DRUTEX S.A.

MB-86N SI TILT & TURN WINDOW (HVHZ)(IMPACT)

GENERAL NOTES:

- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC), INCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - AAMA/WDMA/CSA 101/I.S.2/A440-17
 - TAS 201-94
 - TAS 202-94
 - TAS 203-94
 - ASTM E1886-19
 - ASTM E1996-20
- 2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X FRAMING, AND METAL FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/4 INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
- APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- WINDOW FRAME MATERIAL: ALUMINUM 6063-T5
- GLASS MEETS THE REQUIREMENTS OF ASTM E1300 GLASS CHARTS. SEE SHEET 1 FOR GLAZING DETAIL.
- 9. CUSTOM SIZES AVAILABLE UPON REQUEST. CUSTOM DESIGN PRESSURE WILL BE ASSIGNED EQUAL TO NEXT LARGER STANDARD SIZE.

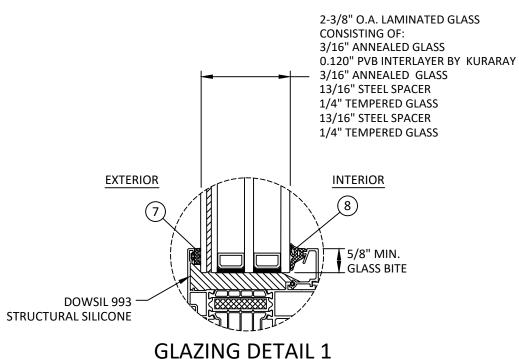
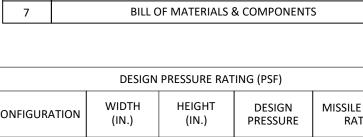


	TABLE OF CONTENTS				
SHEET	SHEET DESCRIPTION				
1	GENERAL NOTES AND GLAZING DETAIL				
2	ELEVATION AND DESIGN PRESSURE TABLE				
3	ANCHOR LAYOUTS				
4	VERTICAL SECTION				
5	HORIZONTAL SECTION				
6	ANCHOR DETAILS AND INSTALLATION NOTES				
7	BILL OF MATERIALS & COMPONENTS				

DESIGN PRESSURE RATING (PSF)				
CONFIGURATION	WIDTH (IN.)	HEIGHT (IN.)	DESIGN PRESSURE	MISSILE IMPACT RATING
Х	SEE TABLES ON SHEET 2		LARGE & SMALL MISSILE IMPACT	





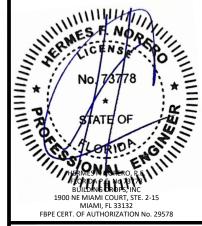
LEBORSKA 31, 77-100 BYTOW, POLAND PH: +48-59-822-9101 FX: +48-59-822-9103

REMARKS

UILDING DROPS, 1900 NE MIAMI COURT, STE.:

BY DATE

ND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFI SITE, IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIA FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC



FL #: FL46728

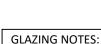
03.19.24 DATE: DWG. BY: CHK. BY:

FB SCALE:

> **DRU048** DWG. #:

SHEET:

NTS



- GLASS TYPE COMPLIES WITH ASTM E1300 REQUIREMENTS. PER THE FBC TEMPER AND SAFETY GLAZING REQUIREMENTS SHALL BE REVIEWED ON A SITE SPECIFIC BASIS.
- 2. SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24.
- SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER FBC CHAPTER 24.
- D.L.O. AND DESIGN PRESSURES MAY NOT EXCEED MAX VALUES SHOWN HEREIN.

ELEVATION

MAX. FRAME

SASH HEIGHT = FRAME HEIGHT - 3.00" SASH WIDTH = FRAME WIDTH - 3.00"

D.L.O. HEIGHT = FRAME HEIGHT - 8.9375" D.L.O. WIDTH = FRAME WIDTH - 8.9375"

DES	IGN PRESSURE TAB	LE (PSF)	
NOMINAL DIMS.		POS.	NEG.
FRAME WIDTH (IN.)	FRAME HEIGHT (IN.)	(+)	(-)
18	36	70.0	70.0
24		70.0	70.0
30		70.0	70.0
36		70.0	70.0
18		70.0	70.0
24		70.0	70.0
30	42	70.0	70.0
36		70.0	70.0
42		70.0	70.0
18		70.0	70.0
24		70.0	70.0
30	40	70.0	70.0
36	48	70.0	70.0
42		70.0	70.0
48		70.0	70.0
18		70.0	70.0
24		70.0	70.0
30	1	70.0	70.0
36	54	70.0	70.0
42		70.0	70.0
48		70.0	70.0
54		68.9	68.9
18		70.0	70.0
24		70.0	70.0
30		70.0	70.0
36	60	70.0	70.0
42		70.0	70.0
48		70.0	70.0
54		68.9	68.9
18		70.0	70.0
24		70.0	70.0
30	1	70.0	70.0
36	66.9375	70.0	70.0
42	1	70.0	70.0
48	1	70.0	70.0
53.125	1	70.0	70.0
	I.		

NOMIN	AL DIMS.		
FRAME WIDTH (IN.)	FRAME HEIGHT (IN.)	POS. (+)	NEG (-)
18	` '	70.0	70.0
24	72	70.0	70.0
30		70.0	70.0
36		70.0	70.0
42	1	70.0	70.0
48	1	70.0	70.0
18		70.0	70.0
24]	70.0	70.0
30	30 78 36 42	70.0	70.0
36		70.0	70.0
42		70.0	70.0
18		70.0	70.0
24	84	70.0	70.0
30		70.0	70.0
36		70.0	70.0
42	1	70.0	70.0
18		70.0	70.0
24]	70.0	70.0
30	90	70.0	70.0
36	1	70.0	70.0
18		70.0	70.0
24]	70.0	70.0
30	96	70.0	70.0
36]	70.0	70.0
18		70.0	70.0
24	102	70.0	70.0
30]	70.0	70.0
18		70.0	70.0
24	108	70.0	70.0
30]	70.0	70.0
18		70.0	70.0
24	114	70.0	70.0
30	30	70.0	70.0
18	120	70.0	70.0
24	120	70.0	70.0



LEBORSKA 31, 77-100 BYTOW, POLAND PH: +48-59-822-9101 FX: +48-59-822-9103

MB-86N SI TILT & TURN WINDOW (HVHZ) (IMPACT) ELEVATION & DESIGN PRESSURE TABLE

PREPARED BY:

BUILDING DROPS, INC.

1900 NE MIAMI COURT, STE. 2-15

NIAMI, FL 33132

PH: (954)7399-8478

FAX: (954)744.4738

The standard of t

REMARKS BY DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL #: FL46728

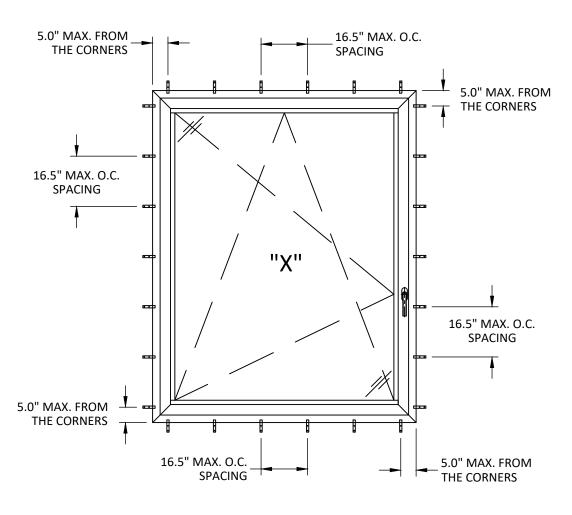
03.19.24 DATE: CHK. BY:

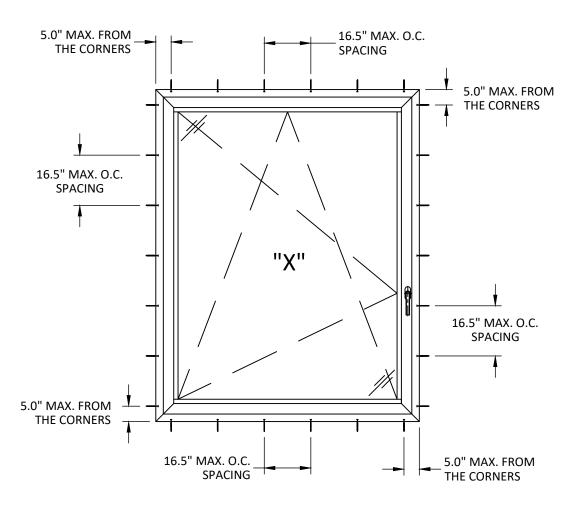
DWG. BY: NTS SCALE:

DRU048 DWG. #:

SHEET:

NOTE: TWO (2) INSTALLATION ANCHORS PER STRAP LOCATION.





ANCHOR LAYOUT STRAP INSTALLATION

ANCHOR LAYOUT THROUGH FRAME INSTALLATION



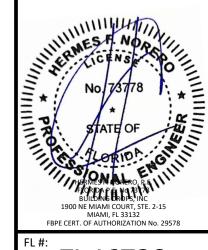
LEBORSKA 31, 77-100 BYTOW, POLAND PH: +48-59-822-9101 FX: +48-59-822-9103

MB-86N SI TILT & TURN WINDOW (HVHZ) (IMPACT) ANCHOR LAYOUTS

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI COURT, STE. 2-15
MIAMI, FL 33132
0.11 (954)3998478

REMARKS BY DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERI AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATI FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



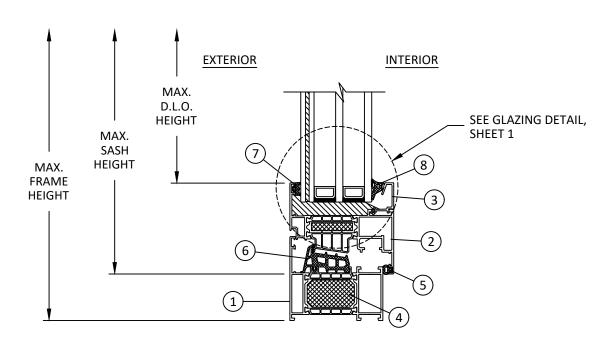
FL #: FL46728

03.19.24 DATE: CHK. BY:

DWG. BY:

NTS SCALE: **DRU048** DWG. #:

SHEET:



1

(6)

7

EXTERIOR

SEE GLAZING DETAIL,

SHEET 1

INTERIOR



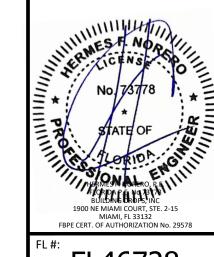


LEBORSKA 31, 77-100 BYTOW, POLAND PH: +48-59-822-9101 FX: +48-59-822-9103

MB-86N SI TILT & TURN WINDOW (HVHZ) (IMPACT) VERTICAL SECTION

REMARKS BY DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL #: FL46728

03.19.24 DATE:

DWG. BY:

CHK. BY: NTS SCALE:

DRU048 DWG. #:

SHEET:

MAX. FRAME WIDTH MAX. FRAME WIDTH — MAX. SASH WIDTH — MAX. SASH WIDTH — MAX. D.L.O. WIDTH -→ MAX. D.L.O. WIDTH → SEE GLAZING DETAIL, SEE GLAZING DETAIL, SHEET 1 SHEET 1 (8) (5) (5) 4 INTERIOR **EXTERIOR**

B HORIZONTAL SECTION
5



LEBORSKA 31, 77-100 BYTOW, POLAND PH: +48-59-822-9101 FX: +48-59-822-9103

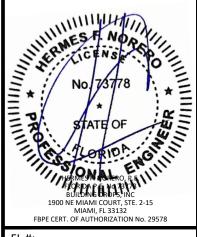
MB-86N SI TILT & TURN WINDOW (HVHZ) (IMPACT) HORIZONTAL SECTION

PREPARED BY:

BUILDING DROPS, INC.
1900 NE MIAMI COURT, STE. 2-15
MIAMI, FL 33132
nu. (954)399-8478

REMARKS BY DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERI AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATI FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL46728

03.19.24 DATE:

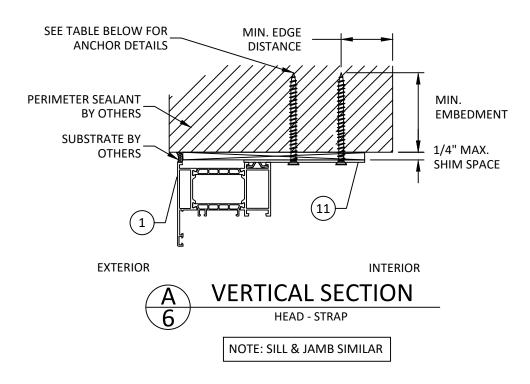
DWG. BY: CHK. BY:

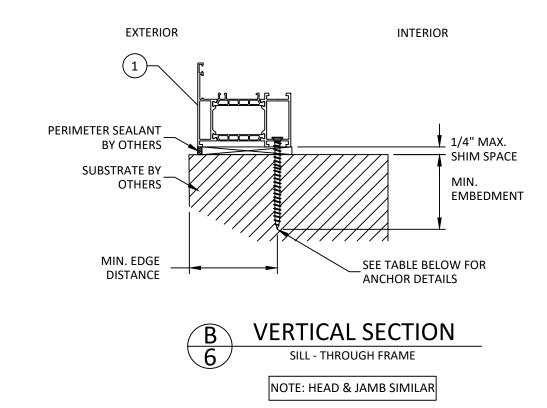
NTS SCALE:

DRU048 DWG. #:

SHEET:

5





INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN, UNLESS OTHERWISE STATED ON SHEET 3.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/2 INCH THE DEPICTED LOCATION & SPACING IN THE ANCHOR LAYOUT DETAILS (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE
- 3. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- FOR MASONRY OR CONCRETE OPENINGS, A 1X WOOD BUCK MAY BE USED (OPTIONAL) AS LONG AS THE MINIMUM EMBEDMENT AND EDGE DISTANCE REQUIREMENTS ARE STILL MET WITHIN THE CORRESPONDING HOST SUBSTRATE. SEE GENERAL NOTE #3 ON SHEET 1 FOR MORE INFORMATION.
- FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.

ANCHOR SCHEDULE				
METHOD	SUBSTRATE	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE
STRAP	WOOD: MIN. SG = 0.55	#8 WOOD SCREW	1.50"	0.75"
	METAL: 18 GAUGE STEEL, MIN. Fy = 33KSI ALUMINUM: 1/8" MIN., 6063-T5	#8 SELF-DRILLING SCREW	3 THREADS MIN. PENETRATION BEYOND STRUCTURE	0.50"
	CONCRETE: f'c=3000PSI	3/16" ITW TAPCON	1.25"	2.00"
	MASONRY: CMU per ASTM C90 MIN. 2000 PSI	3/16" ITW TAPCON	1.00"	2.00"
	WOOD: MIN. SG = 0.55	#12 WOOD SCREW	1.50"	0.75"
THROUGH FRAME	METAL: 18 GAUGE STEEL, MIN. Fy = 33KSI ALUMINUM: 1/8" MIN., 6063-T5	#12 SELF-DRILLING SCREW	3 THREADS MIN. PENETRATION BEYOND STRUCTURE	0.50"
	CONCRETE: f'c=3000PSI	3/16" ITW TAPCON	1.25"	2.00"
	MASONRY: CMU per ASTM C90 MIN. 2000 PSI	3/16" ITW TAPCON	1.00"	2.00"



LEBORSKA 31, 77-100 BYTOW, POLAND PH: +48-59-822-9101 FX: +48-59-822-9103

TILT & TURN WINDC (HVHZ) (IMPACT)

UILDING DROPS,

REMARKS BY DATE

HE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENER ND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIF: ITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIA FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL #: FL46728

03.19.24 DATE: DWG. BY: CHK. BY: HFN

NTS SCALE:

DRU048 DWG. #:

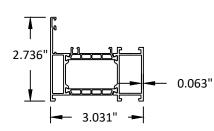
SHEET:

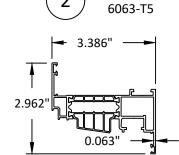
0

ITEM	PART NO.	DESCRIPTION	MATERIAL
1	K528612	FRAME	6063-T5
2	K528712	SASH	6063-T5
3	K431620	GLAZING BEAD	6063-T5
4	-	THERMAL MATERIAL	POLYETHYLENE
5	-	GASKET	EPDM
6	120759	CENTRAL GASKET	EPDM
7	120750	GASKET	EPDM
8	120518	GASKET	EPDM
9	8045502 DRAIN PLUG		PLASTIC
10 -		MACO HARDWARE	STEEL
11	803011040	STRAP	STEEL

BILL OF MATERIALS

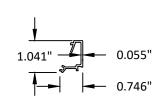






SASH











LEBORSKA 31, 77-100 BYTOW, POLAND PH: +48-59-822-9101 FX: +48-59-822-9103

MB-86N SI
TILT & TURN WINDOW
(HVHZ) (IMPACT)
BILL OF MATERIALS
& COMPONENTS

REMARKS

PREPARED BY:

BUILDING DROPS, INC.

1900 NE MIAMI COURT, STE. 2-15

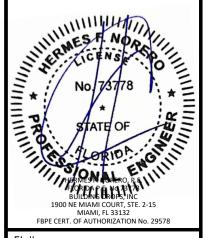
MIAMI, Ft. 33132

PH: (954)7344,4738

FAX: (954)744,4738

BY DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERI AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE, IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIAT FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL #: FL46728

03.19.24 DATE:

DWG. BY: CHK. BY: HFN

NTS SCALE: **DRU048** DWG. #:

SHEET: