# **Town of Melbourne Beach**

# PUBLIC NOTICE AGENDA

# PLANNING & ZONING BOARD MEETING TUESDAY, July 11, 2023 @ 6:30 pm COMMUNITY CENTER – 509 OCEAN AVENUE

#### **Board Members:**

Chairman David Campbell Vice-Chairman Kurt Belsten Member April Evans Member Douglas Hilmes Member Daniel Gonzalez

### **Alternate Board Members**

Alternate Dan Harper Alternate Gabor Kishegyi

#### **Staff Members:**

Town Manager Elizabeth Mascaro Town Clerk Amber Brown Town Attorney Clifford Repperger Building Official Robert Bitgood

PURSUANT TO SECTION 286.0105, FLORIDA STATUTES, THE TOWN HEREBY ADVISES THE PUBLIC THAT: In order to appeal any decision made at this meeting, you will need a verbatim transcript of the proceedings. It will be your responsibility to ensure such a record is made. Such person must provide a method for recording the proceedings verbatim as the Town does not do so.

In accordance with the Americans with Disability Act and Section 286.26, Florida Statutes, persons needing special accommodations for this meeting shall, at least 5 days prior to the meeting, contact the Office of the Town Clerk at (321) 724-5860 or Florida Relay System at 711.

### 1. CALL TO ORDER

### 2. ROLL CALL

### 3. APPROVAL OF MINUTES

A. June 6, 2023 minutes

### 4. NEW BUSINESS

A. Site plan approval for 510 Third Ave – new home

### 5. PUBLIC HEARINGS

### 6. OLD BUSINESS

### 7. PUBLIC COMMENT

Please limit comments to items that are not on the agenda

### 8. REPORTS: TOWN MANAGER AND TOWN ATTORNEY

### 9. ITEMS TO BE ADDED TO THE AGENDA FOR FUTURE MEETINGS

### **10. ADJOURNMENT**

# **Town of Melbourne Beach**

# **MINUTES**

# PLANNING & ZONING BOARD MEETING TUESDAY, JUNE 6, 2023 @ 6:30 pm COMMUNITY CENTER – 509 OCEAN AVENUE

#### **Board Members:**

Chairman David Campbell Vice-Chairman Kurt Belsten Member April Evans Member Douglas Hilmes Member Daniel Gonzalez Alternate Dan Harper Alternate Gabor Kishegyi

#### **Staff Members:**

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### 1. CALL TO ORDER

Chairman David Campbell called the meeting to order at 6:30 p.m.

### 2. ROLL CALL

Town Clerk Amber Brown conducted the roll call

### Present:

Chairman David Campbell Vice-Chairman Kurt Belsten Member Douglas Hilmes Alternate Dan Harper Alternate Gabor Kishegyi

### Staff Present:

Town Manager Elizabeth Mascaro Building Official Robert Bitgood Town Clerk Amber Brown

### Absent:

Member April Evans Member Daniel Gonzalez

### 3. APPROVAL OF MINUTES

A. May 2, 2023 minutes

### <u>Vice Chairman Kurt Belsten made a motion to approve the May 2, 2023</u> <u>minutes; Member Douglas Hilmes seconded; Motion carried 5-0.</u>

### 4. NEW BUSINESS

A. Site plan approval for 504 Fourth Ave – accessory structure

### <u>Member Douglas Hilmes moved to approve the site plan for 504 Fourth Ave;</u> <u>Vice Chairman Kurt Belsten seconded; Motion carried 5-0.</u>

B. Site plan approval for 306 Avenue B - new home

### <u>Vice Chairman Kurt Belsten moved to approve the site plan for 306 Avenue B;</u> <u>Member Douglas Hilmes seconded; Motion carried 5-0.</u>

### 5. PUBLIC HEARINGS

- 6. OLD BUSINESS
- 7. PUBLIC COMMENT
- 8. REPORTS: TOWN MANAGER AND TOWN ATTORNEY
- 9. ITEMS TO BE ADDED TO THE AGENDA FOR FUTURE MEETINGS

### **10. ADJOURNMENT**

### <u>Vice Chairman Kurt Belsten moved to adjourn; Member Douglas Hilmes</u> <u>seconded; Motion carried 5-0.</u>

The meeting adjourned at 6:47 p.m.

**ATTEST:** 

David Campbell, Chairman

Amber Brown, Town Clerk



### TOWN OF MELBOURNE BEACH **DEVELOPMENT APPLICATION**

#### 1. SUBMITTAL REQUIREMENTS:

- 1. Fees per current schedule.
- 2. Deed to property.
- 3. Pre-Application meeting is mandatory. Contact the Building Official or Building Clerk to submit information required and to schedule a pre-application meeting.
- 4. Application deadlines are determined annually by the Boards and will be provided at the pre-application meeting.
- 5. All applicants must complete pages 1-3 and the section(s) as applicable to the request (refer to section II. below). All materials listed in the applicable sections must be provided, and fees paid.

#### 11. **REQUEST:**

- Land Use Plan Amendment
- Special Exception
- Variance
- 🕱 Site Plan Review Single Family (1RS, 2RS, 3RS) 🛛 🛛 Site Plan Review Multifamily (4RM, 5RMO)
- □ Site Plan Review Commercial (6B, 7C, 8B, 9I)
- Rezoning
- Coastal Construction Variance
- □ Appeal (Application must be filed within 30 days)
- Amendment to the Land Development Code
- Other (specify)

#### Ш. **PROPERTY INFORMATION:**

elbourne Beach

Address: 510 3rd Avenue, Melbourne Beach FL 32951

Parcel Number(s): 28-38-07-02-11-7

Area (in acreage): <u>31</u>	Area (in square feet): <u>25,802</u>	

Current Zoning: Single Family Residence Proposed Zoning: Single Family Residence

/ ORS Current Future Land Use:

I BRS Proposed Future Land Use:

Brief Description of Application: New Construction of Single Family Residence

Date of Mandatory Pre-Application Meeting (attach meeting minutes if applicable): 3/09/23

pg. 1 08=2022

IV.	APPLICANT INFORMATION:	
Prope	rty Owner	
Name	510 3rd Avenue, LLC	Phone:321-403-7813
Addre	ss: 2101 Waverly Place Ste. 100	Fax:
Melb	ourne, FL 32901	Email:rrunte@cgcflorida.com
Applic	ant (if other than property owner)	
Name		Phone:
Addres	55:	Fax:
		Email:
<b>v</b> .	OWNER AUTHORIZATION:*	
The un	dersigned hereby affirms the following:	
1.	That I/we are the fee simple title wner/contract application.	ract purchaser (circle one) of the property described in this
2.	That I/we have read and understands the entir	e application and concurs with the request.
3.	That I/we have appointed the Applicant to repr	esent the application, and empowers the Applicant to accept the Town of Melbourne Beach

any and all conditions of approval imposed by the Town of Melbourne Beach.		
Signature:	Date: <u>6/05/23</u>	
Print Name: Ryan Runte	Title: Manager	

\*Must sign in front of notary.

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08-2022

State of Florida County of Breva The foregoing a this day o who is/are pers	ard. pplication is acknowledged I f_ <b></b> , 20 <b>23</b> , by <b>P</b> conally known to me, or who	before me <b>Yon Runte</b> has/have produced_	NA	
as identification	tary Public, State of Florida	TINA MAI Notary Public Commission My Comm. Exp Bonded through Nat	RIE JENICEK - State of Florida n # GG 981441 bires Apr 23, 2024 tional Notary Assn.	
pg. 2	Town of Melbourne Beach – (	Development Application	ſ	

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#### VI. APPLICANT CERTIFICATION:\*

1.16

I/we affirm and certify that I/we understand and will comply with the land development regulations of the Town of Melbourne Beach, Florida. I/we further certify that the application and support documents are fully complete and comply with the requirements of the land development regulations of the Town of Melbourne Beach, Florida. I/we further certify that the statements and/or diagrams made on any paper or plans submitted here with are true to the best of my/our knowledge and belief that this application, attachments and application filing fees become part of the official public record of the Town of Melbourne Beach, Florida and are not returnable or refundable.

Under penalties of perjury, I/we declare that I/we have read the foregoing application and that to the best of my/our knowledge and belief the facts stated in the application are true.

Signature:	Date: <u>6/05/23</u>
Print Name: Ryan Runte	Title: Manager
*Must sign in front of notary.	
State of Florida County of Brevard. The foregoing application is acknowledged befor thisday of, 20 23 by who is/are personally known to me, or who has/ as identification. Signature of Notary Public, State of Florida	TINA MARIE JENICEK Notary Public - State of Florida Commission # GG 981441 My Comm. Expires Apr 23, 2024 Bonded through National Notary Assn.
VII. PROJECT DESCRIPTION:	
Describe Application: <u>Demolition of Existing Si</u> of Single Family Residence. New Residence	ngle Family Residence, and New Construction e is 2 story, 3,884 Sf.
Provide attachment if more space is needed.	
Describe Existing Conditions: Existing 2 story di	lapidated single family residence.
Provide attachment if more space is needed.	
pg. 3 Town of Melbourne Beach – Develo	opment Application

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*`OWN OF MELBOURNE BEACH* 

BREVARD COUNTY'S OLDEST BEACH COMMUNITY ESTABLISHED 1883

# Site Plan Review

Applicable Codes Town of Melbourne Beach Land Development Code Current Florida Building Code

Date: 6/19/2023 Owner: Ryan Runte Owner Address: 510 3<sup>rd</sup> Ave Melbourne Beach Fl. 32901 Site Address: Same Parcel ID: 28-38-07-02-11-7 Zoning: 1RS Zoning District 1RS

Project: Single Family Residence.

- Reference: Town of Melbourne Beach Code of Ordinances: 7A-31.
- Request: Approval by the Planning and Zoning Board and the Town Commission for: Single Family Residence.

Staff Review:

1).The project is: A single family home in the Town Limits of Melbourne Beach Fl.

2). The Building Lot Zoning District requirements of min. lot area, width and depth. Lot area is 25,802 sq. ft. (min. 12,000 sq. ft.) Lot width is 187.84 (min.100 ft.) Lot depth is 120.21 (min. 120 ft.)

- 3). Lot coverage has a maximum of 30% for principle structure. Lot coverage per plan is: 20.3% Footprint of Primary Structure is 5,247 sq. ft. with the addition. Max allowed for Primary Structure is 7,740.6 sq. ft. for Lot Area of 25,802
  sq. ft. Minimum pervious area per lot is 30%. Pervious area is 56%
- 4). Structure maximum height for zoning district is 28 ft. The proposed height provided is 27'8 ¼" from FFE Flood Zone \_AE And X\_\_\_\_\_

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### 510 3rd Ave. Melbourne Beach. Fl.

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IMPERVIOUS		PERVIOUS	
Primary Structure	5,247	Shed space	
Pool	840	Open areas	
Decks	1020	Other	
Driveway	2,094		
Accessory Bldg	0		
Concrete areas	20	TOTAL PERVIOUS	15,218
Paver areas	1,363		
Other			
TOTAL IMPERVIOUS	41.00%		
		Lot Total Sq Footage	25,802
		<b>TOTAL % PERVIOUS</b>	59%



# Stormwater Calculations

SUBMITTED TO: Town of Melbourne Beach

**REVISION DATE: 6-1-23** 



Erin Trauger, P.E. FL License No. 66576

# 510 3<sup>RD</sup> Avenue Residence

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### I. Introduction

The goal of this report is to detail requirements of compliance of the stormwater treatment system for the proposed improvements. The proposed singe family residence improvements include a new single-family house located at 510 3<sup>rd</sup> Avenue in the Town of Melbourne Beach, Florida. The Brevard County Property Appraiser Aerial and Details have been included for reference.

### II. Existing Conditions

There is currently a house on this lot but there is no existing stormwater treatment. Much of the lot drains toward the east directly to the river with the remainder of the lot drainage to Third Avenue that ultimately discharges directly to the river.

### III. Proposed Conditions

The proposed site improvements involve the construction of the new single family house with porch as well as driveway and garage connected by a breezeway. A treatment swale is proposed mostly in the west part of the property to provide for stormwater treatment required on the lot before discharge to the river. Stormwater runoff created by the impervious surface for this project will be collected on-site and directed to three dry retention swales to treat the stormwater runoff. The 10 year 24 hour storm event was evaluated using the combined volume of the swales to verify retainage of the 8" storm event.

### **IV.** Required Stormwater Calculations

A complete summary report has been provided in the attachments to include volume calculations for the proposed stormwater system, HydroCAD stormwater modeling information for the 10 year 24 hour storm event and a MODRET recovery analysis to ensure the Town of Melbourne Beach stormwater requirements are met. Also included in attached calculations are the soils reports provided by Universal Engineering identifying the season high water table and the percolation test results for conditions at the property. The following considerations were included in the evaluation.

• 8" of runoff from a 10-yr/24 hour storm event was evaluated for the 0.52 acre drainage basin at 510 Third Ave (including the proposed improvements) using HydroCAD and zero discharge is proposed from the storm collection ponds for this storm event.

- 72-Welaka sand has been determined to be the soils mapped according to the Soils Survey Map of Brevard County which is reflect in the weighted average CN value using A soil values for grass.
- The Season High Water Table information is provided in the table below and the soils report completed by Universal Engineering is provided in the attachments for review. The highest value encountered was utilized for recovery analysis purposes.

Boring#	Natural Ground	Existing Ground Water Elevation	Estimated Wet Season Ground Water Table
B-1	6.5	-0.3	0.7
B-2	7.0	0	1.0
B-3	6.7	0.3	1.3

- The peak stage of the storm ponds remains below the top of bank.
- The pond area is proposed to include removal of any organic build up under the ponds such that the horizontal and vertical percolation rate of 20 feet per day is maintained. Based on the soils report these high percolations rates are in place and therefore the pond volume recovery will be less than 72 hours for the 8 inch storm event.

### V. Summary

As presented in the details above it has been determined that the proposed dry retention stormwater treatment system satisfies the design requirements of the Town of Melbourne Beach for the 10 year 24 hour-8 inch storm event.

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# LOCATION INFORMATION





# Brevard County Property Appraiser Titusville • Viera • Melbourne • Palm Bay

PROPERTY DETAILS

Phone: (321) 264-6700 https://www.bcpao.us

Account	2847687
Owners	510 3RD AVENUE LLC
Mailing Address	2101 WAVERLY PL, STE 100 MELBOURNE FL 32901
Site Address	510 THIRD AVE MELBOURNE BEACH FL 32951
Parcel ID	28-38-07-02-11-7
Property Use	0110 - SINGLE FAMILY RESIDENCE
Exemptions	HEX1 - HOMESTEAD FIRST HEX2 - HOMESTEAD ADDITIONAL
Taxing District	34X0 - MELBOURNE BEACH
Total Acres	0.59
Subdivision	WILCOX PLAT OF MELBOURNE BEACH RESUBD OF BLKS 11,20,21,30 & 31
Site Code	0110 - RIVER FRONT
Plat Book/Page	0010/0051
	WILCOX PLAT OF MELBOURNE BEACH RESUBD OF
Land Description	BLKS 11,20,21,30 & 31 S 120 FT OF LOT 7 BLK 11



VALUE SUMMARY				
2022	2021	2020		
\$1,067,330	\$838,540	\$794,430		
\$0	\$0	\$0		
\$675,550	\$655,880	\$635,970		
\$675,550	\$655,880	\$635,970		
\$25,000	\$25,000	\$25,000		
\$25,000	\$25,000	\$25,000		
\$0	\$0	\$0		
\$625,550	\$605,880	\$585,970		
\$650,550	\$630,880	\$610,970		
	VALUE SUMMARY 2022 \$1,067,330 \$0 \$675,550 \$675,550 \$25,000 \$25,000 \$0 \$625,550 \$650,550	VALUE SUMMARY           2022         2021           \$1,067,330         \$838,540           \$0         \$0           \$675,550         \$655,880           \$675,550         \$655,880           \$25,000         \$25,000           \$25,000         \$25,000           \$675,550         \$665,880           \$650,550         \$665,880           \$650,550         \$665,880		

Date	Price	Туре	Instrument
09/06/2022	\$1,550,000	WD	9606/0564
06/04/2019		WD	8458/619
09/18/2015	19 <del>44</del> )	QC	7457/0864
09/17/2015		QC	7454/0862
09/15/2015	\$725,000	TD	7457/0870
11/08/1999		WD	4127/2475
06/01/1993		QC	3317/0420
05/01/1992		QC	3205/0326
04/01/1966	\$14,000	. <del></del> .	0861/0342

# BUILDINGS

## **PROPERTY DATA CARD #1**

### Building Use: 0110 - SINGLE FAMILY RESIDENCE

Materials		Details	
Exterior Wall:	STUCCO	Year Built	1967
Frame:	MASNRYCONC	Story Height	8
Roof:	ASPH/ASB SHNGL	Floors	2
Roof Structure:	HIP/GABLE	Residential Units	1
		Commercial Units	0

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Sub-Areas		Extra Features
Base Area (1st)	2,088	Fireplace
Base Area (2nd)	1,012	
Enclosed Por	286	
Garage	576	
Open Porch	40	
Open Porch	40	
Open Porch	144	
Open Porch	184	
Open Porch	325	
Open Porch	480	
Total Base Area	3,100	
Total Sub Area	5,175	

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# DATA AND CALCULATIONS

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#### STORMWATER CALCULATIONS

### Post-Development Drainage Basin Data: Type A Soils

Cover Type	Area (acres)	CN Value
Impervious	10032.00	98
Pervious	12587.50	39
Total Area	22619.50	65

### Stage/Storage Volume of Dry Retention Pond:

Elevation	Area	Avg. Area	Volume	Sum. Volume
(Feet)	(Sq. Ft.)	(Sq. Ft.)	(Cu. Ft.)	(Cu. Ft.)
7.00	4,358		3,011	3,011
		3,011		
6.00	1,663		0	0

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# Area Listing (all nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
0.289	39	>75% Grass cover, Good, HSG A (2S)
0.230	98	Roofs, HSG A (2S)
0.519	65	TOTAL AREA

## **Runte on Third**

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# Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
0.519	HSG A	2S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.519		TOTAL AREA

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# Ground Covers (all nodes)

HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment
 (acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
 0.289	0.000	0.000	0.000	0.000	0.289	>75% Grass cover, Good	2S
0.230	0.000	0.000	0.000	0.000	0.230	Roofs	2S
0.519	0.000	0.000	0.000	0.000	0.519	TOTAL AREA	

Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

> Runoff Area=22,619 sf 44.35% Impervious Runoff Depth=3.89" Tc=10.0 min CN=65 Runoff=1.28 cfs 0.169 af

Pond 3P: Dry Retention Pond

Subcatchment2S: Runte Lot

Peak Elev=6.71' Storage=1,423 cf Inflow=1.28 cfs 0.169 af Outflow=0.61 cfs 0.169 af

Total Runoff Area = 0.519 ac Runoff Volume = 0.169 af Average Runoff Depth = 3.89" 55.65% Pervious = 0.289 ac 44.35% Impervious = 0.230 ac

Runoff = 1.28 cfs @ 12.21 hrs, Volume= Routed to Pond 3P : Dry Retention Pond 0.169 af, Depth= 3.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs Type II FL 24-hr 10 YR 24 HR Rainfall=8.00"

Area (sf)	CN	Description		
10,032	98	Roofs, HSC	βA	
12,587	39	>75% Gras	s cover, Go	bod, HSG A
22,619	65	Weighted A	verage	
12,587		55.65% Pe	rvious Area	I
10,032		44.35% Imp	pervious Ar	ea
Tc Length	Slop	e Velocity	Capacity	Description
(min) (feet)	(ft/f	t) (ft/sec)	(cfs)	
10.0				Direct Entry,
	Subcatchment 2S: Runte Lot			
			Hydro	graph



### Summary for Pond 3P: Dry Retention Pond

Inflow A	rea =	0.519 ac, 44.	35% In	pervious,	Inflow D	epth =	3.89"	for 10	YR 24 HR even	t
Inflow	=	1.28 cfs @ 1	2.21 hr	s, Volume	=	0.169	af		2	
Outflow	=	0.61 cfs @ 1	2.71 hr	s, Volume	=	0.169	af, Atter	n= 52%	, Lag= 30.3 mir	า
Discarde	ed =	0.61 cfs @ 1	2.71 hr	s, Volume	=	0.169	af			
Routing	by Dyn-Sto	or-Ind method,	Time S	pan= 0.00	-30.00 h	rs, dt= C	).01 hrs			
Peak Ele	ev= 6.71' @	) 12.71 hrs Su	urf.Area	i= 2,374 sf	Storag	e= 1,42	3 cf			
Plug-Flo Center-c	w detention of-Mass def	n time= 15.5 m . time= 15.5 m	in calcu in ( 871	llated for 0 .2 - 855.7	.169 af ( )	100% o	f inflow)			
Volume	Inve	t Avail.Sto	rage	Storage De	escription	11				
#1	6.00	2,16	53 cf	24.00'W x	69.30'L	x 1.00'ł	l Prisma	atoid Z	=5.0	
Device	Routing	Invert	Outle	Devices						
#1	Discardeo	6.00'	<b>10.00</b> Cond	0 in/hr Ex uctivity to 0	filtration Groundw	over S ater Ele	<b>urface</b> a vation =	a <b>rea</b> 1.00'	Phase-In= 0.01	1'

**Discarded OutFlow** Max=0.61 cfs @ 12.71 hrs HW=6.71' (Free Discharge) **1=Exfiltration** (Controls 0.61 cfs)

**Runte on Third** 

### Pond 3P: Dry Retention Pond



# MODRET

# SUMMARY OF UNSATURATED & SATURATED INPUT PARAMETERS

# PROJECT NAME : 510 Third Ave POLLUTION VOLUME RUNOFF DATA USED UNSATURATED ANALYSIS INCLUDED

Pond Bottom Area	1,663.00 ft <sup>2</sup>
Pond Volume between Bottom & DHWL	3,011.00 ft³
Pond Length to Width Ratio (L/W)	3.00
Elevation of Effective Aquifer Base	0.00 ft
Elevation of Seasonal High Groundwater Table	1.00 ft
Elevation of Starting Water Level	6.00 ft
Elevation of Pond Bottom	6.00 ft
Design High Water Level Elevation	7.00 ft
Avg. Effective Storage Coefficient of Soil for Unsaturated Analysis	0.28
Unsaturated Vertical Hydraulic Conductivity	10.00 ft/d
Factor of Safety	2.00
Saturated Horizontal Hydraulic Conductivity	10.00 ft/d
Avg. Effective Storage Coefficient of Soil for Saturated Analysis	0.29
Avg. Effective Storage Coefficient of Pond/Exfiltration Trench	1.00
Hydraulic Control Features:	

	Тор	Bottom	Left	Right
Groundwater Control Features - Y/N	N	Ν	Ν	N
Distance to Edge of Pond	0.00	0.00	0.00	0.00
Elevation of Water Level	0.00	0.00	0.00	0.00
Impervious Barrier - Y/N	N	N	N	N
Elevation of Barrier Bottom	0.00	0.00	0.00	0.00

# MODRET

# **TIME - RUNOFF INPUT DATA**

### PROJECT NAME: 510 THIRD AVE

STRESS PERIOD NUMBER	INCREMENT OF TIME (hrs)	VOLUME OF RUNOFF (ft <sup>3</sup> )
Unsat	6.72	2,328.20
1	1.00	682.80
2	8.03	0.00
3	8.03	0.00
4	8.03	0.00
5	8.03	0.00
6	8.03	0.00
7	8.03	0.00
8	8.03	0.00
9	8.03	0.00

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# MODRET

# SUMMARY OF RESULTS

## **PROJECT NAME : 510 Third Ave**

CUMULATIVE TIME (hrs)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)	CUMULATIVE OVERFLOW (ft <sup>3</sup> )
00.00 - 0.00	1.000	0.000 *		
			0.00000	
0.00	1.000	0.10835		
			0.08892	
7.72	6.179	0.06948		0.00
			0.04925	
10.76	6.000	0.04175		0.00
			0.03425	
23.79	5.377	0.02961		0.00
			0.02497	
31.82	5.137	0.02233		0.00
			0.01968	
39.86	4.948	0.01797		0.00
			0.01626	
47.90	4.792	0.01504		0.00
	1		0.01382	
55.93	4.659	0.01289		0.00
			0.01197	
63.97	4.544	0.01126		0.00
70.00			0.01054	
/2.00	4.443			0.00
	1			

# SOILS REPORT AND MAP INFORMATION



### UNIVERSAL ENGINEERING SCIENCES

### LIMITED SUBSURFACE EXPLORATION

Proposed Retention Basin Residential lot 510 Third Avenue Melbourne Beach, Brevard County, Florida Universal Project No. 0330.2300030.0000

February 28, 2023

PREPARED FOR: Certified General Contractors, Inc. 730 E. Strawbridge Avenue Melbourne, Florida 32901

#### **PREPARED BY:**

Universal Engineering Sciences, LLC. 820 Brevard Avenue Melbourne, Florida 32901 (321) 638-0808

Consultants in: Geotechnical Engineering • Environmental Sciences • Construction Materials Testing • Threshold Inspection Offices in: Orlando • Daytona Beach • Fort Myers • Gainesville • Jacksonville • Ocala • Palm Coast • Rockledge • Sarasota • Miami • Panama City • Pensacola • Fort Pierce • Tampa • West Palm Beach • Atlanta, GA • Tifton, GA 31

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LOCATIONS: Atlanta

- Daytona Beach
- Fort Myers
- Fort Pierce
- Gainesville
   Jacksonville
- Miami
- Ocala
- Orlando (Headquarters)
- Palm Coast
- Panama City

February 28, 2023

- Pensacola
- Rockledge
   Sarasota
- Tampa
- West Palm Beach
- Tifton, GA

Certified General Contractors, Inc. 730 E. Strawbridge Avenue Suite 100 Melbourne, Florida 32901

Attention: Mr. Ryan Runte

Reference: Limited Subsurface Exploration Retention Basin Residential Lot 510 Third Avenue Melbourne Beach, Brevard County, Florida Universal Project No. 0330.2300030.0000

UNIVERSA

ENGINEERING SCIENCES

Consultants In: Geotechnical Engineering • Environmental Sciences

Building Inspection • Plan Review • Building Code Administration

Geophysical Services • Construction Materials Testing • Threshold Inspection

Dear Mr. Runte:

Universal Engineering Sciences, LLC. (Universal) has completed a limited subsurface exploration at the above referenced site in Melbourne Beach, Florida. Our exploration was authorized by you, and was conducted as outlined in Universal's Proposal No. 0330.0223.00022. This exploration was performed in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

The following report presents the results of our field exploration with a geotechnical engineering interpretation of those results with respect to the project characteristics as provided to us. We have included our estimates of the typical wet season high groundwater levels at the boring locations and general comments concerning anticipated infiltration characteristics of the retention basin subsoils.

We appreciate the opportunity to have worked with you on this project and look forward to a continued association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

Sincerely yours, UNIVERSAL ENGINEERING SCIENCES, LLC Certificate of Authorization No. 549

Robert Smith, P.E., PMP Geotechnical Department Manager Florida Professional Engineer No. 78130

1 – Client (by e-mail) UES DOCS# 2004993 Brad Faucett, M.S. P.E. Regional Engineer Florida Professional Engineer No. 33123 A 18

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### 1.0 INTRODUCTION

Universal Engineering Sciences, LLC. (Universal) has completed a limited subsurface exploration for the retention basin at the proposed residential lot in Melbourne Beach, Florida. Our exploration was authorized by Mr. Ryan Runte of Certified General Contractors, Inc. and was conducted as outlined in Universal's Proposal No. 0330.0223.00022.

This exploration was performed in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

### 2.0 PROJECT DESCRIPTION

Universal understands from the information submitted to us by the Client that the proposed project will include the demolition of the existing house and construction of a new retention basin in the approximate location as shown on the attached Figure 3.

Please note that our subsurface exploration was conducted to acquire general subsurface information for the proposed retention basin <u>only</u>.

### 3.0 PURPOSE

The purposes of this exploration were:

- to explore the subsurface conditions at the general locations and depths as requested by the project civil engineers;
- to provide our estimates of the typical wet season high groundwater level at the boring locations; and
- to provide general comments concerning the anticipated infiltration characteristics of the proposed retention basin subsoils.

### 4.0 SITE DESCRIPTION

The subject site is located within Section 7, Township 28 South, Range 38 East in Melbourne Beach, Brevard County, Florida. More specifically, the site is located on the north side of Third Avenue, west of the intersection with Pine Street, in Melbourne Beach, Brevard County, Florida. At the time of drilling, a house existed on the property with surrounding vegetation and yard. We understand that the existing house will be demolished with the proposed construction.

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### 4.1 SOIL SURVEY

One soil type is mapped within the general area of the site according to the Brevard County Soil Survey (BCSS), dated 1974, (updated using USDA-NCSS SSURGO and STATSGO Soil Survey). A brief description of the soil is shown in the following Table I. A copy of the relevant portion of the BCSS map is included as Figure No. 1.

TABLE I BCSS DESIGNATED SOIL TYPES

Soil Type (Map Symbol)	Brief Description
72-Welaka sand, (We)	Nearly level, well drained sandy soil on moderately broad ridges interspersed with long narrow sloughs.

#### 4.2 **TOPOGRAPHY**

According to information obtained from the United States Geological Survey (USGS) Melbourne East, Florida 7.5-minute topographic quadrangle map (dated 2021); ground surface elevation across the site area is approximately +10 feet North American Vertical Datum (NAVD). The portion of the USGS map with coverage of the site is included as Figure No. 2 of this report.

### 5.0 SCOPE OF SERVICES

The services conducted by Universal during our subsurface exploration program were as follows:

- Complete four (4) manual auger borings within the footprint of the retention basin to a depth of 7 feet bls.
- Obtain six (6) bulk samples of the near surface soils within the retention basin footprint for subsequent laboratory permeability testing.
- Secure samples of representative soils encountered in the soil borings for review, laboratory analysis and classification by a Geotechnical Engineer.
- Measure the existing site groundwater levels and provide an estimate of the typical wet season high groundwater levels.
- Conduct soil gradation tests on selected soil samples obtained in the field to help determine their engineering properties.
- Assess the existing soil conditions with respect to the proposed construction.
- Preparing a geotechnical engineering report that documents the results of our preliminary subsurface exploration and laboratory testing program with analysis and general comments.
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### 6.0 LIMITATIONS

Please note that this report is based on a limited subsurface exploration program with the scope of services as requested by the Client. The information submitted in this report is based on data obtained from the soil boring performed at the location indicated on the Boring Location Plan and from other information as referenced. This report has not been prepared to meet the full needs of design professionals, contractors, or any other parties, and any use of this report by them without the guidance of the soil and foundation engineer who prepared it constitutes improper usage that could lead to erroneous assumptions, faulty conclusions, and other problems.

This report does not reflect any variations that may occur between the boring locations. The nature and extent of such variations may not become evident until the course of construction. If variations become evident, it will then be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during the construction period and noting the characteristics of the variations.

Borings for a typical geotechnical report are widely spaced and generally not sufficient for reliably detecting the presence of isolated, anomalous surface or subsurface conditions, or reliably estimating unsuitable or suitable material quantities. Accordingly, Universal does not recommend relying on our boring information to negate the presence of anomalous materials or for estimation of material quantities unless our contracted services *specifically* include sufficient exploration for such purpose(s) and within the report we so state that the level of exploration provided should be sufficient to detect such anomalous conditions or estimate such quantities. Therefore, Universal will not be responsible for any extrapolation or use of our data by others beyond the purpose(s) for which it is applicable or intended.

All users of this report are cautioned that there was no requirement for Universal to attempt to locate any manmade buried objects or identify any other potentially hazardous conditions that may exist at the site during the course of this exploration. Therefore, no attempt was made by Universal to locate or identify such concerns. Universal cannot be responsible for any buried manmade objects or environmental hazards which may be subsequently encountered during construction that are not discussed within the text of this report. We can provide this service if requested.

For a further description of the scope and limitations of this report, please review the document attached within Exhibit 1, "Important Information about Your Geotechnical Engineering Report", prepared by GBA/The Geoprofessional Business Association.

### 7.0 FIELD METHODOLOGIES

### 7.1 AUGER BORINGS

The three (3) auger borings, designated B1 through B3 on the attached Figure No. 3, were drilled in general accordance with the procedures of ASTM D 1452 (Standard Practice for Soil Investigation and Sampling by Auger Borings). The auger drilling technique involves advancing a slender, solid-stem, bucket auger into the soil to the required depth. The soil types encountered were also evaluated by visually classifying the cuttings recovered from the auger bucket in accordance with ASTM D 2487 guidelines.

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The shallow auger borings were performed by experienced field technicians using hand equipment. The boring locations were determined in the field using a hand held GPS receiver. No survey control was provided on-site, and our boring locations should be considered only as accurate as implied by the methods of measurement used. The approximate boring locations are shown on the attached Figure No. 3.

### 8.0 LABORATORY METHODOLOGIES

### 8.1 PARTICLE SIZE ANALYSIS

We completed #200 sieve particle size analyses on three (3) representative soil samples. These samples were tested according to the procedures listed ASTM D 1140 (Standard Test Method for Amount of Material in Soils Finer than the No. 200 Sieve). In part, ASTM D 1140 requires a thorough mixing the sample with water and flushing it through a No. 200 sieve until all of the particles smaller than the sieve size leave the sample.

The percentage of the material finer than the No. 200 sieve helps determines the textural nature of the soil sample and aids in evaluating its engineering characteristics. The percentage of soil particles passing the #200 sieve in each sample tested is shown on the appropriate attached boring logs.

### 8.2 PERMEABILITY TESTS

Constant head permeability tests were performed on six (6) remolded bulk samples, recovered from the boring locations by measuring the water flow through the samples for time versus flow volume. This data was used to calculate the coefficient of permeability (K) of the soils. Results of these tests are found in the laboratory results section of this report.

### 9.0 SOIL STRATIGRAPHY

The results of our field exploration and laboratory analysis, together with pertinent information obtained from the auger borings, such as soil profiles, penetration resistance and stabilized groundwater levels are shown on the boring logs included in Appendix A. The Key to Boring Logs, Soil Classification Chart is also included in Appendix A. The soil profiles were prepared from field logs after the recovered soil samples were examined by a Geotechnical Engineer.

The stratification lines shown on the boring logs represent the approximate boundaries between soil types, and may not depict exact subsurface soil conditions. The actual soil boundaries may be more transitional than depicted. A generalized profile of the soils encountered at our boring locations is presented in the following Table II. For more detailed soil profiles, please refer to the attached boring logs.

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TABLE II GENERALIZED SOIL PROFILE

Depth Encountered (feet, bls)	Approximate Thickness (feet)	Soil Description
Surface	1	Fill soils consisting of fine sand with silt, and varying amounts of clay lumps, gravel and shell [SP-SM]. The fill soils were not evident at boring location B1, however, a thick layer of topsoil was noted at this location.
1	3 to 4	Fine sand [SP].
4 to 5	2+ to 3+	Fine sand with broken shell [SP].

NOTE: [] denotes Unified Soil Classification system designation.

+ indicates strata encountered at boring termination, total thickness undetermined.

### **10.0 GROUNDWATER CONDITIONS**

### **10.1 EXISTING GROUNDWATER CONDITIONS**

We measured the water level in the auger boreholes on February 23, 2023 after the groundwater was allowed to stabilize. The measured groundwater level depth ranged from 6.4 feet at boring location B3 to 7.0 feet bls at boring location B2 as shown on the attached boring logs. Fluctuations in groundwater levels should be anticipated throughout the year, primarily due to seasonal variations in rainfall, surface runoff, and other factors that may vary from the time the borings were conducted.

### 10.2 TYPICAL WET SEASON HIGH GROUNDWATER LEVEL

The typical wet season high groundwater level is defined as the highest groundwater level sustained for a period of 2 to 4 weeks during the "wet" season of the year, for existing site conditions, in a year with average normal rainfall amounts. Based on historical data, the rainy season in Brevard County, Florida is between June and October of the year. In order to estimate the wet season water level at the boring locations, many factors are examined, including the following:

- a. Measured groundwater level
- b. Drainage characteristics of existing soil types
- c. Season of the year (wet/dry season)
- d. Current & historical rainfall data (recent and year-to-date)
- e. Natural relief points (such as lakes, rivers, swamp areas, etc.)
- f. Man-made drainage systems (ditches, canals, etc.)
- g. Distances to relief points and man-made drainage systems
- h. On-site types of vegetation
- i. Area topography (ground surface elevations)

Groundwater level readings were taken on February 23, 2023. According to data from the Southeast Regional Climate Center and the National Weather Service, the total rainfall in the previous month of January for Central Brevard County was 0.4 inches, approximately 2.2 inches below the normal amount for the month of January. Rainfall for calendar year 2022 was 52.1

inches, about 1.4 inches above normal levels. Total precipitation in 2023 as of February 23 was approximately 2.0 inches, roughly 2½ inches below the normal levels for this time period.

Based on this information and the factors listed above, we estimate that the typical wet season high groundwater levels at the boring locations will be approximately one (1) foot above the recorded measured levels. Please note, however, that peak stage elevations immediately following various intense storm events, may be somewhat higher than the estimated typical wet season high levels.

### 11.0 LABORATORY RESULTS

### 11.1 PARTICLE SIZE ANALYSIS

The soil samples submitted for analysis were classified as fine sand [SP]. The percentage of soil sizes passing the #200 sieve size are shown on the boring logs at the approximate depth sampled.

### **11.2 PERMEABILITY TESTS**

Soil permeability is a measure of the soil's ability to allow water flow though it under saturated conditions. Permeability is a function of the grain size and sorting of the entire soil mass. According to the National Soil Survey Handbook, 1993 Edition, published by the U.S. Department of Agriculture, permeability rates can be expressed in the following classes:

Permeability Class	Permeability K (in/hr)
Extremely Slow	0.0 - 0.01
Very Slow	0.01 – 0.06
Slow	0.06 - 0.2
Moderately Slow	0.2 - 0.6
Moderate	0.6 – 2.0
Moderately Rapid	2.0 - 6.0
Rapid	6.0 - 20.0
Very Rapid	> 20.0

Most "clean" fine sands [SP] typically exhibit moderately rapid to very rapid permeabilities. Fine sands with silt or clay [SP-SM or SP-SC] can usually be considered to have slow to moderately slow permeabilities; while silty sand [SM], clayey sands [SC], silts [ML] and clays [CL] are typically within the extremely slow to slow class.

The results obtained from our laboratory vertical and horizontal permeability tests, where K is the coefficient of permeability, are displayed in the following Table III:

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PERMEABILITY TEST RESULTS	

Boring Location	Soil Type	Permeability Rate K (in/hr)	Permeability Class	
B1	Fine sand [SP]	Remolded at 2	1.2	Moderate
B1	Fine sand [SP]	Remolded at 4	16.3	Rapid
B2	Fine sand [SP]	Remolded at 2	7.7	Rapid
B2	Fine Sand [SP]	Remolded at 5	18.8	Raid
B3	Fine sand [SP]	Remolded at 2	5.3	Moderately Rapid
В3	Fine sand [SP]	Remolded at 4	25.1	Very Rapid

It should be noted that the coefficient of permeability is not an infiltration rate. The actual infiltration rate is influenced by the coefficient of permeability as well as several factors, including the elevation of the pond bottom, water level in the pond, the elevation of the wet season water table, and the confining layer.

### 12.0 RETENTION BASIN

We understand that the stormwater runoff from the new impervious surfaces at this project will be collected within a proposed retention basin to be constructed in the approximate areas of our borings as shown on Figure 3. The hydraulic capacity of a stormwater retention basin is principally a function of the ability of the surface soil to receive and percolate the storm water runoff. Upon reaching the groundwater table or a restrictive layer, the stormwater runoff begins to mound.

The amount and rate of rise in the recharge mound depends on several factors, including the thickness and permeability of the receiving stratum, the elevation of the groundwater table, and the geometry of the loaded area.

The actual infiltration rate of retention basin subsoils is influenced by the coefficient of permeability as well as several factors, including the elevation of the pond bottom, water level in the pond, the elevation of the wet season water table, and the confining layer. These factors must be accounted for in an appropriate groundwater model to determine the infiltration rate of a given soil stratum. We recommend the designer use a commercial software program such as "Ponds" or "Modret" in order to evaluate these ponds.

The retention basin area subsoils appear to be mostly moderately rapid to rapid fine sand [SP] to the termination depth of our borings at seven (7) feet bls.

We estimate that the natural site surficial sands would exhibit a fillable porosity of approximately N = 25%. For a dry retention system to be used at this project, we recommend that the site be contoured to allow a pond bottom level of at least 1 foot above the estimated seasonal high groundwater levels.

Please note that the action of earthmoving equipment tends to densify the subsoils at the bottom of pond level during construction; somewhat reducing their permeability rate. Hence, we recommend that the permeability rate of the existing surficial sands [SP] listed in Table III be reduced by approximately 25% in the actual design.

After the configurations of the proposed retention basins are further defined, Universal should be allowed to review the proposed plans, so that recommendations for any necessary additional borings and/or laboratory testing can be formulated.

### 14.0 CLOSURE

We appreciate this opportunity to be of service as your geotechnical consultant on this phase of the project and look forward to providing follow up explorations and geotechnical engineering analyses as the project progresses through the design phase. If you have any questions concerning this report or when we may be of any further service, please contact us.







### PROPOSED RESIDENCE DRAINAGE IMPROVEMENTS 510 THIRD AVENUE MELBOURNE, BREVARD COUNTY, FLORIDA

### **BREVARD COUNTY SOIL SURVEY**

DRAWN BY:	RS	DATE: FEBRUARY 27, 2023 CHECKED BY: BF	DATE: FEBRUARY 27, 2023
SCALE:	N.T.S.	PROJECT NO: 0330.2300030.0000	PAGE NO: FIGURE 1

44 440



### **PROPOSED RESIDENCE DRAINAGE IMPROVEMENTS 510 THIRD AVENUE** MELBOURNE, BREVARD COUNTY, FLORIDA

### USGS TOPOGRAPHIC SURVEY

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ENGINEERING SCIENCES	DRAWN BY: RS	S	DATE: FEBRUARY 27, 2023	CHECKED BY: BF	DATE: FEBRUARY 27, 2023
	SCALE: 1"	= 2000'	PROJECT NO: 0330.2300030	0.0000	PAGE NO: FIGURE 2



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		UNIVERSAL ENGINEERING SCIENCES						
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LOCATION:	SEE BORING LOCATION PLAN	WATER TABLE (ft): 6.8	DATE FINISHED:	2/22/23				
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CLIENT:						G.S. ELEVATION (f	ît):	DA	TE STAR	TED:	2/22/23	
LOCATION:	SEE BORING	LOCATION	N PLAN	I		WATER TABLE (ft):	6.4	DA	TE FINIS	HED:	2/22/23	
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# Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

### While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you - assumedly a client representative - interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

# Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civilworks constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnicalengineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled*. No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one* – *not even you* – *should apply this report for any purpose or project except the one originally contemplated*.

### Read this Report in Full

Costly problems have occurred because those relying on a geotechnicalengineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full*.

# You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, or ientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

### This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be*, and, in general, *if you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying it. A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

### Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

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### This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmationdependent recommendations if you fail to retain that engineer to perform construction observation*.

### This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnicalengineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

### **Give Constructors a Complete Report and Guidance**

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

### **Read Responsibility Provisions Closely**

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

### **Geoenvironmental Concerns Are Not Covered**

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnicalengineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old.* 

## Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration*. Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not buildingenvelope or mold specialists*.



Telephone: 301/565-2733 e-mail: info@geoprofessional.org www.geoprofessional.org

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## 510 3<sup>rd</sup> Ave Residence

510 3rd Ave, Melbourne Beach, FL 32951



### **Client Information:**

510 3<sup>rd</sup> Avenue LLC 2101 Waverly Place, Ste. 100 Melbourne, FL 32901

### **Project Information:**

510 3rd Avenue Melbourne Beach, FL 32951

Land Description: WILCOX PLAT OF MELBOURNE BEACH RESUBD OF BLKS 11,20,21,30 & 31 S 120 FT OF LOT 7 BLK 11 EXC E 100 FT

Parcel Number: 28-38-07-02-11-7



1542 GUAVA AVE., UNIT A,. MELBOURNE, FL 32935

321.428.3869



### Architect:

MelD Studio Architecture, LLC Jeffrey K. Anderson, Architect 1542 Guava Ave. Unit A Melbourne, FL 32935 321-428-3869

### Structural Engineer:

MK Structural Engineer Mike Kalajian 614-546-6896321-794-5596

### **Project Narrative:**

The 510 3<sup>rd</sup> Ave Residence is a single-family, Modern West Indies, two-story home located in Melbourne Beach, FL. The new residence replaces an existing twostory residence built in the late 60s. The main living areas and Owner's Suite is located on the first floor. The guest bedrooms and a hangout room are located on the second floor. The residence has two garages, one connected by a short breezeway and the other directly connected to the residence. The exterior of the house features stucco, hardboard siding and a standing steam metal roof.

### General Location:

Located on the north side of Third Ave, adjacent to the Indian River.

### **General Lot Information:**

Area (in acreage): 0.31

Area (in square feet): 25,802 SQ. FT.

Set Back Lines:	
Front:	25'-0''
Side: (Inside):	15'-0''
Side (Corner):	25'-0''
Rear:	25'-0''
Zoning Classification:	I & RS Single-Family Residence
Lot Dimension:	222.25' x 120.67' x 179.0' x 137.67'

1542 GUAVA AVE., UNIT A,. MELBOURNE, FL 32935



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General Project Information: Proposed Use:	Single-Fo	amily Residential
Number of Stories:	2-Stories	
Garage Spaces:	3	
Existing Grade:	7.00'	
Finish Floor Elevation	8.50'	
Building Height:	36.20' (2	7'-8.25" A.F.F.)
Lot Coverage: Principal Lot Coverage:	20.3 %	
Area Calculations:		
<u>First Floor:</u> Conditioned Space: Front Porch: Back Porch: 2-Car Garage: 1-Car Garage: Storage: Breezeway:	2,754 113 1,000 907 371 45 57	SQ. FT. SQ. FT. SQ. FT. SQ. FT. SQ. FT. SQ. FT. SQ. FT.
<u>Second Floor:</u> Conditioned Space: Balcony:	1,130 249	SQ. FT. SQ. FT.
Total Conditioned Sq. Ft.: Total Unconditioned Sq. Ft.:	3,884 2,742	SQ. FT. SQ. FT.
Total Sq. Ft.:	6,626	SQ. FT.





Jeff Anderson <jeff@meldarch.com>

### FW: Set Backs

**Ryan Runte** <RRunte@cgcflorida.com> To: Jeff Anderson <jeff@meldarch.com> Mon, Apr 10, 2023 at 7:30 AM

Hey Man,

Hope you all had a great easter!

So if I am reading this correctly – looks like the north property line can be 15'? However then it looks like they are saying that all others need to be 25'? Not sure how far you had the garage of the east line?

I think this is good, lemme know your thoughts.

### **Ryan Runte**

### **Executive Vice President**

Certified General Contractors, Inc.

730 E. Strawbridge Ave, Suite 100 - Melbourne, FL 32901

P: 321-984-5000 x 17 I F: 321-724-4659

www.cgcflorida.com

From: Melbourne Beach Building Official <BuildingOfficial@melbournebeachfl.org> Sent: Monday, April 10, 2023 6:38 AM To: Ryan Runte <RRunte@cgcfiorida.com> Subject: Set Backs

Good afternoon Robert,

Hope all is well!

In reply to your question below, I have reviewed the property information and the town zoning code, and found the following:

- Parcel ID: 28-38-07-02-11-7
- Zoning district: 1-RS
- Setbacks:
  - Front: 25'

- Side interior: 15'
- Side corner: 25'
- Rear: 25'

\$ 3

- Orientation of Yards. Section 1A-3 Definitions includes the following relevant definitions:
  - Yard: An open space on the same lot with a principal building which is unoccupied and unobstructed by buildings from the ground to the sky except for overhangs or bay windows or as otherwise provided in this section.
  - Front yard: A space extending the full width of the lot between any building and the front lot line and measured perpendicular to the building at the closest point to the front lot line.
  - Rear Yard: A space extending the full width of the lot between the principal building and the rear lot line and measured perpendicular to the building at the closest point to the rear lot line.
  - Side Yard: The space extending along the side lot line from the front yard to the rear yard and lying between the side lot line and the nearest part of the principal building, including covered porches, carports and garages.

Based on the above, the Town Code does not specify that the "front" yard and "Front" setback must be measured from the lot line that abuts the public right-of-way. Rather, the front yard is the space between the building and the front lot line, and the front lot line is not defined in the code. Consequently, the lot line for the subject property which abuts the Third Avenue right-of-way could be considered the "side corner" and the setback would be 25'. The northernmost line would then be considered the "side interior" and the setback would be 15', and all other setbacks would be 25'.

I hope that helps. Please let me know if you have any questions. THANKS!

Ryan, this is the response I received from the Town planner, hope this helps.

Robert Bitgood Building Official Code Enforcement supervisor buildingofficial@melbournebeachfl.org 507 Ocean Ave., Melbourne Beach, FL 32951-2523 (321) 724-5860 ~ Fax (321) 984-8994 www.melbournebeachfl.org

Building Permits insure quality work.



Brevard County's Oldest Beach Community - Established 1883

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This Document Prepared By and Return to: Gary B. Frese, Esquire Frese, Whitehead & Anderson, P.A. 2200 Front Street, #301 Melbourne, FL 32901

Parcel ID Number: 28-37-07-0201107

### Warranty Deed

This Indenture, Made this 6th day of September , 2022 A.D., Between STEPHEN M. PERKINS, single and INGRID B. EGELI, single, Individually and as Trustees of Stephen M. Perkins and Ingrid B. Egeli Trust dated March 22, 2019

of the County of Brevard , State of Florida , grantors, and 510 3RD AVENUE, LLC, a Florida limited liability company

whose address is: 244 Harbour Drive E, Indian Harbour Bcach, FL 32937

of the County of Brevard , State of Florida , grantee. Witnesseth that the GRANTORS, for and in consideration of the sum of **TEN DOLLARS (S10)** 

and other good and valuable consideration to GRANTORS in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, have granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate, lying and being in the County of Brevard State of Florida to wit:

The South 120 feet of Lot 7, Block 11, Resubdivision of Blocks 11, 20, 21, 30 and 31 of Wilcox Plat of Melbourne Beach, Florida, according to the map or plat thereof, as recorded in Plat Book 10, Page(s) 51, of the Public Records of Brevard County, Florida.

LESS AND EXCEPT

The East 100 feet of the South 120 feet of Lot 7, Block 11, Resubdivision of Blocks 11, 20, 21, 30 and 31 of Wilcox Plat of Melbourne Beach, Florida, according to the map or plat thereof, as recorded in Plat Book 10, Page(s) 51, of the Public Records of Brevard County, Florida.

Continued on Attached

and the grantors do hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever

In Witness Whereof, the grantors have hereunto set their hands and seals the day and year first above written. Signed, sealed and delivered in our presence:

Printed Name: Victic Bobit

Witness

Printed Name: MELANDE CHASTELN Witness

Mun TRUSTA Stephen M. Perkins, Individually and as Trustee P.O. Address: 510 3rd Avenue, Melbourne Beach, FL 32951 B motil m nil By

Ingrid B.Egeli, Individually and as Trustee P.O. Address: 510 3rd Avenue, Melbourne Beach, FL 32951

State of Florida

County of Brevard

The foregoing instrument was acknowledged before me by means of  $\checkmark$  physical presence or  $\square$  online notarization, this day of September, 2022, by

Stephen M. Perkins, Individually and as Trustee and Ingrid B. Egeli, Individually and as Trustee of Stephen M. Perkins and Ingrid B. Egeli Trust dated March 22, 2019 on behalf of the trust who are personally known to me or who have produced their

Florida's driver	MELANIE CHASTAIN	) a saft
as identification	Conumission # GG 962434	Salance Chestain
	Bondud Thru Tray Fais Interstoce 600-385-7019	Printed Name:
		Notary Public
		My Commission Expires:

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This original document has been electronically filed in the Public Becords of Brevard County. Florida on 022 in Official Records Book Theolo Page Sitt at 9:17 AM

This Document Prepared By and Return to: Gary B. Frese, Esquire Frese, Whitehead & Anderson, P.A. 2200 Front Street, #301 Melbourne, FL 32901

Parcel ID Number: 28-37-07-0201107

Ξ.

### Warranty Deed

This Indenture, Made this day of September , 2022 A.D., Between 6th STEPHEN M. PERKINS, single and INGRID B. EGELI, single, Individually and as Trustees of Stephen M. Perkins and Ingrid B. Egeli Trust dated March 22, 2019

of the County of Brevard	, State of Florida	, grantors, an	d
510 3RD AVENUE, LLC, a Florida limited	liability company		

#### whose address is: 244 Harbour Drive E, Indian Harbour Beach, FL 32937

of the County of Brevard	, State of	Florida	, grantee.
Witnesseth that the GRANTORS, for an	d in consideration of the s	um of	

#### **TEN DOLLARS (\$10)**

and other good and valuable consideration to GRANTORS in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, have granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate, lying and being in the County of Brevard State of Florida to wit:

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#### Continued on Attached

and the grantors do hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

In Witness Whereof, the grantors have hereunto set their hands and seals the day and year first above written. Signed, sealed and delivered in our presence:

Printed Name: Vic Lie Bobit Witness

Printed Name: MELANIE CHASTELN Witness

State of Florida

TRUSTA Mury Stephen M. Perkins, Individually and as Trustee

P.O. Address: 510 3rd Avenue, Melbourne Beach, FL 32951

B. na 2 Am

Ingrid B. Egeli, Individually and as Trustee P.O. Address: 510 3rd Avenue, Melbourne Beach, FL 32951

County of Breva	rd									
The foregoing	instrument was	acknowledged	before m	ne by	means	of 🔽	physical	presence	or 🗌	online
notarization, this	day of Septe	ember , 2022	, by							

er, 2022, by Stephen M. Perkins, Individually and as Trustee and Ingrid B. Egeli, Individually and asTrustee of Stephen M. Perkins and Ingrid B. Egeli Trust dated, March 22, 2019 on behalf of the trust

who are personally known to me or who have produced the	eir
Florida's driver ficense MELANIE CHASTAIN	1 a after
as identification Commission # GG 952434 Expires Merch 20, 2024	Printed Name: Notary Public

My Commission Expires:

### Warranty Deed - Page 2

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Parcel ID Number: 28-37-07-0201107

The property being conveyed is the Homestead Property of the Grantors, who are the Settlors of the named trust.

Subject to restrictions, reservations and easements of record, if any, and taxes subsequent to December 31, 2021.





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	PLAN NOTES	
	PLAN LEGEND	uuus
	TAG DESCRIPTION	ARCHITECTURE
	EXISTING GAR EXISTING GAR EXISTING GAR	1542 GUAVA AVE MELBOURNE, FL 32035
	NEW LANDSCAPING AS SELECTED BY CLIENT	321 428 3889 design@meiderch.com
	HATCH LEGEND	
	GRASS AREA	DRAWN JKA
	NEW PAVER PATH/FLOOR PAVER PROPILE AND	CHECKED JAA
	PER MANUFACTURE'S SPECIFICATIONS.	SD <u>2023-05-31</u>
	CONCRETE	
	NEW POOL BY POOL CONTRACTOR OUT PART OF SCOPE).	
	IRRIGATION NOTE:	
	STANDARD WELL-FED IRRIGATION TO BE PROVIDED OFF EXISTING WELL, SPRINKLER HEADS SPACED PER BEST PRACTICES FOR COMPLETE COVERAGE.	<u>A</u> .
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		SEAL
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		SHEET TITLE
		LANDSCAPE / IRRIGATION PLAN
		SHEET NUMBER
		A0.2



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### PLAN NOTES

THE PROPERTY IS CURRENTLY DEVELOPED. EXISTING TREES ON THE PROPERTY & USEE TREE LEGEND FOR MORE INFORMATION)

THE EXISTING UNDEVELOPED SO, FT, IS 2.1/21 WITH 9 TREES. THE UNDEVELOPED AREA OF THE LOT AFTER THE DEVELOPMENT OF THE NEW HOUSE AND HARDSCOPE IS IS AS 30, FT, TO MANTAM THE EXCENT AND AND A THE LASE REGUMED ON THE LOT AFTER THE DEVELOPMENT OF THE STAF

THE CLIENT PLANS ON DEMOLISHING S TREES AND MAINTAIN 4 EXISTING TREES, THE CLIENT PLANS ON PLANTING 3 NEW TREES TO THAIL THE TOWN OF RELIGIOURE BEACH LANGGAPE REQUIREMENTS. SEE THE LANDSCAPE PLAN FOR THE NEW TREES.

### TREE LEGEND

TAG	TREE	DIAMETER	STATUS
(1)	PINE	127	DEMOLISH
2	OAK	19*	SAVE
0	OAK	4.	SAVE
$\odot$	OAK	21	SAVE
(3)	OAK	6*	DEMOLISH
(	OAK	Q*	DEMOLISH
$\langle  \rangle$	OAK	8*	DEMOLISH
	OAK	2.	DEMOLISH
0	OAK	20-	SAVE

CUSTOM DESIGN 510 3RD AVE RESIDENCE 510 3RD AVE, MELBOURNE BEACH, FL 32951
SEAL
DATE: 2023-05-31 SHEET TRUE EXISTING TREE PLAN SHEET MUMBER AO.3



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	CUSTOM DESIGN 510 3RD AVE RESIDENCE 510 3RD AVE, MELBOURNE BEACH, FL 32951		
	SEA		
SECOND FLOOR	DATE 2023-05-11 SHEET TITLE SECOND FLOOR PL;AN SHEET NUMBER A1.2		



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	ACHITECTURE	AQU
2** F0*	CUSTOM DESIGN 510 3RD AVE RESIDENCE 510 3RD AVE, MELBOURNE BEACH, FL 32951	
	SEAL	
v* - 17-9**	DATE 20745.31 SHEET TILE EXTERIOR ELEVATIONS SHEET NUMBER A2.0	

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BOOK BOOK RVEYOR & MAPPER SS VATION CE LINE RHEAD UTILITY LINE	DATUM OF 1988 (NAVD 88). THE RVEY IS BASED ON IS DESCRIBED SIDE VERTICAL CONTROL BC PID S BCS&M BENCHMARK DISK IN CT, PUBLISHED ELEVATION = 9.899 RKS ARE SHOWN AND DESCRIBED SURVEY.	ARINGS FOR THIS SURVEY IS GRID IE COORDINATE SYSTEM, FLORIDA ADJUSTMENT OF 2011. THE NORTH E OF THIRD AVENUE BEARS GE NOTED, SURVEY MEASUREMENTS RES SHOWN ON THIS SURVEY ARE ELD MEASUREMENTS. THIS SURVEY MEETS OR EXCEEDS TH IN ADMINISTRATIVE RULE 5J-17 RACTICE FOR SURVEYORS AND PROVEMENTS THAT EXISTED AS OF SURVEY WERE LOCATED AND ARE VEY. OOD INSURANCE RATE MAPS FOR ORDIA, INDICATES THAT A PORTION LIES WITHIN ZONE AE (SPECIAL EAS SUBJECT TO 1% ANNUAL H A BASE FLOOD ELEVATION OF HAT THE REMAINDER OF THIS HIN ZONE X (AREA OF MINIMAL ORMATION WAS TAKEN FROM MAP 4H, REVISED AUGUST 24, 2017. FLOOD ZONE SHOWN ON THIS ON DIGITAL DATA AVAILABLE FROM ASE.	OT PLAN WAS PREPARED FOR RYAN OR DELETIONS BY ANYONE OTHER PARTY ARE PROHIBITED WITHOUT SENT OF LEADING EDGE LAND	CKS 11, 20, 21, 30 AND 31 OF LAT BOOK 10, PAGE 51, OF THE <b>YOR'S NOTES</b>	I OF WILCOX PLAT OF MELBOURNE HE PUBLIC RECORDS OF BREVARD
		BUILDING PLOT PLAN	DATE	E OF DRAWING:	5 JUN 2023
L'EADING EDGE		FOR RVAN RINTE	MANA	AGER: JH	CADD: TQ
I AND SERVICES		SURVEYOR'S CERTIFICATION	PRO	JECT NUMBER:	761-21013
V JINCORPORATED		I, THE UNDERSIGNED FLORIDA LICENSED SURVEYOR AND	APPER, FIEL	D BOOK NUMBE	.R: 1648,1689
0RI ANDO FI ORIDA 32800		ACCORDANCE WITH FLORIDA ADMINISTRATIVE RULE	5J-17 LAST	FIELD WORK:	19 JAN 2023
PHONE: (407) 351-6730		MAPPERS OF PRAPTICE FOR PROFESSIONAL SURVEYOR	S AND CREV	W CHIEF(S): SC	
V FAX: (407) 351-9691 WEB:www.leadingedgels.com		XII 11 1 06/05/2023	COM	PUTER FILE: 76	1013PP.DWG
FLORIDA LICENSED BUSINESS NUMBER LB 6846		JEFFREY JOFIUS PROPESSIONAL SURVEYOR AND MAPPER NUMBER 6610	SCAL	E: 1* = 30'	SHEET 1 OF 1

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## GRADING AND DRAINAGE PLAN

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### SURVEYOR NOTES:

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- THIS BOUNDARY AND TOPOGRAPHIC SURVEY WAS PREPARED FOR RYAN RUNTE, ADDITIONS OR DELETIONS BY ANYONE OTHER THAN SIGNING PARTY ARE PROHIBITED WITHOUT WRITTEN CONSENT OF LEADING EDGE LAND SERVICES, INC. THE BASIS OF BEARINGS FOR THIS SURVEY IS GRID NORTH, STATE FLANE COORDINATE SYSTEM, FLORIDA EAST, NAD 83, NGS ADJUSTINENT OF 2011, THE NORTH RIGHT-OF WAY UNE OF THIRD AVENUE BEARS SBY 344 597 W. UNLESS OTHERWISE NOTED, SURVEY MEASUREMENTS AND PLOTTED FEATURES SHOWN ON THIS SURVEY AREA BASED ON ACTUAL FIELD NAFASI REMARTS.
- ACTUAL FIELD MEASUREMENTS THE ACCURACY OF THIS SURVEY MEETS OR EXCEEDS STANDARDS SET FORTH IN ADMINISTRATIVE RULE 5J-17 "STANDARDS
- THE ALCOMET OF THE VERY AND A MAPPERS " OF PRACTIVE FOR SURVEYORS AND MAPPERS" THE SUBJECT PROPERTY CONTAINS 22,633 SQUARE FEET (0.520 ACRES) OF LAND, MORE OR LESS. ONLY VISIBLE IMPROVEMENTS THAT EXISTED AS OF THE DATE OF THIS SURVEY WERE LOCATED AND ARE SHOWN ON THIS
- SURVEY. THE PLAT OF "RESUBDIVISION OF BLOCKS 11, 20, 21, 30 AND 31 OF WILCOX PLAT OF MELBOURNE BEACH, ASRECORDED IN THAT BOOK 10, PAGE 51, OG THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AS USED IN THE PREPARATION OF THIS PLAT BOOK 10, PAGE 51, OG THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AS USED IN THE PREPARATION OF THIS
- LIKE DOUGLAD, FOR 23, OF THE POBLIC RELOTED OF THE PARTY RECORDER TO THE PARTY REPORT THE PARTY REPORT OF THIS SURVEY. A REVIEW OF FLOOD INSUBANCE RATE MAPS FOR BREVARD CONTY, FLORIOA, INDICATES THAT A PORTION OF THIS PROPERTY LISE WITHIN 2010R AE (SPECILL FLOOD HAZARD AREAS SUBJECT TO 1% ANNUAL CHANCE FLOOD) WITH A BASE PLOOD ELEVATION OF 6.00 FEET AND THAT THE REMAINDER OF THIS PROPERTY LISE WITHIN 2010K (A REA OF MINIMAL FLOOD LEVATION OF 6.00 FEET AND THAT THE REMAINDER OF THIS PROPERTY LISE WITHIN 2010K (A REA OF MINIMAL FLOOD LEVATION OF 6.00 FEET AND THAT THE REMAINDER OF THIS PROPERTY LISE MULTINE VALUES (A REA OF MINIMAL FLOOD LEVATION OF 6.00 FEET AND THAT THE REMAINDER OF THIS PROPERTY LISE MULTINE TO REAL FLOOD LEVATION ON THIS SURVEY ARE BASED ON DIGITAL DATA AVAILABLE FROM STATEWIDE GIS DATABASE. THE FLOOD ZONE SHOWN ON THIS SURVEY ARE BASED ON DIGITAL DATA AVAILABLE FROM STATEMIDE GIS DATABASE. THE FLOOD ZONE SHOWN ON THIS SURVEY ARE BASED ON DIGITAL DATA AVAILABLE FROM STATEMIDE GIS DATABASE. THE SUBJECT ROPORTY THAT ARE NOT DEPICTED ON THE SURVEY. THE VERTICAL DATUM FOR THIS SURVEY IS MORTH AMBERICAN VERTICE DATUM OF 1988 (NAVD 88). THE BENCHMARK THIS SURVEY IS BASED ON IN DESCRIBED AS FOLLOWS (B RACHSIDE VERTICAL CONTROL BC PID 422-35, 25' BRASS BCSMM BENCHMARK DISK IN CONCRETE CUBB INLET, PUBLISHED ELEVATION = 9.899 FEET, SITE BENCHMARKS ARE SHOWN AND DESCRIBED GRAPHICALLY ON THE SURVEY.
- DESCRIBED GRAPHICALLY ON THE SURVEY

### SURVEYOR LEGEND:

			FENCE LINE	(C)	CALCULATED
	FOUND CONCRETE MONUMENT		- OVERHEAD UTILITY LINE	(P)	FER PLAT
Ø	FOUND IRON PIPE		RIAT BOOK	SF	SQUARE FEET
	FOUND IRON ROD & CAP	P <sub>a</sub> B,	PLAT BOOK	PSM	PROFESSIONAL SURVEYOR & MAPPER
0	SET 5/8" IRON ROD & CAP "LB 6846"	OR	OFFICIAL NECORDS BOOK	1.0	NCENSED BUSINESS
đ	WOOD POWER POLE	PG	PAGE	LB	
ĩ	GUY ANCHOR	CONC. MON.	CONCRETE MONUMENT	@1_0	SUFT SURFACE ELEVATION
	UTUTY PEDESTAL	iD	IDENTIFICATION	¢1.00	HARD SURFACE ELEVATION
-		R/W	RIGHT OF WAY	FFE	FINISHED FLOOR ELEVATION
	CAICH BASIN			INV	INVERT
•	BENCHMARK				

### CIVIL SITE GRADING NOTES:

#### 0 CONTRACTOR TO ENSURE POSITIVE DRAINAGE PATH TO STORMWATER TREATMENT AREA.

- CONTRACTOR TO COORDINATE GRADING ALONG COMMON LOT LIVES WITH ADJACENT NEIGHBORS TO ENSURE CONTINUED POSITIVE DRAINAGE. CARE TO BE TAKEN DURING GRADING EFFORTS TO MAINTAIN EXISTING DRAINAGE PATHS OF ADJACENT NEIGHBORS WHICH SHALL NDT TO THE RECEVEN 2. BE BLOCKED
- PROVIDE COQUINA REVETMENT ALONG THE LENGTH OF THE SHORELINE FROM WATERS EDGE AT 3.) A 2.1 SLOPE TO THE IN AT ELEVATION 7 FT (NAVD 80) AS SHOWN IN PLAN VIEW FOR STORMWATER RETENTION. SEE STRUCTURE FOR DETAILS AND SPECIFICATIONS. REVETMENT DESIGN AND ERMITTING BY OTHERS
- CONTRACTOR TO COORDINATE REGRADING EFFORTS WITH TOWN OF MELBOURNE BEACH FOR AREA ADJACENT TO 3RD AVENUE RIGHT OF WAY WITH FIELD VERHICATION OF TIE INS TO EXISTIN ELEVATIONS ALLOWING TRANSITION FROM SWALE TOP OF BANK TO PAVEMENT ELEVATIONS WHILE MAINTAINING EXISTING ORAMAGE CONNECTIONS 4.)
- CONTRACTOR TO COORDINATE CONSTRUCTION OF A RETAINING WALL IF FIELD CONDITIONS DICTATE TO CONNECT RESTORED REVENUENT ALONG NORTH PROPERTY UNE APPROVED DESCON ALTERNATIVE INCLUDES REVENUESDIN FROM NEIGHORE TO REGRADING REFORTS TO RESTORE REVENUENT NEAR EXISTING DOCK. RETAINING WALL AND/OR REVENUENT DESIGN AND 5. ERMITTING BY OTHERS.
- GRASS COVER WITHIN BOUNDARY OF STORMWATER POND BOTTOM SHALL BE EITHER SEED AND MULCH OR SAND GROWN SOD. REMOVE AND REPLACE ANY DELETERIOUS MATERIALS OR LIMITING SOLS WITH PERCOLATION VALUES LESS THAN TO INCHES PER HOLIR PLACED AT A DENSITY OF APROXIMATERY 29216, OTHE ADDIVIDE MATERIAL TESTING DURING ENGINEER RECOMMENDATIONS. CONTRACTOR TO INCLUDE MATERIAL TESTING DURING 6. CONSTRUCTION
- (7.) CONTRACTOR TO PITCH DRIVEWAY TOWARD STORMWATER COLLECTION AREAS FOR TREATMENT
- PROVIDE FENCE ALONG PROPERTY LINE WITH SWING GATES PER OWNER, CONTRACTOR TO COORDINATE CONSTRUCTION WITH NEIGHBORS FOR ANY IMPACTS OR REVISIONS TO FENCING. 8
- 9.) DRIVEWAY, SIDEWALK, PORCH, RESIDENCE AND FENCE DESIGN INCLUDING DETAILS WITH SPECIFICATIONS BY OTHERS.
- FOOTPRINT PROVIDED BY ARCHITECT AND DWIVER, ANY DIMENSIONS ON GRADING PLAN FOR REFERENCE DW.Y. CONTRACTOR TO ENSURE CORRECT DIMENSIONS INCLUDED PRIOR TO CONSTRUCTION. 10
- SEE ARCHITECTURAL PLAN FOR ROOF DRAINAGE AND DOWINSPOUT COLLECTION. RUNOFF COLLECTION SHOULD BE DIRECTED TO PROPOSED DRY RETENTION AREAS. (11)
- PROVIDE 6: ADS N-12 LINDERGROUND STORMWATER COLLECTION PIPE WITH WATER TIGHT (12) PROVIDE 6: AD3 4-12 UNDERBRUGHD SUDRAWATER COLLECTOR VIEW WITT WATER HIGHT JOIN'S TO EXTEND AT A WINNUM 1% SCOPE WITH A MINIMUM OVER OF 12" FROM GUTTER AND DOWNSPOLT COLLECTION SYSTEM FOR ROOF ADJACENT TO POOL TO STORAWATER COLLECTOR MER A PROVID FAND DARA BUBBEL UP CONNECTION IN STORAWATER PODU WITH TOP OF DRAIN AT 6.0 AND INVERT FIELD CUT. INCLUDE ROCK FOR EROSION PROTECTION AROUND

OWNER 510 3rd AVENUE, LLC MELBOURNE BEACH, FL 32901

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NOTE: SOD IN AREA OF POND SHA	ALL BE SAND GROWN
SECTION	(c)
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SOD IN AREA OF POND SHALL BE SAND GROWN

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AL DESCRIPTION			LAST FIELD WORK: 17 AUG 2022 CREW CHIFT(5): SG COMPUTER FILE: WEBOURWEDWG SCALE: 1"-20"   5HEET 1 OF 1		
O.R. 8458, PG, 619 Back 1, Besigerein or BLOCKS 11, 25, 21, of MCLBOURSE BEACH, ACCORDING TO THE MAT BACK 10, PAGE 31, or THE PUBLIC RECORDS OF UTH 100 FEET OF LOT 7, BLOCK 11, BERLBOUGSION AND 33 OF FLOX FLOX FOR OF MELSON, 10, PAGE 51, OF DE COUNTY, FLOREDA.	REVISIONS:		DATE OF DRAWING 23 AUG 2022 MANUGER UDH (2000: EAC PROJECT NUMBER IE 1648 FELD BOOK NUMBER IE 1648		
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1 OF WILCOX PLAT OF MELBOURNE THE PUBLIC RECORDS OF BREVARD	5 JUN 2023 Caddp: TQ 761-21013 R: 1648,1689 19 JAN 2023 19 JAN 2023 1013PP.DWG 1013PP.DWG
CKS 11, 20, 21, 30 AND 31 OF PLAT BOOK 10, PAGE 51, OF THE CYOR'S NOTES	DATE OF DRAWING: WANAGER: JH PROJECT NUMBER: FIELD BOOK NUMBER: LAST FIELD WORK: 1 CREW CHIEF(S): SC COMPUTER FILE: 76 SCALE: 1* = 30'
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BOOK JRVEYOR & MAPPER SS EVATION ICE LINE ERHEAD UTILITY LINE	EADING EDGE LAND SERVICES LAND SERVICES BROZ EXCHANGE DRIVE ORLANDO, FLORIDA 32809 PHONE: (407) 351-6531 FHONE: (407) 351-6531 WEB:www.leadingedgels.com



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