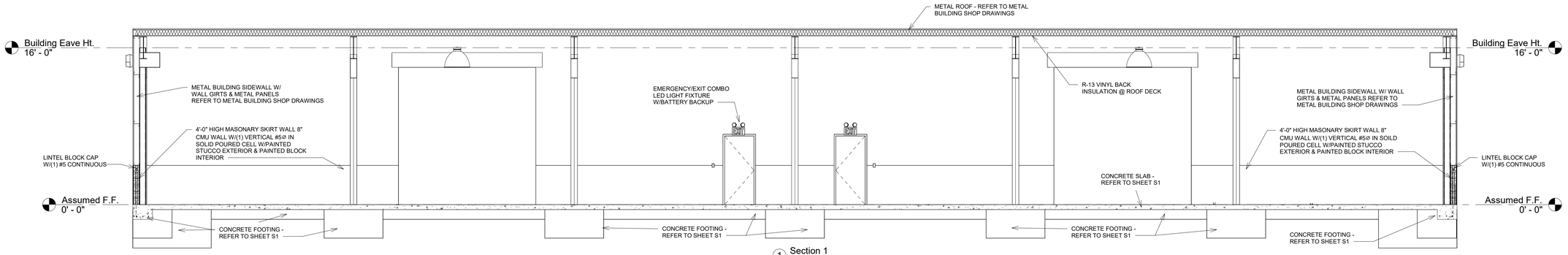
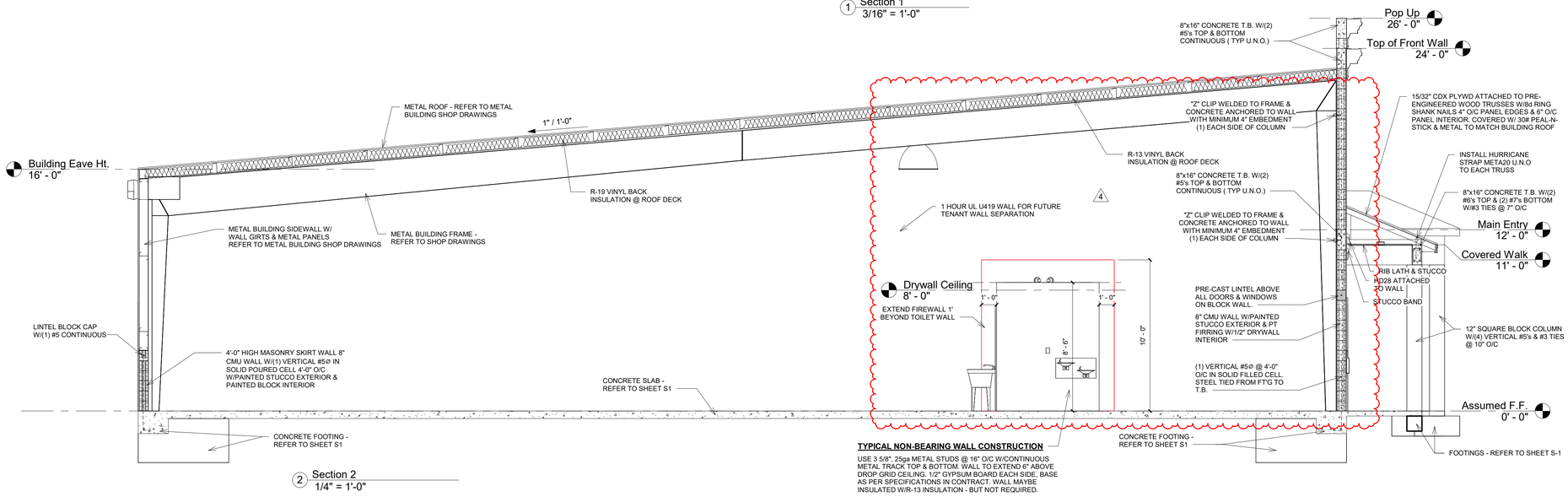


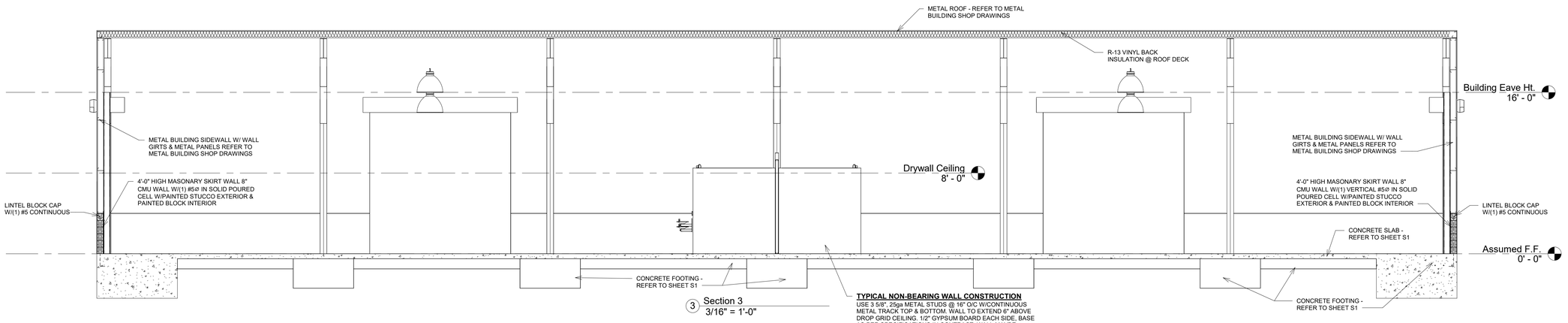
1 Section 1
3/16" = 1'-0"



2 Section 2
1/4" = 1'-0"

TYPICAL NON-BEARING WALL CONSTRUCTION

USE 3 5/8", 25ga METAL STUDS @ 16" O/C W/CONTINUOUS METAL TRACK TOP & BOTTOM. WALL TO EXTEND 6" ABOVE DROP GRID CEILING. 1/2" GYPSUM BOARD EACH SIDE, BASE AS PER SPECIFICATIONS IN CONTRACT. WALL MAYBE INSULATED W/R-13 INSULATION - BUT NOT REQUIRED.



3 Section 3
3/16" = 1'-0"

TYPICAL NON-BEARING WALL CONSTRUCTION

USE 3 5/8", 25ga METAL STUDS @ 16" O/C W/CONTINUOUS METAL TRACK TOP & BOTTOM. WALL TO EXTEND 6" ABOVE DROP GRID CEILING. 1/2" GYPSUM BOARD EACH SIDE, BASE AS PER SPECIFICATIONS IN CONTRACT. WALL MAYBE INSULATED W/R-13 INSULATION - BUT NOT REQUIRED.

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Certificate of Authorization Number #645

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Alfred I. Quattrone
Florida PE #52741

Al Quattrone, Professional Engineer, State of Florida, License No. 52741
This item has been digitally signed and sealed by Al Quattrone, PE, on 4/9/2024.

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Alfred Quattrone Digitally signed by Alfred Quattrone Date: 2024-04-09 09:44:24

Southern Aluminum Building 3

677 Stonecrest Lane
Cape Coral, FL

#	Revision	Date
4	Revised Electrical	03-15-2024

Strap#	08-44-24-C2-00808.0080
Start Date	November 21, 2022
Drawn By	jrr
Checked By	ajq

A3

Sections

Print Date: 3/15/2024 7:08:07 PM

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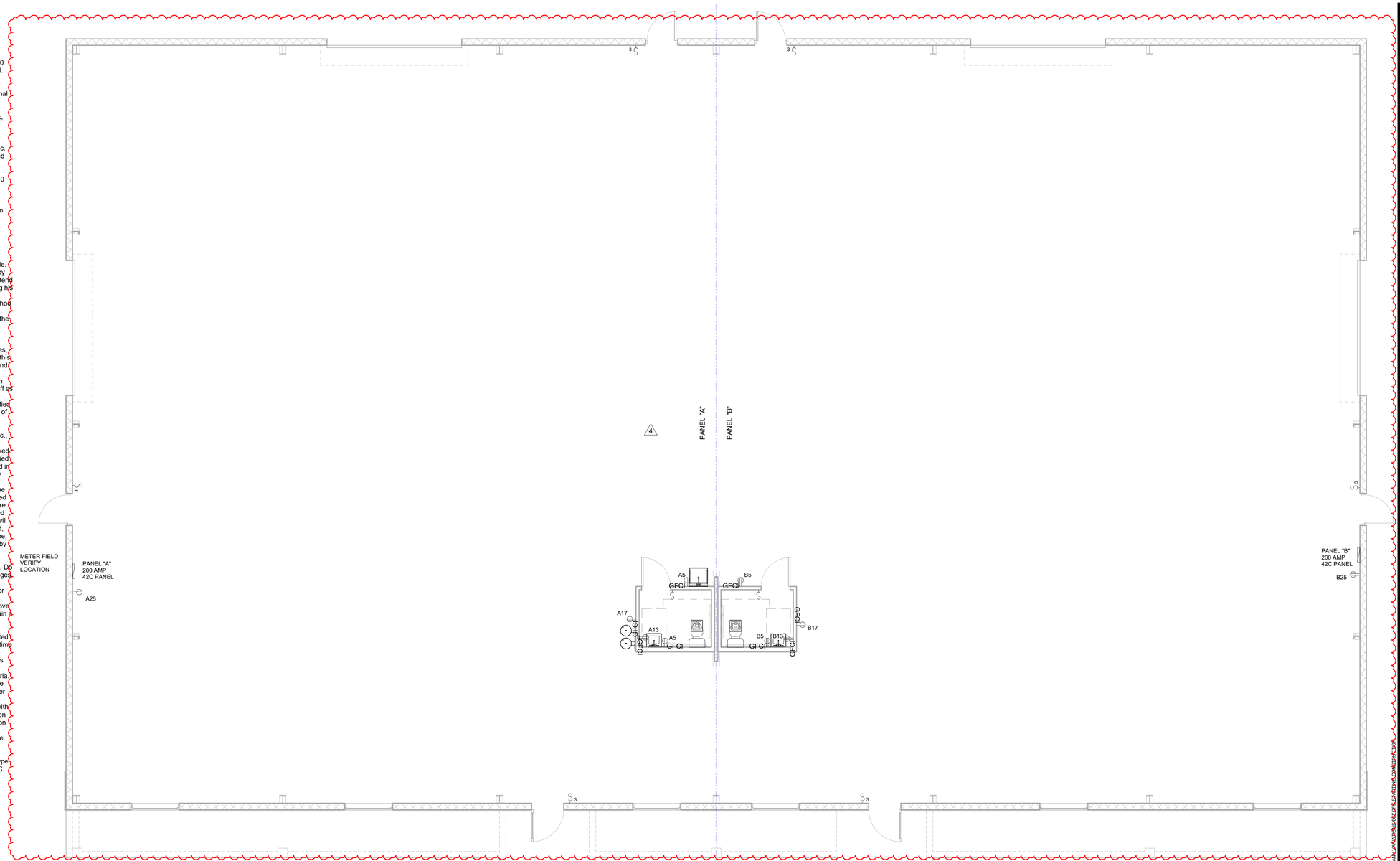
3/15/2024 7:08:07 PM R:\Commercial Files_2006-2012\QUATTRONE\Southern Aluminum Buildings\Southern Aluminum 677 Stonecrest Ln-R1.rvt

Electrical Notes

1. Installation shall meet all requirements of the latest Edition of the National Electrical Code; NFPA 101, and all other applicable Codes and Ordinances.
2. Grounding shall be in accordance with the National Electrical Code, Article 250
3. All wire shall be THW or THWN Copper #12 minimum unless otherwise noted. Green ground conductor not shown; all conduits require copper ground conductor. Two conductors plus ground required, as a minimum.
4. Wire sizes not shown on drawings shall be selected in accordance with National Electrical Code Ampacity and de-rating requirements.
5. All equipment shall be UL listed.
6. Schedule 40 PVC is to be used underground or in floor slabs to first outlet box, panel board, switchboard or junction box if it is concealed. No PVC conduit is allowed exposed in building interiors. Exposed PVC conduit may be used in protected locations on the exterior and other locations when the conduit is exposed to the elements. Conduit sizes shown on the drawings are for metallic. When the Contractor uses nonmetallic conduits, such conduits shall be resized per NEC to accommodate the ground wire at no additional cost to the owner. "SMURF" conduit is not permitted.
7. All "home runs" 100 feet or over for lighting and receptacle circuits shall be #10 minimum.
8. All conduit shall be sized to accommodate the required size and number of conductors. " Home runs" shall be 3/4" conduit minimum.
9. Maximum length of flexible conduit shall be six (6) feet and 0 inches with strain relief.
10. Coordinate all lighting fixtures and equipment locations with the Architect and Mechanical Contractor before installation.
11. Coordinate telephone requirements with the telephone company.
12. All circuit breakers shall be rated for switching duty when used for switching lighting.
13. Pull and junction boxes shall meet requirements of the National Electrical Code.
14. The Electrical Contractor shall visit and examine carefully the areas affected by this work to become familiar with existing conditions and difficulties that will attend the execution of this work. The Contractor shall perform this prior to submitting his as evidence that such an examination for extra labor, equipment, or materials required because of difficulties encountered which could have been foreseen had such an examination been made.
15. All work shall be designed and in compliance with the "Fair Housing Act" and the "Americans with Disabilities Act".
16. Any deviations from the electrical plans or specifications must be approved in writing by the Engineer.
17. Drawings are diagrammatic and do not indicate exact location of wiring, fixtures, receptacles, equipment, etc.. It is the responsibility of the contractor to make this installation in compliance with all applicable codes superseding all drawings and notes.
18. All exterior lights are to be controlled by a photocell facing north and a timer in series. In this manner the lighting can be turned on as needed but switched off as desired during the night.
19. Calculations have been provided based upon equipment KW ratings as identified at the time of proto type issue. Any deviation of equipment KW ratings at time of construction must be accommodated for in calculations.
20. Disconnect switches shall be labeled with corresponding panel being fed.
21. Lighting fixtures shall be installed using approved fasteners, stems, chains, etc., to meet the requirements of the Engineer. All mounting provisions are the responsibility of the Electrical Contractor. Lighting fixtures are to be UL approved. Conductors run through lighting fixtures shall be rated for temperatures specified by the fixture manufacturer, and in no event less than 90° C. Fixtures mounted in fire rated surfaces shall be installed with the surface materials surrounding the back and sides in accordance with UL procedures. Such fixtures shall be manufactured specifically to handle the resultant build-up of that, without undue lessening of ballast or lamp life. Fixtures installed in ceilings which are insulated shall be specifically rated by UL for direct contact with insulation. All fixtures are to be grounded. All recessed incandescent fixtures shall be thermally protected unless they are identified as suitable for installation where thermal insulation will be in direct contact with the fixture. Fluorescent ballast's shall be UL approved, rated by the Certified Ballast Manufacturers Association high power factor type, with maximum noise level of 24DB related to 0.0002 microbars as measured by the Engineer. Class A noise level required. A complete set of lamps shall be installed throughout the project at the time of final acceptance.
22. Fire wall, ceiling and floor penetrations are to be made with metallic raceways. Do not make openings into void spaces or otherwise degrade firewall's. All passages into or through fire wall are to be performed in a manner acceptable to the building department, and sealed as required by the local fire department and/or building department.
23. Install 1/2" PVC conduit for each telephone outlet, from the junction box to above the ceiling, and at the backboard to above the ceiling. Each conduit is to contain a pull string.
24. Revisions to these Drawings and any necessary certification required for permitting as the result of a Contractor requested revision shall be compensated to the Engineer by the requesting Contractor. Payment will be required at the time of delivery of certified Drawings.
25. Aluminum electrical conductors of any kind are not to be used anywhere in this work.
26. All outdoor lighting fixtures and installation shall meet 160 mph wind load criteria.
27. All panel boards, disconnects, etc. which are mounted on the exterior are to be flashed and/or caulked by the Electrical Contractor to prevent seepage of water into the interior.
28. Circuits have been provided for on panel schedules according to equipment with electrical connections as identified at the time of proto type issue. Any deviation from schedule equipment at time of construction must be accommodated for on panel schedules and for electrical installation.
29. All bathroom outlets and outside receptacle outlets shall be G.F.C.I. receptacle outlets.
30. All A/C equipment shall be fused as per manufacture specifications.
31. Coordinate available fault current with local utility company and modify prototype service distribution accordingly. Power distribution equipment shall have A.I.C. and withstanding rating as required for site specific available fault values.
32. Coordinate location of all Life Safety equipment with the Fire Marshall.
33. Coordinate location of Meter Bank and Disconnects with the Local Power Company.
34. Contractor shall NOT use Romex on this project.



1 Electrical Power Plan
3/16" = 1'-0"

LOAD CALCULATIONS PANEL "A"

FUTURE_LIGHTING - OFFICE AREA (3.5W x 1575 SQ. FT)	=	5,513 VA
PRODUCTION LIGHTING	=	2,400 VA
FUTURE_AHU (HEAT & FAN) (1)	=	7,500 VA
RECEPTACLES (32 @ 180W)	=	5,760 VA
220v OUTLETS (3 @ 4500W)	=	13,500 VA
SIGNAGE	=	1,200 VA
WATER COOLER	=	800 VA
FUTURE REFRIGERATOR	=	750 VA
INSTA-HOT or FUTURE WATER HEATER	=	4,500 VA
TOTAL	=	41,923 VA
	÷ √	3x208V (360)
200 AMPS PROVIDED		116.5 AMPS

LOAD CALCULATIONS PANEL "B"

FUTURE_LIGHTING - OFFICE AREA (3.5W x 1575 SQ. FT)	=	5,513 VA
PRODUCTION LIGHTING	=	2,400 VA
FUTURE AHU (HEAT & FAN) (1)	=	7,500 VA
RECEPTACLES (32 @ 180W)	=	5,760 VA
220v OUTLETS (3 @ 4500W)	=	13,500 VA
SIGNAGE	=	1,200 VA
FUTURE WATER COOLER	=	800 VA
FUTURE REFRIGERATOR	=	750 VA
INSTA-HOT or FUTURE WATER HEATER	=	4,500 VA
TOTAL	=	41,923 VA
	÷ √	3x208V (360)
200 AMPS PROVIDED		116.5 AMPS

PANEL "A"

LOAD	WIRE	POLE	AMP			AMP	POLE	WIRE	LOAD
FUTURE A/H UNIT	6	2	50	1	2	45	2	8	FUTURE A/H UNIT
				3	4				
OFFICE LIGHTING	12	1	20	5	6	20	1	12	INSTA-HOT
OFFICE LIGHTING	12	1	20	7	8	20	1	12	SPARE
FUTURE OFFICE LIGHTING	12	1	20	9	10	30	2	10	FUTURE 220v RECEPTACLES
FRONT CANOPY LIGHTING	12	1	20	11	12				
TOILET GFCI RECEPTACLE	12	1	20	13	14	30	2	10	FUTURE 220v RECEPTACLES
TOILET FAN LIGHTS	12	1	20	15	16				
FUTURE DRINK FOUNTAIN	12	1	20	17	18	30	2	10	FUTURE 220v RECEPTACLES
FUTURE GFCI RECEPTACLES	12	1	20	19	20				
FUTURE SERVICE RECEPTACLE	12	1	20	21	22	20	1	12	PRODUCTION LIGHTING
FUTURE REFRIGERATOR	12	1	20	23	24	20	1	12	LED WALL PACK LIGHTING
RECEPTACLE	12	1	20	25	26				
FUTURE RECEPTACLE	12	1	20	27	28				
FUTURE RECEPTACLE	12	1	20	29	30				
FUTURE RECEPTACLE	12	1	20	31	32				
				33	34				
				35	36				
				37	38				
				39	40				
				41	42				

RATED VOLTAGE ☐ 120/208 ☐ 3 PHASE 4 WIRE BRANCH POLES ☐ 12 ☐ 20 ☐ 30 ■ 42
RATED AMPS ☐ 100 ☐ 150 ■ 200 ☐ CABINET: ☐ SURFACE ■ FLUSH
FULL NEUTRAL BUS ☐ GROUND BUS ☐ KEYED DOOR LATCH ☐ MAIN LUGS SETS SIZE
☐ FUSED ☐ BRANCH DEVICES FEED IS TO BE: ☐ BOTTOM ☐ TOP
MAIN LUGS ONLY ■ TO BE GFI BREAKER(S)
ALL BREAKERS MUST BE RATED TO INTERRUPT A SHORT CIRCUIT OF AMPS ASYMMETRICAL
APPROVED MFRS. WESTINGHOUSE, ITE, ALLEN BRADLEY, GE, CUTLER-HAMMER, or EQUAL

PANEL "B"

LOAD	WIRE	POLE	AMP			AMP	POLE	WIRE	LOAD
FUTURE A/H UNIT 2	6	2	50	1	2	45	2	8	FUTURE A/H UNIT 2
				3	4				
OFFICE LIGHTING	12	1	20	5	6	20	1	12	INSTA-HOT
OFFICE LIGHTING	12	1	20	7	8	20	1	12	SPARE
FUTURE OFFICE LIGHTING	12	1	20	9	10	30	2	10	FUTURE 220v RECEPTACLES
FRONT CANOPY LIGHTING	12	1	20	11	12				
TOILET GFCI RECEPTACLE	12	1	20	13	14	30	2	10	FUTURE 220v RECEPTACLES
TOILET FAN LIGHTS	12	1	20	15	16				
DRINK FOUNTAIN	12	1	20	17	18	30	2	10	FUTURE 220v RECEPTACLES
FUTURE GFCI RECEPTACLES	12	1	20	19	20				
SERVICE RECEPTACLE W/P	12	1	20	21	22	20	1	12	PRODUCTION LIGHTING
FUTURE REFRIGERATOR	12	1	20	23	24	20	1	12	LED WALL PACK LIGHTING
RECEPTACLE	12	1	20	25	26				
FUTURE RECEPTACLE	12	1	20	27	28				
FUTURE RECEPTACLE	12	1	20	29	30				
FUTURE RECEPTACLE	12	1	20	31	32				
				33	34				
				35	36				
				37	38				
				39	40				
				41	42				

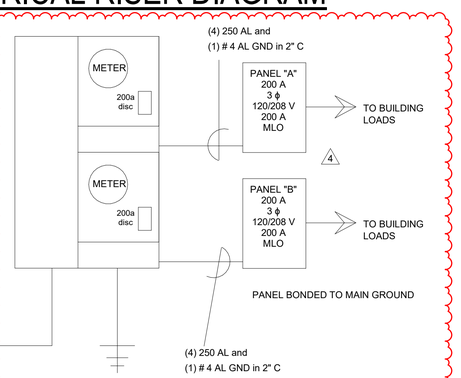
RATED VOLTAGE ☐ 120/208 ☐ 3 PHASE 4 WIRE BRANCH POLES ☐ 12 ☐ 20 ☐ 30 ■ 42
RATED AMPS ☐ 100 ☐ 150 ■ 200 ☐ CABINET: ☐ SURFACE ■ FLUSH
FULL NEUTRAL BUS ☐ GROUND BUS ☐ KEYED DOOR LATCH ☐ MAIN LUGS SETS SIZE
☐ FUSED ☐ BRANCH DEVICES FEED IS TO BE: ☐ BOTTOM ☐ TOP
MAIN LUGS ONLY ■ TO BE GFI BREAKER(S)
ALL BREAKERS MUST BE RATED TO INTERRUPT A SHORT CIRCUIT OF AMPS ASYMMETRICAL
APPROVED MFRS. WESTINGHOUSE, ITE, ALLEN BRADLEY, GE, CUTLER-HAMMER, or EQUAL

SYMBOL LEGEND:

- 110v DUPLEX RECEPTACLE
- 220v RECEPTACLE
- GFCI 110v GFCI DUPLEX RECEPTACLE
- 100 CFM EXHAUST FAN DUCTED TO EXTERIOR WALL W/INSECT SCREEN AND GRAVITY DAMPER
- DISCONNECT BOX

3 TO UTILITY

ELECTRICAL RISER DIAGRAM



Contractor / Owner to Review Plans

- IF ANY ERRORS OR OMISSIONS EXIST IN THESE DRAWINGS OR SPECIFICATIONS, OR IF ANY QUESTIONS ARISE AS TO THE INTENT OF THESE DRAWINGS, CONTRACT NO CONSTRUCTION SHALL BE PERFORMED IN THE AFFECTED AREAS UNTIL THE QUESTIONS HAVE BEEN RESOLVED BY THE ARCHITECT OF RECORD. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE RESULTS AND COST OF INCORRECT AND UNAUTHORIZED WORK.
- QUATTRONE & ASSOCIATES, INC. AND J. R. ROST ASSOCIATES, INC. DOES NOT GUARANTEE THE ACCURACY OF THE SURVEY AND ASSUMES NO RESPONSIBILITY FOR ANY ENGINEERING DECISIONS, CALCULATIONS OR DESIGN ELEMENTS WHICH MAY BE BASED THEREON. THE CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND ARRANGEMENTS WITH LOCAL UTILITIES AND GOVERNMENTAL AGENCIES AND DEPARTMENTS.
- ALL CONSTRUCTION SHALL COMPLY WITH THE FLORIDA BUILDING CODE 8TH EDITION (2023) AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
- ALL DIMENSIONS ARE TRUE, EXCEPT AS NOTED OTHERWISE.
- ALL DIMENSIONS ARE TO FACE OF CONCRETE OR CENTERLINE OF STEEL, UNLESS NOTED OTHERWISE.

J.R. ROST Associates, Inc.
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Certificate of Authorization Number: #645

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Alfred I. Quattrone
Florida PE #52741

Southern Aluminum Building 3

677 Stonecrest Lane
Cape Coral, FL

#	Revision	Date
3	As Per Comments	07-26-2023
4	Revised Electrical	03-15-2024

Strap# 08-44-24-C2-00808.0080
Start Date November 21, 2022
Drawn By jrr
Checked By ajq

E1
Electrical Power Plan
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1 Lighting Plan
3/16" = 1'-0"

EXIT & EMERGENCY LIGHT CONNECTION
N.T.S.

Lighting Legend:

- HI-BAY LIGHT FIXTURE - LED ROUND or SQUARE
- 100 CFM DUCTED EXHAUST FAN
- EXTERIOR LED WALL PACK ON PHOTO CELL
- EXIT/EMERGENCY LIGHT COMBO W/ BATTERY BACKUP
- EMERGENCY LIGHT W/ BATTERY BACKUP
- WALL MOUNTED LED LIGHT FIXTURE VERIFY STYLE W/OWNER
- 6"x6" SQUARE LED RECESSED FIXTURE ON PHOTO CELL

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Certificate of Authorization Number: #845

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Southern Aluminum Building 3

677 Stonecrest Lane
Cape Coral, FL

#	Revision	Date
3	As Per Comments	07-26-2023
4	Revised Electrical	03-15-2024

Strap#	08-44-24-C2-00808.0080
Start Date	November 21, 2022
Drawn By	jrr
Checked By	ajq

E2

Electrical Lighting Plan

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