

FBC APPROVED PRODUCTS LIST

FBC APPROVED PRODUCTS LIST				MAXIMUM ALLOWABLE WIND SPEED		
PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL No. & DATE	QA EXPIRATION DATE	OPEN	PARTIALLY ENCLOSED
STRUCTURAL COMPONENTS	ROOF DECK	CAROLINA CARPORTS, INC. 26 Gauge AG Panel	FL6396-1-R7 12/12/23	04/05/27	180	180
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 26 Gauge AG Panel	FL6702-1-R7 12/12/23	03/14/27	180	180
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAROLINA CARPORTS, INC. 26 Gauge Dutch Lap Wall Panel	FL6702-3-R7 12/12/23 **	03/14/27	N/A	143
EXTERIOR DOORS	SWINGING	ELIXIR DOOR AND METAL COMPANY Series 402-14	FL17996-3-R3 12/26/23	08/26/25	N/A	139
EXTERIOR DOORS	SWINGING	ELIXIR DOOR AND METAL COMPANY Series 407	FL17996-5-R3 12/26/23	08/19/25	N/A	155
EXTERIOR DOORS	ROLL-UP	ASTA INDUSTRIES INC. Model 203 (12' Max. Width)	FL8888-1-R7 11/06/23	12/31/24	N/A	174
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll Up Sheet Door (8' Max. Width)	FL16806-2-R6 12/13/23	04/05/27	N/A	180
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (10' Max. Width)	FL16806-4-R6 12/13/23	04/05/27	N/A	172
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (12' Max. Width)	FL16806-4-R6 12/13/23	04/05/27	N/A	154
EXTERIOR DOORS	ROLL-UP	CAROLINA CARPORTS, INC. Steel Roll-Up Sheet Door - (16' Max. Width)	FL4133-5-R1 12/13/23	04/05/27	N/A	142
WINDOWS	SINGLE HUNG	CGI WINDOWS AND DOORS Model SH 4000A	FL23358-2-R7 12/19/23	02/28/32	N/A	156

NOTES:
1. DOORS AND WINDOWS SHOWN MAY BE SUBSTITUTED FOR DIFFERENT PRODUCT LINES AND/OR MODELS, PROVIDED THE FOLLOWING CONDITIONS ARE MET:
A. PRODUCT SHALL HAVE A VALID FBC PRODUCT APPROVAL.
B. COMPONENTS ARE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION REQUIREMENTS.
2. FRAMING CONNECTIONS FOR DOOR AND WINDOW FRAMES REMAIN THE SAME FOR SUBSTITUTED PRODUCTS. HEADERS AND WINDOW RAILS MAY BE RAISED OR LOWERED AS NECESSARY TO ACCOMMODATE SUBSTITUTED PRODUCT.
** MAXIMUM POST SPACING FOR DUTCH LAP IS 4'0"

GENERAL NOTES:

- THESE PLANS PERTAIN ONLY TO THE STRUCTURE, INCLUDING MAIN WIND FORCE RESISTING SYSTEM, COMPONENTS AND CLADDING, AND BASE RAIL ANCHORAGE. OTHER DESIGN ISSUES, INCLUDING BUT NOT LIMITED TO PLUMBING, ELECTRICAL, INGRESS/EGRESS, PROPERTY SET-BACKS, FINISH FLOOR ELEVATION AND SLOPE, OR OTHER LOCAL ZONING REQUIREMENTS ARE THE RESPONSIBILITY OF OTHERS.
- THESE STRUCTURES ARE DESIGNED AS NON-HABITABLE UTILITY/STORAGE BUILDINGS (RISK CATEGORY I) CAPABLE OF SUPPORTING DEAD LOAD OF THE STRUCTURE AND APPLICABLE LIVE AND WIND LOADS. IMPROVEMENTS NOT SPECIFICALLY ADDRESSED HEREIN, INCLUDING DOORS, WINDOWS, OR OTHER COMPONENTS NOT LISTED IN THE FBC APPROVED PRODUCTS LIST (THIS SHEET), AND NOT PROVIDED AND INSTALLED BY CAROLINA CARPORTS, INC., WHICH EXERT ADDITIONAL LOADS ON THE STRUCTURE SHALL BE AT THE OWNER'S RISK. BECHTOL ENGINEERING AND TESTING, INC., SHALL NOT BE RESPONSIBLE FOR STRUCTURAL DAMAGE OR FAILURE DUE TO THE APPLICATION OF ADDITIONAL LOADS.
- ALL STEEL TUBING SHALL BE 50 KSI GALVANIZED STEEL. ALL FASTENERS SHALL BE GALVANIZED OR STAINLESS STEEL OR ZINC PLATED.
- ALL COMPONENTS AND CLADDING SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION INSTRUCTIONS, **AND SHALL MEET THE DESIGN PRESSURES REQUIRED BY THE FLORIDA BUILDING CODE (FBC) AT THE LOCATION OF THE BUILDING WITHIN THE STATE OF FLORIDA.**
- ALL FIELD FRAMING CONNECTIONS SHALL BE #12-14 x 3/4" SELF DRILLING SCREWS **WITHOUT CONTROL SEAL WASHER**. ALL SHOP FRAMING CONNECTIONS SHALL BE WELDED.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS. THE REINFORCING STEEL SHALL BE MINIMUM GRADE 40. CONCRETE SLAB FOUNDATIONS SHALL BE REINFORCED WITH 6X6-W1.4XW1.4 WELDED WIRE FABRIC COMPLYING WITH ASTM A 185, OR WITH SYNTHETIC FIBER REINFORCEMENT COMPLYING WITH ASTM C1116.
- BASE RAIL GROUND ANCHOR REQUIREMENTS: ONE WITHIN 6" OF EVERY POST LOCATION, AND BOTH SIDES OF OPENINGS WHERE BASE RAIL IS ABSENT. GROUND ANCHORS ARE NOT REQUIRED FOR CONCRETE FOOTING AND/OR CONCRETE SLAB CONSTRUCTION. SEE GROUND ANCHOR SCHEDULE (THIS SHEET) FOR SPECIFIC GROUND ANCHOR SIZE REQUIREMENTS.
- CONCRETE ANCHORS SHALL BE TAPCON REDHEAD LDT 1/2" x 5" OR EQUIVALENT OR WEJ-IT ANKR-TITE MODEL AT1252, OR SLEEVE ANCHOR MODEL HSA 1260, OR EQUIVALENT.
- POST/RAFTER BRACING: BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALLS.
- SLAB FOUNDATION SUBGRADE SOILS SHALL BE TERMITE TREATED AND COVERED WITH 6 MIL. VAPOR RETARDER PER SECTION R318.1 OF THE FBC EIGHTH EDITION (2023). RESIDENTIAL, AND SECTION 1816.1 OF THE FBC EIGHTH EDITION (2023). BUILDING. MINIMUM ALLOWABLE FOUNDATION SOIL CONTACT BEARING PRESSURE OF 2,000 PSF IS ASSUMED.
- 14 GA FRAMING: 2-1/2" x 2-1/2" TUBE STEEL (TS) WITH 2-1/4" x 2-1/4" TS NIPPLES.
- 12 GA FRAMING: 2-1/4" x 2-1/4" TS WITH 2" x 2" TS NIPPLES.

TABLE 1
RAFTER FRAME, END POST, GROUND ANCHOR AND PANEL FASTENER SPACING SPECIFICATIONS

RISK CATEGORY	WIND EXPOSURE CATEGORY	ULTIMATE WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM POST / RAFTER SPACING (FEET)	AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS OR GIRTS (INCHES)	
					INTERIOR POSTS/RAFTERS	END POSTS/RAFTERS
I	C	110 TO 150	89 TO 116	5.0	6	6
		151 TO 180	117 TO 139	4.0	6	6

NOTES:
1. Specifications applicable to 26 gauge metal roof and wall panels fastened directly to 12 or 14 gauge steel tube framing, or 18 gauge hat channel roof purlins.
2. Specifications applicable only for mean roof height of 20 feet or less, and roof slopes of 7" to 27" (1.5:12 to 6:12 pitch). Spacing requirements for other roof heights and/or slopes may vary.

GROUND ANCHOR SCHEDULE

ULTIMATE WIND SPEED (mph)		BUILDING WIDTH (feet)										
		110	120	130	140	150	160	170	180			
DETAILS 1C AND 1D SHOWN ON SHEET 4 OF 6	30" Anchor Detail 1E											
	48" Anchor Detail 1D											
	60" Anchor Detail 1D											

METAL CARPORT INSTALLATION PLANS
AND DETAILS AND FRAMING AND
FASTENER SPECIFICATIONS

FOR CONSTRUCTION IN THE STATE OF FLORIDA

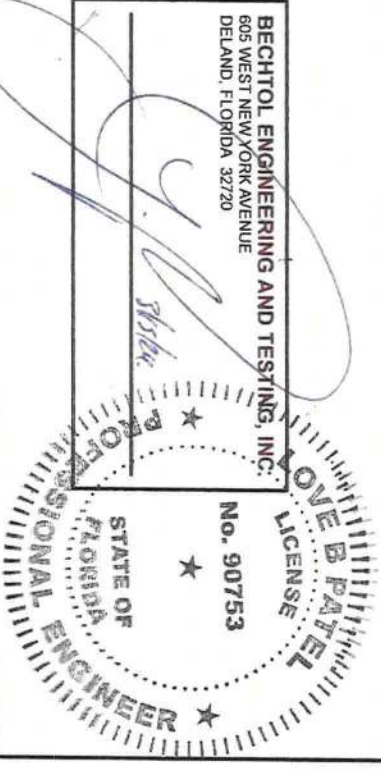
PREPARED FOR:
CAROLINA CARPORTS, INC.
P.O. BOX 1263
DOBSON, NORTH CAROLINA 27017

PREPARED BY:
BECHTOL ENGINEERING AND TESTING, INC.
605 WEST NEW YORK AVENUE
DELAND, FLORIDA 32720
Certificate of Authorization No. 00065492

THIS IS TO CERTIFY THAT THE CALCULATIONS AND SPECIFICATIONS HEREIN HAVE BEEN PREPARED BY THE UNDERSIGNED PROFESSIONAL ENGINEER, AND ARE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1609 OF THE FLORIDA BUILDING CODE, EIGHTH EDITION (2023).



BECHTOL ENGINEERING AND TESTING, INC.
605 WEST NEW YORK AVENUE
DELAND, FLORIDA 32720

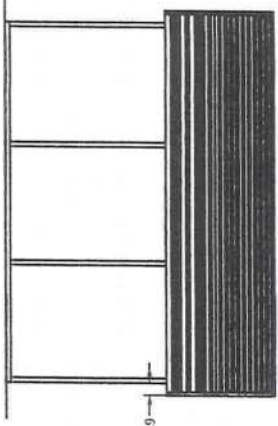


CAROLINA CARPORTS, INC.

GENERIC PLANS FOR USE IN THE STATE OF FLORIDA

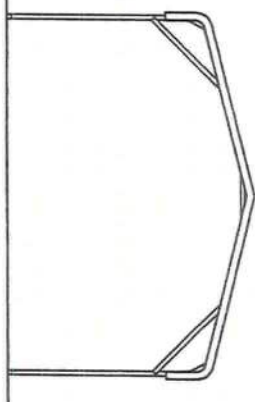
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	DATE	2/5/2024	SCALE	1/1/2024
	CONC'D	TS/CS	PROJ NO.	G24001
	APPROVED	TS/ILP	SHEET	1 OF 6

BOW FRAME RAFTER OPEN CARPORT - HORIZONTAL ROOF



TYPICAL SIDE ELEVATION

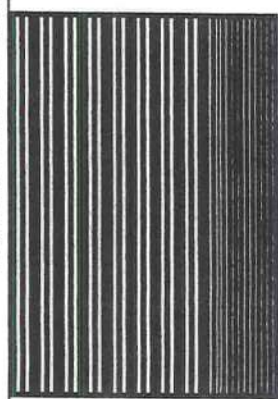
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TYPICAL END ELEVATION

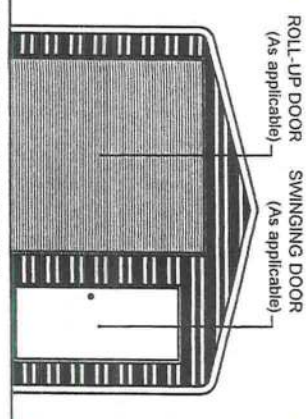
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BOW FRAME RAFTER ENCLOSED BUILDING - HORIZONTAL ROOF



TYPICAL SIDE ELEVATION

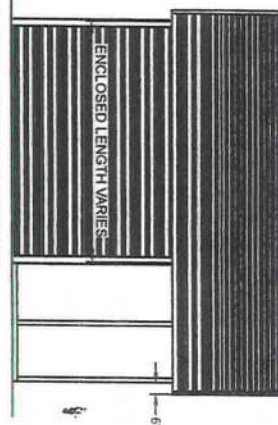
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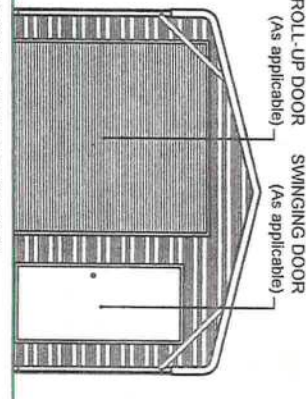
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BOW FRAME RAFTER UTILITY BUILDING - HORIZONTAL ROOF



TYPICAL SIDE ELEVATION

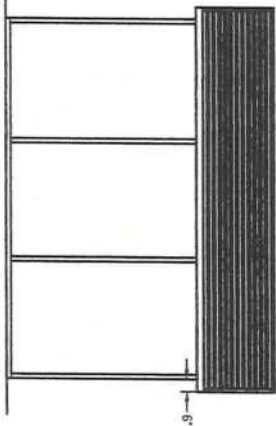
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TYPICAL END ELEVATION

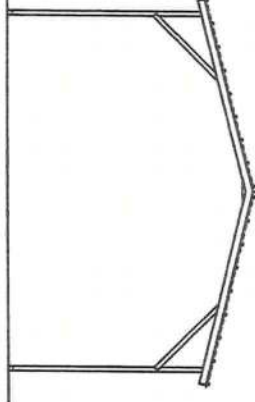
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BOX EAVE FRAME RAFTER OPEN CARPORT - HORIZONTAL ROOF



TYPICAL SIDE ELEVATION

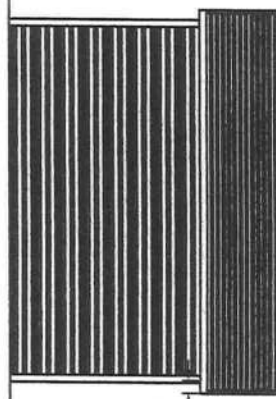
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TYPICAL END ELEVATION

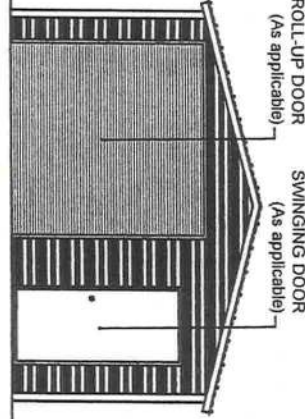
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BOX EAVE FRAME RAFTER ENCLOSED BLDG - HORIZONTAL ROOF



TYPICAL SIDE ELEVATION

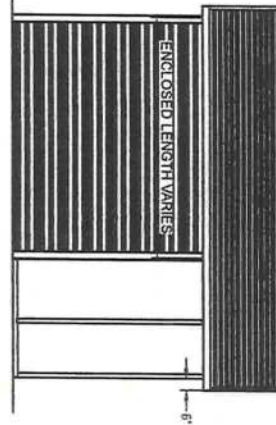
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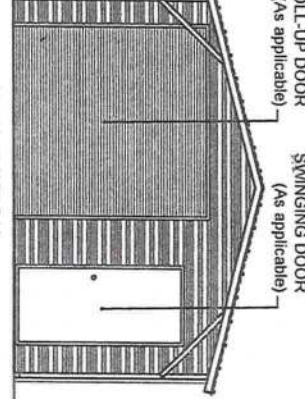
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BOX EAVE FRAME RAFTER UTILITY BLDG - HORIZONTAL ROOF



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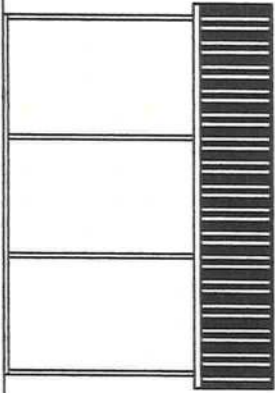
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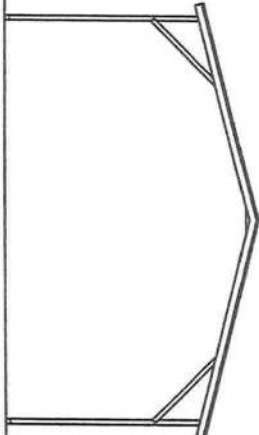
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BOX EAVE FRAME RAFTER OPEN CARPORT - VERTICAL ROOF



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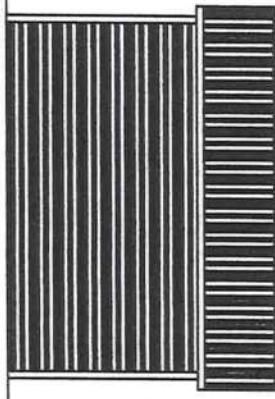
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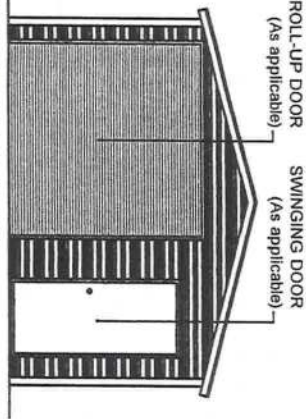
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BOX EAVE FRAME RAFTER ENCLOSED BLDG - VERTICAL ROOF



TYPICAL SIDE ELEVATION

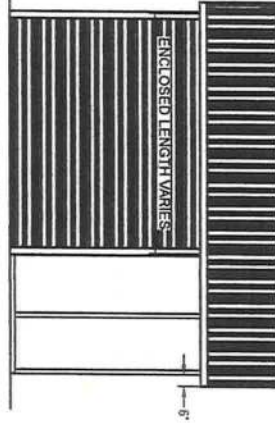
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TYPICAL END ELEVATION

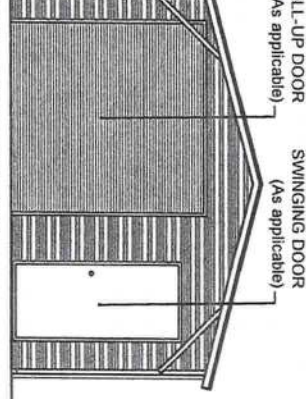
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BOX EAVE FRAME RAFTER UTILITY BLDG - VERTICAL ROOF



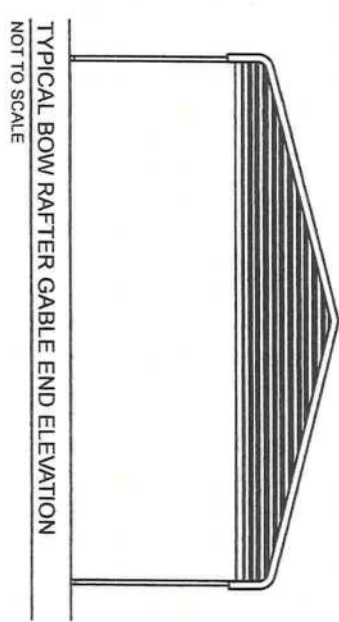
TYPICAL SIDE ELEVATION

NOT TO SCALE



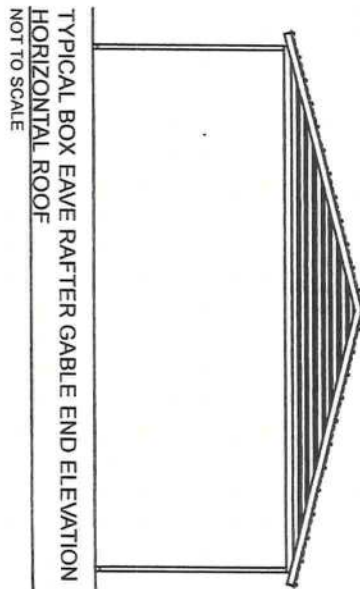
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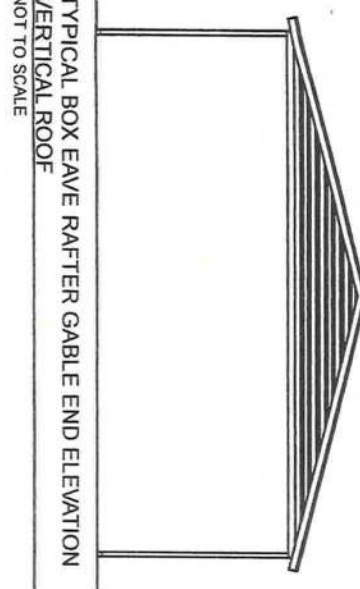
TYPICAL BOW RAFTER GABLE END ELEVATION

NOT TO SCALE



TYPICAL BOX EAVE RAFTER GABLE END ELEVATION

NOT TO SCALE



TYPICAL BOX EAVE RAFTER GABLE END ELEVATION

NOT TO SCALE

CAROLINA CARPORTS, INC.

GENERIC PLANS FOR USE IN THE STATE OF FLORIDA



BECHTOL ENGINEERING
AND TESTING, Inc.

DESIGNED
2/5/2024

DRAWN
MKB/CS

CHECKED
TB/CS

APPROVED
TB/LP

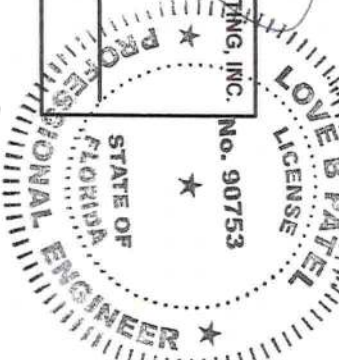
DATE
1/11/2024

SCALE
NTS

PROJECT NO
G24001

SHEET 2 OF 6

BECHTOL ENGINEERING AND TESTING, INC. No. 90753
605 WEST NEWYORK AVENUE
DELAND, FLORIDA 32720



LOVE B. PATEL
FLORIDA
PROFESSIONAL ENGINEER