Additional information for Item 10.A - Continuation of the Update on Highland Beach Fire Rescue Department 02/01/2022 Town Commission Meeting





Town of Highland Beach Fire Station

Commission Update
Prelim Program & Concept Drawings
02-01-2022

Conceptual Approach Options:

Based on the Commissions Comments at the meeting of January 18, 2022, We have updated and addressed as follows:

Vice Mayor Moore:

Liked Option #4 would like to see a 2nd Floor for Admin and E.O.C

Commissioner Shoemaker:

Would like a Fourth truck bay on Option #1, how much would it cost?

Commissioner Gossett-Seidman:

Wants to see pros and cons of option #4

Review of the Approaches by the Fire Services Implementation Committee at their meeting of January 28, 2022:

Reviewed three options including input from the building official

We have updated the presentation to address as follows:





Conceptual Approach Options:

Updates on Option's #1 and #4

Option # 1: Phased 3-Bay Rebuild with Temporary Truck Canopy in Parking Lot

Pros: Consolidates Fire Station at Existing Location

> Two Phase Replacement keeps Firefighters in existing housing Rebuild Station House to Raise floor Above Flood Elevation

> > Uses existing bay for Housing raising floor approx. 1.75 Feet

Totally Hardened and Code Compliant Structure

· Demo Frame roof portion (south end) to allow for higher floor

• 3 new consolidated bays

Need temporary area to house trucks (canopy) Cons:

> Compromise on space to accommodate footprint and existing configuration Building heights vary and fake façade needed to tie buildings together

Option # 1A: Phased 4-Bay Rebuild with Temporary Truck Canopy in Parking Lot

Pros: Same as Option 1

Additional bay for the future

Cons: Need temporary area to house trucks (canopy)

> Compromise on space to accommodate footprint and existing configuration Building heights vary and fake façade needed to tie buildings together

Option # 4: Split Bay Station Temporary Station and Total Build New Two-Story on Existing Site

+++

Pros: Do not have to relocate during construction

Four-bay station

Can be Built without interfering with Existing Station

Fire Admin on 2nd Floor and EOC identified as adding (\$5,000,007 + \$250,000)

Cons:

Minimal Change to Existing

Station House below Flood Elevation (potential code violation/raise floor/flood proofing)

Non-Hardened Facility

One Bunk Room Has to be Added after Completion (5) in Existing

ADA non-compliant restrooms (potential code violation)

Split Bays Require Duplication of Elements for Fire and Rescue

Bunker Gear Room **Decontamination Room**

Less space

One less bunk room (only 5) limits future growth Smaller gym (hard to share with PD (77 sf less)

Smaller dayroom/kitchen area (382 sf)

Estimated Construction Cost \$5,335,457*

Estimated Construction Cost \$6,196,757*

Estimated Construction Cost \$5,250,007*

Unknown Cost: Floodproofing

Hurricane Hardening

ADA Improvements





Estimated Cost include CM @ Risk hard cost and Overhead and Profit. Design fees are not included in the estimate.

+++ Does not include Floodproofing or ADA improvements Cost or Temporary Facilities

Conceptual Approach Option Design & Construction Schedule Comparisons:

PLA	NNING	DESIGN	DOCUMENTS		CONSTRUCTION	
Option 	Program Site Concepts Dec 21	Schematic Design Feb 14		Construction Phase One (Renovate Existing 2-Bays to Housing) Ct Oct -Feb	Construction Phase Two (New 2-Story Addition 3 Bays) Feb 1-Jan 30	Final Complete Mar I
	2021	2022		2	2023	
Option	Program Site Concepts Dec 21	Schematic Design Feb 14		Construction Phase One (Renovate Existing 2-Bays to Housing) Oct 1 Oct 1-Feb 1	Construction Phase Two (New 2-Story Addition 4 Bays) Feb 1-Feb 28	Final Complete Apr I
	2021	2022		2	2023	
Option 4	Program Site Concepts Dec 21	Schematic Design Feb 14	7	Construction Phase One (New 2-Story Addition 2 Bays) Oct 1-Oct 1	(Renovate & H Oct	ion Phase Two Existing 2-Bays ousing) I-Apr I Try Facilities? Final Complete May I
	2021	2022		2	2023	



Option # 1: Phased Rebuild with Temporary Station

Phase One

- Covert 2-Bays to Housing

- Maintain Existing Housing

- Temporary 2-Bay Canopy for Trucks

Phase Two

- Move Into New Housing (2-Bay)

- Demo Existing Housing

- Build Two Story 3-Bay Addition

Estimated Square Footage

Fire Station Renovate Existing 2 bays 1,960 GSF

Fire Station Two-Story Addition 8,769 GSF

Total GSF 10,720 GSF

Estimated Construction Cost

Addition: 8,769 GSF @ \$450/SF \$3,946,050

Renovation: 1,960 GSF @ \$350/SF \$ 686,000

Sitework/Utilities: \$ 603,407

Temp Station Canopy (leased): \$ 100,000

Total Estimated Cost: \$5,335,457



Apparatus Area

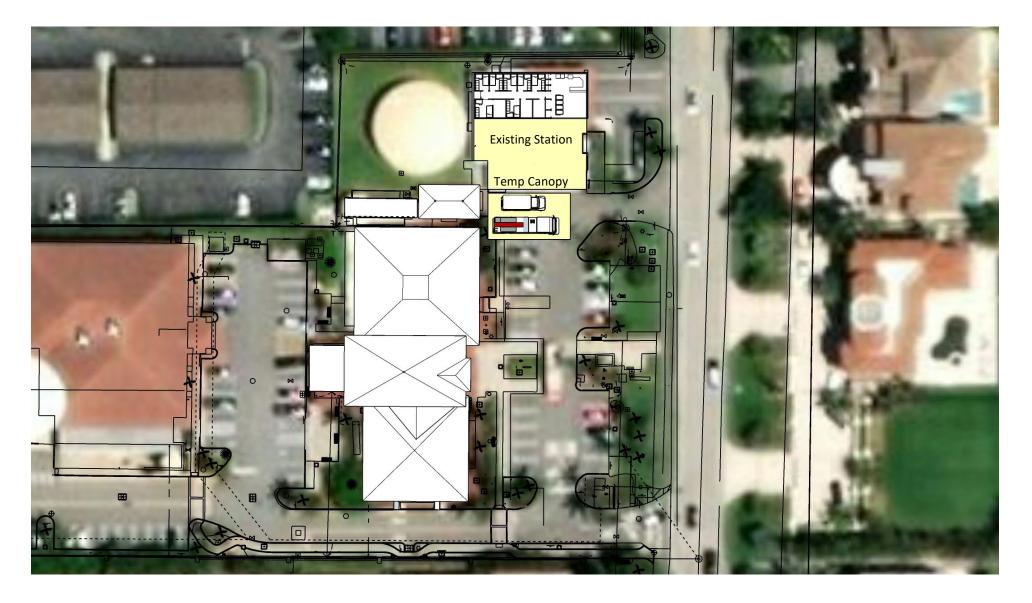
Living Quarters

Fire Administration

Hose Storage	SPACE	# Spaces	NSF	Total NSF
Appartaus Bays (3 Bay) 1 2822 28 Hose Storage 1 64 SCBA Work Area 1 90 Decontamination 1 100 Bunker Gear 1 142 Shop/ Storage 1 0 Electrical/Generator (Exterior) 1 250 Medical Storage 1 100 Ice 1 64 Stair 2 248 Living Quarters (One Story) Kitchen/ Dining/Dayroom 1 832 Pantry 3 6 Bunk Room 6 80 Captain Bunk 1 132 Restroom/Shower 3 64 Laundry 1 18 Janitor/Storage 1 12 Mechanical/Electrical 1 168 Fire Administration (2nd Floor) Lobby/ Reception 212 Elevator 80 Public Restrooms/Showers 180 Janitor 64 Office 2 155 Chief's Office/Conference 1 369 Copen Office 4 36 Conference Room 1 155 Gym 1 335 E.O.C. 1 500 Break Area 1 52 I.T. 1 40 Stair 2 248 Mechanical/Electrical 1 182 Total Net 99				
Hose Storage	•			6
SCBA Work Area 1 90 Decontamination 1 100 Bunker Gear 1 142 Shop/ Storage 1 0 Electrical/Generator (Exterior) 1 250 Medical Storage 1 100 Ice 1 64 Stair 2 248 Living Quarters (One Story) 6 4 Kitchen/ Dining/Dayroom 1 832 8 Pantry 3 6 80 4 Captain Bunk 1 132 8 Restroom/Shower 3 64 1 Laundry 1 18 1 Janitor/Storage 1 12 1 Mechanical/Electrical 1 168 1 Fire Administration (2nd Floor) 1 1 168 1 Fire Administration (2nd Floor) 2 1 1 1 Lobby/ Reception 2 1 5 3 1 Elevator 80 1 3 3 3 3 <td></td> <td></td> <td></td> <td>282</td>				282
Decontamination 1 100 Bunker Gear 1 142 Shop/ Storage 1 0 Electrical/Generator (Exterior) 1 250 Medical Storage 1 100 Ice 1 64 Stair 2 248 Living Quarters (One Story) 4 Kitchen/ Dining/Dayroom 1 832 Pantry 3 6 Bunk Room 6 80 4 Captain Bunk 1 132 1 Restroom/Shower 3 64 1 Laundry 1 18 1 Janitor/Storage 1 12 1 Mechanical/Electrical 1 168 1 Fire Administration (2nd Floor) 1 1 1 Lobby/ Reception 212 2 2 Elevator 80 1 1 Public Restrooms/Showers 180 3 Janitor 64				64
Bunker Gear 1 142 Shop/ Storage 1 0 Electrical/Generator (Exterior) 1 250 Medical Storage 1 100 Ice 1 64 Stair 2 248 Living Quarters (One Story) 4 Kitchen/ Dining/Dayroom 1 832 Pantry 3 6 Bunk Room 6 80 4 Captain Bunk 1 132 Restroom/Shower 3 64 1 Laundry 1 18 18 Janitor/Storage 1 12 168 Mechanical/Electrical 1 168 168 Fire Administration (2nd Floor) 212 2 2 Lobby/ Reception 212 2 2 Elevator 80 80 80 Public Restrooms/Showers 180 369 3 Janitor 64 4 36 3 Chief's Office/Conference 1 369 3 Open Office				90
Shop/ Storage 1 0 Electrical/Generator (Exterior) 1 250 Medical Storage 1 100 Ice 1 64 Stair 2 248 Elving Quarters (One Story) 6 Kitchen/ Dining/Dayroom 1 832 Pantry 3 6 Bunk Room 6 80 Captain Bunk 1 132 Restroom/Shower 3 64 Laundry 1 18 Janitor/Storage 1 12 Mechanical/Electrical 1 168 Fire Administration (2nd Floor) 2 Lobby/ Reception 212 2 Elevator 80 80 Public Restrooms/Showers 180 30 Janitor 64 36 Office 2 155 Chief's Office/Conference 1 369 Open Office 4 36 Conference Room 1 155 Gym 1 335 E.O.C. <td></td> <td></td> <td>100</td> <td>100</td>			100	100
Electrical/Generator (Exterior) 1 250 25	Bunker Gear	1	142	143
Medical Storage 1 100 1 Ice 1 64 1 64 Stair 2 248 4 Stair 2 248 4 Stair 2 248 4 Living Quarters (One Story) 8 2 3 Kitchen/ Dining/Dayroom 1 832 3 Pantry 3 6 80 4 Captain Bunk 1 132 3 Restroom/Shower 3 64 4 3 Laundry 1 18 3 Janitor/Storage 1 12 4 Mechanical/Electrical 1 168 3 Fire Administration (2nd Floor) 2 12 2 Lobby/ Reception 212 2 2 Elevator 80 80 80 Public Restrooms/Showers 180 3 Janitor 64 4 4 Office 2 155 3 Chief's Office/Conference 1 369 <td></td> <td>1</td> <td>0</td> <td>(</td>		1	0	(
Color	Electrical/Generator (Exterior)	1	250	250
Stair 2 248 4 Living Quarters (One Story) Kitchen/ Dining/Dayroom 1 832 3 Pantry 3 6 80 4 Bunk Room 6 80 4 Captain Bunk 1 132 3 64 1 Restroom/Shower 3 64 1 18 1 132 1 18 1 132 1 1 18 1 132 1 1 18 1 132 1 1 18 1 132 1 1 1 18 1 1 1 1 18 1	Medical Storage	1	100	100
Living Quarters (One Story) 832 8 Kitchen/ Dining/Dayroom 1 832 8 Pantry 3 6 80 4 Bunk Room 6 80 4 Captain Bunk 1 132 3 64 1 Restroom/Shower 3 64 1 18 3 3 64 1 1 18 3 3 64 1 1 18 3 3 64 1 1 18 3 3 64 1 1 18 3 3 64 1 1 18 3 3 64 1 1 18 3 3 1 1 1 18 3 3 1 3 1 3 3 3 1 3	Ice	1	64	64
Kitchen/ Dining/Dayroom 1 832 8 Pantry 3 6 80 4 Bunk Room 6 80 4 Captain Bunk 1 132 3 64 3 Laundry 1 18 3 3 64 3 3 64 3 3 3 64 3 3 3 3 64 3 3 3 64 3 3 3 64 3 3 3 64 3<	Stair	2	248	49
Pantry 3 6 Bunk Room 6 80 Captain Bunk 1 132 Restroom/Shower 3 64 Laundry 1 18 Janitor/Storage 1 12 Mechanical/Electrical 1 168 Fire Administration (2nd Floor) Lobby/ Reception 212 3 Elevator 80 80 Public Restrooms/Showers 180 3 Janitor 64 4 Office 2 155 Chief's Office/Conference 1 369 Open Office 4 36 Conference Room 1 155 Gym 1 335 E.O.C. 1 500 Break Area 1 52 I.T. 1 40 Stair 2 248 Mechanical/Electrical 1 182	Living Quarters (One Story)			
Bunk Room 6 80 4 Captain Bunk 1 132 3 Restroom/Shower 3 64 3 Laundry 1 18 3 Janitor/Storage 1 12 Mechanical/Electrical 1 168 Fire Administration (2nd Floor) Lobby/ Reception 212 3 Elevator 80 80 Public Restrooms/Showers 180 3 Janitor 64 4 Office 2 155 Chief's Office/Conference 1 369 Open Office 4 36 Conference Room 1 155 Gym 1 335 3 E.O.C. 1 500 9 Break Area 1 52 I.T. 1 40 Stair 2 248 4 Mechanical/Electrical 1 182 Total Net 9	Kitchen/ Dining/Dayroom	1	832	83
Captain Bunk 1 132 Restroom/Shower 3 64 Laundry 1 18 Janitor/Storage 1 12 Mechanical/Electrical 1 168 Fire Administration (2nd Floor) Lobby/ Reception 212 2 Elevator 80 80 Public Restrooms/Showers 180 3 Janitor 64 4 Office 2 155 3 Chief's Office/Conference 1 369 3 Open Office 4 36 36 Conference Room 1 155 3 Gym 1 335 3 E.O.C. 1 500 9 Break Area 1 52 I.T. 1 40 Stair 2 248 4 Mechanical/Electrical 1 182 Total Net 9:	Pantry	3	6	18
Restroom/Shower 3 64 Laundry 1 18 Janitor/Storage 1 12 Mechanical/Electrical 1 168 Fire Administration (2nd Floor) Lobby/ Reception 212 Elevator 80 Public Restrooms/Showers 180 Janitor 64 Office 2 155 Chief's Office/Conference 1 369 Open Office 4 36 Conference Room 1 155 Gym 1 335 E.O.C. 1 500 Break Area 1 52 I.T. 1 40 Stair 2 248 Mechanical/Electrical 1 182	Bunk Room	6	80	480
Laundry 1 18 Janitor/Storage 1 12 Mechanical/Electrical 1 168 Fire Administration (2nd Floor) Lobby/ Reception 212 Elevator 80 Public Restrooms/Showers 180 Janitor 64 Office 2 Chief's Office/Conference 1 Open Office 4 Conference Room 1 Gym 1 E.O.C. 1 Break Area 1 I.T. 1 Stair 2 Mechanical/Electrical 1 Total Net 9:	Captain Bunk	1	132	13:
Janitor/Storage	Restroom/Shower	3	64	19:
Mechanical/Electrical 1 168 Fire Administration (2nd Floor) Lobby/ Reception 212 2 Elevator 80 80 Public Restrooms/Showers 180 3 Janitor 64 64 Office 2 155 3 Chief's Office/Conference 1 369 369 Open Office 4 36 36 Conference Room 1 155 335 E.O.C. 1 500 9 Break Area 1 52 1 I.T. 1 40 40 Stair 2 248 4 Mechanical/Electrical 1 182 4 Total Net 9: 9: 9:	Laundry	1	18	18
Fire Administration (2nd Floor) Lobby/ Reception 212 Elevator 80 Public Restrooms/Showers 180 Janitor 64 Office 2 155 Chief's Office/Conference 1 369 Open Office 4 36 Conference Room 1 155 Gym 1 335 E.O.C. 1 500 Break Area 1 52 I.T. 1 40 Stair 2 248 Mechanical/Electrical 1 182	Janitor/Storage	1	12	1:
Lobby/ Reception 212 Elevator 80 Public Restrooms/Showers 180 Janitor 64 Office 2 Chief's Office/Conference 1 Open Office 4 Conference Room 1 Gym 1 E.O.C. 1 Break Area 1 I.T. 1 Stair 2 Mechanical/Electrical 1 Total Net 9:	Mechanical/Electrical	1	168	16
Lobby/ Reception 212 Elevator 80 Public Restrooms/Showers 180 Janitor 64 Office 2 Chief's Office/Conference 1 Open Office 4 Conference Room 1 Gym 1 E.O.C. 1 Break Area 1 I.T. 1 Stair 2 Mechanical/Electrical 1 Total Net 9:	Fire Administration (2nd Floor)			
Public Restrooms/Showers 180 Janitor 64 Office 2 155 Chief's Office/Conference 1 369 Open Office 4 36 Conference Room 1 155 Gym 1 335 E.O.C. 1 500 Break Area 1 52 I.T. 1 40 Stair 2 248 Mechanical/Electrical 1 182 Total Net 9:			212	21
Janitor 64 Office 2 155 3 Chief's Office/Conference 1 369 3 Open Office 4 36 36 Conference Room 1 155 335 3 E.O.C. 1 500 9 Break Area 1 52 1 I.T. 1 40 40 Stair 2 248 4 Mechanical/Electrical 1 182 3 Total Net 9:	Elevator		80	80
Office 2 155 369 Chief's Office/Conference 1 369 369 Open Office 4 36 36 Conference Room 1 155 335 35 E.O.C. 1 500 5 Break Area 1 52 50 I.T. 1 40 40 Stair 2 248 4 Mechanical/Electrical 1 182 32 Total Net 99	Public Restrooms/Showers		180	180
Chief's Office/Conference 1 369 36 Open Office 4 36 36 Conference Room 1 155 335 Gym 1 335 35 E.O.C. 1 500 5 Break Area 1 52 I.T. 1 40 Stair 2 248 4 Mechanical/Electrical 1 182 3 Total Net 99	Janitor		64	64
Open Office 4 36 36 Conference Room 1 155 35 Gym 1 335 35 E.O.C. 1 500 9 Break Area 1 52 I.T. 1 40 Stair 2 248 4 Mechanical/Electrical 1 182 3 Total Net 99 99 99 99	Office	2	155	310
Conference Room 1 155 3 Gym 1 335 3 E.O.C. 1 500 9 Break Area 1 52 I.T. 1 40 Stair 2 248 4 Mechanical/Electrical 1 182 3 Total Net 9	Chief's Office/Conference	1	369	369
Gym 1 335 3 E.O.C. 1 500 9 Break Area 1 52 I.T. 1 40 Stair 2 248 4 Mechanical/Electrical 1 182 3 Total Net 93	Open Office	4	36	14
E.O.C. 1 500 9 Break Area 1 52 I.T. 1 40 Stair 2 248 4 Mechanical/Electrical 1 182 Total Net 99	Conference Room	1	155	15
Break Area 1 52 I.T. 1 40 Stair 2 248 Mechanical/Electrical 1 182 Total Net 9:	Gym	1	335	33
I.T. 1 40 Stair 2 248 4 Mechanical/Electrical 1 182 3 Total Net 9:	E.O.C.	1	500	500
Stair 2 248 4 Mechanical/Electrical 1 182 3 Total Net 93	Break Area	1	52	5:
Stair 2 248 4 Mechanical/Electrical 1 182 3 Total Net 93	I.T.	1	40	40
Total Net 9:	Stair	2		49
	Mechanical/Electrical	1	182	183
	Total Net			916
				155
Total GSF 103	Total GSF			1072

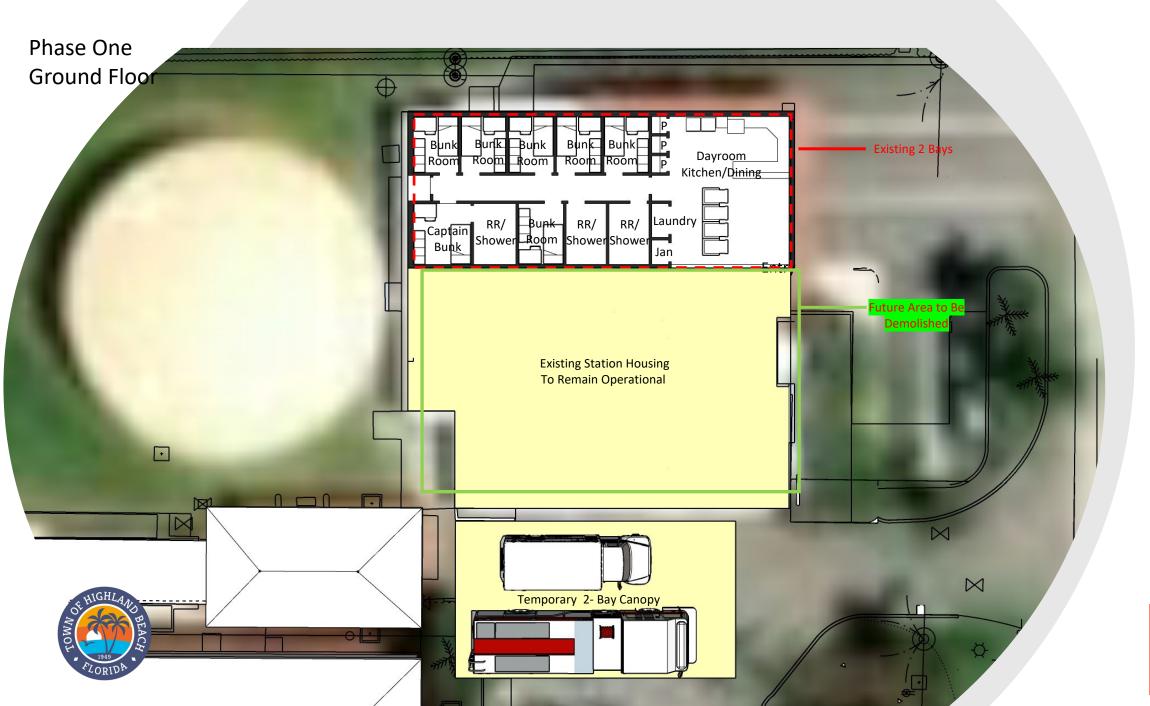


Site Plan

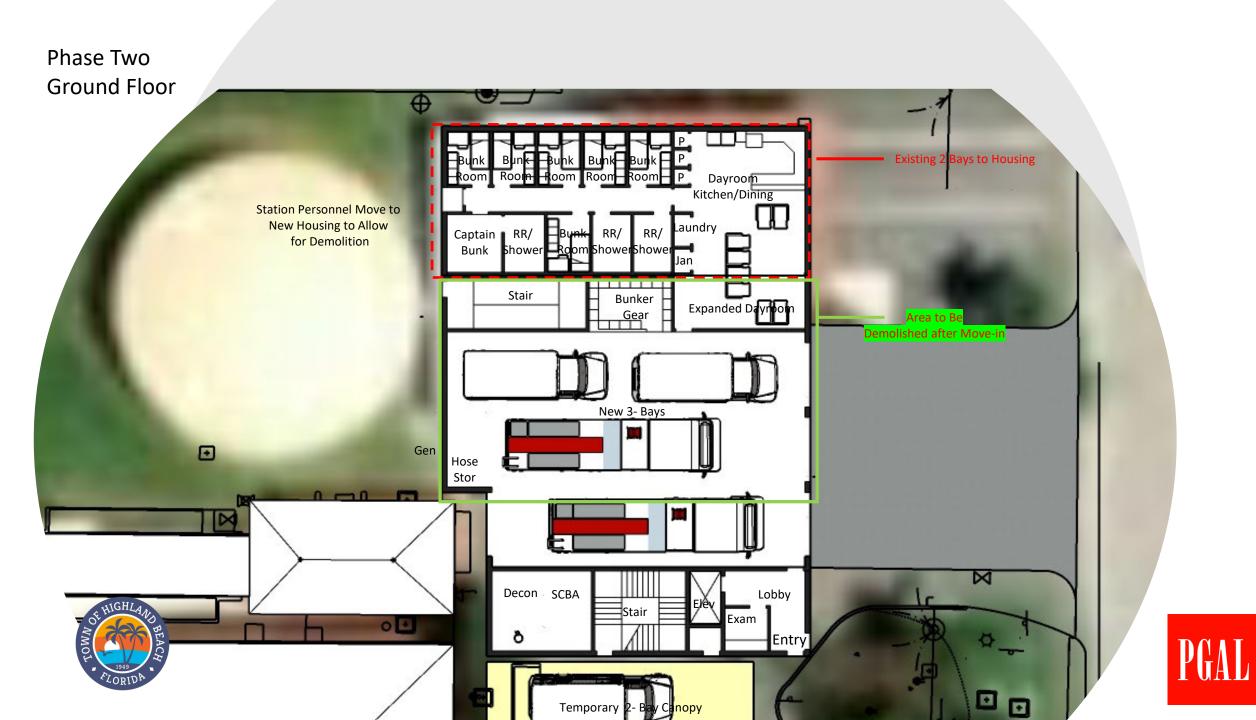


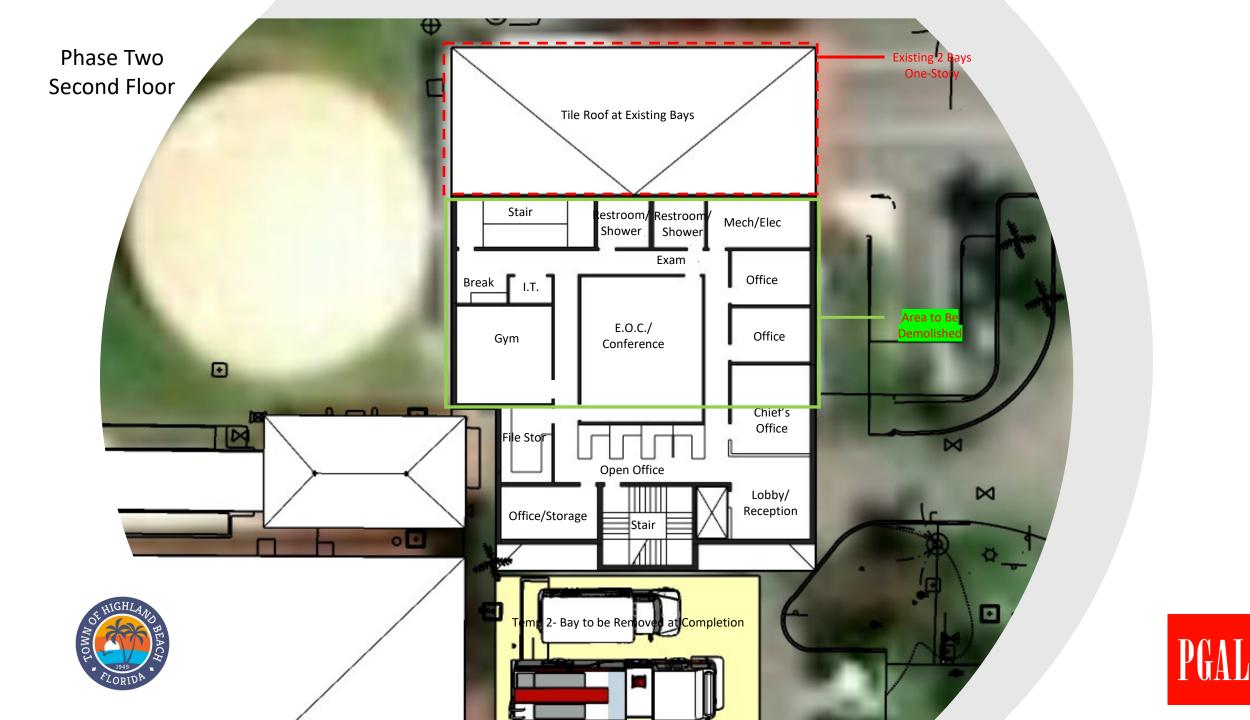














Option # 1a: Phased Rebuild with Temporary Station with 4th Bay

Phase One

- Covert 2-Bays to Housing

- Maintain Existing Housing

- Temporary 2-Bay Canopy for Trucks

Phase Two

- Move Into New Housing (2-Bay)

- Demo Existing Housing

- Build Two Story 4-Bay Addition

Estimated Square Footage

Fire Station Renovate Existing 2 bays 1,960 GSF

Fire Station Two-Story Addition 10,683 GSF

Total GSF 12,643 GSF

Estimated Construction Cost

Addition: 10,683 GSF @ \$450/SF \$4,807,350

Renovation: 1,960 GSF @ \$350/SF \$ 686,000

Sitework/Utilities: \$ 603,407

Temp Station Canopy (leased): \$ 100,000

Total Estimated Cost: \$6,196,757



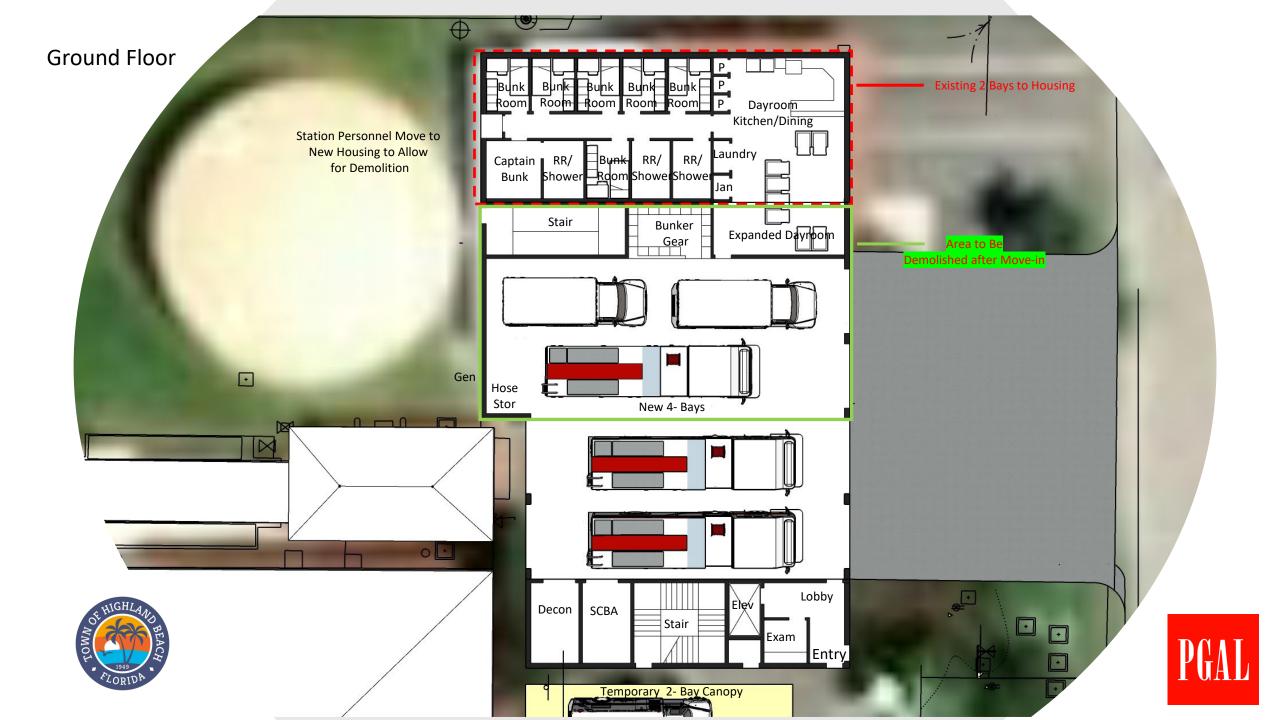
Apparatus Area

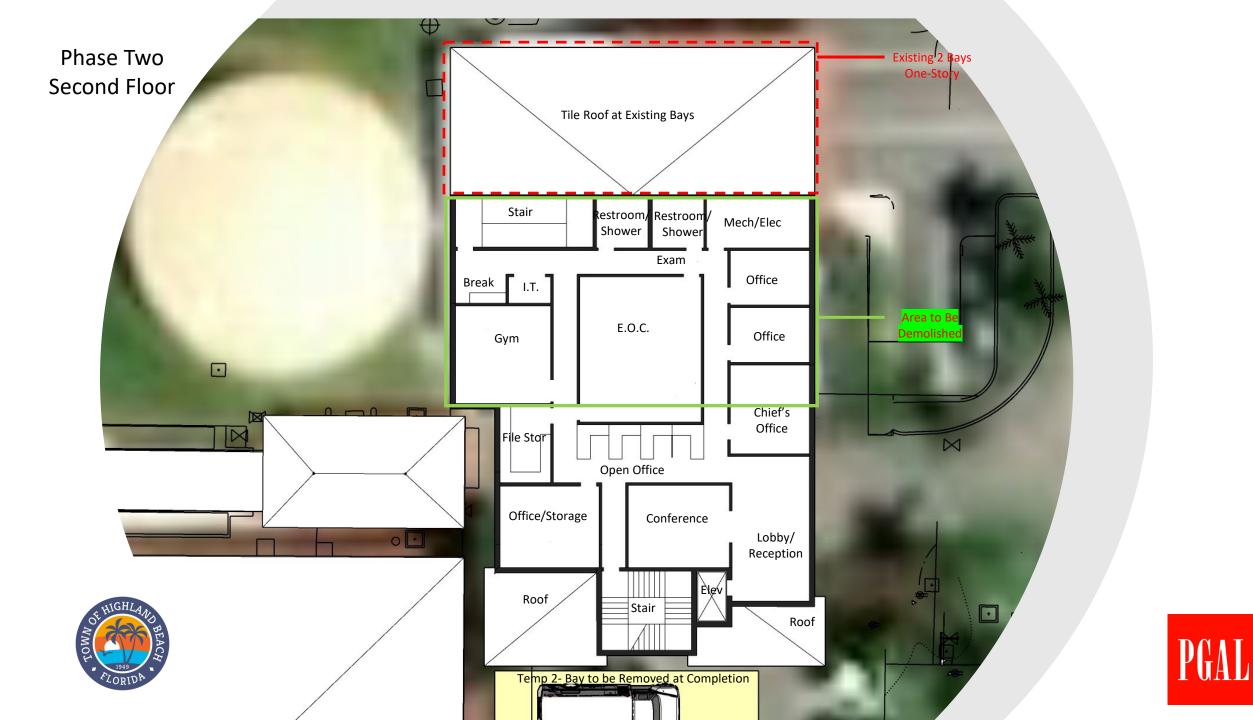
Living Quarters

Fire Administration

SPACE	# Spaces	NSF	Total NSF
Elevator Lobby	1	165	165
Elevator	1	80	80
Appartaus Bays (4 Bay)	1	3700	3700
Hose Storage	1	64	64
SCBA Work Area	1	138	138
Decontamination	1	138	138
Bunker Gear	1	150	150
Shop/ Storage	1	0	0
Electrical/Generator (Exterior)	1	250	250
Medical Storage	1	100	100
Exam	1	64	64
Ice	1	64	64
Stair	2	248	496
Living Quarters (One Story)			
Kitchen/ Dining/Dayroom	1	832	832
Pantry	3	6	18
Bunk Room	6	80	480
Captain Bunk	1	132	132
Restroom/Shower	3	64	192
Laundry	1	18	18
Janitor/Storage	1	12	12
Mechanical/Electrical	1	168	168
Fire Administration (2nd Floor)			
Lobby/ Reception		212	212
Elevator		80	80
Public Restrooms/Showers		180	180
Janitor		64	64
Office	2	155	310
Chief's Office/Conference	1	369	369
Open Office	4	36	144
Conference Room	1	298	298
Gym	1	335	335
E.O.C.	1	632	632
Break Area	1	52	52
I.T.	1	40	40
Office/Storage	1	288	288
File Storage	1	138	138
Stair	2	248	496
Mechanical/Electrical	1	182	182
Total Net			11081
Net to Gross			1562
			12643









Option # 4: Provide a Two-Story 2-Bay Addition on South Side of Existing and Minor Cosmetic Renovations to Existing

Estimated Square Footage

Existing Fire Station Renovation	4,726 GSF
Addition 2 Bay	4,360 GSF
Second Floor Admin (above new bays)	4,360 GSF
Total GSF	9,086 GSF

Estimated Construction Cost

Addition:	8,720 sf @ \$450/SF	\$3,924,000

Renovation: 4726 sf @ \$100/SF \$ 472,600

Cosmetic changes and reroof existing \$ 250,000

Site/Utilities: \$ 603,407

Total Estimated Cost \$5,250,007

Additional Cost to be considered:

Floodproofing ADA Improvements Hardening of Roof Temporary Facilities



xisting Fire Station Ground Floor

New Addition Ground Floor

SPACE	# Spaces	NSF	Total NSF	
Podesto -				
Existing	1	1540	1540	
Rescue Bays (2 Bay)	1		1548	
Laundry	1		86	
Janitorial	1		36	
Decontamination	1		86	
Bunker Gear	1		142	
Shop/ Storage	1	200	200	
Electrical/Generator	1	250	250	
Lobby	1		36	
Watch Room	1		120	
Medical Storage	1	51	51	
Conference Room	1		136	
Exam	1		75	
Kitchen/ Dining/Dayroom**	1	450	450	
Ice	1	0	0	
Pantry	3	4	12	
I.T. Server	1	45	45	
Custodial	1	36	36	
Captain's Office	1	98	98	
New Bunk Room (from gym)	1	64	64	
Bunk Room	4	67	268	
Captain Bunk	1	132	132	
Captain Restroom/Shower*	1	64	192	
Restroom/Shower*	2	312	312	
New Storage (from gym)	1	80	80	
Mechanical	1	0	0	
Subtotal			4455	
Net to Gross				
Total Existing GSF			4726	
New Construction				
Ground Floor				
Apparatus Bays (2 Bay)	1	2312	2312	
Hose Storage	1	64	64	
SCBA Work Area	1		100	
Decon	1	172	172	
Gym	1	258	258	
New Bunker Gear	1	158	158	
Lobby	1	150	150	
Mechanical	1	200	100	
Total Net			3214	
Net to Gross			1146	
Total GSF New Building			4360	
Total GSF New and Existing			9086	
* Restroom Need ADA Upgrades				
** Relocate Gym for added Bunk	Room and A	dded Davro	om Space	







