater attenuation will need to occur by means of underground detention (Note that this will most likely need to occur with all proposed options)



OPTION 3 - PROPOSED SITE PLAN
1" = 50'-0"

#### PROPOSED SITE PLAN

EXISTING PARKING ON SITE: 84 PROPOSED PARKING ON SITE: 96

EXISTING PARKING ON STREET:31 PROPOSED PARKING ON STREET:62

TOTAL OVERALL: 158

#### SITE KEY

- Y
  NEW ON STREET
  PARKING (22 SPACES)
  EXISTING FIRE HYDRANT
  FENCE
  GATE
  NEW FIRE HYDRANT
  EXISTING BEP TO REMAIN
  FUEL TANK
  SECURE PARKING (19
  SPACES)
  EXISTING POWER POLES
  TRASH ENCLOSURE
  PROPOSED CURB CUT
  GENERATOR
  EXISTING CHILLER TO
  REMAIN
  OVERHEAD LINES
  NEW PARKING (9
  SPACES) 1.
- 2. 3. 4. 5. 6. 7. 8.
- 9.

- 10. 11. 12. 13. 14.
- 15. 16.



The existing Fire Station 1 has exceeded its useful life. As a result the City of Venice plans to replace the building with a new Fire Station that will meet the Fire Department's current and future needs.

Sweet Sparkman Architects and the City of Venice Fire Department have worked together to compose a Space Utilization program for the proposed Fire Station replacement. The following list summarizes the proposed program.

City of Venice	Sweet Sparkman Architects
Draft Architectural Program: Station #1	Date: 18.03.26

		PPL/Units	Number	Space	NSF	Gross	GSF	
No.	Component	Per Area	of Areas	Standard		Factor		Notes
1.000	SITE							
1.100	SITE							
1.101	Parking		25	180 /vehicle	(4,500)			20 for shift change-5 for public (two of which accessible spaces)
1.102	Trash/Recycling Storage		2	140 /area	280	1	280	Review city standard.
1.103	Driveways			/area				Refer to site Plan options
1.104	Generator/Mech. Yard		1	600 /yard	600		600	Gen size TBD. Anticipate generator to be in roofed enclosure
1.105	Fuel Tank & Diesel Tank		2	450 /area	900		100	1000 gal. diesel tank and 500 gallon fuel tank
Subtotal					6,280			
Total	1.000						6,280	

# 2.000 LIVING AREAS

2.100	SHOWER/RESTROOMS/EXERCISE							
								Includes: (2) Restrooms at Ground Flr. adj. to Fitness Rm. (4) restrooms for
2.101	Separate Toilet/Shower	1	7	100 /area	700			Fire EMS. (1) Restroom for Lieutenant
2.102								
2.103	Fitness Room	1	1	500 /area	500			Ground Flr. Available for City Hall Staff
2.104	Utility /Gen. Stor./Cleaning		1	150 /area	150			Residential grade washer/dryer. Mop sink Washer/Extractor
2.105	Mechanical/Electrical Room		1	140 /area	140			Locate at Mezzanine
2.106	Mechanical AHU Closets		2	120 /area	240			Locate at Mezzanine
Subtotal	2.100	·			1,730	1.20	2,076	

2.200	KITCHEN/DINING AREA							
								Top grade Appls,3 refrig, 3 lockable pantries, Commercial Grade Stove &
2.201	Cooking Area		1	250 /area	250			vented commercial hood
2.202	Dining Area	10	1	25 /person	250			Open plan connected to Dining and Day Room
2.203	Ice Alcove		1	25 /area	25			Near kitchen
2.204	Covered Patio/Grill Area	8	1	20 /person	160			Built-in grill with hood /Adjacent to Kitchen
2.205								Ground Flr. (Exterior Space)
Subtotal	2.200				685	1.20	822	

2.300	LIVING AREAS							
2.301	Day Room	10	1	50 /person	500			Adjacent to Kitchen/Dining (open plan)
2.302								Not Used
2.303	IT/Communications Closet		1	80 /area	80			Elec./tele/data communication room capabilities
2.304	Sleeping Areas	1	10	120 /area	1,200			Bed, desk, Lockers, TV, Stor., blocking for future Murphy beds
Subtotal	2.300				1,780	1.20	2,136	
Total	2.000				4,195		5,034	

3.000	ADMINISTR/	ATION,	/ PUBLIC
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3.100	O ADMINISTRATION/ PUBLIC									
3.101	Lt. Office		1	100 /area	100			Adjacent to Lt. Bunk		
3.102								Intentionally left blank		
3.103	Office Supplies Closet		1	100 /area	100					
3.104								Intentionally left blank		
3.105	Waiting Area		1	100 /area	100			Adjacent to Main entry and Elevator Lobby		
3.106								Intentionally left blank		
3.107	Report Rm		1	150 /area	150			Verify space requirements (How may occupants/computer stations)		
3.108	Paramedics Office		1	100 /area	100			Verify space requirements (How may occupants/computer stations)		
3.109	Training Room Supply CL.		1	50 /area	50			Adjacent to Training Room at ground floor		
3.110								Intentionally left blank		
3.111	Training/Public Meeting Rm.	1	1	500 /area	500			Entry from ground Flr. (Verify size)		
3.112	Public Toilets		2	80 /area	160	4.2		Accessible - Men and Women's Restrooms to serve public		
Total	3.000				1,260	1.2	1,512			

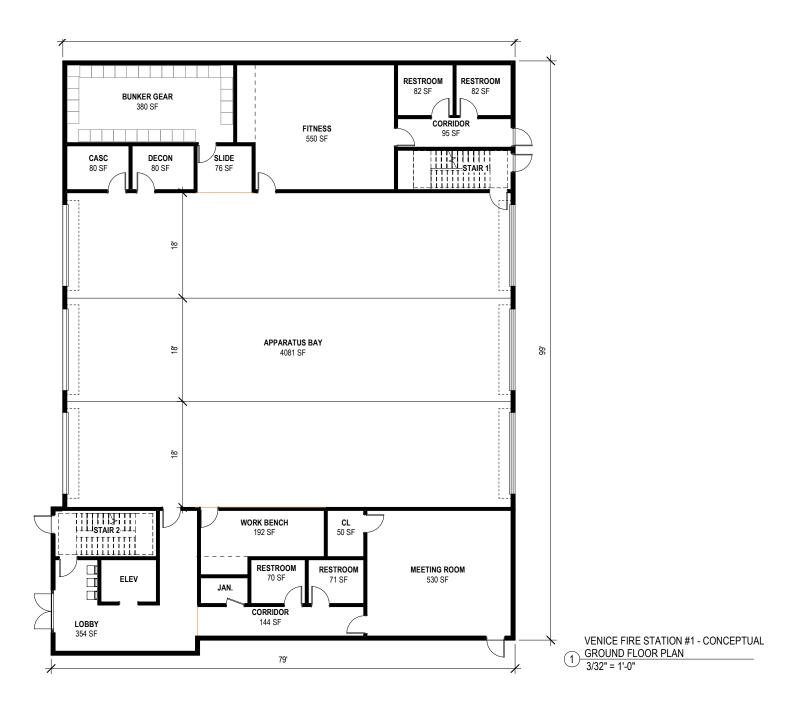
# 4.000 APPARATUS BAYS

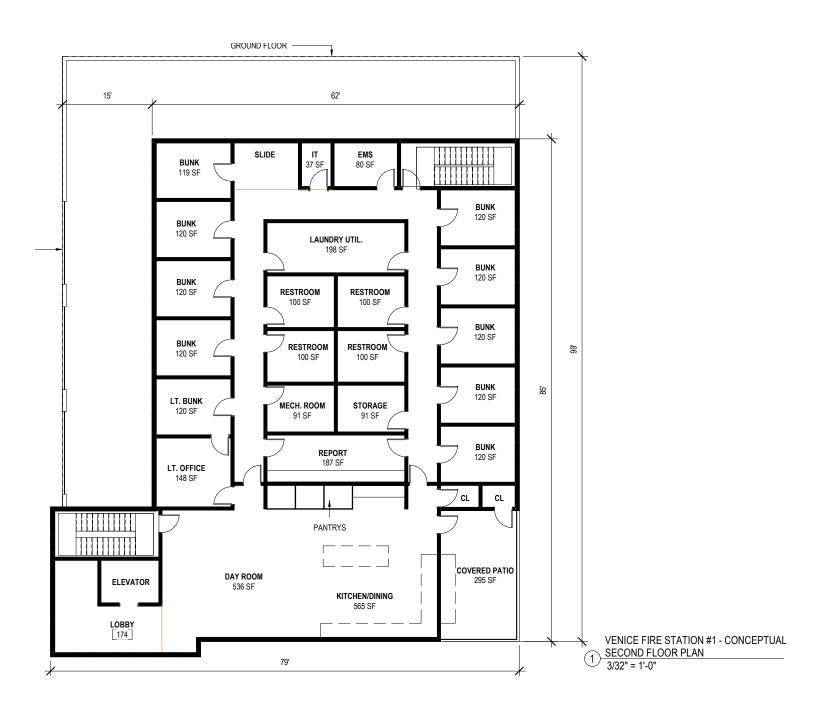
# 4.100 APPARATUS BAYS AND SUPPORT

4.101	Apparatus Bays		3	1350 /area	4.050			Bay size: 75' x 18' (accommodate parking for Mule if possible) wall mounted hose reel in bay for washing. 1" hose line required
4.102	Storage/ EMS Storage		1	50 /area	50			EMS Conditioned space.
4.103	Cascade Room Decon Room	1	1	80 /area 80 /area	80			10' x 10' with ventilation. Ice maker can be located within room.  Eye Wash Sink, Floor Drain, Shower.(size per min. NFPA req.)
4.104	Decon Room	1	1	ou /area	80			Lye wash sink, 11001 Drain, shower (size per him. Ni FA req.)
4.105	Bunker Gear Storage/Lockers		30	8.5 /area	255			Gear Grid installation. 24' wide. 30 count is approved.
4.109	Workroom/ Bay Storage		1	200 /area	200			Near or adjacent to Apparatus Bay
Total	4.000				4,715	1.1	5,187	

# AREA SUMMARIES

2.000	Living Areas			5,034	
3.000	Administration			1,512	
4.000	Apparatus Bays			5,187	
Total				11,733	





FIRE STATION AND CAMPUS - CONCEP	TUAL RENDERING



**VENICE FS #1 CONCEPT AERIAL VIEW** 

SWEET SPARKMAN ARCHITECTS

# **BUDGETING COST ESTIMATES**

# Fire Station 1 - City of Venice

Budgeting Estimate - Option 1 (single phased)

June 1, 2018

CODE	DESCRIPTION	OUDGONTD 4 CTCT	QUANTITY	LIMITS	UNIT PRICE	TOTAL	DIVISION TOTAL	COST
CODE	DESCRIPTION	SUBCONTRACTOR	QUANTITY	UNITS	UNIT PRICE	IOIAL	DIVISION TOTAL	РЭГ
1	GENERAL REQUIREMENTS						201,610	17.
	General Conditions		1	ls	175,240.00	175,240		
	Survey/Layout		1	ls	17,370.00	17,370		
	Material Testing		1	ls	9,000.00	9,000		
	- Martin and Tooking				0,000.00	0		
2	SITE WORK						787,260	0 67
	Demolition of Existing FS1		1	ls	42,850.00	42,850		
	Earthwork		1	ls	61,250.00	61,250		
	Storm Water Pipe & Inlets		1	ls	38,750.00	38,750		
	Storm Retention Underground System		1	ls	175,000.00	175,000		
	Water/Fire Service		1	ls	59,850.00	59,850		
	Asphalt Paving Curbs Striping		1	ls	137,500.00	137,500		
	6" Concrete Paving - Reinforced		1	ls	28,000.00	28,000		
	4" Sidewalks		1	ls	16,200.00	16,200		
	Lift Station - None Anticipated		1	ls	0.00	0		
	Operating Power gates with access Control			ls	22,650.00	90,600		
	Sod		62000		0.27	16,740		
	Decorative Perimeter Fence		02000	ls	48,520.00	48,520		
	Landscape		1	ls	50,000.00	50.000		
	Irrigation		1	ls	22,000.00	22,000		
	Well or Reclaimed Connection not budgeted			ls	0.00	22,000		
3	CONCRETE		I	IS	0.00	U	283,458	2 24
3	Soil Treatment		74.44		0.00	0.000	-	3 24
			7144		0.28 187,200.00	2,000 187,200		
	Concrete structural		1	ls				
	Concrete Precast Deck		1		56,000.00	56,000		
	Polished Concrete		1	ls	38,258.00	38,258		
4	MASONRY						152,000	) 12
	Masonry		1	ls	152,000.00	152,000		
	OTES, A MICO METALO					0		
5	STEEL & MISC. METALS						188,010	) 16
	Metal Trusses, decking, install			ls	148,500.00	148,500		
	Structural Steel			ls	29,850.00	29,850		
	Aluminum Screen Enclosure at Patio		1	ls	3,500.00	3,500		
						0		
						0		
	Bollards		16	ea	385.00	6,160		
6	WOOD & PLASTIC						138,300	) 11
	Solid Surface Window Sills			ls	2,000.00	2,000		
	Granite or Other Solid Counter tops		1	ls	24,000.00	24,000		
	Cabinets		1	ls	112,300.00	112,300		
7	THERMAL & MOISTURE	_					233,565	5 19
	Insulation - foamed in place (roof, cmu. Thermal barrier	)	1	ls	38,220.00	38,220		
	Batt Insulation		1	ls	9,220.00	9,220		
	Barrel tile - Metal Roof system		1	ls	178,500.00	178,500		

	Gutter/downspouts - Incl in roof				0		
	Caulking	1	ls	7,625.00	7,625		
8	DOORS/FRAMES/WINDOWS/HARDWARE					269,395	22.96
	HM Doors/Frames, Wood Doors & Hardware		ls	85,800.00	85,800		
	Install above	44	ea	246.00	10,824		
	OHD	1	ls	46,600.00	46,600		
	Storefront/Manufactured Windows	1	ls	125,571.00	125,571		
	Mirrors	1	ls	600.00	600		
					0		
					0		
9	FINISHES					383,229	32.66
	Metal Framing/ Rigid insulation, Sound Batts/Drywall	1	ls	94,520.00	94,520		
	Exterior Stucco		ls	88,650.00	88,650		
	Precast Exterior Trim - Venetian		ls	62,530.00	62,530		
	Acrylic Plaster Apparatus Bay Ceiling	4073		8.00	32,584		
	Acoustical Ceiling		ls	22,000.00	22,000		
	Epoxy Flooring Restrooms	1	ls	8,050.00	8,050		
	Ceramic Tile Wainscot	1	ls	12,320.00	12,320		
	Epoxy Flooring Restrooms	1	ls	8,050.00	8,050		
	Aparatus Floor Striping		ls	1,925.00	1,925		
	Painting	1	ls	52,600.00	52,600		
				7	0		
10	SPECIALTIES				-	44,876	3.82
	Toilet Accessories	1	ls	5,187.00	5,187	, ,	
	Fire Extinguisher/Cabinets		ls	750.00	750		
	- ma _ mangananan gananan ganan ang manganan ganan ang manganan ganan ang manganan ganan ang manganan ganan ang			1 2 2 1 2 2	0		
					0		
					0		
	Louvers	1	ls	14,200.00	14,200		
	Signage		ls	8,392.81	8,393		
	Gear Lockers		ls	11,245.70	11,246		
	Flagpoles		ls	5,100.00	5,100		
11	EQUIPMENT	·	.0	3,100.00	0,100	45,697	3.89
	Washing Equipment incl Extractor	1	ls	9,327.78	9,328	10,001	0.00
	Cascade System Model # FCFS-2BP3W		ls	18,010.24	18,010		
	Appliances:	-	10	10,010.24	0,010		
	Gas Range: GE Monogram ZGP366LRSS	1	ea	6,200.00	6,200		
	Microwave: whirlpool wmc50522as		ea	309,23	309		
	Kitchen Fridge: whirpool wrb322DMBMSS		ea	1,496.93	4,491		
	Ice Machine		ea	3,500.00	3,500		
	Dishwasher: whirlpool wdr920sadm		ea	854.93	855		
	Gas Grill		ea	801.43	801		
	Day Roon TV - Sharp 50"	1 1	ea	481.50	482		
	Kitchen/Fitness TV - Sharp 42"	2	ea	335.69	671		
	TV Mounts		ea	150.00	450		
	Blueray Player		ea	400.00	400		
	Sound Bar System		ea	200.00	200		
12	FURNISHINGS		ca	200.00	200	70,494	6.01
14	Window Treatments	1	ls	3,850.42	3,850	70,494	0.01
	Fitness Equipment		ls	16,644.00	16,644		
	II IUIOOO EYUIPIIIOIIL		li O	10,044.00	10.0441		

	Allowance for FF&E		1 ls	50,000.00	50,000		
13	SPECIAL CONSTRUCTION					28,000	2.39
	Stainless Steel Access Slide - Allow		1 ls	28,000.00	28,000		
					0		
14	ELEVATORS					79,450	6.77
	Elevator - Kone Traction		1 ls	79,000.00	79,000		
	Hoist and Beam		1 ls	450.00	450		
15	MECHANICAL					320,870	27.35
	Fire Protection		1 ls	24,850.00	24,850		
	Gas Piping		1 ls	1,500.00	1,500		
	Plumbing		1 ls	108,520.00	108,520		
	Grease Trap	incl above			0		
	HVAC - All Work Excludes New Chiller Plant		1 ls	186,000.00	186,000		
16	ELECTRICAL					462,000	39.38
	Electrical		1 ls	462,000.00	462,000		
	Site Lighting	incl above	1 ls		0		
	Generator				0		
	Fire Alarm	incl above	1 ls	0.00	0		
	Structured Cabling	incl above	1 ls	0.00	0		
	Paging System	incl above	1 ls	0.00	0		
17	MISC.					33,500	2.86
	New Access Control System	Allow	1 ls	32,000.00	32,000		
	FPL Fees cutover	Allow	1 ls	1,500.00	1,500		
	SUBTOTAL					3,721,715	317.20
	GL Insurance				0.0095	35,356	
	Builder's Risk Insurance					18,000	
	CM Fee				0.0800	302,006	
	SUBTOTAL					4,077,076	
	Performance & Payment Bond				0.01000	40,771	
				TOTAL		4,117,847	350.96

Cost of New Chiller Plant and Impact Structures to Service both City Hall and Fire Station

Cost of New 800 KW Generator, Fuel Tank and Impact Enclosures to service both City Hall and Fire Station

Estimated Building Permit and Utility Impact Fees

Design and Engineering Fees (Includung Chiller and Generator Adds)

825,000

810,000

122,475

**Total Project Estimating Contingency 10%** 

645,061

TOTAL 7,095,668

Price Escalation over time is expected to be 3%/year with the above baseline in 2018:

 Total Future Cost
 2019:
 7,308,538

 Total Future Cost
 2020:
 7,527,794

 Total Future Cost
 2021:
 7,753,628

#### Other Owner Requested Options for this Project:

- \* Photovolteic to support building lighting and refrigerators This can vary depending on voltage storage capacity, etc. Cost of cells meeting hurricane code requirements create some difficulties, but a realistic number would be \$120,000 to \$150,000
- \* Asphalt paving for lord higel house parking lot and entry drive. \$73,000 includes curbs and striping, signage, and ROW Access with sidewalk.

### 11733 <u>GSF</u>

Fire Station 1 - City of Venice Budgeting Estimate - Option 2 (phased)

June 1, 2018

CSI CODE	DESCRIPTION	SUBCONTRACTOR	QUANTITY	UNITS	UNIT PRICE	TOTAL	DIVISION TOTAL	COST PSF
1	GENERAL REQUIREMENTS						245,375	20.
	General Conditions			ls	219,005.00	219,005		
	Survey/Layout			ls	17,370.00	17,370		
	Material Testing		1	Is	9,000.00	9,000		
2	SITE WORK					<u>`</u>	743,160	63.
	Demolition of Existing FS1			ls	42,850.00	42,850		
	Earthwork		1	ls	61,250.00	61,250		
	Storm Water Pipe & Inlets		1	ls	38,750.00	38,750		
	Storm Retention Underground System		1	ls	175,000.00	175,000		
	Water/Fire Service		1	ls	63,250.00	63,250		
	Fire Hydrant		1	ls	6,500.00	6,500		
	Asphalt Paving Curbs Striping			ls	152,620.00	152,620		
	6" Concrete Paving - Reinforced			ls	24,000.00	24,000		
	4" Sidewalks			ls	13,700.00	13,700		
	Lift Station - None Anticipated			ls	0.00	0		
	Operating Power gates with access Control			ls	22,650.00	45,300		
	Sod		62000		0.27	16,740		
	Decorative Perimeter Fence			ls	31,200.00	31,200		
	Landscape			ls	50,000.00	50,000		
	Irrigation			ls	22,000.00	22,000		
					0.00	22,000		
3	Well or Reclaimed Connection not budgeted CONCRETE		- 1	Is	0.00	0		24
<u>ა</u>			7444		0.00	0.000	283,458	3 24
	Soil Treatment		7144		0.28	2,000		
	Concrete structural		1	ls	187,200.00	187,200		
	Concrete Precast Deck		1		56,000.00	56,000		
	Polished Concrete		1	ls	38,258.00	38,258		
4	MASONRY						152,000	12
	Masonry		1	ls	152,000.00	152,000		
						0		
5	STEEL & MISC. METALS						188,010	16.
	Metal Trusses, decking, install			ls	148,500.00	148,500		
	Structural Steel		1	ls	29,850.00	29,850		
	Aluminum Screen Enclosure at Patio		1	ls	3,500.00	3,500		
						0		
	Bollards		16	ea	385.00	0 6.160		
6	WOOD & PLASTIC					2,.00	138,300	) 11.
	Solid Surface Window Sills		1	ls	2,000.00	2,000		1
	Granite or Other Solid Counter tops			ls	24,000.00	24,000		
	Cabinets			ls	112,300.00	112,300		1
7	THERMAL & MOISTURE			13	112,300.00	112,300	233,565	19
	Insulation - foamed in place (roof, cmu. Thermal barrier	<u> </u> 	1	ls	38,220.00	38,220	233,360	19
	Batt Insulation	)		ls	9.220.00	9,220		
					-,			
	Barrel tile - Metal Roof system		1	ls	178,500.00	178,500		

	Gutter/downspouts - Incl in roof				0		
	Caulking	1	ls	7,625.00	7,625		
8	DOORS/FRAMES/WINDOWS/HARDWARE					269,395	22.9
	HM Doors/Frames, Wood Doors & Hardware		ls	85,800.00	85,800		
	Install above		ea	246.00	10,824		
	OHD	1	Is	46,600.00	46,600		
	Storefront/Manufactured Windows	1	Is	125,571.00	125,571		
	Mirrors	1	ls	600.00	600		
					0		
					0		
9	FINISHES					383,229	32.6
	Metal Framing/ Rigid insulation, Sound Batts/Drywall	1	ls	94,520.00	94,520		
	Exterior Stucco	1	ls	88,650.00	88,650		
	Precast Exterior Trim - Venetian		ls	62,530.00	62,530		
	Acrylic Plaster Apparatus Bay Ceiling	4073	sf	8.00	32,584		
	Acoustical Ceiling		ls	22,000.00	22,000		
	Epoxy Flooring Restrooms		ls	8.050.00	8,050		
	Ceramic Tile Wainscot		ls	12,320.00	12,320		
	Epoxy Flooring Restrooms		ls	8,050.00	8,050		
	Aparatus Floor Striping		ls	1,925.00	1,925		
	Painting		ls	52,600.00	52,600		
	i dining	<u>'</u>	10	02,000.00	0		
10	SPECIALTIES				0	44,876	3.8
10	Toilet Accessories	1	ls	5,187.00	5,187	44,070	5.
	Fire Extinguisher/Cabinets		ls	750.00	750		
	The Extinguisher/Cabinets	'	13	7 30.00	0		
					0		
					0		
	Leuvere	4	la	14,200.00	14,200		
	Louvers		ls				
	Signage		ls	8,392.81	8,393		
	Gear Lockers		ls	11,245.70	11,246		
	Flagpoles	1	ls	5,100.00	5,100		
11	EQUIPMENT					45,697	3.8
	Washing Equipment incl Extractor		ls .	9,327.78	9,328		
	Cascade System Model # FCFS-2BP3W	1	ls	18,010.24	18,010		
	Appliances:				0		
	Gas Range: GE Monogram ZGP366LRSS		ea	6,200.00	6,200		
	Microwave: whirlpool wmc50522as		ea	309.23	309		
	Kitchen Fridge: whirpool wrb322DMBMSS	3	ea	1,496.93	4,491		
	Ice Machine	1	ea	3,500.00	3,500		
	Dishwasher: whirlpool wdr920sadm	1	ea	854.93	855		
	Gas Grill	1	ea	801.43	801		
	Day Roon TV - Sharp 50"	1	ea	481.50	482		
	Kitchen/Fitness TV - Sharp 42"	2	ea	335.69	671		
	TV Mounts		ea	150.00	450		
	Blueray Player		ea	400.00	400		
	Sound Bar System		ea	200.00	200		
12	FURNISHINGS		120	200.00		70.494	6.
-	Window Treatments	1	ls	3,850.42	3,850	70,101	<u>J.</u>
	Fitness Equipment		ls	16,644.00	16,644		
	Furniture (FF&E)	'	1.~	10,014.00	0		
	Allowance for FF&E		1	i l	·		

13	SPECIAL CONSTRUCTION					28,000	2.39
	Stainless Steel Access Slide - Allow		1 ls	28,000.00	28,000		
					0		
14	ELEVATORS					79,450	6.77
	Elevator - Kone Traction		1 ls	79,000.00	79,000		
	Hoist and Beam		1 ls	450.00	450		
15	MECHANICAL					320,870	27.35
	Fire Protection		1 ls	24,850.00	24,850		
	Gas Piping		1 ls	1,500.00	1,500		
	Plumbing		1 ls	108,520.00	108,520		
	Grease Trap	incl above			0		
	HVAC - Chiller Plant Separate Pricing (not in total be	elow)			0		
	HVAC - All Work Excludes New Chiller Plant		1 ls	186,000.00	186,000		
	ELECTRICAL					462,000	39.38
	Electrical		1 ls	462,000.00	462,000		
	Site Lighting	incl above	1 ls		0		
	Generator - Separate Estimate Item (Not in total belo	ow)			0		
	Fire Alarm	incl above	1 ls	0.00	0		
	Structured Cabling	incl above	1 ls	0.00	0		
	Paging System	incl above	1 ls	0.00	0		
	MISC.					141,850	12.09
	New Access Control System	Allow	1 ls	32,000.00	32,000		
	Median and Curb removal and Pave - West Location	Cost	1 ls	34,850.00	34,850		
	FPL Power reroute and Fees Pole	Allow	1 ls	75,000.00	75,000		
	SUBTOTAL					3,829,730	326.41
	GL Insurance				0.0095	36,382	
	Builder's Risk Insurance					18,000	
	CM Fee				0.0800	310,729	
	SUBTOTAL	-				4,194,841	
	Performance & Payment Bond				0.01000	41,948	
				TOT	AL	4,236,789	361.10

Cost of New Chiller Plant and Impact Structures to Service both City Hall and Fire Station

Cost of New 800 KW Generator, Fuel Tank and Impact Enclosures to service both City Hall and Fire Station

Estimated Building Permit and Utility Impact Fees

Design and Engineering Fees (Includung Chiller and Generator Adds)

812,000

795,000

123,850

584,379

TOTAL 7,207,220 ith the above baseline in 2018:

655,202

Price Escalation over time is expected to be 3%/year with the above baseline in 2018:

 Total Future Cost
 2019:
 7,423,437

 Total Future Cost
 2020:
 7,646,140

 Total Future Cost
 2021:
 7,875,524

#### Other Owner Requested Options for this Project:

**Total Project Estimating Contingency 10%** 

- \* Photovolteic to support building lighting and refrigerators This can vary depending on voltage storage capacity, etc. Cost of cells meeting hurricane code requirements create some difficulties, but a realistic number would be \$120,000 to \$150,000
- \* Asphalt paving for lord higel house parking lot and entry drive. \$73,000 includes curbs and striping, signage, and ROW Access with sidewalk.

# Budgeting Estimate - Option 3 (not phased)

June 1, 2018

CSI	DESCRIPTION	SUBCONTRACTOR	June 1, 2018  QUANTITY		UNIT PRICE	TOTAL	DIVISION TOTAL	COST PSF
1	GENERAL REQUIREMENTS						201,610	17.18
	General Conditions		1	ls	175,240.00	175,240		
	Survey/Layout		1	ls	17,370.00	17,370		
	Material Testing		1	Is	9,000.00	9,000		
	OITE MORK					0		00.00
2	SITE WORK			1-	10.050.00	40.050	784,950	66.90
	Demolition of Existing FS1 Earthwork			ls Is	42,850.00 61,250.00	42,850 61,250		
					38,750.00			
	Storm Water Pipe & Inlets			ls Is		38,750		
	Storm Retention Underground System Water/Fire Service				175,000.00	175,000		
				Is	63,250.00	63,250 6.500		
	Fire Hydrant			Is	6,500.00 137,200.00	-,		
	Asphalt Paving Curbs Striping			ls		137,200		
	6" Concrete Paving - Reinforced 4" Sidewalks			ls	24,000.00	24,000		
				ls	14,900.00	14,900		
	New Dumpster Enclosure			ls	22,900.00	22,900		
	Lift Station - None Anticipated			ls	0.00	0		
	Operating Power gates with access Control			Is	22,650.00	67,950		
	Sod		62000		0.27	16,740		
	Decorative Perimeter Fence			ls	41,660.00	41,660		
	Landscape			ls	50,000.00	50,000		
	Irrigation			ls	22,000.00	22,000		
	Well or Reclaimed Connection not budgeted		1	Is	0.00	0		
3	CONCRETE						283,458	24.16
	Soil Treatment		7144		0.28	2,000		
	Concrete structural		1	Is	187,200.00	187,200		
	Concrete Precast Deck		1		56,000.00	56,000		
	Polished Concrete		1	Is	38,258.00	38,258		
4	MASONRY						152,000	12.95
	Masonry		1	Is	152,000.00	152,000		
	07551 0 1100 115711 0					0		40.00
5	STEEL & MISC. METALS					4.40.500	188,010	16.02
	Metal Trusses, decking, install			ls	148,500.00	148,500		
	Structural Steel			ls	29,850.00	29,850		
	Aluminum Screen Enclosure at Patio		1	Is	3,500.00	3,500		
						0		
						0		
	Bollards		16	ea	385.00	6,160		
6	WOOD & PLASTIC						138,300	11.79
	Solid Surface Window Sills			ls	2,000.00	2,000		
	Granite or Other Solid Counter tops			ls	24,000.00	24,000		
	Cabinets		1	Is	112,300.00	112,300		10.5
7	THERMAL & MOISTURE				00.000.00	22.5	233,565	19.91
	Insulation - foamed in place (roof, cmu. Thermal barrier	)		ls	38,220.00	38,220		
	Batt Insulation		1	ls	9,220.00	9,220		]

Caul DOC HM I Insta OHE Store Mirro  FINI: Meta Exte Prec Acry Acou Epoy Cera Epoy Apar Pain  SPE Toile Fire	ter/downspouts - Incl in roof  ulking  ORS/FRAMES/WINDOWS/HARDWARE  Doors/Frames, Wood Doors & Hardware  all above  D	1	ls	7,625.00	7,625		
FINI:  FINI:  FINI:  FINI:  Meta Exte Prec Acry Acou Epon Apar Pain  SPE Toile Fire	ORS/FRAMES/WINDOWS/HARDWARE Doors/Frames, Wood Doors & Hardware all above	1	ls	7,625.00	7,625		l
HM I Insta OHE Store Mirror FINI:  FI	Doors/Frames, Wood Doors & Hardware all above						
Insta OHD Store Mirro FINI: Meta Exte Prec Acry Acou Epon Apar Pain O SPE Toile Fire	all above					269,395	22
OHE Store Mirro  FINII  Meta Exte Preca Acry Acou Epon Apain Pain  SPE Toile Fire			ls	85,800.00	85,800		l
Store Mirro  FINI:  Meta Exte Prec Acry Acou Epox Cera Epox Apain O SPE Toile Fire	D		ea	246.00	10,824		l
Mirro FINI: Meta Exte Prec Acry Acou Epox Cera Epox Apain O SPE Toile Fire		1	ls	46,600.00	46,600		l
FINI: Meta Exte Prec Acry Acou Epox Cera Epox Apai Pain  SPE Toile Fire	refront/Manufactured Windows		ls	125,571.00	125,571		l
Meta Exte Prec Acry Acou Epox Cera Epox Apar Pain O SPE Toile Fire	rors	1	ls	600.00	600		l
Meta Exte Prec Acry Acou Epox Cera Epox Apar Pain O SPE Toile Fire					0		l
Meta Exte Prec Acry Acou Epox Cera Epox Apar Pain O SPE Toile Fire					0		<u> </u>
Exte Prec Acry Acou Epox Cera Epox Apar Pain O SPE Toile Fire	ISHES					383,229	32
Prec Acry Acou Epoy Cera Epoy Apar Pain O SPE Toile Fire	al Framing/ Rigid insulation, Sound Batts/Drywall		ls	94,520.00	94,520		l
Acry Acou Epox Cera Epox Apar Pain O SPE Toile Fire	erior Stucco		ls	88,650.00	88,650		l
Acou Epox Cera Epox Apar Pain O SPE Toile Fire	cast Exterior Trim - Venetian		ls	62,530.00	62,530		l
Epox Cera Epox Apar Pain O SPE Toile Fire	ylic Plaster Apparatus Bay Ceiling	4073	sf	8.00	32,584		l
Cera Epox Apar Pain O SPE Toile Fire	oustical Ceiling	1	ls	22,000.00	22,000		l
Apar Pain SPE Toile Fire	oxy Flooring Restrooms		ls	8,050.00	8,050		l
Apar Pain SPE Toile Fire	amic Tile Wainscot	1	ls	12,320.00	12,320		l
Pain  SPE Toile Fire Louv	oxy Flooring Restrooms	1	ls	8,050.00	8,050		l
SPE Toile Fire	aratus Floor Striping	1	ls	1,925.00	1,925		l
Toile Fire Louv	nting	1	Is	52,600.00	52,600		l
Toile Fire Louv					0		<del> </del>
Fire	ECIALTIES		1-	F 407 00	5.407	44,876	
Louv	et Accessories		ls	5,187.00	5,187		l
	Extinguisher/Cabinets	1	ls	750.00	750		l
					0		l
					0		l
		4		44.000.00	•		l
			ls	14,200.00	14,200		l
	nage		ls	8,392.81	8,393		l
	ar Lockers		ls	11,245.70	11,246		l
	gpoles	1	ls	5,100.00	5,100		<b>—</b>
	UIPMENT			0.007.70	0.000	45,697	
	shing Equipment incl Extractor		ls	9,327.78	9,328		l
	scade System Model # FCFS-2BP3W	1	Is	18,010.24	18,010		l
Appi	pliances:			0.000.00	0		l
	Range: GE Monogram ZGP366LRSS		ea	6,200.00	6,200		ı
	rowave: whirlpool wmc50522as		ea	309.23	309		l
	hen Fridge: whirpool wrb322DMBMSS		ea	1,496.93	4,491		l
	Machine		ea	3,500.00	3,500		l
	hwasher: whirlpool wdr920sadm		ea	854.93	855		l
	s Grill		ea	801.43	801		l
Day	Roon TV - Sharp 50"		ea	481.50	482	_	l
	hen/Fitness TV - Sharp 42"		ea	335.69	671		l
	Mounts		ea	150.00	450		l
Blue	eray Player		ea	400.00	400		l
Sour	ınd Bar System	1	ea	200.00	200		<b>—</b>
	RNISHINGS					70,494	
	dow Treatments		Is	3,850.42	3,850		l
Fitne <b>Furn</b>		1 4	ls	16,644.00	16,644		ı

	Allowance for FF&E		1	ls	50,000.00	50,000		
13	SPECIAL CONSTRUCTION						28,000	2.39
	Stainless Steel Access Slide - Allow		1	ls	28,000.00	28,000		
						0		
14	ELEVATORS						79,450	6.77
	Elevator - Kone Traction		1	ls	79,000.00	79,000		
	Hoist and Beam		1	ls	450.00	450		
15	MECHANICAL						320,870	27.35
	Fire Protection		1	ls	24,850.00	24,850		
	Gas Piping		1	ls	1,500.00	1,500		
	Plumbing		1	ls	108,520.00	108,520		
	<b>HVAC - Chiller Plant Separate Pricing (not in total</b>	below)				0		
	Grease Trap	incl above				0		
	HVAC - All Work Excludes New Chiller Plant		1	ls	186,000.00	186,000		
16	ELECTRICAL						462,000	39.38
	Electrical		1	ls	462,000.00	462,000		
	Site Lighting	incl above	1	ls		0		
	Generator - Separate Estimate Item (Not in total b	elow)				0		
	Fire Alarm	incl above	1	Is	0.00	0		
	Structured Cabling	incl above	1	ls	0.00	0		
	Paging System	incl above	1	ls	0.00	0		
17	MISC.						32,000	2.73
	New Access Control System	Allow	1	ls	32,000.00	32,000		
						0		
	SUBTOTAL				_		3,717,905	316.88
	GL Insurance					0.0095	35,320	
	Builder's Risk Insurance						18,000	
	CM Fee					0.0800	301,698	
	SUBTOTAL						4,072,923	
	Performance & Payment Bond					0.01000	40,729	
					TOT	AL	4,113,652	350.61

Cost of New Chiller Plant and Impact Structures to Service both City Hall and Fire Station

Cost of New 800 KW Generator, Fuel Tank and Impact Enclosures to service both City Hall and Fire Station

Estimated Building Permit and Utility Impact Fees

Design and Engineering Fees (Includung Chiller and Generator Adds)

Total Project Estimating Contingency 10%

652,853

TOTAL

7,181,385

Price Escalation over time is expected to be 3%/year with the above baseline in 2018:

 Total Future Cost
 2019:
 7,396,827

 Total Future Cost
 2020:
 7,618,732

 Total Future Cost
 2021:
 7,847,294

#### Other Owner Requested Options for this Project:

- \* Photovolteic to support building lighting and refrigerators This can vary depending on voltage storage capacity, etc. Cost of cells meeting hurricane code requirements create some difficulties, but a realistic number would be \$120,000 to \$150,000
- \* Asphalt paving for lord higel house parking lot and entry drive. \$73,000 includes curbs and striping, signage, and ROW Access with sidewalk.

CIVIL ENGINEERING DUE DILIGENCE REPORT	



# CIVIL ENGINEERING DUE DILIGENCE FOR VENICE FIRE STATION NO. 1 REPLACEMENT

FOR SWEET SPARKMAN ARCHITECTS

PREPARED BY FISHER ENGINEERING

1817 Pinyon Pine Drive Sarasota, Florida 34240 Tel: 941-203-8565

# Civil Engineering Due Diligence for Venice Fire Station No. 1 Replacement

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- I. Authorization
- II. Purpose and Scope
- III. Traffic Circulation and Parking
- IV. Utilities
- V. Stormwater Management System
- VI. Permitting

# **Exhibits**

- 1. Existing Potable Water and Sanitary Sewer
- 2. Existing Stormwater Drainage



# I. <u>AUTHORIZATION</u>

Fisher Engineering was authorized by Sweet Sparkman Architects to perform civil engineering due diligence and prepare a narrative for the City of Venice for the replacement of Venice Fire Station No. 1 located in Venice, Florida. The location of the existing fire station is Sarasota County Parcel ID Number 0176080001 and the address is 112 Harbor Drive South, Venice, FL 34285.

# II. PURPOSE AND SCOPE

The purpose of this study is to assist in the assessment of the civil engineering infrastructure as it relates to the replacement of Fire Station No. 1 in the City of Venice. The scope of the study includes a review of the adequacy of existing drainage facilities, potable water and sanitary sewer availability and locations, and an assessment of other site infrastructure including parking and traffic circulation needed to accommodate the future building. Concept plan options provided by Sweet Sparkman Architects identify potential locations for the new building. The locations identified are within the current parcel that the existing building occupies. The parcel also houses the City of Venice City Hall Complex. Proposed Site Plan Option 1 provides for a new building in the same location as the existing building. Proposed Site Plan Option 2 provides for a new location for the building at the southwest corner of the parcel. Proposed Site Plan Option 3 provides for a new building in the same location as the existing building with variations in traffic patterns from Option 1. Based on these concept plans, Fisher Engineering has consulted with the City of Venice Fire Department, the City of Venice and the Southwest Florida Water Management District (SWFWMD) to develop a narrative of existing and available infrastructure and an assessment of improvements that may be required for the proposed building.

# III. TRAFFIC CIRCULATION AND PARKING

The existing City Hall and Fire Station parcel maintains parking and vehicular circulation within and around the perimeter of the parcel. Existing perimeter parking is available along Venice Avenue West, Avenue Des Parques, and along the northeast corner of Harbor Drive South. Existing interior parking for the site is located at the west end of the parcel and in the central interior of the property. Ingress and Egress access locations to the interior parking are located at Avenue Des Parques and Granada Avenue. The existing fire station ingress/egress locations are at Harbor Drive South and at Granada Avenue. The existing interior parking is identifiable by striping but is not specifically identified as to the intended user. This creates a mixture of parking throughout the site consisting of City of Venice staff, Fire Department employees and citizen commuters.



Proposed Site Plan Option 1 places the fire station in a similar location to its existing condition and maintains a similar parking arrangement to the existing parcel but alters the use of parking areas considerably via the use of fencing and gating. As seen in the Option 1 drawing, the northwest parking lot remains the same and is open to the general public. The southwest parking area and the central interior parking area are fenced and gated. New and additional gated parking has been added along the southern property line behind the proposed fire station due to the relocation of the chiller yard. A new ingress/egress driveway has been proposed on the eastern end of the central interior parking lot for access to Harbor Drive South. New and additional offsite parking has been added in the median of Avenue Des Parques and along Granada Avenue. The ingress/egress access locations for the fire station remain the same. However, the access along Granada Avenue has been shifted further to the west.

Proposed Site Plan Option 2 places the fire station in the southwest corner of the parcel. Ingress/egress access for the fire trucks is located on Avenue Des Parques and Granada Avenue. A landscaped median is located beyond the ingress/egress location for the fire trucks in Avenue Des Parques. This median will require removal to allow for fire truck maneuvers to south bound Avenue Des Parques. Additionally, overhead power lines may need to be relocated underground at the southwest corner of the parcel to prevent overhead obstructions for fire trucks. The location of the fire station removes existing parking in this area but is replaced with new parking in the southeast corner of the property. The new southeast corner parking area has ingress/egress access to Harbor Drive South. The chiller yard has been relocated in this option. The existing northwest parking lot within the parcel remains and has ingress/egress access along Avenue Des Parques. New and additional offsite parking has been added in the median of Avenue Des Parques and along Granada Avenue. Proposed Site Plan Option 2 provides the greatest total overall parking spaces when compared with the other two plan options.

Proposed Site Plan Option 3 places the fire station in a similar location to its existing condition. As seen in the Option 3 drawing, the chiller remains in its existing location and gated parking behind the fire station is reconfigured around the structure. A new gated ingress/egress access has been provided for cars and fire trucks along Avenue Des Parques and an ingress/egress access is provided for fire trucks on Harbor Drive South. The northwest parking lot within the parcel remains the same and the central interior parking lot has been slightly altered for more parking and is gated. An ingress/egress driveway access for automobile parking has been provided at Harbor Drive South. New and additional offsite parking has been added in the median of Avenue Des Parques and along Granada Avenue. Proposed Site Plan Option 3 provides the least total overall parking spaces when compared with the other two plan options.



### IV. UTILITIES

Fisher Engineering has investigated the availability of utilities within the property to serve the proposed buildings in Option 1, Option 2 and Option 3 including water, sewer, electric, telecommunications and miscellaneous utilities. The review was based on meetings and communication with City of Venice Utility Department and the City of Venice Engineering Department. The potable water and sanitary sewer exhibit attached in this report provides a graphical representation of the existing distribution of water and sewer within City of Venice right-of-way near the property.

### **Potable Water**

The City of Venice Utility Department provides potable water service for the parcel via a 10-inch water main running parallel to and within the northerly right-of way of Granada Avenue. Two fire hydrants are tapped into this water main and are located adjacent to the parcel. One hydrant is near the existing fire station and the other is located at the southwest corner of the property. A 6-inch water service enters the parcel from the 10-inch water main at the existing fire station drive on Granada Avenue to service the site. Within the property near the chiller yard are fire backflow and water meter assemblies connected to the 6-inch water service which serves City Hall and the existing fire station. A six-inch potable water main is located within the Avenue Des Parques South right-of-way located at the west end of the parcel. This water main does not currently provide potable water service to the property.

Proposed Site Plan Option 1 and 3 could utilize the existing potable water service connections that currently service the existing building. These building service connections within the property and the fire hydrant near the existing fire station may only need to be relocated and could eliminate the need for a new tap in the water main within Granada Avenue. Additionally, the fire backflow and water meter assemblies and the existing 6-inch water main within the property could possibly remain in their existing locations with this layout. The fire department is requesting a new fire hydrant be located near the southeast corner of the parcel. A new tap into the existing 10-inch water main would be required to accommodate this fire hydrant. Sprinklering of the new building can be achieved by tapping into the fire hydrant assembly line or tapping into the 10-inch water main within Granada Avenue.

Proposed Site Plan Option 2 could also utilize the existing potable water service connections that currently service the existing building. These building service connections within the property would need to be re-routed to service the new building and could eliminate the need for a new tap in the water main within Granada Avenue. Both fire hydrants located within the Granada Avenue right-of-way could remain in their existing locations. The fire backflow and water meter assemblies and the existing 6-inch water main within the property could remain in their existing locations with this layout. Sprinklering of the new building can be achieved by tapping into the fire hydrant assembly line or tapping into the 10-inch water main within Granada Avenue.



## **Sanitary Sewer**

The City of Venice Utility Department provides sanitary sewer service for the parcel via an 8-inch sanitary sewer gravity main running parallel to and within the southerly right-of way of Granada Avenue. A 6-inch sanitary sewer service enters the parcel from the 8-inch sanitary sewer main at the existing fire station drive on Granada Avenue to service the site.

Proposed Site Plan Option 1 and 3 could utilize the existing sanitary service connection that currently services the existing building. This building service connection within the property may need to be relocated to accommodate the new building and could eliminate the need for a new connection to the sewer main within Granada Avenue.

Proposed Site Plan Option 2 could also utilize the existing sanitary service connection that currently services the existing building. This building service connection within the property may need to be relocated to accommodate the new building and could eliminate the need for a new connection to the sewer main within Granada Avenue. Survey data would be required to determine that an adequate slope could be maintained for the service line. In the event adequate slope is not available, a new connection into the sewer main within Granada Avenue would be necessary.

### **Reclaimed Water**

Reclaimed water is not within the vicinity of the subject parcel. The closest connection point is approximately 0.5 miles to the southeast near the intersection of Nokomis Avenue South and Milan Avenue West.

### Wells

No wells are located near the proposed project limits.

### **Electric**

FPL is the electric provider through the area. Perimeter power lines are overhead on utility poles. Power interior to the site is underground and will need to be field verified to determine the exact locations and to determine if relocation of lines may be necessary for any of the Proposed Site Plan Options. The overhead power lines on Avenue Des Parques would need to be relocated underground for Site Plan Option 2 to provide fire truck clearance.

#### Gas

No gas facilities are located near the proposed project limits.

### **Telecommunications**

The current service is provided through "My-Florida-Network" for City Hall and the Fire Station with the main line for the telephone service through AT&T. The Fire Station is connected via a fiber optic line that runs under the parking lot to weight room where the telephone and IT equipment is located.

The telecommunication lines will need to be physically located by the provider to determine if relocation will be necessary for either of the Proposed Site Plan Options.



# V. <u>Stormwater Management System</u>

The following information regarding the stormwater management system is based on discussions with the Southwest Florida Water Management District (SWFWMD), permitted and record drawings from SWFWMD, and recorded permits maintained at the SWFWMD and City of Venice plan rooms. The stormwater drainage exhibit attached in this report provides a graphical representation of the existing stormwater management system within the vicinity of the property.

Two independent stormwater systems exist on the City Hall / Fire Station property. The first system is located within the northeast quadrant of the parcel. The second is located within the southern half of the parcel. Both systems incorporate stormwater ponds, underground piping and inlets throughout the site to provide stormwater attenuation and treatment for the property.

The first system commences within the existing asphalt drive and parking area between the existing fire station and city hall buildings. Stormwater is collected via inlets and routed through concrete piping to the east end of the property. The stormwater is then conveyed via piping to the northeast corner of the parcel to a retention pond. From this pond, the stormwater is routed to the west along the northern property line through a series of two more ponds and piping until eventually discharging into piping located in the Venice Avenue West right-of-way at the northwest corner of the property. This system collects stormwater from most of the northern half of the property including the city hall building structure and parking areas.

The second system commences just north of the existing chiller structure. A retention area collects stormwater from the southern half of the west parking lot and chiller yard area and routes stormwater via piping to a retention pond located at the southeast corner of the parcel. Stormwater then discharges via piping to a stormwater structure located within the Harbor Drive South right-of-way. This system collects stormwater from most of the southern half of the property including the fire station building structure and fire station driveways.

Proposed Site Plan Options 1, 2 and 3 would remove the majority of the exiting stormwater retention at the southern end of the site. Due to the constraints of the improvements, several options were discussed with SWFWMD and the City of Venice regarding replacement of these attenuation and treatment facilities and for providing attenuation and treatment for any increase in impervious area. Possible options include modification of the northern ponds via retaining walls, converting the northern ponds to wet ponds, and the use of underground stormwater chambers or vaults beneath the parking lot areas or a combination of all of these items. A detailed investigation would be required to determine the exact extent of the modifications that would be required for replacement. Per SWFWMD, the City of Venice Watershed Model maps the existing onsite ponds as floodplain. SWFWMD stated that any new design would need to demonstrate the existing storage up to a 100-year storm would be replaced or show now stage increases for the 2-100 year 24-hour storms.



Also included in the discussions with SWFWMD was the additional offsite parking within the streets on Granada Avenue and Avenue Des Parques. This additional impervious area may not require attenuation or treatment if the areas comply with the SWFWMD exemption rules.

# VI. <u>Permitting</u>

Several agencies will be required to redevelop the site for the proposed fire station and parking improvements.

Planning and Zoning, Site and Development, and Building permitting for the parcel falls within the City of Venice jurisdiction. The design and construction will be required to adhere to the planning, engineering, technical, and building standards established by the City of Venice. The procedures for permitting through the City of Venice will need to be discussed with City staff due to the parcel zoning of GU, Governmental Use.

Driveway access to City maintained streets will be permitted through the City of Venice. Granada Avenue, Avenue Des Parques and Venice Avenue West are City of Venice maintained roads.

Driveway access to Sarasota County maintained streets will be permitted through Sarasota County. Harbor Drive South is maintained by Sarasota County. The City of Venice may have agreements with Sarasota County for certain improvements and will need to be discussed with the City of Venice.

The Southwest Florida Water Management District will require a Major Modification ERP for the current associated permit Number 3863.000/001 for the parcel.

New water and sewer or taps and connections to public mains and sewers will require permitting through the City of Venice Utility Department, Florida Department of Environmental Protection and the Department of Health.



# **EXHIBITS**



# EXISTING STORMWATER DRAINAGE EXHIBIT



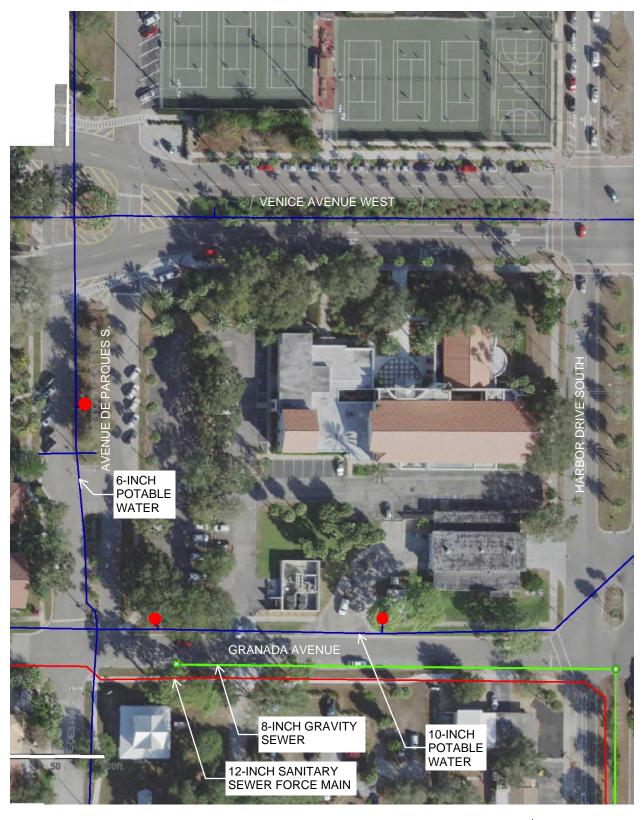


**EXISTING STORMWATER RETENTION POND** 





# EXISTING POTABLE WATER AND SANITARY SEWER EXHIBIT



EXISTING POTABLE WATER

EXISTING SANITARY SEWER GRAVITY MAIN

EXISTING SANITARY SEWER FORCE MAIN

EXISTING FIRE HYDRANT



SWFWMD PRELIMINA	RY MEETING NOTES	

THIS FORM IS INTENDED TO FACILITATE AND GUIDE THE DIALOGUE DURING A PRE-APPLICATION MEETING BY PROVIDING A PARTIAL "PROMPT LIST" OF DISCUSSION SUBJECTS. IT IS NOT A LIST OF REQUIREMENTS FOR SUBMITTAL BY THE APPLICANT.



## SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT RESOURCE REGULATION DIVISION PRE-APPLICATION MEETING NOTES

FILE NUMBER: PA 405420

				I .	
Date:	3-8-2018				
Time:	10:00am				
Project Name:	Venice Fire Station #1				
District Engineer:	Steve Lopes, P.E.				
Attendees:	Gregg Fisher, P.E./Fisher Engineering <u>afisher@fisherengr.com</u>				
	Karl Bernhard, AIA kbernhard@sweetsparkman.com				
County:	Sarasota	Sec/Twp/Rge:	12/39/18		
Total Land Acreage:		Project Acreage:	acres		

### **Prior On-Site/Off-Site Permit Activity:**

403863.000, .001

### **Project Overview:**

• Fire station renovation on existing City of Venice property. New building will replace old building, relocate chiller area. Increase in impervious approximately 6100 SF.

Site Information Discussion: (SHW Levels, Floodplain, Tailwater Conditions, Adjacent Off-Site Contributing Sources, Receiving Waterbody, etc.)

- Document/justify SHWE's at pond locations.
- Two existing ponds within project area (Ponds 4 and 5). Ponds 4 and 5 will need to be relocated/replaced due to site improvements. The permitted treatment area for Ponds 4 and 5 appears to be 1.116 ac (for ½" equates to 0.047 acre-feet treatment volume).
- Due to site constraints, discussed possibility of modifying existing Ponds 1, 2 and 3 to provide additional treatment/attenuation storage volume to compensate for loss of Ponds 4 and 5. Possible modifications discussed included converting Ponds 1, 2 and 3 to wet ponds and/or providing retaining walls to maximize storage.

### Water Quantity Discussions: (Basin Description, Storm Event, Pre/Post Volume, Pre/Post Discharge, etc.)

- Demonstrate that post development peak discharges from proposed project area will not cause an adverse impact for a 25-year, 24-hour storm event.
- Demonstrate that any contributory upgradient offsite runoff is accommodated onsite. Refer to ERP Applicant's Handbook Vol. II Subsection 3.8.
- Demonstrate that the project will not increase flood stages up- or down-stream of the project area(s).
- City of Venice Watershed Model maps the existing onsite ponds as 'floodplain'. Demonstrate the existing storage (up to 100yr) is replaced. Otherwise use model to demonstrate no adverse stage increases for 2.33yr, 10yr, 25yr, 100yr 24-hr storms.

### Water Quality Discussions: (Type of Treatment, Technical Characteristics, Non-presumptive Alternatives, etc.)

 Provide water quality treatment for entire project area and all contributing off-site flows. Refer to Part IV, A.H.V.II.

### Net improvement

- Refer to rule 62-330.301(2), F.A.C.
- WBID 2018B impaired for nutrients. Please verify accuracy of WBID boundaries and status of impairment.
- The application must demonstrate a net improvement for nutrients. Applicant may demonstrate a net improvement for the parameters of concern by performing a pre/post pollutant loading analysis based on existing land use and the proposed land use. Refer to ERP Applicant's Handbook Vol. II Subsection 4.1(g).

**Operation and Maintenance/Legal Information:** (Ownership or Perpetual Control, O&M Entity, O&M Instructions, Homeowner Association Documents, Coastal Zone requirements, etc.)

- The permit must be issued to entity that owns or legally controls the property.
- Provide evidence of ownership or control by deed, easement, contract for purchase, etc.

### **Application Type and Fee Required:**

- For Major Modification of ERP 3863.000/.001: Provide/address Sections A, C, and E of the SWERP Application.
- < 10 acre of project area and no wetland or surface water impacts fee is \$182.00. Online Submittal.</li>
- < 10 acres of project area and < 1 acre of wetland or surface water impacts fee is \$1,092.00. Online Submittal.
- Consult the fee schedule for different thresholds...
- Possible street parking improvements (Granada Avenue) may be included as part of the ERP application, or it may be submitted as a separate permit application or exemption verification. Treatment/attenuation not required if meets Rule 62-330.020(2), F.A.C. criteria.

Other: (Future Pre-Application Meetings, Fast Track, Submittal Date, Construction Start Date, Required District Permits – WUP, WOD, Well Construction, etc.)

- An application for an individual permit to construct or alter a dam, impoundment, reservoir, or appurtenant work, requires that a notice of receipt of the application must be published in a newspaper within the affected area.
   Provide documentation that such noticing has been accomplished. Note that the published notices of receipt for an ERP can be in accordance with the language provided in Rule 40D-1.603(10), F.A.C.
- Provide a copy of the legal description (of all applicable parcels within the project area) in one of the following forms: Deed with complete Legal Description attachment, Plat, Boundary survey of the property(ies) with a sketch.
- The plans and drainage report submitted electronically must include the appropriate information required under Rules 61G15-23.005 and 61G15-23.004 (Digital), F.A.C. The following text is acceptable to the Florida Board of Professional Engineers (FBPE) to meet this requirement and must appear where the signature would normally appear:

ELECTRONIC (Manifest): [Licensee] State of Florida, Professional Engineer, License No. X This item has been electronically signed and sealed by [Licensee, PE] on [DATE] using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies

DIGITAL: [Licensee] State of Florida, Professional Engineer, License No. X; This item has been digitally signed and sealed by [Licensee, PE] on [DATE] using a Digital Signature; Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

• Provide soil erosion and sediment control measures for use during construction. Refer to ERP Applicant's Handbook Vol. 1 Part IV Erosion and Sediment Control.

**Disclaimer:** The District ERP pre-application meeting process is a service made available to the public to assist interested parties in preparing for submittal of a permit application. Information shared at pre-application meetings is superseded by the actual permit application submittal. District permit decisions are based upon information submitted during the application process and Rules in effect at the time the application is complete.

