

FILED

Department of Business and Professional Regulation

Senior Deputy Agency Clerk

CLERK: Brandon Nichols

Date: 8/9/2023

File #:

GEORGE MERLIN ASSOCIATES INC
ARCHITECTURE • INTERIOR DESIGN7729 Holiday Drive, Snug Harbor Village
George Merlin Architect #AR10623

Sarasota, FL 34231

ph: 941 923 8868 fax 941 923-9148
Corporation #AA002459e-mail: gmerlin@merlinarchitecture.com

06/29/2023 (Amended)

Florida Building Commission
Florida Department of Business & Professional Regulation
Building Codes and Standards
1940 North Monroe Street
Tallahassee, FL 32399Attn: Mo.Madani@myfloridalicense.com c/o Office of Codes and Standards, Florida Department of Professional Regulation
Phone: 850-717-1825Re: Petition for clarification and declaratory statement before the Florida Building Commission
Petitioner: George Merlin Associates, Inc. c/o George Merlin, president.
GMAI File# 21-10**DS 2023-035**

Dear Mr. Madani:

This petition is to request clarification of Florida Building Code sections R322 and 3109 regarding the definition and height location of design flood elevation (DFE), and of allowed uses below the DFE.

Background:

I'm a Florida licensed architect. I'm currently designing a new oceanfront single family residence on Casey Key, Nokomis Florida. This residence will be in multiple flood zones, FEMA A flood zone and also in the FDEP Coastal construction control line (CCCL) zone. The property has existing hardened shoreline protection along the gulf front with access stair down to the beach and mean high water line area. The existing ground level elevation at the new residence location is approximately +10 ft. NAVD. The new residence will be piling supported and have ground level parking, storage and vertical building access at elevation +11.0 NAVD and with two story elevated living area above the ground level space. Attached is a land survey and proposed ground level plan and cross section drawings which depict this information. My inquiry is about determining the elevation height level of the design flood elevation (DFE) and about other uses being allowed besides parking, storage and building access at the ground level, specifically a pool bath and snack bar.

While designing this home I've reviewed the current 2020 Florida Building Code (FBC) section R322, section 3109 and ASCE-24 referred to in the FBC, as follows:

Per R322.1, Table R301.2 (1), and R322.1.4, local government has legally adopted the Florida Building Code and also entered the NFIP and has adopted FEMA FIRM flood hazard maps.

Accordingly and per R322.1.4, the DFE is, at a minimum, the base elevation that has a 1 percent change of being equaled in any given year (100 year flood) or elevation of the design flood associated with the area designated on a flood hazard map adopted by the community. According to the FEMA FIRM map for the area where this home will be built, the base flood elevation (BFE), is +10.0 ft. NAVD.

Per R322.2.1, the lowest floor must be elevated to the BFE + 1 ft. = 11.0 ft, NAVD or DFE whichever is higher. It appears the DFE is +11.0 ft. NAVD.

Also, per R322.1.1 using alternative provision ASCE 24, section 1.2 defines the DFE as the elevation of the design flood specified on the community's flood hazard map. Using ASCE-24 then yields the same result as using R322 to determine the DFE.

However, since this residence will also be in the CCCL zone, FBC R322. 1.11 refers to FBC 3109 for additional requirements, including further elevation requirements, and the more restrictive provisions shall govern.

The FDEP 100 year storm elevation referred to in FBC 3109.2 and as determined by FDEP's report "100 year storm elevation requirements for habitable structures located seaward of the CCCL" for this area is +18.3 NAVD.

Per FBC 3109.3, the bottom of the lowest horizontal structural member of the lowest floor of this building must therefore be designed to

meet this higher and more restrictive elevation requirement, which is +18.3 NAVD.

But, is this +18.3 NAVD elevation the DFE or a separate additional requirement beyond the DFE?

Conflict / Issue:

FBC 3109.3.4.5.a. states that in FEMA V and A zones, enclosures below the elevation specified in ASCE 24 shall be used solely for vehicle parking, building access or storage.

FBC 3109.3.4.5.b. states that enclosures above the elevation specified in ASCE 24 and below the FDEP 100 year storm elevation shall be limited to the allowed uses noted in FBC 3109.2. These allowed uses exceed the limited uses of parking, access and storage.

Therefore, I reason that since a distinction is made between the elevation specified in ASCE 24 and the 100 year storm elevation specified by FDEP, the elevation specified in ASCE 24 is determined differently than the elevation specified by FDEP.

I further reason that since R322.2.2 states that enclosed areas below the design flood elevation (DFE) be used solely for parking of vehicles, building access or storage, and FBC 3109.2 allows other uses beyond those limitations, I conclude that the FDEP elevation must not be the DFE, but some other higher elevation requirement based on FDEP's separate methodology, as distinguished from ASCE FEMA FIRM map methodology. Otherwise, if the required FDEP elevation were the DFE, then FBC and FBCR would be contradicting themselves by allowing the uses stated in FBC 3109.2 when FBC R322.2.2 expressly prohibits them.

I also reason that since the allowed uses listed in FBC 3109.2 include small mechanical and electrical rooms, snack bar, bathrooms and recreation use such as gym and card room, these must all be considered non-habitable uses and/or structures, since they are allowed below the required FDEP elevation and that elevation applies to all structures that are habitable.

Questions for Florida Building Commission Declaratory Action:

Question 1:

My inquiry is whether the design flood elevation (DFE) for this project is the +11.0 NAVD elevation based on ASCE-24 / FEMA FIRM maps or the higher +18.3 elevation based on FDEP's 100 year storm elevation referenced in FBC 3109.2.

Since the building must be designed to meet FDEP requirements, which are more restrictive as to elevation requirements but less restrictive as to allowed uses below their required elevation and contradicts allowed uses below the DFE per R322.2.2, I reason that the DFE must not be the separate FDEP elevation requirement.

Is the DFE based on ASCE / FEMA FIRM maps and NOT based on FDEP's 100 year storm elevation?

Please answer yes or no.

Is the DFE based on the higher FDEP elevation?

Please answer yes or no.

If yes, then please explain how the allowed uses noted in FBC 3109.2 are acceptable below that elevation when FBC R322.2 expressly prohibits them below the DFE?

Question 2:

-Does the FBC allow an enclosed bathroom and snack bar to be provided at the ground level of this residence, if the bathroom and snack bar are above the +11.0 ASCE / FEMA FIRM map elevation and below the +18.3 NAVD FDEP elevation and their enclosure walls are breakaway with fixtures and utilities not attached to any breakaway walls?

Please answer Yes or No.

Question 3:

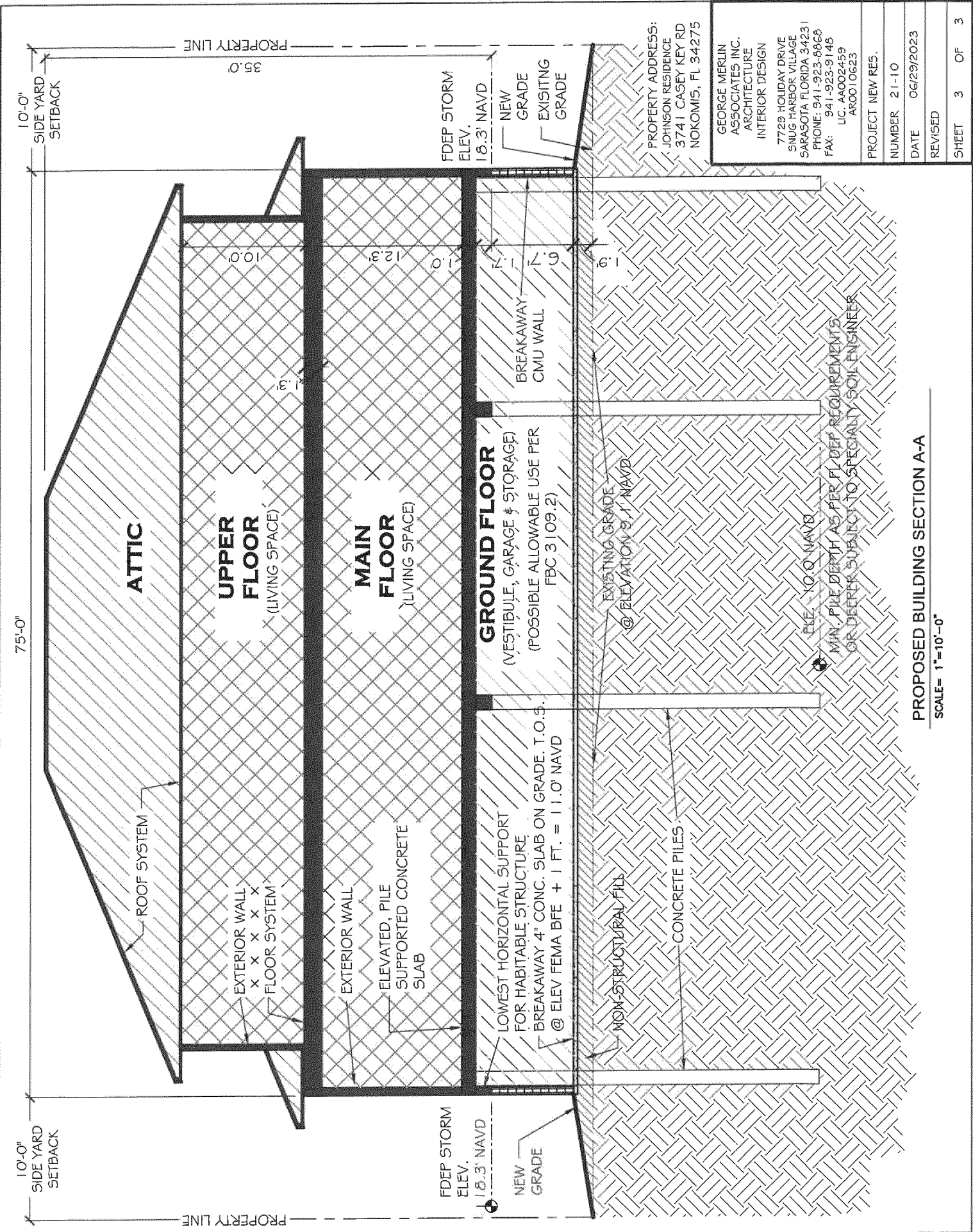
-Are the pool bath and snack bar enclosures described above considered a non-habitable use and / or non-habitable structure?

Please answer yes or no.

Respectfully

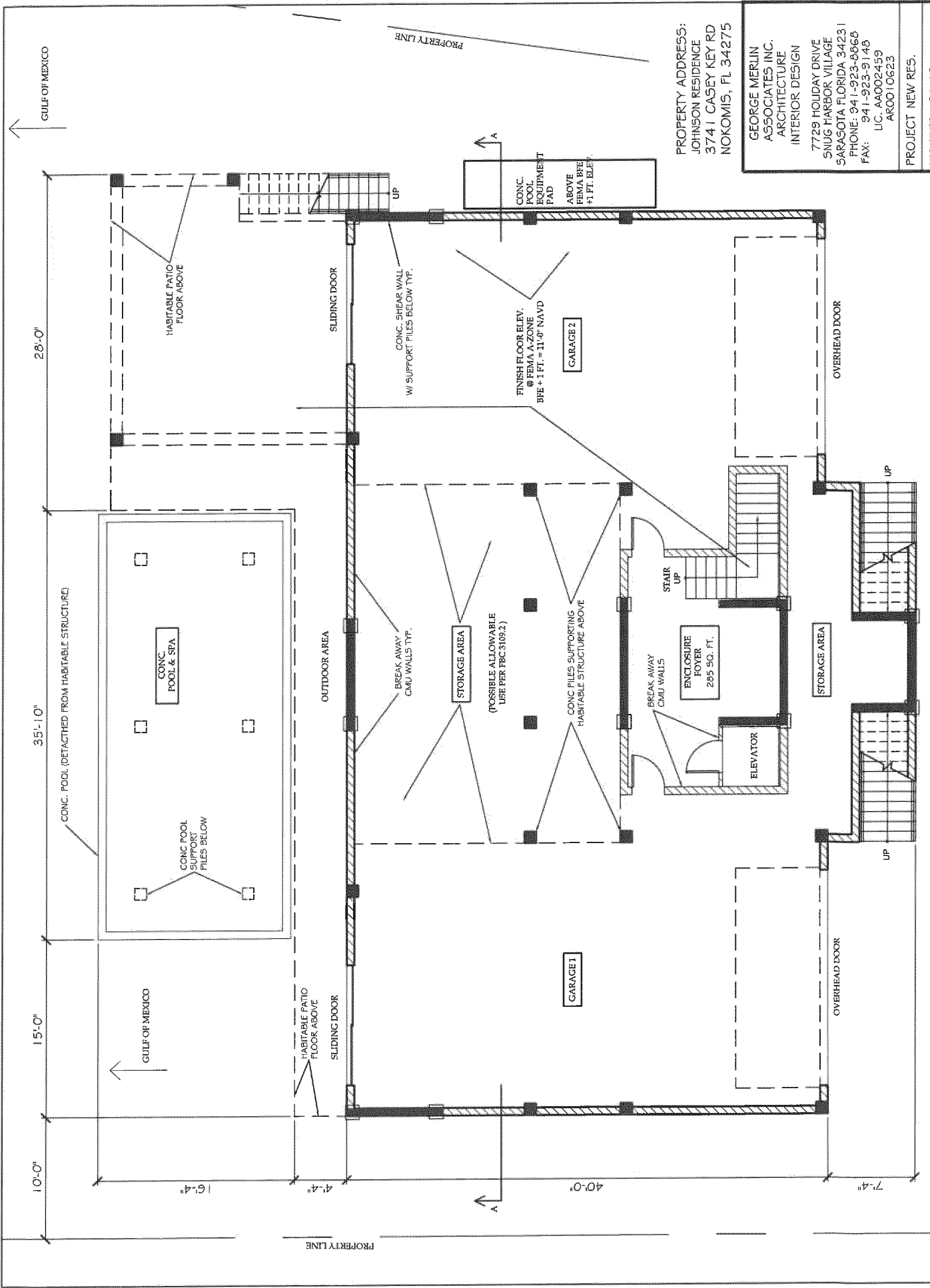
George Merlin

George Merlin, president



PROPOSED BUILDING SECTION A-A

SCALE= 1"=10'-0"



GULF OF MEXICO

28'-0"

35'-1 0"

15'-0"

10'-0"

CONC. POOL (DETACHED FROM HABITABLE STRUCTURE)

CONC. POOL & SPA

CONC. POOL SUPPORT PILES BELOW

HABITABLE PATIO FLOOR ABOVE

SLIDING DOOR

OUTDOOR AREA

HABITABLE PATIO FLOOR ABOVE

PROPERTY LINE

CONC. SHEAR WALL W/ SUPPORT PILES BELOW TYP.

STORAGE AREA (POSSIBLE ALLOWABLE USE PER FBC 31.09.2)

CONC. FILES SUPPORTING HABITABLE STRUCTURE ABOVE

GARAGE1

BREAK AWAY CMU WALLS

STAIR UP

ENCLOSURE Foyer 295 SQ. FT.

ELEVATOR

STORAGE AREA

OVERHEAD DOOR

UP

UP

OVERHEAD DOOR

FINISH FLOOR ELEV. @ FEMA A-ZONE BRE + 1 FT. = 11'-0" NAVD

GARAGE2

CONC. POOL EQUIPMENT PAD ABOVE FEMA BRE + 1 FT. ELEV.

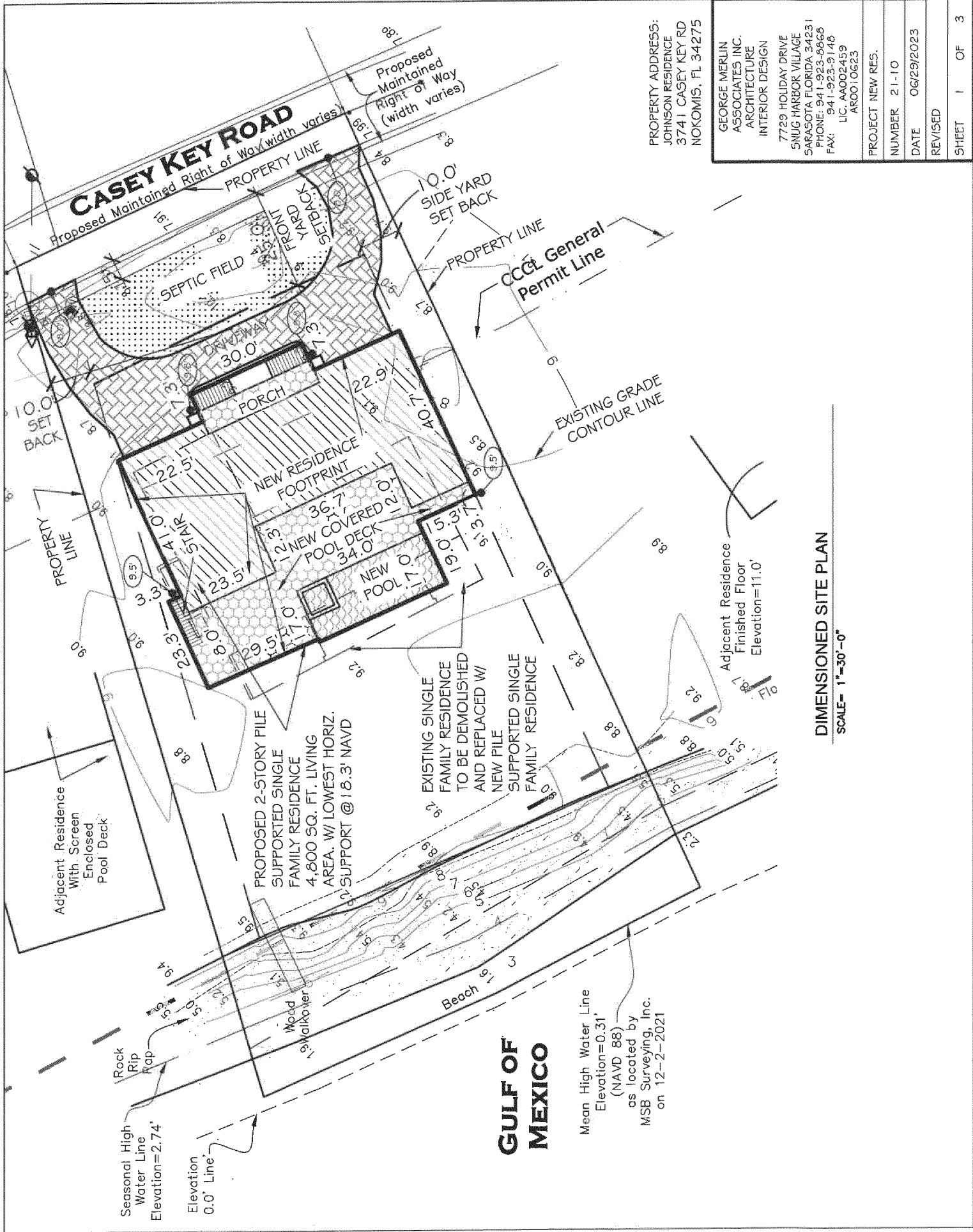
PROPERTY LINE

PROPERTY ADDRESS:
JOHNSON RESIDENCE
3741 CASEY KEY RD
NOKOMIS, FL 34275

GEORGE MERLIN ASSOCIATES INC. ARCHITECTURE INTERIOR DESIGN	
7729 HOLIDAY DRIVE SNUG HARBOR VILLAGE SARASOTA FLORIDA 34231 PHONE: 941-923-8868 FAX: 941-923-9145 LIC. AA002459 AR0010623	
PROJECT NEW RES.	NUMBER 21-10
DATE 06/29/2023	REVISIED
SHEET 2	OF 3

PROPOSED GROUND FLOOR PLAN

SCALE = 3/32" = 1'-0"



CASEY KEY ROAD

PROPERTY ADDRESS:
JOHNSON RESIDENCE
3741 CASEY KEY RD
NOKOMIS, FL 34275

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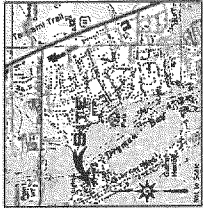
PROJECT NEW RES.
NUMBER 21-10
DATE 06/29/2023
REVISED
SHEET 1 OF 3

GULF OF MEXICO

Mean High Water Line
Elevation=0.31'
(NAVD 88)
as located by
MSB Surveying, Inc.
on 12-2-2021

DIMENSIONED SITE PLAN
SCALE= 1"=30'-0"

BITE MAP



BOUNDARY, TOPOGRAPHIC & TIDAL WATER BOUNDARY SURVEY

Section 15, Township 38 South, Range 18 East
 Address: 3794, Casey Key Road, Nokomis, Florida, 34715

Owner: Robert T. Johnson, Stephen A. Johnson and Sydney L. Johnson

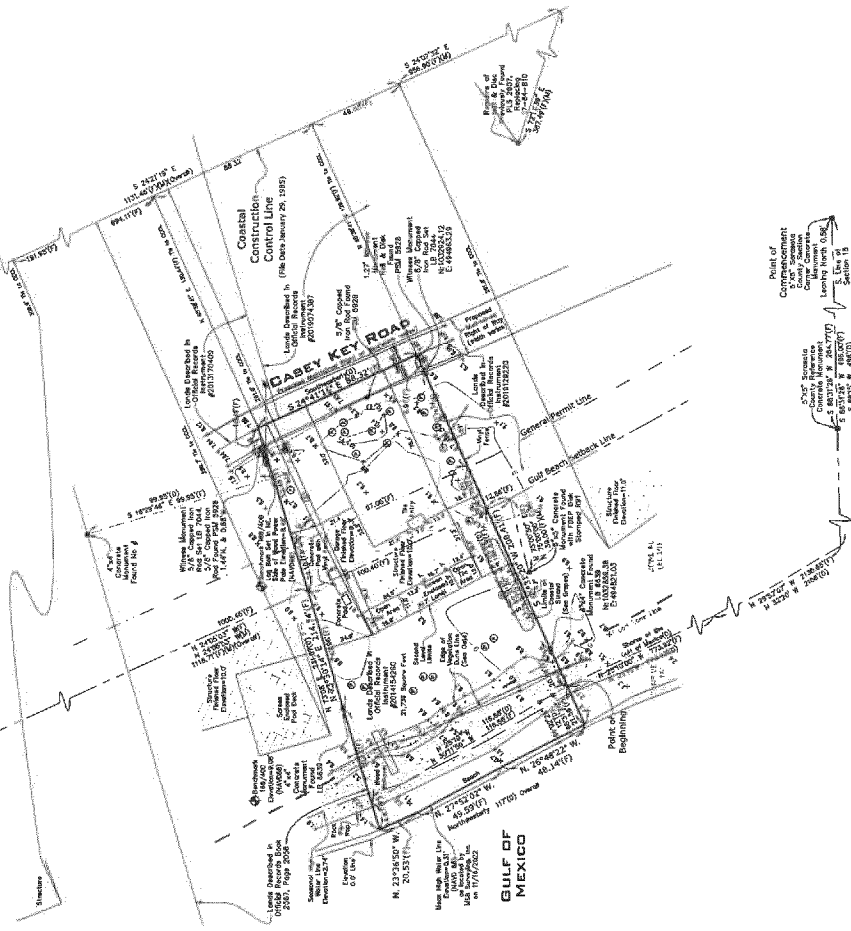
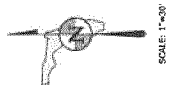
DESCRIPTION: (Summary)

Commence at the U.S. Government Marker on the South line of Section 15, Township 38 South, Range 18 East, Sarasota County, Florida, and the Western boundary of the East line of Section 15, Township 38 South, Range 18 East, Sarasota County, Florida, to the center of the Gulf of Mexico, thence North 29°02' West along said shore, 773.97' to a Point of Beginning; thence South 68° 02' 25" West, 232.0' West, 2.156' to the center of the Gulf of Mexico, thence North 29°02' West, 232.0' to a point which bears South 93° 05' West from a benchmark in the North 28°00' West, 116.65' from the Point of Beginning; thence North 73°08' East, passing through said point 231.07' to the center of existing pavement of county road through Section 15, Township 38 South, Range 18 East, Sarasota County, Florida, from the Point of Beginning; thence South 69°02'53" West, 188.89' to the Point of Beginning. All being and being in Section 15, Township 38 South, Range 18 East, Sarasota County, Florida, as recorded in the Public Records of Sarasota County in G.R. Book 781, Page 1027.

Detail of Coastal Construction Control Line Traverse

U.S. Survey Mark
 Florida H2027
 17-84-809
 Latitude: N. 27°11'42.571774"
 Longitude: W. 85°30'55.57623387985"
 N. 105262.15' E. 463140.96'
 17-84-809
 Latitude: N. 27°10'20.823737"
 Longitude: W. 85°31'57.11481"
 N. 105262.15' E. 451533.037'

Traverse Controller TSC3 Version 12.0012 was used
 Error:
 Difference of 17-84-809 observation from 17-84-809
 N: 0.03"
 W: 0.02"
 No new stations established



Point of Beginning
 Coastal Construction Control Line
 5/21/2021
 17-84-809

Legend

- (A) - Shows Top Edge
- (B) - Shows End Date
- (C) - Shows End Measurement
- (D) - Shows End of Traverse
- (E) - Shows End of Traverse
- (F) - Shows End of Traverse
- (G) - Shows End of Traverse
- (H) - Shows End of Traverse
- (I) - Shows End of Traverse
- (J) - Shows End of Traverse
- (K) - Shows End of Traverse
- (L) - Shows End of Traverse
- (M) - Shows End of Traverse
- (N) - Shows End of Traverse
- (O) - Shows End of Traverse
- (P) - Shows End of Traverse
- (Q) - Shows End of Traverse
- (R) - Shows End of Traverse
- (S) - Shows End of Traverse
- (T) - Shows End of Traverse
- (U) - Shows End of Traverse
- (V) - Shows End of Traverse
- (W) - Shows End of Traverse
- (X) - Shows End of Traverse
- (Y) - Shows End of Traverse
- (Z) - Shows End of Traverse

REPORT OF SURVEY

Accuracy: The accuracy obtained by measurement and calculation of a closed traverse is the accuracy obtained by a closed level loop, based on National Geodetic Survey Benchmark # 875, 994.74, projected to vertical ellipsoid error of 0.01".

1. Commitment for This Insurance by Chicago Title Insurance Company.
 2. Warranty Deed recorded in Public Records Book 2557, Page 2658, Public Records of Sarasota County, Florida, Instrument # 2013170409.
 3. Warranty Deed recorded in Official Records Instrument # 2013170409, Public Records of Sarasota County, Florida.
 4. Warranty Deed recorded in Official Records Instrument # 2013170437, Public Records of Sarasota County, Florida.
 5. Coastal Construction Control Line Survey, dated 1/20/21, Book 2557, Page 2658, Public Records of Sarasota County, Florida.
 6. Coastal Construction Control Line Survey, dated 1/20/21, Book 2557, Page 2658, Public Records of Sarasota County, Florida.
 7. State of Florida Department of Natural Resources Coastal Construction Control Line Survey, dated 1/20/21, Book 2557, Page 2658, Public Records of Sarasota County, Florida.
 8. This site was furnished by Florida Department of Environmental Protection, Tidal Water Boundary Survey, dated 1/20/21, Book 2557, Page 2658, Public Records of Sarasota County, Florida.
 9. 2015 geo-raster aerial image furnished by Sarasota County.
 10. Sarasota County Aerial Section Map, Sheet No. 158.
 11. No other information was researched or furnished.
 12. No other information was researched or furnished.

Approximate Physical Use:
 Residential
 Assessment:
 1. No comments were researched or furnished.