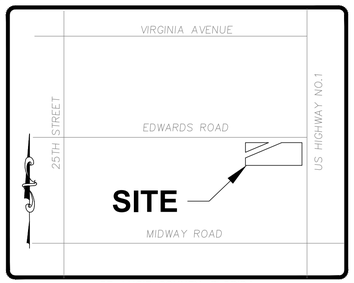
BOUNDARY & TOPOGRAPHIC SURVEY

FOR: TWIN VEE

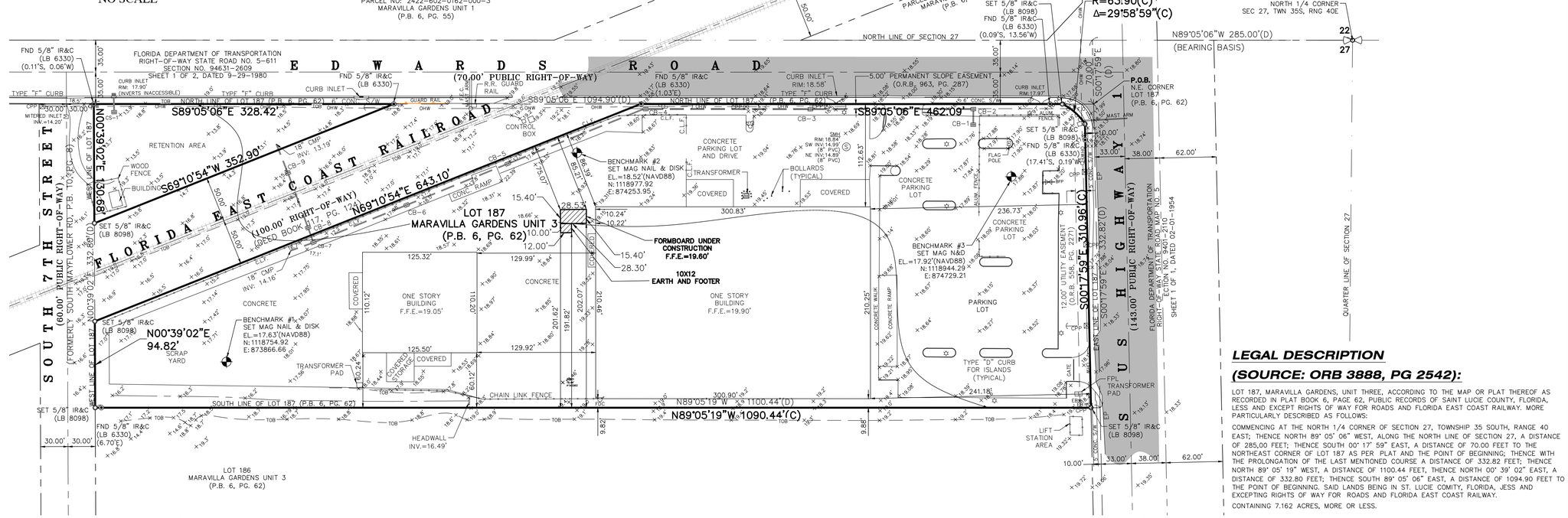


ST. LUCIE COUNTY, FLORIDA

VICINITY MAP

NO SCALE

	RIM	INVERT ELEV	INVERT DIR	INVERT PIPE	INVERT ELEV	INVERT DIR	INVERT PIPE	BTM	NOTE
CB-1	17.33	15.07	N	18" CMP	–	–	18" CMP	14.87	–
CB-2	17.54	14.97	S	18" CMP	15.08	W	18" CMP	14.62	–
CB-3	17.86	15.20	E	18" CMP	15.19	W	18" CMP	15.20	–
CB-4	17.91	14.98	E	18" CMP	14.98	W	18" CMP	14.98	–
CB-5	17.48	14.72	NE	18" CMP	14.72	SW	18" CMP	14.72	–
CB-6	17.10	14.50	E	18" RCP	14.50	W	18" CMP	14.35	–
CB-7	17.09	13.99	NE	18" CMP	13.99	SW	18" CMP	13.74	–
CB-8	15.82	13.89	NW	18" CMP	13.82	SE	18" CMP	13.74	NO TOP
CB-9	15.88	13.97	NW	18" CMP	14.07	SE	18" CMP	14.07	NO TOP
CS-1	16.78	12.93	N	18" RCP	13.83	S	WEEP HOLE	11.03	



LEGAL DESCRIPTION

(SOURCE: ORB 3888, PG 2542):

LOT 187, MARAVILLA GARDENS, UNIT THREE, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 6, PAGE 62, PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA, LESS AND EXCEPT RIGHTS OF WAY FOR ROADS AND FLORIDA EAST COAST RAILWAY. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH 1/4 CORNER OF SECTION 27, TOWNSHIP 35 SOUTH, RANGE 40 EAST; THENCE NORTH 89° 05' 06" WEST, ALONG THE NORTH LINE OF SECTION 27, A DISTANCE OF 285.00 FEET; THENCE SOUTH 00° 17' 59" EAST, A DISTANCE OF 70.00 FEET TO THE NORTHEAST CORNER OF LOT 187 AS PER PLAT AND THE POINT OF BEGINNING; THENCE WITH THE PROLONGATION OF THE LAST MENTIONED COURSE A DISTANCE OF 332.82 FEET; THENCE NORTH 89° 05' 19" WEST, A DISTANCE OF 1100.44 FEET, THENCE NORTH 00° 39' 02" EAST, A DISTANCE OF 332.80 FEET; THENCE SOUTH 89° 05' 06" EAST, A DISTANCE OF 1094.90 FEET TO THE POINT OF BEGINNING. SAID LANDS BEING IN ST. LUCIE COMITY, FLORIDA, JESS AND EXCEPTING RIGHTS OF WAY FOR ROADS AND FLORIDA EAST COAST RAILWAY.

CONTAINING 7.162 ACRES, MORE OR LESS.

SYMBOL & ABBREVIATION LEGEND:

Ⓐ	AIR RELEASE VALVE	EHH	ELECTRIC HAND HOLE (EHH)	L	LENGTH	PSL	PORT SAINT LUCIE, FLORIDA	TYP	TYPICAL
AL	ARC LENGTH	EM	ELECTRIC METER		LIGHT POST	PLS	PROFESSIONAL LAND SURVEYOR	U.E.	UTILITY EASEMENT
ASPH	ASPHALT	ELEC PANEL	ELECTRICAL PANEL	MAG/D	MAG NAIL MAG BRAND NAIL	R	RADIUS	UNK	UNKNOWN
BFP	BACK FLOW PREVENTER			Ⓜ	MAILBOX	RGE	RANGE	UNKN HHH	UNKNOWN HANDHOLD
	BENCHMARK (BM) OR GROUND CONTROL POINT (GCP)	EL./ELEV.	ELEVATION	M.C.	MARTIN COUNTY	RTK	REAL TIME KINEMATIC	RISER BOX	UNKNOWN RISER BOX
	BIKE RACK	FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	MHWL	MEAN HIGH WATER LINE	RWV	RECLAIMED WATER VALVE	Ⓤ	UNKNOWN TYPE MANHOLE
CATV	CABLE RISER	F.O.	FIBER OPTIC	MLWL	MEAN LOWER WATER LINE	RLS	REGISTERED LAND SURVEYOR	VCP	VITRIFIED CLAY PIPE
(C)	CALCULATED	FOHH	FIBER OPTIC HAND HOLE		METAL LIGHT POST	RCP	REINFORCED CONCRETE PIPE	WM	WATER METER
	CATCH BASIN		FIBER OPTIC MARKER		METAL POWER POLE	R/W	RIGHT-OF-WAY	Ⓦ	WATER SERVICE METER (WM)
℄	CENTERLINE	FIBER RISER	FIBER OPTIC RISER	MP	METAL PIPE	R/C	ROD AND CAP	WV	WATER VALVE (WV)
CCR	CERTIFIED CORNER RECORD	(M)	FIELD MEASURED	MON	MONUMENT	Ⓢ	SANITARY MANHOLE	Ⓦ	WELL
CLF	CHAIN LINK FENCE	F.F.E.	FINISHED FLOOR ELEVATION	NGVD29	NATIONAL GEODETIC VERTICAL DATUM OF 1929	SV	SANITARY VALVE	W	WEST
CHD.	CHORD	FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	N/D	NON DESCRIPT NAIL AND DISK	SEC	SECTION	WF	WOOD FENCE
CO	CLEAN OUT	FPL	FLORIDA POWER AND LIGHT	N.R.	NON RADIAL		PROPERTY CORNER		WOOD POLE STREET LIGHT
COMM RISER	COMMUNICATION RISER	FT	FOOT	NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988		RIGHT-OF-WAY CONTROL		WOOD POWER POLE
CONC	CONCRETE	FM	FORCE MAIN	N	NORTH OR NORTHING		SIGN		
	CONCRETE LIGHT POST	FND	FOUND	No.	NUMBER	S	SOUTH		
CM	CONCRETE MONUMENT	Ⓕ	FPL MANHOLE	O.R.B.	OFFICIAL RECORDS BOOK		SPIGOT		
CPP	CONCRETE POWER POLE (CPP)	SQ FT.	SQUARE FEET	OHW	OVER HEAD WIRES		SPRINKLER VALVE		
	CONCRETE POWER POLE W/STREET LIGHT	GAS	GAS VALVE	PG	PAGE	S.L.C.	ST. LUCIE COUNTY		
	CONCRETE SIGNAL LIGHT POLE	GIS	GEOGRAPHIC INFORMATION SYSTEMS	PCN	PARCEL CONTROL NUMBER	STA	STATION		
CMP	CORRUGATED METAL PIPE	GND	GROUND	PK NAIL	PARKER-KALON NAIL	Ⓓ	STORMWATER DRAINAGE MANHOLE		
	CURB INLET		GROUND LIGHT	PK/D	PARKER-KALON NAIL & DISK		STREET SIGN		
	DECORATIVE LIGHT POST		GUY WIRE ANCHOR	PCP	PERMANENT CONTROL POINT	TELE RISER	TELEPHONE RISER BOX		
(D)	DEED		HANDICAP	PRM	PERMANENT REFERENCE MONUMENT	TOE	TOE OF SLOPE		
D.B.	DEED BOOK	HDPE	HIGH DENSITY POLYETHYLENE PIPE	P.B.	PLAT BOOK	TOB	TOP OF BANK/BERM		
Δ	DELTA/CENTRAL ANGLE	HWF	HOG WIRE FENCE	(P)	PLAT DATA	T.O.N.	TOP OF NUT		
ø	DIAMETER (DIA.)	HYDRANT		P.O.B.	POINT OF BEGINNING	X 0.0	TOPOGRAPHIC DATA (SOFT SURFACE)		
Ⓓ	DRAINAGE MANHOLE	IN	INCH	P.O.C.	POINT OF COMMENCEMENT	X 0.00	TOPOGRAPHIC DATA (HARD SURFACE)		
DIP	DUCTILE IRON PIPE	INV	INVERT	P.C.C.	POINT OF COMPOUND CURVE	TWNSHP	TOWNSHIP		
E	EAST/EASTING	IP	IRON PIPE	P.C.	POINT OF CURVATURE	Ⓣ	TRAFFIC HANDHOLD		
EOW	EDGE OF WATER	IR	IRON ROD	P.T.	POINT OF TANGENCY	TSCB	TRAFFIC SIGNAL CONTROL BOX		
EB	ELECTRIC BOX	IR/C	IRON ROD AND CAP	P.O.T.	POINT OF TERMINUS				
			IRRIGATION CONTROL VALVE	PVC	POLYVINYL CHLORIDE				

LIDAR FLIGHT NOTES & ACCURACY REPORT:

1. THIS SITE WAS FLOWN DURING OCTOBER 14, 2021 UTILIZING A DJI MATRICE 300 UAV.
2. SENSOR(S) USED: ZENMUSE L1 WITH LIVOX LIDAR MODULE
2. FLIGHT PLANNING WAS PERFORMED WITH DJI PILOT FOR FLIGHT PLANNING AND POST-PROCESSED USING TRIMBLE BUSINESS CENTER AND/OR PIX4D SURVEY.
3. THE FLIGHT WAS OBSERVED BY CERTIFIED REMOTE PILOT NO.
4. GROUND ELEVATIONS WHERE SPOT CHECKED WITH GPS REAL TIME KINEMATIC (RTK) OBSERVATION.
5. MEASUREMENTS OF DISTANCE, AREA AND VOLUME WITHIN THE MAP ARE ACCURATE TO WITHIN 1–3 TIMES THE GROUND SAMPLING DISTANCE. MAP MEASUREMENTS ARE WITHIN 1–3% OF GROUND-BASED MEASUREMENTS.
6. FEATURES ARE LIMITED TO THOSE VISIBLE AT TIME OF THE FLIGHT AND ARE SUBJECT TO FIELD VERIFICATION BY THE END USER. AREAS DESIGNATED AS "OBSCURED" INDICATE THE GROUND IS OBSCURED BY VEGETATION AND/OR SHADOWS. MAPPING WITHIN THESE AREAS MAY NOT MEET STANDARD ACCURACY.
7. RELATIVE ACCURACY:
   - VERTICAL ACCURACY IS ± 0.25' FOR OPEN AREAS
   - VERTICAL ACCURACY IS ± 0.50' AREAS OF DENSE VEGETATION.

PHOTOGRAMMETRIC FLIGHT NOTES & ACCURACY REPORT:

1. THIS SITE WAS FLOWN DURING OCTOBER 14, 2021 UTILIZING A OR DJI MATRICE 300 UAV.
2. DATA POST PROCESSING WAS PERFORMED UTILIZING DRONE DEPLOY ENTERPRISE, VERSION 2134.0, ON OCTOBER 15, 2021.
3. SENSOR(S) USED: ZENMUSE P1 45MP OR FC6310 18MP
4. THE FLIGHT WAS CONDUCTED BY CERTIFIED REMOTE PILOT NO. 4297810 (TONY)
5. HORIZONTAL CONTROL STATEMENT: MAP BASED UPON NORTH AMERICAN DATUM OF 1983 (NAD83), FLORIDA STATE PLANE PROJECTION, EAST ZONE, US SURVEY FEET, FL83-EF UTILIZING EPSG CODE 2236. USE OF FOUND PLAT CONTROL, STATE RIGHT OF WAY POINTS, NGS MONUMENTATION AND/OR SECTIONAL BREAKDOWN WERE USED AS PART OF THE MAPPING PROCESS. DISTANCES SHOWN ARE IN U.S. SURVEY FEET AND DECIMAL PARTS THEREOF.
6. MEASUREMENTS OF DISTANCE, AREA AND VOLUME WITHIN THE MAP ARE ACCURATE TO WITHIN 1–3 TIMES THE GROUND SAMPLING DISTANCE. MAP MEASUREMENTS ARE WITHIN 1–3% OF GROUND-BASED MEASUREMENTS.
7. FEATURES ARE LIMITED TO THOSE VISIBLE AT TIME OF THE PHOTOGRAPHY AND ARE SUBJECT TO FIELD VERIFICATION BY THE END USER. AREAS DESIGNATED AS "OBSCURED" INDICATE THE GROUND IS OBSCURED BY VEGETATION AND/OR SHADOWS. MAPPING WITHIN THESE AREAS MAY NOT MEET STANDARD ACCURACY.
8. RELATIVE ACCURACY:
   - GROUND SAMPLING DISTANCE (GSD) RANGE= 0.32 IN/PIXEL
   - TOTAL (RMSE) X:0.3126 IN – Y:0.1221 IN – Z:0.2860 IN
   - TOTAL GCPS UTILIZED: 6 WITH A MEAN RMS ERROR: 0.25 IN
   - CAMERA CALIBRATION/OPTIMIZATION:0.00% VARIATION FROM REFERENCE DATA.
9. DENSIFICATION:
   - TOTAL POINTS COLLECTED: 23.9 MILLION
   - EXTRACTED TOPOGRAPHY SHOWN BASED ON A POINT CLOUD DENSITY OF: 24.16 POINTS/FT²

SURVEYORS NOTES AND REPORT:

1. THIS BOUNDARY SURVEY WAS PERFORMED FOR THE PURPOSE OF MAPPING EXISTING FEATURES AND CONDITIONS, AS SHOWN AND DEPICTED HEREON. I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS IS A TRUE AND ACCURATE DEPICTION OF A FIELD SURVEY PERFORMED UNDER MY DIRECTION AND COMPLETED ON OCTEOBER 14, 2021. I FURTHER CERTIFY THAT SAID DRAWING IS IN COMPLIANCE WITH THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, IN CHAPTER 5J–17, FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
2. THIS SURVEY MAP AND REPRODUCTIONS THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER. THIS SURVEY CANNOT BE TRANSFERRED OR ASSIGNED WITHOUT THE SPECIFIC WRITTEN PERMISSION OF ENGINEERING, DESIGN AND CONSTRUCTION, INC. IT IS A VIOLATION OF CHAPTER 5J–17, FLORIDA ADMINISTRATIVE CODE, TO ALTER THIS SURVEY WITHOUT THE EXPRESS PRIOR WRITTEN CONSENT OF THE SURVEYOR. ADDITIONS AND/OR DELETIONS MADE TO THE FACE OF THIS SURVEY WILL MAKE THIS SURVEY INVALID.
3. THE LAST DATE OF FIELD WORK (AND DATA ACQUISITION) WAS FEBRUARY 14, 2023.
4. CURRENT DESCRIPTION(S) SHOWN HEREON PROVIDED BY: THE CLIENT. A TITLE SEARCH FOR THIS PROPERTY HAS NOT BEEN ABSTRACTED TO SHOW MATTERS OF RECORD SUCH AS EASEMENTS OR OTHER ENCUMBRANCES OR RESTRICTIONS.
5. PARCELS CONTAIN A TOTAL OF 7.162 ACRES, MORE OR LESS.
6. THIS BOUNDARY SURVEY HAS BEEN REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM–EAST ZONE, NAD 83 (1990).
7. SUB–SURFACE IMPROVEMENTS INCLUDING UNDERGROUND UTILITIES, UTILITY SERVICES, WERE NOT LOCATED AS PART OF THIS SURVEY.
8. REVISIONS SHOWN HEREON DO NOT REPRESENT A "FIELD SURVEY UPDATE" UNLESS OTHERWISE NOTED.
9. BEARINGS SHOWN HERON ARE BASED UPON GRID BEARINGS AND REFERENCE TO THE LINE LABELED HERON AS (BEARING BASIS) AND ALL OTHER BEARINGS ARE RELATIVE THERETO. DISTANCES ARE IN U.S. SURVEY FEET AND DECIMAL PARTS THEREOF.
10. ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND ARE BASED ON ST. LUCIE COUNTY BENCHARK "B 401" WHOSE PUBLISHED ELEVATION IS 16.17'. SITE BENCHMARKS UTILIZED ARE SHOWN HEREON.
11. THIS SITE WAS SURVEYED UTILIZING TRIMBLE/SPRECTRA HARDWARE TOGETHER WITH SPECTRA SURVEY PRO REALTIME PROCESSING AND WAS BASED ON TRIMBLES "VRS NOW" NETWORK AND/OR THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN). THE PROCEDURES AND NETWORK DESIGN MEETS THE GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATED POSITIONING AS SET FORTH BY THE FEDERAL GEODETIC CONTROL COMMITTEE IN THE MOST CURRENT PUBLICATION FOR 3RD ORDER CLASS ONE FOR HORIZONTAL CONTROL SURVEYS.
12. IN SOME INSTANCES, GRAPHIC REPRESENTATIONS AND SYMBOLS SHOWN HAVE BEEN EXAGGERATED TO MORE CLEARLY ILLUSTRATE THE RELATIONSHIP BETWEEN PHYSICAL IMPROVEMENTS AND/OR LOT LINES. THE DIMENSIONS SHOWN SHALL CONTROL THE LOCATION, OF THE IMPROVEMENTS, OVER THE SCALED POSITIONS.
13. THE OWNERSHIP OF PERIMETER FENCES, WALLS, HEDGES AND LANDSCAPING, IF ANY, SHOWN HEREON ARE NOT KNOWN AND ARE NOT LISTED AS ENCROACHMENTS. THEIR RELATIVE LOCATION IS SHOWN IN RELATION TO THE BOUNDARY LINES SHOWN.
14. THE SURVEY MAP SHOWN HEREON DOES NOT NECESSARILY CONTAIN ALL OF THE INFORMATION OBTAINED OR DEVELOPED BY THE UNDERSIGNED SURVEYOR IN HIS FIELD WORK, OFFICE WORK OR RESEARCH.
15. THE PROPERTY WHICH IS THE SUBJECT OF THIS SURVEY APPEARS TO BE SITUATE IN AN AREA OF MINIMAL FLOOD HAZARD ZONE (X) AT THIS TIME PURSUANT TO F.E.M.A. FIRM NUMBER 1211C0187K, HAVING AN EFFECTIVE DATE OF FEBRUARY 19, 2012. FOR APPROXIMATE DELINEATION OF THE FLOOD ZONE LIMITS, REFER TO AFOREMENTIONED FIRM PANELS.

Michael T Owen

Digitally signed by Michael T Owen
Date: 2023.02.16 15:59:41 -05'00'

MICHAEL T. OWEN PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REGISTRATION #5556

SIGNATURE DATE:

ENGINEERS SURVEYORS ENVIRONMENTAL
10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
772-462-2455
www.edc-inc.com
F.B.P.E. CERTIFICATE OF AUTHORIZATION 9935
L.B. CERTIFICATE OF AUTHORIZATION 8098

AV	DRAWN BY
MTO	CHECKED BY
JM	FIELD CREW
21-455_SURV_rev3.dwg	FILENAME
AS SHOWN	SCALE
October 14, 2021	DATE

DATE	REVISION COMMENTS
02/16/23	ADDED CONTROL STRUCTURE & SANITARY MANHOLE INFO - SPT
02/09/23	ADDED CATCH BASIN INFORMATION - SPT
07/18/22	ADD FORMBOARD WITH DIMENSIONS - MD

BOUNDARY AND TOPOGRAPHIC SURVEY

FOR: TWIN VEE

LOT 187
MARAVILLA GARDENS UNIT 3
SEC. 27, TWNSHP. 35 SOUTH, RGE. 40 EAST
ST. LUCIE COUNTY, FLORIDA

10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
772-462-2455

21-455

1 OF 1

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